Synergy Resources

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

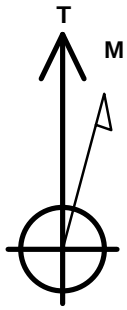
Surface Location: SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone
Ground Elevation: 5019.0

+N/-S	+E/-W	Northing	Easting	Latittude	Longitude	Slot
0.0	0.0	1247317.46	3198241.91	40.010101	-104.792269	

RKB - 12' WELL @ 5031.0ft (RKB - 12')

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
SHL 1766'FNL, 222'FEL	1.0	0.0	0.0	Point
BHL 1120'FNL, 460'FWL	7642.0	644.5	-4612.9	Point



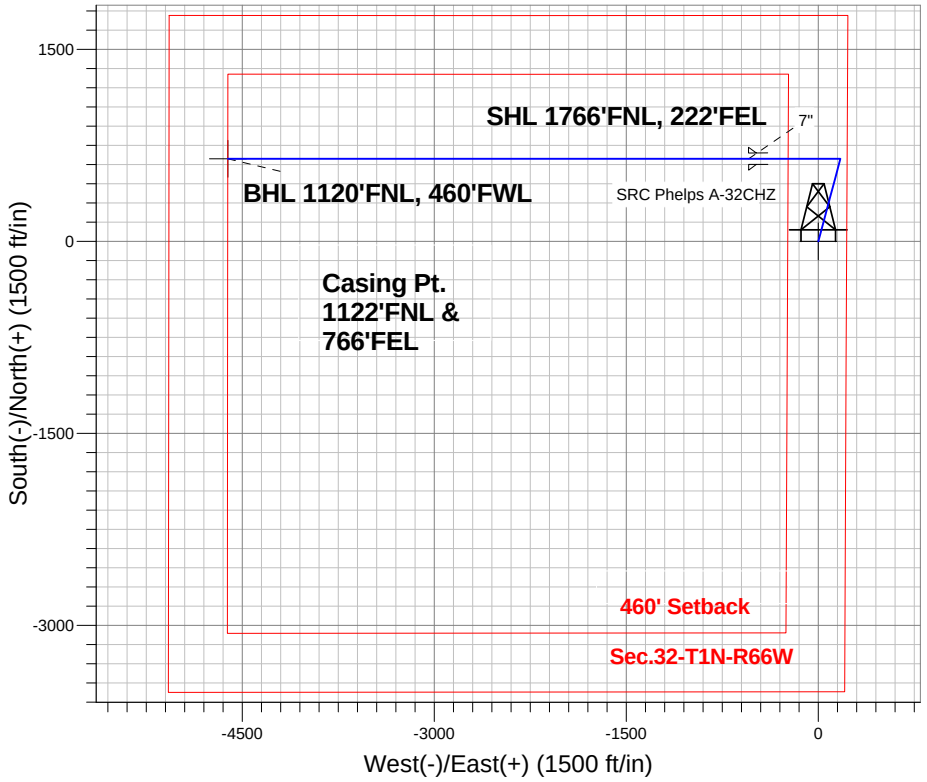
Azimuths to True North
Magnetic North: 8.53°

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 A-32CHZ
Plan #1 (10-28-13)
14:27, October 28 2013

ANNOTATIONS

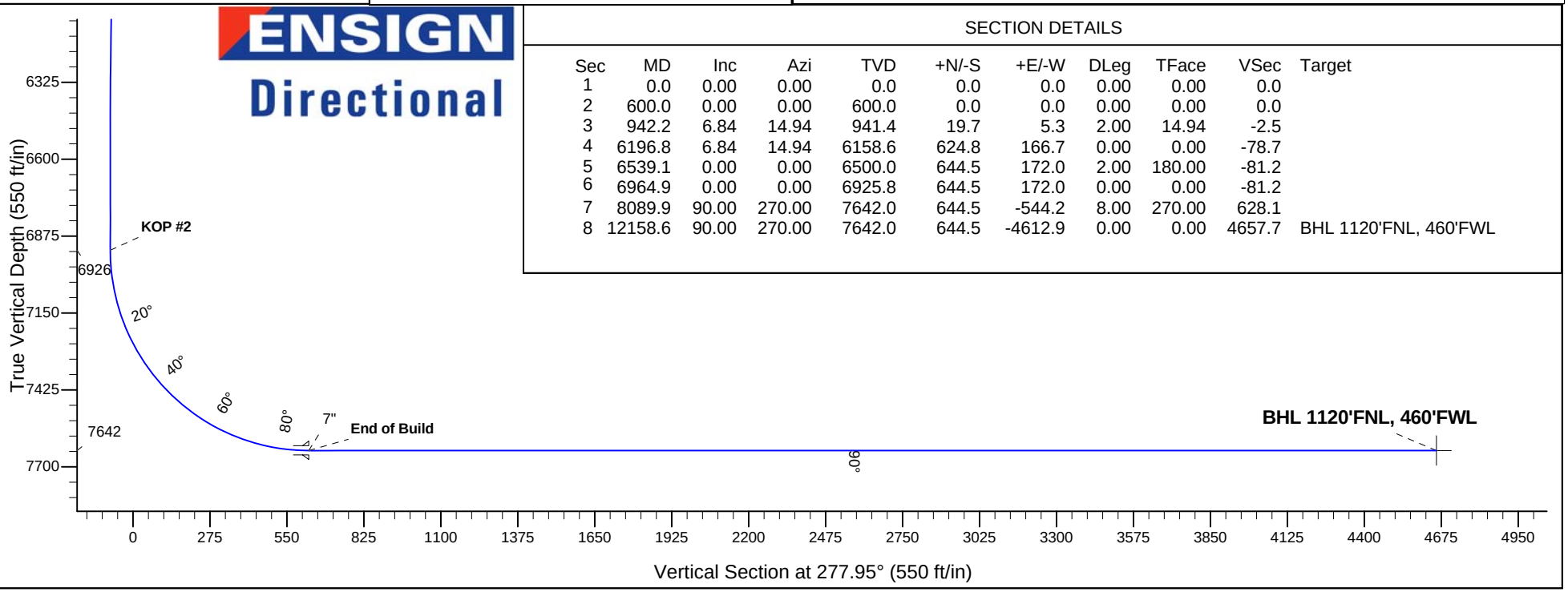
TVD	MD	Annotation
600.0	600.0	KOP #1
6925.8	6964.9	KOP #2
7642.0	8089.9	End of Build



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	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	942.2	6.84	14.94	941.4	19.7	5.3	2.00	14.94	-2.5	
4	6196.8	6.84	14.94	6158.6	624.8	166.7	0.00	0.00	-78.7	
5	6539.1	0.00	0.00	6500.0	644.5	172.0	2.00	180.00	-81.2	
6	6964.9	0.00	0.00	6925.8	644.5	172.0	0.00	0.00	-81.2	
7	8089.9	90.00	270.00	7642.0	644.5	-544.2	8.00	270.00	628.1	
8	12158.6	90.00	270.00	7642.0	644.5	-4612.9	0.00	0.00	4657.7	BHL 1120'FNL, 460'FWL



Synergy Resources

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

Wellbore #1

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

Standard Planning Report

28 October, 2013

Database:	Landmark	**Local Co-ordinate Reference:**	Well SRC Phelps A-32CHZ
Company:	Synergy Resources	**TVD Reference:**	WELL @ 5031.0ft (RKB - 12')
Project:	SEC.32-T1N-R66W	**MD Reference:**	WELL @ 5031.0ft (RKB - 12')
Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	**North Reference:**	True
Well:	SRC Phelps A-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 A-32CHZ

Well Position	**+N/-S**	-4.7 ft	**Northing:**	1,247,317.46 ft	**Latitude:**	40.010101
	+E/-W	-21.8 ft	**Easting:**	3,198,241.91 ft	**Longitude:**	-104.792269
Position Uncertainty		0.0 ft	**Wellhead Elevation:**	ft	**Ground Level:**	5,019.0 ft

Wellbore Wellbore #1

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

Design Plan #1 (10-28-13)

Audit Notes:

Version:		**Phase:**	PROTOTYPE	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	277.95

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	
600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.00	0.00	
942.2	6.84	14.94	941.4	19.7	5.3	2.00	2.00	0.00	14.94	
6,196.8	6.84	14.94	6,158.6	624.8	166.7	0.00	0.00	0.00	0.00	
6,539.1	0.00	0.00	6,500.0	644.5	172.0	2.00	-2.00	0.00	180.00	
6,964.9	0.00	0.00	6,925.8	644.5	172.0	0.00	0.00	0.00	0.00	
8,089.9	90.00	270.00	7,642.0	644.5	-544.2	8.00	8.00	0.00	270.00	
12,158.6	90.00	270.00	7,642.0	644.5	-4,612.9	0.00	0.00	0.00	0.00	BHL 1120'FNL, 460

Database:	Landmark	**Local Co-ordinate Reference:**	Well SRC Phelps A-32CHZ
Company:	Synergy Resources	**TVD Reference:**	WELL @ 5031.0ft (RKB - 12')
Project:	SEC.32-T1N-R66W	**MD Reference:**	WELL @ 5031.0ft (RKB - 12')
Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	**North Reference:**	True
Well:	SRC Phelps A-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 1766'FNL, 222'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
KOP #1									
700.0	2.00	14.94	700.0	1.7	0.4	-0.2	2.00	2.00	0.00
800.0	4.00	14.94	799.8	6.7	1.8	-0.8	2.00	2.00	0.00
900.0	6.00	14.94	899.5	15.2	4.0	-1.9	2.00	2.00	0.00
942.2	6.84	14.94	941.4	19.7	5.3	-2.5	2.00	2.00	0.00
1,000.0	6.84	14.94	998.8	26.4	7.0	-3.3	0.00	0.00	0.00
1,100.0	6.84	14.94	1,098.1	37.9	10.1	-4.8	0.00	0.00	0.00
1,200.0	6.84	14.94	1,197.3	49.4	13.2	-6.2	0.00	0.00	0.00
1,300.0	6.84	14.94	1,296.6	60.9	16.3	-7.7	0.00	0.00	0.00
1,400.0	6.84	14.94	1,395.9	72.4	19.3	-9.1	0.00	0.00	0.00
1,500.0	6.84	14.94	1,495.2	84.0	22.4	-10.6	0.00	0.00	0.00
1,600.0	6.84	14.94	1,594.5	95.5	25.5	-12.0	0.00	0.00	0.00
1,700.0	6.84	14.94	1,693.8	107.0	28.6	-13.5	0.00	0.00	0.00
1,800.0	6.84	14.94	1,793.1	118.5	31.6	-14.9	0.00	0.00	0.00
1,900.0	6.84	14.94	1,892.4	130.0	34.7	-16.4	0.00	0.00	0.00
2,000.0	6.84	14.94	1,991.6	141.5	37.8	-17.8	0.00	0.00	0.00
2,100.0	6.84	14.94	2,090.9	153.0	40.8	-19.3	0.00	0.00	0.00
2,200.0	6.84	14.94	2,190.2	164.6	43.9	-20.7	0.00	0.00	0.00
2,300.0	6.84	14.94	2,289.5	176.1	47.0	-22.2	0.00	0.00	0.00
2,400.0	6.84	14.94	2,388.8	187.6	50.1	-23.6	0.00	0.00	0.00
2,500.0	6.84	14.94	2,488.1	199.1	53.1	-25.1	0.00	0.00	0.00
2,600.0	6.84	14.94	2,587.4	210.6	56.2	-26.5	0.00	0.00	0.00
2,700.0	6.84	14.94	2,686.7	222.1	59.3	-28.0	0.00	0.00	0.00
2,800.0	6.84	14.94	2,785.9	233.6	62.4	-29.4	0.00	0.00	0.00
2,900.0	6.84	14.94	2,885.2	245.2	65.4	-30.9	0.00	0.00	0.00
3,000.0	6.84	14.94	2,984.5	256.7	68.5	-32.3	0.00	0.00	0.00
3,100.0	6.84	14.94	3,083.8	268.2	71.6	-33.8	0.00	0.00	0.00
3,200.0	6.84	14.94	3,183.1	279.7	74.6	-35.2	0.00	0.00	0.00
3,300.0	6.84	14.94	3,282.4	291.2	77.7	-36.7	0.00	0.00	0.00
3,400.0	6.84	14.94	3,381.7	302.7	80.8	-38.1	0.00	0.00	0.00
3,500.0	6.84	14.94	3,481.0	314.2	83.9	-39.6	0.00	0.00	0.00
3,600.0	6.84	14.94	3,580.2	325.8	86.9	-41.0	0.00	0.00	0.00
3,700.0	6.84	14.94	3,679.5	337.3	90.0	-42.5	0.00	0.00	0.00
3,800.0	6.84	14.94	3,778.8	348.8	93.1	-43.9	0.00	0.00	0.00
3,900.0	6.84	14.94	3,878.1	360.3	96.2	-45.4	0.00	0.00	0.00
4,000.0	6.84	14.94	3,977.4	371.8	99.2	-46.8	0.00	0.00	0.00
4,100.0	6.84	14.94	4,076.7	383.3	102.3	-48.3	0.00	0.00	0.00
4,200.0	6.84	14.94	4,176.0	394.8	105.4	-49.7	0.00	0.00	0.00
4,300.0	6.84	14.94	4,275.3	406.4	108.4	-51.2	0.00	0.00	0.00
4,400.0	6.84	14.94	4,374.5	417.9	111.5	-52.6	0.00	0.00	0.00
4,500.0	6.84	14.94	4,473.8	429.4	114.6	-54.1	0.00	0.00	0.00
4,600.0	6.84	14.94	4,573.1	440.9	117.7	-55.5	0.00	0.00	0.00
4,700.0	6.84	14.94	4,672.4	452.4	120.7	-57.0	0.00	0.00	0.00
4,800.0	6.84	14.94	4,771.7	463.9	123.8	-58.4	0.00	0.00	0.00

Database:	Landmark	**Local Co-ordinate Reference:**	Well SRC Phelps A-32CHZ
Company:	Synergy Resources	**TVD Reference:**	WELL @ 5031.0ft (RKB - 12')
Project:	SEC.32-T1N-R66W	**MD Reference:**	WELL @ 5031.0ft (RKB - 12')
Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	**North Reference:**	True
Well:	SRC Phelps A-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)
4,900.0	6.84	14.94	4,871.0	475.4	126.9	-59.9	0.00	0.00	0.00
5,000.0	6.84	14.94	4,970.3	487.0	130.0	-61.3	0.00	0.00	0.00
5,100.0	6.84	14.94	5,069.6	498.5	133.0	-62.8	0.00	0.00	0.00
5,200.0	6.84	14.94	5,168.8	510.0	136.1	-64.2	0.00	0.00	0.00
5,300.0	6.84	14.94	5,268.1	521.5	139.2	-65.7	0.00	0.00	0.00
5,400.0	6.84	14.94	5,367.4	533.0	142.2	-67.1	0.00	0.00	0.00
5,500.0	6.84	14.94	5,466.7	544.5	145.3	-68.6	0.00	0.00	0.00
5,600.0	6.84	14.94	5,566.0	556.0	148.4	-70.0	0.00	0.00	0.00
5,700.0	6.84	14.94	5,665.3	567.6	151.5	-71.5	0.00	0.00	0.00
5,800.0	6.84	14.94	5,764.6	579.1	154.5	-72.9	0.00	0.00	0.00
5,900.0	6.84	14.94	5,863.9	590.6	157.6	-74.4	0.00	0.00	0.00
6,000.0	6.84	14.94	5,963.1	602.1	160.7	-75.8	0.00	0.00	0.00
6,100.0	6.84	14.94	6,062.4	613.6	163.8	-77.3	0.00	0.00	0.00
6,196.8	6.84	14.94	6,158.6	624.8	166.7	-78.7	0.00	0.00	0.00
6,200.0	6.78	14.94	6,161.7	625.1	166.8	-78.7	2.00	-2.00	0.00
6,300.0	4.78	14.94	6,261.2	634.9	169.4	-80.0	2.00	-2.00	0.00
6,400.0	2.78	14.94	6,361.0	641.2	171.1	-80.8	2.00	-2.00	0.00
6,500.0	0.78	14.94	6,460.9	644.2	171.9	-81.1	2.00	-2.00	0.00
6,539.1	0.00	0.00	6,500.0	644.5	172.0	-81.2	2.00	-2.00	0.00
6,600.0	0.00	0.00	6,560.9	644.5	172.0	-81.2	0.00	0.00	0.00
6,700.0	0.00	0.00	6,660.9	644.5	172.0	-81.2	0.00	0.00	0.00
6,800.0	0.00	0.00	6,760.9	644.5	172.0	-81.2	0.00	0.00	0.00
6,900.0	0.00	0.00	6,860.9	644.5	172.0	-81.2	0.00	0.00	0.00
6,964.9	0.00	0.00	6,925.8	644.5	172.0	-81.2	0.00	0.00	0.00
KOP #2									
7,000.0	2.81	270.00	6,960.9	644.5	171.1	-80.3	8.01	8.01	0.00
7,100.0	10.81	270.00	7,060.1	644.5	159.3	-68.6	8.00	8.00	0.00
7,200.0	18.81	270.00	7,156.7	644.5	133.8	-43.3	8.00	8.00	0.00
7,300.0	26.81	270.00	7,248.8	644.5	95.0	-4.9	8.00	8.00	0.00
7,400.0	34.81	270.00	7,334.6	644.5	43.8	45.8	8.00	8.00	0.00
7,500.0	42.81	270.00	7,412.5	644.5	-18.8	107.8	8.00	8.00	0.00
7,600.0	50.81	270.00	7,480.9	644.5	-91.6	179.9	8.00	8.00	0.00
7,700.0	58.81	270.00	7,538.5	644.5	-173.3	260.8	8.00	8.00	0.00
7,800.0	66.81	270.00	7,584.1	644.5	-262.2	348.8	8.00	8.00	0.00
7,900.0	74.81	270.00	7,617.0	644.5	-356.5	442.3	8.00	8.00	0.00
8,000.0	82.81	270.00	7,636.4	644.5	-454.6	539.4	8.00	8.00	0.00
8,089.9	90.00	270.00	7,642.0	644.5	-544.2	628.2	8.00	8.00	0.00
End of Build - 7"									
8,100.0	90.00	270.00	7,642.0	644.5	-554.3	638.2	0.00	0.00	0.00
8,200.0	90.00	270.00	7,642.0	644.5	-654.3	737.2	0.00	0.00	0.00
8,300.0	90.00	270.00	7,642.0	644.5	-754.3	836.2	0.00	0.00	0.00
8,400.0	90.00	270.00	7,642.0	644.5	-854.3	935.3	0.00	0.00	0.00
8,500.0	90.00	270.00	7,642.0	644.5	-954.3	1,034.3	0.00	0.00	0.00
8,600.0	90.00	270.00	7,642.0	644.5	-1,054.3	1,133.4	0.00	0.00	0.00
8,700.0	90.00	270.00	7,642.0	644.5	-1,154.3	1,232.4	0.00	0.00	0.00
8,800.0	90.00	270.00	7,642.0	644.5	-1,254.3	1,331.4	0.00	0.00	0.00
8,900.0	90.00	270.00	7,642.0	644.5	-1,354.3	1,430.5	0.00	0.00	0.00
9,000.0	90.00	270.00	7,642.0	644.5	-1,454.3	1,529.5	0.00	0.00	0.00
9,100.0	90.00	270.00	7,642.0	644.5	-1,554.3	1,628.5	0.00	0.00	0.00
9,200.0	90.00	270.00	7,642.0	644.5	-1,654.3	1,727.6	0.00	0.00	0.00
9,300.0	90.00	270.00	7,642.0	644.5	-1,754.3	1,826.6	0.00	0.00	0.00
9,400.0	90.00	270.00	7,642.0	644.5	-1,854.3	1,925.7	0.00	0.00	0.00
9,500.0	90.00	270.00	7,642.0	644.5	-1,954.3	2,024.7	0.00	0.00	0.00

Database:	Landmark	**Local Co-ordinate Reference:**	Well SRC Phelps A-32CHZ
Company:	Synergy Resources	**TVD Reference:**	WELL @ 5031.0ft (RKB - 12')
Project:	SEC.32-T1N-R66W	**MD Reference:**	WELL @ 5031.0ft (RKB - 12')
Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	**North Reference:**	True
Well:	SRC Phelps A-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)
9,600.0	90.00	270.00	7,642.0	644.5	-2,054.3	2,123.7	0.00	0.00	0.00
9,700.0	90.00	270.00	7,642.0	644.5	-2,154.3	2,222.8	0.00	0.00	0.00
9,800.0	90.00	270.00	7,642.0	644.5	-2,254.3	2,321.8	0.00	0.00	0.00
9,900.0	90.00	270.00	7,642.0	644.5	-2,354.3	2,420.9	0.00	0.00	0.00
10,000.0	90.00	270.00	7,642.0	644.5	-2,454.3	2,519.9	0.00	0.00	0.00
10,100.0	90.00	270.00	7,642.0	644.5	-2,554.3	2,618.9	0.00	0.00	0.00
10,200.0	90.00	270.00	7,642.0	644.5	-2,654.3	2,718.0	0.00	0.00	0.00
10,300.0	90.00	270.00	7,642.0	644.5	-2,754.3	2,817.0	0.00	0.00	0.00
10,400.0	90.00	270.00	7,642.0	644.5	-2,854.3	2,916.0	0.00	0.00	0.00
10,500.0	90.00	270.00	7,642.0	644.5	-2,954.3	3,015.1	0.00	0.00	0.00
10,600.0	90.00	270.00	7,642.0	644.5	-3,054.3	3,114.1	0.00	0.00	0.00
10,700.0	90.00	270.00	7,642.0	644.5	-3,154.3	3,213.2	0.00	0.00	0.00
10,800.0	90.00	270.00	7,642.0	644.5	-3,254.3	3,312.2	0.00	0.00	0.00
10,900.0	90.00	270.00	7,642.0	644.5	-3,354.3	3,411.2	0.00	0.00	0.00
11,000.0	90.00	270.00	7,642.0	644.5	-3,454.3	3,510.3	0.00	0.00	0.00
11,100.0	90.00	270.00	7,642.0	644.5	-3,554.3	3,609.3	0.00	0.00	0.00
11,200.0	90.00	270.00	7,642.0	644.5	-3,654.3	3,708.3	0.00	0.00	0.00
11,300.0	90.00	270.00	7,642.0	644.5	-3,754.3	3,807.4	0.00	0.00	0.00
11,400.0	90.00	270.00	7,642.0	644.5	-3,854.3	3,906.4	0.00	0.00	0.00
11,500.0	90.00	270.00	7,642.0	644.5	-3,954.3	4,005.5	0.00	0.00	0.00
11,600.0	90.00	270.00	7,642.0	644.5	-4,054.3	4,104.5	0.00	0.00	0.00
11,700.0	90.00	270.00	7,642.0	644.5	-4,154.3	4,203.5	0.00	0.00	0.00
11,800.0	90.00	270.00	7,642.0	644.5	-4,254.3	4,302.6	0.00	0.00	0.00
11,900.0	90.00	270.00	7,642.0	644.5	-4,354.3	4,401.6	0.00	0.00	0.00
12,000.0	90.00	270.00	7,642.0	644.5	-4,454.3	4,500.7	0.00	0.00	0.00
12,100.0	90.00	270.00	7,642.0	644.5	-4,554.3	4,599.7	0.00	0.00	0.00
12,158.6	90.00	270.00	7,642.0	644.5	-4,612.9	4,657.7	0.00	0.00	0.00
BHL 1120'FNL, 460'FWL									

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
8,089.9	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
600.0	600.0	0.0	0.0	KOP #1
6,964.9	6,925.8	644.5	172.0	KOP #2
8,089.9	7,642.0	644.5	-544.2	End of Build

ENSIGN Directional

Synergy Resources

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

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

Anticollision Report

28 October, 2013

Company:	Synergy Resources	**Local Co-ordinate Reference:**	Well SRC Phelps A-32CHZ
Project:	SEC.32-T1N-R66W	**TVD Reference:**	WELL @ 5031.0ft (RKB - 12')
Reference Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	**MD Reference:**	WELL @ 5031.0ft (RKB - 12')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	SRC Phelps A-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	12,158.6	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	537.1	536.9	48.9	46.7	21.843	CC, ES
SRC Phelps 11-32CHZ - Wellbore #1 - Plan #1 (10-28-13	12,158.6	12,260.3	659.7	398.1	2.521	SF
SRC Phelps 11-32NHZ - Wellbore #1 - Plan #1 (10-28-13	669.4	669.8	27.8	25.0	9.945	CC
SRC Phelps 11-32NHZ - Wellbore #1 - Plan #1 (10-28-13	700.0	700.4	27.9	25.0	9.495	ES
SRC Phelps 11-32NHZ - Wellbore #1 - Plan #1 (10-28-13	12,158.6	12,013.0	381.3	150.0	1.648	SF
SRC Phelps 12-32CHZ - Wellbore #1 - Plan #1 (10-28-13	600.0	599.0	75.4	72.9	30.522	CC, ES
SRC Phelps 12-32CHZ - Wellbore #1 - Plan #1 (10-28-13	12,158.6	12,128.5	738.4	477.2	2.827	SF
SRC Phelps 12-32NHZ - Wellbore #1 - Plan #1 (10-28-13	600.0	599.0	97.8	95.3	39.573	CC, ES
SRC Phelps 12-32NHZ - Wellbore #1 - Plan #1 (10-28-13	2,000.0	1,990.6	210.0	201.1	23.509	SF
SRC Phelps A-32NHZ - Wellbore #1 - Plan #1 (10-28-13	832.3	831.9	20.0	16.4	5.677	CC, ES
SRC Phelps A-32NHZ - Wellbore #1 - Plan #1 (10-28-13	12,158.6	11,937.7	450.8	212.9	1.895	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	-102.36	-11.3	-51.5	52.8				
100.0	100.0	99.0	99.0	0.1	0.1	-102.36	-11.3	-51.5	52.8	52.5	0.22	235.933	
200.0	200.0	199.0	199.0	0.3	0.3	-102.36	-11.3	-51.5	52.8	52.1	0.67	78.514	
300.0	300.0	299.6	299.6	0.6	0.6	-100.59	-9.6	-51.3	52.1	51.0	1.12	46.410	
400.0	400.0	400.1	399.9	0.8	0.8	-95.00	-4.4	-50.4	50.6	49.0	1.58	31.986	
500.0	500.0	500.0	499.4	1.0	1.0	-85.12	4.2	-48.9	49.1	47.0	2.05	23.910	
537.1	537.1	536.9	536.1	1.1	1.1	-80.34	8.2	-48.2	48.9	46.7	2.24	21.843	CC, ES
600.0	600.0	599.2	597.9	1.2	1.3	-71.07	16.1	-46.9	49.6	47.0	2.56	19.393	
700.0	700.0	697.7	695.2	1.5	1.6	-71.40	31.2	-44.3	53.8	50.7	3.08	17.457	
800.0	799.8	795.7	791.5	1.7	2.0	-59.70	49.6	-41.2	61.1	57.5	3.61	16.938	
900.0	899.5	894.4	887.8	1.9	2.4	-51.30	70.6	-37.6	70.1	66.0	4.14	16.938	
1,000.0	998.8	993.9	984.9	2.2	2.8	-46.32	92.0	-34.0	78.4	73.7	4.68	16.754	
1,100.0	1,098.1	1,093.4	1,081.9	2.4	3.3	-42.50	113.4	-30.3	87.0	81.7	5.22	16.658	
1,200.0	1,197.3	1,192.8	1,179.0	2.7	3.7	-39.37	134.8	-26.7	95.8	90.0	5.75	16.653	
1,300.0	1,296.6	1,292.3	1,276.1	3.0	4.2	-36.77	156.2	-23.0	104.9	98.6	6.28	16.702	
1,400.0	1,395.9	1,391.8	1,373.2	3.3	4.6	-34.59	177.6	-19.4	114.1	107.3	6.80	16.778	

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 A-32CHZ
Project:	SEC.32-T1N-R66W	**TVD Reference:**	WELL @ 5031.0ft (RKB - 12')
Reference Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	**MD Reference:**	WELL @ 5031.0ft (RKB - 12')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	SRC Phelps A-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
1,500.0	1,495.2	1,491.3	1,470.3	3.6	5.0	-32.74	199.0	-15.7	123.5	116.2	7.32	16.869	
1,600.0	1,594.5	1,590.8	1,567.4	3.9	5.5	-31.15	220.4	-12.1	133.0	125.2	7.84	16.967	
1,700.0	1,693.8	1,690.3	1,664.5	4.2	6.0	-29.78	241.8	-8.4	142.6	134.3	8.36	17.067	
1,800.0	1,793.1	1,789.7	1,761.5	4.5	6.4	-28.57	263.2	-4.8	152.3	143.4	8.87	17.165	
1,900.0	1,892.4	1,889.2	1,858.6	4.8	6.9	-27.52	284.6	-1.2	162.0	152.7	9.39	17.260	
2,000.0	1,991.6	1,988.7	1,955.7	5.1	7.3	-26.58	306.0	2.5	171.8	161.9	9.90	17.351	
2,100.0	2,090.9	2,088.2	2,052.8	5.4	7.8	-25.74	327.4	6.1	181.6	171.2	10.42	17.437	
2,200.0	2,190.2	2,187.7	2,149.9	5.7	8.2	-24.99	348.8	9.8	191.5	180.6	10.93	17.519	
2,300.0	2,289.5	2,287.2	2,247.0	6.0	8.7	-24.31	370.2	13.4	201.4	189.9	11.44	17.596	
2,400.0	2,388.8	2,386.6	2,344.1	6.3	9.1	-23.70	391.6	17.1	211.3	199.3	11.96	17.669	
2,500.0	2,488.1	2,486.1	2,441.1	6.6	9.6	-23.14	413.0	20.7	221.2	208.7	12.47	17.738	
2,600.0	2,587.4	2,585.6	2,538.2	6.9	10.0	-22.63	434.4	24.4	231.1	218.2	12.98	17.802	
2,700.0	2,686.7	2,685.1	2,635.3	7.2	10.5	-22.16	455.8	28.0	241.1	227.6	13.50	17.863	
2,800.0	2,785.9	2,784.6	2,732.4	7.5	10.9	-21.73	477.2	31.6	251.1	237.1	14.01	17.921	
2,900.0	2,885.2	2,884.1	2,829.5	7.8	11.4	-21.33	498.6	35.3	261.1	246.5	14.52	17.975	
3,000.0	2,984.5	2,983.5	2,926.6	8.1	11.9	-20.96	520.0	38.9	271.1	256.0	15.04	18.026	
3,100.0	3,083.8	3,083.0	3,023.7	8.5	12.3	-20.62	541.4	42.6	281.1	265.5	15.55	18.074	
3,200.0	3,183.1	3,182.5	3,120.7	8.8	12.8	-20.30	562.8	46.2	291.1	275.0	16.07	18.119	
3,300.0	3,282.4	3,282.0	3,217.8	9.1	13.2	-20.00	584.3	49.9	301.1	284.6	16.58	18.163	
3,400.0	3,381.7	3,381.5	3,314.9	9.4	13.7	-19.72	605.7	53.5	311.2	294.1	17.09	18.203	
3,500.0	3,481.0	3,481.0	3,412.0	9.7	14.1	-19.46	627.1	57.2	321.2	303.6	17.61	18.242	
3,600.0	3,580.2	3,580.4	3,509.1	10.0	14.6	-19.21	648.5	60.8	331.3	313.2	18.12	18.279	
3,700.0	3,679.5	3,679.9	3,606.2	10.3	15.1	-18.98	669.9	64.4	341.3	322.7	18.64	18.314	
3,800.0	3,778.8	3,779.4	3,703.3	10.6	15.5	-18.76	691.3	68.1	351.4	332.2	19.15	18.347	
3,900.0	3,878.1	3,878.9	3,800.3	10.9	16.0	-18.56	712.7	71.7	361.5	341.8	19.67	18.379	
4,000.0	3,977.4	3,978.4	3,897.4	11.2	16.4	-18.36	734.1	75.4	371.5	351.3	20.18	18.409	
4,100.0	4,076.7	4,077.9	3,994.5	11.5	16.9	-18.18	755.5	79.0	381.6	360.9	20.70	18.438	
4,200.0	4,176.0	4,177.4	4,091.6	11.9	17.3	-18.00	776.9	82.7	391.7	370.5	21.21	18.466	
4,300.0	4,275.3	4,276.8	4,188.7	12.2	17.8	-17.84	798.3	86.3	401.8	380.0	21.73	18.492	
4,400.0	4,374.5	4,376.3	4,285.8	12.5	18.3	-17.68	819.7	90.0	411.9	389.6	22.24	18.517	
4,500.0	4,473.8	4,475.8	4,382.9	12.8	18.7	-17.53	841.1	93.6	421.9	399.2	22.76	18.541	
4,600.0	4,573.1	4,575.3	4,479.9	13.1	19.2	-17.39	862.5	97.2	432.0	408.8	23.27	18.564	
4,700.0	4,672.4	4,674.8	4,577.0	13.4	19.6	-17.25	883.9	100.9	442.1	418.3	23.79	18.586	
4,800.0	4,771.7	4,774.3	4,674.1	13.7	20.1	-17.12	905.3	104.5	452.2	427.9	24.30	18.608	
4,900.0	4,871.0	4,873.7	4,771.2	14.0	20.5	-16.99	926.7	108.2	462.3	437.5	24.82	18.628	
5,000.0	4,970.3	4,973.2	4,868.3	14.3	21.0	-16.87	948.1	111.8	472.4	447.1	25.33	18.648	
5,100.0	5,069.6	5,072.7	4,965.4	14.6	21.5	-16.76	969.5	115.5	482.5	456.7	25.85	18.667	
5,200.0	5,168.8	5,172.2	5,062.5	15.0	21.9	-16.65	990.9	119.1	492.6	466.3	26.37	18.685	
5,300.0	5,268.1	5,271.7	5,159.5	15.3	22.4	-16.54	1,012.3	122.8	502.7	475.8	26.88	18.702	
5,400.0	5,367.4	5,371.2	5,256.6	15.6	22.8	-16.44	1,033.7	126.4	512.8	485.4	27.40	18.719	
5,500.0	5,466.7	5,470.6	5,353.7	15.9	23.3	-16.35	1,055.1	130.0	522.9	495.0	27.91	18.735	
5,600.0	5,566.0	5,570.1	5,450.8	16.2	23.7	-16.25	1,076.5	133.7	533.1	504.6	28.43	18.751	
5,700.0	5,665.3	5,669.6	5,547.9	16.5	24.2	-16.16	1,097.9	137.3	543.2	514.2	28.94	18.766	
5,800.0	5,764.6	5,769.1	5,645.0	16.8	24.7	-16.07	1,119.3	141.0	553.3	523.8	29.46	18.781	
5,900.0	5,863.9	5,868.6	5,742.1	17.1	25.1	-15.99	1,140.7	144.6	563.4	533.4	29.98	18.795	
6,000.0	5,963.1	5,968.1	5,839.1	17.4	25.6	-15.91	1,162.1	148.3	573.5	543.0	30.49	18.808	
6,100.0	6,062.4	6,067.5	5,936.2	17.7	26.0	-15.83	1,183.5	151.9	583.6	552.6	31.01	18.822	
6,200.0	6,161.7	6,167.0	6,033.3	18.1	26.5	-15.76	1,204.9	155.6	593.7	562.2	31.52	18.836	
6,300.0	6,261.2	6,266.3	6,130.2	18.3	26.9	-15.70	1,226.3	159.2	605.6	573.7	31.93	18.969	
6,400.0	6,361.0	6,379.5	6,240.8	18.5	27.4	-15.56	1,249.9	163.2	620.3	588.0	32.30	19.203	
6,500.0	6,460.9	6,505.7	6,365.1	18.6	27.8	-15.37	1,271.5	166.9	634.4	601.8	32.60	19.457	

Company:	Synergy Resources	**Local Co-ordinate Reference:**	Well SRC Phelps A-32CHZ
Project:	SEC.32-T1N-R66W	**TVD Reference:**	WELL @ 5031.0ft (RKB - 12')
Reference Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	**MD Reference:**	WELL @ 5031.0ft (RKB - 12')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	SRC Phelps A-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
6,600.0	6,560.9	6,632.9	6,491.2	18.8	28.1	-0.21	1,287.8	169.7	646.9	600.5	46.43	13.932	
6,700.0	6,660.9	6,761.3	6,619.1	19.0	28.4	-0.04	1,298.6	171.5	655.3	608.5	46.87	13.981	
6,800.0	6,760.9	6,890.4	6,748.2	19.1	28.6	0.03	1,303.7	172.4	659.3	612.1	47.24	13.957	
6,900.0	6,860.9	7,002.2	6,859.9	19.3	28.7	0.04	1,304.2	172.5	659.7	612.2	47.54	13.878	
6,948.6	6,909.5	7,050.8	6,908.5	19.4	28.8	90.09	1,304.2	172.5	659.7	625.4	34.33	19.219	
7,000.0	6,960.9	7,102.2	6,959.9	19.5	28.8	90.04	1,304.2	171.6	659.7	625.2	34.52	19.110	
7,100.0	7,060.1	7,202.3	7,059.2	19.6	28.9	90.04	1,304.2	159.7	659.7	624.9	34.80	18.957	
7,200.0	7,156.7	7,302.4	7,155.9	19.7	28.9	90.04	1,304.2	134.2	659.7	624.7	35.02	18.838	
7,300.0	7,248.8	7,402.4	7,248.0	19.8	29.0	90.04	1,304.2	95.4	659.7	624.5	35.24	18.723	
7,400.0	7,334.6	7,502.5	7,333.9	19.8	29.0	90.03	1,304.2	44.1	659.7	624.2	35.53	18.569	
7,500.0	7,412.5	7,602.5	7,411.7	19.9	29.0	90.03	1,304.2	-18.5	659.7	623.7	36.02	18.317	
7,600.0	7,480.9	7,702.6	7,480.1	20.0	29.1	90.03	1,304.2	-91.5	659.7	622.9	36.84	17.906	
7,700.0	7,538.5	7,802.6	7,537.7	20.3	29.2	90.02	1,304.2	-173.2	659.7	621.6	38.14	17.296	
7,800.0	7,584.1	7,902.6	7,583.3	20.8	29.3	90.02	1,304.2	-262.1	659.7	619.7	40.01	16.489	
7,900.0	7,617.0	8,002.6	7,616.1	21.8	29.6	90.01	1,304.2	-356.5	659.7	617.2	42.47	15.534	
8,000.0	7,636.4	8,102.7	7,635.4	23.2	30.1	90.00	1,304.2	-454.5	659.7	614.2	45.47	14.509	
8,100.0	7,642.0	8,202.7	7,641.0	24.9	30.8	90.00	1,304.2	-554.3	659.7	610.8	48.90	13.492	
8,200.0	7,642.0	8,302.7	7,641.0	26.7	31.8	90.00	1,304.2	-654.3	659.7	607.0	52.67	12.525	
8,300.0	7,642.0	8,402.7	7,641.0	28.8	33.1	90.00	1,304.2	-754.3	659.7	603.0	56.75	11.625	
8,400.0	7,642.0	8,502.7	7,641.0	30.9	34.6	90.00	1,304.2	-854.3	659.7	598.6	61.07	10.803	
8,500.0	7,642.0	8,602.7	7,641.0	33.2	36.4	90.00	1,304.2	-954.3	659.7	594.1	65.58	10.059	
8,600.0	7,642.0	8,702.7	7,641.0	35.5	38.4	90.00	1,304.2	-1,054.3	659.7	589.5	70.25	9.390	
8,700.0	7,642.0	8,802.7	7,641.0	37.9	40.5	90.00	1,304.2	-1,154.3	659.7	584.7	75.06	8.790	
8,800.0	7,642.0	8,902.7	7,641.0	40.4	42.7	90.00	1,304.2	-1,254.3	659.7	579.7	79.96	8.250	
8,900.0	7,642.0	9,002.7	7,641.0	42.9	45.0	90.00	1,304.2	-1,354.3	659.7	574.8	84.95	7.765	
9,000.0	7,642.0	9,102.7	7,641.0	45.4	47.3	90.00	1,304.2	-1,454.3	659.7	569.7	90.02	7.328	
9,100.0	7,642.0	9,202.7	7,641.0	47.9	49.7	90.00	1,304.2	-1,554.3	659.7	564.6	95.15	6.934	
9,200.0	7,642.0	9,302.7	7,641.0	50.5	52.2	90.00	1,304.2	-1,654.3	659.7	559.4	100.32	6.576	
9,300.0	7,642.0	9,402.7	7,641.0	53.1	54.7	90.00	1,304.2	-1,754.3	659.7	554.2	105.55	6.250	
9,400.0	7,642.0	9,502.7	7,641.0	55.8	57.2	90.00	1,304.2	-1,854.3	659.7	548.9	110.81	5.954	
9,500.0	7,642.0	9,602.7	7,641.0	58.4	59.7	90.00	1,304.2	-1,954.3	659.7	543.6	116.10	5.682	
9,600.0	7,642.0	9,702.7	7,641.0	61.1	62.3	90.00	1,304.2	-2,054.3	659.7	538.3	121.42	5.433	
9,700.0	7,642.0	9,802.7	7,641.0	63.7	64.9	90.00	1,304.2	-2,154.3	659.7	532.9	126.76	5.204	
9,800.0	7,642.0	9,902.7	7,641.0	66.4	67.5	90.00	1,304.2	-2,254.3	659.7	527.6	132.13	4.993	
9,900.0	7,642.0	10,002.7	7,641.0	69.1	70.1	90.00	1,304.2	-2,354.3	659.7	522.2	137.52	4.797	
10,000.0	7,642.0	10,102.7	7,641.0	71.8	72.8	90.00	1,304.2	-2,454.3	659.7	516.8	142.92	4.616	
10,100.0	7,642.0	10,202.7	7,641.0	74.5	75.4	90.00	1,304.2	-2,554.3	659.7	511.4	148.34	4.447	
10,200.0	7,642.0	10,302.7	7,641.0	77.2	78.1	90.00	1,304.2	-2,654.3	659.7	505.9	153.77	4.290	
10,300.0	7,642.0	10,402.7	7,641.0	79.9	80.7	90.00	1,304.2	-2,754.3	659.7	500.5	159.22	4.143	
10,400.0	7,642.0	10,502.7	7,641.0	82.7	83.4	90.00	1,304.2	-2,854.3	659.7	495.0	164.67	4.006	
10,500.0	7,642.0	10,602.7	7,641.0	85.4	86.1	90.00	1,304.2	-2,954.3	659.7	489.6	170.14	3.878	
10,600.0	7,642.0	10,702.7	7,641.0	88.1	88.8	90.00	1,304.2	-3,054.3	659.7	484.1	175.61	3.757	
10,700.0	7,642.0	10,802.7	7,641.0	90.9	91.5	90.00	1,304.2	-3,154.3	659.7	478.6	181.09	3.643	
10,800.0	7,642.0	10,902.7	7,641.0	93.6	94.2	90.00	1,304.2	-3,254.3	659.7	473.1	186.58	3.536	
10,900.0	7,642.0	11,002.7	7,641.0	96.4	96.9	90.00	1,304.2	-3,354.3	659.7	467.6	192.08	3.435	
11,000.0	7,642.0	11,102.7	7,641.0	99.1	99.7	90.00	1,304.2	-3,454.3	659.7	462.1	197.58	3.339	
11,100.0	7,642.0	11,202.7	7,641.0	101.9	102.4	90.00	1,304.2	-3,554.3	659.7	456.6	203.09	3.248	
11,200.0	7,642.0	11,302.7	7,641.0	104.6	105.1	90.00	1,304.2	-3,654.3	659.7	451.1	208.61	3.162	
11,300.0	7,642.0	11,402.7	7,641.0	107.4	107.8	90.00	1,304.2	-3,754.3	659.7	445.6	214.13	3.081	
11,400.0	7,642.0	11,502.7	7,641.0	110.1	110.6	90.00	1,304.2	-3,854.3	659.7	440.1	219.65	3.003	
11,500.0	7,642.0	11,602.7	7,641.0	112.9	113.3	90.00	1,304.2	-3,954.3	659.7	434.5	225.18	2.930	

Company:	Synergy Resources	**Local Co-ordinate Reference:**	Well SRC Phelps A-32CHZ
Project:	SEC.32-T1N-R66W	**TVD Reference:**	WELL @ 5031.0ft (RKB - 12')
Reference Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	**MD Reference:**	WELL @ 5031.0ft (RKB - 12')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	SRC Phelps A-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
11,600.0	7,642.0	11,702.7	7,641.0	115.7	116.1	90.00	1,304.2	-4,054.3	659.7	429.0	230.71	2.859	
11,700.0	7,642.0	11,802.7	7,641.0	118.4	118.8	90.00	1,304.2	-4,154.3	659.7	423.5	236.25	2.792	
11,800.0	7,642.0	11,902.7	7,641.0	121.2	121.6	90.00	1,304.2	-4,254.3	659.7	417.9	241.78	2.729	
11,900.0	7,642.0	12,002.7	7,641.0	124.0	124.3	90.00	1,304.2	-4,354.3	659.7	412.4	247.33	2.667	
12,000.0	7,642.0	12,102.7	7,641.0	126.8	127.1	90.00	1,304.2	-4,454.3	659.7	406.8	252.87	2.609	
12,100.0	7,642.0	12,202.7	7,641.0	129.5	129.8	90.00	1,304.2	-4,554.3	659.7	401.3	258.42	2.553	
12,133.2	7,642.0	12,235.8	7,641.0	130.4	130.7	90.00	1,304.2	-4,587.5	659.7	399.5	260.26	2.535	
12,158.6	7,642.0	12,260.3	7,641.0	131.2	131.4	90.00	1,304.2	-4,612.0	659.7	398.1	261.65	2.521	SF

Company:	Synergy Resources	**Local Co-ordinate Reference:**	Well SRC Phelps A-32CHZ
Project:	SEC.32-T1N-R66W	**TVD Reference:**	WELL @ 5031.0ft (RKB - 12')
Reference Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	**MD Reference:**	WELL @ 5031.0ft (RKB - 12')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	SRC Phelps A-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	0.0	0.0	0.0	0.0	-102.45	-6.6	-29.7	30.4				
100.0	100.0	100.0	100.0	0.1	0.1	-102.45	-6.6	-29.7	30.4	30.2	0.22	135.289	
200.0	200.0	200.0	200.0	0.3	0.3	-102.45	-6.6	-29.7	30.4	29.7	0.67	45.096	
300.0	300.0	300.0	300.0	0.6	0.6	-102.45	-6.6	-29.7	30.4	29.3	1.12	27.058	
400.0	400.0	400.0	400.0	0.8	0.8	-102.45	-6.6	-29.7	30.4	28.8	1.57	19.327	
500.0	500.0	500.4	500.4	1.0	1.0	-99.36	-4.8	-29.3	29.7	27.7	2.02	14.696	
600.0	600.0	600.5	600.4	1.2	1.2	-89.36	0.3	-28.3	28.3	25.8	2.48	11.422	
669.4	669.4	669.8	669.4	1.4	1.4	-94.45	5.9	-27.1	27.8	25.0	2.80	9.945	CC
700.0	700.0	700.4	699.8	1.5	1.5	-90.05	8.9	-26.5	27.9	25.0	2.94	9.495	ES
800.0	799.8	800.0	798.7	1.7	1.7	-76.39	20.7	-24.1	29.4	26.0	3.43	8.591	
900.0	899.5	899.3	896.8	1.9	2.0	-64.86	35.9	-20.9	32.6	28.7	3.94	8.275	
1,000.0	998.8	999.1	995.1	2.2	2.4	-57.30	52.9	-17.5	36.3	31.8	4.48	8.103	
1,100.0	1,098.1	1,099.0	1,093.4	2.4	2.7	-51.57	69.8	-14.0	40.2	35.2	5.01	8.030	
1,200.0	1,197.3	1,198.8	1,191.8	2.7	3.1	-46.91	86.7	-10.5	44.5	39.0	5.54	8.041	
1,300.0	1,296.6	1,298.7	1,290.1	3.0	3.4	-43.08	103.6	-7.0	49.1	43.0	6.06	8.099	
1,400.0	1,395.9	1,398.5	1,388.4	3.3	3.8	-39.92	120.6	-3.5	53.8	47.2	6.58	8.183	
1,500.0	1,495.2	1,498.4	1,486.8	3.6	4.2	-37.27	137.5	0.0	58.7	51.6	7.09	8.280	
1,600.0	1,594.5	1,598.2	1,585.1	3.9	4.6	-35.03	154.4	3.5	63.6	56.0	7.59	8.381	
1,700.0	1,693.8	1,698.1	1,683.5	4.2	4.9	-33.12	171.4	6.9	68.7	60.6	8.10	8.483	
1,800.0	1,793.1	1,797.9	1,781.8	4.5	5.3	-31.47	188.3	10.4	73.8	65.2	8.60	8.582	
1,900.0	1,892.4	1,897.7	1,880.2	4.8	5.7	-30.04	205.2	13.9	79.0	69.9	9.10	8.678	
2,000.0	1,991.6	1,997.6	1,978.5	5.1	6.1	-28.78	222.1	17.4	84.2	74.6	9.60	8.769	
2,100.0	2,090.9	2,097.4	2,076.8	5.4	6.5	-27.67	239.1	20.9	89.4	79.3	10.10	8.855	
2,200.0	2,190.2	2,197.3	2,175.2	5.7	6.8	-26.69	256.0	24.4	94.7	84.1	10.60	8.936	
2,300.0	2,289.5	2,297.1	2,273.5	6.0	7.2	-25.80	272.9	27.8	100.0	88.9	11.10	9.012	
2,400.0	2,388.8	2,397.0	2,371.9	6.3	7.6	-25.01	289.8	31.3	105.3	93.7	11.59	9.084	
2,500.0	2,488.1	2,496.8	2,470.2	6.6	8.0	-24.29	306.8	34.8	110.7	98.6	12.09	9.151	
2,600.0	2,587.4	2,596.7	2,568.5	6.9	8.4	-23.64	323.7	38.3	116.0	103.4	12.59	9.215	
2,700.0	2,686.7	2,696.5	2,666.9	7.2	8.8	-23.05	340.6	41.8	121.4	108.3	13.09	9.274	
2,800.0	2,785.9	2,796.4	2,765.2	7.5	9.1	-22.50	357.5	45.3	126.8	113.2	13.59	9.330	
2,900.0	2,885.2	2,896.2	2,863.6	7.8	9.5	-22.01	374.5	48.8	132.2	118.1	14.08	9.383	
3,000.0	2,984.5	2,996.1	2,961.9	8.1	9.9	-21.55	391.4	52.2	137.6	123.0	14.58	9.433	
3,100.0	3,083.8	3,095.9	3,060.3	8.5	10.3	-21.12	408.3	55.7	143.0	127.9	15.08	9.480	
3,200.0	3,183.1	3,195.8	3,158.6	8.8	10.7	-20.73	425.2	59.2	148.4	132.8	15.58	9.524	
3,300.0	3,282.4	3,295.6	3,256.9	9.1	11.1	-20.36	442.2	62.7	153.8	137.7	16.08	9.566	
3,400.0	3,381.7	3,395.5	3,355.3	9.4	11.4	-20.02	459.1	66.2	159.2	142.7	16.58	9.606	
3,500.0	3,481.0	3,495.3	3,453.6	9.7	11.8	-19.70	476.0	69.7	164.7	147.6	17.08	9.644	
3,600.0	3,580.2	3,595.2	3,552.0	10.0	12.2	-19.40	492.9	73.1	170.1	152.5	17.57	9.680	
3,700.0	3,679.5	3,695.0	3,650.3	10.3	12.6	-19.12	509.9	76.6	175.6	157.5	18.07	9.714	
3,800.0	3,778.8	3,794.9	3,748.6	10.6	13.0	-18.86	526.8	80.1	181.0	162.4	18.57	9.746	
3,900.0	3,878.1	3,894.7	3,847.0	10.9	13.4	-18.61	543.7	83.6	186.5	167.4	19.07	9.777	
4,000.0	3,977.4	3,994.6	3,945.3	11.2	13.8	-18.38	560.6	87.1	191.9	172.3	19.57	9.806	
4,100.0	4,076.7	4,094.4	4,043.7	11.5	14.1	-18.16	577.6	90.6	197.4	177.3	20.07	9.834	
4,200.0	4,176.0	4,194.3	4,142.0	11.9	14.5	-17.95	594.5	94.1	202.8	182.3	20.57	9.861	
4,300.0	4,275.3	4,294.1	4,240.4	12.2	14.9	-17.75	611.4	97.5	208.3	187.2	21.07	9.887	
4,400.0	4,374.5	4,394.0	4,338.7	12.5	15.3	-17.56	628.3	101.0	213.8	192.2	21.57	9.911	
4,500.0	4,473.8	4,493.8	4,437.0	12.8	15.7	-17.38	645.3	104.5	219.2	197.2	22.07	9.935	
4,600.0	4,573.1	4,593.6	4,535.4	13.1	16.1	-17.22	662.2	108.0	224.7	202.1	22.57	9.957	
4,700.0	4,672.4	4,693.5	4,633.7	13.4	16.5	-17.05	679.1	111.5	230.2	207.1	23.07	9.979	
4,800.0	4,771.7	4,793.3	4,732.1	13.7	16.9	-16.90	696.0	115.0	235.6	212.1	23.57	9.999	
4,900.0	4,871.0	4,893.2	4,830.4	14.0	17.2	-16.75	713.0	118.5	241.1	217.0	24.07	10.019	

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 A-32CHZ
Project:	SEC.32-T1N-R66W	**TVD Reference:**	WELL @ 5031.0ft (RKB - 12')
Reference Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	**MD Reference:**	WELL @ 5031.0ft (RKB - 12')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	SRC Phelps A-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	4,970.3	4,993.0	4,928.7	14.3	17.6	-16.61	729.9	121.9	246.6	222.0	24.56	10.038	
5,100.0	5,069.6	5,092.9	5,027.1	14.6	18.0	-16.48	746.8	125.4	252.1	227.0	25.06	10.056	
5,200.0	5,168.8	5,192.7	5,125.4	15.0	18.4	-16.35	763.7	128.9	257.5	232.0	25.56	10.074	
5,300.0	5,268.1	5,292.6	5,223.8	15.3	18.8	-16.23	780.7	132.4	263.0	237.0	26.06	10.091	
5,400.0	5,367.4	5,392.4	5,322.1	15.6	19.2	-16.11	797.6	135.9	268.5	241.9	26.56	10.108	
5,500.0	5,466.7	5,492.3	5,420.4	15.9	19.6	-15.99	814.5	139.4	274.0	246.9	27.06	10.123	
5,600.0	5,566.0	5,592.1	5,518.8	16.2	19.9	-15.88	831.4	142.8	279.5	251.9	27.56	10.139	
5,700.0	5,665.3	5,692.0	5,617.1	16.5	20.3	-15.78	848.4	146.3	285.0	256.9	28.06	10.153	
5,800.0	5,764.6	5,791.8	5,715.5	16.8	20.7	-15.68	865.3	149.8	290.4	261.9	28.56	10.168	
5,900.0	5,863.9	5,891.7	5,813.8	17.1	21.1	-15.58	882.2	153.3	295.9	266.9	29.06	10.181	
6,000.0	5,963.1	5,991.5	5,912.2	17.4	21.5	-15.49	899.1	156.8	301.4	271.8	29.57	10.195	
6,100.0	6,062.4	6,091.4	6,010.5	17.7	21.9	-15.40	916.1	160.3	306.9	276.8	30.07	10.208	
6,200.0	6,161.7	6,191.8	6,109.4	18.1	22.3	-15.31	933.1	163.8	312.4	281.8	30.56	10.220	
6,300.0	6,261.2	6,303.7	6,220.0	18.3	22.6	-15.23	949.7	167.2	317.6	286.6	30.94	10.263	
6,400.0	6,361.0	6,415.8	6,331.4	18.5	22.9	-15.14	962.2	169.8	322.3	291.0	31.27	10.308	
6,500.0	6,460.9	6,528.2	6,443.5	18.6	23.1	-15.02	970.4	171.4	326.6	295.0	31.54	10.356	
6,600.0	6,560.9	6,640.8	6,556.0	18.8	23.3	0.04	974.2	172.2	329.7	288.2	41.57	7.932	
6,700.0	6,660.9	6,745.7	6,660.9	19.0	23.4	0.05	974.5	172.3	330.0	288.2	41.88	7.881	
6,769.9	6,730.8	6,815.6	6,730.8	19.1	23.5	0.05	974.5	172.3	330.0	287.9	42.09	7.841	
6,800.0	6,760.9	6,845.7	6,760.9	19.1	23.5	-0.03	974.5	171.8	330.0	287.9	42.18	7.825	
6,805.8	6,766.7	6,851.5	6,766.7	19.1	23.5	-0.07	974.5	171.6	330.0	287.9	42.19	7.822	
6,900.0	6,860.9	6,944.5	6,859.1	19.3	23.6	-1.83	974.5	161.4	330.2	287.9	42.34	7.800	
7,000.0	6,960.9	7,039.0	6,950.7	19.5	23.7	84.36	974.5	139.0	331.8	297.9	33.87	9.795	
7,100.0	7,060.1	7,130.0	7,035.5	19.6	23.7	80.23	974.5	106.1	335.2	300.6	34.59	9.690	
7,200.0	7,156.7	7,218.5	7,113.4	19.7	23.8	76.39	974.5	64.1	340.1	304.9	35.16	9.672	
7,300.0	7,248.8	7,304.8	7,183.8	19.8	23.8	72.90	974.5	14.1	346.0	310.5	35.52	9.739	
7,400.0	7,334.6	7,389.4	7,246.4	19.8	23.8	69.80	974.5	-42.7	352.4	316.7	35.69	9.875	
7,500.0	7,412.5	7,472.5	7,300.9	19.9	23.9	67.13	974.5	-105.2	359.0	323.2	35.79	10.029	
7,600.0	7,480.9	7,550.0	7,345.0	20.0	24.0	64.96	974.5	-168.9	365.2	329.3	35.94	10.160	
7,700.0	7,538.5	7,635.2	7,385.2	20.3	24.2	63.06	974.5	-244.0	370.7	334.2	36.48	10.163	
7,800.0	7,584.1	7,715.2	7,414.6	20.8	24.5	61.66	974.5	-318.4	375.3	337.8	37.53	10.000	
7,900.0	7,617.0	7,794.7	7,435.4	21.8	25.0	60.68	974.5	-395.1	378.7	339.4	39.28	9.640	
8,000.0	7,636.4	7,873.9	7,447.5	23.2	25.7	60.11	974.5	-473.3	380.7	338.9	41.79	9.110	
8,100.0	7,642.0	7,955.1	7,451.0	24.9	26.7	59.94	974.5	-554.3	381.3	336.4	44.96	8.482	
8,200.0	7,642.0	8,055.1	7,451.0	26.7	28.2	59.94	974.5	-654.3	381.3	333.0	48.32	7.891	
8,300.0	7,642.0	8,155.1	7,451.0	28.8	30.0	59.94	974.5	-754.3	381.3	329.4	51.92	7.344	
8,400.0	7,642.0	8,255.1	7,451.0	30.9	32.0	59.94	974.5	-854.3	381.3	325.6	55.72	6.843	
8,500.0	7,642.0	8,355.1	7,451.0	33.2	34.1	59.94	974.5	-954.3	381.3	321.6	59.68	6.389	
8,600.0	7,642.0	8,455.1	7,451.0	35.5	36.3	59.94	974.5	-1,054.3	381.3	317.5	63.78	5.979	
8,700.0	7,642.0	8,555.1	7,451.0	37.9	38.6	59.94	974.5	-1,154.3	381.3	313.3	67.99	5.609	
8,800.0	7,642.0	8,655.1	7,451.0	40.4	41.0	59.94	974.5	-1,254.3	381.3	309.0	72.28	5.276	
8,900.0	7,642.0	8,755.1	7,451.0	42.9	43.4	59.94	974.5	-1,354.3	381.3	304.7	76.65	4.975	
9,000.0	7,642.0	8,855.1	7,451.0	45.4	45.9	59.94	974.5	-1,454.3	381.3	300.2	81.08	4.703	
9,100.0	7,642.0	8,955.1	7,451.0	47.9	48.4	59.94	974.5	-1,554.3	381.3	295.8	85.57	4.456	
9,200.0	7,642.0	9,055.1	7,451.0	50.5	51.0	59.94	974.5	-1,654.3	381.3	291.2	90.10	4.232	
9,300.0	7,642.0	9,155.1	7,451.0	53.1	53.5	59.94	974.5	-1,754.3	381.3	286.7	94.66	4.028	
9,400.0	7,642.0	9,255.1	7,451.0	55.8	56.1	59.94	974.5	-1,854.3	381.3	282.1	99.27	3.841	
9,500.0	7,642.0	9,355.1	7,451.0	58.4	58.7	59.94	974.5	-1,954.3	381.3	277.4	103.90	3.670	
9,600.0	7,642.0	9,455.1	7,451.0	61.1	61.4	59.94	974.5	-2,054.3	381.3	272.8	108.55	3.513	
9,700.0	7,642.0	9,555.1	7,451.0	63.7	64.0	59.94	974.5	-2,154.3	381.3	268.1	113.23	3.368	
9,800.0	7,642.0	9,655.1	7,451.0	66.4	66.7	59.94	974.5	-2,254.3	381.3	263.4	117.92	3.234	

Company:	Synergy Resources	**Local Co-ordinate Reference:**	Well SRC Phelps A-32CHZ
Project:	SEC.32-T1N-R66W	**TVD Reference:**	WELL @ 5031.0ft (RKB - 12')
Reference Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	**MD Reference:**	WELL @ 5031.0ft (RKB - 12')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	SRC Phelps A-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
9,900.0	7,642.0	9,755.1	7,451.0	69.1	69.3	59.94	974.5	-2,354.3	381.3	258.7	122.64	3.109	
10,000.0	7,642.0	9,855.1	7,451.0	71.8	72.0	59.94	974.5	-2,454.3	381.3	254.0	127.37	2.994	
10,100.0	7,642.0	9,955.1	7,451.0	74.5	74.7	59.94	974.5	-2,554.3	381.3	249.2	132.11	2.886	
10,200.0	7,642.0	10,055.1	7,451.0	77.2	77.4	59.94	974.5	-2,654.3	381.3	244.5	136.86	2.786	
10,300.0	7,642.0	10,155.1	7,451.0	79.9	80.1	59.94	974.5	-2,754.3	381.3	239.7	141.63	2.692	
10,400.0	7,642.0	10,255.1	7,451.0	82.7	82.8	59.94	974.5	-2,854.3	381.3	234.9	146.40	2.605	
10,500.0	7,642.0	10,355.1	7,451.0	85.4	85.5	59.94	974.5	-2,954.3	381.3	230.1	151.19	2.522	
10,600.0	7,642.0	10,455.1	7,451.0	88.1	88.3	59.94	974.5	-3,054.3	381.3	225.3	155.98	2.445	
10,700.0	7,642.0	10,555.1	7,451.0	90.9	91.0	59.94	974.5	-3,154.3	381.3	220.5	160.78	2.372	
10,800.0	7,642.0	10,655.1	7,451.0	93.6	93.7	59.94	974.5	-3,254.3	381.3	215.7	165.59	2.303	
10,900.0	7,642.0	10,755.1	7,451.0	96.4	96.4	59.94	974.5	-3,354.3	381.3	210.9	170.40	2.238	
11,000.0	7,642.0	10,855.1	7,451.0	99.1	99.2	59.94	974.5	-3,454.3	381.3	206.1	175.22	2.176	
11,100.0	7,642.0	10,955.1	7,451.0	101.9	101.9	59.94	974.5	-3,554.3	381.3	201.3	180.04	2.118	
11,200.0	7,642.0	11,055.1	7,451.0	104.6	104.7	59.94	974.5	-3,654.3	381.3	196.5	184.87	2.063	
11,300.0	7,642.0	11,155.1	7,451.0	107.4	107.4	59.94	974.5	-3,754.3	381.3	191.6	189.70	2.010	
11,400.0	7,642.0	11,255.1	7,451.0	110.1	110.2	59.94	974.5	-3,854.3	381.3	186.8	194.54	1.960	
11,500.0	7,642.0	11,355.1	7,451.0	112.9	112.9	59.94	974.5	-3,954.3	381.3	181.9	199.38	1.913	
11,600.0	7,642.0	11,455.1	7,451.0	115.7	115.7	59.94	974.5	-4,054.3	381.3	177.1	204.22	1.867	
11,700.0	7,642.0	11,555.1	7,451.0	118.4	118.4	59.94	974.5	-4,154.3	381.3	172.3	209.07	1.824	
11,800.0	7,642.0	11,655.1	7,451.0	121.2	121.2	59.94	974.5	-4,254.3	381.3	167.4	213.92	1.783	
11,900.0	7,642.0	11,755.1	7,451.0	124.0	124.0	59.94	974.5	-4,354.3	381.3	162.5	218.78	1.743	
12,000.0	7,642.0	11,855.1	7,451.0	126.8	126.7	59.94	974.5	-4,454.3	381.3	157.7	223.63	1.705	
12,100.0	7,642.0	11,955.1	7,451.0	129.5	129.5	59.94	974.5	-4,554.3	381.3	152.8	228.49	1.669	
12,143.9	7,642.0	11,998.9	7,451.0	130.7	130.7	59.94	974.5	-4,598.2	381.3	150.7	230.62	1.653	
12,158.6	7,642.0	12,013.0	7,451.0	131.2	131.1	59.94	974.5	-4,612.3	381.3	150.0	231.32	1.648 SF	

Company:	Synergy Resources	**Local Co-ordinate Reference:**	Well SRC Phelps A-32CHZ
Project:	SEC.32-T1N-R66W	**TVD Reference:**	WELL @ 5031.0ft (RKB - 12')
Reference Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	**MD Reference:**	WELL @ 5031.0ft (RKB - 12')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	SRC Phelps A-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 12-32CHZ - 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	-102.27	-16.0	-73.7	75.4				
100.0	100.0	99.0	99.0	0.1	0.1	-102.27	-16.0	-73.7	75.4	75.2	0.22	337.123	
200.0	200.0	199.0	199.0	0.3	0.3	-102.27	-16.0	-73.7	75.4	74.7	0.67	112.188	
300.0	300.0	299.0	299.0	0.6	0.6	-102.27	-16.0	-73.7	75.4	74.3	1.12	67.223	
400.0	400.0	399.0	399.0	0.8	0.8	-102.27	-16.0	-73.7	75.4	73.8	1.57	47.989	
500.0	500.0	499.0	499.0	1.0	1.0	-102.27	-16.0	-73.7	75.4	73.4	2.02	37.313	
600.0	600.0	599.0	599.0	1.2	1.2	-102.27	-16.0	-73.7	75.4	72.9	2.47	30.522	CC, ES
700.0	700.0	699.0	699.0	1.5	1.5	-118.37	-16.0	-73.7	76.2	73.3	2.92	26.110	
800.0	799.8	798.8	798.8	1.7	1.7	-121.67	-16.0	-73.7	78.8	75.5	3.37	23.405	
900.0	899.5	898.5	898.5	1.9	1.9	-126.66	-16.0	-73.7	83.7	79.9	3.82	21.905	
1,000.0	998.8	997.8	997.8	2.2	2.1	-132.46	-16.0	-73.7	91.2	86.9	4.29	21.276	
1,100.0	1,098.1	1,099.2	1,099.2	2.4	2.3	-138.37	-16.5	-72.0	98.6	93.8	4.73	20.819	
1,200.0	1,197.3	1,200.3	1,200.2	2.7	2.5	-145.00	-18.1	-67.0	104.9	99.8	5.17	20.306	
1,300.0	1,296.6	1,299.3	1,298.9	3.0	2.7	-151.39	-20.2	-60.6	111.8	106.2	5.60	19.944	
1,400.0	1,395.9	1,398.4	1,397.7	3.3	3.0	-156.99	-22.2	-54.2	119.9	113.8	6.05	19.821	
1,500.0	1,495.2	1,497.4	1,496.5	3.6	3.2	-161.85	-24.2	-47.8	129.0	122.5	6.50	19.852	
1,600.0	1,594.5	1,596.4	1,595.3	3.9	3.4	-166.05	-26.2	-41.5	138.9	131.9	6.95	19.979	
1,700.0	1,693.8	1,695.4	1,694.1	4.2	3.6	-169.68	-28.3	-35.1	149.5	142.0	7.41	20.164	
1,800.0	1,793.1	1,794.5	1,792.9	4.5	3.9	-172.83	-30.3	-28.7	160.5	152.7	7.88	20.382	
1,900.0	1,892.4	1,893.5	1,891.7	4.8	4.1	-175.56	-32.3	-22.3	172.0	163.7	8.34	20.616	
2,000.0	1,991.6	1,992.5	1,990.5	5.1	4.3	-177.95	-34.3	-15.9	183.9	175.0	8.82	20.854	
2,100.0	2,090.9	2,091.5	2,089.3	5.4	4.6	179.95	-36.3	-9.5	196.0	186.7	9.29	21.091	
2,200.0	2,190.2	2,190.5	2,188.1	5.7	4.8	178.10	-38.4	-3.1	208.3	198.5	9.77	21.322	
2,300.0	2,289.5	2,289.6	2,286.9	6.0	5.1	176.46	-40.4	3.2	220.8	210.6	10.25	21.544	
2,400.0	2,388.8	2,388.6	2,385.7	6.3	5.3	174.99	-42.4	9.6	233.5	222.8	10.73	21.758	
2,500.0	2,488.1	2,487.6	2,484.5	6.6	5.6	173.67	-44.4	16.0	246.4	235.1	11.22	21.961	
2,600.0	2,587.4	2,586.6	2,583.3	6.9	5.8	172.49	-46.4	22.4	259.3	247.6	11.70	22.154	
2,700.0	2,686.7	2,685.7	2,682.1	7.2	6.1	171.41	-48.5	28.8	272.3	260.1	12.19	22.337	
2,800.0	2,785.9	2,784.7	2,780.9	7.5	6.3	170.44	-50.5	35.2	285.5	272.8	12.68	22.510	
2,900.0	2,885.2	2,883.7	2,879.7	7.8	6.6	169.55	-52.5	41.6	298.7	285.5	13.17	22.674	
3,000.0	2,984.5	2,982.7	2,978.5	8.1	6.8	168.74	-54.5	47.9	311.9	298.3	13.66	22.830	
3,100.0	3,083.8	3,081.7	3,077.3	8.5	7.1	167.99	-56.6	54.3	325.2	311.1	14.16	22.977	
3,200.0	3,183.1	3,180.8	3,176.1	8.8	7.3	167.30	-58.6	60.7	338.6	324.0	14.65	23.116	
3,300.0	3,282.4	3,279.8	3,274.9	9.1	7.6	166.67	-60.6	67.1	352.0	336.9	15.14	23.247	
3,400.0	3,381.7	3,378.8	3,373.7	9.4	7.8	166.08	-62.6	73.5	365.5	349.9	15.64	23.372	
3,500.0	3,481.0	3,477.8	3,472.5	9.7	8.1	165.53	-64.6	79.9	379.0	362.9	16.13	23.491	
3,600.0	3,580.2	3,576.9	3,571.3	10.0	8.3	165.02	-66.7	86.3	392.5	375.9	16.63	23.604	
3,700.0	3,679.5	3,675.9	3,670.1	10.3	8.6	164.54	-68.7	92.6	406.1	388.9	17.13	23.711	
3,800.0	3,778.8	3,774.9	3,768.8	10.6	8.8	164.10	-70.7	99.0	419.6	402.0	17.62	23.812	
3,900.0	3,878.1	3,873.9	3,867.6	10.9	9.1	163.68	-72.7	105.4	433.2	415.1	18.12	23.909	
4,000.0	3,977.4	3,973.0	3,966.4	11.2	9.3	163.29	-74.8	111.8	446.9	428.2	18.62	24.002	
4,100.0	4,076.7	4,072.0	4,065.2	11.5	9.6	162.92	-76.8	118.2	460.5	441.4	19.12	24.090	
4,200.0	4,176.0	4,171.0	4,164.0	11.9	9.8	162.57	-78.8	124.6	474.2	454.5	19.61	24.174	
4,300.0	4,275.3	4,270.0	4,262.8	12.2	10.1	162.25	-80.8	131.0	487.8	467.7	20.11	24.254	
4,400.0	4,374.5	4,369.0	4,361.6	12.5	10.3	161.94	-82.8	137.3	501.5	480.9	20.61	24.331	
4,500.0	4,473.8	4,468.1	4,460.4	12.8	10.6	161.64	-84.9	143.7	515.2	494.1	21.11	24.405	
4,600.0	4,573.1	4,567.1	4,559.2	13.1	10.8	161.36	-86.9	150.1	528.9	507.3	21.61	24.475	
4,700.0	4,672.4	4,666.1	4,658.0	13.4	11.1	161.10	-88.9	156.5	542.7	520.6	22.11	24.543	
4,800.0	4,771.7	4,765.1	4,756.8	13.7	11.4	160.85	-90.9	162.9	556.4	533.8	22.61	24.607	
4,900.0	4,871.0	4,868.1	4,859.6	14.0	11.6	160.65	-92.9	169.0	570.0	546.9	23.10	24.671	
5,000.0	4,970.3	4,975.4	4,966.8	14.3	11.8	160.77	-93.9	172.1	582.4	558.8	23.56	24.722	

Company:	Synergy Resources	**Local Co-ordinate Reference:**	Well SRC Phelps A-32CHZ
Project:	SEC.32-T1N-R66W	**TVD Reference:**	WELL @ 5031.0ft (RKB - 12')
Reference Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	**MD Reference:**	WELL @ 5031.0ft (RKB - 12')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	SRC Phelps A-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 12-32CHZ - 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
5,100.0	5,069.6	5,077.1	5,068.6	14.6	12.0	161.14	-93.9	172.3	593.7	569.7	23.99	24.753	
5,200.0	5,168.8	5,176.4	5,167.8	15.0	12.2	161.50	-93.9	172.3	605.0	580.6	24.41	24.783	
5,300.0	5,268.1	5,275.7	5,267.1	15.3	12.4	161.85	-93.9	172.3	616.3	591.5	24.84	24.811	
5,400.0	5,367.4	5,375.0	5,366.4	15.6	12.5	162.19	-93.9	172.3	627.7	602.4	25.27	24.839	
5,500.0	5,466.7	5,474.3	5,465.7	15.9	12.7	162.52	-93.9	172.3	639.0	613.3	25.70	24.865	
5,600.0	5,566.0	5,573.6	5,565.0	16.2	12.9	162.83	-93.9	172.3	650.4	624.3	26.13	24.891	
5,700.0	5,665.3	5,672.9	5,664.3	16.5	13.1	163.14	-93.9	172.3	661.8	635.3	26.56	24.915	
5,800.0	5,764.6	5,772.2	5,763.6	16.8	13.3	163.43	-93.9	172.3	673.2	646.2	27.00	24.939	
5,900.0	5,863.9	5,871.4	5,862.9	17.1	13.5	163.72	-93.9	172.3	684.7	657.2	27.43	24.962	
6,000.0	5,963.1	5,970.7	5,962.1	17.4	13.7	163.99	-93.9	172.3	696.1	668.3	27.86	24.984	
6,100.0	6,062.4	6,070.0	6,061.4	17.7	13.9	164.26	-93.9	172.3	707.6	679.3	28.30	25.005	
6,200.0	6,161.7	6,169.3	6,160.7	18.1	14.1	164.52	-93.9	172.3	719.1	690.3	28.73	25.025	
6,300.0	6,261.2	6,268.8	6,260.2	18.3	14.3	164.78	-93.9	172.3	728.8	699.7	29.15	25.003	
6,400.0	6,361.0	6,368.6	6,360.0	18.5	14.5	164.95	-93.9	172.3	735.2	705.6	29.53	24.894	
6,500.0	6,460.9	6,468.5	6,459.9	18.6	14.7	165.03	-93.9	172.3	738.2	708.3	29.88	24.702	
6,600.0	6,560.9	6,568.5	6,559.9	18.8	14.9	179.97	-93.9	172.3	738.4	705.7	32.75	22.546	
6,700.0	6,660.9	6,668.5	6,659.9	19.0	15.1	179.97	-93.9	172.3	738.4	705.3	33.13	22.289	
6,800.0	6,760.9	6,768.5	6,759.9	19.1	15.3	179.97	-93.9	172.3	738.4	704.9	33.51	22.038	
6,900.0	6,860.9	6,868.5	6,859.9	19.3	15.5	179.97	-93.9	172.3	738.4	704.5	33.89	21.791	
7,000.0	6,960.9	6,968.5	6,959.9	19.5	15.7	-90.03	-93.9	171.5	738.4	706.6	31.87	23.168	
7,100.0	7,060.1	7,068.6	7,059.2	19.6	15.8	-90.04	-93.9	159.8	738.4	706.3	32.16	22.961	
7,200.0	7,156.7	7,168.7	7,155.9	19.7	15.9	-90.05	-93.9	134.3	738.4	706.0	32.38	22.803	
7,300.0	7,248.8	7,268.8	7,248.2	19.8	16.0	-90.06	-93.9	95.7	738.4	705.8	32.60	22.654	
7,400.0	7,334.6	7,368.9	7,334.1	19.8	16.1	-90.07	-93.9	44.5	738.4	705.5	32.89	22.452	
7,500.0	7,412.5	7,469.0	7,412.1	19.9	16.3	-90.07	-93.9	-18.1	738.4	705.0	33.39	22.114	
7,600.0	7,480.9	7,569.1	7,480.7	20.0	16.7	-90.08	-93.9	-91.0	738.4	704.2	34.26	21.557	
7,700.0	7,538.5	7,669.3	7,538.4	20.3	17.3	-90.08	-93.9	-172.8	738.4	702.8	35.62	20.729	
7,800.0	7,584.1	7,769.4	7,584.1	20.8	18.3	-90.08	-93.9	-261.8	738.4	700.8	37.59	19.645	
7,900.0	7,617.0	7,869.6	7,617.0	21.8	19.5	-90.08	-93.9	-356.3	738.4	698.3	40.17	18.381	
8,000.0	7,636.4	7,969.7	7,636.4	23.2	21.1	-90.08	-93.9	-454.4	738.4	695.1	43.31	17.048	
8,100.0	7,642.0	8,069.8	7,642.0	24.9	22.9	-90.08	-93.9	-554.3	738.4	691.6	46.88	15.753	
8,200.0	7,642.0	8,169.8	7,642.0	26.7	24.9	-90.08	-93.9	-654.3	738.4	687.6	50.80	14.537	
8,300.0	7,642.0	8,269.8	7,642.0	28.8	27.0	-90.08	-93.9	-754.3	738.4	683.4	55.00	13.427	
8,400.0	7,642.0	8,369.8	7,642.0	30.9	29.2	-90.08	-93.9	-854.3	738.4	679.0	59.43	12.426	
8,500.0	7,642.0	8,469.8	7,642.0	33.2	31.5	-90.08	-93.9	-954.3	738.4	674.4	64.04	11.530	
8,600.0	7,642.0	8,569.8	7,642.0	35.5	33.9	-90.08	-93.9	-1,054.3	738.4	669.6	68.81	10.732	
8,700.0	7,642.0	8,669.8	7,642.0	37.9	36.4	-90.08	-93.9	-1,154.3	738.4	664.7	73.69	10.020	
8,800.0	7,642.0	8,769.8	7,642.0	40.4	38.9	-90.08	-93.9	-1,254.3	738.4	659.8	78.67	9.386	
8,900.0	7,642.0	8,869.8	7,642.0	42.9	41.4	-90.08	-93.9	-1,354.3	738.4	654.7	83.73	8.819	
9,000.0	7,642.0	8,969.8	7,642.0	45.4	44.0	-90.08	-93.9	-1,454.3	738.4	649.6	88.86	8.310	
9,100.0	7,642.0	9,069.8	7,642.0	47.9	46.6	-90.08	-93.9	-1,554.3	738.4	644.4	94.04	7.852	
9,200.0	7,642.0	9,169.8	7,642.0	50.5	49.2	-90.08	-93.9	-1,654.3	738.4	639.2	99.27	7.439	
9,300.0	7,642.0	9,269.8	7,642.0	53.1	51.8	-90.08	-93.9	-1,754.3	738.4	633.9	104.54	7.064	
9,400.0	7,642.0	9,369.8	7,642.0	55.8	54.5	-90.08	-93.9	-1,854.3	738.4	628.6	109.84	6.723	
9,500.0	7,642.0	9,469.8	7,642.0	58.4	57.1	-90.08	-93.9	-1,954.3	738.4	623.3	115.17	6.412	
9,600.0	7,642.0	9,569.8	7,642.0	61.1	59.8	-90.08	-93.9	-2,054.3	738.4	617.9	120.52	6.127	
9,700.0	7,642.0	9,669.8	7,642.0	63.7	62.5	-90.08	-93.9	-2,154.3	738.4	612.5	125.90	5.865	
9,800.0	7,642.0	9,769.8	7,642.0	66.4	65.2	-90.08	-93.9	-2,254.3	738.4	607.1	131.30	5.624	
9,900.0	7,642.0	9,869.8	7,642.0	69.1	67.9	-90.08	-93.9	-2,354.3	738.4	601.7	136.71	5.401	
10,000.0	7,642.0	9,969.8	7,642.0	71.8	70.6	-90.08	-93.9	-2,454.3	738.4	596.3	142.14	5.195	
10,100.0	7,642.0	10,069.8	7,642.0	74.5	73.4	-90.08	-93.9	-2,554.3	738.4	590.8	147.58	5.004	

Company:	Synergy Resources	**Local Co-ordinate Reference:**	Well SRC Phelps A-32CHZ
Project:	SEC.32-T1N-R66W	**TVD Reference:**	WELL @ 5031.0ft (RKB - 12')
Reference Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	**MD Reference:**	WELL @ 5031.0ft (RKB - 12')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	SRC Phelps A-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 12-32CHZ - 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
10,200.0	7,642.0	10,169.8	7,642.0	77.2	76.1	-90.08	-93.9	-2,654.3	738.4	585.4	153.03	4.825	
10,300.0	7,642.0	10,269.8	7,642.0	79.9	78.8	-90.08	-93.9	-2,754.3	738.4	579.9	158.50	4.659	
10,400.0	7,642.0	10,369.8	7,642.0	82.7	81.6	-90.08	-93.9	-2,854.3	738.4	574.5	163.97	4.503	
10,500.0	7,642.0	10,469.8	7,642.0	85.4	84.3	-90.08	-93.9	-2,954.3	738.4	569.0	169.46	4.358	
10,600.0	7,642.0	10,569.8	7,642.0	88.1	87.1	-90.08	-93.9	-3,054.3	738.4	563.5	174.95	4.221	
10,700.0	7,642.0	10,669.8	7,642.0	90.9	89.8	-90.08	-93.9	-3,154.3	738.4	558.0	180.45	4.092	
10,800.0	7,642.0	10,769.8	7,642.0	93.6	92.6	-90.08	-93.9	-3,254.3	738.4	552.5	185.95	3.971	
10,900.0	7,642.0	10,869.8	7,642.0	96.4	95.3	-90.08	-93.9	-3,354.3	738.4	547.0	191.46	3.857	
11,000.0	7,642.0	10,969.8	7,642.0	99.1	98.1	-90.08	-93.9	-3,454.3	738.4	541.4	196.98	3.749	
11,100.0	7,642.0	11,069.8	7,642.0	101.9	100.8	-90.08	-93.9	-3,554.3	738.4	535.9	202.50	3.647	
11,200.0	7,642.0	11,169.8	7,642.0	104.6	103.6	-90.08	-93.9	-3,654.3	738.4	530.4	208.03	3.550	
11,300.0	7,642.0	11,269.8	7,642.0	107.4	106.4	-90.08	-93.9	-3,754.3	738.4	524.9	213.56	3.458	
11,400.0	7,642.0	11,369.8	7,642.0	110.1	109.1	-90.08	-93.9	-3,854.3	738.4	519.3	219.09	3.370	
11,500.0	7,642.0	11,469.8	7,642.0	112.9	111.9	-90.08	-93.9	-3,954.3	738.4	513.8	224.63	3.287	
11,600.0	7,642.0	11,569.8	7,642.0	115.7	114.7	-90.08	-93.9	-4,054.3	738.4	508.3	230.17	3.208	
11,700.0	7,642.0	11,669.8	7,642.0	118.4	117.5	-90.08	-93.9	-4,154.3	738.4	502.7	235.72	3.133	
11,800.0	7,642.0	11,769.8	7,642.0	121.2	120.2	-90.08	-93.9	-4,254.3	738.4	497.2	241.27	3.061	
11,900.0	7,642.0	11,869.8	7,642.0	124.0	123.0	-90.08	-93.9	-4,354.3	738.4	491.6	246.82	2.992	
12,000.0	7,642.0	11,969.8	7,642.0	126.8	125.8	-90.08	-93.9	-4,454.3	738.4	486.1	252.37	2.926	
12,100.0	7,642.0	12,069.8	7,642.0	129.5	128.6	-90.08	-93.9	-4,554.3	738.4	480.5	257.92	2.863	
12,158.6	7,642.0	12,128.5	7,642.0	131.2	130.2	-90.08	-93.9	-4,612.9	738.4	477.2	261.18	2.827	SF

Company:	Synergy Resources	**Local Co-ordinate Reference:**	Well SRC Phelps A-32CHZ
Project:	SEC.32-T1N-R66W	**TVD Reference:**	WELL @ 5031.0ft (RKB - 12')
Reference Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	**MD Reference:**	WELL @ 5031.0ft (RKB - 12')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	SRC Phelps A-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	-102.27	-20.8	-95.5	97.8				
100.0	100.0	99.0	99.0	0.1	0.1	-102.27	-20.8	-95.5	97.8	97.5	0.22	437.094	
200.0	200.0	199.0	199.0	0.3	0.3	-102.27	-20.8	-95.5	97.8	97.1	0.67	145.456	
300.0	300.0	299.0	299.0	0.6	0.6	-102.27	-20.8	-95.5	97.8	96.6	1.12	87.157	
400.0	400.0	399.0	399.0	0.8	0.8	-102.27	-20.8	-95.5	97.8	96.2	1.57	62.219	
500.0	500.0	499.0	499.0	1.0	1.0	-102.27	-20.8	-95.5	97.8	95.7	2.02	48.377	
600.0	600.0	599.0	599.0	1.2	1.2	-102.27	-20.8	-95.5	97.8	95.3	2.47	39.573	CC, ES
700.0	700.0	699.0	699.0	1.5	1.5	-118.10	-20.8	-95.5	98.6	95.6	2.92	33.769	
800.0	799.8	798.8	798.8	1.7	1.7	-120.67	-20.8	-95.5	101.1	97.8	3.37	30.027	
900.0	899.5	898.5	898.5	1.9	1.9	-124.64	-20.8	-95.5	105.9	102.0	3.82	27.686	
1,000.0	998.8	997.8	997.8	2.2	2.1	-129.43	-20.8	-95.5	112.9	108.6	4.29	26.329	
1,100.0	1,098.1	1,097.1	1,097.1	2.4	2.4	-133.78	-20.8	-95.5	120.8	116.1	4.76	25.408	
1,200.0	1,197.3	1,196.3	1,196.3	2.7	2.6	-137.58	-20.8	-95.5	129.4	124.2	5.22	24.766	
1,300.0	1,296.6	1,295.6	1,295.6	3.0	2.8	-140.90	-20.8	-95.5	138.4	132.8	5.69	24.321	
1,400.0	1,395.9	1,394.9	1,394.9	3.3	3.0	-143.81	-20.8	-95.5	147.9	141.8	6.16	24.016	
1,500.0	1,495.2	1,494.2	1,494.2	3.6	3.2	-146.36	-20.8	-95.5	157.7	151.1	6.62	23.809	
1,600.0	1,594.5	1,593.5	1,593.5	3.9	3.5	-148.61	-20.8	-95.5	167.8	160.7	7.09	23.672	
1,700.0	1,693.8	1,692.8	1,692.8	4.2	3.7	-150.60	-20.8	-95.5	178.1	170.5	7.55	23.586	
1,800.0	1,793.1	1,792.1	1,792.1	4.5	3.9	-152.38	-20.8	-95.5	188.6	180.6	8.01	23.536	
1,900.0	1,892.4	1,891.4	1,891.4	4.8	4.1	-153.97	-20.8	-95.5	199.2	190.8	8.47	23.513	
2,000.0	1,991.6	1,990.6	1,990.6	5.1	4.4	-155.39	-20.8	-95.5	210.0	201.1	8.93	23.509	SF
2,100.0	2,090.9	2,087.8	2,087.8	5.4	4.6	-156.98	-21.9	-94.8	221.4	212.0	9.36	23.640	
2,200.0	2,190.2	2,184.0	2,183.9	5.7	4.7	-159.16	-25.7	-92.2	234.0	224.2	9.77	23.964	
2,300.0	2,289.5	2,279.3	2,278.9	6.0	4.9	-161.78	-32.1	-88.0	248.3	238.1	10.16	24.427	
2,400.0	2,388.8	2,373.5	2,372.4	6.3	5.1	-164.71	-41.0	-82.1	264.5	253.9	10.57	25.025	
2,500.0	2,488.1	2,470.6	2,468.6	6.6	5.3	-167.71	-51.7	-74.9	282.2	271.2	10.99	25.682	
2,600.0	2,587.4	2,567.9	2,565.2	6.9	5.5	-170.37	-62.5	-67.8	300.7	289.2	11.42	26.327	
2,700.0	2,686.7	2,665.3	2,661.7	7.2	5.7	-172.73	-73.2	-60.6	319.6	307.8	11.86	26.951	
2,800.0	2,785.9	2,762.7	2,758.2	7.5	6.0	-174.82	-83.9	-53.5	339.1	326.8	12.31	27.548	
2,900.0	2,885.2	2,860.0	2,854.7	7.8	6.2	-176.68	-94.7	-46.3	359.0	346.2	12.76	28.123	
3,000.0	2,984.5	2,957.4	2,951.2	8.1	6.5	-178.35	-105.4	-39.2	379.2	365.9	13.22	28.671	
3,100.0	3,083.8	3,054.8	3,047.7	8.5	6.7	-179.85	-116.2	-32.1	399.6	385.9	13.69	29.193	
3,200.0	3,183.1	3,152.1	3,144.2	8.8	7.0	178.79	-126.9	-24.9	420.3	406.2	14.16	29.690	
3,300.0	3,282.4	3,249.5	3,240.7	9.1	7.3	177.56	-137.7	-17.8	441.3	426.6	14.63	30.163	
3,400.0	3,381.7	3,346.9	3,337.2	9.4	7.6	176.45	-148.4	-10.6	462.3	447.2	15.10	30.612	
3,500.0	3,481.0	3,444.2	3,433.7	9.7	7.8	175.42	-159.2	-3.5	483.6	468.0	15.58	31.039	
3,600.0	3,580.2	3,541.6	3,530.2	10.0	8.1	174.49	-169.9	3.7	505.0	488.9	16.06	31.445	
3,700.0	3,679.5	3,639.0	3,626.7	10.3	8.4	173.63	-180.6	10.8	526.5	509.9	16.54	31.832	
3,800.0	3,778.8	3,736.3	3,723.2	10.6	8.7	172.84	-191.4	18.0	548.1	531.1	17.02	32.200	
3,900.0	3,878.1	3,833.7	3,819.8	10.9	9.0	172.10	-202.1	25.1	569.8	552.3	17.51	32.550	
4,000.0	3,977.4	3,931.1	3,916.3	11.2	9.3	171.43	-212.9	32.3	591.6	573.6	17.99	32.884	
4,100.0	4,076.7	4,028.4	4,012.8	11.5	9.6	170.79	-223.6	39.4	613.4	595.0	18.48	33.202	
4,200.0	4,176.0	4,125.8	4,109.3	11.9	9.9	170.21	-234.4	46.6	635.3	616.4	18.96	33.505	
4,300.0	4,275.3	4,223.2	4,205.8	12.2	10.2	169.66	-245.1	53.7	657.3	637.9	19.45	33.795	
4,400.0	4,374.5	4,320.5	4,302.3	12.5	10.5	169.15	-255.8	60.9	679.4	659.4	19.94	34.072	
4,500.0	4,473.8	4,417.9	4,398.8	12.8	10.8	168.67	-266.6	68.0	701.5	681.0	20.43	34.336	
4,600.0	4,573.1	4,515.3	4,495.3	13.1	11.1	168.21	-277.3	75.2	723.6	702.7	20.92	34.589	
4,700.0	4,672.4	4,612.6	4,591.8	13.4	11.5	167.79	-288.1	82.3	745.7	724.3	21.41	34.831	
4,800.0	4,771.7	4,710.0	4,688.3	13.7	11.8	167.39	-298.8	89.5	768.0	746.1	21.90	35.064	
4,900.0	4,871.0	4,807.4	4,784.8	14.0	12.1	167.01	-309.6	96.6	790.2	767.8	22.39	35.286	
5,000.0	4,970.3	4,904.7	4,881.3	14.3	12.4	166.65	-320.3	103.8	812.5	789.6	22.89	35.499	

Company:	Synergy Resources	**Local Co-ordinate Reference:**	Well SRC Phelps A-32CHZ
Project:	SEC.32-T1N-R66W	**TVD Reference:**	WELL @ 5031.0ft (RKB - 12')
Reference Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	**MD Reference:**	WELL @ 5031.0ft (RKB - 12')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	SRC Phelps A-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
5,100.0	5,069.6	5,002.1	4,977.8	14.6	12.7	166.32	-331.1	110.9	834.8	811.4	23.38	35.704	
5,200.0	5,168.8	5,099.5	5,074.4	15.0	13.0	165.99	-341.8	118.0	857.1	833.2	23.87	35.901	
5,300.0	5,268.1	5,196.8	5,170.9	15.3	13.3	165.69	-352.5	125.2	879.4	855.1	24.37	36.090	
5,400.0	5,367.4	5,294.2	5,267.4	15.6	13.7	165.40	-363.3	132.3	901.8	876.9	24.86	36.272	
5,500.0	5,466.7	5,391.6	5,363.9	15.9	14.0	165.13	-374.0	139.5	924.2	898.8	25.36	36.447	
5,600.0	5,566.0	5,488.9	5,460.4	16.2	14.3	164.86	-384.8	146.6	946.6	920.8	25.85	36.615	
5,700.0	5,665.3	5,586.3	5,556.9	16.5	14.6	164.61	-395.5	153.8	969.0	942.7	26.35	36.778	
5,800.0	5,764.6	5,697.3	5,667.0	16.8	15.0	164.35	-407.4	161.7	991.3	964.4	26.87	36.891	

Company:	Synergy Resources	**Local Co-ordinate Reference:**	Well SRC Phelps A-32CHZ
Project:	SEC.32-T1N-R66W	**TVD Reference:**	WELL @ 5031.0ft (RKB - 12')
Reference Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	**MD Reference:**	WELL @ 5031.0ft (RKB - 12')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	SRC Phelps A-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	0.0	0.0	0.0	0.0	77.76	4.7	21.8	22.4				
100.0	100.0	100.0	100.0	0.1	0.1	77.76	4.7	21.8	22.4	22.1	0.22	99.471	
200.0	200.0	200.0	200.0	0.3	0.3	77.76	4.7	21.8	22.4	21.7	0.67	33.157	
300.0	300.0	300.0	300.0	0.6	0.6	77.76	4.7	21.8	22.4	21.2	1.12	19.894	
400.0	400.0	400.0	400.0	0.8	0.8	77.76	4.7	21.8	22.4	20.8	1.57	14.210	
500.0	500.0	500.0	500.0	1.0	1.0	77.76	4.7	21.8	22.4	20.3	2.02	11.052	
600.0	600.0	600.0	600.0	1.2	1.2	77.76	4.7	21.8	22.4	19.9	2.47	9.043	
700.0	700.0	700.0	700.0	1.5	1.5	66.95	4.7	21.8	21.6	18.7	2.92	7.401	
800.0	799.8	799.8	799.8	1.7	1.7	80.78	4.7	21.8	20.1	16.8	3.37	5.979	
832.3	832.0	831.9	831.9	1.8	1.8	87.20	4.9	21.9	20.0	16.4	3.52	5.677	CC, ES
900.0	899.5	899.4	899.4	1.9	1.9	100.57	6.2	22.8	20.8	17.0	3.83	5.430	
1,000.0	998.8	999.2	999.0	2.2	2.1	115.40	10.5	25.6	24.4	20.1	4.30	5.679	
1,100.0	1,098.1	1,099.0	1,098.6	2.4	2.4	123.28	16.3	29.3	28.9	24.1	4.78	6.052	
1,200.0	1,197.3	1,198.8	1,198.2	2.7	2.6	128.96	22.1	33.1	33.8	28.6	5.26	6.426	
1,300.0	1,296.6	1,298.6	1,297.8	3.0	2.8	133.17	27.8	36.8	39.0	33.2	5.75	6.778	
1,400.0	1,395.9	1,398.5	1,397.4	3.3	3.1	136.38	33.6	40.5	44.3	38.1	6.24	7.100	
1,500.0	1,495.2	1,498.3	1,497.0	3.6	3.3	138.90	39.3	44.3	49.7	43.0	6.73	7.390	
1,600.0	1,594.5	1,598.1	1,596.6	3.9	3.6	140.92	45.1	48.0	55.2	48.0	7.22	7.652	
1,700.0	1,693.8	1,698.0	1,696.2	4.2	3.8	142.58	50.8	51.7	60.8	53.1	7.71	7.887	
1,800.0	1,793.1	1,797.8	1,795.8	4.5	4.0	143.95	56.6	55.5	66.4	58.2	8.20	8.099	
1,900.0	1,892.4	1,897.6	1,895.4	4.8	4.3	145.11	62.4	59.2	72.0	63.3	8.69	8.291	
2,000.0	1,991.6	1,997.5	1,994.9	5.1	4.5	146.11	68.1	62.9	77.7	68.5	9.18	8.465	
2,100.0	2,090.9	2,097.3	2,094.5	5.4	4.8	146.96	73.9	66.7	83.3	73.7	9.67	8.623	
2,200.0	2,190.2	2,197.1	2,194.1	5.7	5.0	147.71	79.6	70.4	89.0	78.9	10.16	8.768	
2,300.0	2,289.5	2,297.0	2,293.7	6.0	5.3	148.37	85.4	74.1	94.7	84.1	10.65	8.900	
2,400.0	2,388.8	2,396.8	2,393.3	6.3	5.5	148.95	91.2	77.9	100.5	89.3	11.14	9.021	
2,500.0	2,488.1	2,496.6	2,492.9	6.6	5.8	149.47	96.9	81.6	106.2	94.6	11.63	9.133	
2,600.0	2,587.4	2,596.5	2,592.5	6.9	6.0	149.94	102.7	85.3	111.9	99.8	12.12	9.237	
2,700.0	2,686.7	2,696.3	2,692.1	7.2	6.3	150.36	108.4	89.1	117.7	105.1	12.61	9.333	
2,800.0	2,785.9	2,796.1	2,791.7	7.5	6.5	150.74	114.2	92.8	123.4	110.3	13.10	9.422	
2,900.0	2,885.2	2,896.0	2,891.3	7.8	6.8	151.09	119.9	96.5	129.2	115.6	13.59	9.505	
3,000.0	2,984.5	2,995.8	2,990.9	8.1	7.1	151.41	125.7	100.3	134.9	120.8	14.08	9.582	
3,100.0	3,083.8	3,095.6	3,090.5	8.5	7.3	151.70	131.5	104.0	140.7	126.1	14.57	9.655	
3,200.0	3,183.1	3,195.4	3,190.1	8.8	7.6	151.97	137.2	107.7	146.4	131.4	15.06	9.723	
3,300.0	3,282.4	3,295.3	3,289.7	9.1	7.8	152.22	143.0	111.5	152.2	136.7	15.55	9.786	
3,400.0	3,381.7	3,395.1	3,389.3	9.4	8.1	152.45	148.7	115.2	158.0	141.9	16.04	9.846	
3,500.0	3,481.0	3,494.9	3,488.9	9.7	8.3	152.67	154.5	118.9	163.8	147.2	16.54	9.903	
3,600.0	3,580.2	3,594.8	3,588.5	10.0	8.6	152.87	160.2	122.6	169.5	152.5	17.03	9.956	
3,700.0	3,679.5	3,694.6	3,688.1	10.3	8.8	153.05	166.0	126.4	175.3	157.8	17.52	10.007	
3,800.0	3,778.8	3,794.4	3,787.7	10.6	9.1	153.23	171.8	130.1	181.1	163.1	18.01	10.054	
3,900.0	3,878.1	3,894.3	3,887.3	10.9	9.3	153.39	177.5	133.8	186.9	168.4	18.50	10.100	
4,000.0	3,977.4	3,994.1	3,986.9	11.2	9.6	153.55	183.3	137.6	192.6	173.6	18.99	10.143	
4,100.0	4,076.7	4,093.9	4,086.5	11.5	9.8	153.69	189.0	141.3	198.4	178.9	19.48	10.184	
4,200.0	4,176.0	4,193.8	4,186.0	11.9	10.1	153.83	194.8	145.0	204.2	184.2	19.98	10.223	
4,300.0	4,275.3	4,293.6	4,285.6	12.2	10.3	153.96	200.5	148.8	210.0	189.5	20.47	10.260	
4,400.0	4,374.5	4,393.4	4,385.2	12.5	10.6	154.08	206.3	152.5	215.8	194.8	20.96	10.295	
4,500.0	4,473.8	4,493.3	4,484.8	12.8	10.9	154.20	212.1	156.2	221.6	200.1	21.45	10.329	
4,600.0	4,573.1	4,593.1	4,584.4	13.1	11.1	154.31	217.8	160.0	227.3	205.4	21.94	10.361	
4,700.0	4,672.4	4,692.9	4,684.0	13.4	11.4	154.41	223.6	163.7	233.1	210.7	22.43	10.392	
4,800.0	4,771.7	4,792.8	4,783.6	13.7	11.6	154.51	229.3	167.4	238.9	216.0	22.93	10.422	
4,900.0	4,871.0	4,887.9	4,878.6	14.0	11.8	154.76	234.0	170.4	245.5	222.1	23.37	10.504	

Company:	Synergy Resources	**Local Co-ordinate Reference:**	Well SRC Phelps A-32CHZ
Project:	SEC.32-T1N-R66W	**TVD Reference:**	WELL @ 5031.0ft (RKB - 12')
Reference Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	**MD Reference:**	WELL @ 5031.0ft (RKB - 12')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	SRC Phelps A-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	4,970.3	4,981.4	4,972.1	14.3	12.0	155.46	236.0	171.8	254.4	230.7	23.75	10.711	
5,100.0	5,069.6	5,078.9	5,069.6	14.6	12.2	156.49	236.1	171.8	265.2	241.1	24.13	10.992	
5,200.0	5,168.8	5,178.2	5,168.8	15.0	12.4	157.48	236.1	171.8	276.2	251.6	24.53	11.258	
5,300.0	5,268.1	5,277.5	5,268.1	15.3	12.6	158.39	236.1	171.8	287.2	262.3	24.94	11.515	
5,400.0	5,367.4	5,376.7	5,367.4	15.6	12.8	159.23	236.1	171.8	298.4	273.0	25.36	11.764	
5,500.0	5,466.7	5,476.0	5,466.7	15.9	13.0	160.01	236.1	171.8	309.5	283.8	25.78	12.006	
5,600.0	5,566.0	5,575.3	5,566.0	16.2	13.2	160.74	236.1	171.8	320.8	294.6	26.21	12.241	
5,700.0	5,665.3	5,674.6	5,665.3	16.5	13.4	161.41	236.1	171.8	332.0	305.4	26.63	12.468	
5,800.0	5,764.6	5,773.9	5,764.6	16.8	13.6	162.05	236.1	171.8	343.4	316.3	27.06	12.689	
5,900.0	5,863.9	5,873.2	5,863.9	17.1	13.8	162.64	236.1	171.8	354.7	327.2	27.49	12.904	
6,000.0	5,963.1	5,972.5	5,963.1	17.4	14.0	163.20	236.1	171.8	366.1	338.2	27.92	13.112	
6,100.0	6,062.4	6,071.8	6,062.4	17.7	14.2	163.72	236.1	171.8	377.6	349.2	28.36	13.314	
6,200.0	6,161.7	6,171.0	6,161.7	18.1	14.4	164.21	236.1	171.8	389.0	360.2	28.80	13.510	
6,300.0	6,261.2	6,270.5	6,261.2	18.3	14.6	164.66	236.1	171.8	398.7	369.5	29.19	13.658	
6,400.0	6,361.0	6,370.3	6,361.0	18.5	14.8	164.94	236.1	171.8	405.1	375.5	29.57	13.701	
6,500.0	6,460.9	6,470.3	6,460.9	18.6	15.0	165.07	236.1	171.8	408.1	378.2	29.91	13.643	
6,600.0	6,560.9	6,570.3	6,560.9	18.8	15.2	-179.98	236.1	171.8	408.4	374.8	33.57	12.163	
6,700.0	6,660.9	6,670.3	6,660.9	19.0	15.5	-179.98	236.1	171.8	408.4	374.4	33.96	12.026	
6,760.2	6,721.1	6,730.5	6,721.1	19.1	15.6	-179.98	236.1	171.8	408.4	374.2	34.19	11.945	
6,800.0	6,760.9	6,770.2	6,760.9	19.1	15.7	-179.91	236.1	171.4	408.4	374.0	34.33	11.894	
6,900.0	6,860.9	6,869.0	6,859.0	19.3	15.8	-178.46	236.1	161.0	408.5	373.8	34.74	11.760	
7,000.0	6,960.9	6,963.4	6,950.6	19.5	15.9	-85.37	236.1	138.6	409.8	378.1	31.66	12.945	
7,100.0	7,060.1	7,054.3	7,035.4	19.6	16.0	-82.02	236.1	105.7	412.6	380.8	31.84	12.961	
7,200.0	7,156.7	7,142.8	7,113.2	19.7	16.1	-78.87	236.1	63.7	416.6	384.6	32.04	13.001	
7,300.0	7,248.8	7,229.1	7,183.6	19.8	16.2	-75.99	236.1	13.8	421.4	389.1	32.32	13.040	
7,400.0	7,334.6	7,313.7	7,246.2	19.8	16.4	-73.40	236.1	-42.9	426.7	394.1	32.67	13.064	
7,500.0	7,412.5	7,400.0	7,302.8	19.9	16.9	-71.07	236.1	-108.0	432.2	399.0	33.17	13.028	
7,600.0	7,480.9	7,478.5	7,347.1	20.0	17.6	-69.22	236.1	-172.8	437.3	403.5	33.86	12.916	
7,700.0	7,538.5	7,559.3	7,385.0	20.3	18.4	-67.64	236.1	-244.1	441.9	407.1	34.83	12.688	
7,800.0	7,584.1	7,639.4	7,414.5	20.8	19.5	-66.43	236.1	-318.5	445.8	409.6	36.16	12.328	
7,900.0	7,617.0	7,718.9	7,435.3	21.8	20.7	-65.57	236.1	-395.2	448.6	410.7	37.90	11.838	
8,000.0	7,636.4	7,800.0	7,447.7	23.2	22.1	-65.07	236.1	-475.3	450.3	410.3	40.07	11.237	
8,100.0	7,642.0	7,879.1	7,451.0	24.9	23.6	-64.93	236.1	-554.3	450.8	408.2	42.67	10.566	
8,200.0	7,642.0	7,979.1	7,451.0	26.7	25.6	-64.93	236.1	-654.3	450.8	404.6	46.26	9.745	
8,300.0	7,642.0	8,079.1	7,451.0	28.8	27.7	-64.93	236.1	-754.3	450.8	400.7	50.11	8.997	
8,400.0	7,642.0	8,179.1	7,451.0	30.9	30.0	-64.93	236.1	-854.3	450.8	396.7	54.17	8.323	
8,500.0	7,642.0	8,279.1	7,451.0	33.2	32.3	-64.93	236.1	-954.3	450.8	392.4	58.39	7.721	
8,600.0	7,642.0	8,379.1	7,451.0	35.5	34.7	-64.93	236.1	-1,054.3	450.8	388.1	62.75	7.185	
8,700.0	7,642.0	8,479.1	7,451.0	37.9	37.2	-64.93	236.1	-1,154.3	450.8	383.6	67.21	6.708	
8,800.0	7,642.0	8,579.1	7,451.0	40.4	39.7	-64.93	236.1	-1,254.3	450.8	379.1	71.76	6.282	
8,900.0	7,642.0	8,679.1	7,451.0	42.9	42.2	-64.93	236.1	-1,354.3	450.8	374.4	76.38	5.902	
9,000.0	7,642.0	8,779.1	7,451.0	45.4	44.8	-64.93	236.1	-1,454.3	450.8	369.8	81.06	5.561	
9,100.0	7,642.0	8,879.1	7,451.0	47.9	47.4	-64.93	236.1	-1,554.3	450.8	365.0	85.79	5.255	
9,200.0	7,642.0	8,979.1	7,451.0	50.5	50.1	-64.93	236.1	-1,654.3	450.8	360.3	90.57	4.978	
9,300.0	7,642.0	9,079.1	7,451.0	53.1	52.7	-64.93	236.1	-1,754.3	450.8	355.4	95.37	4.727	
9,400.0	7,642.0	9,179.1	7,451.0	55.8	55.4	-64.93	236.1	-1,854.3	450.8	350.6	100.21	4.499	
9,500.0	7,642.0	9,279.1	7,451.0	58.4	58.0	-64.93	236.1	-1,954.3	450.8	345.7	105.08	4.290	
9,600.0	7,642.0	9,379.1	7,451.0	61.1	60.7	-64.93	236.1	-2,054.3	450.8	340.9	109.96	4.100	
9,700.0	7,642.0	9,479.1	7,451.0	63.7	63.4	-64.93	236.1	-2,154.3	450.8	336.0	114.87	3.925	
9,800.0	7,642.0	9,579.1	7,451.0	66.4	66.1	-64.93	236.1	-2,254.3	450.8	331.0	119.79	3.763	
9,900.0	7,642.0	9,679.1	7,451.0	69.1	68.8	-64.93	236.1	-2,354.3	450.8	326.1	124.73	3.614	

Company:	Synergy Resources	**Local Co-ordinate Reference:**	Well SRC Phelps A-32CHZ
Project:	SEC.32-T1N-R66W	**TVD Reference:**	WELL @ 5031.0ft (RKB - 12')
Reference Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	**MD Reference:**	WELL @ 5031.0ft (RKB - 12')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	SRC Phelps A-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-

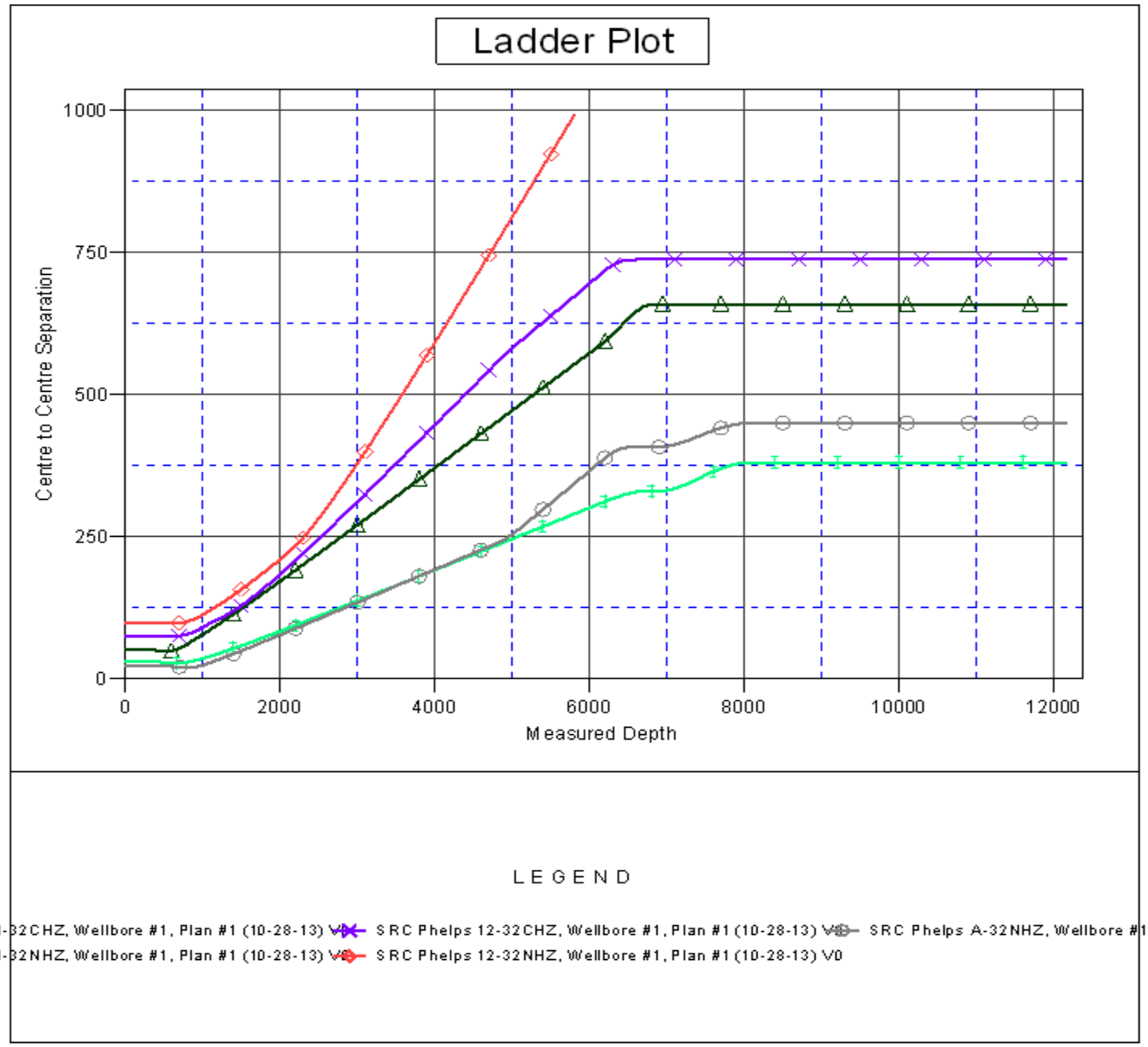
Offset Site Error: 0.0 ft

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
10,000.0	7,642.0	9,779.1	7,451.0	71.8	71.5	-64.93	236.1	-2,454.3	450.8	321.1	129.68	3.476	
10,100.0	7,642.0	9,879.1	7,451.0	74.5	74.3	-64.93	236.1	-2,554.3	450.8	316.2	134.65	3.348	
10,200.0	7,642.0	9,979.1	7,451.0	77.2	77.0	-64.93	236.1	-2,654.3	450.8	311.2	139.62	3.229	
10,300.0	7,642.0	10,079.1	7,451.0	79.9	79.7	-64.93	236.1	-2,754.3	450.8	306.2	144.61	3.118	
10,400.0	7,642.0	10,179.1	7,451.0	82.7	82.5	-64.93	236.1	-2,854.3	450.8	301.2	149.60	3.013	
10,500.0	7,642.0	10,279.1	7,451.0	85.4	85.2	-64.93	236.1	-2,954.3	450.8	296.2	154.60	2.916	
10,600.0	7,642.0	10,379.1	7,451.0	88.1	88.0	-64.93	236.1	-3,054.3	450.8	291.2	159.61	2.824	
10,700.0	7,642.0	10,479.1	7,451.0	90.9	90.7	-64.93	236.1	-3,154.3	450.8	286.2	164.63	2.738	
10,800.0	7,642.0	10,579.1	7,451.0	93.6	93.5	-64.93	236.1	-3,254.3	450.8	281.2	169.65	2.657	
10,900.0	7,642.0	10,679.1	7,451.0	96.4	96.2	-64.93	236.1	-3,354.3	450.8	276.1	174.67	2.581	
11,000.0	7,642.0	10,779.1	7,451.0	99.1	99.0	-64.93	236.1	-3,454.3	450.8	271.1	179.71	2.509	
11,100.0	7,642.0	10,879.1	7,451.0	101.9	101.8	-64.93	236.1	-3,554.3	450.8	266.1	184.74	2.440	
11,200.0	7,642.0	10,979.1	7,451.0	104.6	104.5	-64.93	236.1	-3,654.3	450.8	261.0	189.78	2.375	
11,300.0	7,642.0	11,079.1	7,451.0	107.4	107.3	-64.93	236.1	-3,754.3	450.8	256.0	194.82	2.314	
11,400.0	7,642.0	11,179.1	7,451.0	110.1	110.1	-64.93	236.1	-3,854.3	450.8	251.0	199.87	2.256	
11,500.0	7,642.0	11,279.1	7,451.0	112.9	112.8	-64.93	236.1	-3,954.3	450.8	245.9	204.92	2.200	
11,600.0	7,642.0	11,379.1	7,451.0	115.7	115.6	-64.93	236.1	-4,054.3	450.8	240.8	209.98	2.147	
11,700.0	7,642.0	11,479.1	7,451.0	118.4	118.4	-64.93	236.1	-4,154.3	450.8	235.8	215.03	2.097	
11,800.0	7,642.0	11,579.1	7,451.0	121.2	121.1	-64.93	236.1	-4,254.3	450.8	230.7	220.09	2.048	
11,900.0	7,642.0	11,679.1	7,451.0	124.0	123.9	-64.93	236.1	-4,354.3	450.8	225.7	225.15	2.002	
12,000.0	7,642.0	11,779.1	7,451.0	126.8	126.7	-64.93	236.1	-4,454.3	450.8	220.6	230.22	1.958	
12,100.0	7,642.0	11,879.1	7,451.0	129.5	129.5	-64.93	236.1	-4,554.3	450.8	215.5	235.28	1.916	
12,158.6	7,642.0	11,937.7	7,451.0	131.2	130.7	-64.93	236.1	-4,612.9	450.8	212.9	237.91	1.895	SF

Company:	Synergy Resources	**Local Co-ordinate Reference:**	Well SRC Phelps A-32CHZ
Project:	SEC.32-T1N-R66W	**TVD Reference:**	WELL @ 5031.0ft (RKB - 12')
Reference Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	**MD Reference:**	WELL @ 5031.0ft (RKB - 12')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	SRC Phelps A-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 @ 5031.0ft (RKB - 12')	Coordinates are relative to: SRC Phelps A-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 A-32CHZ
Project:	SEC.32-T1N-R66W	**TVD Reference:**	WELL @ 5031.0ft (RKB - 12')
Reference Site:	SRC Phelps 11-32CHZ Pad Sec.32-T1N-R66W	**MD Reference:**	WELL @ 5031.0ft (RKB - 12')
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	SRC Phelps A-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 @ 5031.0ft (RKB - 12')	Coordinates are relative to: SRC Phelps A-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°