

Synergy Resources

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

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

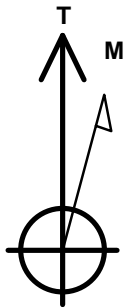
Ground Elevation: 4963.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1357582.39	3136635.67	40.313928	-105.010025	

RKB - 13' WELL @ 4976.0ft (RKB - 13')

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
SHL 2440'FNL & 2167'FWL, SEC.16	1.0	0.0	0.0	Point
BHL 460'FNL & 700' FEL, SEC.9	6290.0	7328.5	2410.2	Point
LANDING PT. 2201'FNL & 700'FEL, SEC.16	6290.0	267.9	2420.9	Point



Azimuths to True North
Magnetic North: 8.61°

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

SRC Markham Pad Sec.16-T4N-R68W
SRC Markham 41-16-9CHZ
Plan #1 (3-31-14)
10:44, April 09 2014

ANNOTATIONS

TVD	MD	Annotation
400.0	400.0	KOP - Start Build 2.00
5581.5	6040.6	Start DLS 8.00 TFO -100.98
6290.0	7230.1	Start 7060.4 hold at 7230.1 MD
6290.0	14290.5	TD at 14290.5

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

BHL 460'FNL & 700' FEL, SEC.9

SRC Markham 41-16-9CHZ

Casing Pt. 2201'FNL & 700'FEL, SEC.16

SRC Markham 41-16-9CHZ

LANDING PT. 2201'FNL & 700'FEL, SEC.16

SHL 2440'FNL & 2167'FWL, SEC.16

460' Setback

Sec.16-T4N-R68W

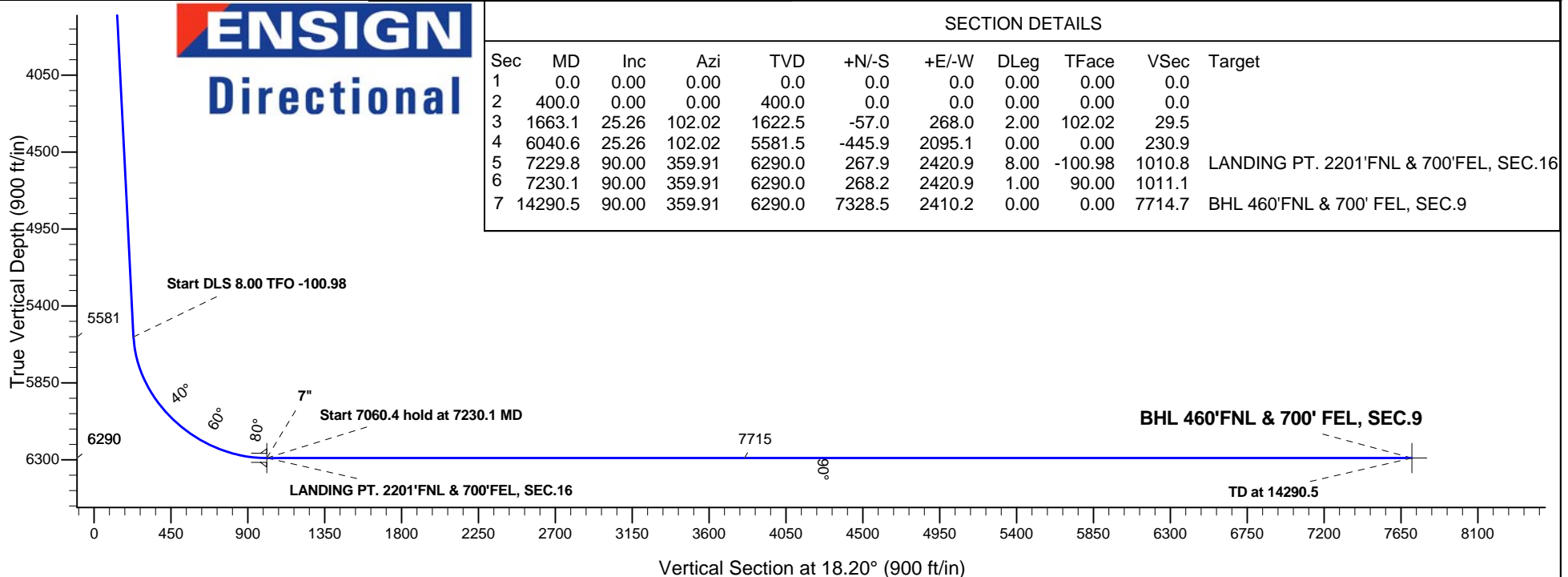
-3000

0

3000

6000

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





Synergy Resources

Sec.16-T4N-R68W

SRC Markham Pad Sec.16-T4N-R68W

SRC Markham 41-16-9CHZ

Wellbore #1

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

Standard Planning Report

09 April, 2014

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,663.1	25.26	102.02	1,622.5	-57.0	268.0	2.00	2.00	0.00	102.02	
6,040.6	25.26	102.02	5,581.5	-445.9	2,095.1	0.00	0.00	0.00	0.00	
7,229.8	90.00	359.91	6,290.0	267.9	2,420.9	8.00	5.44	-8.59	-100.98	LANDING PT. 2201
7,230.1	90.00	359.91	6,290.0	268.2	2,420.9	1.00	0.00	1.00	90.00	
14,290.5	90.00	359.91	6,290.0	7,328.5	2,410.2	0.00	0.00	0.00	0.00	BHL 460'FNL & 700

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

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
1.0	0.00	0.00	1.0	0.0	0.0	0.0	0.00	0.00	0.00
SHL 2440'FNL & 2167'FWL, SEC.16									
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
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
KOP - Start Build 2.00									
500.0	2.00	102.02	500.0	-0.4	1.7	0.2	2.00	2.00	0.00
600.0	4.00	102.02	599.8	-1.5	6.8	0.8	2.00	2.00	0.00
700.0	6.00	102.02	699.5	-3.3	15.3	1.7	2.00	2.00	0.00
800.0	8.00	102.02	798.7	-5.8	27.3	3.0	2.00	2.00	0.00
900.0	10.00	102.02	897.5	-9.1	42.6	4.7	2.00	2.00	0.00
1,000.0	12.00	102.02	995.6	-13.0	61.2	6.7	2.00	2.00	0.00
1,100.0	14.00	102.02	1,093.1	-17.7	83.2	9.2	2.00	2.00	0.00
1,200.0	16.00	102.02	1,189.6	-23.1	108.5	12.0	2.00	2.00	0.00
1,300.0	18.00	102.02	1,285.3	-29.2	137.1	15.1	2.00	2.00	0.00
1,400.0	20.00	102.02	1,379.8	-36.0	169.0	18.6	2.00	2.00	0.00
1,500.0	22.00	102.02	1,473.2	-43.4	204.0	22.5	2.00	2.00	0.00
1,600.0	24.00	102.02	1,565.2	-51.6	242.2	26.7	2.00	2.00	0.00
1,663.1	25.26	102.02	1,622.5	-57.0	268.0	29.5	2.00	2.00	0.00
1,700.0	25.26	102.02	1,655.9	-60.3	283.4	31.2	0.00	0.00	0.00
1,800.0	25.26	102.02	1,746.4	-69.2	325.1	35.8	0.00	0.00	0.00
1,900.0	25.26	102.02	1,836.8	-78.1	366.8	40.4	0.00	0.00	0.00
2,000.0	25.26	102.02	1,927.3	-87.0	408.6	45.0	0.00	0.00	0.00
2,100.0	25.26	102.02	2,017.7	-95.9	450.3	49.6	0.00	0.00	0.00
2,200.0	25.26	102.02	2,108.1	-104.7	492.1	54.2	0.00	0.00	0.00
2,300.0	25.26	102.02	2,198.6	-113.6	533.8	58.8	0.00	0.00	0.00
2,400.0	25.26	102.02	2,289.0	-122.5	575.5	63.4	0.00	0.00	0.00
2,500.0	25.26	102.02	2,379.4	-131.4	617.3	68.0	0.00	0.00	0.00
2,600.0	25.26	102.02	2,469.9	-140.3	659.0	72.6	0.00	0.00	0.00
2,700.0	25.26	102.02	2,560.3	-149.2	700.8	77.2	0.00	0.00	0.00
2,800.0	25.26	102.02	2,650.8	-158.0	742.5	81.8	0.00	0.00	0.00
2,900.0	25.26	102.02	2,741.2	-166.9	784.2	86.4	0.00	0.00	0.00
3,000.0	25.26	102.02	2,831.6	-175.8	826.0	91.0	0.00	0.00	0.00
3,100.0	25.26	102.02	2,922.1	-184.7	867.7	95.6	0.00	0.00	0.00
3,200.0	25.26	102.02	3,012.5	-193.6	909.5	100.2	0.00	0.00	0.00
3,300.0	25.26	102.02	3,102.9	-202.5	951.2	104.8	0.00	0.00	0.00
3,400.0	25.26	102.02	3,193.4	-211.3	992.9	109.4	0.00	0.00	0.00
3,500.0	25.26	102.02	3,283.8	-220.2	1,034.7	114.0	0.00	0.00	0.00
3,600.0	25.26	102.02	3,374.2	-229.1	1,076.4	118.6	0.00	0.00	0.00
3,700.0	25.26	102.02	3,464.7	-238.0	1,118.2	123.2	0.00	0.00	0.00
3,800.0	25.26	102.02	3,555.1	-246.9	1,159.9	127.8	0.00	0.00	0.00
3,900.0	25.26	102.02	3,645.6	-255.8	1,201.6	132.4	0.00	0.00	0.00
4,000.0	25.26	102.02	3,736.0	-264.6	1,243.4	137.0	0.00	0.00	0.00
4,100.0	25.26	102.02	3,826.4	-273.5	1,285.1	141.6	0.00	0.00	0.00
4,200.0	25.26	102.02	3,916.9	-282.4	1,326.9	146.2	0.00	0.00	0.00
4,300.0	25.26	102.02	4,007.3	-291.3	1,368.6	150.8	0.00	0.00	0.00
4,400.0	25.26	102.02	4,097.7	-300.2	1,410.3	155.4	0.00	0.00	0.00
4,500.0	25.26	102.02	4,188.2	-309.1	1,452.1	160.0	0.00	0.00	0.00
4,600.0	25.26	102.02	4,278.6	-318.0	1,493.8	164.6	0.00	0.00	0.00
4,700.0	25.26	102.02	4,369.1	-326.8	1,535.6	169.2	0.00	0.00	0.00
4,800.0	25.26	102.02	4,459.5	-335.7	1,577.3	173.9	0.00	0.00	0.00
4,900.0	25.26	102.02	4,549.9	-344.6	1,619.0	178.5	0.00	0.00	0.00

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
5,000.0	25.26	102.02	4,640.4	-353.5	1,660.8	183.1	0.00	0.00	0.00	
5,100.0	25.26	102.02	4,730.8	-362.4	1,702.5	187.7	0.00	0.00	0.00	
5,200.0	25.26	102.02	4,821.2	-371.3	1,744.3	192.3	0.00	0.00	0.00	
5,300.0	25.26	102.02	4,911.7	-380.1	1,786.0	196.9	0.00	0.00	0.00	
5,400.0	25.26	102.02	5,002.1	-389.0	1,827.7	201.5	0.00	0.00	0.00	
5,500.0	25.26	102.02	5,092.6	-397.9	1,869.5	206.1	0.00	0.00	0.00	
5,600.0	25.26	102.02	5,183.0	-406.8	1,911.2	210.7	0.00	0.00	0.00	
5,700.0	25.26	102.02	5,273.4	-415.7	1,953.0	215.3	0.00	0.00	0.00	
5,800.0	25.26	102.02	5,363.9	-424.6	1,994.7	219.9	0.00	0.00	0.00	
5,900.0	25.26	102.02	5,454.3	-433.4	2,036.4	224.5	0.00	0.00	0.00	
6,000.0	25.26	102.02	5,544.7	-442.3	2,078.2	229.1	0.00	0.00	0.00	
6,040.6	25.26	102.02	5,581.5	-445.9	2,095.1	230.9	0.00	0.00	0.00	
Start DLS 8.00 TFO -100.98										
6,100.0	24.77	90.83	5,635.3	-448.8	2,120.0	236.0	8.00	-0.83	-18.84	
6,200.0	25.84	72.21	5,725.9	-442.4	2,161.7	255.1	8.00	1.07	-18.62	
6,300.0	29.01	56.20	5,814.7	-422.2	2,202.7	287.1	8.00	3.17	-16.01	
6,400.0	33.70	43.69	5,900.2	-388.6	2,242.1	331.3	8.00	4.68	-12.51	
6,500.0	39.35	34.15	5,980.6	-342.2	2,279.1	386.9	8.00	5.66	-9.54	
6,600.0	45.61	26.76	6,054.3	-284.0	2,313.0	452.8	8.00	6.26	-7.39	
6,700.0	52.26	20.83	6,120.0	-215.0	2,343.2	527.8	8.00	6.64	-5.92	
6,800.0	59.15	15.91	6,176.4	-136.7	2,369.1	610.3	8.00	6.89	-4.93	
6,900.0	66.20	11.65	6,222.3	-50.4	2,390.1	698.8	8.00	7.05	-4.26	
7,000.0	73.36	7.84	6,256.8	42.0	2,405.9	791.5	8.00	7.16	-3.81	
7,100.0	80.58	4.30	6,279.3	138.8	2,416.2	886.7	8.00	7.22	-3.54	
7,200.0	87.83	0.91	6,289.4	238.1	2,420.7	982.4	8.00	7.26	-3.39	
7,229.8	90.00	359.91	6,290.0	267.9	2,420.9	1,010.8	8.00	7.26	-3.35	
7" - LANDING PT. 2201'FNL & 700'FEL, SEC.16										
7,230.1	90.00	359.91	6,290.0	268.2	2,420.9	1,011.1	0.94	0.17	0.92	
Start 7060.4 hold at 7230.1 MD										
7,300.0	90.00	359.91	6,290.0	338.1	2,420.8	1,077.5	0.00	0.00	0.00	
7,400.0	90.00	359.91	6,290.0	438.1	2,420.6	1,172.4	0.00	0.00	0.00	
7,500.0	90.00	359.91	6,290.0	538.1	2,420.5	1,267.3	0.00	0.00	0.00	
7,600.0	90.00	359.91	6,290.0	638.1	2,420.3	1,362.3	0.00	0.00	0.00	
7,700.0	90.00	359.91	6,290.0	738.1	2,420.2	1,457.2	0.00	0.00	0.00	
7,800.0	90.00	359.91	6,290.0	838.1	2,420.0	1,552.2	0.00	0.00	0.00	
7,900.0	90.00	359.91	6,290.0	938.1	2,419.9	1,647.1	0.00	0.00	0.00	
8,000.0	90.00	359.91	6,290.0	1,038.1	2,419.7	1,742.1	0.00	0.00	0.00	
8,100.0	90.00	359.91	6,290.0	1,138.1	2,419.6	1,837.0	0.00	0.00	0.00	
8,200.0	90.00	359.91	6,290.0	1,238.1	2,419.4	1,932.0	0.00	0.00	0.00	
8,300.0	90.00	359.91	6,290.0	1,338.1	2,419.3	2,026.9	0.00	0.00	0.00	
8,400.0	90.00	359.91	6,290.0	1,438.1	2,419.1	2,121.9	0.00	0.00	0.00	
8,500.0	90.00	359.91	6,290.0	1,538.1	2,419.0	2,216.8	0.00	0.00	0.00	
8,600.0	90.00	359.91	6,290.0	1,638.1	2,418.8	2,311.8	0.00	0.00	0.00	
8,700.0	90.00	359.91	6,290.0	1,738.1	2,418.7	2,406.7	0.00	0.00	0.00	
8,800.0	90.00	359.91	6,290.0	1,838.1	2,418.5	2,501.7	0.00	0.00	0.00	
8,900.0	90.00	359.91	6,290.0	1,938.1	2,418.4	2,596.6	0.00	0.00	0.00	
9,000.0	90.00	359.91	6,290.0	2,038.1	2,418.2	2,691.6	0.00	0.00	0.00	
9,100.0	90.00	359.91	6,290.0	2,138.1	2,418.1	2,786.5	0.00	0.00	0.00	
9,200.0	90.00	359.91	6,290.0	2,238.1	2,417.9	2,881.4	0.00	0.00	0.00	
9,300.0	90.00	359.91	6,290.0	2,338.1	2,417.8	2,976.4	0.00	0.00	0.00	
9,400.0	90.00	359.91	6,290.0	2,438.1	2,417.6	3,071.3	0.00	0.00	0.00	
9,500.0	90.00	359.91	6,290.0	2,538.1	2,417.5	3,166.3	0.00	0.00	0.00	
9,600.0	90.00	359.91	6,290.0	2,638.1	2,417.3	3,261.2	0.00	0.00	0.00	

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

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
9,700.0	90.00	359.91	6,290.0	2,738.1	2,417.1	3,356.2	0.00	0.00	0.00
9,800.0	90.00	359.91	6,290.0	2,838.1	2,417.0	3,451.1	0.00	0.00	0.00
9,900.0	90.00	359.91	6,290.0	2,938.1	2,416.8	3,546.1	0.00	0.00	0.00
10,000.0	90.00	359.91	6,290.0	3,038.1	2,416.7	3,641.0	0.00	0.00	0.00
10,100.0	90.00	359.91	6,290.0	3,138.1	2,416.5	3,736.0	0.00	0.00	0.00
10,200.0	90.00	359.91	6,290.0	3,238.1	2,416.4	3,830.9	0.00	0.00	0.00
10,300.0	90.00	359.91	6,290.0	3,338.1	2,416.2	3,925.9	0.00	0.00	0.00
10,400.0	90.00	359.91	6,290.0	3,438.1	2,416.1	4,020.8	0.00	0.00	0.00
10,500.0	90.00	359.91	6,290.0	3,538.1	2,415.9	4,115.8	0.00	0.00	0.00
10,600.0	90.00	359.91	6,290.0	3,638.1	2,415.8	4,210.7	0.00	0.00	0.00
10,700.0	90.00	359.91	6,290.0	3,738.1	2,415.6	4,305.7	0.00	0.00	0.00
10,800.0	90.00	359.91	6,290.0	3,838.1	2,415.5	4,400.6	0.00	0.00	0.00
10,900.0	90.00	359.91	6,290.0	3,938.1	2,415.3	4,495.5	0.00	0.00	0.00
11,000.0	90.00	359.91	6,290.0	4,038.1	2,415.2	4,590.5	0.00	0.00	0.00
11,100.0	90.00	359.91	6,290.0	4,138.1	2,415.0	4,685.4	0.00	0.00	0.00
11,200.0	90.00	359.91	6,290.0	4,238.1	2,414.9	4,780.4	0.00	0.00	0.00
11,300.0	90.00	359.91	6,290.0	4,338.1	2,414.7	4,875.3	0.00	0.00	0.00
11,400.0	90.00	359.91	6,290.0	4,438.1	2,414.6	4,970.3	0.00	0.00	0.00
11,500.0	90.00	359.91	6,290.0	4,538.1	2,414.4	5,065.2	0.00	0.00	0.00
11,600.0	90.00	359.91	6,290.0	4,638.1	2,414.3	5,160.2	0.00	0.00	0.00
11,700.0	90.00	359.91	6,290.0	4,738.1	2,414.1	5,255.1	0.00	0.00	0.00
11,800.0	90.00	359.91	6,290.0	4,838.1	2,414.0	5,350.1	0.00	0.00	0.00
11,900.0	90.00	359.91	6,290.0	4,938.1	2,413.8	5,445.0	0.00	0.00	0.00
12,000.0	90.00	359.91	6,290.0	5,038.1	2,413.7	5,540.0	0.00	0.00	0.00
12,100.0	90.00	359.91	6,290.0	5,138.1	2,413.5	5,634.9	0.00	0.00	0.00
12,200.0	90.00	359.91	6,290.0	5,238.1	2,413.3	5,729.9	0.00	0.00	0.00
12,300.0	90.00	359.91	6,290.0	5,338.1	2,413.2	5,824.8	0.00	0.00	0.00
12,400.0	90.00	359.91	6,290.0	5,438.1	2,413.0	5,919.8	0.00	0.00	0.00
12,500.0	90.00	359.91	6,290.0	5,538.1	2,412.9	6,014.7	0.00	0.00	0.00
12,600.0	90.00	359.91	6,290.0	5,638.1	2,412.7	6,109.6	0.00	0.00	0.00
12,700.0	90.00	359.91	6,290.0	5,738.1	2,412.6	6,204.6	0.00	0.00	0.00
12,800.0	90.00	359.91	6,290.0	5,838.1	2,412.4	6,299.5	0.00	0.00	0.00
12,900.0	90.00	359.91	6,290.0	5,938.1	2,412.3	6,394.5	0.00	0.00	0.00
13,000.0	90.00	359.91	6,290.0	6,038.1	2,412.1	6,489.4	0.00	0.00	0.00
13,100.0	90.00	359.91	6,290.0	6,138.1	2,412.0	6,584.4	0.00	0.00	0.00
13,200.0	90.00	359.91	6,290.0	6,238.1	2,411.8	6,679.3	0.00	0.00	0.00
13,300.0	90.00	359.91	6,290.0	6,338.1	2,411.7	6,774.3	0.00	0.00	0.00
13,400.0	90.00	359.91	6,290.0	6,438.1	2,411.5	6,869.2	0.00	0.00	0.00
13,500.0	90.00	359.91	6,290.0	6,538.1	2,411.4	6,964.2	0.00	0.00	0.00
13,600.0	90.00	359.91	6,290.0	6,638.1	2,411.2	7,059.1	0.00	0.00	0.00
13,700.0	90.00	359.91	6,290.0	6,738.1	2,411.1	7,154.1	0.00	0.00	0.00
13,800.0	90.00	359.91	6,290.0	6,838.1	2,410.9	7,249.0	0.00	0.00	0.00
13,900.0	90.00	359.91	6,290.0	6,938.1	2,410.8	7,344.0	0.00	0.00	0.00
14,000.0	90.00	359.91	6,290.0	7,038.1	2,410.6	7,438.9	0.00	0.00	0.00
14,100.0	90.00	359.91	6,290.0	7,138.1	2,410.5	7,533.9	0.00	0.00	0.00
14,200.0	90.00	359.91	6,290.0	7,238.1	2,410.3	7,628.8	0.00	0.00	0.00
14,290.5	90.00	359.91	6,290.0	7,328.5	2,410.2	7,714.7	0.00	0.00	0.00
BHL 460'FNL & 700' FEL, SEC.9									

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

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name		Casing Diameter (")	Hole Diameter (")
7,229.8	6,290.0	7"		7	7-1/2

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
400.0	400.0	0.0	0.0	KOP - Start Build 2.00	
6,040.6	5,581.5	-445.9	2,095.1	Start DLS 8.00 TFO -100.98	
7,230.1	6,290.0	268.2	2,420.9	Start 7060.4 hold at 7230.1 MD	
14,290.5	6,290.0	7,328.6	2,410.2	TD at 14290.5	



Synergy Resources

Sec.16-T4N-R68W

SRC Markham Pad Sec.16-T4N-R68W

SRC Markham 41-16-9CHZ

Wellbore #1

Plan #1 (3-31-14)

Anticollision Report

09 April, 2014

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

Reference	Plan #1 (3-31-14)		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.0ft	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 4/7/2014			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	14,290.5	Plan #1 (3-31-14) (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 31-16-9CHZ - Wellbore #1 - Plan #1 (3-31-14)	400.0	401.0	135.0	133.4	85.671	CC, ES
SRC Markham 31-16-9CHZ - Wellbore #1 - Plan #1 (3-31-14)	5,000.0	5,053.8	997.8	965.6	31.010	SF
SRC Markham 31-16-9NHZ - Wellbore #1 - Plan #1 (3-31-14)	400.0	401.0	112.4	110.8	71.335	CC, ES
SRC Markham 31-16-9NHZ - Wellbore #1 - Plan #1 (3-31-14)	5,600.0	5,675.8	868.6	829.7	22.292	SF
SRC Markham 41-16-9NHZ - Wellbore #1 - Plan #1 (3-31-14)	200.0	200.0	22.6	21.9	33.500	CC
SRC Markham 41-16-9NHZ - Wellbore #1 - Plan #1 (3-31-14)	14,290.5	14,227.4	260.5	0.8	1.003	Level 2, ES, SF
SRC Markham C-16-9CHZ - Wellbore #1 - Plan #1 (3-31-14)	400.0	400.0	90.1	88.5	57.256	CC, ES
SRC Markham C-16-9CHZ - Wellbore #1 - Plan #1 (3-31-14)	14,290.5	14,050.0	880.0	593.5	3.071	SF
SRC Markham C-16-9NHZ - Wellbore #1 - Plan #1 (3-31-14)	400.0	400.0	67.5	65.9	42.897	CC, ES
SRC Markham C-16-9NHZ - Wellbore #1 - Plan #1 (3-31-14)	14,290.5	13,976.5	674.7	395.7	2.419	SF
SRC Markham R-16-9-CHZ - Wellbore #1 - Plan#1 (3-31-14)	400.0	400.0	44.9	43.3	28.541	CC, ES
SRC Markham R-16-9-CHZ - Wellbore #1 - Plan#1 (3-31-14)	14,290.5	14,165.0	440.0	153.0	1.533	SF
SRC Markham R-16-9NHZ - Wellbore #1 - Plan #1 (3-31-14)	400.0	400.0	22.6	21.0	14.359	CC
SRC Markham R-16-9NHZ - Wellbore #1 - Plan #1 (3-31-14)	14,290.5	14,099.1	260.8	16.7	1.068	Level 2, ES, SF

Offset Design												
SRC Markham Pad Sec.16-T4N-R68W - SRC Markham 31-16-9CHZ - Wellbore #1 - Plan #1 (3-31-14)												
Survey Program: 0-MWD												
Reference		Offset		Semi Major Axis			Distance					
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor
0.0	0.0	1.0	1.0	0.0	0.0	-90.62	-1.5	-135.0	135.0			
100.0	100.0	101.0	101.0	0.1	0.1	-90.62	-1.5	-135.0	135.0	134.8	0.23	594.608
200.0	200.0	201.0	201.0	0.3	0.3	-90.62	-1.5	-135.0	135.0	134.3	0.68	199.519
300.0	300.0	301.0	301.0	0.6	0.6	-90.62	-1.5	-135.0	135.0	133.9	1.13	119.871
400.0	400.0	401.0	401.0	0.8	0.8	-90.62	-1.5	-135.0	135.0	133.4	1.58	85.671 CC, ES
500.0	500.0	501.0	501.0	1.0	1.0	167.52	-1.5	-135.0	136.7	134.7	2.01	67.914
600.0	599.8	600.8	600.8	1.2	1.2	167.95	-1.5	-135.0	141.8	139.4	2.44	58.000
700.0	699.5	700.5	700.5	1.4	1.5	168.61	-1.5	-135.0	150.3	147.5	2.88	52.118
800.0	798.7	799.7	799.7	1.7	1.7	169.42	-1.5	-135.0	162.3	159.0	3.33	48.756
900.0	897.5	898.5	898.5	2.0	1.9	170.29	-1.5	-135.0	177.7	173.9	3.78	47.055
1,000.0	995.6	996.6	996.6	2.4	2.1	171.17	-1.5	-135.0	196.5	192.3	4.23	46.501
1,100.0	1,093.1	1,094.1	1,094.1	2.8	2.3	172.01	-1.5	-135.0	218.8	214.1	4.68	46.765
1,200.0	1,189.6	1,190.6	1,190.6	3.3	2.6	172.79	-1.5	-135.0	244.5	239.3	5.13	47.630
1,300.0	1,285.3	1,286.3	1,286.3	3.9	2.8	173.49	-1.5	-135.0	273.5	267.9	5.59	48.945

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

Offset Design SRC Markham Pad Sec.16-T4N-R68W - SRC Markham 31-16-9CHZ - Wellbore #1 - Plan #1 (3-31-14)													Offset Site Error: 0.0 ft	
Survey Program: 0-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
1,400.0	1,379.8	1,380.8	1,380.8	4.5	3.0	174.11	-1.5	-135.0	305.9	299.9	6.05	50.601		
1,500.0	1,473.2	1,474.2	1,474.2	5.2	3.2	174.65	-1.5	-135.0	341.6	335.1	6.50	52.521		
1,600.0	1,565.2	1,566.2	1,566.2	6.0	3.4	175.13	-1.5	-135.0	380.5	373.6	6.96	54.646		
1,700.0	1,655.9	1,666.3	1,666.3	6.8	3.6	175.58	-1.8	-134.3	421.8	414.4	7.45	56.638		
1,800.0	1,746.4	1,774.4	1,774.3	7.7	3.8	175.89	-3.6	-130.1	460.7	452.8	7.96	57.867		
1,900.0	1,836.8	1,885.8	1,885.4	8.6	4.1	176.01	-7.3	-122.0	496.2	487.7	8.49	58.440		
2,000.0	1,927.3	2,000.3	1,999.0	9.5	4.3	175.97	-12.9	-109.5	528.1	519.1	9.05	58.387		
2,100.0	2,017.7	2,117.6	2,114.8	10.4	4.6	175.80	-20.5	-92.4	556.3	546.7	9.63	57.781		
2,200.0	2,108.1	2,237.4	2,232.1	11.3	5.0	175.50	-30.4	-70.5	580.7	570.5	10.24	56.700		
2,300.0	2,198.6	2,359.4	2,350.5	12.3	5.4	175.09	-42.4	-43.7	601.1	590.2	10.89	55.197		
2,400.0	2,289.0	2,483.1	2,469.2	13.2	5.9	174.56	-56.7	-11.8	617.6	606.0	11.58	53.341		
2,500.0	2,379.4	2,582.6	2,564.0	14.1	6.4	174.10	-69.1	15.9	631.9	619.6	12.24	51.642		
2,600.0	2,469.9	2,681.5	2,658.1	15.0	6.9	173.66	-81.5	43.3	646.2	633.3	12.91	50.043		
2,700.0	2,560.3	2,780.3	2,752.3	15.9	7.4	173.24	-93.8	70.8	660.6	647.0	13.61	48.551		
2,800.0	2,650.8	2,879.2	2,846.4	16.9	7.9	172.83	-106.1	98.3	675.0	660.7	14.31	47.158		
2,900.0	2,741.2	2,978.0	2,940.6	17.8	8.5	172.45	-118.4	125.7	689.5	674.4	15.04	45.855		
3,000.0	2,831.6	3,076.9	3,034.7	18.7	9.1	172.08	-130.7	153.2	704.0	688.2	15.77	44.638		
3,100.0	2,922.1	3,175.7	3,128.9	19.7	9.6	171.72	-143.1	180.6	718.5	702.0	16.52	43.499		
3,200.0	3,012.5	3,274.5	3,223.1	20.6	10.2	171.38	-155.4	208.1	733.0	715.7	17.27	42.433		
3,300.0	3,102.9	3,373.4	3,317.2	21.5	10.8	171.05	-167.7	235.5	747.6	729.5	18.04	41.435		
3,400.0	3,193.4	3,472.2	3,411.4	22.4	11.4	170.74	-180.0	263.0	762.1	743.3	18.82	40.499		
3,500.0	3,283.8	3,571.1	3,505.5	23.4	12.0	170.44	-192.4	290.5	776.8	757.1	19.61	39.619		
3,600.0	3,374.2	3,669.9	3,599.7	24.3	12.6	170.14	-204.7	317.9	791.4	771.0	20.40	38.793		
3,700.0	3,464.7	3,768.8	3,693.8	25.2	13.2	169.86	-217.0	345.4	806.0	784.8	21.20	38.016		
3,800.0	3,555.1	3,867.6	3,788.0	26.2	13.9	169.59	-229.3	372.8	820.7	798.7	22.01	37.283		
3,900.0	3,645.6	3,966.5	3,882.1	27.1	14.5	169.33	-241.6	400.3	835.4	812.5	22.83	36.592		
4,000.0	3,736.0	4,065.3	3,976.3	28.0	15.1	169.08	-254.0	427.8	850.1	826.4	23.65	35.940		
4,100.0	3,826.4	4,164.2	4,070.4	29.0	15.7	168.83	-266.3	455.2	864.8	840.3	24.48	35.323		
4,200.0	3,916.9	4,263.0	4,164.6	29.9	16.3	168.60	-278.6	482.7	879.5	854.2	25.32	34.739		
4,300.0	4,007.3	4,361.9	4,258.7	30.8	17.0	168.37	-290.9	510.1	894.2	868.1	26.16	34.186		
4,400.0	4,097.7	4,460.7	4,352.9	31.8	17.6	168.15	-303.2	537.6	909.0	882.0	27.00	33.662		
4,500.0	4,188.2	4,559.5	4,447.0	32.7	18.2	167.93	-315.6	565.1	923.8	895.9	27.85	33.163		
4,600.0	4,278.6	4,658.4	4,541.2	33.6	18.8	167.72	-327.9	592.5	938.5	909.8	28.71	32.690		
4,700.0	4,369.1	4,757.2	4,635.3	34.6	19.5	167.52	-340.2	620.0	953.3	923.8	29.57	32.239		
4,800.0	4,459.5	4,856.1	4,729.5	35.5	20.1	167.33	-352.5	647.4	968.1	937.7	30.44	31.810		
4,900.0	4,549.9	4,954.9	4,823.6	36.4	20.7	167.14	-364.8	674.9	982.9	951.6	31.30	31.400		
5,000.0	4,640.4	5,053.8	4,917.8	37.4	21.4	166.96	-377.2	702.3	997.8	965.6	32.18	31.010 SF		

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

Offset Design SRC Markham Pad Sec.16-T4N-R68W - SRC Markham 31-16-9NHZ - Wellbore #1 - Plan #1 (3-31-14)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	1.0	1.0	0.0	0.0	-90.75	-1.5	-112.4	112.4	112.4	0.00	N/A		
100.0	100.0	101.0	101.0	0.1	0.1	-90.75	-1.5	-112.4	112.4	112.2	0.23	495.110		
200.0	200.0	201.0	201.0	0.3	0.3	-90.75	-1.5	-112.4	112.4	111.7	0.68	166.133		
300.0	300.0	301.0	301.0	0.6	0.6	-90.75	-1.5	-112.4	112.4	111.3	1.13	99.813		
400.0	400.0	401.0	401.0	0.8	0.8	-90.75	-1.5	-112.4	112.4	110.8	1.58	71.335 CC, ES		
500.0	500.0	501.0	501.0	1.0	1.0	167.42	-1.5	-112.4	114.1	112.1	2.01	56.691		
600.0	599.8	600.8	600.8	1.2	1.2	167.95	-1.5	-112.4	119.2	116.8	2.44	48.760		
700.0	699.5	700.5	700.5	1.4	1.5	168.73	-1.5	-112.4	127.7	124.9	2.88	44.288		
800.0	798.7	799.7	799.7	1.7	1.7	169.66	-1.5	-112.4	139.7	136.4	3.33	41.975		
900.0	897.5	898.5	898.5	2.0	1.9	170.65	-1.5	-112.4	155.1	151.4	3.78	41.085		
1,000.0	995.6	996.6	996.6	2.4	2.1	171.61	-1.5	-112.4	174.0	169.8	4.23	41.176		
1,100.0	1,093.1	1,094.1	1,094.1	2.8	2.3	172.51	-1.5	-112.4	196.3	191.6	4.68	41.966		
1,200.0	1,189.6	1,190.6	1,190.6	3.3	2.6	173.32	-1.5	-112.4	222.0	216.9	5.13	43.268		
1,300.0	1,285.3	1,286.3	1,286.3	3.9	2.8	174.03	-1.5	-112.4	251.1	245.5	5.59	44.951		
1,400.0	1,379.8	1,380.8	1,380.8	4.5	3.0	174.65	-1.5	-112.4	283.5	277.4	6.04	46.922		
1,500.0	1,473.2	1,483.2	1,483.1	5.2	3.2	175.19	-1.9	-111.3	318.1	311.6	6.50	48.969		
1,600.0	1,565.2	1,589.0	1,588.9	6.0	3.4	175.53	-3.7	-106.6	352.8	345.9	6.94	50.849		
1,700.0	1,655.9	1,696.4	1,695.9	6.8	3.6	175.72	-7.0	-98.1	387.1	379.7	7.41	52.216		
1,800.0	1,746.4	1,806.4	1,805.1	7.7	3.9	175.79	-11.8	-85.5	418.6	410.7	7.95	52.649		
1,900.0	1,836.8	1,919.1	1,916.2	8.6	4.2	175.72	-18.3	-68.6	446.5	438.0	8.52	52.430		
2,000.0	1,927.3	2,034.0	2,028.9	9.5	4.5	175.53	-26.5	-47.2	470.6	461.5	9.11	51.660		
2,100.0	2,017.7	2,151.0	2,142.5	10.4	4.9	175.23	-36.6	-21.0	490.9	481.2	9.74	50.420		
2,200.0	2,108.1	2,269.8	2,256.5	11.3	5.5	174.82	-48.4	9.9	507.3	496.9	10.40	48.775		
2,300.0	2,198.6	2,389.8	2,370.2	12.3	6.1	174.30	-62.2	45.7	519.7	508.6	11.10	46.813		
2,400.0	2,289.0	2,490.0	2,464.5	13.2	6.6	173.83	-74.4	77.5	529.9	518.1	11.78	44.976		
2,500.0	2,379.4	2,589.4	2,557.9	14.1	7.2	173.38	-86.5	109.0	540.2	527.7	12.48	43.277		
2,600.0	2,469.9	2,688.8	2,651.4	15.0	7.9	172.95	-98.6	140.6	550.5	537.3	13.20	41.707		
2,700.0	2,560.3	2,788.2	2,744.8	15.9	8.5	172.54	-110.7	172.2	560.9	546.9	13.93	40.255		
2,800.0	2,650.8	2,887.6	2,838.3	16.9	9.1	172.13	-122.9	203.7	571.2	556.5	14.68	38.910		
2,900.0	2,741.2	2,986.9	2,931.7	17.8	9.8	171.75	-135.0	235.3	581.6	566.2	15.44	37.664		
3,000.0	2,831.6	3,086.3	3,025.2	18.7	10.5	171.37	-147.1	266.9	592.0	575.8	16.22	36.508		
3,100.0	2,922.1	3,185.7	3,118.6	19.7	11.1	171.01	-159.2	298.4	602.5	585.5	17.00	35.434		
3,200.0	3,012.5	3,285.1	3,212.1	20.6	11.8	170.66	-171.3	330.0	613.0	595.2	17.80	34.434		
3,300.0	3,102.9	3,384.5	3,305.6	21.5	12.5	170.33	-183.5	361.6	623.4	604.8	18.61	33.502		
3,400.0	3,193.4	3,483.8	3,399.0	22.4	13.2	170.00	-195.6	393.1	634.0	614.5	19.43	32.632		
3,500.0	3,283.8	3,583.2	3,492.5	23.4	13.9	169.69	-207.7	424.7	644.5	624.2	20.26	31.818		
3,600.0	3,374.2	3,682.6	3,585.9	24.3	14.6	169.38	-219.8	456.3	655.0	633.9	21.09	31.056		
3,700.0	3,464.7	3,782.0	3,679.4	25.2	15.3	169.09	-231.9	487.8	665.6	643.7	21.94	30.342		
3,800.0	3,555.1	3,881.4	3,772.8	26.2	16.0	168.80	-244.1	519.4	676.2	653.4	22.79	29.671		
3,900.0	3,645.6	3,980.8	3,866.3	27.1	16.7	168.52	-256.2	551.0	686.8	663.1	23.65	29.039		
4,000.0	3,736.0	4,080.1	3,959.7	28.0	17.4	168.25	-268.3	582.5	697.4	672.9	24.52	28.445		
4,100.0	3,826.4	4,179.5	4,053.2	29.0	18.1	167.99	-280.4	614.1	708.0	682.6	25.39	27.884		
4,200.0	3,916.9	4,278.9	4,146.6	29.9	18.8	167.74	-292.6	645.6	718.7	692.4	26.27	27.354		
4,300.0	4,007.3	4,378.3	4,240.1	30.8	19.6	167.50	-304.7	677.2	729.3	702.2	27.16	26.853		
4,400.0	4,097.7	4,477.7	4,333.5	31.8	20.3	167.26	-316.8	708.8	740.0	711.9	28.05	26.378		
4,500.0	4,188.2	4,577.1	4,427.0	32.7	21.0	167.03	-328.9	740.3	750.7	721.7	28.95	25.928		
4,600.0	4,278.6	4,676.4	4,520.5	33.6	21.7	166.80	-341.0	771.9	761.4	731.5	29.86	25.501		
4,700.0	4,369.1	4,775.8	4,613.9	34.6	22.4	166.58	-353.2	803.5	772.1	741.3	30.77	25.095		
4,800.0	4,459.5	4,875.2	4,707.4	35.5	23.1	166.37	-365.3	835.0	782.8	751.1	31.68	24.709		
4,900.0	4,549.9	4,974.6	4,800.8	36.4	23.8	166.16	-377.4	866.6	793.5	760.9	32.60	24.342		
5,000.0	4,640.4	5,074.0	4,894.3	37.4	24.6	165.96	-389.5	898.2	804.3	770.7	33.52	23.991		
5,100.0	4,730.8	5,173.4	4,987.7	38.3	25.3	165.76	-401.6	929.7	815.0	780.6	34.45	23.657		

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

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

Offset Design SRC Markham Pad Sec.16-T4N-R68W - SRC Markham 31-16-9NHZ - Wellbore #1 - Plan #1 (3-31-14)												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,200.0	4,821.2	5,272.7	5,081.2	39.2	26.0	165.57	-413.8	961.3	825.8	790.4	35.38	23.338	
5,300.0	4,911.7	5,372.1	5,174.6	40.2	26.7	165.38	-425.9	992.9	836.5	800.2	36.32	23.033	
5,400.0	5,002.1	5,471.5	5,268.1	41.1	27.4	165.20	-438.0	1,024.4	847.3	810.0	37.26	22.741	
5,500.0	5,092.6	5,570.9	5,361.5	42.0	28.2	165.03	-450.1	1,056.0	858.1	819.9	38.20	22.461	
5,600.0	5,183.0	5,675.8	5,460.6	43.0	28.8	165.11	-458.9	1,089.4	868.6	829.7	38.97	22.292 SF	
5,700.0	5,273.4	5,780.6	5,559.6	43.9	29.4	166.16	-452.8	1,122.9	878.5	839.4	39.06	22.490	
5,800.0	5,363.9	5,879.0	5,650.9	44.8	29.8	168.00	-433.3	1,153.6	888.4	849.8	38.65	22.986	
5,900.0	5,454.3	5,968.3	5,730.9	45.8	30.1	170.34	-404.4	1,180.6	899.6	861.6	38.02	23.659	
6,000.0	5,544.7	6,047.3	5,798.3	46.7	30.3	172.90	-370.2	1,203.3	913.5	876.0	37.46	24.383	
6,100.0	5,635.3	6,117.4	5,854.9	47.6	30.5	-173.57	-333.4	1,222.3	931.0	894.1	36.97	25.180	
6,200.0	5,725.9	6,184.5	5,905.6	48.3	30.6	-152.86	-293.0	1,239.4	951.3	914.3	37.02	25.698	
6,300.0	5,814.7	6,250.0	5,951.4	49.0	30.7	-134.95	-248.8	1,254.8	973.2	935.5	37.71	25.809	
6,400.0	5,900.2	6,313.6	5,992.0	49.6	30.8	-120.85	-201.8	1,268.4	995.6	956.8	38.73	25.706	

Offset Design												Offset Site Error:		0.0 ft
Survey Program: 0-MWD												Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	90.03	0.0	22.6	22.6					
100.0	100.0	100.0	100.0	0.1	0.1	90.03	0.0	22.6	22.6	22.4	0.22	100.500		
200.0	200.0	200.0	200.0	0.3	0.3	90.03	0.0	22.6	22.6	21.9	0.67	33.500	CC	
300.0	300.0	299.2	299.2	0.6	0.5	90.81	-0.3	24.3	24.3	23.2	1.11	21.886		
400.0	400.0	398.1	398.0	0.8	0.8	92.59	-1.3	29.3	29.4	27.9	1.55	18.948		
500.0	500.0	496.8	496.3	1.0	1.0	-7.87	-3.0	37.7	36.2	34.3	1.98	18.290		
600.0	599.8	595.2	593.9	1.2	1.3	-6.88	-5.2	49.3	43.0	40.6	2.41	17.870		
700.0	699.5	693.4	691.0	1.4	1.6	-6.24	-8.1	64.2	49.8	47.0	2.85	17.470		
800.0	798.7	791.4	787.2	1.7	2.0	-5.82	-11.7	82.3	56.5	53.2	3.31	17.085		
900.0	897.5	889.1	882.5	2.0	2.4	-5.53	-15.8	103.5	63.1	59.4	3.78	16.705		
1,000.0	995.6	986.6	976.8	2.4	2.9	-5.36	-20.6	127.9	69.7	65.4	4.27	16.324		
1,100.0	1,093.1	1,083.9	1,070.0	2.8	3.5	-5.26	-25.9	155.4	76.2	71.4	4.78	15.938		
1,200.0	1,189.6	1,181.1	1,162.0	3.3	4.1	-5.21	-31.9	185.9	82.6	77.3	5.31	15.545		
1,300.0	1,285.3	1,278.0	1,252.7	3.9	4.8	-5.21	-38.4	219.3	88.9	83.0	5.87	15.140		
1,400.0	1,379.8	1,374.7	1,342.0	4.5	5.5	-5.25	-45.5	255.7	95.0	88.6	6.43	14.770		
1,500.0	1,473.2	1,471.2	1,429.9	5.2	6.4	-5.32	-53.2	294.9	101.1	94.1	7.05	14.343		
1,600.0	1,565.2	1,568.4	1,517.0	6.0	7.3	-5.41	-61.5	337.2	107.0	99.3	7.68	13.918		
1,700.0	1,655.9	1,668.3	1,606.1	6.8	8.2	-5.63	-70.1	381.6	110.5	102.2	8.37	13.199		
1,800.0	1,746.4	1,768.3	1,695.3	7.7	9.2	-5.87	-78.8	425.9	113.4	104.3	9.11	12.443		
1,900.0	1,836.8	1,868.3	1,784.5	8.6	10.2	-6.10	-87.5	470.3	116.3	106.4	9.87	11.786		
2,000.0	1,927.3	1,968.2	1,873.6	9.5	11.2	-6.32	-96.1	514.6	119.2	108.6	10.63	11.211		
2,100.0	2,017.7	2,068.2	1,962.8	10.4	12.1	-6.53	-104.8	559.0	122.1	110.7	11.40	10.706		
2,200.0	2,108.1	2,168.1	2,051.9	11.3	13.1	-6.73	-113.5	603.3	125.0	112.8	12.18	10.258		
2,300.0	2,198.6	2,268.1	2,141.1	12.3	14.1	-6.92	-122.1	647.7	127.9	114.9	12.97	9.859		
2,400.0	2,289.0	2,368.0	2,230.2	13.2	15.1	-7.10	-130.8	692.1	130.8	117.0	13.76	9.501		
2,500.0	2,379.4	2,468.0	2,319.4	14.1	16.1	-7.28	-139.4	736.4	133.7	119.1	14.56	9.179		
2,600.0	2,469.9	2,568.0	2,408.5	15.0	17.1	-7.44	-148.1	780.8	136.6	121.2	15.36	8.888		
2,700.0	2,560.3	2,667.9	2,497.7	15.9	18.1	-7.60	-156.8	825.1	139.5	123.3	16.17	8.624		
2,800.0	2,650.8	2,767.9	2,586.9	16.9	19.1	-7.75	-165.4	869.5	142.4	125.4	16.98	8.382		
2,900.0	2,741.2	2,867.8	2,676.0	17.8	20.1	-7.90	-174.1	913.9	145.3	127.5	17.80	8.161		
3,000.0	2,831.6	2,967.8	2,765.2	18.7	21.0	-8.04	-182.8	958.2	148.2	129.5	18.62	7.958		
3,100.0	2,922.1	3,067.7	2,854.3	19.7	22.0	-8.18	-191.4	1,002.6	151.1	131.6	19.44	7.771		
3,200.0	3,012.5	3,167.7	2,943.5	20.6	23.0	-8.31	-200.1	1,046.9	154.0	133.7	20.26	7.598		
3,300.0	3,102.9	3,267.7	3,032.6	21.5	24.0	-8.43	-208.8	1,091.3	156.9	135.8	21.09	7.437		
3,400.0	3,193.4	3,367.6	3,121.8	22.4	25.0	-8.56	-217.4	1,135.6	159.8	137.8	21.92	7.288		
3,500.0	3,283.8	3,467.6	3,210.9	23.4	26.0	-8.67	-226.1	1,180.0	162.7	139.9	22.76	7.149		
3,600.0	3,374.2	3,567.5	3,300.1	24.3	27.0	-8.78	-234.8	1,224.4	165.6	142.0	23.59	7.019		
3,700.0	3,464.7	3,667.5	3,389.3	25.2	28.0	-8.89	-243.4	1,268.7	168.5	144.1	24.43	6.897		
3,800.0	3,555.1	3,767.4	3,478.4	26.2	29.0	-9.00	-252.1	1,313.1	171.4	146.1	25.27	6.783		
3,900.0	3,645.6	3,867.4	3,567.6	27.1	30.0	-9.10	-260.8	1,357.4	174.3	148.2	26.11	6.676		
4,000.0	3,736.0	3,967.4	3,656.7	28.0	31.0	-9.20	-269.4	1,401.8	177.2	150.3	26.95	6.575		
4,100.0	3,826.4	4,067.3	3,745.9	29.0	32.0	-9.29	-278.1	1,446.2	180.1	152.3	27.80	6.479		
4,200.0	3,916.9	4,167.3	3,835.0	29.9	33.0	-9.39	-286.7	1,490.5	183.0	154.4	28.65	6.389		
4,300.0	4,007.3	4,267.2	3,924.2	30.8	34.0	-9.48	-295.4	1,534.9	185.9	156.4	29.49	6.304		
4,400.0	4,097.7	4,367.2	4,013.3	31.8	35.0	-9.56	-304.1	1,579.2	188.8	158.5	30.34	6.223		
4,500.0	4,188.2	4,467.1	4,102.5	32.7	36.0	-9.65	-312.7	1,623.6	191.8	160.6	31.20	6.147		
4,600.0	4,278.6	4,567.1	4,191.7	33.6	37.0	-9.73	-321.4	1,667.9	194.7	162.6	32.05	6.074		
4,700.0	4,369.1	4,667.1	4,280.8	34.6	38.0	-9.81	-330.1	1,712.3	197.6	164.7	32.90	6.005		
4,800.0	4,459.5	4,767.0	4,370.0	35.5	39.0	-9.88	-338.7	1,756.7	200.5	166.7	33.76	5.939		
4,900.0	4,549.9	4,867.0	4,459.1	36.4	40.0	-9.96	-347.4	1,801.0	203.4	168.8	34.62	5.876		
5,000.0	4,640.4	4,966.9	4,548.3	37.4	41.0	-10.03	-356.1	1,845.4	206.3	170.8	35.48	5.816		
5,100.0	4,730.8	5,066.9	4,637.4	38.3	42.0	-10.10	-364.7	1,889.7	209.2	172.9	36.33	5.758		

Offset Design										SRC Markham Pad Sec.16-T4N-R68W - SRC Markham 41-16-9NHZ - Wellbore #1 - Plan #1 (3-31-14)				Offset Site Error:		0.0 ft
Survey Program: 0-MWD														Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance									
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)					
5,200.0	4,821.2	5,166.8	4,726.6	39.2	43.0	-10.17	-373.4	1,934.1	212.1	174.9	37.19	5.703				
5,300.0	4,911.7	5,266.8	4,815.7	40.2	44.0	-10.23	-382.1	1,978.5	215.1	177.0	38.06	5.651				
5,400.0	5,002.1	5,366.8	4,904.9	41.1	45.0	-10.30	-390.7	2,022.8	218.0	179.0	38.92	5.601				
5,500.0	5,092.6	5,466.7	4,994.1	42.0	46.0	-10.36	-399.4	2,067.2	220.9	181.1	39.78	5.552				
5,600.0	5,183.0	5,566.7	5,083.2	43.0	47.0	-10.42	-408.1	2,111.5	223.8	183.1	40.65	5.506				
5,700.0	5,273.4	5,666.6	5,172.4	43.9	48.0	-10.48	-416.7	2,155.9	226.7	185.2	41.51	5.461				
5,800.0	5,363.9	5,766.6	5,261.5	44.8	49.0	-10.54	-425.4	2,200.2	229.6	187.2	42.38	5.418				
5,900.0	5,454.3	5,866.5	5,350.7	45.8	50.0	-10.60	-434.0	2,244.6	232.5	189.3	43.24	5.377				
6,000.0	5,544.7	5,966.5	5,439.8	46.7	50.9	-10.65	-442.7	2,289.0	235.5	191.3	44.11	5.338				
6,100.0	5,635.3	6,066.3	5,529.1	47.6	51.8	-1.34	-446.3	2,333.4	238.4	193.0	45.35	5.256				
6,200.0	5,725.9	6,165.7	5,617.5	48.3	52.6	14.39	-436.2	2,377.3	241.4	194.8	46.60	5.179				
6,300.0	5,814.7	6,264.5	5,703.4	49.0	53.3	27.55	-412.7	2,420.0	244.3	196.8	47.59	5.135				
6,400.0	5,900.2	6,362.8	5,785.2	49.6	54.0	37.26	-376.4	2,460.6	247.2	199.0	48.27	5.122				
6,500.0	5,980.6	6,460.7	5,861.5	50.1	54.5	44.03	-328.3	2,498.5	250.0	201.4	48.66	5.138				
6,600.0	6,054.3	6,558.3	5,930.9	50.5	54.9	48.69	-269.2	2,532.9	252.6	203.8	48.80	5.176				
6,700.0	6,120.0	6,655.4	5,992.3	50.9	55.3	51.89	-200.4	2,563.3	254.9	206.1	48.79	5.224				
6,800.0	6,176.4	6,752.3	6,044.7	51.1	55.6	54.10	-123.2	2,589.2	256.9	208.1	48.75	5.269				
6,900.0	6,222.3	6,849.0	6,087.2	51.4	55.8	55.60	-39.1	2,610.2	258.5	209.6	48.84	5.292				
7,000.0	6,256.8	6,945.4	6,119.1	51.5	56.0	56.60	50.5	2,626.0	259.7	210.5	49.20	5.278				
7,100.0	6,279.3	7,041.8	6,140.0	51.6	56.1	57.22	144.0	2,636.2	260.5	210.5	49.93	5.216				
7,200.0	6,289.4	7,138.1	6,149.4	51.7	56.2	57.50	239.6	2,640.7	260.8	209.7	51.10	5.104				
7,300.0	6,290.0	7,236.9	6,150.0	51.7	56.2	57.53	338.4	2,640.8	260.8	208.4	52.38	4.979				
7,400.0	6,290.0	7,336.9	6,150.0	51.8	56.3	57.53	438.4	2,640.7	260.8	206.9	53.88	4.840				
7,500.0	6,290.0	7,436.9	6,150.0	51.9	56.4	57.53	538.4	2,640.5	260.8	205.2	55.54	4.695				
7,600.0	6,290.0	7,536.9	6,150.0	52.1	56.5	57.53	638.4	2,640.4	260.8	203.4	57.35	4.548				
7,700.0	6,290.0	7,636.9	6,150.0	52.3	56.7	57.53	738.4	2,640.2	260.8	201.5	59.28	4.399				
7,800.0	6,290.0	7,736.9	6,150.0	52.6	56.9	57.53	838.4	2,640.0	260.8	199.4	61.34	4.251				
7,900.0	6,290.0	7,836.9	6,150.0	52.9	57.2	57.53	938.4	2,639.9	260.8	197.3	63.51	4.106				
8,000.0	6,290.0	7,936.9	6,150.0	53.3	57.5	57.53	1,038.4	2,639.7	260.8	195.0	65.77	3.965				
8,100.0	6,290.0	8,036.9	6,150.0	53.7	57.9	57.53	1,138.4	2,639.6	260.8	192.6	68.13	3.828				
8,200.0	6,290.0	8,136.9	6,150.0	54.2	58.3	57.53	1,238.4	2,639.4	260.8	190.2	70.56	3.696				
8,300.0	6,290.0	8,236.9	6,150.0	54.8	58.8	57.53	1,338.4	2,639.3	260.8	187.7	73.06	3.569				
8,400.0	6,290.0	8,336.9	6,150.0	55.4	59.3	57.53	1,438.4	2,639.1	260.8	185.1	75.63	3.448				
8,500.0	6,290.0	8,436.9	6,150.0	56.1	59.9	57.53	1,538.4	2,638.9	260.7	182.5	78.26	3.332				
8,600.0	6,290.0	8,536.9	6,150.0	56.9	60.6	57.53	1,638.4	2,638.8	260.7	179.8	80.94	3.222				
8,700.0	6,290.0	8,636.9	6,150.0	57.7	61.3	57.52	1,738.4	2,638.6	260.7	177.1	83.66	3.117				
8,800.0	6,290.0	8,736.9	6,150.0	58.6	62.1	57.52	1,838.4	2,638.5	260.7	174.3	86.43	3.017				
8,900.0	6,290.0	8,836.9	6,150.0	59.5	62.9	57.52	1,938.4	2,638.3	260.7	171.5	89.24	2.922				
9,000.0	6,290.0	8,936.9	6,150.0	60.5	63.8	57.52	2,038.4	2,638.2	260.7	168.6	92.08	2.831				
9,100.0	6,290.0	9,036.9	6,150.0	61.6	64.8	57.52	2,138.4	2,638.0	260.7	165.8	94.96	2.746				
9,200.0	6,290.0	9,136.9	6,150.0	62.7	65.8	57.52	2,238.4	2,637.8	260.7	162.9	97.86	2.664				
9,300.0	6,290.0	9,236.9	6,150.0	63.9	66.8	57.52	2,338.4	2,637.7	260.7	159.9	100.79	2.587				
9,400.0	6,290.0	9,336.9	6,150.0	65.1	67.9	57.52	2,438.4	2,637.5	260.7	157.0	103.75	2.513				
9,500.0	6,290.0	9,436.9	6,150.0	66.4	69.1	57.52	2,538.4	2,637.4	260.7	154.0	106.72	2.443				
9,600.0	6,290.0	9,536.9	6,150.0	67.7	70.3	57.52	2,638.4	2,637.2	260.7	151.0	109.72	2.376				
9,700.0	6,290.0	9,636.9	6,150.0	69.1	71.6	57.52	2,738.4	2,637.1	260.7	148.0	112.74	2.312				
9,800.0	6,290.0	9,736.9	6,150.0	70.5	72.9	57.52	2,838.4	2,636.9	260.7	144.9	115.77	2.252				
9,900.0	6,290.0	9,836.9	6,150.0	71.9	74.2	57.52	2,938.4	2,636.8	260.7	141.9	118.82	2.194				
10,000.0	6,290.0	9,936.9	6,150.0	73.3	75.6	57.52	3,038.4	2,636.6	260.7	138.8	121.89	2.139				
10,100.0	6,290.0	10,036.9	6,150.0	74.8	77.0	57.52	3,138.4	2,636.4	260.7	135.7	124.97	2.086				
10,200.0	6,290.0	10,136.9	6,150.0	76.3	78.4	57.52	3,238.4	2,636.3	260.7	132.6	128.06	2.036				
10,300.0	6,290.0	10,236.9	6,150.0	77.9	79.9	57.52	3,338.4	2,636.1	260.7	129.5	131.16	1.987				

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

Offset Design SRC Markham Pad Sec.16-T4N-R68W - SRC Markham 41-16-9NHZ - Wellbore #1 - Plan #1 (3-31-14)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,400.0	6,290.0	10,336.9	6,150.0	79.4	81.4	57.52	3,438.4	2,636.0	260.7	126.4	134.28	1.941		
10,500.0	6,290.0	10,436.9	6,150.0	81.0	82.9	57.51	3,538.4	2,635.8	260.7	123.3	137.41	1.897		
10,600.0	6,290.0	10,536.9	6,150.0	82.6	84.4	57.51	3,638.4	2,635.7	260.7	120.1	140.54	1.855		
10,700.0	6,290.0	10,636.9	6,150.0	84.2	86.0	57.51	3,738.4	2,635.5	260.7	117.0	143.68	1.814		
10,800.0	6,290.0	10,736.9	6,150.0	85.9	87.5	57.51	3,838.4	2,635.3	260.7	113.8	146.84	1.775		
10,900.0	6,290.0	10,836.9	6,150.0	87.5	89.1	57.51	3,938.4	2,635.2	260.7	110.7	150.00	1.738		
11,000.0	6,290.0	10,936.9	6,150.0	89.2	90.7	57.51	4,038.4	2,635.0	260.6	107.5	153.17	1.702		
11,100.0	6,290.0	11,036.9	6,150.0	90.8	92.4	57.51	4,138.4	2,634.9	260.6	104.3	156.34	1.667		
11,200.0	6,290.0	11,136.9	6,150.0	92.5	94.0	57.51	4,238.4	2,634.7	260.6	101.1	159.52	1.634		
11,300.0	6,290.0	11,236.9	6,150.0	94.2	95.7	57.51	4,338.4	2,634.6	260.6	97.9	162.71	1.602		
11,400.0	6,290.0	11,336.9	6,150.0	95.9	97.3	57.51	4,438.4	2,634.4	260.6	94.7	165.90	1.571		
11,500.0	6,290.0	11,436.9	6,150.0	97.6	99.0	57.51	4,538.4	2,634.2	260.6	91.5	169.10	1.541		
11,600.0	6,290.0	11,536.9	6,150.0	99.3	100.7	57.51	4,638.4	2,634.1	260.6	88.3	172.30	1.513		
11,700.0	6,290.0	11,636.9	6,150.0	101.1	102.4	57.51	4,738.4	2,633.9	260.6	85.1	175.51	1.485	Level 3	
11,800.0	6,290.0	11,736.9	6,150.0	102.8	104.1	57.51	4,838.4	2,633.8	260.6	81.9	178.73	1.458	Level 3	
11,900.0	6,290.0	11,836.9	6,150.0	104.6	105.8	57.51	4,938.4	2,633.6	260.6	78.7	181.94	1.432	Level 3	
12,000.0	6,290.0	11,936.9	6,150.0	106.3	107.6	57.51	5,038.4	2,633.5	260.6	75.4	185.16	1.407	Level 3	
12,100.0	6,290.0	12,036.9	6,150.0	108.1	109.3	57.51	5,138.4	2,633.3	260.6	72.2	188.39	1.383	Level 3	
12,200.0	6,290.0	12,136.9	6,150.0	109.9	111.0	57.51	5,238.4	2,633.1	260.6	69.0	191.62	1.360	Level 3	
12,300.0	6,290.0	12,236.9	6,150.0	111.6	112.8	57.50	5,338.4	2,633.0	260.6	65.7	194.85	1.337	Level 3	
12,400.0	6,290.0	12,336.9	6,150.0	113.4	114.5	57.50	5,438.4	2,632.8	260.6	62.5	198.09	1.316	Level 3	
12,500.0	6,290.0	12,436.9	6,150.0	115.2	116.3	57.50	5,538.4	2,632.7	260.6	59.3	201.33	1.294	Level 3	
12,600.0	6,290.0	12,536.9	6,150.0	117.0	118.1	57.50	5,638.4	2,632.5	260.6	56.0	204.57	1.274	Level 3	
12,700.0	6,290.0	12,636.9	6,150.0	118.8	119.8	57.50	5,738.4	2,632.4	260.6	52.8	207.82	1.254	Level 3	
12,800.0	6,290.0	12,736.9	6,150.0	120.6	121.6	57.50	5,838.4	2,632.2	260.6	49.5	211.06	1.235	Level 2	
12,900.0	6,290.0	12,836.9	6,150.0	122.4	123.4	57.50	5,938.4	2,632.1	260.6	46.3	214.31	1.216	Level 2	
13,000.0	6,290.0	12,936.9	6,150.0	124.2	125.2	57.50	6,038.4	2,631.9	260.6	43.0	217.57	1.198	Level 2	
13,100.0	6,290.0	13,036.9	6,150.0	126.0	127.0	57.50	6,138.4	2,631.7	260.6	39.7	220.82	1.180	Level 2	
13,200.0	6,290.0	13,136.9	6,150.0	127.8	128.8	57.50	6,238.4	2,631.6	260.6	36.5	224.08	1.163	Level 2	
13,300.0	6,290.0	13,236.9	6,150.0	129.6	130.6	57.50	6,338.4	2,631.4	260.6	33.2	227.34	1.146	Level 2	
13,400.0	6,290.0	13,336.9	6,150.0	131.4	132.4	57.50	6,438.4	2,631.3	260.6	29.9	230.60	1.130	Level 2	
13,500.0	6,290.0	13,436.9	6,150.0	133.2	134.2	57.50	6,538.4	2,631.1	260.5	26.7	233.87	1.114	Level 2	
13,600.0	6,290.0	13,536.9	6,150.0	135.1	136.0	57.50	6,638.4	2,631.0	260.5	23.4	237.13	1.099	Level 2	
13,700.0	6,290.0	13,636.9	6,150.0	136.9	137.8	57.50	6,738.4	2,630.8	260.5	20.1	240.40	1.084	Level 2	
13,800.0	6,290.0	13,736.9	6,150.0	138.7	139.6	57.50	6,838.4	2,630.6	260.5	16.9	243.67	1.069	Level 2	
13,900.0	6,290.0	13,836.9	6,150.0	140.6	141.4	57.50	6,938.4	2,630.5	260.5	13.6	246.94	1.055	Level 2	
14,000.0	6,290.0	13,936.9	6,150.0	142.4	143.3	57.50	7,038.4	2,630.3	260.5	10.3	250.21	1.041	Level 2	
14,100.0	6,290.0	14,036.9	6,150.0	144.2	145.1	57.49	7,138.4	2,630.2	260.5	7.0	253.49	1.028	Level 2	
14,200.0	6,290.0	14,136.9	6,150.0	146.1	146.9	57.49	7,238.4	2,630.0	260.5	3.8	256.77	1.015	Level 2	
14,290.5	6,290.0	14,227.4	6,150.0	147.7	148.6	57.49	7,328.9	2,629.9	260.5	0.8	259.73	1.003	Level 2, ES, SF	

SRC Markham Pad Sec.16-T4N-R68W - SRC Markham C-16-9CHZ - Wellbore #1 - Plan #1 (3-31-14)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth Depth (ft)	Vertical Depth (ft)	Measured Depth Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	-90.70	-1.1	-90.1	90.1					
100.0	100.0	100.0	100.0	0.1	0.1	-90.70	-1.1	-90.1	90.1	89.9	0.22	400.789		
200.0	200.0	200.0	200.0	0.3	0.3	-90.70	-1.1	-90.1	90.1	89.4	0.67	133.596		
300.0	300.0	300.0	300.0	0.6	0.6	-90.70	-1.1	-90.1	90.1	89.0	1.12	80.158		
400.0	400.0	400.0	400.0	0.8	0.8	-90.70	-1.1	-90.1	90.1	88.5	1.57	57.256 CC, ES		
500.0	500.0	500.0	500.0	1.0	1.0	167.52	-1.1	-90.1	91.8	89.8	2.01	45.656		
600.0	599.8	599.8	599.8	1.2	1.2	168.17	-1.1	-90.1	96.9	94.5	2.44	39.671		
700.0	699.5	699.5	699.5	1.4	1.5	169.11	-1.1	-90.1	105.4	102.6	2.88	36.586		
800.0	798.7	798.7	798.7	1.7	1.7	170.19	-1.1	-90.1	117.4	114.1	3.33	35.307		
900.0	897.5	897.5	897.5	2.0	1.9	171.29	-1.1	-90.1	132.9	129.1	3.77	35.218		
1,000.0	995.6	995.6	995.6	2.4	2.1	172.33	-1.1	-90.1	151.8	147.6	4.22	35.947		
1,100.0	1,093.1	1,093.1	1,093.1	2.8	2.3	173.26	-1.1	-90.1	174.1	169.4	4.67	37.257		
1,200.0	1,189.6	1,189.6	1,189.6	3.3	2.6	174.08	-1.1	-90.1	199.8	194.7	5.13	38.990		
1,300.0	1,285.3	1,292.5	1,292.5	3.9	2.8	174.75	-1.6	-88.7	227.6	222.0	5.57	40.852		
1,400.0	1,379.8	1,397.2	1,397.1	4.5	3.0	175.19	-3.2	-83.6	255.3	249.3	6.00	42.534		
1,500.0	1,473.2	1,503.1	1,502.5	5.2	3.2	175.45	-6.1	-74.9	282.9	276.5	6.45	43.873		
1,600.0	1,565.2	1,610.2	1,608.8	6.0	3.5	175.57	-10.3	-62.3	310.3	303.4	6.91	44.895		
1,700.0	1,655.9	1,718.5	1,715.7	6.8	3.7	175.61	-15.8	-45.7	337.4	329.9	7.42	45.469		
1,800.0	1,746.4	1,828.8	1,823.8	7.7	4.1	175.55	-22.7	-24.8	361.4	353.4	7.99	45.222		
1,900.0	1,836.8	1,941.0	1,932.8	8.6	4.5	175.37	-31.0	0.4	381.7	373.1	8.59	44.411		
2,000.0	1,927.3	2,054.9	2,042.2	9.5	5.0	175.09	-40.9	30.1	398.2	389.0	9.23	43.130		
2,100.0	2,017.7	2,170.0	2,151.6	10.4	5.6	174.71	-52.2	64.3	410.9	401.0	9.90	41.516		
2,200.0	2,108.1	2,278.2	2,253.1	11.3	6.2	174.27	-64.0	99.9	420.0	409.4	10.59	39.664		
2,300.0	2,198.6	2,377.8	2,346.3	12.3	6.9	173.87	-75.0	133.2	428.7	417.4	11.28	38.011		
2,400.0	2,289.0	2,477.4	2,439.5	13.2	7.5	173.48	-86.0	166.5	437.3	425.3	11.98	36.499		
2,500.0	2,379.4	2,576.9	2,532.7	14.1	8.2	173.11	-97.0	199.8	446.0	433.3	12.70	35.115		
2,600.0	2,469.9	2,676.5	2,625.9	15.0	8.9	172.75	-108.1	233.1	454.7	441.3	13.43	33.847		
2,700.0	2,560.3	2,776.1	2,719.1	15.9	9.6	172.41	-119.1	266.4	463.4	449.2	14.18	32.682		
2,800.0	2,650.8	2,875.7	2,812.3	16.9	10.3	172.07	-130.1	299.7	472.1	457.2	14.94	31.610		
2,900.0	2,741.2	2,975.3	2,905.5	17.8	11.0	171.75	-141.1	333.0	480.9	465.2	15.70	30.622		
3,000.0	2,831.6	3,074.8	2,998.7	18.7	11.7	171.45	-152.2	366.3	489.6	473.1	16.48	29.709		
3,100.0	2,922.1	3,174.4	3,091.9	19.7	12.4	171.15	-163.2	399.6	498.4	481.1	17.27	28.863		
3,200.0	3,012.5	3,274.0	3,185.1	20.6	13.2	170.86	-174.2	432.9	507.2	489.1	18.06	28.078		
3,300.0	3,102.9	3,373.6	3,278.3	21.5	13.9	170.58	-185.2	466.2	516.0	497.1	18.87	27.349		
3,400.0	3,193.4	3,473.2	3,371.5	22.4	14.6	170.32	-196.2	499.5	524.8	505.1	19.68	26.669		
3,500.0	3,283.8	3,572.8	3,464.7	23.4	15.4	170.06	-207.3	532.8	533.6	513.1	20.50	26.034		
3,600.0	3,374.2	3,672.3	3,557.9	24.3	16.1	169.80	-218.3	566.1	542.4	521.1	21.32	25.440		
3,700.0	3,464.7	3,771.9	3,651.1	25.2	16.8	169.56	-229.3	599.4	551.3	529.1	22.15	24.884		
3,800.0	3,555.1	3,871.5	3,744.3	26.2	17.6	169.33	-240.3	632.7	560.1	537.1	22.99	24.362		
3,900.0	3,645.6	3,971.1	3,837.5	27.1	18.3	169.10	-251.3	666.0	569.0	545.1	23.83	23.872		
4,000.0	3,736.0	4,070.7	3,930.7	28.0	19.0	168.88	-262.4	699.3	577.8	553.1	24.68	23.409		
4,100.0	3,826.4	4,170.2	4,023.9	29.0	19.8	168.66	-273.4	732.6	586.7	561.2	25.54	22.974		
4,200.0	3,916.9	4,269.8	4,117.1	29.9	20.5	168.46	-284.4	765.9	595.6	569.2	26.40	22.562		
4,300.0	4,007.3	4,369.4	4,210.3	30.8	21.3	168.25	-295.4	799.2	604.5	577.2	27.26	22.173		
4,400.0	4,097.7	4,469.0	4,303.5	31.8	22.0	168.06	-306.4	832.5	613.4	585.2	28.13	21.804		
4,500.0	4,188.2	4,568.6	4,396.7	32.7	22.8	167.87	-317.5	865.8	622.3	593.3	29.00	21.455		
4,600.0	4,278.6	4,668.2	4,489.9	33.6	23.5	167.68	-328.5	899.1	631.2	601.3	29.88	21.123		
4,700.0	4,369.1	4,767.7	4,583.1	34.6	24.3	167.50	-339.5	932.4	640.1	609.3	30.76	20.808		
4,800.0	4,459.5	4,867.3	4,676.3	35.5	25.0	167.33	-350.5	965.7	649.0	617.4	31.65	20.508		
4,900.0	4,549.9	4,966.9	4,769.5	36.4	25.8	167.16	-361.5	999.0	657.9	625.4	32.54	20.222		
5,000.0	4,640.4	5,066.5	4,862.7	37.4	26.5	166.99	-372.6	1,032.3	666.9	633.4	33.43	19.949		
5,100.0	4,730.8	5,166.1	4,955.9	38.3	27.3	166.83	-383.6	1,065.6	675.8	641.5	34.32	19.689		

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

Offset Design												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,200.0	4,821.2	5,265.7	5,049.1	39.2	28.0	166.68	-394.6	1,098.9	684.8	649.5	35.22	19.441	
5,300.0	4,911.7	5,365.2	5,142.3	40.2	28.8	166.52	-405.6	1,132.2	693.7	657.6	36.12	19.203	
5,400.0	5,002.1	5,464.8	5,235.5	41.1	29.5	166.37	-416.7	1,165.5	702.7	665.6	37.03	18.975	
5,500.0	5,092.6	5,564.4	5,328.7	42.0	30.3	166.23	-427.7	1,198.8	711.6	673.7	37.94	18.757	
5,600.0	5,183.0	5,664.0	5,421.9	43.0	31.0	166.09	-438.7	1,232.1	720.6	681.7	38.85	18.548	
5,700.0	5,273.4	5,763.6	5,515.1	43.9	31.8	165.95	-449.7	1,265.4	729.5	689.8	39.76	18.348	
5,800.0	5,363.9	5,866.6	5,611.8	44.8	32.4	166.12	-457.1	1,300.0	738.3	697.9	40.45	18.254	
5,900.0	5,454.3	5,968.5	5,707.4	45.8	33.0	167.36	-450.4	1,334.1	746.7	706.3	40.41	18.478	
6,000.0	5,544.7	6,064.1	5,795.6	46.7	33.4	169.48	-431.0	1,365.6	755.5	715.7	39.86	18.954	
6,100.0	5,635.3	6,152.0	5,873.8	47.6	33.8	-177.30	-402.4	1,393.5	766.1	727.1	39.00	19.644	
6,200.0	5,725.9	6,236.0	5,944.9	48.3	34.1	-157.13	-365.7	1,418.8	778.3	739.9	38.45	20.241	
6,300.0	5,814.7	6,317.0	6,009.2	49.0	34.3	-139.77	-322.2	1,441.7	791.8	753.3	38.49	20.571	
6,400.0	5,900.2	6,400.0	6,069.9	49.6	34.5	-126.09	-269.9	1,463.3	805.9	766.9	38.99	20.668	
6,500.0	5,980.6	6,472.3	6,117.8	50.1	34.6	-115.90	-218.6	1,480.3	819.9	780.2	39.67	20.667	
6,600.0	6,054.3	6,550.0	6,163.6	50.5	34.7	-108.08	-158.0	1,496.6	833.3	793.0	40.36	20.649	
6,700.0	6,120.0	6,621.2	6,199.9	50.9	34.8	-102.22	-98.2	1,509.5	845.7	804.9	40.84	20.707	
6,800.0	6,176.4	6,700.0	6,233.4	51.1	34.9	-97.71	-27.8	1,521.3	856.7	815.5	41.16	20.814	
6,900.0	6,222.3	6,766.1	6,255.7	51.4	34.9	-94.48	33.9	1,529.1	865.8	824.5	41.26	20.983	
7,000.0	6,256.8	6,837.6	6,273.7	51.5	35.0	-92.16	102.7	1,535.5	872.8	831.4	41.38	21.090	
7,100.0	6,279.3	6,908.6	6,285.0	51.6	35.0	-90.71	172.7	1,539.4	877.4	835.8	41.66	21.063	
7,200.0	6,289.4	6,979.5	6,289.8	51.7	35.0	-90.05	243.4	1,541.0	879.7	837.4	42.28	20.805	
7,300.0	6,290.0	7,072.9	6,290.0	51.7	35.1	-90.00	336.7	1,540.9	879.9	836.7	43.15	20.393	
7,400.0	6,290.0	7,172.9	6,290.0	51.8	35.3	-90.00	436.7	1,540.8	879.9	835.2	44.63	19.714	
7,500.0	6,290.0	7,272.9	6,290.0	51.9	35.6	-90.00	536.7	1,540.6	879.9	833.4	46.42	18.953	
7,600.0	6,290.0	7,372.9	6,290.0	52.1	35.9	-90.00	636.7	1,540.5	879.9	831.4	48.45	18.158	
7,700.0	6,290.0	7,472.9	6,290.0	52.3	36.3	-90.00	736.7	1,540.3	879.9	829.2	50.70	17.356	
7,800.0	6,290.0	7,572.9	6,290.0	52.6	36.9	-90.00	836.7	1,540.2	879.9	826.7	53.12	16.564	
7,900.0	6,290.0	7,672.9	6,290.0	52.9	37.5	-90.00	936.7	1,540.0	879.9	824.2	55.70	15.795	
8,000.0	6,290.0	7,772.9	6,290.0	53.3	38.3	-90.00	1,036.7	1,539.9	879.9	821.4	58.43	15.060	
8,100.0	6,290.0	7,872.9	6,290.0	53.7	39.1	-90.00	1,136.7	1,539.7	879.9	818.6	61.27	14.361	
8,200.0	6,290.0	7,972.9	6,290.0	54.2	40.1	-90.00	1,236.7	1,539.6	879.9	815.7	64.21	13.703	
8,300.0	6,290.0	8,072.9	6,290.0	54.8	41.1	-90.00	1,336.7	1,539.4	879.9	812.6	67.25	13.084	
8,400.0	6,290.0	8,172.9	6,290.0	55.4	42.3	-90.00	1,436.7	1,539.3	879.9	809.5	70.36	12.505	
8,500.0	6,290.0	8,272.9	6,290.0	56.1	43.5	-90.00	1,536.7	1,539.1	879.9	806.3	73.54	11.964	
8,600.0	6,290.0	8,372.9	6,290.0	56.9	44.7	-90.00	1,636.7	1,538.9	879.9	803.1	76.79	11.459	
8,700.0	6,290.0	8,472.9	6,290.0	57.7	46.1	-90.00	1,736.7	1,538.8	879.9	799.8	80.08	10.987	
8,800.0	6,290.0	8,572.9	6,290.0	58.6	47.4	-90.00	1,836.7	1,538.6	879.9	796.4	83.42	10.547	
8,900.0	6,290.0	8,672.9	6,290.0	59.5	48.9	-90.00	1,936.7	1,538.5	879.9	793.1	86.81	10.136	
9,000.0	6,290.0	8,772.9	6,290.0	60.5	50.4	-90.00	2,036.7	1,538.3	879.9	789.6	90.23	9.752	
9,100.0	6,290.0	8,872.9	6,290.0	61.6	51.9	-90.00	2,136.7	1,538.2	879.9	786.2	93.68	9.393	
9,200.0	6,290.0	8,972.9	6,290.0	62.7	53.4	-90.00	2,236.7	1,538.0	879.9	782.7	97.16	9.056	
9,300.0	6,290.0	9,072.9	6,290.0	63.9	55.0	-90.00	2,336.7	1,537.9	879.9	779.2	100.67	8.740	
9,400.0	6,290.0	9,172.9	6,290.0	65.1	56.6	-90.00	2,436.7	1,537.7	879.9	775.7	104.20	8.444	
9,500.0	6,290.0	9,272.9	6,290.0	66.4	58.2	-90.00	2,536.7	1,537.6	879.9	772.1	107.75	8.166	
9,600.0	6,290.0	9,372.9	6,290.0	67.7	59.8	-90.00	2,636.7	1,537.4	879.9	768.6	111.32	7.904	
9,700.0	6,290.0	9,472.9	6,290.0	69.1	61.5	-90.00	2,736.7	1,537.3	879.9	765.0	114.91	7.657	
9,800.0	6,290.0	9,572.9	6,290.0	70.5	63.2	-90.00	2,836.7	1,537.1	879.9	761.4	118.51	7.424	
9,900.0	6,290.0	9,672.9	6,290.0	71.9	64.9	-90.00	2,936.7	1,537.0	879.9	757.7	122.13	7.204	
10,000.0	6,290.0	9,772.9	6,290.0	73.3	66.6	-90.00	3,036.7	1,536.8	879.9	754.1	125.77	6.996	
10,100.0	6,290.0	9,872.9	6,290.0	74.8	68.3	-90.00	3,136.7	1,536.7	879.9	750.5	129.41	6.799	
10,200.0	6,290.0	9,972.9	6,290.0	76.3	70.0	-90.00	3,236.7	1,536.5	879.9	746.8	133.07	6.612	
10,300.0	6,290.0	10,072.9	6,290.0	77.9	71.8	-90.00	3,336.7	1,536.4	879.9	743.2	136.73	6.435	

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

Offset Design SRC Markham Pad Sec.16-T4N-R68W - SRC Markham C-16-9CHZ - Wellbore #1 - Plan #1 (3-31-14)												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
10,400.0	6,290.0	10,172.9	6,290.0	79.4	73.5	-90.00	3,436.7	1,536.2	879.9	739.5	140.41	6.267	
10,500.0	6,290.0	10,272.9	6,290.0	81.0	75.3	-90.00	3,536.7	1,536.0	879.9	735.8	144.09	6.107	
10,600.0	6,290.0	10,372.9	6,290.0	82.6	77.0	-90.00	3,636.7	1,535.9	879.9	732.1	147.78	5.954	
10,700.0	6,290.0	10,472.9	6,290.0	84.2	78.8	-90.00	3,736.7	1,535.7	879.9	728.4	151.48	5.809	
10,800.0	6,290.0	10,572.9	6,290.0	85.9	80.6	-90.00	3,836.7	1,535.6	879.9	724.7	155.19	5.670	
10,900.0	6,290.0	10,672.9	6,290.0	87.5	82.4	-90.00	3,936.7	1,535.4	879.9	721.0	158.90	5.537	
11,000.0	6,290.0	10,772.9	6,290.0	89.2	84.2	-90.00	4,036.7	1,535.3	879.9	717.3	162.62	5.411	
11,100.0	6,290.0	10,872.9	6,290.0	90.8	86.0	-90.00	4,136.7	1,535.1	879.9	713.6	166.34	5.290	
11,200.0	6,290.0	10,972.9	6,290.0	92.5	87.8	-90.00	4,236.7	1,535.0	879.9	709.8	170.07	5.174	
11,300.0	6,290.0	11,072.9	6,290.0	94.2	89.6	-90.00	4,336.7	1,534.8	879.9	706.1	173.80	5.063	
11,400.0	6,290.0	11,172.9	6,290.0	95.9	91.4	-90.00	4,436.7	1,534.7	879.9	702.4	177.54	4.956	
11,500.0	6,290.0	11,272.9	6,290.0	97.6	93.2	-90.00	4,536.7	1,534.5	879.9	698.6	181.28	4.854	
11,600.0	6,290.0	11,372.9	6,290.0	99.3	95.1	-90.00	4,636.7	1,534.4	879.9	694.9	185.03	4.755	
11,700.0	6,290.0	11,472.9	6,290.0	101.1	96.9	-90.00	4,736.7	1,534.2	879.9	691.1	188.78	4.661	
11,800.0	6,290.0	11,572.9	6,290.0	102.8	98.7	-90.00	4,836.7	1,534.1	879.9	687.4	192.54	4.570	
11,900.0	6,290.0	11,672.9	6,290.0	104.6	100.6	-90.00	4,936.7	1,533.9	879.9	683.6	196.29	4.483	
12,000.0	6,290.0	11,772.9	6,290.0	106.3	102.4	-90.00	5,036.7	1,533.8	879.9	679.8	200.05	4.398	
12,100.0	6,290.0	11,872.9	6,290.0	108.1	104.2	-90.00	5,136.7	1,533.6	879.9	676.1	203.82	4.317	
12,200.0	6,290.0	11,972.9	6,290.0	109.9	106.1	-90.00	5,236.7	1,533.4	879.9	672.3	207.58	4.239	
12,300.0	6,290.0	12,072.9	6,290.0	111.6	107.9	-90.00	5,336.7	1,533.3	879.9	668.5	211.35	4.163	
12,400.0	6,290.0	12,172.9	6,290.0	113.4	109.8	-90.00	5,436.7	1,533.1	879.9	664.8	215.12	4.090	
12,500.0	6,290.0	12,272.9	6,290.0	115.2	111.6	-90.00	5,536.7	1,533.0	879.9	661.0	218.90	4.020	
12,600.0	6,290.0	12,372.9	6,290.0	117.0	113.5	-90.00	5,636.7	1,532.8	879.9	657.2	222.68	3.952	
12,700.0	6,290.0	12,472.9	6,290.0	118.8	115.3	-90.00	5,736.7	1,532.7	879.9	653.5	226.45	3.886	
12,800.0	6,290.0	12,572.9	6,290.0	120.6	117.2	-90.00	5,836.7	1,532.5	879.9	649.7	230.23	3.822	
12,900.0	6,290.0	12,672.9	6,290.0	122.4	119.0	-90.00	5,936.7	1,532.4	879.9	645.9	234.02	3.760	
13,000.0	6,290.0	12,772.9	6,290.0	124.2	120.9	-90.00	6,036.7	1,532.2	879.9	642.1	237.80	3.700	
13,100.0	6,290.0	12,872.9	6,290.0	126.0	122.8	-90.00	6,136.7	1,532.1	879.9	638.3	241.59	3.642	
13,200.0	6,290.0	12,972.9	6,290.0	127.8	124.6	-90.00	6,236.7	1,531.9	879.9	634.5	245.38	3.586	
13,300.0	6,290.0	13,072.9	6,290.0	129.6	126.5	-90.00	6,336.7	1,531.8	879.9	630.7	249.17	3.531	
13,400.0	6,290.0	13,172.9	6,290.0	131.4	128.4	-90.00	6,436.7	1,531.6	879.9	627.0	252.96	3.478	
13,500.0	6,290.0	13,272.9	6,290.0	133.2	130.2	-90.00	6,536.7	1,531.5	879.9	623.2	256.75	3.427	
13,600.0	6,290.0	13,372.9	6,290.0	135.1	132.1	-90.00	6,636.7	1,531.3	879.9	619.4	260.54	3.377	
13,700.0	6,290.0	13,472.9	6,290.0	136.9	134.0	-90.00	6,736.7	1,531.2	879.9	615.6	264.34	3.329	
13,800.0	6,290.0	13,572.9	6,290.0	138.7	135.9	-90.00	6,836.7	1,531.0	879.9	611.8	268.14	3.282	
13,900.0	6,290.0	13,672.9	6,290.0	140.6	137.7	-90.00	6,936.7	1,530.8	879.9	608.0	271.93	3.236	
14,000.0	6,290.0	13,772.9	6,290.0	142.4	139.6	-90.00	7,036.7	1,530.7	879.9	604.2	275.73	3.191	
14,100.0	6,290.0	13,872.9	6,290.0	144.2	141.5	-90.00	7,136.7	1,530.5	879.9	600.4	279.53	3.148	
14,200.0	6,290.0	13,972.9	6,290.0	146.1	143.4	-90.00	7,236.7	1,530.4	879.9	596.6	283.34	3.106	
14,249.5	6,290.0	14,022.4	6,290.0	147.0	144.3	-90.00	7,286.3	1,530.3	879.9	594.7	285.22	3.085	
14,290.5	6,290.0	14,050.0	6,290.0	147.7	144.8	-90.00	7,313.9	1,530.3	880.0	593.5	286.52	3.071 SF	

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

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-90.62	-0.7	-67.5	67.5					
100.0	100.0	100.0	100.0	0.1	0.1	-90.62	-0.7	-67.5	67.5	67.3	0.22	300.277		
200.0	200.0	200.0	200.0	0.3	0.3	-90.62	-0.7	-67.5	67.5	66.8	0.67	100.092		
300.0	300.0	300.0	300.0	0.6	0.6	-90.62	-0.7	-67.5	67.5	66.4	1.12	60.055		
400.0	400.0	400.0	400.0	0.8	0.8	-90.62	-0.7	-67.5	67.5	65.9	1.57	42.897 CC, ES		
500.0	500.0	500.0	500.0	1.0	1.0	167.67	-0.7	-67.5	69.2	67.2	2.01	34.419		
600.0	599.8	599.8	599.8	1.2	1.2	168.52	-0.7	-67.5	74.3	71.9	2.44	30.425		
700.0	699.5	699.5	699.5	1.4	1.5	169.68	-0.7	-67.5	82.9	80.0	2.88	28.755		
800.0	798.7	798.7	798.7	1.7	1.7	170.96	-0.7	-67.5	94.9	91.6	3.33	28.532		
900.0	897.5	897.5	897.5	2.0	1.9	172.20	-0.7	-67.5	110.4	106.6	3.77	29.259		
1,000.0	995.6	995.6	995.6	2.4	2.1	173.30	-0.7	-67.5	129.3	125.1	4.22	30.637		
1,100.0	1,093.1	1,098.1	1,098.1	2.8	2.3	174.18	-1.2	-65.9	150.1	145.4	4.66	32.231		
1,200.0	1,189.6	1,201.7	1,201.5	3.3	2.5	174.75	-2.7	-60.7	170.9	165.8	5.08	33.635		
1,300.0	1,285.3	1,306.0	1,305.4	3.9	2.8	175.10	-5.3	-51.8	191.5	186.0	5.52	34.713		
1,400.0	1,379.8	1,411.2	1,409.8	4.5	3.0	175.31	-9.0	-39.2	212.1	206.1	5.97	35.512		
1,500.0	1,473.2	1,517.2	1,514.4	5.2	3.3	175.40	-13.8	-22.8	232.4	226.0	6.44	36.067		
1,600.0	1,565.2	1,624.1	1,619.2	6.0	3.7	175.40	-19.8	-2.5	252.6	245.7	6.94	36.405		
1,700.0	1,655.9	1,731.9	1,724.0	6.8	4.1	175.33	-26.9	21.7	272.4	264.9	7.48	36.406		
1,800.0	1,746.4	1,841.1	1,829.0	7.7	4.6	175.18	-35.2	50.1	289.1	281.0	8.09	35.718		
1,900.0	1,836.8	1,951.5	1,934.1	8.6	5.1	174.92	-44.8	82.7	302.1	293.4	8.74	34.570		
2,000.0	1,927.3	2,062.8	2,038.6	9.5	5.8	174.56	-55.6	119.5	311.3	301.9	9.42	33.048		
2,100.0	2,017.7	2,170.0	2,137.8	10.4	6.6	174.11	-66.9	158.4	317.0	306.9	10.13	31.305		
2,200.0	2,108.1	2,269.8	2,230.0	11.3	7.3	173.68	-77.7	195.2	322.0	311.2	10.84	29.717		
2,300.0	2,198.6	2,369.6	2,322.1	12.3	8.0	173.27	-88.5	232.0	327.0	315.5	11.56	28.282		
2,400.0	2,289.0	2,469.5	2,414.3	13.2	8.8	172.87	-99.3	268.9	332.1	319.8	12.31	26.983		
2,500.0	2,379.4	2,569.3	2,506.5	14.1	9.6	172.48	-110.2	305.7	337.1	324.1	13.06	25.804		
2,600.0	2,469.9	2,669.2	2,598.6	15.0	10.4	172.10	-121.0	342.6	342.2	328.3	13.84	24.732		
2,700.0	2,560.3	2,769.0	2,690.8	15.9	11.2	171.73	-131.8	379.4	347.3	332.6	14.62	23.752		
2,800.0	2,650.8	2,868.9	2,783.0	16.9	11.9	171.38	-142.6	416.3	352.3	336.9	15.42	22.856		
2,900.0	2,741.2	2,968.7	2,875.2	17.8	12.7	171.03	-153.4	453.1	357.4	341.2	16.22	22.032		
3,000.0	2,831.6	3,068.6	2,967.3	18.7	13.6	170.69	-164.2	490.0	362.6	345.5	17.04	21.275		
3,100.0	2,922.1	3,168.4	3,059.5	19.7	14.4	170.37	-175.0	526.8	367.7	349.8	17.87	20.576		
3,200.0	3,012.5	3,268.3	3,151.7	20.6	15.2	170.05	-185.8	563.7	372.8	354.1	18.71	19.929		
3,300.0	3,102.9	3,368.1	3,243.8	21.5	16.0	169.74	-196.6	600.5	378.0	358.4	19.56	19.329		
3,400.0	3,193.4	3,468.0	3,336.0	22.4	16.8	169.44	-207.4	637.4	383.1	362.7	20.41	18.771		
3,500.0	3,283.8	3,567.8	3,428.2	23.4	17.6	169.14	-218.2	674.2	388.3	367.0	21.28	18.251		
3,600.0	3,374.2	3,667.7	3,520.3	24.3	18.4	168.86	-229.0	711.1	393.5	371.3	22.15	17.766		
3,700.0	3,464.7	3,767.5	3,612.5	25.2	19.3	168.58	-239.8	747.9	398.7	375.6	23.03	17.313		
3,800.0	3,555.1	3,867.3	3,704.7	26.2	20.1	168.31	-250.6	784.8	403.9	380.0	23.92	16.887		
3,900.0	3,645.6	3,967.2	3,796.8	27.1	20.9	168.05	-261.4	821.6	409.1	384.3	24.81	16.488		
4,000.0	3,736.0	4,067.0	3,889.0	28.0	21.7	167.79	-272.2	858.4	414.3	388.6	25.71	16.113		
4,100.0	3,826.4	4,166.9	3,981.2	29.0	22.5	167.54	-283.0	895.3	419.5	392.9	26.62	15.759		
4,200.0	3,916.9	4,266.7	4,073.3	29.9	23.4	167.29	-293.8	932.1	424.8	397.2	27.54	15.425		
4,300.0	4,007.3	4,366.6	4,165.5	30.8	24.2	167.05	-304.6	969.0	430.0	401.5	28.46	15.110		
4,400.0	4,097.7	4,466.4	4,257.7	31.8	25.0	166.82	-315.4	1,005.8	435.2	405.9	29.38	14.812		
4,500.0	4,188.2	4,566.3	4,349.8	32.7	25.8	166.59	-326.2	1,042.7	440.5	410.2	30.32	14.530		
4,600.0	4,278.6	4,666.1	4,442.0	33.6	26.7	166.37	-337.0	1,079.5	445.8	414.5	31.26	14.262		
4,700.0	4,369.1	4,766.0	4,534.2	34.6	27.5	166.16	-347.8	1,116.4	451.0	418.8	32.20	14.007		
4,800.0	4,459.5	4,865.8	4,626.3	35.5	28.3	165.94	-358.6	1,153.2	456.3	423.1	33.15	13.765		
4,900.0	4,549.9	4,965.7	4,718.5	36.4	29.1	165.74	-369.4	1,190.1	461.6	427.5	34.10	13.535		
5,000.0	4,640.4	5,065.5	4,810.7	37.4	30.0	165.53	-380.2	1,226.9	466.9	431.8	35.06	13.315		
5,100.0	4,730.8	5,165.4	4,902.9	38.3	30.8	165.34	-391.0	1,263.8	472.2	436.1	36.03	13.106		

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

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

Offset Design												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,200.0	4,821.2	5,265.2	4,995.0	39.2	31.6	165.14	-401.8	1,300.6	477.4	440.5	36.99	12.906	
5,300.0	4,911.7	5,365.0	5,087.2	40.2	32.4	164.95	-412.6	1,337.5	482.7	444.8	37.97	12.715	
5,400.0	5,002.1	5,464.9	5,179.4	41.1	33.3	164.77	-423.4	1,374.3	488.1	449.1	38.94	12.533	
5,500.0	5,092.6	5,564.7	5,271.5	42.0	34.1	164.59	-434.2	1,411.1	493.4	453.4	39.92	12.358	
5,600.0	5,183.0	5,664.6	5,363.7	43.0	34.9	164.41	-445.0	1,448.0	498.7	457.8	40.91	12.190	
5,700.0	5,273.4	5,767.1	5,458.5	43.9	35.7	164.43	-454.4	1,485.9	503.9	462.1	41.76	12.067	
5,800.0	5,363.9	5,870.9	5,554.7	44.8	36.4	165.90	-451.0	1,524.3	508.3	466.7	41.57	12.228	
5,900.0	5,454.3	5,969.2	5,644.5	45.8	36.9	168.78	-433.9	1,560.2	512.8	472.3	40.52	12.655	
6,000.0	5,544.7	6,059.0	5,724.0	46.7	37.4	172.61	-406.9	1,591.9	519.5	480.2	39.28	13.226	
6,100.0	5,635.3	6,140.1	5,792.6	47.6	37.7	-172.57	-373.5	1,619.3	530.2	491.7	38.45	13.788	
6,200.0	5,725.9	6,217.3	5,854.3	48.3	38.0	-150.93	-334.1	1,643.9	544.4	505.7	38.77	14.043	
6,300.0	5,814.7	6,291.9	5,909.8	49.0	38.2	-132.27	-289.5	1,666.0	561.0	521.0	40.04	14.013	
6,400.0	5,900.2	6,364.3	5,959.2	49.6	38.4	-117.56	-240.5	1,685.6	578.8	537.2	41.62	13.909	
6,500.0	5,980.6	6,435.0	6,002.9	50.1	38.6	-106.35	-187.7	1,703.0	596.9	554.0	42.90	13.912	
6,600.0	6,054.3	6,500.0	6,038.6	50.5	38.7	-97.93	-135.3	1,717.2	614.3	570.9	43.44	14.141	
6,700.0	6,120.0	6,572.6	6,073.0	50.9	38.8	-91.36	-72.9	1,730.8	630.4	587.1	43.32	14.553	
6,800.0	6,176.4	6,639.9	6,099.6	51.1	38.9	-86.48	-11.9	1,741.4	644.6	602.2	42.40	15.202	
6,900.0	6,222.3	6,700.0	6,118.7	51.4	38.9	-82.95	44.5	1,748.9	656.4	615.5	40.98	16.018	
7,000.0	6,256.8	6,772.9	6,135.9	51.5	39.0	-80.36	114.9	1,755.7	665.4	625.8	39.64	16.785	
7,100.0	6,279.3	6,838.8	6,145.7	51.6	39.0	-78.78	180.0	1,759.5	671.4	632.8	38.63	17.381	
7,200.0	6,289.4	6,904.5	6,149.8	51.7	39.1	-78.07	245.5	1,761.0	674.3	635.8	38.48	17.523	
7,300.0	6,290.0	6,996.0	6,150.0	51.7	39.1	-78.02	337.1	1,761.0	674.5	635.3	39.23	17.194	
7,400.0	6,290.0	7,096.0	6,150.0	51.8	39.3	-78.02	437.1	1,760.8	674.5	633.9	40.65	16.592	
7,500.0	6,290.0	7,196.0	6,150.0	51.9	39.5	-78.02	537.1	1,760.7	674.5	632.1	42.37	15.920	
7,600.0	6,290.0	7,296.0	6,150.0	52.1	39.7	-78.02	637.1	1,760.5	674.5	630.2	44.34	15.213	
7,700.0	6,290.0	7,396.0	6,150.0	52.3	40.1	-78.02	737.1	1,760.4	674.5	628.0	46.53	14.496	
7,800.0	6,290.0	7,496.0	6,150.0	52.6	40.5	-78.02	837.1	1,760.2	674.5	625.6	48.92	13.789	
7,900.0	6,290.0	7,596.0	6,150.0	52.9	41.1	-78.02	937.1	1,760.0	674.5	623.1	51.47	13.106	
8,000.0	6,290.0	7,696.0	6,150.0	53.3	41.7	-78.02	1,037.1	1,759.9	674.5	620.4	54.16	12.454	
8,100.0	6,290.0	7,796.0	6,150.0	53.7	42.4	-78.02	1,137.1	1,759.7	674.5	617.6	56.98	11.839	
8,200.0	6,290.0	7,896.0	6,150.0	54.2	43.2	-78.02	1,237.1	1,759.6	674.5	614.6	59.90	11.262	
8,300.0	6,290.0	7,996.0	6,150.0	54.8	44.1	-78.02	1,337.1	1,759.4	674.5	611.6	62.90	10.723	
8,400.0	6,290.0	8,096.0	6,150.0	55.4	45.0	-78.02	1,437.1	1,759.3	674.5	608.5	65.99	10.221	
8,500.0	6,290.0	8,196.0	6,150.0	56.1	46.1	-78.02	1,537.1	1,759.1	674.5	605.4	69.15	9.755	
8,600.0	6,290.0	8,296.0	6,150.0	56.9	47.2	-78.02	1,637.1	1,759.0	674.5	602.2	72.36	9.322	
8,700.0	6,290.0	8,396.0	6,150.0	57.7	48.4	-78.02	1,737.1	1,758.8	674.5	598.9	75.63	8.919	
8,800.0	6,290.0	8,496.0	6,150.0	58.6	49.7	-78.02	1,837.1	1,758.7	674.5	595.6	78.94	8.545	
8,900.0	6,290.0	8,596.0	6,150.0	59.5	51.0	-78.02	1,937.1	1,758.5	674.5	592.3	82.29	8.197	
9,000.0	6,290.0	8,696.0	6,150.0	60.5	52.4	-78.02	2,037.1	1,758.4	674.5	588.9	85.67	7.874	
9,100.0	6,290.0	8,796.0	6,150.0	61.6	53.8	-78.02	2,137.1	1,758.2	674.5	585.5	89.09	7.572	
9,200.0	6,290.0	8,896.0	6,150.0	62.7	55.2	-78.02	2,237.1	1,758.1	674.5	582.0	92.53	7.290	
9,300.0	6,290.0	8,996.0	6,150.0	63.9	56.7	-78.02	2,337.1	1,757.9	674.5	578.6	96.00	7.027	
9,400.0	6,290.0	9,096.0	6,150.0	65.1	58.3	-78.02	2,437.1	1,757.7	674.5	575.1	99.49	6.780	
9,500.0	6,290.0	9,196.0	6,150.0	66.4	59.8	-78.02	2,537.1	1,757.6	674.5	571.6	102.99	6.549	
9,600.0	6,290.0	9,296.0	6,150.0	67.7	61.4	-78.02	2,637.1	1,757.4	674.6	568.0	106.52	6.333	
9,700.0	6,290.0	9,396.0	6,150.0	69.1	63.0	-78.02	2,737.1	1,757.3	674.6	564.5	110.06	6.129	
9,800.0	6,290.0	9,496.0	6,150.0	70.5	64.6	-78.02	2,837.1	1,757.1	674.6	560.9	113.62	5.937	
9,900.0	6,290.0	9,596.0	6,150.0	71.9	66.3	-78.02	2,937.1	1,757.0	674.6	557.4	117.19	5.756	
10,000.0	6,290.0	9,696.0	6,150.0	73.3	67.9	-78.02	3,037.1	1,756.8	674.6	553.8	120.77	5.585	
10,100.0	6,290.0	9,796.0	6,150.0	74.8	69.6	-78.02	3,137.1	1,756.7	674.6	550.2	124.37	5.424	
10,200.0	6,290.0	9,896.0	6,150.0	76.3	71.3	-78.02	3,237.1	1,756.5	674.6	546.6	127.97	5.271	
10,300.0	6,290.0	9,996.0	6,150.0	77.9	73.0	-78.02	3,337.1	1,756.4	674.6	543.0	131.59	5.126	

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

Offset Design											Offset Site Error:		0.0 ft
Survey Program: 0-MWD											Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,400.0	6,290.0	10,096.0	6,150.0	79.4	74.7	-78.02	3,437.1	1,756.2	674.6	539.4	135.21	4.989	
10,500.0	6,290.0	10,196.0	6,150.0	81.0	76.4	-78.02	3,537.1	1,756.1	674.6	535.7	138.84	4.859	
10,600.0	6,290.0	10,296.0	6,150.0	82.6	78.2	-78.02	3,637.1	1,755.9	674.6	532.1	142.47	4.735	
10,700.0	6,290.0	10,396.0	6,150.0	84.2	79.9	-78.02	3,737.1	1,755.7	674.6	528.5	146.12	4.617	
10,800.0	6,290.0	10,496.0	6,150.0	85.9	81.7	-78.02	3,837.1	1,755.6	674.6	524.8	149.77	4.504	
10,900.0	6,290.0	10,596.0	6,150.0	87.5	83.4	-78.02	3,937.1	1,755.4	674.6	521.2	153.42	4.397	
11,000.0	6,290.0	10,696.0	6,150.0	89.2	85.2	-78.02	4,037.1	1,755.3	674.6	517.5	157.08	4.294	
11,100.0	6,290.0	10,796.0	6,150.0	90.8	87.0	-78.02	4,137.1	1,755.1	674.6	513.8	160.75	4.196	
11,200.0	6,290.0	10,896.0	6,150.0	92.5	88.8	-78.02	4,237.1	1,755.0	674.6	510.2	164.42	4.103	
11,300.0	6,290.0	10,996.0	6,150.0	94.2	90.5	-78.02	4,337.1	1,754.8	674.6	506.5	168.09	4.013	
11,400.0	6,290.0	11,096.0	6,150.0	95.9	92.3	-78.02	4,437.1	1,754.7	674.6	502.8	171.77	3.927	
11,500.0	6,290.0	11,196.0	6,150.0	97.6	94.1	-78.02	4,537.1	1,754.5	674.6	499.1	175.46	3.845	
11,600.0	6,290.0	11,296.0	6,150.0	99.3	95.9	-78.02	4,637.1	1,754.4	674.6	495.4	179.14	3.766	
11,700.0	6,290.0	11,396.0	6,150.0	101.1	97.7	-78.02	4,737.1	1,754.2	674.6	491.8	182.83	3.690	
11,800.0	6,290.0	11,496.0	6,150.0	102.8	99.6	-78.02	4,837.1	1,754.1	674.6	488.1	186.53	3.617	
11,900.0	6,290.0	11,596.0	6,150.0	104.6	101.4	-78.02	4,937.1	1,753.9	674.6	484.4	190.22	3.546	
12,000.0	6,290.0	11,696.0	6,150.0	106.3	103.2	-78.02	5,037.1	1,753.8	674.6	480.7	193.92	3.479	
12,100.0	6,290.0	11,796.0	6,150.0	108.1	105.0	-78.02	5,137.1	1,753.6	674.6	477.0	197.62	3.414	
12,200.0	6,290.0	11,896.0	6,150.0	109.9	106.9	-78.02	5,237.1	1,753.4	674.6	473.3	201.33	3.351	
12,300.0	6,290.0	11,996.0	6,150.0	111.6	108.7	-78.02	5,337.1	1,753.3	674.6	469.6	205.03	3.290	
12,400.0	6,290.0	12,096.0	6,150.0	113.4	110.5	-78.02	5,437.1	1,753.1	674.6	465.9	208.74	3.232	
12,500.0	6,290.0	12,196.0	6,150.0	115.2	112.4	-78.02	5,537.1	1,753.0	674.6	462.1	212.45	3.175	
12,600.0	6,290.0	12,296.0	6,150.0	117.0	114.2	-78.02	5,637.1	1,752.8	674.6	458.4	216.16	3.121	
12,700.0	6,290.0	12,396.0	6,150.0	118.8	116.0	-78.02	5,737.1	1,752.7	674.6	454.7	219.88	3.068	
12,800.0	6,290.0	12,496.0	6,150.0	120.6	117.9	-78.02	5,837.1	1,752.5	674.6	451.0	223.60	3.017	
12,900.0	6,290.0	12,596.0	6,150.0	122.4	119.7	-78.02	5,937.1	1,752.4	674.6	447.3	227.31	2.968	
13,000.0	6,290.0	12,696.0	6,150.0	124.2	121.6	-78.02	6,037.1	1,752.2	674.6	443.6	231.03	2.920	
13,100.0	6,290.0	12,796.0	6,150.0	126.0	123.4	-78.02	6,137.1	1,752.1	674.6	439.9	234.76	2.874	
13,200.0	6,290.0	12,896.0	6,150.0	127.8	125.3	-78.02	6,237.1	1,751.9	674.6	436.1	238.48	2.829	
13,300.0	6,290.0	12,996.0	6,150.0	129.6	127.2	-78.02	6,337.1	1,751.8	674.6	432.4	242.20	2.785	
13,400.0	6,290.0	13,096.0	6,150.0	131.4	129.0	-78.02	6,437.1	1,751.6	674.6	428.7	245.93	2.743	
13,500.0	6,290.0	13,196.0	6,150.0	133.2	130.9	-78.02	6,537.1	1,751.4	674.6	425.0	249.66	2.702	
13,600.0	6,290.0	13,296.0	6,150.0	135.1	132.7	-78.02	6,637.1	1,751.3	674.6	421.2	253.39	2.662	
13,700.0	6,290.0	13,396.0	6,150.0	136.9	134.6	-78.02	6,737.1	1,751.1	674.6	417.5	257.11	2.624	
13,800.0	6,290.0	13,496.0	6,150.0	138.7	136.5	-78.02	6,837.1	1,751.0	674.6	413.8	260.85	2.586	
13,900.0	6,290.0	13,596.0	6,150.0	140.6	138.3	-78.02	6,937.1	1,750.8	674.6	410.0	264.58	2.550	
14,000.0	6,290.0	13,696.0	6,150.0	142.4	140.2	-78.02	7,037.1	1,750.7	674.6	406.3	268.31	2.514	
14,100.0	6,290.0	13,796.0	6,150.0	144.2	142.1	-78.02	7,137.1	1,750.5	674.6	402.6	272.04	2.480	
14,200.0	6,290.0	13,896.0	6,150.0	146.1	144.0	-78.02	7,237.1	1,750.4	674.6	398.8	275.78	2.446	
14,251.0	6,290.0	13,947.0	6,150.0	147.0	144.9	-78.02	7,288.0	1,750.3	674.6	396.9	277.68	2.429	
14,290.5	6,290.0	13,976.5	6,150.0	147.7	145.5	-78.02	7,317.6	1,750.2	674.7	395.7	278.97	2.419 SF	

SRC Markham Pad Sec.16-T4N-R68W - SRC Markham R-16-9-CHZ - Wellbore #1 - Plan#1 (3-31-14)												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.0	0.0	0.0	0.0	0.0	0.0	-90.95	-0.7	-44.9	44.9				
100.0	100.0	100.0	100.0	0.1	0.1	-90.95	-0.7	-44.9	44.9	44.7	0.22	199.786	
200.0	200.0	200.0	200.0	0.3	0.3	-90.95	-0.7	-44.9	44.9	44.2	0.67	66.595	
300.0	300.0	300.0	300.0	0.6	0.6	-90.95	-0.7	-44.9	44.9	43.8	1.12	39.957	
400.0	400.0	400.0	400.0	0.8	0.8	-90.95	-0.7	-44.9	44.9	43.3	1.57	28.541 CC, ES	
500.0	500.0	500.0	500.0	1.0	1.0	167.51	-0.7	-44.9	46.6	44.6	2.01	23.183	
600.0	599.8	599.8	599.8	1.2	1.2	168.75	-0.7	-44.9	51.7	49.3	2.44	21.178	
700.0	699.5	699.5	699.5	1.4	1.5	170.33	-0.7	-44.9	60.3	57.4	2.88	20.924	
800.0	798.7	798.7	798.7	1.7	1.7	171.92	-0.7	-44.9	72.3	69.0	3.33	21.755	
900.0	897.5	900.5	900.4	2.0	1.9	173.17	-1.2	-43.2	86.2	82.4	3.75	22.956	
1,000.0	995.6	1,002.8	1,002.6	2.4	2.1	173.98	-2.5	-38.0	100.0	95.8	4.17	23.975	
1,100.0	1,093.1	1,105.6	1,105.0	2.8	2.3	174.50	-4.8	-29.1	113.7	109.1	4.60	24.722	
1,200.0	1,189.6	1,209.0	1,207.6	3.3	2.6	174.83	-8.1	-16.7	127.4	122.4	5.05	25.248	
1,300.0	1,285.3	1,312.9	1,310.2	3.9	2.9	175.03	-12.3	-0.6	141.0	135.5	5.51	25.589	
1,400.0	1,379.8	1,417.3	1,412.6	4.5	3.2	175.12	-17.4	19.2	154.4	148.4	5.99	25.771	
1,500.0	1,473.2	1,522.3	1,514.7	5.2	3.6	175.14	-23.5	42.8	167.7	161.2	6.50	25.813	
1,600.0	1,565.2	1,627.8	1,616.3	6.0	4.1	175.09	-30.6	70.1	180.8	173.8	7.03	25.732	
1,700.0	1,655.9	1,733.9	1,717.4	6.8	4.7	174.99	-38.7	101.1	193.6	185.9	7.62	25.410	
1,800.0	1,746.4	1,840.7	1,818.0	7.7	5.4	174.80	-47.8	136.1	203.3	195.0	8.26	24.622	
1,900.0	1,836.8	1,948.2	1,917.7	8.6	6.1	174.47	-57.8	174.8	209.3	200.4	8.95	23.392	
2,000.0	1,927.3	2,048.7	2,010.2	9.5	6.9	174.10	-67.8	213.0	213.3	203.6	9.65	22.107	
2,100.0	2,017.7	2,148.6	2,102.0	10.4	7.6	173.74	-77.6	251.0	217.2	206.8	10.36	20.961	
2,200.0	2,108.1	2,248.6	2,193.9	11.3	8.4	173.40	-87.5	289.0	221.1	210.0	11.09	19.937	
2,300.0	2,198.6	2,348.5	2,285.8	12.3	9.2	173.06	-97.4	327.0	225.0	213.2	11.83	19.019	
2,400.0	2,289.0	2,448.4	2,377.7	13.2	10.1	172.74	-107.2	365.0	229.0	216.4	12.59	18.192	
2,500.0	2,379.4	2,548.3	2,469.6	14.1	10.9	172.44	-117.1	403.0	232.9	219.6	13.35	17.445	
2,600.0	2,469.9	2,648.2	2,561.5	15.0	11.7	172.14	-127.0	441.0	236.9	222.8	14.13	16.767	
2,700.0	2,560.3	2,748.1	2,653.3	15.9	12.5	171.85	-136.8	478.9	240.9	225.9	14.91	16.150	
2,800.0	2,650.8	2,848.0	2,745.2	16.9	13.3	171.57	-146.7	516.9	244.8	229.1	15.71	15.587	
2,900.0	2,741.2	2,948.0	2,837.1	17.8	14.2	171.30	-156.6	554.9	248.8	232.3	16.51	15.070	
3,000.0	2,831.6	3,047.9	2,929.0	18.7	15.0	171.03	-166.4	592.9	252.8	235.5	17.32	14.596	
3,100.0	2,922.1	3,147.8	3,020.9	19.7	15.9	170.78	-176.3	630.9	256.8	238.6	18.14	14.158	
3,200.0	3,012.5	3,247.7	3,112.8	20.6	16.7	170.53	-186.2	668.9	260.8	241.8	18.96	13.753	
3,300.0	3,102.9	3,347.6	3,204.6	21.5	17.5	170.29	-196.0	706.9	264.7	245.0	19.79	13.378	
3,400.0	3,193.4	3,447.5	3,296.5	22.4	18.4	170.06	-205.9	744.8	268.7	248.1	20.63	13.030	
3,500.0	3,283.8	3,547.4	3,388.4	23.4	19.2	169.84	-215.8	782.8	272.7	251.3	21.47	12.705	
3,600.0	3,374.2	3,647.4	3,480.3	24.3	20.1	169.62	-225.7	820.8	276.8	254.4	22.32	12.402	
3,700.0	3,464.7	3,747.3	3,572.2	25.2	20.9	169.41	-235.5	858.8	280.8	257.6	23.17	12.118	
3,800.0	3,555.1	3,847.2	3,664.1	26.2	21.7	169.20	-245.4	896.8	284.8	260.8	24.03	11.852	
3,900.0	3,645.6	3,947.1	3,755.9	27.1	22.6	169.00	-255.3	934.8	288.8	263.9	24.89	11.603	
4,000.0	3,736.0	4,047.0	3,847.8	28.0	23.4	168.80	-265.1	972.8	292.8	267.1	25.76	11.368	
4,100.0	3,826.4	4,146.9	3,939.7	29.0	24.3	168.61	-275.0	1,010.7	296.8	270.2	26.63	11.147	
4,200.0	3,916.9	4,246.8	4,031.6	29.9	25.1	168.43	-284.9	1,048.7	300.9	273.4	27.51	10.938	
4,300.0	4,007.3	4,346.8	4,123.5	30.8	26.0	168.25	-294.7	1,086.7	304.9	276.5	28.39	10.740	
4,400.0	4,097.7	4,446.7	4,215.4	31.8	26.8	168.07	-304.6	1,124.7	308.9	279.7	29.27	10.553	
4,500.0	4,188.2	4,546.6	4,307.2	32.7	27.7	167.90	-314.5	1,162.7	313.0	282.8	30.16	10.376	
4,600.0	4,278.6	4,646.5	4,399.1	33.6	28.5	167.74	-324.3	1,200.7	317.0	286.0	31.06	10.208	
4,700.0	4,369.1	4,746.4	4,491.0	34.6	29.4	167.58	-334.2	1,238.6	321.1	289.1	31.95	10.048	
4,800.0	4,459.5	4,846.3	4,582.9	35.5	30.2	167.42	-344.1	1,276.6	325.1	292.3	32.85	9.896	
4,900.0	4,549.9	4,946.2	4,674.8	36.4	31.0	167.26	-353.9	1,314.6	329.2	295.4	33.75	9.751	
5,000.0	4,640.4	5,046.2	4,766.7	37.4	31.9	167.11	-363.8	1,352.6	333.2	298.5	34.66	9.613	
5,100.0	4,730.8	5,146.1	4,858.5	38.3	32.7	166.97	-373.7	1,390.6	337.3	301.7	35.57	9.481	

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

Offset Design												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,200.0	4,821.2	5,246.0	4,950.4	39.2	33.6	166.82	-383.6	1,428.6	341.3	304.8	36.48	9.355	
5,300.0	4,911.7	5,345.9	5,042.3	40.2	34.4	166.68	-393.4	1,466.6	345.4	308.0	37.40	9.235	
5,400.0	5,002.1	5,445.8	5,134.2	41.1	35.3	166.55	-403.3	1,504.5	349.4	311.1	38.32	9.120	
5,500.0	5,092.6	5,545.7	5,226.1	42.0	36.1	166.41	-413.2	1,542.5	353.5	314.3	39.24	9.009	
5,600.0	5,183.0	5,645.6	5,318.0	43.0	37.0	166.28	-423.0	1,580.5	357.6	317.4	40.16	8.903	
5,700.0	5,273.4	5,745.6	5,409.8	43.9	37.8	166.15	-432.9	1,618.5	361.6	320.5	41.09	8.801	
5,800.0	5,363.9	5,845.5	5,501.7	44.8	38.7	166.03	-442.8	1,656.5	365.7	323.7	42.02	8.703	
5,900.0	5,454.3	5,946.3	5,594.5	45.8	39.5	166.04	-451.9	1,694.8	369.7	326.9	42.85	8.627	
6,000.0	5,544.7	6,047.4	5,687.9	46.7	40.2	167.76	-449.8	1,733.4	373.4	330.8	42.52	8.781	
6,100.0	5,635.3	6,144.3	5,776.3	47.6	40.8	-178.60	-434.5	1,769.9	377.6	336.4	41.26	9.153	
6,200.0	5,725.9	6,238.2	5,859.3	48.3	41.3	-158.13	-407.5	1,804.2	383.2	342.8	40.41	9.482	
6,300.0	5,814.7	6,329.5	5,936.3	49.0	41.7	-140.52	-370.2	1,836.0	389.9	349.6	40.29	9.677	
6,400.0	5,900.2	6,418.7	6,006.7	49.6	42.1	-126.72	-323.8	1,865.0	397.2	356.5	40.73	9.752	
6,500.0	5,980.6	6,506.0	6,069.9	50.1	42.3	-116.26	-269.6	1,891.0	404.8	363.4	41.45	9.767	
6,600.0	6,054.3	6,591.8	6,125.6	50.5	42.6	-108.36	-208.7	1,913.9	412.4	370.2	42.15	9.783	
6,700.0	6,120.0	6,676.2	6,173.5	50.9	42.7	-102.38	-142.1	1,933.6	419.5	376.9	42.65	9.836	
6,800.0	6,176.4	6,759.5	6,213.3	51.1	42.9	-97.86	-70.8	1,950.0	425.9	383.0	42.88	9.932	
6,900.0	6,222.3	6,841.9	6,245.0	51.4	43.0	-94.53	4.2	1,962.9	431.3	388.4	42.93	10.047	
7,000.0	6,256.8	6,923.8	6,268.3	51.5	43.1	-92.19	82.0	1,972.4	435.5	392.5	42.96	10.137	
7,100.0	6,279.3	7,005.1	6,283.2	51.6	43.1	-90.71	161.7	1,978.5	438.3	395.1	43.18	10.150	
7,200.0	6,289.4	7,086.2	6,289.7	51.7	43.2	-90.05	242.4	1,981.0	439.7	395.9	43.78	10.043	
7,300.0	6,290.0	7,181.2	6,290.0	51.7	43.2	-90.00	337.4	1,981.0	439.8	395.0	44.83	9.811	
7,400.0	6,290.0	7,281.2	6,290.0	51.8	43.3	-90.00	437.4	1,980.8	439.8	393.5	46.30	9.499	
7,500.0	6,290.0	7,381.2	6,290.0	51.9	43.5	-90.00	537.4	1,980.7	439.8	391.8	48.03	9.156	
7,600.0	6,290.0	7,481.2	6,290.0	52.1	43.7	-90.00	637.4	1,980.5	439.8	389.8	50.00	8.796	
7,700.0	6,290.0	7,581.2	6,290.0	52.3	44.0	-90.00	737.4	1,980.4	439.8	387.6	52.18	8.429	
7,800.0	6,290.0	7,681.2	6,290.0	52.6	44.4	-90.00	837.4	1,980.2	439.8	385.3	54.54	8.065	
7,900.0	6,290.0	7,781.2	6,290.0	52.9	44.9	-90.00	937.4	1,980.1	439.8	382.8	57.06	7.708	
8,000.0	6,290.0	7,881.2	6,290.0	53.3	45.4	-90.00	1,037.4	1,979.9	439.8	380.1	59.72	7.365	
8,100.0	6,290.0	7,981.2	6,290.0	53.7	46.0	-90.00	1,137.4	1,979.7	439.8	377.3	62.51	7.037	
8,200.0	6,290.0	8,081.2	6,290.0	54.2	46.7	-90.00	1,237.4	1,979.6	439.8	374.4	65.40	6.726	
8,300.0	6,290.0	8,181.2	6,290.0	54.8	47.4	-90.00	1,337.4	1,979.4	439.8	371.5	68.38	6.432	
8,400.0	6,290.0	8,281.2	6,290.0	55.4	48.3	-90.00	1,437.4	1,979.3	439.8	368.4	71.45	6.156	
8,500.0	6,290.0	8,381.2	6,290.0	56.1	49.2	-90.00	1,537.4	1,979.1	439.9	365.3	74.59	5.897	
8,600.0	6,290.0	8,481.2	6,290.0	56.9	50.2	-90.00	1,637.4	1,979.0	439.9	362.1	77.79	5.654	
8,700.0	6,290.0	8,581.2	6,290.0	57.7	51.3	-90.00	1,737.4	1,978.8	439.9	358.8	81.05	5.427	
8,800.0	6,290.0	8,681.2	6,290.0	58.6	52.4	-90.00	1,837.4	1,978.6	439.9	355.5	84.36	5.214	
8,900.0	6,290.0	8,781.2	6,290.0	59.5	53.6	-90.00	1,937.4	1,978.5	439.9	352.2	87.71	5.015	
9,000.0	6,290.0	8,881.2	6,290.0	60.5	54.9	-90.00	2,037.4	1,978.3	439.9	348.8	91.09	4.829	
9,100.0	6,290.0	8,981.2	6,290.0	61.6	56.2	-90.00	2,137.4	1,978.2	439.9	345.4	94.52	4.654	
9,200.0	6,290.0	9,081.2	6,290.0	62.7	57.5	-90.00	2,237.4	1,978.0	439.9	341.9	97.97	4.490	
9,300.0	6,290.0	9,181.2	6,290.0	63.9	58.9	-90.00	2,337.4	1,977.9	439.9	338.4	101.45	4.336	
9,400.0	6,290.0	9,281.2	6,290.0	65.1	60.4	-90.00	2,437.4	1,977.7	439.9	334.9	104.96	4.191	
9,500.0	6,290.0	9,381.2	6,290.0	66.4	61.8	-90.00	2,537.4	1,977.5	439.9	331.4	108.49	4.055	
9,600.0	6,290.0	9,481.2	6,290.0	67.7	63.3	-90.00	2,637.4	1,977.4	439.9	327.9	112.04	3.926	
9,700.0	6,290.0	9,581.2	6,290.0	69.1	64.9	-90.00	2,737.4	1,977.2	439.9	324.3	115.61	3.805	
9,800.0	6,290.0	9,681.2	6,290.0	70.5	66.4	-90.00	2,837.4	1,977.1	439.9	320.7	119.20	3.691	
9,900.0	6,290.0	9,781.2	6,290.0	71.9	68.0	-90.00	2,937.4	1,976.9	439.9	317.1	122.80	3.582	
10,000.0	6,290.0	9,881.2	6,290.0	73.3	69.6	-90.00	3,037.4	1,976.8	439.9	313.5	126.41	3.480	
10,100.0	6,290.0	9,981.2	6,290.0	74.8	71.2	-90.00	3,137.4	1,976.6	439.9	309.9	130.04	3.383	
10,200.0	6,290.0	10,081.2	6,290.0	76.3	72.9	-90.00	3,237.4	1,976.4	439.9	306.3	133.68	3.291	
10,300.0	6,290.0	10,181.2	6,290.0	77.9	74.5	-90.00	3,337.4	1,976.3	439.9	302.6	137.33	3.203	

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

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

Offset Design SRC Markham Pad Sec.16-T4N-R68W - SRC Markham R-16-9-CHZ - Wellbore #1 - Plan#1 (3-31-14)												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
10,400.0	6,290.0	10,281.2	6,290.0	79.4	76.2	-90.00	3,437.4	1,976.1	440.0	299.0	141.00	3.120	
10,500.0	6,290.0	10,381.2	6,290.0	81.0	77.9	-90.00	3,537.4	1,976.0	440.0	295.3	144.67	3.041	
10,600.0	6,290.0	10,481.2	6,290.0	82.6	79.6	-90.00	3,637.4	1,975.8	440.0	291.6	148.35	2.966	
10,700.0	6,290.0	10,581.2	6,290.0	84.2	81.3	-90.00	3,737.4	1,975.7	440.0	287.9	152.03	2.894	
10,800.0	6,290.0	10,681.2	6,290.0	85.9	83.0	-90.00	3,837.4	1,975.5	440.0	284.2	155.73	2.825	
10,900.0	6,290.0	10,781.2	6,290.0	87.5	84.8	-90.00	3,937.4	1,975.3	440.0	280.5	159.43	2.760	
11,000.0	6,290.0	10,881.2	6,290.0	89.2	86.5	-90.00	4,037.4	1,975.2	440.0	276.8	163.14	2.697	
11,100.0	6,290.0	10,981.2	6,290.0	90.8	88.2	-90.00	4,137.4	1,975.0	440.0	273.1	166.85	2.637	
11,200.0	6,290.0	11,081.2	6,290.0	92.5	90.0	-90.00	4,237.4	1,974.9	440.0	269.4	170.57	2.580	
11,300.0	6,290.0	11,181.2	6,290.0	94.2	91.8	-90.00	4,337.4	1,974.7	440.0	265.7	174.30	2.524	
11,400.0	6,290.0	11,281.2	6,290.0	95.9	93.5	-90.00	4,437.4	1,974.6	440.0	262.0	178.03	2.472	
11,500.0	6,290.0	11,381.2	6,290.0	97.6	95.3	-90.00	4,537.4	1,974.4	440.0	258.2	181.76	2.421	
11,600.0	6,290.0	11,481.2	6,290.0	99.3	97.1	-90.00	4,637.4	1,974.2	440.0	254.5	185.50	2.372	
11,700.0	6,290.0	11,581.2	6,290.0	101.1	98.9	-90.00	4,737.4	1,974.1	440.0	250.8	189.24	2.325	
11,800.0	6,290.0	11,681.2	6,290.0	102.8	100.7	-90.00	4,837.4	1,973.9	440.0	247.0	192.99	2.280	
11,900.0	6,290.0	11,781.2	6,290.0	104.6	102.5	-90.00	4,937.4	1,973.8	440.0	243.3	196.74	2.237	
12,000.0	6,290.0	11,881.2	6,290.0	106.3	104.3	-90.00	5,037.4	1,973.6	440.0	239.5	200.49	2.195	
12,100.0	6,290.0	11,981.2	6,290.0	108.1	106.1	-90.00	5,137.4	1,973.5	440.0	235.8	204.25	2.154	
12,200.0	6,290.0	12,081.2	6,290.0	109.9	107.9	-90.00	5,237.4	1,973.3	440.0	232.0	208.01	2.115	
12,300.0	6,290.0	12,181.2	6,290.0	111.6	109.7	-90.00	5,337.4	1,973.1	440.0	228.3	211.78	2.078	
12,400.0	6,290.0	12,281.2	6,290.0	113.4	111.5	-90.00	5,437.4	1,973.0	440.1	224.5	215.54	2.042	
12,500.0	6,290.0	12,381.2	6,290.0	115.2	113.3	-90.00	5,537.4	1,972.8	440.1	220.7	219.31	2.007	
12,600.0	6,290.0	12,481.2	6,290.0	117.0	115.2	-90.00	5,637.4	1,972.7	440.1	217.0	223.08	1.973	
12,700.0	6,290.0	12,581.2	6,290.0	118.8	117.0	-90.00	5,737.4	1,972.5	440.1	213.2	226.85	1.940	
12,800.0	6,290.0	12,681.2	6,290.0	120.6	118.8	-90.00	5,837.4	1,972.4	440.1	209.4	230.63	1.908	
12,900.0	6,290.0	12,781.2	6,290.0	122.4	120.7	-90.00	5,937.4	1,972.2	440.1	205.7	234.41	1.877	
13,000.0	6,290.0	12,881.2	6,290.0	124.2	122.5	-90.00	6,037.4	1,972.0	440.1	201.9	238.19	1.848	
13,100.0	6,290.0	12,981.2	6,290.0	126.0	124.3	-90.00	6,137.4	1,971.9	440.1	198.1	241.97	1.819	
13,200.0	6,290.0	13,081.2	6,290.0	127.8	126.2	-90.00	6,237.4	1,971.7	440.1	194.3	245.75	1.791	
13,300.0	6,290.0	13,181.2	6,290.0	129.6	128.0	-90.00	6,337.4	1,971.6	440.1	190.6	249.54	1.764	
13,400.0	6,290.0	13,281.2	6,290.0	131.4	129.9	-90.00	6,437.4	1,971.4	440.1	186.8	253.33	1.737	
13,500.0	6,290.0	13,381.2	6,290.0	133.2	131.7	-90.00	6,537.4	1,971.3	440.1	183.0	257.11	1.712	
13,600.0	6,290.0	13,481.2	6,290.0	135.1	133.6	-90.00	6,637.4	1,971.1	440.1	179.2	260.90	1.687	
13,700.0	6,290.0	13,581.2	6,290.0	136.9	135.4	-90.00	6,737.4	1,970.9	440.1	175.4	264.70	1.663	
13,800.0	6,290.0	13,681.2	6,290.0	138.7	137.3	-90.00	6,837.4	1,970.8	440.1	171.6	268.49	1.639	
13,900.0	6,290.0	13,781.2	6,290.0	140.6	139.1	-90.00	6,937.4	1,970.6	440.1	167.8	272.28	1.616	
14,000.0	6,290.0	13,881.2	6,290.0	142.4	141.0	-90.00	7,037.4	1,970.5	440.1	164.1	276.08	1.594	
14,100.0	6,290.0	13,981.2	6,290.0	144.2	142.9	-90.00	7,137.4	1,970.3	440.1	160.3	279.88	1.573	
14,200.0	6,290.0	14,081.2	6,290.0	146.1	144.7	-90.00	7,237.4	1,970.2	440.1	156.5	283.67	1.552	
14,270.4	6,290.0	14,152.9	6,290.0	147.4	146.1	-90.00	7,309.1	1,970.2	440.0	153.6	286.37	1.536	
14,290.5	6,290.0	14,165.0	6,290.0	147.7	146.3	-90.00	7,321.2	1,970.2	440.0	153.0	286.98	1.533 SF	

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

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-90.92	-0.4	-22.6	22.6					
100.0	100.0	100.0	100.0	0.1	0.1	-90.92	-0.4	-22.6	22.6	22.4	0.22	100.513		
200.0	200.0	200.0	200.0	0.3	0.3	-90.92	-0.4	-22.6	22.6	21.9	0.67	33.504		
300.0	300.0	300.0	300.0	0.6	0.6	-90.92	-0.4	-22.6	22.6	21.5	1.12	20.103		
400.0	400.0	400.0	400.0	0.8	0.8	-90.92	-0.4	-22.6	22.6	21.0	1.57	14.359 CC		
500.0	500.0	500.0	500.0	1.0	1.0	167.97	-0.4	-22.6	24.3	22.3	2.01	12.085		
600.0	599.8	599.8	599.8	1.2	1.2	170.08	-0.4	-22.6	29.4	27.0	2.44	12.050		
700.0	699.5	700.7	700.7	1.4	1.4	171.91	-0.8	-20.9	36.3	33.5	2.86	12.688		
800.0	798.7	801.9	801.7	1.7	1.7	173.06	-2.0	-15.7	43.2	39.9	3.27	13.197		
900.0	897.5	903.3	902.7	2.0	1.9	173.80	-4.0	-7.0	50.1	46.4	3.70	13.536		
1,000.0	995.6	1,004.9	1,003.6	2.4	2.1	174.27	-6.9	5.2	56.9	52.8	4.14	13.750		
1,100.0	1,093.1	1,106.8	1,104.2	2.8	2.4	174.57	-10.6	20.9	63.7	59.1	4.59	13.864		
1,200.0	1,189.6	1,209.0	1,204.4	3.3	2.8	174.75	-15.1	40.2	70.4	65.3	5.07	13.896		
1,300.0	1,285.3	1,311.4	1,304.1	3.9	3.2	174.83	-20.5	62.9	77.0	71.5	5.56	13.860		
1,400.0	1,379.8	1,414.0	1,403.1	4.5	3.7	174.85	-26.7	89.2	83.6	77.5	6.07	13.763		
1,500.0	1,473.2	1,516.9	1,501.3	5.2	4.3	174.80	-33.7	119.0	90.1	83.5	6.62	13.614		
1,600.0	1,565.2	1,620.0	1,598.6	6.0	4.9	174.71	-41.5	152.3	96.5	89.3	7.18	13.425		
1,700.0	1,655.9	1,723.4	1,694.9	6.8	5.6	174.58	-50.1	189.1	102.5	94.7	7.80	13.133		
1,800.0	1,746.4	1,827.1	1,789.9	7.7	6.5	174.27	-59.6	229.4	105.6	97.1	8.50	12.426		
1,900.0	1,836.8	1,927.8	1,881.3	8.6	7.3	173.82	-69.3	270.6	106.4	97.1	9.22	11.536		
2,000.0	1,927.3	2,027.8	1,972.0	9.5	8.2	173.38	-79.0	311.7	107.0	97.1	9.96	10.750		
2,100.0	2,017.7	2,127.8	2,062.6	10.4	9.0	172.94	-88.6	352.7	107.7	97.0	10.71	10.056		
2,200.0	2,108.1	2,227.8	2,153.3	11.3	9.9	172.51	-98.2	393.7	108.4	96.9	11.49	9.441		
2,300.0	2,198.6	2,327.8	2,244.0	12.3	10.8	172.09	-107.9	434.7	109.1	96.9	12.27	8.893		
2,400.0	2,289.0	2,427.8	2,334.7	13.2	11.7	171.67	-117.5	475.8	109.8	96.8	13.07	8.402		
2,500.0	2,379.4	2,527.8	2,425.4	14.1	12.6	171.26	-127.2	516.8	110.6	96.7	13.89	7.960		
2,600.0	2,469.9	2,627.8	2,516.0	15.0	13.5	170.85	-136.8	557.8	111.3	96.6	14.72	7.560		
2,700.0	2,560.3	2,727.8	2,606.7	15.9	14.4	170.44	-146.5	598.9	112.0	96.4	15.56	7.198		
2,800.0	2,650.8	2,827.8	2,697.4	16.9	15.3	170.04	-156.1	639.9	112.7	96.3	16.42	6.867		
2,900.0	2,741.2	2,927.8	2,788.1	17.8	16.2	169.65	-165.8	680.9	113.5	96.2	17.28	6.565		
3,000.0	2,831.6	3,027.8	2,878.7	18.7	17.1	169.26	-175.4	721.9	114.2	96.0	18.16	6.288		
3,100.0	2,922.1	3,127.8	2,969.4	19.7	18.1	168.88	-185.1	763.0	115.0	95.9	19.06	6.032		
3,200.0	3,012.5	3,227.8	3,060.1	20.6	19.0	168.50	-194.7	804.0	115.7	95.7	19.96	5.797		
3,300.0	3,102.9	3,327.7	3,150.8	21.5	19.9	168.13	-204.4	845.0	116.5	95.6	20.88	5.578		
3,400.0	3,193.4	3,427.7	3,241.5	22.4	20.8	167.76	-214.0	886.1	117.2	95.4	21.81	5.376		
3,500.0	3,283.8	3,527.7	3,332.1	23.4	21.7	167.40	-223.7	927.1	118.0	95.2	22.75	5.187		
3,600.0	3,374.2	3,627.7	3,422.8	24.3	22.6	167.04	-233.3	968.1	118.8	95.1	23.70	5.011		
3,700.0	3,464.7	3,727.7	3,513.5	25.2	23.5	166.68	-242.9	1,009.2	119.5	94.9	24.66	4.847		
3,800.0	3,555.1	3,827.7	3,604.2	26.2	24.5	166.33	-252.6	1,050.2	120.3	94.7	25.63	4.693		
3,900.0	3,645.6	3,927.7	3,694.8	27.1	25.4	165.99	-262.2	1,091.2	121.1	94.5	26.62	4.549		
4,000.0	3,736.0	4,027.7	3,785.5	28.0	26.3	165.65	-271.9	1,132.2	121.9	94.3	27.62	4.414		
4,100.0	3,826.4	4,127.7	3,876.2	29.0	27.2	165.31	-281.5	1,173.3	122.7	94.1	28.62	4.286		
4,200.0	3,916.9	4,227.7	3,966.9	29.9	28.1	164.98	-291.2	1,214.3	123.5	93.8	29.64	4.166		
4,300.0	4,007.3	4,327.7	4,057.5	30.8	29.0	164.65	-300.8	1,255.3	124.3	93.6	30.67	4.052		
4,400.0	4,097.7	4,427.7	4,148.2	31.8	30.0	164.33	-310.5	1,296.4	125.1	93.4	31.71	3.945		
4,500.0	4,188.2	4,527.7	4,238.9	32.7	30.9	164.01	-320.1	1,337.4	125.9	93.1	32.76	3.843		
4,600.0	4,278.6	4,627.7	4,329.6	33.6	31.8	163.69	-329.8	1,378.4	126.7	92.9	33.82	3.747		
4,700.0	4,369.1	4,727.7	4,420.3	34.6	32.7	163.38	-339.4	1,419.4	127.5	92.6	34.89	3.655		
4,800.0	4,459.5	4,827.7	4,510.9	35.5	33.6	163.07	-349.1	1,460.5	128.3	92.4	35.97	3.568		
4,900.0	4,549.9	4,927.7	4,601.6	36.4	34.6	162.77	-358.7	1,501.5	129.2	92.1	37.06	3.486		
5,000.0	4,640.4	5,027.7	4,692.3	37.4	35.5	162.47	-368.4	1,542.5	130.0	91.8	38.16	3.407		
5,100.0	4,730.8	5,127.6	4,783.0	38.3	36.4	162.18	-378.0	1,583.6	130.8	91.6	39.26	3.332		

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

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

Offset Design		SRC Markham Pad Sec.16-T4N-R68W - SRC Markham R-16-9NHZ - Wellbore #1 - Plan #1 (3-31-14)										Offset Site Error:		0.0 ft
Survey Program: 0-MWD												Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth Vertical Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,200.0	4,821.2	5,227.6	4,873.6	39.2	37.3	161.88	-387.6	1,624.6	131.7	91.3	40.38	3.260		
5,300.0	4,911.7	5,327.6	4,964.3	40.2	38.2	161.59	-397.3	1,665.6	132.5	91.0	41.51	3.192		
5,400.0	5,002.1	5,427.6	5,055.0	41.1	39.2	161.31	-406.9	1,706.6	133.3	90.7	42.64	3.127		
5,500.0	5,092.6	5,527.6	5,145.7	42.0	40.1	161.03	-416.6	1,747.7	134.2	90.4	43.79	3.064		
5,600.0	5,183.0	5,627.6	5,236.4	43.0	41.0	160.75	-426.2	1,788.7	135.0	90.1	44.94	3.005		
5,700.0	5,273.4	5,727.6	5,327.0	43.9	41.9	160.48	-435.9	1,829.7	135.9	89.8	46.10	2.947		
5,800.0	5,363.9	5,827.6	5,417.7	44.8	42.8	160.21	-445.5	1,870.8	136.7	89.5	47.27	2.892		
5,900.0	5,454.3	5,929.8	5,510.6	45.8	43.7	161.97	-450.5	1,912.8	136.9	90.1	46.78	2.927		
5,974.4	5,521.6	6,004.4	5,578.4	46.5	44.2	167.01	-445.0	1,943.4	136.5	92.7	43.78	3.118		
6,000.0	5,544.7	6,029.3	5,600.9	46.7	44.4	169.42	-441.5	1,953.6	136.6	94.1	42.52	3.213		
6,100.0	5,635.3	6,123.2	5,684.2	47.6	45.0	-169.16	-420.5	1,991.3	140.5	100.7	39.84	3.528		
6,200.0	5,725.9	6,213.4	5,761.3	48.3	45.5	-141.83	-389.3	2,026.1	149.9	106.7	43.28	3.464		
6,300.0	5,814.7	6,300.0	5,831.3	49.0	45.9	-118.96	-349.5	2,057.7	163.1	114.1	48.92	3.333		
6,400.0	5,900.2	6,386.0	5,896.1	49.6	46.3	-101.23	-301.2	2,086.9	178.2	124.8	53.39	3.337		
6,500.0	5,980.6	6,469.0	5,953.2	50.1	46.6	-88.12	-246.7	2,112.7	193.9	138.6	55.31	3.505		
6,600.0	6,054.3	6,550.0	6,003.0	50.5	46.8	-78.48	-187.0	2,135.1	209.1	154.5	54.66	3.826		
6,700.0	6,120.0	6,630.5	6,046.1	50.9	47.0	-71.35	-121.8	2,154.5	223.1	171.3	51.86	4.303		
6,800.0	6,176.4	6,709.4	6,081.6	51.1	47.1	-66.15	-53.2	2,170.4	235.4	188.0	47.37	4.970		
6,900.0	6,222.3	6,787.5	6,109.8	51.4	47.3	-62.41	18.4	2,183.1	245.5	203.7	41.86	5.866		
7,000.0	6,256.8	6,864.9	6,130.5	51.5	47.4	-59.84	92.4	2,192.3	253.2	217.1	36.14	7.006		
7,100.0	6,279.3	6,941.9	6,143.8	51.6	47.4	-58.27	167.9	2,198.2	258.3	226.9	31.37	8.234		
7,200.0	6,289.4	7,018.6	6,149.7	51.7	47.5	-57.58	244.4	2,200.8	260.6	231.7	28.97	8.996		
7,300.0	6,290.0	7,112.0	6,150.0	51.7	47.5	-57.53	337.8	2,200.8	260.8	231.4	29.38	8.876		
7,400.0	6,290.0	7,212.0	6,150.0	51.8	47.6	-57.53	437.8	2,200.6	260.8	230.2	30.62	8.517		
7,500.0	6,290.0	7,312.0	6,150.0	51.9	47.7	-57.53	537.8	2,200.5	260.8	228.6	32.16	8.109		
7,600.0	6,290.0	7,412.0	6,150.0	52.1	47.9	-57.53	637.8	2,200.3	260.8	226.8	33.96	7.679		
7,700.0	6,290.0	7,512.0	6,150.0	52.3	48.2	-57.53	737.8	2,200.2	260.8	224.8	35.98	7.248		
7,800.0	6,290.0	7,612.0	6,150.0	52.6	48.5	-57.53	837.8	2,200.0	260.8	222.6	38.18	6.830		
7,900.0	6,290.0	7,712.0	6,150.0	52.9	48.9	-57.53	937.8	2,199.9	260.8	220.3	40.54	6.433		
8,000.0	6,290.0	7,812.0	6,150.0	53.3	49.3	-57.53	1,037.8	2,199.7	260.8	217.8	43.03	6.061		
8,100.0	6,290.0	7,912.0	6,150.0	53.7	49.8	-57.53	1,137.8	2,199.6	260.8	215.2	45.62	5.716		
8,200.0	6,290.0	8,012.0	6,150.0	54.2	50.4	-57.53	1,237.8	2,199.4	260.8	212.5	48.31	5.398		
8,300.0	6,290.0	8,112.0	6,150.0	54.8	51.0	-57.53	1,337.8	2,199.2	260.8	209.7	51.07	5.106		
8,400.0	6,290.0	8,212.0	6,150.0	55.4	51.7	-57.53	1,437.8	2,199.1	260.8	206.9	53.90	4.839		
8,500.0	6,290.0	8,312.0	6,150.0	56.1	52.5	-57.53	1,537.8	2,198.9	260.8	204.0	56.78	4.593		
8,600.0	6,290.0	8,412.0	6,150.0	56.9	53.4	-57.53	1,637.8	2,198.8	260.8	201.1	59.71	4.368		
8,700.0	6,290.0	8,512.0	6,150.0	57.7	54.3	-57.53	1,737.8	2,198.6	260.8	198.1	62.68	4.161		
8,800.0	6,290.0	8,612.0	6,150.0	58.6	55.3	-57.53	1,837.8	2,198.5	260.8	195.1	65.68	3.970		
8,900.0	6,290.0	8,712.0	6,150.0	59.5	56.4	-57.53	1,937.8	2,198.3	260.8	192.1	68.72	3.795		
9,000.0	6,290.0	8,812.0	6,150.0	60.5	57.5	-57.53	2,037.8	2,198.2	260.8	189.0	71.78	3.633		
9,100.0	6,290.0	8,912.0	6,150.0	61.6	58.7	-57.53	2,137.8	2,198.0	260.8	185.9	74.86	3.483		
9,200.0	6,290.0	9,012.0	6,150.0	62.7	59.9	-57.53	2,237.8	2,197.9	260.8	182.8	77.97	3.345		
9,300.0	6,290.0	9,112.0	6,150.0	63.9	61.2	-57.53	2,337.8	2,197.7	260.8	179.7	81.09	3.216		
9,400.0	6,290.0	9,212.0	6,150.0	65.1	62.5	-57.53	2,437.8	2,197.6	260.8	176.5	84.23	3.096		
9,500.0	6,290.0	9,312.0	6,150.0	66.4	63.9	-57.53	2,537.8	2,197.4	260.8	173.4	87.39	2.984		
9,600.0	6,290.0	9,412.0	6,150.0	67.7	65.3	-57.53	2,637.8	2,197.3	260.8	170.2	90.55	2.880		
9,700.0	6,290.0	9,512.0	6,150.0	69.1	66.8	-57.53	2,737.8	2,197.1	260.8	167.0	93.73	2.782		
9,800.0	6,290.0	9,612.0	6,150.0	70.5	68.2	-57.53	2,837.8	2,197.0	260.8	163.9	96.92	2.691		
9,900.0	6,290.0	9,712.0	6,150.0	71.9	69.7	-57.53	2,937.8	2,196.8	260.8	160.7	100.12	2.605		
10,000.0	6,290.0	9,812.0	6,150.0	73.3	71.3	-57.53	3,037.8	2,196.7	260.8	157.5	103.33	2.524		
10,100.0	6,290.0	9,912.0	6,150.0	74.8	72.8	-57.53	3,137.8	2,196.5	260.8	154.2	106.54	2.448		
10,200.0	6,290.0	10,012.0	6,150.0	76.3	74.4	-57.53	3,237.8	2,196.4	260.8	151.0	109.76	2.376		

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

Offset Design SRC Markham Pad Sec.16-T4N-R68W - SRC Markham R-16-9NHZ - Wellbore #1 - Plan #1 (3-31-14)													Offset Site Error: 0.0 ft	
Survey Program: 0-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
10,300.0	6,290.0	10,112.0	6,150.0	77.9	76.0	-57.53	3,337.8	2,196.2	260.8	147.8	112.99	2.308		
10,400.0	6,290.0	10,212.0	6,150.0	79.4	77.6	-57.53	3,437.8	2,196.1	260.8	144.6	116.22	2.244		
10,500.0	6,290.0	10,312.0	6,150.0	81.0	79.3	-57.53	3,537.8	2,195.9	260.8	141.3	119.46	2.183		
10,600.0	6,290.0	10,412.0	6,150.0	82.6	80.9	-57.53	3,637.8	2,195.8	260.8	138.1	122.71	2.125		
10,700.0	6,290.0	10,512.0	6,150.0	84.2	82.6	-57.53	3,737.8	2,195.6	260.8	134.8	125.96	2.070		
10,800.0	6,290.0	10,612.0	6,150.0	85.9	84.3	-57.53	3,837.8	2,195.5	260.8	131.6	129.21	2.018		
10,900.0	6,290.0	10,712.0	6,150.0	87.5	85.9	-57.53	3,937.8	2,195.3	260.8	128.3	132.47	1.969		
11,000.0	6,290.0	10,812.0	6,150.0	89.2	87.6	-57.53	4,037.8	2,195.2	260.8	125.0	135.73	1.921		
11,100.0	6,290.0	10,912.0	6,150.0	90.8	89.4	-57.53	4,137.8	2,195.0	260.8	121.8	138.99	1.876		
11,200.0	6,290.0	11,012.0	6,150.0	92.5	91.1	-57.53	4,237.8	2,194.9	260.8	118.5	142.26	1.833		
11,300.0	6,290.0	11,112.0	6,150.0	94.2	92.8	-57.53	4,337.8	2,194.7	260.8	115.2	145.53	1.792		
11,400.0	6,290.0	11,212.0	6,150.0	95.9	94.6	-57.53	4,437.8	2,194.6	260.8	112.0	148.81	1.752		
11,500.0	6,290.0	11,312.0	6,150.0	97.6	96.3	-57.53	4,537.8	2,194.4	260.8	108.7	152.08	1.715		
11,600.0	6,290.0	11,412.0	6,150.0	99.3	98.1	-57.53	4,637.8	2,194.3	260.8	105.4	155.36	1.678		
11,700.0	6,290.0	11,512.0	6,150.0	101.1	99.8	-57.53	4,737.8	2,194.1	260.8	102.1	158.64	1.644		
11,800.0	6,290.0	11,612.0	6,150.0	102.8	101.6	-57.53	4,837.8	2,194.0	260.8	98.8	161.92	1.610		
11,900.0	6,290.0	11,712.0	6,150.0	104.6	103.4	-57.53	4,937.8	2,193.8	260.8	95.6	165.21	1.578		
12,000.0	6,290.0	11,812.0	6,150.0	106.3	105.1	-57.53	5,037.8	2,193.7	260.8	92.3	168.50	1.548		
12,100.0	6,290.0	11,912.0	6,150.0	108.1	106.9	-57.53	5,137.8	2,193.5	260.8	89.0	171.79	1.518		
12,200.0	6,290.0	12,012.0	6,150.0	109.9	108.7	-57.53	5,237.8	2,193.4	260.8	85.7	175.08	1.489	Level 3	
12,300.0	6,290.0	12,112.0	6,150.0	111.6	110.5	-57.53	5,337.8	2,193.2	260.8	82.4	178.37	1.462	Level 3	
12,400.0	6,290.0	12,212.0	6,150.0	113.4	112.3	-57.53	5,437.8	2,193.1	260.8	79.1	181.66	1.435	Level 3	
12,500.0	6,290.0	12,312.0	6,150.0	115.2	114.1	-57.53	5,537.8	2,192.9	260.8	75.8	184.96	1.410	Level 3	
12,600.0	6,290.0	12,412.0	6,150.0	117.0	115.9	-57.53	5,637.8	2,192.7	260.8	72.5	188.25	1.385	Level 3	
12,700.0	6,290.0	12,512.0	6,150.0	118.8	117.7	-57.53	5,737.8	2,192.6	260.8	69.2	191.55	1.361	Level 3	
12,800.0	6,290.0	12,612.0	6,150.0	120.6	119.6	-57.53	5,837.8	2,192.4	260.8	65.9	194.85	1.338	Level 3	
12,900.0	6,290.0	12,712.0	6,150.0	122.4	121.4	-57.53	5,937.8	2,192.3	260.8	62.6	198.15	1.316	Level 3	
13,000.0	6,290.0	12,812.0	6,150.0	124.2	123.2	-57.53	6,037.7	2,192.1	260.8	59.3	201.45	1.294	Level 3	
13,100.0	6,290.0	12,912.0	6,150.0	126.0	125.0	-57.53	6,137.7	2,192.0	260.8	56.0	204.75	1.274	Level 3	
13,200.0	6,290.0	13,012.0	6,150.0	127.8	126.8	-57.53	6,237.7	2,191.8	260.8	52.7	208.06	1.253	Level 3	
13,300.0	6,290.0	13,112.0	6,150.0	129.6	128.7	-57.53	6,337.7	2,191.7	260.8	49.4	211.36	1.234	Level 2	
13,400.0	6,290.0	13,212.0	6,150.0	131.4	130.5	-57.53	6,437.7	2,191.5	260.8	46.1	214.67	1.215	Level 2	
13,500.0	6,290.0	13,312.0	6,150.0	133.2	132.4	-57.53	6,537.7	2,191.4	260.8	42.8	217.97	1.196	Level 2	
13,600.0	6,290.0	13,412.0	6,150.0	135.1	134.2	-57.53	6,637.7	2,191.2	260.8	39.5	221.28	1.178	Level 2	
13,700.0	6,290.0	13,512.0	6,150.0	136.9	136.0	-57.53	6,737.7	2,191.1	260.8	36.2	224.59	1.161	Level 2	
13,800.0	6,290.0	13,612.0	6,150.0	138.7	137.9	-57.53	6,837.7	2,190.9	260.8	32.9	227.89	1.144	Level 2	
13,900.0	6,290.0	13,712.0	6,150.0	140.6	139.7	-57.53	6,937.7	2,190.8	260.8	29.6	231.20	1.128	Level 2	
14,000.0	6,290.0	13,812.0	6,150.0	142.4	141.6	-57.53	7,037.7	2,190.6	260.8	26.2	234.51	1.112	Level 2	
14,100.0	6,290.0	13,912.0	6,150.0	144.2	143.4	-57.53	7,137.7	2,190.5	260.8	22.9	237.82	1.096	Level 2	
14,200.0	6,290.0	14,012.0	6,150.0	146.1	145.3	-57.53	7,237.7	2,190.3	260.8	19.6	241.13	1.081	Level 2	
14,264.2	6,290.0	14,076.2	6,150.0	147.3	146.5	-57.53	7,301.9	2,190.2	260.8	17.5	243.26	1.072	Level 2	
14,290.5	6,290.0	14,099.1	6,150.0	147.7	146.9	-57.53	7,324.9	2,190.2	260.8	16.7	244.07	1.068 Level 2, ES, SF		

Company: Synergy Resources
Project: Sec.16-T4N-R68W
Reference Site: SRC Markham Pad Sec.16-T4N-R68W
Site Error: 0.0ft
Reference Well: SRC Markham 41-16-9CHZ
Well Error: 0.0ft
Reference Wellbore: Wellbore #1
Reference Design: Plan #1 (3-31-14)

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

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

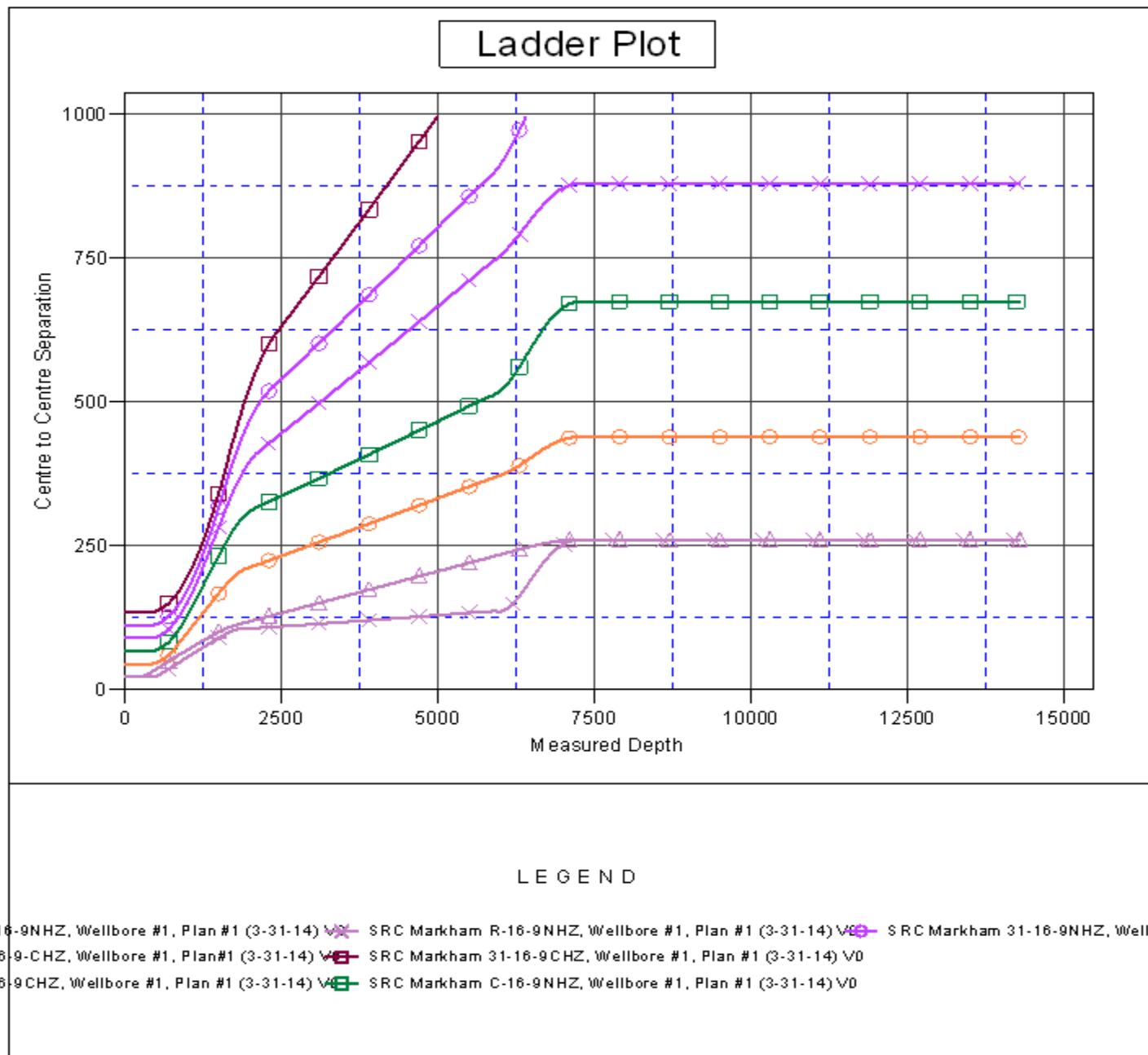
Offset Depths are relative to Offset Datum

Central Meridian is -105.500000 °

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

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.32°



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

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

Offset Depths are relative to Offset Datum

Central Meridian is -105.500000 °

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

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.32°

