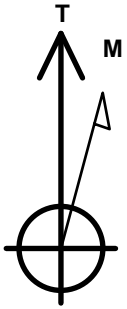


Synergy Resources

Well Name: **SRC Markham 11-16NHZ**
 Surface Location: SRC Markham Pad Sec.16-T4N-R68W
 North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone
 Ground Elevation: 4984.0
 +N/-S +E/-W Northing Easting Latitude Longitude Slot
 0.0 0.0 1359813.84 3138165.90 40.320030 -105.004493
 Original Well Elev WELL @ 4997.5ft (Original Well Elev)

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
SHL 235'FNL, 1582'FEL	1.0	0.0	0.0	Point
BHL 637'FNL, 460'FWL	6210.0	-439.9	-3244.8	Point
Landing Pt. (11-16NHZ)	6210.0	-398.2	811.0	Point



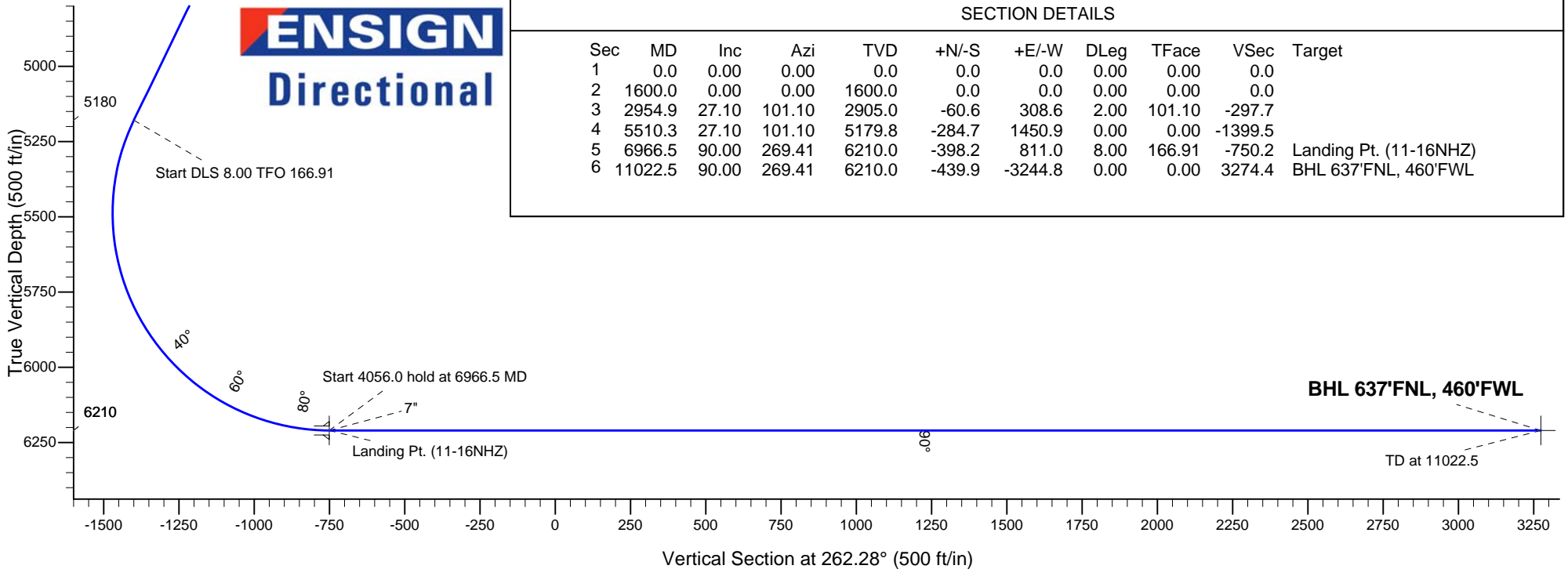
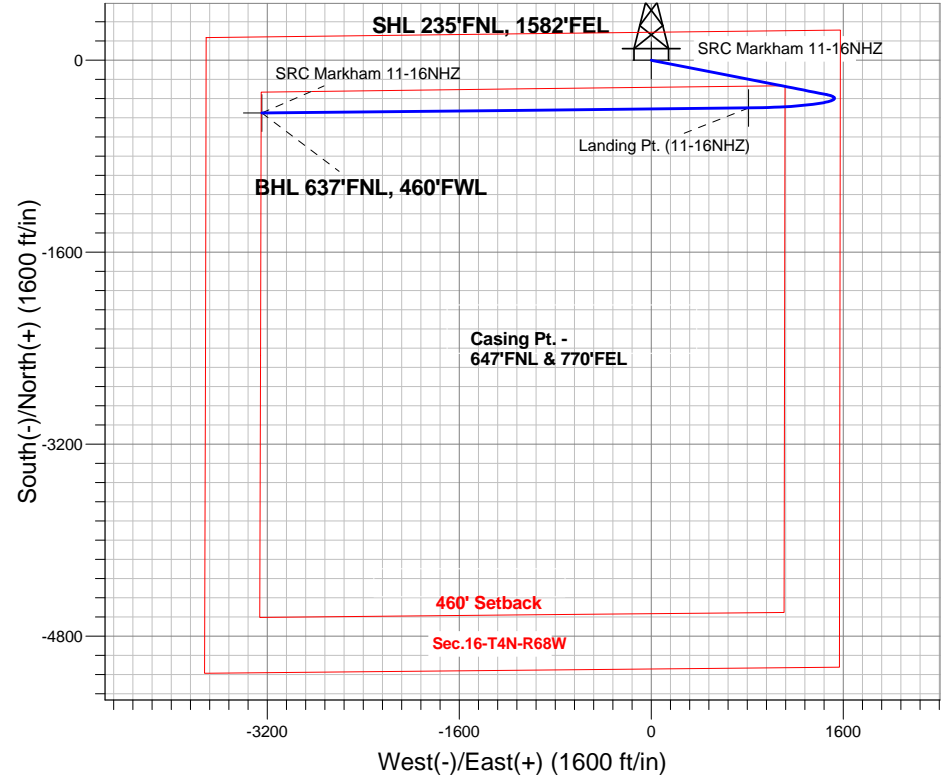
Azimuths to True North
 Magnetic North: 8.51°

Magnetic Field
 Strength: 52687.5snT
 Dip Angle: 66.82°
 Date: 1/7/2015
 Model: IGRF2010

SRC Markham Pad Sec.16-T4N-R68W
 SRC Markham 11-16NHZ
 Plan #1 (1-05-15)
 10:46, January 07 2015

ANNOTATIONS

TVD	MD	Annotation
1600.0	1600.0	Start Build 2.00
2905.0	2954.9	Start 2555.4 hold at 2954.9 MD
5179.8	5510.3	Start DLS 8.00 TFO 166.91
6210.0	6966.5	Start 4056.0 hold at 6966.5 MD
6210.0	11022.5	TD at 11022.5



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1600.0	0.00	0.00	1600.0	0.0	0.0	0.00	0.00	0.0	
3	2954.9	27.10	101.10	2905.0	-60.6	308.6	2.00	101.10	-297.7	
4	5510.3	27.10	101.10	5179.8	-284.7	1450.9	0.00	0.00	-1399.5	
5	6966.5	90.00	269.41	6210.0	-398.2	811.0	8.00	166.91	-750.2	Landing Pt. (11-16NHZ)
6	11022.5	90.00	269.41	6210.0	-439.9	-3244.8	0.00	0.00	3274.4	BHL 637'FNL, 460'FWL



Synergy Resources

SEC.16-T4N-R68W

SRC Markham Pad Sec.16-T4N-R68W

SRC Markham 11-16NHZ

Wellbore #1

Plan: Plan #1 (1-05-15)

Standard Planning Report

07 January, 2015

Database:	Landmark	Local Co-ordinate Reference:	Well SRC Markham 11-16NHZ
Company:	Synergy Resources	TVD Reference:	WELL @ 4997.5ft (Original Well Elev)
Project:	SEC.16-T4N-R68W	MD Reference:	WELL @ 4997.5ft (Original Well Elev)
Site:	SRC Markham Pad Sec.16-T4N-R68W	North Reference:	True
Well:	SRC Markham 11-16NHZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (1-05-15)		

Project	SEC.16-T4N-R68W, Weld County, CO		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		Using Well Reference Point
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Site	SRC Markham Pad Sec.16-T4N-R68W				
Site Position:		Northing:	1,359,813.85ft	Latitude:	40.320030
From:	Lat/Long	Easting:	3,138,165.90ft	Longitude:	-105.004493
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.32 °

Well	SRC Markham 11-16NHZ					
Well Position	+N-S	0.0 ft	Northing:	1,359,813.84 ft	Latitude:	40.320030
	+E-W	0.0 ft	Easting:	3,138,165.90 ft	Longitude:	-105.004493
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,984.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	1/7/2015	8.51	66.82	52,687

Design	Plan #1 (1-05-15)			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N-S (ft)	+E-W (ft)	Direction (°)
	0.0	0.0	0.0	262.28

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,954.9	27.10	101.10	2,905.0	-60.6	308.6	2.00	2.00	0.00	101.10	
5,510.3	27.10	101.10	5,179.8	-284.7	1,450.9	0.00	0.00	0.00	0.00	
6,966.5	90.00	269.41	6,210.0	-398.2	811.0	8.00	4.32	11.56	166.91	Landing Pt. (11-16N
11,022.5	90.00	269.41	6,210.0	-439.9	-3,244.8	0.00	0.00	0.00	0.00	BHL 637°FNL, 460'f

Database:	Landmark	Local Co-ordinate Reference:	Well SRC Markham 11-16NHZ
Company:	Synergy Resources	TVD Reference:	WELL @ 4997.5ft (Original Well Elev)
Project:	SEC.16-T4N-R68W	MD Reference:	WELL @ 4997.5ft (Original Well Elev)
Site:	SRC Markham Pad Sec.16-T4N-R68W	North Reference:	True
Well:	SRC Markham 11-16NHZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (1-05-15)		

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 235'FNL, 1582'FEL										
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00	
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00	
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00	
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00	
Start Build 2.00										
1,700.0	2.00	101.10	1,700.0	-0.3	1.7	-1.7	2.00	2.00	0.00	
1,800.0	4.00	101.10	1,799.8	-1.3	6.8	-6.6	2.00	2.00	0.00	
1,900.0	6.00	101.10	1,899.5	-3.0	15.4	-14.9	2.00	2.00	0.00	
2,000.0	8.00	101.10	1,998.7	-5.4	27.4	-26.4	2.00	2.00	0.00	
2,100.0	10.00	101.10	2,097.5	-8.4	42.7	-41.2	2.00	2.00	0.00	
2,200.0	12.00	101.10	2,195.6	-12.1	61.4	-59.3	2.00	2.00	0.00	
2,300.0	14.00	101.10	2,293.1	-16.4	83.5	-80.5	2.00	2.00	0.00	
2,400.0	16.00	101.10	2,389.6	-21.4	108.9	-105.0	2.00	2.00	0.00	
2,500.0	18.00	101.10	2,485.3	-27.0	137.6	-132.7	2.00	2.00	0.00	
2,600.0	20.00	101.10	2,579.8	-33.3	169.5	-163.5	2.00	2.00	0.00	
2,700.0	22.00	101.10	2,673.2	-40.2	204.7	-197.4	2.00	2.00	0.00	
2,800.0	24.00	101.10	2,765.2	-47.7	243.0	-234.4	2.00	2.00	0.00	
2,900.0	26.00	101.10	2,855.8	-55.8	284.5	-274.4	2.00	2.00	0.00	
2,954.9	27.10	101.10	2,905.0	-60.6	308.6	-297.7	2.00	2.00	0.00	
Start 2555.4 hold at 2954.9 MD										
3,000.0	27.10	101.10	2,945.1	-64.5	328.7	-317.1	0.00	0.00	0.00	
3,100.0	27.10	101.10	3,034.1	-73.3	373.4	-360.2	0.00	0.00	0.00	
3,200.0	27.10	101.10	3,123.1	-82.1	418.1	-403.3	0.00	0.00	0.00	
3,300.0	27.10	101.10	3,212.2	-90.8	462.8	-446.4	0.00	0.00	0.00	
3,400.0	27.10	101.10	3,301.2	-99.6	507.5	-489.6	0.00	0.00	0.00	
3,500.0	27.10	101.10	3,390.2	-108.4	552.2	-532.7	0.00	0.00	0.00	
3,600.0	27.10	101.10	3,479.2	-117.2	596.9	-575.8	0.00	0.00	0.00	
3,700.0	27.10	101.10	3,568.3	-125.9	641.6	-618.9	0.00	0.00	0.00	
3,800.0	27.10	101.10	3,657.3	-134.7	686.3	-662.0	0.00	0.00	0.00	
3,900.0	27.10	101.10	3,746.3	-143.5	731.0	-705.1	0.00	0.00	0.00	
4,000.0	27.10	101.10	3,835.3	-152.2	775.7	-748.3	0.00	0.00	0.00	
4,100.0	27.10	101.10	3,924.3	-161.0	820.4	-791.4	0.00	0.00	0.00	
4,200.0	27.10	101.10	4,013.4	-169.8	865.1	-834.5	0.00	0.00	0.00	
4,300.0	27.10	101.10	4,102.4	-178.6	909.8	-877.6	0.00	0.00	0.00	
4,400.0	27.10	101.10	4,191.4	-187.3	954.5	-920.7	0.00	0.00	0.00	
4,500.0	27.10	101.10	4,280.4	-196.1	999.2	-963.8	0.00	0.00	0.00	
4,600.0	27.10	101.10	4,369.5	-204.9	1,043.9	-1,007.0	0.00	0.00	0.00	
4,700.0	27.10	101.10	4,458.5	-213.7	1,088.6	-1,050.1	0.00	0.00	0.00	

Database:	Landmark	Local Co-ordinate Reference:	Well SRC Markham 11-16NHZ
Company:	Synergy Resources	TVD Reference:	WELL @ 4997.5ft (Original Well Elev)
Project:	SEC.16-T4N-R68W	MD Reference:	WELL @ 4997.5ft (Original Well Elev)
Site:	SRC Markham Pad Sec.16-T4N-R68W	North Reference:	True
Well:	SRC Markham 11-16NHZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (1-05-15)		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
4,800.0	27.10	101.10	4,547.5	-222.4	1,133.3	-1,093.2	0.00	0.00	0.00	
4,900.0	27.10	101.10	4,636.5	-231.2	1,178.0	-1,136.3	0.00	0.00	0.00	
5,000.0	27.10	101.10	4,725.5	-240.0	1,222.7	-1,179.4	0.00	0.00	0.00	
5,100.0	27.10	101.10	4,814.6	-248.7	1,267.4	-1,222.5	0.00	0.00	0.00	
5,200.0	27.10	101.10	4,903.6	-257.5	1,312.1	-1,265.7	0.00	0.00	0.00	
5,300.0	27.10	101.10	4,992.6	-266.3	1,356.8	-1,308.8	0.00	0.00	0.00	
5,400.0	27.10	101.10	5,081.6	-275.1	1,401.5	-1,351.9	0.00	0.00	0.00	
5,500.0	27.10	101.10	5,170.7	-283.8	1,446.2	-1,395.0	0.00	0.00	0.00	
5,510.3	27.10	101.10	5,179.8	-284.7	1,450.9	-1,399.5	0.00	0.00	0.00	
Start DLS 8.00 TFO 166.91										
5,600.0	20.17	105.81	5,262.0	-292.9	1,485.8	-1,433.0	8.00	-7.72	5.25	
5,700.0	12.76	116.68	5,357.8	-302.6	1,512.3	-1,458.0	8.00	-7.42	10.87	
5,800.0	6.78	150.07	5,456.4	-312.7	1,525.2	-1,469.3	8.00	-5.97	33.39	
5,900.0	7.54	217.86	5,555.8	-323.0	1,524.1	-1,466.9	8.00	0.76	67.79	
6,000.0	13.98	244.78	5,654.0	-333.3	1,509.1	-1,450.7	8.00	6.43	26.93	
6,100.0	21.48	254.13	5,749.2	-343.5	1,480.5	-1,421.0	8.00	7.50	9.34	
6,200.0	29.24	258.73	5,839.5	-353.3	1,438.9	-1,378.4	8.00	7.76	4.60	
6,300.0	37.09	261.53	5,923.2	-362.5	1,385.0	-1,323.8	8.00	7.85	2.79	
6,400.0	44.99	263.46	5,998.5	-371.0	1,320.0	-1,258.2	8.00	7.90	1.93	
6,500.0	52.91	264.91	6,064.2	-378.6	1,245.0	-1,182.9	8.00	7.92	1.46	
6,600.0	60.85	266.10	6,118.8	-385.1	1,161.6	-1,099.3	8.00	7.94	1.18	
6,700.0	68.80	267.11	6,161.3	-390.4	1,071.3	-1,009.2	8.00	7.95	1.01	
6,800.0	76.75	268.01	6,190.8	-394.5	976.0	-914.1	8.00	7.95	0.91	
6,900.0	84.71	268.86	6,206.9	-397.2	877.4	-816.1	8.00	7.96	0.85	
6,966.5	90.00	269.41	6,210.0	-398.2	811.0	-750.2	8.00	7.96	0.83	
Start 4056.0 hold at 6966.5 MD - 7" - Landing Pt. (11-16NHZ)										
7,000.0	90.00	269.41	6,210.0	-398.5	777.5	-716.9	0.00	0.00	0.00	
7,100.0	90.00	269.41	6,210.0	-399.5	677.5	-617.7	0.00	0.00	0.00	
7,200.0	90.00	269.41	6,210.0	-400.6	577.5	-518.5	0.00	0.00	0.00	
7,300.0	90.00	269.41	6,210.0	-401.6	477.5	-419.2	0.00	0.00	0.00	
7,400.0	90.00	269.41	6,210.0	-402.6	377.5	-320.0	0.00	0.00	0.00	
7,500.0	90.00	269.41	6,210.0	-403.6	277.5	-220.8	0.00	0.00	0.00	
7,600.0	90.00	269.41	6,210.0	-404.7	177.5	-121.6	0.00	0.00	0.00	
7,700.0	90.00	269.41	6,210.0	-405.7	77.5	-22.3	0.00	0.00	0.00	
7,800.0	90.00	269.41	6,210.0	-406.7	-22.5	76.9	0.00	0.00	0.00	
7,900.0	90.00	269.41	6,210.0	-407.8	-122.5	176.1	0.00	0.00	0.00	
8,000.0	90.00	269.41	6,210.0	-408.8	-222.5	275.4	0.00	0.00	0.00	
8,100.0	90.00	269.41	6,210.0	-409.8	-322.5	374.6	0.00	0.00	0.00	
8,200.0	90.00	269.41	6,210.0	-410.8	-422.5	473.8	0.00	0.00	0.00	
8,300.0	90.00	269.41	6,210.0	-411.9	-522.4	573.0	0.00	0.00	0.00	
8,400.0	90.00	269.41	6,210.0	-412.9	-622.4	672.3	0.00	0.00	0.00	
8,500.0	90.00	269.41	6,210.0	-413.9	-722.4	771.5	0.00	0.00	0.00	
8,600.0	90.00	269.41	6,210.0	-415.0	-822.4	870.7	0.00	0.00	0.00	
8,700.0	90.00	269.41	6,210.0	-416.0	-922.4	969.9	0.00	0.00	0.00	
8,800.0	90.00	269.41	6,210.0	-417.0	-1,022.4	1,069.2	0.00	0.00	0.00	
8,900.0	90.00	269.41	6,210.0	-418.0	-1,122.4	1,168.4	0.00	0.00	0.00	
9,000.0	90.00	269.41	6,210.0	-419.1	-1,222.4	1,267.6	0.00	0.00	0.00	
9,100.0	90.00	269.41	6,210.0	-420.1	-1,322.4	1,366.8	0.00	0.00	0.00	
9,200.0	90.00	269.41	6,210.0	-421.1	-1,422.4	1,466.1	0.00	0.00	0.00	
9,300.0	90.00	269.41	6,210.0	-422.2	-1,522.4	1,565.3	0.00	0.00	0.00	
9,400.0	90.00	269.41	6,210.0	-423.2	-1,622.4	1,664.5	0.00	0.00	0.00	
9,500.0	90.00	269.41	6,210.0	-424.2	-1,722.4	1,763.8	0.00	0.00	0.00	
9,600.0	90.00	269.41	6,210.0	-425.2	-1,822.4	1,863.0	0.00	0.00	0.00	
9,700.0	90.00	269.41	6,210.0	-426.3	-1,922.4	1,962.2	0.00	0.00	0.00	

Database:	Landmark	Local Co-ordinate Reference:	Well SRC Markham 11-16NHZ
Company:	Synergy Resources	TVD Reference:	WELL @ 4997.5ft (Original Well Elev)
Project:	SEC.16-T4N-R68W	MD Reference:	WELL @ 4997.5ft (Original Well Elev)
Site:	SRC Markham Pad Sec.16-T4N-R68W	North Reference:	True
Well:	SRC Markham 11-16NHZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (1-05-15)		

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)	
9,800.0	90.00	269.41	6,210.0	-427.3	-2,022.4	2,061.4	0.00	0.00	0.00	
9,900.0	90.00	269.41	6,210.0	-428.3	-2,122.4	2,160.7	0.00	0.00	0.00	
10,000.0	90.00	269.41	6,210.0	-429.4	-2,222.4	2,259.9	0.00	0.00	0.00	
10,100.0	90.00	269.41	6,210.0	-430.4	-2,322.4	2,359.1	0.00	0.00	0.00	
10,200.0	90.00	269.41	6,210.0	-431.4	-2,422.3	2,458.3	0.00	0.00	0.00	
10,300.0	90.00	269.41	6,210.0	-432.4	-2,522.3	2,557.6	0.00	0.00	0.00	
10,400.0	90.00	269.41	6,210.0	-433.5	-2,622.3	2,656.8	0.00	0.00	0.00	
10,500.0	90.00	269.41	6,210.0	-434.5	-2,722.3	2,756.0	0.00	0.00	0.00	
10,600.0	90.00	269.41	6,210.0	-435.5	-2,822.3	2,855.2	0.00	0.00	0.00	
10,700.0	90.00	269.41	6,210.0	-436.5	-2,922.3	2,954.5	0.00	0.00	0.00	
10,800.0	90.00	269.41	6,210.0	-437.6	-3,022.3	3,053.7	0.00	0.00	0.00	
10,900.0	90.00	269.41	6,210.0	-438.6	-3,122.3	3,152.9	0.00	0.00	0.00	
11,000.0	90.00	269.41	6,210.0	-439.6	-3,222.3	3,252.2	0.00	0.00	0.00	
11,022.5	90.00	269.41	6,210.0	-439.9	-3,244.8	3,274.4	0.00	0.00	0.00	
TD at 11022.5 - BHL 637'FNL, 460'FWL										

Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude	
SHL 235'FNL, 1582'FI - hit/miss target - Shape - Point	0.00	0.00	1.0	0.0	0.0	1,359,813.85	3,138,165.90	40.320030	-105.004493	
Landing Pt. (11-16NH) - plan hits target center - Point	0.00	0.00	6,210.0	-398.2	811.0	1,359,420.24	3,138,979.08	40.318937	-105.001585	
BHL 637'FNL, 460'FW - plan hits target center - Point	0.00	0.00	6,210.0	-439.9	-3,244.8	1,359,355.87	3,134,923.78	40.318822	-105.016129	

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
6,966.5	6,210.0	7"	7	7-1/2	

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment	
1,600.0	1,600.0	0.0	0.0	Start Build 2.00	
2,954.9	2,905.0	-60.6	308.6	Start 2555.4 hold at 2954.9 MD	
5,510.3	5,179.8	-284.7	1,450.9	Start DLS 8.00 TFO 166.91	
6,966.5	6,210.0	-398.2	811.0	Start 4056.0 hold at 6966.5 MD	
11,022.5	6,210.0	-439.9	-3,244.8	TD at 11022.5	



Directional

Synergy Resources

SEC.16-T4N-R68W

SRC Markham Pad Sec.16-T4N-R68W

SRC Markham 11-16NHZ

Wellbore #1

Plan #1 (1-05-15)

Anticollision Report

07 January, 2015

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Markham 11-16NHZ
Project:	SEC.16-T4N-R68W	TVD Reference:	WELL @ 4997.5ft (Original Well Elev)
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4997.5ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 11-16NHZ	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 (1-05-15)	Offset TVD Reference:	Offset Datum

Reference	Plan #1 (1-05-15)		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 1,000.0ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program	Date	1/7/2015		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	11,022.5	Plan #1 (1-05-15) (Wellbore #1)	MWD	MWD - Standard

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
SRC Markham Pad Sec.16-T4N-R68W						
SRC Markham 11-16CHZ - Wellbore #1 - Plan #1 (1-05-15)	1,400.0	1,400.0	15.1	9.0	2.482	CC, ES
SRC Markham 11-16CHZ - Wellbore #1 - Plan #1 (1-05-15)	11,022.9	11,148.5	266.3	49.4	1.228	Level 2, SF
SRC Markham 12-16CHZ - Wellbore #1 - Plan #1 (1-06-15)	200.0	200.0	104.9	104.2	155.507	CC, ES
SRC Markham 12-16CHZ - Wellbore #1 - Plan #1 (1-06-15)	4,700.0	4,443.1	993.0	947.1	21.619	SF
SRC Markham 12-16NHZ - Wellbore #1 - Plan #1 (1-06-15)	400.0	400.0	90.1	88.5	57.250	CC, ES
SRC Markham 12-16NHZ - Wellbore #1 - Plan #1 (1-06-15)	5,300.0	5,059.5	990.6	932.5	17.071	SF
SRC Markham A-16CHZ - Wellbore #1 - Plan #1 (1-06-15)	600.0	600.0	75.0	72.5	30.342	CC, ES
SRC Markham A-16CHZ - Wellbore #1 - Plan #1 (1-06-15)	5,700.0	5,505.7	870.9	804.2	13.057	SF
SRC Markham A-16NHZ - Wellbore #1 - Plan #1 (1-05-15)	800.0	800.0	60.0	56.6	17.784	CC, ES
SRC Markham A-16NHZ - Wellbore #1 - Plan #1 (1-05-15)	11,022.9	11,058.8	879.7	623.0	3.427	SF
SRC Markham F-16CHZ - Wellbore #1 - Plan #1 (1-05-15)	1,000.0	1,000.0	44.9	40.6	10.514	CC, ES
SRC Markham F-16CHZ - Wellbore #1 - Plan #1 (1-05-15)	11,022.9	11,175.3	673.9	423.2	2.688	SF
SRC Markham F-16NHZ - Wellbore #1 - Plan #1 (1-05-15)	1,200.0	1,200.0	29.8	24.7	5.772	CC, ES
SRC Markham F-16NHZ - Wellbore #1 - Plan #1 (1-05-15)	11,022.9	11,022.6	439.7	181.9	1.705	SF

Offset Design													Offset Site Error:	0.0ft		
Survey Program: 0-MWD													Offset Well Error:	0.0ft		
Reference													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	88.63	0.4	15.1	15.1	15.1	0.00	N/A				
100.0	100.0	100.0	100.0	0.1	0.1	88.63	0.4	15.1	15.1	14.8	0.22	67.013				
200.0	200.0	200.0	200.0	0.3	0.3	88.63	0.4	15.1	15.1	14.4	0.67	22.338				
300.0	300.0	300.0	300.0	0.6	0.6	88.63	0.4	15.1	15.1	13.9	1.12	13.403				
400.0	400.0	400.0	400.0	0.8	0.8	88.63	0.4	15.1	15.1	13.5	1.57	9.573				
500.0	500.0	500.0	500.0	1.0	1.0	88.63	0.4	15.1	15.1	13.0	2.02	7.446				
600.0	600.0	600.0	600.0	1.2	1.2	88.63	0.4	15.1	15.1	12.6	2.47	6.092				
700.0	700.0	700.0	700.0	1.5	1.5	88.63	0.4	15.1	15.1	12.1	2.92	5.155				
800.0	800.0	800.0	800.0	1.7	1.7	88.63	0.4	15.1	15.1	11.7	3.37	4.468				
900.0	900.0	900.0	900.0	1.9	1.9	88.63	0.4	15.1	15.1	11.2	3.82	3.942				
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	88.63	0.4	15.1	15.1	10.8	4.27	3.527				
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	88.63	0.4	15.1	15.1	10.3	4.72	3.191				
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	88.63	0.4	15.1	15.1	9.9	5.17	2.914				
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	88.63	0.4	15.1	15.1	9.4	5.62	2.681				

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 11-16NHZ
Project:	SEC.16-T4N-R68W	TVD Reference:	WELL @ 4997.5ft (Original Well Elev)
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4997.5ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 11-16NHZ	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 (1-05-15)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0ft	
Survey Program: 0-MWD													Offset Well Error:		0.0ft
Reference		Offset		Semi Major Axis			Distance						Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor			
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	88.63	0.4	15.1	15.1	9.0	6.07	2.482	CC, ES		
1,500.0	1,500.0	1,499.5	1,499.4	3.3	3.2	90.59	-0.2	16.7	16.7	10.2	6.50	2.571			
1,600.0	1,600.0	1,598.7	1,598.5	3.5	3.4	94.66	-1.8	21.6	21.7	14.8	6.92	3.141			
1,700.0	1,700.0	1,697.6	1,697.1	3.7	3.6	-2.86	-4.4	29.8	28.5	21.2	7.31	3.894			
1,800.0	1,799.8	1,796.3	1,795.0	3.9	3.9	0.00	-8.1	41.1	35.2	27.5	7.69	4.579			
1,900.0	1,899.5	1,894.7	1,892.3	4.1	4.1	2.49	-12.8	55.6	42.0	33.9	8.07	5.199			
2,000.0	1,998.7	1,992.9	1,988.7	4.3	4.4	4.74	-18.5	73.2	48.7	40.3	8.46	5.764			
2,100.0	2,097.5	2,090.9	2,084.2	4.6	4.7	6.85	-25.2	93.9	55.5	46.7	8.84	6.279			
2,200.0	2,195.6	2,188.6	2,178.7	4.9	5.1	8.86	-32.9	117.7	62.3	53.1	9.23	6.749			
2,300.0	2,293.1	2,286.1	2,272.1	5.2	5.5	10.80	-41.5	144.4	69.1	59.5	9.64	7.174			
2,400.0	2,389.6	2,383.4	2,364.2	5.6	6.0	12.67	-51.1	174.1	76.0	66.0	10.06	7.556			
2,500.0	2,485.3	2,480.5	2,455.0	6.0	6.6	14.49	-61.6	206.6	82.9	72.4	10.51	7.889			
2,600.0	2,579.8	2,577.3	2,544.4	6.5	7.3	16.27	-73.1	242.0	89.9	78.9	11.01	8.171			
2,700.0	2,673.2	2,675.6	2,634.1	7.1	8.0	18.09	-85.5	280.4	96.5	84.9	11.56	8.350			
2,800.0	2,765.2	2,775.5	2,725.0	7.8	8.7	20.34	-98.3	319.7	100.2	88.0	12.20	8.215			
2,900.0	2,855.8	2,875.3	2,815.9	8.5	9.5	23.20	-111.0	359.0	100.9	87.9	12.99	7.768			
2,954.9	2,905.0	2,930.2	2,865.8	8.9	10.0	25.12	-118.0	380.6	100.1	86.5	13.52	7.402			
3,000.0	2,945.1	2,975.1	2,906.7	9.3	10.4	26.82	-123.7	398.3	99.0	85.0	14.04	7.052			
3,100.0	3,034.1	3,074.9	2,997.6	10.2	11.2	30.71	-136.4	437.6	97.1	81.7	15.36	6.320			
3,200.0	3,123.1	3,174.6	3,088.4	11.1	12.0	34.74	-149.1	476.8	95.6	78.7	16.90	5.659			
3,300.0	3,212.2	3,274.4	3,179.2	12.0	12.9	38.87	-161.8	516.1	94.7	76.0	18.66	5.075			
3,400.0	3,301.2	3,374.1	3,270.0	12.9	13.7	43.06	-174.5	555.4	94.2	73.6	20.61	4.571			
3,442.5	3,339.0	3,416.5	3,308.6	13.3	14.1	44.85	-179.9	572.0	94.2	72.7	21.49	4.381			
3,500.0	3,390.2	3,473.9	3,360.8	13.9	14.6	47.28	-187.3	594.6	94.2	71.5	22.73	4.145			
3,600.0	3,479.2	3,573.7	3,451.7	14.8	15.4	51.46	-200.0	633.9	94.8	69.8	25.00	3.792			
3,700.0	3,568.3	3,673.4	3,542.5	15.7	16.3	55.58	-212.7	673.2	95.8	68.5	27.36	3.503			
3,800.0	3,657.3	3,773.2	3,633.3	16.7	17.2	59.59	-225.4	712.5	97.4	67.6	29.78	3.270			
3,900.0	3,746.3	3,872.9	3,724.1	17.7	18.0	63.46	-238.1	751.7	99.4	67.1	32.22	3.084			
4,000.0	3,835.3	3,972.7	3,814.9	18.6	18.9	67.16	-250.8	791.0	101.8	67.1	34.65	2.938			
4,100.0	3,924.3	4,072.5	3,905.8	19.6	19.8	70.67	-263.5	830.3	104.6	67.6	37.06	2.823			
4,200.0	4,013.4	4,172.2	3,996.6	20.6	20.7	73.99	-276.2	869.5	107.8	68.4	39.42	2.736			
4,300.0	4,102.4	4,272.0	4,087.4	21.6	21.6	77.10	-288.9	908.8	111.4	69.7	41.72	2.670			
4,400.0	4,191.4	4,371.7	4,178.2	22.6	22.4	80.02	-301.7	948.1	115.3	71.3	43.97	2.622			
4,500.0	4,280.4	4,471.5	4,269.0	23.5	23.3	82.74	-314.4	987.3	119.4	73.3	46.14	2.588			
4,600.0	4,369.5	4,571.3	4,359.8	24.5	24.2	85.27	-327.1	1,026.6	123.8	75.5	48.26	2.565			
4,700.0	4,458.5	4,671.0	4,450.7	25.5	25.1	87.63	-339.8	1,065.9	128.4	78.1	50.31	2.552			
4,800.0	4,547.5	4,770.8	4,541.5	26.5	26.0	89.82	-352.5	1,105.2	133.2	80.9	52.31	2.547			
4,900.0	4,636.5	4,870.5	4,632.3	27.5	26.9	91.85	-365.2	1,144.4	138.2	84.0	54.26	2.548			
5,000.0	4,725.5	4,970.3	4,723.1	28.5	27.8	93.75	-377.9	1,183.7	143.4	87.2	56.16	2.554			
5,100.0	4,814.6	5,070.0	4,813.9	29.5	28.7	95.50	-390.6	1,223.0	148.7	90.7	58.01	2.563			
5,200.0	4,903.6	5,169.8	4,904.8	30.5	29.6	97.14	-403.4	1,262.2	154.1	94.3	59.83	2.576			
5,300.0	4,992.6	5,269.6	4,995.6	31.5	30.4	98.66	-416.1	1,301.5	159.7	98.1	61.62	2.592			
5,400.0	5,081.6	5,369.3	5,086.4	32.5	31.3	100.08	-428.8	1,340.8	165.4	102.0	63.37	2.609			
5,500.0	5,170.7	5,469.1	5,177.2	33.5	32.2	101.41	-441.5	1,380.0	171.1	106.0	65.10	2.628			
5,510.3	5,179.8	5,479.4	5,186.6	33.6	32.3	101.54	-442.8	1,384.1	171.7	106.4	65.28	2.630			
5,550.0	5,215.6	5,519.0	5,222.7	33.9	32.7	100.25	-447.9	1,399.7	173.6	107.6	65.96	2.631			
5,600.0	5,262.0	5,568.9	5,268.1	34.2	33.1	96.88	-454.2	1,419.4	174.6	107.8	66.81	2.613			
5,650.0	5,309.4	5,618.6	5,313.4	34.5	33.6	91.08	-460.5	1,438.9	174.3	106.6	67.67	2.575			
5,700.0	5,357.8	5,667.9	5,358.2	34.7	34.0	81.76	-466.8	1,458.3	172.9	104.5	68.46	2.526			
5,750.0	5,406.9	5,714.3	5,400.7	34.9	34.4	66.85	-472.8	1,476.0	171.2	102.2	68.97	2.482			
5,800.0	5,456.4	5,760.1	5,443.6	35.0	34.6	41.45	-478.8	1,490.9	170.1	101.0	69.13	2.461			
5,840.9	5,497.0	5,798.0	5,479.8	35.0	34.8	9.63	-483.9	1,501.1	169.9	100.8	69.03	2.461			

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 11-16NHZ
Project:	SEC.16-T4N-R68W	TVD Reference:	WELL @ 4997.5ft (Original Well Elev)
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4997.5ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 11-16NHZ	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 (1-05-15)	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			
5,850.0	5,506.1	5,806.6	5,487.9	35.0	34.9	1.92	-485.1	1,503.1	169.9	100.9	68.99	2.463			
5,900.0	5,555.8	5,853.7	5,533.7	35.0	35.1	-33.61	-491.6	1,512.5	170.5	101.9	68.55	2.487			
5,950.0	5,605.2	5,901.6	5,580.7	35.0	35.2	-54.79	-498.3	1,518.9	171.9	104.1	67.83	2.534			
6,000.0	5,654.0	5,950.4	5,628.8	35.0	35.3	-67.82	-505.2	1,522.2	174.3	107.4	66.88	2.606			
6,050.0	5,702.1	5,999.9	5,677.9	34.9	35.4	-76.97	-512.3	1,522.1	177.4	111.7	65.72	2.700			
6,100.0	5,749.2	6,050.4	5,727.7	34.8	35.4	-84.06	-519.6	1,518.5	181.4	117.0	64.40	2.817			
6,150.0	5,795.1	6,101.9	5,778.1	34.7	35.4	-89.90	-526.9	1,511.2	186.1	123.1	62.99	2.955			
6,200.0	5,839.5	6,154.3	5,828.8	34.6	35.3	-94.87	-534.4	1,500.0	191.4	129.9	61.52	3.111			
6,250.0	5,882.3	6,207.8	5,879.5	34.5	35.2	-99.20	-541.8	1,484.7	197.2	137.2	60.05	3.284			
6,300.0	5,923.2	6,262.4	5,929.9	34.4	35.1	-103.01	-549.3	1,465.3	203.4	144.8	58.63	3.470			
6,350.0	5,962.0	6,318.1	5,979.7	34.3	35.0	-106.38	-556.8	1,441.5	209.9	152.6	57.30	3.663			
6,400.0	5,998.5	6,375.0	6,028.5	34.2	34.9	-109.36	-564.1	1,413.2	216.5	160.4	56.09	3.860			
6,450.0	6,032.7	6,433.0	6,075.8	34.2	34.7	-111.99	-571.3	1,380.5	223.1	168.1	55.05	4.053			
6,500.0	6,064.2	6,492.2	6,121.2	34.2	34.6	-114.32	-578.2	1,343.2	229.6	175.4	54.20	4.237			
6,550.0	6,092.9	6,552.5	6,164.2	34.2	34.5	-116.36	-584.8	1,301.4	235.9	182.4	53.58	4.403			
6,600.0	6,118.8	6,613.9	6,204.2	34.2	34.4	-118.13	-591.1	1,255.2	241.9	188.7	53.21	4.545			
6,650.0	6,141.6	6,676.4	6,240.7	34.3	34.4	-119.66	-596.9	1,204.9	247.4	194.3	53.11	4.657			
6,700.0	6,161.3	6,739.9	6,273.3	34.5	34.4	-120.95	-602.1	1,150.6	252.3	199.0	53.28	4.735			
6,750.0	6,177.7	6,804.3	6,301.2	34.7	34.5	-122.02	-606.8	1,092.9	256.6	202.9	53.73	4.776			
6,800.0	6,190.8	6,869.5	6,324.2	35.0	34.6	-122.88	-610.7	1,032.0	260.2	205.7	54.45	4.778			
6,850.0	6,200.6	6,935.3	6,341.8	35.3	34.8	-123.53	-613.9	968.7	263.0	207.6	55.42	4.745			
6,900.0	6,206.9	7,001.6	6,353.6	35.6	35.2	-123.99	-616.3	903.5	265.0	208.4	56.62	4.680			
6,950.0	6,209.8	7,068.2	6,359.4	36.0	35.5	-124.24	-617.8	837.2	266.1	208.1	58.02	4.586			
6,966.5	6,210.0	7,090.2	6,360.0	36.1	35.7	-124.28	-618.1	815.2	266.2	207.7	58.51	4.550			
7,000.0	6,210.0	7,125.7	6,360.0	36.4	35.9	-124.29	-618.5	779.7	266.3	207.2	59.05	4.509			
7,100.0	6,210.0	7,225.7	6,360.0	37.4	36.8	-124.29	-619.5	679.8	266.3	205.5	60.81	4.378			
7,200.0	6,210.0	7,325.7	6,360.0	38.6	37.8	-124.29	-620.5	579.8	266.3	203.4	62.88	4.235			
7,300.0	6,210.0	7,425.7	6,360.0	39.9	39.0	-124.29	-621.6	479.8	266.3	201.0	65.22	4.083			
7,400.0	6,210.0	7,525.7	6,360.0	41.4	40.4	-124.29	-622.6	379.8	266.3	198.5	67.81	3.927			
7,500.0	6,210.0	7,625.7	6,360.0	43.0	41.9	-124.29	-623.6	279.8	266.3	195.7	70.62	3.771			
7,600.0	6,210.0	7,725.7	6,360.0	44.8	43.6	-124.29	-624.7	179.8	266.3	192.6	73.62	3.617			
7,700.0	6,210.0	7,825.7	6,360.0	46.6	45.4	-124.29	-625.7	79.8	266.3	189.5	76.80	3.467			
7,800.0	6,210.0	7,925.7	6,360.0	48.6	47.3	-124.29	-626.7	-20.2	266.3	186.1	80.13	3.323			
7,900.0	6,210.0	8,025.7	6,360.0	50.6	49.3	-124.29	-627.7	-120.2	266.3	182.7	83.59	3.185			
8,000.0	6,210.0	8,125.7	6,360.0	52.7	51.4	-124.29	-628.8	-220.2	266.3	179.1	87.17	3.055			
8,100.0	6,210.0	8,225.7	6,360.0	54.9	53.6	-124.29	-629.8	-320.2	266.3	175.4	90.85	2.931			
8,200.0	6,210.0	8,325.7	6,360.0	57.1	55.8	-124.29	-630.8	-420.2	266.3	171.6	94.63	2.814			
8,300.0	6,210.0	8,425.7	6,360.0	59.4	58.1	-124.29	-631.9	-520.2	266.3	167.8	98.48	2.704			
8,400.0	6,210.0	8,525.7	6,360.0	61.7	60.4	-124.29	-632.9	-620.2	266.3	163.9	102.41	2.600			
8,500.0	6,210.0	8,625.7	6,360.0	64.1	62.7	-124.29	-633.9	-720.2	266.3	159.9	106.40	2.503			
8,600.0	6,210.0	8,725.7	6,360.0	66.4	65.1	-124.29	-634.9	-820.2	266.3	155.8	110.45	2.411			
8,700.0	6,210.0	8,825.7	6,360.0	68.9	67.5	-124.29	-636.0	-920.2	266.3	151.7	114.55	2.325			
8,800.0	6,210.0	8,925.7	6,360.0	71.3	70.0	-124.29	-637.0	-1,020.2	266.3	147.6	118.69	2.243			
8,900.0	6,210.0	9,025.7	6,360.0	73.8	72.5	-124.29	-638.0	-1,120.2	266.3	143.4	122.88	2.167			
9,000.0	6,210.0	9,125.7	6,360.0	76.3	75.0	-124.29	-639.1	-1,220.1	266.3	139.2	127.10	2.095			
9,100.0	6,210.0	9,225.7	6,360.0	78.8	77.5	-124.29	-640.1	-1,320.1	266.3	134.9	131.36	2.027			
9,200.0	6,210.0	9,325.7	6,360.0	81.4	80.1	-124.29	-641.1	-1,420.1	266.3	130.6	135.65	1.963			
9,300.0	6,210.0	9,425.7	6,360.0	83.9	82.6	-124.29	-642.2	-1,520.1	266.3	126.3	139.96	1.903			
9,400.0	6,210.0	9,525.7	6,360.0	86.5	85.2	-124.29	-643.2	-1,620.1	266.3	122.0	144.30	1.845			
9,500.0	6,210.0	9,625.7	6,360.0	89.1	87.8	-124.29	-644.2	-1,720.1	266.3	117.6	148.66	1.791			
9,600.0	6,210.0	9,725.7	6,360.0	91.7	90.4	-124.29	-645.2	-1,820.1	266.3	113.2	153.05	1.740			
9,700.0	6,210.0	9,825.7	6,360.0	94.3	93.0	-124.29	-646.3	-1,920.1	266.3	108.8	157.45	1.691			

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 11-16NHZ
Project:	SEC.16-T4N-R68W	TVD Reference:	WELL @ 4997.5ft (Original Well Elev)
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4997.5ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 11-16NHZ	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 (1-05-15)	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			
9,800.0	6,210.0	9,925.7	6,360.0	96.9	95.6	-124.29	-647.3	-2,020.1	266.3	104.4	161.87	1.645			
9,900.0	6,210.0	10,025.7	6,360.0	99.6	98.3	-124.29	-648.3	-2,120.1	266.3	100.0	166.30	1.601			
10,000.0	6,210.0	10,125.7	6,360.0	102.2	100.9	-124.29	-649.4	-2,220.1	266.3	95.5	170.75	1.559			
10,100.0	6,210.0	10,225.7	6,360.0	104.9	103.6	-124.29	-650.4	-2,320.1	266.3	91.1	175.22	1.520			
10,200.0	6,210.0	10,325.7	6,360.0	107.5	106.2	-124.28	-651.4	-2,420.1	266.3	86.6	179.70	1.482	Level 3		
10,300.0	6,210.0	10,425.7	6,360.0	110.2	108.9	-124.28	-652.4	-2,520.1	266.3	82.1	184.19	1.446	Level 3		
10,400.0	6,210.0	10,525.7	6,360.0	112.9	111.6	-124.28	-653.5	-2,620.1	266.3	77.6	188.69	1.411	Level 3		
10,500.0	6,210.0	10,625.7	6,360.0	115.5	114.3	-124.28	-654.5	-2,720.1	266.3	73.1	193.20	1.378	Level 3		
10,600.0	6,210.0	10,725.7	6,360.0	118.2	117.0	-124.28	-655.5	-2,820.1	266.3	68.6	197.72	1.347	Level 3		
10,700.0	6,210.0	10,825.7	6,360.0	120.9	119.7	-124.28	-656.6	-2,920.1	266.3	64.0	202.25	1.317	Level 3		
10,800.0	6,210.0	10,925.7	6,360.0	123.6	122.4	-124.28	-657.6	-3,020.1	266.3	59.5	206.78	1.288	Level 3		
10,900.0	6,210.0	11,025.7	6,360.0	126.3	125.1	-124.28	-658.6	-3,120.0	266.3	55.0	211.33	1.260	Level 3		
11,000.0	6,210.0	11,125.7	6,360.0	129.0	127.8	-124.28	-659.6	-3,220.0	266.3	50.4	215.88	1.234	Level 2		
11,022.5	6,210.0	11,148.1	6,360.0	129.6	128.4	-124.28	-659.9	-3,242.5	266.3	49.4	216.90	1.228	Level 2		
11,022.9	6,210.0	11,148.5	6,360.0	129.6	128.4	-124.28	-659.9	-3,242.9	266.3	49.4	216.92	1.228	Level 2, SF		

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Markham 11-16NHZ
Project:	SEC.16-T4N-R68W	TVD Reference:	WELL @ 4997.5ft (Original Well Elev)
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4997.5ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 11-16NHZ	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 (1-05-15)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0ft	
Survey Program: 0-MWD													Offset Well Error:		0.0ft
Reference				Offset		Semi Major Axis			Distance				Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor			
0.0	0.0	0.0	0.0	0.0	0.0	89.21	1.5	104.8	104.9						
100.0	100.0	100.0	100.0	0.1	0.1	89.21	1.5	104.8	104.9	104.6	0.22	466.521			
200.0	200.0	200.0	200.0	0.3	0.3	89.21	1.5	104.8	104.9	104.2	0.67	155.507	CC, ES		
300.0	300.0	297.7	297.7	0.6	0.5	89.90	0.2	105.9	106.0	104.9	1.10	96.262			
400.0	400.0	395.1	395.0	0.8	0.7	91.89	-3.6	109.2	109.3	107.8	1.53	71.329			
500.0	500.0	492.1	491.6	1.0	1.0	94.93	-9.9	114.5	115.2	113.2	1.98	58.103			
600.0	600.0	588.5	587.3	1.2	1.3	98.66	-18.6	121.9	124.0	121.5	2.45	50.521			
700.0	700.0	683.9	681.6	1.5	1.6	102.71	-29.6	131.3	135.8	132.9	2.95	45.999			
800.0	800.0	778.3	774.4	1.7	1.9	106.73	-42.9	142.6	151.0	147.5	3.49	43.271			
900.0	900.0	871.5	865.3	1.9	2.3	110.51	-58.2	155.6	169.7	165.6	4.07	41.651			
1,000.0	1,000.0	963.2	954.2	2.1	2.8	113.91	-75.5	170.3	191.9	187.2	4.71	40.742			
1,100.0	1,100.0	1,053.3	1,040.8	2.4	3.3	116.89	-94.6	186.6	217.4	212.1	5.39	40.306			
1,200.0	1,200.0	1,141.7	1,124.9	2.6	3.8	119.46	-115.4	204.3	246.3	240.2	6.13	40.196			
1,300.0	1,300.0	1,228.3	1,206.4	2.8	4.4	121.65	-137.6	223.2	278.4	271.5	6.91	40.316			
1,400.0	1,400.0	1,313.0	1,285.2	3.0	5.0	123.53	-161.1	243.2	313.5	305.8	7.72	40.603			
1,500.0	1,500.0	1,400.0	1,365.2	3.3	5.7	125.19	-187.2	265.4	351.6	343.0	8.61	40.848			
1,600.0	1,600.0	1,482.6	1,440.4	3.5	6.4	126.56	-213.2	287.6	392.0	382.5	9.51	41.234			
1,700.0	1,700.0	1,574.1	1,523.6	3.7	7.2	126.43	-242.2	312.2	431.3	423.4	7.89	54.648			
1,800.0	1,799.8	1,666.6	1,607.7	3.9	8.0	127.41	-271.5	337.2	468.0	459.6	8.39	55.810			
1,900.0	1,899.5	1,760.0	1,692.6	4.1	8.8	128.41	-301.1	362.4	502.1	493.2	8.88	56.513			
2,000.0	1,998.7	1,854.2	1,778.3	4.3	9.6	129.45	-331.0	387.8	533.4	524.0	9.39	56.829			
2,100.0	2,097.5	1,949.1	1,864.6	4.6	10.4	130.54	-361.1	413.4	562.2	552.3	9.90	56.808			
2,200.0	2,195.6	2,044.6	1,951.4	4.9	11.3	131.70	-391.3	439.1	588.4	578.0	10.42	56.477			
2,300.0	2,293.1	2,140.5	2,038.6	5.2	12.1	132.94	-421.7	465.0	612.1	601.1	10.96	55.849			
2,400.0	2,389.6	2,236.7	2,126.1	5.6	12.9	134.26	-452.3	491.0	633.3	621.8	11.53	54.925			
2,500.0	2,485.3	2,333.2	2,213.8	6.0	13.8	135.67	-482.8	517.0	652.2	640.1	12.15	53.701			
2,600.0	2,579.8	2,429.8	2,301.6	6.5	14.6	137.18	-513.4	543.1	668.9	656.1	12.82	52.169			
2,700.0	2,673.2	2,526.3	2,389.4	7.1	15.5	138.79	-544.0	569.1	683.5	669.9	13.58	50.330			
2,800.0	2,765.2	2,622.8	2,477.1	7.8	16.3	140.53	-574.6	595.1	696.1	681.7	14.44	48.196			
2,900.0	2,855.8	2,718.9	2,564.6	8.5	17.2	142.38	-605.1	621.0	706.9	691.5	15.44	45.795			
2,954.9	2,905.0	2,771.6	2,612.5	8.9	17.6	143.46	-621.8	635.3	712.2	696.2	16.05	44.379			
3,000.0	2,945.1	2,814.8	2,651.7	9.3	18.0	144.40	-635.5	646.9	716.4	699.8	16.59	43.188			
3,100.0	3,034.1	2,910.6	2,738.8	10.2	18.8	146.47	-665.8	672.7	726.5	708.7	17.86	40.678			
3,200.0	3,123.1	3,006.3	2,825.9	11.1	19.7	148.48	-696.2	698.6	737.6	718.4	19.23	38.362			
3,300.0	3,212.2	3,102.1	2,913.0	12.0	20.5	150.44	-726.5	724.4	749.7	729.0	20.68	36.247			
3,400.0	3,301.2	3,197.9	3,000.1	12.9	21.4	152.33	-756.9	750.2	762.6	740.4	22.21	34.330			
3,500.0	3,390.2	3,293.7	3,087.2	13.9	22.2	154.16	-787.2	776.1	776.4	752.6	23.81	32.602			
3,600.0	3,479.2	3,389.5	3,174.3	14.8	23.0	155.94	-817.6	801.9	791.0	765.5	25.48	31.049			
3,700.0	3,568.3	3,485.3	3,261.4	15.7	23.9	157.64	-848.0	827.8	806.3	779.1	27.19	29.656			
3,800.0	3,657.3	3,581.1	3,348.5	16.7	24.7	159.29	-878.3	853.6	822.4	793.4	28.95	28.409			
3,900.0	3,746.3	3,676.8	3,435.6	17.7	25.6	160.88	-908.7	879.4	839.1	808.4	30.75	27.292			
4,000.0	3,835.3	3,772.6	3,522.7	18.6	26.4	162.41	-939.0	905.3	856.5	823.9	32.58	26.292			
4,100.0	3,924.3	3,868.4	3,609.7	19.6	27.3	163.88	-969.4	931.1	874.5	840.0	34.43	25.395			
4,200.0	4,013.4	3,964.2	3,696.8	20.6	28.1	165.29	-999.8	956.9	893.0	856.7	36.31	24.591			
4,300.0	4,102.4	4,060.0	3,783.9	21.6	28.9	166.64	-1,030.1	982.8	912.1	873.9	38.21	23.867			
4,400.0	4,191.4	4,155.8	3,871.0	22.6	29.8	167.95	-1,060.5	1,008.6	931.6	891.5	40.13	23.216			
4,500.0	4,280.4	4,251.5	3,958.1	23.5	30.6	169.20	-1,090.8	1,034.4	951.7	909.6	42.05	22.629			
4,600.0	4,369.5	4,347.3	4,045.2	24.5	31.5	170.40	-1,121.2	1,060.3	972.1	928.1	43.99	22.099			
4,700.0	4,458.5	4,443.1	4,132.3	25.5	32.3	171.55	-1,151.5	1,086.1	993.0	947.1	45.93	21.619	SF		

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Markham 11-16NHZ
Project:	SEC.16-T4N-R68W	TVD Reference:	WELL @ 4997.5ft (Original Well Elev)
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4997.5ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 11-16NHZ	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 (1-05-15)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0ft	
Survey Program: 0-MWD													Offset Well Error:		0.0ft
Reference				Offset		Semi Major Axis			Distance				Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor			
0.0	0.0	0.0	0.0	0.0	0.0	89.31	1.1	90.1	90.1						
100.0	100.0	100.0	100.0	0.1	0.1	89.31	1.1	90.1	90.1	89.9	0.22	400.752			
200.0	200.0	200.0	200.0	0.3	0.3	89.31	1.1	90.1	90.1	89.4	0.67	133.584			
300.0	300.0	300.0	300.0	0.6	0.6	89.31	1.1	90.1	90.1	89.0	1.12	80.150			
400.0	400.0	400.0	400.0	0.8	0.8	89.31	1.1	90.1	90.1	88.5	1.57	57.250 CC, ES			
500.0	500.0	497.8	497.8	1.0	1.0	90.07	-0.1	91.2	91.3	89.3	2.00	45.691			
600.0	600.0	595.4	595.3	1.2	1.2	92.22	-3.7	94.7	94.9	92.5	2.42	39.271			
700.0	700.0	692.6	692.1	1.5	1.4	95.43	-9.6	100.5	101.3	98.4	2.85	35.491			
800.0	800.0	789.1	787.9	1.7	1.7	99.27	-17.7	108.6	110.7	107.4	3.31	33.412			
900.0	900.0	884.7	882.4	1.9	1.9	103.30	-28.1	118.8	123.3	119.5	3.80	32.449			
1,000.0	1,000.0	979.2	975.3	2.1	2.3	107.19	-40.5	131.0	139.3	135.0	4.33	32.209			
1,100.0	1,100.0	1,072.5	1,066.3	2.4	2.7	110.72	-54.9	145.2	158.8	153.9	4.90	32.425			
1,200.0	1,200.0	1,164.3	1,155.2	2.6	3.1	113.83	-71.2	161.1	181.8	176.2	5.52	32.922			
1,300.0	1,300.0	1,254.5	1,241.9	2.8	3.6	116.49	-89.1	178.8	208.0	201.8	6.19	33.587			
1,400.0	1,400.0	1,343.1	1,326.1	3.0	4.1	118.74	-108.6	198.0	237.6	230.6	6.92	34.351			
1,500.0	1,500.0	1,429.8	1,407.7	3.3	4.7	120.64	-129.4	218.5	270.2	262.5	7.68	35.172			
1,600.0	1,600.0	1,514.6	1,486.7	3.5	5.3	122.24	-151.5	240.2	305.8	297.3	8.49	36.025			
1,700.0	1,700.0	1,600.0	1,565.2	3.7	5.9	122.34	-175.5	263.8	342.8	335.2	7.58	45.198			
1,800.0	1,799.8	1,685.1	1,642.6	3.9	6.6	123.51	-200.8	288.6	379.4	371.3	8.05	47.139			
1,900.0	1,899.5	1,778.5	1,727.3	4.1	7.4	124.75	-228.7	316.2	413.6	405.0	8.53	48.491			
2,000.0	1,998.7	1,872.8	1,812.9	4.3	8.3	125.98	-257.0	343.9	445.0	436.0	9.02	49.356			
2,100.0	2,097.5	1,967.8	1,899.2	4.6	9.1	127.23	-285.4	371.9	473.8	464.3	9.51	49.795			
2,200.0	2,195.6	2,063.5	1,986.0	4.9	9.9	128.51	-314.1	400.1	499.9	489.9	10.03	49.852			
2,300.0	2,293.1	2,159.8	2,073.3	5.2	10.8	129.84	-342.9	428.5	523.4	512.8	10.56	49.556			
2,400.0	2,389.6	2,256.4	2,161.0	5.6	11.6	131.25	-371.8	457.0	544.3	533.1	11.13	48.922			
2,500.0	2,485.3	2,353.3	2,249.0	6.0	12.5	132.75	-400.9	485.5	562.7	551.0	11.73	47.957			
2,600.0	2,579.8	2,450.4	2,337.1	6.5	13.3	134.34	-429.9	514.1	578.8	566.4	12.40	46.664			
2,700.0	2,673.2	2,547.5	2,425.2	7.1	14.2	136.05	-459.0	542.7	592.6	579.4	13.15	45.049			
2,800.0	2,765.2	2,644.6	2,513.3	7.8	15.0	137.88	-488.1	571.3	604.3	590.3	14.01	43.127			
2,900.0	2,855.8	2,741.5	2,601.2	8.5	15.9	139.85	-517.1	599.9	614.0	599.0	15.00	40.929			
2,954.9	2,905.0	2,794.6	2,649.5	8.9	16.4	140.99	-533.0	615.5	618.6	603.0	15.61	39.621			
3,000.0	2,945.1	2,838.1	2,688.9	9.3	16.8	141.98	-546.0	628.3	622.3	606.1	16.16	38.511			
3,100.0	3,034.1	2,934.7	2,776.6	10.2	17.6	144.15	-575.0	656.8	631.1	613.7	17.44	36.177			
3,200.0	3,123.1	3,031.3	2,864.2	11.1	18.5	146.26	-603.9	685.3	640.8	622.0	18.83	34.031			
3,300.0	3,212.2	3,127.9	2,951.9	12.0	19.3	148.31	-632.8	713.7	651.5	631.2	20.31	32.079			
3,400.0	3,301.2	3,224.5	3,039.5	12.9	20.2	150.29	-661.7	742.2	662.9	641.1	21.87	30.316			
3,500.0	3,390.2	3,321.1	3,127.2	13.9	21.1	152.21	-690.6	770.6	675.2	651.7	23.50	28.734			
3,600.0	3,479.2	3,417.6	3,214.8	14.8	21.9	154.06	-719.6	799.1	688.2	663.0	25.19	27.318			
3,700.0	3,568.3	3,514.2	3,302.5	15.7	22.8	155.85	-748.5	827.5	702.0	675.0	26.94	26.053			
3,800.0	3,657.3	3,610.8	3,390.1	16.7	23.6	157.56	-777.4	856.0	716.4	687.7	28.74	24.925			
3,900.0	3,746.3	3,707.4	3,477.8	17.7	24.5	159.21	-806.3	884.4	731.5	700.9	30.58	23.920			
4,000.0	3,835.3	3,804.0	3,565.4	18.6	25.4	160.80	-835.3	912.9	747.1	714.7	32.45	23.023			
4,100.0	3,924.3	3,900.6	3,653.1	19.6	26.2	162.32	-864.2	941.3	763.3	729.0	34.35	22.222			
4,200.0	4,013.4	3,997.1	3,740.7	20.6	27.1	163.78	-893.1	969.8	780.0	743.8	36.27	21.505			
4,300.0	4,102.4	4,093.7	3,828.4	21.6	28.0	165.18	-922.0	998.2	797.3	759.1	38.21	20.864			
4,400.0	4,191.4	4,190.3	3,916.0	22.6	28.8	166.52	-950.9	1,026.7	815.0	774.8	40.17	20.288			
4,500.0	4,280.4	4,286.9	4,003.7	23.5	29.7	167.81	-979.9	1,055.2	833.1	790.9	42.14	19.771			
4,600.0	4,369.5	4,383.5	4,091.3	24.5	30.6	169.04	-1,008.8	1,083.6	851.6	807.5	44.11	19.305			
4,700.0	4,458.5	4,480.1	4,178.9	25.5	31.4	170.23	-1,037.7	1,112.1	870.5	824.4	46.09	18.885			
4,800.0	4,547.5	4,576.6	4,266.6	26.5	32.3	171.36	-1,066.6	1,140.5	889.7	841.7	48.08	18.505			
4,900.0	4,636.5	4,673.2	4,354.2	27.5	33.1	172.45	-1,095.6	1,169.0	909.3	859.3	50.07	18.161			
5,000.0	4,725.5	4,769.8	4,441.9	28.5	34.0	173.49	-1,124.5	1,197.4	929.2	877.2	52.06	17.849			

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 11-16NHZ
Project:	SEC.16-T4N-R68W	TVD Reference:	WELL @ 4997.5ft (Original Well Elev)
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4997.5ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 11-16NHZ	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 (1-05-15)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft	
SRC Markham Pad Sec.16-T4N-R68W - SRC Markham 12-16NHZ - Wellbore #1 - Plan #1 (1-06-15)												Offset Well Error:	0.0 ft	
Survey Program: 0-MWD														
Reference		Offset		Semi Major Axis			Distance					Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.0	4,814.6	4,866.4	4,529.5	29.5	34.9	74.49	-1,153.4	1,225.9	949.4	895.4	54.05	17.565		
5,200.0	4,903.6	4,963.0	4,617.2	30.5	35.7	75.44	-1,182.3	1,254.3	969.9	913.8	56.04	17.307		
5,300.0	4,992.6	5,059.5	4,704.8	31.5	36.6	76.36	-1,211.2	1,282.8	990.6	932.5	58.03	17.071 SF		

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Markham 11-16NHZ
Project:	SEC.16-T4N-R68W	TVD Reference:	WELL @ 4997.5ft (Original Well Elev)
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4997.5ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 11-16NHZ	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 (1-05-15)	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	89.17	1.1	75.0	75.0					
100.0	100.0	100.0	100.0	0.1	0.1	89.17	1.1	75.0	75.0	74.8	0.22	333.764		
200.0	200.0	200.0	200.0	0.3	0.3	89.17	1.1	75.0	75.0	74.3	0.67	111.255		
300.0	300.0	300.0	300.0	0.6	0.6	89.17	1.1	75.0	75.0	73.9	1.12	66.753		
400.0	400.0	400.0	400.0	0.8	0.8	89.17	1.1	75.0	75.0	73.4	1.57	47.681		
500.0	500.0	500.0	500.0	1.0	1.0	89.17	1.1	75.0	75.0	73.0	2.02	37.085		
600.0	600.0	600.0	600.0	1.2	1.2	89.17	1.1	75.0	75.0	72.5	2.47	30.342	CC, ES	
700.0	700.0	698.0	698.0	1.5	1.4	90.01	0.0	76.3	76.3	73.4	2.90	26.342		
800.0	800.0	795.9	795.7	1.7	1.6	92.36	-3.3	80.1	80.2	76.9	3.31	24.228		
900.0	900.0	893.2	892.7	1.9	1.8	95.79	-8.8	86.3	87.1	83.3	3.74	23.266		
1,000.0	1,000.0	989.9	988.7	2.1	2.1	99.74	-16.3	95.0	97.0	92.9	4.19	23.146		
1,100.0	1,100.0	1,085.7	1,083.4	2.4	2.3	103.72	-25.9	106.0	110.4	105.7	4.67	23.626		
1,200.0	1,200.0	1,180.4	1,176.5	2.6	2.7	107.41	-37.4	119.2	127.1	121.9	5.19	24.506		
1,300.0	1,300.0	1,273.9	1,267.7	2.8	3.0	110.66	-50.7	134.5	147.3	141.6	5.75	25.630		
1,400.0	1,400.0	1,365.9	1,356.8	3.0	3.4	113.42	-65.7	151.8	170.9	164.6	6.36	26.881		
1,500.0	1,500.0	1,456.3	1,443.6	3.3	3.9	115.73	-82.3	170.8	197.8	190.8	7.02	28.183		
1,600.0	1,600.0	1,545.0	1,528.0	3.5	4.4	117.65	-100.3	191.5	227.9	220.2	7.73	29.486		
1,700.0	1,700.0	1,632.4	1,610.2	3.7	5.0	18.05	-119.7	213.8	259.4	252.0	7.39	35.110		
1,800.0	1,799.8	1,718.8	1,690.5	3.9	5.6	19.48	-140.5	237.7	290.9	283.1	7.82	37.173		
1,900.0	1,899.5	1,806.2	1,770.9	4.1	6.2	20.89	-163.1	263.7	322.2	313.9	8.28	38.934		
2,000.0	1,998.7	1,901.3	1,857.9	4.3	7.0	22.36	-188.3	292.6	351.6	342.8	8.74	40.219		
2,100.0	2,097.5	1,997.2	1,945.7	4.6	7.8	23.80	-213.6	321.7	378.1	368.9	9.22	41.010		
2,200.0	2,195.6	2,093.7	2,034.1	4.9	8.6	25.24	-239.1	351.0	401.9	392.1	9.71	41.367		
2,300.0	2,293.1	2,190.7	2,122.9	5.2	9.4	26.74	-264.8	380.4	422.9	412.6	10.23	41.330		
2,400.0	2,389.6	2,288.1	2,212.1	5.6	10.2	28.30	-290.5	410.0	441.2	430.4	10.78	40.928		
2,500.0	2,485.3	2,385.9	2,301.6	6.0	11.0	29.95	-316.3	439.7	456.9	445.5	11.37	40.176		
2,600.0	2,579.8	2,483.8	2,391.2	6.5	11.8	31.73	-342.2	469.4	470.1	458.0	12.03	39.085		
2,700.0	2,673.2	2,581.7	2,480.8	7.1	12.6	33.63	-368.1	499.1	480.9	468.1	12.77	37.668		
2,800.0	2,765.2	2,679.6	2,570.5	7.8	13.5	35.69	-394.0	528.9	489.4	475.8	13.62	35.945		
2,900.0	2,855.8	2,777.3	2,659.9	8.5	14.3	37.93	-419.8	558.5	495.9	481.3	14.61	33.947		
2,954.9	2,905.0	2,830.9	2,708.9	8.9	14.8	39.24	-433.9	574.8	498.7	483.5	15.23	32.751		
3,000.0	2,945.1	2,874.8	2,749.1	9.3	15.1	40.36	-445.5	588.1	500.9	485.1	15.78	31.733		
3,100.0	3,034.1	2,972.1	2,838.2	10.2	16.0	42.81	-471.3	617.7	506.4	489.3	17.10	29.603		
3,200.0	3,123.1	3,069.5	2,927.4	11.1	16.8	45.21	-497.0	647.2	512.8	494.3	18.54	27.663		
3,300.0	3,212.2	3,166.9	3,016.5	12.0	17.6	47.54	-522.7	676.8	520.2	500.1	20.07	25.914		
3,400.0	3,301.2	3,264.3	3,105.7	12.9	18.5	49.81	-548.5	706.4	528.4	506.7	21.70	24.352		
3,500.0	3,390.2	3,361.7	3,194.8	13.9	19.3	52.01	-574.2	735.9	537.5	514.1	23.41	22.965		
3,600.0	3,479.2	3,459.1	3,284.0	14.8	20.1	54.14	-599.9	765.5	547.4	522.2	25.18	21.738		
3,700.0	3,568.3	3,556.4	3,373.1	15.7	20.9	56.19	-625.7	795.1	558.0	531.0	27.01	20.656		
3,800.0	3,657.3	3,653.8	3,462.2	16.7	21.8	58.17	-651.4	824.6	569.3	540.4	28.90	19.703		
3,900.0	3,746.3	3,751.2	3,551.4	17.7	22.6	60.07	-677.1	854.2	581.3	550.5	30.82	18.863		
4,000.0	3,835.3	3,848.6	3,640.5	18.6	23.5	61.89	-702.9	883.8	594.0	561.2	32.77	18.123		
4,100.0	3,924.3	3,946.0	3,729.7	19.6	24.3	63.64	-728.6	913.3	607.2	572.4	34.75	17.471		
4,200.0	4,013.4	4,043.3	3,818.8	20.6	25.1	65.32	-754.3	942.9	621.0	584.2	36.75	16.895		
4,300.0	4,102.4	4,140.7	3,908.0	21.6	26.0	66.92	-780.1	972.5	635.2	596.5	38.77	16.386		
4,400.0	4,191.4	4,238.1	3,997.1	22.6	26.8	68.45	-805.8	1,002.0	650.0	609.2	40.79	15.935		
4,500.0	4,280.4	4,335.5	4,086.3	23.5	27.6	69.92	-831.5	1,031.6	665.2	622.4	42.82	15.535		
4,600.0	4,369.5	4,432.9	4,175.4	24.5	28.5	71.32	-857.3	1,061.2	680.9	636.0	44.85	15.179		
4,700.0	4,458.5	4,530.3	4,264.5	25.5	29.3	72.66	-883.0	1,090.7	696.9	650.0	46.89	14.863		
4,800.0	4,547.5	4,627.6	4,353.7	26.5	30.1	73.94	-908.8	1,120.3	713.3	664.4	48.92	14.580		
4,900.0	4,636.5	4,725.0	4,442.8	27.5	31.0	75.17	-934.5	1,149.9	730.0	679.1	50.95	14.328		
5,000.0	4,725.5	4,822.4	4,532.0	28.5	31.8	76.34	-960.2	1,179.4	747.1	694.1	52.98	14.102		

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 11-16NHZ
Project:	SEC.16-T4N-R68W	TVD Reference:	WELL @ 4997.5ft (Original Well Elev)
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4997.5ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 11-16NHZ	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 (1-05-15)	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			
5,100.0	4,814.6	4,919.8	4,621.1	29.5	32.7	77.46	-986.0	1,209.0	764.4	709.4	55.00	13.899			
5,200.0	4,903.6	5,017.2	4,710.3	30.5	33.5	78.53	-1,011.7	1,238.6	782.0	725.0	57.01	13.717			
5,300.0	4,992.6	5,114.6	4,799.4	31.5	34.3	79.55	-1,037.4	1,268.1	799.9	740.9	59.02	13.554			
5,400.0	5,081.6	5,211.9	4,888.6	32.5	35.2	80.53	-1,063.2	1,297.7	818.0	757.0	61.02	13.406			
5,500.0	5,170.7	5,309.3	4,977.7	33.5	36.0	81.47	-1,088.9	1,327.3	836.4	773.4	63.01	13.273			
5,510.3	5,179.8	5,319.4	4,986.9	33.6	36.1	81.56	-1,091.6	1,330.3	838.3	775.1	63.22	13.260			
5,550.0	5,215.6	5,358.1	5,022.4	33.9	36.4	80.84	-1,101.8	1,342.1	845.5	781.4	64.16	13.178			
5,600.0	5,262.0	5,407.3	5,067.4	34.2	36.8	78.98	-1,114.8	1,357.0	854.4	789.2	65.17	13.111			
5,650.0	5,309.4	5,456.6	5,112.5	34.5	37.3	75.54	-1,127.8	1,372.0	862.8	796.8	66.01	13.071			
5,700.0	5,357.8	5,505.7	5,157.4	34.7	37.7	69.45	-1,140.8	1,386.9	870.9	804.2	66.70	13.057 SF			
5,750.0	5,406.9	5,554.4	5,202.0	34.9	38.1	58.23	-1,153.7	1,401.7	878.6	811.4	67.23	13.069			
5,800.0	5,456.4	5,602.5	5,246.1	35.0	38.5	36.41	-1,166.4	1,416.3	886.0	818.3	67.61	13.104			
5,850.0	5,506.1	5,649.7	5,289.3	35.0	38.9	0.35	-1,178.8	1,430.6	893.1	825.2	67.85	13.162			
5,900.0	5,555.8	5,695.8	5,331.5	35.0	39.3	-31.83	-1,191.0	1,444.6	900.1	832.1	67.97	13.242			
5,950.0	5,605.2	5,740.7	5,372.6	35.0	39.7	-49.78	-1,202.9	1,458.2	907.1	839.1	67.98	13.343			
6,000.0	5,654.0	5,783.9	5,412.2	35.0	40.1	-59.73	-1,214.3	1,471.4	914.4	846.5	67.91	13.464			
6,050.0	5,702.1	5,825.5	5,450.2	34.9	40.4	-65.96	-1,225.3	1,484.0	922.0	854.3	67.78	13.604			
6,100.0	5,749.2	5,865.3	5,486.8	34.8	40.7	-70.25	-1,235.9	1,495.7	930.3	862.7	67.58	13.766			
6,150.0	5,795.1	5,905.8	5,524.5	34.7	41.0	-73.46	-1,246.8	1,505.7	939.3	871.9	67.33	13.950			
6,200.0	5,839.5	5,947.8	5,564.1	34.6	41.2	-76.00	-1,258.3	1,513.6	948.9	881.9	67.06	14.150			
6,250.0	5,882.3	5,991.5	5,605.7	34.5	41.4	-78.12	-1,270.3	1,519.3	959.2	892.5	66.77	14.366			
6,300.0	5,923.2	6,037.2	5,649.4	34.4	41.6	-79.95	-1,283.1	1,522.4	970.2	903.7	66.47	14.596			
6,350.0	5,962.0	6,085.2	5,695.5	34.3	41.7	-81.59	-1,296.5	1,522.6	981.7	915.6	66.17	14.836			
6,400.0	5,998.5	6,136.0	5,744.1	34.2	41.8	-83.11	-1,310.8	1,519.2	993.8	927.9	65.88	15.085			

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Markham 11-16NHZ
Project:	SEC.16-T4N-R68W	TVD Reference:	WELL @ 4997.5ft (Original Well Elev)
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4997.5ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 11-16NHZ	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 (1-05-15)	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	89.31	0.7	60.0	60.0						
100.0	100.0	100.0	100.0	0.1	0.1	89.31	0.7	60.0	60.0	59.7	0.22	266.755			
200.0	200.0	200.0	200.0	0.3	0.3	89.31	0.7	60.0	60.0	59.3	0.67	88.918			
300.0	300.0	300.0	300.0	0.6	0.6	89.31	0.7	60.0	60.0	58.8	1.12	53.351			
400.0	400.0	400.0	400.0	0.8	0.8	89.31	0.7	60.0	60.0	58.4	1.57	38.108			
500.0	500.0	500.0	500.0	1.0	1.0	89.31	0.7	60.0	60.0	57.9	2.02	29.639			
600.0	600.0	600.0	600.0	1.2	1.2	89.31	0.7	60.0	60.0	57.5	2.47	24.250			
700.0	700.0	700.0	700.0	1.5	1.5	89.31	0.7	60.0	60.0	57.0	2.92	20.520			
800.0	800.0	800.0	800.0	1.7	1.7	89.31	0.7	60.0	60.0	56.6	3.37	17.784	CC, ES		
900.0	900.0	898.3	898.3	1.9	1.9	90.24	-0.3	61.3	61.3	57.5	3.80	16.158			
1,000.0	1,000.0	996.4	996.2	2.1	2.1	92.81	-3.2	65.4	65.6	61.4	4.21	15.579			
1,100.0	1,100.0	1,094.0	1,093.5	2.4	2.3	96.40	-8.1	72.2	72.9	68.3	4.64	15.722			
1,200.0	1,200.0	1,190.9	1,189.7	2.6	2.5	100.32	-14.9	81.6	83.5	78.4	5.08	16.428			
1,300.0	1,300.0	1,287.0	1,284.6	2.8	2.8	104.07	-23.4	93.4	97.6	92.0	5.56	17.551			
1,400.0	1,400.0	1,381.9	1,377.9	3.0	3.1	107.38	-33.7	107.7	115.0	109.0	6.07	18.956			
1,500.0	1,500.0	1,475.6	1,469.4	3.3	3.4	110.17	-45.7	124.3	135.9	129.3	6.62	20.528			
1,600.0	1,600.0	1,567.8	1,558.7	3.5	3.8	112.47	-59.1	142.9	160.1	152.9	7.22	22.175			
1,700.0	1,700.0	1,658.9	1,646.1	3.7	4.3	13.24	-74.0	163.6	185.9	178.6	7.28	25.533			
1,800.0	1,799.8	1,749.1	1,731.8	3.9	4.8	14.97	-90.4	186.3	211.6	203.9	7.70	27.477			
1,900.0	1,899.5	1,838.6	1,816.0	4.1	5.3	16.61	-108.2	211.0	237.2	229.1	8.12	29.207			
2,000.0	1,998.7	1,927.2	1,898.3	4.3	5.9	18.16	-127.3	237.5	262.9	254.3	8.55	30.736			
2,100.0	2,097.5	2,015.0	1,978.9	4.6	6.6	19.65	-147.7	265.8	288.5	279.5	8.99	32.078			
2,200.0	2,195.6	2,111.4	2,066.7	4.9	7.4	21.25	-171.0	298.0	312.8	303.3	9.47	33.036			
2,300.0	2,293.1	2,208.6	2,155.3	5.2	8.1	22.84	-194.4	330.5	334.2	324.2	9.96	33.539			
2,400.0	2,389.6	2,306.3	2,244.3	5.6	9.0	24.47	-218.0	363.2	352.8	342.3	10.49	33.621			
2,500.0	2,485.3	2,404.4	2,333.7	6.0	9.8	26.17	-241.6	396.0	368.5	357.5	11.06	33.311			
2,600.0	2,579.8	2,502.7	2,423.3	6.5	10.6	27.97	-265.3	428.9	381.6	369.9	11.69	32.633			
2,700.0	2,673.2	2,601.2	2,513.0	7.1	11.5	29.92	-289.1	461.8	392.1	379.6	12.40	31.606			
2,800.0	2,765.2	2,699.7	2,602.7	7.8	12.3	32.03	-312.8	494.7	400.0	386.8	13.22	30.254			
2,900.0	2,855.8	2,798.1	2,692.4	8.5	13.2	34.34	-336.5	527.6	405.7	391.5	14.18	28.609			
2,954.9	2,905.0	2,852.1	2,741.5	8.9	13.6	35.70	-349.5	545.7	407.9	393.2	14.78	27.597			
3,000.0	2,945.1	2,896.3	2,781.8	9.3	14.0	36.86	-360.2	560.4	409.6	394.3	15.33	26.717			
3,100.0	3,034.1	2,994.4	2,871.3	10.2	14.9	39.40	-383.9	593.3	413.9	397.2	16.64	24.873			
3,200.0	3,123.1	3,092.6	2,960.7	11.1	15.7	41.89	-407.5	626.1	419.0	400.9	18.07	23.191			
3,300.0	3,212.2	3,190.8	3,050.2	12.0	16.6	44.31	-431.2	658.9	424.9	405.3	19.60	21.675			
3,400.0	3,301.2	3,288.9	3,139.6	12.9	17.5	46.67	-454.9	691.7	431.6	410.3	21.24	20.320			
3,500.0	3,390.2	3,387.1	3,229.0	13.9	18.3	48.95	-478.5	724.5	439.0	416.0	22.96	19.119			
3,600.0	3,479.2	3,485.3	3,318.5	14.8	19.2	51.16	-502.2	757.4	447.0	422.3	24.76	18.058			
3,700.0	3,568.3	3,583.4	3,407.9	15.7	20.0	53.28	-525.9	790.2	455.8	429.2	26.62	17.124			
3,800.0	3,657.3	3,681.6	3,497.4	16.7	20.9	55.33	-549.5	823.0	465.1	436.6	28.53	16.303			
3,900.0	3,746.3	3,779.8	3,586.8	17.7	21.8	57.30	-573.2	855.8	475.1	444.6	30.49	15.581			
4,000.0	3,835.3	3,878.0	3,676.2	18.6	22.6	59.18	-596.9	888.6	485.5	453.1	32.48	14.947			
4,100.0	3,924.3	3,976.1	3,765.7	19.6	23.5	60.99	-620.6	921.5	496.5	462.0	34.51	14.390			
4,200.0	4,013.4	4,074.3	3,855.1	20.6	24.4	62.71	-644.2	954.3	508.0	471.5	36.55	13.899			
4,300.0	4,102.4	4,172.5	3,944.6	21.6	25.2	64.37	-667.9	987.1	519.9	481.3	38.61	13.466			
4,400.0	4,191.4	4,270.6	4,034.0	22.6	26.1	65.94	-691.6	1,019.9	532.3	491.6	40.68	13.084			
4,500.0	4,280.4	4,368.8	4,123.4	23.5	27.0	67.45	-715.2	1,052.7	545.0	502.2	42.76	12.746			
4,600.0	4,369.5	4,467.0	4,212.9	24.5	27.8	68.89	-738.9	1,085.6	558.0	513.2	44.84	12.445			
4,700.0	4,458.5	4,565.1	4,302.3	25.5	28.7	70.26	-762.6	1,118.4	571.5	524.5	46.92	12.179			
4,800.0	4,547.5	4,663.3	4,391.8	26.5	29.6	71.57	-786.2	1,151.2	585.2	536.2	49.01	11.941			
4,900.0	4,636.5	4,761.5	4,481.2	27.5	30.4	72.82	-809.9	1,184.0	599.2	548.1	51.09	11.730			
5,000.0	4,725.5	4,859.6	4,570.6	28.5	31.3	74.02	-833.6	1,216.8	613.5	560.3	53.16	11.540			

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 11-16NHZ
Project:	SEC.16-T4N-R68W	TVD Reference:	WELL @ 4997.5ft (Original Well Elev)
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4997.5ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 11-16NHZ	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 (1-05-15)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0ft	
Survey Program: 0-MWD													Offset Well Error:		0.0ft
Reference		Offset		Semi Major Axis			Distance						Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor			
5,100.0	4,814.6	4,957.8	4,660.1	29.5	32.2	75.16	-857.2	1,249.7	628.0	572.8	55.23	11.371			
5,200.0	4,903.6	5,056.0	4,749.5	30.5	33.1	76.25	-880.9	1,282.5	642.8	585.5	57.30	11.219			
5,300.0	4,992.6	5,154.1	4,839.0	31.5	33.9	77.29	-904.6	1,315.3	657.8	598.5	59.35	11.083			
5,400.0	5,081.6	5,252.3	4,928.4	32.5	34.8	78.28	-928.2	1,348.1	673.0	611.6	61.41	10.960			
5,500.0	5,170.7	5,350.5	5,017.8	33.5	35.7	79.23	-951.9	1,380.9	688.4	625.0	63.45	10.850			
5,510.3	5,179.8	5,360.6	5,027.1	33.6	35.8	79.33	-954.3	1,384.3	690.0	626.4	63.66	10.839			
5,550.0	5,215.6	5,399.7	5,062.7	33.9	36.1	78.50	-963.8	1,397.4	696.1	631.6	64.57	10.781			
5,600.0	5,262.0	5,449.1	5,107.7	34.2	36.5	76.47	-975.7	1,413.9	703.7	638.2	65.52	10.740			
5,650.0	5,309.4	5,498.5	5,152.7	34.5	37.0	72.83	-987.6	1,430.4	711.0	644.7	66.31	10.723			
5,700.0	5,357.8	5,547.6	5,197.4	34.7	37.4	66.51	-999.4	1,446.8	718.1	651.1	66.92	10.730			
5,750.0	5,406.9	5,596.2	5,241.7	34.9	37.8	55.03	-1,011.2	1,463.1	725.0	657.6	67.38	10.760			
5,800.0	5,456.4	5,644.1	5,285.4	35.0	38.3	32.94	-1,022.7	1,479.1	731.8	664.1	67.68	10.813			
5,850.0	5,506.1	5,688.6	5,326.3	35.0	38.6	-3.25	-1,033.5	1,492.9	738.7	670.9	67.80	10.896			
5,900.0	5,555.8	5,733.6	5,368.4	35.0	38.8	-35.38	-1,044.7	1,504.1	745.9	678.1	67.83	10.998			
5,950.0	5,605.2	5,779.4	5,411.8	35.0	39.1	-53.15	-1,056.3	1,512.7	753.4	685.6	67.77	11.117			
6,000.0	5,654.0	5,826.1	5,456.5	35.0	39.2	-62.84	-1,068.2	1,518.5	761.0	693.4	67.65	11.250			
6,050.0	5,702.1	5,873.6	5,502.4	34.9	39.4	-68.74	-1,080.5	1,521.3	768.9	701.4	67.46	11.398			
6,100.0	5,749.2	5,922.3	5,549.4	34.8	39.5	-72.72	-1,093.1	1,520.9	776.9	709.7	67.22	11.557			
6,150.0	5,795.1	5,972.0	5,597.3	34.7	39.6	-75.62	-1,106.0	1,517.1	785.0	718.0	66.94	11.727			
6,200.0	5,839.5	6,023.0	5,645.9	34.6	39.6	-77.86	-1,119.2	1,509.6	793.1	726.5	66.63	11.904			
6,250.0	5,882.3	6,075.2	5,695.1	34.5	39.7	-79.66	-1,132.5	1,498.3	801.3	735.0	66.30	12.087			
6,300.0	5,923.2	6,128.9	5,744.7	34.4	39.6	-81.17	-1,146.0	1,482.8	809.5	743.5	65.96	12.271			
6,350.0	5,962.0	6,184.0	5,794.3	34.3	39.6	-82.46	-1,159.5	1,462.9	817.5	751.9	65.64	12.455			
6,400.0	5,998.5	6,240.7	5,843.6	34.2	39.5	-83.59	-1,173.0	1,438.3	825.4	760.0	65.33	12.633			
6,450.0	6,032.7	6,299.1	5,892.2	34.2	39.4	-84.59	-1,186.3	1,409.0	833.0	767.9	65.07	12.801			
6,500.0	6,064.2	6,359.1	5,939.6	34.2	39.3	-85.49	-1,199.4	1,374.6	840.3	775.4	64.87	12.953			
6,550.0	6,092.9	6,421.0	5,985.3	34.2	39.2	-86.30	-1,212.1	1,335.0	847.2	782.5	64.75	13.085			
6,600.0	6,118.8	6,484.5	6,028.7	34.2	39.1	-87.02	-1,224.2	1,290.1	853.7	789.0	64.72	13.190			
6,650.0	6,141.6	6,549.9	6,069.1	34.3	38.9	-87.68	-1,235.6	1,240.1	859.6	794.8	64.82	13.262			
6,700.0	6,161.3	6,616.9	6,105.8	34.5	38.8	-88.25	-1,246.0	1,185.0	864.9	799.9	65.06	13.295			
6,750.0	6,177.7	6,685.5	6,138.0	34.7	38.7	-88.75	-1,255.3	1,125.2	869.5	804.1	65.45	13.285			
6,800.0	6,190.8	6,755.5	6,165.1	35.0	38.6	-89.18	-1,263.2	1,061.1	873.3	807.3	66.01	13.230			
6,850.0	6,200.6	6,826.8	6,186.2	35.3	38.5	-89.52	-1,269.6	993.4	876.3	809.5	66.75	13.128			
6,900.0	6,206.9	6,899.1	6,200.9	35.6	38.5	-89.78	-1,274.3	922.8	878.4	810.7	67.65	12.984			
6,950.0	6,209.8	6,972.1	6,208.8	36.0	38.5	-89.95	-1,277.2	850.3	879.5	810.8	68.71	12.801			
6,966.5	6,210.0	6,996.2	6,209.8	36.1	38.6	-89.98	-1,277.7	826.2	879.7	810.6	69.08	12.734			
7,000.0	6,210.0	7,035.9	6,210.0	36.4	38.6	-90.00	-1,278.2	786.5	879.7	810.0	69.73	12.617			
7,100.0	6,210.0	7,135.9	6,210.0	37.4	38.9	-90.00	-1,279.2	686.5	879.7	808.0	71.74	12.262			
7,200.0	6,210.0	7,235.9	6,210.0	38.6	39.3	-90.00	-1,280.2	586.5	879.7	805.6	74.11	11.870			
7,300.0	6,210.0	7,335.9	6,210.0	39.9	39.9	-90.00	-1,281.3	486.5	879.7	802.9	76.82	11.452			
7,400.0	6,210.0	7,435.9	6,210.0	41.4	40.8	-90.00	-1,282.3	386.6	879.7	799.9	79.83	11.020			
7,500.0	6,210.0	7,535.9	6,210.0	43.0	41.9	-90.00	-1,283.3	286.6	879.7	796.6	83.11	10.585			
7,600.0	6,210.0	7,635.9	6,210.0	44.8	43.2	-90.00	-1,284.3	186.6	879.7	793.1	86.63	10.155			
7,700.0	6,210.0	7,735.9	6,210.0	46.6	44.7	-90.00	-1,285.4	86.6	879.7	789.4	90.36	9.736			
7,800.0	6,210.0	7,835.9	6,210.0	48.6	46.4	-90.00	-1,286.4	-13.4	879.7	785.4	94.28	9.331			
7,900.0	6,210.0	7,935.9	6,210.0	50.6	48.3	-90.00	-1,287.4	-113.4	879.7	781.4	98.36	8.944			
8,000.0	6,210.0	8,035.9	6,210.0	52.7	50.2	-90.00	-1,288.5	-213.4	879.7	777.1	102.59	8.575			
8,100.0	6,210.0	8,135.9	6,210.0	54.9	52.3	-90.00	-1,289.5	-313.4	879.7	772.8	106.94	8.226			
8,200.0	6,210.0	8,235.9	6,210.0	57.1	54.5	-90.00	-1,290.5	-413.4	879.7	768.3	111.41	7.896			
8,300.0	6,210.0	8,335.9	6,210.0	59.4	56.7	-90.00	-1,291.5	-513.4	879.7	763.7	115.98	7.585			
8,400.0	6,210.0	8,435.9	6,210.0	61.7	59.0	-90.00	-1,292.6	-613.4	879.7	759.1	120.63	7.293			
8,500.0	6,210.0	8,535.9	6,210.0	64.1	61.3	-90.00	-1,293.6	-713.4	879.7	754.4	125.36	7.017			

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 11-16NHZ
Project:	SEC.16-T4N-R68W	TVD Reference:	WELL @ 4997.5ft (Original Well Elev)
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4997.5ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 11-16NHZ	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 (1-05-15)	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			
8,600.0	6,210.0	8,635.9	6,210.0	66.4	63.7	-90.00	-1,294.6	-813.4	879.7	749.6	130.17	6.759			
8,700.0	6,210.0	8,735.9	6,210.0	68.9	66.2	-90.00	-1,295.7	-913.4	879.7	744.7	135.03	6.515			
8,800.0	6,210.0	8,835.9	6,210.0	71.3	68.6	-90.00	-1,296.7	-1,013.4	879.7	739.8	139.95	6.286			
8,900.0	6,210.0	8,935.9	6,210.0	73.8	71.1	-90.00	-1,297.7	-1,113.4	879.7	734.8	144.92	6.070			
9,000.0	6,210.0	9,035.9	6,210.0	76.3	73.6	-90.00	-1,298.7	-1,213.4	879.7	729.8	149.94	5.867			
9,100.0	6,210.0	9,135.9	6,210.0	78.8	76.2	-90.00	-1,299.8	-1,313.4	879.7	724.7	154.99	5.676			
9,200.0	6,210.0	9,235.9	6,210.0	81.4	78.7	-90.00	-1,300.8	-1,413.4	879.7	719.6	160.09	5.495			
9,300.0	6,210.0	9,335.9	6,210.0	83.9	81.3	-90.00	-1,301.8	-1,513.3	879.7	714.5	165.21	5.325			
9,400.0	6,210.0	9,435.9	6,210.0	86.5	83.9	-90.00	-1,302.9	-1,613.3	879.7	709.4	170.37	5.164			
9,500.0	6,210.0	9,535.9	6,210.0	89.1	86.5	-90.00	-1,303.9	-1,713.3	879.7	704.2	175.56	5.011			
9,600.0	6,210.0	9,635.9	6,210.0	91.7	89.1	-90.00	-1,304.9	-1,813.3	879.7	699.0	180.77	4.867			
9,700.0	6,210.0	9,735.9	6,210.0	94.3	91.7	-90.00	-1,305.9	-1,913.3	879.7	693.7	186.00	4.730			
9,800.0	6,210.0	9,835.9	6,210.0	96.9	94.4	-90.00	-1,307.0	-2,013.3	879.7	688.5	191.25	4.600			
9,900.0	6,210.0	9,935.9	6,210.0	99.6	97.0	-90.00	-1,308.0	-2,113.3	879.7	683.2	196.53	4.476			
10,000.0	6,210.0	10,035.9	6,210.0	102.2	99.7	-90.00	-1,309.0	-2,213.3	879.7	677.9	201.82	4.359			
10,100.0	6,210.0	10,135.9	6,210.0	104.9	102.3	-90.00	-1,310.1	-2,313.3	879.7	672.6	207.13	4.247			
10,200.0	6,210.0	10,235.9	6,210.0	107.5	105.0	-90.00	-1,311.1	-2,413.3	879.7	667.3	212.46	4.141			
10,300.0	6,210.0	10,335.9	6,210.0	110.2	107.7	-90.00	-1,312.1	-2,513.3	879.7	661.9	217.80	4.039			
10,400.0	6,210.0	10,435.9	6,210.0	112.9	110.4	-90.00	-1,313.1	-2,613.3	879.7	656.6	223.15	3.942			
10,500.0	6,210.0	10,535.9	6,210.0	115.5	113.0	-90.00	-1,314.2	-2,713.3	879.7	651.2	228.51	3.850			
10,600.0	6,210.0	10,635.9	6,210.0	118.2	115.7	-90.00	-1,315.2	-2,813.3	879.7	645.8	233.89	3.761			
10,700.0	6,210.0	10,735.9	6,210.0	120.9	118.4	-90.00	-1,316.2	-2,913.3	879.7	640.4	239.28	3.677			
10,800.0	6,210.0	10,835.9	6,210.0	123.6	121.1	-90.00	-1,317.3	-3,013.3	879.7	635.1	244.67	3.596			
10,900.0	6,210.0	10,935.9	6,210.0	126.3	123.8	-90.00	-1,318.3	-3,113.3	879.7	629.6	250.08	3.518			
11,000.0	6,210.0	11,035.9	6,210.0	129.0	126.6	-90.00	-1,319.3	-3,213.3	879.7	624.2	255.49	3.443			
11,022.5	6,210.0	11,058.4	6,210.0	129.6	127.2	-90.00	-1,319.5	-3,235.7	879.7	623.0	256.71	3.427			
11,022.9	6,210.0	11,058.8	6,210.0	129.6	127.2	-90.00	-1,319.5	-3,236.1	879.7	623.0	256.73	3.427 SF			

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Markham 11-16NHZ
Project:	SEC.16-T4N-R68W	TVD Reference:	WELL @ 4997.5ft (Original Well Elev)
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4997.5ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 11-16NHZ	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 (1-05-15)	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	89.08	0.7	44.9	44.9						
100.0	100.0	100.0	100.0	0.1	0.1	89.08	0.7	44.9	44.9	44.7	0.22	199.767			
200.0	200.0	200.0	200.0	0.3	0.3	89.08	0.7	44.9	44.9	44.2	0.67	66.589			
300.0	300.0	300.0	300.0	0.6	0.6	89.08	0.7	44.9	44.9	43.8	1.12	39.953			
400.0	400.0	400.0	400.0	0.8	0.8	89.08	0.7	44.9	44.9	43.3	1.57	28.538			
500.0	500.0	500.0	500.0	1.0	1.0	89.08	0.7	44.9	44.9	42.9	2.02	22.196			
600.0	600.0	600.0	600.0	1.2	1.2	89.08	0.7	44.9	44.9	42.4	2.47	18.161			
700.0	700.0	700.0	700.0	1.5	1.5	89.08	0.7	44.9	44.9	42.0	2.92	15.367			
800.0	800.0	800.0	800.0	1.7	1.7	89.08	0.7	44.9	44.9	41.5	3.37	13.318			
900.0	900.0	900.0	900.0	1.9	1.9	89.08	0.7	44.9	44.9	41.1	3.82	11.751			
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	89.08	0.7	44.9	44.9	40.6	4.27	10.514	CC, ES		
1,100.0	1,100.0	1,098.6	1,098.6	2.4	2.3	90.17	-0.1	46.4	46.4	41.7	4.70	9.874			
1,200.0	1,200.0	1,197.0	1,196.9	2.6	2.5	93.05	-2.7	50.7	50.9	45.8	5.11	9.958			
1,300.0	1,300.0	1,295.0	1,294.5	2.8	2.7	96.84	-7.0	58.0	58.7	53.1	5.54	10.591			
1,400.0	1,400.0	1,392.2	1,391.0	3.0	3.0	100.69	-12.8	68.0	69.8	63.8	5.98	11.667			
1,500.0	1,500.0	1,488.6	1,486.2	3.3	3.2	104.12	-20.3	80.7	84.4	77.9	6.45	13.077			
1,600.0	1,600.0	1,583.9	1,579.8	3.5	3.5	106.96	-29.3	96.0	102.4	95.4	6.96	14.719			
1,700.0	1,700.0	1,678.2	1,671.8	3.7	3.8	8.19	-39.7	113.8	122.1	114.8	7.24	16.857			
1,800.0	1,799.8	1,771.8	1,762.5	3.9	4.2	10.28	-51.6	134.0	141.7	134.1	7.65	18.539			
1,900.0	1,899.5	1,864.9	1,851.8	4.1	4.7	12.21	-64.8	156.6	161.4	153.3	8.05	20.039			
2,000.0	1,998.7	1,957.2	1,939.5	4.3	5.1	14.02	-79.5	181.6	181.0	172.6	8.47	21.383			
2,100.0	2,097.5	2,049.0	2,025.7	4.6	5.7	15.75	-95.4	208.7	200.7	191.8	8.89	22.582			
2,200.0	2,195.6	2,140.1	2,110.2	4.9	6.3	17.41	-112.6	238.0	220.4	211.1	9.32	23.646			
2,300.0	2,293.1	2,235.2	2,197.5	5.2	7.0	19.09	-131.7	270.5	239.6	229.8	9.79	24.482			
2,400.0	2,389.6	2,333.5	2,287.6	5.6	7.8	20.84	-151.5	304.4	256.0	245.7	10.28	24.895			
2,500.0	2,485.3	2,432.2	2,378.1	6.0	8.6	22.66	-171.4	338.3	269.5	258.7	10.82	24.900			
2,600.0	2,579.8	2,531.1	2,468.9	6.5	9.3	24.60	-191.4	372.4	280.1	268.7	11.42	24.528			
2,700.0	2,673.2	2,630.2	2,559.8	7.1	10.1	26.72	-211.4	406.5	287.9	275.8	12.10	23.803			
2,800.0	2,765.2	2,729.3	2,650.6	7.8	11.0	29.06	-231.4	440.6	293.1	280.2	12.88	22.753			
2,900.0	2,855.8	2,828.3	2,741.4	8.5	11.8	31.67	-251.4	474.6	295.8	282.0	13.82	21.409			
2,954.9	2,905.0	2,882.7	2,791.2	8.9	12.2	33.25	-262.4	493.3	296.3	281.9	14.41	20.561			
3,000.0	2,945.1	2,927.2	2,832.0	9.3	12.6	34.59	-271.4	508.7	296.5	281.6	14.96	19.815			
3,100.0	3,034.1	3,026.0	2,922.6	10.2	13.4	37.54	-291.3	542.6	297.6	281.3	16.30	18.260			
3,200.0	3,123.1	3,124.7	3,013.2	11.1	14.2	40.47	-311.3	576.6	299.6	281.8	17.78	16.851			
3,300.0	3,212.2	3,223.5	3,103.8	12.0	15.1	43.35	-331.2	610.6	302.3	282.9	19.38	15.593			
3,400.0	3,301.2	3,322.3	3,194.4	12.9	15.9	46.18	-351.1	644.6	305.7	284.6	21.11	14.483			
3,500.0	3,390.2	3,421.1	3,285.0	13.9	16.7	48.94	-371.1	678.6	309.9	287.0	22.94	13.512			
3,600.0	3,479.2	3,519.9	3,375.5	14.8	17.6	51.62	-391.0	712.6	314.9	290.0	24.85	12.670			
3,700.0	3,568.3	3,618.6	3,466.1	15.7	18.4	54.21	-411.0	746.6	320.5	293.6	26.84	11.941			
3,800.0	3,657.3	3,717.4	3,556.7	16.7	19.3	56.71	-430.9	780.6	326.7	297.8	28.88	11.313			
3,900.0	3,746.3	3,816.2	3,647.3	17.7	20.1	59.12	-450.9	814.6	333.6	302.6	30.96	10.772			
4,000.0	3,835.3	3,915.0	3,737.9	18.6	20.9	61.42	-470.8	848.6	341.0	307.9	33.08	10.308			
4,100.0	3,924.3	4,013.8	3,828.4	19.6	21.8	63.63	-490.7	882.6	349.0	313.7	35.22	9.908			
4,200.0	4,013.4	4,112.6	3,919.0	20.6	22.6	65.74	-510.7	916.5	357.4	320.0	37.37	9.564			
4,300.0	4,102.4	4,211.3	4,009.6	21.6	23.5	67.74	-530.6	950.5	366.3	326.8	39.53	9.268			
4,400.0	4,191.4	4,310.1	4,100.2	22.6	24.3	69.66	-550.6	984.5	375.7	334.0	41.68	9.014			
4,500.0	4,280.4	4,408.9	4,190.8	23.5	25.2	71.47	-570.5	1,018.5	385.5	341.6	43.83	8.794			
4,600.0	4,369.5	4,507.7	4,281.4	24.5	26.0	73.20	-590.5	1,052.5	395.6	349.6	45.98	8.605			
4,700.0	4,458.5	4,606.5	4,371.9	25.5	26.8	74.84	-610.4	1,086.5	406.1	358.0	48.11	8.441			
4,800.0	4,547.5	4,705.3	4,462.5	26.5	27.7	76.40	-630.3	1,120.5	416.9	366.6	50.23	8.300			
4,900.0	4,636.5	4,804.0	4,553.1	27.5	28.5	77.88	-650.3	1,154.5	428.0	375.6	52.33	8.178			
5,000.0	4,725.5	4,902.8	4,643.7	28.5	29.4	79.29	-670.2	1,188.5	439.3	384.9	54.42	8.073			

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 11-16NHZ
Project:	SEC.16-T4N-R68W	TVD Reference:	WELL @ 4997.5ft (Original Well Elev)
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4997.5ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 11-16NHZ	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 (1-05-15)	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			
5,100.0	4,814.6	5,001.6	4,734.3	29.5	30.2	80.62	-690.2	1,222.5	450.9	394.4	56.49	7.982			
5,200.0	4,903.6	5,100.4	4,824.8	30.5	31.1	81.89	-710.1	1,256.5	462.8	404.2	58.55	7.903			
5,300.0	4,992.6	5,199.2	4,915.4	31.5	31.9	83.09	-730.1	1,290.4	474.8	414.2	60.60	7.836			
5,400.0	5,081.6	5,298.0	5,006.0	32.5	32.8	84.24	-750.0	1,324.4	487.1	424.4	62.62	7.778			
5,500.0	5,170.7	5,396.7	5,096.6	33.5	33.6	85.33	-769.9	1,358.4	499.5	434.9	64.64	7.728			
5,510.3	5,179.8	5,406.9	5,105.9	33.6	33.7	85.44	-772.0	1,361.9	500.8	435.9	64.84	7.723			
5,550.0	5,215.6	5,446.2	5,142.0	33.9	34.0	84.52	-779.9	1,375.5	505.6	439.9	65.67	7.699			
5,600.0	5,262.0	5,495.9	5,187.5	34.2	34.5	82.25	-790.0	1,392.6	511.2	444.7	66.52	7.685			
5,650.0	5,309.4	5,545.5	5,233.0	34.5	34.9	78.25	-800.0	1,409.6	516.2	449.0	67.20	7.681			
5,700.0	5,357.8	5,594.9	5,278.3	34.7	35.3	71.45	-809.9	1,426.6	520.7	453.0	67.72	7.689			
5,750.0	5,406.9	5,643.7	5,323.0	34.9	35.7	59.40	-819.8	1,443.4	524.7	456.7	68.07	7.709			
5,800.0	5,456.4	5,691.7	5,367.1	35.0	36.2	36.62	-829.5	1,459.9	528.5	460.3	68.25	7.744			
5,850.0	5,506.1	5,738.8	5,410.2	35.0	36.6	-0.48	-839.0	1,476.1	532.3	464.0	68.28	7.796			
5,900.0	5,555.8	5,782.8	5,450.8	35.0	36.9	-33.61	-847.9	1,490.6	536.4	468.2	68.15	7.871			
5,950.0	5,605.2	5,826.8	5,492.1	35.0	37.2	-52.36	-857.1	1,502.7	541.1	473.2	67.90	7.969			
6,000.0	5,654.0	5,871.8	5,535.1	35.0	37.4	-63.01	-866.6	1,512.3	546.4	478.8	67.56	8.088			
6,050.0	5,702.1	5,917.9	5,579.6	34.9	37.6	-69.87	-876.5	1,519.2	552.3	485.1	67.14	8.225			
6,100.0	5,749.2	5,965.3	5,625.6	34.8	37.7	-74.79	-886.7	1,523.3	558.8	492.1	66.68	8.380			
6,150.0	5,795.1	6,014.0	5,673.2	34.7	37.8	-78.62	-897.4	1,524.2	565.8	499.6	66.17	8.551			
6,200.0	5,839.5	6,064.3	5,722.1	34.6	37.9	-81.76	-908.3	1,521.7	573.4	507.7	65.64	8.735			
6,250.0	5,882.3	6,116.2	5,772.3	34.5	37.9	-84.45	-919.6	1,515.4	581.3	516.2	65.09	8.932			
6,300.0	5,923.2	6,169.9	5,823.7	34.4	37.9	-86.82	-931.2	1,504.9	589.7	525.1	64.54	9.136			
6,350.0	5,962.0	6,225.6	5,876.0	34.3	37.9	-88.95	-943.1	1,490.0	598.3	534.3	64.01	9.347			
6,400.0	5,998.5	6,283.4	5,929.0	34.2	37.8	-90.89	-955.1	1,470.1	607.1	543.6	63.52	9.558			
6,450.0	6,032.7	6,343.6	5,982.2	34.2	37.7	-92.67	-967.3	1,444.9	616.0	552.9	63.08	9.765			
6,500.0	6,064.2	6,406.2	6,035.2	34.2	37.6	-94.31	-979.4	1,413.8	624.8	562.1	62.71	9.963			
6,550.0	6,092.9	6,471.5	6,087.4	34.2	37.5	-95.82	-991.5	1,376.5	633.4	571.0	62.44	10.144			
6,600.0	6,118.8	6,539.6	6,138.0	34.2	37.3	-97.21	-1,003.2	1,332.6	641.7	579.4	62.29	10.301			
6,650.0	6,141.6	6,610.4	6,186.1	34.3	37.2	-98.47	-1,014.5	1,281.9	649.4	587.1	62.29	10.425			
6,700.0	6,161.3	6,684.0	6,230.7	34.5	37.0	-99.59	-1,025.0	1,224.3	656.4	594.0	62.48	10.507			
6,750.0	6,177.7	6,760.3	6,270.5	34.7	36.9	-100.57	-1,034.5	1,160.0	662.7	599.8	62.87	10.539			
6,800.0	6,190.8	6,839.0	6,304.4	35.0	36.8	-101.39	-1,042.8	1,089.5	667.9	604.4	63.50	10.517			
6,850.0	6,200.6	6,919.8	6,331.1	35.3	36.8	-102.04	-1,049.5	1,013.5	672.0	607.6	64.38	10.438			
6,900.0	6,206.9	7,002.3	6,349.5	35.6	36.9	-102.50	-1,054.4	933.3	674.8	609.3	65.48	10.305			
6,950.0	6,209.8	7,086.0	6,358.9	36.0	37.1	-102.76	-1,057.3	850.3	676.3	609.5	66.81	10.123			
6,966.5	6,210.0	7,113.7	6,359.9	36.1	37.1	-102.80	-1,057.8	822.6	676.5	609.2	67.28	10.055			
7,000.0	6,210.0	7,152.5	6,360.0	36.4	37.3	-102.81	-1,058.2	783.8	676.5	608.6	67.90	9.964			
7,100.0	6,210.0	7,252.5	6,360.0	37.4	37.7	-102.81	-1,059.1	683.8	676.5	606.6	69.86	9.683			
7,200.0	6,210.0	7,352.5	6,360.0	38.6	38.4	-102.81	-1,060.1	583.8	676.4	604.2	72.17	9.372			
7,300.0	6,210.0	7,452.5	6,360.0	39.9	39.3	-102.81	-1,061.0	483.8	676.3	601.5	74.82	9.040			
7,400.0	6,210.0	7,552.5	6,360.0	41.4	40.3	-102.82	-1,062.0	383.8	676.3	598.5	77.76	8.697			
7,500.0	6,210.0	7,652.5	6,360.0	43.0	41.6	-102.82	-1,063.0	283.8	676.2	595.2	80.96	8.352			
7,600.0	6,210.0	7,752.5	6,360.0	44.8	43.1	-102.82	-1,063.9	183.8	676.1	591.7	84.40	8.011			
7,700.0	6,210.0	7,852.5	6,360.0	46.6	44.8	-102.82	-1,064.9	83.8	676.1	588.0	88.05	7.678			
7,800.0	6,210.0	7,952.5	6,360.0	48.6	46.6	-102.82	-1,065.8	-16.1	676.0	584.1	91.88	7.357			
7,900.0	6,210.0	8,052.5	6,360.0	50.6	48.5	-102.82	-1,066.8	-116.1	675.9	580.1	95.87	7.050			
8,000.0	6,210.0	8,152.5	6,360.0	52.7	50.5	-102.82	-1,067.8	-216.1	675.9	575.9	100.00	6.758			
8,100.0	6,210.0	8,252.5	6,360.0	54.9	52.6	-102.82	-1,068.7	-316.1	675.8	571.5	104.26	6.482			
8,200.0	6,210.0	8,352.5	6,360.0	57.1	54.8	-102.83	-1,069.7	-416.1	675.7	567.1	108.63	6.221			
8,300.0	6,210.0	8,452.5	6,360.0	59.4	57.0	-102.83	-1,070.6	-516.1	675.7	562.6	113.09	5.974			
8,400.0	6,210.0	8,552.5	6,360.0	61.7	59.3	-102.83	-1,071.6	-616.1	675.6	558.0	117.64	5.743			
8,500.0	6,210.0	8,652.5	6,360.0	64.1	61.7	-102.83	-1,072.6	-716.1	675.5	553.3	122.27	5.525			

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 11-16NHZ
Project:	SEC.16-T4N-R68W	TVD Reference:	WELL @ 4997.5ft (Original Well Elev)
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4997.5ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 11-16NHZ	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 (1-05-15)	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			
8,600.0	6,210.0	8,752.5	6,360.0	66.4	64.1	-102.83	-1,073.5	-816.1	675.5	548.5	126.96	5.320			
8,700.0	6,210.0	8,852.5	6,360.0	68.9	66.5	-102.83	-1,074.5	-916.1	675.4	543.7	131.72	5.128			
8,800.0	6,210.0	8,952.5	6,360.0	71.3	69.0	-102.83	-1,075.4	-1,016.1	675.3	538.8	136.53	4.946			
8,900.0	6,210.0	9,052.5	6,360.0	73.8	71.4	-102.83	-1,076.4	-1,116.1	675.3	533.9	141.39	4.776			
9,000.0	6,210.0	9,152.5	6,360.0	76.3	74.0	-102.84	-1,077.4	-1,216.1	675.2	528.9	146.29	4.615			
9,100.0	6,210.0	9,252.5	6,360.0	78.8	76.5	-102.84	-1,078.3	-1,316.1	675.1	523.9	151.23	4.464			
9,200.0	6,210.0	9,352.5	6,360.0	81.4	79.0	-102.84	-1,079.3	-1,416.1	675.1	518.9	156.21	4.321			
9,300.0	6,210.0	9,452.5	6,360.0	83.9	81.6	-102.84	-1,080.2	-1,516.1	675.0	513.8	161.22	4.187			
9,400.0	6,210.0	9,552.5	6,360.0	86.5	84.2	-102.84	-1,081.2	-1,616.1	674.9	508.7	166.26	4.059			
9,500.0	6,210.0	9,652.5	6,360.0	89.1	86.8	-102.84	-1,082.2	-1,716.1	674.9	503.5	171.33	3.939			
9,600.0	6,210.0	9,752.5	6,360.0	91.7	89.4	-102.84	-1,083.1	-1,816.1	674.8	498.4	176.42	3.825			
9,700.0	6,210.0	9,852.5	6,360.0	94.3	92.0	-102.84	-1,084.1	-1,916.1	674.7	493.2	181.54	3.717			
9,800.0	6,210.0	9,952.5	6,360.0	96.9	94.7	-102.85	-1,085.0	-2,016.1	674.7	488.0	186.67	3.614			
9,900.0	6,210.0	10,052.5	6,360.0	99.6	97.3	-102.85	-1,086.0	-2,116.0	674.6	482.8	191.83	3.517			
10,000.0	6,210.0	10,152.5	6,360.0	102.2	99.9	-102.85	-1,087.0	-2,216.0	674.5	477.5	197.00	3.424			
10,100.0	6,210.0	10,252.5	6,360.0	104.9	102.6	-102.85	-1,087.9	-2,316.0	674.5	472.3	202.19	3.336			
10,200.0	6,210.0	10,352.5	6,360.0	107.5	105.3	-102.85	-1,088.9	-2,416.0	674.4	467.0	207.39	3.252			
10,300.0	6,210.0	10,452.5	6,360.0	110.2	107.9	-102.85	-1,089.8	-2,516.0	674.3	461.7	212.61	3.172			
10,400.0	6,210.0	10,552.5	6,360.0	112.9	110.6	-102.85	-1,090.8	-2,616.0	674.3	456.4	217.84	3.095			
10,500.0	6,210.0	10,652.5	6,360.0	115.5	113.3	-102.86	-1,091.8	-2,716.0	674.2	451.1	223.08	3.022			
10,600.0	6,210.0	10,752.5	6,360.0	118.2	116.0	-102.86	-1,092.7	-2,816.0	674.1	445.8	228.34	2.952			
10,700.0	6,210.0	10,852.5	6,360.0	120.9	118.7	-102.86	-1,093.7	-2,916.0	674.1	440.5	233.60	2.886			
10,800.0	6,210.0	10,952.5	6,360.0	123.6	121.4	-102.86	-1,094.6	-3,016.0	674.0	435.1	238.87	2.822			
10,900.0	6,210.0	11,052.5	6,360.0	126.3	124.1	-102.86	-1,095.6	-3,116.0	673.9	429.8	244.16	2.760			
11,000.0	6,210.0	11,152.5	6,360.0	129.0	126.8	-102.86	-1,096.6	-3,216.0	673.9	424.4	249.45	2.701			
11,022.5	6,210.0	11,174.9	6,360.0	129.6	127.4	-102.86	-1,096.8	-3,238.5	673.9	423.2	250.64	2.689			
11,022.9	6,210.0	11,175.3	6,360.0	129.6	127.4	-102.86	-1,096.8	-3,238.9	673.9	423.2	250.65	2.688 SF			

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Markham 11-16NHZ
Project:	SEC.16-T4N-R68W	TVD Reference:	WELL @ 4997.5ft (Original Well Elev)
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4997.5ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 11-16NHZ	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 (1-05-15)	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	89.32	0.4	29.8	29.8						
100.0	100.0	100.0	100.0	0.1	0.1	89.32	0.4	29.8	29.8	29.6	0.22	132.757			
200.0	200.0	200.0	200.0	0.3	0.3	89.32	0.4	29.8	29.8	29.2	0.67	44.252			
300.0	300.0	300.0	300.0	0.6	0.6	89.32	0.4	29.8	29.8	28.7	1.12	26.551			
400.0	400.0	400.0	400.0	0.8	0.8	89.32	0.4	29.8	29.8	28.3	1.57	18.965			
500.0	500.0	500.0	500.0	1.0	1.0	89.32	0.4	29.8	29.8	27.8	2.02	14.751			
600.0	600.0	600.0	600.0	1.2	1.2	89.32	0.4	29.8	29.8	27.4	2.47	12.069			
700.0	700.0	700.0	700.0	1.5	1.5	89.32	0.4	29.8	29.8	26.9	2.92	10.212			
800.0	800.0	800.0	800.0	1.7	1.7	89.32	0.4	29.8	29.8	26.5	3.37	8.850			
900.0	900.0	900.0	900.0	1.9	1.9	89.32	0.4	29.8	29.8	26.0	3.82	7.809			
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	89.32	0.4	29.8	29.8	25.6	4.27	6.987			
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	89.32	0.4	29.8	29.8	25.1	4.72	6.322			
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	89.32	0.4	29.8	29.8	24.7	5.17	5.772 CC, ES			
1,300.0	1,300.0	1,299.0	1,299.0	2.8	2.8	90.63	-0.3	31.4	31.4	25.8	5.60	5.612			
1,400.0	1,400.0	1,397.8	1,397.7	3.0	3.0	93.86	-2.4	36.1	36.2	30.2	6.01	6.023			
1,500.0	1,500.0	1,496.1	1,495.6	3.3	3.2	97.66	-5.9	43.8	44.4	38.0	6.44	6.893			
1,600.0	1,600.0	1,593.8	1,592.5	3.5	3.4	101.08	-10.7	54.5	56.0	49.2	6.89	8.137			
1,700.0	1,700.0	1,690.7	1,688.3	3.7	3.7	2.77	-16.8	68.1	69.4	62.1	7.26	9.556			
1,800.0	1,799.8	1,787.3	1,783.1	3.9	3.9	5.16	-24.1	84.6	82.7	75.1	7.65	10.812			
1,900.0	1,899.5	1,883.3	1,876.9	4.1	4.3	7.32	-32.7	103.9	96.0	88.0	8.04	11.941			
2,000.0	1,998.7	1,978.9	1,969.4	4.3	4.6	9.31	-42.6	125.9	109.4	100.9	8.44	12.960			
2,100.0	2,097.5	2,074.1	2,060.6	4.6	5.1	11.20	-53.6	150.6	122.7	113.9	8.84	13.879			
2,200.0	2,195.6	2,168.8	2,150.5	4.9	5.6	13.00	-65.9	178.0	136.1	126.8	9.25	14.711			
2,300.0	2,293.1	2,263.1	2,238.9	5.2	6.1	14.74	-79.2	207.9	149.5	139.8	9.68	15.442			
2,400.0	2,389.6	2,357.0	2,325.8	5.6	6.8	16.42	-93.7	240.3	163.0	152.8	10.13	16.082			
2,500.0	2,485.3	2,450.9	2,411.5	6.0	7.5	18.07	-109.3	275.2	176.5	165.9	10.62	16.622			
2,600.0	2,579.8	2,550.0	2,501.5	6.5	8.3	19.86	-126.3	313.2	188.3	177.1	11.17	16.858			
2,700.0	2,673.2	2,649.4	2,591.7	7.1	9.1	21.81	-143.3	351.4	197.0	185.2	11.78	16.717			
2,800.0	2,765.2	2,748.9	2,682.0	7.8	9.9	24.00	-160.4	389.5	202.7	190.2	12.49	16.227			
2,900.0	2,855.8	2,848.5	2,772.3	8.5	10.7	26.51	-177.5	427.7	205.6	192.3	13.34	15.418			
2,954.9	2,905.0	2,903.1	2,821.9	8.9	11.2	28.06	-186.8	448.7	206.1	192.2	13.88	14.853			
3,000.0	2,945.1	2,947.9	2,862.6	9.3	11.6	29.38	-194.5	465.9	206.2	191.8	14.39	14.324			
3,100.0	3,034.1	3,047.4	2,952.8	10.2	12.5	32.30	-211.6	504.0	206.8	191.2	15.65	13.215			
3,200.0	3,123.1	3,146.8	3,043.0	11.1	13.3	35.21	-228.6	542.2	208.0	191.0	17.05	12.197			
3,300.0	3,212.2	3,246.2	3,133.3	12.0	14.2	38.07	-245.6	580.3	209.7	191.1	18.60	11.278			
3,400.0	3,301.2	3,345.7	3,223.5	12.9	15.1	40.88	-262.7	618.4	212.0	191.7	20.27	10.458			
3,500.0	3,390.2	3,445.1	3,313.7	13.9	16.0	43.62	-279.7	656.6	214.7	192.7	22.05	9.736			
3,600.0	3,479.2	3,544.5	3,404.0	14.8	16.8	46.29	-296.8	694.7	217.9	194.0	23.94	9.103			
3,700.0	3,568.3	3,644.0	3,494.2	15.7	17.7	48.88	-313.8	732.9	221.6	195.7	25.91	8.553			
3,800.0	3,657.3	3,743.4	3,584.4	16.7	18.6	51.38	-330.9	771.0	225.7	197.8	27.95	8.076			
3,900.0	3,746.3	3,842.8	3,674.7	17.7	19.5	53.78	-347.9	809.1	230.3	200.2	30.05	7.664			
4,000.0	3,835.3	3,942.3	3,764.9	18.6	20.4	56.09	-365.0	847.3	235.2	203.0	32.19	7.308			
4,100.0	3,924.3	4,041.7	3,855.1	19.6	21.3	58.30	-382.0	885.4	240.5	206.2	34.36	7.001			
4,200.0	4,013.4	4,141.1	3,945.4	20.6	22.2	60.42	-399.1	923.6	246.2	209.6	36.55	6.735			
4,300.0	4,102.4	4,240.6	4,035.6	21.6	23.1	62.43	-416.1	961.7	252.1	213.4	38.76	6.505			
4,400.0	4,191.4	4,340.0	4,125.8	22.6	24.0	64.36	-433.1	999.9	258.4	217.4	40.97	6.307			
4,500.0	4,280.4	4,439.4	4,216.1	23.5	24.9	66.19	-450.2	1,038.0	265.0	221.8	43.19	6.135			
4,600.0	4,369.5	4,538.9	4,306.3	24.5	25.8	67.93	-467.2	1,076.1	271.8	226.4	45.40	5.986			
4,700.0	4,458.5	4,638.3	4,396.5	25.5	26.7	69.58	-484.3	1,114.3	278.8	231.2	47.61	5.856			
4,800.0	4,547.5	4,737.7	4,486.8	26.5	27.6	71.16	-501.3	1,152.4	286.1	236.3	49.81	5.743			
4,900.0	4,636.5	4,837.2	4,577.0	27.5	28.5	72.65	-518.4	1,190.6	293.5	241.5	52.00	5.645			
5,000.0	4,725.5	4,936.6	4,667.2	28.5	29.4	74.07	-535.4	1,228.7	301.2	247.0	54.18	5.560			

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 11-16NHZ
Project:	SEC.16-T4N-R68W	TVD Reference:	WELL @ 4997.5ft (Original Well Elev)
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4997.5ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 11-16NHZ	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 (1-05-15)	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			
5,100.0	4,814.6	5,036.1	4,757.4	29.5	30.3	75.42	-552.5	1,266.8	309.0	252.7	56.34	5.485			
5,200.0	4,903.6	5,135.5	4,847.7	30.5	31.2	76.70	-569.5	1,305.0	317.0	258.5	58.49	5.420			
5,300.0	4,992.6	5,234.9	4,937.9	31.5	32.1	77.92	-586.6	1,343.1	325.2	264.6	60.63	5.364			
5,400.0	5,081.6	5,334.4	5,028.1	32.5	33.0	79.08	-603.6	1,381.3	333.5	270.7	62.75	5.314			
5,500.0	5,170.7	5,433.8	5,118.4	33.5	33.9	80.18	-620.6	1,419.4	341.9	277.0	64.86	5.271			
5,510.3	5,179.8	5,444.1	5,127.7	33.6	34.0	80.29	-622.4	1,423.3	342.8	277.7	65.08	5.267			
5,550.0	5,215.6	5,483.6	5,163.5	33.9	34.4	79.20	-629.2	1,438.5	346.1	280.2	65.89	5.253			
5,600.0	5,262.0	5,533.4	5,208.7	34.2	34.9	76.58	-637.7	1,457.6	350.0	283.4	66.66	5.251			
5,650.0	5,309.4	5,582.3	5,253.2	34.5	35.3	72.12	-646.1	1,476.2	353.8	286.6	67.21	5.264			
5,700.0	5,357.8	5,630.0	5,297.4	34.7	35.6	65.17	-654.5	1,492.0	357.7	290.1	67.56	5.294			
5,750.0	5,406.9	5,678.1	5,342.9	34.9	35.8	53.35	-663.2	1,504.8	361.6	293.8	67.78	5.335			
5,800.0	5,456.4	5,726.4	5,389.4	35.0	36.1	31.13	-672.0	1,514.6	365.7	297.8	67.90	5.387			
5,850.0	5,506.1	5,775.1	5,436.8	35.0	36.2	-5.10	-681.1	1,521.2	369.9	302.0	67.91	5.447			
5,900.0	5,555.8	5,824.2	5,484.9	35.0	36.3	-37.28	-690.4	1,524.5	374.2	306.3	67.84	5.515			
5,950.0	5,605.2	5,873.6	5,533.4	35.0	36.4	-55.10	-699.8	1,524.4	378.5	310.8	67.70	5.591			
6,000.0	5,654.0	5,923.5	5,582.2	35.0	36.5	-64.80	-709.2	1,520.9	382.9	315.4	67.50	5.673			
6,050.0	5,702.1	5,973.8	5,631.1	34.9	36.5	-70.72	-718.7	1,513.9	387.3	320.0	67.25	5.759			
6,100.0	5,749.2	6,024.4	5,679.7	34.8	36.4	-74.69	-728.3	1,503.3	391.7	324.7	66.96	5.849			
6,150.0	5,795.1	6,075.5	5,727.8	34.7	36.4	-77.57	-737.7	1,489.0	396.0	329.4	66.65	5.942			
6,200.0	5,839.5	6,127.1	5,775.2	34.6	36.3	-79.76	-747.1	1,471.2	400.3	334.0	66.33	6.035			
6,250.0	5,882.3	6,179.0	5,821.7	34.5	36.2	-81.51	-756.2	1,449.7	404.5	338.5	66.02	6.127			
6,300.0	5,923.2	6,231.5	5,866.8	34.4	36.1	-82.94	-765.2	1,424.6	408.6	342.8	65.73	6.216			
6,350.0	5,962.0	6,284.3	5,910.4	34.3	36.0	-84.13	-773.9	1,396.0	412.5	347.0	65.47	6.301			
6,400.0	5,998.5	6,337.6	5,952.1	34.2	35.9	-85.15	-782.3	1,363.9	416.3	351.0	65.27	6.378			
6,450.0	6,032.7	6,391.3	5,991.6	34.2	35.7	-86.01	-790.3	1,328.5	419.9	354.7	65.14	6.446			
6,500.0	6,064.2	6,445.5	6,028.7	34.2	35.6	-86.76	-797.9	1,289.8	423.2	358.1	65.08	6.502			
6,550.0	6,092.9	6,500.0	6,063.0	34.2	35.6	-87.41	-805.0	1,248.0	426.3	361.2	65.13	6.545			
6,600.0	6,118.8	6,554.9	6,094.3	34.2	35.5	-87.98	-811.5	1,203.5	429.1	363.8	65.29	6.573			
6,650.0	6,141.6	6,610.1	6,122.3	34.3	35.5	-88.46	-817.4	1,156.2	431.7	366.1	65.56	6.584			
6,700.0	6,161.3	6,665.7	6,146.8	34.5	35.5	-88.87	-822.6	1,106.7	433.9	367.9	65.96	6.578			
6,750.0	6,177.7	6,721.5	6,167.6	34.7	35.5	-89.21	-827.2	1,055.0	435.8	369.3	66.48	6.555			
6,800.0	6,190.8	6,777.6	6,184.4	35.0	35.6	-89.49	-831.0	1,001.7	437.3	370.2	67.13	6.514			
6,850.0	6,200.6	6,833.8	6,197.0	35.3	35.8	-89.71	-834.0	947.0	438.4	370.6	67.89	6.458			
6,900.0	6,206.9	6,890.3	6,205.5	35.6	36.0	-89.87	-836.2	891.2	439.2	370.5	68.76	6.388			
6,950.0	6,209.8	6,946.8	6,209.6	36.0	36.2	-89.98	-837.5	834.9	439.6	369.9	69.73	6.305			
6,966.5	6,210.0	6,965.4	6,210.0	36.1	36.3	-90.00	-837.8	816.2	439.7	369.6	70.06	6.276			
7,000.0	6,210.0	6,999.7	6,210.0	36.4	36.5	-90.00	-838.2	782.0	439.7	369.0	70.67	6.222			
7,100.0	6,210.0	7,099.7	6,210.0	37.4	37.2	-90.00	-839.2	682.0	439.7	367.0	72.72	6.046			
7,200.0	6,210.0	7,199.7	6,210.0	38.6	38.1	-90.00	-840.2	582.0	439.7	364.6	75.14	5.852			
7,300.0	6,210.0	7,299.7	6,210.0	39.9	39.2	-90.00	-841.3	482.0	439.7	361.8	77.88	5.646			
7,400.0	6,210.0	7,399.7	6,210.0	41.4	40.5	-90.00	-842.3	382.0	439.7	358.8	80.92	5.434			
7,500.0	6,210.0	7,499.7	6,210.0	43.0	42.0	-90.00	-843.3	282.0	439.7	355.5	84.23	5.220			
7,600.0	6,210.0	7,599.7	6,210.0	44.8	43.6	-90.00	-844.3	182.0	439.7	351.9	87.77	5.010			
7,700.0	6,210.0	7,699.7	6,210.0	46.6	45.3	-90.00	-845.4	82.0	439.7	348.2	91.52	4.805			
7,800.0	6,210.0	7,799.7	6,210.0	48.6	47.2	-90.00	-846.4	-17.9	439.7	344.3	95.45	4.607			
7,900.0	6,210.0	7,899.7	6,210.0	50.6	49.2	-90.00	-847.4	-117.9	439.7	340.2	99.54	4.417			
8,000.0	6,210.0	7,999.7	6,210.0	52.7	51.2	-90.00	-848.5	-217.9	439.7	335.9	103.77	4.237			
8,100.0	6,210.0	8,099.7	6,210.0	54.9	53.4	-90.00	-849.5	-317.9	439.7	331.6	108.13	4.067			
8,200.0	6,210.0	8,199.7	6,210.0	57.1	55.6	-90.00	-850.5	-417.9	439.7	327.1	112.60	3.905			
8,300.0	6,210.0	8,299.7	6,210.0	59.4	57.9	-90.00	-851.6	-517.9	439.7	322.5	117.17	3.753			
8,400.0	6,210.0	8,399.7	6,210.0	61.7	60.2	-90.00	-852.6	-617.9	439.7	317.9	121.82	3.609			
8,500.0	6,210.0	8,499.7	6,210.0	64.1	62.5	-90.00	-853.6	-717.9	439.7	313.2	126.55	3.475			

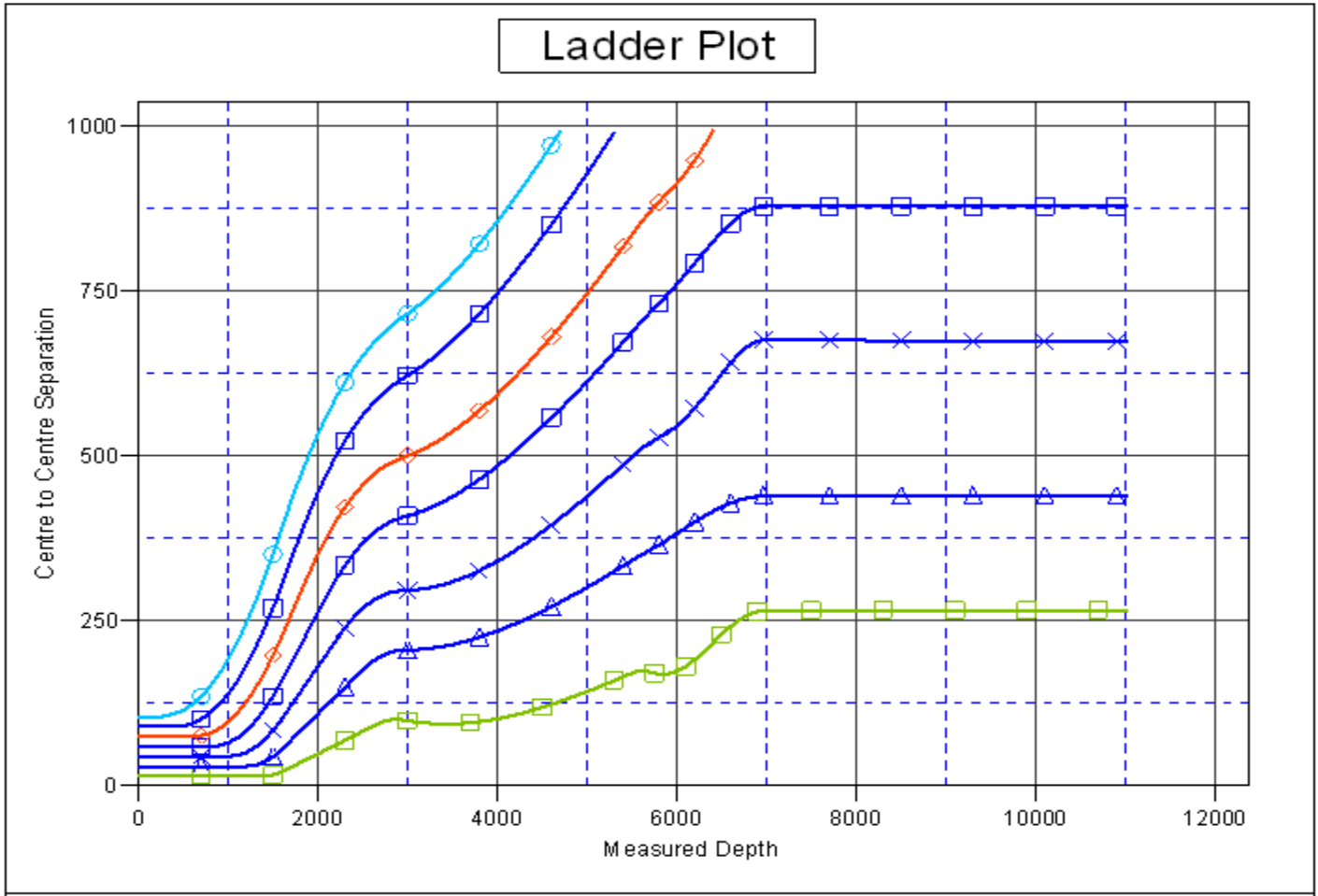
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Markham 11-16NHZ
Project:	SEC.16-T4N-R68W	TVD Reference:	WELL @ 4997.5ft (Original Well Elev)
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4997.5ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 11-16NHZ	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 (1-05-15)	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)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor			
8,600.0	6,210.0	8,599.7	6,210.0	66.4	64.9	-90.00	-854.6	-817.9	439.7	308.4	131.35	3.348			
8,700.0	6,210.0	8,699.7	6,210.0	68.9	67.4	-90.00	-855.7	-917.9	439.7	303.5	136.22	3.228			
8,800.0	6,210.0	8,799.7	6,210.0	71.3	69.8	-90.00	-856.7	-1,017.9	439.7	298.6	141.13	3.116			
8,900.0	6,210.0	8,899.7	6,210.0	73.8	72.3	-90.00	-857.7	-1,117.9	439.7	293.6	146.10	3.010			
9,000.0	6,210.0	8,999.7	6,210.0	76.3	74.8	-90.00	-858.8	-1,217.9	439.7	288.6	151.12	2.910			
9,100.0	6,210.0	9,099.7	6,210.0	78.8	77.3	-90.00	-859.8	-1,317.9	439.7	283.5	156.17	2.816			
9,200.0	6,210.0	9,199.7	6,210.0	81.4	79.9	-90.00	-860.8	-1,417.9	439.7	278.5	161.26	2.727			
9,300.0	6,210.0	9,299.7	6,210.0	83.9	82.5	-90.00	-861.9	-1,517.9	439.7	273.3	166.38	2.643			
9,400.0	6,210.0	9,399.7	6,210.0	86.5	85.0	-90.00	-862.9	-1,617.9	439.7	268.2	171.54	2.563			
9,500.0	6,210.0	9,499.7	6,210.0	89.1	87.6	-90.00	-863.9	-1,717.9	439.7	263.0	176.72	2.488			
9,600.0	6,210.0	9,599.7	6,210.0	91.7	90.2	-90.00	-864.9	-1,817.9	439.7	257.8	181.93	2.417			
9,700.0	6,210.0	9,699.7	6,210.0	94.3	92.9	-90.00	-866.0	-1,917.8	439.7	252.6	187.16	2.349			
9,800.0	6,210.0	9,799.7	6,210.0	96.9	95.5	-90.00	-867.0	-2,017.8	439.7	247.3	192.41	2.285			
9,900.0	6,210.0	9,899.7	6,210.0	99.6	98.1	-90.00	-868.0	-2,117.8	439.7	242.0	197.68	2.224			
10,000.0	6,210.0	9,999.7	6,210.0	102.2	100.8	-90.00	-869.1	-2,217.8	439.7	236.8	202.97	2.166			
10,100.0	6,210.0	10,099.7	6,210.0	104.9	103.4	-90.00	-870.1	-2,317.8	439.7	231.5	208.28	2.111			
10,200.0	6,210.0	10,199.7	6,210.0	107.5	106.1	-90.00	-871.1	-2,417.8	439.7	226.1	213.60	2.059			
10,300.0	6,210.0	10,299.7	6,210.0	110.2	108.8	-90.00	-872.1	-2,517.8	439.7	220.8	218.94	2.008			
10,400.0	6,210.0	10,399.7	6,210.0	112.9	111.4	-90.00	-873.2	-2,617.8	439.7	215.4	224.29	1.961			
10,500.0	6,210.0	10,499.7	6,210.0	115.5	114.1	-90.00	-874.2	-2,717.8	439.7	210.1	229.65	1.915			
10,600.0	6,210.0	10,599.7	6,210.0	118.2	116.8	-90.00	-875.2	-2,817.8	439.7	204.7	235.02	1.871			
10,700.0	6,210.0	10,699.7	6,210.0	120.9	119.5	-90.00	-876.3	-2,917.8	439.7	199.3	240.41	1.829			
10,800.0	6,210.0	10,799.7	6,210.0	123.6	122.2	-90.00	-877.3	-3,017.8	439.7	193.9	245.80	1.789			
10,900.0	6,210.0	10,899.7	6,210.0	126.3	124.9	-90.00	-878.3	-3,117.8	439.7	188.5	251.21	1.751			
11,000.0	6,210.0	10,999.7	6,210.0	129.0	127.6	-90.00	-879.4	-3,217.8	439.7	183.1	256.62	1.714			
11,022.5	6,210.0	11,022.1	6,210.0	129.6	128.2	-90.00	-879.6	-3,240.2	439.7	181.9	257.84	1.706			
11,022.9	6,210.0	11,022.6	6,210.0	129.6	128.3	-90.00	-879.6	-3,240.7	439.7	181.9	257.85	1.705 SF			

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Markham 11-16NHZ
Project:	SEC.16-T4N-R68W	TVD Reference:	WELL @ 4997.5ft (Original Well Elev)
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4997.5ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 11-16NHZ	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 (1-05-15)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4997.5ft (Original Well Elev) Coordinates are relative to: SRC Markham 11-16NHZ
 Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, Colorado Northern Zone
 Central Meridian is -105.500000 ° Grid Convergence at Surface is: 0.32°

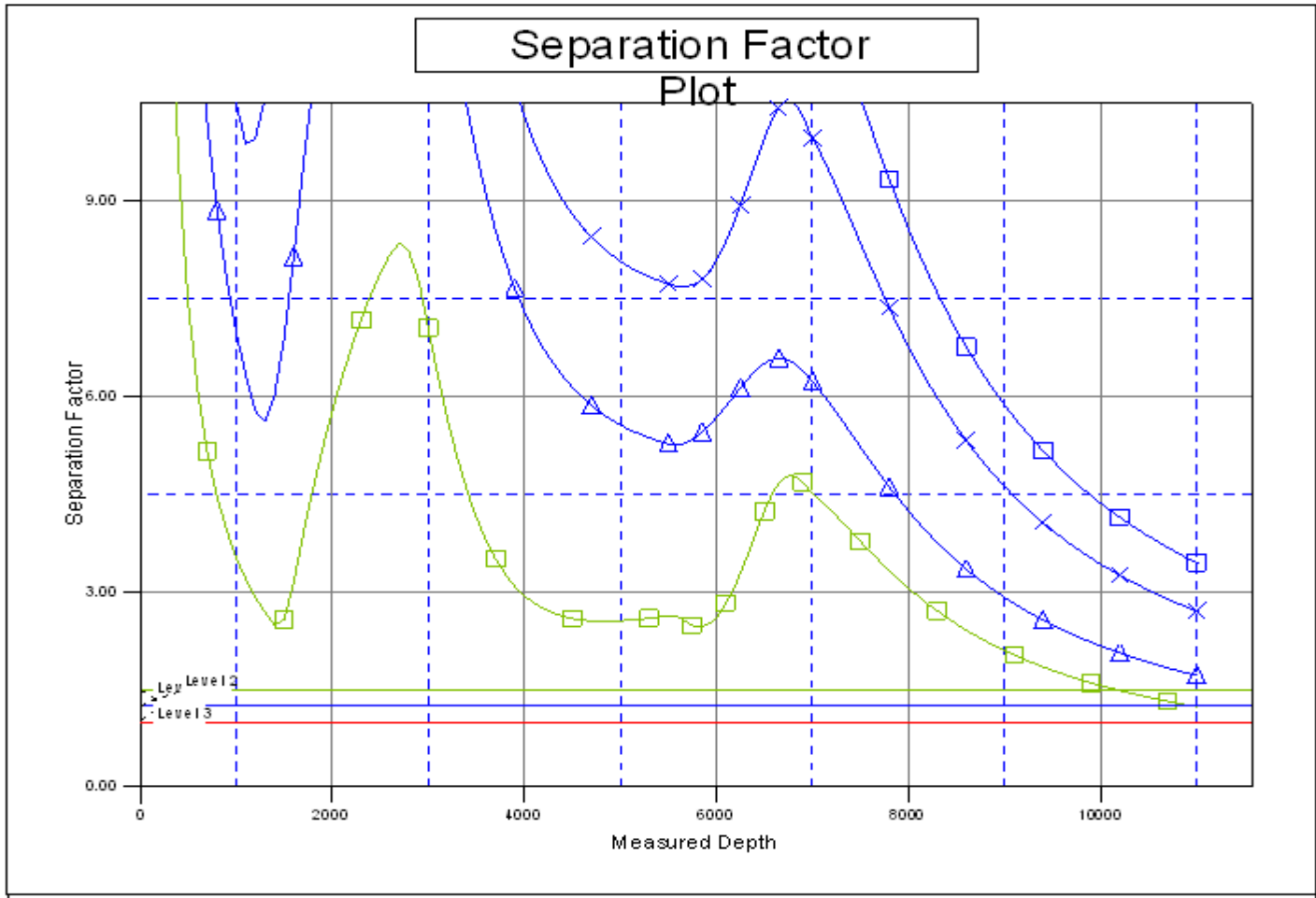


LEGEND

- F-16CHZ, Wellbore #1, Plan #1 (1-05-15) V0
- A-16NHZ, Wellbore #1, Plan #1 (1-05-15) V0
- A-16CHZ, Wellbore #1, Plan #1 (1-06-15) V0
- SRC Markham 12-16NHZ, Wellbore #1, Plan #1 (1-06-15) V0
- SRC Markham F-16NHZ, Wellbore #1, Plan #1 (1-05-15) V0
- SRC Markham 12-16CHZ, Wellbore #1, Plan #1 (1-06-15) V0
- SRC Markham 11-16CHZ, Wellbore #1, Plan #1 (1-06-15) V0

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Markham 11-16NHZ
Project:	SEC.16-T4N-R68W	TVD Reference:	WELL @ 4997.5ft (Original Well Elev)
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4997.5ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 11-16NHZ	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 (1-05-15)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4997.5ft (Original Well Elev) Coordinates are relative to: SRC Markham 11-16NHZ
 Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, Colorado Northern Zone
 Central Meridian is -105.500000 ° Grid Convergence at Surface is: 0.32°



LEGEND

- F-16CHZ, Wellbore #1, Plan #1 (1-05-15) V0
- A-16NHZ, Wellbore #1, Plan #1 (1-05-15) V0
- A-16CHZ, Wellbore #1, Plan #1 (1-06-15) V0
- SRC Markham 12-16NHZ, Wellbore #1, Plan #1 (1-06-15) V0
- SRC Markham F-16NHZ, Wellbore #1, Plan #1 (1-05-15) V0
- SRC Markham 12-16CHZ, Wellbore #1, Plan #1 (1-06-15) V0
- SRC Markham 11-16CHZ, Wellbore #1, Plan #1 (1-05-15) V0