

Synergy Resources

Well Name: **SRC Markham 12-16CHZ**

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

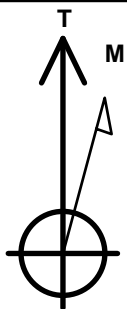
Ground Elevation: 4984.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1359815.88	3138270.74	40.320034	-105.004117	

Original Well Elev WELL @ 4997.5ft (Original Well Elev)

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
SHL 235'FNL, 1477'FEL	1.0	0.0	0.0	Point
BHL 2177'FNL, 460'FWL	6360.0	-1980.9	-3353.2	Point
Landing Pt. (12-16CHZ)	6360.0	-1939.2	701.1	Point



Azimuths to True North
Magnetic North: 8.51°

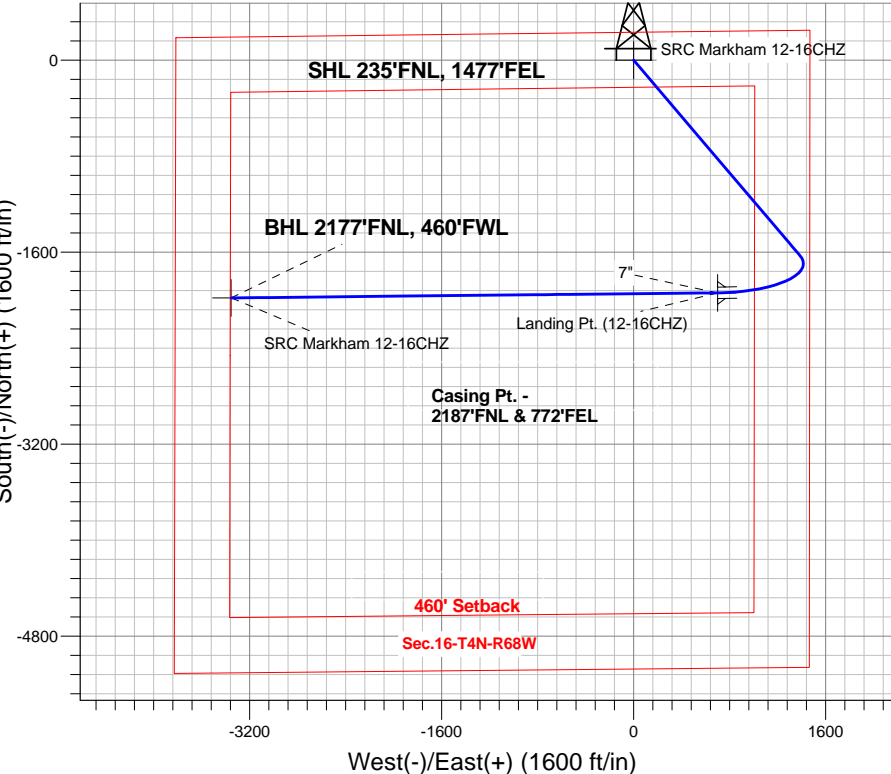
Magnetic Field
Strength: 52687.8snT
Dip Angle: 66.82°
Date: 1/6/2015
Model: IGRF2010

SRC Markham Pad Sec.16-T4N-R68W
SRC Markham 12-16CHZ
Plan #1 (1-06-15)
14:21, January 06 2015

ANNOTATIONS

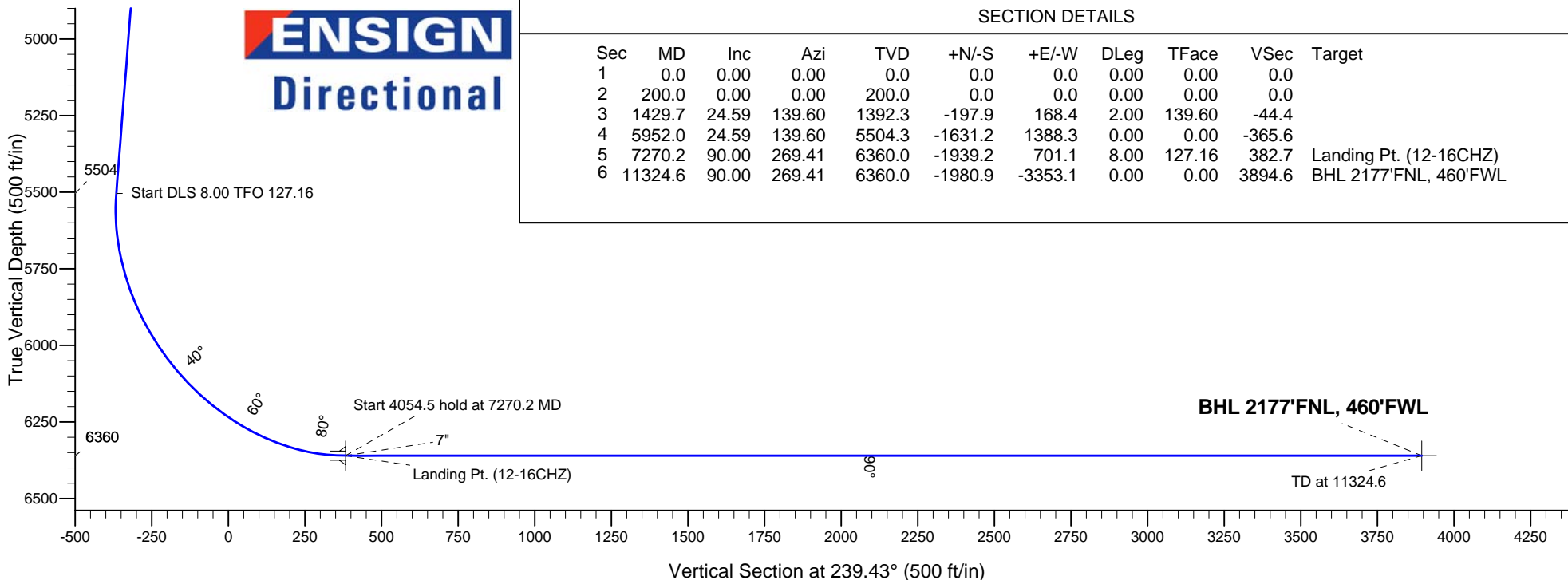
TVD	MD	Annotation
200.0	200.0	Start Build 2.00
1392.3	1429.7	Start 4522.3 hold at 1429.7 MD
5504.3	5952.0	Start DLS 8.00 TFO 127.16
6360.0	7270.2	Start 4054.5 hold at 7270.2 MD
6360.0	11324.6	TD at 11324.6

South(-)/North(+) (1600 ft/in)



West(-)/East(+) (1600 ft/in)

ENSIGN
Directional



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	
3	1429.7	24.59	139.60	1392.3	-197.9	168.4	2.00	139.60	-44.4	
4	5952.0	24.59	139.60	5504.3	-1631.2	1388.3	0.00	0.00	-365.6	
5	7270.2	90.00	269.41	6360.0	-1939.2	701.1	8.00	127.16	382.7	Landing Pt. (12-16CHZ)
6	11324.6	90.00	269.41	6360.0	-1980.9	-3353.1	0.00	0.00	3894.6	BHL 2177'FNL, 460'FWL



Synergy Resources

SEC.16-T4N-R68W

SRC Markham Pad Sec.16-T4N-R68W

SRC Markham 12-16CHZ

Wellbore #1

Plan: Plan #1 (1-06-15)

Standard Planning Report

06 January, 2015

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,429.7	24.59	139.60	1,392.3	-197.9	168.4	2.00	2.00	0.00	139.60	
5,952.0	24.59	139.60	5,504.3	-1,631.2	1,388.3	0.00	0.00	0.00	0.00	
7,270.2	90.00	269.41	6,360.0	-1,939.2	701.1	8.00	4.96	9.85	127.16	Landing Pt. (12-16C)
11,324.6	90.00	269.41	6,360.0	-1,980.9	-3,353.1	0.00	0.00	0.00	0.00	BHL 2177'FNL, 46C

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
1.0	0.00	0.00	1.0	0.0	0.0	0.0	0.00	0.00	0.00
SHL 235°FNL, 1477°FEL									
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
Start Build 2.00									
300.0	2.00	139.60	300.0	-1.3	1.1	-0.3	2.00	2.00	0.00
400.0	4.00	139.60	399.8	-5.3	4.5	-1.2	2.00	2.00	0.00
500.0	6.00	139.60	499.5	-12.0	10.2	-2.7	2.00	2.00	0.00
600.0	8.00	139.60	598.7	-21.2	18.1	-4.8	2.00	2.00	0.00
700.0	10.00	139.60	697.5	-33.1	28.2	-7.4	2.00	2.00	0.00
800.0	12.00	139.60	795.6	-47.7	40.6	-10.7	2.00	2.00	0.00
900.0	14.00	139.60	893.1	-64.8	55.2	-14.5	2.00	2.00	0.00
1,000.0	16.00	139.60	989.6	-84.5	71.9	-18.9	2.00	2.00	0.00
1,100.0	18.00	139.60	1,085.3	-106.8	90.9	-23.9	2.00	2.00	0.00
1,200.0	20.00	139.60	1,179.8	-131.6	112.0	-29.5	2.00	2.00	0.00
1,300.0	22.00	139.60	1,273.2	-158.9	135.2	-35.6	2.00	2.00	0.00
1,400.0	24.00	139.60	1,365.2	-188.6	160.5	-42.3	2.00	2.00	0.00
1,429.7	24.59	139.60	1,392.3	-197.9	168.4	-44.4	2.00	2.00	0.00
Start 4522.3 hold at 1429.7 MD									
1,500.0	24.59	139.60	1,456.2	-220.2	187.4	-49.3	0.00	0.00	0.00
1,600.0	24.59	139.60	1,547.1	-251.9	214.4	-56.5	0.00	0.00	0.00
1,700.0	24.59	139.60	1,638.1	-283.6	241.4	-63.6	0.00	0.00	0.00
1,800.0	24.59	139.60	1,729.0	-315.3	268.3	-70.7	0.00	0.00	0.00
1,900.0	24.59	139.60	1,819.9	-347.0	295.3	-77.8	0.00	0.00	0.00
2,000.0	24.59	139.60	1,910.8	-378.7	322.3	-84.9	0.00	0.00	0.00
2,100.0	24.59	139.60	2,001.8	-410.4	349.2	-92.0	0.00	0.00	0.00
2,200.0	24.59	139.60	2,092.7	-442.1	376.2	-99.1	0.00	0.00	0.00
2,300.0	24.59	139.60	2,183.6	-473.8	403.2	-106.2	0.00	0.00	0.00
2,400.0	24.59	139.60	2,274.6	-505.4	430.2	-113.3	0.00	0.00	0.00
2,500.0	24.59	139.60	2,365.5	-537.1	457.1	-120.4	0.00	0.00	0.00
2,600.0	24.59	139.60	2,456.4	-568.8	484.1	-127.5	0.00	0.00	0.00
2,700.0	24.59	139.60	2,547.3	-600.5	511.1	-134.6	0.00	0.00	0.00
2,800.0	24.59	139.60	2,638.3	-632.2	538.1	-141.7	0.00	0.00	0.00
2,900.0	24.59	139.60	2,729.2	-663.9	565.0	-148.8	0.00	0.00	0.00
3,000.0	24.59	139.60	2,820.1	-695.6	592.0	-155.9	0.00	0.00	0.00
3,100.0	24.59	139.60	2,911.1	-727.3	619.0	-163.0	0.00	0.00	0.00
3,200.0	24.59	139.60	3,002.0	-759.0	646.0	-170.1	0.00	0.00	0.00
3,300.0	24.59	139.60	3,092.9	-790.7	672.9	-177.2	0.00	0.00	0.00
3,400.0	24.59	139.60	3,183.8	-822.4	699.9	-184.3	0.00	0.00	0.00
3,500.0	24.59	139.60	3,274.8	-854.1	726.9	-191.4	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well SRC Markham 12-16CHZ
Company:	Synergy Resources	TVD Reference:	WELL @ 4997.5ft (Original Well Elev)
Project:	SEC.16-T4N-R68W	MD Reference:	WELL @ 4997.5ft (Original Well Elev)
Site:	SRC Markham Pad Sec.16-T4N-R68W	North Reference:	True
Well:	SRC Markham 12-16CHZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (1-06-15)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,800.0	24.59	139.60	4,456.8	-1,266.1	1,077.5	-283.7	0.00	0.00	0.00
4,900.0	24.59	139.60	4,547.8	-1,297.8	1,104.5	-290.8	0.00	0.00	0.00
5,000.0	24.59	139.60	4,638.7	-1,329.5	1,131.5	-297.9	0.00	0.00	0.00
5,100.0	24.59	139.60	4,729.6	-1,361.2	1,158.5	-305.1	0.00	0.00	0.00
5,200.0	24.59	139.60	4,820.5	-1,392.9	1,185.4	-312.2	0.00	0.00	0.00
5,300.0	24.59	139.60	4,911.5	-1,424.6	1,212.4	-319.3	0.00	0.00	0.00
5,400.0	24.59	139.60	5,002.4	-1,456.3	1,239.4	-326.4	0.00	0.00	0.00
5,500.0	24.59	139.60	5,093.3	-1,488.0	1,266.4	-333.5	0.00	0.00	0.00
5,600.0	24.59	139.60	5,184.3	-1,519.7	1,293.3	-340.6	0.00	0.00	0.00
5,700.0	24.59	139.60	5,275.2	-1,551.4	1,320.3	-347.7	0.00	0.00	0.00
5,800.0	24.59	139.60	5,366.1	-1,583.1	1,347.3	-354.8	0.00	0.00	0.00
5,900.0	24.59	139.60	5,457.0	-1,614.7	1,374.2	-361.9	0.00	0.00	0.00
5,952.0	24.59	139.60	5,504.3	-1,631.2	1,388.3	-365.6	0.00	0.00	0.00
Start DLS 8.00 TFO 127.16									
6,000.0	22.47	147.63	5,548.3	-1,646.6	1,399.7	-367.6	8.00	-4.42	16.72
6,100.0	19.69	168.63	5,641.8	-1,679.3	1,413.2	-362.6	8.00	-2.78	21.00
6,200.0	19.84	192.43	5,736.0	-1,712.4	1,412.9	-345.5	8.00	0.15	23.80
6,300.0	22.86	212.92	5,829.3	-1,745.4	1,398.7	-316.5	8.00	3.02	20.49
6,400.0	27.84	227.66	5,919.7	-1,777.5	1,370.8	-276.1	8.00	4.97	14.74
6,500.0	33.91	237.87	6,005.6	-1,808.1	1,329.9	-225.3	8.00	6.07	10.21
6,600.0	40.58	245.18	6,085.2	-1,836.6	1,276.6	-165.0	8.00	6.68	7.31
6,700.0	47.61	250.69	6,157.0	-1,862.5	1,212.2	-96.3	8.00	7.03	5.51
6,800.0	54.85	255.07	6,219.6	-1,885.3	1,137.7	-20.6	8.00	7.24	4.38
6,900.0	62.21	258.73	6,271.7	-1,904.5	1,054.7	60.7	8.00	7.37	3.66
7,000.0	69.67	261.92	6,312.5	-1,919.8	964.7	145.9	8.00	7.45	3.19
7,100.0	77.17	264.82	6,341.0	-1,930.8	869.6	233.4	8.00	7.50	2.89
7,200.0	84.71	267.54	6,356.8	-1,937.3	771.1	321.5	8.00	7.53	2.73
7,270.2	90.00	269.41	6,360.0	-1,939.2	701.1	382.7	8.00	7.54	2.66
Start 4054.5 hold at 7270.2 MD - 7" - Landing Pt. (12-16CHZ)									
7,300.0	90.00	269.41	6,360.0	-1,939.5	671.3	408.5	0.01	0.01	0.00
7,400.0	90.00	269.41	6,360.0	-1,940.5	571.3	495.2	0.00	0.00	0.00
7,500.0	90.00	269.41	6,360.0	-1,941.5	471.3	581.8	0.00	0.00	0.00
7,600.0	90.00	269.41	6,360.0	-1,942.6	371.3	668.4	0.00	0.00	0.00
7,700.0	90.00	269.41	6,360.0	-1,943.6	271.3	755.0	0.00	0.00	0.00
7,800.0	90.00	269.41	6,360.0	-1,944.6	171.3	841.6	0.00	0.00	0.00
7,900.0	90.00	269.41	6,360.0	-1,945.7	71.3	928.3	0.00	0.00	0.00
8,000.0	90.00	269.41	6,360.0	-1,946.7	-28.7	1,014.9	0.00	0.00	0.00
8,100.0	90.00	269.41	6,360.0	-1,947.7	-128.7	1,101.5	0.00	0.00	0.00
8,200.0	90.00	269.41	6,360.0	-1,948.8	-228.7	1,188.1	0.00	0.00	0.00
8,300.0	90.00	269.41	6,360.0	-1,949.8	-328.7	1,274.7	0.00	0.00	0.00
8,400.0	90.00	269.41	6,360.0	-1,950.8	-428.7	1,361.3	0.00	0.00	0.00
8,500.0	90.00	269.41	6,360.0	-1,951.8	-528.7	1,448.0	0.00	0.00	0.00
8,600.0	90.00	269.41	6,360.0	-1,952.9	-628.7	1,534.6	0.00	0.00	0.00
8,700.0	90.00	269.41	6,360.0	-1,953.9	-728.7	1,621.2	0.00	0.00	0.00
8,800.0	90.00	269.41	6,360.0	-1,954.9	-828.7	1,707.8	0.00	0.00	0.00
8,900.0	90.00	269.41	6,360.0	-1,956.0	-928.6	1,794.4	0.00	0.00	0.00
9,000.0	90.00	269.41	6,360.0	-1,957.0	-1,028.6	1,881.0	0.00	0.00	0.00
9,100.0	90.00	269.41	6,360.0	-1,958.0	-1,128.6	1,967.7	0.00	0.00	0.00
9,200.0	90.00	269.41	6,360.0	-1,959.0	-1,228.6	2,054.3	0.00	0.00	0.00
9,300.0	90.00	269.41	6,360.0	-1,960.1	-1,328.6	2,140.9	0.00	0.00	0.00
9,400.0	90.00	269.41	6,360.0	-1,961.1	-1,428.6	2,227.5	0.00	0.00	0.00
9,500.0	90.00	269.41	6,360.0	-1,962.1	-1,528.6	2,314.1	0.00	0.00	0.00
9,600.0	90.00	269.41	6,360.0	-1,963.2	-1,628.6	2,400.7	0.00	0.00	0.00
9,700.0	90.00	269.41	6,360.0	-1,964.2	-1,728.6	2,487.4	0.00	0.00	0.00

Plan Annotations					
	Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
			+N/-S (ft)	+E/-W (ft)	
	200.0	200.0	0.0	0.0	Start Build 2.00
	1,429.7	1,392.3	-197.9	168.4	Start 4522.3 hold at 1429.7 MD
	5,952.0	5,504.3	-1,631.2	1,388.3	Start DLS 8.00 TFO 127.16
	7,270.2	6,360.0	-1,939.2	701.1	Start 4054.5 hold at 7270.2 MD
	11,324.6	6,360.0	-1,980.9	-3,353.1	TD at 11324.6



Synergy Resources

SEC.16-T4N-R68W

SRC Markham Pad Sec.16-T4N-R68W

SRC Markham 12-16CHZ

Wellbore #1

Plan #1 (1-06-15)

Anticollision Report

06 January, 2015

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Markham 12-16CHZ
Project:	SEC.16-T4N-R68W	TVD Reference:	WELL @ 4997.5ft (Original Well Elev)
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4997.5ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 12-16CHZ	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (1-06-15)	Offset TVD Reference:	Offset Datum

Reference	Plan #1 (1-06-15)		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 1,000.0ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program	Date 1/6/2015			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	11,324.6	Plan #1 (1-06-15) (Wellbore #1)	MWD	MWD - Standard

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
SRC Cannon Pad Sec.16-T4N-R68W						
SRC Cannon K-16CHZ - Wellbore #1 - Plan #1 (10-20-14)	11,319.2	10,958.0	736.4	481.4	2.887	CC
SRC Cannon K-16CHZ - Wellbore #1 - Plan #1 (10-20-14)	11,324.6	10,958.0	736.4	481.3	2.886	ES, SF
SRC Markham Pad Sec.16-T4N-R68W						
SRC Markham 11-16CHZ - Wellbore #1 - Plan #1 (1-05-1)	200.0	200.0	89.8	89.1	133.171	CC, ES
SRC Markham 11-16CHZ - Wellbore #1 - Plan #1 (1-05-1)	5,200.0	5,230.1	990.2	934.1	17.637	SF
SRC Markham 11-16NHZ - Wellbore #1 - Plan #1 (1-05-1)	200.0	200.0	104.9	104.2	155.507	CC, ES
SRC Markham 11-16NHZ - Wellbore #1 - Plan #1 (1-05-1)	4,500.0	4,545.3	982.5	937.8	21.987	SF
SRC Markham 12-16NHZ - Wellbore #1 - Plan #1 (1-06-1)	200.0	200.0	14.8	14.1	21.925	CC, ES
SRC Markham 12-16NHZ - Wellbore #1 - Plan #1 (1-06-1)	11,324.6	11,140.9	266.1	56.1	1.267	Level 3, SF
SRC Markham A-16CHZ - Wellbore #1 - Plan #1 (1-06-1)	200.0	200.0	29.8	29.2	44.252	CC, ES
SRC Markham A-16CHZ - Wellbore #1 - Plan #1 (1-06-1)	11,324.6	11,242.7	439.8	186.5	1.736	SF
SRC Markham A-16NHZ - Wellbore #1 - Plan #1 (1-05-1)	200.0	200.0	44.9	44.2	66.589	CC, ES
SRC Markham A-16NHZ - Wellbore #1 - Plan #1 (1-05-1)	11,324.6	11,069.5	676.7	430.0	2.743	SF
SRC Markham F-16CHZ - Wellbore #1 - Plan #1 (1-05-1)	200.0	200.0	60.0	59.3	88.918	CC, ES
SRC Markham F-16CHZ - Wellbore #1 - Plan #1 (1-05-1)	11,324.6	11,183.6	882.6	628.6	3.475	SF
SRC Markham F-16NHZ - Wellbore #1 - Plan #1 (1-05-1)	200.0	200.0	75.0	74.3	111.255	CC, ES
SRC Markham F-16NHZ - Wellbore #1 - Plan #1 (1-05-1)	5,600.0	5,653.3	875.9	809.1	13.121	SF

Offset Design	SRC Cannon Pad Sec.16-T4N-R68W - SRC Cannon K-16CHZ - Wellbore #1 - Plan #1 (10-20-14)												Offset Site Error:	0.0ft
Survey Program:	0-MWD												Offset Well Error:	0.0ft
Reference Measured Depth (ft)	Vertical Depth (ft)	Offset Measured Depth (ft)	Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
6,100.0	5,641.8	5,733.5	5,590.3	46.5	24.7	11.53	-2,669.9	1,421.9	990.7	944.6	46.08	21.501		
6,150.0	5,688.9	5,780.6	5,637.4	46.7	24.7	-1.05	-2,669.9	1,421.9	974.1	928.3	45.79	21.274		
6,200.0	5,736.0	5,827.7	5,684.5	46.9	24.7	-13.68	-2,669.9	1,420.7	957.5	912.1	45.45	21.066		
6,250.0	5,782.9	5,874.8	5,731.4	47.0	24.8	-25.42	-2,670.0	1,416.5	941.0	895.9	45.12	20.855		
6,300.0	5,829.3	5,922.1	5,778.1	47.1	24.8	-35.77	-2,670.1	1,409.2	924.7	879.9	44.81	20.638		
6,350.0	5,875.0	5,969.6	5,824.4	47.2	24.8	-44.61	-2,670.2	1,398.7	908.7	864.2	44.51	20.416		
6,400.0	5,919.7	6,017.3	5,870.2	47.3	24.8	-52.09	-2,670.3	1,385.2	892.9	848.7	44.23	20.189		
6,450.0	5,963.3	6,065.3	5,915.2	47.3	24.8	-58.41	-2,670.4	1,368.5	877.6	833.6	43.97	19.959		
6,500.0	6,005.6	6,113.7	5,959.2	47.3	24.8	-63.78	-2,670.6	1,348.7	862.8	819.0	43.74	19.725		
6,550.0	6,046.2	6,162.4	6,002.2	47.3	24.8	-68.39	-2,670.9	1,325.8	848.5	805.0	43.54	19.487		

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 12-16CHZ
Project:	SEC.16-T4N-R68W	TVD Reference:	WELL @ 4997.5ft (Original Well Elev)
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4997.5ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 12-16CHZ	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (1-06-15)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						
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
6,600.0	6,085.2	6,211.5	6,043.9	47.2	24.8	-72.39	-2,671.1	1,299.7	834.9	791.5	43.38	19.244	
6,650.0	6,122.1	6,261.0	6,083.9	47.2	24.8	-75.87	-2,671.4	1,270.7	821.9	778.7	43.28	18.992	
6,700.0	6,157.0	6,311.0	6,122.3	47.1	24.8	-78.93	-2,671.7	1,238.6	809.8	766.5	43.24	18.725	
6,750.0	6,189.5	6,361.4	6,158.6	47.0	24.8	-81.62	-2,672.0	1,203.6	798.4	755.1	43.30	18.438	
6,800.0	6,219.6	6,412.3	6,192.6	46.9	24.9	-83.98	-2,672.4	1,165.8	788.0	744.5	43.48	18.124	
6,850.0	6,247.0	6,463.7	6,224.2	46.8	24.9	-86.05	-2,672.8	1,125.3	778.4	734.6	43.84	17.756	
6,900.0	6,271.7	6,515.5	6,253.0	46.7	24.9	-87.86	-2,673.2	1,082.3	769.9	725.5	44.36	17.356	
6,950.0	6,293.6	6,567.7	6,278.8	46.6	25.0	-89.41	-2,673.6	1,036.9	762.3	717.2	45.09	16.908	
7,000.0	6,312.5	6,620.3	6,301.4	46.5	25.1	-90.73	-2,674.1	989.4	755.8	709.7	46.05	16.413	
7,050.0	6,328.3	6,673.3	6,320.6	46.4	25.2	-91.82	-2,674.5	940.0	750.3	703.1	47.25	15.881	
7,100.0	6,341.0	6,726.6	6,336.1	46.3	25.4	-92.68	-2,675.0	889.1	746.0	697.3	48.69	15.321	
7,150.0	6,350.5	6,780.1	6,347.9	46.1	25.7	-93.33	-2,675.5	836.9	742.7	692.4	50.35	14.751	
7,200.0	6,356.8	6,833.8	6,355.7	46.0	26.1	-93.76	-2,676.0	783.7	740.5	688.3	52.21	14.185	
7,250.0	6,359.7	6,887.6	6,359.6	45.9	26.5	-93.97	-2,676.5	730.1	739.5	685.3	54.22	13.639	
7,270.2	6,360.0	6,909.4	6,360.0	45.8	26.7	-93.99	-2,676.8	708.3	739.4	684.3	55.07	13.428	
7,300.0	6,360.0	6,939.4	6,360.0	45.7	27.0	-93.99	-2,677.0	678.3	739.4	683.5	55.88	13.233	
7,400.0	6,360.0	7,039.4	6,360.0	45.5	28.4	-93.99	-2,678.0	578.3	739.3	680.5	58.77	12.579	
7,500.0	6,360.0	7,139.4	6,360.0	45.4	30.0	-93.99	-2,679.0	478.3	739.2	677.2	62.01	11.922	
7,600.0	6,360.0	7,239.4	6,360.0	45.3	31.9	-94.00	-2,679.9	378.3	739.2	673.6	65.54	11.279	
7,700.0	6,360.0	7,339.4	6,360.0	45.3	34.0	-94.00	-2,680.9	278.3	739.1	669.8	69.32	10.662	
7,800.0	6,360.0	7,439.4	6,360.0	45.4	36.2	-94.00	-2,681.8	178.3	739.0	665.7	73.32	10.080	
7,900.0	6,360.0	7,539.4	6,360.0	45.7	38.5	-94.00	-2,682.8	78.3	738.9	661.4	77.50	9.535	
8,000.0	6,360.0	7,639.4	6,360.0	46.3	40.8	-94.00	-2,683.7	-21.6	738.9	657.0	81.84	9.028	
8,100.0	6,360.0	7,739.4	6,360.0	47.2	43.3	-94.00	-2,684.7	-121.6	738.8	652.5	86.32	8.558	
8,200.0	6,360.0	7,839.4	6,360.0	48.4	45.7	-94.00	-2,685.6	-221.6	738.7	647.8	90.92	8.125	
8,300.0	6,360.0	7,939.4	6,360.0	49.9	48.3	-94.00	-2,686.6	-321.6	738.7	643.0	95.62	7.725	
8,400.0	6,360.0	8,039.4	6,360.0	51.8	50.8	-94.00	-2,687.6	-421.6	738.6	638.2	100.41	7.355	
8,500.0	6,360.0	8,139.4	6,360.0	53.8	53.4	-94.00	-2,688.5	-521.6	738.5	633.2	105.28	7.015	
8,600.0	6,360.0	8,239.4	6,360.0	56.0	56.0	-94.00	-2,689.5	-621.6	738.4	628.2	110.22	6.700	
8,700.0	6,360.0	8,339.4	6,360.0	58.2	58.6	-94.00	-2,690.4	-721.6	738.4	623.1	115.21	6.409	
8,800.0	6,360.0	8,439.4	6,360.0	60.6	61.2	-94.00	-2,691.4	-821.6	738.3	618.0	120.26	6.139	
8,900.0	6,360.0	8,539.4	6,360.0	63.0	63.9	-94.00	-2,692.3	-921.6	738.2	612.9	125.35	5.889	
9,000.0	6,360.0	8,639.4	6,360.0	65.4	66.6	-94.00	-2,693.3	-1,021.6	738.1	607.7	130.48	5.657	
9,100.0	6,360.0	8,739.4	6,360.0	67.9	69.2	-94.00	-2,694.2	-1,121.6	738.1	602.4	135.65	5.441	
9,200.0	6,360.0	8,839.4	6,360.0	70.4	71.9	-94.00	-2,695.2	-1,221.6	738.0	597.1	140.85	5.239	
9,300.0	6,360.0	8,939.4	6,360.0	72.9	74.6	-94.00	-2,696.2	-1,321.6	737.9	591.8	146.08	5.051	
9,400.0	6,360.0	9,039.4	6,360.0	75.5	77.3	-94.00	-2,697.1	-1,421.6	737.8	586.5	151.34	4.875	
9,500.0	6,360.0	9,139.4	6,360.0	78.0	80.0	-94.00	-2,698.1	-1,521.6	737.8	581.1	156.62	4.710	
9,600.0	6,360.0	9,239.4	6,360.0	80.6	82.8	-94.00	-2,699.0	-1,621.6	737.7	575.8	161.92	4.556	
9,700.0	6,360.0	9,339.4	6,360.0	83.2	85.5	-94.00	-2,700.0	-1,721.6	737.6	570.4	167.25	4.410	
9,800.0	6,360.0	9,439.4	6,360.0	85.8	88.2	-94.00	-2,700.9	-1,821.6	737.5	565.0	172.58	4.274	
9,900.0	6,360.0	9,539.4	6,360.0	88.5	90.9	-94.00	-2,701.9	-1,921.6	737.5	559.5	177.94	4.145	
10,000.0	6,360.0	9,639.4	6,360.0	91.1	93.7	-94.00	-2,702.9	-2,021.6	737.4	554.1	183.31	4.023	
10,100.0	6,360.0	9,739.4	6,360.0	93.7	96.4	-94.01	-2,703.8	-2,121.6	737.3	548.6	188.69	3.908	
10,200.0	6,360.0	9,839.4	6,360.0	96.4	99.2	-94.01	-2,704.8	-2,221.5	737.3	543.2	194.08	3.799	
10,300.0	6,360.0	9,939.4	6,360.0	99.0	101.9	-94.01	-2,705.7	-2,321.5	737.2	537.7	199.49	3.695	
10,400.0	6,360.0	10,039.4	6,360.0	101.7	104.7	-94.01	-2,706.7	-2,421.5	737.1	532.2	204.91	3.597	
10,500.0	6,360.0	10,139.4	6,360.0	104.4	107.4	-94.01	-2,707.6	-2,521.5	737.0	526.7	210.33	3.504	
10,600.0	6,360.0	10,239.4	6,360.0	107.1	110.2	-94.01	-2,708.6	-2,621.5	737.0	521.2	215.77	3.416	
10,700.0	6,360.0	10,339.4	6,360.0	109.8	112.9	-94.01	-2,709.5	-2,721.5	736.9	515.7	221.21	3.331	
10,800.0	6,360.0	10,439.4	6,360.0	112.5	115.7	-94.01	-2,710.5	-2,821.5	736.8	510.2	226.66	3.251	
10,900.0	6,360.0	10,539.4	6,360.0	115.1	118.4	-94.01	-2,711.5	-2,921.5	736.7	504.6	232.12	3.174	

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 12-16CHZ
Project:	SEC.16-T4N-R68W	TVD Reference:	WELL @ 4997.5ft (Original Well Elev)
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4997.5ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 12-16CHZ	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (1-06-15)	Offset TVD Reference:	Offset Datum

Offset Design SRC Cannon Pad Sec.16-T4N-R68W - SRC Cannon K-16CHZ - Wellbore #1 - Plan #1 (10-20-14)												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
11,000.0	6,360.0	10,639.4	6,360.0	117.9	121.2	-94.01	-2,712.4	-3,021.5	736.7	499.1	237.58	3.101	
11,100.0	6,360.0	10,739.4	6,360.0	120.6	124.0	-94.01	-2,713.4	-3,121.5	736.6	493.5	243.05	3.031	
11,200.0	6,360.0	10,839.4	6,360.0	123.3	126.7	-94.01	-2,714.3	-3,221.5	736.5	488.0	248.52	2.964	
11,300.0	6,360.0	10,939.4	6,360.0	126.0	129.5	-94.01	-2,715.3	-3,321.5	736.4	482.4	254.00	2.899	
11,319.2	6,360.0	10,958.0	6,360.0	126.5	130.0	-94.01	-2,715.5	-3,340.1	736.4	481.4	255.04	2.887 CC	
11,324.6	6,360.0	10,958.0	6,360.0	126.7	130.0	-94.01	-2,715.5	-3,340.1	736.4	481.3	255.19	2.886 ES, SF	

SRC Markham Pad Sec.16-T4N-R68W - SRC Markham 11-16CHZ - Wellbore #1 - Plan #1 (1-05-15)												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	-90.70	-1.1	-89.8	89.8				
100.0	100.0	100.0	100.0	0.1	0.1	-90.70	-1.1	-89.8	89.8	89.6	0.22	399.512	
200.0	200.0	200.0	200.0	0.3	0.3	-90.70	-1.1	-89.8	89.8	89.1	0.67	133.171	CC, ES
300.0	300.0	300.0	300.0	0.5	0.6	130.53	-1.1	-89.8	90.9	89.8	1.11	82.190	
400.0	399.8	399.8	399.8	0.8	0.8	132.89	-1.1	-89.8	94.4	92.9	1.54	61.179	
500.0	499.5	499.5	499.5	1.0	1.0	136.44	-1.1	-89.8	100.5	98.5	2.00	50.184	
600.0	598.7	598.7	598.7	1.3	1.2	140.70	-1.1	-89.8	109.7	107.2	2.48	44.208	
700.0	697.5	697.5	697.5	1.6	1.5	145.19	-1.1	-89.8	122.3	119.3	2.97	41.145	
800.0	795.6	795.6	795.6	2.0	1.7	149.51	-1.1	-89.8	138.4	135.0	3.47	39.937	
900.0	893.1	893.1	893.1	2.5	1.9	153.44	-1.1	-89.8	158.3	154.4	3.96	39.969	
1,000.0	989.6	989.6	989.6	3.0	2.1	156.88	-1.1	-89.8	182.0	177.5	4.45	40.853	
1,100.0	1,085.3	1,085.3	1,085.3	3.6	2.3	159.81	-1.1	-89.8	209.3	204.4	4.94	42.332	
1,200.0	1,179.8	1,179.8	1,179.8	4.2	2.5	162.28	-1.1	-89.8	240.3	234.8	5.43	44.227	
1,300.0	1,273.2	1,273.2	1,273.2	4.9	2.7	164.35	-1.1	-89.8	274.8	268.9	5.92	46.418	
1,400.0	1,365.2	1,365.2	1,365.2	5.7	3.0	166.08	-1.1	-89.8	312.8	306.4	6.41	48.819	
1,429.7	1,392.3	1,392.3	1,392.3	6.0	3.0	166.53	-1.1	-89.8	324.7	318.1	6.55	49.564	
1,500.0	1,456.2	1,463.5	1,463.5	6.6	3.2	167.79	-1.3	-89.1	352.7	345.8	6.91	51.048	
1,600.0	1,547.1	1,568.5	1,568.4	7.4	3.4	169.48	-2.6	-85.1	390.2	382.8	7.41	52.692	
1,700.0	1,638.1	1,676.1	1,675.6	8.3	3.6	171.09	-5.2	-77.1	424.7	416.8	7.90	53.730	
1,800.0	1,729.0	1,785.9	1,784.8	9.1	3.8	172.68	-9.1	-65.1	456.1	447.7	8.42	54.184	
1,900.0	1,819.9	1,897.9	1,895.4	10.0	4.1	174.29	-14.4	-48.7	484.4	475.5	8.95	54.123	
2,000.0	1,910.8	2,011.6	2,006.9	10.9	4.5	175.95	-21.1	-27.9	509.6	500.1	9.51	53.575	
2,100.0	2,001.8	2,126.7	2,119.0	11.7	4.9	177.69	-29.3	-2.6	531.7	521.6	10.11	52.571	
2,200.0	2,092.7	2,243.0	2,230.9	12.6	5.3	179.53	-39.0	27.4	550.7	539.9	10.77	51.116	
2,300.0	2,183.6	2,360.0	2,342.2	13.5	5.9	-178.51	-50.2	61.8	566.6	555.1	11.50	49.279	
2,400.0	2,274.6	2,477.4	2,452.2	14.4	6.6	-176.41	-62.8	100.7	579.7	567.4	12.33	47.007	
2,500.0	2,365.5	2,594.7	2,560.4	15.2	7.4	-174.16	-76.7	143.8	590.1	576.8	13.29	44.382	
2,600.0	2,456.4	2,696.7	2,653.3	16.1	8.1	-172.11	-89.7	183.9	598.8	584.5	14.31	41.849	
2,700.0	2,547.3	2,794.2	2,742.0	17.0	8.9	-170.20	-102.1	222.2	608.1	592.7	15.38	39.528	
2,800.0	2,638.3	2,891.6	2,830.7	17.9	9.7	-168.34	-114.5	260.6	618.1	601.6	16.54	37.364	
2,900.0	2,729.2	2,989.0	2,919.4	18.7	10.5	-166.55	-126.9	298.9	628.8	611.0	17.78	35.367	
3,000.0	2,820.1	3,086.5	3,008.1	19.6	11.3	-164.81	-139.3	337.3	640.1	621.0	19.09	33.536	
3,100.0	2,911.1	3,183.9	3,096.8	20.5	12.1	-163.14	-151.8	375.6	651.9	631.5	20.46	31.867	
3,200.0	3,002.0	3,281.4	3,185.5	21.4	12.9	-161.52	-164.2	414.0	664.3	642.4	21.89	30.352	
3,300.0	3,092.9	3,378.8	3,274.2	22.3	13.8	-159.96	-176.6	452.3	677.3	653.9	23.37	28.980	
3,400.0	3,183.8	3,476.2	3,363.0	23.1	14.6	-158.46	-189.0	490.7	690.7	665.8	24.90	27.739	
3,500.0	3,274.8	3,573.7	3,451.7	24.0	15.4	-157.02	-201.4	529.1	704.6	678.1	26.47	26.618	
3,600.0	3,365.7	3,671.1	3,540.4	24.9	16.3	-155.63	-213.8	567.4	718.9	690.8	28.08	25.605	
3,700.0	3,456.6	3,768.5	3,629.1	25.8	17.1	-154.29	-226.2	605.8	733.6	703.9	29.71	24.689	
3,800.0	3,547.5	3,866.0	3,717.8	26.7	18.0	-153.01	-238.7	644.1	748.7	717.3	31.38	23.859	
3,900.0	3,638.5	3,963.4	3,806.5	27.5	18.8	-151.77	-251.1	682.5	764.2	731.1	33.07	23.108	
4,000.0	3,729.4	4,060.8	3,895.2	28.4	19.7	-150.58	-263.5	720.8	780.0	745.2	34.78	22.426	
4,100.0	3,820.3	4,158.3	3,983.9	29.3	20.6	-149.44	-275.9	759.2	796.2	759.6	36.51	21.806	
4,200.0	3,911.3	4,255.7	4,072.6	30.2	21.4	-148.35	-288.3	797.6	812.6	774.3	38.25	21.242	
4,300.0	4,002.2	4,353.2	4,161.3	31.1	22.3	-147.30	-300.7	835.9	829.3	789.3	40.01	20.727	
4,400.0	4,093.1	4,450.6	4,250.0	31.9	23.1	-146.28	-313.2	874.3	846.3	804.5	41.78	20.257	
4,500.0	4,184.0	4,548.0	4,338.7	32.8	24.0	-145.31	-325.6	912.6	863.6	820.0	43.56	19.826	
4,600.0	4,275.0	4,645.5	4,427.4	33.7	24.9	-144.38	-338.0	951.0	881.1	835.7	45.34	19.432	
4,700.0	4,365.9	4,742.9	4,516.1	34.6	25.7	-143.48	-350.4	989.3	898.8	851.6	47.13	19.069	
4,800.0	4,456.8	4,840.3	4,604.8	35.5	26.6	-142.61	-362.8	1,027.7	916.7	867.8	48.93	18.735	
4,900.0	4,547.8	4,937.8	4,693.5	36.3	27.5	-141.78	-375.2	1,066.1	934.8	884.1	50.73	18.427	
5,000.0	4,638.7	5,035.2	4,782.2	37.2	28.3	-140.98	-387.7	1,104.4	953.1	900.6	52.53	18.143	

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Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Markham 12-16CHZ
Project:	SEC.16-T4N-R68W	TVD Reference:	WELL @ 4997.5ft (Original Well Elev)
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4997.5ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 12-16CHZ	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (1-06-15)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
SRC Markham Pad Sec.16-T4N-R68W - SRC Markham 11-16CHZ - Wellbore #1 - Plan #1 (1-05-15)												Offset Well Error:	0.0 ft
Survey Program: 0-MWD													
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,100.0	4,729.6	5,132.6	4,870.9	38.1	29.2	-140.21	-400.1	1,142.8	971.6	917.2	54.34	17.880	
5,200.0	4,820.5	5,230.1	4,959.6	39.0	30.1	-139.47	-412.5	1,181.1	990.2	934.1	56.15	17.637 SF	

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Markham 12-16CHZ
Project:	SEC.16-T4N-R68W	TVD Reference:	WELL @ 4997.5ft (Original Well Elev)
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4997.5ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 12-16CHZ	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (1-06-15)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-90.79	-1.5	-104.8	104.9					
100.0	100.0	100.0	100.0	0.1	0.1	-90.79	-1.5	-104.8	104.9	104.6	0.22	466.521		
200.0	200.0	200.0	200.0	0.3	0.3	-90.79	-1.5	-104.8	104.9	104.2	0.67	155.507 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.6	130.32	-1.5	-104.8	106.0	104.9	1.11	95.804		
400.0	399.8	399.8	399.8	0.8	0.8	132.35	-1.5	-104.8	109.4	107.9	1.54	70.923		
500.0	499.5	499.5	499.5	1.0	1.0	135.46	-1.5	-104.8	115.5	113.5	2.00	57.638		
600.0	598.7	598.7	598.7	1.3	1.2	139.26	-1.5	-104.8	124.5	122.0	2.48	50.125		
700.0	697.5	697.5	697.5	1.6	1.5	143.38	-1.5	-104.8	136.8	133.8	2.98	45.943		
800.0	795.6	795.6	795.6	2.0	1.7	147.46	-1.5	-104.8	152.6	149.1	3.48	43.880		
900.0	893.1	893.1	893.1	2.5	1.9	151.28	-1.5	-104.8	172.1	168.1	3.98	43.244		
1,000.0	989.6	989.6	989.6	3.0	2.1	154.70	-1.5	-104.8	195.3	190.8	4.48	43.598		
1,100.0	1,085.3	1,085.3	1,085.3	3.6	2.3	157.69	-1.5	-104.8	222.3	217.3	4.98	44.652		
1,200.0	1,179.8	1,179.8	1,179.8	4.2	2.5	160.26	-1.5	-104.8	252.9	247.4	5.47	46.206		
1,300.0	1,273.2	1,273.2	1,273.2	4.9	2.7	162.45	-1.5	-104.8	287.1	281.1	5.97	48.119		
1,400.0	1,365.2	1,365.2	1,365.2	5.7	3.0	164.30	-1.5	-104.8	324.7	318.3	6.46	50.292		
1,429.7	1,392.3	1,392.3	1,392.3	6.0	3.0	164.79	-1.5	-104.8	336.6	330.0	6.60	50.977		
1,500.0	1,456.2	1,456.2	1,456.2	6.6	3.2	165.99	-1.5	-104.8	365.1	358.1	6.97	52.395		
1,600.0	1,547.1	1,547.1	1,547.1	7.4	3.4	167.40	-1.5	-104.8	405.7	398.3	7.49	54.182		
1,700.0	1,638.1	1,644.1	1,644.1	8.3	3.6	168.66	-1.5	-104.5	446.3	438.3	8.01	55.699		
1,800.0	1,729.0	1,751.4	1,751.3	9.1	3.8	169.99	-2.2	-100.9	484.6	476.1	8.52	56.846		
1,900.0	1,819.9	1,861.2	1,860.8	10.0	4.0	171.37	-3.7	-93.2	520.0	511.0	9.03	57.574		
2,000.0	1,910.8	1,973.1	1,972.1	10.9	4.3	172.82	-6.1	-81.0	552.4	542.9	9.55	57.847		
2,100.0	2,001.8	2,087.0	2,084.7	11.7	4.5	174.34	-9.4	-64.3	582.0	571.9	10.09	57.701		
2,200.0	2,092.7	2,202.6	2,198.1	12.6	4.9	175.96	-13.6	-42.9	608.6	597.9	10.65	57.148		
2,300.0	2,183.6	2,319.3	2,311.8	13.5	5.3	177.69	-18.8	-16.7	632.3	621.0	11.26	56.169		
2,400.0	2,274.6	2,437.0	2,425.1	14.4	5.7	179.53	-24.8	14.3	653.2	641.2	11.93	54.773		
2,500.0	2,365.5	2,555.2	2,537.6	15.2	6.3	-178.49	-31.8	50.0	671.4	658.7	12.67	52.970		
2,600.0	2,456.4	2,673.5	2,648.5	16.1	6.9	-176.38	-39.7	90.2	687.0	673.5	13.54	50.748		
2,700.0	2,547.3	2,791.4	2,757.4	17.0	7.7	-174.12	-48.5	134.8	700.3	685.8	14.54	48.156		
2,800.0	2,638.3	2,908.7	2,863.7	17.9	8.6	-171.71	-58.0	183.4	711.5	695.8	15.73	45.247		
2,900.0	2,729.2	3,012.7	2,956.4	18.7	9.4	-169.45	-67.1	229.6	721.4	704.4	16.99	42.461		
3,000.0	2,820.1	3,108.5	3,041.7	19.6	10.3	-167.41	-75.5	272.4	732.0	713.7	18.30	40.009		
3,100.0	2,911.1	3,204.3	3,127.0	20.5	11.1	-165.43	-83.9	315.2	743.6	723.9	19.70	37.752		
3,200.0	3,002.0	3,300.1	3,212.3	21.4	12.0	-163.51	-92.3	358.0	756.0	734.9	21.18	35.695		
3,300.0	3,092.9	3,395.9	3,297.5	22.3	12.9	-161.64	-100.7	400.9	769.4	746.7	22.74	33.833		
3,400.0	3,183.8	3,491.7	3,382.8	23.1	13.8	-159.84	-109.1	443.7	783.6	759.2	24.37	32.155		
3,500.0	3,274.8	3,587.4	3,468.1	24.0	14.7	-158.10	-117.5	486.5	798.6	772.5	26.05	30.650		
3,600.0	3,365.7	3,683.2	3,553.3	24.9	15.6	-156.42	-125.9	529.3	814.3	786.5	27.79	29.301		
3,700.0	3,456.6	3,779.0	3,638.6	25.8	16.5	-154.80	-134.3	572.1	830.7	801.1	29.57	28.094		
3,800.0	3,547.5	3,874.8	3,723.9	26.7	17.4	-153.25	-142.7	614.9	847.7	816.4	31.38	27.013		
3,900.0	3,638.5	3,970.6	3,809.1	27.5	18.4	-151.75	-151.1	657.7	865.4	832.2	33.23	26.045		
4,000.0	3,729.4	4,066.4	3,894.4	28.4	19.3	-150.31	-159.5	700.6	883.7	848.6	35.10	25.178		
4,100.0	3,820.3	4,162.2	3,979.7	29.3	20.2	-148.92	-167.9	743.4	902.5	865.5	36.99	24.399		
4,200.0	3,911.3	4,257.9	4,064.9	30.2	21.2	-147.60	-176.3	786.2	921.8	882.9	38.90	23.699		
4,300.0	4,002.2	4,353.7	4,150.2	31.1	22.1	-146.32	-184.7	829.0	941.6	900.8	40.82	23.069		
4,400.0	4,093.1	4,449.5	4,235.5	31.9	23.0	-145.09	-193.1	871.8	961.8	919.1	42.75	22.500		
4,500.0	4,184.0	4,545.3	4,320.7	32.8	24.0	-143.92	-201.5	914.6	982.5	937.8	44.69	21.987 SF		

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Markham 12-16CHZ
Project:	SEC.16-T4N-R68W	TVD Reference:	WELL @ 4997.5ft (Original Well Elev)
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4997.5ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 12-16CHZ	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (1-06-15)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.0	0.0	0.0	0.0	0.0	0.0	-91.44	-0.4	-14.8	14.8	14.8	0.00	N/A	
100.0	100.0	100.0	100.0	0.1	0.1	-91.44	-0.4	-14.8	14.8	14.6	0.22	65.774	
200.0	200.0	200.0	200.0	0.3	0.3	-91.44	-0.4	-14.8	14.8	14.1	0.67	21.925 CC, ES	
300.0	300.0	300.0	300.0	0.5	0.6	133.82	-0.4	-14.8	15.9	14.8	1.11	14.403	
400.0	399.8	399.8	399.8	0.8	0.8	144.69	-0.4	-14.8	19.9	18.4	1.54	12.897	
500.0	499.5	500.3	500.3	1.0	1.0	153.89	-1.6	-13.5	25.9	23.9	1.97	13.122	
600.0	598.7	601.0	600.9	1.3	1.2	159.98	-5.4	-9.8	32.2	29.8	2.39	13.440	
700.0	697.5	702.0	701.4	1.6	1.4	164.41	-11.7	-3.6	38.6	35.8	2.83	13.631	
800.0	795.6	803.2	801.9	2.0	1.7	167.87	-20.6	5.1	45.1	41.8	3.28	13.733	
900.0	893.1	904.7	902.1	2.5	2.0	170.73	-32.0	16.3	51.6	47.9	3.75	13.768	
1,000.0	989.6	1,006.4	1,001.9	3.0	2.4	173.19	-45.9	30.1	58.2	54.0	4.23	13.749	
1,100.0	1,085.3	1,108.3	1,101.1	3.6	2.8	175.37	-62.5	46.3	64.8	60.1	4.74	13.683	
1,200.0	1,179.8	1,210.5	1,199.7	4.2	3.3	177.35	-81.6	65.1	71.4	66.1	5.26	13.573	
1,300.0	1,273.2	1,312.9	1,297.6	4.9	3.9	179.19	-103.2	86.4	78.0	72.1	5.81	13.419	
1,400.0	1,365.2	1,415.6	1,394.5	5.7	4.6	-179.09	-127.4	110.2	84.5	78.1	6.40	13.215	
1,429.7	1,392.3	1,446.1	1,423.0	6.0	4.8	-178.59	-135.0	117.7	86.5	79.9	6.58	13.144	
1,500.0	1,456.2	1,518.5	1,490.3	6.6	5.3	-177.43	-154.1	136.4	90.2	83.2	7.04	12.810	
1,600.0	1,547.1	1,621.7	1,585.0	7.4	6.1	-175.66	-183.3	165.2	92.6	84.8	7.76	11.919	
1,700.0	1,638.1	1,722.3	1,676.4	8.3	7.0	-173.77	-213.4	194.8	92.6	84.0	8.53	10.846	
1,800.0	1,729.0	1,822.3	1,767.1	9.1	7.8	-171.89	-243.3	224.2	92.6	83.3	9.36	9.897	
1,900.0	1,819.9	1,922.2	1,857.8	10.0	8.7	-170.01	-273.2	253.7	92.8	82.5	10.24	9.057	
2,000.0	1,910.8	2,022.2	1,948.5	10.9	9.6	-168.14	-303.2	283.1	93.0	81.8	11.20	8.309	
2,100.0	2,001.8	2,122.2	2,039.2	11.7	10.4	-166.28	-333.1	312.6	93.4	81.2	12.22	7.642	
2,200.0	2,092.7	2,222.1	2,129.9	12.6	11.3	-164.44	-363.0	342.0	93.8	80.5	13.31	7.046	
2,300.0	2,183.6	2,322.1	2,220.6	13.5	12.2	-162.61	-392.9	371.4	94.4	79.9	14.49	6.514	
2,400.0	2,274.6	2,422.0	2,311.3	14.4	13.1	-160.81	-422.9	400.9	95.0	79.3	15.73	6.039	
2,500.0	2,365.5	2,522.0	2,402.0	15.2	14.0	-159.04	-452.8	430.3	95.7	78.7	17.05	5.615	
2,600.0	2,456.4	2,621.9	2,492.7	16.1	14.8	-157.29	-482.7	459.8	96.6	78.1	18.43	5.237	
2,700.0	2,547.3	2,721.9	2,583.4	17.0	15.7	-155.57	-512.7	489.2	97.5	77.6	19.89	4.900	
2,800.0	2,638.3	2,821.8	2,674.1	17.9	16.6	-153.89	-542.6	518.7	98.5	77.0	21.40	4.600	
2,900.0	2,729.2	2,921.8	2,764.8	18.7	17.5	-152.24	-572.5	548.1	99.5	76.6	22.98	4.331	
3,000.0	2,820.1	3,021.7	2,855.5	19.6	18.4	-150.63	-602.5	577.6	100.7	76.1	24.61	4.092	
3,100.0	2,911.1	3,121.7	2,946.3	20.5	19.3	-149.06	-632.4	607.0	101.9	75.6	26.29	3.877	
3,200.0	3,002.0	3,221.6	3,037.0	21.4	20.2	-147.52	-662.3	636.5	103.2	75.2	28.01	3.685	
3,300.0	3,092.9	3,321.6	3,127.7	22.3	21.1	-146.03	-692.3	665.9	104.6	74.8	29.78	3.514	
3,400.0	3,183.8	3,421.5	3,218.4	23.1	22.0	-144.57	-722.2	695.4	106.1	74.5	31.58	3.359	
3,500.0	3,274.8	3,521.5	3,309.1	24.0	22.8	-143.15	-752.1	724.8	107.6	74.2	33.41	3.220	
3,600.0	3,365.7	3,621.5	3,399.8	24.9	23.7	-141.78	-782.1	754.3	109.2	73.9	35.28	3.095	
3,700.0	3,456.6	3,721.4	3,490.5	25.8	24.6	-140.45	-812.0	783.7	110.8	73.7	37.16	2.982	
3,800.0	3,547.5	3,821.4	3,581.2	26.7	25.5	-139.15	-841.9	813.2	112.5	73.5	39.07	2.880	
3,900.0	3,638.5	3,921.3	3,671.9	27.5	26.4	-137.89	-871.9	842.6	114.3	73.3	41.00	2.787	
4,000.0	3,729.4	4,021.3	3,762.6	28.4	27.3	-136.68	-901.8	872.1	116.1	73.2	42.95	2.703	
4,100.0	3,820.3	4,121.2	3,853.3	29.3	28.2	-135.50	-931.7	901.5	118.0	73.1	44.91	2.627	
4,200.0	3,911.3	4,221.2	3,944.0	30.2	29.1	-134.35	-961.6	931.0	119.9	73.0	46.88	2.557	
4,300.0	4,002.2	4,321.1	4,034.7	31.1	30.0	-133.25	-991.6	960.4	121.8	73.0	48.85	2.494	
4,400.0	4,093.1	4,421.1	4,125.4	31.9	30.9	-132.18	-1,021.5	989.8	123.8	73.0	50.84	2.436	
4,500.0	4,184.0	4,521.0	4,216.1	32.8	31.8	-131.14	-1,051.4	1,019.3	125.9	73.0	52.83	2.383	
4,600.0	4,275.0	4,621.0	4,306.9	33.7	32.7	-130.14	-1,081.4	1,048.7	128.0	73.1	54.83	2.334	
4,700.0	4,365.9	4,720.9	4,397.6	34.6	33.6	-129.17	-1,111.3	1,078.2	130.1	73.3	56.83	2.289	
4,800.0	4,456.8	4,820.9	4,488.3	35.5	34.5	-128.23	-1,141.2	1,107.6	132.2	73.4	58.83	2.248	
4,900.0	4,547.8	4,920.9	4,579.0	36.3	35.4	-127.32	-1,171.2	1,137.1	134.4	73.6	60.83	2.210	
5,000.0	4,638.7	5,020.8	4,669.7	37.2	36.3	-126.44	-1,201.1	1,166.5	136.7	73.8	62.84	2.175	

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 12-16NHZ - Wellbore #1 - Plan #1 (1-06-15)													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		
5,100.0	4,729.6	5,120.8	4,760.4	38.1	37.1	-125.59	-1,231.0	1,196.0	138.9	74.1	64.84	2.142		
5,200.0	4,820.5	5,220.7	4,851.1	39.0	38.0	-124.77	-1,261.0	1,225.4	141.2	74.4	66.84	2.113		
5,300.0	4,911.5	5,320.7	4,941.8	39.9	38.9	-123.97	-1,290.9	1,254.9	143.5	74.7	68.84	2.085		
5,400.0	5,002.4	5,420.6	5,032.5	40.8	39.8	-123.20	-1,320.8	1,284.3	145.9	75.0	70.84	2.059		
5,500.0	5,093.3	5,520.6	5,123.2	41.6	40.7	-122.45	-1,350.8	1,313.8	148.2	75.4	72.83	2.035		
5,600.0	5,184.3	5,620.5	5,213.9	42.5	41.6	-121.73	-1,380.7	1,343.2	150.6	75.8	74.82	2.013		
5,700.0	5,275.2	5,720.5	5,304.6	43.4	42.5	-121.03	-1,410.6	1,372.7	153.0	76.2	76.81	1.992		
5,800.0	5,366.1	5,826.4	5,401.7	44.3	43.3	-121.66	-1,442.7	1,400.1	154.1	76.2	77.91	1.978		
5,900.0	5,457.0	5,932.3	5,501.4	45.2	43.8	-127.62	-1,475.8	1,412.7	150.9	75.7	75.14	2.008		
5,952.0	5,504.3	5,985.0	5,551.3	45.6	44.0	-132.81	-1,492.4	1,413.2	148.6	76.9	71.73	2.072		
6,000.0	5,548.3	6,032.1	5,596.0	46.0	44.2	-145.47	-1,507.3	1,410.4	147.6	79.8	67.72	2.179		
6,014.3	5,561.6	6,046.0	5,609.0	46.1	44.2	-149.52	-1,511.7	1,409.0	147.5	81.0	66.45	2.220		
6,050.0	5,594.8	6,080.2	5,641.2	46.3	44.3	-160.13	-1,522.5	1,404.3	147.9	84.7	63.21	2.339		
6,100.0	5,641.8	6,127.4	5,685.1	46.5	44.3	-176.01	-1,537.2	1,395.3	149.6	90.9	58.69	2.549		
6,150.0	5,688.9	6,173.8	5,727.6	46.7	44.4	167.55	-1,551.5	1,383.4	152.7	98.2	54.46	2.804		
6,200.0	5,736.0	6,219.3	5,768.5	46.9	44.4	151.49	-1,565.3	1,369.0	157.0	106.2	50.74	3.093		
6,250.0	5,782.9	6,264.1	5,807.9	47.0	44.4	136.70	-1,578.6	1,352.1	162.2	114.5	47.64	3.404		
6,300.0	5,829.3	6,308.3	5,845.5	47.1	44.4	123.69	-1,591.4	1,333.0	168.2	123.1	45.17	3.724		
6,350.0	5,875.0	6,350.0	5,880.0	47.2	44.4	112.70	-1,603.1	1,312.7	174.9	131.6	43.30	4.038		
6,400.0	5,919.7	6,394.7	5,915.7	47.3	44.3	103.19	-1,615.2	1,288.7	181.9	140.2	41.70	4.362		
6,450.0	5,963.3	6,437.1	5,948.2	47.3	44.3	95.31	-1,626.3	1,263.7	189.2	148.7	40.45	4.677		
6,500.0	6,005.6	6,479.0	5,978.8	47.3	44.2	88.67	-1,636.8	1,237.1	196.6	157.2	39.36	4.995		
6,550.0	6,046.2	6,520.5	6,007.6	47.3	44.1	83.06	-1,646.7	1,209.0	204.0	165.6	38.37	5.317		
6,600.0	6,085.2	6,561.6	6,034.6	47.2	44.1	78.31	-1,656.0	1,179.4	211.3	173.8	37.45	5.642		
6,650.0	6,122.1	6,600.0	6,058.3	47.2	44.0	74.34	-1,664.2	1,150.3	218.4	181.7	36.62	5.963		
6,700.0	6,157.0	6,642.7	6,082.8	47.1	43.9	70.81	-1,672.7	1,116.5	225.1	189.3	35.86	6.278		
6,750.0	6,189.5	6,682.7	6,104.1	47.0	43.8	67.87	-1,680.2	1,083.4	231.5	196.2	35.30	6.558		
6,800.0	6,219.6	6,722.5	6,123.4	46.9	43.7	65.35	-1,687.0	1,049.3	237.5	202.5	34.99	6.787		
6,850.0	6,247.0	6,762.1	6,140.8	46.8	43.6	63.21	-1,693.1	1,014.3	243.0	208.0	35.01	6.941		
6,900.0	6,271.7	6,800.0	6,155.8	46.7	43.5	61.42	-1,698.5	979.9	248.0	212.5	35.42	7.000		
6,950.0	6,293.6	6,840.6	6,169.8	46.6	43.4	59.88	-1,703.6	942.1	252.4	216.1	36.28	6.956		
7,000.0	6,312.5	6,879.6	6,181.4	46.5	43.4	58.63	-1,707.8	905.1	256.2	218.6	37.60	6.814		
7,050.0	6,328.3	6,918.5	6,191.0	46.4	43.3	57.61	-1,711.4	867.6	259.4	220.1	39.37	6.590		
7,100.0	6,341.0	6,957.3	6,198.7	46.3	43.2	56.83	-1,714.4	829.7	262.0	220.5	41.54	6.308		
7,150.0	6,350.5	7,000.0	6,204.9	46.1	43.1	56.23	-1,716.9	787.5	264.0	220.0	44.08	5.990		
7,200.0	6,356.8	7,034.6	6,208.1	46.0	43.0	55.87	-1,718.3	753.1	265.3	218.4	46.88	5.659		
7,250.0	6,359.7	7,073.2	6,209.9	45.9	43.0	55.69	-1,719.3	714.6	265.9	216.0	49.91	5.328		
7,270.2	6,360.0	7,088.9	6,210.0	45.8	43.0	55.67	-1,719.5	698.8	266.0	214.8	51.18	5.198		
7,270.4	6,360.0	7,089.1	6,210.0	45.8	43.0	55.67	-1,719.5	698.6	266.0	214.8	51.18	5.198		
7,300.0	6,360.0	7,118.8	6,210.0	45.7	42.9	55.67	-1,719.8	669.0	266.0	214.4	51.57	5.158		
7,400.0	6,360.0	7,218.8	6,210.0	45.5	42.8	55.67	-1,720.8	569.0	266.0	212.9	53.08	5.011		
7,500.0	6,360.0	7,318.8	6,210.0	45.4	42.8	55.67	-1,721.9	469.0	266.0	211.0	54.96	4.840		
7,600.0	6,360.0	7,418.8	6,210.0	45.3	42.9	55.67	-1,722.9	369.0	266.0	208.8	57.16	4.653		
7,700.0	6,360.0	7,518.8	6,210.0	45.3	43.2	55.67	-1,723.9	269.0	266.0	206.4	59.66	4.459		
7,800.0	6,360.0	7,618.8	6,210.0	45.4	43.7	55.67	-1,725.0	169.0	266.0	203.6	62.41	4.262		
7,900.0	6,360.0	7,718.8	6,210.0	45.7	44.4	55.68	-1,726.0	69.0	266.0	200.6	65.39	4.068		
8,000.0	6,360.0	7,818.8	6,210.0	46.3	45.4	55.68	-1,727.0	-31.0	266.0	197.5	68.56	3.880		
8,100.0	6,360.0	7,918.8	6,210.0	47.2	46.7	55.68	-1,728.0	-130.9	266.0	194.1	71.90	3.700		
8,200.0	6,360.0	8,018.8	6,210.0	48.4	48.2	55.68	-1,729.1	-230.9	266.0	190.6	75.39	3.529		
8,300.0	6,360.0	8,118.8	6,210.0	49.9	50.0	55.68	-1,730.1	-330.9	266.0	187.0	79.00	3.367		
8,400.0	6,360.0	8,218.8	6,210.0	51.8	52.0	55.68	-1,731.1	-430.9	266.0	183.3	82.73	3.216		
8,500.0	6,360.0	8,318.8	6,210.0	53.8	54.1	55.68	-1,732.2	-530.9	266.0	179.5	86.55	3.074		

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Markham 12-16CHZ
Project:	SEC.16-T4N-R68W	TVD Reference:	WELL @ 4997.5ft (Original Well Elev)
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4997.5ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 12-16CHZ	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (1-06-15)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						
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
8,600.0	6,360.0	8,418.8	6,210.0	56.0	56.3	55.68	-1,733.2	-630.9	266.0	175.6	90.45	2.941	
8,700.0	6,360.0	8,518.8	6,210.0	58.2	58.6	55.68	-1,734.2	-730.9	266.0	171.6	94.43	2.817	
8,800.0	6,360.0	8,618.8	6,210.0	60.6	60.9	55.68	-1,735.2	-830.9	266.0	167.5	98.48	2.701	
8,900.0	6,360.0	8,718.8	6,210.0	63.0	63.3	55.68	-1,736.3	-930.9	266.0	163.4	102.58	2.593	
9,000.0	6,360.0	8,818.8	6,210.0	65.4	65.8	55.68	-1,737.3	-1,030.9	266.0	159.3	106.73	2.493	
9,100.0	6,360.0	8,918.8	6,210.0	67.9	68.2	55.68	-1,738.3	-1,130.9	266.0	155.1	110.92	2.398	
9,200.0	6,360.0	9,018.8	6,210.0	70.4	70.7	55.68	-1,739.4	-1,230.9	266.0	150.9	115.16	2.310	
9,300.0	6,360.0	9,118.8	6,210.0	72.9	73.2	55.68	-1,740.4	-1,330.9	266.0	146.6	119.43	2.227	
9,400.0	6,360.0	9,218.8	6,210.0	75.5	75.8	55.68	-1,741.4	-1,430.9	266.0	142.3	123.74	2.150	
9,500.0	6,360.0	9,318.8	6,210.0	78.0	78.4	55.68	-1,742.4	-1,530.9	266.0	138.0	128.07	2.077	
9,600.0	6,360.0	9,418.8	6,210.0	80.6	80.9	55.68	-1,743.5	-1,630.9	266.0	133.6	132.43	2.009	
9,700.0	6,360.0	9,518.8	6,210.0	83.2	83.5	55.68	-1,744.5	-1,730.9	266.0	129.2	136.81	1.944	
9,800.0	6,360.0	9,618.8	6,210.0	85.8	86.1	55.68	-1,745.5	-1,830.9	266.0	124.8	141.21	1.884	
9,900.0	6,360.0	9,718.8	6,210.0	88.5	88.8	55.68	-1,746.6	-1,930.9	266.0	120.4	145.64	1.827	
10,000.0	6,360.0	9,818.8	6,210.0	91.1	91.4	55.68	-1,747.6	-2,030.8	266.0	116.0	150.08	1.773	
10,100.0	6,360.0	9,918.8	6,210.0	93.7	94.0	55.68	-1,748.6	-2,130.8	266.0	111.5	154.53	1.721	
10,200.0	6,360.0	10,018.8	6,210.0	96.4	96.7	55.68	-1,749.6	-2,230.8	266.0	107.0	159.01	1.673	
10,300.0	6,360.0	10,118.8	6,210.0	99.0	99.4	55.68	-1,750.7	-2,330.8	266.0	102.5	163.49	1.627	
10,400.0	6,360.0	10,218.8	6,210.0	101.7	102.0	55.68	-1,751.7	-2,430.8	266.0	98.0	167.99	1.584	
10,500.0	6,360.0	10,318.8	6,210.0	104.4	104.7	55.68	-1,752.7	-2,530.8	266.0	93.5	172.50	1.542	
10,600.0	6,360.0	10,418.8	6,210.0	107.1	107.4	55.68	-1,753.8	-2,630.8	266.0	89.0	177.02	1.503	
10,700.0	6,360.0	10,518.8	6,210.0	109.8	110.1	55.68	-1,754.8	-2,730.8	266.0	84.5	181.55	1.465 Level 3	
10,800.0	6,360.0	10,618.8	6,210.0	112.5	112.8	55.68	-1,755.8	-2,830.8	266.0	80.0	186.08	1.430 Level 3	
10,900.0	6,360.0	10,718.8	6,210.0	115.1	115.5	55.68	-1,756.8	-2,930.8	266.0	75.4	190.63	1.396 Level 3	
11,000.0	6,360.0	10,818.8	6,210.0	117.9	118.2	55.68	-1,757.9	-3,030.8	266.0	70.9	195.19	1.363 Level 3	
11,100.0	6,360.0	10,918.8	6,210.0	120.6	120.9	55.68	-1,758.9	-3,130.8	266.0	66.3	199.75	1.332 Level 3	
11,200.0	6,360.0	11,018.8	6,210.0	123.3	123.6	55.68	-1,759.9	-3,230.8	266.0	61.7	204.32	1.302 Level 3	
11,300.0	6,360.0	11,118.8	6,210.0	126.0	126.3	55.68	-1,761.0	-3,330.8	266.0	57.1	208.89	1.274 Level 3	
11,309.9	6,360.0	11,128.7	6,210.0	126.3	126.6	55.68	-1,761.1	-3,340.7	266.0	56.7	209.35	1.271 Level 3	
11,324.6	6,360.0	11,140.9	6,210.0	126.7	126.9	55.68	-1,761.2	-3,352.9	266.1	56.1	209.96	1.267 Level 3, SF	

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Markham 12-16CHZ
Project:	SEC.16-T4N-R68W	TVD Reference:	WELL @ 4997.5ft (Original Well Elev)
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4997.5ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 12-16CHZ	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (1-06-15)	Offset TVD Reference:	Offset Datum

Offset Design SRC Markham Pad Sec.16-T4N-R68W - SRC Markham A-16CHZ - Wellbore #1 - Plan #1 (1-06-15)													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	-90.70	-0.4	-29.8	29.8					
100.0	100.0	100.0	100.0	0.1	0.1	-90.70	-0.4	-29.8	29.8	29.6	0.22	132.757		
200.0	200.0	200.0	200.0	0.3	0.3	-90.70	-0.4	-29.8	29.8	29.2	0.67	44.252 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.6	132.17	-0.4	-29.8	31.0	29.9	1.11	28.003		
400.0	399.8	399.8	399.8	0.8	0.8	138.53	-0.4	-29.8	34.7	33.2	1.54	22.484		
500.0	499.5	499.5	499.5	1.0	1.0	146.41	-0.4	-29.8	41.7	39.7	2.00	20.814		
600.0	598.7	598.7	598.7	1.3	1.2	153.72	-0.4	-29.8	52.3	49.8	2.47	21.185		
700.0	697.5	699.7	699.7	1.6	1.4	159.38	-1.5	-28.5	65.0	62.1	2.91	22.347		
800.0	795.6	801.2	801.0	2.0	1.6	163.55	-5.0	-24.5	78.0	74.7	3.33	23.403		
900.0	893.1	903.2	902.7	2.5	1.9	166.84	-10.9	-17.7	91.2	87.4	3.77	24.164		
1,000.0	989.6	1,005.7	1,004.4	3.0	2.1	169.60	-19.2	-8.2	104.4	100.2	4.23	24.702		
1,100.0	1,085.3	1,108.7	1,106.1	3.6	2.4	171.99	-29.9	4.1	117.7	113.0	4.70	25.066		
1,200.0	1,179.8	1,212.2	1,207.6	4.2	2.8	174.14	-43.2	19.3	131.0	125.9	5.18	25.282		
1,300.0	1,273.2	1,316.2	1,308.8	4.9	3.2	176.11	-58.8	37.3	144.4	138.7	5.69	25.369		
1,400.0	1,365.2	1,420.7	1,409.5	5.7	3.7	177.96	-77.0	58.2	157.7	151.5	6.23	25.335		
1,429.7	1,392.3	1,451.8	1,439.3	6.0	3.9	178.48	-82.9	65.0	161.7	155.3	6.39	25.297		
1,500.0	1,456.2	1,525.8	1,509.8	6.6	4.3	179.70	-97.7	82.0	170.2	163.4	6.83	24.931		
1,600.0	1,547.1	1,631.6	1,609.5	7.4	5.0	-178.59	-121.0	108.8	179.4	171.9	7.49	23.962		
1,700.0	1,638.1	1,738.0	1,708.3	8.3	5.7	-176.82	-146.8	138.4	185.0	176.8	8.19	22.595		
1,800.0	1,729.0	1,840.9	1,802.7	9.1	6.5	-175.00	-173.8	169.4	187.7	178.8	8.95	20.984		
1,900.0	1,819.9	1,940.7	1,894.0	10.0	7.3	-173.25	-200.1	199.7	190.3	180.5	9.75	19.517		
2,000.0	1,910.8	2,040.5	1,985.4	10.9	8.1	-171.55	-226.5	230.0	192.9	182.3	10.60	18.197		
2,100.0	2,001.8	2,140.3	2,076.7	11.7	8.9	-169.90	-252.9	260.3	195.8	184.3	11.51	17.007		
2,200.0	2,092.7	2,240.1	2,168.1	12.6	9.8	-168.30	-279.3	290.6	198.8	186.3	12.48	15.932		
2,300.0	2,183.6	2,339.9	2,259.5	13.5	10.6	-166.75	-305.6	320.9	202.0	188.5	13.50	14.962		
2,400.0	2,274.6	2,439.7	2,350.8	14.4	11.4	-165.24	-332.0	351.2	205.3	190.7	14.57	14.086		
2,500.0	2,365.5	2,539.5	2,442.2	15.2	12.3	-163.79	-358.4	381.5	208.7	193.0	15.70	13.295		
2,600.0	2,456.4	2,639.3	2,533.5	16.1	13.1	-162.38	-384.8	411.8	212.3	195.4	16.87	12.580		
2,700.0	2,547.3	2,739.1	2,624.9	17.0	14.0	-161.02	-411.1	442.1	216.0	197.9	18.10	11.935		
2,800.0	2,638.3	2,838.9	2,716.3	17.9	14.8	-159.71	-437.5	472.4	219.8	200.4	19.36	11.351		
2,900.0	2,729.2	2,938.7	2,807.6	18.7	15.7	-158.44	-463.9	502.7	223.7	203.1	20.67	10.823		
3,000.0	2,820.1	3,038.5	2,899.0	19.6	16.5	-157.21	-490.3	533.0	227.8	205.7	22.02	10.345		
3,100.0	2,911.1	3,138.3	2,990.3	20.5	17.4	-156.03	-516.6	563.3	231.9	208.5	23.40	9.911		
3,200.0	3,002.0	3,238.1	3,081.7	21.4	18.2	-154.89	-543.0	593.6	236.1	211.3	24.81	9.517		
3,300.0	3,092.9	3,337.9	3,173.1	22.3	19.1	-153.79	-569.4	623.9	240.4	214.2	26.26	9.158		
3,400.0	3,183.8	3,437.7	3,264.4	23.1	19.9	-152.73	-595.8	654.2	244.8	217.1	27.73	8.831		
3,500.0	3,274.8	3,537.5	3,355.8	24.0	20.8	-151.71	-622.1	684.5	249.3	220.1	29.22	8.533		
3,600.0	3,365.7	3,637.3	3,447.1	24.9	21.6	-150.72	-648.5	714.8	253.9	223.2	30.74	8.260		
3,700.0	3,456.6	3,737.1	3,538.5	25.8	22.5	-149.77	-674.9	745.1	258.5	226.3	32.28	8.010		
3,800.0	3,547.5	3,836.9	3,629.9	26.7	23.4	-148.85	-701.2	775.4	263.2	229.4	33.84	7.780		
3,900.0	3,638.5	3,936.7	3,721.2	27.5	24.2	-147.97	-727.6	805.7	268.0	232.6	35.41	7.569		
4,000.0	3,729.4	4,036.5	3,812.6	28.4	25.1	-147.12	-754.0	836.0	272.8	235.8	37.00	7.374		
4,100.0	3,820.3	4,136.3	3,904.0	29.3	25.9	-146.29	-780.4	866.3	277.7	239.1	38.60	7.194		
4,200.0	3,911.3	4,236.1	3,995.3	30.2	26.8	-145.50	-806.7	896.6	282.7	242.4	40.22	7.028		
4,300.0	4,002.2	4,335.9	4,086.7	31.1	27.6	-144.73	-833.1	926.9	287.7	245.8	41.85	6.874		
4,400.0	4,093.1	4,435.7	4,178.0	31.9	28.5	-143.99	-859.5	957.2	292.7	249.2	43.49	6.731		
4,500.0	4,184.0	4,535.5	4,269.4	32.8	29.4	-143.27	-885.9	987.5	297.8	252.7	45.14	6.598		
4,600.0	4,275.0	4,635.4	4,360.8	33.7	30.2	-142.58	-912.2	1,017.8	302.9	256.1	46.79	6.474		
4,700.0	4,365.9	4,735.2	4,452.1	34.6	31.1	-141.91	-938.6	1,048.1	308.1	259.7	48.46	6.358		
4,800.0	4,456.8	4,835.0	4,543.5	35.5	31.9	-141.26	-965.0	1,078.4	313.3	263.2	50.13	6.251		
4,900.0	4,547.8	4,934.8	4,634.8	36.3	32.8	-140.63	-991.4	1,108.7	318.6	266.8	51.81	6.150		
5,000.0	4,638.7	5,034.6	4,726.2	37.2	33.6	-140.03	-1,017.7	1,139.0	323.9	270.4	53.49	6.055		

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 12-16CHZ
Project:	SEC.16-T4N-R68W	TVD Reference:	WELL @ 4997.5ft (Original Well Elev)
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4997.5ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 12-16CHZ	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (1-06-15)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
Survey Program: 0-MWDD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,100.0	4,729.6	5,134.4	4,817.6	38.1	34.5	-139.44	-1,044.1	1,169.3	329.2	274.0	55.18	5.967	
5,200.0	4,820.5	5,234.2	4,908.9	39.0	35.4	-138.88	-1,070.5	1,199.6	334.6	277.7	56.87	5.883	
5,300.0	4,911.5	5,334.0	5,000.3	39.9	36.2	-138.33	-1,096.9	1,229.9	340.0	281.4	58.57	5.805	
5,400.0	5,002.4	5,433.8	5,091.6	40.8	37.1	-137.80	-1,123.2	1,260.2	345.4	285.1	60.27	5.731	
5,500.0	5,093.3	5,533.6	5,183.0	41.6	37.9	-137.28	-1,149.6	1,290.5	350.9	288.9	61.97	5.662	
5,600.0	5,184.3	5,633.4	5,274.4	42.5	38.8	-136.78	-1,176.0	1,320.8	356.4	292.7	63.68	5.596	
5,700.0	5,275.2	5,733.2	5,365.7	43.4	39.7	-136.30	-1,202.4	1,351.1	361.9	296.5	65.39	5.534	
5,800.0	5,366.1	5,833.0	5,457.1	44.3	40.5	-135.83	-1,228.7	1,381.4	367.4	300.3	67.10	5.475	
5,900.0	5,457.0	5,938.0	5,554.8	45.2	41.2	-136.32	-1,257.0	1,407.1	372.3	304.4	67.91	5.482	
5,952.0	5,504.3	5,992.0	5,606.1	45.6	41.4	-137.48	-1,271.9	1,414.5	374.4	306.8	67.53	5.543	
6,000.0	5,548.3	6,041.0	5,653.1	46.0	41.6	-146.32	-1,285.6	1,417.7	376.3	309.6	66.72	5.640	
6,050.0	5,594.8	6,091.4	5,701.4	46.3	41.7	-156.99	-1,299.7	1,417.5	378.5	312.8	65.73	5.759	
6,100.0	5,641.8	6,141.1	5,749.1	46.5	41.8	-168.99	-1,313.7	1,413.8	381.0	316.4	64.66	5.892	
6,150.0	5,688.9	6,190.3	5,795.8	46.7	41.9	178.25	-1,327.4	1,406.8	383.7	320.2	63.56	6.037	
6,200.0	5,736.0	6,238.9	5,841.3	46.9	41.9	165.61	-1,340.8	1,396.6	386.6	324.1	62.45	6.190	
6,250.0	5,782.9	6,287.0	5,885.6	47.0	42.0	153.93	-1,353.9	1,383.4	389.6	328.3	61.37	6.349	
6,300.0	5,829.3	6,334.5	5,928.5	47.1	42.0	143.68	-1,366.6	1,367.3	392.8	332.5	60.34	6.510	
6,350.0	5,875.0	6,381.6	5,969.9	47.2	41.9	134.98	-1,378.9	1,348.5	396.1	336.7	59.38	6.671	
6,400.0	5,919.7	6,428.2	6,009.5	47.3	41.9	127.70	-1,390.7	1,327.1	399.5	341.0	58.52	6.827	
6,450.0	5,963.3	6,474.4	6,047.4	47.3	41.8	121.62	-1,402.0	1,303.3	402.9	345.1	57.76	6.976	
6,500.0	6,005.6	6,520.1	6,083.5	47.3	41.7	116.52	-1,412.8	1,277.3	406.3	349.2	57.12	7.114	
6,550.0	6,046.2	6,565.5	6,117.6	47.3	41.7	112.20	-1,423.0	1,249.1	409.7	353.1	56.61	7.238	
6,600.0	6,085.2	6,610.6	6,149.6	47.2	41.6	108.53	-1,432.7	1,219.0	413.1	356.8	56.24	7.345	
6,650.0	6,122.1	6,655.3	6,179.6	47.2	41.5	105.38	-1,441.8	1,187.1	416.3	360.3	56.01	7.433	
6,700.0	6,157.0	6,700.0	6,207.5	47.1	41.4	102.66	-1,450.3	1,153.2	419.5	363.5	55.94	7.498	
6,750.0	6,189.5	6,743.8	6,232.9	47.0	41.3	100.32	-1,458.1	1,118.4	422.5	366.4	56.05	7.538	
6,800.0	6,219.6	6,787.7	6,256.3	46.9	41.2	98.30	-1,465.3	1,081.9	425.3	369.0	56.32	7.552	
6,850.0	6,247.0	6,831.4	6,277.3	46.8	41.1	96.55	-1,471.8	1,044.2	427.9	371.2	56.76	7.539	
6,900.0	6,271.7	6,874.8	6,296.0	46.7	41.0	95.05	-1,477.7	1,005.4	430.4	373.0	57.38	7.501	
6,950.0	6,293.6	6,918.1	6,312.4	46.6	40.9	93.78	-1,482.9	965.7	432.5	374.4	58.16	7.437	
7,000.0	6,312.5	6,961.3	6,326.4	46.5	40.8	92.71	-1,487.4	925.2	434.4	375.3	59.11	7.350	
7,050.0	6,328.3	7,004.3	6,337.9	46.4	40.7	91.83	-1,491.2	883.9	436.1	375.9	60.21	7.243	
7,100.0	6,341.0	7,050.0	6,347.6	46.3	40.7	91.11	-1,494.4	839.4	437.4	376.0	61.45	7.118	
7,150.0	6,350.5	7,089.9	6,353.8	46.1	40.6	90.60	-1,496.7	800.0	438.5	375.7	62.80	6.982	
7,200.0	6,356.8	7,132.7	6,358.1	46.0	40.6	90.23	-1,498.3	757.5	439.2	374.9	64.24	6.836	
7,250.0	6,359.7	7,175.4	6,359.9	45.9	40.5	90.03	-1,499.3	714.9	439.6	373.8	65.76	6.685	
7,270.2	6,360.0	7,193.6	6,360.0	45.8	40.5	90.00	-1,499.5	696.6	439.7	373.3	66.39	6.623	
7,300.0	6,360.0	7,223.5	6,360.0	45.7	40.5	90.00	-1,499.8	666.7	439.7	372.8	66.88	6.574	
7,354.2	6,360.0	7,277.6	6,360.0	45.6	40.5	90.00	-1,500.4	612.6	439.7	371.8	67.85	6.480	
7,400.0	6,360.0	7,323.5	6,360.0	45.5	40.6	90.00	-1,500.9	566.7	439.7	370.9	68.72	6.398	
7,500.0	6,360.0	7,423.5	6,360.0	45.4	40.8	90.00	-1,501.9	466.8	439.7	368.7	70.95	6.197	
7,600.0	6,360.0	7,523.5	6,360.0	45.3	41.1	90.00	-1,502.9	366.8	439.7	366.1	73.55	5.978	
7,654.2	6,360.0	7,577.6	6,360.0	45.3	41.4	90.00	-1,503.5	312.6	439.7	364.6	75.11	5.853	
7,700.0	6,360.0	7,623.5	6,360.0	45.3	41.7	90.00	-1,504.0	266.8	439.7	363.2	76.47	5.750	
7,800.0	6,360.0	7,723.5	6,360.0	45.4	42.5	90.00	-1,505.0	166.8	439.7	360.0	79.68	5.518	
7,900.0	6,360.0	7,823.5	6,360.0	45.7	43.6	90.00	-1,506.0	66.8	439.7	356.5	83.14	5.288	
7,954.8	6,360.0	7,878.3	6,360.0	46.0	44.3	90.00	-1,506.6	12.0	439.7	354.5	85.15	5.163	
8,000.0	6,360.0	7,923.5	6,360.0	46.3	44.9	90.00	-1,507.0	-33.2	439.7	352.8	86.83	5.064	
8,100.0	6,360.0	8,023.5	6,360.0	47.2	46.5	90.00	-1,508.1	-133.2	439.7	349.0	90.72	4.847	
8,200.0	6,360.0	8,123.5	6,360.0	48.4	48.2	90.00	-1,509.1	-233.2	439.7	344.9	94.78	4.639	
8,300.0	6,360.0	8,223.5	6,360.0	49.9	50.1	90.00	-1,510.1	-333.2	439.7	340.7	98.99	4.442	
8,400.0	6,360.0	8,323.5	6,360.0	51.8	52.2	90.00	-1,511.2	-433.2	439.7	336.3	103.33	4.255	

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 A-16CHZ - Wellbore #1 - Plan #1 (1-06-15)												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
8,454.2	6,360.0	8,377.6	6,360.0	52.9	53.3	90.00	-1,511.7	-487.4	439.7	333.9	105.74	4.158	
8,500.0	6,360.0	8,423.5	6,360.0	53.8	54.3	90.00	-1,512.2	-533.2	439.7	331.9	107.79	4.079	
8,600.0	6,360.0	8,523.5	6,360.0	56.0	56.5	90.00	-1,513.2	-633.2	439.7	327.3	112.35	3.913	
8,700.0	6,360.0	8,623.5	6,360.0	58.2	58.8	90.00	-1,514.3	-733.2	439.7	322.7	117.01	3.758	
8,754.2	6,360.0	8,677.6	6,360.0	59.5	60.1	90.00	-1,514.8	-787.3	439.7	320.1	119.57	3.677	
8,800.0	6,360.0	8,723.5	6,360.0	60.6	61.2	90.00	-1,515.3	-833.2	439.7	317.9	121.74	3.611	
8,900.0	6,360.0	8,823.5	6,360.0	63.0	63.6	90.00	-1,516.3	-933.2	439.7	313.1	126.55	3.474	
9,000.0	6,360.0	8,923.5	6,360.0	65.4	66.0	90.00	-1,517.3	-1,033.2	439.7	308.2	131.42	3.346	
9,050.3	6,360.0	8,973.8	6,360.0	66.6	67.3	90.00	-1,517.9	-1,083.5	439.7	305.8	133.89	3.284	
9,100.0	6,360.0	9,023.5	6,360.0	67.9	68.5	90.00	-1,518.4	-1,133.2	439.7	303.3	136.35	3.225	
9,200.0	6,360.0	9,123.5	6,360.0	70.4	71.0	90.00	-1,519.4	-1,233.2	439.7	298.3	141.33	3.111	
9,300.0	6,360.0	9,223.5	6,360.0	72.9	73.5	90.00	-1,520.4	-1,333.2	439.7	293.3	146.35	3.004	
9,350.3	6,360.0	9,273.8	6,360.0	74.2	74.8	90.00	-1,521.0	-1,383.4	439.7	290.8	148.89	2.953	
9,400.0	6,360.0	9,323.5	6,360.0	75.5	76.0	90.00	-1,521.5	-1,433.1	439.7	288.3	151.41	2.904	
9,500.0	6,360.0	9,423.5	6,360.0	78.0	78.6	90.00	-1,522.5	-1,533.1	439.7	283.2	156.52	2.809	
9,550.3	6,360.0	9,473.8	6,360.0	79.3	79.9	90.00	-1,523.0	-1,583.4	439.7	280.6	159.10	2.764	
9,600.0	6,360.0	9,523.5	6,360.0	80.6	81.2	90.00	-1,523.5	-1,633.1	439.7	278.0	161.65	2.720	
9,700.0	6,360.0	9,623.5	6,360.0	83.2	83.8	90.00	-1,524.6	-1,733.1	439.7	272.8	166.82	2.636	
9,800.0	6,360.0	9,723.5	6,360.0	85.8	86.4	90.00	-1,525.6	-1,833.1	439.7	267.7	172.01	2.556	
9,850.3	6,360.0	9,773.8	6,360.0	87.1	87.7	90.00	-1,526.1	-1,883.4	439.7	265.0	174.64	2.518	
9,900.0	6,360.0	9,823.5	6,360.0	88.5	89.0	90.00	-1,526.6	-1,933.1	439.7	262.4	177.23	2.481	
10,000.0	6,360.0	9,923.5	6,360.0	91.1	91.6	90.00	-1,527.6	-2,033.1	439.7	257.2	182.47	2.409	
10,100.0	6,360.0	10,023.5	6,360.0	93.7	94.3	90.00	-1,528.7	-2,133.1	439.7	251.9	187.74	2.342	
10,200.0	6,360.0	10,123.5	6,360.0	96.4	96.9	90.00	-1,529.7	-2,233.1	439.7	246.6	193.02	2.278	
10,300.0	6,360.0	10,223.5	6,360.0	99.0	99.6	90.00	-1,530.7	-2,333.1	439.7	241.3	198.32	2.217	
10,400.0	6,360.0	10,323.5	6,360.0	101.7	102.2	90.00	-1,531.8	-2,433.1	439.7	236.0	203.64	2.159	
10,500.0	6,360.0	10,423.5	6,360.0	104.4	104.9	90.00	-1,532.8	-2,533.1	439.7	230.7	208.97	2.104	
10,600.0	6,360.0	10,523.5	6,360.0	107.1	107.6	90.00	-1,533.8	-2,633.1	439.7	225.3	214.32	2.051	
10,700.0	6,360.0	10,623.5	6,360.0	109.8	110.3	90.00	-1,534.9	-2,733.1	439.7	220.0	219.68	2.001	
10,800.0	6,360.0	10,723.5	6,360.0	112.5	113.0	90.00	-1,535.9	-2,833.1	439.7	214.6	225.05	1.954	
10,900.0	6,360.0	10,823.5	6,360.0	115.1	115.7	90.00	-1,536.9	-2,933.1	439.7	209.2	230.44	1.908	
11,000.0	6,360.0	10,923.5	6,360.0	117.9	118.4	90.00	-1,537.9	-3,033.1	439.7	203.8	235.83	1.864	
11,100.0	6,360.0	11,023.5	6,360.0	120.6	121.1	90.00	-1,539.0	-3,133.1	439.7	198.4	241.24	1.823	
11,200.0	6,360.0	11,123.5	6,360.0	123.3	123.8	90.00	-1,540.0	-3,233.1	439.7	193.0	246.65	1.783	
11,233.1	6,360.0	11,156.6	6,360.0	124.2	124.7	90.00	-1,540.3	-3,266.1	439.7	191.2	248.44	1.770	
11,300.0	6,360.0	11,222.7	6,360.0	126.0	126.5	90.00	-1,541.0	-3,332.3	439.7	187.7	252.05	1.745	
11,324.6	6,360.0	11,242.7	6,360.0	126.7	127.0	90.00	-1,541.2	-3,352.3	439.8	186.5	253.26	1.736 SF	

SRC Markham Pad Sec.16-T4N-R68W - SRC Markham A-16NHZ - Wellbore #1 - Plan #1 (1-05-15)												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 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	-90.93	-0.7	-44.9	44.9				
100.0	100.0	100.0	100.0	0.1	0.1	-90.93	-0.7	-44.9	44.9	44.7	0.22	199.768	
200.0	200.0	200.0	200.0	0.3	0.3	-90.93	-0.7	-44.9	44.9	44.2	0.67	66.589	CC, ES
300.0	300.0	300.0	300.0	0.5	0.6	131.13	-0.7	-44.9	46.0	44.9	1.11	41.607	
400.0	399.8	399.8	399.8	0.8	0.8	135.63	-0.7	-44.9	49.6	48.1	1.54	32.154	
500.0	499.5	499.5	499.5	1.0	1.0	141.77	-0.7	-44.9	56.2	54.2	2.00	28.067	
600.0	598.7	598.7	598.7	1.3	1.2	148.19	-0.7	-44.9	66.2	63.7	2.47	26.779	
700.0	697.5	697.5	697.5	1.6	1.5	153.97	-0.7	-44.9	80.0	77.0	2.95	27.134	
800.0	795.6	795.6	795.6	2.0	1.7	158.75	-0.7	-44.9	97.5	94.1	3.42	28.502	
900.0	893.1	897.0	897.0	2.5	1.9	162.65	-1.7	-43.6	117.2	113.4	3.87	30.268	
1,000.0	989.6	999.3	999.2	3.0	2.1	165.78	-4.8	-39.3	137.2	132.9	4.30	31.866	
1,100.0	1,085.3	1,102.4	1,101.8	3.6	2.3	168.44	-10.1	-32.0	157.2	152.5	4.75	33.115	
1,200.0	1,179.8	1,206.2	1,204.8	4.2	2.5	170.79	-17.5	-21.6	177.4	172.2	5.20	34.080	
1,300.0	1,273.2	1,310.7	1,308.0	4.9	2.8	172.93	-27.3	-8.1	197.6	191.9	5.68	34.808	
1,400.0	1,365.2	1,415.9	1,411.2	5.7	3.2	174.91	-39.3	8.6	217.9	211.7	6.17	35.325	
1,429.7	1,392.3	1,447.3	1,441.8	6.0	3.3	175.48	-43.3	14.2	224.0	217.6	6.32	35.432	
1,500.0	1,456.2	1,522.1	1,514.5	6.6	3.6	176.79	-53.7	28.5	237.4	230.7	6.72	35.345	
1,600.0	1,547.1	1,629.6	1,618.0	7.4	4.1	178.58	-70.5	51.8	253.7	246.4	7.32	34.677	
1,700.0	1,638.1	1,738.1	1,721.4	8.3	4.7	-179.64	-89.8	78.6	266.5	258.5	7.96	33.471	
1,800.0	1,729.0	1,847.4	1,824.2	9.1	5.4	-177.81	-111.5	108.7	275.8	267.2	8.65	31.884	
1,900.0	1,819.9	1,957.1	1,925.9	10.0	6.1	-175.86	-135.6	142.1	281.8	272.4	9.42	29.923	
2,000.0	1,910.8	2,062.2	2,022.0	10.9	7.0	-173.84	-160.6	176.8	284.7	274.5	10.25	27.778	
2,100.0	2,001.8	2,161.8	2,112.6	11.7	7.8	-171.93	-184.6	210.0	287.5	276.4	11.14	25.815	
2,200.0	2,092.7	2,261.3	2,203.3	12.6	8.6	-170.06	-208.6	243.3	290.5	278.5	12.09	24.025	
2,300.0	2,183.6	2,360.8	2,293.9	13.5	9.4	-168.23	-232.5	276.6	293.9	280.8	13.12	22.397	
2,400.0	2,274.6	2,460.3	2,384.6	14.4	10.3	-166.45	-256.5	309.8	297.6	283.3	14.22	20.921	
2,500.0	2,365.5	2,559.8	2,475.2	15.2	11.1	-164.71	-280.5	343.1	301.5	286.1	15.39	19.586	
2,600.0	2,456.4	2,659.3	2,565.9	16.1	12.0	-163.01	-304.5	376.4	305.7	289.1	16.63	18.382	
2,700.0	2,547.3	2,758.8	2,656.6	17.0	12.8	-161.36	-328.5	409.6	310.2	292.3	17.93	17.298	
2,800.0	2,638.3	2,858.3	2,747.2	17.9	13.7	-159.76	-352.5	442.9	314.9	295.6	19.29	16.324	
2,900.0	2,729.2	2,957.8	2,837.9	18.7	14.6	-158.21	-376.5	476.2	319.9	299.2	20.71	15.448	
3,000.0	2,820.1	3,057.3	2,928.5	19.6	15.4	-156.70	-400.5	509.4	325.1	302.9	22.17	14.660	
3,100.0	2,911.1	3,156.8	3,019.2	20.5	16.3	-155.25	-424.5	542.7	330.5	306.8	23.69	13.953	
3,200.0	3,002.0	3,256.3	3,109.8	21.4	17.2	-153.84	-448.5	576.0	336.1	310.9	25.24	13.316	
3,300.0	3,092.9	3,355.8	3,200.5	22.3	18.0	-152.47	-472.4	609.2	341.9	315.1	26.84	12.742	
3,400.0	3,183.8	3,455.3	3,291.2	23.1	18.9	-151.16	-496.4	642.5	347.9	319.5	28.46	12.224	
3,500.0	3,274.8	3,554.8	3,381.8	24.0	19.8	-149.89	-520.4	675.8	354.1	324.0	30.12	11.756	
3,600.0	3,365.7	3,654.3	3,472.5	24.9	20.7	-148.66	-544.4	709.0	360.5	328.7	31.81	11.333	
3,700.0	3,456.6	3,753.8	3,563.1	25.8	21.5	-147.47	-568.4	742.3	367.0	333.5	33.52	10.949	
3,800.0	3,547.5	3,853.3	3,653.8	26.7	22.4	-146.33	-592.4	775.6	373.6	338.4	35.25	10.600	
3,900.0	3,638.5	3,952.8	3,744.4	27.5	23.3	-145.23	-616.4	808.8	380.5	343.4	37.00	10.282	
4,000.0	3,729.4	4,052.3	3,835.1	28.4	24.2	-144.17	-640.4	842.1	387.4	348.6	38.77	9.992	
4,100.0	3,820.3	4,151.8	3,925.8	29.3	25.1	-143.14	-664.4	875.4	394.5	353.9	40.55	9.727	
4,200.0	3,911.3	4,251.3	4,016.4	30.2	25.9	-142.15	-688.4	908.6	401.7	359.3	42.35	9.485	
4,300.0	4,002.2	4,350.8	4,107.1	31.1	26.8	-141.19	-712.3	941.9	409.0	364.8	44.16	9.262	
4,400.0	4,093.1	4,450.3	4,197.7	31.9	27.7	-140.27	-736.3	975.2	416.4	370.4	45.97	9.057	
4,500.0	4,184.0	4,549.8	4,288.4	32.8	28.6	-139.38	-760.3	1,008.4	423.9	376.1	47.80	8.869	
4,600.0	4,275.0	4,649.3	4,379.1	33.7	29.5	-138.53	-784.3	1,041.7	431.5	381.9	49.63	8.695	
4,700.0	4,365.9	4,748.8	4,469.7	34.6	30.3	-137.70	-808.3	1,075.0	439.2	387.8	51.47	8.535	
4,800.0	4,456.8	4,848.4	4,560.4	35.5	31.2	-136.90	-832.3	1,108.2	447.0	393.7	53.31	8.386	
4,900.0	4,547.8	4,947.9	4,651.0	36.3	32.1	-136.13	-856.3	1,141.5	454.9	399.8	55.16	8.248	
5,000.0	4,638.7	5,047.4	4,741.7	37.2	33.0	-135.38	-880.3	1,174.7	462.9	405.9	57.01	8.120	

SRC Markham Pad Sec.16-T4N-R68W - SRC Markham A-16NHZ - Wellbore #1 - Plan #1 (1-05-15)													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)			
5,100.0	4,729.6	5,146.9	4,832.3	38.1	33.9	-134.66	-904.3	1,208.0	470.9	412.1	58.86	8.001		
5,200.0	4,820.5	5,246.4	4,923.0	39.0	34.7	-133.96	-928.3	1,241.3	479.1	418.3	60.72	7.890		
5,300.0	4,911.5	5,345.9	5,013.7	39.9	35.6	-133.29	-952.2	1,274.5	487.2	424.7	62.57	7.787		
5,400.0	5,002.4	5,445.4	5,104.3	40.8	36.5	-132.64	-976.2	1,307.8	495.5	431.1	64.43	7.690		
5,500.0	5,093.3	5,544.9	5,195.0	41.6	37.4	-132.01	-1,000.2	1,341.1	503.8	437.5	66.29	7.600		
5,600.0	5,184.3	5,644.4	5,285.6	42.5	38.3	-131.40	-1,024.2	1,374.3	512.2	444.0	68.15	7.515		
5,700.0	5,275.2	5,758.2	5,391.7	43.4	39.0	-131.65	-1,052.4	1,404.3	519.2	449.9	69.29	7.494		
5,800.0	5,366.1	5,869.6	5,498.5	44.3	39.4	-133.76	-1,080.9	1,416.4	523.9	455.0	68.90	7.604		
5,900.0	5,457.0	5,973.0	5,598.2	45.2	39.6	-137.31	-1,107.7	1,412.1	527.7	460.5	67.15	7.858		
5,952.0	5,504.3	6,022.6	5,645.6	45.6	39.6	-139.52	-1,120.5	1,404.8	530.1	464.3	65.82	8.054		
6,000.0	5,548.3	6,066.4	5,686.9	46.0	39.7	-149.21	-1,131.7	1,395.6	533.2	468.9	64.25	8.299		
6,050.0	5,594.8	6,110.8	5,728.1	46.3	39.7	-160.74	-1,142.9	1,383.6	537.3	474.8	62.53	8.593		
6,100.0	5,641.8	6,154.2	5,767.6	46.5	39.6	-173.55	-1,153.7	1,369.3	542.3	481.5	60.80	8.919		
6,150.0	5,688.9	6,196.5	5,805.3	46.7	39.6	172.90	-1,164.0	1,353.0	548.0	488.9	59.12	9.269		
6,200.0	5,736.0	6,238.0	5,841.2	46.9	39.5	159.52	-1,173.8	1,334.8	554.4	496.8	57.53	9.637		
6,250.0	5,782.9	6,278.6	5,875.4	47.0	39.5	147.12	-1,183.2	1,314.9	561.3	505.2	56.05	10.014		
6,300.0	5,829.3	6,318.6	5,907.9	47.1	39.4	136.21	-1,192.1	1,293.4	568.6	513.9	54.71	10.394		
6,350.0	5,875.0	6,357.9	5,938.7	47.2	39.3	126.88	-1,200.6	1,270.5	576.3	522.8	53.52	10.768		
6,400.0	5,919.7	6,400.0	5,970.2	47.3	39.2	118.91	-1,209.4	1,244.0	584.3	531.8	52.42	11.147		
6,450.0	5,963.3	6,434.8	5,995.1	47.3	39.2	112.39	-1,216.3	1,220.7	592.3	540.7	51.63	11.472		
6,500.0	6,005.6	6,472.6	6,020.9	47.3	39.1	106.79	-1,223.5	1,194.0	600.4	549.4	50.93	11.787		
6,550.0	6,046.2	6,509.9	6,044.9	47.3	39.0	102.01	-1,230.2	1,166.3	608.3	558.0	50.40	12.071		
6,600.0	6,085.2	6,550.0	6,069.2	47.2	38.9	97.85	-1,237.1	1,135.2	616.2	566.2	49.98	12.328		
6,650.0	6,122.1	6,583.4	6,088.1	47.2	38.9	94.40	-1,242.4	1,108.1	623.8	574.0	49.84	12.516		
6,700.0	6,157.0	6,619.7	6,107.3	47.1	38.8	91.36	-1,247.9	1,077.8	631.1	581.3	49.83	12.664		
6,750.0	6,189.5	6,650.0	6,122.1	47.0	38.7	88.81	-1,252.2	1,051.7	638.1	588.0	50.05	12.749		
6,800.0	6,219.6	6,691.5	6,140.6	46.9	38.7	86.44	-1,257.5	1,015.0	644.5	594.1	50.40	12.789		
6,850.0	6,247.0	6,727.1	6,154.8	46.8	38.6	84.47	-1,261.7	982.6	650.5	599.5	51.00	12.757		
6,900.0	6,271.7	6,762.5	6,167.4	46.7	38.6	82.78	-1,265.4	949.8	656.0	604.2	51.80	12.664		
6,950.0	6,293.6	6,800.0	6,179.0	46.6	38.5	81.32	-1,268.9	914.3	660.9	608.1	52.82	12.513		
7,000.0	6,312.5	6,832.8	6,187.7	46.5	38.5	80.14	-1,271.5	882.8	665.2	611.1	54.05	12.306		
7,050.0	6,328.3	6,867.7	6,195.4	46.4	38.5	79.16	-1,274.0	848.8	668.8	613.3	55.47	12.057		
7,100.0	6,341.0	6,900.0	6,201.1	46.3	38.5	78.40	-1,275.8	817.1	671.8	614.7	57.05	11.776		
7,150.0	6,350.5	6,937.4	6,205.9	46.1	38.5	77.80	-1,277.5	780.0	674.0	615.2	58.81	11.462		
7,200.0	6,356.8	6,972.1	6,208.8	46.0	38.5	77.42	-1,278.6	745.4	675.6	614.9	60.67	11.135		
7,250.0	6,359.7	7,006.8	6,210.0	45.9	38.6	77.22	-1,279.3	710.7	676.4	613.8	62.62	10.802		
7,270.2	6,360.0	7,023.3	6,210.0	45.8	38.6	77.19	-1,279.5	694.3	676.6	613.1	63.45	10.663		
7,300.0	6,360.0	7,053.1	6,210.0	45.7	38.6	77.19	-1,279.8	664.5	676.6	612.6	63.93	10.583		
7,400.0	6,360.0	7,153.1	6,210.0	45.5	38.9	77.19	-1,280.8	564.5	676.6	610.8	65.74	10.291		
7,500.0	6,360.0	7,253.1	6,210.0	45.4	39.4	77.19	-1,281.9	464.5	676.6	608.6	67.93	9.959		
7,600.0	6,360.0	7,353.1	6,210.0	45.3	40.1	77.19	-1,282.9	364.5	676.6	606.1	70.49	9.598		
7,700.0	6,360.0	7,453.1	6,210.0	45.3	41.0	77.19	-1,283.9	264.5	676.6	603.2	73.36	9.222		
7,800.0	6,360.0	7,553.1	6,210.0	45.4	42.1	77.19	-1,284.9	164.5	676.6	600.0	76.52	8.841		
7,900.0	6,360.0	7,653.1	6,210.0	45.7	43.4	77.19	-1,286.0	64.5	676.6	596.6	79.94	8.464		
8,000.0	6,360.0	7,753.1	6,210.0	46.3	45.0	77.19	-1,287.0	-35.5	676.6	593.0	83.57	8.096		
8,100.0	6,360.0	7,853.1	6,210.0	47.2	46.7	77.19	-1,288.0	-135.5	676.6	589.2	87.40	7.741		
8,200.0	6,360.0	7,953.1	6,210.0	48.4	48.6	77.19	-1,289.1	-235.5	676.6	585.2	91.39	7.403		
8,300.0	6,360.0	8,053.1	6,210.0	49.9	50.6	77.19	-1,290.1	-335.5	676.6	581.0	95.53	7.082		
8,400.0	6,360.0	8,153.1	6,210.0	51.8	52.7	77.19	-1,291.1	-435.5	676.6	576.8	99.81	6.779		
8,500.0	6,360.0	8,253.1	6,210.0	53.8	54.8	77.19	-1,292.1	-535.5	676.6	572.4	104.19	6.493		
8,600.0	6,360.0	8,353.1	6,210.0	56.0	57.1	77.19	-1,293.2	-635.4	676.6	567.9	108.68	6.225		
8,700.0	6,360.0	8,453.1	6,210.0	58.2	59.4	77.19	-1,294.2	-735.4	676.6	563.3	113.25	5.974		

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Markham 12-16CHZ
Project:	SEC.16-T4N-R68W	TVD Reference:	WELL @ 4997.5ft (Original Well Elev)
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4997.5ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 12-16CHZ	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (1-06-15)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						
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
8,800.0	6,360.0	8,553.1	6,210.0	60.6	61.8	77.19	-1,295.2	-835.4	676.6	558.7	117.90	5.738	
8,900.0	6,360.0	8,653.1	6,210.0	63.0	64.2	77.19	-1,296.3	-935.4	676.6	553.9	122.62	5.518	
9,000.0	6,360.0	8,753.1	6,210.0	65.4	66.6	77.19	-1,297.3	-1,035.4	676.6	549.2	127.40	5.311	
9,100.0	6,360.0	8,853.1	6,210.0	67.9	69.1	77.19	-1,298.3	-1,135.4	676.6	544.3	132.24	5.116	
9,200.0	6,360.0	8,953.1	6,210.0	70.4	71.5	77.19	-1,299.3	-1,235.4	676.6	539.5	137.12	4.934	
9,300.0	6,360.0	9,053.1	6,210.0	72.9	74.1	77.19	-1,300.4	-1,335.4	676.6	534.5	142.05	4.763	
9,400.0	6,360.0	9,153.1	6,210.0	75.5	76.6	77.19	-1,301.4	-1,435.4	676.6	529.6	147.02	4.602	
9,500.0	6,360.0	9,253.1	6,210.0	78.0	79.2	77.19	-1,302.4	-1,535.4	676.6	524.6	152.02	4.451	
9,600.0	6,360.0	9,353.1	6,210.0	80.6	81.7	77.19	-1,303.5	-1,635.4	676.6	519.5	157.05	4.308	
9,700.0	6,360.0	9,453.1	6,210.0	83.2	84.3	77.19	-1,304.5	-1,735.4	676.6	514.5	162.12	4.173	
9,800.0	6,360.0	9,553.1	6,210.0	85.8	86.9	77.19	-1,305.5	-1,835.4	676.6	509.4	167.21	4.046	
9,900.0	6,360.0	9,653.1	6,210.0	88.5	89.5	77.19	-1,306.5	-1,935.4	676.6	504.3	172.32	3.926	
10,000.0	6,360.0	9,753.1	6,210.0	91.1	92.2	77.19	-1,307.6	-2,035.4	676.6	499.1	177.46	3.813	
10,100.0	6,360.0	9,853.1	6,210.0	93.7	94.8	77.19	-1,308.6	-2,135.4	676.6	494.0	182.61	3.705	
10,200.0	6,360.0	9,953.1	6,210.0	96.4	97.5	77.19	-1,309.6	-2,235.4	676.6	488.8	187.79	3.603	
10,300.0	6,360.0	10,053.1	6,210.0	99.0	100.1	77.19	-1,310.7	-2,335.4	676.6	483.6	192.98	3.506	
10,400.0	6,360.0	10,153.1	6,210.0	101.7	102.8	77.19	-1,311.7	-2,435.4	676.6	478.4	198.19	3.414	
10,500.0	6,360.0	10,253.1	6,210.0	104.4	105.5	77.19	-1,312.7	-2,535.3	676.6	473.2	203.41	3.326	
10,600.0	6,360.0	10,353.1	6,210.0	107.1	108.1	77.19	-1,313.7	-2,635.3	676.6	468.0	208.64	3.243	
10,700.0	6,360.0	10,453.1	6,210.0	109.8	110.8	77.19	-1,314.8	-2,735.3	676.6	462.7	213.89	3.163	
10,800.0	6,360.0	10,553.1	6,210.0	112.5	113.5	77.19	-1,315.8	-2,835.3	676.6	457.4	219.15	3.087	
10,900.0	6,360.0	10,653.1	6,210.0	115.1	116.2	77.19	-1,316.8	-2,935.3	676.6	452.2	224.42	3.015	
11,000.0	6,360.0	10,753.1	6,210.0	117.9	118.9	77.19	-1,317.9	-3,035.3	676.6	446.9	229.70	2.946	
11,100.0	6,360.0	10,853.1	6,210.0	120.6	121.6	77.19	-1,318.9	-3,135.3	676.6	441.6	234.99	2.879	
11,200.0	6,360.0	10,953.1	6,210.0	123.3	124.3	77.19	-1,319.9	-3,235.3	676.6	436.3	240.28	2.816	
11,300.0	6,360.0	11,053.1	6,210.0	126.0	127.0	77.19	-1,320.9	-3,335.3	676.6	431.0	245.59	2.755	
11,306.7	6,360.0	11,059.8	6,210.0	126.2	127.2	77.19	-1,321.0	-3,342.0	676.6	430.7	245.95	2.751	
11,324.6	6,360.0	11,069.5	6,210.0	126.7	127.5	77.19	-1,321.1	-3,351.7	676.7	430.0	246.68	2.743 SF	

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Markham 12-16CHZ
Project:	SEC.16-T4N-R68W	TVD Reference:	WELL @ 4997.5ft (Original Well Elev)
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4997.5ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 12-16CHZ	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (1-06-15)	Offset TVD Reference:	Offset Datum

Offset Design SRC Markham Pad Sec.16-T4N-R68W - SRC Markham F-16CHZ - Wellbore #1 - Plan #1 (1-05-15)													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	-90.70	-0.7	-60.0	60.0					
100.0	100.0	100.0	100.0	0.1	0.1	-90.70	-0.7	-60.0	60.0	59.7	0.22	266.755		
200.0	200.0	200.0	200.0	0.3	0.3	-90.70	-0.7	-60.0	60.0	59.3	0.67	88.918 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.6	130.95	-0.7	-60.0	61.1	60.0	1.11	55.218		
400.0	399.8	399.8	399.8	0.8	0.8	134.40	-0.7	-60.0	64.6	63.1	1.54	41.882		
500.0	499.5	499.5	499.5	1.0	1.0	139.34	-0.7	-60.0	71.0	69.0	2.00	35.457		
600.0	598.7	598.7	598.7	1.3	1.2	144.86	-0.7	-60.0	80.7	78.2	2.48	32.571		
700.0	697.5	697.5	697.5	1.6	1.5	150.21	-0.7	-60.0	93.9	91.0	2.96	31.763		
800.0	795.6	795.6	795.6	2.0	1.7	154.95	-0.7	-60.0	110.9	107.5	3.44	32.264		
900.0	893.1	893.1	893.1	2.5	1.9	158.93	-0.7	-60.0	131.7	127.8	3.92	33.616		
1,000.0	989.6	989.6	989.6	3.0	2.1	162.18	-0.7	-60.0	156.2	151.8	4.40	35.530		
1,100.0	1,085.3	1,091.1	1,091.1	3.6	2.3	164.99	-1.5	-58.7	183.0	178.2	4.86	37.666		
1,200.0	1,179.8	1,194.1	1,193.9	4.2	2.5	167.44	-4.1	-54.3	210.0	204.7	5.30	39.637		
1,300.0	1,273.2	1,298.0	1,297.5	4.9	2.7	169.64	-8.6	-46.6	237.1	231.4	5.75	41.270		
1,400.0	1,365.2	1,402.9	1,401.6	5.7	3.0	171.67	-15.0	-35.6	264.4	258.2	6.21	42.601		
1,429.7	1,392.3	1,434.3	1,432.6	6.0	3.1	172.25	-17.4	-31.6	272.5	266.1	6.35	42.932		
1,500.0	1,456.2	1,509.0	1,506.4	6.6	3.3	173.62	-23.6	-21.0	290.9	284.2	6.71	43.347		
1,600.0	1,547.1	1,617.0	1,612.2	7.4	3.6	175.45	-34.2	-2.9	314.4	307.1	7.26	43.322		
1,700.0	1,638.1	1,726.5	1,718.8	8.3	4.0	177.21	-47.1	19.1	334.4	326.6	7.83	42.694		
1,800.0	1,729.0	1,837.4	1,825.5	9.1	4.5	178.98	-62.2	44.9	351.1	342.7	8.45	41.547		
1,900.0	1,819.9	1,949.3	1,932.0	10.0	5.1	-179.19	-79.6	74.5	364.5	355.3	9.12	39.959		
2,000.0	1,910.8	2,061.8	2,037.7	10.9	5.8	-177.26	-99.2	107.8	374.4	364.6	9.86	37.987		
2,100.0	2,001.8	2,174.7	2,142.1	11.7	6.6	-175.18	-120.9	144.9	381.1	370.4	10.68	35.668		
2,200.0	2,092.7	2,273.9	2,233.0	12.6	7.3	-173.30	-140.9	179.0	386.3	374.8	11.54	33.468		
2,300.0	2,183.6	2,372.9	2,323.8	13.5	8.1	-171.48	-160.9	213.1	392.0	379.5	12.47	31.431		
2,400.0	2,274.6	2,472.0	2,414.7	14.4	8.9	-169.71	-180.9	247.2	398.0	384.6	13.47	29.552		
2,500.0	2,365.5	2,571.1	2,505.5	15.2	9.7	-167.99	-200.9	281.3	404.5	389.9	14.53	27.828		
2,600.0	2,456.4	2,670.1	2,596.3	16.1	10.5	-166.33	-220.9	315.4	411.2	395.6	15.66	26.253		
2,700.0	2,547.3	2,769.2	2,687.2	17.0	11.3	-164.72	-240.9	349.4	418.3	401.5	16.86	24.819		
2,800.0	2,638.3	2,868.2	2,778.0	17.9	12.1	-163.16	-260.9	383.5	425.8	407.7	18.10	23.517		
2,900.0	2,729.2	2,967.3	2,868.8	18.7	12.9	-161.66	-280.9	417.6	433.5	414.1	19.41	22.338		
3,000.0	2,820.1	3,066.4	2,959.7	19.6	13.8	-160.22	-300.9	451.7	441.5	420.8	20.76	21.269		
3,100.0	2,911.1	3,165.4	3,050.5	20.5	14.6	-158.82	-320.9	485.8	449.8	427.7	22.16	20.303		
3,200.0	3,002.0	3,264.5	3,141.3	21.4	15.4	-157.47	-340.9	519.9	458.4	434.8	23.59	19.428		
3,300.0	3,092.9	3,363.5	3,232.2	22.3	16.3	-156.18	-360.9	554.0	467.2	442.1	25.07	18.636		
3,400.0	3,183.8	3,462.6	3,323.0	23.1	17.1	-154.93	-380.9	588.0	476.2	449.6	26.58	17.918		
3,500.0	3,274.8	3,561.6	3,413.8	24.0	17.9	-153.73	-400.9	622.1	485.5	457.4	28.12	17.266		
3,600.0	3,365.7	3,660.7	3,504.7	24.9	18.8	-152.57	-420.9	656.2	494.9	465.2	29.68	16.674		
3,700.0	3,456.6	3,759.8	3,595.5	25.8	19.6	-151.46	-440.9	690.3	504.6	473.3	31.27	16.135		
3,800.0	3,547.5	3,858.8	3,686.4	26.7	20.5	-150.39	-460.9	724.4	514.4	481.5	32.88	15.643		
3,900.0	3,638.5	3,957.9	3,777.2	27.5	21.3	-149.36	-480.9	758.5	524.4	489.9	34.51	15.194		
4,000.0	3,729.4	4,056.9	3,868.0	28.4	22.1	-148.37	-500.9	792.6	534.6	498.4	36.16	14.783		
4,100.0	3,820.3	4,156.0	3,958.9	29.3	23.0	-147.41	-520.9	826.6	544.9	507.1	37.82	14.406		
4,200.0	3,911.3	4,255.1	4,049.7	30.2	23.8	-146.49	-540.9	860.7	555.4	515.9	39.50	14.060		
4,300.0	4,002.2	4,354.1	4,140.5	31.1	24.7	-145.60	-560.9	894.8	566.0	524.8	41.19	13.741		
4,400.0	4,093.1	4,453.2	4,231.4	31.9	25.5	-144.75	-580.9	928.9	576.7	533.8	42.89	13.448		
4,500.0	4,184.0	4,552.2	4,322.2	32.8	26.4	-143.93	-600.9	963.0	587.6	543.0	44.59	13.176		
4,600.0	4,275.0	4,651.3	4,413.0	33.7	27.2	-143.14	-620.9	997.1	598.6	552.3	46.31	12.925		
4,700.0	4,365.9	4,750.3	4,503.9	34.6	28.1	-142.37	-640.9	1,031.2	609.7	561.6	48.03	12.693		
4,800.0	4,456.8	4,849.4	4,594.7	35.5	28.9	-141.64	-660.9	1,065.2	620.8	571.1	49.76	12.477		
4,900.0	4,547.8	4,948.5	4,685.5	36.3	29.8	-140.93	-680.9	1,099.3	632.1	580.6	51.49	12.276		
5,000.0	4,638.7	5,047.5	4,776.4	37.2	30.6	-140.24	-700.9	1,133.4	643.5	590.3	53.23	12.089		

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 12-16CHZ
Project:	SEC.16-T4N-R68W	TVD Reference:	WELL @ 4997.5ft (Original Well Elev)
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4997.5ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 12-16CHZ	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (1-06-15)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,100.0	4,729.6	5,146.6	4,867.2	38.1	31.5	-139.58	-720.9	1,167.5	655.0	600.0	54.97	11.914	
5,200.0	4,820.5	5,245.6	4,958.0	39.0	32.3	-138.94	-740.9	1,201.6	666.5	609.8	56.72	11.751	
5,300.0	4,911.5	5,344.7	5,048.9	39.9	33.2	-138.32	-760.9	1,235.7	678.2	619.7	58.47	11.599	
5,400.0	5,002.4	5,443.8	5,139.7	40.8	34.0	-137.72	-780.9	1,269.8	689.9	629.7	60.22	11.456	
5,500.0	5,093.3	5,542.8	5,230.5	41.6	34.9	-137.15	-800.9	1,303.8	701.7	639.7	61.97	11.322	
5,600.0	5,184.3	5,641.9	5,321.4	42.5	35.7	-136.59	-820.9	1,337.9	713.5	649.8	63.73	11.196	
5,700.0	5,275.2	5,740.9	5,412.2	43.4	36.6	-136.05	-840.9	1,372.0	725.4	659.9	65.48	11.078	
5,800.0	5,366.1	5,849.0	5,513.2	44.3	37.3	-136.00	-863.2	1,402.9	736.8	670.1	66.79	11.032	
5,900.0	5,457.0	5,956.1	5,616.7	45.2	37.7	-137.17	-886.2	1,417.9	747.1	680.1	66.99	11.153	
5,952.0	5,504.3	6,009.5	5,668.8	45.6	37.8	-138.19	-897.8	1,419.4	752.2	685.5	66.70	11.278	
6,000.0	5,548.3	6,057.5	5,715.5	46.0	37.9	-146.99	-908.3	1,417.4	757.2	691.2	65.96	11.479	
6,050.0	5,594.8	6,106.4	5,762.9	46.3	37.9	-157.61	-919.0	1,412.0	762.6	697.6	65.07	11.720	
6,100.0	5,641.8	6,154.4	5,809.0	46.5	37.9	-169.56	-929.4	1,403.5	768.4	704.3	64.13	11.982	
6,150.0	5,688.9	6,201.6	5,853.7	46.7	37.9	-177.74	-939.5	1,392.1	774.5	711.3	63.16	12.261	
6,200.0	5,736.0	6,248.0	5,896.7	46.9	37.9	-165.15	-949.2	1,378.0	780.7	718.5	62.20	12.552	
6,250.0	5,782.9	6,293.6	5,938.2	47.0	37.8	-153.52	-958.7	1,361.3	787.2	725.9	61.27	12.848	
6,300.0	5,829.3	6,338.6	5,977.9	47.1	37.7	-143.32	-967.8	1,342.3	793.7	733.3	60.38	13.145	
6,350.0	5,875.0	6,383.0	6,015.9	47.2	37.6	-134.67	-976.4	1,321.0	800.3	740.8	59.57	13.435	
6,400.0	5,919.7	6,426.8	6,052.0	47.3	37.6	-127.43	-984.8	1,297.8	807.0	748.1	58.84	13.714	
6,450.0	5,963.3	6,470.0	6,086.3	47.3	37.5	-121.38	-992.7	1,272.6	813.6	755.4	58.21	13.976	
6,500.0	6,005.6	6,512.8	6,118.6	47.3	37.4	-116.31	-1,000.2	1,245.6	820.1	762.4	57.69	14.215	
6,550.0	6,046.2	6,555.2	6,149.1	47.3	37.3	-112.03	-1,007.3	1,217.0	826.5	769.2	57.29	14.426	
6,600.0	6,085.2	6,600.0	6,179.4	47.2	37.2	-108.34	-1,014.3	1,184.8	832.7	775.7	57.00	14.610	
6,650.0	6,122.1	6,638.7	6,204.0	47.2	37.1	-105.25	-1,020.1	1,155.5	838.7	781.8	56.89	14.743	
6,700.0	6,157.0	6,680.0	6,228.4	47.1	37.0	-102.55	-1,025.9	1,122.7	844.4	787.5	56.89	14.841	
6,750.0	6,189.5	6,721.0	6,250.8	47.0	37.0	-100.23	-1,031.3	1,088.9	849.8	792.7	57.05	14.895	
6,800.0	6,219.6	6,761.7	6,271.2	46.9	36.9	-98.21	-1,036.1	1,054.0	854.8	797.5	57.36	14.903	
6,850.0	6,247.0	6,800.0	6,288.5	46.8	36.9	-96.49	-1,040.4	1,020.0	859.5	801.7	57.82	14.864	
6,900.0	6,271.7	6,842.4	6,305.7	46.7	36.8	-94.99	-1,044.6	981.5	863.7	805.3	58.45	14.777	
6,950.0	6,293.6	6,882.5	6,319.8	46.6	36.8	-93.72	-1,048.1	944.2	867.5	808.3	59.23	14.647	
7,000.0	6,312.5	6,922.4	6,331.8	46.5	36.8	-92.66	-1,051.1	906.2	870.8	810.7	60.15	14.478	
7,050.0	6,328.3	6,962.1	6,341.6	46.4	36.8	-91.79	-1,053.7	867.8	873.6	812.4	61.20	14.275	
7,100.0	6,341.0	7,000.0	6,349.1	46.3	36.9	-91.10	-1,055.7	830.7	875.9	813.6	62.36	14.047	
7,150.0	6,350.5	7,041.4	6,355.0	46.1	37.0	-90.58	-1,057.4	789.8	877.7	814.1	63.65	13.790	
7,200.0	6,356.8	7,080.9	6,358.6	46.0	37.0	-90.22	-1,058.6	750.5	878.9	813.9	65.01	13.521	
7,250.0	6,359.7	7,120.3	6,360.0	45.9	37.1	-90.03	-1,059.3	711.1	879.6	813.2	66.42	13.244	
7,270.2	6,360.0	7,138.8	6,360.0	45.8	37.2	-90.00	-1,059.5	692.7	879.7	812.7	67.03	13.125	
7,300.0	6,360.0	7,168.6	6,360.0	45.7	37.3	-90.00	-1,059.8	662.8	879.7	812.2	67.52	13.030	
7,400.0	6,360.0	7,268.6	6,360.0	45.5	37.8	-90.00	-1,060.7	562.8	879.8	810.4	69.41	12.676	
7,500.0	6,360.0	7,368.6	6,360.0	45.4	38.5	-90.00	-1,061.7	462.8	879.9	808.2	71.68	12.275	
7,600.0	6,360.0	7,468.6	6,360.0	45.3	39.4	-90.00	-1,062.7	362.8	880.0	805.6	74.31	11.842	
7,700.0	6,360.0	7,568.6	6,360.0	45.3	40.5	-90.00	-1,063.6	262.8	880.0	802.8	77.25	11.391	
7,800.0	6,360.0	7,668.6	6,360.0	45.4	41.9	-90.00	-1,064.6	162.8	880.1	799.6	80.48	10.935	
7,900.0	6,360.0	7,768.6	6,360.0	45.7	43.4	-90.00	-1,065.5	62.9	880.2	796.2	83.96	10.483	
8,000.0	6,360.0	7,868.6	6,360.0	46.3	45.0	-90.00	-1,066.5	-37.1	880.2	792.6	87.67	10.041	
8,100.0	6,360.0	7,968.6	6,360.0	47.2	46.9	-90.00	-1,067.5	-137.1	880.3	788.7	91.56	9.614	
8,200.0	6,360.0	8,068.6	6,360.0	48.4	48.8	-90.00	-1,068.4	-237.1	880.4	784.7	95.63	9.206	
8,300.0	6,360.0	8,168.6	6,360.0	49.9	50.8	-90.00	-1,069.4	-337.1	880.4	780.6	99.84	8.818	
8,400.0	6,360.0	8,268.6	6,360.0	51.8	52.9	-90.00	-1,070.3	-437.1	880.5	776.3	104.19	8.451	
8,500.0	6,360.0	8,368.6	6,360.0	53.8	55.1	-90.00	-1,071.3	-537.1	880.6	771.9	108.66	8.104	
8,600.0	6,360.0	8,468.6	6,360.0	56.0	57.4	-90.00	-1,072.3	-637.1	880.7	767.4	113.22	7.778	
8,700.0	6,360.0	8,568.6	6,360.0	58.2	59.7	-90.00	-1,073.2	-737.1	880.7	762.8	117.88	7.471	

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 F-16CHZ - Wellbore #1 - Plan #1 (1-05-15)												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
8,800.0	6,360.0	8,668.6	6,360.0	60.6	62.1	90.00	-1,074.2	-837.1	880.8	758.2	122.61	7.183	
8,900.0	6,360.0	8,768.6	6,360.0	63.0	64.5	90.00	-1,075.1	-937.1	880.9	753.4	127.42	6.913	
9,000.0	6,360.0	8,868.6	6,360.0	65.4	66.9	90.00	-1,076.1	-1,037.1	880.9	748.6	132.29	6.659	
9,100.0	6,360.0	8,968.6	6,360.0	67.9	69.4	90.00	-1,077.1	-1,137.1	881.0	743.8	137.22	6.420	
9,200.0	6,360.0	9,068.6	6,360.0	70.4	71.8	90.00	-1,078.0	-1,237.1	881.1	738.9	142.20	6.196	
9,300.0	6,360.0	9,168.6	6,360.0	72.9	74.4	90.00	-1,079.0	-1,337.1	881.1	733.9	147.22	5.985	
9,400.0	6,360.0	9,268.6	6,360.0	75.5	76.9	90.00	-1,079.9	-1,437.1	881.2	728.9	152.28	5.787	
9,500.0	6,360.0	9,368.6	6,360.0	78.0	79.4	90.00	-1,080.9	-1,537.1	881.3	723.9	157.38	5.600	
9,600.0	6,360.0	9,468.6	6,360.0	80.6	82.0	90.00	-1,081.9	-1,637.1	881.4	718.8	162.52	5.423	
9,700.0	6,360.0	9,568.6	6,360.0	83.2	84.6	90.00	-1,082.8	-1,737.1	881.4	713.7	167.68	5.256	
9,800.0	6,360.0	9,668.6	6,360.0	85.8	87.2	90.00	-1,083.8	-1,837.1	881.5	708.6	172.88	5.099	
9,900.0	6,360.0	9,768.6	6,360.0	88.5	89.8	90.00	-1,084.7	-1,937.1	881.6	703.5	178.09	4.950	
10,000.0	6,360.0	9,868.6	6,360.0	91.1	92.4	90.00	-1,085.7	-2,037.1	881.6	698.3	183.34	4.809	
10,100.0	6,360.0	9,968.6	6,360.0	93.7	95.1	90.00	-1,086.7	-2,137.0	881.7	693.1	188.60	4.675	
10,200.0	6,360.0	10,068.6	6,360.0	96.4	97.7	90.00	-1,087.6	-2,237.0	881.8	687.9	193.88	4.548	
10,300.0	6,360.0	10,168.6	6,360.0	99.0	100.4	90.00	-1,088.6	-2,337.0	881.8	682.7	199.18	4.427	
10,400.0	6,360.0	10,268.6	6,360.0	101.7	103.0	90.00	-1,089.5	-2,437.0	881.9	677.4	204.50	4.313	
10,500.0	6,360.0	10,368.6	6,360.0	104.4	105.7	90.00	-1,090.5	-2,537.0	882.0	672.2	209.83	4.203	
10,600.0	6,360.0	10,468.6	6,360.0	107.1	108.4	90.00	-1,091.5	-2,637.0	882.1	666.9	215.17	4.099	
10,700.0	6,360.0	10,568.6	6,360.0	109.8	111.1	90.00	-1,092.4	-2,737.0	882.1	661.6	220.53	4.000	
10,800.0	6,360.0	10,668.6	6,360.0	112.5	113.7	90.00	-1,093.4	-2,837.0	882.2	656.3	225.90	3.905	
10,900.0	6,360.0	10,768.6	6,360.0	115.1	116.4	90.00	-1,094.3	-2,937.0	882.3	651.0	231.29	3.815	
11,000.0	6,360.0	10,868.6	6,360.0	117.9	119.1	90.00	-1,095.3	-3,037.0	882.3	645.7	236.68	3.728	
11,100.0	6,360.0	10,968.6	6,360.0	120.6	121.8	90.00	-1,096.3	-3,137.0	882.4	640.3	242.08	3.645	
11,200.0	6,360.0	11,068.6	6,360.0	123.3	124.5	90.00	-1,097.2	-3,237.0	882.5	635.0	247.49	3.566	
11,300.0	6,360.0	11,168.6	6,360.0	126.0	127.3	90.00	-1,098.2	-3,337.0	882.5	629.6	252.92	3.489	
11,303.2	6,360.0	11,171.8	6,360.0	126.1	127.3	90.00	-1,098.2	-3,340.2	882.5	629.5	253.09	3.487	
11,324.6	6,360.0	11,183.6	6,360.0	126.7	127.7	90.00	-1,098.3	-3,352.0	882.6	628.6	253.99	3.475 SF	

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Markham 12-16CHZ
Project:	SEC.16-T4N-R68W	TVD Reference:	WELL @ 4997.5ft (Original Well Elev)
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4997.5ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 12-16CHZ	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (1-06-15)	Offset TVD Reference:	Offset Datum

Offset Design SRC Markham Pad Sec.16-T4N-R68W - SRC Markham F-16NHZ - Wellbore #1 - Plan #1 (1-05-15)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Semi Major Axis 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	-90.84	-1.1	-75.0	75.0					
100.0	100.0	100.0	100.0	0.1	0.1	-90.84	-1.1	-75.0	75.0	74.8	0.22	333.765		
200.0	200.0	200.0	200.0	0.3	0.3	-90.84	-1.1	-75.0	75.0	74.3	0.67	111.255 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.6	130.55	-1.1	-75.0	76.1	75.0	1.11	68.830		
400.0	399.8	399.8	399.8	0.8	0.8	133.36	-1.1	-75.0	79.6	78.1	1.54	51.610		
500.0	499.5	499.5	499.5	1.0	1.0	137.50	-1.1	-75.0	85.9	83.9	2.00	42.864		
600.0	598.7	598.7	598.7	1.3	1.2	142.33	-1.1	-75.0	95.2	92.8	2.48	38.401		
700.0	697.5	697.5	697.5	1.6	1.5	147.25	-1.1	-75.0	108.1	105.1	2.97	36.443		
800.0	795.6	795.6	795.6	2.0	1.7	151.82	-1.1	-75.0	124.6	121.2	3.45	36.075		
900.0	893.1	893.1	893.1	2.5	1.9	155.84	-1.1	-75.0	144.9	141.0	3.94	36.762		
1,000.0	989.6	989.6	989.6	3.0	2.1	159.24	-1.1	-75.0	169.0	164.5	4.43	38.161		
1,100.0	1,085.3	1,085.3	1,085.3	3.6	2.3	162.07	-1.1	-75.0	196.7	191.8	4.91	40.046		
1,200.0	1,179.8	1,179.8	1,179.8	4.2	2.5	164.41	-1.1	-75.0	228.0	222.6	5.39	42.268		
1,300.0	1,273.2	1,280.3	1,280.3	4.9	2.7	166.53	-1.6	-74.0	261.8	256.0	5.87	44.632		
1,400.0	1,365.2	1,383.7	1,383.6	5.7	3.0	168.53	-3.5	-69.6	295.9	289.6	6.31	46.866		
1,429.7	1,392.3	1,414.6	1,414.4	6.0	3.0	169.10	-4.4	-67.7	306.1	299.7	6.45	47.479		
1,500.0	1,456.2	1,488.5	1,488.0	6.6	3.2	170.48	-7.0	-61.8	329.5	322.7	6.79	48.508		
1,600.0	1,547.1	1,595.5	1,594.3	7.4	3.4	172.31	-12.2	-50.1	360.0	352.7	7.30	49.339		
1,700.0	1,638.1	1,704.7	1,702.1	8.3	3.7	174.06	-19.2	-34.5	387.4	379.6	7.82	49.519		
1,800.0	1,729.0	1,815.7	1,811.0	9.1	4.0	175.79	-28.0	-14.8	411.6	403.2	8.38	49.125		
1,900.0	1,819.9	1,928.3	1,920.5	10.0	4.4	177.55	-38.7	9.1	432.6	423.6	8.97	48.222		
2,000.0	1,910.8	2,042.2	2,030.1	10.9	4.9	179.37	-51.2	37.2	450.2	440.6	9.61	46.849		
2,100.0	2,001.8	2,156.9	2,139.2	11.7	5.5	-178.71	-65.7	69.5	464.7	454.4	10.31	45.080		
2,200.0	2,092.7	2,272.1	2,247.3	12.6	6.2	-176.66	-82.0	106.0	476.0	464.9	11.10	42.879		
2,300.0	2,183.6	2,387.6	2,353.8	13.5	7.0	-174.45	-100.1	146.5	484.2	472.2	12.01	40.334		
2,400.0	2,274.6	2,493.9	2,450.6	14.4	7.8	-172.28	-118.1	186.9	490.1	477.1	12.99	37.714		
2,500.0	2,365.5	2,592.2	2,539.8	15.2	8.6	-170.29	-135.0	224.6	496.2	482.1	14.04	35.347		
2,600.0	2,456.4	2,690.5	2,629.0	16.1	9.4	-168.35	-151.8	262.3	502.9	487.7	15.17	33.157		
2,700.0	2,547.3	2,788.8	2,718.2	17.0	10.2	-166.46	-168.7	300.0	510.1	493.8	16.38	31.147		
2,800.0	2,638.3	2,887.1	2,807.3	17.9	11.1	-164.62	-185.5	337.7	517.9	500.3	17.67	29.316		
2,900.0	2,729.2	2,985.4	2,896.5	18.7	11.9	-162.84	-202.4	375.4	526.3	507.3	19.03	27.656		
3,000.0	2,820.1	3,083.7	2,985.7	19.6	12.8	-161.11	-219.2	413.1	535.1	514.7	20.46	26.157		
3,100.0	2,911.1	3,182.0	3,074.9	20.5	13.6	-159.45	-236.1	450.8	544.5	522.5	21.95	24.808		
3,200.0	3,002.0	3,280.3	3,164.1	21.4	14.5	-157.83	-252.9	488.5	554.3	530.8	23.49	23.595		
3,300.0	3,092.9	3,378.5	3,253.3	22.3	15.4	-156.27	-269.8	526.2	564.5	539.4	25.08	22.505		
3,400.0	3,183.8	3,476.8	3,342.5	23.1	16.2	-154.77	-286.6	563.9	575.1	548.4	26.72	21.525		
3,500.0	3,274.8	3,575.1	3,431.7	24.0	17.1	-153.32	-303.5	601.6	586.1	557.7	28.39	20.645		
3,600.0	3,365.7	3,673.4	3,520.9	24.9	18.0	-151.93	-320.3	639.3	597.5	567.4	30.09	19.853		
3,700.0	3,456.6	3,771.7	3,610.1	25.8	18.9	-150.59	-337.2	677.0	609.2	577.3	31.83	19.139		
3,800.0	3,547.5	3,870.0	3,699.3	26.7	19.8	-149.29	-354.0	714.7	621.2	587.6	33.59	18.495		
3,900.0	3,638.5	3,968.3	3,788.5	27.5	20.7	-148.05	-370.9	752.4	633.5	598.2	35.37	17.912		
4,000.0	3,729.4	4,066.6	3,877.7	28.4	21.5	-146.85	-387.7	790.1	646.2	609.0	37.17	17.385		
4,100.0	3,820.3	4,164.9	3,966.9	29.3	22.4	-145.70	-404.6	827.8	659.1	620.1	38.98	16.906		
4,200.0	3,911.3	4,263.2	4,056.1	30.2	23.3	-144.60	-421.4	865.5	672.2	631.4	40.81	16.471		
4,300.0	4,002.2	4,361.5	4,145.3	31.1	24.2	-143.53	-438.3	903.2	685.6	643.0	42.65	16.075		
4,400.0	4,093.1	4,459.8	4,234.5	31.9	25.1	-142.51	-455.1	940.9	699.2	654.7	44.50	15.713		
4,500.0	4,184.0	4,558.1	4,323.7	32.8	26.0	-141.52	-472.0	978.6	713.1	666.7	46.36	15.382		
4,600.0	4,275.0	4,656.4	4,412.9	33.7	26.9	-140.57	-488.8	1,016.3	727.1	678.9	48.22	15.079		
4,700.0	4,365.9	4,754.6	4,502.1	34.6	27.8	-139.66	-505.7	1,054.1	741.4	691.3	50.09	14.801		
4,800.0	4,456.8	4,852.9	4,591.3	35.5	28.7	-138.78	-522.5	1,091.8	755.8	703.8	51.96	14.545		
4,900.0	4,547.8	4,951.2	4,680.5	36.3	29.6	-137.93	-539.4	1,129.5	770.4	716.5	53.83	14.310		
5,000.0	4,638.7	5,049.5	4,769.7	37.2	30.4	-137.12	-556.2	1,167.2	785.1	729.4	55.71	14.092		

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

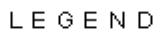
Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Markham 12-16CHZ
Project:	SEC.16-T4N-R68W	TVD Reference:	WELL @ 4997.5ft (Original Well Elev)
Reference Site:	SRC Markham Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4997.5ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Markham 12-16CHZ	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (1-06-15)	Offset TVD Reference:	Offset Datum

Offset Design		SRC Markham Pad Sec.16-T4N-R68W - SRC Markham F-16NHZ - Wellbore #1 - Plan #1 (1-05-15)										Offset Site Error:		0.0 ft	
Survey Program: 0-MWD												Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor			
5,100.0	4,729.6	5,147.8	4,858.9	38.1	31.3	-136.33	-573.1	1,204.9	800.0	742.4	57.59	13.892			
5,200.0	4,820.5	5,246.1	4,948.1	39.0	32.2	-135.58	-589.9	1,242.6	815.0	755.6	59.47	13.706			
5,300.0	4,911.5	5,344.4	5,037.3	39.9	33.1	-134.85	-606.8	1,280.3	830.2	768.9	61.35	13.533			
5,400.0	5,002.4	5,442.7	5,126.5	40.8	34.0	-134.15	-623.6	1,318.0	845.5	782.3	63.22	13.373			
5,500.0	5,093.3	5,541.0	5,215.7	41.6	34.9	-133.47	-640.5	1,355.7	860.9	795.8	65.10	13.224			
5,600.0	5,184.3	5,653.3	5,319.4	42.5	35.7	-133.07	-660.1	1,393.8	875.9	809.1	66.75	13.121 SF			
5,700.0	5,275.2	5,769.8	5,431.6	43.4	36.2	-133.84	-681.6	1,415.8	888.9	821.4	67.43	13.182			
5,800.0	5,366.1	5,880.4	5,540.0	44.3	36.4	-135.64	-702.5	1,419.3	900.4	833.2	67.21	13.397			
5,900.0	5,457.0	5,980.8	5,637.8	45.2	36.5	-138.11	-721.5	1,407.8	912.0	845.6	66.32	13.752			
5,952.0	5,504.3	6,028.2	5,683.2	45.6	36.4	-139.54	-730.4	1,397.5	918.5	852.8	65.67	13.986			
6,000.0	5,548.3	6,069.8	5,722.5	46.0	36.4	-148.75	-738.1	1,386.0	925.1	860.5	64.62	14.317			
6,050.0	5,594.8	6,112.0	5,761.5	46.3	36.3	-159.79	-745.8	1,371.9	932.8	869.3	63.44	14.703			
6,100.0	5,641.8	6,153.1	5,798.7	46.5	36.2	-172.16	-753.1	1,356.0	941.1	878.9	62.24	15.119			
6,150.0	5,688.9	6,193.3	5,834.1	46.7	36.2	174.73	-760.2	1,338.4	950.0	888.9	61.06	15.557			
6,200.0	5,736.0	6,232.6	5,867.8	46.9	36.1	161.74	-766.9	1,319.2	959.3	899.4	59.93	16.008			
6,250.0	5,782.9	6,271.2	5,899.8	47.0	36.0	149.71	-773.3	1,298.6	969.0	910.1	58.86	16.463			
6,300.0	5,829.3	6,309.2	5,930.1	47.1	35.9	139.13	-779.4	1,276.6	978.9	921.0	57.88	16.913			
6,350.0	5,875.0	6,350.0	5,961.4	47.2	35.8	130.04	-785.7	1,251.2	989.0	932.1	56.95	17.367			
6,400.0	5,919.7	6,383.4	5,985.9	47.3	35.8	122.52	-790.6	1,229.0	999.2	942.9	56.24	17.766			

Reference Depths are relative to WELL @ 4997.5ft (Original Well Elev) Coordinates are relative to: SRC Markham 12-16CHZ
Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, Colorado Northern Zone
Central Meridian is -105.500000 ° Grid Convergence at Surface is: 0.32°



Reference Depths are relative to WELL @ 4997.5ft (Original Well Elev) Coordinates are relative to: SRC Markham 12-16CHZ
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11-16NHZ, Wellbore #1, Plan #1 (1-05-15) V0 SRC Markham F-16CHZ, Wellbore #1, Plan #1 (1-05-15) V0 SRC Markham A-16NHZ, Wellbore #1, Plan #1 (1-06-15) V0 SRC Markham F-16NHZ, Wellbore #1, Plan #1 (1-05-15) V0 SRC Cannon K-16CHZ, Wellbore #1, Plan #1 (1-06-15) V0 SRC Markham 11-16CHZ, Wellbore #1, Plan #1 (1-05-15) V0