

# ENSIGN

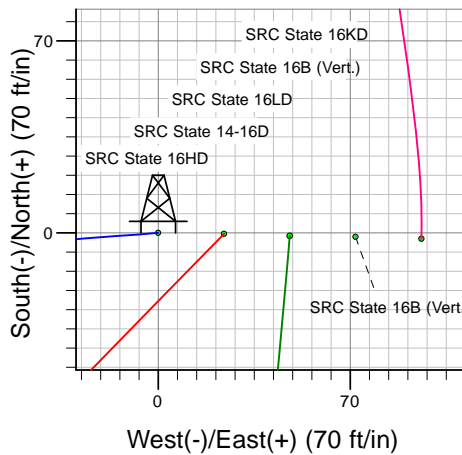
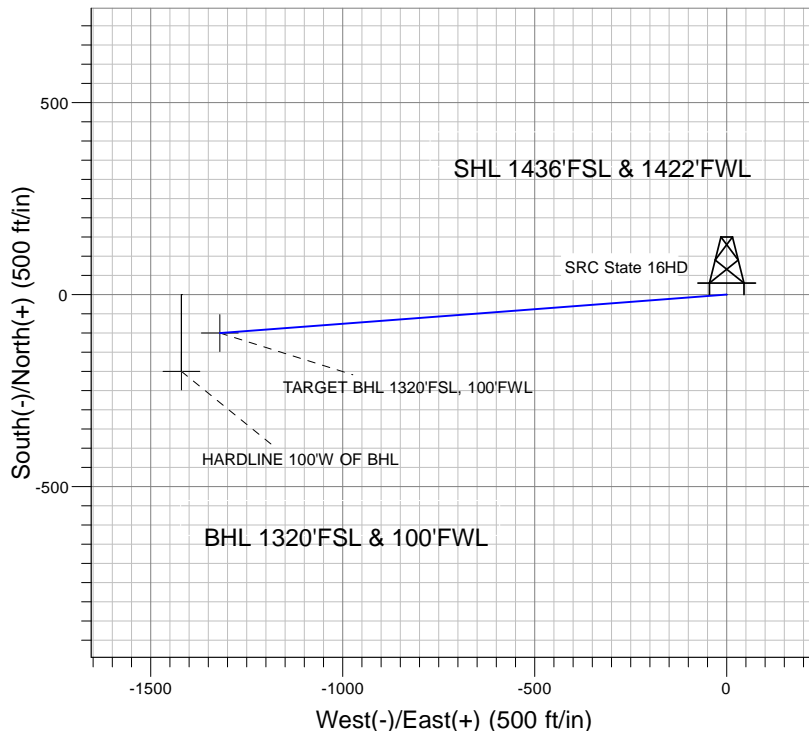
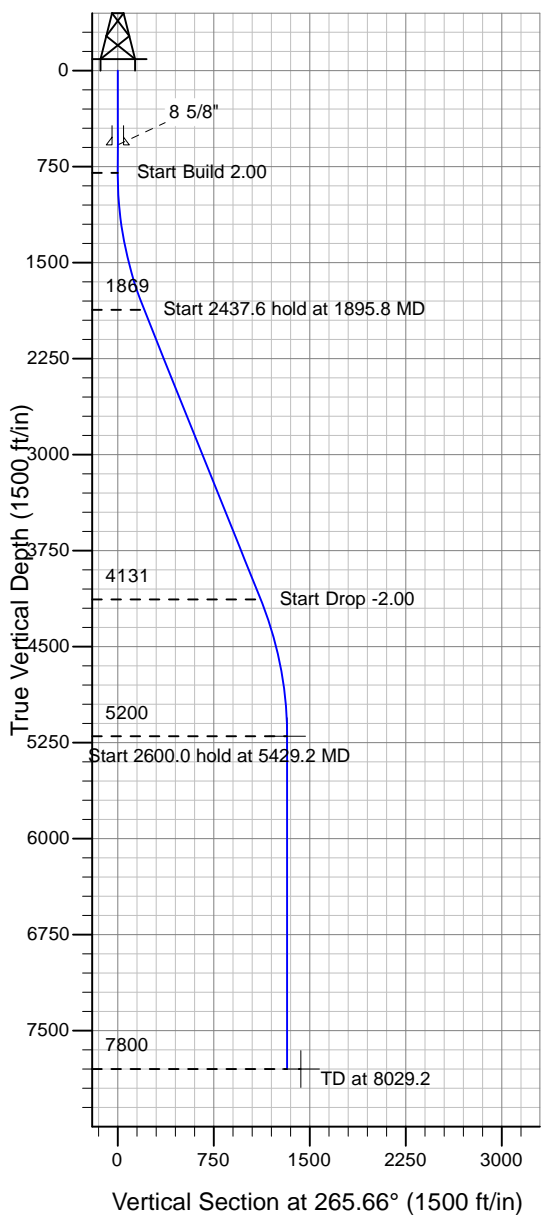
## Directional

### Well Name: SRC State 16HD

Surface Location: SRC-State Pad Sec.16-T4N-R67W  
 North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone  
 Ground Elevation: 4896.0

+N/-S+E/-W Northing Easting Latitude Longitude Slot  
 0.0 0.0 1356163.98 3167146.14 40° 18' 34.272 N 104° 54' 2.347 W  
 Original Well Elev WELL @ 4909.0ft (Original Well Elev)

## Synergy Resources



SRC-State Pad Sec.16-T4N-R67W  
 SRC State 16HD  
 Plan #2 (1-8-10)  
 12:11, January 11 2010



Azimuths to True North  
 Magnetic North: 9.27°  
 Magnetic Field  
 Strength: 53377.5nT  
 Dip Angle: 67.06°  
 Date: 9/5/2008  
 Model: IGRF200510

### WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
TARGET BHL 1320'FSL, 100'FWL	5200.0	-100.2	-1320.1	40° 18' 33.282 N	104° 54' 19.387 W	Point
HARDLINE 100'W OF BHL	7800.0	-200.2	-1420.1	40° 18' 32.293 N	104° 54' 20.678 W	Polygon

### 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	800.0	0.00	0.00	800.0	0.0	0.0	0.00	0.00	0.0	
3	1895.8	21.92	265.66	1869.3	-15.7	-206.4	2.00	265.66	207.0	
4	4333.4	21.92	265.66	4130.7	-84.5	-1113.7	0.00	0.00	1116.9	
5	5429.2	0.00	0.00	5200.0	-100.2	-1320.1	2.00	180.00	1323.9	TARGET BHL 1320'FSL, 100'FWL
6	8029.2	0.00	0.00	7800.0	-100.2	-1320.1	0.00	0.00	1323.9	



## **Synergy Resources**

**SEC.16-T4N-R67W**

**SRC-State Pad Sec.16-T4N-R67W**

**SRC State 16HD**

**Wellbore #1**

**Plan: Plan #2 (1-8-10)**

## **Standard Planning Report**

**11 January, 2010**

<b>Database:</b>	EDM den0-adp01 Server Data	<b>Local Co-ordinate Reference:</b>	Well SRC State 16HD
<b>Company:</b>	Synergy Resources	<b>TVD Reference:</b>	WELL @ 4909.0ft (Original Well Elev)
<b>Project:</b>	SEC.16-T4N-R67W	<b>MD Reference:</b>	WELL @ 4909.0ft (Original Well Elev)
<b>Site:</b>	SRC-State Pad Sec.16-T4N-R67W	<b>North Reference:</b>	True
<b>Well:</b>	SRC State 16HD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #2 (1-8-10)		

<b>Project</b>	SEC.16-T4N-R67W, Weld County, Colorado		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		Using Well Reference Point
<b>Map Zone:</b>	Colorado Northern Zone		Using geodetic scale factor

Site SRC-State Pad Sec.16-T4N-R67W					
Site Position:		Northing:	1,356,084.00ft	Latitude:	40° 18' 33.480 N
From:	Lat/Long	Easting:	3,167,169.55ft	Longitude:	104° 54' 2.052 W
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.39 °

Well	SRC State 16HD					
Well Position	+N/-S	80.1 ft	Northing:	1,356,163.98 ft	Latitude:	40° 18' 34.272 N
	+E/-W	-22.9 ft	Easting:	3,167,146.14 ft	Longitude:	104° 54' 2.347 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,896.0 ft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF200510	9/5/2008	9.27	67.06	53,378

<b>Design</b>	Plan #2 (1-8-10)			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	265.66

<b>Plan Sections</b>										
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	
800.0	0.00	0.00	800.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,895.8	21.92	265.66	1,869.3	-15.7	-206.4	2.00	2.00	0.00	265.66	
4,333.4	21.92	265.66	4,130.7	-84.5	-1,113.7	0.00	0.00	0.00	0.00	
5,429.2	0.00	0.00	5,200.0	-100.2	-1,320.1	2.00	-2.00	0.00	180.00	TARGET BHL 132C
8,029.2	0.00	0.00	7,800.0	-100.2	-1,320.1	0.00	0.00	0.00	0.00	

<b>Database:</b>	EDM den0-adp01 Server Data	<b>Local Co-ordinate Reference:</b>	Well SRC State 16HD
<b>Company:</b>	Synergy Resources	<b>TVD Reference:</b>	WELL @ 4909.0ft (Original Well Elev)
<b>Project:</b>	SEC.16-T4N-R67W	<b>MD Reference:</b>	WELL @ 4909.0ft (Original Well Elev)
<b>Site:</b>	SRC-State Pad Sec.16-T4N-R67W	<b>North Reference:</b>	True
<b>Well:</b>	SRC State 16HD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #2 (1-8-10)		

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
40.0	0.00	0.00	40.0	0.0	0.0	0.0	0.00	0.00	0.00
80.0	0.00	0.00	80.0	0.0	0.0	0.0	0.00	0.00	0.00
120.0	0.00	0.00	120.0	0.0	0.0	0.0	0.00	0.00	0.00
160.0	0.00	0.00	160.0	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
240.0	0.00	0.00	240.0	0.0	0.0	0.0	0.00	0.00	0.00
280.0	0.00	0.00	280.0	0.0	0.0	0.0	0.00	0.00	0.00
320.0	0.00	0.00	320.0	0.0	0.0	0.0	0.00	0.00	0.00
360.0	0.00	0.00	360.0	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
440.0	0.00	0.00	440.0	0.0	0.0	0.0	0.00	0.00	0.00
480.0	0.00	0.00	480.0	0.0	0.0	0.0	0.00	0.00	0.00
520.0	0.00	0.00	520.0	0.0	0.0	0.0	0.00	0.00	0.00
560.0	0.00	0.00	560.0	0.0	0.0	0.0	0.00	0.00	0.00
580.0	0.00	0.00	580.0	0.0	0.0	0.0	0.00	0.00	0.00
8 5/8"									
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
640.0	0.00	0.00	640.0	0.0	0.0	0.0	0.00	0.00	0.00
680.0	0.00	0.00	680.0	0.0	0.0	0.0	0.00	0.00	0.00
720.0	0.00	0.00	720.0	0.0	0.0	0.0	0.00	0.00	0.00
760.0	0.00	0.00	760.0	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
840.0	0.80	265.66	840.0	0.0	-0.3	0.3	2.00	2.00	0.00
880.0	1.60	265.66	880.0	-0.1	-1.1	1.1	2.00	2.00	0.00
920.0	2.40	265.66	920.0	-0.2	-2.5	2.5	2.00	2.00	0.00
960.0	3.20	265.66	959.9	-0.3	-4.5	4.5	2.00	2.00	0.00
1,000.0	4.00	265.66	999.8	-0.5	-7.0	7.0	2.00	2.00	0.00
1,040.0	4.80	265.66	1,039.7	-0.8	-10.0	10.0	2.00	2.00	0.00
1,080.0	5.60	265.66	1,079.6	-1.0	-13.6	13.7	2.00	2.00	0.00
1,120.0	6.40	265.66	1,119.3	-1.4	-17.8	17.9	2.00	2.00	0.00
1,160.0	7.20	265.66	1,159.1	-1.7	-22.5	22.6	2.00	2.00	0.00
1,200.0	8.00	265.66	1,198.7	-2.1	-27.8	27.9	2.00	2.00	0.00
1,240.0	8.80	265.66	1,238.3	-2.6	-33.6	33.7	2.00	2.00	0.00
1,280.0	9.60	265.66	1,277.8	-3.0	-40.0	40.1	2.00	2.00	0.00
1,320.0	10.40	265.66	1,317.1	-3.6	-46.9	47.1	2.00	2.00	0.00
1,360.0	11.20	265.66	1,356.4	-4.1	-54.4	54.6	2.00	2.00	0.00
1,400.0	12.00	265.66	1,395.6	-4.7	-62.4	62.6	2.00	2.00	0.00
1,440.0	12.80	265.66	1,434.7	-5.4	-71.0	71.2	2.00	2.00	0.00
1,480.0	13.60	265.66	1,473.6	-6.1	-80.1	80.3	2.00	2.00	0.00
1,520.0	14.40	265.66	1,512.4	-6.8	-89.7	90.0	2.00	2.00	0.00
1,560.0	15.20	265.66	1,551.1	-7.6	-99.9	100.2	2.00	2.00	0.00
1,600.0	16.00	265.66	1,589.6	-8.4	-110.7	111.0	2.00	2.00	0.00
1,640.0	16.80	265.66	1,628.0	-9.3	-121.9	122.3	2.00	2.00	0.00
1,680.0	17.60	265.66	1,666.2	-10.1	-133.7	134.1	2.00	2.00	0.00
1,720.0	18.40	265.66	1,704.3	-11.1	-146.0	146.5	2.00	2.00	0.00
1,760.0	19.20	265.66	1,742.1	-12.1	-158.9	159.3	2.00	2.00	0.00
1,800.0	20.00	265.66	1,779.8	-13.1	-172.3	172.8	2.00	2.00	0.00
1,840.0	20.80	265.66	1,817.3	-14.1	-186.2	186.7	2.00	2.00	0.00
1,880.0	21.60	265.66	1,854.6	-15.2	-200.6	201.2	2.00	2.00	0.00
1,895.8	21.92	265.66	1,869.3	-15.7	-206.4	207.0	2.00	2.00	0.00
1,920.0	21.92	265.66	1,891.7	-16.4	-215.4	216.1	0.00	0.00	0.00
1,960.0	21.92	265.66	1,928.8	-17.5	-230.3	231.0	0.00	0.00	0.00
2,000.0	21.92	265.66	1,965.9	-18.6	-245.2	245.9	0.00	0.00	0.00

<b>Database:</b>	EDM den0-adp01 Server Data	<b>Local Co-ordinate Reference:</b>	Well SRC State 16HD
<b>Company:</b>	Synergy Resources	<b>TVD Reference:</b>	WELL @ 4909.0ft (Original Well Elev)
<b>Project:</b>	SEC.16-T4N-R67W	<b>MD Reference:</b>	WELL @ 4909.0ft (Original Well Elev)
<b>Site:</b>	SRC-State Pad Sec.16-T4N-R67W	<b>North Reference:</b>	True
<b>Well:</b>	SRC State 16HD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #2 (1-8-10)		

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)
2,040.0	21.92	265.66	2,003.1	-19.7	-260.1	260.9	0.00	0.00	0.00
2,080.0	21.92	265.66	2,040.2	-20.9	-275.0	275.8	0.00	0.00	0.00
2,120.0	21.92	265.66	2,077.3	-22.0	-289.9	290.7	0.00	0.00	0.00
2,160.0	21.92	265.66	2,114.4	-23.1	-304.8	305.6	0.00	0.00	0.00
2,200.0	21.92	265.66	2,151.5	-24.3	-319.7	320.6	0.00	0.00	0.00
2,240.0	21.92	265.66	2,188.6	-25.4	-334.5	335.5	0.00	0.00	0.00
2,280.0	21.92	265.66	2,225.7	-26.5	-349.4	350.4	0.00	0.00	0.00
2,320.0	21.92	265.66	2,262.8	-27.6	-364.3	365.4	0.00	0.00	0.00
2,360.0	21.92	265.66	2,299.9	-28.8	-379.2	380.3	0.00	0.00	0.00
2,400.0	21.92	265.66	2,337.0	-29.9	-394.1	395.2	0.00	0.00	0.00
2,440.0	21.92	265.66	2,374.1	-31.0	-409.0	410.2	0.00	0.00	0.00
2,480.0	21.92	265.66	2,411.3	-32.2	-423.9	425.1	0.00	0.00	0.00
2,520.0	21.92	265.66	2,448.4	-33.3	-438.8	440.0	0.00	0.00	0.00
2,560.0	21.92	265.66	2,485.5	-34.4	-453.6	454.9	0.00	0.00	0.00
2,600.0	21.92	265.66	2,522.6	-35.6	-468.5	469.9	0.00	0.00	0.00
2,640.0	21.92	265.66	2,559.7	-36.7	-483.4	484.8	0.00	0.00	0.00
2,680.0	21.92	265.66	2,596.8	-37.8	-498.3	499.7	0.00	0.00	0.00
2,720.0	21.92	265.66	2,633.9	-38.9	-513.2	514.7	0.00	0.00	0.00
2,760.0	21.92	265.66	2,671.0	-40.1	-528.1	529.6	0.00	0.00	0.00
2,800.0	21.92	265.66	2,708.1	-41.2	-543.0	544.5	0.00	0.00	0.00
2,840.0	21.92	265.66	2,745.2	-42.3	-557.8	559.5	0.00	0.00	0.00
2,880.0	21.92	265.66	2,782.3	-43.5	-572.7	574.4	0.00	0.00	0.00
2,920.0	21.92	265.66	2,819.5	-44.6	-587.6	589.3	0.00	0.00	0.00
2,960.0	21.92	265.66	2,856.6	-45.7	-602.5	604.2	0.00	0.00	0.00
3,000.0	21.92	265.66	2,893.7	-46.9	-617.4	619.2	0.00	0.00	0.00
3,040.0	21.92	265.66	2,930.8	-48.0	-632.3	634.1	0.00	0.00	0.00
3,080.0	21.92	265.66	2,967.9	-49.1	-647.2	649.0	0.00	0.00	0.00
3,120.0	21.92	265.66	3,005.0	-50.2	-662.1	664.0	0.00	0.00	0.00
3,160.0	21.92	265.66	3,042.1	-51.4	-676.9	678.9	0.00	0.00	0.00
3,200.0	21.92	265.66	3,079.2	-52.5	-691.8	693.8	0.00	0.00	0.00
3,240.0	21.92	265.66	3,116.3	-53.6	-706.7	708.8	0.00	0.00	0.00
3,280.0	21.92	265.66	3,153.4	-54.8	-721.6	723.7	0.00	0.00	0.00
3,320.0	21.92	265.66	3,190.5	-55.9	-736.5	738.6	0.00	0.00	0.00
3,360.0	21.92	265.66	3,227.7	-57.0	-751.4	753.5	0.00	0.00	0.00
3,400.0	21.92	265.66	3,264.8	-58.2	-766.3	768.5	0.00	0.00	0.00
3,440.0	21.92	265.66	3,301.9	-59.3	-781.2	783.4	0.00	0.00	0.00
3,480.0	21.92	265.66	3,339.0	-60.4	-796.0	798.3	0.00	0.00	0.00
3,520.0	21.92	265.66	3,376.1	-61.5	-810.9	813.3	0.00	0.00	0.00
3,560.0	21.92	265.66	3,413.2	-62.7	-825.8	828.2	0.00	0.00	0.00
3,600.0	21.92	265.66	3,450.3	-63.8	-840.7	843.1	0.00	0.00	0.00
3,640.0	21.92	265.66	3,487.4	-64.9	-855.6	858.1	0.00	0.00	0.00
3,680.0	21.92	265.66	3,524.5	-66.1	-870.5	873.0	0.00	0.00	0.00
3,720.0	21.92	265.66	3,561.6	-67.2	-885.4	887.9	0.00	0.00	0.00
3,760.0	21.92	265.66	3,598.8	-68.3	-900.3	902.8	0.00	0.00	0.00
3,800.0	21.92	265.66	3,635.9	-69.5	-915.1	917.8	0.00	0.00	0.00
3,840.0	21.92	265.66	3,673.0	-70.6	-930.0	932.7	0.00	0.00	0.00
3,880.0	21.92	265.66	3,710.1	-71.7	-944.9	947.6	0.00	0.00	0.00
3,920.0	21.92	265.66	3,747.2	-72.8	-959.8	962.6	0.00	0.00	0.00
3,960.0	21.92	265.66	3,784.3	-74.0	-974.7	977.5	0.00	0.00	0.00
4,000.0	21.92	265.66	3,821.4	-75.1	-989.6	992.4	0.00	0.00	0.00
4,040.0	21.92	265.66	3,858.5	-76.2	-1,004.5	1,007.4	0.00	0.00	0.00
4,080.0	21.92	265.66	3,895.6	-77.4	-1,019.3	1,022.3	0.00	0.00	0.00
4,120.0	21.92	265.66	3,932.7	-78.5	-1,034.2	1,037.2	0.00	0.00	0.00
4,160.0	21.92	265.66	3,969.8	-79.6	-1,049.1	1,052.1	0.00	0.00	0.00

<b>Database:</b>	EDM den0-adp01 Server Data	<b>Local Co-ordinate Reference:</b>	Well SRC State 16HD
<b>Company:</b>	Synergy Resources	<b>TVD Reference:</b>	WELL @ 4909.0ft (Original Well Elev)
<b>Project:</b>	SEC.16-T4N-R67W	<b>MD Reference:</b>	WELL @ 4909.0ft (Original Well Elev)
<b>Site:</b>	SRC-State Pad Sec.16-T4N-R67W	<b>North Reference:</b>	True
<b>Well:</b>	SRC State 16HD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #2 (1-8-10)		

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)
4,200.0	21.92	265.66	4,007.0	-80.8	-1,064.0	1,067.1	0.00	0.00	0.00
4,240.0	21.92	265.66	4,044.1	-81.9	-1,078.9	1,082.0	0.00	0.00	0.00
4,280.0	21.92	265.66	4,081.2	-83.0	-1,093.8	1,096.9	0.00	0.00	0.00
4,320.0	21.92	265.66	4,118.3	-84.1	-1,108.7	1,111.9	0.00	0.00	0.00
4,333.4	21.92	265.66	4,130.7	-84.5	-1,113.7	1,116.9	0.00	0.00	0.00
4,360.0	21.38	265.66	4,155.4	-85.3	-1,123.4	1,126.7	2.00	-2.00	0.00
4,400.0	20.58	265.66	4,192.8	-86.3	-1,137.7	1,141.0	2.00	-2.00	0.00
4,440.0	19.78	265.66	4,230.3	-87.4	-1,151.5	1,154.8	2.00	-2.00	0.00
4,480.0	18.98	265.66	4,268.1	-88.4	-1,164.7	1,168.1	2.00	-2.00	0.00
4,520.0	18.18	265.66	4,306.0	-89.4	-1,177.4	1,180.8	2.00	-2.00	0.00
4,560.0	17.38	265.66	4,344.1	-90.3	-1,189.6	1,193.0	2.00	-2.00	0.00
4,600.0	16.58	265.66	4,382.3	-91.2	-1,201.3	1,204.7	2.00	-2.00	0.00
4,640.0	15.78	265.66	4,420.7	-92.0	-1,212.4	1,215.9	2.00	-2.00	0.00
4,680.0	14.98	265.66	4,459.3	-92.8	-1,223.0	1,226.5	2.00	-2.00	0.00
4,720.0	14.18	265.66	4,498.0	-93.6	-1,233.0	1,236.6	2.00	-2.00	0.00
4,760.0	13.38	265.66	4,536.9	-94.3	-1,242.5	1,246.1	2.00	-2.00	0.00
4,800.0	12.58	265.66	4,575.8	-95.0	-1,251.5	1,255.1	2.00	-2.00	0.00
4,840.0	11.78	265.66	4,614.9	-95.6	-1,259.9	1,263.5	2.00	-2.00	0.00
4,880.0	10.98	265.66	4,654.1	-96.2	-1,267.8	1,271.4	2.00	-2.00	0.00
4,920.0	10.18	265.66	4,693.5	-96.8	-1,275.1	1,278.8	2.00	-2.00	0.00
4,960.0	9.38	265.66	4,732.9	-97.3	-1,281.9	1,285.6	2.00	-2.00	0.00
5,000.0	8.58	265.66	4,772.4	-97.8	-1,288.1	1,291.8	2.00	-2.00	0.00
5,040.0	7.78	265.66	4,812.0	-98.2	-1,293.8	1,297.5	2.00	-2.00	0.00
5,080.0	6.98	265.66	4,851.6	-98.6	-1,298.9	1,302.6	2.00	-2.00	0.00
5,120.0	6.18	265.66	4,891.4	-98.9	-1,303.5	1,307.2	2.00	-2.00	0.00
5,160.0	5.38	265.66	4,931.2	-99.2	-1,307.5	1,311.3	2.00	-2.00	0.00
5,200.0	4.58	265.66	4,971.0	-99.5	-1,311.0	1,314.7	2.00	-2.00	0.00
5,240.0	3.78	265.66	5,010.9	-99.7	-1,313.9	1,317.7	2.00	-2.00	0.00
5,280.0	2.98	265.66	5,050.9	-99.9	-1,316.2	1,320.0	2.00	-2.00	0.00
5,320.0	2.18	265.66	5,090.8	-100.0	-1,318.0	1,321.8	2.00	-2.00	0.00
5,360.0	1.38	265.66	5,130.8	-100.1	-1,319.3	1,323.1	2.00	-2.00	0.00
5,400.0	0.58	265.66	5,170.8	-100.2	-1,320.0	1,323.8	2.00	-2.00	0.00
5,429.2	0.00	0.00	5,200.0	-100.2	-1,320.1	1,323.9	2.00	-2.00	0.00
TARGET BHL 1320'FSL, 100'FWL									
5,440.0	0.00	0.00	5,210.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
5,480.0	0.00	0.00	5,250.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
5,520.0	0.00	0.00	5,290.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
5,560.0	0.00	0.00	5,330.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
5,600.0	0.00	0.00	5,370.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
5,640.0	0.00	0.00	5,410.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
5,680.0	0.00	0.00	5,450.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
5,720.0	0.00	0.00	5,490.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
5,760.0	0.00	0.00	5,530.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
5,800.0	0.00	0.00	5,570.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
5,840.0	0.00	0.00	5,610.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
5,880.0	0.00	0.00	5,650.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
5,920.0	0.00	0.00	5,690.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
5,960.0	0.00	0.00	5,730.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
6,000.0	0.00	0.00	5,770.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
6,040.0	0.00	0.00	5,810.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
6,080.0	0.00	0.00	5,850.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
6,120.0	0.00	0.00	5,890.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
6,160.0	0.00	0.00	5,930.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
6,200.0	0.00	0.00	5,970.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00

<b>Database:</b>	EDM den0-adp01 Server Data	<b>Local Co-ordinate Reference:</b>	Well SRC State 16HD
<b>Company:</b>	Synergy Resources	<b>TVD Reference:</b>	WELL @ 4909.0ft (Original Well Elev)
<b>Project:</b>	SEC.16-T4N-R67W	<b>MD Reference:</b>	WELL @ 4909.0ft (Original Well Elev)
<b>Site:</b>	SRC-State Pad Sec.16-T4N-R67W	<b>North Reference:</b>	True
<b>Well:</b>	SRC State 16HD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #2 (1-8-10)		

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)
6,240.0	0.00	0.00	6,010.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
6,280.0	0.00	0.00	6,050.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
6,320.0	0.00	0.00	6,090.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
6,360.0	0.00	0.00	6,130.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
6,400.0	0.00	0.00	6,170.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
6,440.0	0.00	0.00	6,210.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
6,480.0	0.00	0.00	6,250.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
6,520.0	0.00	0.00	6,290.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
6,560.0	0.00	0.00	6,330.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
6,600.0	0.00	0.00	6,370.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
6,640.0	0.00	0.00	6,410.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
6,680.0	0.00	0.00	6,450.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
6,720.0	0.00	0.00	6,490.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
6,760.0	0.00	0.00	6,530.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
6,800.0	0.00	0.00	6,570.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
6,840.0	0.00	0.00	6,610.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
6,880.0	0.00	0.00	6,650.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
6,920.0	0.00	0.00	6,690.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
6,960.0	0.00	0.00	6,730.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
7,000.0	0.00	0.00	6,770.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
7,040.0	0.00	0.00	6,810.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
7,080.0	0.00	0.00	6,850.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
7,120.0	0.00	0.00	6,890.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
7,160.0	0.00	0.00	6,930.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
7,200.0	0.00	0.00	6,970.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
7,240.0	0.00	0.00	7,010.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
7,280.0	0.00	0.00	7,050.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
7,320.0	0.00	0.00	7,090.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
7,360.0	0.00	0.00	7,130.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
7,400.0	0.00	0.00	7,170.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
7,440.0	0.00	0.00	7,210.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
7,480.0	0.00	0.00	7,250.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
7,520.0	0.00	0.00	7,290.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
7,560.0	0.00	0.00	7,330.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
7,600.0	0.00	0.00	7,370.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
7,640.0	0.00	0.00	7,410.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
7,680.0	0.00	0.00	7,450.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
7,720.0	0.00	0.00	7,490.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
7,760.0	0.00	0.00	7,530.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
7,800.0	0.00	0.00	7,570.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
7,840.0	0.00	0.00	7,610.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
7,880.0	0.00	0.00	7,650.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
7,920.0	0.00	0.00	7,690.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
7,960.0	0.00	0.00	7,730.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
8,000.0	0.00	0.00	7,770.8	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
8,029.2	0.00	0.00	7,800.0	-100.2	-1,320.1	1,323.9	0.00	0.00	0.00
HARDLINE 100'W OF BHL									

<b>Database:</b>	EDM den0-adp01 Server Data	<b>Local Co-ordinate Reference:</b>	Well SRC State 16HD
<b>Company:</b>	Synergy Resources	<b>TVD Reference:</b>	WELL @ 4909.0ft (Original Well Elev)
<b>Project:</b>	SEC.16-T4N-R67W	<b>MD Reference:</b>	WELL @ 4909.0ft (Original Well Elev)
<b>Site:</b>	SRC-State Pad Sec.16-T4N-R67W	<b>North Reference:</b>	True
<b>Well:</b>	SRC State 16HD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #2 (1-8-10)		

Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
HARDLINE 100'W OF	0.00	0.00	7,800.0	-200.2	-1,420.1	1,355,954.20	3,165,727.48	40° 18' 32.293 N	104° 54' 20.678 W
- plan misses target center by 141.4ft at 8029.2ft MD (7800.0 TVD, -100.2 N, -1320.1 E)									
- Polygon									
Point 1			7,800.0	0.0	0.0	1,355,954.20	3,165,727.48		
Point 2			7,800.0	200.0	0.0	1,356,154.18	3,165,726.13		
TARGET BHL 1320'F:	0.00	0.00	5,200.0	-100.2	-1,320.1	1,356,054.88	3,165,826.80	40° 18' 33.282 N	104° 54' 19.387 W
- plan hits target center									
- Point									

Casing Points					
	Measured Depth	Vertical Depth		Casing Diameter	Hole Diameter
	(ft)	(ft)	Name	(")	(")
	580.0	580.0	8 5/8"	8-5/8	12-1/4





## **Synergy Resources**

**SEC.16-T4N-R67W**

**SRC-State Pad Sec.16-T4N-R67W**

**SRC State 16HD**

**Wellbore #1**

**Plan #2 (1-8-10)**

## **Anticollision Report**

**11 January, 2010**

<b>Company:</b>	Synergy Resources	<b>Local Co-ordinate Reference:</b>	Well SRC State 16HD
<b>Project:</b>	SEC.16-T4N-R67W	<b>TVD Reference:</b>	WELL @ 4909.0ft (Original Well Elev)
<b>Reference Site:</b>	SRC-State Pad Sec.16-T4N-R67W	<b>MD Reference:</b>	WELL @ 4909.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	SRC State 16HD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDM den0-adp01 Server Data
<b>Reference Design:</b>	Plan #2 (1-8-10)	<b>Offset TVD Reference:</b>	Offset Datum

<b>Reference</b>	Plan #2 (1-8-10)		
<b>Filter type:</b>	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
<b>Interpolation Method:</b>	MD Interval 100.0ft	<b>Error Model:</b>	ISCSWA
<b>Depth Range:</b>	Unlimited	<b>Scan Method:</b>	Closest Approach 3D
<b>Results Limited by:</b>	Maximum center-center distance of 2,000.0ft	<b>Error Surface:</b>	Elliptical Conic
<b>Warning Levels Evaluated at:</b>	2.00 Sigma		

Survey Tool Program		Date	1/11/2010		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	8,029.2	Plan #2 (1-8-10) (Wellbore #1)	MWD	MWD - Standard	

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
SRC-State Pad Sec.16-T4N-R67W						
SRC State 14-16D - Wellbore #1 - Plan #3 (1-8-10)	800.0	801.0	24.0	20.6	7.110	CC, ES
SRC State 14-16D - Wellbore #1 - Plan #3 (1-8-10)	900.0	901.0	25.7	21.9	6.755	SF

SRC-State Pad Sec.16-T4N-R67W - SRC State 14-16D - Wellbore #1 - Plan #3 (1-8-10)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0.0	0.0	1.0	1.0	0.0	0.0	90.88	-0.4	24.0	24.0	24.0	0.00	N/A		
100.0	100.0	101.0	101.0	0.1	0.1	90.88	-0.4	24.0	24.0	23.8	0.23	105.667		
200.0	200.0	201.0	201.0	0.3	0.3	90.88	-0.4	24.0	24.0	23.3	0.68	35.456		
300.0	300.0	301.0	301.0	0.6	0.6	90.88	-0.4	24.0	24.0	22.9	1.13	21.302		
400.0	400.0	401.0	401.0	0.8	0.8	90.88	-0.4	24.0	24.0	22.4	1.58	15.224		
500.0	500.0	501.0	501.0	1.0	1.0	90.88	-0.4	24.0	24.0	22.0	2.03	11.845		
600.0	600.0	601.0	601.0	1.2	1.2	90.88	-0.4	24.0	24.0	21.5	2.47	9.693		
700.0	700.0	701.0	701.0	1.5	1.5	90.88	-0.4	24.0	24.0	21.1	2.92	8.203		
800.0	800.0	801.0	801.0	1.7	1.7	90.88	-0.4	24.0	24.0	20.6	3.37	7.110 CC, ES		
900.0	900.0	901.0	901.0	1.9	1.9	-175.13	-0.4	24.0	25.7	21.9	3.81	6.755 SF		
1,000.0	999.8	1,000.8	1,000.8	2.1	2.1	-175.95	-0.4	24.0	30.9	26.7	4.23	7.313		
1,100.0	1,099.5	1,100.5	1,100.5	2.3	2.4	-176.83	-0.4	24.0	39.6	35.0	4.66	8.516		
1,200.0	1,198.7	1,199.7	1,199.7	2.6	2.6	-177.56	-0.4	24.0	51.8	46.7	5.08	10.202		
1,300.0	1,297.5	1,300.1	1,300.1	2.9	2.8	-177.08	-1.6	22.8	66.2	60.7	5.48	12.086		
1,400.0	1,395.6	1,400.8	1,400.6	3.2	3.0	-175.14	-5.4	19.1	81.6	75.7	5.86	13.930		
1,500.0	1,493.1	1,501.4	1,500.9	3.6	3.2	-172.49	-11.7	12.9	98.1	91.9	6.26	15.689		
1,600.0	1,589.6	1,602.1	1,600.8	4.0	3.4	-169.50	-20.5	4.3	116.0	109.3	6.68	17.358		
1,700.0	1,685.3	1,702.6	1,700.1	4.5	3.6	-166.39	-31.8	-6.8	135.4	128.3	7.16	18.906		
1,800.0	1,779.8	1,803.0	1,798.6	5.1	3.9	-163.28	-45.6	-20.2	156.5	148.8	7.71	20.287		
1,900.0	1,873.2	1,903.1	1,896.0	5.8	4.3	-160.26	-61.8	-36.0	179.4	171.0	8.36	21.448		
2,000.0	1,965.9	2,003.2	1,992.7	6.5	4.7	-157.33	-80.4	-54.2	202.4	193.2	9.18	22.047		
2,100.0	2,058.7	2,103.3	2,088.4	7.2	5.1	-154.18	-101.4	-74.7	224.4	214.3	10.13	22.143		
2,200.0	2,151.5	2,203.3	2,182.9	8.0	5.7	-150.85	-124.7	-97.6	245.6	234.4	11.24	21.859		
2,300.0	2,244.3	2,302.9	2,275.9	8.7	6.3	-147.35	-150.3	-122.6	266.5	254.0	12.50	21.324		
2,400.0	2,337.0	2,401.0	2,366.2	9.5	6.9	-143.81	-177.6	-149.3	287.3	273.4	13.89	20.682		

<b>Company:</b>	Synergy Resources	<b>Local Co-ordinate Reference:</b>	Well SRC State 16HD
<b>Project:</b>	SEC.16-T4N-R67W	<b>TVD Reference:</b>	WELL @ 4909.0ft (Original Well Elev)
<b>Reference Site:</b>	SRC-State Pad Sec.16-T4N-R67W	<b>MD Reference:</b>	WELL @ 4909.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	SRC State 16HD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDM den0-adp01 Server Data
<b>Reference Design:</b>	Plan #2 (1-8-10)	<b>Offset TVD Reference:</b>	Offset Datum

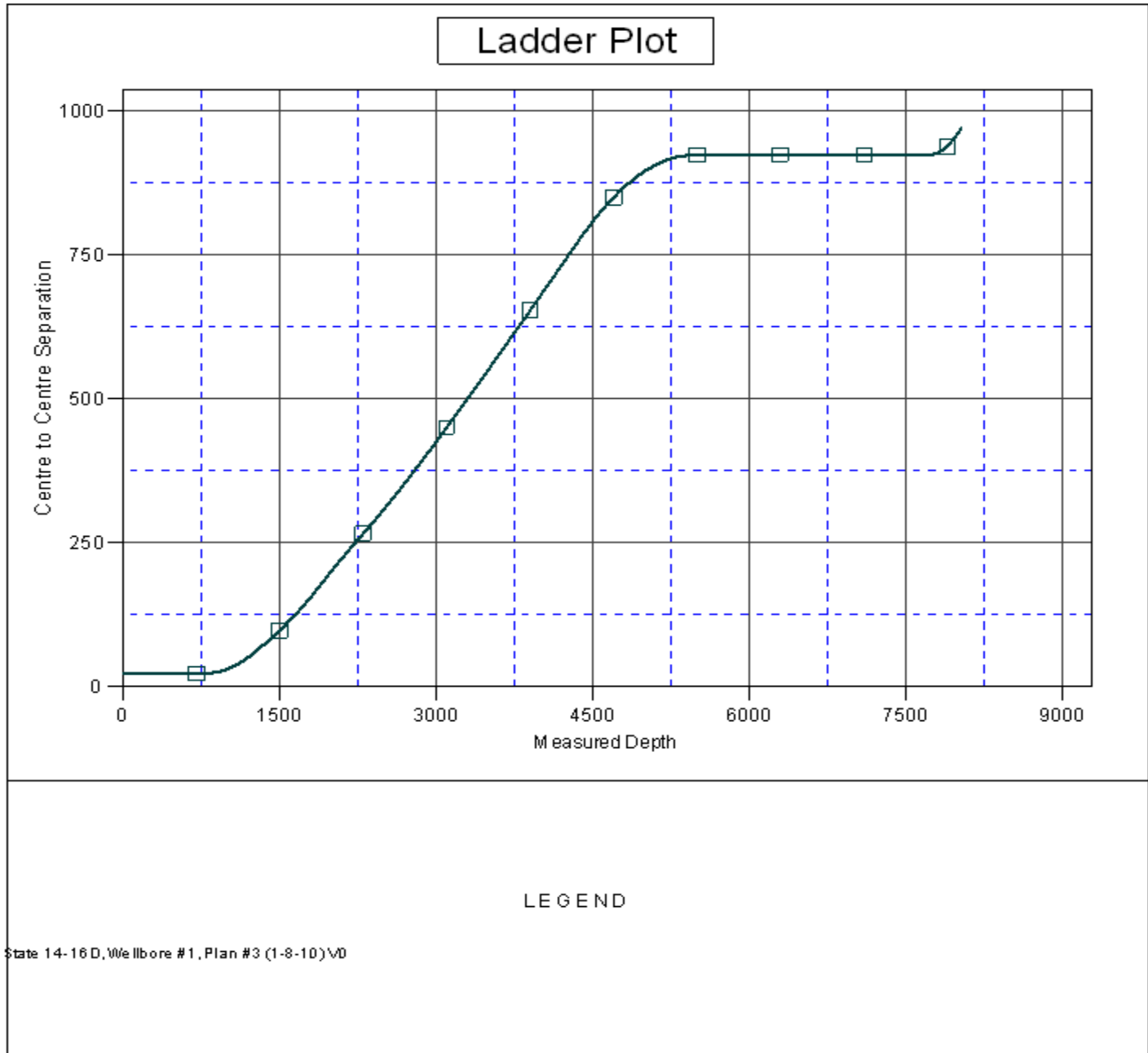
SRC-State Pad Sec.16-T4N-R67W - SRC State 14-16D - Wellbore #1 - Plan #3 (1-8-10)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
2,500.0	2,429.8	2,497.3	2,454.7	10.3	7.6	-140.69	-204.8	-175.8	308.9	293.6	15.34	20.137		
2,600.0	2,522.6	2,593.6	2,543.1	11.0	8.3	-137.97	-232.0	-202.4	331.3	314.5	16.82	19.694		
2,700.0	2,615.4	2,689.9	2,631.6	11.8	9.0	-135.59	-259.2	-229.0	354.4	336.0	18.33	19.336		
2,800.0	2,708.1	2,786.2	2,720.1	12.6	9.7	-133.50	-286.4	-255.6	377.9	358.1	19.84	19.047		
2,900.0	2,800.9	2,882.5	2,808.6	13.4	10.5	-131.66	-313.6	-282.2	401.9	380.5	21.36	18.812		
3,000.0	2,893.7	2,978.8	2,897.0	14.2	11.2	-130.02	-340.8	-308.8	426.2	403.3	22.89	18.621		
3,100.0	2,986.4	3,075.1	2,985.5	15.0	11.9	-128.55	-368.0	-335.4	450.9	426.4	24.42	18.465		
3,200.0	3,079.2	3,171.4	3,074.0	15.8	12.7	-127.24	-395.2	-362.0	475.7	449.8	25.94	18.337		
3,300.0	3,172.0	3,267.7	3,162.4	16.6	13.4	-126.06	-422.4	-388.6	500.8	473.4	27.47	18.231		
3,400.0	3,264.8	3,364.0	3,250.9	17.4	14.2	-124.99	-449.6	-415.1	526.1	497.1	29.00	18.143		
3,500.0	3,357.5	3,460.3	3,339.4	18.2	15.0	-124.01	-476.9	-441.7	551.5	521.0	30.52	18.070		
3,600.0	3,450.3	3,556.6	3,427.9	18.9	15.7	-123.12	-504.1	-468.3	577.1	545.1	32.04	18.009		
3,700.0	3,543.1	3,652.9	3,516.3	19.7	16.5	-122.31	-531.3	-494.9	602.8	569.2	33.57	17.958		
3,800.0	3,635.9	3,749.2	3,604.8	20.5	17.3	-121.56	-558.5	-521.5	628.6	593.5	35.09	17.916		
3,900.0	3,728.6	3,845.5	3,693.3	21.3	18.0	-120.88	-585.7	-548.1	654.5	617.9	36.60	17.880		
4,000.0	3,821.4	3,941.8	3,781.7	22.1	18.8	-120.24	-612.9	-574.7	680.4	642.3	38.12	17.849		
4,100.0	3,914.2	4,038.1	3,870.2	22.9	19.6	-119.65	-640.1	-601.3	706.5	666.8	39.64	17.824		
4,200.0	4,007.0	4,134.4	3,958.7	23.7	20.3	-119.10	-667.3	-627.9	732.6	691.4	41.15	17.803		
4,300.0	4,099.7	4,230.7	4,047.2	24.5	21.1	-118.59	-694.5	-654.4	758.7	716.1	42.66	17.785		
4,400.0	4,192.8	4,327.1	4,135.7	25.3	21.9	-118.38	-721.7	-681.0	784.6	740.5	44.14	17.775		
4,500.0	4,287.0	4,427.2	4,227.9	25.8	22.6	-118.14	-749.5	-708.2	808.9	763.5	45.43	17.806		
4,600.0	4,382.3	4,530.3	4,324.3	26.4	23.2	-117.89	-775.9	-734.0	831.1	784.5	46.54	17.855		
4,700.0	4,478.6	4,634.5	4,422.8	26.8	23.7	-117.66	-800.0	-757.5	851.0	803.4	47.57	17.889		
4,800.0	4,575.8	4,739.7	4,523.5	27.2	24.2	-117.44	-821.7	-778.8	868.6	820.1	48.50	17.908		
4,900.0	4,673.8	4,845.8	4,626.1	27.6	24.6	-117.22	-840.9	-797.5	883.8	834.5	49.33	17.916		
5,000.0	4,772.4	4,952.6	4,730.4	27.9	25.0	-117.01	-857.5	-813.7	896.7	846.6	50.06	17.911		
5,100.0	4,871.5	5,060.2	4,836.2	28.1	25.4	-116.80	-871.3	-827.3	907.1	856.4	50.69	17.896		
5,200.0	4,971.0	5,168.3	4,943.2	28.3	25.7	-116.59	-882.4	-838.1	915.1	863.9	51.21	17.870		
5,300.0	5,070.8	5,276.9	5,051.2	28.5	25.9	-116.37	-890.6	-846.2	920.6	868.9	51.62	17.833		
5,400.0	5,170.8	5,385.9	5,160.0	28.6	26.1	-116.15	-895.9	-851.3	923.6	871.6	51.93	17.783		
5,500.0	5,270.8	5,495.2	5,269.1	28.7	26.3	149.69	-898.2	-853.6	924.4	872.2	52.17	17.721		
5,600.0	5,370.8	5,597.8	5,371.8	28.8	26.3	149.70	-898.4	-853.7	924.4	872.1	52.35	17.659		
5,700.0	5,470.8	5,697.8	5,471.8	28.9	26.4	149.70	-898.4	-853.7	924.4	871.9	52.54	17.597		
5,800.0	5,570.8	5,797.8	5,571.8	28.9	26.5	149.70	-898.4	-853.7	924.4	871.7	52.72	17.534		
5,900.0	5,670.8	5,897.8	5,671.8	29.0	26.6	149.70	-898.4	-853.7	924.4	871.5	52.91	17.471		
6,000.0	5,770.8	5,997.8	5,771.8	29.1	26.7	149.70	-898.4	-853.7	924.4	871.3	53.11	17.408		
6,100.0	5,870.8	6,097.8	5,871.8	29.2	26.8	149.70	-898.4	-853.7	924.4	871.1	53.30	17.343		
6,200.0	5,970.8	6,197.8	5,971.8	29.3	26.9	149.70	-898.4	-853.7	924.4	870.9	53.50	17.279		
6,300.0	6,070.8	6,297.8	6,071.8	29.4	27.0	149.70	-898.4	-853.7	924.4	870.7	53.70	17.214		
6,400.0	6,170.8	6,397.8	6,171.8	29.5	27.1	149.70	-898.4	-853.7	924.4	870.5	53.91	17.148		
6,500.0	6,270.8	6,497.8	6,271.8	29.6	27.2	149.70	-898.4	-853.7	924.4	870.3	54.12	17.082		
6,600.0	6,370.8	6,597.8	6,371.8	29.7	27.3	149.70	-898.4	-853.7	924.4	870.1	54.33	17.015		
6,700.0	6,470.8	6,697.8	6,471.8	29.8	27.4	149.70	-898.4	-853.7	924.4	869.9	54.54	16.949		
6,800.0	6,570.8	6,797.8	6,571.8	29.9	27.5	149.70	-898.4	-853.7	924.4	869.7	54.76	16.881		
6,900.0	6,670.8	6,897.8	6,671.8	30.0	27.6	149.70	-898.4	-853.7	924.4	869.5	54.98	16.814		
7,000.0	6,770.8	6,997.8	6,771.8	30.1	27.7	149.70	-898.4	-853.7	924.4	869.2	55.20	16.746		
7,100.0	6,870.8	7,097.8	6,871.8	30.2	27.8	149.70	-898.4	-853.7	924.4	869.0	55.43	16.678		
7,200.0	6,970.8	7,197.8	6,971.8	30.3	27.9	149.70	-898.4	-853.7	924.4	868.8	55.66	16.609		
7,300.0	7,070.8	7,297.8	7,071.8	30.5	28.1	149.70	-898.4	-853.7	924.4	868.6	55.89	16.541		
7,400.0	7,170.8	7,397.8	7,171.8	30.6	28.2	149.70	-898.4	-853.7	924.4	868.3	56.12	16.472		
7,500.0	7,270.8	7,497.8	7,271.8	30.7	28.3	149.70	-898.4	-853.7	924.4	868.1	56.36	16.403		
7,600.0	7,370.8	7,597.8	7,371.8	30.8	28.4	149.70	-898.4	-853.7	924.4	867.9	56.60	16.334		

<b>Company:</b>	Synergy Resources	<b>Local Co-ordinate Reference:</b>	Well SRC State 16HD
<b>Project:</b>	SEC.16-T4N-R67W	<b>TVD Reference:</b>	WELL @ 4909.0ft (Original Well Elev)
<b>Reference Site:</b>	SRC-State Pad Sec.16-T4N-R67W	<b>MD Reference:</b>	WELL @ 4909.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	SRC State 16HD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDM den0-adp01 Server Data
<b>Reference Design:</b>	Plan #2 (1-8-10)	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b>												<b>Offset Site Error:</b>	0.0 ft
SRC-State Pad Sec.16-T4N-R67W - SRC State 14-16D - Wellbore #1 - Plan #3 (1-8-10)												<b>Offset Well Error:</b>	0.0 ft
Survey Program: 0-MWD													
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
7,700.0	7,470.8	7,697.8	7,471.8	30.9	28.5	149.70	-898.4	-853.7	924.4	867.6	56.84	16.264	
7,800.0	7,570.8	7,731.0	7,505.0	31.0	28.6	149.70	-898.4	-853.7	926.9	869.9	57.00	16.260	
7,900.0	7,670.8	7,731.0	7,505.0	31.1	28.6	149.70	-898.4	-853.7	939.4	882.2	57.12	16.444	
8,000.0	7,770.8	7,731.0	7,505.0	31.3	28.6	149.70	-898.4	-853.7	962.2	904.9	57.25	16.807	
8,029.2	7,800.0	7,731.0	7,505.0	31.3	28.6	149.70	-898.4	-853.7	970.7	913.4	57.29	16.945	

<b>Company:</b>	Synergy Resources	<b>Local Co-ordinate Reference:</b>	Well SRC State 16HD
<b>Project:</b>	SEC.16-T4N-R67W	<b>TVD Reference:</b>	WELL @ 4909.0ft (Original Well Elev)
<b>Reference Site:</b>	SRC-State Pad Sec.16-T4N-R67W	<b>MD Reference:</b>	WELL @ 4909.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	SRC State 16HD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDM den0-adp01 Server Data
<b>Reference Design:</b>	Plan #2 (1-8-10)	<b>Offset TVD Reference:</b>	Offset Datum

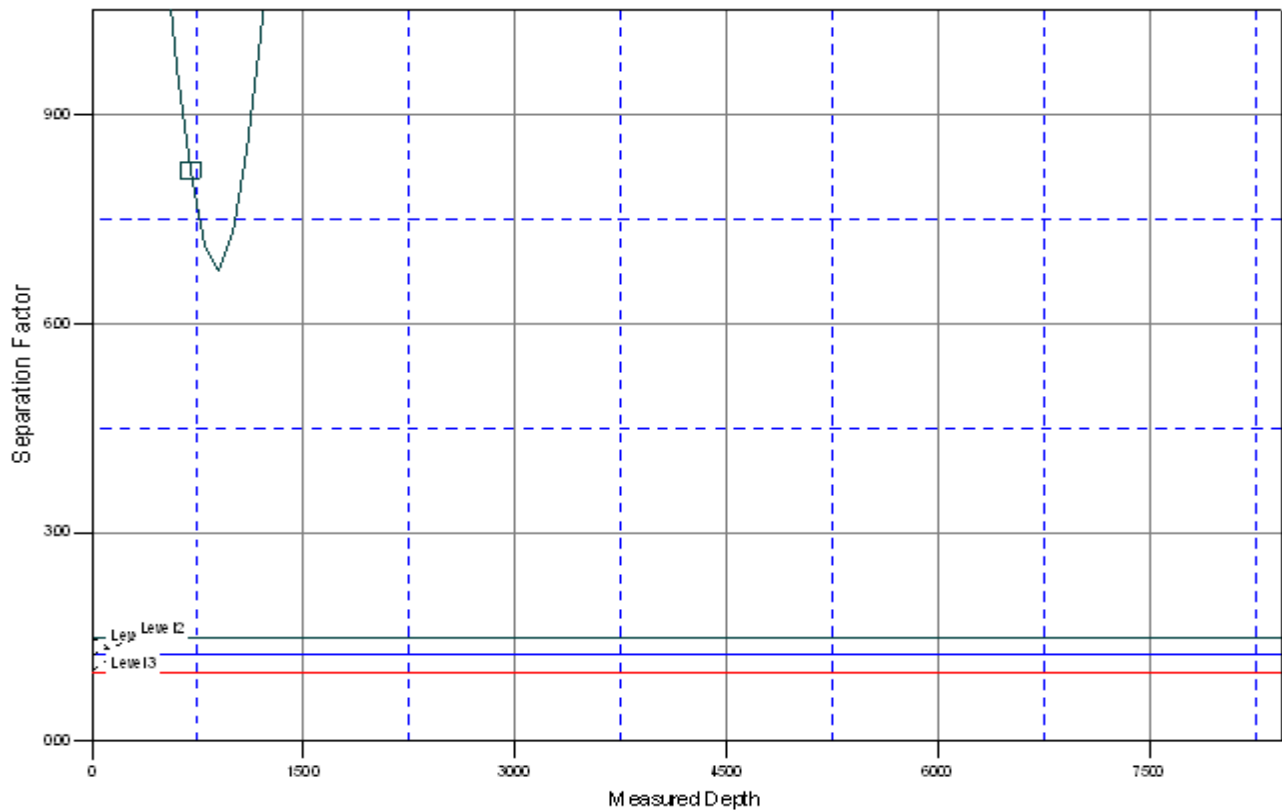
Reference Depths are relative to WELL @ 4909.0ft (Original Well Elev) Coordinates are relative to: SRC State 16HD  
Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, Colorado Northern Zone  
Central Meridian is 105° 30' 0.000 W ° Grid Convergence at Surface is: 0.39°



<b>Company:</b>	Synergy Resources	<b>Local Co-ordinate Reference:</b>	Well SRC State 16HD
<b>Project:</b>	SEC.16-T4N-R67W	<b>TVD Reference:</b>	WELL @ 4909.0ft (Original Well Elev)
<b>Reference Site:</b>	SRC-State Pad Sec.16-T4N-R67W	<b>MD Reference:</b>	WELL @ 4909.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	SRC State 16HD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDM den0-adp01 Server Data
<b>Reference Design:</b>	Plan #2 (1-8-10)	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to WELL @ 4909.0ft (Original Well Elev) Coordinates are relative to: SRC State 16HD  
Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, Colorado Northern Zone  
Central Meridian is 105° 30' 0.000 W ° Grid Convergence at Surface is: 0.39°

## Separation Factor Plot



## LEGEND

C State 14-16 D, Wellbore #1, Plan #3 (1-8-10) \V0