

# Synergy Resources

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

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

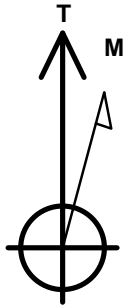
Ground Elevation: 5019.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1247290.80	3198123.63	40.010030	-104.792692	

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

## WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
SHL 1791'FNL, 339'FEL		0.0	0.0	Point
BHL 1528'FNL, 460'FWL	7496.0	261.8	-4494.8	Point



Azimuths to True North  
Magnetic North: 8.52°

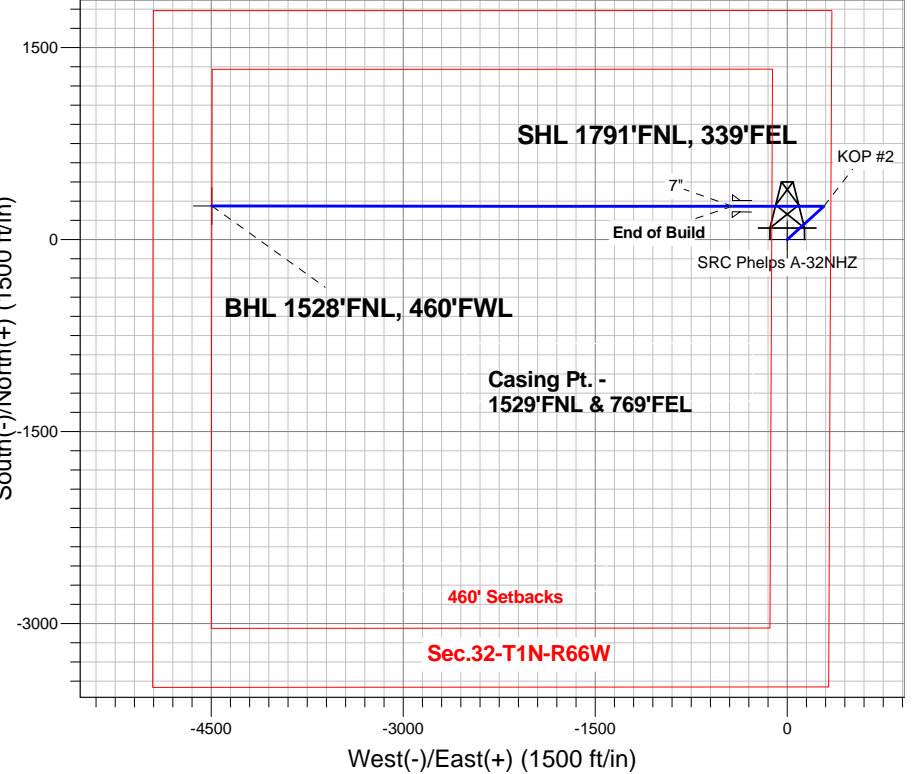
Magnetic Field  
Strength: 52667.1snT  
Dip Angle: 66.65°  
Date: 11/14/2013  
Model: IGRF2010

SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W  
SRC Phelps A-32NHZ  
Plan #3 (11-14-13)  
7:21, November 14 2013

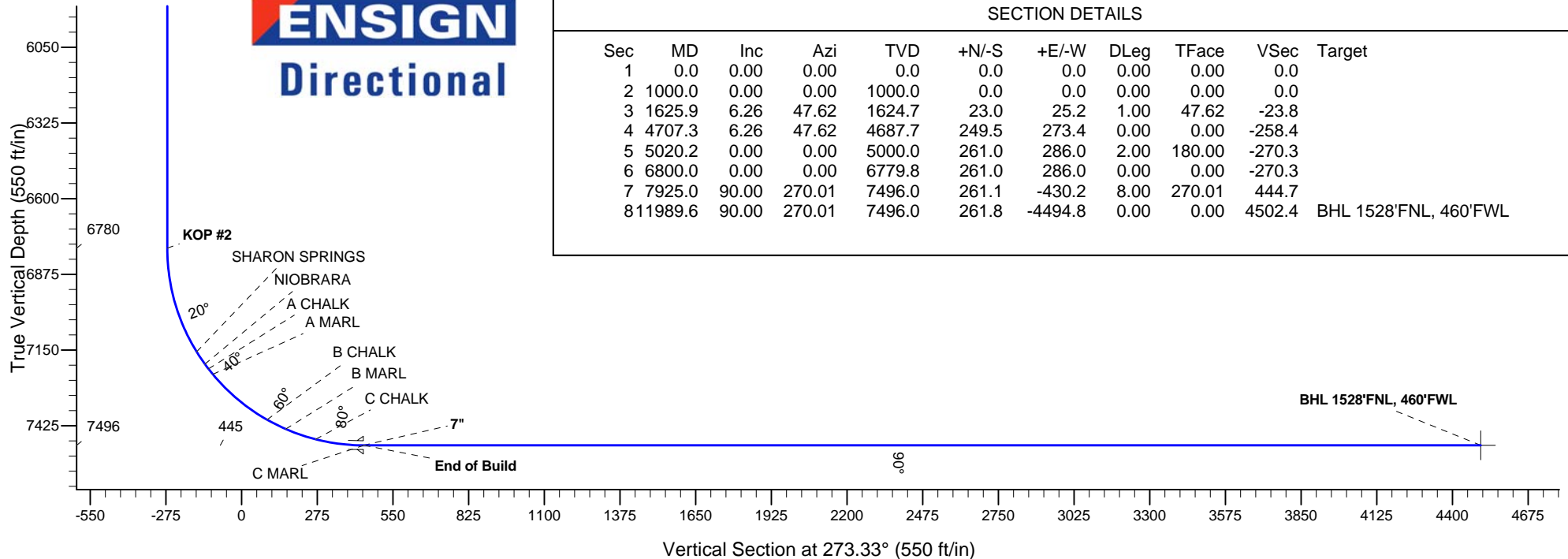
## ANNOTATIONS

TVD	MD	Annotation
1000.0	1000.0	KOP #1
6779.8	6800.0	KOP #2
7496.0	7925.0	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	1000.0	0.00	0.00	1000.0	0.0	0.0	0.00	0.00	0.0	
3	1625.9	6.26	47.62	1624.7	23.0	25.2	1.00	47.62	-23.8	
4	4707.3	6.26	47.62	4687.7	249.5	273.4	0.00	0.00	-258.4	
5	5020.2	0.00	0.00	5000.0	261.0	286.0	2.00	180.00	-270.3	
6	6800.0	0.00	0.00	6779.8	261.0	286.0	0.00	0.00	-270.3	
7	7925.0	90.00	270.01	7496.0	261.1	-430.2	8.00	270.01	444.7	
8	11989.6	90.00	270.01	7496.0	261.8	-4494.8	0.00	0.00	4502.4	BHL 1528'FNL, 460'FWL



## **Directional**

### **Synergy Resources**

**SEC.32-T1N-R66W**

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

**SRC Phelps A-32NHZ**

**Wellbore #1**

**Plan: Plan #3 (11-14-13)**

### **Standard Planning Report**

**14 November, 2013**

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well SRC Phelps A-32NHZ
<b>Company:</b>	Synergy Resources	<b>TVD Reference:</b>	WELL @ 5031.0ft (Ensign Rig #17 - RKB - 12')
<b>Project:</b>	SEC.32-T1N-R66W	<b>MD Reference:</b>	WELL @ 5031.0ft (Ensign Rig #17 - RKB - 12')
<b>Site:</b>	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	<b>North Reference:</b>	True
<b>Well:</b>	SRC Phelps A-32NHZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #3 (11-14-13)		

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

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

Well	SRC Phelps A-32NHZ					
Well Position	+N/-S	-30.5 ft	Northing:	1,247,290.80 ft	Latitude:	40.010030
	+E/-W	-140.3 ft	Easting:	3,198,123.63 ft	Longitude:	-104.792692
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,019.0 ft

<b>Wellbore</b>	Wellbore #1				
-----------------	-------------	--	--	--	--

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	11/14/2013	8.52	66.65	52,667

<b>Design</b>	Plan #3 (11-14-13)				
---------------	--------------------	--	--	--	--

<b>Audit Notes:</b>					
<b>Version:</b>		<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD)</b>	<b>+N/-S</b>	<b>+E/-W</b>	<b>Direction</b>	
	(ft)	(ft)	(ft)	(°)	
	0.0	0.0	0.0	273.33	

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,625.9	6.26	47.62	1,624.7	23.0	25.2	1.00	1.00	0.00	47.62	
4,707.3	6.26	47.62	4,687.7	249.5	273.4	0.00	0.00	0.00	0.00	
5,020.2	0.00	0.00	5,000.0	261.0	286.0	2.00	-2.00	0.00	180.00	
6,800.0	0.00	0.00	6,779.8	261.0	286.0	0.00	0.00	0.00	0.00	
7,925.0	90.00	270.01	7,496.0	261.1	-430.2	8.00	8.00	0.00	270.01	
11,989.6	90.00	270.01	7,496.0	261.8	-4,494.8	0.00	0.00	0.00	0.00	BHL 1528'FNL, 46C

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well SRC Phelps A-32NHZ
<b>Company:</b>	Synergy Resources	<b>TVD Reference:</b>	WELL @ 5031.0ft (Ensign Rig #17 - RKB - 12')
<b>Project:</b>	SEC.32-T1N-R66W	<b>MD Reference:</b>	WELL @ 5031.0ft (Ensign Rig #17 - RKB - 12')
<b>Site:</b>	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	<b>North Reference:</b>	True
<b>Well:</b>	SRC Phelps A-32NHZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #3 (11-14-13)		

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
<b>SHL 1791'FNL, 339'FEL</b>									
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>KOP #1</b>									
1,100.0	1.00	47.62	1,100.0	0.6	0.6	-0.6	1.00	1.00	0.00
1,200.0	2.00	47.62	1,200.0	2.4	2.6	-2.4	1.00	1.00	0.00
1,300.0	3.00	47.62	1,299.9	5.3	5.8	-5.5	1.00	1.00	0.00
1,400.0	4.00	47.62	1,399.7	9.4	10.3	-9.7	1.00	1.00	0.00
1,500.0	5.00	47.62	1,499.4	14.7	16.1	-15.2	1.00	1.00	0.00
1,600.0	6.00	47.62	1,598.9	21.2	23.2	-21.9	1.00	1.00	0.00
1,625.9	6.26	47.62	1,624.7	23.0	25.2	-23.8	1.00	1.00	0.00
1,700.0	6.26	47.62	1,698.3	28.5	31.2	-29.5	0.00	0.00	0.00
1,800.0	6.26	47.62	1,797.7	35.8	39.2	-37.1	0.00	0.00	0.00
1,900.0	6.26	47.62	1,897.1	43.2	47.3	-44.7	0.00	0.00	0.00
2,000.0	6.26	47.62	1,996.5	50.5	55.4	-52.3	0.00	0.00	0.00
2,100.0	6.26	47.62	2,095.9	57.9	63.4	-59.9	0.00	0.00	0.00
2,200.0	6.26	47.62	2,195.3	65.2	71.5	-67.5	0.00	0.00	0.00
2,300.0	6.26	47.62	2,294.7	72.6	79.5	-75.2	0.00	0.00	0.00
2,400.0	6.26	47.62	2,394.1	79.9	87.6	-82.8	0.00	0.00	0.00
2,500.0	6.26	47.62	2,493.5	87.3	95.6	-90.4	0.00	0.00	0.00
2,600.0	6.26	47.62	2,592.9	94.6	103.7	-98.0	0.00	0.00	0.00
2,700.0	6.26	47.62	2,692.4	102.0	111.7	-105.6	0.00	0.00	0.00
2,800.0	6.26	47.62	2,791.8	109.3	119.8	-113.2	0.00	0.00	0.00
2,900.0	6.26	47.62	2,891.2	116.7	127.8	-120.8	0.00	0.00	0.00
3,000.0	6.26	47.62	2,990.6	124.0	135.9	-128.4	0.00	0.00	0.00
3,100.0	6.26	47.62	3,090.0	131.4	143.9	-136.1	0.00	0.00	0.00
3,200.0	6.26	47.62	3,189.4	138.7	152.0	-143.7	0.00	0.00	0.00
3,300.0	6.26	47.62	3,288.8	146.1	160.1	-151.3	0.00	0.00	0.00
3,400.0	6.26	47.62	3,388.2	153.4	168.1	-158.9	0.00	0.00	0.00
3,500.0	6.26	47.62	3,487.6	160.8	176.2	-166.5	0.00	0.00	0.00
3,600.0	6.26	47.62	3,587.0	168.1	184.2	-174.1	0.00	0.00	0.00
3,700.0	6.26	47.62	3,686.4	175.5	192.3	-181.7	0.00	0.00	0.00
3,800.0	6.26	47.62	3,785.8	182.8	200.3	-189.3	0.00	0.00	0.00
3,900.0	6.26	47.62	3,885.2	190.2	208.4	-197.0	0.00	0.00	0.00
4,000.0	6.26	47.62	3,984.6	197.5	216.4	-204.6	0.00	0.00	0.00
4,100.0	6.26	47.62	4,084.0	204.9	224.5	-212.2	0.00	0.00	0.00
4,200.0	6.26	47.62	4,183.4	212.2	232.5	-219.8	0.00	0.00	0.00
4,300.0	6.26	47.62	4,282.8	219.6	240.6	-227.4	0.00	0.00	0.00
4,400.0	6.26	47.62	4,382.2	226.9	248.6	-235.0	0.00	0.00	0.00
4,500.0	6.26	47.62	4,481.6	234.3	256.7	-242.6	0.00	0.00	0.00
4,600.0	6.26	47.62	4,581.0	241.6	264.7	-250.2	0.00	0.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well SRC Phelps A-32NHZ
<b>Company:</b>	Synergy Resources	<b>TVD Reference:</b>	WELL @ 5031.0ft (Ensign Rig #17 - RKB - 12')
<b>Project:</b>	SEC.32-T1N-R66W	<b>MD Reference:</b>	WELL @ 5031.0ft (Ensign Rig #17 - RKB - 12')
<b>Site:</b>	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	<b>North Reference:</b>	True
<b>Well:</b>	SRC Phelps A-32NHZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #3 (11-14-13)		

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)
4,700.0	6.26	47.62	4,680.4	249.0	272.8	-257.9	0.00	0.00	0.00
4,707.3	6.26	47.62	4,687.7	249.5	273.4	-258.4	0.00	0.00	0.00
4,800.0	4.40	47.62	4,780.0	255.3	279.8	-264.4	2.00	-2.00	0.00
4,900.0	2.40	47.62	4,879.8	259.3	284.1	-268.6	2.00	-2.00	0.00
5,000.0	0.40	47.62	4,979.8	261.0	285.9	-270.3	2.00	-2.00	0.00
5,020.2	0.00	0.00	5,000.0	261.0	286.0	-270.3	2.00	-2.00	0.00
5,100.0	0.00	0.00	5,079.8	261.0	286.0	-270.3	0.00	0.00	0.00
5,200.0	0.00	0.00	5,179.8	261.0	286.0	-270.3	0.00	0.00	0.00
5,300.0	0.00	0.00	5,279.8	261.0	286.0	-270.3	0.00	0.00	0.00
5,400.0	0.00	0.00	5,379.8	261.0	286.0	-270.3	0.00	0.00	0.00
5,500.0	0.00	0.00	5,479.8	261.0	286.0	-270.3	0.00	0.00	0.00
5,600.0	0.00	0.00	5,579.8	261.0	286.0	-270.3	0.00	0.00	0.00
5,700.0	0.00	0.00	5,679.8	261.0	286.0	-270.3	0.00	0.00	0.00
5,800.0	0.00	0.00	5,779.8	261.0	286.0	-270.3	0.00	0.00	0.00
5,900.0	0.00	0.00	5,879.8	261.0	286.0	-270.3	0.00	0.00	0.00
6,000.0	0.00	0.00	5,979.8	261.0	286.0	-270.3	0.00	0.00	0.00
6,100.0	0.00	0.00	6,079.8	261.0	286.0	-270.3	0.00	0.00	0.00
6,200.0	0.00	0.00	6,179.8	261.0	286.0	-270.3	0.00	0.00	0.00
6,300.0	0.00	0.00	6,279.8	261.0	286.0	-270.3	0.00	0.00	0.00
6,400.0	0.00	0.00	6,379.8	261.0	286.0	-270.3	0.00	0.00	0.00
6,500.0	0.00	0.00	6,479.8	261.0	286.0	-270.3	0.00	0.00	0.00
6,600.0	0.00	0.00	6,579.8	261.0	286.0	-270.3	0.00	0.00	0.00
6,700.0	0.00	0.00	6,679.8	261.0	286.0	-270.3	0.00	0.00	0.00
6,800.0	0.00	0.00	6,779.8	261.0	286.0	-270.3	0.00	0.00	0.00
<b>KOP #2</b>									
6,900.0	8.00	270.01	6,879.4	261.0	279.0	-263.4	8.00	8.00	0.00
7,000.0	16.00	270.01	6,977.2	261.0	258.3	-242.7	8.00	8.00	0.00
7,100.0	24.00	270.01	7,071.1	261.0	224.1	-208.5	8.00	8.00	0.00
7,196.1	31.69	270.01	7,156.0	261.0	179.2	-163.8	8.00	8.00	0.00
<b>SHARON SPRINGS</b>									
7,200.0	32.00	270.01	7,159.3	261.0	177.2	-161.7	8.00	8.00	0.00
7,250.3	36.02	270.01	7,201.0	261.0	149.1	-133.6	8.00	8.00	0.00
<b>NIOBRARA</b>									
7,271.6	37.72	270.01	7,218.0	261.0	136.3	-120.9	8.00	8.00	0.00
<b>A CHALK</b>									
7,297.2	39.77	270.01	7,238.0	261.0	120.3	-104.9	8.00	8.00	0.00
<b>A MARL</b>									
7,300.0	40.00	270.01	7,240.1	261.0	118.5	-103.1	8.00	8.00	0.00
7,400.0	48.00	270.01	7,312.0	261.0	49.1	-33.8	8.00	8.00	0.00
7,500.0	56.00	270.01	7,373.5	261.1	-29.7	44.8	8.00	8.00	0.00
7,556.0	60.48	270.01	7,403.0	261.1	-77.3	92.3	8.00	8.00	0.00
<b>B CHALK</b>									
7,600.0	64.00	270.01	7,423.5	261.1	-116.2	131.2	8.00	8.00	0.00
7,632.3	66.58	270.01	7,437.0	261.1	-145.5	160.5	8.00	8.00	0.00
<b>B MARL</b>									
7,700.0	72.00	270.01	7,460.9	261.1	-208.8	223.7	8.00	8.00	0.00
7,747.1	75.76	270.01	7,474.0	261.1	-254.0	268.8	8.00	8.00	0.00
<b>C CHALK</b>									
7,800.0	80.00	270.01	7,485.1	261.1	-305.8	320.5	8.00	8.00	0.00
7,900.0	88.00	270.01	7,495.6	261.1	-405.2	419.7	8.00	8.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well SRC Phelps A-32NHZ
<b>Company:</b>	Synergy Resources	<b>TVD Reference:</b>	WELL @ 5031.0ft (Ensign Rig #17 - RKB - 12')
<b>Project:</b>	SEC.32-T1N-R66W	<b>MD Reference:</b>	WELL @ 5031.0ft (Ensign Rig #17 - RKB - 12')
<b>Site:</b>	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	<b>North Reference:</b>	True
<b>Well:</b>	SRC Phelps A-32NHZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #3 (11-14-13)		

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)
7,923.0	89.84	270.01	7,496.0	261.1	-428.2	442.6	8.00	8.00	0.00
7"									
7,925.0	90.00	270.01	7,496.0	261.1	-430.2	444.7	8.00	8.00	0.00
End of Build - C MARL									
8,000.0	90.00	270.01	7,496.0	261.1	-505.2	519.5	0.00	0.00	0.00
8,100.0	90.00	270.01	7,496.0	261.2	-605.2	619.3	0.00	0.00	0.00
8,200.0	90.00	270.01	7,496.0	261.2	-705.2	719.2	0.00	0.00	0.00
8,300.0	90.00	270.01	7,496.0	261.2	-805.2	819.0	0.00	0.00	0.00
8,400.0	90.00	270.01	7,496.0	261.2	-905.2	918.8	0.00	0.00	0.00
8,500.0	90.00	270.01	7,496.0	261.2	-1,005.2	1,018.6	0.00	0.00	0.00
8,600.0	90.00	270.01	7,496.0	261.2	-1,105.2	1,118.5	0.00	0.00	0.00
8,700.0	90.00	270.01	7,496.0	261.3	-1,205.2	1,218.3	0.00	0.00	0.00
8,800.0	90.00	270.01	7,496.0	261.3	-1,305.2	1,318.1	0.00	0.00	0.00
8,900.0	90.00	270.01	7,496.0	261.3	-1,405.2	1,418.0	0.00	0.00	0.00
9,000.0	90.00	270.01	7,496.0	261.3	-1,505.2	1,517.8	0.00	0.00	0.00
9,100.0	90.00	270.01	7,496.0	261.3	-1,605.2	1,617.6	0.00	0.00	0.00
9,200.0	90.00	270.01	7,496.0	261.3	-1,705.2	1,717.5	0.00	0.00	0.00
9,300.0	90.00	270.01	7,496.0	261.4	-1,805.2	1,817.3	0.00	0.00	0.00
9,400.0	90.00	270.01	7,496.0	261.4	-1,905.2	1,917.1	0.00	0.00	0.00
9,500.0	90.00	270.01	7,496.0	261.4	-2,005.2	2,017.0	0.00	0.00	0.00
9,600.0	90.00	270.01	7,496.0	261.4	-2,105.2	2,116.8	0.00	0.00	0.00
9,700.0	90.00	270.01	7,496.0	261.4	-2,205.2	2,216.6	0.00	0.00	0.00
9,800.0	90.00	270.01	7,496.0	261.4	-2,305.2	2,316.5	0.00	0.00	0.00
9,900.0	90.00	270.01	7,496.0	261.5	-2,405.2	2,416.3	0.00	0.00	0.00
10,000.0	90.00	270.01	7,496.0	261.5	-2,505.2	2,516.1	0.00	0.00	0.00
10,100.0	90.00	270.01	7,496.0	261.5	-2,605.2	2,616.0	0.00	0.00	0.00
10,200.0	90.00	270.01	7,496.0	261.5	-2,705.2	2,715.8	0.00	0.00	0.00
10,300.0	90.00	270.01	7,496.0	261.5	-2,805.2	2,815.6	0.00	0.00	0.00
10,400.0	90.00	270.01	7,496.0	261.6	-2,905.2	2,915.5	0.00	0.00	0.00
10,500.0	90.00	270.01	7,496.0	261.6	-3,005.2	3,015.3	0.00	0.00	0.00
10,600.0	90.00	270.01	7,496.0	261.6	-3,105.2	3,115.1	0.00	0.00	0.00
10,700.0	90.00	270.01	7,496.0	261.6	-3,205.2	3,214.9	0.00	0.00	0.00
10,800.0	90.00	270.01	7,496.0	261.6	-3,305.2	3,314.8	0.00	0.00	0.00
10,900.0	90.00	270.01	7,496.0	261.6	-3,405.2	3,414.6	0.00	0.00	0.00
11,000.0	90.00	270.01	7,496.0	261.7	-3,505.2	3,514.4	0.00	0.00	0.00
11,100.0	90.00	270.01	7,496.0	261.7	-3,605.2	3,614.3	0.00	0.00	0.00
11,200.0	90.00	270.01	7,496.0	261.7	-3,705.2	3,714.1	0.00	0.00	0.00
11,300.0	90.00	270.01	7,496.0	261.7	-3,805.2	3,813.9	0.00	0.00	0.00
11,400.0	90.00	270.01	7,496.0	261.7	-3,905.2	3,913.8	0.00	0.00	0.00
11,500.0	90.00	270.01	7,496.0	261.7	-4,005.2	4,013.6	0.00	0.00	0.00
11,600.0	90.00	270.01	7,496.0	261.8	-4,105.2	4,113.4	0.00	0.00	0.00
11,700.0	90.00	270.01	7,496.0	261.8	-4,205.2	4,213.3	0.00	0.00	0.00
11,800.0	90.00	270.01	7,496.0	261.8	-4,305.2	4,313.1	0.00	0.00	0.00
11,900.0	90.00	270.01	7,496.0	261.8	-4,405.2	4,412.9	0.00	0.00	0.00
11,989.6	90.00	270.01	7,496.0	261.8	-4,494.8	4,502.4	0.00	0.00	0.00
BHL 1528'FNL, 460'FWL									

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well SRC Phelps A-32NHZ
<b>Company:</b>	Synergy Resources	<b>TVD Reference:</b>	WELL @ 5031.0ft (Ensign Rig #17 - RKB - 12')
<b>Project:</b>	SEC.32-T1N-R66W	<b>MD Reference:</b>	WELL @ 5031.0ft (Ensign Rig #17 - RKB - 12')
<b>Site:</b>	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	<b>North Reference:</b>	True
<b>Well:</b>	SRC Phelps A-32NHZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #3 (11-14-13)		

Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting		
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)	Latitude	Longitude
BHL 1528'FNL, 460'FI - plan hits target center - Point	0.00	0.00	7,496.0	261.8	-4,494.8	1,247,516.76	3,193,627.05	40.010748	-104.808738
SHL 1791'FNL, 339'FI - plan hits target center - Point	0.00	0.00	1.0	0.0	0.0	1,247,290.81	3,198,123.63	40.010030	-104.792692

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
7,923.0	7,496.0	7"	7	7-1/2	

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
7,196.1	7,156.0	SHARON SPRINGS		0.00	
7,250.3	7,201.0	NIOBRARA		0.00	
7,271.6	7,218.0	A CHALK		0.00	
7,297.2	7,238.0	A MARL		0.00	
7,556.0	7,403.0	B CHALK		0.00	
7,632.3	7,437.0	B MARL		0.00	
7,747.1	7,474.0	C CHALK		0.00	
7,925.0	7,496.0	C MARL		0.00	

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
1,000.0	1,000.0	0.0	0.0	KOP #1
6,800.0	6,779.8	261.0	286.0	KOP #2
7,925.0	7,496.0	261.1	-430.2	End of Build



## **Directional**

### **Synergy Resources**

**SEC.32-T1N-R66W**

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

**SRC Phelps A-32NHZ**

**Wellbore #1**

**Plan #3 (11-14-13)**

### **Anticollision Report**

**14 November, 2013**



<b>Company:</b>	Synergy Resources	<b>Local Co-ordinate Reference:</b>	Well SRC Phelps A-32NHZ
<b>Project:</b>	SEC.32-T1N-R66W	<b>TVD Reference:</b>	WELL @ 5031.0ft (Ensign Rig #17 - RKB - 12')
<b>Reference Site:</b>	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	<b>MD Reference:</b>	WELL @ 5031.0ft (Ensign Rig #17 - RKB - 12')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	SRC Phelps A-32NHZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #3 (11-14-13)	<b>Offset TVD Reference:</b>	Offset Datum

<b>Reference</b>	Plan #3 (11-14-13)		
<b>Filter type:</b>	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
<b>Interpolation Method:</b>	Stations	<b>Error Model:</b>	ISCWSA
<b>Depth Range:</b>	Unlimited	<b>Scan Method:</b>	Closest Approach 3D
<b>Results Limited by:</b>	Maximum center-center distance of 1,000.0ft	<b>Error Surface:</b>	Elliptical Conic
<b>Warning Levels Evaluated at:</b>	2.00 Sigma		

<b>Survey Tool Program</b>	<b>Date</b> 11/14/2013			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
0.0	11,989.6	Plan #3 (11-14-13) (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 #2 (11-12-13)	200.0	199.0	68.5	67.8	101.906	CC, ES
SRC Phelps 11-32CHZ - Wellbore #1 - Plan #2 (11-12-13)	5,020.2	4,940.2	777.1	743.9	23.424	SF
SRC Phelps 11-32NHZ - Wellbore #1 - Plan #2 (11-11-13)	400.0	400.0	90.8	89.3	57.738	CC, ES
SRC Phelps 11-32NHZ - Wellbore #1 - Plan #2 (11-11-13)	11,989.6	12,058.0	738.4	477.9	2.834	SF
SRC Phelps 12-32CHZ - Wellbore #1 - Plan #2 (11-12-13)	500.0	499.0	45.9	43.8	22.693	CC, ES
SRC Phelps 12-32CHZ - Wellbore #1 - Plan #2 (11-12-13)	11,989.6	12,127.9	361.3	121.7	1.508	SF
SRC Phelps 12-32NHZ - Wellbore #1 - Plan #2 (11-12-13)	800.0	799.0	23.5	20.1	6.974	CC
SRC Phelps 12-32NHZ - Wellbore #1 - Plan #2 (11-12-13)	900.0	898.8	23.8	20.0	6.281	ES
SRC Phelps 12-32NHZ - Wellbore #1 - Plan #2 (11-12-13)	11,989.6	11,954.1	661.1	402.5	2.556	SF
SRC Phelps A-32CHZ - Wellbore #1 - Plan #2 (11-14-13)	1,000.0	1,000.0	21.6	17.3	5.051	CC, ES
SRC Phelps A-32CHZ - Wellbore #1 - Plan #2 (11-14-13)	11,989.6	12,166.8	433.7	189.2	1.774	SF

<b>Offset Design</b>	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W - SRC Phelps 11-32CHZ - Wellbore #1 - Plan #2 (11-12)												<b>Offset Site Error:</b>	0.0 ft
<b>Survey Program:</b>	0-MWD												<b>Offset Well Error:</b>	0.0 ft
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	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	77.84	14.4	66.9	68.5					
100.0	100.0	99.0	99.0	0.1	0.1	77.84	14.4	66.9	68.5	68.3	0.22	306.227		
200.0	200.0	199.0	199.0	0.3	0.3	77.84	14.4	66.9	68.5	67.8	0.67	101.906	CC, ES	
300.0	300.0	298.1	298.1	0.6	0.6	76.55	16.1	67.2	69.1	68.0	1.12	61.628		
400.0	400.0	396.9	396.8	0.8	0.8	72.78	21.1	68.1	71.3	69.7	1.58	45.134		
500.0	500.0	495.3	494.8	1.0	1.0	67.06	29.4	69.5	75.6	73.5	2.04	37.023		
600.0	600.0	593.0	591.8	1.2	1.3	60.18	41.0	71.5	82.7	80.2	2.51	33.004		
700.0	700.0	689.8	687.4	1.5	1.6	53.07	55.6	74.0	93.3	90.3	2.97	31.374		
800.0	800.0	785.4	781.4	1.7	2.0	46.44	73.2	77.0	107.7	104.2	3.45	31.213		
900.0	900.0	880.3	873.9	1.9	2.4	40.66	93.6	80.4	126.0	122.0	3.95	31.903		
1,000.0	1,000.0	977.6	968.6	2.1	2.8	36.03	115.8	84.2	146.3	141.9	4.46	32.777		
1,100.0	1,100.0	1,075.0	1,063.4	2.4	3.2	-15.11	137.9	88.0	166.6	161.6	4.97	33.511		
1,200.0	1,200.0	1,172.8	1,158.5	2.6	3.7	-18.01	160.1	91.8	185.7	180.3	5.44	34.149		
1,300.0	1,299.9	1,270.8	1,253.9	2.8	4.1	-20.53	182.4	95.6	203.6	197.7	5.91	34.479		
1,400.0	1,399.7	1,369.0	1,349.5	3.0	4.6	-22.81	204.8	99.4	220.3	213.9	6.37	34.551		

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

SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W - SRC Phelps 11-32CHZ - Wellbore #1 - Plan #2 (11-12)													Offset Site Error: 0.0 ft	
Survey Program: 0-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
1,500.0	1,499.4	1,467.5	1,445.3	3.3	5.1	-24.93	227.1	103.2	235.7	228.8	6.85	34.418		
1,600.0	1,598.9	1,566.1	1,541.2	3.5	5.5	-26.96	249.6	107.0	249.8	242.5	7.32	34.114		
1,625.9	1,624.7	1,591.7	1,566.1	3.6	5.6	-27.48	255.4	108.0	253.3	245.8	7.45	34.010		
1,700.0	1,698.3	1,664.8	1,637.2	3.7	6.0	-28.95	272.0	110.8	263.2	255.4	7.81	33.709		
1,800.0	1,797.7	1,763.5	1,733.3	4.0	6.5	-30.76	294.4	114.6	276.7	268.4	8.30	33.350		
1,900.0	1,897.1	1,862.2	1,829.3	4.3	6.9	-32.41	316.9	118.5	290.6	281.8	8.80	33.033		
2,000.0	1,996.5	1,960.9	1,925.4	4.5	7.4	-33.90	339.3	122.3	304.6	295.3	9.30	32.749		
2,100.0	2,095.9	2,059.6	2,021.4	4.8	7.9	-35.27	361.8	126.1	318.9	309.1	9.81	32.491		
2,200.0	2,195.3	2,158.3	2,117.5	5.1	8.3	-36.51	384.2	129.9	333.3	322.9	10.33	32.254		
2,300.0	2,294.7	2,257.0	2,213.5	5.4	8.8	-37.66	406.6	133.7	347.8	337.0	10.86	32.034		
2,400.0	2,394.1	2,355.7	2,309.6	5.6	9.3	-38.71	429.1	137.6	362.5	351.1	11.39	31.831		
2,500.0	2,493.5	2,454.4	2,405.6	5.9	9.7	-39.68	451.5	141.4	377.3	365.3	11.92	31.640		
2,600.0	2,592.9	2,553.1	2,501.7	6.2	10.2	-40.58	474.0	145.2	392.2	379.7	12.46	31.462		
2,700.0	2,692.4	2,651.8	2,597.7	6.5	10.7	-41.41	496.4	149.0	407.1	394.1	13.01	31.295		
2,800.0	2,791.8	2,750.5	2,693.8	6.8	11.2	-42.18	518.8	152.8	422.2	408.6	13.56	31.137		
2,900.0	2,891.2	2,849.2	2,789.8	7.1	11.6	-42.90	541.3	156.7	437.3	423.2	14.11	30.989		
3,000.0	2,990.6	2,948.0	2,885.8	7.4	12.1	-43.57	563.7	160.5	452.5	437.8	14.67	30.848		
3,100.0	3,090.0	3,046.7	2,981.9	7.7	12.6	-44.20	586.2	164.3	467.7	452.5	15.23	30.716		
3,200.0	3,189.4	3,145.4	3,077.9	7.9	13.1	-44.79	608.6	168.1	483.0	467.2	15.79	30.590		
3,300.0	3,288.8	3,244.1	3,174.0	8.2	13.5	-45.34	631.1	171.9	498.3	481.9	16.35	30.471		
3,400.0	3,388.2	3,342.8	3,270.0	8.5	14.0	-45.86	653.5	175.8	513.7	496.8	16.92	30.358		
3,500.0	3,487.6	3,441.5	3,366.1	8.8	14.5	-46.35	675.9	179.6	529.1	511.6	17.49	30.251		
3,600.0	3,587.0	3,540.2	3,462.1	9.1	14.9	-46.81	698.4	183.4	544.5	526.5	18.06	30.148		
3,700.0	3,686.4	3,638.9	3,558.2	9.4	15.4	-47.24	720.8	187.2	560.0	541.4	18.64	30.051		
3,800.0	3,785.8	3,737.6	3,654.2	9.7	15.9	-47.66	743.3	191.1	575.5	556.3	19.21	29.959		
3,900.0	3,885.2	3,836.3	3,750.3	10.0	16.4	-48.05	765.7	194.9	591.1	571.3	19.79	29.870		
4,000.0	3,984.6	3,935.0	3,846.3	10.3	16.8	-48.42	788.1	198.7	606.6	586.3	20.37	29.786		
4,100.0	4,084.0	4,033.7	3,942.4	10.6	17.3	-48.77	810.6	202.5	622.2	601.3	20.95	29.706		
4,200.0	4,183.4	4,132.4	4,038.4	10.9	17.8	-49.10	833.0	206.3	637.8	616.3	21.53	29.629		
4,300.0	4,282.8	4,231.1	4,134.4	11.2	18.3	-49.42	855.5	210.2	653.5	631.4	22.11	29.555		
4,400.0	4,382.2	4,329.8	4,230.5	11.5	18.7	-49.73	877.9	214.0	669.1	646.4	22.69	29.485		
4,500.0	4,481.6	4,428.6	4,326.5	11.8	19.2	-50.02	900.3	217.8	684.8	661.5	23.28	29.417		
4,600.0	4,581.0	4,527.3	4,422.6	12.1	19.7	-50.30	922.8	221.6	700.5	676.6	23.86	29.352		
4,707.3	4,687.7	4,633.1	4,525.6	12.4	20.2	-50.58	946.9	225.7	717.3	692.8	24.49	29.286		
4,800.0	4,780.0	4,724.5	4,614.6	12.6	20.6	-50.97	967.6	229.3	732.8	707.8	24.98	29.337		
4,900.0	4,879.8	4,822.8	4,710.1	12.8	21.1	-51.21	990.0	233.1	751.6	726.2	25.43	29.560		
5,000.0	4,979.8	4,920.5	4,805.2	13.0	21.6	-51.28	1,012.2	236.8	772.6	746.8	25.83	29.912		
5,020.2	5,000.0	4,940.2	4,824.4	13.0	21.7	-3.66	1,016.7	237.6	777.1	743.9	33.18	23.424 SF		
5,100.0	5,079.8	5,017.8	4,899.9	13.2	22.0	-3.36	1,034.3	240.6	795.0	761.3	33.71	23.582		
5,200.0	5,179.8	5,115.1	4,994.6	13.3	22.5	-3.00	1,056.4	244.4	817.5	783.1	34.40	23.765		
5,300.0	5,279.8	5,212.4	5,089.3	13.5	23.0	-2.65	1,078.5	248.1	840.1	805.0	35.09	23.941		
5,400.0	5,379.8	5,309.7	5,183.9	13.7	23.4	-2.32	1,100.7	251.9	862.7	826.9	35.78	24.112		
5,500.0	5,479.8	5,407.0	5,278.6	13.9	23.9	-2.02	1,122.8	255.7	885.2	848.8	36.46	24.277		
5,600.0	5,579.8	5,504.3	5,373.3	14.1	24.4	-1.72	1,144.9	259.4	907.9	870.7	37.15	24.437		
5,700.0	5,679.8	5,601.6	5,468.0	14.3	24.8	-1.44	1,167.0	263.2	930.5	892.7	37.84	24.593		
5,800.0	5,779.8	5,698.9	5,562.7	14.5	25.3	-1.17	1,189.2	267.0	953.2	914.7	38.52	24.743		
5,900.0	5,879.8	5,796.2	5,657.3	14.7	25.8	-0.92	1,211.3	270.7	975.9	936.6	39.21	24.889		
6,000.0	5,979.8	5,893.5	5,752.0	14.9	26.2	-0.68	1,233.4	274.5	998.6	958.7	39.89	25.031		

SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W - SRC Phelps 11-32NHZ - Wellbore #1 - Plan #2 (11-11)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
0.0	0.0	0.0	0.0	0.0	0.0	77.82	19.2	88.8	90.8					
100.0	100.0	100.0	100.0	0.1	0.1	77.82	19.2	88.8	90.8	90.6	0.22	404.166		
200.0	200.0	200.0	200.0	0.3	0.3	77.82	19.2	88.8	90.8	90.2	0.67	134.722		
300.0	300.0	300.0	300.0	0.6	0.6	77.82	19.2	88.8	90.8	89.7	1.12	80.833		
400.0	400.0	400.0	400.0	0.8	0.8	77.82	19.2	88.8	90.8	89.3	1.57	57.738 CC, ES		
500.0	500.0	498.7	498.7	1.0	1.0	76.85	20.8	89.1	91.6	89.5	2.02	45.302		
600.0	600.0	597.2	597.0	1.2	1.2	74.03	25.8	90.2	93.8	91.4	2.47	37.931		
700.0	700.0	695.2	694.6	1.5	1.5	69.67	34.0	91.9	98.1	95.2	2.93	33.488		
800.0	800.0	792.5	791.2	1.7	1.7	64.25	45.5	94.2	105.0	101.6	3.39	30.981		
900.0	900.0	888.9	886.5	1.9	2.0	58.35	59.9	97.2	115.0	111.1	3.85	29.873		
1,000.0	1,000.0	987.1	983.3	2.1	2.3	52.73	76.6	100.6	127.5	123.2	4.31	29.564		
1,100.0	1,100.0	1,085.7	1,080.4	2.4	2.7	0.51	93.3	104.1	140.2	135.4	4.86	28.877		
1,200.0	1,200.0	1,184.5	1,177.7	2.6	3.0	-3.34	110.0	107.5	152.0	146.7	5.33	28.532		
1,300.0	1,299.9	1,283.5	1,275.2	2.8	3.4	-6.70	126.8	111.0	162.6	156.8	5.79	28.060		
1,400.0	1,399.7	1,382.7	1,372.9	3.0	3.8	-9.73	143.6	114.4	172.0	165.7	6.26	27.476		
1,500.0	1,499.4	1,482.0	1,470.7	3.3	4.1	-12.56	160.4	117.9	180.1	173.3	6.72	26.794		
1,600.0	1,598.9	1,581.4	1,568.6	3.5	4.5	-15.28	177.3	121.4	186.9	179.7	7.18	26.026		
1,625.9	1,624.7	1,607.2	1,594.0	3.6	4.6	-15.97	181.7	122.3	188.5	181.2	7.30	25.814		
1,700.0	1,698.3	1,680.8	1,666.5	3.7	4.9	-17.92	194.1	124.8	192.9	185.3	7.65	25.228		
1,800.0	1,797.7	1,780.2	1,764.4	4.0	5.2	-20.41	211.0	128.3	199.3	191.2	8.12	24.552		
1,900.0	1,897.1	1,879.7	1,862.3	4.3	5.6	-22.75	227.9	131.8	206.0	197.5	8.59	23.980		
2,000.0	1,996.5	1,979.1	1,960.3	4.5	6.0	-24.93	244.7	135.2	213.1	204.0	9.07	23.492		
2,100.0	2,095.9	2,078.5	2,058.2	4.8	6.4	-26.98	261.6	138.7	220.4	210.9	9.55	23.070		
2,200.0	2,195.3	2,178.0	2,156.1	5.1	6.8	-28.88	278.4	142.2	228.0	218.0	10.04	22.702		
2,300.0	2,294.7	2,277.4	2,254.1	5.4	7.1	-30.67	295.3	145.6	235.9	225.3	10.54	22.378		
2,400.0	2,394.1	2,376.8	2,352.0	5.6	7.5	-32.34	312.1	149.1	243.9	232.9	11.04	22.090		
2,500.0	2,493.5	2,476.2	2,449.9	5.9	7.9	-33.90	329.0	152.6	252.1	240.6	11.55	21.833		
2,600.0	2,592.9	2,575.7	2,547.9	6.2	8.3	-35.36	345.8	156.1	260.6	248.5	12.06	21.600		
2,700.0	2,692.4	2,675.1	2,645.8	6.5	8.7	-36.73	362.7	159.5	269.1	256.6	12.58	21.390		
2,800.0	2,791.8	2,774.5	2,743.7	6.8	9.1	-38.02	379.5	163.0	277.9	264.7	13.11	21.198		
2,900.0	2,891.2	2,874.0	2,841.6	7.1	9.4	-39.23	396.4	166.5	286.7	273.1	13.64	21.023		
3,000.0	2,990.6	2,973.4	2,939.6	7.4	9.8	-40.36	413.3	169.9	295.7	281.5	14.17	20.862		
3,100.0	3,090.0	3,072.8	3,037.5	7.7	10.2	-41.43	430.1	173.4	304.8	290.0	14.71	20.714		
3,200.0	3,189.4	3,172.3	3,135.4	7.9	10.6	-42.44	447.0	176.9	313.9	298.7	15.26	20.576		
3,300.0	3,288.8	3,271.7	3,233.4	8.2	11.0	-43.38	463.8	180.4	323.2	307.4	15.80	20.449		
3,400.0	3,388.2	3,371.1	3,331.3	8.5	11.4	-44.28	480.7	183.8	332.5	316.2	16.36	20.331		
3,500.0	3,487.6	3,470.6	3,429.2	8.8	11.7	-45.13	497.5	187.3	342.0	325.1	16.91	20.221		
3,600.0	3,587.0	3,570.0	3,527.2	9.1	12.1	-45.93	514.4	190.8	351.5	334.0	17.47	20.118		
3,700.0	3,686.4	3,669.4	3,625.1	9.4	12.5	-46.69	531.2	194.2	361.0	343.0	18.03	20.022		
3,800.0	3,785.8	3,768.8	3,723.0	9.7	12.9	-47.41	548.1	197.7	370.7	352.1	18.60	19.932		
3,900.0	3,885.2	3,868.3	3,820.9	10.0	13.3	-48.09	565.0	201.2	380.3	361.2	19.16	19.848		
4,000.0	3,984.6	3,967.7	3,918.9	10.3	13.7	-48.74	581.8	204.6	390.1	370.3	19.73	19.769		
4,100.0	4,084.0	4,067.1	4,016.8	10.6	14.0	-49.36	598.7	208.1	399.8	379.5	20.30	19.694		
4,200.0	4,183.4	4,166.6	4,114.7	10.9	14.4	-49.94	615.5	211.6	409.6	388.8	20.88	19.624		
4,300.0	4,282.8	4,266.0	4,212.7	11.2	14.8	-50.50	632.4	215.1	419.5	398.1	21.45	19.558		
4,400.0	4,382.2	4,365.4	4,310.6	11.5	15.2	-51.04	649.2	218.5	429.4	407.4	22.03	19.495		
4,500.0	4,481.6	4,464.9	4,408.5	11.8	15.6	-51.55	666.1	222.0	439.3	416.7	22.60	19.436		
4,600.0	4,581.0	4,564.3	4,506.5	12.1	16.0	-52.04	682.9	225.5	449.3	426.1	23.18	19.380		
4,707.3	4,687.7	4,670.9	4,611.5	12.4	16.4	-52.54	701.0	229.2	460.0	436.2	23.81	19.323		
4,800.0	4,780.0	4,763.1	4,702.3	12.6	16.7	-52.97	716.6	232.4	470.2	445.9	24.29	19.359		
4,900.0	4,879.8	4,862.2	4,799.9	12.8	17.1	-53.13	733.4	235.9	483.2	458.5	24.73	19.543		

SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W - SRC Phelps 11-32NHZ - Wellbore #1 - Plan #2 (11-11)													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)			
5,000.0	4,979.8	4,961.0	4,897.2	13.0	17.5	-53.01	750.2	239.3	498.3	473.2	25.11	19.845		
5,020.2	5,000.0	4,981.0	4,916.9	13.0	17.6	-5.33	753.6	240.0	501.6	472.6	29.02	17.284		
5,100.0	5,079.8	5,059.5	4,994.2	13.2	17.9	-4.89	766.9	242.7	514.9	485.4	29.50	17.453		
5,200.0	5,179.8	5,158.0	5,091.2	13.3	18.3	-4.36	783.6	246.2	531.5	501.4	30.11	17.651		
5,300.0	5,279.8	5,256.5	5,188.2	13.5	18.6	-3.86	800.3	249.6	548.2	517.5	30.72	17.843		
5,400.0	5,379.8	5,355.0	5,285.2	13.7	19.0	-3.39	817.0	253.1	564.9	533.6	31.33	18.029		
5,500.0	5,479.8	5,453.5	5,382.2	13.9	19.4	-2.95	833.7	256.5	581.7	549.7	31.94	18.211		
5,600.0	5,579.8	5,552.0	5,479.3	14.1	19.8	-2.53	850.4	259.9	598.4	565.9	32.55	18.387		
5,700.0	5,679.8	5,650.5	5,576.3	14.3	20.2	-2.14	867.1	263.4	615.2	582.1	33.15	18.558		
5,800.0	5,779.8	5,749.0	5,673.3	14.5	20.6	-1.76	883.8	266.8	632.1	598.3	33.76	18.724		
5,900.0	5,879.8	5,847.5	5,770.3	14.7	20.9	-1.41	900.4	270.2	648.9	614.6	34.36	18.885		
6,000.0	5,979.8	5,946.0	5,867.3	14.9	21.3	-1.08	917.1	273.7	665.8	630.9	34.97	19.042		
6,100.0	6,079.8	6,044.4	5,964.3	15.1	21.7	-0.76	933.8	277.1	682.7	647.2	35.57	19.194		
6,200.0	6,179.8	6,142.9	6,061.3	15.2	22.1	-0.45	950.5	280.6	699.7	663.5	36.17	19.342		
6,300.0	6,279.8	6,259.2	6,176.0	15.4	22.5	-0.13	969.4	284.4	715.9	679.1	36.78	19.465		
6,400.0	6,379.8	6,391.0	6,306.7	15.6	22.8	0.14	985.5	287.8	728.2	690.9	37.34	19.502		
6,500.0	6,479.8	6,524.0	6,439.3	15.8	23.1	0.30	995.8	289.9	736.0	698.1	37.82	19.458		
6,600.0	6,579.8	6,657.7	6,572.9	16.0	23.3	0.37	1,000.1	290.8	739.2	700.9	38.24	19.331		
6,700.0	6,679.8	6,764.6	6,679.8	16.2	23.4	0.37	1,000.3	290.8	739.3	700.7	38.59	19.159		
6,800.0	6,779.8	6,864.6	6,779.8	16.4	23.6	0.37	1,000.3	290.8	739.3	700.3	38.93	18.990		
6,850.0	6,829.7	6,914.9	6,830.1	16.5	23.6	90.36	1,000.3	289.0	739.3	706.4	32.85	22.506		
6,900.0	6,879.4	6,965.3	6,880.1	16.6	23.7	90.36	1,000.3	283.7	739.3	706.3	32.98	22.413		
6,950.0	6,928.7	7,015.6	6,929.7	16.6	23.7	90.35	1,000.3	274.9	739.3	706.2	33.10	22.336		
7,000.0	6,977.2	7,065.9	6,978.5	16.7	23.7	90.35	1,000.3	262.7	739.3	706.1	33.20	22.271		
7,050.0	7,024.7	7,116.2	7,026.3	16.7	23.8	90.34	1,000.3	247.1	739.3	706.0	33.28	22.213		
7,100.0	7,071.1	7,166.5	7,072.9	16.7	23.8	90.33	1,000.3	228.1	739.3	705.9	33.36	22.159		
7,150.0	7,116.0	7,216.8	7,118.0	16.7	23.8	90.32	1,000.3	205.9	739.3	705.8	33.45	22.099		
7,200.0	7,159.3	7,267.1	7,161.5	16.7	23.8	90.31	1,000.3	180.6	739.3	705.7	33.56	22.026		
7,250.0	7,200.7	7,317.4	7,203.0	16.7	23.8	90.29	1,000.3	152.4	739.2	705.5	33.71	21.930		
7,300.0	7,240.1	7,367.7	7,242.5	16.7	23.9	90.28	1,000.3	121.3	739.2	705.3	33.91	21.800		
7,350.0	7,277.3	7,417.9	7,279.7	16.8	23.9	90.26	1,000.3	87.5	739.2	705.0	34.19	21.624		
7,400.0	7,312.0	7,468.2	7,314.4	16.8	23.9	90.24	1,000.3	51.2	739.2	704.7	34.55	21.394		
7,450.0	7,344.1	7,518.4	7,346.5	17.0	24.0	90.22	1,000.3	12.6	739.2	704.2	35.03	21.100		
7,500.0	7,373.5	7,568.6	7,375.8	17.2	24.0	90.20	1,000.3	-28.2	739.2	703.6	35.64	20.739		
7,550.0	7,400.0	7,618.8	7,402.1	17.6	24.1	90.18	1,000.3	-70.9	739.2	702.8	36.40	20.309		
7,600.0	7,423.5	7,668.9	7,425.4	18.0	24.3	90.16	1,000.3	-115.3	739.2	701.9	37.30	19.817		
7,650.0	7,443.8	7,719.0	7,445.5	18.6	24.4	90.13	1,000.3	-161.2	739.2	700.8	38.36	19.268		
7,700.0	7,460.9	7,769.2	7,462.3	19.2	24.6	90.11	1,000.3	-208.4	739.2	699.6	39.58	18.676		
7,750.0	7,474.7	7,819.2	7,475.8	19.9	24.9	90.09	1,000.3	-256.6	739.2	698.2	40.95	18.053		
7,800.0	7,485.1	7,869.3	7,485.9	20.6	25.3	90.06	1,000.3	-305.7	739.2	696.7	42.45	17.414		
7,850.0	7,492.1	7,919.4	7,492.6	21.4	25.8	90.04	1,000.3	-355.2	739.2	695.1	44.07	16.772		
7,900.0	7,495.6	7,969.4	7,495.7	22.3	26.4	90.01	1,000.3	-405.2	739.1	693.3	45.79	16.140		
7,925.0	7,496.0	7,994.4	7,496.0	22.7	26.7	90.00	1,000.3	-430.2	739.1	692.4	46.69	15.831		
8,000.0	7,496.0	8,069.4	7,496.0	24.2	27.8	90.00	1,000.3	-505.2	739.1	689.6	49.52	14.924		
8,100.0	7,496.0	8,169.4	7,496.0	26.2	29.5	90.00	1,000.3	-605.2	739.1	685.5	53.56	13.798		
8,200.0	7,496.0	8,269.4	7,496.0	28.4	31.4	90.00	1,000.3	-705.2	739.1	681.2	57.87	12.772		
8,300.0	7,496.0	8,369.4	7,496.0	30.6	33.5	90.00	1,000.3	-805.2	739.1	676.7	62.38	11.848		
8,400.0	7,496.0	8,469.4	7,496.0	33.0	35.7	90.00	1,000.3	-905.2	739.1	672.0	67.05	11.022		
8,500.0	7,496.0	8,569.4	7,496.0	35.4	38.0	90.00	1,000.3	-1,005.2	739.0	667.2	71.87	10.284		
8,600.0	7,496.0	8,669.4	7,496.0	37.9	40.3	90.00	1,000.3	-1,105.2	739.0	662.2	76.78	9.625		

<b>Company:</b>	Synergy Resources	<b>Local Co-ordinate Reference:</b>	Well SRC Phelps A-32NHZ
<b>Project:</b>	SEC.32-T1N-R66W	<b>TVD Reference:</b>	WELL @ 5031.0ft (Ensign Rig #17 - RKB - 12')
<b>Reference Site:</b>	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	<b>MD Reference:</b>	WELL @ 5031.0ft (Ensign Rig #17 - RKB - 12')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	SRC Phelps A-32NHZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #3 (11-14-13)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design		SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W - SRC Phelps 11-32NHZ - Wellbore #1 - Plan #2 (11-11)										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)			
8,700.0	7,496.0	8,769.4	7,496.0	40.4	42.7	90.00	1,000.3	-1,205.2	739.0	657.2	81.79	9.035		
8,800.0	7,496.0	8,869.4	7,496.0	42.9	45.2	90.00	1,000.3	-1,305.2	739.0	652.1	86.87	8.507		
8,900.0	7,496.0	8,969.4	7,496.0	45.5	47.7	90.00	1,000.3	-1,405.2	739.0	647.0	92.02	8.031		
9,000.0	7,496.0	9,069.4	7,496.0	48.1	50.2	90.00	1,000.3	-1,505.2	739.0	641.7	97.21	7.602		
9,100.0	7,496.0	9,169.4	7,496.0	50.7	52.8	90.00	1,000.3	-1,605.2	738.9	636.5	102.45	7.213		
9,200.0	7,496.0	9,269.4	7,496.0	53.4	55.4	90.00	1,000.3	-1,705.2	738.9	631.2	107.72	6.859		
9,300.0	7,496.0	9,369.4	7,496.0	56.0	58.0	90.00	1,000.3	-1,805.2	738.9	625.9	113.03	6.537		
9,400.0	7,496.0	9,469.4	7,496.0	58.7	60.6	90.00	1,000.3	-1,905.2	738.9	620.5	118.36	6.242		
9,500.0	7,496.0	9,569.4	7,496.0	61.4	63.2	90.00	1,000.3	-2,005.2	738.9	615.1	123.72	5.972		
9,600.0	7,496.0	9,669.4	7,496.0	64.1	65.9	90.00	1,000.3	-2,105.2	738.8	609.7	129.10	5.723		
9,700.0	7,496.0	9,769.4	7,496.0	66.8	68.5	90.00	1,000.3	-2,205.2	738.8	604.3	134.50	5.493		
9,800.0	7,496.0	9,869.4	7,496.0	69.5	71.2	90.00	1,000.3	-2,305.2	738.8	598.9	139.92	5.280		
9,900.0	7,496.0	9,969.4	7,496.0	72.2	73.9	90.00	1,000.3	-2,405.2	738.8	593.4	145.35	5.083		
10,000.0	7,496.0	10,069.4	7,496.0	74.9	76.6	90.00	1,000.3	-2,505.2	738.8	588.0	150.79	4.899		
10,100.0	7,496.0	10,169.4	7,496.0	77.6	79.3	90.00	1,000.3	-2,605.2	738.8	582.5	156.25	4.728		
10,200.0	7,496.0	10,269.4	7,496.0	80.4	82.0	90.00	1,000.3	-2,705.2	738.7	577.0	161.71	4.568		
10,300.0	7,496.0	10,369.4	7,496.0	83.1	84.7	90.00	1,000.3	-2,805.2	738.7	571.5	167.19	4.419		
10,400.0	7,496.0	10,469.4	7,496.0	85.9	87.4	90.00	1,000.3	-2,905.2	738.7	566.0	172.67	4.278		
10,500.0	7,496.0	10,569.4	7,496.0	88.6	90.2	90.00	1,000.3	-3,005.2	738.7	560.5	178.16	4.146		
10,600.0	7,496.0	10,669.4	7,496.0	91.4	92.9	90.00	1,000.3	-3,105.2	738.7	555.0	183.66	4.022		
10,700.0	7,496.0	10,769.4	7,496.0	94.1	95.6	90.00	1,000.3	-3,205.2	738.7	549.5	189.17	3.905		
10,800.0	7,496.0	10,869.4	7,496.0	96.9	98.4	90.00	1,000.3	-3,305.2	738.6	544.0	194.68	3.794		
10,900.0	7,496.0	10,969.4	7,496.0	99.6	101.1	90.00	1,000.3	-3,405.2	738.6	538.4	200.19	3.690		
11,000.0	7,496.0	11,069.4	7,496.0	102.4	103.9	90.00	1,000.3	-3,505.2	738.6	532.9	205.71	3.590		
11,100.0	7,496.0	11,169.4	7,496.0	105.2	106.6	90.00	1,000.3	-3,605.2	738.6	527.3	211.24	3.496		
11,200.0	7,496.0	11,269.4	7,496.0	107.9	109.3	90.00	1,000.3	-3,705.2	738.6	521.8	216.77	3.407		
11,300.0	7,496.0	11,369.4	7,496.0	110.7	112.1	90.00	1,000.3	-3,805.2	738.6	516.2	222.30	3.322		
11,400.0	7,496.0	11,469.4	7,496.0	113.5	114.9	90.00	1,000.3	-3,905.2	738.5	510.7	227.84	3.241		
11,500.0	7,496.0	11,569.4	7,496.0	116.2	117.6	90.00	1,000.3	-4,005.2	738.5	505.1	233.38	3.164		
11,600.0	7,496.0	11,669.4	7,496.0	119.0	120.4	90.00	1,000.3	-4,105.2	738.5	499.6	238.93	3.091		
11,700.0	7,496.0	11,769.4	7,496.0	121.8	123.1	90.00	1,000.3	-4,205.2	738.5	494.0	244.47	3.021		
11,800.0	7,496.0	11,869.4	7,496.0	124.6	125.9	90.00	1,000.3	-4,305.2	738.5	488.4	250.02	2.954		
11,900.0	7,496.0	11,969.4	7,496.0	127.3	128.7	90.00	1,000.3	-4,405.2	738.4	482.9	255.57	2.889		
11,964.9	7,496.0	12,034.3	7,496.0	129.1	130.5	90.00	1,000.3	-4,470.1	738.4	479.3	259.18	2.849		
11,989.6	7,496.0	12,058.0	7,496.0	129.8	131.1	90.00	1,000.3	-4,493.8	738.4	477.9	260.53	2.834 SF		

SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W - SRC Phelps 12-32CHZ - Wellbore #1 - Plan #2 (11-12)												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	77.80	9.7	44.8	45.9				
100.0	100.0	99.0	99.0	0.1	0.1	77.80	9.7	44.8	45.9	45.6	0.22	205.036	
200.0	200.0	199.0	199.0	0.3	0.3	77.80	9.7	44.8	45.9	45.2	0.67	68.232	
300.0	300.0	299.0	299.0	0.6	0.6	77.80	9.7	44.8	45.9	44.7	1.12	40.884	
400.0	400.0	399.0	399.0	0.8	0.8	77.80	9.7	44.8	45.9	44.3	1.57	29.186	
500.0	500.0	499.0	499.0	1.0	1.0	77.80	9.7	44.8	45.9	43.8	2.02	22.693 CC, ES	
600.0	600.0	598.3	598.3	1.2	1.2	78.32	9.4	45.6	46.6	44.1	2.45	19.004	
700.0	700.0	697.5	697.5	1.5	1.4	79.78	8.7	48.1	48.9	46.0	2.87	16.996	
800.0	800.0	796.7	796.5	1.7	1.6	81.95	7.4	52.1	52.7	49.4	3.31	15.933	
900.0	900.0	896.1	895.8	1.9	1.8	84.44	5.6	57.7	58.0	54.3	3.75	15.464	
1,000.0	1,000.0	995.9	995.4	2.1	2.1	86.58	3.8	63.5	63.7	59.5	4.21	15.141	
1,100.0	1,100.0	1,095.7	1,095.0	2.4	2.3	41.21	2.0	69.2	68.7	64.1	4.62	14.879	
1,200.0	1,200.0	1,195.6	1,194.7	2.6	2.5	44.08	0.1	75.0	72.6	67.6	5.05	14.369	
1,300.0	1,299.9	1,295.4	1,294.4	2.8	2.8	47.62	-1.7	80.8	75.5	70.0	5.49	13.749	
1,400.0	1,399.7	1,395.2	1,394.0	3.0	3.0	51.89	-3.5	86.6	77.5	71.6	5.93	13.075	
1,500.0	1,499.4	1,495.0	1,493.6	3.3	3.3	56.97	-5.4	92.4	79.0	72.6	6.38	12.393	
1,600.0	1,598.9	1,594.6	1,593.0	3.5	3.5	62.90	-7.2	98.1	80.3	73.5	6.83	11.749	
1,625.9	1,624.7	1,620.5	1,618.8	3.6	3.6	64.59	-7.7	99.6	80.6	73.7	6.96	11.593	
1,700.0	1,698.3	1,694.2	1,692.4	3.7	3.8	69.42	-9.0	103.9	82.0	74.6	7.31	11.209	
1,800.0	1,797.7	1,793.7	1,791.8	4.0	4.0	75.64	-10.8	109.7	84.6	76.8	7.81	10.843	
1,900.0	1,897.1	1,893.3	1,891.1	4.3	4.3	81.42	-12.7	115.4	88.2	79.9	8.31	10.617	
2,000.0	1,996.5	1,992.8	1,990.5	4.5	4.5	86.69	-14.5	121.2	92.7	83.9	8.83	10.500	
2,100.0	2,095.9	2,092.4	2,089.9	4.8	4.7	91.46	-16.3	127.0	97.8	88.5	9.35	10.465	
2,200.0	2,195.3	2,191.9	2,189.2	5.1	5.0	95.72	-18.2	132.7	103.6	93.7	9.87	10.492	
2,300.0	2,294.7	2,291.5	2,288.6	5.4	5.2	99.52	-20.0	138.5	109.9	99.5	10.40	10.564	
2,400.0	2,394.1	2,391.0	2,388.0	5.6	5.5	102.90	-21.8	144.3	116.6	105.6	10.93	10.668	
2,500.0	2,493.5	2,490.6	2,487.3	5.9	5.7	105.90	-23.6	150.0	123.6	112.2	11.45	10.795	
2,600.0	2,592.9	2,590.1	2,586.7	6.2	6.0	108.57	-25.5	155.8	131.0	119.0	11.98	10.936	
2,700.0	2,692.4	2,689.7	2,686.1	6.5	6.2	110.95	-27.3	161.6	138.6	126.1	12.50	11.087	
2,800.0	2,791.8	2,789.3	2,785.5	6.8	6.5	113.09	-29.1	167.3	146.5	133.4	13.03	11.243	
2,900.0	2,891.2	2,888.8	2,884.8	7.1	6.7	115.00	-30.9	173.1	154.5	140.9	13.55	11.402	
3,000.0	2,990.6	2,988.4	2,984.2	7.4	7.0	116.72	-32.8	178.9	162.7	148.6	14.07	11.560	
3,100.0	3,090.0	3,087.9	3,083.6	7.7	7.2	118.28	-34.6	184.7	171.0	156.4	14.59	11.718	
3,200.0	3,189.4	3,187.5	3,182.9	7.9	7.5	119.70	-36.4	190.4	179.4	164.3	15.11	11.873	
3,300.0	3,288.8	3,287.0	3,282.3	8.2	7.7	120.98	-38.2	196.2	187.9	172.3	15.63	12.024	
3,400.0	3,388.2	3,386.6	3,381.7	8.5	8.0	122.16	-40.1	202.0	196.5	180.3	16.14	12.172	
3,500.0	3,487.6	3,486.1	3,481.0	8.8	8.2	123.23	-41.9	207.7	205.2	188.5	16.66	12.315	
3,600.0	3,587.0	3,585.7	3,580.4	9.1	8.5	124.22	-43.7	213.5	213.9	196.7	17.18	12.454	
3,700.0	3,686.4	3,685.2	3,679.8	9.4	8.7	125.13	-45.5	219.3	222.7	205.0	17.69	12.589	
3,800.0	3,785.8	3,784.8	3,779.1	9.7	9.0	125.97	-47.4	225.0	231.6	213.4	18.21	12.719	
3,900.0	3,885.2	3,884.3	3,878.5	10.0	9.2	126.75	-49.2	230.8	240.5	221.7	18.72	12.844	
4,000.0	3,984.6	3,983.9	3,977.9	10.3	9.5	127.47	-51.0	236.6	249.4	230.2	19.24	12.966	
4,100.0	4,084.0	4,083.4	4,077.2	10.6	9.7	128.15	-52.9	242.3	258.4	238.6	19.75	13.083	
4,200.0	4,183.4	4,183.0	4,176.6	10.9	10.0	128.77	-54.7	248.1	267.4	247.1	20.26	13.196	
4,300.0	4,282.8	4,282.5	4,276.0	11.2	10.3	129.36	-56.5	253.9	276.4	255.7	20.78	13.304	
4,400.0	4,382.2	4,382.1	4,375.3	11.5	10.5	129.91	-58.3	259.6	285.5	264.2	21.29	13.409	
4,500.0	4,481.6	4,481.6	4,474.7	11.8	10.8	130.43	-60.2	265.4	294.6	272.8	21.80	13.511	
4,600.0	4,581.0	4,581.2	4,574.1	12.1	11.0	130.91	-62.0	271.2	303.7	281.4	22.32	13.609	
4,707.3	4,687.7	4,688.0	4,680.7	12.4	11.3	131.40	-63.9	277.3	313.5	290.6	22.87	13.710	
4,800.0	4,780.0	4,780.4	4,772.9	12.6	11.5	131.71	-65.6	282.7	321.0	297.7	23.32	13.762	
4,900.0	4,879.8	4,881.9	4,874.3	12.8	11.7	131.62	-67.4	288.2	326.7	303.0	23.75	13.755	



<b>Company:</b>	Synergy Resources	<b>Local Co-ordinate Reference:</b>	Well SRC Phelps A-32NHZ
<b>Project:</b>	SEC.32-T1N-R66W	<b>TVD Reference:</b>	WELL @ 5031.0ft (Ensign Rig #17 - RKB - 12')
<b>Reference Site:</b>	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	<b>MD Reference:</b>	WELL @ 5031.0ft (Ensign Rig #17 - RKB - 12')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	SRC Phelps A-32NHZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #3 (11-14-13)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design		SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W - SRC Phelps 12-32CHZ - Wellbore #1 - Plan #2 (11-12)										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				
5,000.0	4,979.8	4,985.7	4,978.0	13.0	11.9	131.55	-68.2	290.7	329.2	305.1	24.12	13.650				
5,020.2	5,000.0	5,006.6	4,999.0	13.0	12.0	179.16	-68.2	290.8	329.2	306.1	23.17	14.212				
5,100.0	5,079.8	5,086.5	5,078.8	13.2	12.1	179.16	-68.2	290.8	329.2	305.8	23.47	14.030				
5,200.0	5,179.8	5,186.5	5,178.8	13.3	12.3	179.16	-68.2	290.8	329.2	305.4	23.85	13.802				
5,300.0	5,279.8	5,286.5	5,278.8	13.5	12.5	179.16	-68.2	290.8	329.2	305.0	24.24	13.580				
5,400.0	5,379.8	5,386.5	5,378.8	13.7	12.7	179.16	-68.2	290.8	329.2	304.6	24.64	13.364				
5,500.0	5,479.8	5,486.5	5,478.8	13.9	12.9	179.16	-68.2	290.8	329.2	304.2	25.03	13.154				
5,600.0	5,579.8	5,586.5	5,578.8	14.1	13.0	179.16	-68.2	290.8	329.2	303.8	25.43	12.949				
5,700.0	5,679.8	5,686.5	5,678.8	14.3	13.2	179.16	-68.2	290.8	329.2	303.4	25.82	12.750				
5,800.0	5,779.8	5,786.5	5,778.8	14.5	13.4	179.16	-68.2	290.8	329.2	303.0	26.22	12.556				
5,900.0	5,879.8	5,886.5	5,878.8	14.7	13.6	179.16	-68.2	290.8	329.2	302.6	26.62	12.367				
6,000.0	5,979.8	5,986.5	5,978.8	14.9	13.8	179.16	-68.2	290.8	329.2	302.2	27.02	12.183				
6,100.0	6,079.8	6,086.5	6,078.8	15.1	14.0	179.16	-68.2	290.8	329.2	301.8	27.43	12.004				
6,200.0	6,179.8	6,186.5	6,178.8	15.2	14.2	179.16	-68.2	290.8	329.2	301.4	27.83	11.829				
6,300.0	6,279.8	6,286.5	6,278.8	15.4	14.4	179.16	-68.2	290.8	329.2	301.0	28.24	11.659				
6,400.0	6,379.8	6,386.5	6,378.8	15.6	14.6	179.16	-68.2	290.8	329.2	300.6	28.65	11.493				
6,500.0	6,479.8	6,486.5	6,478.8	15.8	14.8	179.16	-68.2	290.8	329.2	300.2	29.06	11.331				
6,600.0	6,579.8	6,586.5	6,578.8	16.0	15.0	179.16	-68.2	290.8	329.2	299.8	29.47	11.174				
6,700.0	6,679.8	6,686.5	6,678.8	16.2	15.2	179.16	-68.2	290.8	329.2	299.4	29.88	11.020				
6,800.0	6,779.8	6,786.5	6,778.8	16.4	15.4	179.16	-68.2	290.8	329.2	299.0	30.29	10.870				
6,850.0	6,829.7	6,836.4	6,828.7	16.5	15.5	-91.15	-68.2	290.8	329.3	297.9	31.37	10.496				
6,900.0	6,879.4	6,886.1	6,878.4	16.6	15.6	-92.04	-68.2	290.8	329.4	297.9	31.55	10.442				
6,950.0	6,928.7	6,935.4	6,927.7	16.6	15.6	-93.49	-68.2	290.8	329.8	298.1	31.72	10.400				
7,000.0	6,977.2	6,986.2	6,978.4	16.7	15.7	-95.23	-68.2	288.9	330.6	298.8	31.85	10.381				
7,050.0	7,024.7	7,037.7	7,029.6	16.7	15.8	-96.94	-68.2	283.3	331.7	299.8	31.95	10.382				
7,100.0	7,071.1	7,090.0	7,081.1	16.7	15.9	-98.62	-68.2	273.8	333.1	301.1	32.03	10.402				
7,150.0	7,116.0	7,143.2	7,132.5	16.7	15.9	-100.27	-68.2	260.3	334.8	302.7	32.07	10.439				
7,200.0	7,159.3	7,197.2	7,183.6	16.7	16.0	-101.86	-68.2	242.8	336.7	304.6	32.09	10.491				
7,250.0	7,200.7	7,252.1	7,234.0	16.7	16.0	-103.38	-68.2	221.1	338.7	306.6	32.10	10.551				
7,300.0	7,240.1	7,307.8	7,283.3	16.7	16.0	-104.84	-68.2	195.2	340.9	308.8	32.12	10.613				
7,350.0	7,277.3	7,364.5	7,331.2	16.8	16.1	-106.22	-68.2	165.0	343.2	311.1	32.17	10.669				
7,400.0	7,312.0	7,421.9	7,377.2	16.8	16.2	-107.50	-68.2	130.6	345.6	313.3	32.27	10.709				
7,450.0	7,344.1	7,480.2	7,421.0	17.0	16.3	-108.69	-68.2	92.1	348.0	315.5	32.45	10.723				
7,500.0	7,373.5	7,539.3	7,461.9	17.2	16.5	-109.78	-68.2	49.5	350.2	317.5	32.74	10.699				
7,550.0	7,400.0	7,599.2	7,499.7	17.6	16.8	-110.76	-68.2	3.1	352.4	319.3	33.16	10.627				
7,600.0	7,423.5	7,659.7	7,533.8	18.0	17.2	-111.62	-68.2	-46.9	354.4	320.7	33.76	10.497				
7,650.0	7,443.8	7,720.9	7,563.9	18.6	17.7	-112.35	-68.2	-100.2	356.2	321.7	34.56	10.308				
7,700.0	7,460.9	7,782.6	7,589.5	19.2	18.4	-112.96	-68.2	-156.3	357.8	322.2	35.55	10.063				
7,750.0	7,474.7	7,844.8	7,610.4	19.9	19.2	-113.44	-68.2	-214.9	359.0	322.2	36.75	9.767				
7,800.0	7,485.1	7,907.4	7,626.1	20.6	20.1	-113.78	-68.2	-275.4	359.9	321.7	38.17	9.429				
7,850.0	7,492.1	7,970.1	7,636.6	21.4	21.1	-113.99	-68.2	-337.3	360.5	320.7	39.78	9.061				
7,900.0	7,495.6	8,033.0	7,641.5	22.3	22.2	-114.07	-68.2	-399.9	360.7	319.1	41.57	8.677				
7,924.8	7,496.0	8,063.0	7,642.0	22.7	22.8	-114.05	-68.2	-429.9	360.6	318.2	42.49	8.488				
7,925.0	7,496.0	8,063.3	7,642.0	22.7	22.8	-114.05	-68.2	-430.2	360.6	318.2	42.50	8.487				
8,000.0	7,496.0	8,138.3	7,642.0	24.2	24.2	-114.05	-68.2	-505.2	360.7	315.5	45.12	7.994				
8,100.0	7,496.0	8,238.3	7,642.0	26.2	26.3	-114.05	-68.2	-605.2	360.7	311.8	48.85	7.383				
8,200.0	7,496.0	8,338.3	7,642.0	28.4	28.5	-114.05	-68.2	-705.2	360.7	307.9	52.82	6.828				
8,300.0	7,496.0	8,438.3	7,642.0	30.6	30.8	-114.05	-68.2	-805.2	360.7	303.7	56.99	6.330				
8,400.0	7,496.0	8,538.3	7,642.0	33.0	33.1	-114.05	-68.2	-905.2	360.7	299.4	61.31	5.884				
8,500.0	7,496.0	8,638.3	7,642.0	35.4	35.6	-114.05	-68.2	-1,005.2	360.7	295.0	65.74	5.487				

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

<b>Company:</b>	Synergy Resources	<b>Local Co-ordinate Reference:</b>	Well SRC Phelps A-32NHZ
<b>Project:</b>	SEC.32-T1N-R66W	<b>TVD Reference:</b>	WELL @ 5031.0ft (Ensign Rig #17 - RKB - 12')
<b>Reference Site:</b>	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	<b>MD Reference:</b>	WELL @ 5031.0ft (Ensign Rig #17 - RKB - 12')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	SRC Phelps A-32NHZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #3 (11-14-13)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design		SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W - SRC Phelps 12-32CHZ - Wellbore #1 - Plan #2 (11-12)										Offset Site Error: 0.0 ft	
Survey Program: 0-MWD												Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)		Separation Factor
8,600.0	7,496.0	8,738.3	7,642.0	37.9	38.0	-114.05	-68.2	-1,105.2	360.8	290.5	70.28	5.133	
8,700.0	7,496.0	8,838.3	7,642.0	40.4	40.6	-114.05	-68.2	-1,205.2	360.8	285.9	74.90	4.817	
8,800.0	7,496.0	8,938.3	7,642.0	42.9	43.1	-114.04	-68.2	-1,305.2	360.8	281.2	79.59	4.533	
8,900.0	7,496.0	9,038.3	7,642.0	45.5	45.7	-114.04	-68.2	-1,405.2	360.8	276.5	84.33	4.279	
9,000.0	7,496.0	9,138.3	7,642.0	48.1	48.3	-114.04	-68.2	-1,505.2	360.8	271.7	89.12	4.049	
9,100.0	7,496.0	9,238.3	7,642.0	50.7	51.0	-114.04	-68.2	-1,605.2	360.8	266.9	93.94	3.841	
9,200.0	7,496.0	9,338.3	7,642.0	53.4	53.6	-114.04	-68.2	-1,705.2	360.9	262.0	98.81	3.652	
9,300.0	7,496.0	9,438.3	7,642.0	56.0	56.3	-114.04	-68.2	-1,805.2	360.9	257.2	103.70	3.480	
9,400.0	7,496.0	9,538.3	7,642.0	58.7	59.0	-114.04	-68.2	-1,905.2	360.9	252.3	108.61	3.323	
9,500.0	7,496.0	9,638.3	7,642.0	61.4	61.6	-114.04	-68.2	-2,005.2	360.9	247.3	113.55	3.178	
9,600.0	7,496.0	9,738.3	7,642.0	64.1	64.3	-114.04	-68.2	-2,105.2	360.9	242.4	118.51	3.045	
9,700.0	7,496.0	9,838.3	7,642.0	66.8	67.1	-114.03	-68.2	-2,205.2	360.9	237.4	123.48	2.923	
9,800.0	7,496.0	9,938.3	7,642.0	69.5	69.8	-114.03	-68.2	-2,305.2	360.9	232.5	128.47	2.810	
9,900.0	7,496.0	10,038.3	7,642.0	72.2	72.5	-114.03	-68.2	-2,405.2	361.0	227.5	133.47	2.704	
10,000.0	7,496.0	10,138.3	7,642.0	74.9	75.2	-114.03	-68.2	-2,505.2	361.0	222.5	138.49	2.607	
10,100.0	7,496.0	10,238.3	7,642.0	77.6	78.0	-114.03	-68.2	-2,605.2	361.0	217.5	143.51	2.515	
10,200.0	7,496.0	10,338.3	7,642.0	80.4	80.7	-114.03	-68.2	-2,705.2	361.0	212.5	148.55	2.430	
10,300.0	7,496.0	10,438.3	7,642.0	83.1	83.4	-114.03	-68.2	-2,805.2	361.0	207.4	153.59	2.351	
10,400.0	7,496.0	10,538.3	7,642.0	85.9	86.2	-114.03	-68.2	-2,905.2	361.0	202.4	158.64	2.276	
10,500.0	7,496.0	10,638.3	7,642.0	88.6	88.9	-114.03	-68.2	-3,005.2	361.1	197.4	163.70	2.206	
10,600.0	7,496.0	10,738.3	7,642.0	91.4	91.7	-114.02	-68.2	-3,105.2	361.1	192.3	168.76	2.140	
10,700.0	7,496.0	10,838.3	7,642.0	94.1	94.4	-114.02	-68.2	-3,205.2	361.1	187.3	173.83	2.077	
10,800.0	7,496.0	10,938.3	7,642.0	96.9	97.2	-114.02	-68.2	-3,305.2	361.1	182.2	178.91	2.018	
10,900.0	7,496.0	11,038.3	7,642.0	99.6	100.0	-114.02	-68.2	-3,405.2	361.1	177.1	183.99	1.963	
11,000.0	7,496.0	11,138.3	7,642.0	102.4	102.7	-114.02	-68.2	-3,505.2	361.1	172.1	189.07	1.910	
11,100.0	7,496.0	11,238.3	7,642.0	105.2	105.5	-114.02	-68.2	-3,605.2	361.1	167.0	194.16	1.860	
11,200.0	7,496.0	11,338.3	7,642.0	107.9	108.3	-114.02	-68.2	-3,705.2	361.2	161.9	199.25	1.813	
11,300.0	7,496.0	11,438.3	7,642.0	110.7	111.0	-114.02	-68.2	-3,805.2	361.2	156.8	204.35	1.767	
11,400.0	7,496.0	11,538.3	7,642.0	113.5	113.8	-114.02	-68.2	-3,905.2	361.2	151.7	209.45	1.725	
11,500.0	7,496.0	11,638.3	7,642.0	116.2	116.6	-114.01	-68.2	-4,005.2	361.2	146.7	214.55	1.684	
11,600.0	7,496.0	11,738.3	7,642.0	119.0	119.4	-114.01	-68.2	-4,105.2	361.2	141.6	219.66	1.644	
11,700.0	7,496.0	11,838.3	7,642.0	121.8	122.1	-114.01	-68.2	-4,205.2	361.2	136.5	224.77	1.607	
11,800.0	7,496.0	11,938.3	7,642.0	124.6	124.9	-114.01	-68.2	-4,305.2	361.3	131.4	229.88	1.572	
11,900.0	7,496.0	12,038.3	7,642.0	127.3	127.7	-114.01	-68.2	-4,405.2	361.3	126.3	234.99	1.537	
11,989.6	7,496.0	12,127.9	7,642.0	129.8	130.2	-114.01	-68.2	-4,494.8	361.3	121.7	239.58	1.508 SF	



SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W - SRC Phelps 12-32NHZ - Wellbore #1 - Plan #2 (11-12)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
0.0	0.0	0.0	0.0	0.0	0.0	77.84	5.0	23.0	23.5					
100.0	100.0	99.0	99.0	0.1	0.1	77.84	5.0	23.0	23.5	23.3	0.22	105.066		
200.0	200.0	199.0	199.0	0.3	0.3	77.84	5.0	23.0	23.5	22.8	0.67	34.964		
300.0	300.0	299.0	299.0	0.6	0.6	77.84	5.0	23.0	23.5	22.4	1.12	20.950		
400.0	400.0	399.0	399.0	0.8	0.8	77.84	5.0	23.0	23.5	21.9	1.57	14.956		
500.0	500.0	499.0	499.0	1.0	1.0	77.84	5.0	23.0	23.5	21.5	2.02	11.629		
600.0	600.0	599.0	599.0	1.2	1.2	77.84	5.0	23.0	23.5	21.0	2.47	9.512		
700.0	700.0	699.0	699.0	1.5	1.5	77.84	5.0	23.0	23.5	20.6	2.92	8.048		
800.0	800.0	799.0	799.0	1.7	1.7	77.84	5.0	23.0	23.5	20.1	3.37	6.974 CC		
900.0	900.0	898.8	898.8	1.9	1.9	79.75	4.2	23.4	23.8	20.0	3.79	6.281 ES		
1,000.0	1,000.0	998.6	998.6	2.1	2.1	85.21	2.1	24.9	25.0	20.8	4.20	5.945		
1,100.0	1,100.0	1,098.3	1,098.1	2.4	2.3	46.88	-1.5	27.3	26.7	22.1	4.61	5.799		
1,200.0	1,200.0	1,197.7	1,197.4	2.6	2.5	59.90	-6.5	30.6	29.5	24.4	5.02	5.865		
1,300.0	1,299.9	1,296.8	1,296.1	2.8	2.7	74.29	-13.0	34.9	34.5	29.0	5.44	6.330		
1,400.0	1,399.7	1,395.5	1,394.4	3.0	2.9	87.38	-20.8	40.1	42.6	36.7	5.88	7.251		
1,500.0	1,499.4	1,494.6	1,493.0	3.3	3.1	97.87	-29.1	45.6	53.1	46.8	6.32	8.404		
1,600.0	1,598.9	1,593.5	1,591.4	3.5	3.4	106.19	-37.4	51.2	65.2	58.5	6.77	9.633		
1,625.9	1,624.7	1,619.1	1,616.9	3.6	3.5	108.07	-39.6	52.6	68.7	61.8	6.89	9.960		
1,700.0	1,698.3	1,692.2	1,689.6	3.7	3.7	112.73	-45.7	56.7	78.8	71.6	7.24	10.886		
1,800.0	1,797.7	1,790.9	1,787.8	4.0	3.9	117.37	-54.0	62.2	93.2	85.4	7.72	12.071		
1,900.0	1,897.1	1,889.6	1,886.1	4.3	4.2	120.77	-62.3	67.7	107.9	99.7	8.20	13.162		
2,000.0	1,996.5	1,988.4	1,984.3	4.5	4.5	123.34	-70.6	73.3	123.0	114.3	8.69	14.155		
2,100.0	2,095.9	2,087.1	2,082.5	4.8	4.7	125.35	-78.9	78.8	138.2	129.1	9.18	15.056		
2,200.0	2,195.3	2,185.8	2,180.7	5.1	5.0	126.96	-87.3	84.3	153.6	143.9	9.68	15.874		
2,300.0	2,294.7	2,284.6	2,278.9	5.4	5.3	128.27	-95.6	89.8	169.1	158.9	10.18	16.616		
2,400.0	2,394.1	2,383.3	2,377.2	5.6	5.6	129.37	-103.9	95.4	184.6	174.0	10.68	17.292		
2,500.0	2,493.5	2,482.0	2,475.4	5.9	5.8	130.29	-112.2	100.9	200.2	189.1	11.18	17.909		
2,600.0	2,592.9	2,580.7	2,573.6	6.2	6.1	131.08	-120.5	106.4	215.9	204.2	11.69	18.473		
2,700.0	2,692.4	2,679.5	2,671.8	6.5	6.4	131.77	-128.8	111.9	231.6	219.4	12.19	18.990		
2,800.0	2,791.8	2,778.2	2,770.1	6.8	6.7	132.36	-137.1	117.5	247.3	234.6	12.70	19.466		
2,900.0	2,891.2	2,876.9	2,868.3	7.1	7.0	132.89	-145.4	123.0	263.0	249.8	13.21	19.906		
3,000.0	2,990.6	2,975.7	2,966.5	7.4	7.3	133.36	-153.7	128.5	278.8	265.0	13.72	20.312		
3,100.0	3,090.0	3,074.4	3,064.7	7.7	7.6	133.77	-162.0	134.0	294.5	280.3	14.24	20.689		
3,200.0	3,189.4	3,173.1	3,162.9	7.9	7.9	134.15	-170.3	139.6	310.3	295.6	14.75	21.039		
3,300.0	3,288.8	3,271.8	3,261.2	8.2	8.1	134.49	-178.6	145.1	326.1	310.8	15.26	21.365		
3,400.0	3,388.2	3,370.6	3,359.4	8.5	8.4	134.79	-186.9	150.6	341.9	326.1	15.78	21.670		
3,500.0	3,487.6	3,469.3	3,457.6	8.8	8.7	135.07	-195.2	156.1	357.7	341.4	16.29	21.954		
3,600.0	3,587.0	3,568.0	3,555.8	9.1	9.0	135.33	-203.5	161.7	373.5	356.7	16.81	22.221		
3,700.0	3,686.4	3,666.7	3,654.1	9.4	9.3	135.56	-211.8	167.2	389.4	372.0	17.33	22.472		
3,800.0	3,785.8	3,765.5	3,752.3	9.7	9.6	135.78	-220.1	172.7	405.2	387.3	17.84	22.708		
3,900.0	3,885.2	3,864.2	3,850.5	10.0	9.9	135.98	-228.4	178.2	421.0	402.7	18.36	22.931		
4,000.0	3,984.6	3,962.9	3,948.7	10.3	10.2	136.17	-236.7	183.8	436.9	418.0	18.88	23.140		
4,100.0	4,084.0	4,061.7	4,046.9	10.6	10.5	136.34	-245.0	189.3	452.7	433.3	19.40	23.339		
4,200.0	4,183.4	4,160.4	4,145.2	10.9	10.8	136.50	-253.3	194.8	468.6	448.6	19.92	23.527		
4,300.0	4,282.8	4,259.1	4,243.4	11.2	11.0	136.65	-261.6	200.3	484.4	464.0	20.44	23.705		
4,400.0	4,382.2	4,357.8	4,341.6	11.5	11.3	136.79	-270.0	205.9	500.3	479.3	20.95	23.873		
4,500.0	4,481.6	4,456.6	4,439.8	11.8	11.6	136.93	-278.3	211.4	516.1	494.6	21.47	24.034		
4,600.0	4,581.0	4,555.3	4,538.1	12.1	11.9	137.05	-286.6	216.9	532.0	510.0	21.99	24.187		
4,707.3	4,687.7	4,661.2	4,643.4	12.4	12.2	137.18	-295.5	222.8	549.0	526.4	22.55	24.343		
4,800.0	4,780.0	4,752.9	4,734.7	12.6	12.5	137.36	-303.2	228.0	562.6	539.6	23.03	24.429		
4,900.0	4,879.8	4,852.1	4,833.4	12.8	12.8	137.30	-311.5	233.5	574.9	551.4	23.49	24.474		

<b>Company:</b>	Synergy Resources	<b>Local Co-ordinate Reference:</b>	Well SRC Phelps A-32NHZ
<b>Project:</b>	SEC.32-T1N-R66W	<b>TVD Reference:</b>	WELL @ 5031.0ft (Ensign Rig #17 - RKB - 12')
<b>Reference Site:</b>	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	<b>MD Reference:</b>	WELL @ 5031.0ft (Ensign Rig #17 - RKB - 12')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	SRC Phelps A-32NHZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #3 (11-14-13)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design		SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W - SRC Phelps 12-32NHZ - Wellbore #1 - Plan #2 (11-12)										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	Measured	Vertical	Reference	Offset	Highside	Offset Wellbore Centre		Between	Between	Minimum	Separation	Warning		
Depth (ft)	Depth (ft)	Depth (ft)	Depth (ft)	(ft)	(ft)	Toolface (°)	+N/-S (ft)	+E/-W (ft)	Centres (ft)	Ellipses (ft)	Separation (ft)	Factor			
5,000.0	4,979.8	4,951.6	4,932.3	13.0	13.1	136.97	-319.9	239.1	584.6	560.7	23.92	24.441			
5,020.2	5,000.0	4,971.7	4,952.3	13.0	13.2	-175.51	-321.6	240.2	586.2	561.7	24.58	23.852			
5,100.0	5,079.8	5,051.0	5,031.3	13.2	13.4	-175.99	-328.3	244.6	592.6	567.7	24.94	23.759			
5,200.0	5,179.8	5,150.5	5,130.2	13.3	13.7	-176.57	-336.6	250.2	600.7	575.2	25.42	23.633			
5,300.0	5,279.8	5,250.0	5,229.2	13.5	14.0	-177.14	-345.0	255.8	608.8	582.9	25.89	23.510			
5,400.0	5,379.8	5,349.5	5,328.2	13.7	14.3	-177.70	-353.4	261.3	616.9	590.6	26.37	23.393			
5,500.0	5,479.8	5,449.0	5,427.2	13.9	14.6	-178.24	-361.7	266.9	625.2	598.3	26.85	23.280			
5,600.0	5,579.8	5,548.5	5,526.2	14.1	14.9	-178.77	-370.1	272.5	633.4	606.1	27.34	23.171			
5,700.0	5,679.8	5,648.0	5,625.1	14.3	15.2	-179.29	-378.5	278.0	641.8	613.9	27.82	23.066			
5,800.0	5,779.8	5,750.6	5,727.3	14.5	15.5	-179.80	-387.1	283.8	650.1	621.8	28.31	22.962			
5,900.0	5,879.8	5,873.8	5,850.1	14.7	15.7	179.76	-394.6	288.8	656.3	627.5	28.77	22.808			
6,000.0	5,979.8	5,997.5	5,973.7	14.9	15.9	179.57	-397.8	290.9	658.8	629.6	29.19	22.572			
6,100.0	6,079.8	6,102.5	6,078.8	15.1	16.1	179.57	-397.9	291.0	658.9	629.3	29.57	22.283			
6,200.0	6,179.8	6,202.5	6,178.8	15.2	16.3	179.57	-397.9	291.0	658.9	629.0	29.93	22.014			
6,300.0	6,279.8	6,302.5	6,278.8	15.4	16.4	179.57	-397.9	291.0	658.9	628.6	30.30	21.750			
6,400.0	6,379.8	6,402.5	6,378.8	15.6	16.6	179.57	-397.9	291.0	658.9	628.3	30.66	21.491			
6,500.0	6,479.8	6,502.5	6,478.8	15.8	16.7	179.57	-397.9	291.0	658.9	627.9	31.03	21.236			
6,600.0	6,579.8	6,602.5	6,578.8	16.0	16.9	179.57	-397.9	291.0	658.9	627.5	31.40	20.986			
6,700.0	6,679.8	6,702.5	6,678.8	16.2	17.0	179.57	-397.9	291.0	658.9	627.1	31.77	20.741			
6,800.0	6,779.8	6,802.8	6,779.0	16.4	17.2	179.68	-397.9	289.7	658.9	626.8	32.14	20.501			
6,850.0	6,829.7	6,852.8	6,828.8	16.5	17.3	-90.07	-397.9	284.9	658.9	627.3	31.58	20.867			
6,858.3	6,838.0	6,861.1	6,837.0	16.5	17.3	-90.02	-397.9	283.8	658.9	627.3	31.60	20.854			
6,900.0	6,879.4	6,902.7	6,878.0	16.6	17.3	-89.80	-397.9	276.7	658.9	627.2	31.69	20.789			
6,950.0	6,928.7	6,952.3	6,926.2	16.6	17.3	-89.54	-397.9	265.2	658.9	627.1	31.79	20.730			
7,000.0	6,977.2	7,001.8	6,973.4	16.7	17.4	-89.29	-397.9	250.4	659.0	627.1	31.86	20.686			
7,050.0	7,024.7	7,051.0	7,019.3	16.7	17.4	-89.03	-397.9	232.5	659.0	627.1	31.91	20.651			
7,100.0	7,071.1	7,100.0	7,063.6	16.7	17.4	-88.78	-397.9	211.6	659.1	627.1	31.96	20.620			
7,150.0	7,116.0	7,148.9	7,106.3	16.7	17.4	-88.54	-397.9	187.7	659.1	627.1	32.02	20.585			
7,200.0	7,159.3	7,197.6	7,147.0	16.7	17.4	-88.31	-397.9	161.1	659.2	627.1	32.10	20.535			
7,250.0	7,200.7	7,246.1	7,185.8	16.7	17.4	-88.08	-397.9	132.0	659.3	627.1	32.22	20.461			
7,300.0	7,240.1	7,294.5	7,222.3	16.7	17.4	-87.86	-397.9	100.3	659.4	627.0	32.40	20.351			
7,350.0	7,277.3	7,342.7	7,256.6	16.8	17.4	-87.66	-397.9	66.4	659.5	626.8	32.66	20.195			
7,400.0	7,312.0	7,390.7	7,288.4	16.8	17.4	-87.46	-397.9	30.4	659.6	626.6	33.01	19.982			
7,450.0	7,344.1	7,438.6	7,317.6	17.0	17.4	-87.28	-397.9	-7.6	659.7	626.2	33.48	19.706			
7,500.0	7,373.5	7,486.4	7,344.2	17.2	17.4	-87.11	-397.9	-47.3	659.8	625.7	34.08	19.362			
7,550.0	7,400.0	7,534.1	7,368.0	17.6	17.4	-86.95	-397.9	-88.6	659.9	625.1	34.82	18.952			
7,600.0	7,423.5	7,581.7	7,388.9	18.0	17.7	-86.81	-397.9	-131.3	660.0	624.3	35.72	18.478			
7,650.0	7,443.8	7,629.2	7,407.0	18.6	18.3	-86.68	-397.9	-175.2	660.1	623.3	36.77	17.954			
7,700.0	7,460.9	7,676.6	7,422.0	19.2	18.9	-86.57	-397.9	-220.2	660.2	622.2	37.97	17.388			
7,750.0	7,474.7	7,723.9	7,434.1	19.9	19.6	-86.47	-397.9	-265.9	660.2	620.9	39.31	16.794			
7,800.0	7,485.1	7,771.2	7,443.0	20.6	20.4	-86.39	-397.9	-312.3	660.3	619.5	40.79	16.187			
7,850.0	7,492.1	7,818.4	7,448.9	21.4	21.2	-86.33	-397.9	-359.2	660.4	618.0	42.39	15.578			
7,900.0	7,495.6	7,865.6	7,451.7	22.3	22.0	-86.28	-397.9	-406.3	660.4	616.3	44.09	14.980			
7,925.0	7,496.0	7,889.5	7,452.0	22.7	22.5	-86.27	-397.9	-430.2	660.4	615.4	44.97	14.685			
8,000.0	7,496.0	7,964.5	7,452.0	24.2	24.0	-86.27	-397.9	-505.2	660.4	612.6	47.84	13.804			
8,100.0	7,496.0	8,064.5	7,452.0	26.2	26.0	-86.27	-397.9	-605.2	660.5	608.5	51.93	12.718			
8,200.0	7,496.0	8,164.5	7,452.0	28.4	28.2	-86.27	-397.9	-705.2	660.5	604.2	56.28	11.735			
8,300.0	7,496.0	8,264.5	7,452.0	30.6	30.5	-86.27	-397.9	-805.2	660.5	599.7	60.83	10.857			
8,400.0	7,496.0	8,364.5	7,452.0	33.0	32.9	-86.27	-397.9	-905.2	660.5	595.0	65.55	10.076			
8,500.0	7,496.0	8,464.5	7,452.0	35.4	35.3	-86.27	-397.9	-1,005.2	660.5	590.1	70.39	9.383			

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

<b>Company:</b>	Synergy Resources	<b>Local Co-ordinate Reference:</b>	Well SRC Phelps A-32NHZ
<b>Project:</b>	SEC.32-T1N-R66W	<b>TVD Reference:</b>	WELL @ 5031.0ft (Ensign Rig #17 - RKB - 12')
<b>Reference Site:</b>	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	<b>MD Reference:</b>	WELL @ 5031.0ft (Ensign Rig #17 - RKB - 12')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	SRC Phelps A-32NHZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #3 (11-14-13)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design		SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W - SRC Phelps 12-32NHZ - Wellbore #1 - Plan #2 (11-12)										Offset Site Error:		0.0 ft
Survey Program:		0-MWD										Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
8,600.0	7,496.0	8,564.5	7,452.0	37.9	37.8	-86.27	-397.9	-1,105.2	660.5	585.2	75.34	8.767		
8,700.0	7,496.0	8,664.5	7,452.0	40.4	40.4	-86.27	-397.9	-1,205.2	660.6	580.2	80.38	8.218		
8,800.0	7,496.0	8,764.5	7,452.0	42.9	42.9	-86.27	-397.9	-1,305.2	660.6	575.1	85.48	7.728		
8,900.0	7,496.0	8,864.5	7,452.0	45.5	45.5	-86.27	-397.9	-1,405.2	660.6	569.9	90.64	7.288		
9,000.0	7,496.0	8,964.5	7,452.0	48.1	48.1	-86.27	-397.9	-1,505.2	660.6	564.8	95.85	6.892		
9,100.0	7,496.0	9,064.5	7,452.0	50.7	50.8	-86.27	-397.9	-1,605.2	660.6	559.5	101.11	6.534		
9,200.0	7,496.0	9,164.5	7,452.0	53.4	53.4	-86.27	-397.9	-1,705.2	660.6	554.2	106.39	6.209		
9,300.0	7,496.0	9,264.5	7,452.0	56.0	56.1	-86.27	-397.9	-1,805.2	660.7	548.9	111.71	5.914		
9,400.0	7,496.0	9,364.5	7,452.0	58.7	58.8	-86.27	-397.9	-1,905.2	660.7	543.6	117.06	5.644		
9,500.0	7,496.0	9,464.5	7,452.0	61.4	61.4	-86.27	-397.9	-2,005.2	660.7	538.3	122.42	5.397		
9,600.0	7,496.0	9,564.5	7,452.0	64.1	64.1	-86.27	-397.9	-2,105.2	660.7	532.9	127.81	5.170		
9,700.0	7,496.0	9,664.5	7,452.0	66.8	66.8	-86.27	-397.9	-2,205.2	660.7	527.5	133.21	4.960		
9,800.0	7,496.0	9,764.5	7,452.0	69.5	69.6	-86.27	-397.9	-2,305.2	660.7	522.1	138.63	4.766		
9,900.0	7,496.0	9,864.5	7,452.0	72.2	72.3	-86.27	-397.9	-2,405.2	660.8	516.7	144.06	4.587		
10,000.0	7,496.0	9,964.5	7,452.0	74.9	75.0	-86.27	-397.9	-2,505.2	660.8	511.3	149.51	4.420		
10,100.0	7,496.0	10,064.5	7,452.0	77.6	77.7	-86.27	-397.9	-2,605.2	660.8	505.8	154.96	4.264		
10,200.0	7,496.0	10,164.5	7,452.0	80.4	80.5	-86.27	-397.9	-2,705.2	660.8	500.4	160.43	4.119		
10,300.0	7,496.0	10,264.5	7,452.0	83.1	83.2	-86.27	-397.9	-2,805.2	660.8	494.9	165.90	3.983		
10,400.0	7,496.0	10,364.5	7,452.0	85.9	86.0	-86.27	-397.9	-2,905.2	660.8	489.5	171.38	3.856		
10,500.0	7,496.0	10,464.5	7,452.0	88.6	88.7	-86.27	-397.9	-3,005.2	660.9	484.0	176.87	3.736		
10,600.0	7,496.0	10,564.5	7,452.0	91.4	91.5	-86.27	-397.9	-3,105.2	660.9	478.5	182.37	3.624		
10,700.0	7,496.0	10,664.5	7,452.0	94.1	94.2	-86.27	-397.9	-3,205.2	660.9	473.0	187.87	3.518		
10,800.0	7,496.0	10,764.5	7,452.0	96.9	97.0	-86.27	-397.9	-3,305.2	660.9	467.5	193.38	3.418		
10,900.0	7,496.0	10,864.5	7,452.0	99.6	99.8	-86.27	-397.9	-3,405.2	660.9	462.0	198.89	3.323		
11,000.0	7,496.0	10,964.5	7,452.0	102.4	102.5	-86.27	-397.9	-3,505.2	660.9	456.5	204.40	3.234		
11,100.0	7,496.0	11,064.5	7,452.0	105.2	105.3	-86.27	-397.9	-3,605.2	661.0	451.0	209.93	3.149		
11,200.0	7,496.0	11,164.5	7,452.0	107.9	108.1	-86.27	-397.9	-3,705.2	661.0	445.5	215.45	3.068		
11,300.0	7,496.0	11,264.5	7,452.0	110.7	110.8	-86.27	-397.9	-3,805.2	661.0	440.0	220.98	2.991		
11,400.0	7,496.0	11,364.5	7,452.0	113.5	113.6	-86.27	-397.9	-3,905.2	661.0	434.5	226.51	2.918		
11,500.0	7,496.0	11,464.5	7,452.0	116.2	116.4	-86.27	-397.9	-4,005.2	661.0	429.0	232.05	2.849		
11,600.0	7,496.0	11,564.5	7,452.0	119.0	119.1	-86.27	-397.9	-4,105.2	661.0	423.5	237.58	2.782		
11,700.0	7,496.0	11,664.5	7,452.0	121.8	121.9	-86.27	-397.9	-4,205.2	661.1	417.9	243.12	2.719		
11,800.0	7,496.0	11,764.5	7,452.0	124.6	124.7	-86.27	-397.9	-4,305.2	661.1	412.4	248.67	2.659		
11,900.0	7,496.0	11,864.5	7,452.0	127.3	127.5	-86.27	-397.9	-4,405.2	661.1	406.9	254.21	2.601		
11,989.6	7,496.0	11,954.1	7,452.0	129.8	129.4	-86.27	-397.9	-4,494.8	661.1	402.5	258.65	2.556 SF		

SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W - SRC Phelps A-32CHZ - Wellbore #1 - Plan #2 (11-14-													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
0.0	0.0	0.0	0.0	0.0	0.0	-103.08	-4.9	-21.0	21.6					
100.0	100.0	100.0	100.0	0.1	0.1	-103.08	-4.9	-21.0	21.6	21.3	0.22	95.961		
200.0	200.0	200.0	200.0	0.3	0.3	-103.08	-4.9	-21.0	21.6	20.9	0.67	31.987		
300.0	300.0	300.0	300.0	0.6	0.6	-103.08	-4.9	-21.0	21.6	20.4	1.12	19.192		
400.0	400.0	400.0	400.0	0.8	0.8	-103.08	-4.9	-21.0	21.6	20.0	1.57	13.709		
500.0	500.0	500.0	500.0	1.0	1.0	-103.08	-4.9	-21.0	21.6	19.5	2.02	10.662		
600.0	600.0	600.0	600.0	1.2	1.2	-103.08	-4.9	-21.0	21.6	19.1	2.47	8.724		
700.0	700.0	700.0	700.0	1.5	1.5	-103.08	-4.9	-21.0	21.6	18.6	2.92	7.382		
800.0	800.0	800.0	800.0	1.7	1.7	-103.08	-4.9	-21.0	21.6	18.2	3.37	6.397		
900.0	900.0	900.0	900.0	1.9	1.9	-103.08	-4.9	-21.0	21.6	17.7	3.82	5.645		
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	-103.08	-4.9	-21.0	21.6	17.3	4.27	5.051	CC, ES	
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	-151.79	-4.9	-21.0	22.3	17.6	4.72	4.737		
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	-154.65	-4.9	-21.0	24.7	19.5	5.16	4.786		
1,300.0	1,299.9	1,299.7	1,299.7	2.8	2.8	-156.74	-4.2	-21.6	29.0	23.4	5.59	5.181		
1,400.0	1,399.7	1,399.3	1,399.2	3.0	3.0	-156.68	-2.2	-23.2	35.5	29.5	6.03	5.893		
1,500.0	1,499.4	1,498.6	1,498.5	3.3	3.2	-155.41	1.1	-26.0	44.3	37.8	6.46	6.850		
1,600.0	1,598.9	1,597.7	1,597.4	3.5	3.5	-153.67	5.7	-29.9	55.3	48.4	6.90	8.009		
1,625.9	1,624.7	1,623.3	1,622.9	3.6	3.5	-153.20	7.1	-31.1	58.5	51.5	7.02	8.338		
1,700.0	1,698.3	1,696.4	1,695.8	3.7	3.7	-151.71	11.6	-34.8	68.2	60.8	7.36	9.270		
1,800.0	1,797.7	1,796.7	1,795.7	4.0	3.9	-149.61	18.7	-39.7	80.9	73.0	7.81	10.348		
1,900.0	1,897.1	1,897.5	1,896.1	4.3	4.2	-147.68	26.8	-43.2	92.0	83.7	8.27	11.118		
2,000.0	1,996.5	1,998.5	1,996.7	4.5	4.4	-145.76	35.9	-45.1	101.6	92.8	8.74	11.615		
2,100.0	2,095.9	2,099.8	2,097.5	4.8	4.6	-143.79	45.9	-45.6	109.6	100.4	9.23	11.881		
2,200.0	2,195.3	2,201.3	2,198.4	5.1	4.9	-141.68	56.8	-44.5	116.3	106.5	9.73	11.952		
2,300.0	2,294.7	2,302.9	2,299.3	5.4	5.1	-139.39	68.8	-41.8	121.5	111.3	10.24	11.861		
2,400.0	2,394.1	2,404.6	2,400.0	5.6	5.4	-136.86	81.6	-37.7	125.4	114.6	10.78	11.636		
2,500.0	2,493.5	2,506.2	2,500.6	5.9	5.7	-134.04	95.4	-32.0	128.1	116.7	11.33	11.302		
2,600.0	2,592.9	2,607.8	2,600.8	6.2	5.9	-130.85	110.1	-24.8	129.6	117.7	11.91	10.886		
2,700.0	2,692.4	2,707.9	2,699.4	6.5	6.3	-127.45	125.2	-16.6	130.7	118.2	12.50	10.451		
2,800.0	2,791.8	2,807.6	2,797.6	6.8	6.6	-124.11	140.3	-8.5	132.1	119.0	13.11	10.077		
2,900.0	2,891.2	2,907.3	2,895.8	7.1	6.9	-120.86	155.4	-0.4	134.0	120.3	13.73	9.760		
3,000.0	2,990.6	3,006.9	2,994.0	7.4	7.2	-117.72	170.4	7.7	136.4	122.0	14.36	9.494		
3,100.0	3,090.0	3,106.6	3,092.3	7.7	7.5	-114.68	185.5	15.8	139.1	124.1	15.00	9.274		
3,200.0	3,189.4	3,206.3	3,190.5	7.9	7.9	-111.77	200.5	23.9	142.2	126.6	15.64	9.093		
3,300.0	3,288.8	3,306.0	3,288.7	8.2	8.2	-108.99	215.6	32.1	145.7	129.4	16.28	8.948		
3,400.0	3,388.2	3,405.7	3,386.9	8.5	8.6	-106.34	230.7	40.2	149.5	132.5	16.92	8.833		
3,500.0	3,487.6	3,505.4	3,485.1	8.8	8.9	-103.83	245.7	48.3	153.5	136.0	17.56	8.744		
3,600.0	3,587.0	3,605.1	3,583.3	9.1	9.3	-101.46	260.8	56.4	157.9	139.7	18.20	8.679		
3,700.0	3,686.4	3,704.8	3,681.6	9.4	9.6	-99.21	275.9	64.5	162.5	143.7	18.83	8.632		
3,800.0	3,785.8	3,804.5	3,779.8	9.7	10.0	-97.09	290.9	72.6	167.4	147.9	19.46	8.603		
3,900.0	3,885.2	3,904.2	3,878.0	10.0	10.3	-95.10	306.0	80.8	172.5	152.4	20.08	8.588		
4,000.0	3,984.6	4,003.9	3,976.2	10.3	10.7	-93.22	321.0	88.9	177.8	157.1	20.71	8.585		
4,100.0	4,084.0	4,103.6	4,074.4	10.6	11.0	-91.44	336.1	97.0	183.2	161.9	21.32	8.593		
4,200.0	4,183.4	4,203.3	4,172.6	10.9	11.4	-89.78	351.2	105.1	188.8	166.9	21.94	8.609		
4,300.0	4,282.8	4,303.0	4,270.8	11.2	11.8	-88.21	366.2	113.2	194.6	172.1	22.55	8.632		
4,400.0	4,382.2	4,402.7	4,369.1	11.5	12.1	-86.73	381.3	121.3	200.5	177.4	23.15	8.661		
4,500.0	4,481.6	4,502.4	4,467.3	11.8	12.5	-85.34	396.4	129.5	206.6	182.8	23.76	8.696		
4,600.0	4,581.0	4,602.1	4,565.5	12.1	12.9	-84.02	411.4	137.6	212.7	188.4	24.35	8.734		
4,707.3	4,687.7	4,709.0	4,670.8	12.4	13.3	-82.70	427.6	146.3	219.4	194.4	24.99	8.780		
4,800.0	4,780.0	4,801.4	4,761.8	12.6	13.6	-81.36	441.5	153.8	225.6	200.1	25.49	8.849		
4,900.0	4,879.8	4,900.7	4,859.7	12.8	14.0	-79.21	456.5	161.9	232.9	207.0	25.92	8.987		

COMPASS 2003.21 Build 46

<b>Company:</b>	Synergy Resources	<b>Local Co-ordinate Reference:</b>	Well SRC Phelps A-32NHZ
<b>Project:</b>	SEC.32-T1N-R66W	<b>TVD Reference:</b>	WELL @ 5031.0ft (Ensign Rig #17 - RKB - 12')
<b>Reference Site:</b>	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	<b>MD Reference:</b>	WELL @ 5031.0ft (Ensign Rig #17 - RKB - 12')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	SRC Phelps A-32NHZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #3 (11-14-13)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design		SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W - SRC Phelps A-32CHZ - Wellbore #1 - Plan #2 (11-14-										Offset Site Error:		0.0 ft	
Survey Program:		0-MWD										Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor			
5,000.0	4,979.8	4,999.5	4,957.1	13.0	14.4	-76.44	471.5	169.9	241.4	215.2	26.27	9.192			
5,020.2	5,000.0	5,019.5	4,976.7	13.0	14.4	-28.19	474.5	171.6	243.3	219.3	24.03	10.125			
5,100.0	5,079.8	5,098.1	5,054.1	13.2	14.7	-25.61	486.4	178.0	251.2	226.6	24.59	10.218			
5,200.0	5,179.8	5,196.6	5,151.2	13.3	15.1	-22.60	501.2	186.0	261.8	236.5	25.31	10.345			
5,300.0	5,279.8	5,295.1	5,248.2	13.5	15.5	-19.83	516.1	194.0	273.0	247.0	26.02	10.491			
5,400.0	5,379.8	5,393.6	5,345.3	13.7	15.8	-17.28	531.0	202.0	284.9	258.1	26.74	10.653			
5,500.0	5,479.8	5,492.1	5,442.3	13.9	16.2	-14.93	545.9	210.0	297.2	269.8	27.45	10.827			
5,600.0	5,579.8	5,590.6	5,539.4	14.1	16.6	-12.77	560.8	218.1	310.0	281.9	28.16	11.011			
5,700.0	5,679.8	5,689.2	5,636.5	14.3	16.9	-10.78	575.7	226.1	323.2	294.4	28.85	11.203			
5,800.0	5,779.8	5,787.7	5,733.5	14.5	17.3	-8.95	590.6	234.1	336.8	307.3	29.54	11.401			
5,900.0	5,879.8	5,886.2	5,830.6	14.7	17.7	-7.26	605.4	242.1	350.7	320.5	30.22	11.603			
6,000.0	5,979.8	5,984.7	5,927.6	14.9	18.1	-5.70	620.3	250.2	364.9	334.0	30.90	11.808			
6,100.0	6,079.8	6,085.3	6,026.7	15.1	18.4	-4.23	635.5	258.3	379.2	347.6	31.57	12.012			
6,200.0	6,179.8	6,197.1	6,137.3	15.2	18.8	-2.94	649.8	266.1	391.6	359.5	32.18	12.170			
6,300.0	6,279.8	6,309.9	6,249.5	15.4	19.0	-2.04	660.5	271.8	400.9	368.1	32.72	12.250			
6,400.0	6,379.8	6,423.6	6,362.9	15.6	19.3	-1.49	667.2	275.4	406.7	373.5	33.20	12.252			
6,500.0	6,479.8	6,537.6	6,476.9	15.8	19.4	-1.27	670.0	276.9	409.1	375.5	33.61	12.174			
6,600.0	6,579.8	6,640.5	6,579.8	16.0	19.6	-1.26	670.1	277.0	409.2	375.2	33.98	12.044			
6,700.0	6,679.8	6,740.5	6,679.8	16.2	19.8	-1.26	670.1	277.0	409.2	374.9	34.35	11.913			
6,800.0	6,779.8	6,840.6	6,779.8	16.4	19.9	-1.26	670.1	277.0	409.2	374.5	34.72	11.785			
6,850.0	6,829.7	6,890.5	6,829.7	16.5	20.0	88.97	670.1	277.0	409.2	376.6	32.63	12.541			
6,900.0	6,879.4	6,940.2	6,879.4	16.6	20.1	89.71	670.1	277.0	409.1	376.4	32.73	12.501			
6,914.2	6,893.5	6,954.2	6,893.5	16.6	20.1	90.00	670.1	277.0	409.1	376.4	32.75	12.494			
6,950.0	6,928.7	6,989.4	6,928.7	16.6	20.2	90.90	670.1	277.0	409.2	376.4	32.77	12.485			
7,000.0	6,977.2	7,039.2	6,978.4	16.7	20.2	92.30	670.1	275.1	409.5	376.7	32.77	12.494			
7,050.0	7,024.7	7,089.7	7,028.6	16.7	20.3	93.69	670.1	269.6	410.0	377.2	32.75	12.518			
7,100.0	7,071.1	7,141.0	7,079.0	16.7	20.3	95.08	670.1	260.4	410.8	378.1	32.72	12.553			
7,150.0	7,116.0	7,193.0	7,129.4	16.7	20.3	96.44	670.1	247.4	411.8	379.1	32.69	12.597			
7,200.0	7,159.3	7,245.9	7,179.5	16.7	20.3	97.78	670.1	230.5	413.1	380.4	32.67	12.645			
7,250.0	7,200.7	7,299.6	7,229.0	16.7	20.3	99.08	670.1	209.7	414.5	381.8	32.66	12.692			
7,300.0	7,240.1	7,354.1	7,277.5	16.7	20.3	100.35	670.1	184.7	416.1	383.4	32.68	12.732			
7,350.0	7,277.3	7,409.6	7,324.6	16.8	20.3	101.56	670.1	155.7	417.8	385.1	32.75	12.758			
7,400.0	7,312.0	7,465.8	7,370.1	16.8	20.3	102.71	670.1	122.5	419.7	386.8	32.89	12.761			
7,450.0	7,344.1	7,523.0	7,413.5	17.0	20.3	103.80	670.1	85.3	421.5	388.4	33.11	12.733			
7,500.0	7,373.5	7,580.9	7,454.3	17.2	20.3	104.81	670.1	44.2	423.4	390.0	33.43	12.665			
7,550.0	7,400.0	7,639.7	7,492.1	17.6	20.3	105.75	670.1	-0.8	425.3	391.4	33.89	12.551			
7,600.0	7,423.5	7,699.3	7,526.6	18.0	20.2	106.60	670.1	-49.3	427.1	392.6	34.48	12.386			
7,650.0	7,443.8	7,759.5	7,557.2	18.6	20.3	107.35	670.1	-101.2	428.8	393.5	35.25	12.163			
7,700.0	7,460.9	7,820.4	7,583.6	19.2	20.4	108.01	670.1	-156.0	430.3	394.1	36.20	11.886			
7,750.0	7,474.7	7,881.9	7,605.5	19.9	20.6	108.57	670.1	-213.5	431.6	394.3	37.33	11.563			
7,800.0	7,485.1	7,943.8	7,622.5	20.6	21.2	109.01	670.1	-273.0	432.7	394.1	38.63	11.202			
7,850.0	7,492.1	8,006.2	7,634.3	21.4	22.1	109.35	670.1	-334.2	433.5	393.4	40.10	10.810			
7,900.0	7,495.6	8,068.8	7,640.7	22.3	23.0	109.57	670.1	-396.5	434.1	392.4	41.74	10.401			
7,925.0	7,496.0	8,100.2	7,641.9	22.7	23.6	109.63	670.1	-427.9	434.3	391.7	42.60	10.194			
8,000.0	7,496.0	8,177.5	7,642.0	24.2	25.0	109.65	670.1	-505.2	434.3	389.0	45.25	9.596			
8,100.0	7,496.0	8,277.5	7,642.0	26.2	26.9	109.65	670.1	-605.2	434.3	385.2	49.02	8.859			
8,200.0	7,496.0	8,377.5	7,642.0	28.4	29.0	109.65	670.1	-705.2	434.2	381.2	53.04	8.187			
8,300.0	7,496.0	8,477.5	7,642.0	30.6	31.2	109.65	670.1	-805.2	434.2	377.0	57.28	7.581			
8,400.0	7,496.0	8,577.5	7,642.0	33.0	33.5	109.65	670.1	-905.2	434.2	372.5	61.68	7.040			
8,500.0	7,496.0	8,677.5	7,642.0	35.4	35.9	109.65	670.1	-1,005.2	434.2	368.0	66.21	6.558			

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

<b>Company:</b>	Synergy Resources	<b>Local Co-ordinate Reference:</b>	Well SRC Phelps A-32NHZ
<b>Project:</b>	SEC.32-T1N-R66W	<b>TVD Reference:</b>	WELL @ 5031.0ft (Ensign Rig #17 - RKB - 12')
<b>Reference Site:</b>	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	<b>MD Reference:</b>	WELL @ 5031.0ft (Ensign Rig #17 - RKB - 12')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	SRC Phelps A-32NHZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #3 (11-14-13)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design		SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W - SRC Phelps A-32CHZ - Wellbore #1 - Plan #2 (11-14-									Offset Site Error:		0.0 ft
Survey Program: 0-MWD											Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)		
8,600.0	7,496.0	8,777.5	7,642.0	37.9	38.3	109.65	670.1	-1,105.2	434.2	363.3	70.85	6.128	
8,700.0	7,496.0	8,877.5	7,642.0	40.4	40.8	109.65	670.1	-1,205.2	434.2	358.6	75.57	5.745	
8,800.0	7,496.0	8,977.5	7,642.0	42.9	43.3	109.65	670.1	-1,305.2	434.2	353.8	80.37	5.402	
8,900.0	7,496.0	9,077.5	7,642.0	45.5	45.8	109.65	670.1	-1,405.2	434.1	348.9	85.23	5.094	
9,000.0	7,496.0	9,177.5	7,642.0	48.1	48.4	109.65	670.1	-1,505.2	434.1	344.0	90.13	4.816	
9,100.0	7,496.0	9,277.5	7,642.0	50.7	51.0	109.65	670.1	-1,605.2	434.1	339.0	95.08	4.566	
9,200.0	7,496.0	9,377.5	7,642.0	53.4	53.6	109.65	670.1	-1,705.2	434.1	334.0	100.07	4.338	
9,300.0	7,496.0	9,477.5	7,642.0	56.0	56.2	109.65	670.1	-1,805.2	434.1	329.0	105.09	4.131	
9,400.0	7,496.0	9,577.5	7,642.0	58.7	58.9	109.65	670.2	-1,905.2	434.1	323.9	110.13	3.941	
9,500.0	7,496.0	9,677.5	7,642.0	61.4	61.5	109.66	670.2	-2,005.2	434.0	318.9	115.19	3.768	
9,600.0	7,496.0	9,777.5	7,642.0	64.1	64.2	109.66	670.2	-2,105.2	434.0	313.8	120.28	3.609	
9,700.0	7,496.0	9,877.5	7,642.0	66.8	66.9	109.66	670.2	-2,205.2	434.0	308.6	125.38	3.461	
9,800.0	7,496.0	9,977.5	7,642.0	69.5	69.6	109.66	670.2	-2,305.2	434.0	303.5	130.50	3.326	
9,900.0	7,496.0	10,077.5	7,642.0	72.2	72.3	109.66	670.2	-2,405.2	434.0	298.4	135.64	3.200	
10,000.0	7,496.0	10,177.5	7,642.0	74.9	75.0	109.66	670.2	-2,505.2	434.0	293.2	140.78	3.083	
10,100.0	7,496.0	10,277.5	7,642.0	77.6	77.7	109.66	670.2	-2,605.2	434.0	288.0	145.94	2.974	
10,200.0	7,496.0	10,377.5	7,642.0	80.4	80.4	109.66	670.2	-2,705.2	433.9	282.8	151.11	2.872	
10,300.0	7,496.0	10,477.5	7,642.0	83.1	83.1	109.66	670.2	-2,805.2	433.9	277.6	156.28	2.777	
10,400.0	7,496.0	10,577.5	7,642.0	85.9	85.9	109.66	670.2	-2,905.2	433.9	272.4	161.47	2.687	
10,500.0	7,496.0	10,677.5	7,642.0	88.6	88.6	109.66	670.2	-3,005.2	433.9	267.2	166.66	2.604	
10,600.0	7,496.0	10,777.5	7,642.0	91.4	91.4	109.66	670.2	-3,105.2	433.9	262.0	171.86	2.525	
10,700.0	7,496.0	10,877.5	7,642.0	94.1	94.1	109.66	670.2	-3,205.2	433.9	256.8	177.06	2.450	
10,800.0	7,496.0	10,977.5	7,642.0	96.9	96.9	109.66	670.2	-3,305.2	433.9	251.6	182.27	2.380	
10,900.0	7,496.0	11,077.5	7,642.0	99.6	99.6	109.67	670.2	-3,405.2	433.8	246.4	187.48	2.314	
11,000.0	7,496.0	11,177.5	7,642.0	102.4	102.4	109.67	670.2	-3,505.2	433.8	241.1	192.70	2.251	
11,100.0	7,496.0	11,277.5	7,642.0	105.2	105.1	109.67	670.2	-3,605.2	433.8	235.9	197.92	2.192	
11,200.0	7,496.0	11,377.5	7,642.0	107.9	107.9	109.67	670.2	-3,705.2	433.8	230.6	203.15	2.135	
11,300.0	7,496.0	11,477.5	7,642.0	110.7	110.6	109.67	670.2	-3,805.2	433.8	225.4	208.38	2.082	
11,400.0	7,496.0	11,577.5	7,642.0	113.5	113.4	109.67	670.2	-3,905.2	433.8	220.2	213.62	2.031	
11,500.0	7,496.0	11,677.5	7,642.0	116.2	116.2	109.67	670.2	-4,005.2	433.8	214.9	218.85	1.982	
11,600.0	7,496.0	11,777.5	7,642.0	119.0	118.9	109.67	670.2	-4,105.2	433.7	209.6	224.09	1.936	
11,700.0	7,496.0	11,877.5	7,642.0	121.8	121.7	109.67	670.2	-4,205.2	433.7	204.4	229.34	1.891	
11,800.0	7,496.0	11,977.5	7,642.0	124.6	124.5	109.67	670.2	-4,305.2	433.7	199.1	234.58	1.849	
11,900.0	7,496.0	12,077.5	7,642.0	127.3	127.2	109.67	670.2	-4,405.2	433.7	193.9	239.83	1.808	
11,967.1	7,496.0	12,144.6	7,642.0	129.2	129.1	109.67	670.2	-4,472.2	433.7	190.3	243.35	1.782	
11,989.6	7,496.0	12,166.8	7,642.0	129.8	129.7	109.67	670.2	-4,494.4	433.7	189.2	244.52	1.774 SF	

Reference Depths are relative to WELL @ 5031.0ft (Ensign Rig #17 - RCoordinates are relative to: SRC Phelps A-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°





Reference Depths are relative to WELL @ 5031.0ft (Ensign Rig #17 - RCoordinates are relative to: SRC Phelps A-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°

