

Synergy Resources

Well Name: **SRC Phelps 11-32NHZ**

Surface Location: SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

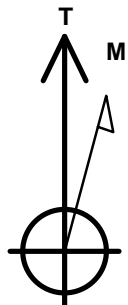
Ground Elevation: 5019.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1247310.67	3198212.27	40.010083	-104.792375	

Ensign Rig #17 RKB - 12' WELL @ 5031.0ft (Ensign Rig #17 RKB - 12')

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
SHL 1772'FNL, 252'FEL	1.0	0.0	0.0	Point
BHL 790'FNL, 460'FWL	7451.0	981.1	-4582.6	Point



Azimuths to True North
Magnetic North: 8.53°

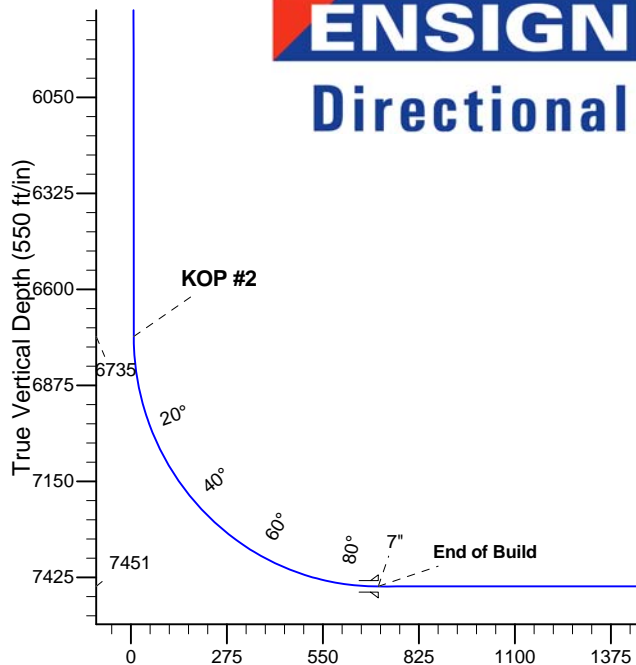
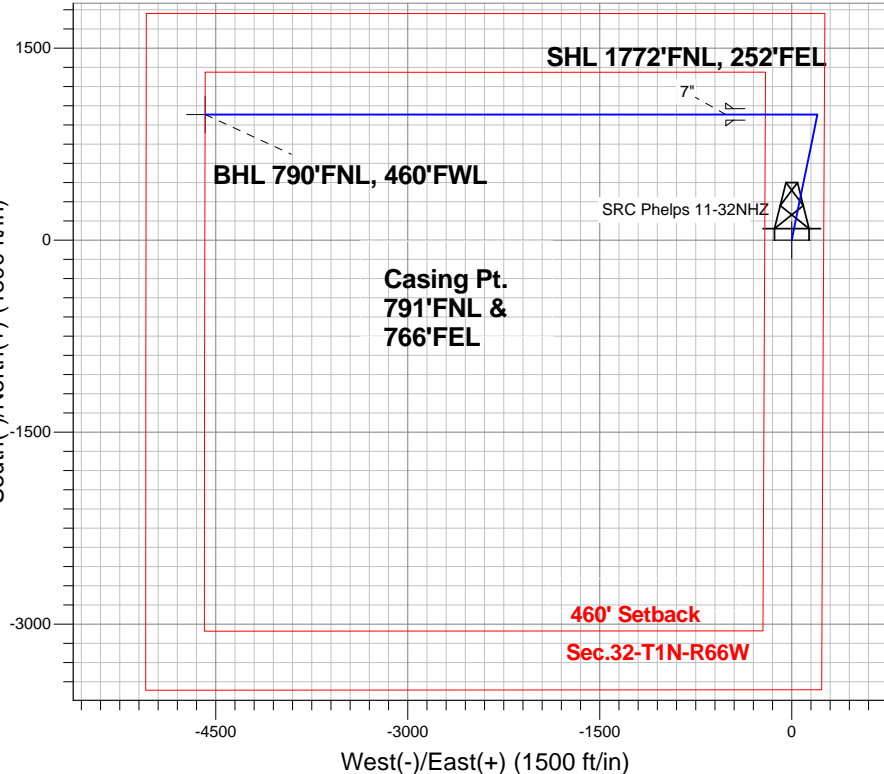
Magnetic Field
Strength: 52672.0snT
Dip Angle: 66.65°
Date: 10/28/2013
Model: IGRF2010

SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W
SRC Phelps 11-32NHZ
Plan #1 (10-28-13)
15:03, October 28 2013

ANNOTATIONS

TVD	MD	Annotation
400.0	400.0	KOP #1
6734.8	6819.6	KOP #2
7451.0	7944.6	End of Build

South(-)/North(+) (1500 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	400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.0	
3	898.3	9.97	11.63	895.8	42.3	8.7	2.00	11.63	0.3	
4	6186.5	9.97	11.63	6104.2	938.8	193.3	0.00	0.00	7.5	
5	6684.8	0.00	0.00	6600.0	981.1	202.0	2.00	180.00	7.9	
6	6819.6	0.00	0.00	6734.8	981.1	202.0	0.00	0.00	7.9	
7	7944.6	90.00	270.00	7451.0	981.1	-514.2	8.00	270.00	708.2	
8	12013.0	90.00	270.00	7451.0	981.1	-4582.6	0.00	0.00	4686.5	BHL 790'FNL, 460'FWL

Vertical Section at 282.08° (550 ft/in)



Synergy Resources

SEC.32-T1N-R66W

SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W

SRC Phelps 11-32NHZ

Wellbore #1

Plan: Plan #1 (10-28-13)

Standard Planning Report

28 October, 2013

Database:	Landmark	Local Co-ordinate Reference:	Well SRC Phelps 11-32NHZ
Company:	Synergy Resources	TVD Reference:	WELL @ 5031.0ft (Ensign Rig #17 RKB - 12')
Project:	SEC.32-T1N-R66W	MD Reference:	WELL @ 5031.0ft (Ensign Rig #17 RKB - 12')
Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	North Reference:	True
Well:	SRC Phelps 11-32NHZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (10-28-13)		

Project	SEC.32-T1N-R66W, Weld County, Colorado		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		Using Well Reference Point
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Site						SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W											
Site Position:						Northing:			1,247,322.38 ft			Latitude:			40.010114		
From:			Lat/Long			Easting:			3,198,263.72 ft			Longitude:			-104.792191		
Position Uncertainty:			0.0 ft			Slot Radius:			"			Grid Convergence:			0.46 °		

Well	SRC Phelps 11-32NHZ					
Well Position	+N-S	-11.3 ft	Northing:	1,247,310.67 ft	Latitude:	40.010083
	+E-W	-51.5 ft	Easting:	3,198,212.27 ft	Longitude:	-104.792375
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,019.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	10/28/2013	8.53	66.65	52,672

Design	Plan #1 (10-28-13)			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	282.08

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.00	0.00	
898.3	9.97	11.63	895.8	42.3	8.7	2.00	2.00	0.00	11.63	
6,186.5	9.97	11.63	6,104.2	938.8	193.3	0.00	0.00	0.00	0.00	
6,684.8	0.00	0.00	6,600.0	981.1	202.0	2.00	-2.00	0.00	180.00	
6,819.6	0.00	0.00	6,734.8	981.1	202.0	0.00	0.00	0.00	0.00	
7,944.6	90.00	270.00	7,451.0	981.1	-514.2	8.00	8.00	0.00	270.00	
12,013.0	90.00	270.00	7,451.0	981.1	-4,582.6	0.00	0.00	0.00	0.00	BHL 790'FNL, 460'f

Database:	Landmark	Local Co-ordinate Reference:	Well SRC Phelps 11-32NHZ
Company:	Synergy Resources	TVD Reference:	WELL @ 5031.0ft (Ensign Rig #17 RKB - 12')
Project:	SEC.32-T1N-R66W	MD Reference:	WELL @ 5031.0ft (Ensign Rig #17 RKB - 12')
Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	North Reference:	True
Well:	SRC Phelps 11-32NHZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (10-28-13)		

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 1772'FNL, 252'FEL									
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP #1									
500.0	2.00	11.63	500.0	1.7	0.4	0.0	2.00	2.00	0.00
600.0	4.00	11.63	599.8	6.8	1.4	0.1	2.00	2.00	0.00
700.0	6.00	11.63	699.5	15.4	3.2	0.1	2.00	2.00	0.00
800.0	8.00	11.63	798.7	27.3	5.6	0.2	2.00	2.00	0.00
898.3	9.97	11.63	895.8	42.3	8.7	0.3	2.00	2.00	0.00
900.0	9.97	11.63	897.5	42.6	8.8	0.3	0.00	0.00	0.00
1,000.0	9.97	11.63	996.0	59.6	12.3	0.5	0.00	0.00	0.00
1,100.0	9.97	11.63	1,094.4	76.5	15.8	0.6	0.00	0.00	0.00
1,200.0	9.97	11.63	1,192.9	93.5	19.2	0.7	0.00	0.00	0.00
1,300.0	9.97	11.63	1,291.4	110.4	22.7	0.9	0.00	0.00	0.00
1,400.0	9.97	11.63	1,389.9	127.4	26.2	1.0	0.00	0.00	0.00
1,500.0	9.97	11.63	1,488.4	144.3	29.7	1.2	0.00	0.00	0.00
1,600.0	9.97	11.63	1,586.9	161.3	33.2	1.3	0.00	0.00	0.00
1,700.0	9.97	11.63	1,685.4	178.2	36.7	1.4	0.00	0.00	0.00
1,800.0	9.97	11.63	1,783.9	195.2	40.2	1.6	0.00	0.00	0.00
1,900.0	9.97	11.63	1,882.4	212.1	43.7	1.7	0.00	0.00	0.00
2,000.0	9.97	11.63	1,980.9	229.1	47.2	1.8	0.00	0.00	0.00
2,100.0	9.97	11.63	2,079.4	246.0	50.7	2.0	0.00	0.00	0.00
2,200.0	9.97	11.63	2,177.8	263.0	54.1	2.1	0.00	0.00	0.00
2,300.0	9.97	11.63	2,276.3	279.9	57.6	2.2	0.00	0.00	0.00
2,400.0	9.97	11.63	2,374.8	296.9	61.1	2.4	0.00	0.00	0.00
2,500.0	9.97	11.63	2,473.3	313.8	64.6	2.5	0.00	0.00	0.00
2,600.0	9.97	11.63	2,571.8	330.8	68.1	2.7	0.00	0.00	0.00
2,700.0	9.97	11.63	2,670.3	347.8	71.6	2.8	0.00	0.00	0.00
2,800.0	9.97	11.63	2,768.8	364.7	75.1	2.9	0.00	0.00	0.00
2,900.0	9.97	11.63	2,867.3	381.7	78.6	3.1	0.00	0.00	0.00
3,000.0	9.97	11.63	2,965.8	398.6	82.1	3.2	0.00	0.00	0.00
3,100.0	9.97	11.63	3,064.3	415.6	85.6	3.3	0.00	0.00	0.00
3,200.0	9.97	11.63	3,162.8	432.5	89.0	3.5	0.00	0.00	0.00
3,300.0	9.97	11.63	3,261.2	449.5	92.5	3.6	0.00	0.00	0.00
3,400.0	9.97	11.63	3,359.7	466.4	96.0	3.7	0.00	0.00	0.00
3,500.0	9.97	11.63	3,458.2	483.4	99.5	3.9	0.00	0.00	0.00
3,600.0	9.97	11.63	3,556.7	500.3	103.0	4.0	0.00	0.00	0.00
3,700.0	9.97	11.63	3,655.2	517.3	106.5	4.1	0.00	0.00	0.00
3,800.0	9.97	11.63	3,753.7	534.2	110.0	4.3	0.00	0.00	0.00
3,900.0	9.97	11.63	3,852.2	551.2	113.5	4.4	0.00	0.00	0.00
4,000.0	9.97	11.63	3,950.7	568.1	117.0	4.6	0.00	0.00	0.00
4,100.0	9.97	11.63	4,049.2	585.1	120.5	4.7	0.00	0.00	0.00
4,200.0	9.97	11.63	4,147.7	602.0	124.0	4.8	0.00	0.00	0.00
4,300.0	9.97	11.63	4,246.2	619.0	127.4	5.0	0.00	0.00	0.00
4,400.0	9.97	11.63	4,344.6	635.9	130.9	5.1	0.00	0.00	0.00
4,500.0	9.97	11.63	4,443.1	652.9	134.4	5.2	0.00	0.00	0.00
4,600.0	9.97	11.63	4,541.6	669.8	137.9	5.4	0.00	0.00	0.00
4,700.0	9.97	11.63	4,640.1	686.8	141.4	5.5	0.00	0.00	0.00
4,800.0	9.97	11.63	4,738.6	703.7	144.9	5.6	0.00	0.00	0.00

Planned Survey		Actual 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)
4,900.0	9.97	11.63	4,837.1	720.7	148.4	5.8	0.00	0.00	0.00
5,000.0	9.97	11.63	4,935.6	737.6	151.9	5.9	0.00	0.00	0.00
5,100.0	9.97	11.63	5,034.1	754.6	155.4	6.0	0.00	0.00	0.00
5,200.0	9.97	11.63	5,132.6	771.5	158.9	6.2	0.00	0.00	0.00
5,300.0	9.97	11.63	5,231.1	788.5	162.3	6.3	0.00	0.00	0.00
5,400.0	9.97	11.63	5,329.6	805.4	165.8	6.5	0.00	0.00	0.00
5,500.0	9.97	11.63	5,428.1	822.4	169.3	6.6	0.00	0.00	0.00
5,600.0	9.97	11.63	5,526.5	839.3	172.8	6.7	0.00	0.00	0.00
5,700.0	9.97	11.63	5,625.0	856.3	176.3	6.9	0.00	0.00	0.00
5,800.0	9.97	11.63	5,723.5	873.2	179.8	7.0	0.00	0.00	0.00
5,900.0	9.97	11.63	5,822.0	890.2	183.3	7.1	0.00	0.00	0.00
6,000.0	9.97	11.63	5,920.5	907.1	186.8	7.3	0.00	0.00	0.00
6,100.0	9.97	11.63	6,019.0	924.1	190.3	7.4	0.00	0.00	0.00
6,186.5	9.97	11.63	6,104.2	938.8	193.3	7.5	0.00	0.00	0.00
6,200.0	9.70	11.63	6,117.5	941.0	193.7	7.5	2.00	-2.00	0.00
6,300.0	7.70	11.63	6,216.3	955.8	196.8	7.7	2.00	-2.00	0.00
6,400.0	5.70	11.63	6,315.7	967.2	199.1	7.8	2.00	-2.00	0.00
6,500.0	3.70	11.63	6,415.3	975.3	200.8	7.8	2.00	-2.00	0.00
6,600.0	1.70	11.63	6,515.2	979.9	201.7	7.9	2.00	-2.00	0.00
6,684.8	0.00	0.00	6,600.0	981.1	202.0	7.9	2.00	-2.00	0.00
6,700.0	0.00	0.00	6,615.2	981.1	202.0	7.9	0.00	0.00	0.00
6,800.0	0.00	0.00	6,715.2	981.1	202.0	7.9	0.00	0.00	0.00
6,819.6	0.00	0.00	6,734.8	981.1	202.0	7.9	0.00	0.00	0.00
KOP #2									
6,900.0	6.43	270.00	6,815.0	981.1	197.5	12.3	8.00	8.00	0.00
7,000.0	14.43	270.00	6,913.3	981.1	179.4	30.0	8.00	8.00	0.00
7,100.0	22.43	270.00	7,008.1	981.1	147.8	60.8	8.00	8.00	0.00
7,200.0	30.43	270.00	7,097.5	981.1	103.3	104.3	8.00	8.00	0.00
7,300.0	38.43	270.00	7,180.0	981.1	46.8	159.6	8.00	8.00	0.00
7,400.0	46.43	270.00	7,253.7	981.1	-20.6	225.5	8.00	8.00	0.00
7,500.0	54.43	270.00	7,317.4	981.1	-97.6	300.8	8.00	8.00	0.00
7,600.0	62.43	270.00	7,369.7	981.1	-182.7	384.1	8.00	8.00	0.00
7,700.0	70.43	270.00	7,409.6	981.1	-274.3	473.6	8.00	8.00	0.00
7,800.0	78.43	270.00	7,436.4	981.1	-370.6	567.7	8.00	8.00	0.00
7,900.0	86.43	270.00	7,449.6	981.1	-469.6	664.6	8.00	8.00	0.00
7,944.6	90.00	270.00	7,451.0	981.1	-514.2	708.2	8.00	8.00	0.00
End of Build - 7"									
8,000.0	90.00	270.00	7,451.0	981.1	-569.6	762.3	0.00	0.00	0.00
8,100.0	90.00	270.00	7,451.0	981.1	-669.6	860.1	0.00	0.00	0.00
8,200.0	90.00	270.00	7,451.0	981.1	-769.6	957.9	0.00	0.00	0.00

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
9,600.0	90.00	270.00	7,451.0	981.1	-2,169.6	2,326.9	0.00	0.00	0.00	
9,700.0	90.00	270.00	7,451.0	981.1	-2,269.6	2,424.7	0.00	0.00	0.00	
9,800.0	90.00	270.00	7,451.0	981.1	-2,369.6	2,522.5	0.00	0.00	0.00	
9,900.0	90.00	270.00	7,451.0	981.1	-2,469.6	2,620.2	0.00	0.00	0.00	
10,000.0	90.00	270.00	7,451.0	981.1	-2,569.6	2,718.0	0.00	0.00	0.00	
10,100.0	90.00	270.00	7,451.0	981.1	-2,669.6	2,815.8	0.00	0.00	0.00	
10,200.0	90.00	270.00	7,451.0	981.1	-2,769.6	2,913.6	0.00	0.00	0.00	
10,300.0	90.00	270.00	7,451.0	981.1	-2,869.6	3,011.4	0.00	0.00	0.00	
10,400.0	90.00	270.00	7,451.0	981.1	-2,969.6	3,109.2	0.00	0.00	0.00	
10,500.0	90.00	270.00	7,451.0	981.1	-3,069.6	3,206.9	0.00	0.00	0.00	
10,600.0	90.00	270.00	7,451.0	981.1	-3,169.6	3,304.7	0.00	0.00	0.00	
10,700.0	90.00	270.00	7,451.0	981.1	-3,269.6	3,402.5	0.00	0.00	0.00	
10,800.0	90.00	270.00	7,451.0	981.1	-3,369.6	3,500.3	0.00	0.00	0.00	
10,900.0	90.00	270.00	7,451.0	981.1	-3,469.6	3,598.1	0.00	0.00	0.00	
11,000.0	90.00	270.00	7,451.0	981.1	-3,569.6	3,695.9	0.00	0.00	0.00	
11,100.0	90.00	270.00	7,451.0	981.1	-3,669.6	3,793.7	0.00	0.00	0.00	
11,200.0	90.00	270.00	7,451.0	981.1	-3,769.6	3,891.4	0.00	0.00	0.00	
11,300.0	90.00	270.00	7,451.0	981.1	-3,869.6	3,989.2	0.00	0.00	0.00	
11,400.0	90.00	270.00	7,451.0	981.1	-3,969.6	4,087.0	0.00	0.00	0.00	
11,500.0	90.00	270.00	7,451.0	981.1	-4,069.6	4,184.8	0.00	0.00	0.00	
11,600.0	90.00	270.00	7,451.0	981.1	-4,169.6	4,282.6	0.00	0.00	0.00	
11,700.0	90.00	270.00	7,451.0	981.1	-4,269.6	4,380.4	0.00	0.00	0.00	
11,800.0	90.00	270.00	7,451.0	981.1	-4,369.6	4,478.1	0.00	0.00	0.00	
11,900.0	90.00	270.00	7,451.0	981.1	-4,469.6	4,575.9	0.00	0.00	0.00	
12,000.0	90.00	270.00	7,451.0	981.1	-4,569.6	4,673.7	0.00	0.00	0.00	
12,013.0	90.00	270.00	7,451.0	981.1	-4,582.6	4,686.5	0.00	0.00	0.00	
BHL 790°FNL, 460°FWL										

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)		Name	Casing Diameter (")	Hole Diameter (")
7,944.6	7,451.0	7"		7	7-1/2

Plan Annotations					
	Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
			+N/-S	+E/-W	
			(ft)	(ft)	
	400.0	400.0	0.0	0.0	KOP #1
	6,819.6	6,734.8	981.1	202.0	KOP #2
	7,944.6	7,451.0	981.1	-514.2	End of Build



Synergy Resources

SEC.32-T1N-R66W

SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W

SRC Phelps 11-32NHZ

Wellbore #1

Plan #1 (10-28-13)

Anticollision Report

28 October, 2013

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Phelps 11-32NHZ
Project:	SEC.32-T1N-R66W	TVD Reference:	WELL @ 5031.0ft (Ensign Rig #17 RKB - 12')
Reference Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	MD Reference:	WELL @ 5031.0ft (Ensign Rig #17 RKB - 12')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Phelps 11-32NHZ	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 (10-28-13)	Offset TVD Reference:	Offset Datum

Reference	Plan #1 (10-28-13)		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.0ft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 1,000.0ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program	Date	10/28/2013		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	12,013.0	Plan #1 (10-28-13) (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 Phelps 11-32CHZ Pad Sec.32-T1N-R66W						
SRC Phelps 11-32CHZ - Wellbore #1 - Plan #1 (10-28-13)	419.3	418.6	20.7	19.1	12.433	CC, ES
SRC Phelps 11-32CHZ - Wellbore #1 - Plan #1 (10-28-13)	12,013.0	12,260.3	381.0	154.6	1.683	SF
SRC Phelps 12-32CHZ - Wellbore #1 - Plan #1 (10-28-13)	400.0	399.0	45.0	43.4	28.634	CC, ES
SRC Phelps 12-32CHZ - Wellbore #1 - Plan #1 (10-28-13)	800.0	797.7	61.7	58.3	18.149	SF
SRC Phelps 12-32NHZ - Wellbore #1 - Plan #1 (10-28-13)	400.0	399.0	67.3	65.8	42.865	CC, ES
SRC Phelps 12-32NHZ - Wellbore #1 - Plan #1 (10-28-13)	900.0	896.5	93.8	89.9	24.136	SF
SRC Phelps A-32CHZ - Wellbore #1 - Plan #1 (10-28-13)	669.8	669.4	27.8	25.0	9.945	CC
SRC Phelps A-32CHZ - Wellbore #1 - Plan #1 (10-28-13)	700.0	699.5	27.9	25.0	9.501	ES
SRC Phelps A-32CHZ - Wellbore #1 - Plan #1 (10-28-13)	12,013.0	12,158.0	381.3	150.0	1.649	SF
SRC Phelps A-32NHZ - Wellbore #1 - Plan #1 (10-28-13)	750.9	750.0	48.2	45.0	15.128	CC, ES
SRC Phelps A-32NHZ - Wellbore #1 - Plan #1 (10-28-13)	12,013.0	11,937.1	738.4	477.0	2.825	SF

Offset Design		SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W - SRC Phelps 11-32CHZ - Wellbore #1 - Plan #1 (10-28										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	-102.23	-4.7	-21.8	22.4							
100.0	100.0	99.0	99.0	0.1	0.1	-102.23	-4.7	-21.8	22.4	22.1	0.22	99.966				
200.0	200.0	199.0	199.0	0.3	0.3	-102.23	-4.7	-21.8	22.4	21.7	0.67	33.267				
300.0	300.0	299.2	299.2	0.6	0.6	-98.03	-3.0	-21.6	21.8	20.7	1.12	19.401				
400.0	400.0	399.3	399.1	0.8	0.8	-84.22	2.1	-20.7	20.8	19.2	1.58	13.179				
419.3	419.3	418.6	418.3	0.8	0.8	-92.16	3.5	-20.5	20.7	19.1	1.67	12.433	CC, ES			
500.0	500.0	498.9	498.4	1.0	1.0	-77.11	10.6	-19.2	21.5	19.5	2.05	10.504				
600.0	599.8	598.4	597.1	1.2	1.3	-61.31	22.5	-17.2	24.4	21.9	2.54	9.602				
700.0	699.5	697.6	695.1	1.5	1.6	-49.71	37.8	-14.6	28.8	25.7	3.05	9.441				
800.0	798.7	796.6	792.3	1.7	2.0	-41.58	56.3	-11.5	34.1	30.5	3.57	9.548				
900.0	897.5	896.1	889.4	2.0	2.4	-36.46	77.5	-7.8	39.3	35.2	4.10	9.566				
1,000.0	996.0	996.0	986.9	2.4	2.8	-33.66	99.0	-4.2	43.5	38.8	4.66	9.321				
1,100.0	1,094.4	1,095.8	1,084.4	2.7	3.3	-31.35	120.5	-0.5	47.7	42.5	5.22	9.149				
1,200.0	1,192.9	1,195.7	1,181.9	3.1	3.7	-29.43	142.0	3.1	52.1	46.3	5.77	9.027				
1,300.0	1,291.4	1,295.6	1,279.3	3.4	4.2	-27.80	163.5	6.8	56.5	50.2	6.32	8.939				
1,400.0	1,389.9	1,395.5	1,376.8	3.8	4.6	-26.41	184.9	10.4	60.9	54.0	6.86	8.873				

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 Phelps 11-32NHZ
Project:	SEC.32-T1N-R66W	TVD Reference:	WELL @ 5031.0ft (Ensign Rig #17 RKB - 12')
Reference Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	MD Reference:	WELL @ 5031.0ft (Ensign Rig #17 RKB - 12')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Phelps 11-32NHZ	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 (10-28-13)	Offset TVD Reference:	Offset Datum

Offset Design SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W - SRC Phelps 11-32CHZ - Wellbore #1 - Plan #1 (10-28)													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	Offset	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
1,500.0	1,488.4	1,495.4	1,474.3	4.2	5.1	-25.21	-25.21	206.4	14.1	65.4	58.0	7.41	8.824	
1,600.0	1,586.9	1,595.3	1,571.8	4.6	5.5	-24.16	-24.16	227.9	17.8	69.8	61.9	7.95	8.786	
1,700.0	1,685.4	1,695.2	1,669.3	4.9	6.0	-23.24	-23.24	249.4	21.4	74.4	65.9	8.49	8.757	
1,800.0	1,783.9	1,795.1	1,766.8	5.3	6.4	-22.43	-22.43	270.9	25.1	78.9	69.8	9.03	8.735	
1,900.0	1,882.4	1,895.0	1,864.2	5.7	6.9	-21.70	-21.70	292.4	28.7	83.4	73.8	9.57	8.717	
2,000.0	1,980.9	1,994.9	1,961.7	6.1	7.3	-21.05	-21.05	313.9	32.4	88.0	77.9	10.11	8.703	
2,100.0	2,079.4	2,094.8	2,059.2	6.5	7.8	-20.46	-20.46	335.4	36.1	92.5	81.9	10.65	8.692	
2,200.0	2,177.8	2,194.7	2,156.7	6.8	8.2	-19.93	-19.93	356.9	39.7	97.1	85.9	11.18	8.683	
2,300.0	2,276.3	2,294.5	2,254.2	7.2	8.7	-19.44	-19.44	378.4	43.4	101.7	90.0	11.72	8.675	
2,400.0	2,374.8	2,394.4	2,351.7	7.6	9.2	-19.00	-19.00	399.9	47.0	106.3	94.0	12.26	8.669	
2,500.0	2,473.3	2,494.3	2,449.1	8.0	9.6	-18.59	-18.59	421.3	50.7	110.8	98.1	12.79	8.664	
2,600.0	2,571.8	2,594.2	2,546.6	8.4	10.1	-18.22	-18.22	442.8	54.4	115.4	102.1	13.33	8.660	
2,700.0	2,670.3	2,694.1	2,644.1	8.8	10.5	-17.88	-17.88	464.3	58.0	120.0	106.2	13.87	8.657	
2,800.0	2,768.8	2,794.0	2,741.6	9.1	11.0	-17.56	-17.56	485.8	61.7	124.6	110.2	14.40	8.654	
2,900.0	2,867.3	2,893.9	2,839.1	9.5	11.5	-17.26	-17.26	507.3	65.3	129.2	114.3	14.94	8.652	
3,000.0	2,965.8	2,993.8	2,936.6	9.9	11.9	-16.98	-16.98	528.8	69.0	133.9	118.4	15.48	8.650	
3,100.0	3,064.3	3,093.7	3,034.0	10.3	12.4	-16.72	-16.72	550.3	72.7	138.5	122.5	16.01	8.648	
3,200.0	3,162.8	3,193.6	3,131.5	10.7	12.8	-16.48	-16.48	571.8	76.3	143.1	126.5	16.55	8.647	
3,300.0	3,261.2	3,293.5	3,229.0	11.1	13.3	-16.26	-16.26	593.3	80.0	147.7	130.6	17.08	8.646	
3,400.0	3,359.7	3,393.4	3,326.5	11.5	13.7	-16.04	-16.04	614.8	83.6	152.3	134.7	17.62	8.645	
3,500.0	3,458.2	3,493.2	3,424.0	11.9	14.2	-15.84	-15.84	636.3	87.3	156.9	138.8	18.16	8.644	
3,600.0	3,556.7	3,593.1	3,521.5	12.2	14.7	-15.66	-15.66	657.7	91.0	161.6	142.9	18.69	8.643	
3,700.0	3,655.2	3,693.0	3,619.0	12.6	15.1	-15.48	-15.48	679.2	94.6	166.2	147.0	19.23	8.643	
3,800.0	3,753.7	3,792.9	3,716.4	13.0	15.6	-15.31	-15.31	700.7	98.3	170.8	151.1	19.77	8.642	
3,900.0	3,852.2	3,892.8	3,813.9	13.4	16.0	-15.15	-15.15	722.2	101.9	175.4	155.1	20.30	8.642	
4,000.0	3,950.7	3,992.7	3,911.4	13.8	16.5	-15.00	-15.00	743.7	105.6	180.1	159.2	20.84	8.642	
4,100.0	4,049.2	4,092.6	4,008.9	14.2	17.0	-14.85	-14.85	765.2	109.3	184.7	163.3	21.37	8.642	
4,200.0	4,147.7	4,192.5	4,106.4	14.6	17.4	-14.72	-14.72	786.7	112.9	189.3	167.4	21.91	8.641	
4,300.0	4,246.2	4,292.4	4,203.9	14.9	17.9	-14.59	-14.59	808.2	116.6	194.0	171.5	22.45	8.641	
4,400.0	4,344.6	4,392.3	4,301.3	15.3	18.3	-14.46	-14.46	829.7	120.2	198.6	175.6	22.98	8.641	
4,500.0	4,443.1	4,492.2	4,398.8	15.7	18.8	-14.35	-14.35	851.2	123.9	203.2	179.7	23.52	8.641	
4,600.0	4,541.6	4,592.1	4,496.3	16.1	19.2	-14.23	-14.23	872.7	127.6	207.9	183.8	24.06	8.641	
4,700.0	4,640.1	4,691.9	4,593.8	16.5	19.7	-14.12	-14.12	894.1	131.2	212.5	187.9	24.59	8.641	
4,800.0	4,738.6	4,791.8	4,691.3	16.9	20.2	-14.02	-14.02	915.6	134.9	217.1	192.0	25.13	8.641	
4,900.0	4,837.1	4,891.7	4,788.8	17.3	20.6	-13.92	-13.92	937.1	138.5	221.8	196.1	25.67	8.641	
5,000.0	4,935.6	4,991.6	4,886.2	17.7	21.1	-13.83	-13.83	958.6	142.2	226.4	200.2	26.20	8.641	
5,100.0	5,034.1	5,091.5	4,983.7	18.0	21.5	-13.73	-13.73	980.1	145.8	231.1	204.3	26.74	8.641	
5,200.0	5,132.6	5,191.4	5,081.2	18.4	22.0	-13.65	-13.65	1,001.6	149.5	235.7	208.4	27.28	8.641	
5,300.0	5,231.1	5,291.3	5,178.7	18.8	22.5	-13.56	-13.56	1,023.1	153.2	240.3	212.5	27.81	8.642	
5,400.0	5,329.6	5,391.2	5,276.2	19.2	22.9	-13.48	-13.48	1,044.6	156.8	245.0	216.6	28.35	8.642	
5,500.0	5,428.1	5,491.1	5,373.7	19.6	23.4	-13.40	-13.40	1,066.1	160.5	249.6	220.7	28.89	8.642	
5,600.0	5,526.5	5,591.0	5,471.1	20.0	23.8	-13.33	-13.33	1,087.6	164.1	254.3	224.8	29.42	8.642	
5,700.0	5,625.0	5,690.9	5,568.6	20.4	24.3	-13.25	-13.25	1,109.1	167.8	258.9	228.9	29.96	8.642	
5,800.0	5,723.5	5,790.8	5,666.1	20.8	24.8	-13.18	-13.18	1,130.5	171.5	263.6	233.1	30.50	8.642	
5,900.0	5,822.0	5,890.6	5,763.6	21.1	25.2	-13.12	-13.12	1,152.0	175.1	268.2	237.2	31.03	8.642	
6,000.0	5,920.5	5,990.5	5,861.1	21.5	25.7	-13.05	-13.05	1,173.5	178.8	272.8	241.3	31.57	8.642	
6,100.0	6,019.0	6,090.4	5,958.6	21.9	26.1	-12.99	-12.99	1,195.0	182.4	277.5	245.4	32.11	8.642	
6,200.0	6,117.5	6,190.3	6,056.0	22.3	26.6	-12.93	-12.93	1,216.5	186.1	282.2	249.5	32.64	8.645	
6,300.0	6,216.0	6,290.1	6,153.4	22.6	27.0	-12.80	-12.80	1,238.0	189.8	286.9	253.6	33.17	8.737	
6,400.0	6,314.5	6,388.4	6,259.4	22.8	27.5	-12.56	-12.56	1,260.0	193.5	290.0	257.6	33.70	8.910	
6,500.0	6,413.0	6,509.5	6,368.9	23.0	27.8	-12.32	-12.32	1,278.6	196.7	306.7	261.7	34.23	9.094	

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 Phelps 11-32NHZ
Project:	SEC.32-T1N-R66W	TVD Reference:	WELL @ 5031.0ft (Ensign Rig #17 RKB - 12')
Reference Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	MD Reference:	WELL @ 5031.0ft (Ensign Rig #17 RKB - 12')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Phelps 11-32NHZ	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 (10-28-13)	Offset TVD Reference:	Offset Datum

Offset Design SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W - SRC Phelps 11-32CHZ - Wellbore #1 - Plan #1 (10-28)													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	Offset	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
6,600.0	6,515.2	6,621.1	6,479.5	23.2	28.1	-12.08		1,293.0	199.1	315.1	281.1	33.95	9.280	
6,700.0	6,615.2	6,733.1	6,591.0	23.3	28.3	-0.20		1,303.2	200.9	323.0	271.8	51.14	6.315	
6,800.0	6,715.2	6,845.5	6,703.3	23.5	28.5	-0.02		1,309.2	201.9	328.2	276.8	51.48	6.376	
6,900.0	6,815.0	6,956.3	6,814.0	23.6	28.7	90.80		1,310.8	202.2	329.7	295.0	34.71	9.498	
7,000.0	6,913.3	7,054.6	6,912.3	23.7	28.8	93.82		1,310.8	202.2	330.4	295.8	34.62	9.545	
7,100.0	7,008.1	7,155.7	7,013.1	23.7	28.9	98.20		1,310.8	196.7	333.3	298.8	34.48	9.667	
7,200.0	7,097.5	7,261.4	7,116.7	23.8	28.9	102.46		1,310.8	175.9	338.2	303.7	34.47	9.810	
7,300.0	7,180.0	7,371.8	7,220.4	23.8	29.0	106.46		1,310.8	138.3	344.6	310.1	34.54	9.976	
7,400.0	7,253.7	7,487.1	7,321.2	23.8	29.0	110.10		1,310.8	82.5	352.1	317.5	34.64	10.164	
7,500.0	7,317.4	7,607.5	7,415.4	23.9	29.0	113.28		1,310.8	7.7	360.0	325.2	34.78	10.350	
7,600.0	7,369.7	7,732.8	7,498.7	24.1	29.1	115.92		1,310.8	-85.6	367.5	332.4	35.04	10.486	
7,700.0	7,409.6	7,862.6	7,566.5	24.5	29.2	117.96		1,310.8	-196.1	373.8	338.1	35.67	10.478	
7,800.0	7,436.4	7,995.9	7,614.3	25.1	29.6	119.34		1,310.8	-320.3	378.4	341.5	36.86	10.265	
7,900.0	7,449.6	8,131.5	7,638.4	26.0	30.2	120.02		1,310.8	-453.5	380.8	342.0	38.79	9.816	
8,000.0	7,451.0	8,247.6	7,641.0	27.4	31.2	120.09		1,310.8	-569.6	381.0	339.3	41.65	9.147	
8,100.0	7,451.0	8,347.6	7,641.0	29.0	32.3	120.09		1,310.8	-669.6	381.0	336.0	45.03	8.461	
8,200.0	7,451.0	8,447.6	7,641.0	30.9	33.7	120.09		1,310.8	-769.6	381.0	332.3	48.67	7.828	
8,300.0	7,451.0	8,547.6	7,641.0	32.9	35.4	120.09		1,310.8	-869.6	381.0	328.5	52.52	7.255	
8,400.0	7,451.0	8,647.6	7,641.0	35.1	37.3	120.09		1,310.8	-969.6	381.0	324.5	56.53	6.740	
8,500.0	7,451.0	8,747.6	7,641.0	37.4	39.3	120.09		1,310.8	-1,069.6	381.0	320.3	60.67	6.280	
8,600.0	7,451.0	8,847.6	7,641.0	39.7	41.5	120.09		1,310.8	-1,169.6	381.0	316.1	64.92	5.869	
8,700.0	7,451.0	8,947.6	7,641.0	42.1	43.7	120.09		1,310.8	-1,269.6	381.0	311.7	69.25	5.502	
8,800.0	7,451.0	9,047.6	7,641.0	44.5	46.0	120.09		1,310.8	-1,369.6	381.0	307.3	73.66	5.173	
8,900.0	7,451.0	9,147.6	7,641.0	47.0	48.4	120.09		1,310.8	-1,469.6	381.0	302.9	78.12	4.877	
9,000.0	7,451.0	9,247.6	7,641.0	49.6	50.8	120.09		1,310.8	-1,569.6	381.0	298.4	82.64	4.610	
9,100.0	7,451.0	9,347.6	7,641.0	52.1	53.3	120.09		1,310.8	-1,669.6	381.0	293.8	87.20	4.370	
9,200.0	7,451.0	9,447.6	7,641.0	54.7	55.8	120.09		1,310.8	-1,769.6	381.0	289.2	91.79	4.151	
9,300.0	7,451.0	9,547.6	7,641.0	57.3	58.3	120.09		1,310.8	-1,869.6	381.0	284.6	96.41	3.952	
9,400.0	7,451.0	9,647.6	7,641.0	59.9	60.9	120.09		1,310.8	-1,969.6	381.0	279.9	101.06	3.770	
9,500.0	7,451.0	9,747.6	7,641.0	62.6	63.5	120.09		1,310.8	-2,069.6	381.0	275.3	105.73	3.603	
9,600.0	7,451.0	9,847.6	7,641.0	65.2	66.1	120.09		1,310.8	-2,169.6	381.0	270.6	110.43	3.450	
9,700.0	7,451.0	9,947.6	7,641.0	67.9	68.7	120.09		1,310.8	-2,269.6	381.0	265.9	115.14	3.309	
9,800.0	7,451.0	10,047.6	7,641.0	70.5	71.3	120.09		1,310.8	-2,369.6	381.0	261.1	119.86	3.179	
9,900.0	7,451.0	10,147.6	7,641.0	73.2	73.9	120.09		1,310.8	-2,469.6	381.0	256.4	124.60	3.058	
10,000.0	7,451.0	10,247.6	7,641.0	75.9	76.6	120.09		1,310.8	-2,569.6	381.0	251.7	129.35	2.945	
10,100.0	7,451.0	10,347.6	7,641.0	78.6	79.3	120.09		1,310.8	-2,669.6	381.0	246.9	134.11	2.841	
10,200.0	7,451.0	10,447.6	7,641.0	81.3	81.9	120.09		1,310.8	-2,769.6	381.0	242.1	138.89	2.743	
10,300.0	7,451.0	10,547.6	7,641.0	84.0	84.6	120.09		1,310.8	-2,869.6	381.0	237.3	143.67	2.652	
10,400.0	7,451.0	10,647.6	7,641.0	86.8	87.3	120.09		1,310.8	-2,969.6	381.0	232.5	148.46	2.566	
10,500.0	7,451.0	10,747.6	7,641.0	89.5	90.0	120.09		1,310.8	-3,069.6	381.0	227.8	153.25	2.486	
10,600.0	7,451.0	10,847.6	7,641.0	92.2	92.7	120.09		1,310.8	-3,169.6	381.0	223.0	158.05	2.411	
10,700.0	7,451.0	10,947.6	7,641.0	94.9	95.4	120.09		1,310.8	-3,269.6	381.0	218.1	162.86	2.339	
10,800.0	7,451.0	11,047.6	7,641.0	97.7	98.2	120.09		1,310.8	-3,369.6	381.0	213.3	167.68	2.272	
10,900.0	7,451.0	11,147.6	7,641.0	100.4	100.9	120.09		1,310.8	-3,469.6	381.0	208.5	172.50	2.209	
11,000.0	7,451.0	11,247.6	7,641.0	103.2	103.6	120.09		1,310.8	-3,569.6	381.0	203.7	177.32	2.149	
11,100.0	7,451.0	11,347.6	7,641.0	105.9	106.3	120.09		1,310.8	-3,669.6	381.0	198.9	182.15	2.092	
11,200.0	7,451.0	11,447.6	7,641.0	108.7	109.1	120.09		1,310.8	-3,769.6	381.0	194.0	186.98	2.038	
11,300.0	7,451.0	11,547.6	7,641.0	111.4	111.8	120.09		1,310.8	-3,869.6	381.0	189.2	191.81	1.986	
11,400.0	7,451.0	11,647.6	7,641.0	114.2	114.5	120.09		1,310.8	-3,969.6	381.0	184.4	196.65	1.937	
11,500.0	7,451.0	11,747.6	7,641.0	116.9	117.3	120.09		1,310.8	-4,069.6	381.0	179.5	201.49	1.891	
11,600.0	7,451.0	11,847.6	7,641.0	119.7	120.0	120.09		1,310.8	-4,169.6	381.0	174.7	206.34	1.847	

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 Phelps 11-32NHZ
Project:	SEC.32-T1N-R66W	TVD Reference:	WELL @ 5031.0ft (Ensign Rig #17 RKB - 12')
Reference Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	MD Reference:	WELL @ 5031.0ft (Ensign Rig #17 RKB - 12')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Phelps 11-32NHZ	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 (10-28-13)	Offset TVD Reference:	Offset Datum

Offset Design SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W - SRC Phelps 11-32CHZ - Wellbore #1 - Plan #1 (10-28													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		
11,700.0	7,451.0	11,947.6	7,641.0	122.5	122.8	120.09	1,310.8	-4,269.6	381.0	169.8	211.19	1.804		
11,800.0	7,451.0	12,047.6	7,641.0	125.2	125.5	120.09	1,310.8	-4,369.6	381.0	165.0	216.04	1.764		
11,900.0	7,451.0	12,147.6	7,641.0	128.0	128.3	120.09	1,310.8	-4,469.6	381.0	160.1	220.89	1.725		
12,000.0	7,451.0	12,247.6	7,641.0	130.7	131.0	120.09	1,310.8	-4,569.6	381.0	155.3	225.74	1.688		
12,003.0	7,451.0	12,250.6	7,641.0	130.8	131.1	120.09	1,310.8	-4,572.6	381.0	155.1	225.89	1.687		
12,013.0	7,451.0	12,260.3	7,641.0	131.1	131.4	120.09	1,310.8	-4,582.3	381.0	154.6	226.37	1.683 SF		

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Phelps 11-32NHZ
Project:	SEC.32-T1N-R66W	TVD Reference:	WELL @ 5031.0ft (Ensign Rig #17 RKB - 12')
Reference Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	MD Reference:	WELL @ 5031.0ft (Ensign Rig #17 RKB - 12')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Phelps 11-32NHZ	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 (10-28-13)	Offset TVD Reference:	Offset Datum

Offset Design SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W - SRC Phelps 12-32CHZ - Wellbore #1 - Plan #1 (10-28)													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	Offset	Semi Major Axis	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Distance Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-102.15	-102.15	-9.5	-44.0	45.0				
100.0	100.0	99.0	99.0	0.1	0.1	-102.15	-102.15	-9.5	-44.0	45.0	44.8	0.22	201.157	
200.0	200.0	199.0	199.0	0.3	0.3	-102.15	-102.15	-9.5	-44.0	45.0	44.3	0.67	66.941	
300.0	300.0	299.0	299.0	0.6	0.6	-102.15	-102.15	-9.5	-44.0	45.0	43.9	1.12	40.111	
400.0	400.0	399.0	399.0	0.8	0.8	-102.15	-102.15	-9.5	-44.0	45.0	43.4	1.57	28.634 CC, ES	
500.0	500.0	499.0	499.0	1.0	1.0	-115.78	-115.78	-9.5	-44.0	45.7	43.7	2.02	22.629	
600.0	599.8	598.8	598.8	1.2	1.2	-121.33	-121.33	-9.5	-44.0	48.2	45.8	2.47	19.503	
700.0	699.5	698.5	698.5	1.5	1.5	-129.27	-129.27	-9.5	-44.0	53.3	50.4	2.93	18.164	
800.0	798.7	797.7	797.7	1.7	1.7	-137.91	-137.91	-9.5	-44.0	61.7	58.3	3.40	18.149 SF	
900.0	897.5	896.5	896.5	2.0	1.9	-145.87	-145.87	-9.5	-44.0	74.1	70.3	3.87	19.148	
1,000.0	996.0	995.0	995.0	2.4	2.1	-152.11	-152.11	-9.5	-44.0	89.1	84.7	4.34	20.526	
1,100.0	1,094.4	1,094.4	1,094.4	2.7	2.3	-157.40	-157.40	-9.9	-42.5	104.3	99.5	4.78	21.792	
1,200.0	1,192.9	1,193.6	1,193.5	3.1	2.5	-162.92	-162.92	-11.4	-37.7	119.4	114.2	5.21	22.914	
1,300.0	1,291.4	1,291.8	1,291.4	3.4	2.7	-167.86	-167.86	-13.5	-31.4	135.2	129.6	5.65	23.942	
1,400.0	1,389.9	1,389.9	1,389.3	3.8	2.9	-171.75	-171.75	-15.5	-25.1	151.8	145.7	6.10	24.901	
1,500.0	1,488.4	1,488.1	1,487.2	4.2	3.2	-174.88	-174.88	-17.5	-18.8	168.9	162.3	6.55	25.777	
1,600.0	1,586.9	1,586.2	1,585.2	4.6	3.4	-177.42	-177.42	-19.5	-12.4	186.4	179.4	7.02	26.563	
1,700.0	1,685.4	1,684.3	1,683.1	4.9	3.6	-179.53	-179.53	-21.5	-6.1	204.2	196.8	7.49	27.266	
1,800.0	1,783.9	1,782.5	1,781.0	5.3	3.8	-178.70	-178.70	-23.5	0.2	222.3	214.3	7.97	27.894	
1,900.0	1,882.4	1,880.6	1,878.9	5.7	4.1	-177.20	-177.20	-25.5	6.6	240.5	232.1	8.45	28.454	
2,000.0	1,980.9	1,978.8	1,976.8	6.1	4.3	-175.91	-175.91	-27.5	12.9	258.9	249.9	8.94	28.956	
2,100.0	2,079.4	2,076.9	2,074.8	6.5	4.6	-174.79	-174.79	-29.5	19.2	277.3	267.9	9.43	29.406	
2,200.0	2,177.8	2,175.1	2,172.7	6.8	4.8	-173.81	-173.81	-31.5	25.5	295.9	286.0	9.93	29.812	
2,300.0	2,276.3	2,273.2	2,270.6	7.2	5.0	-172.94	-172.94	-33.5	31.9	314.5	304.1	10.42	30.180	
2,400.0	2,374.8	2,371.4	2,368.5	7.6	5.3	-172.17	-172.17	-35.5	38.2	333.2	322.3	10.92	30.513	
2,500.0	2,473.3	2,469.5	2,466.4	8.0	5.5	-171.49	-171.49	-37.5	44.5	352.0	340.5	11.42	30.817	
2,600.0	2,571.8	2,567.6	2,564.3	8.4	5.8	-170.87	-170.87	-39.5	50.9	370.8	358.8	11.92	31.094	
2,700.0	2,670.3	2,665.8	2,662.3	8.8	6.0	-170.31	-170.31	-41.5	57.2	389.6	377.2	12.43	31.348	
2,800.0	2,768.8	2,763.9	2,760.2	9.1	6.3	-169.81	-169.81	-43.5	63.5	408.4	395.5	12.93	31.582	
2,900.0	2,867.3	2,862.1	2,858.1	9.5	6.5	-169.34	-169.34	-45.5	69.8	427.3	413.9	13.44	31.798	
3,000.0	2,965.8	2,960.2	2,956.0	9.9	6.7	-168.92	-168.92	-47.5	76.2	446.3	432.3	13.95	31.997	
3,100.0	3,064.3	3,058.4	3,053.9	10.3	7.0	-168.53	-168.53	-49.5	82.5	465.2	450.7	14.45	32.182	
3,200.0	3,162.8	3,156.5	3,151.9	10.7	7.2	-168.18	-168.18	-51.5	88.8	484.1	469.2	14.96	32.354	
3,300.0	3,261.2	3,254.7	3,249.8	11.1	7.5	-167.85	-167.85	-53.5	95.2	503.1	487.6	15.47	32.514	
3,400.0	3,359.7	3,352.8	3,347.7	11.5	7.7	-167.54	-167.54	-55.5	101.5	522.1	506.1	15.98	32.663	
3,500.0	3,458.2	3,450.9	3,445.6	11.9	8.0	-167.25	-167.25	-57.5	107.8	541.1	524.6	16.50	32.803	
3,600.0	3,556.7	3,549.1	3,543.5	12.2	8.2	-166.99	-166.99	-59.5	114.2	560.1	543.1	17.01	32.934	
3,700.0	3,655.2	3,647.2	3,641.5	12.6	8.5	-166.74	-166.74	-61.5	120.5	579.1	561.6	17.52	33.057	
3,800.0	3,753.7	3,745.4	3,739.4	13.0	8.7	-166.51	-166.51	-63.6	126.8	598.2	580.1	18.03	33.173	
3,900.0	3,852.2	3,843.5	3,837.3	13.4	9.0	-166.29	-166.29	-65.6	133.1	617.2	598.6	18.54	33.282	
4,000.0	3,950.7	3,941.7	3,935.2	13.8	9.2	-166.08	-166.08	-67.6	139.5	636.2	617.2	19.06	33.384	
4,100.0	4,049.2	4,039.8	4,033.1	14.2	9.5	-165.89	-165.89	-69.6	145.8	655.3	635.7	19.57	33.482	
4,200.0	4,147.7	4,138.0	4,131.1	14.6	9.7	-165.71	-165.71	-71.6	152.1	674.4	654.3	20.09	33.574	
4,300.0	4,246.2	4,236.1	4,229.0	14.9	10.0	-165.53	-165.53	-73.6	158.5	693.4	672.8	20.60	33.661	
4,400.0	4,344.6	4,334.2	4,326.9	15.3	10.2	-165.37	-165.37	-75.6	164.8	712.5	691.4	21.12	33.744	
4,500.0	4,443.1	4,432.4	4,424.8	15.7	10.5	-165.22	-165.22	-77.6	171.1	731.6	710.0	21.63	33.822	
4,600.0	4,541.6	4,530.5	4,522.7	16.1	10.8	-165.07	-165.07	-79.6	177.4	750.7	728.5	22.15	33.897	
4,700.0	4,640.1	4,628.7	4,620.7	16.5	11.0	-164.93	-164.93	-81.6	183.8	769.8	747.1	22.66	33.968	
4,800.0	4,738.6	4,726.8	4,718.6	16.9	11.3	-164.80	-164.80	-83.6	190.1	788.8	765.7	23.18	34.036	
4,900.0	4,837.1	4,826.1	4,817.7	17.3	11.5	-164.67	-164.67	-85.6	196.5	807.9	784.2	23.69	34.102	
5,000.0	4,935.6	4,935.6	4,927.1	17.7	11.7	-164.70	-164.70	-87.1	201.1	826.2	802.0	24.18	34.168	

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 Phelps 11-32NHZ
Project:	SEC.32-T1N-R66W	TVD Reference:	WELL @ 5031.0ft (Ensign Rig #17 RKB - 12')
Reference Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	MD Reference:	WELL @ 5031.0ft (Ensign Rig #17 RKB - 12')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Phelps 11-32NHZ	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 (10-28-13)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance								
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
5,100.0	5,034.1	5,041.7	5,033.1	18.0	11.9	164.98	-87.4	202.0	843.2	818.6	24.63	34.238		
5,200.0	5,132.6	5,140.2	5,131.6	18.4	12.1	165.28	-87.4	202.0	860.0	834.9	25.06	34.311		
5,300.0	5,231.1	5,238.7	5,230.1	18.8	12.3	165.56	-87.4	202.0	876.8	851.2	25.50	34.378		
5,400.0	5,329.6	5,337.1	5,328.6	19.2	12.5	165.84	-87.4	202.0	893.5	867.6	25.94	34.443		
5,500.0	5,428.1	5,435.6	5,427.1	19.6	12.7	166.11	-87.4	202.0	910.3	884.0	26.38	34.506		
5,600.0	5,526.5	5,534.1	5,525.5	20.0	12.9	166.36	-87.4	202.0	927.2	900.3	26.82	34.565		
5,700.0	5,625.0	5,632.6	5,624.0	20.4	13.0	166.61	-87.4	202.0	944.0	916.7	27.27	34.622		
5,800.0	5,723.5	5,731.1	5,722.5	20.8	13.2	166.85	-87.4	202.0	960.9	933.2	27.71	34.677		
5,900.0	5,822.0	5,829.6	5,821.0	21.1	13.4	167.08	-87.4	202.0	977.7	949.6	28.15	34.729		
6,000.0	5,920.5	5,928.1	5,919.5	21.5	13.6	167.30	-87.4	202.0	994.6	966.0	28.60	34.779		

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Phelps 11-32NHZ
Project:	SEC.32-T1N-R66W	TVD Reference:	WELL @ 5031.0ft (Ensign Rig #17 RKB - 12')
Reference Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	MD Reference:	WELL @ 5031.0ft (Ensign Rig #17 RKB - 12')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Phelps 11-32NHZ	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 (10-28-13)	Offset TVD Reference:	Offset Datum

Offset Design													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	Offset	Semi Major Axis	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Distance Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-102.18	-102.18	-14.2	-65.8	67.4				
100.0	100.0	99.0	99.0	0.1	0.1	-102.18	-102.18	-14.2	-65.8	67.3	67.1	0.22	301.127	
200.0	200.0	199.0	199.0	0.3	0.3	-102.18	-102.18	-14.2	-65.8	67.3	66.7	0.67	100.209	
300.0	300.0	299.0	299.0	0.6	0.6	-102.18	-102.18	-14.2	-65.8	67.3	66.2	1.12	60.045	
400.0	400.0	399.0	399.0	0.8	0.8	-102.18	-102.18	-14.2	-65.8	67.3	65.8	1.57	42.865 CC, ES	
500.0	500.0	499.0	499.0	1.0	1.0	-115.15	-115.15	-14.2	-65.8	68.1	66.0	2.02	33.692	
600.0	599.8	598.8	598.8	1.2	1.2	-118.96	-118.96	-14.2	-65.8	70.5	68.0	2.47	28.494	
700.0	699.5	698.5	698.5	1.5	1.5	-124.69	-124.69	-14.2	-65.8	75.1	72.1	2.93	25.585	
800.0	798.7	797.7	797.7	1.7	1.7	-131.52	-131.52	-14.2	-65.8	82.6	79.2	3.41	24.258	
900.0	897.5	896.5	896.5	2.0	1.9	-138.50	-138.50	-14.2	-65.8	93.8	89.9	3.89	24.136 SF	
1,000.0	996.0	995.0	995.0	2.4	2.1	-144.60	-144.60	-14.2	-65.8	107.4	103.1	4.36	24.623	
1,100.0	1,094.4	1,093.4	1,093.4	2.7	2.3	-149.29	-149.29	-14.2	-65.8	122.0	117.2	4.84	25.229	
1,200.0	1,192.9	1,191.9	1,191.9	3.1	2.6	-152.97	-152.97	-14.2	-65.8	137.2	131.9	5.31	25.862	
1,300.0	1,291.4	1,290.4	1,290.4	3.4	2.8	-155.92	-155.92	-14.2	-65.8	152.9	147.1	5.77	26.479	
1,400.0	1,389.9	1,388.9	1,388.9	3.8	3.0	-158.31	-158.31	-14.2	-65.8	168.9	162.6	6.24	27.058	
1,500.0	1,488.4	1,487.4	1,487.4	4.2	3.2	-160.28	-160.28	-14.2	-65.8	185.1	178.4	6.71	27.594	
1,600.0	1,586.9	1,585.9	1,585.9	4.6	3.5	-161.94	-161.94	-14.2	-65.8	201.5	194.3	7.17	28.086	
1,700.0	1,685.4	1,684.4	1,684.4	4.9	3.7	-163.35	-163.35	-14.2	-65.8	218.1	210.4	7.64	28.535	
1,800.0	1,783.9	1,782.9	1,782.9	5.3	3.9	-164.56	-164.56	-14.2	-65.8	234.7	226.6	8.11	28.944	
1,900.0	1,882.4	1,881.4	1,881.4	5.7	4.1	-165.61	-165.61	-14.2	-65.8	251.4	242.9	8.58	29.318	
2,000.0	1,980.9	1,979.9	1,979.9	6.1	4.3	-166.53	-166.53	-14.2	-65.8	268.3	259.2	9.04	29.660	
2,100.0	2,079.4	2,074.4	2,074.4	6.5	4.5	-167.47	-167.47	-15.0	-65.3	285.7	276.2	9.48	30.122	
2,200.0	2,177.8	2,167.1	2,167.0	6.8	4.7	-168.77	-168.77	-18.3	-63.1	304.9	295.0	9.90	30.806	
2,300.0	2,276.3	2,258.7	2,258.3	7.2	4.9	-170.35	-170.35	-23.9	-59.4	326.1	315.8	10.30	31.644	
2,400.0	2,374.8	2,349.0	2,348.1	7.6	5.0	-172.11	-172.11	-31.9	-54.1	349.3	338.6	10.71	32.604	
2,500.0	2,473.3	2,442.7	2,441.0	8.0	5.2	-174.00	-174.00	-42.1	-47.3	374.4	363.3	11.14	33.611	
2,600.0	2,571.8	2,538.7	2,536.1	8.4	5.4	-175.73	-175.73	-52.7	-40.2	400.0	388.4	11.58	34.551	
2,700.0	2,670.3	2,634.7	2,631.3	8.8	5.7	-177.25	-177.25	-63.3	-33.2	425.9	413.8	12.02	35.417	
2,800.0	2,768.8	2,730.7	2,726.5	9.1	5.9	-178.59	-178.59	-73.9	-26.1	452.0	439.5	12.48	36.218	
2,900.0	2,867.3	2,826.7	2,821.6	9.5	6.1	-179.79	-179.79	-84.5	-19.1	478.3	465.4	12.94	36.958	
3,000.0	2,965.8	2,922.7	2,916.8	9.9	6.4	-179.13	-179.13	-95.0	-12.1	504.8	491.4	13.41	37.644	
3,100.0	3,064.3	3,018.7	3,012.0	10.3	6.6	-178.16	-178.16	-105.6	-5.0	531.5	517.6	13.88	38.281	
3,200.0	3,162.8	3,114.7	3,107.1	10.7	6.9	-177.29	-177.29	-116.2	2.0	558.3	543.9	14.36	38.873	
3,300.0	3,261.2	3,210.7	3,202.3	11.1	7.2	-176.49	-176.49	-126.8	9.1	585.2	570.3	14.84	39.425	
3,400.0	3,359.7	3,306.7	3,297.4	11.5	7.4	-175.77	-175.77	-137.4	16.1	612.2	596.8	15.33	39.940	
3,500.0	3,458.2	3,402.7	3,392.6	11.9	7.7	-175.10	-175.10	-148.0	23.2	639.3	623.4	15.81	40.421	
3,600.0	3,556.7	3,498.7	3,487.8	12.2	8.0	-174.49	-174.49	-158.6	30.2	666.4	650.1	16.30	40.872	
3,700.0	3,655.2	3,594.7	3,582.9	12.6	8.3	-173.92	-173.92	-169.2	37.3	693.6	676.8	16.80	41.295	
3,800.0	3,753.7	3,690.8	3,678.1	13.0	8.6	-173.40	-173.40	-179.8	44.3	720.9	703.6	17.29	41.692	
3,900.0	3,852.2	3,786.8	3,773.2	13.4	8.9	-172.92	-172.92	-190.4	51.4	748.2	730.4	17.79	42.066	
4,000.0	3,950.7	3,882.8	3,868.4	13.8	9.2	-172.47	-172.47	-201.0	58.4	775.6	757.3	18.28	42.419	
4,100.0	4,049.2	3,978.8	3,963.6	14.2	9.5	-172.05	-172.05	-211.6	65.5	803.0	784.2	18.78	42.751	
4,200.0	4,147.7	4,074.8	4,058.7	14.6	9.8	-171.66	-171.66	-222.2	72.5	830.5	811.2	19.28	43.066	
4,300.0	4,246.2	4,170.8	4,153.9	14.9	10.1	-171.29	-171.29	-232.8	79.6	858.0	838.2	19.79	43.363	
4,400.0	4,344.6	4,266.8	4,249.0	15.3	10.4	-170.95	-170.95	-243.4	86.6	885.5	865.2	20.29	43.646	
4,500.0	4,443.1	4,362.8	4,344.2	15.7	10.7	-170.63	-170.63	-254.0	93.7	913.0	892.2	20.79	43.913	
4,600.0	4,541.6	4,458.8	4,439.4	16.1	11.0	-170.32	-170.32	-264.5	100.7	940.6	919.3	21.30	44.167	
4,700.0	4,640.1	4,554.8	4,534.5	16.5	11.3	-170.03	-170.03	-275.1	107.8	968.2	946.4	21.80	44.409	
4,800.0	4,738.6	4,650.8	4,629.7	16.9	11.6	-169.76	-169.76	-285.7	114.8	995.8	973.5	22.31	44.639	

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Phelps 11-32NHZ
Project:	SEC.32-T1N-R66W	TVD Reference:	WELL @ 5031.0ft (Ensign Rig #17 RKB - 12')
Reference Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	MD Reference:	WELL @ 5031.0ft (Ensign Rig #17 RKB - 12')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Phelps 11-32NHZ	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 (10-28-13)	Offset TVD Reference:	Offset Datum

Offset Design SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W - SRC Phelps A-32CHZ - Wellbore #1 - Plan #1 (10-28-13)													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	Offset	Semi Major Axis	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Distance Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	77.55	77.55	6.6	29.7	30.4				
100.0	100.0	100.0	100.0	0.1	0.1	77.55	77.55	6.6	29.7	30.4	30.2	0.22	135.289	
200.0	200.0	200.0	200.0	0.3	0.3	77.55	77.55	6.6	29.7	30.4	29.7	0.67	45.096	
300.0	300.0	300.0	300.0	0.6	0.6	77.55	77.55	6.6	29.7	30.4	29.3	1.12	27.058	
400.0	400.0	400.0	400.0	0.8	0.8	77.55	77.55	6.6	29.7	30.4	28.8	1.57	19.327	
500.0	500.0	500.0	500.0	1.0	1.0	69.00	69.00	6.6	29.7	29.7	27.7	2.02	14.705	
600.0	599.8	599.8	599.8	1.2	1.2	78.96	78.96	6.6	29.7	28.3	25.8	2.47	11.436	
669.8	669.4	669.4	669.3	1.4	1.4	88.86	88.86	7.4	29.9	27.8	25.0	2.80	9.945 CC	
700.0	699.5	699.5	699.5	1.5	1.5	93.19	93.19	8.2	30.1	27.9	25.0	2.94	9.501 ES	
800.0	798.7	799.3	799.2	1.7	1.7	106.86	106.86	13.3	31.5	29.4	26.0	3.42	8.595	
900.0	897.5	899.5	898.9	2.0	1.9	118.43	118.43	21.7	33.7	32.6	28.7	3.94	8.284	
1,000.0	996.0	999.5	998.3	2.4	2.2	125.99	125.99	32.9	36.7	36.3	31.8	4.47	8.117	
1,100.0	1,094.4	1,099.4	1,097.4	2.7	2.4	131.72	131.72	44.4	39.8	40.3	35.2	5.00	8.046	
1,200.0	1,192.9	1,199.2	1,196.6	3.1	2.7	136.38	136.38	55.9	42.9	44.6	39.0	5.53	8.057	
1,300.0	1,291.4	1,299.1	1,295.7	3.4	3.0	140.20	140.20	67.4	45.9	49.1	43.0	6.05	8.116	
1,400.0	1,389.9	1,398.9	1,394.8	3.8	3.3	143.36	143.36	78.9	49.0	53.8	47.3	6.56	8.200	
1,500.0	1,488.4	1,498.8	1,494.0	4.2	3.6	146.01	146.01	90.4	52.1	58.7	51.6	7.07	8.296	
1,600.0	1,586.9	1,598.6	1,593.1	4.6	3.9	148.24	148.24	101.9	55.1	63.6	56.1	7.58	8.398	
1,700.0	1,685.4	1,698.5	1,692.3	4.9	4.2	150.16	150.16	113.4	58.2	68.7	60.6	8.08	8.499	
1,800.0	1,783.9	1,798.3	1,791.4	5.3	4.5	151.80	151.80	124.9	61.3	73.8	65.2	8.58	8.598	
1,900.0	1,882.4	1,898.2	1,890.5	5.7	4.8	153.24	153.24	136.4	64.3	79.0	69.9	9.08	8.693	
2,000.0	1,980.9	1,998.0	1,989.7	6.1	5.1	154.49	154.49	147.9	67.4	84.2	74.6	9.58	8.784	
2,100.0	2,079.4	2,097.8	2,088.8	6.5	5.4	155.60	155.60	159.3	70.5	89.4	79.3	10.08	8.869	
2,200.0	2,177.8	2,197.7	2,187.9	6.8	5.7	156.59	156.59	170.8	73.5	94.7	84.1	10.58	8.950	
2,300.0	2,276.3	2,297.5	2,287.1	7.2	6.0	157.47	157.47	182.3	76.6	100.0	88.9	11.08	9.026	
2,400.0	2,374.8	2,397.4	2,386.2	7.6	6.3	158.27	158.27	193.8	79.7	105.3	93.8	11.58	9.097	
2,500.0	2,473.3	2,497.2	2,485.3	8.0	6.6	158.98	158.98	205.3	82.7	110.7	98.6	12.08	9.164	
2,600.0	2,571.8	2,597.1	2,584.5	8.4	6.9	159.63	159.63	216.8	85.8	116.0	103.5	12.57	9.227	
2,700.0	2,670.3	2,696.9	2,683.6	8.8	7.2	160.23	160.23	228.3	88.9	121.4	108.3	13.07	9.287	
2,800.0	2,768.8	2,796.8	2,782.8	9.1	7.5	160.77	160.77	239.8	91.9	126.8	113.2	13.57	9.342	
2,900.0	2,867.3	2,896.6	2,881.9	9.5	7.8	161.27	161.27	251.3	95.0	132.2	118.1	14.07	9.395	
3,000.0	2,965.8	2,996.5	2,981.0	9.9	8.1	161.73	161.73	262.8	98.1	137.6	123.0	14.57	9.444	
3,100.0	3,064.3	3,096.3	3,080.2	10.3	8.4	162.15	162.15	274.3	101.2	143.0	127.9	15.06	9.491	
3,200.0	3,162.8	3,196.2	3,179.3	10.7	8.7	162.55	162.55	285.8	104.2	148.4	132.8	15.56	9.535	
3,300.0	3,261.2	3,296.0	3,278.4	11.1	9.1	162.91	162.91	297.3	107.3	153.8	137.8	16.06	9.577	
3,400.0	3,359.7	3,395.9	3,377.6	11.5	9.4	163.26	163.26	308.8	110.4	159.3	142.7	16.56	9.616	
3,500.0	3,458.2	3,495.7	3,476.7	11.9	9.7	163.57	163.57	320.3	113.4	164.7	147.6	17.06	9.654	
3,600.0	3,556.7	3,595.6	3,575.8	12.2	10.0	163.87	163.87	331.8	116.5	170.1	152.6	17.56	9.689	
3,700.0	3,655.2	3,695.4	3,675.0	12.6	10.3	164.15	164.15	343.3	119.6	175.6	157.5	18.06	9.723	
3,800.0	3,753.7	3,795.3	3,774.1	13.0	10.6	164.41	164.41	354.8	122.6	181.0	162.5	18.56	9.755	
3,900.0	3,852.2	3,895.1	3,873.3	13.4	10.9	164.66	164.66	366.3	125.7	186.5	167.4	19.05	9.786	
4,000.0	3,950.7	3,995.0	3,972.4	13.8	11.2	164.90	164.90	377.8	128.8	191.9	172.4	19.55	9.815	
4,100.0	4,049.2	4,094.8	4,071.5	14.2	11.5	165.12	165.12	389.3	131.8	197.4	177.3	20.05	9.843	
4,200.0	4,147.7	4,194.7	4,170.7	14.6	11.8	165.33	165.33	400.8	134.9	202.8	182.3	20.55	9.869	
4,300.0	4,246.2	4,294.5	4,269.8	14.9	12.1	165.52	165.52	412.3	138.0	208.3	187.2	21.05	9.895	
4,400.0	4,344.6	4,394.4	4,368.9	15.3	12.5	165.71	165.71	423.8	141.0	213.8	192.2	21.55	9.919	
4,500.0	4,443.1	4,494.2	4,468.1	15.7	12.8	165.89	165.89	435.3	144.1	219.2	197.2	22.05	9.942	
4,600.0	4,541.6	4,594.1	4,567.2	16.1	13.1	166.06	166.06	446.8	147.2	224.7	202.2	22.55	9.965	
4,700.0	4,640.1	4,693.9	4,666.3	16.5	13.4	166.22	166.22	458.3	150.2	230.2	207.1	23.05	9.986	
4,800.0	4,738.6	4,793.7	4,765.5	16.9	13.7	166.37	166.37	469.8	153.3	235.6	212.1	23.55	10.006	
4,900.0	4,837.1	4,893.6	4,864.6	17.3	14.0	166.52	166.52	481.3	156.4	241.1	217.1	24.05	10.026	

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 Phelps 11-32NHZ
Project:	SEC.32-T1N-R66W	TVD Reference:	WELL @ 5031.0ft (Ensign Rig #17 RKB - 12')
Reference Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	MD Reference:	WELL @ 5031.0ft (Ensign Rig #17 RKB - 12')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Phelps 11-32NHZ	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 (10-28-13)	Offset TVD Reference:	Offset Datum

Offset Design SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W - SRC Phelps A-32CHZ - Wellbore #1 - Plan #1 (10-28-13)													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	Offset	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	Warning	
5,000.0	4,935.6	4,993.4	4,963.8	17.7	14.3	166.66	492.8	159.4	246.6	222.0	24.55	10.045		
5,100.0	5,034.1	5,093.3	5,062.9	18.0	14.6	166.80	504.3	162.5	252.1	227.0	25.05	10.063		
5,200.0	5,132.6	5,193.1	5,162.0	18.4	14.9	166.93	515.8	165.6	257.6	232.0	25.55	10.081		
5,300.0	5,231.1	5,293.0	5,261.2	18.8	15.2	167.05	527.3	168.7	263.0	237.0	26.05	10.098		
5,400.0	5,329.6	5,392.8	5,360.3	19.2	15.6	167.17	538.8	171.7	268.5	242.0	26.55	10.114		
5,500.0	5,428.1	5,492.7	5,459.4	19.6	15.9	167.28	550.2	174.8	274.0	246.9	27.05	10.130		
5,600.0	5,526.5	5,592.5	5,558.6	20.0	16.2	167.39	561.7	177.9	279.5	251.9	27.55	10.145		
5,700.0	5,625.0	5,692.4	5,657.7	20.4	16.5	167.50	573.2	180.9	285.0	256.9	28.05	10.159		
5,800.0	5,723.5	5,792.2	5,756.9	20.8	16.8	167.60	584.7	184.0	290.4	261.9	28.55	10.174		
5,900.0	5,822.0	5,892.1	5,856.0	21.1	17.1	167.69	596.2	187.1	295.9	266.9	29.05	10.187		
6,000.0	5,920.5	5,991.9	5,955.1	21.5	17.4	167.79	607.7	190.1	301.4	271.9	29.55	10.200		
6,100.0	6,019.0	6,091.8	6,054.3	21.9	17.7	167.88	619.2	193.2	306.9	276.9	30.05	10.213		
6,200.0	6,117.5	6,191.6	6,153.4	22.3	18.0	167.97	630.7	196.3	312.4	281.8	30.55	10.224		
6,300.0	6,216.3	6,282.4	6,243.7	22.6	18.2	168.05	640.0	198.7	317.1	286.1	30.93	10.249		
6,400.0	6,315.7	6,372.6	6,333.7	22.8	18.4	168.14	646.4	200.4	321.4	290.1	31.26	10.279		
6,500.0	6,415.3	6,462.7	6,423.7	23.0	18.6	168.25	650.1	201.4	325.3	293.8	31.54	10.313		
6,600.0	6,515.2	6,554.3	6,515.2	23.2	18.7	168.37	651.1	201.7	328.8	297.0	31.78	10.346		
6,700.0	6,615.2	6,654.3	6,615.2	23.3	18.9	-179.95	651.1	201.7	330.0	288.3	41.74	7.907		
6,800.0	6,715.2	6,754.3	6,715.2	23.5	19.1	-179.95	651.1	201.7	330.0	288.0	42.05	7.850		
6,841.3	6,756.5	6,795.5	6,756.5	23.5	19.1	-90.11	651.1	201.7	330.0	297.4	32.62	10.117		
6,900.0	6,815.0	6,854.1	6,815.0	23.6	19.2	-90.72	651.1	201.7	330.1	297.2	32.90	10.032		
7,000.0	6,913.3	6,952.4	6,913.3	23.7	19.4	-93.74	651.1	201.7	330.8	297.2	33.56	9.857		
7,100.0	7,008.1	7,053.4	7,014.1	23.7	19.5	-98.11	651.1	196.2	333.6	299.3	34.31	9.723		
7,200.0	7,097.5	7,159.1	7,117.6	23.8	19.7	-102.37	651.1	175.5	338.4	303.6	34.88	9.704		
7,300.0	7,180.0	7,269.4	7,221.2	23.8	19.7	-106.38	651.1	137.9	344.9	309.7	35.18	9.801		
7,400.0	7,253.7	7,384.6	7,321.9	23.8	19.8	-110.02	651.1	82.2	352.3	317.0	35.29	9.984		
7,500.0	7,317.4	7,504.9	7,416.1	23.9	19.9	-113.20	651.1	7.5	360.2	324.8	35.40	10.175		
7,600.0	7,369.7	7,630.2	7,499.5	24.1	20.1	-115.86	651.1	-85.7	367.7	331.8	35.87	10.251		
7,700.0	7,409.6	7,759.8	7,567.3	24.5	20.6	-117.90	651.1	-196.0	374.1	337.0	37.08	10.087		
7,800.0	7,436.4	7,893.1	7,615.1	25.1	21.7	-119.29	651.1	-320.2	378.7	339.3	39.35	9.622		
7,900.0	7,449.6	8,028.6	7,639.4	26.0	23.6	-119.98	651.1	-453.3	381.1	338.3	42.77	8.909		
8,000.0	7,451.0	8,145.0	7,642.0	27.4	25.7	-120.06	651.1	-569.6	381.3	334.9	46.44	8.211		
8,100.0	7,451.0	8,245.0	7,642.0	29.0	27.6	-120.06	651.1	-669.6	381.3	331.4	49.91	7.640		
8,200.0	7,451.0	8,345.0	7,642.0	30.9	29.7	-120.06	651.1	-769.6	381.3	327.7	53.61	7.113		
8,300.0	7,451.0	8,445.0	7,642.0	32.9	31.9	-120.06	651.1	-869.6	381.3	323.8	57.48	6.634		
8,400.0	7,451.0	8,545.0	7,642.0	35.1	34.2	-120.06	651.1	-969.6	381.3	319.8	61.51	6.199		
8,500.0	7,451.0	8,645.0	7,642.0	37.4	36.6	-120.06	651.1	-1,069.6	381.3	315.7	65.66	5.808		
8,600.0	7,451.0	8,745.0	7,642.0	39.7	39.0	-120.06	651.1	-1,169.6	381.3	311.4	69.91	5.455		
8,700.0	7,451.0	8,845.0	7,642.0	42.1	41.5	-120.06	651.1	-1,269.6	381.3	307.1	74.24	5.137		
8,800.0	7,451.0	8,945.0	7,642.0	44.5	44.0	-120.06	651.1	-1,369.6	381.3	302.7	78.64	4.849		
8,900.0	7,451.0	9,045.0	7,642.0	47.0	46.5	-120.06	651.1	-1,469.6	381.3	298.2	83.09	4.589		
9,000.0	7,451.0	9,145.0	7,642.0	49.6	49.1	-120.06	651.1	-1,569.6	381.3	293.7	87.60	4.353		
9,100.0	7,451.0	9,245.0	7,642.0	52.1	51.7	-120.06	651.1	-1,669.6	381.3	289.2	92.15	4.138		
9,200.0	7,451.0	9,345.0	7,642.0	54.7	54.3	-120.06	651.1	-1,769.6	381.3	284.6	96.73	3.942		
9,300.0	7,451.0	9,445.0	7,642.0	57.3	56.9	-120.06	651.1	-1,869.6	381.3	280.0	101.34	3.763		
9,400.0	7,451.0	9,545.0	7,642.0	59.9	59.6	-120.06	651.1	-1,969.6	381.3	275.3	105.99	3.598		
9,500.0	7,451.0	9,645.0	7,642.0	62.6	62.3	-120.06	651.1	-2,069.6	381.3	270.7	110.65	3.446		
9,600.0	7,451.0	9,745.0	7,642.0	65.2	64.9	-120.06	651.1	-2,169.6	381.3	266.0	115.34	3.306		
9,700.0	7,451.0	9,845.0	7,642.0	67.9	67.6	-120.06	651.1	-2,269.6	381.3	261.3	120.04	3.177		
9,800.0	7,451.0	9,945.0	7,642.0	70.5	70.3	-120.06	651.1	-2,369.6	381.3	256.6	124.76	3.056		
9,900.0	7,451.0	10,045.0	7,642.0	73.2	73.0	-120.06	651.1	-2,469.6	381.3	251.8	129.50	2.945		

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 Phelps 11-32NHZ
Project:	SEC.32-T1N-R66W	TVD Reference:	WELL @ 5031.0ft (Ensign Rig #17 RKB - 12')
Reference Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	MD Reference:	WELL @ 5031.0ft (Ensign Rig #17 RKB - 12')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Phelps 11-32NHZ	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 (10-28-13)	Offset TVD Reference:	Offset Datum

Offset Design SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W - SRC Phelps A-32CHZ - Wellbore #1 - Plan #1 (10-28-													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	Offset	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
10,000.0	7,451.0	10,145.0	7,642.0	75.9	75.7	-120.06	651.1	-2,569.6	381.3	247.1	134.24	2.841		
10,100.0	7,451.0	10,245.0	7,642.0	78.6	78.4	-120.06	651.1	-2,669.6	381.3	242.3	139.00	2.743		
10,200.0	7,451.0	10,345.0	7,642.0	81.3	81.2	-120.06	651.1	-2,769.6	381.3	237.5	143.77	2.652		
10,300.0	7,451.0	10,445.0	7,642.0	84.0	83.9	-120.06	651.1	-2,869.6	381.3	232.8	148.55	2.567		
10,400.0	7,451.0	10,545.0	7,642.0	86.8	86.6	-120.06	651.1	-2,969.6	381.3	228.0	153.34	2.487		
10,500.0	7,451.0	10,645.0	7,642.0	89.5	89.4	-120.06	651.1	-3,069.6	381.3	223.2	158.14	2.411		
10,600.0	7,451.0	10,745.0	7,642.0	92.2	92.1	-120.06	651.1	-3,169.6	381.3	218.4	162.94	2.340		
10,700.0	7,451.0	10,845.0	7,642.0	94.9	94.9	-120.06	651.1	-3,269.6	381.3	213.6	167.75	2.273		
10,800.0	7,451.0	10,945.0	7,642.0	97.7	97.6	-120.06	651.1	-3,369.6	381.3	208.8	172.56	2.210		
10,900.0	7,451.0	11,045.0	7,642.0	100.4	100.4	-120.06	651.1	-3,469.6	381.3	203.9	177.39	2.150		
11,000.0	7,451.0	11,145.0	7,642.0	103.2	103.1	-120.06	651.1	-3,569.6	381.3	199.1	182.21	2.093		
11,100.0	7,451.0	11,245.0	7,642.0	105.9	105.9	-120.06	651.1	-3,669.6	381.3	194.3	187.04	2.039		
11,200.0	7,451.0	11,345.0	7,642.0	108.7	108.6	-120.06	651.1	-3,769.6	381.3	189.4	191.88	1.987		
11,300.0	7,451.0	11,445.0	7,642.0	111.4	111.4	-120.06	651.1	-3,869.6	381.3	184.6	196.71	1.938		
11,400.0	7,451.0	11,545.0	7,642.0	114.2	114.2	-120.06	651.1	-3,969.6	381.3	179.8	201.56	1.892		
11,500.0	7,451.0	11,645.0	7,642.0	116.9	116.9	-120.06	651.1	-4,069.6	381.3	174.9	206.40	1.847		
11,600.0	7,451.0	11,745.0	7,642.0	119.7	119.7	-120.06	651.1	-4,169.6	381.3	170.1	211.25	1.805		
11,700.0	7,451.0	11,845.0	7,642.0	122.5	122.5	-120.06	651.1	-4,269.6	381.3	165.2	216.10	1.765		
11,800.0	7,451.0	11,945.0	7,642.0	125.2	125.2	-120.06	651.1	-4,369.6	381.3	160.4	220.96	1.726		
11,900.0	7,451.0	12,045.0	7,642.0	128.0	128.0	-120.06	651.1	-4,469.6	381.3	155.5	225.82	1.689		
12,000.0	7,451.0	12,145.0	7,642.0	130.7	130.8	-120.06	651.1	-4,569.6	381.3	150.6	230.68	1.653		
12,013.0	7,451.0	12,158.0	7,642.0	131.1	131.1	-120.06	651.1	-4,582.6	381.3	150.0	231.31	1.649 SF		

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Phelps 11-32NHZ
Project:	SEC.32-T1N-R66W	TVD Reference:	WELL @ 5031.0ft (Ensign Rig #17 RKB - 12')
Reference Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	MD Reference:	WELL @ 5031.0ft (Ensign Rig #17 RKB - 12')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Phelps 11-32NHZ	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 (10-28-13)	Offset TVD Reference:	Offset Datum

Offset Design SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W - SRC Phelps A-32NHZ - Wellbore #1 - Plan #1 (10-28-13)													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	Offset	Semi Major Axis	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
0.0	0.0	0.0	0.0	0.0	0.0	77.64	77.64	11.3	51.5	52.8				
100.0	100.0	100.0	100.0	0.1	0.1	77.64	77.64	11.3	51.5	52.8	52.5	0.22	234.760	
200.0	200.0	200.0	200.0	0.3	0.3	77.64	77.64	11.3	51.5	52.8	52.1	0.67	78.253	
300.0	300.0	300.0	300.0	0.6	0.6	77.64	77.64	11.3	51.5	52.8	51.6	1.12	46.952	
400.0	400.0	400.0	400.0	0.8	0.8	77.64	77.64	11.3	51.5	52.8	51.2	1.57	33.537	
500.0	500.0	500.0	500.0	1.0	1.0	67.77	67.77	11.3	51.5	52.1	50.1	2.02	25.752	
600.0	599.8	599.8	599.8	1.2	1.2	73.32	73.32	11.3	51.5	50.3	47.9	2.47	20.347	
700.0	699.5	699.5	699.5	1.5	1.5	83.22	83.22	11.3	51.5	48.5	45.6	2.94	16.526	
750.9	750.0	750.0	750.0	1.6	1.6	90.00	90.00	11.3	51.5	48.2	45.0	3.19	15.128 CC, ES	
800.0	798.7	798.7	798.7	1.7	1.7	97.51	97.51	11.3	51.5	48.6	45.2	3.43	14.192	
900.0	897.5	897.5	897.5	2.0	1.9	112.50	112.50	12.7	52.4	52.9	49.0	3.93	13.457	
1,000.0	996.0	997.0	996.8	2.4	2.1	122.85	122.85	17.0	55.2	60.5	56.1	4.44	13.615	
1,100.0	1,094.4	1,096.3	1,095.9	2.7	2.4	129.37	129.37	22.7	58.9	69.0	64.1	4.95	13.932	
1,200.0	1,192.9	1,195.7	1,195.1	3.1	2.6	134.41	134.41	28.4	62.7	78.2	72.8	5.46	14.323	
1,300.0	1,291.4	1,295.1	1,294.2	3.4	2.8	138.37	138.37	34.2	66.4	87.9	81.9	5.97	14.734	
1,400.0	1,389.9	1,394.4	1,393.3	3.8	3.1	141.53	141.53	39.9	70.1	97.9	91.5	6.47	15.138	
1,500.0	1,488.4	1,493.8	1,492.5	4.2	3.3	144.11	144.11	45.6	73.8	108.2	101.2	6.97	15.522	
1,600.0	1,586.9	1,593.2	1,591.6	4.6	3.5	146.23	146.23	51.4	77.5	118.6	111.1	7.47	15.880	
1,700.0	1,685.4	1,692.5	1,690.7	4.9	3.8	148.01	148.01	57.1	81.2	129.2	121.2	7.97	16.212	
1,800.0	1,783.9	1,791.9	1,789.9	5.3	4.0	149.52	149.52	62.8	84.9	139.9	131.4	8.47	16.518	
1,900.0	1,882.4	1,891.3	1,889.0	5.7	4.3	150.82	150.82	68.6	88.7	150.6	141.6	8.97	16.799	
2,000.0	1,980.9	1,990.6	1,988.1	6.1	4.5	151.94	151.94	74.3	92.4	161.4	152.0	9.46	17.058	
2,100.0	2,079.4	2,090.0	2,087.3	6.5	4.8	152.92	152.92	80.0	96.1	172.3	162.4	9.96	17.297	
2,200.0	2,177.8	2,189.4	2,186.4	6.8	5.0	153.78	153.78	85.7	99.8	183.2	172.8	10.46	17.517	
2,300.0	2,276.3	2,288.7	2,285.5	7.2	5.3	154.55	154.55	91.5	103.5	194.2	183.2	10.96	17.720	
2,400.0	2,374.8	2,388.1	2,384.6	7.6	5.5	155.24	155.24	97.2	107.2	205.2	193.7	11.46	17.908	
2,500.0	2,473.3	2,487.5	2,483.8	8.0	5.8	155.85	155.85	102.9	110.9	216.2	204.2	11.96	18.082	
2,600.0	2,571.8	2,586.8	2,582.9	8.4	6.0	156.41	156.41	108.7	114.7	227.2	214.8	12.45	18.244	
2,700.0	2,670.3	2,686.2	2,682.0	8.8	6.3	156.91	156.91	114.4	118.4	238.3	225.3	12.95	18.395	
2,800.0	2,768.8	2,785.6	2,781.2	9.1	6.5	157.37	157.37	120.1	122.1	249.4	235.9	13.45	18.536	
2,900.0	2,867.3	2,884.9	2,880.3	9.5	6.8	157.79	157.79	125.9	125.8	260.4	246.5	13.95	18.668	
3,000.0	2,965.8	2,984.3	2,979.4	9.9	7.0	158.18	158.18	131.6	129.5	271.5	257.1	14.45	18.791	
3,100.0	3,064.3	3,083.7	3,078.6	10.3	7.3	158.53	158.53	137.3	133.2	282.7	267.7	14.95	18.907	
3,200.0	3,162.8	3,183.0	3,177.7	10.7	7.5	158.86	158.86	143.1	136.9	293.8	278.3	15.45	19.016	
3,300.0	3,261.2	3,282.4	3,276.8	11.1	7.8	159.17	159.17	148.8	140.7	304.9	289.0	15.95	19.118	
3,400.0	3,359.7	3,381.8	3,376.0	11.5	8.0	159.45	159.45	154.5	144.4	316.0	299.6	16.45	19.215	
3,500.0	3,458.2	3,481.1	3,475.1	11.9	8.3	159.71	159.71	160.2	148.1	327.2	310.2	16.95	19.306	
3,600.0	3,556.7	3,580.5	3,574.2	12.2	8.5	159.96	159.96	166.0	151.8	338.3	320.9	17.45	19.392	
3,700.0	3,655.2	3,679.9	3,673.4	12.6	8.8	160.19	160.19	171.7	155.5	349.5	331.5	17.95	19.474	
3,800.0	3,753.7	3,779.2	3,772.5	13.0	9.0	160.41	160.41	177.4	159.2	360.7	342.2	18.45	19.552	
3,900.0	3,852.2	3,878.6	3,871.6	13.4	9.3	160.61	160.61	183.2	163.0	371.8	352.9	18.95	19.625	
4,000.0	3,950.7	3,977.9	3,970.7	13.8	9.5	160.80	160.80	188.9	166.7	383.0	363.5	19.45	19.695	
4,100.0	4,049.2	4,077.3	4,069.9	14.2	9.8	160.98	160.98	194.6	170.4	394.2	374.2	19.95	19.762	
4,200.0	4,147.7	4,176.7	4,169.0	14.6	10.1	161.15	161.15	200.4	174.1	405.3	384.9	20.45	19.825	
4,300.0	4,246.2	4,276.0	4,268.1	14.9	10.3	161.32	161.32	206.1	177.8	416.5	395.6	20.95	19.886	
4,400.0	4,344.6	4,375.4	4,367.3	15.3	10.6	161.47	161.47	211.8	181.5	427.7	406.3	21.45	19.944	
4,500.0	4,443.1	4,474.8	4,466.4	15.7	10.8	161.61	161.61	217.5	185.2	438.9	417.0	21.95	19.999	
4,600.0	4,541.6	4,574.1	4,565.5	16.1	11.1	161.75	161.75	223.3	189.0	450.1	427.6	22.45	20.052	
4,700.0	4,640.1	4,673.5	4,664.7	16.5	11.3	161.88	161.88	229.0	192.7	461.3	438.3	22.95	20.103	
4,800.0	4,738.6	4,772.9	4,763.8	16.9	11.6	162.01	162.01	234.7	196.4	472.5	449.0	23.45	20.151	
4,900.0	4,837.1	4,865.3	4,856.0	17.3	11.8	162.16	162.16	239.7	199.6	484.1	460.2	23.91	20.247	

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 Phelps 11-32NHZ
Project:	SEC.32-T1N-R66W	TVD Reference:	WELL @ 5031.0ft (Ensign Rig #17 RKB - 12')
Reference Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	MD Reference:	WELL @ 5031.0ft (Ensign Rig #17 RKB - 12')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Phelps 11-32NHZ	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 (10-28-13)	Offset TVD Reference:	Offset Datum

Offset Design SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W - SRC Phelps A-32NHZ - Wellbore #1 - Plan #1 (10-28-13)													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	Offset	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	Warning	
5,000.0	4,935.6	4,952.6	4,943.3	17.7	12.0	162.47	242.2	201.2	497.9	473.6	24.32	20.476		
5,100.0	5,034.1	5,043.4	5,034.1	18.0	12.1	162.97	242.7	201.5	514.0	489.3	24.71	20.802		
5,200.0	5,132.6	5,141.9	5,132.6	18.4	12.3	163.52	242.7	201.5	530.6	505.4	25.13	21.113		
5,300.0	5,231.1	5,240.4	5,231.1	18.8	12.5	164.03	242.7	201.5	547.2	521.6	25.56	21.404		
5,400.0	5,329.6	5,338.9	5,329.6	19.2	12.7	164.51	242.7	201.5	563.9	537.9	26.00	21.685		
5,500.0	5,428.1	5,437.4	5,428.1	19.6	12.9	164.97	242.7	201.5	580.6	554.1	26.44	21.955		
5,600.0	5,526.5	5,535.9	5,526.5	20.0	13.1	165.40	242.7	201.5	597.3	570.4	26.89	22.217		
5,700.0	5,625.0	5,634.4	5,625.0	20.4	13.3	165.80	242.7	201.5	614.1	586.8	27.33	22.469		
5,800.0	5,723.5	5,732.9	5,723.5	20.8	13.5	166.19	242.7	201.5	630.9	603.1	27.78	22.713		
5,900.0	5,822.0	5,831.3	5,822.0	21.1	13.7	166.55	242.7	201.5	647.8	619.5	28.23	22.949		
6,000.0	5,920.5	5,929.8	5,920.5	21.5	13.9	166.90	242.7	201.5	664.6	635.9	28.67	23.177		
6,100.0	6,019.0	6,028.3	6,019.0	21.9	14.1	167.23	242.7	201.5	681.5	652.4	29.13	23.398		
6,200.0	6,117.5	6,126.8	6,117.5	22.3	14.3	167.55	242.7	201.5	698.4	668.8	29.58	23.609		
6,300.0	6,216.3	6,225.7	6,216.3	22.6	14.5	167.88	242.7	201.5	713.1	683.1	30.01	23.764		
6,400.0	6,315.7	6,325.0	6,315.7	22.8	14.7	168.12	242.7	201.5	724.6	694.1	30.41	23.828		
6,500.0	6,415.3	6,424.6	6,415.3	23.0	14.9	168.28	242.7	201.5	732.6	701.8	30.77	23.805		
6,600.0	6,515.2	6,524.5	6,515.2	23.2	15.1	168.38	242.7	201.5	737.2	706.1	31.11	23.699		
6,700.0	6,615.2	6,624.5	6,615.2	23.3	15.4	-179.96	242.7	201.5	738.4	700.2	38.20	19.331		
6,800.0	6,715.2	6,724.5	6,715.2	23.5	15.6	-179.96	242.7	201.5	738.4	699.9	38.55	19.157		
6,900.0	6,815.0	6,824.5	6,815.0	23.6	15.7	-89.96	242.7	197.0	738.4	706.2	32.18	22.946		
7,000.0	6,913.3	6,924.4	6,913.2	23.7	15.9	-89.97	242.7	179.0	738.4	706.0	32.45	22.755		
7,100.0	7,008.1	7,024.3	7,007.9	23.7	16.0	-89.97	242.7	147.4	738.4	705.7	32.69	22.588		
7,200.0	7,097.5	7,124.3	7,097.3	23.8	16.1	-89.97	242.7	103.0	738.4	705.4	32.97	22.396		
7,300.0	7,180.0	7,224.2	7,179.7	23.8	16.2	-89.97	242.7	46.6	738.4	705.0	33.39	22.112		
7,400.0	7,253.7	7,324.2	7,253.5	23.8	16.5	-89.98	242.7	-20.8	738.4	704.3	34.10	21.654		
7,500.0	7,317.4	7,424.1	7,317.1	23.9	17.1	-89.98	242.7	-97.7	738.4	703.2	35.24	20.956		
7,600.0	7,369.7	7,524.1	7,369.5	24.1	18.1	-89.98	242.7	-182.8	738.4	701.5	36.92	19.999		
7,700.0	7,409.6	7,624.1	7,409.5	24.5	19.3	-89.99	242.7	-274.4	738.4	699.2	39.22	18.829		
7,800.0	7,436.4	7,724.1	7,436.4	25.1	20.8	-89.99	242.7	-370.6	738.4	696.3	42.10	17.539		
7,900.0	7,449.6	7,824.1	7,449.6	26.0	22.5	-90.00	242.7	-469.6	738.4	692.9	45.48	16.237		
8,000.0	7,451.0	7,924.1	7,451.0	27.4	24.5	-90.00	242.7	-569.6	738.4	689.2	49.23	14.999		
8,100.0	7,451.0	8,024.1	7,451.0	29.0	26.5	-90.00	242.7	-669.6	738.4	685.1	53.29	13.856		
8,200.0	7,451.0	8,124.1	7,451.0	30.9	28.7	-90.00	242.7	-769.6	738.4	680.8	57.61	12.816		
8,300.0	7,451.0	8,224.1	7,451.0	32.9	31.0	-90.00	242.7	-869.6	738.4	676.3	62.14	11.883		
8,400.0	7,451.0	8,324.1	7,451.0	35.1	33.4	-90.00	242.7	-969.6	738.4	671.6	66.83	11.048		
8,500.0	7,451.0	8,424.1	7,451.0	37.4	35.8	-90.00	242.7	-1,069.6	738.4	666.7	71.66	10.305		
8,600.0	7,451.0	8,524.1	7,451.0	39.7	38.3	-90.00	242.7	-1,169.6	738.4	661.8	76.59	9.641		
8,700.0	7,451.0	8,624.1	7,451.0	42.1	40.8	-90.00	242.7	-1,269.6	738.4	656.8	81.61	9.048		
8,800.0	7,451.0	8,724.1	7,451.0	44.5	43.4	-90.00	242.7	-1,369.6	738.4	651.7	86.70	8.517		
8,900.0	7,451.0	8,824.1	7,451.0	47.0	46.0	-90.00	242.7	-1,469.6	738.4	646.6	91.85	8.039		
9,000.0	7,451.0	8,924.1	7,451.0	49.6	48.6	-90.00	242.7	-1,569.6	738.4	641.4	97.05	7.608		
9,100.0	7,451.0	9,024.1	7,451.0	52.1	51.2	-90.00	242.7	-1,669.6	738.4	636.1	102.30	7.218		
9,200.0	7,451.0	9,124.1	7,451.0	54.7	53.9	-90.00	242.7	-1,769.6	738.4	630.8	107.58	6.864		
9,300.0	7,451.0	9,224.1	7,451.0	57.3	56.6	-90.00	242.7	-1,869.6	738.4	625.5	112.89	6.541		
9,400.0	7,451.0	9,324.1	7,451.0	59.9	59.2	-90.00	242.7	-1,969.6	738.4	620.2	118.23	6.245		
9,500.0	7,451.0	9,424.1	7,451.0	62.6	61.9	-90.00	242.7	-2,069.6	738.4	614.8	123.59	5.974		
9,600.0	7,451.0	9,524.1	7,451.0	65.2	64.6	-90.00	242.7	-2,169.6	738.4	609.4	128.98	5.725		
9,700.0	7,451.0	9,624.1	7,451.0	67.9	67.3	-90.00	242.7	-2,269.6	738.4	604.0	134.38	5.495		
9,800.0	7,451.0	9,724.1	7,451.0	70.5	70.0	-90.00	242.7	-2,369.6	738.4	598.6	139.80	5.282		
9,900.0	7,451.0	9,824.1	7,451.0	73.2	72.8	-90.00	242.7	-2,469.6	738.4	593.2	145.24	5.084		
10,000.0	7,451.0	9,924.1	7,451.0	75.9	75.5	-90.00	242.7	-2,569.6	738.4	587.7	150.68	4.900		

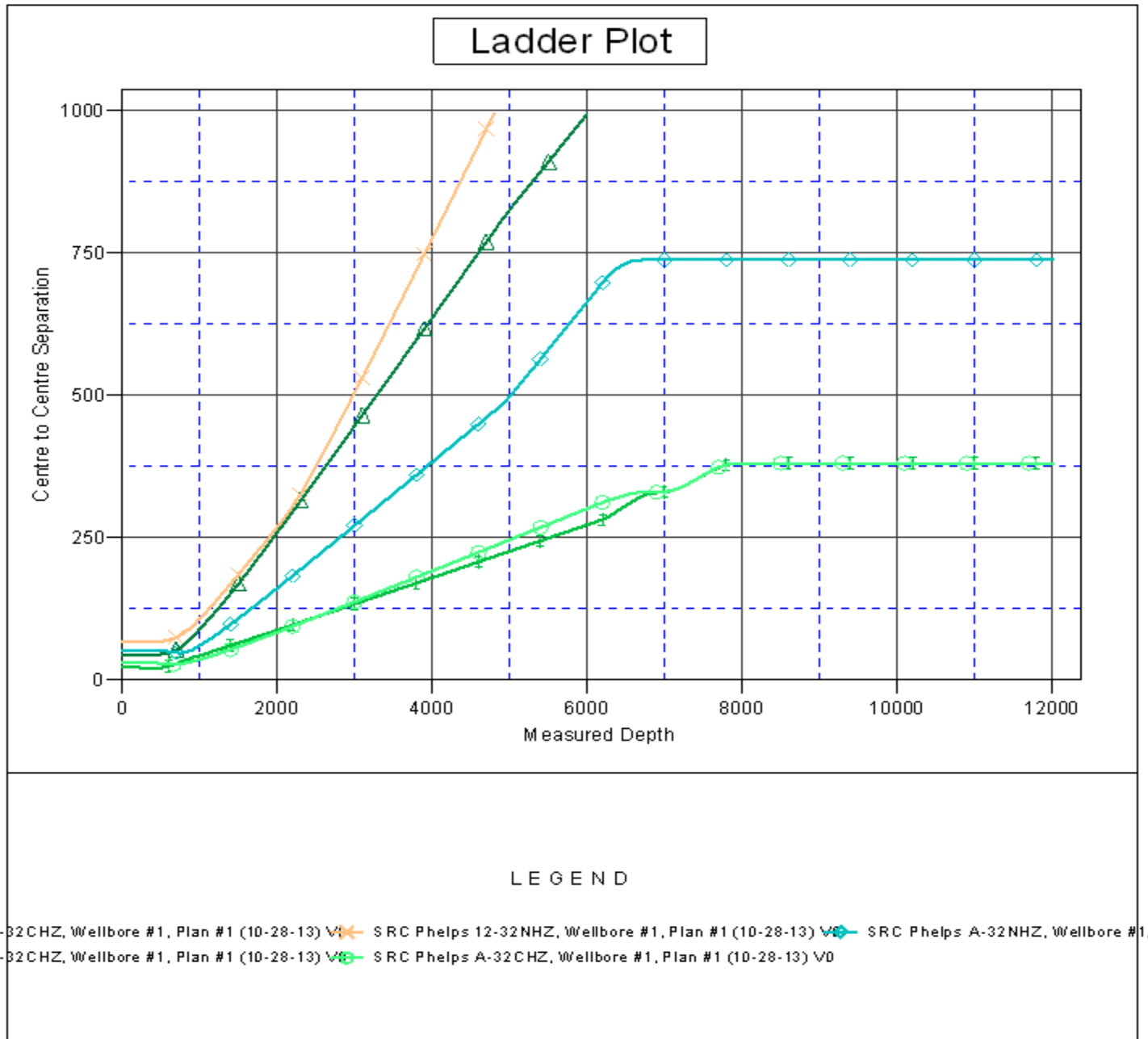
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Phelps 11-32NHZ
Project:	SEC.32-T1N-R66W	TVD Reference:	WELL @ 5031.0ft (Ensign Rig #17 RKB - 12')
Reference Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	MD Reference:	WELL @ 5031.0ft (Ensign Rig #17 RKB - 12')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Phelps 11-32NHZ	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 (10-28-13)	Offset TVD Reference:	Offset Datum

Offset Design SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W - SRC Phelps A-32NHZ - Wellbore #1 - Plan #1 (10-28-													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	Offset	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
10,100.0	7,451.0	10,024.1	7,451.0	78.6	78.2	-90.00	242.7	-2,669.6	738.4	582.3	156.14	4.729		
10,200.0	7,451.0	10,124.1	7,451.0	81.3	81.0	-90.00	242.7	-2,769.6	738.4	576.8	161.61	4.569		
10,300.0	7,451.0	10,224.1	7,451.0	84.0	83.7	-90.00	242.7	-2,869.6	738.4	571.3	167.09	4.419		
10,400.0	7,451.0	10,324.1	7,451.0	86.8	86.5	-90.00	242.7	-2,969.6	738.4	565.8	172.57	4.279		
10,500.0	7,451.0	10,424.1	7,451.0	89.5	89.2	-90.00	242.7	-3,069.6	738.4	560.3	178.07	4.147		
10,600.0	7,451.0	10,524.1	7,451.0	92.2	92.0	-90.00	242.7	-3,169.6	738.4	554.8	183.57	4.023		
10,700.0	7,451.0	10,624.1	7,451.0	94.9	94.7	-90.00	242.7	-3,269.6	738.4	549.3	189.07	3.905		
10,800.0	7,451.0	10,724.1	7,451.0	97.7	97.5	-90.00	242.7	-3,369.6	738.4	543.8	194.59	3.795		
10,900.0	7,451.0	10,824.1	7,451.0	100.4	100.2	-90.00	242.7	-3,469.6	738.4	538.3	200.10	3.690		
11,000.0	7,451.0	10,924.1	7,451.0	103.2	103.0	-90.00	242.7	-3,569.6	738.4	532.8	205.63	3.591		
11,100.0	7,451.0	11,024.1	7,451.0	105.9	105.8	-90.00	242.7	-3,669.6	738.4	527.2	211.15	3.497		
11,200.0	7,451.0	11,124.1	7,451.0	108.7	108.5	-90.00	242.7	-3,769.6	738.4	521.7	216.69	3.408		
11,300.0	7,451.0	11,224.1	7,451.0	111.4	111.3	-90.00	242.7	-3,869.6	738.4	516.2	222.22	3.323		
11,400.0	7,451.0	11,324.1	7,451.0	114.2	114.1	-90.00	242.7	-3,969.6	738.4	510.6	227.76	3.242		
11,500.0	7,451.0	11,424.1	7,451.0	116.9	116.8	-90.00	242.7	-4,069.6	738.4	505.1	233.30	3.165		
11,600.0	7,451.0	11,524.1	7,451.0	119.7	119.6	-90.00	242.7	-4,169.6	738.4	499.6	238.85	3.092		
11,700.0	7,451.0	11,624.1	7,451.0	122.5	122.4	-90.00	242.7	-4,269.6	738.4	494.0	244.40	3.021		
11,800.0	7,451.0	11,724.1	7,451.0	125.2	125.2	-90.00	242.7	-4,369.6	738.4	488.5	249.95	2.954		
11,900.0	7,451.0	11,824.1	7,451.0	128.0	128.0	-90.00	242.7	-4,469.6	738.4	482.9	255.50	2.890		
12,000.0	7,451.0	11,924.1	7,451.0	130.7	130.5	-90.00	242.7	-4,569.6	738.4	477.6	260.82	2.831		
12,013.0	7,451.0	11,937.1	7,451.0	131.1	130.7	-90.00	242.7	-4,582.6	738.4	477.0	261.41	2.825 SF		

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Phelps 11-32NHZ
Project:	SEC.32-T1N-R66W	TVD Reference:	WELL @ 5031.0ft (Ensign Rig #17 RKB - 12')
Reference Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	MD Reference:	WELL @ 5031.0ft (Ensign Rig #17 RKB - 12')
Site Error:	0.0ft	North Reference:	True
Reference Well:	SRC Phelps 11-32NHZ	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 (10-28-13)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 5031.0ft (Ensign Rig #17 RKCoordinates are relative to: SRC Phelps 11-32NHZ
 Offset Depths are relative to Offset Datum
 Central Meridian is -105.500000 °
 Coordinate System is US State Plane 1983, Colorado Northern Zone
 Grid Convergence at Surface is: 0.46°



Reference Depths are relative to WELL @ 5031.0ft (Ensign Rig #17 RKCoordinates are relative to: SRC Phelps 11-32NHZ
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: 0.46°

