Synergy Resources

Well Name: **SRC Phelps 12-32CHZ**

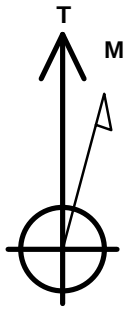
Surface Location: SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone
Ground Elevation: 5018.0

+N/-S	+E/-W	Northing	Easting	Latittude	Longitude	Slot
0.0	0.0	1247300.85	3198168.37	40.010057	-104.792532	

Ensign Rig #12 - RKB - 12' WELL @ 5030.0ft (Ensign Rig #12 - RKB - 12')

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
SHL 1781'FNL, 296'FEL	1.0	0.0	0.0	Point
BHL 1858'FNL, 460'FWL	7642.0	-77.9	-4540.0	Point



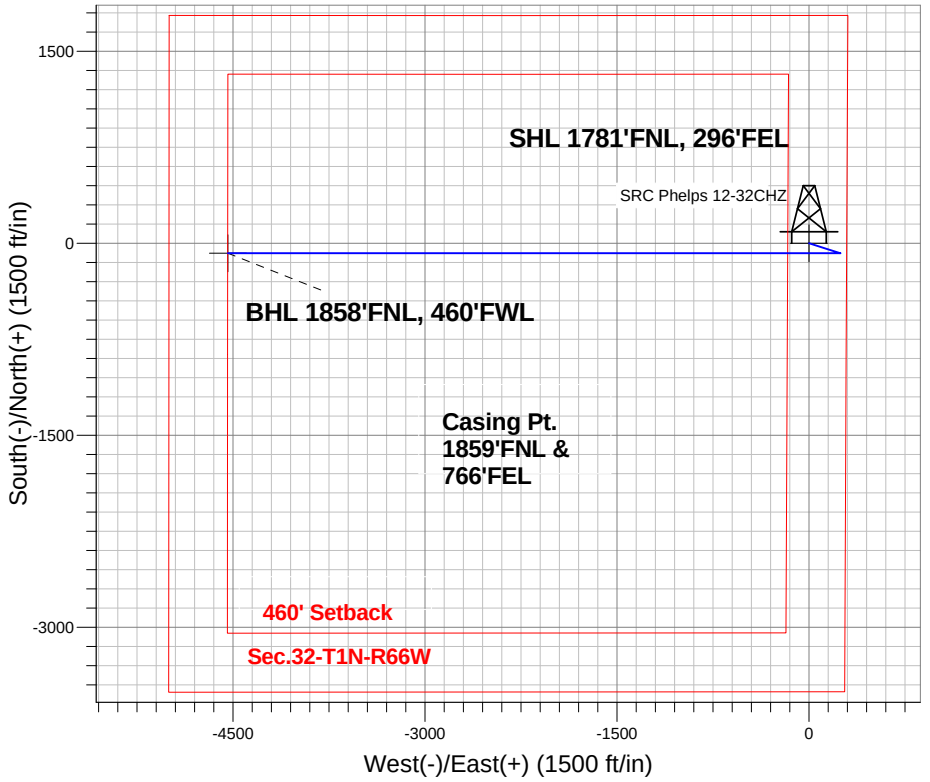
Azimuths to True North
Magnetic North: 8.53°

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 12-32CHZ
Plan #1 (10-28-13)
7:22, October 29 2013

ANNOTATIONS

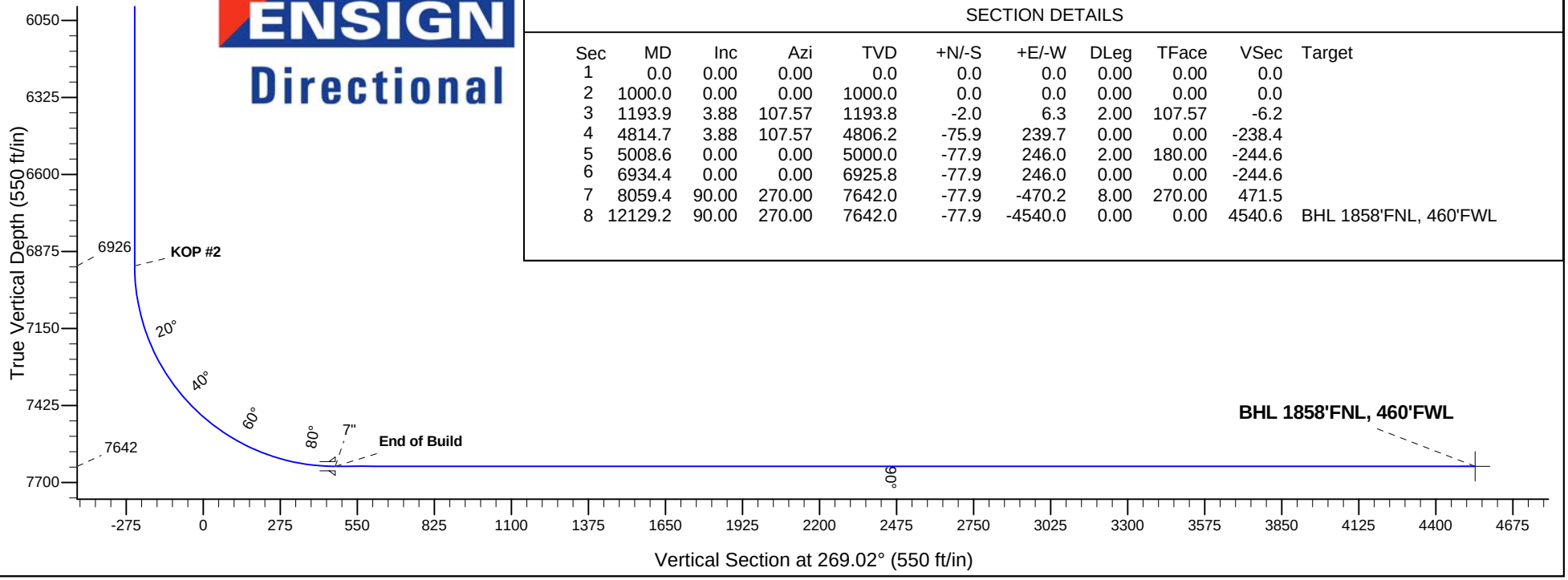
TVD	MD	Annotation
1000.0	1000.0	KOP #1
6925.8	6934.4	KOP #2
7642.0	8059.4	End of Build



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	1193.9	3.88	107.57	1193.8	-2.0	6.3	2.00	107.57	-6.2	
4	4814.7	3.88	107.57	4806.2	-75.9	239.7	0.00	0.00	-238.4	
5	5008.6	0.00	0.00	5000.0	-77.9	246.0	2.00	180.00	-244.6	
6	6934.4	0.00	0.00	6925.8	-77.9	246.0	0.00	0.00	-244.6	
7	8059.4	90.00	270.00	7642.0	-77.9	-470.2	8.00	270.00	471.5	
8	12129.2	90.00	270.00	7642.0	-77.9	-4540.0	0.00	0.00	4540.6	BHL 1858'FNL, 460'FWL



Synergy Resources

SEC.32-T1N-R66W
SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W
SRC Phelps 12-32CHZ

Wellbore #1

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

Standard Planning Report

29 October, 2013

Database:	Landmark	**Local Co-ordinate Reference:**	Well SRC Phelps 12-32CHZ
Company:	Synergy Resources	**TVD Reference:**	WELL @ 5030.0ft (Ensign Rig #12 - RKB - 12')
Project:	SEC.32-T1N-R66W	**MD Reference:**	WELL @ 5030.0ft (Ensign Rig #12 - RKB - 12')
Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	**North Reference:**	True
Well:	SRC Phelps 12-32CHZ	**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 12-32CHZ

Well Position	**+N/-S**	-20.8 ft	**Northing:**	1,247,300.85 ft	**Latitude:**	40.010057
	+E/-W	-95.5 ft	**Easting:**	3,198,168.37 ft	**Longitude:**	-104.792532
Position Uncertainty		0.0 ft	**Wellhead Elevation:**	ft	**Ground Level:**	5,018.0 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	269.02

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	
1,193.9	3.88	107.57	1,193.8	-2.0	6.3	2.00	2.00	0.00	107.57	
4,814.7	3.88	107.57	4,806.2	-75.9	239.7	0.00	0.00	0.00	0.00	
5,008.6	0.00	0.00	5,000.0	-77.9	246.0	2.00	-2.00	0.00	180.00	
6,934.4	0.00	0.00	6,925.8	-77.9	246.0	0.00	0.00	0.00	0.00	
8,059.4	90.00	270.00	7,642.0	-77.9	-470.2	8.00	8.00	0.00	270.00	
12,129.2	90.00	270.00	7,642.0	-77.9	-4,540.0	0.00	0.00	0.00	0.00	BHL 1858'FNL, 460

Database:	Landmark	**Local Co-ordinate Reference:**	Well SRC Phelps 12-32CHZ
Company:	Synergy Resources	**TVD Reference:**	WELL @ 5030.0ft (Ensign Rig #12 - RKB - 12')
Project:	SEC.32-T1N-R66W	**MD Reference:**	WELL @ 5030.0ft (Ensign Rig #12 - RKB - 12')
Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	**North Reference:**	True
Well:	SRC Phelps 12-32CHZ	**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 1781'FNL, 296'FEL									
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP #1									
1,100.0	2.00	107.57	1,100.0	-0.5	1.7	-1.7	2.00	2.00	0.00
1,193.9	3.88	107.57	1,193.8	-2.0	6.3	-6.2	2.00	2.00	0.00
1,200.0	3.88	107.57	1,199.8	-2.1	6.6	-6.6	0.00	0.00	0.00
1,300.0	3.88	107.57	1,299.6	-4.1	13.1	-13.0	0.00	0.00	0.00
1,400.0	3.88	107.57	1,399.4	-6.2	19.5	-19.4	0.00	0.00	0.00
1,500.0	3.88	107.57	1,499.2	-8.2	26.0	-25.8	0.00	0.00	0.00
1,600.0	3.88	107.57	1,598.9	-10.3	32.4	-32.3	0.00	0.00	0.00
1,700.0	3.88	107.57	1,698.7	-12.3	38.9	-38.7	0.00	0.00	0.00
1,800.0	3.88	107.57	1,798.5	-14.4	45.3	-45.1	0.00	0.00	0.00
1,900.0	3.88	107.57	1,898.2	-16.4	51.8	-51.5	0.00	0.00	0.00
2,000.0	3.88	107.57	1,998.0	-18.4	58.2	-57.9	0.00	0.00	0.00
2,100.0	3.88	107.57	2,097.8	-20.5	64.7	-64.3	0.00	0.00	0.00
2,200.0	3.88	107.57	2,197.5	-22.5	71.1	-70.7	0.00	0.00	0.00
2,300.0	3.88	107.57	2,297.3	-24.6	77.6	-77.1	0.00	0.00	0.00
2,400.0	3.88	107.57	2,397.1	-26.6	84.0	-83.6	0.00	0.00	0.00
2,500.0	3.88	107.57	2,496.9	-28.7	90.5	-90.0	0.00	0.00	0.00
2,600.0	3.88	107.57	2,596.6	-30.7	96.9	-96.4	0.00	0.00	0.00
2,700.0	3.88	107.57	2,696.4	-32.7	103.4	-102.8	0.00	0.00	0.00
2,800.0	3.88	107.57	2,796.2	-34.8	109.8	-109.2	0.00	0.00	0.00
2,900.0	3.88	107.57	2,895.9	-36.8	116.3	-115.6	0.00	0.00	0.00
3,000.0	3.88	107.57	2,995.7	-38.9	122.7	-122.0	0.00	0.00	0.00
3,100.0	3.88	107.57	3,095.5	-40.9	129.2	-128.5	0.00	0.00	0.00
3,200.0	3.88	107.57	3,195.3	-42.9	135.6	-134.9	0.00	0.00	0.00
3,300.0	3.88	107.57	3,295.0	-45.0	142.1	-141.3	0.00	0.00	0.00
3,400.0	3.88	107.57	3,394.8	-47.0	148.5	-147.7	0.00	0.00	0.00
3,500.0	3.88	107.57	3,494.6	-49.1	155.0	-154.1	0.00	0.00	0.00
3,600.0	3.88	107.57	3,594.3	-51.1	161.4	-160.5	0.00	0.00	0.00
3,700.0	3.88	107.57	3,694.1	-53.2	167.9	-166.9	0.00	0.00	0.00
3,800.0	3.88	107.57	3,793.9	-55.2	174.3	-173.3	0.00	0.00	0.00
3,900.0	3.88	107.57	3,893.7	-57.2	180.8	-179.8	0.00	0.00	0.00
4,000.0	3.88	107.57	3,993.4	-59.3	187.2	-186.2	0.00	0.00	0.00
4,100.0	3.88	107.57	4,093.2	-61.3	193.7	-192.6	0.00	0.00	0.00
4,200.0	3.88	107.57	4,193.0	-63.4	200.1	-199.0	0.00	0.00	0.00
4,300.0	3.88	107.57	4,292.7	-65.4	206.6	-205.4	0.00	0.00	0.00
4,400.0	3.88	107.57	4,392.5	-67.5	213.0	-211.8	0.00	0.00	0.00
4,500.0	3.88	107.57	4,492.3	-69.5	219.5	-218.2	0.00	0.00	0.00
4,600.0	3.88	107.57	4,592.1	-71.5	225.9	-224.6	0.00	0.00	0.00

Database:	Landmark	**Local Co-ordinate Reference:**	Well SRC Phelps 12-32CHZ
Company:	Synergy Resources	**TVD Reference:**	WELL @ 5030.0ft (Ensign Rig #12 - RKB - 12')
Project:	SEC.32-T1N-R66W	**MD Reference:**	WELL @ 5030.0ft (Ensign Rig #12 - RKB - 12')
Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	**North Reference:**	True
Well:	SRC Phelps 12-32CHZ	**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)
4,700.0	3.88	107.57	4,691.8	-73.6	232.4	-231.1	0.00	0.00	0.00
4,800.0	3.88	107.57	4,791.6	-75.6	238.8	-237.5	0.00	0.00	0.00
4,814.7	3.88	107.57	4,806.2	-75.9	239.7	-238.4	0.00	0.00	0.00
4,900.0	2.17	107.57	4,891.4	-77.3	244.0	-242.7	2.00	-2.00	0.00
5,000.0	0.17	107.57	4,991.4	-77.9	246.0	-244.6	2.00	-2.00	0.00
5,008.6	0.00	0.00	5,000.0	-77.9	246.0	-244.6	2.00	-2.00	0.00
5,100.0	0.00	0.00	5,091.4	-77.9	246.0	-244.6	0.00	0.00	0.00
5,200.0	0.00	0.00	5,191.4	-77.9	246.0	-244.6	0.00	0.00	0.00
5,300.0	0.00	0.00	5,291.4	-77.9	246.0	-244.6	0.00	0.00	0.00
5,400.0	0.00	0.00	5,391.4	-77.9	246.0	-244.6	0.00	0.00	0.00
5,500.0	0.00	0.00	5,491.4	-77.9	246.0	-244.6	0.00	0.00	0.00
5,600.0	0.00	0.00	5,591.4	-77.9	246.0	-244.6	0.00	0.00	0.00
5,700.0	0.00	0.00	5,691.4	-77.9	246.0	-244.6	0.00	0.00	0.00
5,800.0	0.00	0.00	5,791.4	-77.9	246.0	-244.6	0.00	0.00	0.00
5,900.0	0.00	0.00	5,891.4	-77.9	246.0	-244.6	0.00	0.00	0.00
6,000.0	0.00	0.00	5,991.4	-77.9	246.0	-244.6	0.00	0.00	0.00
6,100.0	0.00	0.00	6,091.4	-77.9	246.0	-244.6	0.00	0.00	0.00
6,200.0	0.00	0.00	6,191.4	-77.9	246.0	-244.6	0.00	0.00	0.00
6,300.0	0.00	0.00	6,291.4	-77.9	246.0	-244.6	0.00	0.00	0.00
6,400.0	0.00	0.00	6,391.4	-77.9	246.0	-244.6	0.00	0.00	0.00
6,500.0	0.00	0.00	6,491.4	-77.9	246.0	-244.6	0.00	0.00	0.00
6,600.0	0.00	0.00	6,591.4	-77.9	246.0	-244.6	0.00	0.00	0.00
6,700.0	0.00	0.00	6,691.4	-77.9	246.0	-244.6	0.00	0.00	0.00
6,800.0	0.00	0.00	6,791.4	-77.9	246.0	-244.6	0.00	0.00	0.00
6,900.0	0.00	0.00	6,891.4	-77.9	246.0	-244.6	0.00	0.00	0.00
6,934.4	0.00	0.00	6,925.8	-77.9	246.0	-244.6	0.00	0.00	0.00
KOP #2									
7,000.0	5.25	270.00	6,991.3	-77.9	243.0	-241.6	8.00	8.00	0.00
7,100.0	13.25	270.00	7,089.9	-77.9	226.9	-225.6	8.00	8.00	0.00
7,200.0	21.25	270.00	7,185.4	-77.9	197.3	-195.9	8.00	8.00	0.00
7,300.0	29.25	270.00	7,275.7	-77.9	154.7	-153.3	8.00	8.00	0.00
7,400.0	37.25	270.00	7,359.3	-77.9	99.9	-98.6	8.00	8.00	0.00
7,500.0	45.25	270.00	7,434.4	-77.9	34.0	-32.7	8.00	8.00	0.00
7,600.0	53.25	270.00	7,499.6	-77.9	-41.7	43.0	8.00	8.00	0.00
7,700.0	61.25	270.00	7,553.7	-77.9	-125.7	127.0	8.00	8.00	0.00
7,800.0	69.25	270.00	7,595.5	-77.9	-216.4	217.7	8.00	8.00	0.00
7,900.0	77.25	270.00	7,624.3	-77.9	-312.1	313.4	8.00	8.00	0.00
8,000.0	85.25	270.00	7,639.5	-77.9	-410.9	412.2	8.00	8.00	0.00
8,059.4	90.00	270.00	7,642.0	-77.9	-470.2	471.5	8.00	8.00	0.00
End of Build - 7"									
8,100.0	90.00	270.00	7,642.0	-77.9	-510.8	512.1	0.00	0.00	0.00
8,200.0	90.00	270.00	7,642.0	-77.9	-610.8	612.1	0.00	0.00	0.00
8,300.0	90.00	270.00	7,642.0	-77.9	-710.8	712.0	0.00	0.00	0.00
8,400.0	90.00	270.00	7,642.0	-77.9	-810.8	812.0	0.00	0.00	0.00
8,500.0	90.00	270.00	7,642.0	-77.9	-910.8	912.0	0.00	0.00	0.00
8,600.0	90.00	270.00	7,642.0	-77.9	-1,010.8	1,012.0	0.00	0.00	0.00
8,700.0	90.00	270.00	7,642.0	-77.9	-1,110.8	1,112.0	0.00	0.00	0.00
8,800.0	90.00	270.00	7,642.0	-77.9	-1,210.8	1,212.0	0.00	0.00	0.00
8,900.0	90.00	270.00	7,642.0	-77.9	-1,310.8	1,311.9	0.00	0.00	0.00
9,000.0	90.00	270.00	7,642.0	-77.9	-1,410.8	1,411.9	0.00	0.00	0.00
9,100.0	90.00	270.00	7,642.0	-77.9	-1,510.8	1,511.9	0.00	0.00	0.00

Database:	Landmark	**Local Co-ordinate Reference:**	Well SRC Phelps 12-32CHZ
Company:	Synergy Resources	**TVD Reference:**	WELL @ 5030.0ft (Ensign Rig #12 - RKB - 12')
Project:	SEC.32-T1N-R66W	**MD Reference:**	WELL @ 5030.0ft (Ensign Rig #12 - RKB - 12')
Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	**North Reference:**	True
Well:	SRC Phelps 12-32CHZ	**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)
9,200.0	90.00	270.00	7,642.0	-77.9	-1,610.8	1,611.9	0.00	0.00	0.00
9,300.0	90.00	270.00	7,642.0	-77.9	-1,710.8	1,711.9	0.00	0.00	0.00
9,400.0	90.00	270.00	7,642.0	-77.9	-1,810.8	1,811.9	0.00	0.00	0.00
9,500.0	90.00	270.00	7,642.0	-77.9	-1,910.8	1,911.9	0.00	0.00	0.00
9,600.0	90.00	270.00	7,642.0	-77.9	-2,010.8	2,011.8	0.00	0.00	0.00
9,700.0	90.00	270.00	7,642.0	-77.9	-2,110.8	2,111.8	0.00	0.00	0.00
9,800.0	90.00	270.00	7,642.0	-77.9	-2,210.8	2,211.8	0.00	0.00	0.00
9,900.0	90.00	270.00	7,642.0	-77.9	-2,310.8	2,311.8	0.00	0.00	0.00
10,000.0	90.00	270.00	7,642.0	-77.9	-2,410.8	2,411.8	0.00	0.00	0.00
10,100.0	90.00	270.00	7,642.0	-77.9	-2,510.8	2,511.8	0.00	0.00	0.00
10,200.0	90.00	270.00	7,642.0	-77.9	-2,610.8	2,611.8	0.00	0.00	0.00
10,300.0	90.00	270.00	7,642.0	-77.9	-2,710.8	2,711.7	0.00	0.00	0.00
10,400.0	90.00	270.00	7,642.0	-77.9	-2,810.8	2,811.7	0.00	0.00	0.00
10,500.0	90.00	270.00	7,642.0	-77.9	-2,910.8	2,911.7	0.00	0.00	0.00
10,600.0	90.00	270.00	7,642.0	-77.9	-3,010.8	3,011.7	0.00	0.00	0.00
10,700.0	90.00	270.00	7,642.0	-77.9	-3,110.8	3,111.7	0.00	0.00	0.00
10,800.0	90.00	270.00	7,642.0	-77.9	-3,210.8	3,211.7	0.00	0.00	0.00
10,900.0	90.00	270.00	7,642.0	-77.9	-3,310.8	3,311.7	0.00	0.00	0.00
11,000.0	90.00	270.00	7,642.0	-77.9	-3,410.8	3,411.6	0.00	0.00	0.00
11,100.0	90.00	270.00	7,642.0	-77.9	-3,510.8	3,511.6	0.00	0.00	0.00
11,200.0	90.00	270.00	7,642.0	-77.9	-3,610.8	3,611.6	0.00	0.00	0.00
11,300.0	90.00	270.00	7,642.0	-77.9	-3,710.8	3,711.6	0.00	0.00	0.00
11,400.0	90.00	270.00	7,642.0	-77.9	-3,810.8	3,811.6	0.00	0.00	0.00
11,500.0	90.00	270.00	7,642.0	-77.9	-3,910.8	3,911.6	0.00	0.00	0.00
11,600.0	90.00	270.00	7,642.0	-77.9	-4,010.8	4,011.6	0.00	0.00	0.00
11,700.0	90.00	270.00	7,642.0	-77.9	-4,110.8	4,111.5	0.00	0.00	0.00
11,800.0	90.00	270.00	7,642.0	-77.9	-4,210.8	4,211.5	0.00	0.00	0.00
11,900.0	90.00	270.00	7,642.0	-77.9	-4,310.8	4,311.5	0.00	0.00	0.00
12,000.0	90.00	270.00	7,642.0	-77.9	-4,410.8	4,411.5	0.00	0.00	0.00
12,100.0	90.00	270.00	7,642.0	-77.9	-4,510.8	4,511.5	0.00	0.00	0.00
12,129.2	90.00	270.00	7,642.0	-77.9	-4,540.0	4,540.6	0.00	0.00	0.00
BHL 1858'FNL, 460'FWL									

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
8,059.4	7,642.0	7"	7	7-1/2

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
1,000.0	1,000.0	0.0	0.0	KOP #1
6,934.4	6,925.8	-77.9	246.0	KOP #2
8,059.4	7,642.0	-77.9	-470.2	End of Build

ENSIGN Directional

Synergy Resources

SEC.32-T1N-R66W
SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W
SRC Phelps 12-32CHZ

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

Anticollision Report

29 October, 2013

Company:	Synergy Resources	**Local Co-ordinate Reference:**	Well SRC Phelps 12-32CHZ
Project:	SEC.32-T1N-R66W	**TVD Reference:**	WELL @ 5030.0ft (Ensign Rig #12 - RKB - 12')
Reference Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	**MD Reference:**	WELL @ 5030.0ft (Ensign Rig #12 - RKB - 12')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	SRC Phelps 12-32CHZ	**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	12,129.2	Plan #1 (10-28-13) (Wellbore #1)	MWD	MWD - Standard

Summary

Site Name / Offset Well - Wellbore - Design	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W						
SRC Phelps 11-32CHZ - Wellbore #1 - Plan #1 (10-28-13	200.0	200.0	22.6	22.0	33.562	CC, ES
SRC Phelps 11-32CHZ - Wellbore #1 - Plan #1 (10-28-13	500.0	498.0	31.9	29.9	15.573	SF
SRC Phelps 11-32NHZ - Wellbore #1 - Plan #1 (10-28-13	366.3	367.3	45.0	43.6	31.587	CC
SRC Phelps 11-32NHZ - Wellbore #1 - Plan #1 (10-28-13	400.0	401.0	45.0	43.4	28.553	ES
SRC Phelps 11-32NHZ - Wellbore #1 - Plan #1 (10-28-13	800.0	795.9	61.7	58.2	18.048	SF
SRC Phelps 12-32NHZ - Wellbore #1 - Plan #1 (10-28-13	1,000.0	1,000.0	22.4	18.1	5.235	CC, ES
SRC Phelps 12-32NHZ - Wellbore #1 - Plan #1 (10-28-13	12,129.2	11,961.8	380.5	152.1	1.666	SF
SRC Phelps A-32CHZ - Wellbore #1 - Plan #1 (10-28-13	566.3	567.3	75.4	73.1	32.452	CC
SRC Phelps A-32CHZ - Wellbore #1 - Plan #1 (10-28-13	600.0	601.0	75.4	72.9	30.467	ES
SRC Phelps A-32CHZ - Wellbore #1 - Plan #1 (10-28-13	12,129.2	12,158.6	738.4	477.2	2.827	SF
SRC Phelps A-32NHZ - Wellbore #1 - Plan #1 (10-28-13	766.3	767.3	97.8	94.5	30.336	CC
SRC Phelps A-32NHZ - Wellbore #1 - Plan #1 (10-28-13	800.0	800.0	97.8	94.4	28.996	ES
SRC Phelps A-32NHZ - Wellbore #1 - Plan #1 (10-28-13	12,129.2	11,938.4	381.8	153.1	1.669	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 Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	77.92	4.7	22.1	22.6				
100.0	100.0	100.0	100.0	0.1	0.1	77.92	4.7	22.1	22.6	22.4	0.22	100.686	
200.0	200.0	200.0	200.0	0.3	0.3	77.92	4.7	22.1	22.6	22.0	0.67	33.562	CC, ES
300.0	300.0	299.7	299.6	0.6	0.6	73.96	6.4	22.4	23.3	22.2	1.12	20.750	
400.0	400.0	399.1	398.9	0.8	0.8	63.62	11.6	23.3	26.0	24.4	1.58	16.466	
500.0	500.0	498.0	497.5	1.0	1.0	51.03	20.0	24.7	31.9	29.9	2.05	15.573	SF
600.0	600.0	596.3	595.0	1.2	1.3	40.12	31.7	26.7	41.8	39.2	2.55	16.398	
700.0	700.0	693.6	691.2	1.5	1.6	32.14	46.6	29.2	55.7	52.6	3.08	18.053	
800.0	800.0	789.8	785.6	1.7	2.0	26.64	64.4	32.3	73.4	69.8	3.66	20.048	
900.0	900.0	886.4	879.9	1.9	2.4	22.86	84.9	35.8	94.3	90.0	4.28	22.018	
1,000.0	1,000.0	984.0	975.2	2.1	2.8	20.39	105.9	39.4	115.6	110.7	4.92	23.510	
1,100.0	1,100.0	1,081.5	1,070.3	2.3	3.2	-89.18	126.9	42.9	137.1	132.3	4.86	28.198	
1,200.0	1,199.8	1,178.8	1,165.3	2.5	3.6	-91.82	147.8	46.5	158.9	153.6	5.30	29.973	

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

Company:	Synergy Resources	**Local Co-ordinate Reference:**	Well SRC Phelps 12-32CHZ
Project:	SEC.32-T1N-R66W	**TVD Reference:**	WELL @ 5030.0ft (Ensign Rig #12 - RKB - 12')
Reference Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	**MD Reference:**	WELL @ 5030.0ft (Ensign Rig #12 - RKB - 12')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	SRC Phelps 12-32CHZ	**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 Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
1,300.0	1,299.6	1,275.9	1,260.1	2.8	4.1	-94.63	168.7	50.0	181.1	175.3	5.75	31.489	
1,400.0	1,399.4	1,373.1	1,354.9	3.0	4.5	-96.82	189.6	53.6	203.6	197.4	6.21	32.772	
1,500.0	1,499.2	1,470.3	1,449.8	3.2	5.0	-98.58	210.5	57.2	226.4	219.7	6.69	33.859	
1,600.0	1,598.9	1,567.4	1,544.6	3.4	5.4	-100.02	231.4	60.7	249.3	242.1	7.17	34.785	
1,700.0	1,698.7	1,664.6	1,639.4	3.7	5.8	-101.21	252.3	64.3	272.4	264.7	7.66	35.580	
1,800.0	1,798.5	1,761.7	1,734.2	3.9	6.3	-102.22	273.2	67.8	295.5	287.4	8.15	36.268	
1,900.0	1,898.2	1,858.9	1,829.0	4.1	6.7	-103.09	294.1	71.4	318.7	310.1	8.65	36.866	
2,000.0	1,998.0	1,956.1	1,923.9	4.4	7.2	-103.83	315.0	75.0	342.0	332.9	9.15	37.390	
2,100.0	2,097.8	2,053.2	2,018.7	4.6	7.6	-104.48	335.9	78.5	365.3	355.7	9.65	37.852	
2,200.0	2,197.5	2,150.4	2,113.5	4.9	8.0	-105.05	356.8	82.1	388.7	378.5	10.16	38.262	
2,300.0	2,297.3	2,247.6	2,208.3	5.1	8.5	-105.56	377.7	85.6	412.1	401.4	10.67	38.628	
2,400.0	2,397.1	2,344.7	2,303.1	5.3	8.9	-106.01	398.6	89.2	435.5	424.3	11.18	38.956	
2,500.0	2,496.9	2,441.9	2,398.0	5.6	9.4	-106.42	419.5	92.8	459.0	447.3	11.69	39.252	
2,600.0	2,596.6	2,539.1	2,492.8	5.8	9.8	-106.79	440.4	96.3	482.4	470.2	12.21	39.520	
2,700.0	2,696.4	2,636.2	2,587.6	6.1	10.3	-107.12	461.3	99.9	505.9	493.2	12.72	39.763	
2,800.0	2,796.2	2,733.4	2,682.4	6.3	10.7	-107.43	482.2	103.4	529.4	516.2	13.24	39.985	
2,900.0	2,895.9	2,830.5	2,777.3	6.6	11.2	-107.70	503.2	107.0	552.9	539.2	13.76	40.188	
3,000.0	2,995.7	2,927.7	2,872.1	6.9	11.6	-107.96	524.1	110.6	576.5	562.2	14.28	40.375	
3,100.0	3,095.5	3,024.9	2,966.9	7.1	12.1	-108.19	545.0	114.1	600.0	585.2	14.80	40.547	
3,200.0	3,195.3	3,122.0	3,061.7	7.4	12.5	-108.41	565.9	117.7	623.5	608.2	15.32	40.705	
3,300.0	3,295.0	3,219.2	3,156.5	7.6	12.9	-108.61	586.8	121.2	647.1	631.3	15.84	40.853	
3,400.0	3,394.8	3,316.4	3,251.4	7.9	13.4	-108.80	607.7	124.8	670.6	654.3	16.36	40.989	
3,500.0	3,494.6	3,413.5	3,346.2	8.1	13.8	-108.98	628.6	128.4	694.2	677.3	16.88	41.117	
3,600.0	3,594.3	3,510.7	3,441.0	8.4	14.3	-109.14	649.5	131.9	717.8	700.4	17.41	41.236	
3,700.0	3,694.1	3,607.8	3,535.8	8.6	14.7	-109.29	670.4	135.5	741.4	723.4	17.93	41.347	
3,800.0	3,793.9	3,705.0	3,630.6	8.9	15.2	-109.44	691.3	139.0	764.9	746.5	18.45	41.451	
3,900.0	3,893.7	3,802.2	3,725.5	9.1	15.6	-109.57	712.2	142.6	788.5	769.5	18.98	41.549	
4,000.0	3,993.4	3,899.3	3,820.3	9.4	16.1	-109.70	733.1	146.2	812.1	792.6	19.50	41.640	
4,100.0	4,093.2	3,996.5	3,915.1	9.6	16.5	-109.82	754.0	149.7	835.7	815.7	20.03	41.727	
4,200.0	4,193.0	4,093.7	4,009.9	9.9	17.0	-109.93	774.9	153.3	859.3	838.7	20.55	41.808	
4,300.0	4,292.7	4,190.8	4,104.7	10.2	17.4	-110.04	795.8	156.8	882.9	861.8	21.08	41.886	
4,400.0	4,392.5	4,288.0	4,199.6	10.4	17.8	-110.14	816.7	160.4	906.5	884.9	21.60	41.959	
4,500.0	4,492.3	4,385.1	4,294.4	10.7	18.3	-110.24	837.6	163.9	930.1	908.0	22.13	42.028	
4,600.0	4,592.1	4,482.3	4,389.2	10.9	18.7	-110.33	858.5	167.5	953.7	931.0	22.66	42.093	
4,700.0	4,691.8	4,579.5	4,484.0	11.2	19.2	-110.42	879.4	171.1	977.3	954.1	23.18	42.155	

Company:	Synergy Resources	**Local Co-ordinate Reference:**	Well SRC Phelps 12-32CHZ
Project:	SEC.32-T1N-R66W	**TVD Reference:**	WELL @ 5030.0ft (Ensign Rig #12 - RKB - 12')
Reference Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	**MD Reference:**	WELL @ 5030.0ft (Ensign Rig #12 - RKB - 12')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	SRC Phelps 12-32CHZ	**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 11-32NHZ - Wellbore #1 - Plan #1 (10-28

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	1.0	1.0	0.0	0.0	77.85	9.5	44.0	45.0	45.0	0.00	N/A	
100.0	100.0	101.0	101.0	0.1	0.1	77.85	9.5	44.0	45.0	44.8	0.23	198.171	
200.0	200.0	201.0	201.0	0.3	0.3	77.85	9.5	44.0	45.0	44.3	0.68	66.496	
300.0	300.0	301.0	301.0	0.6	0.6	77.85	9.5	44.0	45.0	43.9	1.13	39.951	
366.3	366.3	367.3	367.3	0.7	0.7	77.85	9.5	44.0	45.0	43.6	1.42	31.587	CC
400.0	400.0	401.0	401.0	0.8	0.8	77.85	9.5	44.0	45.0	43.4	1.58	28.553	ES
500.0	500.0	500.0	500.0	1.0	1.0	75.84	11.2	44.3	45.7	43.7	2.02	22.603	
600.0	600.0	599.4	599.3	1.2	1.2	70.28	16.3	45.4	48.2	45.8	2.48	19.482	
700.0	700.0	698.0	697.5	1.5	1.5	62.38	24.6	47.1	53.3	50.3	2.94	18.145	
800.0	800.0	795.9	794.7	1.7	1.7	53.79	36.2	49.5	61.7	58.2	3.42	18.048	SF
900.0	900.0	892.9	890.5	1.9	2.0	45.89	50.9	52.5	73.9	70.0	3.93	18.801	
1,000.0	1,000.0	991.3	987.4	2.1	2.4	39.62	67.6	55.9	88.8	84.3	4.48	19.812	
1,100.0	1,100.0	1,089.7	1,084.3	2.3	2.7	-73.03	84.3	59.4	103.9	99.1	4.80	21.648	
1,200.0	1,199.8	1,188.0	1,181.1	2.5	3.0	-78.36	100.9	62.8	119.0	113.8	5.23	22.760	
1,300.0	1,299.6	1,286.1	1,277.8	2.8	3.4	-83.34	117.6	66.2	134.7	129.1	5.66	23.788	
1,400.0	1,399.4	1,384.3	1,374.4	3.0	3.8	-87.26	134.2	69.7	151.3	145.2	6.11	24.758	
1,500.0	1,499.2	1,482.4	1,471.1	3.2	4.1	-90.40	150.8	73.1	168.4	161.8	6.57	25.644	
1,600.0	1,598.9	1,580.6	1,567.8	3.4	4.5	-92.96	167.5	76.5	185.9	178.9	7.03	26.442	
1,700.0	1,698.7	1,678.7	1,664.4	3.7	4.9	-95.08	184.1	79.9	203.7	196.2	7.50	27.156	
1,800.0	1,798.5	1,776.9	1,761.1	3.9	5.2	-96.85	200.7	83.4	221.8	213.8	7.98	27.794	
1,900.0	1,898.2	1,875.0	1,857.8	4.1	5.6	-98.36	217.4	86.8	240.0	231.5	8.46	28.364	
2,000.0	1,998.0	1,973.2	1,954.4	4.4	6.0	-99.66	234.0	90.2	258.3	249.4	8.95	28.875	
2,100.0	2,097.8	2,071.3	2,051.1	4.6	6.4	-100.78	250.6	93.6	276.8	267.4	9.44	29.334	
2,200.0	2,197.5	2,169.4	2,147.7	4.9	6.7	-101.77	267.3	97.1	295.4	285.4	9.93	29.747	
2,300.0	2,297.3	2,267.6	2,244.4	5.1	7.1	-102.64	283.9	100.5	314.0	303.6	10.42	30.121	
2,400.0	2,397.1	2,365.7	2,341.1	5.3	7.5	-103.41	300.6	103.9	332.7	321.8	10.92	30.461	
2,500.0	2,496.9	2,463.9	2,437.7	5.6	7.9	-104.10	317.2	107.3	351.4	340.0	11.42	30.770	
2,600.0	2,596.6	2,562.0	2,534.4	5.8	8.2	-104.71	333.8	110.8	370.2	358.3	11.92	31.053	
2,700.0	2,696.4	2,660.2	2,631.1	6.1	8.6	-105.27	350.5	114.2	389.1	376.6	12.42	31.312	
2,800.0	2,796.2	2,758.3	2,727.7	6.3	9.0	-105.78	367.1	117.6	407.9	395.0	12.93	31.551	
2,900.0	2,895.9	2,856.5	2,824.4	6.6	9.4	-106.24	383.7	121.0	426.8	413.4	13.43	31.770	
3,000.0	2,995.7	2,954.6	2,921.1	6.9	9.7	-106.67	400.4	124.5	445.7	431.8	13.94	31.974	
3,100.0	3,095.5	3,052.7	3,017.7	7.1	10.1	-107.06	417.0	127.9	464.6	450.2	14.45	32.162	
3,200.0	3,195.3	3,150.9	3,114.4	7.4	10.5	-107.41	433.7	131.3	483.6	468.6	14.95	32.337	
3,300.0	3,295.0	3,249.0	3,211.0	7.6	10.9	-107.75	450.3	134.7	502.6	487.1	15.46	32.500	
3,400.0	3,394.8	3,347.2	3,307.7	7.9	11.3	-108.05	466.9	138.2	521.6	505.6	15.97	32.653	
3,500.0	3,494.6	3,445.3	3,404.4	8.1	11.6	-108.34	483.6	141.6	540.6	524.1	16.48	32.795	
3,600.0	3,594.3	3,543.5	3,501.0	8.4	12.0	-108.61	500.2	145.0	559.6	542.6	16.99	32.929	
3,700.0	3,694.1	3,641.6	3,597.7	8.6	12.4	-108.85	516.8	148.4	578.6	561.1	17.50	33.054	
3,800.0	3,793.9	3,739.7	3,694.4	8.9	12.8	-109.09	533.5	151.9	597.6	579.6	18.02	33.172	
3,900.0	3,893.7	3,837.9	3,791.0	9.1	13.2	-109.31	550.1	155.3	616.7	598.1	18.53	33.283	
4,000.0	3,993.4	3,936.0	3,887.7	9.4	13.5	-109.51	566.7	158.7	635.7	616.7	19.04	33.388	
4,100.0	4,093.2	4,034.2	3,984.4	9.6	13.9	-109.71	583.4	162.1	654.8	635.2	19.55	33.487	
4,200.0	4,193.0	4,132.3	4,081.0	9.9	14.3	-109.89	600.0	165.6	673.8	653.8	20.07	33.581	
4,300.0	4,292.7	4,230.5	4,177.7	10.2	14.7	-110.06	616.7	169.0	692.9	672.3	20.58	33.670	
4,400.0	4,392.5	4,328.6	4,274.3	10.4	15.1	-110.22	633.3	172.4	712.0	690.9	21.09	33.754	
4,500.0	4,492.3	4,426.8	4,371.0	10.7	15.4	-110.38	649.9	175.8	731.0	709.4	21.61	33.834	
4,600.0	4,592.1	4,524.9	4,467.7	10.9	15.8	-110.53	666.6	179.3	750.1	728.0	22.12	33.911	
4,700.0	4,691.8	4,623.0	4,564.3	11.2	16.2	-110.67	683.2	182.7	769.2	746.6	22.64	33.983	
4,800.0	4,791.6	4,721.2	4,661.0	11.4	16.6	-110.80	699.8	186.1	788.3	765.2	23.15	34.052	
4,900.0	4,891.4	4,819.4	4,757.8	11.7	17.0	-111.14	716.5	189.5	807.0	783.3	23.66	34.100	

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

Company:	Synergy Resources	**Local Co-ordinate Reference:**	Well SRC Phelps 12-32CHZ
Project:	SEC.32-T1N-R66W	**TVD Reference:**	WELL @ 5030.0ft (Ensign Rig #12 - RKB - 12')
Reference Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	**MD Reference:**	WELL @ 5030.0ft (Ensign Rig #12 - RKB - 12')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	SRC Phelps 12-32CHZ	**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 11-32NHZ - Wellbore #1 - Plan #1 (10-28

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,000.0	4,991.4	4,917.9	4,854.7	11.8	17.3	-111.28	733.2	193.0	824.4	800.3	24.13	34.159	
5,100.0	5,091.4	5,016.4	4,951.7	12.0	17.7	-3.43	749.9	196.4	841.1	812.5	28.66	29.353	
5,200.0	5,191.4	5,114.8	5,048.7	12.2	18.1	-3.13	766.6	199.9	857.8	828.6	29.23	29.344	
5,300.0	5,291.4	5,213.3	5,145.7	12.4	18.5	-2.84	783.3	203.3	874.6	844.8	29.81	29.336	
5,400.0	5,391.4	5,311.8	5,242.7	12.6	18.9	-2.56	800.0	206.7	891.4	861.0	30.39	29.328	
5,500.0	5,491.4	5,410.3	5,339.7	12.8	19.2	-2.29	816.7	210.2	908.2	877.2	30.98	29.319	
5,600.0	5,591.4	5,508.8	5,436.7	13.0	19.6	-2.04	833.4	213.6	925.0	893.5	31.56	29.311	
5,700.0	5,691.4	5,607.3	5,533.7	13.2	20.0	-1.79	850.0	217.0	941.9	909.7	32.14	29.302	
5,800.0	5,791.4	5,705.8	5,630.7	13.4	20.4	-1.55	866.7	220.5	958.7	926.0	32.73	29.293	
5,900.0	5,891.4	5,804.3	5,727.7	13.6	20.8	-1.32	883.4	223.9	975.6	942.3	33.31	29.285	
6,000.0	5,991.4	5,902.8	5,824.7	13.8	21.2	-1.09	900.1	227.4	992.5	958.6	33.90	29.276	

Company:	Synergy Resources	**Local Co-ordinate Reference:**	Well SRC Phelps 12-32CHZ
Project:	SEC.32-T1N-R66W	**TVD Reference:**	WELL @ 5030.0ft (Ensign Rig #12 - RKB - 12')
Reference Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	**MD Reference:**	WELL @ 5030.0ft (Ensign Rig #12 - RKB - 12')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	SRC Phelps 12-32CHZ	**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 12-32NHZ - Wellbore #1 - Plan #1 (10-28

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-102.24	-4.7	-21.8	22.4				
100.0	100.0	100.0	100.0	0.1	0.1	-102.24	-4.7	-21.8	22.4	22.1	0.22	99.471	
200.0	200.0	200.0	200.0	0.3	0.3	-102.24	-4.7	-21.8	22.4	21.7	0.67	33.157	
300.0	300.0	300.0	300.0	0.6	0.6	-102.24	-4.7	-21.8	22.4	21.2	1.12	19.894	
400.0	400.0	400.0	400.0	0.8	0.8	-102.24	-4.7	-21.8	22.4	20.8	1.57	14.210	
500.0	500.0	500.0	500.0	1.0	1.0	-102.24	-4.7	-21.8	22.4	20.3	2.02	11.052	
600.0	600.0	600.0	600.0	1.2	1.2	-102.24	-4.7	-21.8	22.4	19.9	2.47	9.043	
700.0	700.0	700.0	700.0	1.5	1.5	-102.24	-4.7	-21.8	22.4	19.4	2.92	7.652	
800.0	800.0	800.0	800.0	1.7	1.7	-102.24	-4.7	-21.8	22.4	19.0	3.37	6.631	
900.0	900.0	900.0	900.0	1.9	1.9	-102.24	-4.7	-21.8	22.4	18.5	3.82	5.851	
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	-102.24	-4.7	-21.8	22.4	18.1	4.27	5.235	CC, ES
1,100.0	1,100.0	1,100.0	1,100.0	2.3	2.4	152.26	-4.7	-21.8	23.9	19.2	4.70	5.081	
1,200.0	1,199.8	1,199.8	1,199.8	2.5	2.6	157.10	-4.7	-21.8	28.6	23.5	5.12	5.594	
1,300.0	1,299.6	1,299.6	1,299.6	2.8	2.8	161.42	-4.7	-21.8	35.0	29.4	5.54	6.311	
1,400.0	1,399.4	1,399.4	1,399.4	3.0	3.0	164.40	-4.7	-21.8	41.4	35.5	5.96	6.944	
1,500.0	1,499.2	1,499.2	1,499.2	3.2	3.3	166.57	-4.7	-21.8	48.0	41.6	6.40	7.501	
1,600.0	1,598.9	1,598.9	1,598.9	3.4	3.5	168.22	-4.7	-21.8	54.6	47.7	6.83	7.991	
1,700.0	1,698.7	1,698.7	1,698.7	3.7	3.7	169.51	-4.7	-21.8	61.2	53.9	7.27	8.425	
1,800.0	1,798.5	1,798.5	1,798.5	3.9	3.9	170.55	-4.7	-21.8	67.9	60.2	7.70	8.811	
1,900.0	1,898.2	1,898.2	1,898.2	4.1	4.2	171.41	-4.7	-21.8	74.6	66.4	8.14	9.156	
2,000.0	1,998.0	1,998.0	1,998.0	4.4	4.4	172.12	-4.7	-21.8	81.2	72.7	8.58	9.465	
2,100.0	2,097.8	2,099.9	2,099.8	4.6	4.6	171.91	-6.2	-20.9	86.8	77.8	9.00	9.637	
2,200.0	2,197.5	2,201.9	2,201.7	4.9	4.8	170.03	-10.7	-17.9	89.9	80.5	9.40	9.562	
2,300.0	2,297.3	2,303.8	2,303.2	5.1	5.0	166.52	-18.1	-12.9	90.9	81.1	9.82	9.262	
2,400.0	2,397.1	2,404.9	2,403.6	5.3	5.2	161.32	-28.4	-6.1	90.4	80.1	10.25	8.813	
2,483.2	2,480.1	2,487.8	2,485.7	5.6	5.3	156.55	-37.6	0.0	90.1	79.4	10.63	8.469	
2,500.0	2,496.9	2,504.5	2,502.3	5.6	5.4	155.59	-39.4	1.2	90.1	79.4	10.71	8.408	
2,600.0	2,596.6	2,604.1	2,601.0	5.8	5.6	149.89	-50.4	8.5	90.7	79.5	11.19	8.100	
2,700.0	2,696.4	2,703.7	2,699.7	6.1	5.8	144.31	-61.4	15.8	92.2	80.5	11.70	7.878	
2,800.0	2,796.2	2,803.3	2,798.4	6.3	6.1	138.96	-72.4	23.2	94.5	82.3	12.22	7.732	
2,900.0	2,895.9	2,902.8	2,897.1	6.6	6.3	133.91	-83.4	30.5	97.6	84.9	12.76	7.652	
3,000.0	2,995.7	3,002.4	2,995.8	6.9	6.6	129.20	-94.4	37.8	101.5	88.2	13.30	7.629	
3,100.0	3,095.5	3,102.0	3,094.5	7.1	6.9	124.86	-105.4	45.1	105.9	92.1	13.85	7.650	
3,200.0	3,195.3	3,201.6	3,193.2	7.4	7.1	120.90	-116.4	52.4	111.0	96.6	14.40	7.709	
3,300.0	3,295.0	3,301.2	3,292.0	7.6	7.4	117.29	-127.3	59.7	116.5	101.6	14.94	7.798	
3,400.0	3,394.8	3,400.8	3,390.7	7.9	7.7	114.01	-138.3	67.0	122.5	107.0	15.48	7.908	
3,500.0	3,494.6	3,500.4	3,489.4	8.1	8.0	111.05	-149.3	74.3	128.8	112.7	16.02	8.035	
3,600.0	3,594.3	3,600.0	3,588.1	8.4	8.3	108.37	-160.3	81.6	135.4	118.8	16.56	8.175	
3,700.0	3,694.1	3,699.6	3,686.8	8.6	8.6	105.94	-171.3	89.0	142.3	125.2	17.09	8.323	
3,800.0	3,793.9	3,799.1	3,785.5	8.9	8.9	103.74	-182.3	96.3	149.4	131.8	17.62	8.477	
3,900.0	3,893.7	3,898.7	3,884.2	9.1	9.2	101.74	-193.3	103.6	156.7	138.5	18.15	8.635	
4,000.0	3,993.4	3,998.3	3,982.9	9.4	9.5	99.93	-204.3	110.9	164.2	145.5	18.67	8.794	
4,100.0	4,093.2	4,097.9	4,081.6	9.6	9.8	98.27	-215.3	118.2	171.8	152.6	19.19	8.953	
4,200.0	4,193.0	4,197.5	4,180.4	9.9	10.1	96.75	-226.2	125.5	179.6	159.9	19.71	9.111	
4,300.0	4,292.7	4,297.1	4,279.1	10.2	10.4	95.36	-237.2	132.8	187.5	167.2	20.23	9.267	
4,400.0	4,392.5	4,396.7	4,377.8	10.4	10.8	94.08	-248.2	140.1	195.5	174.7	20.75	9.421	
4,500.0	4,492.3	4,496.3	4,476.5	10.7	11.1	92.91	-259.2	147.4	203.5	182.3	21.26	9.572	
4,600.0	4,592.1	4,595.9	4,575.2	10.9	11.4	91.82	-270.2	154.8	211.7	189.9	21.78	9.720	
4,700.0	4,691.8	4,695.5	4,673.9	11.2	11.7	90.81	-281.2	162.1	219.9	197.6	22.29	9.865	
4,800.0	4,791.6	4,795.0	4,772.6	11.4	12.0	89.88	-292.2	169.4	228.2	205.4	22.81	10.006	
4,900.0	4,891.4	4,894.6	4,871.3	11.7	12.4	88.85	-303.2	176.7	236.6	213.3	23.28	10.160	

Company:	Synergy Resources	**Local Co-ordinate Reference:**	Well SRC Phelps 12-32CHZ
Project:	SEC.32-T1N-R66W	**TVD Reference:**	WELL @ 5030.0ft (Ensign Rig #12 - RKB - 12')
Reference Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	**MD Reference:**	WELL @ 5030.0ft (Ensign Rig #12 - RKB - 12')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	SRC Phelps 12-32CHZ	**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 12-32NHZ - Wellbore #1 - Plan #1 (10-28

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,000.0	4,991.4	4,993.9	4,969.7	11.8	12.7	87.12	-314.1	184.0	245.2	221.5	23.69	10.351	
5,100.0	5,091.4	5,093.0	5,068.0	12.0	13.0	-167.51	-325.1	191.2	254.2	231.1	23.09	11.008	
5,200.0	5,191.4	5,192.1	5,166.2	12.2	13.3	-169.58	-336.0	198.5	263.6	240.0	23.66	11.143	
5,300.0	5,291.4	5,291.2	5,264.4	12.4	13.6	-171.50	-346.9	205.8	273.4	249.1	24.23	11.282	
5,400.0	5,391.4	5,390.4	5,362.7	12.6	14.0	-173.29	-357.9	213.1	283.4	258.6	24.80	11.426	
5,500.0	5,491.4	5,489.5	5,460.9	12.8	14.3	-174.96	-368.8	220.3	293.6	268.2	25.37	11.573	
5,600.0	5,591.4	5,588.6	5,559.2	13.0	14.6	-176.52	-379.7	227.6	304.1	278.2	25.94	11.723	
5,700.0	5,691.4	5,691.4	5,661.1	13.2	14.9	-177.99	-390.8	235.0	314.6	288.1	26.51	11.866	
5,800.0	5,791.4	5,800.9	5,770.0	13.4	15.2	-179.12	-399.9	241.0	322.7	295.7	27.02	11.945	
5,900.0	5,891.4	5,911.1	5,880.0	13.6	15.4	-179.78	-405.5	244.8	327.8	300.3	27.48	11.930	
6,000.0	5,991.4	6,021.6	5,990.5	13.8	15.6	179.98	-407.6	246.1	329.7	301.8	27.89	11.820	
6,100.0	6,091.4	6,122.5	6,091.4	13.9	15.8	179.97	-407.6	246.2	329.7	301.4	28.27	11.661	
6,200.0	6,191.4	6,222.5	6,191.4	14.1	16.0	179.97	-407.6	246.2	329.7	301.0	28.65	11.509	
6,300.0	6,291.4	6,322.5	6,291.4	14.3	16.1	179.97	-407.6	246.2	329.7	300.7	29.02	11.359	
6,400.0	6,391.4	6,422.5	6,391.4	14.5	16.3	179.97	-407.6	246.2	329.7	300.3	29.40	11.213	
6,500.0	6,491.4	6,522.5	6,491.4	14.7	16.5	179.97	-407.6	246.2	329.7	299.9	29.78	11.069	
6,600.0	6,591.4	6,622.5	6,591.4	14.9	16.6	179.97	-407.6	246.2	329.7	299.5	30.17	10.929	
6,700.0	6,691.4	6,722.5	6,691.4	15.1	16.8	179.97	-407.6	246.2	329.7	299.1	30.55	10.791	
6,759.1	6,750.5	6,781.6	6,750.5	15.3	16.9	-180.00	-407.6	246.0	329.7	298.9	30.78	10.712	
6,800.0	6,791.4	6,822.4	6,791.3	15.3	17.0	-179.65	-407.6	244.0	329.7	298.8	30.92	10.664	
6,900.0	6,891.4	6,920.1	6,887.9	15.5	17.1	-177.19	-407.6	229.8	330.1	298.9	31.17	10.589	
7,000.0	6,991.3	7,013.3	6,977.4	15.7	17.1	-83.09	-407.6	204.2	332.3	300.8	31.47	10.559	
7,100.0	7,089.9	7,103.6	7,060.2	15.8	17.1	-79.06	-407.6	168.5	336.2	304.4	31.76	10.584	
7,200.0	7,185.4	7,191.5	7,135.9	15.9	17.2	-75.33	-407.6	123.9	341.3	309.4	31.93	10.690	
7,300.0	7,275.7	7,277.3	7,204.1	16.0	17.2	-71.97	-407.6	71.8	347.4	315.4	32.01	10.852	
7,400.0	7,359.3	7,361.5	7,264.4	16.1	17.2	-69.01	-407.6	13.2	353.9	321.8	32.07	11.035	
7,500.0	7,434.4	7,444.2	7,316.6	16.4	17.2	-66.47	-407.6	-51.0	360.3	328.1	32.21	11.184	
7,600.0	7,499.6	7,525.8	7,360.5	16.8	17.2	-64.36	-407.6	-119.7	366.3	333.7	32.60	11.236	
7,700.0	7,553.7	7,606.5	7,395.9	17.6	17.9	-62.68	-407.6	-192.1	371.5	338.1	33.37	11.133	
7,800.0	7,595.5	7,686.4	7,422.7	18.6	18.9	-61.41	-407.6	-267.4	375.7	341.1	34.65	10.843	
7,900.0	7,624.3	7,765.9	7,440.9	20.0	20.1	-60.56	-407.6	-344.7	378.7	342.2	36.50	10.374	
8,000.0	7,639.5	7,850.0	7,450.8	21.6	21.6	-60.10	-407.6	-428.2	380.3	341.3	38.99	9.753	
8,011.8	7,640.5	7,854.4	7,451.0	21.8	21.7	-60.09	-407.6	-432.6	380.4	341.1	39.25	9.691	
8,100.0	7,642.0	7,932.6	7,452.0	23.5	23.2	-60.05	-407.6	-510.8	380.5	338.6	41.96	9.069	
8,200.0	7,642.0	8,032.6	7,452.0	25.5	25.2	-60.05	-407.6	-610.8	380.5	335.1	45.44	8.373	
8,300.0	7,642.0	8,132.6	7,452.0	27.6	27.4	-60.05	-407.6	-710.8	380.5	331.3	49.17	7.738	
8,400.0	7,642.0	8,232.6	7,452.0	29.9	29.6	-60.04	-407.6	-810.8	380.5	327.4	53.09	7.167	
8,500.0	7,642.0	8,332.6	7,452.0	32.2	32.0	-60.04	-407.6	-910.8	380.5	323.3	57.17	6.656	
8,600.0	7,642.0	8,432.6	7,452.0	34.6	34.4	-60.04	-407.6	-1,010.8	380.5	319.2	61.37	6.201	
8,700.0	7,642.0	8,532.6	7,452.0	37.1	36.9	-60.04	-407.6	-1,110.8	380.5	314.9	65.66	5.795	
8,800.0	7,642.0	8,632.6	7,452.0	39.6	39.4	-60.04	-407.6	-1,210.8	380.5	310.5	70.04	5.433	
8,900.0	7,642.0	8,732.6	7,452.0	42.2	42.0	-60.04	-407.6	-1,310.8	380.5	306.0	74.48	5.109	
9,000.0	7,642.0	8,832.6	7,452.0	44.7	44.5	-60.04	-407.6	-1,410.8	380.5	301.5	78.98	4.818	
9,100.0	7,642.0	8,932.6	7,452.0	47.3	47.2	-60.04	-407.6	-1,510.8	380.5	297.0	83.52	4.556	
9,200.0	7,642.0	9,032.6	7,452.0	50.0	49.8	-60.04	-407.6	-1,610.8	380.5	292.4	88.11	4.319	
9,300.0	7,642.0	9,132.6	7,452.0	52.6	52.4	-60.04	-407.6	-1,710.8	380.5	287.8	92.72	4.104	
9,400.0	7,642.0	9,232.6	7,452.0	55.3	55.1	-60.04	-407.6	-1,810.8	380.5	283.1	97.37	3.908	
9,500.0	7,642.0	9,332.6	7,452.0	57.9	57.8	-60.04	-407.6	-1,910.8	380.5	278.5	102.04	3.729	
9,600.0	7,642.0	9,432.6	7,452.0	60.6	60.5	-60.04	-407.6	-2,010.8	380.5	273.8	106.73	3.565	
9,700.0	7,642.0	9,532.6	7,452.0	63.3	63.2	-60.04	-407.6	-2,110.8	380.5	269.1	111.44	3.415	

Company:	Synergy Resources	**Local Co-ordinate Reference:**	Well SRC Phelps 12-32CHZ
Project:	SEC.32-T1N-R66W	**TVD Reference:**	WELL @ 5030.0ft (Ensign Rig #12 - RKB - 12')
Reference Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	**MD Reference:**	WELL @ 5030.0ft (Ensign Rig #12 - RKB - 12')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	SRC Phelps 12-32CHZ	**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 12-32NHZ - Wellbore #1 - Plan #1 (10-28

Offset Site Error: 0.0 ft

Survey Program: 0-MWD **Offset Well Error:** 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
9,800.0	7,642.0	9,632.6	7,452.0	66.0	65.9	-60.04	-407.6	-2,210.8	380.5	264.3	116.17	3.276	
9,900.0	7,642.0	9,732.6	7,452.0	68.7	68.6	-60.04	-407.6	-2,310.8	380.5	259.6	120.91	3.147	
10,000.0	7,642.0	9,832.6	7,452.0	71.5	71.3	-60.04	-407.6	-2,410.8	380.5	254.9	125.66	3.028	
10,100.0	7,642.0	9,932.6	7,452.0	74.2	74.0	-60.04	-407.6	-2,510.8	380.5	250.1	130.43	2.917	
10,200.0	7,642.0	10,032.6	7,452.0	76.9	76.8	-60.04	-407.6	-2,610.8	380.5	245.3	135.20	2.814	
10,300.0	7,642.0	10,132.6	7,452.0	79.7	79.5	-60.04	-407.6	-2,710.8	380.5	240.5	139.99	2.718	
10,400.0	7,642.0	10,232.6	7,452.0	82.4	82.2	-60.04	-407.6	-2,810.8	380.5	235.7	144.78	2.628	
10,500.0	7,642.0	10,332.6	7,452.0	85.1	85.0	-60.04	-407.6	-2,910.8	380.5	230.9	149.58	2.544	
10,600.0	7,642.0	10,432.6	7,452.0	87.9	87.7	-60.04	-407.6	-3,010.8	380.5	226.1	154.39	2.465	
10,700.0	7,642.0	10,532.6	7,452.0	90.6	90.5	-60.04	-407.6	-3,110.8	380.5	221.3	159.20	2.390	
10,800.0	7,642.0	10,632.6	7,452.0	93.4	93.2	-60.04	-407.6	-3,210.8	380.5	216.5	164.02	2.320	
10,900.0	7,642.0	10,732.6	7,452.0	96.2	96.0	-60.04	-407.6	-3,310.8	380.5	211.7	168.85	2.254	
11,000.0	7,642.0	10,832.6	7,452.0	98.9	98.8	-60.04	-407.6	-3,410.8	380.5	206.8	173.68	2.191	
11,100.0	7,642.0	10,932.6	7,452.0	101.7	101.5	-60.04	-407.6	-3,510.8	380.5	202.0	178.51	2.132	
11,200.0	7,642.0	11,032.6	7,452.0	104.4	104.3	-60.04	-407.6	-3,610.8	380.5	197.2	183.35	2.075	
11,300.0	7,642.0	11,132.6	7,452.0	107.2	107.1	-60.04	-407.6	-3,710.8	380.5	192.3	188.19	2.022	
11,400.0	7,642.0	11,232.6	7,452.0	110.0	109.8	-60.04	-407.6	-3,810.8	380.5	187.5	193.03	1.971	
11,500.0	7,642.0	11,332.6	7,452.0	112.8	112.6	-60.04	-407.6	-3,910.8	380.5	182.6	197.88	1.923	
11,600.0	7,642.0	11,432.6	7,452.0	115.5	115.4	-60.04	-407.6	-4,010.8	380.5	177.8	202.73	1.877	
11,700.0	7,642.0	11,532.6	7,452.0	118.3	118.1	-60.04	-407.6	-4,110.8	380.5	172.9	207.59	1.833	
11,800.0	7,642.0	11,632.6	7,452.0	121.1	120.9	-60.04	-407.6	-4,210.8	380.5	168.1	212.44	1.791	
11,900.0	7,642.0	11,732.6	7,452.0	123.9	123.7	-60.04	-407.6	-4,310.8	380.5	163.2	217.30	1.751	
12,000.0	7,642.0	11,832.6	7,452.0	126.6	126.5	-60.04	-407.6	-4,410.8	380.5	158.4	222.16	1.713	
12,100.0	7,642.0	11,932.6	7,452.0	129.4	129.3	-60.04	-407.6	-4,510.8	380.5	153.5	227.02	1.676	
12,129.2	7,642.0	11,961.8	7,452.0	130.2	130.1	-60.04	-407.6	-4,540.0	380.5	152.1	228.44	1.666	SF

Company:	Synergy Resources	**Local Co-ordinate Reference:**	Well SRC Phelps 12-32CHZ
Project:	SEC.32-T1N-R66W	**TVD Reference:**	WELL @ 5030.0ft (Ensign Rig #12 - RKB - 12')
Reference Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	**MD Reference:**	WELL @ 5030.0ft (Ensign Rig #12 - RKB - 12')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	SRC Phelps 12-32CHZ	**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

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	1.0	1.0	0.0	0.0	77.73	16.0	73.7	75.4	75.4	0.00	N/A	
100.0	100.0	101.0	101.0	0.1	0.1	77.73	16.0	73.7	75.4	75.2	0.23	332.120	
200.0	200.0	201.0	201.0	0.3	0.3	77.73	16.0	73.7	75.4	74.7	0.68	111.442	
300.0	300.0	301.0	301.0	0.6	0.6	77.73	16.0	73.7	75.4	74.3	1.13	66.954	
400.0	400.0	401.0	401.0	0.8	0.8	77.73	16.0	73.7	75.4	73.8	1.58	47.852	
500.0	500.0	501.0	501.0	1.0	1.0	77.73	16.0	73.7	75.4	73.4	2.03	37.230	
566.3	566.3	567.3	567.3	1.2	1.2	77.73	16.0	73.7	75.4	73.1	2.32	32.452	CC
600.0	600.0	601.0	601.0	1.2	1.2	77.73	16.0	73.7	75.4	72.9	2.47	30.467	ES
700.0	700.0	700.0	700.0	1.5	1.5	76.56	17.7	74.1	76.2	73.3	2.92	26.086	
800.0	800.0	798.3	798.1	1.7	1.7	73.28	22.7	75.4	78.8	75.5	3.37	23.388	
900.0	900.0	896.4	895.8	1.9	1.9	68.34	30.8	77.6	83.7	79.9	3.82	21.877	
1,000.0	1,000.0	994.8	993.7	2.1	2.2	62.57	41.8	80.6	91.1	86.8	4.29	21.201	
1,100.0	1,100.0	1,094.1	1,092.2	2.3	2.4	-50.72	53.2	83.6	98.4	93.7	4.73	20.791	
1,200.0	1,199.8	1,193.2	1,190.6	2.5	2.7	-57.16	64.7	86.6	104.7	99.5	5.16	20.275	
1,300.0	1,299.6	1,292.2	1,288.9	2.8	3.0	-63.58	76.1	89.7	111.5	105.9	5.60	19.899	
1,400.0	1,399.4	1,391.3	1,387.3	3.0	3.3	-69.20	87.5	92.7	119.6	113.5	6.05	19.766	
1,500.0	1,499.2	1,490.3	1,485.6	3.2	3.6	-74.09	98.9	95.8	128.7	122.2	6.50	19.793	
1,600.0	1,598.9	1,589.3	1,583.9	3.4	3.8	-78.31	110.3	98.8	138.5	131.6	6.96	19.919	
1,700.0	1,698.7	1,688.3	1,682.2	3.7	4.1	-81.96	121.7	101.9	149.1	141.7	7.41	20.104	
1,800.0	1,798.5	1,787.4	1,780.5	3.9	4.4	-85.12	133.1	104.9	160.1	152.3	7.88	20.323	
1,900.0	1,898.2	1,886.4	1,878.8	4.1	4.7	-87.87	144.5	107.9	171.6	163.3	8.35	20.559	
2,000.0	1,998.0	1,985.4	1,977.2	4.4	5.0	-90.27	155.9	111.0	183.4	174.6	8.82	20.800	
2,100.0	2,097.8	2,084.4	2,075.5	4.6	5.3	-92.37	167.3	114.0	195.5	186.2	9.29	21.039	
2,200.0	2,197.5	2,183.5	2,173.8	4.9	5.6	-94.23	178.7	117.1	207.9	198.1	9.77	21.273	
2,300.0	2,297.3	2,282.5	2,272.1	5.1	5.9	-95.88	190.1	120.1	220.4	210.1	10.25	21.498	
2,400.0	2,397.1	2,381.5	2,370.4	5.3	6.2	-97.36	201.5	123.2	233.1	222.3	10.73	21.714	
2,500.0	2,496.9	2,480.5	2,468.7	5.6	6.5	-98.68	212.9	126.2	245.9	234.7	11.22	21.920	
2,600.0	2,596.6	2,579.5	2,567.1	5.8	6.8	-99.87	224.3	129.3	258.8	247.1	11.70	22.115	
2,700.0	2,696.4	2,678.6	2,665.4	6.1	7.2	-100.95	235.7	132.3	271.9	259.7	12.19	22.300	
2,800.0	2,796.2	2,777.6	2,763.7	6.3	7.5	-101.92	247.1	135.3	285.0	272.3	12.68	22.476	
2,900.0	2,895.9	2,876.6	2,862.0	6.6	7.8	-102.82	258.5	138.4	298.2	285.0	13.17	22.642	
3,000.0	2,995.7	2,975.6	2,960.3	6.9	8.1	-103.63	269.9	141.4	311.5	297.8	13.66	22.799	
3,100.0	3,095.5	3,074.7	3,058.6	7.1	8.4	-104.38	281.3	144.5	324.8	310.6	14.15	22.948	
3,200.0	3,195.3	3,173.7	3,157.0	7.4	8.7	-105.07	292.7	147.5	338.1	323.5	14.65	23.088	
3,300.0	3,295.0	3,272.7	3,255.3	7.6	9.0	-105.71	304.1	150.6	351.6	336.4	15.14	23.222	
3,400.0	3,394.8	3,371.7	3,353.6	7.9	9.3	-106.30	315.5	153.6	365.0	349.4	15.63	23.348	
3,500.0	3,494.6	3,470.7	3,451.9	8.1	9.6	-106.85	326.9	156.6	378.5	362.4	16.13	23.468	
3,600.0	3,594.3	3,569.8	3,550.2	8.4	9.9	-107.36	338.3	159.7	392.0	375.4	16.62	23.582	
3,700.0	3,694.1	3,668.8	3,648.6	8.6	10.2	-107.84	349.7	162.7	405.6	388.5	17.12	23.690	
3,800.0	3,793.9	3,767.8	3,746.9	8.9	10.5	-108.28	361.1	165.8	419.2	401.5	17.62	23.793	
3,900.0	3,893.7	3,866.8	3,845.2	9.1	10.8	-108.70	372.5	168.8	432.8	414.6	18.11	23.891	
4,000.0	3,993.4	3,965.9	3,943.5	9.4	11.1	-109.09	383.9	171.9	446.4	427.8	18.61	23.984	
4,100.0	4,093.2	4,064.9	4,041.8	9.6	11.4	-109.46	395.3	174.9	460.0	440.9	19.11	24.073	
4,200.0	4,193.0	4,163.9	4,140.1	9.9	11.7	-109.81	406.7	177.9	473.7	454.1	19.61	24.158	
4,300.0	4,292.7	4,262.9	4,238.5	10.2	12.0	-110.14	418.1	181.0	487.4	467.2	20.11	24.239	
4,400.0	4,392.5	4,362.0	4,336.8	10.4	12.4	-110.45	429.5	184.0	501.0	480.4	20.60	24.317	
4,500.0	4,492.3	4,461.0	4,435.1	10.7	12.7	-110.74	440.9	187.1	514.7	493.6	21.10	24.391	
4,600.0	4,592.1	4,560.0	4,533.4	10.9	13.0	-111.02	452.3	190.1	528.5	506.9	21.60	24.462	
4,700.0	4,691.8	4,659.0	4,631.7	11.2	13.3	-111.29	463.7	193.2	542.2	520.1	22.10	24.531	
4,800.0	4,791.6	4,758.0	4,730.0	11.4	13.6	-111.54	475.1	196.2	555.9	533.3	22.60	24.596	
4,900.0	4,891.4	4,857.2	4,828.4	11.7	13.9	-111.87	486.5	199.2	569.2	546.1	23.09	24.653	

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

Company:	Synergy Resources	**Local Co-ordinate Reference:**	Well SRC Phelps 12-32CHZ
Project:	SEC.32-T1N-R66W	**TVD Reference:**	WELL @ 5030.0ft (Ensign Rig #12 - RKB - 12')
Reference Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	**MD Reference:**	WELL @ 5030.0ft (Ensign Rig #12 - RKB - 12')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	SRC Phelps 12-32CHZ	**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

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,000.0	4,991.4	4,956.4	4,927.0	11.8	14.2	-111.89	498.0	202.3	581.2	557.7	23.53	24.700	
5,100.0	5,091.4	5,055.7	5,025.6	12.0	14.5	-3.96	509.4	205.3	592.5	567.0	25.49	23.241	
5,200.0	5,191.4	5,155.0	5,124.1	12.2	14.8	-3.59	520.8	208.4	603.8	577.8	26.00	23.227	
5,300.0	5,291.4	5,254.3	5,222.7	12.4	15.1	-3.24	532.3	211.4	615.1	588.6	26.50	23.212	
5,400.0	5,391.4	5,353.5	5,321.3	12.6	15.4	-2.90	543.7	214.5	626.4	599.4	27.00	23.198	
5,500.0	5,491.4	5,452.8	5,419.9	12.8	15.7	-2.57	555.1	217.5	637.8	610.3	27.51	23.184	
5,600.0	5,591.4	5,552.1	5,518.5	13.0	16.0	-2.26	566.6	220.6	649.2	621.2	28.02	23.171	
5,700.0	5,691.4	5,651.4	5,617.0	13.2	16.4	-1.95	578.0	223.6	660.6	632.1	28.53	23.157	
5,800.0	5,791.4	5,750.7	5,715.6	13.4	16.7	-1.66	589.4	226.7	672.0	643.0	29.04	23.144	
5,900.0	5,891.4	5,850.0	5,814.2	13.6	17.0	-1.37	600.9	229.7	683.4	653.9	29.55	23.131	
6,000.0	5,991.4	5,949.3	5,912.8	13.8	17.3	-1.10	612.3	232.8	694.9	664.8	30.06	23.119	
6,100.0	6,091.4	6,048.6	6,011.4	13.9	17.6	-0.83	623.7	235.9	706.4	675.8	30.57	23.106	
6,200.0	6,191.4	6,147.8	6,109.9	14.1	17.9	-0.57	635.2	238.9	717.8	686.8	31.08	23.094	
6,300.0	6,291.4	6,263.5	6,224.9	14.3	18.2	-0.30	647.7	242.3	728.8	697.2	31.60	23.064	
6,400.0	6,391.4	6,395.9	6,356.9	14.5	18.5	-0.10	657.1	244.8	735.8	703.8	32.08	22.938	
6,500.0	6,491.4	6,529.0	6,489.9	14.7	18.7	-0.03	660.5	245.7	738.4	705.9	32.50	22.719	
6,600.0	6,591.4	6,631.5	6,592.4	14.9	18.9	-0.03	660.5	245.7	738.4	705.6	32.87	22.465	
6,700.0	6,691.4	6,731.5	6,692.4	15.1	19.0	-0.03	660.5	245.7	738.4	705.2	33.25	22.210	
6,800.0	6,791.4	6,831.5	6,792.4	15.3	19.2	-0.03	660.5	245.7	738.4	704.8	33.63	21.959	
6,900.0	6,891.4	6,931.5	6,892.4	15.5	19.4	-0.03	660.5	245.7	738.4	704.4	34.01	21.714	
7,000.0	6,991.3	7,031.5	6,992.3	15.7	19.5	89.97	660.5	242.6	738.4	706.5	31.97	23.095	
7,100.0	7,089.9	7,131.4	7,090.8	15.8	19.6	89.96	660.5	226.4	738.4	706.2	32.24	22.907	
7,200.0	7,185.4	7,231.3	7,186.1	15.9	19.7	89.95	660.5	196.7	738.4	706.0	32.45	22.758	
7,300.0	7,275.7	7,331.2	7,276.4	16.0	19.8	89.94	660.5	154.0	738.4	705.8	32.67	22.600	
7,400.0	7,359.3	7,431.1	7,359.8	16.1	19.9	89.93	660.5	99.2	738.4	705.4	33.02	22.366	
7,500.0	7,434.4	7,531.0	7,434.8	16.4	19.9	89.93	660.5	33.4	738.4	704.8	33.61	21.969	
7,600.0	7,499.6	7,630.8	7,499.8	16.8	20.1	89.92	660.5	-42.3	738.4	703.8	34.62	21.332	
7,700.0	7,553.7	7,730.7	7,553.8	17.6	20.4	89.92	660.5	-126.2	738.4	702.3	36.16	20.422	
7,800.0	7,595.5	7,830.5	7,595.6	18.6	21.1	89.92	660.5	-216.8	738.4	700.1	38.31	19.273	
7,900.0	7,624.3	7,930.4	7,624.3	20.0	22.2	89.92	660.5	-312.4	738.4	697.4	41.07	17.978	
8,000.0	7,639.5	8,030.2	7,639.5	21.6	23.7	89.92	660.5	-411.0	738.4	694.1	44.35	16.649	
8,100.0	7,642.0	8,130.2	7,642.0	23.5	25.4	89.92	660.5	-510.8	738.4	690.4	48.03	15.373	
8,200.0	7,642.0	8,230.2	7,642.0	25.5	27.3	89.92	660.5	-610.8	738.4	686.4	52.03	14.191	
8,300.0	7,642.0	8,330.2	7,642.0	27.6	29.4	89.92	660.5	-710.8	738.4	682.1	56.31	13.114	
8,400.0	7,642.0	8,430.2	7,642.0	29.9	31.6	89.92	660.5	-810.8	738.4	677.6	60.80	12.145	
8,500.0	7,642.0	8,530.2	7,642.0	32.2	33.9	89.92	660.5	-910.8	738.4	673.0	65.47	11.279	
8,600.0	7,642.0	8,630.2	7,642.0	34.6	36.2	89.92	660.5	-1,010.8	738.4	668.2	70.27	10.508	
8,700.0	7,642.0	8,730.2	7,642.0	37.1	38.6	89.92	660.5	-1,110.8	738.4	663.2	75.19	9.821	
8,800.0	7,642.0	8,830.2	7,642.0	39.6	41.1	89.92	660.5	-1,210.8	738.4	658.2	80.19	9.208	
8,900.0	7,642.0	8,930.2	7,642.0	42.2	43.6	89.92	660.5	-1,310.8	738.4	653.2	85.27	8.660	
9,000.0	7,642.0	9,030.2	7,642.0	44.7	46.2	89.92	660.5	-1,410.8	738.4	648.0	90.42	8.167	
9,100.0	7,642.0	9,130.2	7,642.0	47.3	48.7	89.92	660.5	-1,510.8	738.4	642.8	95.61	7.723	
9,200.0	7,642.0	9,230.2	7,642.0	50.0	51.3	89.92	660.5	-1,610.8	738.4	637.6	100.85	7.322	
9,300.0	7,642.0	9,330.2	7,642.0	52.6	53.9	89.92	660.5	-1,710.8	738.4	632.3	106.13	6.958	
9,400.0	7,642.0	9,430.2	7,642.0	55.3	56.6	89.92	660.5	-1,810.8	738.4	627.0	111.44	6.626	
9,500.0	7,642.0	9,530.2	7,642.0	57.9	59.2	89.92	660.5	-1,910.8	738.4	621.6	116.78	6.323	
9,600.0	7,642.0	9,630.2	7,642.0	60.6	61.9	89.92	660.5	-2,010.8	738.4	616.3	122.14	6.046	
9,700.0	7,642.0	9,730.2	7,642.0	63.3	64.5	89.92	660.5	-2,110.8	738.4	610.9	127.52	5.790	
9,800.0	7,642.0	9,830.2	7,642.0	66.0	67.2	89.92	660.5	-2,210.8	738.4	605.5	132.93	5.555	
9,900.0	7,642.0	9,930.2	7,642.0	68.7	69.9	89.92	660.5	-2,310.8	738.4	600.1	138.34	5.338	

Company:	Synergy Resources	**Local Co-ordinate Reference:**	Well SRC Phelps 12-32CHZ
Project:	SEC.32-T1N-R66W	**TVD Reference:**	WELL @ 5030.0ft (Ensign Rig #12 - RKB - 12')
Reference Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	**MD Reference:**	WELL @ 5030.0ft (Ensign Rig #12 - RKB - 12')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	SRC Phelps 12-32CHZ	**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

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,000.0	7,642.0	10,030.2	7,642.0	71.5	72.6	89.92	660.5	-2,410.8	738.4	594.6	143.78	5.136	
10,100.0	7,642.0	10,130.2	7,642.0	74.2	75.3	89.92	660.5	-2,510.8	738.4	589.2	149.22	4.948	
10,200.0	7,642.0	10,230.2	7,642.0	76.9	78.0	89.92	660.5	-2,610.8	738.4	583.7	154.68	4.774	
10,300.0	7,642.0	10,330.2	7,642.0	79.7	80.8	89.92	660.5	-2,710.8	738.4	578.3	160.15	4.611	
10,400.0	7,642.0	10,430.2	7,642.0	82.4	83.5	89.92	660.5	-2,810.8	738.4	572.8	165.63	4.458	
10,500.0	7,642.0	10,530.2	7,642.0	85.1	86.2	89.92	660.5	-2,910.8	738.4	567.3	171.11	4.315	
10,600.0	7,642.0	10,630.2	7,642.0	87.9	89.0	89.92	660.5	-3,010.8	738.4	561.8	176.61	4.181	
10,700.0	7,642.0	10,730.2	7,642.0	90.6	91.7	89.92	660.5	-3,110.8	738.4	556.3	182.11	4.055	
10,800.0	7,642.0	10,830.2	7,642.0	93.4	94.5	89.92	660.5	-3,210.8	738.4	550.8	187.61	3.936	
10,900.0	7,642.0	10,930.2	7,642.0	96.2	97.2	89.92	660.5	-3,310.8	738.4	545.3	193.13	3.824	
11,000.0	7,642.0	11,030.2	7,642.0	98.9	100.0	89.92	660.5	-3,410.8	738.4	539.8	198.64	3.717	
11,100.0	7,642.0	11,130.2	7,642.0	101.7	102.7	89.92	660.5	-3,510.8	738.4	534.3	204.17	3.617	
11,200.0	7,642.0	11,230.2	7,642.0	104.4	105.5	89.92	660.5	-3,610.8	738.4	528.7	209.70	3.521	
11,300.0	7,642.0	11,330.2	7,642.0	107.2	108.2	89.92	660.5	-3,710.8	738.4	523.2	215.23	3.431	
11,400.0	7,642.0	11,430.2	7,642.0	110.0	111.0	89.92	660.5	-3,810.8	738.4	517.7	220.76	3.345	
11,500.0	7,642.0	11,530.2	7,642.0	112.8	113.7	89.92	660.5	-3,910.8	738.4	512.1	226.30	3.263	
11,600.0	7,642.0	11,630.2	7,642.0	115.5	116.5	89.92	660.5	-4,010.8	738.4	506.6	231.84	3.185	
11,700.0	7,642.0	11,730.2	7,642.0	118.3	119.3	89.92	660.5	-4,110.8	738.4	501.0	237.39	3.111	
11,800.0	7,642.0	11,830.2	7,642.0	121.1	122.0	89.92	660.5	-4,210.8	738.4	495.5	242.94	3.040	
11,900.0	7,642.0	11,930.2	7,642.0	123.9	124.8	89.92	660.5	-4,310.8	738.4	489.9	248.49	2.972	
12,000.0	7,642.0	12,030.2	7,642.0	126.6	127.6	89.92	660.5	-4,410.8	738.4	484.4	254.04	2.907	
12,100.0	7,642.0	12,130.2	7,642.0	129.4	130.4	89.92	660.5	-4,510.8	738.4	478.8	259.60	2.844	
12,124.2	7,642.0	12,154.4	7,642.0	130.1	131.0	89.92	660.5	-4,535.0	738.4	477.5	260.94	2.830	
12,129.2	7,642.0	12,158.6	7,642.0	130.2	131.2	89.92	660.5	-4,539.3	738.4	477.2	261.20	2.827	SF

Company:	Synergy Resources	**Local Co-ordinate Reference:**	Well SRC Phelps 12-32CHZ
Project:	SEC.32-T1N-R66W	**TVD Reference:**	WELL @ 5030.0ft (Ensign Rig #12 - RKB - 12')
Reference Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	**MD Reference:**	WELL @ 5030.0ft (Ensign Rig #12 - RKB - 12')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	SRC Phelps 12-32CHZ	**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

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	1.0	1.0	0.0	0.0	77.73	20.8	95.5	97.8	97.8	0.00	N/A	
100.0	100.0	101.0	101.0	0.1	0.1	77.73	20.8	95.5	97.8	97.5	0.23	430.606	
200.0	200.0	201.0	201.0	0.3	0.3	77.73	20.8	95.5	97.8	97.1	0.68	144.489	
300.0	300.0	301.0	301.0	0.6	0.6	77.73	20.8	95.5	97.8	96.6	1.13	86.809	
400.0	400.0	401.0	401.0	0.8	0.8	77.73	20.8	95.5	97.8	96.2	1.58	62.042	
500.0	500.0	501.0	501.0	1.0	1.0	77.73	20.8	95.5	97.8	95.7	2.03	48.270	
600.0	600.0	601.0	601.0	1.2	1.2	77.73	20.8	95.5	97.8	95.3	2.47	39.502	
700.0	700.0	701.0	701.0	1.5	1.5	77.73	20.8	95.5	97.8	94.8	2.92	33.429	
766.3	766.3	767.3	767.3	1.6	1.6	77.73	20.8	95.5	97.8	94.5	3.22	30.336	CC
800.0	800.0	800.0	800.0	1.7	1.7	77.73	20.8	95.5	97.8	94.4	3.37	28.996	ES
900.0	900.0	898.6	898.6	1.9	1.9	77.04	22.2	96.4	99.0	95.2	3.82	25.943	
1,000.0	1,000.0	997.0	996.9	2.1	2.1	75.07	26.5	99.2	102.8	98.5	4.26	24.116	
1,100.0	1,100.0	1,095.7	1,095.3	2.3	2.4	-35.41	32.1	102.9	106.5	101.8	4.68	22.740	
1,200.0	1,199.8	1,195.4	1,194.8	2.5	2.6	-39.30	37.9	106.6	107.8	102.7	5.10	21.148	
1,300.0	1,299.6	1,295.1	1,294.2	2.8	2.8	-43.65	43.6	110.3	108.5	103.0	5.53	19.630	
1,400.0	1,399.4	1,394.7	1,393.6	3.0	3.1	-47.91	49.4	114.1	109.9	103.9	5.97	18.409	
1,500.0	1,499.2	1,494.4	1,493.0	3.2	3.3	-52.05	55.1	117.8	111.8	105.4	6.41	17.427	
1,600.0	1,598.9	1,594.0	1,592.5	3.4	3.5	-56.04	60.9	121.5	114.3	107.4	6.87	16.640	
1,700.0	1,698.7	1,693.7	1,691.9	3.7	3.8	-59.84	66.6	125.3	117.3	109.9	7.32	16.011	
1,800.0	1,798.5	1,793.4	1,791.3	3.9	4.0	-63.43	72.4	129.0	120.8	113.0	7.79	15.509	
1,900.0	1,898.2	1,893.0	1,890.7	4.1	4.3	-66.81	78.1	132.7	124.7	116.5	8.25	15.110	
2,000.0	1,998.0	1,992.7	1,990.2	4.4	4.5	-69.97	83.9	136.4	129.1	120.3	8.72	14.794	
2,100.0	2,097.8	2,092.3	2,089.6	4.6	4.8	-72.92	89.6	140.2	133.8	124.6	9.20	14.546	
2,200.0	2,197.5	2,192.0	2,189.0	4.9	5.0	-75.67	95.4	143.9	138.9	129.2	9.67	14.353	
2,300.0	2,297.3	2,291.6	2,288.4	5.1	5.3	-78.21	101.1	147.6	144.2	134.1	10.15	14.204	
2,400.0	2,397.1	2,391.3	2,387.9	5.3	5.5	-80.57	106.9	151.3	149.8	139.2	10.63	14.090	
2,500.0	2,496.9	2,491.0	2,487.3	5.6	5.8	-82.76	112.6	155.1	155.7	144.6	11.12	14.006	
2,600.0	2,596.6	2,590.6	2,586.7	5.8	6.0	-84.78	118.4	158.8	161.7	150.1	11.60	13.945	
2,700.0	2,696.4	2,690.3	2,686.1	6.1	6.3	-86.66	124.1	162.5	168.0	155.9	12.08	13.903	
2,800.0	2,796.2	2,789.9	2,785.5	6.3	6.5	-88.40	129.9	166.2	174.4	161.8	12.57	13.876	
2,900.0	2,895.9	2,889.6	2,885.0	6.6	6.8	-90.02	135.6	170.0	181.0	167.9	13.06	13.862	
3,000.0	2,995.7	2,989.3	2,984.4	6.9	7.0	-91.52	141.3	173.7	187.7	174.1	13.54	13.859	
3,100.0	3,095.5	3,088.9	3,083.8	7.1	7.3	-92.92	147.1	177.4	194.5	180.5	14.03	13.863	
3,200.0	3,195.3	3,188.6	3,183.2	7.4	7.5	-94.22	152.8	181.1	201.4	186.9	14.52	13.874	
3,300.0	3,295.0	3,288.2	3,282.7	7.6	7.8	-95.44	158.6	184.9	208.5	193.4	15.01	13.891	
3,400.0	3,394.8	3,387.9	3,382.1	7.9	8.0	-96.58	164.3	188.6	215.6	200.1	15.50	13.912	
3,500.0	3,494.6	3,487.5	3,481.5	8.1	8.3	-97.64	170.1	192.3	222.8	206.8	15.98	13.936	
3,600.0	3,594.3	3,587.2	3,580.9	8.4	8.6	-98.64	175.8	196.0	230.0	213.5	16.47	13.963	
3,700.0	3,694.1	3,686.9	3,680.3	8.6	8.8	-99.57	181.6	199.8	237.4	220.4	16.96	13.992	
3,800.0	3,793.9	3,786.5	3,779.8	8.9	9.1	-100.45	187.3	203.5	244.7	227.3	17.45	14.022	
3,900.0	3,893.7	3,886.2	3,879.2	9.1	9.3	-101.28	193.1	207.2	252.2	234.2	17.94	14.054	
4,000.0	3,993.4	3,985.8	3,978.6	9.4	9.6	-102.06	198.8	210.9	259.7	241.2	18.43	14.086	
4,100.0	4,093.2	4,085.5	4,078.0	9.6	9.8	-102.80	204.6	214.7	267.2	248.3	18.92	14.119	
4,200.0	4,193.0	4,185.2	4,177.5	9.9	10.1	-103.49	210.3	218.4	274.8	255.4	19.42	14.153	
4,300.0	4,292.7	4,284.8	4,276.9	10.2	10.3	-104.15	216.1	222.1	282.4	262.5	19.91	14.187	
4,400.0	4,392.5	4,384.5	4,376.3	10.4	10.6	-104.77	221.8	225.8	290.1	269.7	20.40	14.220	
4,500.0	4,492.3	4,484.1	4,475.7	10.7	10.8	-105.37	227.6	229.6	297.7	276.9	20.89	14.254	
4,600.0	4,592.1	4,583.8	4,575.2	10.9	11.1	-105.93	233.3	233.3	305.5	284.1	21.38	14.287	
4,700.0	4,691.8	4,683.4	4,674.6	11.2	11.3	-106.46	239.1	237.0	313.2	291.3	21.87	14.320	
4,800.0	4,791.6	4,783.1	4,774.0	11.4	11.6	-106.97	244.8	240.7	321.0	298.6	22.36	14.353	
4,900.0	4,891.4	4,890.3	4,881.0	11.7	11.8	-107.46	250.1	244.2	327.6	304.7	22.82	14.354	

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

Company:	Synergy Resources	**Local Co-ordinate Reference:**	Well SRC Phelps 12-32CHZ
Project:	SEC.32-T1N-R66W	**TVD Reference:**	WELL @ 5030.0ft (Ensign Rig #12 - RKB - 12')
Reference Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	**MD Reference:**	WELL @ 5030.0ft (Ensign Rig #12 - RKB - 12')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	SRC Phelps 12-32CHZ	**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

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,000.0	4,991.4	5,000.9	4,991.6	11.8	12.0	-107.65	252.2	245.5	330.1	306.9	23.20	14.227	
5,100.0	5,091.4	5,101.7	5,092.4	12.0	12.2	-0.08	252.2	245.5	330.1	306.9	23.15	14.258	
5,200.0	5,191.4	5,201.7	5,192.4	12.2	12.4	-0.08	252.2	245.5	330.1	306.5	23.55	14.015	
5,300.0	5,291.4	5,301.7	5,292.4	12.4	12.6	-0.08	252.2	245.5	330.1	306.1	23.95	13.779	
5,400.0	5,391.4	5,401.7	5,392.4	12.6	12.8	-0.08	252.2	245.5	330.1	305.7	24.36	13.550	
5,500.0	5,491.4	5,501.7	5,492.4	12.8	13.0	-0.08	252.2	245.5	330.1	305.3	24.77	13.328	
5,600.0	5,591.4	5,601.7	5,592.4	13.0	13.2	-0.08	252.2	245.5	330.1	304.9	25.17	13.112	
5,700.0	5,691.4	5,701.7	5,692.4	13.2	13.4	-0.08	252.2	245.5	330.1	304.5	25.58	12.902	
5,800.0	5,791.4	5,801.7	5,792.4	13.4	13.6	-0.08	252.2	245.5	330.1	304.1	25.99	12.698	
5,900.0	5,891.4	5,901.7	5,892.4	13.6	13.8	-0.08	252.2	245.5	330.1	303.7	26.41	12.500	
6,000.0	5,991.4	6,001.7	5,992.4	13.8	14.1	-0.08	252.2	245.5	330.1	303.2	26.82	12.307	
6,100.0	6,091.4	6,101.7	6,092.4	13.9	14.3	-0.08	252.2	245.5	330.1	302.8	27.23	12.120	
6,200.0	6,191.4	6,201.7	6,192.4	14.1	14.5	-0.08	252.2	245.5	330.1	302.4	27.65	11.938	
6,300.0	6,291.4	6,301.7	6,292.4	14.3	14.7	-0.08	252.2	245.5	330.1	302.0	28.06	11.761	
6,400.0	6,391.4	6,401.7	6,392.4	14.5	14.9	-0.08	252.2	245.5	330.1	301.6	28.48	11.589	
6,500.0	6,491.4	6,501.7	6,492.4	14.7	15.1	-0.08	252.2	245.5	330.1	301.2	28.90	11.421	
6,600.0	6,591.4	6,601.7	6,592.4	14.9	15.3	-0.08	252.2	245.5	330.1	300.7	29.32	11.257	
6,700.0	6,691.4	6,701.7	6,692.4	15.1	15.5	-0.08	252.2	245.5	330.1	300.3	29.74	11.098	
6,744.1	6,735.5	6,745.8	6,736.5	15.2	15.6	-0.08	252.2	245.5	330.1	300.1	29.93	11.030	
6,800.0	6,791.4	6,801.6	6,792.2	15.3	15.7	-0.48	252.2	243.2	330.1	299.9	30.14	10.950	
6,900.0	6,891.4	6,899.2	6,888.6	15.5	15.8	-2.98	252.2	228.8	330.5	300.0	30.52	10.828	
7,000.0	6,991.3	6,992.1	6,977.9	15.7	16.0	82.89	252.2	203.0	332.8	301.6	31.21	10.662	
7,100.0	7,089.9	7,082.2	7,060.4	15.8	16.0	78.84	252.2	167.2	336.8	305.4	31.43	10.717	
7,200.0	7,185.4	7,169.9	7,135.9	15.9	16.1	75.09	252.2	122.7	342.1	310.6	31.57	10.836	
7,300.0	7,275.7	7,255.5	7,203.8	16.0	16.2	71.72	252.2	70.6	348.3	316.6	31.69	10.993	
7,400.0	7,359.3	7,339.5	7,263.9	16.1	16.6	68.76	252.2	12.0	354.9	323.1	31.83	11.148	
7,500.0	7,434.4	7,422.0	7,315.9	16.4	17.1	66.21	252.2	-52.1	361.4	329.3	32.12	11.253	
7,600.0	7,499.6	7,500.0	7,358.0	16.8	17.8	64.17	252.2	-117.7	367.5	334.9	32.64	11.262	
7,700.0	7,553.7	7,583.9	7,394.9	17.6	18.7	62.42	252.2	-192.9	372.8	339.2	33.59	11.097	
7,800.0	7,595.5	7,663.7	7,421.7	18.6	19.8	61.16	252.2	-268.0	377.0	342.0	35.01	10.769	
7,900.0	7,624.3	7,742.9	7,439.9	20.0	21.1	60.32	252.2	-345.1	380.0	343.1	36.96	10.281	
8,000.0	7,639.5	7,821.9	7,449.4	21.6	22.5	59.88	252.2	-423.5	381.6	342.2	39.44	9.675	
8,100.0	7,642.0	7,909.3	7,451.0	23.5	24.2	59.81	252.2	-510.8	381.8	339.4	42.48	8.989	
8,200.0	7,642.0	8,009.3	7,451.0	25.5	26.2	59.81	252.2	-610.8	381.8	335.9	45.99	8.303	
8,300.0	7,642.0	8,109.3	7,451.0	27.6	28.4	59.81	252.2	-710.8	381.8	332.1	49.74	7.678	
8,400.0	7,642.0	8,209.3	7,451.0	29.9	30.7	59.81	252.2	-810.8	381.8	328.2	53.67	7.115	
8,500.0	7,642.0	8,309.3	7,451.0	32.2	33.0	59.81	252.2	-910.8	381.8	324.1	57.76	6.611	
8,600.0	7,642.0	8,409.3	7,451.0	34.6	35.5	59.81	252.2	-1,010.8	381.8	319.9	61.96	6.163	
8,700.0	7,642.0	8,509.3	7,451.0	37.1	37.9	59.81	252.2	-1,110.8	381.8	315.6	66.26	5.763	
8,800.0	7,642.0	8,609.3	7,451.0	39.6	40.5	59.81	252.2	-1,210.8	381.8	311.2	70.64	5.405	
8,900.0	7,642.0	8,709.3	7,451.0	42.2	43.0	59.81	252.2	-1,310.8	381.8	306.8	75.09	5.085	
9,000.0	7,642.0	8,809.3	7,451.0	44.7	45.6	59.81	252.2	-1,410.8	381.8	302.3	79.59	4.798	
9,100.0	7,642.0	8,909.3	7,451.0	47.3	48.2	59.81	252.2	-1,510.8	381.8	297.7	84.13	4.539	
9,200.0	7,642.0	9,009.3	7,451.0	50.0	50.8	59.81	252.2	-1,610.8	381.8	293.1	88.72	4.304	
9,300.0	7,642.0	9,109.3	7,451.0	52.6	53.5	59.81	252.2	-1,710.8	381.8	288.5	93.34	4.091	
9,400.0	7,642.0	9,209.3	7,451.0	55.3	56.2	59.81	252.2	-1,810.8	381.8	283.9	97.98	3.897	
9,500.0	7,642.0	9,309.3	7,451.0	57.9	58.8	59.81	252.2	-1,910.8	381.8	279.2	102.65	3.720	
9,600.0	7,642.0	9,409.3	7,451.0	60.6	61.5	59.81	252.2	-2,010.8	381.8	274.5	107.35	3.557	
9,700.0	7,642.0	9,509.3	7,451.0	63.3	64.2	59.81	252.2	-2,110.8	381.8	269.8	112.06	3.408	
9,800.0	7,642.0	9,609.3	7,451.0	66.0	66.9	59.81	252.2	-2,210.8	381.8	265.1	116.78	3.270	

Company:	Synergy Resources	**Local Co-ordinate Reference:**	Well SRC Phelps 12-32CHZ
Project:	SEC.32-T1N-R66W	**TVD Reference:**	WELL @ 5030.0ft (Ensign Rig #12 - RKB - 12')
Reference Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	**MD Reference:**	WELL @ 5030.0ft (Ensign Rig #12 - RKB - 12')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	SRC Phelps 12-32CHZ	**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-

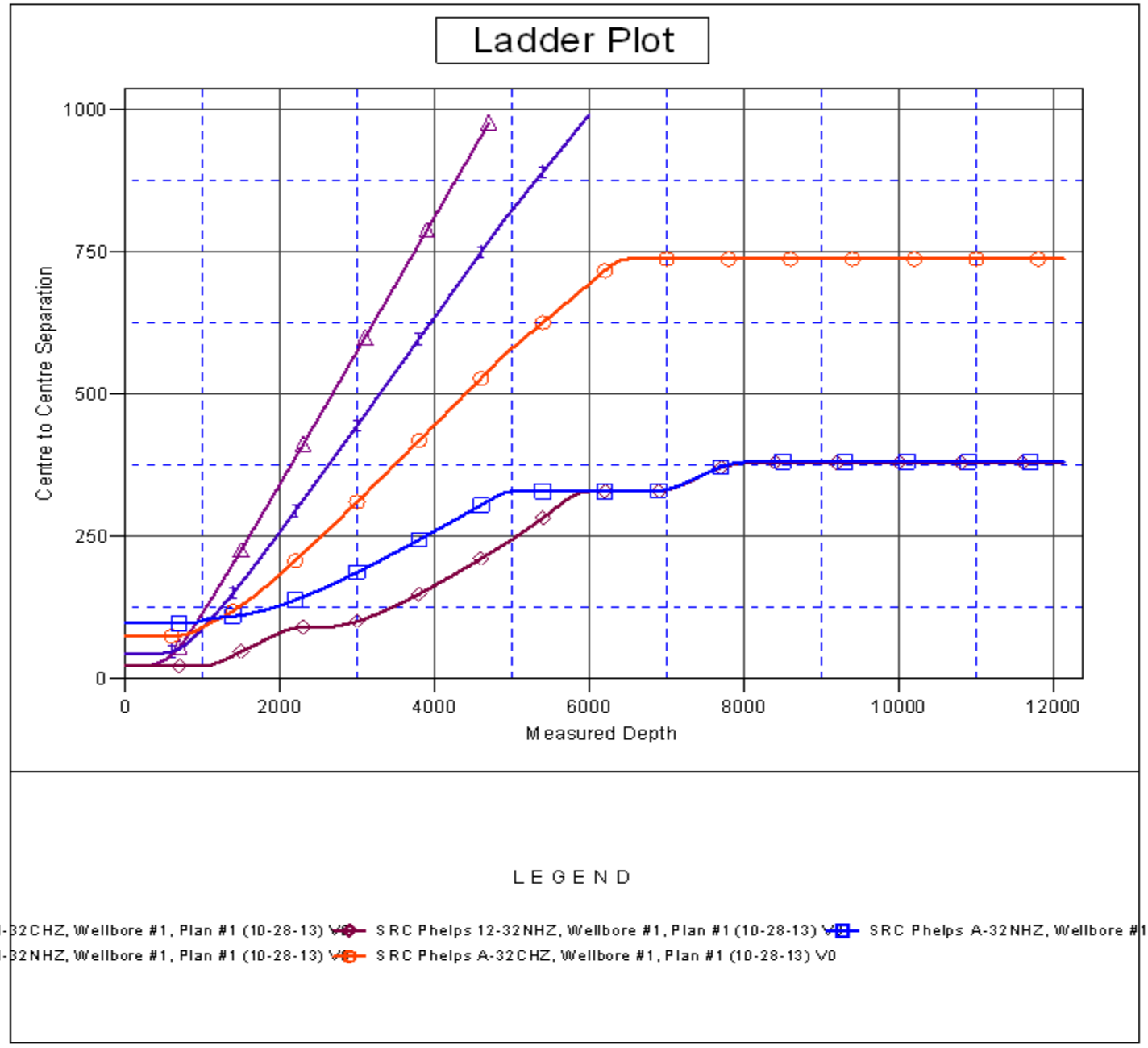
Offset Site Error: 0.0 ft

Survey Program: 0-MWD **Offset Well Error:** 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
9,900.0	7,642.0	9,709.3	7,451.0	68.7	69.6	59.81	252.2	-2,310.8	381.8	260.3	121.53	3.142	
10,000.0	7,642.0	9,809.3	7,451.0	71.5	72.4	59.81	252.2	-2,410.8	381.8	255.6	126.28	3.024	
10,100.0	7,642.0	9,909.3	7,451.0	74.2	75.1	59.81	252.2	-2,510.8	381.8	250.8	131.05	2.914	
10,200.0	7,642.0	10,009.3	7,451.0	76.9	77.8	59.81	252.2	-2,610.8	381.8	246.0	135.82	2.811	
10,300.0	7,642.0	10,109.3	7,451.0	79.7	80.6	59.81	252.2	-2,710.8	381.8	241.2	140.61	2.716	
10,400.0	7,642.0	10,209.3	7,451.0	82.4	83.3	59.81	252.2	-2,810.8	381.8	236.4	145.40	2.626	
10,500.0	7,642.0	10,309.3	7,451.0	85.1	86.0	59.81	252.2	-2,910.8	381.8	231.6	150.20	2.542	
10,600.0	7,642.0	10,409.3	7,451.0	87.9	88.8	59.81	252.2	-3,010.8	381.8	226.8	155.01	2.463	
10,700.0	7,642.0	10,509.3	7,451.0	90.6	91.5	59.81	252.2	-3,110.8	381.8	222.0	159.82	2.389	
10,800.0	7,642.0	10,609.3	7,451.0	93.4	94.3	59.81	252.2	-3,210.8	381.8	217.2	164.64	2.319	
10,900.0	7,642.0	10,709.3	7,451.0	96.2	97.1	59.81	252.2	-3,310.8	381.8	212.4	169.47	2.253	
11,000.0	7,642.0	10,809.3	7,451.0	98.9	99.8	59.81	252.2	-3,410.8	381.8	207.6	174.29	2.191	
11,100.0	7,642.0	10,909.3	7,451.0	101.7	102.6	59.81	252.2	-3,510.8	381.8	202.7	179.13	2.132	
11,200.0	7,642.0	11,009.3	7,451.0	104.4	105.4	59.81	252.2	-3,610.8	381.8	197.9	183.97	2.076	
11,300.0	7,642.0	11,109.3	7,451.0	107.2	108.1	59.81	252.2	-3,710.8	381.8	193.0	188.81	2.022	
11,400.0	7,642.0	11,209.3	7,451.0	110.0	110.9	59.81	252.2	-3,810.8	381.8	188.2	193.65	1.972	
11,500.0	7,642.0	11,309.3	7,451.0	112.8	113.7	59.81	252.2	-3,910.8	381.8	183.3	198.50	1.924	
11,600.0	7,642.0	11,409.3	7,451.0	115.5	116.4	59.81	252.2	-4,010.8	381.8	178.5	203.35	1.878	
11,700.0	7,642.0	11,509.3	7,451.0	118.3	119.2	59.81	252.2	-4,110.8	381.8	173.6	208.20	1.834	
11,800.0	7,642.0	11,609.3	7,451.0	121.1	122.0	59.81	252.2	-4,210.8	381.8	168.8	213.06	1.792	
11,900.0	7,642.0	11,709.3	7,451.0	123.9	124.8	59.81	252.2	-4,310.8	381.8	163.9	217.92	1.752	
12,000.0	7,642.0	11,809.3	7,451.0	126.6	127.5	59.81	252.2	-4,410.8	381.8	159.1	222.78	1.714	
12,100.0	7,642.0	11,909.3	7,451.0	129.4	130.2	59.81	252.2	-4,510.8	381.8	154.3	227.56	1.678	
12,129.2	7,642.0	11,938.4	7,451.0	130.2	130.7	59.81	252.2	-4,540.0	381.8	153.1	228.72	1.669 SF	

Company:	Synergy Resources	**Local Co-ordinate Reference:**	Well SRC Phelps 12-32CHZ
Project:	SEC.32-T1N-R66W	**TVD Reference:**	WELL @ 5030.0ft (Ensign Rig #12 - RKB - 12')
Reference Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	**MD Reference:**	WELL @ 5030.0ft (Ensign Rig #12 - RKB - 12')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	SRC Phelps 12-32CHZ	**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 @ 5030.0ft (Ensign Rig #12 - RCoordinates are relative to: SRC Phelps 12-32CHZ
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°



Company:	Synergy Resources	**Local Co-ordinate Reference:**	Well SRC Phelps 12-32CHZ
Project:	SEC.32-T1N-R66W	**TVD Reference:**	WELL @ 5030.0ft (Ensign Rig #12 - RKB - 12')
Reference Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	**MD Reference:**	WELL @ 5030.0ft (Ensign Rig #12 - RKB - 12')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	SRC Phelps 12-32CHZ	**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 @ 5030.0ft (Ensign Rig #12 - RCoordinates are relative to: SRC Phelps 12-32CHZ
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°