

Synergy Resources

Well Name: **SRC Markham 41-16-9NHZ**

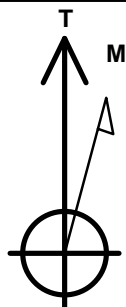
Surface Location: SRC Markham Pad Sec.16-T4N-R68W
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

Ground Elevation: 4963.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1357582.51	3136658.26	40.313928	-105.009944	
RKB - 13' WELL @ 4976.0ft (RKB - 13')						

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
SHL 2440'FNL & 2189'FWL, SEC.16	1.0	0.0	0.0	Point
BHL 460'FNL & 480'FEL, SEC.9	6150.0	7332.2	2607.3	Point
LANDING PT. 2201'FNL & 480'FEL, SEC.16	6150.0	270.1	2618.3	Point



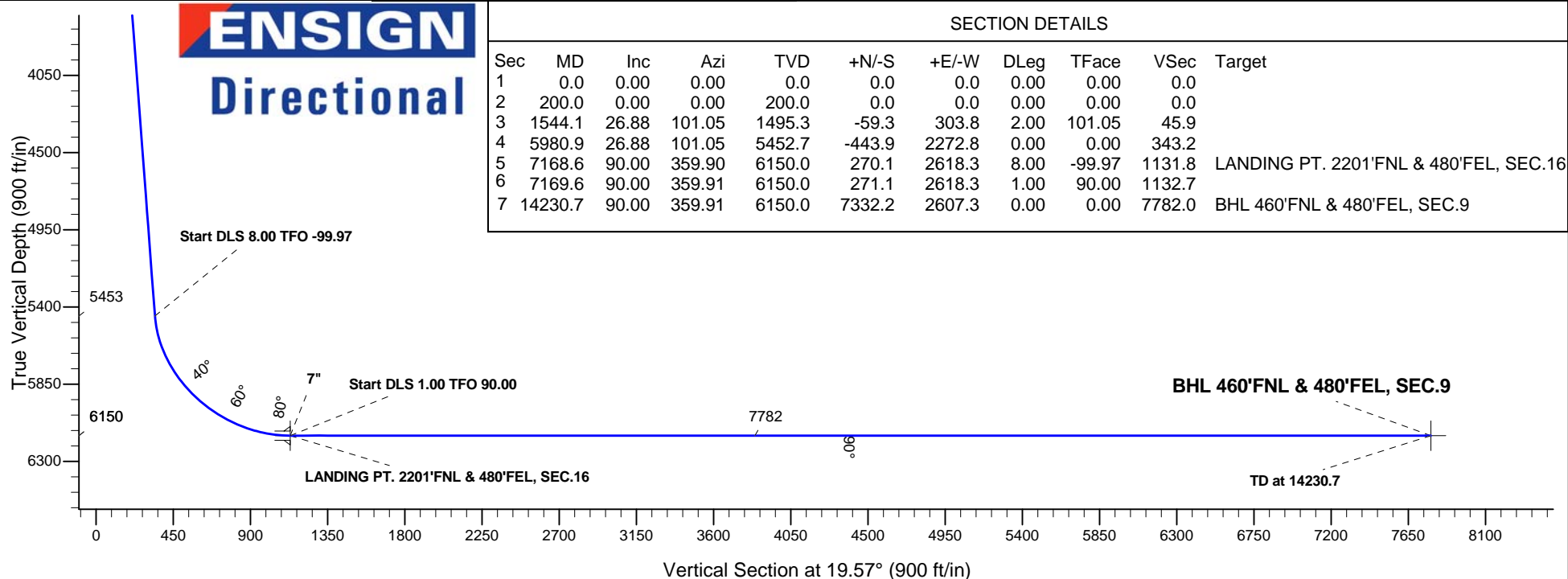
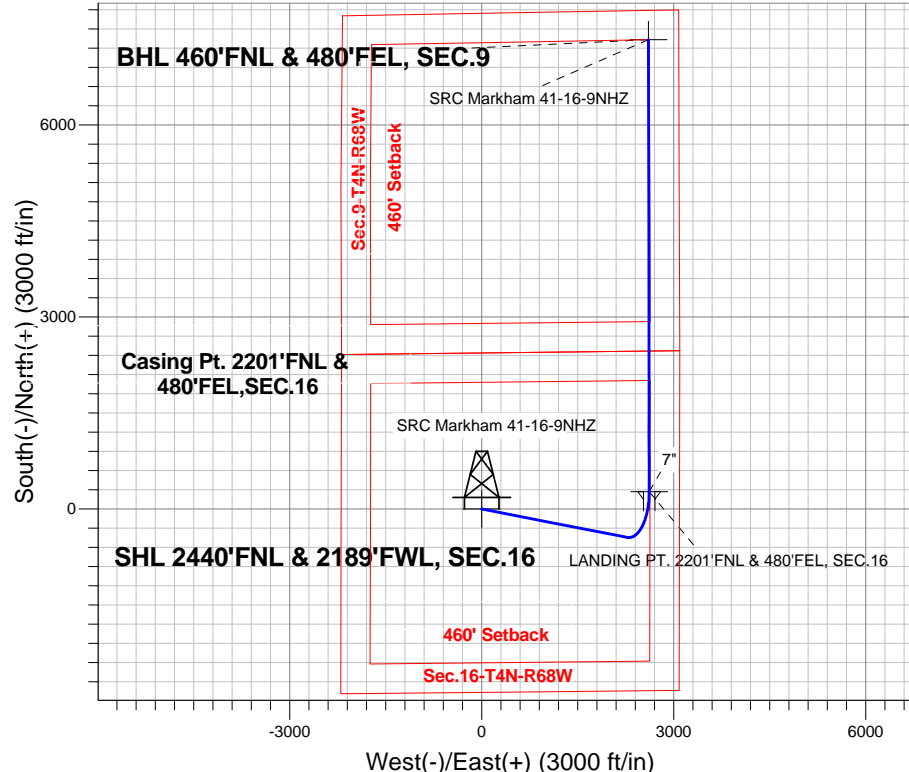
Azimuths to True North
Magnetic North: 8.61°

Magnetic Field
Strength: 52763.0snT
Dip Angle: 66.84°
Date: 4/7/2014
Model: IGRF2010

SRC Markham Pad Sec.16-T4N-R68W
SRC Markham 41-16-9NHZ
Plan #1 (3-31-14)
11:04, April 09 2014

ANNOTATIONS

TVD	MD	Annotation
200.0	200.0	Start Build 2.00
5452.7	5980.9	Start DLS 8.00 TFO -99.97
6150.0	7168.6	Start DLS 1.00 TFO 90.00
6150.0	14230.7	TD at 14230.7





Synergy Resources

Sec.16-T4N-R68W

SRC Markham Pad Sec.16-T4N-R68W

SRC Markham 41-16-9NHZ

Wellbore #1

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

Standard Planning Report

09 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		
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00		
1,544.1	26.88	101.05	1,495.3	-59.3	303.8	2.00	2.00	0.00	101.05		
5,980.9	26.88	101.05	5,452.7	-443.9	2,272.8	0.00	0.00	0.00	0.00		
7,168.6	90.00	359.90	6,150.0	270.1	2,618.3	8.00	5.31	-8.52	-99.97	LANDING PT. 2201	
7,169.6	90.00	359.91	6,150.0	271.1	2,618.3	1.00	0.00	1.00	90.00		
14,230.7	90.00	359.91	6,150.0	7,332.2	2,607.3	0.00	0.00	0.00	0.00	BHL 460'FNL & 480'	

Database:	Landmark	Local Co-ordinate Reference:	Well SRC Markham 41-16-9NHZ
Company:	Synergy Resources	TVD Reference:	WELL @ 4976.0ft (RKB - 13')
Project:	Sec.16-T4N-R68W	MD Reference:	WELL @ 4976.0ft (RKB - 13')
Site:	SRC Markham Pad Sec.16-T4N-R68W	North Reference:	True
Well:	SRC Markham 41-16-9NHZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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
SHL 2440'FNL & 2189'FWL, SEC.16									
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
Start Build 2.00									
300.0	2.00	101.05	300.0	-0.3	1.7	0.3	2.00	2.00	0.00
400.0	4.00	101.05	399.8	-1.3	6.8	1.0	2.00	2.00	0.00
500.0	6.00	101.05	499.5	-3.0	15.4	2.3	2.00	2.00	0.00
600.0	8.00	101.05	598.7	-5.3	27.4	4.1	2.00	2.00	0.00
700.0	10.00	101.05	697.5	-8.3	42.7	6.4	2.00	2.00	0.00
800.0	12.00	101.05	795.6	-12.0	61.4	9.3	2.00	2.00	0.00
900.0	14.00	101.05	893.1	-16.3	83.5	12.6	2.00	2.00	0.00
1,000.0	16.00	101.05	989.6	-21.3	108.9	16.4	2.00	2.00	0.00
1,100.0	18.00	101.05	1,085.3	-26.9	137.6	20.8	2.00	2.00	0.00
1,200.0	20.00	101.05	1,179.8	-33.1	169.6	25.6	2.00	2.00	0.00
1,300.0	22.00	101.05	1,273.2	-40.0	204.7	30.9	2.00	2.00	0.00
1,400.0	24.00	101.05	1,365.2	-47.5	243.1	36.7	2.00	2.00	0.00
1,500.0	26.00	101.05	1,455.8	-55.6	284.6	43.0	2.00	2.00	0.00
1,544.1	26.88	101.05	1,495.3	-59.3	303.8	45.9	2.00	2.00	0.00
1,600.0	26.88	101.05	1,545.2	-64.2	328.6	49.6	0.00	0.00	0.00
1,700.0	26.88	101.05	1,634.4	-72.9	373.0	56.3	0.00	0.00	0.00
1,800.0	26.88	101.05	1,723.6	-81.5	417.4	63.0	0.00	0.00	0.00
1,900.0	26.88	101.05	1,812.8	-90.2	461.8	69.7	0.00	0.00	0.00
2,000.0	26.88	101.05	1,902.0	-98.9	506.1	76.4	0.00	0.00	0.00
2,100.0	26.88	101.05	1,991.2	-107.5	550.5	83.1	0.00	0.00	0.00
2,200.0	26.88	101.05	2,080.3	-116.2	594.9	89.8	0.00	0.00	0.00
2,300.0	26.88	101.05	2,169.5	-124.9	639.3	96.5	0.00	0.00	0.00
2,400.0	26.88	101.05	2,258.7	-133.5	683.7	103.2	0.00	0.00	0.00
2,500.0	26.88	101.05	2,347.9	-142.2	728.0	109.9	0.00	0.00	0.00
2,600.0	26.88	101.05	2,437.1	-150.9	772.4	116.6	0.00	0.00	0.00
2,700.0	26.88	101.05	2,526.3	-159.5	816.8	123.3	0.00	0.00	0.00
2,800.0	26.88	101.05	2,615.5	-168.2	861.2	130.0	0.00	0.00	0.00
2,900.0	26.88	101.05	2,704.7	-176.9	905.5	136.7	0.00	0.00	0.00
3,000.0	26.88	101.05	2,793.9	-185.6	949.9	143.4	0.00	0.00	0.00
3,100.0	26.88	101.05	2,883.1	-194.2	994.3	150.1	0.00	0.00	0.00
3,200.0	26.88	101.05	2,972.3	-202.9	1,038.7	156.8	0.00	0.00	0.00
3,300.0	26.88	101.05	3,061.5	-211.6	1,083.0	163.5	0.00	0.00	0.00
3,400.0	26.88	101.05	3,150.7	-220.2	1,127.4	170.2	0.00	0.00	0.00
3,500.0	26.88	101.05	3,239.9	-228.9	1,171.8	176.9	0.00	0.00	0.00
3,600.0	26.88	101.05	3,329.1	-237.6	1,216.2	183.6	0.00	0.00	0.00
3,700.0	26.88	101.05	3,418.3	-246.2	1,260.6	190.3	0.00	0.00	0.00
3,800.0	26.88	101.05	3,507.4	-254.9	1,304.9	197.0	0.00	0.00	0.00
3,900.0	26.88	101.05	3,596.6	-263.6	1,349.3	203.7	0.00	0.00	0.00
4,000.0	26.88	101.05	3,685.8	-272.2	1,393.7	210.4	0.00	0.00	0.00
4,100.0	26.88	101.05	3,775.0	-280.9	1,438.1	217.1	0.00	0.00	0.00
4,200.0	26.88	101.05	3,864.2	-289.6	1,482.4	223.8	0.00	0.00	0.00
4,300.0	26.88	101.05	3,953.4	-298.2	1,526.8	230.5	0.00	0.00	0.00
4,400.0	26.88	101.05	4,042.6	-306.9	1,571.2	237.2	0.00	0.00	0.00
4,500.0	26.88	101.05	4,131.8	-315.6	1,615.6	243.9	0.00	0.00	0.00
4,600.0	26.88	101.05	4,221.0	-324.2	1,660.0	250.6	0.00	0.00	0.00
4,700.0	26.88	101.05	4,310.2	-332.9	1,704.3	257.3	0.00	0.00	0.00
4,800.0	26.88	101.05	4,399.4	-341.6	1,748.7	264.0	0.00	0.00	0.00
4,900.0	26.88	101.05	4,488.6	-350.2	1,793.1	270.7	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well SRC Markham 41-16-9NHZ
Company:	Synergy Resources	TVD Reference:	WELL @ 4976.0ft (RKB - 13')
Project:	Sec.16-T4N-R68W	MD Reference:	WELL @ 4976.0ft (RKB - 13')
Site:	SRC Markham Pad Sec.16-T4N-R68W	North Reference:	True
Well:	SRC Markham 41-16-9NHZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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)	
5,000.0	26.88	101.05	4,577.8	-358.9	1,837.5	277.5	0.00	0.00	0.00	
5,100.0	26.88	101.05	4,667.0	-367.6	1,881.8	284.2	0.00	0.00	0.00	
5,200.0	26.88	101.05	4,756.2	-376.3	1,926.2	290.9	0.00	0.00	0.00	
5,300.0	26.88	101.05	4,845.4	-384.9	1,970.6	297.6	0.00	0.00	0.00	
5,400.0	26.88	101.05	4,934.5	-393.6	2,015.0	304.3	0.00	0.00	0.00	
5,500.0	26.88	101.05	5,023.7	-402.3	2,059.3	311.0	0.00	0.00	0.00	
5,600.0	26.88	101.05	5,112.9	-410.9	2,103.7	317.7	0.00	0.00	0.00	
5,700.0	26.88	101.05	5,202.1	-419.6	2,148.1	324.4	0.00	0.00	0.00	
5,800.0	26.88	101.05	5,291.3	-428.3	2,192.5	331.1	0.00	0.00	0.00	
5,900.0	26.88	101.05	5,380.5	-436.9	2,236.9	337.8	0.00	0.00	0.00	
5,980.9	26.88	101.05	5,452.7	-443.9	2,272.8	343.2	0.00	0.00	0.00	
Start DLS 8.00 TFO -99.97										
6,000.0	26.66	97.69	5,469.7	-445.3	2,281.2	344.7	8.01	-1.18	-17.59	
6,100.0	26.80	79.85	5,559.2	-444.4	2,325.7	360.5	8.00	0.14	-17.84	
6,200.0	29.06	63.41	5,647.7	-429.5	2,369.7	389.3	8.00	2.26	-16.44	
6,300.0	33.01	49.87	5,733.4	-401.0	2,412.3	430.4	8.00	3.95	-13.55	
6,400.0	38.11	39.24	5,814.8	-359.5	2,452.7	483.0	8.00	5.11	-10.62	
6,500.0	43.98	30.93	5,890.3	-305.7	2,490.2	546.2	8.00	5.86	-8.31	
6,600.0	50.32	24.27	5,958.3	-240.8	2,523.9	618.7	8.00	6.35	-6.66	
6,700.0	56.98	18.76	6,017.6	-165.9	2,553.2	699.2	8.00	6.66	-5.51	
6,800.0	63.85	14.03	6,066.9	-82.5	2,577.6	785.9	8.00	6.87	-4.72	
6,900.0	70.85	9.84	6,105.4	7.7	2,596.6	877.3	8.00	7.00	-4.19	
7,000.0	77.95	6.00	6,132.3	103.1	2,609.8	971.5	8.00	7.09	-3.85	
7,100.0	85.09	2.35	6,147.1	201.6	2,617.0	1,066.8	8.00	7.14	-3.65	
7,168.6	90.00	359.90	6,150.0	270.1	2,618.3	1,131.8	8.00	7.16	-3.57	
Start DLS 1.00 TFO 90.00 - 7" - LANDING PT. 2201'FNL & 480'FEL, SEC.16										
7,169.6	90.00	359.91	6,150.0	271.1	2,618.3	1,132.7	1.00	0.00	1.00	
7,200.0	90.00	359.91	6,150.0	301.5	2,618.3	1,161.3	0.00	0.00	0.00	
7,300.0	90.00	359.91	6,150.0	401.5	2,618.1	1,255.5	0.00	0.00	0.00	
7,400.0	90.00	359.91	6,150.0	501.5	2,618.0	1,349.7	0.00	0.00	0.00	
7,500.0	90.00	359.91	6,150.0	601.5	2,617.8	1,443.8	0.00	0.00	0.00	
7,600.0	90.00	359.91	6,150.0	701.5	2,617.7	1,538.0	0.00	0.00	0.00	
7,700.0	90.00	359.91	6,150.0	801.5	2,617.5	1,632.2	0.00	0.00	0.00	
7,800.0	90.00	359.91	6,150.0	901.5	2,617.4	1,726.3	0.00	0.00	0.00	
7,900.0	90.00	359.91	6,150.0	1,001.5	2,617.2	1,820.5	0.00	0.00	0.00	
8,000.0	90.00	359.91	6,150.0	1,101.5	2,617.0	1,914.7	0.00	0.00	0.00	
8,100.0	90.00	359.91	6,150.0	1,201.5	2,616.9	2,008.8	0.00	0.00	0.00	
8,200.0	90.00	359.91	6,150.0	1,301.5	2,616.7	2,103.0	0.00	0.00	0.00	
8,300.0	90.00	359.91	6,150.0	1,401.5	2,616.6	2,197.2	0.00	0.00	0.00	
8,400.0	90.00	359.91	6,150.0	1,501.5	2,616.4	2,291.3	0.00	0.00	0.00	
8,500.0	90.00	359.91	6,150.0	1,601.5	2,616.3	2,385.5	0.00	0.00	0.00	
8,600.0	90.00	359.91	6,150.0	1,701.5	2,616.1	2,479.7	0.00	0.00	0.00	
8,700.0	90.00	359.91	6,150.0	1,801.5	2,615.9	2,573.8	0.00	0.00	0.00	
8,800.0	90.00	359.91	6,150.0	1,901.5	2,615.8	2,668.0	0.00	0.00	0.00	
8,900.0	90.00	359.91	6,150.0	2,001.5	2,615.6	2,762.2	0.00	0.00	0.00	
9,000.0	90.00	359.91	6,150.0	2,101.5	2,615.5	2,856.3	0.00	0.00	0.00	
9,100.0	90.00	359.91	6,150.0	2,201.5	2,615.3	2,950.5	0.00	0.00	0.00	
9,200.0	90.00	359.91	6,150.0	2,301.5	2,615.2	3,044.7	0.00	0.00	0.00	
9,300.0	90.00	359.91	6,150.0	2,401.5	2,615.0	3,138.8	0.00	0.00	0.00	
9,400.0	90.00	359.91	6,150.0	2,501.5	2,614.8	3,233.0	0.00	0.00	0.00	
9,500.0	90.00	359.91	6,150.0	2,601.5	2,614.7	3,327.2	0.00	0.00	0.00	
9,600.0	90.00	359.91	6,150.0	2,701.5	2,614.5	3,421.3	0.00	0.00	0.00	
9,700.0	90.00	359.91	6,150.0	2,801.5	2,614.4	3,515.5	0.00	0.00	0.00	
9,800.0	90.00	359.91	6,150.0	2,901.5	2,614.2	3,609.7	0.00	0.00	0.00	

Database:	Landmark	Local Co-ordinate Reference:	Well SRC Markham 41-16-9NHZ
Company:	Synergy Resources	TVD Reference:	WELL @ 4976.0ft (RKB - 13')
Project:	Sec.16-T4N-R68W	MD Reference:	WELL @ 4976.0ft (RKB - 13')
Site:	SRC Markham Pad Sec.16-T4N-R68W	North Reference:	True
Well:	SRC Markham 41-16-9NHZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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)
9,900.0	90.00	359.91	6,150.0	3,001.5	2,614.1	3,703.9	0.00	0.00	0.00
10,000.0	90.00	359.91	6,150.0	3,101.5	2,613.9	3,798.0	0.00	0.00	0.00
10,100.0	90.00	359.91	6,150.0	3,201.5	2,613.7	3,892.2	0.00	0.00	0.00
10,200.0	90.00	359.91	6,150.0	3,301.5	2,613.6	3,986.4	0.00	0.00	0.00
10,300.0	90.00	359.91	6,150.0	3,401.5	2,613.4	4,080.5	0.00	0.00	0.00
10,400.0	90.00	359.91	6,150.0	3,501.5	2,613.3	4,174.7	0.00	0.00	0.00
10,500.0	90.00	359.91	6,150.0	3,601.5	2,613.1	4,268.9	0.00	0.00	0.00
10,600.0	90.00	359.91	6,150.0	3,701.5	2,613.0	4,363.0	0.00	0.00	0.00
10,700.0	90.00	359.91	6,150.0	3,801.5	2,612.8	4,457.2	0.00	0.00	0.00
10,800.0	90.00	359.91	6,150.0	3,901.5	2,612.7	4,551.4	0.00	0.00	0.00
10,900.0	90.00	359.91	6,150.0	4,001.5	2,612.5	4,645.5	0.00	0.00	0.00
11,000.0	90.00	359.91	6,150.0	4,101.5	2,612.3	4,739.7	0.00	0.00	0.00
11,100.0	90.00	359.91	6,150.0	4,201.5	2,612.2	4,833.9	0.00	0.00	0.00
11,200.0	90.00	359.91	6,150.0	4,301.5	2,612.0	4,928.0	0.00	0.00	0.00
11,300.0	90.00	359.91	6,150.0	4,401.5	2,611.9	5,022.2	0.00	0.00	0.00
11,400.0	90.00	359.91	6,150.0	4,501.5	2,611.7	5,116.4	0.00	0.00	0.00
11,500.0	90.00	359.91	6,150.0	4,601.5	2,611.6	5,210.5	0.00	0.00	0.00
11,600.0	90.00	359.91	6,150.0	4,701.5	2,611.4	5,304.7	0.00	0.00	0.00
11,700.0	90.00	359.91	6,150.0	4,801.5	2,611.2	5,398.9	0.00	0.00	0.00
11,800.0	90.00	359.91	6,150.0	4,901.5	2,611.1	5,493.0	0.00	0.00	0.00
11,900.0	90.00	359.91	6,150.0	5,001.5	2,610.9	5,587.2	0.00	0.00	0.00
12,000.0	90.00	359.91	6,150.0	5,101.5	2,610.8	5,681.4	0.00	0.00	0.00
12,100.0	90.00	359.91	6,150.0	5,201.5	2,610.6	5,775.5	0.00	0.00	0.00
12,200.0	90.00	359.91	6,150.0	5,301.5	2,610.5	5,869.7	0.00	0.00	0.00
12,300.0	90.00	359.91	6,150.0	5,401.5	2,610.3	5,963.9	0.00	0.00	0.00
12,400.0	90.00	359.91	6,150.0	5,501.5	2,610.1	6,058.0	0.00	0.00	0.00
12,500.0	90.00	359.91	6,150.0	5,601.5	2,610.0	6,152.2	0.00	0.00	0.00
12,600.0	90.00	359.91	6,150.0	5,701.5	2,609.8	6,246.4	0.00	0.00	0.00
12,700.0	90.00	359.91	6,150.0	5,801.5	2,609.7	6,340.5	0.00	0.00	0.00
12,800.0	90.00	359.91	6,150.0	5,901.5	2,609.5	6,434.7	0.00	0.00	0.00
12,900.0	90.00	359.91	6,150.0	6,001.5	2,609.4	6,528.9	0.00	0.00	0.00
13,000.0	90.00	359.91	6,150.0	6,101.5	2,609.2	6,623.1	0.00	0.00	0.00
13,100.0	90.00	359.91	6,150.0	6,201.5	2,609.0	6,717.2	0.00	0.00	0.00
13,200.0	90.00	359.91	6,150.0	6,301.5	2,608.9	6,811.4	0.00	0.00	0.00
13,300.0	90.00	359.91	6,150.0	6,401.5	2,608.7	6,905.6	0.00	0.00	0.00
13,400.0	90.00	359.91	6,150.0	6,501.5	2,608.6	6,999.7	0.00	0.00	0.00
13,500.0	90.00	359.91	6,150.0	6,601.5	2,608.4	7,093.9	0.00	0.00	0.00
13,600.0	90.00	359.91	6,150.0	6,701.5	2,608.3	7,188.1	0.00	0.00	0.00
13,700.0	90.00	359.91	6,150.0	6,801.5	2,608.1	7,282.2	0.00	0.00	0.00
13,800.0	90.00	359.91	6,150.0	6,901.5	2,608.0	7,376.4	0.00	0.00	0.00
13,900.0	90.00	359.91	6,150.0	7,001.5	2,607.8	7,470.6	0.00	0.00	0.00
14,000.0	90.00	359.91	6,150.0	7,101.5	2,607.6	7,564.7	0.00	0.00	0.00
14,100.0	90.00	359.91	6,150.0	7,201.5	2,607.5	7,658.9	0.00	0.00	0.00
14,200.0	90.00	359.91	6,150.0	7,301.5	2,607.3	7,753.1	0.00	0.00	0.00
14,230.7	90.00	359.91	6,150.0	7,332.2	2,607.3	7,782.0	0.00	0.00	0.00
TD at 14230.7 - BHL 460°FNL & 480°FEL, SEC.9									

Database:	Landmark	Local Co-ordinate Reference:	Well SRC Markham 41-16-9NHZ
Company:	Synergy Resources	TVD Reference:	WELL @ 4976.0ft (RKB - 13')
Project:	Sec.16-T4N-R68W	MD Reference:	WELL @ 4976.0ft (RKB - 13')
Site:	SRC Markham Pad Sec.16-T4N-R68W	North Reference:	True
Well:	SRC Markham 41-16-9NHZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (3-31-14)		

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
7,168.6	6,150.0	7"	7	7-1/2	

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
200.0	200.0	0.0	0.0	Start Build 2.00	
5,980.9	5,452.7	-443.9	2,272.8	Start DLS 8.00 TFO -99.97	
7,168.6	6,150.0	270.1	2,618.3	Start DLS 1.00 TFO 90.00	
14,230.7	6,150.0	7,332.2	2,607.3	TD at 14230.7	



Synergy Resources

Sec.16-T4N-R68W

SRC Markham Pad Sec.16-T4N-R68W

SRC Markham 41-16-9NHZ

Wellbore #1

Plan #1 (3-31-14)

Anticollision Report

09 April, 2014

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Markham 41-16-9NHZ
Project:	Sec.16-T4N-R68W	TVD Reference:	WELL @ 4976.0ft (RKB - 13')
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4976.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 41-16-9NHZ	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (3-31-14)	Offset TVD Reference:	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
1,400.0	1,365.2	1,366.2	1,366.2	5.8	3.0	175.08	-1.4	-157.6	403.3	397.0	6.26	64.432	
1,500.0	1,455.8	1,456.8	1,456.8	6.6	3.2	175.47	-1.4	-157.6	445.4	438.7	6.74	66.074	
1,600.0	1,545.2	1,546.2	1,546.2	7.6	3.4	175.85	-1.4	-157.6	490.2	483.0	7.25	67.599	
1,700.0	1,634.4	1,643.1	1,643.1	8.5	3.6	176.22	-1.6	-157.3	535.1	527.3	7.79	68.648	
1,800.0	1,723.6	1,754.5	1,754.4	9.5	3.8	176.46	-3.1	-153.8	577.3	568.9	8.34	69.216	
1,900.0	1,812.8	1,869.8	1,869.4	10.5	4.0	176.54	-6.6	-146.0	616.0	607.1	8.89	69.257	
2,000.0	1,902.0	1,988.7	1,987.5	11.5	4.3	176.49	-12.2	-133.5	651.0	641.6	9.47	68.721	
2,100.0	1,991.2	2,111.0	2,108.3	12.5	4.6	176.31	-20.0	-116.1	682.3	672.2	10.08	67.672	
2,200.0	2,080.3	2,236.3	2,231.1	13.4	4.9	176.03	-30.3	-93.4	709.6	698.9	10.73	66.160	
2,300.0	2,169.5	2,364.4	2,355.4	14.4	5.4	175.63	-42.9	-65.1	732.8	721.4	11.41	64.242	
2,400.0	2,258.7	2,492.6	2,478.3	15.4	5.9	175.13	-57.9	-31.7	751.8	739.7	12.12	62.009	
2,500.0	2,347.9	2,591.0	2,572.0	16.4	6.4	174.72	-70.2	-4.4	769.0	756.2	12.80	60.082	
2,600.0	2,437.1	2,689.4	2,665.7	17.4	6.9	174.33	-82.4	22.9	786.2	772.7	13.49	58.269	
2,700.0	2,526.3	2,787.7	2,759.4	18.4	7.4	173.96	-94.7	50.3	803.5	789.3	14.20	56.578	
2,800.0	2,615.5	2,886.1	2,853.1	19.4	8.0	173.60	-107.0	77.6	820.8	805.9	14.92	55.000	
2,900.0	2,704.7	2,984.5	2,946.7	20.4	8.5	173.26	-119.2	104.9	838.1	822.4	15.66	53.526	
3,000.0	2,793.9	3,082.8	3,040.4	21.4	9.1	172.93	-131.5	132.2	855.5	839.1	16.40	52.148	
3,100.0	2,883.1	3,181.2	3,134.1	22.4	9.7	172.61	-143.7	159.6	872.8	855.7	17.16	50.860	
3,200.0	2,972.3	3,279.6	3,227.8	23.4	10.2	172.31	-156.0	186.9	890.2	872.3	17.93	49.654	
3,300.0	3,061.5	3,377.9	3,321.5	24.4	10.8	172.02	-168.3	214.2	907.7	889.0	18.71	48.525	
3,400.0	3,150.7	3,476.3	3,415.2	25.3	11.4	171.74	-180.5	241.5	925.1	905.6	19.49	47.465	
3,500.0	3,239.9	3,574.7	3,508.9	26.3	12.0	171.47	-192.8	268.9	942.6	922.3	20.28	46.470	
3,600.0	3,329.1	3,673.0	3,602.6	27.3	12.6	171.21	-205.1	296.2	960.1	939.0	21.08	45.534	
3,700.0	3,418.3	3,771.4	3,696.3	28.3	13.3	170.96	-217.3	323.5	977.6	955.7	21.89	44.653	
3,800.0	3,507.4	3,869.8	3,790.0	29.3	13.9	170.72	-229.6	350.9	995.1	972.4	22.71	43.822 SF	

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Markham 41-16-9NHZ
Project:	Sec.16-T4N-R68W	TVD Reference:	WELL @ 4976.0ft (RKB - 13')
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4976.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 41-16-9NHZ	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (3-31-14)	Offset TVD Reference:	Offset Datum

Offset Design SRC Markham Pad Sec.16-T4N-R68W - SRC Markham 31-16-9NHZ - 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		
0.0	0.0	1.0	1.0	0.0	0.0	-90.62	-1.5	-135.0	135.0					
100.0	100.0	101.0	101.0	0.1	0.1	-90.62	-1.5	-135.0	135.0	134.8	0.23	594.608		
200.0	200.0	201.0	201.0	0.3	0.3	-90.62	-1.5	-135.0	135.0	134.3	0.68	199.519 CC, ES		
300.0	300.0	301.0	301.0	0.6	0.6	168.47	-1.5	-135.0	136.7	135.6	1.12	122.091		
400.0	399.8	400.8	400.8	0.8	0.8	168.87	-1.5	-135.0	141.8	140.3	1.57	90.600		
500.0	499.5	500.5	500.5	1.0	1.0	169.48	-1.5	-135.0	150.4	148.4	2.02	74.467		
600.0	598.7	599.7	599.7	1.3	1.2	170.23	-1.5	-135.0	162.4	159.9	2.48	65.517		
700.0	697.5	698.5	698.5	1.6	1.5	171.03	-1.5	-135.0	177.8	174.9	2.94	60.460		
800.0	795.6	796.6	796.6	2.0	1.7	171.84	-1.5	-135.0	196.7	193.3	3.41	57.734		
900.0	893.1	894.1	894.1	2.5	1.9	172.62	-1.5	-135.0	219.0	215.1	3.88	56.508		
1,000.0	989.6	990.6	990.6	3.0	2.1	173.34	-1.5	-135.0	244.7	240.4	4.35	56.296		
1,100.0	1,085.3	1,086.3	1,086.3	3.6	2.3	173.98	-1.5	-135.0	273.8	269.0	4.82	56.797		
1,200.0	1,179.8	1,180.8	1,180.8	4.2	2.5	174.56	-1.5	-135.0	306.2	300.9	5.30	57.813		
1,300.0	1,273.2	1,274.2	1,274.2	5.0	2.8	175.06	-1.5	-135.0	341.9	336.1	5.77	59.211		
1,400.0	1,365.2	1,366.2	1,366.2	5.8	3.0	175.50	-1.5	-135.0	380.8	374.6	6.25	60.897		
1,500.0	1,455.8	1,466.4	1,466.3	6.6	3.2	175.90	-1.7	-134.3	422.4	415.6	6.74	62.683		
1,600.0	1,545.2	1,573.6	1,573.5	7.6	3.4	176.20	-3.3	-130.1	463.5	456.3	7.24	64.026		
1,700.0	1,634.4	1,684.2	1,683.7	8.5	3.6	176.35	-6.5	-121.8	501.6	493.8	7.78	64.488		
1,800.0	1,723.6	1,798.1	1,796.9	9.5	3.9	176.37	-11.4	-109.2	536.1	527.8	8.34	64.262		
1,900.0	1,812.8	1,915.2	1,912.4	10.5	4.2	176.27	-18.0	-91.8	566.9	558.0	8.94	63.440		
2,000.0	1,902.0	2,035.1	2,029.9	11.5	4.5	176.07	-26.6	-69.5	593.9	584.4	9.56	62.116		
2,100.0	1,991.2	2,157.6	2,148.8	12.5	5.0	175.77	-37.2	-42.0	616.9	606.7	10.22	60.359		
2,200.0	2,080.3	2,282.2	2,268.3	13.4	5.5	175.37	-49.8	-9.2	635.8	624.9	10.92	58.232		
2,300.0	2,169.5	2,405.4	2,384.9	14.4	6.1	174.89	-64.0	28.0	650.6	638.9	11.65	55.837		
2,400.0	2,258.7	2,504.4	2,478.0	15.4	6.7	174.48	-76.1	59.5	663.7	651.4	12.35	53.734		
2,500.0	2,347.9	2,603.4	2,571.1	16.4	7.3	174.09	-88.2	90.9	676.9	663.8	13.07	51.791		
2,600.0	2,437.1	2,702.5	2,664.2	17.4	7.9	173.71	-100.3	122.4	690.1	676.3	13.80	49.996		
2,700.0	2,526.3	2,801.5	2,757.4	18.4	8.6	173.35	-112.4	153.8	703.3	688.8	14.55	48.336		
2,800.0	2,615.5	2,900.5	2,850.5	19.4	9.2	173.00	-124.4	185.3	716.6	701.3	15.31	46.799		
2,900.0	2,704.7	2,999.5	2,943.6	20.4	9.9	172.66	-136.5	216.7	729.9	713.8	16.08	45.375		
3,000.0	2,793.9	3,098.6	3,036.7	21.4	10.6	172.33	-148.6	248.2	743.2	726.3	16.87	44.053		
3,100.0	2,883.1	3,197.6	3,129.8	22.4	11.2	172.02	-160.7	279.6	756.5	738.8	17.66	42.824		
3,200.0	2,972.3	3,296.6	3,222.9	23.4	11.9	171.72	-172.7	311.1	769.8	751.4	18.47	41.680		
3,300.0	3,061.5	3,395.6	3,316.1	24.4	12.6	171.43	-184.8	342.5	783.2	763.9	19.28	40.613		
3,400.0	3,150.7	3,494.7	3,409.2	25.3	13.3	171.14	-196.9	374.0	796.6	776.5	20.11	39.616		
3,500.0	3,239.9	3,593.7	3,502.3	26.3	14.0	170.87	-209.0	405.4	810.0	789.0	20.94	38.683		
3,600.0	3,329.1	3,692.7	3,595.4	27.3	14.7	170.61	-221.0	436.9	823.4	801.6	21.78	37.809		
3,700.0	3,418.3	3,791.7	3,688.5	28.3	15.4	170.35	-233.1	468.3	836.8	814.2	22.62	36.988		
3,800.0	3,507.4	3,890.8	3,781.7	29.3	16.1	170.10	-245.2	499.8	850.3	826.8	23.48	36.217		
3,900.0	3,596.6	3,989.8	3,874.8	30.3	16.8	169.86	-257.3	531.2	863.8	839.4	24.34	35.491		
4,000.0	3,685.8	4,088.8	3,967.9	31.3	17.5	169.63	-269.4	562.7	877.3	852.0	25.20	34.806		
4,100.0	3,775.0	4,187.8	4,061.0	32.3	18.2	169.40	-281.4	594.1	890.7	864.7	26.08	34.159		
4,200.0	3,864.2	4,286.9	4,154.1	33.3	18.9	169.18	-293.5	625.6	904.3	877.3	26.95	33.548		
4,300.0	3,953.4	4,385.9	4,247.2	34.3	19.6	168.97	-305.6	657.0	917.8	889.9	27.84	32.970		
4,400.0	4,042.6	4,484.9	4,340.4	35.3	20.3	168.77	-317.7	688.5	931.3	902.6	28.73	32.422		
4,500.0	4,131.8	4,583.9	4,433.5	36.3	21.0	168.56	-329.7	719.9	944.9	915.2	29.62	31.902		
4,600.0	4,221.0	4,683.0	4,526.6	37.3	21.7	168.37	-341.8	751.4	958.4	927.9	30.52	31.407		
4,700.0	4,310.2	4,782.0	4,619.7	38.3	22.5	168.18	-353.9	782.8	972.0	940.6	31.42	30.937		
4,800.0	4,399.4	4,881.0	4,712.8	39.3	23.2	168.00	-366.0	814.3	985.6	953.2	32.32	30.490		
4,900.0	4,488.6	4,980.0	4,805.9	40.3	23.9	167.82	-378.0	845.7	999.2	965.9	33.23	30.064 SF		

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	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	-89.97	0.0	-22.6	22.6					
100.0	100.0	100.0	100.0	0.1	0.1	-89.97	0.0	-22.6	22.6	22.4	0.22	100.500		
200.0	200.0	200.0	200.0	0.3	0.3	-89.97	0.0	-22.6	22.6	21.9	0.67	33.500	CC	
300.0	300.0	300.0	300.0	0.6	0.6	169.76	0.0	-22.6	24.3	23.2	1.12	21.750		
400.0	399.8	399.8	399.8	0.8	0.8	171.55	0.0	-22.6	29.5	27.9	1.56	18.851		
500.0	499.5	500.7	500.7	1.0	1.0	173.12	-0.4	-20.9	36.4	34.4	2.00	18.222		
600.0	598.7	601.9	601.7	1.3	1.2	174.10	-1.5	-15.6	43.3	40.9	2.42	17.858		
700.0	697.5	703.3	702.7	1.6	1.5	174.74	-3.3	-6.9	50.1	47.3	2.87	17.496		
800.0	795.6	805.0	803.6	2.0	1.7	175.16	-5.9	5.4	57.0	53.6	3.32	17.136		
900.0	893.1	906.9	904.2	2.5	2.0	175.43	-9.3	21.2	63.7	59.9	3.80	16.773		
1,000.0	989.6	1,009.0	1,004.4	3.0	2.4	175.59	-13.4	40.5	70.5	66.2	4.30	16.402		
1,100.0	1,085.3	1,111.4	1,104.1	3.6	2.9	175.68	-18.3	63.4	77.1	72.3	4.81	16.021		
1,200.0	1,179.8	1,214.1	1,203.2	4.2	3.4	175.71	-23.9	89.8	83.6	78.3	5.35	15.629		
1,300.0	1,273.2	1,317.0	1,301.4	5.0	4.0	175.69	-30.3	119.7	90.1	84.2	5.92	15.225		
1,400.0	1,365.2	1,420.1	1,398.7	5.8	4.6	175.63	-37.4	153.2	96.5	89.9	6.52	14.800		
1,500.0	1,455.8	1,523.5	1,494.9	6.6	5.4	175.54	-45.3	190.1	102.7	95.6	7.13	14.407		
1,600.0	1,545.2	1,627.1	1,590.0	7.6	6.2	175.40	-53.9	230.6	108.3	100.5	7.82	13.857		
1,700.0	1,634.4	1,728.5	1,681.7	8.5	7.1	175.16	-62.8	272.7	111.4	102.8	8.55	13.032		
1,800.0	1,723.6	1,828.4	1,772.1	9.5	8.0	174.92	-71.7	314.4	114.3	105.0	9.29	12.297		
1,900.0	1,812.8	1,928.4	1,862.5	10.5	8.9	174.70	-80.6	356.1	117.2	107.1	10.05	11.658		
2,000.0	1,902.0	2,028.3	1,952.9	11.5	9.8	174.48	-89.5	397.8	120.1	109.2	10.82	11.099		
2,100.0	1,991.2	2,128.3	2,043.3	12.5	10.7	174.27	-98.4	439.5	122.9	111.4	11.59	10.607		
2,200.0	2,080.3	2,228.2	2,133.7	13.4	11.6	174.08	-107.2	481.3	125.8	113.5	12.37	10.170		
2,300.0	2,169.5	2,328.2	2,224.1	14.4	12.5	173.89	-116.1	523.0	128.7	115.6	13.16	9.780		
2,400.0	2,258.7	2,428.2	2,314.5	15.4	13.4	173.71	-125.0	564.7	131.6	117.7	13.96	9.431		
2,500.0	2,347.9	2,528.1	2,404.9	16.4	14.4	173.54	-133.9	606.4	134.5	119.8	14.76	9.116		
2,600.0	2,437.1	2,628.1	2,495.3	17.4	15.3	173.38	-142.8	648.2	137.4	121.9	15.56	8.830		
2,700.0	2,526.3	2,728.0	2,585.7	18.4	16.2	173.22	-151.6	689.9	140.3	124.0	16.37	8.571		
2,800.0	2,615.5	2,828.0	2,676.1	19.4	17.1	173.07	-160.5	731.6	143.2	126.0	17.18	8.334		
2,900.0	2,704.7	2,927.9	2,766.5	20.4	18.1	172.92	-169.4	773.3	146.1	128.1	18.00	8.117		
3,000.0	2,793.9	3,027.9	2,856.9	21.4	19.0	172.78	-178.3	815.0	149.0	130.2	18.82	7.918		
3,100.0	2,883.1	3,127.9	2,947.3	22.4	19.9	172.65	-187.2	856.8	151.9	132.3	19.64	7.734		
3,200.0	2,972.3	3,227.8	3,037.7	23.4	20.8	172.52	-196.0	898.5	154.8	134.4	20.47	7.564		
3,300.0	3,061.5	3,327.8	3,128.1	24.4	21.8	172.39	-204.9	940.2	157.7	136.4	21.30	7.405		
3,400.0	3,150.7	3,427.7	3,218.5	25.3	22.7	172.27	-213.8	981.9	160.6	138.5	22.13	7.258		
3,500.0	3,239.9	3,527.7	3,308.9	26.3	23.6	172.16	-222.7	1,023.7	163.5	140.6	22.97	7.121		
3,600.0	3,329.1	3,627.6	3,399.3	27.3	24.6	172.05	-231.6	1,065.4	166.5	142.6	23.80	6.993		
3,700.0	3,418.3	3,727.6	3,489.7	28.3	25.5	171.94	-240.4	1,107.1	169.4	144.7	24.64	6.873		
3,800.0	3,507.4	3,827.6	3,580.0	29.3	26.4	171.84	-249.3	1,148.8	172.3	146.8	25.48	6.761		
3,900.0	3,596.6	3,927.5	3,670.4	30.3	27.4	171.74	-258.2	1,190.5	175.2	148.9	26.32	6.655		
4,000.0	3,685.8	4,027.5	3,760.8	31.3	28.3	171.64	-267.1	1,232.3	178.1	150.9	27.17	6.555		
4,100.0	3,775.0	4,127.4	3,851.2	32.3	29.2	171.54	-276.0	1,274.0	181.0	153.0	28.01	6.461		
4,200.0	3,864.2	4,227.4	3,941.6	33.3	30.2	171.45	-284.8	1,315.7	183.9	155.0	28.86	6.372		
4,300.0	3,953.4	4,327.3	4,032.0	34.3	31.1	171.36	-293.7	1,357.4	186.8	157.1	29.71	6.288		
4,400.0	4,042.6	4,427.3	4,122.4	35.3	32.0	171.28	-302.6	1,399.1	189.7	159.2	30.56	6.208		
4,500.0	4,131.8	4,527.3	4,212.8	36.3	32.9	171.20	-311.5	1,440.9	192.6	161.2	31.41	6.132		
4,600.0	4,221.0	4,627.2	4,303.2	37.3	33.9	171.11	-320.4	1,482.6	195.5	163.3	32.27	6.060		
4,700.0	4,310.2	4,727.2	4,393.6	38.3	34.8	171.04	-329.2	1,524.3	198.5	165.3	33.12	5.992		
4,800.0	4,399.4	4,827.1	4,484.0	39.3	35.7	170.96	-338.1	1,566.0	201.4	167.4	33.98	5.926		
4,900.0	4,488.6	4,927.1	4,574.4	40.3	36.7	170.89	-347.0	1,607.8	204.3	169.4	34.84	5.864		
5,000.0	4,577.8	5,027.0	4,664.8	41.3	37.6	170.81	-355.9	1,649.5	207.2	171.5	35.69	5.804		
5,100.0	4,667.0	5,127.0	4,755.2	42.3	38.5	170.75	-364.8	1,691.2	210.1	173.5	36.55	5.748		

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Markham 41-16-9NHZ
Project:	Sec.16-T4N-R68W	TVD Reference:	WELL @ 4976.0ft (RKB - 13')
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4976.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 41-16-9NHZ	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (3-31-14)	Offset TVD Reference:	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	
5,200.0	4,756.2	5,227.0	4,845.6	43.3	39.5	170.68	-373.6	1,732.9	213.0	175.6	37.42	5.693	
5,300.0	4,845.4	5,326.9	4,936.0	44.3	40.4	170.61	-382.5	1,774.6	215.9	177.7	38.28	5.641	
5,400.0	4,934.5	5,426.9	5,026.4	45.3	41.3	170.55	-391.4	1,816.4	218.8	179.7	39.14	5.591	
5,500.0	5,023.7	5,526.8	5,116.8	46.3	42.3	170.48	-400.3	1,858.1	221.8	181.8	40.00	5.543	
5,600.0	5,112.9	5,626.8	5,207.2	47.3	43.2	170.42	-409.2	1,899.8	224.7	183.8	40.87	5.497	
5,700.0	5,202.1	5,726.7	5,297.6	48.3	44.1	170.36	-418.0	1,941.5	227.6	185.9	41.73	5.453	
5,800.0	5,291.3	5,826.7	5,388.0	49.3	45.1	170.31	-426.9	1,983.2	230.5	187.9	42.60	5.411	
5,900.0	5,380.5	5,926.7	5,478.4	50.3	46.0	170.25	-435.8	2,025.0	233.4	189.9	43.47	5.370	
6,000.0	5,469.7	6,026.6	5,568.8	51.3	46.9	173.18	-444.7	2,066.7	236.3	192.0	44.34	5.330	
6,100.0	5,559.2	6,126.7	5,659.5	52.1	47.8	-171.76	-448.4	2,108.5	239.3	193.7	45.55	5.253	
6,200.0	5,647.7	6,227.4	5,750.4	52.9	48.5	-158.10	-438.2	2,150.5	242.3	195.7	46.57	5.203	
6,300.0	5,733.4	6,328.7	5,839.7	53.6	49.2	-147.31	-413.9	2,191.6	245.3	198.0	47.32	5.183	
6,400.0	5,814.8	6,430.8	5,925.6	54.2	49.7	-139.42	-375.6	2,231.2	248.2	200.4	47.81	5.192	
6,500.0	5,890.3	6,533.5	6,006.1	54.7	50.2	-133.83	-324.0	2,268.3	251.0	202.9	48.07	5.222	
6,600.0	5,958.3	6,636.8	6,079.5	55.1	50.7	-129.90	-259.8	2,302.0	253.5	205.4	48.17	5.263	
6,700.0	6,017.6	6,740.6	6,144.1	55.5	51.0	-127.14	-184.2	2,331.7	255.8	207.5	48.23	5.303	
6,800.0	6,066.9	6,844.9	6,198.3	55.7	51.3	-125.21	-98.8	2,356.6	257.7	209.3	48.39	5.325	
6,900.0	6,105.4	6,949.6	6,240.9	55.9	51.4	-123.89	-5.2	2,376.1	259.1	210.4	48.77	5.314	
7,000.0	6,132.3	7,054.6	6,270.6	56.1	51.6	-123.05	94.4	2,389.6	260.2	210.7	49.48	5.259	
7,100.0	6,147.1	7,159.6	6,286.9	56.1	51.7	-122.58	197.9	2,397.0	260.7	210.1	50.57	5.155	
7,200.0	6,150.0	7,263.1	6,290.0	56.2	51.7	-122.47	301.2	2,398.3	260.8	208.9	51.91	5.024	
7,300.0	6,150.0	7,363.1	6,290.0	56.2	51.8	-122.47	401.2	2,398.1	260.8	207.5	53.31	4.892	
7,400.0	6,150.0	7,463.1	6,290.0	56.3	51.9	-122.47	501.2	2,398.0	260.8	205.9	54.91	4.749	
7,500.0	6,150.0	7,563.1	6,290.0	56.5	52.0	-122.47	601.2	2,397.8	260.8	204.1	56.66	4.602	
7,600.0	6,150.0	7,663.1	6,290.0	56.6	52.2	-122.47	701.2	2,397.7	260.8	202.2	58.55	4.454	
7,700.0	6,150.0	7,763.1	6,290.0	56.8	52.5	-122.47	801.2	2,397.5	260.8	200.2	60.57	4.305	
7,800.0	6,150.0	7,863.1	6,290.0	57.1	52.8	-122.47	901.2	2,397.3	260.8	198.1	62.70	4.159	
7,900.0	6,150.0	7,963.1	6,290.0	57.4	53.1	-122.47	1,001.2	2,397.2	260.8	195.8	64.93	4.016	
8,000.0	6,150.0	8,063.1	6,290.0	57.8	53.6	-122.47	1,101.2	2,397.0	260.8	193.5	67.25	3.878	
8,100.0	6,150.0	8,163.1	6,290.0	58.2	54.0	-122.47	1,201.2	2,396.9	260.8	191.1	69.65	3.744	
8,200.0	6,150.0	8,263.1	6,290.0	58.6	54.6	-122.47	1,301.2	2,396.7	260.8	188.6	72.13	3.615	
8,300.0	6,150.0	8,363.1	6,290.0	59.1	55.2	-122.47	1,401.2	2,396.6	260.8	186.1	74.68	3.492	
8,400.0	6,150.0	8,463.1	6,290.0	59.7	55.8	-122.47	1,501.2	2,396.4	260.7	183.5	77.28	3.374	
8,500.0	6,150.0	8,563.1	6,290.0	60.3	56.6	-122.47	1,601.2	2,396.3	260.7	180.8	79.94	3.262	
8,600.0	6,150.0	8,663.1	6,290.0	61.0	57.4	-122.48	1,701.2	2,396.1	260.7	178.1	82.65	3.155	
8,700.0	6,150.0	8,763.1	6,290.0	61.8	58.2	-122.48	1,801.2	2,396.0	260.7	175.3	85.40	3.053	
8,800.0	6,150.0	8,863.1	6,290.0	62.6	59.1	-122.48	1,901.2	2,395.8	260.7	172.5	88.20	2.956	
8,900.0	6,150.0	8,963.1	6,290.0	63.5	60.1	-122.48	2,001.2	2,395.7	260.7	169.7	91.03	2.864	
9,000.0	6,150.0	9,063.1	6,290.0	64.4	61.2	-122.48	2,101.2	2,395.5	260.7	166.8	93.89	2.777	
9,100.0	6,150.0	9,163.1	6,290.0	65.4	62.3	-122.48	2,201.2	2,395.4	260.7	163.9	96.78	2.694	
9,200.0	6,150.0	9,263.1	6,290.0	66.4	63.4	-122.48	2,301.2	2,395.2	260.7	161.0	99.70	2.615	
9,300.0	6,150.0	9,363.1	6,290.0	67.5	64.7	-122.48	2,401.2	2,395.1	260.7	158.1	102.65	2.540	
9,400.0	6,150.0	9,463.1	6,290.0	68.7	65.9	-122.48	2,501.2	2,394.9	260.7	155.1	105.62	2.468	
9,500.0	6,150.0	9,563.1	6,290.0	69.9	67.2	-122.48	2,601.2	2,394.8	260.7	152.1	108.61	2.400	
9,600.0	6,150.0	9,663.1	6,290.0	71.1	68.6	-122.48	2,701.2	2,394.6	260.7	149.1	111.62	2.336	
9,700.0	6,150.0	9,763.1	6,290.0	72.4	69.9	-122.48	2,801.2	2,394.5	260.7	146.0	114.65	2.274	
9,800.0	6,150.0	9,863.1	6,290.0	73.7	71.4	-122.48	2,901.2	2,394.3	260.7	143.0	117.69	2.215	
9,900.0	6,150.0	9,963.1	6,290.0	75.1	72.8	-122.48	3,001.2	2,394.2	260.7	139.9	120.75	2.159	
10,000.0	6,150.0	10,063.1	6,290.0	76.4	74.3	-122.48	3,101.2	2,394.0	260.7	136.9	123.83	2.105	
10,100.0	6,150.0	10,163.1	6,290.0	77.9	75.8	-122.48	3,201.2	2,393.9	260.7	133.8	126.92	2.054	
10,200.0	6,150.0	10,263.1	6,290.0	79.3	77.3	-122.48	3,301.2	2,393.7	260.7	130.7	130.02	2.005	
10,300.0	6,150.0	10,363.1	6,290.0	80.8	78.9	-122.48	3,401.2	2,393.6	260.7	127.5	133.13	1.958	

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

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Markham 41-16-9NHZ
Project:	Sec.16-T4N-R68W	TVD Reference:	WELL @ 4976.0ft (RKB - 13')
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4976.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 41-16-9NHZ	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (3-31-14)	Offset TVD Reference:	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	
10,400.0	6,150.0	10,463.1	6,290.0	82.3	80.4	-122.49	3,501.2	2,393.4	260.7	124.4	136.25	1.913	
10,500.0	6,150.0	10,563.1	6,290.0	83.8	82.0	-122.49	3,601.2	2,393.2	260.7	121.3	139.38	1.870	
10,600.0	6,150.0	10,663.1	6,290.0	85.4	83.6	-122.49	3,701.2	2,393.1	260.7	118.1	142.52	1.829	
10,700.0	6,150.0	10,763.1	6,290.0	87.0	85.2	-122.49	3,801.2	2,392.9	260.7	115.0	145.67	1.789	
10,800.0	6,150.0	10,863.1	6,290.0	88.5	86.9	-122.49	3,901.2	2,392.8	260.7	111.8	148.83	1.751	
10,900.0	6,150.0	10,963.1	6,290.0	90.2	88.5	-122.49	4,001.2	2,392.6	260.6	108.7	151.99	1.715	
11,000.0	6,150.0	11,063.1	6,290.0	91.8	90.2	-122.49	4,101.2	2,392.5	260.6	105.5	155.16	1.680	
11,100.0	6,150.0	11,163.1	6,290.0	93.4	91.9	-122.49	4,201.2	2,392.3	260.6	102.3	158.34	1.646	
11,200.0	6,150.0	11,263.1	6,290.0	95.1	93.6	-122.49	4,301.2	2,392.2	260.6	99.1	161.53	1.614	
11,300.0	6,150.0	11,363.1	6,290.0	96.7	95.3	-122.49	4,401.2	2,392.0	260.6	95.9	164.72	1.582	
11,400.0	6,150.0	11,463.1	6,290.0	98.4	97.0	-122.49	4,501.2	2,391.9	260.6	92.7	167.92	1.552	
11,500.0	6,150.0	11,563.1	6,290.0	100.1	98.7	-122.49	4,601.2	2,391.7	260.6	89.5	171.12	1.523	
11,600.0	6,150.0	11,663.1	6,290.0	101.8	100.4	-122.49	4,701.2	2,391.6	260.6	86.3	174.32	1.495 Level 3	
11,700.0	6,150.0	11,763.1	6,290.0	103.5	102.2	-122.49	4,801.2	2,391.4	260.6	83.1	177.54	1.468 Level 3	
11,800.0	6,150.0	11,863.1	6,290.0	105.2	103.9	-122.49	4,901.2	2,391.3	260.6	79.9	180.75	1.442 Level 3	
11,900.0	6,150.0	11,963.1	6,290.0	106.9	105.7	-122.49	5,001.2	2,391.1	260.6	76.6	183.97	1.417 Level 3	
12,000.0	6,150.0	12,063.1	6,290.0	108.6	107.4	-122.49	5,101.2	2,391.0	260.6	73.4	187.20	1.392 Level 3	
12,100.0	6,150.0	12,163.1	6,290.0	110.4	109.2	-122.49	5,201.2	2,390.8	260.6	70.2	190.42	1.369 Level 3	
12,200.0	6,150.0	12,263.1	6,290.0	112.1	111.0	-122.50	5,301.2	2,390.7	260.6	66.9	193.66	1.346 Level 3	
12,300.0	6,150.0	12,363.1	6,290.0	113.9	112.7	-122.50	5,401.2	2,390.5	260.6	63.7	196.89	1.324 Level 3	
12,400.0	6,150.0	12,463.1	6,290.0	115.6	114.5	-122.50	5,501.2	2,390.4	260.6	60.5	200.13	1.302 Level 3	
12,500.0	6,150.0	12,563.1	6,290.0	117.4	116.3	-122.50	5,601.2	2,390.2	260.6	57.2	203.37	1.281 Level 3	
12,600.0	6,150.0	12,663.1	6,290.0	119.2	118.1	-122.50	5,701.2	2,390.1	260.6	54.0	206.61	1.261 Level 3	
12,700.0	6,150.0	12,763.1	6,290.0	120.9	119.9	-122.50	5,801.2	2,389.9	260.6	50.7	209.86	1.242 Level 2	
12,800.0	6,150.0	12,863.1	6,290.0	122.7	121.7	-122.50	5,901.2	2,389.8	260.6	47.5	213.11	1.223 Level 2	
12,900.0	6,150.0	12,963.1	6,290.0	124.5	123.5	-122.50	6,001.2	2,389.6	260.6	44.2	216.36	1.204 Level 2	
13,000.0	6,150.0	13,063.1	6,290.0	126.3	125.3	-122.50	6,101.2	2,389.4	260.6	40.9	219.62	1.186 Level 2	
13,100.0	6,150.0	13,163.1	6,290.0	128.1	127.1	-122.50	6,201.2	2,389.3	260.6	37.7	222.87	1.169 Level 2	
13,200.0	6,150.0	13,263.1	6,290.0	129.9	128.9	-122.50	6,301.2	2,389.1	260.6	34.4	226.13	1.152 Level 2	
13,300.0	6,150.0	13,363.1	6,290.0	131.7	130.8	-122.50	6,401.2	2,389.0	260.6	31.2	229.40	1.136 Level 2	
13,400.0	6,150.0	13,463.1	6,290.0	133.5	132.6	-122.50	6,501.2	2,388.8	260.5	27.9	232.66	1.120 Level 2	
13,500.0	6,150.0	13,563.1	6,290.0	135.3	134.4	-122.50	6,601.2	2,388.7	260.5	24.6	235.92	1.104 Level 2	
13,600.0	6,150.0	13,663.1	6,290.0	137.1	136.2	-122.50	6,701.2	2,388.5	260.5	21.4	239.19	1.089 Level 2	
13,700.0	6,150.0	13,763.1	6,290.0	138.9	138.1	-122.50	6,801.2	2,388.4	260.5	18.1	242.46	1.075 Level 2	
13,800.0	6,150.0	13,863.1	6,290.0	140.8	139.9	-122.50	6,901.2	2,388.2	260.5	14.8	245.73	1.060 Level 2	
13,900.0	6,150.0	13,963.1	6,290.0	142.6	141.7	-122.50	7,001.2	2,388.1	260.5	11.5	249.00	1.046 Level 2	
14,000.0	6,150.0	14,063.1	6,290.0	144.4	143.6	-122.51	7,101.2	2,387.9	260.5	8.2	252.28	1.033 Level 2	
14,100.0	6,150.0	14,163.1	6,290.0	146.2	145.4	-122.51	7,201.2	2,387.8	260.5	5.0	255.55	1.019 Level 2	
14,200.0	6,150.0	14,263.1	6,290.0	148.1	147.2	-122.51	7,301.2	2,387.6	260.5	1.7	258.83	1.007 Level 2	
14,224.3	6,150.0	14,287.4	6,290.0	148.5	147.7	-122.51	7,325.5	2,387.6	260.5	0.9	259.63	1.003 Level 2	
14,230.7	6,150.0	14,290.5	6,290.0	148.6	147.7	-122.51	7,328.5	2,387.6	260.5	0.8	259.78	1.003 Level 2, ES, SF	

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Markham 41-16-9NHZ
Project:	Sec.16-T4N-R68W	TVD Reference:	WELL @ 4976.0ft (RKB - 13')
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4976.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 41-16-9NHZ	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (3-31-14)	Offset TVD Reference:	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	-90.55	-1.1	-112.7	112.7					
100.0	100.0	100.0	100.0	0.1	0.1	-90.55	-1.1	-112.7	112.7	112.4	0.22	501.283		
200.0	200.0	200.0	200.0	0.3	0.3	-90.55	-1.1	-112.7	112.7	112.0	0.67	167.094 CC, ES		
300.0	300.0	300.0	300.0	0.6	0.6	168.56	-1.1	-112.7	114.4	113.3	1.12	102.365		
400.0	399.8	399.8	399.8	0.8	0.8	169.04	-1.1	-112.7	119.5	118.0	1.56	76.456		
500.0	499.5	499.5	499.5	1.0	1.0	169.75	-1.1	-112.7	128.1	126.1	2.02	63.493		
600.0	598.7	598.7	598.7	1.3	1.2	170.60	-1.1	-112.7	140.1	137.6	2.48	56.578		
700.0	697.5	697.5	697.5	1.6	1.5	171.49	-1.1	-112.7	155.6	152.6	2.94	52.936		
800.0	795.6	795.6	795.6	2.0	1.7	172.37	-1.1	-112.7	174.4	171.0	3.40	51.252		
900.0	893.1	893.1	893.1	2.5	1.9	173.19	-1.1	-112.7	196.8	192.9	3.87	50.825		
1,000.0	989.6	989.6	989.6	3.0	2.1	173.92	-1.1	-112.7	222.5	218.2	4.34	51.245		
1,100.0	1,085.3	1,085.3	1,085.3	3.6	2.3	174.57	-1.1	-112.7	251.6	246.8	4.81	52.258		
1,200.0	1,179.8	1,179.8	1,179.8	4.2	2.5	175.13	-1.1	-112.7	284.0	278.8	5.29	53.697		
1,300.0	1,273.2	1,282.1	1,282.1	5.0	2.8	175.62	-1.5	-111.5	318.7	313.0	5.76	55.296		
1,400.0	1,365.2	1,388.1	1,388.0	5.8	3.0	175.95	-3.0	-106.8	353.4	347.2	6.23	56.774		
1,500.0	1,455.8	1,495.6	1,495.1	6.6	3.2	176.13	-5.9	-98.2	388.0	381.3	6.70	57.910		
1,600.0	1,545.2	1,604.9	1,603.6	7.6	3.4	176.23	-10.1	-85.5	421.8	414.5	7.22	58.387		
1,700.0	1,634.4	1,716.9	1,714.1	8.5	3.7	176.22	-15.7	-68.5	452.3	444.5	7.80	57.994		
1,800.0	1,723.6	1,831.6	1,826.5	9.5	4.1	176.12	-22.9	-46.8	479.1	470.7	8.40	57.007		
1,900.0	1,812.8	1,948.6	1,940.1	10.5	4.5	175.92	-31.6	-20.3	502.1	493.0	9.04	55.526		
2,000.0	1,902.0	2,067.6	2,054.4	11.5	5.1	175.63	-42.0	11.1	521.1	511.4	9.72	53.630		
2,100.0	1,991.2	2,188.2	2,168.8	12.5	5.7	175.25	-54.1	47.6	536.1	525.6	10.42	51.436		
2,200.0	2,080.3	2,295.4	2,269.2	13.4	6.3	174.86	-65.9	83.1	547.8	536.7	11.13	49.201		
2,300.0	2,169.5	2,394.7	2,362.1	14.4	7.0	174.51	-76.9	116.3	559.4	547.5	11.84	47.233		
2,400.0	2,258.7	2,494.0	2,455.0	15.4	7.6	174.17	-87.8	149.5	570.9	558.3	12.57	45.433		
2,500.0	2,347.9	2,593.2	2,547.9	16.4	8.3	173.85	-98.8	182.7	582.5	569.2	13.30	43.787		
2,600.0	2,437.1	2,692.5	2,640.8	17.4	9.0	173.54	-109.8	215.9	594.0	580.0	14.05	42.279		
2,700.0	2,526.3	2,791.8	2,733.7	18.4	9.7	173.24	-120.8	249.1	605.6	590.8	14.81	40.894		
2,800.0	2,615.5	2,891.1	2,826.6	19.4	10.4	172.95	-131.8	282.3	617.3	601.7	15.58	39.619		
2,900.0	2,704.7	2,990.3	2,919.6	20.4	11.1	172.67	-142.8	315.5	628.9	612.5	16.36	38.443		
3,000.0	2,793.9	3,089.6	3,012.5	21.4	11.8	172.41	-153.8	348.7	640.5	623.4	17.15	37.355		
3,100.0	2,883.1	3,188.9	3,105.4	22.4	12.5	172.15	-164.8	381.9	652.2	634.2	17.94	36.348		
3,200.0	2,972.3	3,288.2	3,198.3	23.4	13.3	171.90	-175.7	415.1	663.8	645.1	18.75	35.412		
3,300.0	3,061.5	3,387.4	3,291.2	24.4	14.0	171.66	-186.7	448.3	675.5	656.0	19.56	34.542		
3,400.0	3,150.7	3,486.7	3,384.1	25.3	14.7	171.43	-197.7	481.5	687.2	666.8	20.37	33.730		
3,500.0	3,239.9	3,586.0	3,477.0	26.3	15.5	171.20	-208.7	514.7	698.9	677.7	21.20	32.972		
3,600.0	3,329.1	3,685.3	3,570.0	27.3	16.2	170.98	-219.7	547.9	710.6	688.6	22.03	32.263		
3,700.0	3,418.3	3,784.5	3,662.9	28.3	16.9	170.77	-230.7	581.1	722.3	699.5	22.86	31.597		
3,800.0	3,507.4	3,883.8	3,755.8	29.3	17.7	170.57	-241.7	614.3	734.1	710.4	23.70	30.972		
3,900.0	3,596.6	3,983.1	3,848.7	30.3	18.4	170.37	-252.7	647.5	745.8	721.3	24.55	30.384		
4,000.0	3,685.8	4,082.4	3,941.6	31.3	19.1	170.18	-263.6	680.7	757.6	732.2	25.40	29.830		
4,100.0	3,775.0	4,181.7	4,034.5	32.3	19.9	170.00	-274.6	713.9	769.3	743.1	26.25	29.307		
4,200.0	3,864.2	4,280.9	4,127.4	33.3	20.6	169.82	-285.6	747.1	781.1	754.0	27.11	28.813		
4,300.0	3,953.4	4,380.2	4,220.4	34.3	21.4	169.65	-296.6	780.3	792.9	764.9	27.97	28.345		
4,400.0	4,042.6	4,479.5	4,313.3	35.3	22.1	169.48	-307.6	813.4	804.6	775.8	28.84	27.902		
4,500.0	4,131.8	4,578.8	4,406.2	36.3	22.8	169.31	-318.6	846.6	816.4	786.7	29.71	27.481		
4,600.0	4,221.0	4,678.0	4,499.1	37.3	23.6	169.15	-329.6	879.8	828.2	797.6	30.58	27.082		
4,700.0	4,310.2	4,777.3	4,592.0	38.3	24.3	169.00	-340.6	913.0	840.0	808.6	31.46	26.702		
4,800.0	4,399.4	4,876.6	4,684.9	39.3	25.1	168.85	-351.5	946.2	851.8	819.5	32.34	26.340		
4,900.0	4,488.6	4,975.9	4,777.8	40.3	25.8	168.70	-362.5	979.4	863.6	830.4	33.22	25.995		
5,000.0	4,577.8	5,075.1	4,870.8	41.3	26.6	168.56	-373.5	1,012.6	875.4	841.3	34.11	25.665		
5,100.0	4,667.0	5,174.4	4,963.7	42.3	27.3	168.42	-384.5	1,045.8	887.3	852.3	35.00	25.351		

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

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Markham 41-16-9NHZ
Project:	Sec.16-T4N-R68W	TVD Reference:	WELL @ 4976.0ft (RKB - 13')
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4976.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 41-16-9NHZ	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (3-31-14)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
SRC Markham Pad Sec.16-T4N-R68W - SRC Markham C-16-9CHZ - Wellbore #1 - Plan #1 (3-31-14)												Offset Well Error:	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	4,756.2	5,273.7	5,056.6	43.3	28.1	168.28	-395.5	1,079.0	899.1	863.2	35.89	25.050	
5,300.0	4,845.4	5,373.0	5,149.5	44.3	28.8	168.15	-406.5	1,112.2	910.9	874.1	36.79	24.762	
5,400.0	4,934.5	5,472.2	5,242.4	45.3	29.6	168.02	-417.5	1,145.4	922.7	885.1	37.68	24.487	
5,500.0	5,023.7	5,571.5	5,335.3	46.3	30.3	167.90	-428.4	1,178.6	934.6	896.0	38.58	24.222	
5,600.0	5,112.9	5,670.8	5,428.2	47.3	31.1	167.78	-439.4	1,211.8	946.4	906.9	39.49	23.969	
5,700.0	5,202.1	5,770.1	5,521.2	48.3	31.8	167.66	-450.4	1,245.0	958.3	917.9	40.39	23.725	
5,800.0	5,291.3	5,872.7	5,617.5	49.3	32.5	167.82	-457.1	1,279.4	970.0	928.9	41.08	23.614 SF	
5,900.0	5,380.5	5,973.5	5,712.1	50.3	33.0	168.79	-449.7	1,313.2	981.4	940.3	41.18	23.832	
6,000.0	5,469.7	6,068.1	5,799.2	51.3	33.5	173.58	-429.9	1,344.3	993.3	952.5	40.78	24.357	

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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
0.0	0.0	0.0	0.0	0.0	0.0	-90.46	-0.7	-90.1	90.1					
100.0	100.0	100.0	100.0	0.1	0.1	-90.46	-0.7	-90.1	90.1	89.9	0.22	400.772		
200.0	200.0	200.0	200.0	0.3	0.3	-90.46	-0.7	-90.1	90.1	89.4	0.67	133.591	CC, ES	
300.0	300.0	300.0	300.0	0.6	0.6	168.70	-0.7	-90.1	91.8	90.7	1.12	82.147		
400.0	399.8	399.8	399.8	0.8	0.8	169.29	-0.7	-90.1	96.9	95.4	1.56	62.006		
500.0	499.5	499.5	499.5	1.0	1.0	170.14	-0.7	-90.1	105.5	103.5	2.02	52.302		
600.0	598.7	598.7	598.7	1.3	1.2	171.12	-0.7	-90.1	117.5	115.1	2.48	47.471		
700.0	697.5	697.5	697.5	1.6	1.5	172.12	-0.7	-90.1	133.0	130.1	2.94	45.277		
800.0	795.6	795.6	795.6	2.0	1.7	173.06	-0.7	-90.1	151.9	148.5	3.40	44.657		
900.0	893.1	893.1	893.1	2.5	1.9	173.90	-0.7	-90.1	174.3	170.4	3.87	45.044		
1,000.0	989.6	989.6	989.6	3.0	2.1	174.64	-0.7	-90.1	200.1	195.7	4.34	46.107		
1,100.0	1,085.3	1,092.5	1,092.5	3.6	2.3	175.25	-1.1	-88.6	227.8	223.0	4.80	47.445		
1,200.0	1,179.8	1,197.3	1,197.2	4.2	2.5	175.66	-2.6	-83.6	255.5	250.3	5.25	48.666		
1,300.0	1,273.2	1,303.3	1,302.7	5.0	2.8	175.90	-5.2	-74.7	283.1	277.4	5.72	49.529		
1,400.0	1,365.2	1,410.4	1,409.0	5.8	3.0	176.03	-9.0	-61.9	310.5	304.3	6.20	50.075		
1,500.0	1,455.8	1,518.7	1,515.9	6.6	3.3	176.07	-13.9	-45.1	337.7	331.0	6.71	50.350		
1,600.0	1,545.2	1,628.5	1,623.4	7.6	3.7	176.05	-20.0	-24.2	364.1	356.8	7.27	50.096		
1,700.0	1,634.4	1,740.3	1,732.1	8.5	4.1	175.95	-27.5	1.2	387.1	379.2	7.88	49.098		
1,800.0	1,723.6	1,854.0	1,841.4	9.5	4.6	175.76	-36.3	31.2	406.3	397.8	8.54	47.605		
1,900.0	1,812.8	1,969.2	1,950.8	10.5	5.2	175.48	-46.4	65.8	421.7	412.4	9.22	45.749		
2,000.0	1,902.0	2,085.6	2,059.8	11.5	6.0	175.12	-57.9	105.0	433.1	423.1	9.94	43.548		
2,100.0	1,991.2	2,192.0	2,158.2	12.5	6.7	174.72	-69.3	143.9	441.2	430.6	10.67	41.334		
2,200.0	2,080.3	2,291.7	2,250.2	13.4	7.4	174.36	-80.1	180.7	449.1	437.7	11.41	39.376		
2,300.0	2,169.5	2,391.3	2,342.2	14.4	8.2	174.02	-90.9	217.5	457.0	444.9	12.15	37.609		
2,400.0	2,258.7	2,491.0	2,434.1	15.4	9.0	173.68	-101.7	254.2	465.0	452.0	12.91	36.008		
2,500.0	2,347.9	2,590.6	2,526.1	16.4	9.7	173.35	-112.4	291.0	472.9	459.2	13.69	34.555		
2,600.0	2,437.1	2,690.3	2,618.1	17.4	10.5	173.04	-123.2	327.8	480.8	466.4	14.47	33.232		
2,700.0	2,526.3	2,789.9	2,710.1	18.4	11.3	172.73	-134.0	364.6	488.8	473.5	15.26	32.023		
2,800.0	2,615.5	2,889.6	2,802.1	19.4	12.1	172.44	-144.8	401.3	496.8	480.7	16.07	30.916		
2,900.0	2,704.7	2,989.2	2,894.1	20.4	12.9	172.15	-155.6	438.1	504.8	487.9	16.88	29.898		
3,000.0	2,793.9	3,088.9	2,986.1	21.4	13.7	171.88	-166.3	474.9	512.8	495.1	17.71	28.961		
3,100.0	2,883.1	3,188.5	3,078.0	22.4	14.5	171.61	-177.1	511.7	520.8	502.3	18.54	28.095		
3,200.0	2,972.3	3,288.2	3,170.0	23.4	15.3	171.35	-187.9	548.4	528.8	509.5	19.38	27.292		
3,300.0	3,061.5	3,387.8	3,262.0	24.4	16.1	171.10	-198.7	585.2	536.9	516.6	20.22	26.548		
3,400.0	3,150.7	3,487.5	3,354.0	25.3	17.0	170.85	-209.5	622.0	544.9	523.8	21.08	25.855		
3,500.0	3,239.9	3,587.1	3,446.0	26.3	17.8	170.62	-220.3	658.7	553.0	531.0	21.94	25.209		
3,600.0	3,329.1	3,686.8	3,538.0	27.3	18.6	170.38	-231.0	695.5	561.0	538.2	22.80	24.605		
3,700.0	3,418.3	3,786.4	3,630.0	28.3	19.4	170.16	-241.8	732.3	569.1	545.4	23.67	24.039		
3,800.0	3,507.4	3,886.1	3,721.9	29.3	20.2	169.94	-252.6	769.1	577.2	552.7	24.55	23.509		
3,900.0	3,596.6	3,985.7	3,813.9	30.3	21.0	169.73	-263.4	805.8	585.3	559.9	25.44	23.010		
4,000.0	3,685.8	4,085.4	3,905.9	31.3	21.9	169.52	-274.2	842.6	593.4	567.1	26.33	22.541		
4,100.0	3,775.0	4,185.0	3,997.9	32.3	22.7	169.32	-284.9	879.4	601.5	574.3	27.22	22.099		
4,200.0	3,864.2	4,284.7	4,089.9	33.3	23.5	169.13	-295.7	916.2	609.6	581.5	28.12	21.681		
4,300.0	3,953.4	4,384.3	4,181.9	34.3	24.3	168.94	-306.5	952.9	617.7	588.7	29.02	21.286		
4,400.0	4,042.6	4,484.0	4,273.9	35.3	25.2	168.75	-317.3	989.7	625.9	595.9	29.93	20.911		
4,500.0	4,131.8	4,583.6	4,365.8	36.3	26.0	168.57	-328.1	1,026.5	634.0	603.2	30.84	20.556		
4,600.0	4,221.0	4,683.3	4,457.8	37.3	26.8	168.40	-338.8	1,063.3	642.1	610.4	31.76	20.219		
4,700.0	4,310.2	4,782.9	4,549.8	38.3	27.6	168.23	-349.6	1,100.0	650.3	617.6	32.68	19.899		
4,800.0	4,399.4	4,882.6	4,641.8	39.3	28.5	168.06	-360.4	1,136.8	658.4	624.8	33.60	19.594		
4,900.0	4,488.6	4,982.2	4,733.8	40.3	29.3	167.90	-371.2	1,173.6	666.6	632.1	34.53	19.304		
5,000.0	4,577.8	5,081.9	4,825.8	41.3	30.1	167.74	-382.0	1,210.4	674.8	639.3	35.46	19.027		
5,100.0	4,667.0	5,181.5	4,917.8	42.3	30.9	167.58	-392.8	1,247.1	682.9	646.5	36.40	18.762		

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Markham 41-16-9NHZ
Project:	Sec.16-T4N-R68W	TVD Reference:	WELL @ 4976.0ft (RKB - 13')
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4976.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 41-16-9NHZ	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (3-31-14)	Offset TVD Reference:	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		
5,200.0	4,756.2	5,281.2	5,009.7	43.3	31.8	167.43	-403.5	1,283.9	691.1	653.8	37.34	18.509		
5,300.0	4,845.4	5,380.8	5,101.7	44.3	32.6	167.28	-414.3	1,320.7	699.3	661.0	38.28	18.267		
5,400.0	4,934.5	5,480.4	5,193.7	45.3	33.4	167.14	-425.1	1,357.5	707.5	668.2	39.23	18.036		
5,500.0	5,023.7	5,580.1	5,285.7	46.3	34.2	167.00	-435.9	1,394.2	715.6	675.5	40.17	17.814		
5,600.0	5,112.9	5,679.7	5,377.7	47.3	35.1	166.86	-446.7	1,431.0	723.8	682.7	41.12	17.601		
5,700.0	5,202.1	5,782.6	5,472.8	48.3	35.8	166.95	-454.8	1,469.0	731.9	690.0	41.90	17.467		
5,800.0	5,291.3	5,885.2	5,567.9	49.3	36.5	168.10	-449.3	1,507.0	739.5	697.6	41.90	17.649		
5,900.0	5,380.5	5,981.9	5,656.0	50.3	37.0	170.17	-430.7	1,542.2	747.3	706.0	41.31	18.089		
6,000.0	5,469.7	6,070.2	5,733.7	51.3	37.4	175.99	-402.8	1,573.2	756.9	716.4	40.50	18.689		
6,100.0	5,559.2	6,152.8	5,803.0	52.1	37.8	-164.53	-367.5	1,600.8	768.7	728.8	39.86	19.286		
6,200.0	5,647.7	6,232.3	5,865.8	52.9	38.1	-146.64	-325.6	1,625.9	782.1	742.2	39.96	19.575		
6,300.0	5,733.4	6,309.4	5,922.1	53.6	38.3	-131.90	-278.2	1,648.3	796.5	755.9	40.63	19.604		
6,400.0	5,814.8	6,384.3	5,972.1	54.2	38.5	-120.41	-226.0	1,668.2	811.2	769.7	41.57	19.515		
6,500.0	5,890.3	6,457.7	6,015.8	54.7	38.6	-111.59	-169.8	1,685.6	825.6	783.2	42.45	19.451		
6,600.0	5,958.3	6,529.7	6,053.4	55.1	38.7	-104.85	-110.2	1,700.5	839.1	796.1	43.04	19.495		
6,700.0	6,017.6	6,600.0	6,084.5	55.5	38.8	-99.72	-48.4	1,712.8	851.2	808.0	43.26	19.678		
6,800.0	6,066.9	6,670.9	6,110.0	55.7	38.9	-95.85	16.9	1,722.9	861.6	818.4	43.20	19.945		
6,900.0	6,105.4	6,740.4	6,129.1	55.9	39.0	-93.07	83.3	1,730.4	869.8	826.8	42.99	20.232		
7,000.0	6,132.3	6,809.5	6,142.0	56.1	39.0	-91.22	151.0	1,735.5	875.7	832.8	42.92	20.403		
7,100.0	6,147.1	6,878.3	6,148.8	56.1	39.1	-90.22	219.4	1,738.1	879.1	835.9	43.17	20.362		
7,200.0	6,150.0	6,959.1	6,150.0	56.2	39.1	-90.00	300.2	1,738.4	879.9	835.9	43.95	20.021		
7,300.0	6,150.0	7,059.1	6,150.0	56.2	39.2	-90.00	400.2	1,738.3	879.9	834.6	45.27	19.434		
7,400.0	6,150.0	7,159.1	6,150.0	56.3	39.4	-90.00	500.2	1,738.1	879.9	832.9	46.93	18.749		
7,500.0	6,150.0	7,259.1	6,150.0	56.5	39.6	-90.00	600.2	1,738.0	879.8	831.0	48.83	18.019		
7,600.0	6,150.0	7,359.1	6,150.0	56.6	40.0	-90.00	700.2	1,737.8	879.8	828.9	50.95	17.269		
7,700.0	6,150.0	7,459.1	6,150.0	56.8	40.4	-90.00	800.2	1,737.7	879.8	826.6	53.26	16.519		
7,800.0	6,150.0	7,559.1	6,150.0	57.1	40.8	-90.00	900.2	1,737.5	879.8	824.1	55.74	15.783		
7,900.0	6,150.0	7,659.1	6,150.0	57.4	41.4	-90.00	1,000.2	1,737.4	879.8	821.5	58.37	15.073		
8,000.0	6,150.0	7,759.1	6,150.0	57.8	42.1	-90.00	1,100.2	1,737.2	879.8	818.7	61.13	14.393		
8,100.0	6,150.0	7,859.1	6,150.0	58.2	42.9	-90.00	1,200.2	1,737.1	879.8	815.8	64.00	13.748		
8,200.0	6,150.0	7,959.1	6,150.0	58.6	43.7	-90.00	1,300.2	1,736.9	879.8	812.9	66.96	13.139		
8,300.0	6,150.0	8,059.1	6,150.0	59.1	44.7	-90.00	1,400.2	1,736.7	879.8	809.8	70.01	12.566		
8,400.0	6,150.0	8,159.1	6,150.0	59.7	45.7	-90.00	1,500.2	1,736.6	879.8	806.7	73.14	12.029		
8,500.0	6,150.0	8,259.1	6,150.0	60.3	46.8	-90.00	1,600.2	1,736.4	879.8	803.5	76.33	11.526		
8,600.0	6,150.0	8,359.1	6,150.0	61.0	48.0	-90.00	1,700.2	1,736.3	879.8	800.2	79.58	11.056		
8,700.0	6,150.0	8,459.1	6,150.0	61.8	49.2	-90.00	1,800.2	1,736.1	879.8	796.9	82.88	10.616		
8,800.0	6,150.0	8,559.1	6,150.0	62.6	50.5	-90.00	1,900.2	1,736.0	879.8	793.6	86.22	10.204		
8,900.0	6,150.0	8,659.1	6,150.0	63.5	51.9	-90.00	2,000.2	1,735.8	879.8	790.2	89.60	9.819		
9,000.0	6,150.0	8,759.1	6,150.0	64.4	53.3	-90.00	2,100.2	1,735.7	879.8	786.8	93.02	9.458		
9,100.0	6,150.0	8,859.1	6,150.0	65.4	54.7	-90.00	2,200.2	1,735.5	879.8	783.3	96.47	9.120		
9,200.0	6,150.0	8,959.1	6,150.0	66.4	56.2	-90.00	2,300.2	1,735.4	879.8	779.8	99.95	8.802		
9,300.0	6,150.0	9,059.1	6,150.0	67.5	57.7	-90.00	2,400.2	1,735.2	879.8	776.3	103.45	8.504		
9,400.0	6,150.0	9,159.1	6,150.0	68.7	59.2	-90.00	2,500.2	1,735.1	879.8	772.8	106.98	8.224		
9,500.0	6,150.0	9,259.1	6,150.0	69.9	60.8	-90.00	2,600.2	1,734.9	879.8	769.3	110.53	7.960		
9,600.0	6,150.0	9,359.1	6,150.0	71.1	62.4	-90.00	2,700.2	1,734.8	879.8	765.7	114.10	7.711		
9,700.0	6,150.0	9,459.1	6,150.0	72.4	64.0	-90.00	2,800.2	1,734.6	879.8	762.1	117.68	7.476		
9,800.0	6,150.0	9,559.1	6,150.0	73.7	65.6	-90.00	2,900.2	1,734.4	879.8	758.5	121.28	7.254		
9,900.0	6,150.0	9,659.1	6,150.0	75.1	67.3	-90.00	3,000.2	1,734.3	879.8	754.9	124.89	7.044		
10,000.0	6,150.0	9,759.1	6,150.0	76.4	69.0	-90.00	3,100.2	1,734.1	879.8	751.2	128.52	6.845		
10,100.0	6,150.0	9,859.1	6,150.0	77.9	70.7	-90.00	3,200.2	1,734.0	879.8	747.6	132.16	6.657		
10,200.0	6,150.0	9,959.1	6,150.0	79.3	72.4	-90.00	3,300.2	1,733.8	879.8	744.0	135.81	6.478		
10,300.0	6,150.0	10,059.1	6,150.0	80.8	74.1	-90.00	3,400.2	1,733.7	879.8	740.3	139.47	6.308		

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

Survey Design SRC Markham Pad Sec.16-T4N-R68W - SRC Markham C-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)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
10,400.0	6,150.0	10,159.1	6,150.0	82.3	75.8	-90.00	3,500.2	1,733.5	879.8	736.6	143.14	6.146	
10,500.0	6,150.0	10,259.1	6,150.0	83.8	77.5	-90.00	3,600.2	1,733.4	879.8	732.9	146.82	5.992	
10,600.0	6,150.0	10,359.1	6,150.0	85.4	79.3	-90.00	3,700.2	1,733.2	879.8	729.2	150.51	5.845	
10,700.0	6,150.0	10,459.1	6,150.0	87.0	81.0	-90.00	3,800.2	1,733.1	879.7	725.5	154.20	5.705	
10,800.0	6,150.0	10,559.1	6,150.0	88.5	82.8	-90.00	3,900.2	1,732.9	879.7	721.8	157.91	5.571	
10,900.0	6,150.0	10,659.1	6,150.0	90.2	84.5	-90.00	4,000.2	1,732.8	879.7	718.1	161.61	5.443	
11,000.0	6,150.0	10,759.1	6,150.0	91.8	86.3	-90.00	4,100.2	1,732.6	879.7	714.4	165.33	5.321	
11,100.0	6,150.0	10,859.1	6,150.0	93.4	88.1	-90.00	4,200.2	1,732.4	879.7	710.7	169.05	5.204	
11,200.0	6,150.0	10,959.1	6,150.0	95.1	89.9	-90.00	4,300.2	1,732.3	879.7	707.0	172.77	5.092	
11,300.0	6,150.0	11,059.1	6,150.0	96.7	91.7	-90.00	4,400.2	1,732.1	879.7	703.2	176.50	4.984	
11,400.0	6,150.0	11,159.1	6,150.0	98.4	93.5	-90.00	4,500.2	1,732.0	879.7	699.5	180.24	4.881	
11,500.0	6,150.0	11,259.1	6,150.0	100.1	95.3	-90.00	4,600.2	1,731.8	879.7	695.7	183.98	4.782	
11,600.0	6,150.0	11,359.1	6,150.0	101.8	97.1	-90.00	4,700.2	1,731.7	879.7	692.0	187.72	4.686	
11,700.0	6,150.0	11,459.1	6,150.0	103.5	98.9	-90.00	4,800.2	1,731.5	879.7	688.3	191.47	4.595	
11,800.0	6,150.0	11,559.1	6,150.0	105.2	100.7	-90.00	4,900.2	1,731.4	879.7	684.5	195.22	4.506	
11,900.0	6,150.0	11,659.1	6,150.0	106.9	102.5	-90.00	5,000.2	1,731.2	879.7	680.7	198.97	4.421	
12,000.0	6,150.0	11,759.1	6,150.0	108.6	104.4	-90.00	5,100.2	1,731.1	879.7	677.0	202.73	4.339	
12,100.0	6,150.0	11,859.1	6,150.0	110.4	106.2	-90.00	5,200.2	1,730.9	879.7	673.2	206.49	4.260	
12,200.0	6,150.0	11,959.1	6,150.0	112.1	108.0	-90.00	5,300.2	1,730.8	879.7	669.4	210.26	4.184	
12,300.0	6,150.0	12,059.1	6,150.0	113.9	109.8	-90.00	5,400.2	1,730.6	879.7	665.7	214.02	4.110	
12,400.0	6,150.0	12,159.1	6,150.0	115.6	111.7	-90.00	5,500.2	1,730.5	879.7	661.9	217.79	4.039	
12,500.0	6,150.0	12,259.1	6,150.0	117.4	113.5	-90.00	5,600.2	1,730.3	879.7	658.1	221.56	3.970	
12,600.0	6,150.0	12,359.1	6,150.0	119.2	115.4	-90.00	5,700.2	1,730.1	879.7	654.4	225.34	3.904	
12,700.0	6,150.0	12,459.1	6,150.0	120.9	117.2	-90.00	5,800.2	1,730.0	879.7	650.6	229.11	3.840	
12,800.0	6,150.0	12,559.1	6,150.0	122.7	119.1	-90.00	5,900.2	1,729.8	879.7	646.8	232.89	3.777	
12,900.0	6,150.0	12,659.1	6,150.0	124.5	120.9	-90.00	6,000.2	1,729.7	879.7	643.0	236.67	3.717	
13,000.0	6,150.0	12,759.1	6,150.0	126.3	122.8	-90.00	6,100.2	1,729.5	879.7	639.2	240.45	3.658	
13,100.0	6,150.0	12,859.1	6,150.0	128.1	124.6	-90.00	6,200.2	1,729.4	879.7	635.4	244.24	3.602	
13,200.0	6,150.0	12,959.1	6,150.0	129.9	126.5	-90.00	6,300.2	1,729.2	879.7	631.7	248.02	3.547	
13,300.0	6,150.0	13,059.1	6,150.0	131.7	128.3	-90.00	6,400.2	1,729.1	879.7	627.9	251.81	3.493	
13,400.0	6,150.0	13,159.1	6,150.0	133.5	130.2	-90.00	6,500.2	1,728.9	879.7	624.1	255.60	3.442	
13,500.0	6,150.0	13,259.1	6,150.0	135.3	132.1	-90.00	6,600.2	1,728.8	879.7	620.3	259.39	3.391	
13,600.0	6,150.0	13,359.1	6,150.0	137.1	133.9	-90.00	6,700.2	1,728.6	879.7	616.5	263.18	3.342	
13,700.0	6,150.0	13,459.1	6,150.0	138.9	135.8	-90.00	6,800.2	1,728.5	879.7	612.7	266.97	3.295	
13,800.0	6,150.0	13,559.1	6,150.0	140.8	137.7	-90.00	6,900.2	1,728.3	879.7	608.9	270.77	3.249	
13,900.0	6,150.0	13,659.1	6,150.0	142.6	139.5	-90.00	7,000.2	1,728.1	879.7	605.1	274.56	3.204	
14,000.0	6,150.0	13,759.1	6,150.0	144.4	141.4	-90.00	7,100.2	1,728.0	879.6	601.3	278.36	3.160	
14,100.0	6,150.0	13,859.1	6,150.0	146.2	143.3	-90.00	7,200.2	1,727.8	879.6	597.5	282.16	3.118	
14,200.0	6,150.0	13,959.1	6,150.0	148.1	145.1	-90.00	7,300.2	1,727.7	879.6	593.7	285.96	3.076	
14,217.1	6,150.0	13,976.3	6,150.0	148.4	145.5	-90.00	7,317.3	1,727.7	879.6	593.0	286.61	3.069	
14,230.7	6,150.0	13,976.5	6,150.0	148.6	145.5	-90.00	7,317.6	1,727.7	879.7	592.9	286.87	3.067 SF	

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Markham 41-16-9NHZ
Project:	Sec.16-T4N-R68W	TVD Reference:	WELL @ 4976.0ft (RKB - 13')
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4976.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 41-16-9NHZ	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (3-31-14)	Offset TVD Reference:	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	-90.62	-0.7	-67.5	67.5					
100.0	100.0	100.0	100.0	0.1	0.1	-90.62	-0.7	-67.5	67.5	67.3	0.22	300.277		
200.0	200.0	200.0	200.0	0.3	0.3	-90.62	-0.7	-67.5	67.5	66.8	0.67	100.092 CC, ES		
300.0	300.0	300.0	300.0	0.6	0.6	168.61	-0.7	-67.5	69.2	68.1	1.12	61.932		
400.0	399.8	399.8	399.8	0.8	0.8	169.39	-0.7	-67.5	74.3	72.8	1.56	47.556		
500.0	499.5	499.5	499.5	1.0	1.0	170.47	-0.7	-67.5	82.9	80.9	2.02	41.109		
600.0	598.7	598.7	598.7	1.3	1.2	171.65	-0.7	-67.5	95.0	92.5	2.48	38.361		
700.0	697.5	697.5	697.5	1.6	1.5	172.79	-0.7	-67.5	110.5	107.5	2.94	37.612		
800.0	795.6	795.6	795.6	2.0	1.7	173.81	-0.7	-67.5	129.4	126.0	3.40	38.055		
900.0	893.1	898.2	898.1	2.5	1.9	174.63	-1.2	-65.9	150.2	146.4	3.85	38.994		
1,000.0	989.6	1,001.7	1,001.5	3.0	2.1	175.17	-2.5	-60.6	171.0	166.7	4.29	39.841		
1,100.0	1,085.3	1,106.1	1,105.5	3.6	2.3	175.52	-4.8	-51.7	191.6	186.9	4.75	40.364		
1,200.0	1,179.8	1,211.3	1,209.9	4.2	2.6	175.73	-8.1	-39.0	212.2	206.9	5.22	40.626		
1,300.0	1,273.2	1,317.4	1,314.6	5.0	2.9	175.84	-12.4	-22.4	232.5	226.8	5.72	40.669		
1,400.0	1,365.2	1,424.3	1,419.4	5.8	3.3	175.88	-17.8	-1.9	252.7	246.4	6.23	40.527		
1,500.0	1,455.8	1,532.1	1,524.2	6.6	3.7	175.85	-24.1	22.6	272.6	265.8	6.78	40.223		
1,600.0	1,545.2	1,640.9	1,628.9	7.6	4.2	175.77	-31.5	51.1	291.7	284.3	7.38	39.531		
1,700.0	1,634.4	1,751.1	1,733.7	8.5	4.8	175.62	-40.1	83.9	307.4	299.4	8.05	38.195		
1,800.0	1,723.6	1,862.4	1,838.2	9.5	5.5	175.38	-49.7	121.0	319.4	310.6	8.73	36.577		
1,900.0	1,812.8	1,972.6	1,940.1	10.5	6.3	175.06	-60.2	161.5	327.5	318.1	9.46	34.613		
2,000.0	1,902.0	2,072.3	2,031.9	11.5	7.0	174.75	-70.1	199.4	334.3	324.1	10.18	32.829		
2,100.0	1,991.2	2,172.1	2,123.6	12.5	7.8	174.45	-79.9	237.4	341.1	330.2	10.92	31.237		
2,200.0	2,080.3	2,271.8	2,215.3	13.4	8.6	174.16	-89.8	275.3	348.0	336.3	11.67	29.816		
2,300.0	2,169.5	2,371.6	2,307.1	14.4	9.4	173.88	-99.6	313.2	354.8	342.4	12.43	28.541		
2,400.0	2,258.7	2,471.3	2,398.8	15.4	10.2	173.61	-109.5	351.1	361.6	348.4	13.20	27.392		
2,500.0	2,347.9	2,571.1	2,490.5	16.4	11.1	173.35	-119.3	389.0	368.5	354.5	13.98	26.354		
2,600.0	2,437.1	2,670.8	2,582.3	17.4	11.9	173.11	-129.2	427.0	375.3	360.5	14.77	25.411		
2,700.0	2,526.3	2,770.6	2,674.0	18.4	12.7	172.87	-139.0	464.9	382.2	366.6	15.57	24.552		
2,800.0	2,615.5	2,870.3	2,765.7	19.4	13.5	172.64	-148.9	502.8	389.0	372.7	16.37	23.767		
2,900.0	2,704.7	2,970.1	2,857.5	20.4	14.4	172.41	-158.7	540.7	395.9	378.7	17.18	23.047		
3,000.0	2,793.9	3,069.8	2,949.2	21.4	15.2	172.20	-168.6	578.7	402.8	384.8	17.99	22.384		
3,100.0	2,883.1	3,169.6	3,040.9	22.4	16.0	171.99	-178.5	616.6	409.7	390.8	18.82	21.773		
3,200.0	2,972.3	3,269.3	3,132.7	23.4	16.9	171.79	-188.3	654.5	416.6	396.9	19.64	21.207		
3,300.0	3,061.5	3,369.1	3,224.4	24.4	17.7	171.60	-198.2	692.4	423.4	403.0	20.47	20.682		
3,400.0	3,150.7	3,468.8	3,316.1	25.3	18.5	171.41	-208.0	730.4	430.3	409.0	21.31	20.193		
3,500.0	3,239.9	3,568.6	3,407.9	26.3	19.4	171.23	-217.9	768.3	437.2	415.1	22.15	19.737		
3,600.0	3,329.1	3,668.4	3,499.6	27.3	20.2	171.05	-227.7	806.2	444.1	421.1	23.00	19.312		
3,700.0	3,418.3	3,768.1	3,591.3	28.3	21.1	170.88	-237.6	844.1	451.1	427.2	23.85	18.913		
3,800.0	3,507.4	3,867.9	3,683.1	29.3	21.9	170.71	-247.4	882.1	458.0	433.3	24.70	18.539		
3,900.0	3,596.6	3,967.6	3,774.8	30.3	22.8	170.55	-257.3	920.0	464.9	439.3	25.56	18.188		
4,000.0	3,685.8	4,067.4	3,866.5	31.3	23.6	170.40	-267.1	957.9	471.8	445.4	26.42	17.857		
4,100.0	3,775.0	4,167.1	3,958.3	32.3	24.4	170.24	-277.0	995.8	478.7	451.4	27.29	17.545		
4,200.0	3,864.2	4,266.9	4,050.0	33.3	25.3	170.10	-286.8	1,033.7	485.6	457.5	28.15	17.250		
4,300.0	3,953.4	4,366.6	4,141.7	34.3	26.1	169.95	-296.7	1,071.7	492.6	463.6	29.02	16.971		
4,400.0	4,042.6	4,466.4	4,233.5	35.3	27.0	169.81	-306.5	1,109.6	499.5	469.6	29.90	16.707		
4,500.0	4,131.8	4,566.1	4,325.2	36.3	27.8	169.68	-316.4	1,147.5	506.4	475.7	30.78	16.456		
4,600.0	4,221.0	4,665.9	4,416.9	37.3	28.7	169.55	-326.2	1,185.4	513.4	481.7	31.66	16.218		
4,700.0	4,310.2	4,765.6	4,508.7	38.3	29.5	169.42	-336.1	1,223.4	520.3	487.8	32.54	15.991		
4,800.0	4,399.4	4,865.4	4,600.4	39.3	30.4	169.29	-345.9	1,261.3	527.3	493.8	33.42	15.776		
4,900.0	4,488.6	4,965.1	4,692.2	40.3	31.2	169.17	-355.8	1,299.2	534.2	499.9	34.31	15.570		
5,000.0	4,577.8	5,064.9	4,783.9	41.3	32.1	169.05	-365.7	1,337.1	541.2	506.0	35.20	15.374		
5,100.0	4,667.0	5,164.6	4,875.6	42.3	32.9	168.94	-375.5	1,375.1	548.1	512.0	36.09	15.186		

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

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Markham 41-16-9NHZ
Project:	Sec.16-T4N-R68W	TVD Reference:	WELL @ 4976.0ft (RKB - 13')
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4976.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 41-16-9NHZ	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (3-31-14)	Offset TVD Reference:	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	
5,200.0	4,756.2	5,264.4	4,967.4	43.3	33.7	168.82	-385.4	1,413.0	555.1	518.1	36.99	15.007	
5,300.0	4,845.4	5,364.1	5,059.1	44.3	34.6	168.71	-395.2	1,450.9	562.0	524.1	37.88	14.835	
5,400.0	4,934.5	5,463.9	5,150.8	45.3	35.4	168.61	-405.1	1,488.8	569.0	530.2	38.78	14.671	
5,500.0	5,023.7	5,563.6	5,242.6	46.3	36.3	168.50	-414.9	1,526.8	575.9	536.3	39.68	14.514	
5,600.0	5,112.9	5,663.4	5,334.3	47.3	37.1	168.40	-424.8	1,564.7	582.9	542.3	40.59	14.362	
5,700.0	5,202.1	5,763.1	5,426.0	48.3	38.0	168.30	-434.6	1,602.6	589.9	548.4	41.49	14.217	
5,800.0	5,291.3	5,862.9	5,517.8	49.3	38.8	168.20	-444.5	1,640.5	596.8	554.4	42.40	14.077	
5,900.0	5,380.5	5,963.8	5,610.7	50.3	39.6	168.29	-452.5	1,678.9	603.7	560.6	43.16	13.987	
6,000.0	5,469.7	6,063.9	5,703.1	51.3	40.3	172.62	-448.1	1,717.1	610.5	567.4	43.06	14.177	
6,100.0	5,559.2	6,161.3	5,791.5	52.1	40.9	-169.29	-430.5	1,753.6	617.6	575.2	42.47	14.544	
6,200.0	5,647.7	6,256.5	5,875.1	52.9	41.4	-152.70	-400.9	1,788.1	625.1	583.1	42.09	14.853	
6,300.0	5,733.4	6,350.0	5,952.9	53.6	41.8	-139.14	-360.4	1,820.2	632.8	590.8	42.02	15.060	
6,400.0	5,814.8	6,441.5	6,023.8	54.2	42.1	-128.71	-310.4	1,849.4	640.4	598.1	42.24	15.159	
6,500.0	5,890.3	6,531.7	6,087.3	54.7	42.4	-120.82	-252.1	1,875.6	647.6	604.9	42.70	15.167	
6,600.0	5,958.3	6,620.7	6,142.8	55.1	42.6	-114.86	-186.5	1,898.4	654.4	611.1	43.29	15.116	
6,700.0	6,017.6	6,708.6	6,189.9	55.5	42.8	-110.37	-114.9	1,917.8	660.4	616.5	43.94	15.029	
6,800.0	6,066.9	6,795.7	6,228.2	55.7	42.9	-107.03	-38.4	1,933.5	665.5	620.9	44.62	14.915	
6,900.0	6,105.4	6,882.0	6,257.4	55.9	43.0	-104.63	42.0	1,945.4	669.6	624.2	45.35	14.764	
7,000.0	6,132.3	6,967.9	6,277.4	56.1	43.1	-103.04	125.0	1,953.6	672.5	626.3	46.17	14.564	
7,100.0	6,147.1	7,050.0	6,287.9	56.1	43.2	-102.18	206.3	1,957.7	674.2	627.0	47.11	14.311	
7,200.0	6,150.0	7,144.2	6,290.0	56.2	43.2	-101.98	300.5	1,958.5	674.5	626.2	48.27	13.973	
7,300.0	6,150.0	7,244.2	6,290.0	56.2	43.3	-101.98	400.5	1,958.3	674.5	624.8	49.70	13.571	
7,400.0	6,150.0	7,344.2	6,290.0	56.3	43.4	-101.98	500.5	1,958.2	674.5	623.2	51.36	13.133	
7,500.0	6,150.0	7,444.2	6,290.0	56.5	43.7	-101.98	600.5	1,958.0	674.5	621.3	53.23	12.672	
7,600.0	6,150.0	7,544.2	6,290.0	56.6	43.9	-101.98	700.5	1,957.8	674.5	619.2	55.30	12.198	
7,700.0	6,150.0	7,644.2	6,290.0	56.8	44.3	-101.98	800.5	1,957.7	674.5	617.0	57.54	11.724	
7,800.0	6,150.0	7,744.2	6,290.0	57.1	44.7	-101.98	900.5	1,957.5	674.5	614.6	59.93	11.255	
7,900.0	6,150.0	7,844.2	6,290.0	57.4	45.2	-101.98	1,000.5	1,957.4	674.5	612.1	62.46	10.800	
8,000.0	6,150.0	7,944.2	6,290.0	57.8	45.7	-101.98	1,100.5	1,957.2	674.5	609.4	65.11	10.360	
8,100.0	6,150.0	8,044.2	6,290.0	58.2	46.4	-101.98	1,200.5	1,957.1	674.5	606.7	67.86	9.940	
8,200.0	6,150.0	8,144.2	6,290.0	58.6	47.1	-101.98	1,300.5	1,956.9	674.5	603.8	70.71	9.539	
8,300.0	6,150.0	8,244.2	6,290.0	59.1	47.9	-101.98	1,400.5	1,956.7	674.5	600.9	73.64	9.160	
8,400.0	6,150.0	8,344.2	6,290.0	59.7	48.8	-101.98	1,500.5	1,956.6	674.5	597.9	76.64	8.801	
8,500.0	6,150.0	8,444.2	6,290.0	60.3	49.8	-101.98	1,600.5	1,956.4	674.5	594.8	79.71	8.462	
8,600.0	6,150.0	8,544.2	6,290.0	61.0	50.9	-101.98	1,700.5	1,956.3	674.5	591.7	82.84	8.142	
8,700.0	6,150.0	8,644.2	6,290.0	61.8	52.0	-101.98	1,800.5	1,956.1	674.5	588.5	86.02	7.841	
8,800.0	6,150.0	8,744.2	6,290.0	62.6	53.1	-101.98	1,900.5	1,956.0	674.5	585.3	89.25	7.558	
8,900.0	6,150.0	8,844.2	6,290.0	63.5	54.4	-101.98	2,000.5	1,955.8	674.5	582.0	92.51	7.291	
9,000.0	6,150.0	8,944.2	6,290.0	64.4	55.7	-101.98	2,100.5	1,955.6	674.5	578.7	95.82	7.040	
9,100.0	6,150.0	9,044.2	6,290.0	65.4	57.0	-101.98	2,200.5	1,955.5	674.5	575.4	99.15	6.803	
9,200.0	6,150.0	9,144.2	6,290.0	66.4	58.4	-101.98	2,300.5	1,955.3	674.5	572.0	102.52	6.580	
9,300.0	6,150.0	9,244.2	6,290.0	67.5	59.8	-101.98	2,400.5	1,955.2	674.5	568.6	105.91	6.369	
9,400.0	6,150.0	9,344.2	6,290.0	68.7	61.3	-101.98	2,500.5	1,955.0	674.5	565.2	109.33	6.170	
9,500.0	6,150.0	9,444.2	6,290.0	69.9	62.8	-101.98	2,600.5	1,954.9	674.5	561.8	112.77	5.981	
9,600.0	6,150.0	9,544.2	6,290.0	71.1	64.3	-101.98	2,700.5	1,954.7	674.5	558.3	116.23	5.803	
9,700.0	6,150.0	9,644.2	6,290.0	72.4	65.9	-101.98	2,800.5	1,954.5	674.5	554.8	119.71	5.635	
9,800.0	6,150.0	9,744.2	6,290.0	73.7	67.4	-101.98	2,900.5	1,954.4	674.5	551.3	123.21	5.475	
9,900.0	6,150.0	9,844.2	6,290.0	75.1	69.0	-101.98	3,000.5	1,954.2	674.5	547.8	126.72	5.323	
10,000.0	6,150.0	9,944.2	6,290.0	76.4	70.6	-101.98	3,100.5	1,954.1	674.5	544.3	130.25	5.179	
10,100.0	6,150.0	10,044.2	6,290.0	77.9	72.3	-101.98	3,200.5	1,953.9	674.5	540.7	133.79	5.042	
10,200.0	6,150.0	10,144.2	6,290.0	79.3	73.9	-101.98	3,300.5	1,953.8	674.5	537.2	137.34	4.911	
10,300.0	6,150.0	10,244.2	6,290.0	80.8	75.6	-101.98	3,400.5	1,953.6	674.5	533.6	140.90	4.787	

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

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Markham 41-16-9NHZ
Project:	Sec.16-T4N-R68W	TVD Reference:	WELL @ 4976.0ft (RKB - 13')
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4976.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 41-16-9NHZ	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (3-31-14)	Offset TVD Reference:	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
10,400.0	6,150.0	10,344.2	6,290.0	82.3	77.3	-101.98	3,500.5	1,953.4	674.5	530.0	144.48	4.669	
10,500.0	6,150.0	10,444.2	6,290.0	83.8	79.0	-101.98	3,600.5	1,953.3	674.5	526.5	148.06	4.556	
10,600.0	6,150.0	10,544.2	6,290.0	85.4	80.7	-101.98	3,700.5	1,953.1	674.5	522.9	151.66	4.448	
10,700.0	6,150.0	10,644.2	6,290.0	87.0	82.4	-101.98	3,800.5	1,953.0	674.5	519.3	155.26	4.345	
10,800.0	6,150.0	10,744.2	6,290.0	88.5	84.1	-101.98	3,900.5	1,952.8	674.5	515.7	158.87	4.246	
10,900.0	6,150.0	10,844.2	6,290.0	90.2	85.8	-101.98	4,000.5	1,952.7	674.5	512.0	162.48	4.151	
11,000.0	6,150.0	10,944.2	6,290.0	91.8	87.6	-101.98	4,100.5	1,952.5	674.5	508.4	166.11	4.061	
11,100.0	6,150.0	11,044.2	6,290.0	93.4	89.3	-101.98	4,200.5	1,952.3	674.5	504.8	169.74	3.974	
11,200.0	6,150.0	11,144.2	6,290.0	95.1	91.1	-101.98	4,300.5	1,952.2	674.5	501.2	173.37	3.891	
11,300.0	6,150.0	11,244.2	6,290.0	96.7	92.9	-101.98	4,400.5	1,952.0	674.5	497.5	177.01	3.811	
11,400.0	6,150.0	11,344.2	6,290.0	98.4	94.6	-101.98	4,500.5	1,951.9	674.5	493.9	180.66	3.734	
11,500.0	6,150.0	11,444.2	6,290.0	100.1	96.4	-101.98	4,600.5	1,951.7	674.5	490.2	184.31	3.660	
11,600.0	6,150.0	11,544.2	6,290.0	101.8	98.2	-101.98	4,700.5	1,951.6	674.5	486.6	187.97	3.589	
11,700.0	6,150.0	11,644.2	6,290.0	103.5	100.0	-101.98	4,800.5	1,951.4	674.5	482.9	191.63	3.520	
11,800.0	6,150.0	11,744.2	6,290.0	105.2	101.8	-101.98	4,900.5	1,951.2	674.5	479.2	195.30	3.454	
11,900.0	6,150.0	11,844.2	6,290.0	106.9	103.6	-101.98	5,000.5	1,951.1	674.5	475.6	198.96	3.390	
12,000.0	6,150.0	11,944.2	6,290.0	108.6	105.4	-101.98	5,100.5	1,950.9	674.5	471.9	202.64	3.329	
12,100.0	6,150.0	12,044.2	6,290.0	110.4	107.2	-101.98	5,200.5	1,950.8	674.5	468.2	206.31	3.269	
12,200.0	6,150.0	12,144.2	6,290.0	112.1	109.0	-101.98	5,300.5	1,950.6	674.5	464.5	209.99	3.212	
12,300.0	6,150.0	12,244.2	6,290.0	113.9	110.8	-101.98	5,400.5	1,950.5	674.5	460.9	213.67	3.157	
12,400.0	6,150.0	12,344.2	6,290.0	115.6	112.7	-101.98	5,500.5	1,950.3	674.5	457.2	217.36	3.103	
12,500.0	6,150.0	12,444.2	6,290.0	117.4	114.5	-101.98	5,600.5	1,950.1	674.5	453.5	221.05	3.052	
12,600.0	6,150.0	12,544.2	6,290.0	119.2	116.3	-101.98	5,700.5	1,950.0	674.5	449.8	224.74	3.001	
12,700.0	6,150.0	12,644.2	6,290.0	120.9	118.1	-101.98	5,800.5	1,949.8	674.5	446.1	228.43	2.953	
12,800.0	6,150.0	12,744.2	6,290.0	122.7	120.0	-101.98	5,900.5	1,949.7	674.5	442.4	232.13	2.906	
12,900.0	6,150.0	12,844.2	6,290.0	124.5	121.8	-101.98	6,000.5	1,949.5	674.5	438.7	235.83	2.860	
13,000.0	6,150.0	12,944.2	6,290.0	126.3	123.7	-101.98	6,100.5	1,949.4	674.5	435.0	239.53	2.816	
13,100.0	6,150.0	13,044.2	6,290.0	128.1	125.5	-101.98	6,200.5	1,949.2	674.5	431.3	243.23	2.773	
13,200.0	6,150.0	13,144.2	6,290.0	129.9	127.3	-101.98	6,300.5	1,949.0	674.5	427.6	246.94	2.732	
13,300.0	6,150.0	13,244.2	6,290.0	131.7	129.2	-101.98	6,400.5	1,948.9	674.5	423.9	250.65	2.691	
13,400.0	6,150.0	13,344.2	6,290.0	133.5	131.0	-101.98	6,500.5	1,948.7	674.5	420.2	254.35	2.652	
13,500.0	6,150.0	13,444.2	6,290.0	135.3	132.9	-101.98	6,600.5	1,948.6	674.5	416.5	258.06	2.614	
13,600.0	6,150.0	13,544.2	6,290.0	137.1	134.7	-101.98	6,700.5	1,948.4	674.5	412.8	261.78	2.577	
13,700.0	6,150.0	13,644.2	6,290.0	138.9	136.6	-101.98	6,800.5	1,948.3	674.5	409.0	265.49	2.541	
13,800.0	6,150.0	13,744.2	6,290.0	140.8	138.5	-101.98	6,900.5	1,948.1	674.5	405.3	269.21	2.506	
13,900.0	6,150.0	13,844.2	6,290.0	142.6	140.3	-101.98	7,000.5	1,947.9	674.5	401.6	272.92	2.472	
14,000.0	6,150.0	13,944.2	6,290.0	144.4	142.2	-101.98	7,100.5	1,947.8	674.5	397.9	276.64	2.438	
14,100.0	6,150.0	14,044.2	6,290.0	146.2	144.0	-101.98	7,200.5	1,947.6	674.5	394.2	280.36	2.406	
14,200.0	6,150.0	14,146.2	6,290.0	148.1	145.9	-101.98	7,302.4	1,947.6	674.4	390.3	284.12	2.374	
14,220.8	6,150.0	14,165.0	6,290.0	148.4	146.3	-101.98	7,321.2	1,947.6	674.4	389.5	284.85	2.367	
14,230.7	6,150.0	14,165.0	6,290.0	148.6	146.3	-101.98	7,321.2	1,947.6	674.4	389.4	285.04	2.366 SF	

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	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	-90.45	-0.4	-45.2	45.2					
100.0	100.0	100.0	100.0	0.1	0.1	-90.45	-0.4	-45.2	45.2	45.0	0.22	201.006		
200.0	200.0	200.0	200.0	0.3	0.3	-90.45	-0.4	-45.2	45.2	44.5	0.67	67.002	CC, ES	
300.0	300.0	300.0	300.0	0.6	0.6	168.92	-0.4	-45.2	46.9	45.8	1.12	41.964		
400.0	399.8	399.8	399.8	0.8	0.8	170.01	-0.4	-45.2	52.0	50.5	1.56	33.288		
500.0	499.5	499.5	499.5	1.0	1.0	171.41	-0.4	-45.2	60.6	58.6	2.02	30.064		
600.0	598.7	598.7	598.7	1.3	1.2	172.82	-0.4	-45.2	72.7	70.2	2.47	29.380		
700.0	697.5	700.5	700.5	1.6	1.4	173.92	-0.8	-43.5	86.6	83.6	2.92	29.675		
800.0	795.6	802.8	802.7	2.0	1.7	174.64	-2.0	-38.2	100.4	97.0	3.35	29.979		
900.0	893.1	905.7	905.1	2.5	1.9	175.12	-4.1	-29.3	114.1	110.3	3.80	30.065		
1,000.0	989.6	1,009.1	1,007.7	3.0	2.2	175.42	-7.0	-16.8	127.8	123.5	4.26	29.989		
1,100.0	1,085.3	1,113.0	1,110.3	3.6	2.5	175.60	-10.8	-0.6	141.4	136.6	4.75	29.785		
1,200.0	1,179.8	1,217.5	1,212.7	4.2	2.8	175.69	-15.5	19.4	154.8	149.5	5.25	29.473		
1,300.0	1,273.2	1,322.5	1,314.8	5.0	3.3	175.71	-21.1	43.0	168.0	162.3	5.78	29.071		
1,400.0	1,365.2	1,428.0	1,416.5	5.8	3.8	175.68	-27.5	70.5	181.2	174.8	6.34	28.592		
1,500.0	1,455.8	1,534.1	1,517.6	6.6	4.4	175.61	-34.9	101.7	194.1	187.1	6.92	28.041		
1,600.0	1,545.2	1,640.7	1,618.0	7.6	5.1	175.49	-43.1	136.8	206.2	198.7	7.56	27.286		
1,700.0	1,634.4	1,748.2	1,717.7	8.5	5.8	175.28	-52.3	175.8	215.0	206.8	8.27	26.008		
1,800.0	1,723.6	1,855.5	1,815.7	9.5	6.7	174.97	-62.3	218.4	220.2	211.1	9.01	24.436		
1,900.0	1,812.8	1,955.4	1,906.3	10.5	7.5	174.64	-72.0	259.4	223.7	214.0	9.75	22.941		
2,000.0	1,902.0	2,055.3	1,996.9	11.5	8.4	174.32	-81.6	300.4	227.3	216.8	10.51	21.626		
2,100.0	1,991.2	2,155.3	2,087.5	12.5	9.3	174.00	-91.2	341.4	230.9	219.6	11.28	20.465		
2,200.0	2,080.3	2,255.2	2,178.1	13.4	10.2	173.70	-100.9	382.4	234.5	222.4	12.06	19.434		
2,300.0	2,169.5	2,355.1	2,268.8	14.4	11.1	173.41	-110.5	423.4	238.1	225.2	12.86	18.514		
2,400.0	2,258.7	2,455.0	2,359.4	15.4	12.0	173.13	-120.2	464.4	241.7	228.0	13.66	17.689		
2,500.0	2,347.9	2,555.0	2,450.0	16.4	12.9	172.85	-129.8	505.4	245.3	230.8	14.47	16.946		
2,600.0	2,437.1	2,654.9	2,540.6	17.4	13.8	172.58	-139.4	546.4	248.9	233.6	15.29	16.272		
2,700.0	2,526.3	2,754.8	2,631.2	18.4	14.7	172.32	-149.1	587.4	252.5	236.4	16.12	15.660		
2,800.0	2,615.5	2,854.8	2,721.9	19.4	15.6	172.07	-158.7	628.4	256.1	239.1	16.96	15.101		
2,900.0	2,704.7	2,954.7	2,812.5	20.4	16.5	171.83	-168.4	669.4	259.7	241.9	17.80	14.590		
3,000.0	2,793.9	3,054.6	2,903.1	21.4	17.4	171.59	-178.0	710.4	263.4	244.7	18.65	14.120		
3,100.0	2,883.1	3,154.5	2,993.7	22.4	18.3	171.35	-187.6	751.4	267.0	247.5	19.51	13.686		
3,200.0	2,972.3	3,254.5	3,084.3	23.4	19.2	171.13	-197.3	792.4	270.6	250.3	20.37	13.285		
3,300.0	3,061.5	3,354.4	3,174.9	24.4	20.1	170.91	-206.9	833.4	274.3	253.0	21.24	12.913		
3,400.0	3,150.7	3,454.3	3,265.6	25.3	21.0	170.69	-216.6	874.4	277.9	255.8	22.11	12.568		
3,500.0	3,239.9	3,554.3	3,356.2	26.3	22.0	170.49	-226.2	915.4	281.6	258.6	22.99	12.246		
3,600.0	3,329.1	3,654.2	3,446.8	27.3	22.9	170.28	-235.8	956.4	285.2	261.4	23.88	11.945		
3,700.0	3,418.3	3,754.1	3,537.4	28.3	23.8	170.08	-245.5	997.4	288.9	264.1	24.77	11.663		
3,800.0	3,507.4	3,854.0	3,628.0	29.3	24.7	169.89	-255.1	1,038.4	292.5	266.9	25.66	11.399		
3,900.0	3,596.6	3,954.0	3,718.6	30.3	25.6	169.70	-264.8	1,079.4	296.2	269.6	26.56	11.151		
4,000.0	3,685.8	4,053.9	3,809.3	31.3	26.5	169.52	-274.4	1,120.4	299.9	272.4	27.47	10.918		
4,100.0	3,775.0	4,153.8	3,899.9	32.3	27.4	169.34	-284.0	1,161.4	303.6	275.2	28.38	10.697		
4,200.0	3,864.2	4,253.8	3,990.5	33.3	28.4	169.16	-293.7	1,202.4	307.2	277.9	29.29	10.489		
4,300.0	3,953.4	4,353.7	4,081.1	34.3	29.3	168.99	-303.3	1,243.4	310.9	280.7	30.21	10.293		
4,400.0	4,042.6	4,453.6	4,171.7	35.3	30.2	168.83	-313.0	1,284.4	314.6	283.5	31.13	10.106		
4,500.0	4,131.8	4,553.5	4,262.4	36.3	31.1	168.66	-322.6	1,325.4	318.3	286.2	32.05	9.929		
4,600.0	4,221.0	4,653.5	4,353.0	37.3	32.0	168.50	-332.2	1,366.4	321.9	289.0	32.98	9.761		
4,700.0	4,310.2	4,753.4	4,443.6	38.3	33.0	168.35	-341.9	1,407.4	325.6	291.7	33.91	9.602		
4,800.0	4,399.4	4,853.3	4,534.2	39.3	33.9	168.20	-351.5	1,448.4	329.3	294.5	34.85	9.450		
4,900.0	4,488.6	4,953.2	4,624.8	40.3	34.8	168.05	-361.2	1,489.4	333.0	297.2	35.79	9.305		
5,000.0	4,577.8	5,053.2	4,715.4	41.3	35.7	167.90	-370.8	1,530.4	336.7	300.0	36.73	9.166		
5,100.0	4,667.0	5,153.1	4,806.1	42.3	36.6	167.76	-380.4	1,571.4	340.4	302.7	37.68	9.034		

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Markham 41-16-9NHZ
Project:	Sec.16-T4N-R68W	TVD Reference:	WELL @ 4976.0ft (RKB - 13')
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4976.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 41-16-9NHZ	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (3-31-14)	Offset TVD Reference:	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	4,756.2	5,253.0	4,896.7	43.3	37.6	167.62	-390.1	1,612.4	344.1	305.5	38.63	8.908	
5,300.0	4,845.4	5,353.0	4,987.3	44.3	38.5	167.48	-399.7	1,653.4	347.8	308.2	39.58	8.787	
5,400.0	4,934.5	5,452.9	5,077.9	45.3	39.4	167.35	-409.4	1,694.4	351.5	311.0	40.54	8.671	
5,500.0	5,023.7	5,552.8	5,168.5	46.3	40.3	167.22	-419.0	1,735.4	355.2	313.7	41.49	8.560	
5,600.0	5,112.9	5,652.7	5,259.1	47.3	41.2	167.09	-428.6	1,776.4	358.9	316.5	42.45	8.454	
5,700.0	5,202.1	5,752.7	5,349.8	48.3	42.1	166.96	-438.3	1,817.4	362.6	319.2	43.42	8.352	
5,800.0	5,291.3	5,852.8	5,440.6	49.3	43.1	166.85	-447.9	1,858.5	366.3	321.9	44.38	8.254	
5,900.0	5,380.5	5,954.8	5,533.4	50.3	43.8	168.00	-449.5	1,900.5	369.7	325.3	44.39	8.329	
6,000.0	5,469.7	6,052.8	5,622.0	51.3	44.5	174.20	-437.3	1,940.6	373.2	330.1	43.14	8.652	
6,100.0	5,559.2	6,146.9	5,704.8	52.1	45.1	-165.92	-413.3	1,978.0	378.3	336.3	42.02	9.002	
6,200.0	5,647.7	6,238.3	5,781.8	52.9	45.6	-147.69	-378.8	2,012.8	384.7	342.9	41.83	9.196	
6,300.0	5,733.4	6,327.2	5,852.4	53.6	46.0	-132.67	-335.1	2,044.6	392.1	349.6	42.42	9.242	
6,400.0	5,814.8	6,414.1	5,916.1	54.2	46.4	-120.95	-283.5	2,073.3	400.0	356.6	43.40	9.216	
6,500.0	5,890.3	6,500.0	5,972.9	54.7	46.7	-111.94	-224.6	2,099.0	408.0	363.7	44.35	9.200	
6,600.0	5,958.3	6,583.0	6,021.4	55.1	46.9	-105.08	-160.9	2,120.8	415.8	370.8	44.97	9.245	
6,700.0	6,017.6	6,665.6	6,062.7	55.5	47.1	-99.85	-91.9	2,139.4	422.9	377.7	45.17	9.361	
6,800.0	6,066.9	6,750.0	6,097.1	55.7	47.2	-95.90	-16.4	2,154.8	429.0	384.0	45.02	9.529	
6,900.0	6,105.4	6,828.0	6,121.5	55.9	47.3	-93.11	56.8	2,165.7	434.0	389.3	44.69	9.710	
7,000.0	6,132.3	6,908.3	6,138.9	56.1	47.4	-91.23	134.8	2,173.5	437.6	393.1	44.50	9.832	
7,100.0	6,147.1	6,988.2	6,148.3	56.1	47.4	-90.22	214.0	2,177.6	439.6	394.9	44.70	9.834	
7,200.0	6,150.0	7,075.1	6,150.0	56.2	47.5	-90.00	300.8	2,178.2	440.1	394.6	45.47	9.678	
7,300.0	6,150.0	7,175.1	6,150.0	56.2	47.6	-90.00	400.8	2,178.1	440.1	393.3	46.77	9.410	
7,400.0	6,150.0	7,275.1	6,150.0	56.3	47.7	-90.00	500.8	2,177.9	440.1	391.7	48.36	9.100	
7,500.0	6,150.0	7,375.1	6,150.0	56.5	47.9	-90.00	600.8	2,177.8	440.0	389.9	50.20	8.766	
7,600.0	6,150.0	7,475.1	6,150.0	56.6	48.1	-90.00	700.8	2,177.6	440.0	387.8	52.25	8.421	
7,700.0	6,150.0	7,575.1	6,150.0	56.8	48.4	-90.00	800.8	2,177.5	440.0	385.5	54.50	8.074	
7,800.0	6,150.0	7,675.1	6,150.0	57.1	48.7	-90.00	900.8	2,177.3	440.0	383.1	56.92	7.730	
7,900.0	6,150.0	7,775.1	6,150.0	57.4	49.1	-90.00	1,000.8	2,177.2	440.0	380.5	59.49	7.396	
8,000.0	6,150.0	7,875.1	6,150.0	57.8	49.6	-90.00	1,100.8	2,177.0	440.0	377.8	62.19	7.075	
8,100.0	6,150.0	7,975.1	6,150.0	58.2	50.1	-90.00	1,200.8	2,176.9	440.0	375.0	65.01	6.768	
8,200.0	6,150.0	8,075.1	6,150.0	58.6	50.8	-90.00	1,300.8	2,176.7	440.0	372.1	67.93	6.478	
8,300.0	6,150.0	8,175.1	6,150.0	59.1	51.5	-90.00	1,400.8	2,176.6	440.0	369.1	70.93	6.203	
8,400.0	6,150.0	8,275.1	6,150.0	59.7	52.2	-90.00	1,500.8	2,176.4	440.0	366.0	74.01	5.945	
8,500.0	6,150.0	8,375.1	6,150.0	60.3	53.0	-90.00	1,600.8	2,176.3	440.0	362.8	77.16	5.702	
8,600.0	6,150.0	8,475.1	6,150.0	61.0	54.0	-90.00	1,700.8	2,176.1	440.0	359.6	80.37	5.474	
8,700.0	6,150.0	8,575.1	6,150.0	61.8	54.9	-90.00	1,800.8	2,176.0	440.0	356.3	83.64	5.261	
8,800.0	6,150.0	8,675.1	6,150.0	62.6	56.0	-90.00	1,900.8	2,175.8	440.0	353.0	86.95	5.060	
8,900.0	6,150.0	8,775.1	6,150.0	63.5	57.1	-90.00	2,000.8	2,175.7	440.0	349.7	90.30	4.872	
9,000.0	6,150.0	8,875.1	6,150.0	64.4	58.2	-90.00	2,100.8	2,175.5	440.0	346.3	93.69	4.696	
9,100.0	6,150.0	8,975.1	6,150.0	65.4	59.4	-90.00	2,200.8	2,175.4	440.0	342.8	97.11	4.530	
9,200.0	6,150.0	9,075.1	6,150.0	66.4	60.7	-90.00	2,300.8	2,175.2	440.0	339.4	100.57	4.375	
9,300.0	6,150.0	9,175.1	6,150.0	67.5	62.0	-90.00	2,400.8	2,175.1	440.0	335.9	104.05	4.228	
9,400.0	6,150.0	9,275.1	6,150.0	68.7	63.4	-90.00	2,500.8	2,174.9	439.9	332.4	107.55	4.091	
9,500.0	6,150.0	9,375.1	6,150.0	69.9	64.8	-90.00	2,600.8	2,174.7	439.9	328.9	111.08	3.961	
9,600.0	6,150.0	9,475.1	6,150.0	71.1	66.2	-90.00	2,700.8	2,174.6	439.9	325.3	114.63	3.838	
9,700.0	6,150.0	9,575.1	6,150.0	72.4	67.7	-90.00	2,800.8	2,174.4	439.9	321.7	118.19	3.722	
9,800.0	6,150.0	9,675.1	6,150.0	73.7	69.2	-90.00	2,900.8	2,174.3	439.9	318.1	121.78	3.613	
9,900.0	6,150.0	9,775.1	6,150.0	75.1	70.7	-90.00	3,000.8	2,174.1	439.9	314.5	125.38	3.509	
10,000.0	6,150.0	9,875.1	6,150.0	76.4	72.3	-90.00	3,100.8	2,174.0	439.9	310.9	128.99	3.411	
10,100.0	6,150.0	9,975.1	6,150.0	77.9	73.8	-90.00	3,200.8	2,173.8	439.9	307.3	132.61	3.317	
10,200.0	6,150.0	10,075.1	6,150.0	79.3	75.4	-90.00	3,300.8	2,173.7	439.9	303.7	136.25	3.229	
10,300.0	6,150.0	10,175.1	6,150.0	80.8	77.0	-90.00	3,400.8	2,173.5	439.9	300.0	139.90	3.144	

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

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Markham 41-16-9NHZ
Project:	Sec.16-T4N-R68W	TVD Reference:	WELL @ 4976.0ft (RKB - 13')
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4976.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 41-16-9NHZ	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (3-31-14)	Offset TVD Reference:	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		
10,400.0	6,150.0	10,275.1	6,150.0	82.3	78.7	-90.00	3,500.8	2,173.4	439.9	296.3	143.56	3.064		
10,500.0	6,150.0	10,375.1	6,150.0	83.8	80.3	-90.00	3,600.8	2,173.2	439.9	292.7	147.22	2.988		
10,600.0	6,150.0	10,475.1	6,150.0	85.4	82.0	-90.00	3,700.8	2,173.1	439.9	289.0	150.90	2.915		
10,700.0	6,150.0	10,575.1	6,150.0	87.0	83.6	-90.00	3,800.8	2,172.9	439.9	285.3	154.58	2.846		
10,800.0	6,150.0	10,675.1	6,150.0	88.5	85.3	-90.00	3,900.8	2,172.8	439.9	281.6	158.27	2.779		
10,900.0	6,150.0	10,775.1	6,150.0	90.2	87.0	-90.00	4,000.8	2,172.6	439.9	277.9	161.97	2.716		
11,000.0	6,150.0	10,875.1	6,150.0	91.8	88.7	-90.00	4,100.8	2,172.5	439.9	274.2	165.68	2.655		
11,100.0	6,150.0	10,975.1	6,150.0	93.4	90.4	-90.00	4,200.8	2,172.3	439.9	270.5	169.39	2.597		
11,200.0	6,150.0	11,075.1	6,150.0	95.1	92.2	-90.00	4,300.8	2,172.2	439.8	266.7	173.10	2.541		
11,300.0	6,150.0	11,175.1	6,150.0	96.7	93.9	-90.00	4,400.8	2,172.0	439.8	263.0	176.83	2.487		
11,400.0	6,150.0	11,275.1	6,150.0	98.4	95.7	-90.00	4,500.8	2,171.9	439.8	259.3	180.55	2.436		
11,500.0	6,150.0	11,375.1	6,150.0	100.1	97.4	-90.00	4,600.8	2,171.7	439.8	255.5	184.29	2.387		
11,600.0	6,150.0	11,475.1	6,150.0	101.8	99.2	-90.00	4,700.8	2,171.6	439.8	251.8	188.02	2.339		
11,700.0	6,150.0	11,575.1	6,150.0	103.5	100.9	-90.00	4,800.8	2,171.4	439.8	248.1	191.76	2.294		
11,800.0	6,150.0	11,675.1	6,150.0	105.2	102.7	-90.00	4,900.8	2,171.3	439.8	244.3	195.51	2.250		
11,900.0	6,150.0	11,775.1	6,150.0	106.9	104.5	-90.00	5,000.8	2,171.1	439.8	240.6	199.25	2.207		
12,000.0	6,150.0	11,875.1	6,150.0	108.6	106.3	-90.00	5,100.8	2,171.0	439.8	236.8	203.00	2.166		
12,100.0	6,150.0	11,975.1	6,150.0	110.4	108.1	-90.00	5,200.8	2,170.8	439.8	233.0	206.76	2.127		
12,200.0	6,150.0	12,075.1	6,150.0	112.1	109.8	-90.00	5,300.8	2,170.7	439.8	229.3	210.52	2.089		
12,300.0	6,150.0	12,175.1	6,150.0	113.9	111.6	-90.00	5,400.8	2,170.5	439.8	225.5	214.28	2.052		
12,400.0	6,150.0	12,275.1	6,150.0	115.6	113.4	-90.00	5,500.8	2,170.4	439.8	221.7	218.04	2.017		
12,500.0	6,150.0	12,375.1	6,150.0	117.4	115.3	-90.00	5,600.8	2,170.2	439.8	218.0	221.81	1.983		
12,600.0	6,150.0	12,475.1	6,150.0	119.2	117.1	-90.00	5,700.8	2,170.1	439.8	214.2	225.58	1.950		
12,700.0	6,150.0	12,575.1	6,150.0	120.9	118.9	-90.00	5,800.8	2,169.9	439.8	210.4	229.35	1.917		
12,800.0	6,150.0	12,675.1	6,150.0	122.7	120.7	-90.00	5,900.8	2,169.8	439.8	206.6	233.12	1.886		
12,900.0	6,150.0	12,775.1	6,150.0	124.5	122.5	-90.00	6,000.8	2,169.6	439.8	202.9	236.90	1.856		
13,000.0	6,150.0	12,875.1	6,150.0	126.3	124.3	-90.00	6,100.8	2,169.5	439.7	199.1	240.67	1.827		
13,100.0	6,150.0	12,975.1	6,150.0	128.1	126.2	-90.00	6,200.8	2,169.3	439.7	195.3	244.45	1.799		
13,200.0	6,150.0	13,075.1	6,150.0	129.9	128.0	-90.00	6,300.8	2,169.2	439.7	191.5	248.24	1.771		
13,300.0	6,150.0	13,175.1	6,150.0	131.7	129.8	-90.00	6,400.8	2,169.0	439.7	187.7	252.02	1.745		
13,400.0	6,150.0	13,275.1	6,150.0	133.5	131.7	-90.00	6,500.8	2,168.9	439.7	183.9	255.80	1.719		
13,500.0	6,150.0	13,375.1	6,150.0	135.3	133.5	-90.00	6,600.8	2,168.7	439.7	180.1	259.59	1.694		
13,600.0	6,150.0	13,475.1	6,150.0	137.1	135.4	-90.00	6,700.8	2,168.6	439.7	176.3	263.38	1.670		
13,700.0	6,150.0	13,575.1	6,150.0	138.9	137.2	-90.00	6,800.8	2,168.4	439.7	172.5	267.17	1.646		
13,800.0	6,150.0	13,675.1	6,150.0	140.8	139.0	-90.00	6,900.8	2,168.2	439.7	168.7	270.96	1.623		
13,900.0	6,150.0	13,775.1	6,150.0	142.6	140.9	-90.00	7,000.8	2,168.1	439.7	164.9	274.75	1.600		
14,000.0	6,150.0	13,875.1	6,150.0	144.4	142.7	-90.00	7,100.8	2,167.9	439.7	161.1	278.55	1.579		
14,100.0	6,150.0	13,975.1	6,150.0	146.2	144.6	-90.00	7,200.8	2,167.8	439.7	157.3	282.34	1.557		
14,200.0	6,150.0	14,075.1	6,150.0	148.1	146.4	-90.00	7,300.8	2,167.6	439.7	153.5	286.14	1.537		
14,222.7	6,150.0	14,097.8	6,150.0	148.5	146.9	-90.00	7,323.6	2,167.6	439.7	152.7	287.00	1.532		
14,230.7	6,150.0	14,099.1	6,150.0	148.6	146.9	-90.00	7,324.9	2,167.6	439.7	152.6	287.18	1.531 SF		

Local Co-ordinate Reference:	Well SRC Markham 41-16-9NHZ
TVD Reference:	WELL @ 4976.0ft (RKB - 13')
MD Reference:	WELL @ 4976.0ft (RKB - 13')
North Reference:	True
Survey Calculation Method:	Minimum Curvature
Output errors are at	2.00 sigma
Database:	Landmark
Offset TVD Reference:	Offset Datum

Grid Convergence at Surface is: 0.32°



Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Markham 41-16-9NHZ
Project:	Sec.16-T4N-R68W	TVD Reference:	WELL @ 4976.0ft (RKB - 13')
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4976.0ft (RKB - 13')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 41-16-9NHZ	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (3-31-14)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4976.0ft (RKB - 13')

Offset Depths are relative to Offset Datum

Central Meridian is -105.500000 °

Coordinates are relative to: SRC Markham 41-16-9NHZ

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.32°

