

# ENSIGN

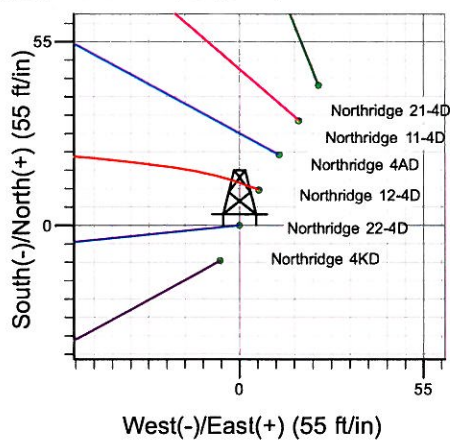
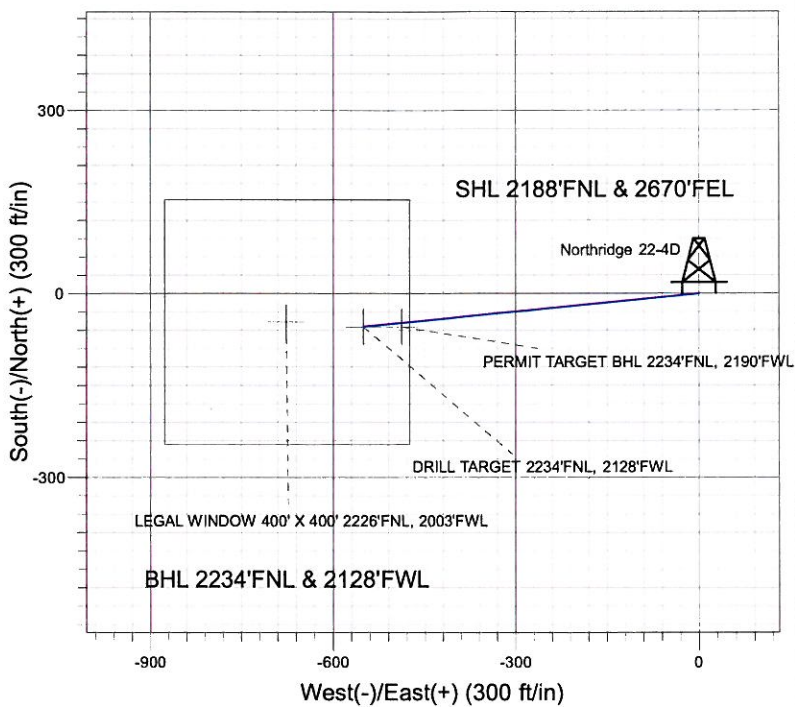
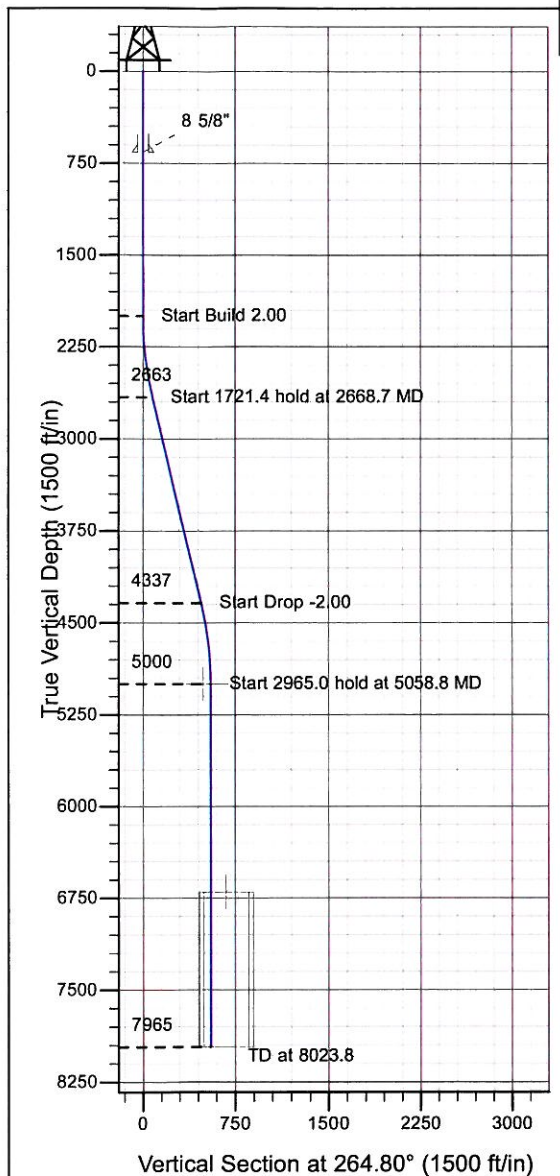
## Directional

### Well Name: Northridge 22-4D

Surface Location: Northridge Pad Sec.4-T5N-R66W  
 North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone  
 Ground Elevation: 4741.0

+N/-S+E/-W Northing Easting Latitude Longitude Slot  
 0.0 0.0 1400794.55 3199450.92 40° 25' 52.935 N 104° 47' 0.694 W  
 Original Well Elev WELL @ 4754.0ft (Original Well Elev)

### Synergy Resources



Northridge Pad Sec.4-T5N-R66W  
 Northridge 22-4D  
 Plan #3 (1-12-10)  
 15:34, January 13 2010



Azimuths to True North  
 Magnetic North: 9.04°

Magnetic Field  
 Strength: 53319.2snT  
 Dip Angle: 67.13°  
 Date: 12/31/2009  
 Model: IGRF200510

### WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
DRILL TARGET 2234'FNL, 2128'FWL	5000.0	-54.1	-550.9	40° 25' 52.401 N	104° 47' 7.817 W	Point
PERMIT TARGET BHL 2234'FNL, 2190'FWL	5000.0	-54.1	-488.9	40° 25' 52.401 N	104° 47' 7.015 W	Point
LEGAL WINDOW 400' X 400' 2226'FNL, 2003'FWL	6700.0	-46.1	-675.9	40° 25' 52.480 N	104° 47' 9.434 W	Rectangle (Sides: L400.0 W400.0)

### 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	2000.0	0.00	0.00	2000.0	0.0	0.0	0.00	0.00	0.0	
3	2668.7	13.37	264.39	2662.6	-7.6	-77.3	2.00	264.39	77.7	
4	4390.1	13.37	264.39	4337.4	-46.5	-473.6	0.00	0.00	475.8	
5	5058.8	0.00	0.00	5000.0	-54.1	-550.9	2.00	180.00	553.5	DRILL TARGET 2234'FNL, 2128'FWL
6	8023.8	0.00	0.00	7965.0	-54.1	-550.9	0.00	0.00	553.5	



## **Directional**

### **Synergy Resources**

**SEC.4-T5N-R66W**

**Northridge Pad Sec.4-T5N-R66W**

**Northridge 22-4D**

**Wellbore #1**

**Plan: Plan #3 (1-12-10)**

### **Standard Planning Report**

**13 January, 2010**

<b>Database:</b>	EDM den0-adp01 Server Data	<b>Local Co-ordinate Reference:</b>	Well Northridge 22-4D
<b>Company:</b>	Synergy Resources	<b>TVD Reference:</b>	WELL @ 4754.0ft (Original Well Elev)
<b>Project:</b>	SEC.4-T5N-R66W	<b>MD Reference:</b>	WELL @ 4754.0ft (Original Well Elev)
<b>Site:</b>	Northridge Pad Sec.4-T5N-R66W	<b>North Reference:</b>	True
<b>Well:</b>	Northridge 22-4D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #3 (1-12-10)		

<b>Project</b>	SEC.4-T5N-R66W, Weld County, Colorado		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		Using Well Reference Point
<b>Map Zone:</b>	Colorado Northern Zone		Using geodetic scale factor

<b>Site</b>	Northridge Pad Sec.4-T5N-R66W		
<b>Site Position:</b>		<b>Northing:</b>	1,400,867.38ft
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,199,490.98ft
<b>Position Uncertainty:</b>	0.0 ft	<b>Slot Radius:</b>	"
		<b>Latitude:</b>	40° 25' 53.652 N
		<b>Longitude:</b>	104° 47' 0.168 W
		<b>Grid Convergence:</b>	0.46 °

<b>Well</b>	Northridge 22-4D		
<b>Well Position</b>	<b>+N/-S</b>	-72.5 ft	<b>Northing:</b> 1,400,794.55 ft
	<b>+E/-W</b>	-40.6 ft	<b>Easting:</b> 3,199,450.92 ft
<b>Position Uncertainty</b>	0.0 ft	<b>Wellhead Elevation:</b>	ft
		<b>Latitude:</b>	40° 25' 52.935 N
		<b>Longitude:</b>	104° 47' 0.694 W
		<b>Ground Level:</b>	4,741.0 ft

<b>Wellbore</b>	Wellbore #1		
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>
	IGRF200510	9/26/2008	9.21
	IGRF200510	12/31/2009	9.04
		<b>Dip Angle (°)</b>	67.17
			67.13
		<b>Field Strength (nT)</b>	53,450
			53,319

<b>Design</b>	Plan #3 (1-12-10)		
<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>
	0.0	0.0	0.0
		<b>Direction (°)</b>	264.80

<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	
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,668.7	13.37	264.39	2,662.6	-7.6	-77.3	2.00	2.00	0.00	264.39	
4,390.1	13.37	264.39	4,337.4	-46.5	-473.6	0.00	0.00	0.00	0.00	
5,058.8	0.00	0.00	5,000.0	-54.1	-550.9	2.00	-2.00	0.00	180.00	DRILL TARGET 22
8,023.8	0.00	0.00	7,965.0	-54.1	-550.9	0.00	0.00	0.00	0.00	

<b>Database:</b>	EDM den0-adp01 Server Data	<b>Local Co-ordinate Reference:</b>	Well Northridge 22-4D
<b>Company:</b>	Synergy Resources	<b>TVD Reference:</b>	WELL @ 4754.0ft (Original Well Elev)
<b>Project:</b>	SEC.4-T5N-R66W	<b>MD Reference:</b>	WELL @ 4754.0ft (Original Well Elev)
<b>Site:</b>	Northridge Pad Sec.4-T5N-R66W	<b>North Reference:</b>	True
<b>Well:</b>	Northridge 22-4D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #3 (1-12-10)		

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
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
660.0	0.00	0.00	660.0	0.0	0.0	0.0	0.00	0.00	0.00
8 5/8"									
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	0.00	0.00	840.0	0.0	0.0	0.0	0.00	0.00	0.00
880.0	0.00	0.00	880.0	0.0	0.0	0.0	0.00	0.00	0.00
920.0	0.00	0.00	920.0	0.0	0.0	0.0	0.00	0.00	0.00
960.0	0.00	0.00	960.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,040.0	0.00	0.00	1,040.0	0.0	0.0	0.0	0.00	0.00	0.00
1,080.0	0.00	0.00	1,080.0	0.0	0.0	0.0	0.00	0.00	0.00
1,120.0	0.00	0.00	1,120.0	0.0	0.0	0.0	0.00	0.00	0.00
1,160.0	0.00	0.00	1,160.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,240.0	0.00	0.00	1,240.0	0.0	0.0	0.0	0.00	0.00	0.00
1,280.0	0.00	0.00	1,280.0	0.0	0.0	0.0	0.00	0.00	0.00
1,320.0	0.00	0.00	1,320.0	0.0	0.0	0.0	0.00	0.00	0.00
1,360.0	0.00	0.00	1,360.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,440.0	0.00	0.00	1,440.0	0.0	0.0	0.0	0.00	0.00	0.00
1,480.0	0.00	0.00	1,480.0	0.0	0.0	0.0	0.00	0.00	0.00
1,520.0	0.00	0.00	1,520.0	0.0	0.0	0.0	0.00	0.00	0.00
1,560.0	0.00	0.00	1,560.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,640.0	0.00	0.00	1,640.0	0.0	0.0	0.0	0.00	0.00	0.00
1,680.0	0.00	0.00	1,680.0	0.0	0.0	0.0	0.00	0.00	0.00
1,720.0	0.00	0.00	1,720.0	0.0	0.0	0.0	0.00	0.00	0.00
1,760.0	0.00	0.00	1,760.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,840.0	0.00	0.00	1,840.0	0.0	0.0	0.0	0.00	0.00	0.00
1,880.0	0.00	0.00	1,880.0	0.0	0.0	0.0	0.00	0.00	0.00
1,920.0	0.00	0.00	1,920.0	0.0	0.0	0.0	0.00	0.00	0.00
1,960.0	0.00	0.00	1,960.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,040.0	0.80	264.39	2,040.0	0.0	-0.3	0.3	2.00	2.00	0.00

<b>Database:</b>	EDM den0-adp01 Server Data	<b>Local Co-ordinate Reference:</b>	Well Northridge 22-4D
<b>Company:</b>	Synergy Resources	<b>TVD Reference:</b>	WELL @ 4754.0ft (Original Well Elev)
<b>Project:</b>	SEC.4-T5N-R66W	<b>MD Reference:</b>	WELL @ 4754.0ft (Original Well Elev)
<b>Site:</b>	Northridge Pad Sec.4-T5N-R66W	<b>North Reference:</b>	True
<b>Well:</b>	Northridge 22-4D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #3 (1-12-10)		

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)
2,080.0	1.60	264.39	2,080.0	-0.1	-1.1	1.1	2.00	2.00	0.00
2,120.0	2.40	264.39	2,120.0	-0.2	-2.5	2.5	2.00	2.00	0.00
2,160.0	3.20	264.39	2,159.9	-0.4	-4.4	4.5	2.00	2.00	0.00
2,200.0	4.00	264.39	2,199.8	-0.7	-6.9	7.0	2.00	2.00	0.00
2,240.0	4.80	264.39	2,239.7	-1.0	-10.0	10.0	2.00	2.00	0.00
2,280.0	5.60	264.39	2,279.6	-1.3	-13.6	13.7	2.00	2.00	0.00
2,320.0	6.40	264.39	2,319.3	-1.7	-17.8	17.9	2.00	2.00	0.00
2,360.0	7.20	264.39	2,359.1	-2.2	-22.5	22.6	2.00	2.00	0.00
2,400.0	8.00	264.39	2,398.7	-2.7	-27.7	27.9	2.00	2.00	0.00
2,440.0	8.80	264.39	2,438.3	-3.3	-33.6	33.7	2.00	2.00	0.00
2,480.0	9.60	264.39	2,477.8	-3.9	-39.9	40.1	2.00	2.00	0.00
2,520.0	10.40	264.39	2,517.1	-4.6	-46.8	47.1	2.00	2.00	0.00
2,560.0	11.20	264.39	2,556.4	-5.3	-54.3	54.6	2.00	2.00	0.00
2,600.0	12.00	264.39	2,595.6	-6.1	-62.3	62.6	2.00	2.00	0.00
2,640.0	12.80	264.39	2,634.7	-7.0	-70.9	71.2	2.00	2.00	0.00
2,688.7	13.37	264.39	2,662.6	-7.6	-77.3	77.7	2.00	2.00	0.00
2,680.0	13.37	264.39	2,673.6	-7.8	-79.9	80.3	0.00	0.00	0.00
2,720.0	13.37	264.39	2,712.6	-8.8	-89.1	89.6	0.00	0.00	0.00
2,760.0	13.37	264.39	2,751.5	-9.7	-98.3	98.8	0.00	0.00	0.00
2,800.0	13.37	264.39	2,790.4	-10.6	-107.5	108.1	0.00	0.00	0.00
2,840.0	13.37	264.39	2,829.3	-11.5	-116.8	117.3	0.00	0.00	0.00
2,880.0	13.37	264.39	2,868.2	-12.4	-126.0	126.6	0.00	0.00	0.00
2,920.0	13.37	264.39	2,907.1	-13.3	-135.2	135.8	0.00	0.00	0.00
2,960.0	13.37	264.39	2,946.0	-14.2	-144.4	145.1	0.00	0.00	0.00
3,000.0	13.37	264.39	2,985.0	-15.1	-153.6	154.3	0.00	0.00	0.00
3,040.0	13.37	264.39	3,023.9	-16.0	-162.8	163.6	0.00	0.00	0.00
3,080.0	13.37	264.39	3,062.8	-16.9	-172.0	172.8	0.00	0.00	0.00
3,120.0	13.37	264.39	3,101.7	-17.8	-181.2	182.1	0.00	0.00	0.00
3,160.0	13.37	264.39	3,140.6	-18.7	-190.4	191.3	0.00	0.00	0.00
3,200.0	13.37	264.39	3,179.5	-19.6	-199.6	200.6	0.00	0.00	0.00
3,240.0	13.37	264.39	3,218.5	-20.5	-208.8	209.8	0.00	0.00	0.00
3,280.0	13.37	264.39	3,257.4	-21.4	-218.0	219.1	0.00	0.00	0.00
3,320.0	13.37	264.39	3,296.3	-22.3	-227.2	228.3	0.00	0.00	0.00
3,360.0	13.37	264.39	3,335.2	-23.2	-236.5	237.6	0.00	0.00	0.00
3,400.0	13.37	264.39	3,374.1	-24.1	-245.7	246.8	0.00	0.00	0.00
3,440.0	13.37	264.39	3,413.0	-25.0	-254.9	256.1	0.00	0.00	0.00
3,480.0	13.37	264.39	3,451.9	-25.9	-264.1	265.3	0.00	0.00	0.00
3,520.0	13.37	264.39	3,490.9	-26.8	-273.3	274.6	0.00	0.00	0.00
3,560.0	13.37	264.39	3,529.8	-27.7	-282.5	283.8	0.00	0.00	0.00
3,600.0	13.37	264.39	3,568.7	-28.6	-291.7	293.1	0.00	0.00	0.00
3,640.0	13.37	264.39	3,607.6	-29.6	-300.9	302.4	0.00	0.00	0.00
3,680.0	13.37	264.39	3,646.5	-30.5	-310.1	311.6	0.00	0.00	0.00
3,720.0	13.37	264.39	3,685.4	-31.4	-319.3	320.9	0.00	0.00	0.00
3,760.0	13.37	264.39	3,724.3	-32.3	-328.5	330.1	0.00	0.00	0.00
3,800.0	13.37	264.39	3,763.3	-33.2	-337.7	339.4	0.00	0.00	0.00
3,840.0	13.37	264.39	3,802.2	-34.1	-347.0	348.6	0.00	0.00	0.00
3,880.0	13.37	264.39	3,841.1	-35.0	-356.2	357.9	0.00	0.00	0.00
3,920.0	13.37	264.39	3,880.0	-35.9	-365.4	367.1	0.00	0.00	0.00
3,960.0	13.37	264.39	3,918.9	-36.8	-374.6	376.4	0.00	0.00	0.00
4,000.0	13.37	264.39	3,957.8	-37.7	-383.8	385.6	0.00	0.00	0.00
4,040.0	13.37	264.39	3,996.8	-38.6	-393.0	394.9	0.00	0.00	0.00
4,080.0	13.37	264.39	4,035.7	-39.5	-402.2	404.1	0.00	0.00	0.00
4,120.0	13.37	264.39	4,074.6	-40.4	-411.4	413.4	0.00	0.00	0.00
4,160.0	13.37	264.39	4,113.5	-41.3	-420.6	422.6	0.00	0.00	0.00

<b>Database:</b>	EDM den0-adp01 Server Data	<b>Local Co-ordinate Reference:</b>	Well Northridge 22-4D
<b>Company:</b>	Synergy Resources	<b>TVD Reference:</b>	WELL @ 4754.0ft (Original Well Elev)
<b>Project:</b>	SEC.4-T5N-R66W	<b>MD Reference:</b>	WELL @ 4754.0ft (Original Well Elev)
<b>Site:</b>	Northridge Pad Sec.4-T5N-R66W	<b>North Reference:</b>	True
<b>Well:</b>	Northridge 22-4D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #3 (1-12-10)		

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	13.37	264.39	4,152.4	-42.2	-429.8	431.9	0.00	0.00	0.00
4,240.0	13.37	264.39	4,191.3	-43.1	-439.0	441.1	0.00	0.00	0.00
4,280.0	13.37	264.39	4,230.2	-44.0	-448.2	450.4	0.00	0.00	0.00
4,320.0	13.37	264.39	4,269.2	-44.9	-457.4	459.6	0.00	0.00	0.00
4,360.0	13.37	264.39	4,308.1	-45.8	-466.7	468.9	0.00	0.00	0.00
4,390.1	13.37	264.39	4,337.4	-46.5	-473.6	475.8	0.00	0.00	0.00
4,400.0	13.18	264.39	4,347.0	-46.7	-475.8	478.1	2.00	-2.00	0.00
4,440.0	12.38	264.39	4,386.0	-47.6	-484.6	487.0	2.00	-2.00	0.00
4,480.0	11.58	264.39	4,425.1	-48.4	-492.9	495.3	2.00	-2.00	0.00
4,520.0	10.78	264.39	4,464.4	-49.2	-500.6	503.0	2.00	-2.00	0.00
4,560.0	9.98	264.39	4,503.7	-49.9	-507.8	510.2	2.00	-2.00	0.00
4,600.0	9.18	264.39	4,543.2	-50.5	-514.4	516.9	2.00	-2.00	0.00
4,640.0	8.38	264.39	4,582.7	-51.1	-520.5	523.0	2.00	-2.00	0.00
4,680.0	7.58	264.39	4,622.3	-51.7	-526.0	528.5	2.00	-2.00	0.00
4,720.0	6.78	264.39	4,662.0	-52.1	-531.0	533.5	2.00	-2.00	0.00
4,760.0	5.98	264.39	4,701.7	-52.6	-535.4	538.0	2.00	-2.00	0.00
4,800.0	5.18	264.39	4,741.6	-53.0	-539.3	541.9	2.00	-2.00	0.00
4,840.0	4.38	264.39	4,781.4	-53.3	-542.6	545.2	2.00	-2.00	0.00
4,880.0	3.58	264.39	4,821.3	-53.6	-545.3	548.0	2.00	-2.00	0.00
4,920.0	2.78	264.39	4,861.3	-53.8	-547.6	550.2	2.00	-2.00	0.00
4,960.0	1.98	264.39	4,901.2	-53.9	-549.2	551.8	2.00	-2.00	0.00
5,000.0	1.18	264.39	4,941.2	-54.0	-550.3	552.9	2.00	-2.00	0.00
5,040.0	0.38	264.39	4,981.2	-54.1	-550.8	553.5	2.00	-2.00	0.00
5,058.6	0.00	264.42	4,999.8	-54.1	-550.9	553.5	2.00	-2.00	0.13
<b>PERMIT TARGET BHL 2234'FNL, 2190'FWL</b>									
5,058.8	0.00	0.00	5,000.0	-54.1	-550.9	553.5	2.00	-2.00	47,207.94
<b>DRILL TARGET 2234'FNL, 2128'FWL</b>									
5,080.0	0.00	0.00	5,021.2	-54.1	-550.9	553.5	0.00	0.00	0.00
5,120.0	0.00	0.00	5,061.2	-54.1	-550.9	553.5	0.00	0.00	0.00
5,160.0	0.00	0.00	5,101.2	-54.1	-550.9	553.5	0.00	0.00	0.00
5,200.0	0.00	0.00	5,141.2	-54.1	-550.9	553.5	0.00	0.00	0.00
5,240.0	0.00	0.00	5,181.2	-54.1	-550.9	553.5	0.00	0.00	0.00
5,280.0	0.00	0.00	5,221.2	-54.1	-550.9	553.5	0.00	0.00	0.00
5,320.0	0.00	0.00	5,261.2	-54.1	-550.9	553.5	0.00	0.00	0.00
5,360.0	0.00	0.00	5,301.2	-54.1	-550.9	553.5	0.00	0.00	0.00
5,400.0	0.00	0.00	5,341.2	-54.1	-550.9	553.5	0.00	0.00	0.00
5,440.0	0.00	0.00	5,381.2	-54.1	-550.9	553.5	0.00	0.00	0.00
5,480.0	0.00	0.00	5,421.2	-54.1	-550.9	553.5	0.00	0.00	0.00
5,520.0	0.00	0.00	5,461.2	-54.1	-550.9	553.5	0.00	0.00	0.00
5,560.0	0.00	0.00	5,501.2	-54.1	-550.9	553.5	0.00	0.00	0.00
5,600.0	0.00	0.00	5,541.2	-54.1	-550.9	553.5	0.00	0.00	0.00
5,640.0	0.00	0.00	5,581.2	-54.1	-550.9	553.5	0.00	0.00	0.00
5,680.0	0.00	0.00	5,621.2	-54.1	-550.9	553.5	0.00	0.00	0.00
5,720.0	0.00	0.00	5,661.2	-54.1	-550.9	553.5	0.00	0.00	0.00
5,760.0	0.00	0.00	5,701.2	-54.1	-550.9	553.5	0.00	0.00	0.00
5,800.0	0.00	0.00	5,741.2	-54.1	-550.9	553.5	0.00	0.00	0.00
5,840.0	0.00	0.00	5,781.2	-54.1	-550.9	553.5	0.00	0.00	0.00
5,880.0	0.00	0.00	5,821.2	-54.1	-550.9	553.5	0.00	0.00	0.00
5,920.0	0.00	0.00	5,861.2	-54.1	-550.9	553.5	0.00	0.00	0.00
5,960.0	0.00	0.00	5,901.2	-54.1	-550.9	553.5	0.00	0.00	0.00
6,000.0	0.00	0.00	5,941.2	-54.1	-550.9	553.5	0.00	0.00	0.00
6,040.0	0.00	0.00	5,981.2	-54.1	-550.9	553.5	0.00	0.00	0.00
6,080.0	0.00	0.00	6,021.2	-54.1	-550.9	553.5	0.00	0.00	0.00
6,120.0	0.00	0.00	6,061.2	-54.1	-550.9	553.5	0.00	0.00	0.00

<b>Database:</b>	EDM den0-adp01 Server Data	<b>Local Co-ordinate Reference:</b>	Well Northridge 22-4D
<b>Company:</b>	Synergy Resources	<b>TVD Reference:</b>	WELL @ 4754.0ft (Original Well Elev)
<b>Project:</b>	SEC.4-T5N-R66W	<b>MD Reference:</b>	WELL @ 4754.0ft (Original Well Elev)
<b>Site:</b>	Northridge Pad Sec.4-T5N-R66W	<b>North Reference:</b>	True
<b>Well:</b>	Northridge 22-4D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #3 (1-12-10)		

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)
6,160.0	0.00	0.00	6,101.2	-54.1	-550.9	553.5	0.00	0.00	0.00
6,200.0	0.00	0.00	6,141.2	-54.1	-550.9	553.5	0.00	0.00	0.00
6,240.0	0.00	0.00	6,181.2	-54.1	-550.9	553.5	0.00	0.00	0.00
6,280.0	0.00	0.00	6,221.2	-54.1	-550.9	553.5	0.00	0.00	0.00
6,320.0	0.00	0.00	6,261.2	-54.1	-550.9	553.5	0.00	0.00	0.00
6,360.0	0.00	0.00	6,301.2	-54.1	-550.9	553.5	0.00	0.00	0.00
6,400.0	0.00	0.00	6,341.2	-54.1	-550.9	553.5	0.00	0.00	0.00
6,440.0	0.00	0.00	6,381.2	-54.1	-550.9	553.5	0.00	0.00	0.00
6,480.0	0.00	0.00	6,421.2	-54.1	-550.9	553.5	0.00	0.00	0.00
6,520.0	0.00	0.00	6,461.2	-54.1	-550.9	553.5	0.00	0.00	0.00
6,560.0	0.00	0.00	6,501.2	-54.1	-550.9	553.5	0.00	0.00	0.00
6,600.0	0.00	0.00	6,541.2	-54.1	-550.9	553.5	0.00	0.00	0.00
6,640.0	0.00	0.00	6,581.2	-54.1	-550.9	553.5	0.00	0.00	0.00
6,680.0	0.00	0.00	6,621.2	-54.1	-550.9	553.5	0.00	0.00	0.00
6,720.0	0.00	0.00	6,661.2	-54.1	-550.9	553.5	0.00	0.00	0.00
6,758.8	0.00	0.00	6,700.0	-54.1	-550.9	553.5	0.00	0.00	0.00
LEGAL WINDOW 400' X 400' 2226'FNL, 2003'FWL									
6,760.0	0.00	0.00	6,701.2	-54.1	-550.9	553.5	0.00	0.00	0.00
6,800.0	0.00	0.00	6,741.2	-54.1	-550.9	553.5	0.00	0.00	0.00
6,840.0	0.00	0.00	6,781.2	-54.1	-550.9	553.5	0.00	0.00	0.00
6,880.0	0.00	0.00	6,821.2	-54.1	-550.9	553.5	0.00	0.00	0.00
6,920.0	0.00	0.00	6,861.2	-54.1	-550.9	553.5	0.00	0.00	0.00
6,960.0	0.00	0.00	6,901.2	-54.1	-550.9	553.5	0.00	0.00	0.00
7,000.0	0.00	0.00	6,941.2	-54.1	-550.9	553.5	0.00	0.00	0.00
7,040.0	0.00	0.00	6,981.2	-54.1	-550.9	553.5	0.00	0.00	0.00
7,080.0	0.00	0.00	7,021.2	-54.1	-550.9	553.5	0.00	0.00	0.00
7,120.0	0.00	0.00	7,061.2	-54.1	-550.9	553.5	0.00	0.00	0.00
7,160.0	0.00	0.00	7,101.2	-54.1	-550.9	553.5	0.00	0.00	0.00
7,200.0	0.00	0.00	7,141.2	-54.1	-550.9	553.5	0.00	0.00	0.00
7,240.0	0.00	0.00	7,181.2	-54.1	-550.9	553.5	0.00	0.00	0.00
7,280.0	0.00	0.00	7,221.2	-54.1	-550.9	553.5	0.00	0.00	0.00
7,320.0	0.00	0.00	7,261.2	-54.1	-550.9	553.5	0.00	0.00	0.00
7,360.0	0.00	0.00	7,301.2	-54.1	-550.9	553.5	0.00	0.00	0.00
7,400.0	0.00	0.00	7,341.2	-54.1	-550.9	553.5	0.00	0.00	0.00
7,440.0	0.00	0.00	7,381.2	-54.1	-550.9	553.5	0.00	0.00	0.00
7,480.0	0.00	0.00	7,421.2	-54.1	-550.9	553.5	0.00	0.00	0.00
7,520.0	0.00	0.00	7,461.2	-54.1	-550.9	553.5	0.00	0.00	0.00
7,560.0	0.00	0.00	7,501.2	-54.1	-550.9	553.5	0.00	0.00	0.00
7,600.0	0.00	0.00	7,541.2	-54.1	-550.9	553.5	0.00	0.00	0.00
7,640.0	0.00	0.00	7,581.2	-54.1	-550.9	553.5	0.00	0.00	0.00
7,680.0	0.00	0.00	7,621.2	-54.1	-550.9	553.5	0.00	0.00	0.00
7,720.0	0.00	0.00	7,661.2	-54.1	-550.9	553.5	0.00	0.00	0.00
7,760.0	0.00	0.00	7,701.2	-54.1	-550.9	553.5	0.00	0.00	0.00
7,800.0	0.00	0.00	7,741.2	-54.1	-550.9	553.5	0.00	0.00	0.00
7,840.0	0.00	0.00	7,781.2	-54.1	-550.9	553.5	0.00	0.00	0.00
7,880.0	0.00	0.00	7,821.2	-54.1	-550.9	553.5	0.00	0.00	0.00
7,920.0	0.00	0.00	7,861.2	-54.1	-550.9	553.5	0.00	0.00	0.00
7,960.0	0.00	0.00	7,901.2	-54.1	-550.9	553.5	0.00	0.00	0.00
8,000.0	0.00	0.00	7,941.2	-54.1	-550.9	553.5	0.00	0.00	0.00
8,023.8	0.00	0.00	7,965.0	-54.1	-550.9	553.5	0.00	0.00	0.00

<b>Database:</b>	EDM den0-adp01 Server Data	<b>Local Co-ordinate Reference:</b>	Well Northridge 22-4D
<b>Company:</b>	Synergy Resources	<b>TVD Reference:</b>	WELL @ 4754.0ft (Original Well Elev)
<b>Project:</b>	SEC.4-T5N-R66W	<b>MD Reference:</b>	WELL @ 4754.0ft (Original Well Elev)
<b>Site:</b>	Northridge Pad Sec.4-T5N-R66W	<b>North Reference:</b>	True
<b>Well:</b>	Northridge 22-4D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #3 (1-12-10)		

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)		
DRILL TARGET 2234	0.00	0.00	5,000.0	-54.1	-550.9	1,400,736.00	3,198,900.50	40° 25' 52.401 N	104° 47' 7.817 W
- plan hits target center									
- Point									
LEGAL WINDOW 40C	0.00	0.00	6,700.0	-46.1	-675.9	1,400,742.99	3,198,775.44	40° 25' 52.480 N	104° 47' 9.434 W
- plan misses target center by 125.3ft at 6758.8ft MD (6700.0 TVD, -54.1 N, -550.9 E)									
- Rectangle (sides W400.0 H400.0 D1,265.0)									
PERMIT TARGET BH	0.00	0.00	5,000.0	-54.1	-488.9	1,400,736.54	3,198,962.51	40° 25' 52.401 N	104° 47' 7.015 W
- plan misses target center by 62.0ft at 5058.8ft MD (5000.0 TVD, -54.1 N, -550.9 E)									
- Point									

Casing Points					
	Measured Depth	Vertical Depth		Casing Diameter	Hole Diameter
	(ft)	(ft)	Name	(")	(")
	660.0	660.0	8 5/8"	8-5/8	12-1/4



## **Directional**

### **Synergy Resources**

**SEC.4-T5N-R66W**

**Northridge Pad Sec.4-T5N-R66W**

**Northridge 22-4D**

**Wellbore #1**

**Plan #3 (1-12-10)**

## **Anticollision Report**

**13 January, 2010**

<b>Company:</b>	Synergy Resources	<b>Local Co-ordinate Reference:</b>	Well Northridge 22-4D
<b>Project:</b>	SEC.4-T5N-R66W	<b>TVD Reference:</b>	WELL @ 4754.0ft (Original Well Elev)
<b>Reference Site:</b>	Northridge Pad Sec.4-T5N-R66W	<b>MD Reference:</b>	WELL @ 4754.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Northridge 22-4D	<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 #3 (1-12-10)	<b>Offset TVD Reference:</b>	Offset Datum

<b>Reference</b>	Plan #3 (1-12-10)		
<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>	ISCWSA
<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		

<b>Survey Tool Program</b>	Date 1/12/2010			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
0.0	8,023.8	Plan #3 (1-12-10) (Wellbore #1)	MWD	MWD - Standard

<b>Summary</b>						
<b>Site Name</b>	<b>Reference Measured Depth (ft)</b>	<b>Offset Measured Depth (ft)</b>	<b>Distance Between Centres (ft)</b>	<b>Between Ellipses (ft)</b>	<b>Separation Factor</b>	<b>Warning</b>
<b>Offset Well - Wellbore - Design</b>						
Northridge Pad Sec.4-T5N-R66W						
Northridge 12-4D - Wellbore #1 - Plan #3 (1-12-10)	403.8	403.8	11.9	10.3	7.530	CC, ES
Northridge 12-4D - Wellbore #1 - Plan #3 (1-12-10)	500.0	499.8	13.0	11.0	6.442	SF
Northridge 4KD - Wellbore #1 - Plan #3 (1-12-10)	200.0	200.0	12.1	11.4	17.907	CC, ES
Northridge 4KD - Wellbore #1 - Plan #3 (1-12-10)	400.0	399.0	18.3	16.8	11.839	SF

<b>Offset Design</b>												
Northridge Pad Sec.4-T5N-R66W - Northridge 12-4D - Wellbore #1 - Plan #3 (1-12-10)												
Survey Program: 0-MWD												
<b>Reference</b>	<b>Offset</b>	<b>Semi Major Axis</b>		<b>Distance</b>								
<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Reference (ft)</b>	<b>Offset (ft)</b>	<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre +N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Between Centres (ft)</b>	<b>Between Ellipses (ft)</b>	<b>Minimum Separation (ft)</b>	<b>Separation Factor</b>
0.0	0.0	0.0	0.0	0.0	0.0	28.96	10.6	5.8	12.1	12.1	0.00	N/A
100.0	100.0	100.0	100.0	0.1	0.1	28.96	10.6	5.8	12.1	11.9	0.22	53.722
200.0	200.0	200.0	200.0	0.3	0.3	28.96	10.6	5.8	12.1	11.4	0.67	17.907
300.0	300.0	300.0	300.0	0.6	0.6	28.96	10.6	5.8	12.1	11.0	1.12	10.744
400.0	400.0	400.0	400.0	0.8	0.8	20.64	11.2	4.2	11.9	10.4	1.57	7.611
403.8	403.8	403.8	403.8	0.8	0.8	20.00	11.2	4.1	11.9	10.3	1.58	7.530 CC, ES
500.0	500.0	499.8	499.6	1.0	1.0	-3.09	12.9	-0.7	13.0	11.0	2.01	6.442 SF
600.0	600.0	599.3	598.8	1.2	1.2	-30.40	15.2	-8.9	17.7	15.2	2.47	7.168
700.0	700.0	698.1	696.9	1.5	1.5	-49.85	17.3	-20.5	27.0	24.1	2.96	9.139
800.0	800.0	796.0	793.6	1.7	1.8	-61.49	19.2	-35.3	40.7	37.2	3.49	11.667
900.0	900.0	892.8	888.7	1.9	2.2	-68.60	20.8	-53.2	58.2	54.1	4.06	14.324
1,000.0	1,000.0	988.3	981.9	2.1	2.6	-73.21	22.3	-73.9	79.3	74.6	4.69	16.908
1,100.0	1,100.0	1,082.3	1,072.9	2.4	3.0	-76.40	23.6	-97.4	103.8	98.4	5.37	19.335
1,200.0	1,200.0	1,174.6	1,161.5	2.6	3.5	-78.70	24.6	-123.3	131.5	125.4	6.10	21.575
1,300.0	1,300.0	1,265.1	1,247.5	2.8	4.1	-80.44	25.5	-151.5	162.3	155.5	6.87	23.626
1,400.0	1,400.0	1,353.7	1,330.8	3.0	4.7	-81.79	26.2	-181.7	196.2	188.5	7.68	25.528
1,500.0	1,500.0	1,446.8	1,417.8	3.3	5.4	-82.88	26.8	-214.9	231.6	223.0	8.57	27.012
1,600.0	1,600.0	1,540.3	1,505.1	3.5	6.0	-83.68	27.5	-248.2	267.1	257.6	9.48	28.188
1,700.0	1,700.0	1,633.7	1,592.4	3.7	6.7	-84.29	28.1	-281.5	302.6	292.3	10.39	29.140
1,800.0	1,800.0	1,727.1	1,679.7	3.9	7.4	-84.78	28.8	-314.8	338.2	326.9	11.30	29.927
1,900.0	1,900.0	1,820.6	1,767.0	4.2	8.1	-85.17	29.4	-348.1	373.8	361.6	12.22	30.586
2,000.0	2,000.0	1,914.0	1,854.3	4.4	8.8	-85.49	30.1	-381.4	409.4	396.2	13.14	31.146
2,100.0	2,100.0	2,008.0	1,942.1	4.6	9.5	9.76	30.7	-414.9	443.4	433.6	9.72	45.594

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

<b>Company:</b>	Synergy Resources	<b>Local Co-ordinate Reference:</b>	Well Northridge 22-4D
<b>Project:</b>	SEC.4-T5N-R66W	<b>TVD Reference:</b>	WELL @ 4754.0ft (Original Well Elev)
<b>Reference Site:</b>	Northridge Pad Sec.4-T5N-R66W	<b>MD Reference:</b>	WELL @ 4754.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Northridge 22-4D	<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 #3 (1-12-10)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Northridge Pad Sec.4-T5N-R66W - Northridge 12-4D - Wellbore #1 - Plan #3 (1-12-10)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference	Offset	Semi Major Axis		Distance		Minimum		Separation		Warning				
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
2,200.0	2,199.8	2,103.2	2,031.0	4.8	10.3	9.53	31.4	-448.8	474.1	463.9	10.23	46.340		
2,300.0	2,299.5	2,199.3	2,120.8	5.0	11.0	9.39	32.0	-483.1	501.6	490.8	10.74	46.685		
2,400.0	2,398.7	2,296.4	2,211.5	5.2	11.7	9.34	32.7	-517.7	525.7	514.4	11.26	46.686		
2,500.0	2,497.5	2,394.2	2,302.9	5.5	12.5	9.35	33.4	-552.6	546.4	534.7	11.78	46.390		
2,600.0	2,595.6	2,492.6	2,394.9	5.7	13.2	9.44	34.0	-587.7	563.8	551.5	12.30	45.834		
2,700.0	2,693.1	2,591.6	2,487.4	6.1	14.0	9.59	34.7	-622.9	578.0	565.1	12.84	45.032		
2,800.0	2,790.4	2,690.7	2,579.9	6.4	14.7	9.78	35.4	-658.3	591.3	578.0	13.39	44.152		
2,900.0	2,887.7	2,789.8	2,672.5	6.8	15.5	9.96	36.1	-693.6	604.7	590.8	13.96	43.321		
3,000.0	2,985.0	2,888.9	2,765.1	7.1	16.2	10.14	36.7	-728.9	618.1	603.5	14.53	42.537		
3,100.0	3,082.2	2,987.9	2,857.6	7.5	17.0	10.30	37.4	-764.2	631.5	616.3	15.11	41.796		
3,200.0	3,179.5	3,087.0	2,950.2	7.9	17.8	10.46	38.1	-799.5	644.8	629.1	15.69	41.096		
3,300.0	3,276.8	3,186.1	3,042.8	8.4	18.5	10.62	38.8	-834.9	658.2	641.9	16.28	40.434		
3,400.0	3,374.1	3,285.2	3,135.4	8.8	19.3	10.77	39.5	-870.2	671.6	654.7	16.87	39.808		
3,500.0	3,471.4	3,384.3	3,227.9	9.2	20.0	10.91	40.2	-905.5	685.0	667.5	17.47	39.216		
3,600.0	3,568.7	3,483.4	3,320.5	9.7	20.8	11.04	40.8	-940.8	698.4	680.3	18.07	38.654		
3,700.0	3,666.0	3,582.4	3,413.1	10.1	21.5	11.18	41.5	-976.1	711.8	693.1	18.67	38.122		
3,800.0	3,763.3	3,681.5	3,505.7	10.6	22.3	11.30	42.2	-1,011.5	725.2	705.9	19.28	37.617		
3,900.0	3,860.6	3,780.6	3,598.2	11.0	23.1	11.42	42.9	-1,046.8	738.6	718.7	19.89	37.137		
4,000.0	3,957.8	3,879.7	3,690.8	11.5	23.8	11.54	43.6	-1,082.1	752.0	731.5	20.50	36.680		
4,100.0	4,055.1	3,978.8	3,783.4	12.0	24.6	11.65	44.2	-1,117.4	765.5	744.3	21.12	36.246		
4,200.0	4,152.4	4,077.9	3,875.9	12.4	25.3	11.76	44.9	-1,152.7	778.9	757.1	21.74	35.833		
4,300.0	4,249.7	4,177.0	3,968.5	12.9	26.1	11.87	45.6	-1,188.1	792.3	769.9	22.36	35.438		
4,400.0	4,347.0	4,276.0	4,061.1	13.4	26.9	11.98	46.3	-1,223.4	805.7	782.8	22.98	35.066		
4,500.0	4,444.7	4,374.8	4,153.4	13.7	27.6	12.11	47.0	-1,258.6	821.2	797.6	23.54	34.887		
4,600.0	4,543.2	4,473.0	4,245.1	14.0	28.4	12.21	47.6	-1,293.6	840.0	815.9	24.06	34.912		
4,700.0	4,642.1	4,570.5	4,336.2	14.3	29.1	12.27	48.3	-1,328.4	862.1	837.6	24.54	35.132		
4,800.0	4,741.6	4,667.2	4,426.6	14.5	29.9	12.29	49.0	-1,362.8	887.6	862.6	24.98	35.539		
4,900.0	4,841.3	4,763.0	4,516.0	14.8	30.6	12.30	49.6	-1,397.0	916.4	891.0	25.37	36.124		
5,000.0	4,941.2	4,857.7	4,604.5	14.9	31.3	12.27	50.3	-1,430.7	948.4	922.7	25.71	36.885		
5,100.0	5,041.2	4,951.3	4,692.0	15.1	32.0	-83.44	50.9	-1,464.1	983.3	957.2	26.08	37.697		
5,200.0	5,141.2	5,044.8	4,779.3	15.2	32.8	-83.63	51.6	-1,497.4	1,018.8	992.3	26.56	38.356		
5,300.0	5,241.2	5,138.2	4,866.6	15.4	33.5	-83.81	52.2	-1,530.7	1,054.4	1,027.3	27.04	38.987		
5,400.0	5,341.2	5,231.6	4,953.9	15.5	34.2	-83.97	52.8	-1,564.0	1,089.9	1,062.4	27.53	39.593		
5,500.0	5,441.2	5,325.0	5,041.2	15.7	34.9	-84.13	53.5	-1,597.3	1,125.4	1,097.4	28.01	40.176		
5,600.0	5,541.2	5,418.5	5,128.4	15.9	35.6	-84.28	54.1	-1,630.6	1,161.0	1,132.5	28.50	40.736		
5,700.0	5,641.2	5,511.9	5,215.7	16.0	36.4	-84.41	54.8	-1,663.9	1,196.5	1,167.6	28.99	41.274		
5,800.0	5,741.2	5,625.0	5,321.5	16.2	37.2	-84.57	55.5	-1,703.9	1,231.9	1,202.4	29.53	41.724		
5,900.0	5,841.2	5,792.9	5,480.9	16.4	38.0	-84.76	56.6	-1,756.6	1,263.2	1,233.1	30.16	41.887		
6,000.0	5,941.2	5,966.8	5,649.0	16.5	38.8	-84.90	57.4	-1,801.2	1,288.8	1,258.1	30.77	41.884		
6,100.0	6,041.2	6,145.9	5,824.5	16.7	39.4	-85.01	58.1	-1,836.4	1,308.5	1,277.1	31.36	41.726		
6,200.0	6,141.2	6,328.8	6,005.7	16.9	39.9	-85.08	58.6	-1,861.0	1,321.9	1,290.0	31.91	41.429		
6,300.0	6,241.2	6,514.1	6,190.5	17.1	40.1	-85.12	58.8	-1,874.1	1,328.9	1,296.5	32.41	41.005		
6,400.0	6,341.2	6,664.8	6,341.2	17.2	40.3	-85.13	58.9	-1,876.2	1,330.1	1,297.2	32.83	40.519		
6,500.0	6,441.2	6,764.8	6,441.2	17.4	40.3	-85.13	58.9	-1,876.2	1,330.1	1,296.9	33.18	40.091		
6,600.0	6,541.2	6,864.8	6,541.2	17.6	40.4	-85.13	58.9	-1,876.2	1,330.1	1,296.5	33.53	39.669		
6,700.0	6,641.2	6,964.8	6,641.2	17.8	40.5	-85.13	58.9	-1,876.2	1,330.1	1,296.2	33.88	39.254		
6,800.0	6,741.2	7,064.8	6,741.2	17.9	40.6	-85.13	58.9	-1,876.2	1,330.1	1,295.8	34.24	38.844		
6,900.0	6,841.2	7,164.8	6,841.2	18.1	40.7	-85.13	58.9	-1,876.2	1,330.1	1,295.5	34.60	38.442		
7,000.0	6,941.2	7,264.8	6,941.2	18.3	40.7	-85.13	58.9	-1,876.2	1,330.1	1,295.1	34.96	38.045		
7,100.0	7,041.2	7,364.8	7,041.2	18.5	40.8	-85.13	58.9	-1,876.2	1,330.1	1,294.7	35.32	37.654		
7,200.0	7,141.2	7,464.8	7,141.2	18.7	40.9	-85.13	58.9	-1,876.2	1,330.1	1,294.4	35.69	37.270		
7,300.0	7,241.2	7,564.8	7,241.2	18.9	41.0	-85.13	58.9	-1,876.2	1,330.1	1,294.0	36.05	36.892		

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



# ENSIGN DIRECTIONAL

## Anticollision Report

<b>Company:</b>	Synergy Resources	<b>Local Co-ordinate Reference:</b>	Well Northridge 22-4D
<b>Project:</b>	SEC.4-T5N-R66W	<b>TVD Reference:</b>	WELL @ 4754.0ft (Original Well Elev)
<b>Reference Site:</b>	Northridge Pad Sec.4-T5N-R66W	<b>MD Reference:</b>	WELL @ 4754.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Northridge 22-4D	<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 #3 (1-12-10)	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b> Northridge Pad Sec.4-T5N-R66W - Northridge 12-4D - Wellbore #1 - Plan #3 (1-12-10)													<b>Offset Site Error:</b>	0.0 ft
<b>Survey Program:</b> 0-MWD													<b>Offset Well Error:</b>	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Semi Major Axis Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Distance Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
7,400.0	7,341.2	7,664.8	7,341.2	19.0	41.1	-85.13	58.9	-1,876.2	1,330.1	1,293.6	36.42	36.519		
7,500.0	7,441.2	7,764.8	7,441.2	19.2	41.2	-85.13	58.9	-1,876.2	1,330.1	1,293.3	36.79	36.153		
7,600.0	7,541.2	7,864.8	7,541.2	19.4	41.2	-85.13	58.9	-1,876.2	1,330.1	1,292.9	37.16	35.792		
7,700.0	7,641.2	7,964.8	7,641.2	19.6	41.3	-85.13	58.9	-1,876.2	1,330.1	1,292.5	37.53	35.437		
7,800.0	7,741.2	8,064.8	7,741.2	19.8	41.4	-85.13	58.9	-1,876.2	1,330.1	1,292.2	37.91	35.087		
7,900.0	7,841.2	8,164.8	7,841.2	20.0	41.5	-85.13	58.9	-1,876.2	1,330.1	1,291.8	38.28	34.743		
8,000.0	7,941.2	8,264.8	7,941.2	20.2	41.6	-85.13	58.9	-1,876.2	1,330.1	1,291.4	38.66	34.405		
8,023.8	7,965.0	8,288.6	7,965.0	20.2	41.6	-85.13	58.9	-1,876.2	1,330.1	1,291.3	38.75	34.325		

## ENSIGN DIRECTIONAL

<b>Company:</b>	Synergy Resources	<b>Local Co-ordinate Reference:</b>	Well Northridge 22-4D
<b>Project:</b>	SEC.4-T5N-R66W	<b>TVD Reference:</b>	WELL @ 4754.0ft (Original Well Elev)
<b>Reference Site:</b>	Northridge Pad Sec.4-T5N-R66W	<b>MD Reference:</b>	WELL @ 4754.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Northridge 22-4D	<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 #3 (1-12-10)	<b>Offset TVD Reference:</b>	Offset Datum

Northridge Pad Sec.4-T5N-R66W - Northridge 4KD - Wellbore #1 - Plan #3 (1-12-10)													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)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)		Separation Factor	
0.0	0.0	0.0	0.0	0.0	0.0	-151.04	-10.6	-5.8	12.1	12.1	0.00	N/A		
100.0	100.0	100.0	100.0	0.1	0.1	-151.04	-10.6	-5.8	12.1	11.9	0.22	53.722		
200.0	200.0	200.0	200.0	0.3	0.3	-151.04	-10.6	-5.8	12.1	11.4	0.67	17.907	CC, ES	
300.0	300.0	299.6	299.6	0.6	0.5	-147.08	-11.4	-7.4	13.6	12.5	1.11	12.261		
400.0	400.0	399.0	398.8	0.8	0.8	-139.25	-13.8	-11.9	18.3	16.8	1.55	11.839	SF	
500.0	500.0	497.9	497.3	1.0	1.0	-132.61	-17.9	-19.5	26.6	24.6	2.02	13.175		
600.0	600.0	596.0	594.8	1.2	1.3	-128.19	-23.5	-29.9	38.4	35.9	2.53	15.201		
700.0	700.0	693.3	690.9	1.5	1.6	-125.40	-30.7	-43.1	53.7	50.6	3.08	17.445		
800.0	800.0	789.4	785.3	1.7	2.0	-123.60	-39.2	-59.0	72.4	68.7	3.68	19.686		
900.0	900.0	884.2	877.7	1.9	2.4	-122.40	-49.1	-77.4	94.4	90.1	4.32	21.824		
1,000.0	1,000.0	977.5	968.0	2.1	2.9	-121.56	-60.3	-98.2	119.6	114.5	5.02	23.822		
1,100.0	1,100.0	1,070.2	1,056.9	2.4	3.4	-120.96	-72.7	-121.2	147.8	142.0	5.76	25.662		
1,200.0	1,200.0	1,165.9	1,148.4	2.6	4.0	-120.53	-86.0	-145.8	176.9	170.4	6.55	27.028		
1,300.0	1,300.0	1,261.5	1,239.9	2.8	4.5	-120.21	-99.2	-170.4	206.1	198.7	7.34	28.073		
1,400.0	1,400.0	1,357.2	1,331.4	3.0	5.1	-119.98	-112.4	-194.9	235.2	227.1	8.14	28.895		
1,500.0	1,500.0	1,452.8	1,422.9	3.3	5.7	-119.79	-125.7	-219.5	264.4	255.5	8.95	29.557		
1,600.0	1,600.0	1,548.5	1,514.4	3.5	6.3	-119.65	-138.9	-244.0	293.6	283.8	9.75	30.102		
1,700.0	1,700.0	1,644.1	1,605.9	3.7	6.9	-119.53	-152.1	-268.6	322.7	312.1	10.56	30.558		
1,800.0	1,800.0	1,739.8	1,697.4	3.9	7.5	-119.43	-165.4	-293.2	351.9	340.5	11.37	30.944		
1,900.0	1,900.0	1,835.5	1,788.9	4.2	8.0	-119.34	-178.6	-317.7	381.0	368.8	12.18	31.276		
2,000.0	2,000.0	1,931.1	1,880.4	4.4	8.6	-119.27	-191.8	-342.3	410.2	397.2	13.00	31.565		
2,100.0	2,100.0	2,027.2	1,972.3	4.6	9.2	-23.46	-205.1	-366.9	437.8	428.1	9.74	44.968		
2,200.0	2,199.8	2,124.1	2,065.0	4.8	9.8	-23.47	-218.5	-391.8	462.4	452.1	10.23	45.195		
2,300.0	2,299.5	2,221.8	2,158.4	5.0	10.4	-23.65	-232.0	-416.9	483.8	473.1	10.73	45.102		
2,400.0	2,398.7	2,320.0	2,252.3	5.2	11.0	-23.99	-245.6	-442.1	502.1	490.9	11.23	44.729		
2,500.0	2,497.5	2,418.7	2,346.7	5.5	11.7	-24.48	-259.3	-467.5	517.3	505.6	11.73	44.107		
2,600.0	2,595.6	2,517.7	2,441.5	5.7	12.3	-25.12	-273.0	-492.9	529.5	517.3	12.24	43.258		
2,700.0	2,693.1	2,616.9	2,536.4	6.1	12.9	-25.92	-286.7	-518.4	538.8	526.0	12.77	42.183		
2,800.0	2,790.4	2,716.2	2,631.3	6.4	13.5	-26.80	-300.4	-543.8	547.4	534.1	13.34	41.045		
2,900.0	2,887.7	2,815.5	2,726.3	6.8	14.1	-27.64	-314.2	-569.3	556.2	542.3	13.92	39.962		
3,000.0	2,985.0	2,914.8	2,821.3	7.1	14.7	-28.46	-327.9	-594.8	565.1	550.6	14.52	38.930		
3,100.0	3,082.2	3,014.0	2,916.2	7.5	15.4	-29.25	-341.6	-620.3	574.1	559.0	15.13	37.947		
3,200.0	3,179.5	3,113.3	3,011.2	7.9	16.0	-30.02	-355.4	-645.8	583.2	567.5	15.76	37.011		
3,300.0	3,276.8	3,212.6	3,106.2	8.4	16.6	-30.76	-369.1	-671.3	592.4	576.0	16.40	36.120		
3,400.0	3,374.1	3,311.9	3,201.1	8.8	17.2	-31.49	-382.8	-696.8	601.8	584.7	17.06	35.273		
3,500.0	3,471.4	3,411.2	3,296.1	9.2	17.8	-32.19	-396.6	-722.3	611.2	593.4	17.73	34.467		
3,600.0	3,568.7	3,510.5	3,391.1	9.7	18.5	-32.86	-410.3	-747.8	620.7	602.2	18.42	33.700		
3,700.0	3,666.0	3,609.7	3,486.0	10.1	19.1	-33.52	-424.0	-773.3	630.2	611.1	19.12	32.970		
3,800.0	3,763.3	3,709.0	3,581.0	10.6	19.7	-34.16	-437.8	-798.8	639.9	620.1	19.83	32.276		
3,900.0	3,860.6	3,808.3	3,676.0	11.0	20.3	-34.78	-451.5	-824.2	649.6	629.1	20.55	31.616		
4,000.0	3,957.8	3,907.6	3,770.9	11.5	20.9	-35.38	-465.2	-849.7	659.4	638.2	21.28	30.988		
4,100.0	4,055.1	4,006.9	3,865.9	12.0	21.5	-35.97	-479.0	-875.2	669.3	647.3	22.02	30.389		
4,200.0	4,152.4	4,106.1	3,960.9	12.4	22.2	-36.53	-492.7	-900.7	679.3	656.5	22.78	29.820		
4,300.0	4,249.7	4,205.4	4,055.8	12.9	22.8	-37.08	-506.5	-926.2	689.3	665.7	23.54	29.278		
4,400.0	4,347.0	4,304.7	4,150.8	13.4	23.4	-37.63	-520.2	-951.7	699.4	675.0	24.31	28.765		
4,500.0	4,444.7	4,403.9	4,245.7	13.7	24.0	-38.19	-533.9	-977.2	711.1	686.1	25.01	28.435		
4,600.0	4,543.2	4,502.8	4,340.2	14.0	24.6	-38.60	-547.6	-1,002.6	725.6	700.0	25.65	28.291		
4,700.0	4,642.1	4,601.3	4,434.5	14.3	25.2	-38.87	-561.2	-1,027.8	742.8	716.6	26.23	28.321		
4,800.0	4,741.6	4,699.3	4,528.2	14.5	25.9	-39.00	-574.8	-1,053.0	762.7	736.0	26.75	28.515		
4,900.0	4,841.3	4,796.6	4,621.3	14.8	26.5	-39.02	-588.2	-1,078.0	785.3	758.0	27.20	28.865		
5,000.0	4,941.2	4,893.2	4,713.7	14.9	27.1	-38.92	-601.6	-1,102.8	810.5	782.9	27.60	29.364		
5,100.0	5,041.2	4,989.0	4,805.4	15.1	27.7	-134.21	-614.9	-1,127.4	838.1	810.2	27.95	29.987		

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



# ENSIGN DIRECTIONAL

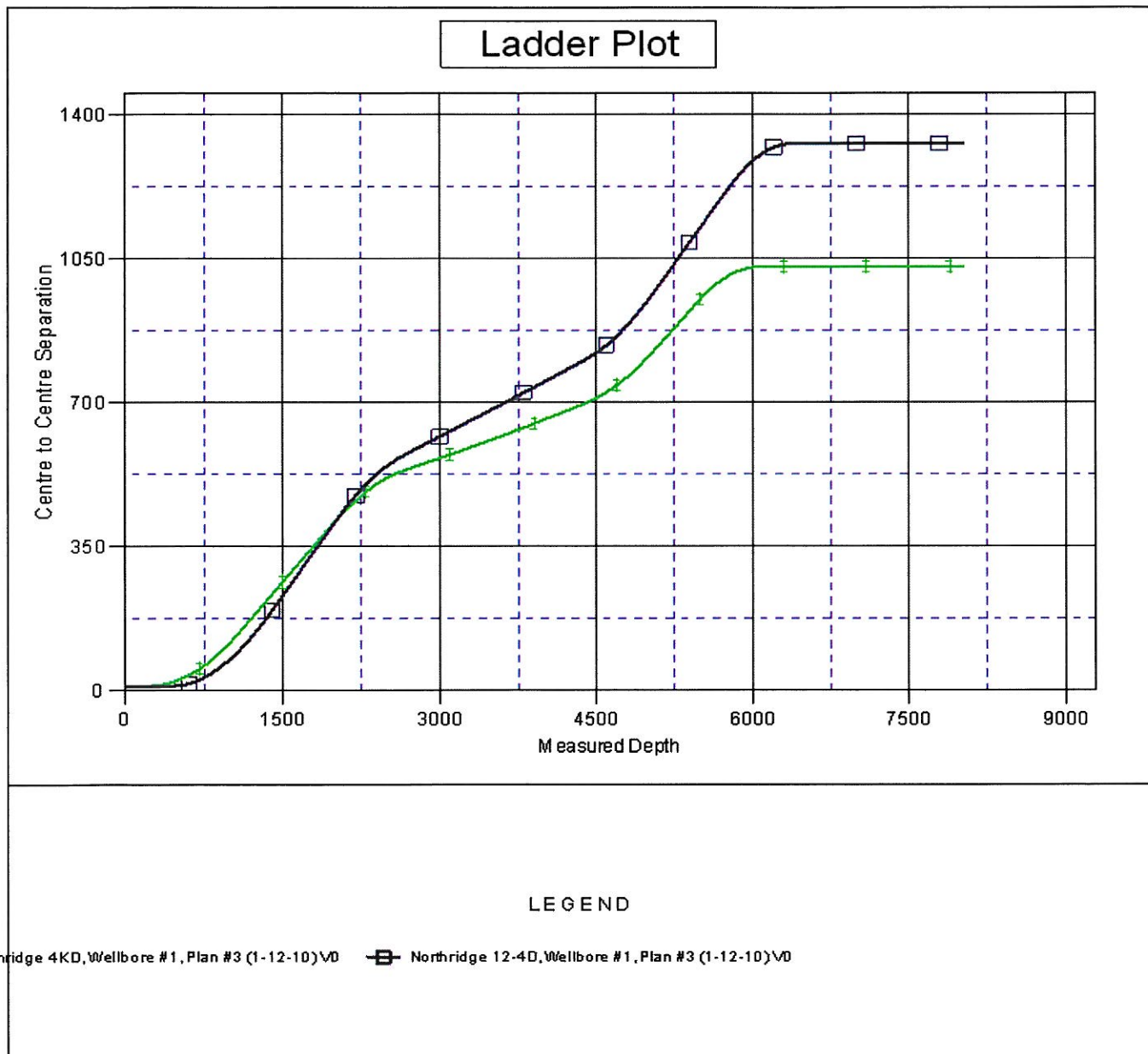
## Anticollision Report

<b>Company:</b>	Synergy Resources	<b>Local Co-ordinate Reference:</b>	Well Northridge 22-4D
<b>Project:</b>	SEC.4-T5N-R66W	<b>TVD Reference:</b>	WELL @ 4754.0ft (Original Well Elev)
<b>Reference Site:</b>	Northridge Pad Sec.4-T5N-R66W	<b>MD Reference:</b>	WELL @ 4754.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Northridge 22-4D	<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 #3 (1-12-10)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Northridge Pad Sec.4-T5N-R66W - Northridge 4KD - Wellbore #1 - Plan #3 (1-12-10)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
5,200.0	5,141.2	5,084.7	4,896.9	15.2	28.3	-133.68	-628.1	-1,152.0	866.3	838.0	28.32	30.589		
5,300.0	5,241.2	5,180.3	4,988.3	15.4	28.9	-133.19	-641.3	-1,176.5	894.5	865.8	28.70	31.169		
5,400.0	5,341.2	5,276.0	5,079.8	15.5	29.5	-132.72	-654.5	-1,201.1	922.8	893.7	29.09	31.727		
5,500.0	5,441.2	5,375.1	5,174.6	15.7	30.1	-132.27	-668.2	-1,226.5	951.1	921.7	29.49	32.259		
5,600.0	5,541.2	5,518.5	5,313.0	15.9	30.7	-131.72	-686.2	-1,259.8	976.9	946.9	29.93	32.638		
5,700.0	5,641.2	5,665.6	5,456.6	16.0	31.2	-131.29	-701.2	-1,287.7	997.8	967.4	30.37	32.850		
5,800.0	5,741.2	5,815.7	5,604.6	16.2	31.6	-130.98	-712.9	-1,309.3	1,013.8	983.0	30.82	32.897		
5,900.0	5,841.2	5,968.0	5,756.0	16.4	32.0	-130.77	-720.9	-1,324.3	1,024.7	993.5	31.25	32.791		
6,000.0	5,941.2	6,121.7	5,909.4	16.5	32.2	-130.66	-725.2	-1,332.2	1,030.4	998.8	31.67	32.539		
6,100.0	6,041.2	6,253.5	6,041.2	16.7	32.3	-130.64	-725.9	-1,333.4	1,031.3	999.3	32.05	32.182		
6,200.0	6,141.2	6,353.5	6,141.2	16.9	32.4	-130.64	-725.9	-1,333.4	1,031.3	998.9	32.39	31.845		
6,300.0	6,241.2	6,453.5	6,241.2	17.1	32.5	-130.64	-725.9	-1,333.4	1,031.3	998.6	32.73	31.514		
6,400.0	6,341.2	6,553.5	6,341.2	17.2	32.5	-130.64	-725.9	-1,333.4	1,031.3	998.3	33.07	31.188		
6,500.0	6,441.2	6,653.5	6,441.2	17.4	32.6	-130.64	-725.9	-1,333.4	1,031.3	997.9	33.41	30.867		
6,600.0	6,541.2	6,753.5	6,541.2	17.6	32.7	-130.64	-725.9	-1,333.4	1,031.3	997.6	33.76	30.550		
6,700.0	6,641.2	6,853.5	6,641.2	17.8	32.8	-130.64	-725.9	-1,333.4	1,031.3	997.2	34.11	30.237		
6,800.0	6,741.2	6,953.5	6,741.2	17.9	32.9	-130.64	-725.9	-1,333.4	1,031.3	996.9	34.46	29.929		
6,900.0	6,841.2	7,053.5	6,841.2	18.1	33.0	-130.64	-725.9	-1,333.4	1,031.3	996.5	34.81	29.625		
7,000.0	6,941.2	7,153.5	6,941.2	18.3	33.1	-130.64	-725.9	-1,333.4	1,031.3	996.2	35.17	29.326		
7,100.0	7,041.2	7,253.5	7,041.2	18.5	33.2	-130.64	-725.9	-1,333.4	1,031.3	995.8	35.53	29.031		
7,200.0	7,141.2	7,353.5	7,141.2	18.7	33.3	-130.64	-725.9	-1,333.4	1,031.3	995.4	35.89	28.740		
7,300.0	7,241.2	7,453.5	7,241.2	18.9	33.3	-130.64	-725.9	-1,333.4	1,031.3	995.1	36.25	28.453		
7,400.0	7,341.2	7,553.5	7,341.2	19.0	33.4	-130.64	-725.9	-1,333.4	1,031.3	994.7	36.61	28.171		
7,500.0	7,441.2	7,653.5	7,441.2	19.2	33.5	-130.64	-725.9	-1,333.4	1,031.3	994.4	36.97	27.893		
7,600.0	7,541.2	7,753.5	7,541.2	19.4	33.6	-130.64	-725.9	-1,333.4	1,031.3	994.0	37.34	27.619		
7,700.0	7,641.2	7,853.5	7,641.2	19.6	33.7	-130.64	-725.9	-1,333.4	1,031.3	993.6	37.71	27.349		
7,800.0	7,741.2	7,953.5	7,741.2	19.8	33.8	-130.64	-725.9	-1,333.4	1,031.3	993.3	38.08	27.083		
7,900.0	7,841.2	8,053.5	7,841.2	20.0	33.9	-130.64	-725.9	-1,333.4	1,031.3	992.9	38.45	26.822		
8,000.0	7,941.2	8,153.5	7,941.2	20.2	34.0	-130.64	-725.9	-1,333.4	1,031.3	992.5	38.82	26.564		
8,023.8	7,965.0	8,177.3	7,965.0	20.2	34.1	-130.64	-725.9	-1,333.4	1,031.3	992.4	38.91	26.503		

<b>Company:</b>	Synergy Resources	<b>Local Co-ordinate Reference:</b>	Well Northridge 22-4D
<b>Project:</b>	SEC.4-T5N-R66W	<b>TVD Reference:</b>	WELL @ 4754.0ft (Original Well Elev)
<b>Reference Site:</b>	Northridge Pad Sec.4-T5N-R66W	<b>MD Reference:</b>	WELL @ 4754.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Northridge 22-4D	<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 #3 (1-12-10)	<b>Offset TVD Reference:</b>	Offset Datum

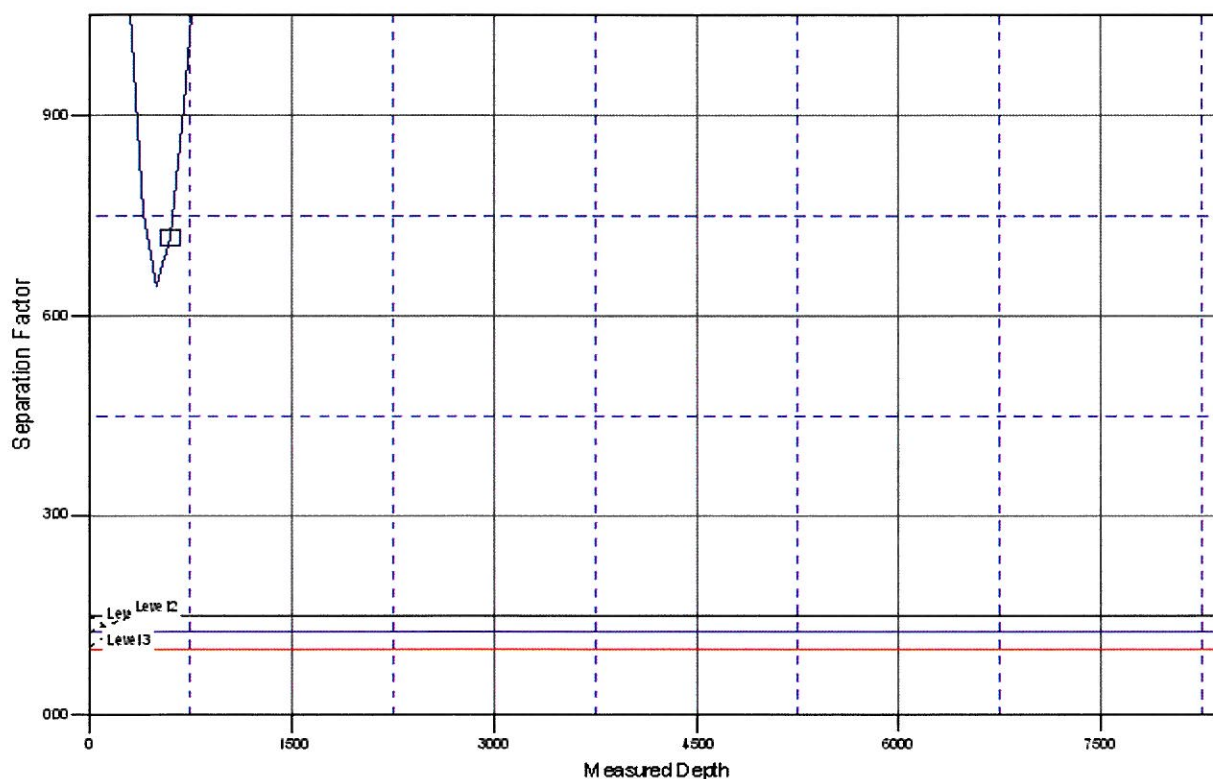
Reference Depths are relative to WELL @ 4754.0ft (Original Well Elev) Coordinates are relative to: Northridge 22-4D  
Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, Colorado Northern Zone  
Central Meridian is 105° 30' 0.000 W ° Grid Convergence at Surface is: 0.46°



<b>Company:</b>	Synergy Resources	<b>Local Co-ordinate Reference:</b>	Well Northridge 22-4D
<b>Project:</b>	SEC.4-T5N-R66W	<b>TVD Reference:</b>	WELL @ 4754.0ft (Original Well Elev)
<b>Reference Site:</b>	Northridge Pad Sec.4-T5N-R66W	<b>MD Reference:</b>	WELL @ 4754.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Northridge 22-4D	<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 #3 (1-12-10)	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to WELL @ 4754.0ft (Original Well Elev) Coordinates are relative to: Northridge 22-4D  
 Offset Depths are relative to Offset Datum  
 Central Meridian is 105° 30' 0.000 W °  
 Coordinate System is US State Plane 1983, Colorado Northern Zone  
 Grid Convergence at Surface is: 0.46°

### Separation Factor Plot



### LEGEND

Northridge 4KD, Wellbore #1, Plan #3 (1-12-10) \V0  Northridge 12-4D, Wellbore #1, Plan #3 (1-12-10) \V0