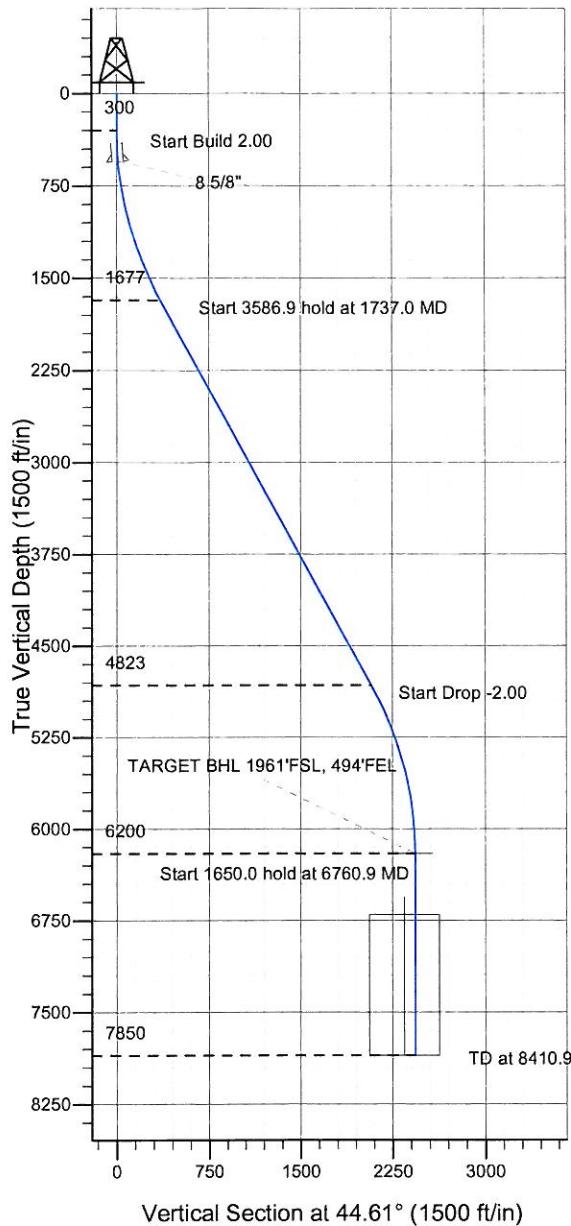


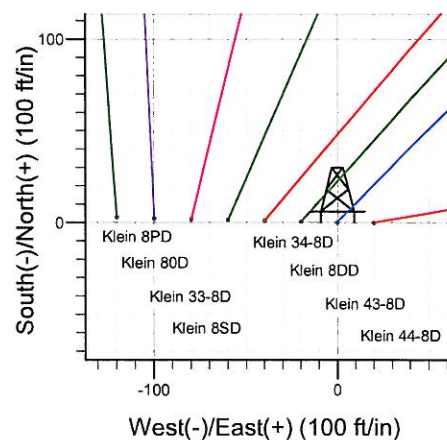
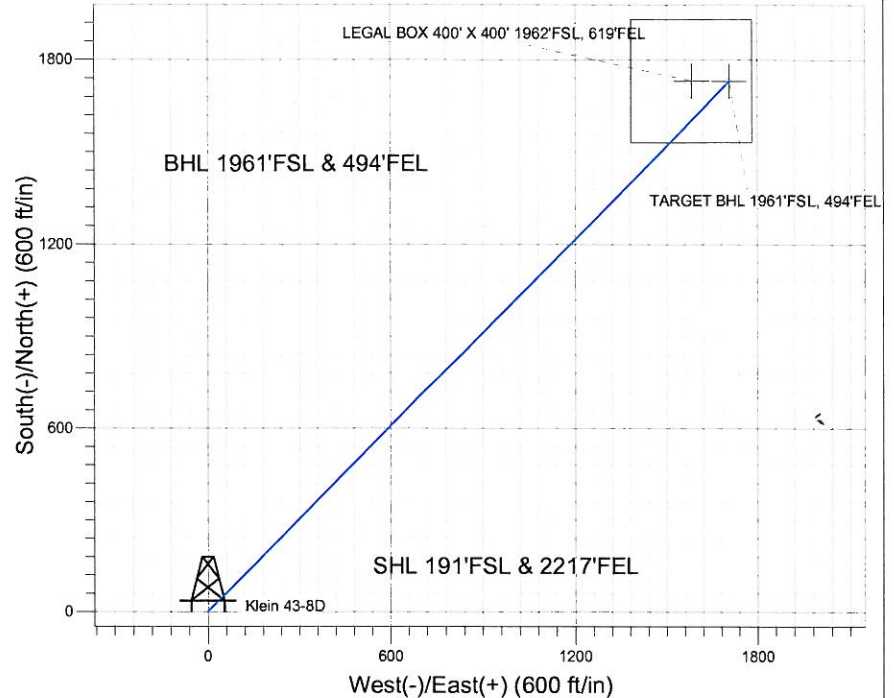
Well Name: Klein 43-8D

Surface Location: Klein 44-8D Pad Sec.8-T4N-R67W
North American Datum 1983 US State Plane 1983 Colorado Northern Zone

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1360242.85	3163413.87	40.320785	-104.913938	
		Original Well Elev WELL @ 4807.0ft (Original Well Elev)				



Synergy Resources



Klein 44-8D Pad Sec.8-T4N-R67W
Klein 43-8D
Plan #1 (5-03-11)
15:25, May 12 2011



Azimuths to True North
Magnetic North: 8.95°

Magnetic Field
Strength: 53084.0nT
Dip Angle: 66.97°
Date: 5/11/2011
Model: IGRF2010

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
TARGET BHL 1961'FSL, 494'FEL	6200.0	1730.2	1707.0	40.325534	-104.907816	Point
LEGAL BOX 400' X 400' 1962'FSL, 619'FEL	6700.0	1731.2	1582.0	40.325537	-104.908264	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	300.0	0.00	0.00	300.0	0.0	0.0	0.00	0.00	0.0	
3	1737.0	28.74	44.61	1677.5	251.2	247.9	2.00	44.61	352.9	
4	5323.9	28.74	44.61	4822.5	1479.0	1459.1	0.00	0.00	2077.6	
5	6760.9	0.00	0.00	6200.0	1730.2	1707.0	2.00	180.00	2430.5	TARGET BHL 1961'FSL, 494'FEL
6	8410.9	0.00	0.00	7850.0	1730.2	1707.0	0.00	0.00	2430.5	



Directional

Synergy Resources

SEC.8-T4N-R67W

Klein 44-8D Pad Sec.8-T4N-R67W

Klein 43-8D

Wellbore #1

Plan: Plan #1 (5-03-11)

Standard Planning Report

12 May, 2011

Database: Landmark
Company: Synergy Resources
Project: SEC.8-T4N-R67W
Site: Klein 44-8D Pad Sec.8-T4N-R67W
Well: Klein 43-8D
Wellbore: Wellbore #1
Design: Plan #1 (5-03-11)

Local Co-ordinate Reference: Well Klein 43-8D
TVD Reference: WELL @ 4807.0ft (Original Well Elev)
MD Reference: WELL @ 4807.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

Project	SEC.8-T4N-R67W, 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	Klein 44-8D Pad Sec.8-T4N-R67W				
Site Position:		Northing:	1,360,242.64 ft	Latitude:	40.320784
From:	Lat/Long	Easting:	3,163,433.95 ft	Longitude:	-104.913866
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.38 °

Well	Klein 43-8D					
Well Position	+N/-S	0.4 ft	Northing:	1,360,242.85 ft	Latitude:	40.320785
	+E/-W	-20.1 ft	Easting:	3,163,413.87 ft	Longitude:	-104.913938
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,794.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	5/11/2011	8.95	66.97	53,084

Design	Plan #1 (5-03-11)				
Audit Notes:					
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0	
Vertical Section:	Depth From (TVD)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.0	0.0	0.0	44.61	

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	
300.0	0.00	0.00	300.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,737.0	28.74	44.61	1,677.5	251.2	247.9	2.00	2.00	0.00	44.61	
5,323.9	28.74	44.61	4,822.5	1,479.0	1,459.1	0.00	0.00	0.00	0.00	
6,760.9	0.00	0.00	6,200.0	1,730.2	1,707.0	2.00	-2.00	0.00	180.00	TARGET BHL 1961
8,410.9	0.00	0.00	7,850.0	1,730.2	1,707.0	0.00	0.00	0.00	0.00	

Database: Landmark
Company: Synergy Resources
Project: SEC.8-T4N-R67W
Site: Klein 44-8D Pad Sec.8-T4N-R67W
Well: Klein 43-8D
Wellbore: Wellbore #1
Design: Plan #1 (5-03-11)

Local Co-ordinate Reference: Well Klein 43-8D
TVD Reference: WELL @ 4807.0ft (Original Well Elev)
MD Reference: WELL @ 4807.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

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
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
320.0	0.40	44.61	320.0	0.0	0.0	0.1	2.00	2.00	0.00
360.0	1.20	44.61	360.0	0.4	0.4	0.6	2.00	2.00	0.00
400.0	2.00	44.61	400.0	1.2	1.2	1.7	2.00	2.00	0.00
440.0	2.80	44.61	439.9	2.4	2.4	3.4	2.00	2.00	0.00
480.0	3.60	44.61	479.9	4.0	4.0	5.7	2.00	2.00	0.00
520.0	4.40	44.61	519.8	6.0	5.9	8.4	2.00	2.00	0.00
550.3	5.01	44.61	550.0	7.8	7.7	10.9	2.00	2.00	0.00
8 5/8"									
560.0	5.20	44.61	559.6	8.4	8.3	11.8	2.00	2.00	0.00
600.0	6.00	44.61	599.5	11.2	11.0	15.7	2.00	2.00	0.00
640.0	6.80	44.61	639.2	14.3	14.2	20.2	2.00	2.00	0.00
680.0	7.60	44.61	678.9	17.9	17.7	25.2	2.00	2.00	0.00
720.0	8.40	44.61	718.5	21.9	21.6	30.7	2.00	2.00	0.00
760.0	9.20	44.61	758.0	26.2	25.9	36.9	2.00	2.00	0.00
800.0	10.00	44.61	797.5	31.0	30.6	43.5	2.00	2.00	0.00
840.0	10.80	44.61	836.8	36.1	35.6	50.7	2.00	2.00	0.00
880.0	11.60	44.61	876.0	41.7	41.1	58.5	2.00	2.00	0.00
920.0	12.40	44.61	915.2	47.6	46.9	66.8	2.00	2.00	0.00
960.0	13.20	44.61	954.2	53.9	53.2	75.7	2.00	2.00	0.00
1,000.0	14.00	44.61	993.1	60.6	59.8	85.1	2.00	2.00	0.00
1,040.0	14.80	44.61	1,031.8	67.7	66.8	95.0	2.00	2.00	0.00
1,080.0	15.60	44.61	1,070.4	75.1	74.1	105.5	2.00	2.00	0.00
1,120.0	16.40	44.61	1,108.8	83.0	81.9	116.6	2.00	2.00	0.00
1,160.0	17.20	44.61	1,147.1	91.2	90.0	128.1	2.00	2.00	0.00
1,200.0	18.00	44.61	1,185.3	99.8	98.5	140.2	2.00	2.00	0.00
1,240.0	18.80	44.61	1,223.2	108.8	107.3	152.8	2.00	2.00	0.00
1,280.0	19.60	44.61	1,261.0	118.2	116.6	166.0	2.00	2.00	0.00
1,320.0	20.40	44.61	1,298.6	127.9	126.2	179.7	2.00	2.00	0.00
1,360.0	21.20	44.61	1,336.0	138.0	136.2	193.9	2.00	2.00	0.00
1,400.0	22.00	44.61	1,373.2	148.5	146.5	208.6	2.00	2.00	0.00
1,440.0	22.80	44.61	1,410.2	159.3	157.2	223.8	2.00	2.00	0.00
1,480.0	23.60	44.61	1,446.9	170.6	168.3	239.6	2.00	2.00	0.00
1,520.0	24.40	44.61	1,483.5	182.1	179.7	255.9	2.00	2.00	0.00
1,560.0	25.20	44.61	1,519.8	194.1	191.5	272.6	2.00	2.00	0.00
1,600.0	26.00	44.61	1,555.8	206.4	203.6	289.9	2.00	2.00	0.00
1,640.0	26.80	44.61	1,591.7	219.1	216.1	307.7	2.00	2.00	0.00
1,680.0	27.60	44.61	1,627.2	232.1	229.0	326.0	2.00	2.00	0.00
1,720.0	28.40	44.61	1,662.6	245.4	242.1	344.8	2.00	2.00	0.00
1,737.0	28.74	44.61	1,677.5	251.2	247.9	352.9	2.00	2.00	0.00
1,760.0	28.74	44.61	1,697.7	259.1	255.6	364.0	0.00	0.00	0.00
1,800.0	28.74	44.61	1,732.7	272.8	269.1	383.2	0.00	0.00	0.00
1,840.0	28.74	44.61	1,767.8	286.5	282.6	402.4	0.00	0.00	0.00
1,880.0	28.74	44.61	1,802.9	300.2	296.1	421.7	0.00	0.00	0.00
1,920.0	28.74	44.61	1,838.0	313.9	309.7	440.9	0.00	0.00	0.00
1,960.0	28.74	44.61	1,873.0	327.6	323.2	460.1	0.00	0.00	0.00

Database: Landmark
Company: Synergy Resources
Project: SEC.8-T4N-R67W
Site: Klein 44-8D Pad Sec.8-T4N-R67W
Well: Klein 43-8D
Wellbore: Wellbore #1
Design: Plan #1 (5-03-11)

Local Co-ordinate Reference: Well Klein 43-8D
TVD Reference: WELL @ 4807.0ft (Original Well Elev)
MD Reference: WELL @ 4807.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

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)
2,000.0	28.74	44.61	1,908.1	341.2	336.7	479.4	0.00	0.00	0.00
2,040.0	28.74	44.61	1,943.2	354.9	350.2	498.6	0.00	0.00	0.00
2,080.0	28.74	44.61	1,978.2	368.6	363.7	517.8	0.00	0.00	0.00
2,120.0	28.74	44.61	2,013.3	382.3	377.2	537.1	0.00	0.00	0.00
2,160.0	28.74	44.61	2,048.4	396.0	390.7	556.3	0.00	0.00	0.00
2,200.0	28.74	44.61	2,083.5	409.7	404.2	575.5	0.00	0.00	0.00
2,240.0	28.74	44.61	2,118.5	423.4	417.7	594.8	0.00	0.00	0.00
2,280.0	28.74	44.61	2,153.6	437.1	431.2	614.0	0.00	0.00	0.00
2,320.0	28.74	44.61	2,188.7	450.8	444.7	633.2	0.00	0.00	0.00
2,360.0	28.74	44.61	2,223.7	464.5	458.2	652.5	0.00	0.00	0.00
2,400.0	28.74	44.61	2,258.8	478.2	471.8	671.7	0.00	0.00	0.00
2,440.0	28.74	44.61	2,293.9	491.8	485.3	690.9	0.00	0.00	0.00
2,480.0	28.74	44.61	2,329.0	505.5	498.8	710.2	0.00	0.00	0.00
2,520.0	28.74	44.61	2,364.0	519.2	512.3	729.4	0.00	0.00	0.00
2,560.0	28.74	44.61	2,399.1	532.9	525.8	748.6	0.00	0.00	0.00
2,600.0	28.74	44.61	2,434.2	546.6	539.3	767.9	0.00	0.00	0.00
2,640.0	28.74	44.61	2,469.3	560.3	552.8	787.1	0.00	0.00	0.00
2,680.0	28.74	44.61	2,504.3	574.0	566.3	806.3	0.00	0.00	0.00
2,720.0	28.74	44.61	2,539.4	587.7	579.8	825.6	0.00	0.00	0.00
2,760.0	28.74	44.61	2,574.5	601.4	593.3	844.8	0.00	0.00	0.00
2,800.0	28.74	44.61	2,609.5	615.1	606.8	864.0	0.00	0.00	0.00
2,840.0	28.74	44.61	2,644.6	628.8	620.3	883.3	0.00	0.00	0.00
2,880.0	28.74	44.61	2,679.7	642.5	633.8	902.5	0.00	0.00	0.00
2,920.0	28.74	44.61	2,714.8	656.1	647.4	921.7	0.00	0.00	0.00
2,960.0	28.74	44.61	2,749.8	669.8	660.9	941.0	0.00	0.00	0.00
3,000.0	28.74	44.61	2,784.9	683.5	674.4	960.2	0.00	0.00	0.00
3,040.0	28.74	44.61	2,820.0	697.2	687.9	979.4	0.00	0.00	0.00
3,080.0	28.74	44.61	2,855.1	710.9	701.4	998.7	0.00	0.00	0.00
3,120.0	28.74	44.61	2,890.1	724.6	714.9	1,017.9	0.00	0.00	0.00
3,160.0	28.74	44.61	2,925.2	738.3	728.4	1,037.1	0.00	0.00	0.00
3,200.0	28.74	44.61	2,960.3	752.0	741.9	1,056.4	0.00	0.00	0.00
3,240.0	28.74	44.61	2,995.3	765.7	755.4	1,075.6	0.00	0.00	0.00
3,280.0	28.74	44.61	3,030.4	779.4	768.9	1,094.8	0.00	0.00	0.00
3,320.0	28.74	44.61	3,065.5	793.1	782.4	1,114.1	0.00	0.00	0.00
3,360.0	28.74	44.61	3,100.6	806.7	795.9	1,133.3	0.00	0.00	0.00
3,400.0	28.74	44.61	3,135.6	820.4	809.4	1,152.5	0.00	0.00	0.00
3,440.0	28.74	44.61	3,170.7	834.1	823.0	1,171.8	0.00	0.00	0.00
3,480.0	28.74	44.61	3,205.8	847.8	836.5	1,191.0	0.00	0.00	0.00
3,520.0	28.74	44.61	3,240.9	861.5	850.0	1,210.2	0.00	0.00	0.00
3,560.0	28.74	44.61	3,275.9	875.2	863.5	1,229.5	0.00	0.00	0.00
3,600.0	28.74	44.61	3,311.0	888.9	877.0	1,248.7	0.00	0.00	0.00
3,640.0	28.74	44.61	3,346.1	902.6	890.5	1,267.9	0.00	0.00	0.00
3,680.0	28.74	44.61	3,381.1	916.3	904.0	1,287.2	0.00	0.00	0.00
3,720.0	28.74	44.61	3,416.2	930.0	917.5	1,306.4	0.00	0.00	0.00
3,760.0	28.74	44.61	3,451.3	943.7	931.0	1,325.6	0.00	0.00	0.00
3,800.0	28.74	44.61	3,486.4	957.4	944.5	1,344.9	0.00	0.00	0.00
3,840.0	28.74	44.61	3,521.4	971.0	958.0	1,364.1	0.00	0.00	0.00
3,880.0	28.74	44.61	3,556.5	984.7	971.5	1,383.3	0.00	0.00	0.00
3,920.0	28.74	44.61	3,591.6	998.4	985.1	1,402.6	0.00	0.00	0.00
3,960.0	28.74	44.61	3,626.7	1,012.1	998.6	1,421.8	0.00	0.00	0.00
4,000.0	28.74	44.61	3,661.7	1,025.8	1,012.1	1,441.0	0.00	0.00	0.00
4,040.0	28.74	44.61	3,696.8	1,039.5	1,025.6	1,460.3	0.00	0.00	0.00
4,080.0	28.74	44.61	3,731.9	1,053.2	1,039.1	1,479.5	0.00	0.00	0.00
4,120.0	28.74	44.61	3,766.9	1,066.9	1,052.6	1,498.7	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Klein 43-8D
Company:	Synergy Resources	TVD Reference:	WELL @ 4807.0ft (Original Well Elev)
Project:	SEC.8-T4N-R67W	MD Reference:	WELL @ 4807.0ft (Original Well Elev)
Site:	Klein 44-8D Pad Sec.8-T4N-R67W	North Reference:	True
Well:	Klein 43-8D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (5-03-11)		

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)
4,160.0	28.74	44.61	3,802.0	1,080.6	1,066.1	1,518.0	0.00	0.00	0.00
4,200.0	28.74	44.61	3,837.1	1,094.3	1,079.6	1,537.2	0.00	0.00	0.00
4,240.0	28.74	44.61	3,872.2	1,108.0	1,093.1	1,556.4	0.00	0.00	0.00
4,280.0	28.74	44.61	3,907.2	1,121.6	1,106.6	1,575.7	0.00	0.00	0.00
4,320.0	28.74	44.61	3,942.3	1,135.3	1,120.1	1,594.9	0.00	0.00	0.00
4,360.0	28.74	44.61	3,977.4	1,149.0	1,133.6	1,614.1	0.00	0.00	0.00
4,400.0	28.74	44.61	4,012.4	1,162.7	1,147.1	1,633.4	0.00	0.00	0.00
4,440.0	28.74	44.61	4,047.5	1,176.4	1,160.7	1,652.6	0.00	0.00	0.00
4,480.0	28.74	44.61	4,082.6	1,190.1	1,174.2	1,671.8	0.00	0.00	0.00
4,520.0	28.74	44.61	4,117.7	1,203.8	1,187.7	1,691.1	0.00	0.00	0.00
4,560.0	28.74	44.61	4,152.7	1,217.5	1,201.2	1,710.3	0.00	0.00	0.00
4,600.0	28.74	44.61	4,187.8	1,231.2	1,214.7	1,729.5	0.00	0.00	0.00
4,640.0	28.74	44.61	4,222.9	1,244.9	1,228.2	1,748.8	0.00	0.00	0.00
4,680.0	28.74	44.61	4,258.0	1,258.6	1,241.7	1,768.0	0.00	0.00	0.00
4,720.0	28.74	44.61	4,293.0	1,272.3	1,255.2	1,787.2	0.00	0.00	0.00
4,760.0	28.74	44.61	4,328.1	1,285.9	1,268.7	1,806.5	0.00	0.00	0.00
4,800.0	28.74	44.61	4,363.2	1,299.6	1,282.2	1,825.7	0.00	0.00	0.00
4,840.0	28.74	44.61	4,398.2	1,313.3	1,295.7	1,844.9	0.00	0.00	0.00
4,880.0	28.74	44.61	4,433.3	1,327.0	1,309.2	1,864.2	0.00	0.00	0.00
4,920.0	28.74	44.61	4,468.4	1,340.7	1,322.7	1,883.4	0.00	0.00	0.00
4,960.0	28.74	44.61	4,503.5	1,354.4	1,336.3	1,902.6	0.00	0.00	0.00
5,000.0	28.74	44.61	4,538.5	1,368.1	1,349.8	1,921.9	0.00	0.00	0.00
5,040.0	28.74	44.61	4,573.6	1,381.8	1,363.3	1,941.1	0.00	0.00	0.00
5,080.0	28.74	44.61	4,608.7	1,395.5	1,376.8	1,960.3	0.00	0.00	0.00
5,120.0	28.74	44.61	4,643.8	1,409.2	1,390.3	1,979.6	0.00	0.00	0.00
5,160.0	28.74	44.61	4,678.8	1,422.9	1,403.8	1,998.8	0.00	0.00	0.00
5,200.0	28.74	44.61	4,713.9	1,436.5	1,417.3	2,018.0	0.00	0.00	0.00
5,240.0	28.74	44.61	4,749.0	1,450.2	1,430.8	2,037.3	0.00	0.00	0.00
5,280.0	28.74	44.61	4,784.0	1,463.9	1,444.3	2,056.5	0.00	0.00	0.00
5,320.0	28.74	44.61	4,819.1	1,477.6	1,457.8	2,075.7	0.00	0.00	0.00
5,323.9	28.74	44.61	4,822.5	1,479.0	1,459.1	2,077.6	0.00	0.00	0.00
5,360.0	28.02	44.61	4,854.3	1,491.2	1,471.2	2,094.8	2.00	-2.00	0.00
5,400.0	27.22	44.61	4,889.7	1,504.4	1,484.2	2,113.3	2.00	-2.00	0.00
5,440.0	26.42	44.61	4,925.4	1,517.2	1,496.9	2,131.3	2.00	-2.00	0.00
5,480.0	25.62	44.61	4,961.4	1,529.7	1,509.2	2,148.9	2.00	-2.00	0.00
5,520.0	24.82	44.61	4,997.6	1,541.8	1,521.2	2,165.9	2.00	-2.00	0.00
5,560.0	24.02	44.61	5,034.0	1,553.6	1,532.8	2,182.5	2.00	-2.00	0.00
5,600.0	23.22	44.61	5,070.6	1,565.0	1,544.0	2,198.5	2.00	-2.00	0.00
5,640.0	22.42	44.61	5,107.5	1,576.1	1,554.9	2,214.0	2.00	-2.00	0.00
5,680.0	21.62	44.61	5,144.6	1,586.7	1,565.5	2,229.0	2.00	-2.00	0.00
5,720.0	20.82	44.61	5,181.9	1,597.0	1,575.6	2,243.5	2.00	-2.00	0.00
5,760.0	20.02	44.61	5,219.4	1,607.0	1,585.4	2,257.4	2.00	-2.00	0.00
5,800.0	19.22	44.61	5,257.1	1,616.5	1,594.9	2,270.9	2.00	-2.00	0.00
5,840.0	18.42	44.61	5,294.9	1,625.7	1,603.9	2,283.8	2.00	-2.00	0.00
5,880.0	17.62	44.61	5,333.0	1,634.5	1,612.6	2,296.1	2.00	-2.00	0.00
5,920.0	16.82	44.61	5,371.2	1,642.9	1,620.9	2,308.0	2.00	-2.00	0.00
5,960.0	16.02	44.61	5,409.5	1,651.0	1,628.9	2,319.3	2.00	-2.00	0.00
6,000.0	15.22	44.61	5,448.0	1,658.7	1,636.4	2,330.0	2.00	-2.00	0.00
6,040.0	14.42	44.61	5,486.7	1,665.9	1,643.6	2,340.3	2.00	-2.00	0.00
6,080.0	13.62	44.61	5,525.5	1,672.8	1,650.4	2,350.0	2.00	-2.00	0.00
6,120.0	12.82	44.61	5,564.5	1,679.4	1,656.9	2,359.1	2.00	-2.00	0.00
6,160.0	12.02	44.61	5,603.5	1,685.5	1,662.9	2,367.7	2.00	-2.00	0.00
6,200.0	11.22	44.61	5,642.7	1,691.2	1,668.6	2,375.8	2.00	-2.00	0.00
6,240.0	10.42	44.61	5,682.0	1,696.6	1,673.8	2,383.3	2.00	-2.00	0.00

Database: Landmark
Company: Synergy Resources
Project: SEC.8-T4N-R67W
Site: Klein 44-8D Pad Sec.8-T4N-R67W
Well: Klein 43-8D
Wellbore: Wellbore #1
Design: Plan #1 (5-03-11)

Local Co-ordinate Reference: Well Klein 43-8D
TVD Reference: WELL @ 4807.0ft (Original Well Elev)
MD Reference: WELL @ 4807.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

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)
6,280.0	9.62	44.61	5,721.4	1,701.5	1,678.7	2,390.2	2.00	-2.00	0.00
6,320.0	8.82	44.61	5,760.9	1,706.1	1,683.2	2,396.6	2.00	-2.00	0.00
6,360.0	8.02	44.61	5,800.4	1,710.2	1,687.3	2,402.5	2.00	-2.00	0.00
6,400.0	7.22	44.61	5,840.1	1,714.0	1,691.0	2,407.8	2.00	-2.00	0.00
6,440.0	6.42	44.61	5,879.8	1,717.4	1,694.4	2,412.5	2.00	-2.00	0.00
6,480.0	5.62	44.61	5,919.6	1,720.4	1,697.3	2,416.7	2.00	-2.00	0.00
6,520.0	4.82	44.61	5,959.4	1,723.0	1,699.9	2,420.4	2.00	-2.00	0.00
6,560.0	4.02	44.61	5,999.3	1,725.2	1,702.0	2,423.5	2.00	-2.00	0.00
6,600.0	3.22	44.61	6,039.2	1,727.0	1,703.8	2,426.0	2.00	-2.00	0.00
6,640.0	2.42	44.61	6,079.2	1,728.4	1,705.2	2,427.9	2.00	-2.00	0.00
6,680.0	1.62	44.61	6,119.1	1,729.4	1,706.2	2,429.4	2.00	-2.00	0.00
6,720.0	0.82	44.61	6,159.1	1,730.0	1,706.8	2,430.2	2.00	-2.00	0.00
6,760.0	0.02	44.61	6,199.1	1,730.2	1,707.0	2,430.5	2.00	-2.00	0.00
6,760.9	0.00	0.00	6,200.0	1,730.2	1,707.0	2,430.5	2.00	-2.00	0.00
TARGET BHL 1961'FSL, 494'FEL									
6,800.0	0.00	0.00	6,239.1	1,730.2	1,707.0	2,430.5	0.00	0.00	0.00
6,840.0	0.00	0.00	6,279.1	1,730.2	1,707.0	2,430.5	0.00	0.00	0.00
6,880.0	0.00	0.00	6,319.1	1,730.2	1,707.0	2,430.5	0.00	0.00	0.00
6,920.0	0.00	0.00	6,359.1	1,730.2	1,707.0	2,430.5	0.00	0.00	0.00
6,960.0	0.00	0.00	6,399.1	1,730.2	1,707.0	2,430.5	0.00	0.00	0.00
7,000.0	0.00	0.00	6,439.1	1,730.2	1,707.0	2,430.5	0.00	0.00	0.00
7,040.0	0.00	0.00	6,479.1	1,730.2	1,707.0	2,430.5	0.00	0.00	0.00
7,080.0	0.00	0.00	6,519.1	1,730.2	1,707.0	2,430.5	0.00	0.00	0.00
7,120.0	0.00	0.00	6,559.1	1,730.2	1,707.0	2,430.5	0.00	0.00	0.00
7,160.0	0.00	0.00	6,599.1	1,730.2	1,707.0	2,430.5	0.00	0.00	0.00
7,200.0	0.00	0.00	6,639.1	1,730.2	1,707.0	2,430.5	0.00	0.00	0.00
7,240.0	0.00	0.00	6,679.1	1,730.2	1,707.0	2,430.5	0.00	0.00	0.00
7,260.9	0.00	0.00	6,700.0	1,730.2	1,707.0	2,430.5	0.00	0.00	0.00
LEGAL BOX 400' X 400' 1962'FSL, 619'FEL									
7,280.0	0.00	0.00	6,719.1	1,730.2	1,707.0	2,430.5	0.00	0.00	0.00
7,320.0	0.00	0.00	6,759.1	1,730.2	1,707.0	2,430.5	0.00	0.00	0.00
7,360.0	0.00	0.00	6,799.1	1,730.2	1,707.0	2,430.5	0.00	0.00	0.00
7,400.0	0.00	0.00	6,839.1	1,730.2	1,707.0	2,430.5	0.00	0.00	0.00
7,440.0	0.00	0.00	6,879.1	1,730.2	1,707.0	2,430.5	0.00	0.00	0.00
7,480.0	0.00	0.00	6,919.1	1,730.2	1,707.0	2,430.5	0.00	0.00	0.00
7,520.0	0.00	0.00	6,959.1	1,730.2	1,707.0	2,430.5	0.00	0.00	0.00
7,560.0	0.00	0.00	6,999.1	1,730.2	1,707.0	2,430.5	0.00	0.00	0.00
7,600.0	0.00	0.00	7,039.1	1,730.2	1,707.0	2,430.5	0.00	0.00	0.00
7,640.0	0.00	0.00	7,079.1	1,730.2	1,707.0	2,430.5	0.00	0.00	0.00
7,680.0	0.00	0.00	7,119.1	1,730.2	1,707.0	2,430.5	0.00	0.00	0.00
7,720.0	0.00	0.00	7,159.1	1,730.2	1,707.0	2,430.5	0.00	0.00	0.00
7,760.0	0.00	0.00	7,199.1	1,730.2	1,707.0	2,430.5	0.00	0.00	0.00
7,800.0	0.00	0.00	7,239.1	1,730.2	1,707.0	2,430.5	0.00	0.00	0.00
7,840.0	0.00	0.00	7,279.1	1,730.2	1,707.0	2,430.5	0.00	0.00	0.00
7,880.0	0.00	0.00	7,319.1	1,730.2	1,707.0	2,430.5	0.00	0.00	0.00
7,920.0	0.00	0.00	7,359.1	1,730.2	1,707.0	2,430.5	0.00	0.00	0.00
7,960.0	0.00	0.00	7,399.1	1,730.2	1,707.0	2,430.5	0.00	0.00	0.00
8,000.0	0.00	0.00	7,439.1	1,730.2	1,707.0	2,430.5	0.00	0.00	0.00
8,040.0	0.00	0.00	7,479.1	1,730.2	1,707.0	2,430.5	0.00	0.00	0.00
8,080.0	0.00	0.00	7,519.1	1,730.2	1,707.0	2,430.5	0.00	0.00	0.00
8,120.0	0.00	0.00	7,559.1	1,730.2	1,707.0	2,430.5	0.00	0.00	0.00
8,160.0	0.00	0.00	7,599.1	1,730.2	1,707.0	2,430.5	0.00	0.00	0.00
8,200.0	0.00	0.00	7,639.1	1,730.2	1,707.0	2,430.5	0.00	0.00	0.00
8,240.0	0.00	0.00	7,679.1	1,730.2	1,707.0	2,430.5	0.00	0.00	0.00

Database: Landmark
Company: Synergy Resources
Project: SEC.8-T4N-R67W
Site: Klein 44-8D Pad Sec.8-T4N-R67W
Well: Klein 43-8D
Wellbore: Wellbore #1
Design: Plan #1 (5-03-11)

Local Co-ordinate Reference: Well Klein 43-8D
TVD Reference: WELL @ 4807.0ft (Original Well Elev)
MD Reference: WELL @ 4807.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

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)
8,280.0	0.00	0.00	7,719.1	1,730.2	1,707.0	2,430.5	0.00	0.00	0.00
8,320.0	0.00	0.00	7,759.1	1,730.2	1,707.0	2,430.5	0.00	0.00	0.00
8,360.0	0.00	0.00	7,799.1	1,730.2	1,707.0	2,430.5	0.00	0.00	0.00
8,400.0	0.00	0.00	7,839.1	1,730.2	1,707.0	2,430.5	0.00	0.00	0.00
8,410.9	0.00	0.00	7,850.0	1,730.2	1,707.0	2,430.5	0.00	0.00	0.00

Targets

Target Name

- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- Shape									
LEGAL BOX 400' X 400'	0.00	0.00	6,700.0	1,731.2	1,582.0	1,361,984.40	3,164,984.32	40.325537	-104.908264
- plan misses target center by 125.0ft at 7260.9ft MD (6700.0 TVD, 1730.2 N, 1707.0 E)									
- Rectangle (sides W400.0 H400.0 D1,150.0)									
TARGET BHL 1961'F	0.00	0.00	6,200.0	1,730.2	1,707.0	1,361,984.19	3,165,109.31	40.325534	-104.907816
- plan hits target center									
- Point									

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
550.3	550.0	8 5/8"	8-5/8	12-1/4



Directional

Synergy Resources

SEC.8-T4N-R67W

Klein 44-8D Pad Sec.8-T4N-R67W

Klein 43-8D

Wellbore #1

Plan #1 (5-03-11)

Anticollision Report

12 May, 2011

Company:	Synergy Resources	Local Co-ordinate Reference:	Well Klein 43-8D
Project:	SEC.8-T4N-R67W	TVD Reference:	WELL @ 4807.0ft (Original Well Elev)
Reference Site:	Klein 44-8D Pad Sec.8-T4N-R67W	MD Reference:	WELL @ 4807.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Klein 43-8D	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 (5-03-11)	Offset TVD Reference:	Offset Datum

Reference	Plan #1 (5-03-11)		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 10,000.0ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program		Date	5/12/2011		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	8,410.9	Plan #1 (5-03-11) (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
Klein 44-8D Pad Sec.8-T4N-R67W						
Klein 44-8D - Wellbore #1 - Plan #1 (5-03-11)	300.0	299.0	20.1	19.0	17.904	CC, ES
Klein 44-8D - Wellbore #1 - Plan #1 (5-03-11)	600.0	596.7	25.9	23.4	10.521	SF
Klein 8DD - Wellbore #1 - Plan #1 (5-03-11)	300.0	299.0	19.9	18.8	17.758	CC, ES
Klein 8DD - Wellbore #1 - Plan #1 (5-03-11)	500.0	498.8	25.2	23.2	12.484	SF

Offset Design Klein 44-8D Pad Sec.8-T4N-R67W - Klein 44-8D - Wellbore #1 - Plan #1 (5-03-11)													Offset Site Error: 0.0 ft	
Survey Program: 0-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (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	91.03	-0.4	20.1	20.1					
100.0	100.0	99.0	99.0	0.1	0.1	91.03	-0.4	20.1	20.1	19.9	0.22	89.787		
200.0	200.0	199.0	199.0	0.3	0.3	91.03	-0.4	20.1	20.1	19.4	0.67	29.879		
300.0	300.0	299.0	299.0	0.6	0.6	91.03	-0.4	20.1	20.1	19.0	1.12	17.904	CC, ES	
400.0	400.0	398.3	398.3	0.8	0.8	49.01	-0.1	21.7	20.6	19.0	1.56	13.210		
500.0	499.8	497.6	497.4	1.0	1.0	55.97	0.8	26.8	22.3	20.3	1.99	11.201		
600.0	599.5	596.7	596.1	1.3	1.2	65.18	2.3	35.2	25.9	23.4	2.46	10.521	SF	
700.0	698.7	695.6	694.3	1.5	1.5	74.22	4.4	46.9	31.6	28.6	2.98	10.612		
800.0	797.5	794.2	791.8	1.8	1.8	81.70	7.0	62.0	39.8	36.2	3.58	11.102		
900.0	895.6	892.6	888.4	2.2	2.2	87.37	10.2	80.2	50.3	46.0	4.29	11.746		
1,000.0	993.1	990.6	983.9	2.6	2.6	91.52	14.0	101.7	63.2	58.1	5.09	12.405		
1,100.0	1,089.6	1,088.1	1,078.2	3.1	3.1	94.53	18.3	126.2	78.2	72.2	6.01	13.011		
1,200.0	1,185.3	1,185.2	1,171.1	3.7	3.6	96.72	23.1	153.7	95.4	88.4	7.05	13.538		
1,300.0	1,279.8	1,281.7	1,262.6	4.3	4.2	98.32	28.5	184.1	114.6	106.4	8.20	13.981		
1,400.0	1,373.2	1,378.4	1,353.2	4.9	4.9	99.61	34.3	217.4	135.7	126.2	9.46	14.340		
1,500.0	1,465.2	1,475.8	1,444.3	5.7	5.6	101.52	40.3	251.3	157.7	146.9	10.83	14.568		
1,600.0	1,555.8	1,572.7	1,535.0	6.5	6.3	103.93	46.2	285.1	180.8	168.5	12.26	14.747		
1,700.0	1,644.9	1,669.1	1,625.1	7.3	7.0	106.62	52.2	318.8	205.1	191.4	13.74	14.931		
1,737.0	1,677.5	1,704.6	1,658.3	7.7	7.2	107.65	54.3	331.1	214.5	200.2	14.29	15.009		
1,800.0	1,732.7	1,765.1	1,714.8	8.3	7.7	109.60	58.0	352.2	230.9	215.6	15.25	15.139		
1,900.0	1,820.4	1,860.9	1,804.5	9.2	8.4	112.18	63.9	385.6	257.2	240.5	16.75	15.354		
2,000.0	1,908.1	1,956.8	1,894.2	10.2	9.1	114.28	69.8	419.1	284.0	265.7	18.24	15.566		
2,100.0	1,995.8	2,052.7	1,983.8	11.1	9.8	116.02	75.7	452.5	311.0	291.3	19.72	15.769		

Company: Synergy Resources
Project: SEC.8-T4N-R67W
Reference Site: Klein 44-8D Pad Sec.8-T4N-R67W
Site Error: 0.0ft
Reference Well: Klein 43-8D
Well Error: 0.0ft
Reference Wellbore: Wellbore #1
Reference Design: Plan #1 (5-03-11)

Local Co-ordinate Reference: Well Klein 43-8D
TVD Reference: WELL @ 4807.0ft (Original Well Elev)
MD Reference: WELL @ 4807.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: Landmark
Offset TVD Reference: Offset Datum

Offset Design Klein 44-8D Pad Sec.8-T4N-R67W - Klein 44-8D - Wellbore #1 - Plan #1 (5-03-11)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference	Offset	Semi Major Axis		Distance		Warning								
Measured Depth (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	2,083.5	2,148.6	2,073.5	12.1	10.5	117.49	81.6	486.0	338.3	317.1	21.20	15.959		
2,300.0	2,171.1	2,244.4	2,163.2	13.0	11.2	118.73	87.4	519.4	365.7	343.1	22.67	16.135		
2,400.0	2,258.8	2,340.3	2,252.8	14.0	11.9	119.80	93.3	552.8	393.3	369.2	24.13	16.299		
2,500.0	2,346.5	2,436.2	2,342.5	15.0	12.6	120.74	99.2	586.3	421.0	395.4	25.59	16.450		
2,600.0	2,434.2	2,532.1	2,432.2	15.9	13.3	121.55	105.1	619.7	448.8	421.8	27.05	16.590		
2,700.0	2,521.9	2,628.0	2,521.8	16.9	14.0	122.28	110.9	653.1	476.7	448.2	28.51	16.719		
2,800.0	2,609.5	2,723.8	2,611.5	17.9	14.8	122.92	116.8	686.6	504.6	474.6	29.97	16.838		
2,900.0	2,697.2	2,819.7	2,701.1	18.8	15.5	123.49	122.7	720.0	532.6	501.1	31.42	16.949		
3,000.0	2,784.9	2,915.6	2,790.8	19.8	16.2	124.01	128.6	753.4	560.6	527.7	32.87	17.052		
3,100.0	2,872.6	3,011.5	2,880.5	20.8	16.9	124.48	134.5	786.9	588.6	554.3	34.33	17.148		
3,200.0	2,960.3	3,107.3	2,970.1	21.8	17.6	124.91	140.3	820.3	616.7	581.0	35.78	17.237		
3,300.0	3,048.0	3,203.2	3,059.8	22.7	18.3	125.30	146.2	853.8	644.9	607.6	37.23	17.321		
3,400.0	3,135.6	3,299.1	3,149.5	23.7	19.1	125.65	152.1	887.2	673.0	634.3	38.68	17.399		
3,500.0	3,223.3	3,395.0	3,239.1	24.7	19.8	125.98	158.0	920.6	701.2	661.0	40.13	17.472		
3,600.0	3,311.0	3,490.8	3,328.8	25.6	20.5	126.28	163.9	954.1	729.4	687.8	41.58	17.541		
3,700.0	3,398.7	3,586.7	3,418.5	26.6	21.2	126.56	169.7	987.5	757.6	714.5	43.03	17.605		
3,800.0	3,486.4	3,682.6	3,508.1	27.6	21.9	126.83	175.6	1,020.9	785.8	741.3	44.48	17.666		
3,900.0	3,574.0	3,778.5	3,597.8	28.6	22.7	127.07	181.5	1,054.4	814.0	768.1	45.93	17.723		
4,000.0	3,661.7	3,874.3	3,687.5	29.5	23.4	127.29	187.4	1,087.8	842.3	794.9	47.38	17.778		
4,100.0	3,749.4	3,970.2	3,777.1	30.5	24.1	127.50	193.3	1,121.2	870.5	821.7	48.83	17.829		
4,200.0	3,837.1	4,066.1	3,866.8	31.5	24.8	127.70	199.1	1,154.7	898.8	848.5	50.28	17.877		
4,300.0	3,924.8	4,162.0	3,956.4	32.5	25.5	127.89	205.0	1,188.1	927.1	875.4	51.72	17.923		
4,400.0	4,012.4	4,257.9	4,046.1	33.4	26.2	128.06	210.9	1,221.6	955.4	902.2	53.17	17.967		
4,500.0	4,100.1	4,353.7	4,135.8	34.4	27.0	128.23	216.8	1,255.0	983.7	929.0	54.62	18.009		
4,600.0	4,187.8	4,449.6	4,225.4	35.4	27.7	128.38	222.6	1,288.4	1,012.0	955.9	56.07	18.049		
4,700.0	4,275.5	4,545.5	4,315.1	36.4	28.4	128.53	228.5	1,321.9	1,040.3	982.8	57.52	18.086		
4,800.0	4,363.2	4,641.4	4,404.8	37.3	29.1	128.67	234.4	1,355.3	1,068.6	1,009.6	58.96	18.122		
4,900.0	4,450.9	4,737.2	4,494.4	38.3	29.8	128.80	240.3	1,388.7	1,096.9	1,036.5	60.41	18.157		
5,000.0	4,538.5	4,833.1	4,584.1	39.3	30.6	128.93	246.2	1,422.2	1,125.2	1,063.4	61.86	18.190		
5,100.0	4,626.2	4,929.0	4,673.8	40.3	31.3	129.05	252.0	1,455.6	1,153.6	1,090.2	63.31	18.221		
5,200.0	4,713.9	5,024.9	4,763.4	41.2	32.0	129.16	257.9	1,489.0	1,181.9	1,117.1	64.76	18.251		
5,300.0	4,801.6	5,120.7	4,853.1	42.2	32.7	129.27	263.8	1,522.5	1,210.2	1,144.0	66.20	18.280		
5,323.9	4,822.5	5,143.6	4,874.5	42.4	32.9	129.29	265.2	1,530.5	1,217.0	1,150.4	66.55	18.287		
5,400.0	4,889.7	5,213.7	4,940.2	43.1	33.4	129.70	269.4	1,554.3	1,238.0	1,170.5	67.51	18.338		
5,500.0	4,979.4	5,305.2	5,026.9	43.8	33.8	130.21	274.5	1,583.2	1,264.1	1,195.5	68.56	18.439		
5,600.0	5,070.6	5,397.0	5,114.8	44.5	34.3	130.70	279.1	1,609.4	1,288.4	1,218.9	69.50	18.537		
5,700.0	5,163.2	5,489.0	5,203.7	45.1	34.7	131.18	283.2	1,632.8	1,310.9	1,240.5	70.35	18.632		
5,800.0	5,257.1	5,581.2	5,293.4	45.7	35.1	131.64	286.8	1,653.4	1,331.5	1,260.4	71.11	18.726		
5,900.0	5,352.0	5,673.5	5,384.0	46.2	35.4	132.08	290.0	1,671.3	1,350.3	1,278.6	71.76	18.818		
6,000.0	5,448.0	5,766.0	5,475.2	46.6	35.6	132.51	292.6	1,686.2	1,367.3	1,295.0	72.31	18.909		
6,100.0	5,545.0	5,858.5	5,566.9	47.1	35.9	132.93	294.7	1,698.3	1,382.3	1,309.6	72.75	19.001		
6,200.0	5,642.7	5,951.0	5,658.9	47.4	36.1	133.34	296.3	1,707.4	1,395.5	1,322.4	73.09	19.092		
6,300.0	5,741.1	6,043.4	5,751.1	47.7	36.2	133.74	297.4	1,713.6	1,406.9	1,333.5	73.33	19.185		
6,400.0	5,840.1	6,135.8	5,843.4	48.0	36.3	134.13	298.0	1,716.9	1,416.3	1,342.8	73.47	19.277		
6,500.0	5,939.5	6,230.9	5,938.5	48.2	36.4	134.51	298.1	1,717.4	1,423.8	1,350.3	73.52	19.367		
6,600.0	6,039.2	6,330.6	6,038.2	48.4	36.5	134.80	298.1	1,717.4	1,428.9	1,355.4	73.55	19.429		
6,700.0	6,139.1	6,430.5	6,138.1	48.5	36.5	134.94	298.1	1,717.4	1,431.7	1,358.1	73.59	19.455		
6,760.9	6,200.0	6,491.4	6,199.0	48.5	36.6	134.98	298.1	1,717.4	1,432.1	1,358.5	73.62	19.454		
6,800.0	6,239.1	6,530.5	6,238.1	48.5	36.6	134.98	298.1	1,717.4	1,432.1	1,358.5	73.68	19.438		
6,900.0	6,339.1	6,630.5	6,338.1	48.6	36.7	134.98	298.1	1,717.4	1,432.1	1,358.3	73.83	19.396		
7,000.0	6,439.1	6,730.5	6,438.1	48.6	36.8	134.98	298.1	1,717.4	1,432.1	1,358.1	74.00	19.354		
7,100.0	6,539.1	6,830.5	6,538.1	48.7	36.9	134.98	298.1	1,717.4	1,432.1	1,358.0	74.16	19.311		

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

Company: Synergy Resources
Project: SEC.8-T4N-R67W
Reference Site: Klein 44-8D Pad Sec.8-T4N-R67W
Site Error: 0.0ft
Reference Well: Klein 43-8D
Well Error: 0.0ft
Reference Wellbore: Wellbore #1
Reference Design: Plan #1 (5-03-11)

Local Co-ordinate Reference: Well Klein 43-8D
TVD Reference: WELL @ 4807.0ft (Original Well Elev)
MD Reference: WELL @ 4807.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: Landmark
Offset TVD Reference: Offset Datum

Offset Design Klein 44-8D Pad Sec.8-T4N-R67W - Klein 44-8D - Wellbore #1 - Plan #1 (5-03-11)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference	Offset	Semi Major Axis		Distance										Warning
Measured Depth (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		
7,200.0	6,639.1	6,930.5	6,638.1	48.8	37.0	179.58	298.1	1,717.4	1,432.1	1,357.8	74.33	19.268		
7,300.0	6,739.1	7,030.5	6,738.1	48.8	37.0	179.58	298.1	1,717.4	1,432.1	1,357.6	74.50	19.224		
7,400.0	6,839.1	7,130.5	6,838.1	48.9	37.1	179.58	298.1	1,717.4	1,432.1	1,357.5	74.67	19.180		
7,500.0	6,939.1	7,230.5	6,938.1	49.0	37.2	179.58	298.1	1,717.4	1,432.1	1,357.3	74.84	19.135		
7,600.0	7,039.1	7,330.5	7,038.1	49.0	37.3	179.58	298.1	1,717.4	1,432.1	1,357.1	75.02	19.091		
7,700.0	7,139.1	7,430.5	7,138.1	49.1	37.4	179.58	298.1	1,717.4	1,432.1	1,356.9	75.20	19.045		
7,800.0	7,239.1	7,530.5	7,238.1	49.2	37.5	179.58	298.1	1,717.4	1,432.1	1,356.8	75.38	19.000		
7,900.0	7,339.1	7,630.5	7,338.1	49.2	37.6	179.58	298.1	1,717.4	1,432.1	1,356.6	75.56	18.954		
8,000.0	7,439.1	7,730.5	7,438.1	49.3	37.7	179.58	298.1	1,717.4	1,432.1	1,356.4	75.74	18.908		
8,100.0	7,539.1	7,830.5	7,538.1	49.4	37.8	179.58	298.1	1,717.4	1,432.1	1,356.2	75.93	18.861		
8,200.0	7,639.1	7,930.5	7,638.1	49.4	37.9	179.58	298.1	1,717.4	1,432.1	1,356.0	76.12	18.814		
8,300.0	7,739.1	8,030.5	7,738.1	49.5	38.0	179.58	298.1	1,717.4	1,432.1	1,355.8	76.31	18.767		
8,400.0	7,839.1	8,130.5	7,838.1	49.6	38.1	179.58	298.1	1,717.4	1,432.1	1,355.6	76.51	18.719		
8,410.9	7,850.0	8,141.4	7,849.0	49.6	38.1	179.58	298.1	1,717.4	1,432.1	1,355.6	76.53	18.714		

Company: Synergy Resources
Project: SEC.8-T4N-R67W
Reference Site: Klein 44-8D Pad Sec.8-T4N-R67W
Site Error: 0.0ft
Reference Well: Klein 43-8D
Well Error: 0.0ft
Reference Wellbore: Wellbore #1
Reference Design: Plan #1 (5-03-11)

Local Co-ordinate Reference: Well Klein 43-8D
TVD Reference: WELL @ 4807.0ft (Original Well Elev)
MD Reference: WELL @ 4807.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: Landmark
Offset TVD Reference: Offset Datum

Offset Design Klein 44-8D Pad Sec.8-T4N-R67W - Klein 8DD - Wellbore #1 - Plan #1 (5-03-11)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference	Offset	Semi Major Axis		Distance		Warning								
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Tooface (")	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	-88.95	0.4	-19.9	19.9	19.9	0.00	N/A		
100.0	100.0	99.0	99.0	0.1	0.1	-88.95	0.4	-19.9	19.9	19.7	0.22	89.055		
200.0	200.0	199.0	199.0	0.3	0.3	-88.95	0.4	-19.9	19.9	19.2	0.67	29.636		
300.0	300.0	299.0	299.0	0.6	0.6	-88.95	0.4	-19.9	19.9	18.8	1.12	17.758 CC, ES		
400.0	400.0	399.0	399.0	0.8	0.8	-136.97	0.4	-19.9	21.2	19.6	1.57	13.477		
500.0	499.8	498.8	498.8	1.0	1.0	-145.06	0.4	-19.9	25.2	23.2	2.02	12.484 SF		
600.0	599.5	598.5	598.5	1.3	1.2	-153.75	0.4	-19.9	32.8	30.3	2.48	13.221		
700.0	698.7	697.7	697.7	1.5	1.5	-160.70	0.4	-19.9	44.0	41.1	2.94	14.994		
800.0	797.5	798.4	798.3	1.8	1.7	-165.23	1.6	-18.8	57.5	54.1	3.39	16.954		
900.0	895.6	899.6	899.4	2.2	1.9	-167.91	5.5	-15.3	71.1	67.3	3.84	18.537		
1,000.0	993.1	1,001.3	1,000.7	2.6	2.1	-169.61	12.1	-9.3	84.8	80.5	4.29	19.770		
1,100.0	1,089.6	1,103.5	1,102.2	3.1	2.4	-170.74	21.4	-0.9	98.6	93.8	4.76	20.720		
1,200.0	1,185.3	1,206.3	1,203.6	3.7	2.7	-171.50	33.5	10.0	112.3	107.0	5.24	21.436		
1,300.0	1,279.8	1,309.6	1,305.0	4.3	3.0	-172.01	48.4	23.3	125.9	120.2	5.74	21.955		
1,400.0	1,373.2	1,413.4	1,406.0	4.9	3.4	-172.34	66.0	39.2	139.5	133.2	6.25	22.305		
1,500.0	1,465.2	1,517.7	1,506.6	5.7	3.9	-172.55	86.5	57.7	152.9	146.1	6.79	22.509		
1,600.0	1,555.8	1,622.6	1,606.7	6.5	4.4	-172.65	109.8	78.7	166.2	158.9	7.36	22.592		
1,700.0	1,644.9	1,723.8	1,702.4	7.3	5.0	-172.71	134.3	100.8	180.1	172.2	7.94	22.700		
1,737.0	1,677.5	1,760.3	1,736.8	7.7	5.2	-172.76	143.2	108.9	186.1	177.9	8.15	22.839		
1,800.0	1,732.7	1,822.4	1,795.5	8.3	5.6	-172.88	158.4	122.5	196.6	188.0	8.57	22.923		
1,900.0	1,820.4	1,921.0	1,888.6	9.2	6.2	-173.03	182.5	144.3	213.2	204.0	9.25	23.048		
2,000.0	1,908.1	2,019.6	1,981.7	10.2	6.8	-173.17	206.6	166.0	229.9	219.9	9.93	23.137		
2,100.0	1,995.8	2,118.2	2,074.9	11.1	7.4	-173.28	230.7	187.7	246.5	235.9	10.63	23.198		
2,200.0	2,083.5	2,216.8	2,168.0	12.1	8.0	-173.38	254.8	209.4	263.2	251.8	11.32	23.240		
2,300.0	2,171.1	2,315.4	2,261.1	13.0	8.7	-173.47	278.9	231.1	279.8	267.8	12.03	23.268		
2,400.0	2,258.8	2,414.0	2,354.2	14.0	9.3	-173.55	303.0	252.8	296.5	283.7	12.73	23.286		
2,500.0	2,346.5	2,512.6	2,447.3	15.0	9.9	-173.62	327.1	274.5	313.1	299.7	13.44	23.296		
2,600.0	2,434.2	2,611.2	2,540.4	15.9	10.6	-173.69	351.2	296.3	329.8	315.6	14.15	23.300		
2,700.0	2,521.9	2,709.8	2,633.5	16.9	11.2	-173.74	375.3	318.0	346.4	331.6	14.87	23.300		
2,800.0	2,609.5	2,808.4	2,726.7	17.9	11.9	-173.80	399.4	339.7	363.1	347.5	15.59	23.297		
2,900.0	2,697.2	2,907.1	2,819.8	18.8	12.5	-173.84	423.5	361.4	379.7	363.4	16.30	23.291		
3,000.0	2,784.9	3,005.7	2,912.9	19.8	13.1	-173.89	447.6	383.1	396.4	379.4	17.02	23.284		
3,100.0	2,872.6	3,104.3	3,006.0	20.8	13.8	-173.93	471.7	404.8	413.1	395.3	17.75	23.275		
3,200.0	2,960.3	3,202.9	3,099.1	21.8	14.4	-173.97	495.8	426.6	429.7	411.2	18.47	23.266		
3,300.0	3,048.0	3,301.5	3,192.2	22.7	15.1	-174.00	519.9	448.3	446.4	427.2	19.19	23.256		
3,400.0	3,135.6	3,400.1	3,285.3	23.7	15.7	-174.03	544.0	470.0	463.0	443.1	19.92	23.246		
3,500.0	3,223.3	3,498.7	3,378.5	24.7	16.4	-174.06	568.1	491.7	479.7	459.0	20.64	23.235		
3,600.0	3,311.0	3,597.3	3,471.6	25.6	17.0	-174.09	592.1	513.4	496.3	475.0	21.37	23.224		
3,700.0	3,398.7	3,695.9	3,564.7	26.6	17.7	-174.12	616.2	535.1	513.0	490.9	22.10	23.213		
3,800.0	3,486.4	3,794.5	3,657.8	27.6	18.3	-174.14	640.3	556.9	529.6	506.8	22.83	23.202		
3,900.0	3,574.0	3,893.1	3,750.9	28.6	19.0	-174.16	664.4	578.6	546.3	522.7	23.56	23.192		
4,000.0	3,661.7	3,991.7	3,844.0	29.5	19.6	-174.18	688.5	600.3	563.0	538.7	24.29	23.181		
4,100.0	3,749.4	4,090.3	3,937.2	30.5	20.3	-174.20	712.6	622.0	579.6	554.6	25.02	23.171		
4,200.0	3,837.1	4,188.9	4,030.3	31.5	20.9	-174.22	736.7	643.7	596.3	570.5	25.75	23.160		
4,300.0	3,924.8	4,287.5	4,123.4	32.5	21.6	-174.24	760.8	665.4	612.9	586.5	26.48	23.150		
4,400.0	4,012.4	4,386.1	4,216.5	33.4	22.3	-174.26	784.9	687.1	629.6	602.4	27.21	23.140		
4,500.0	4,100.1	4,484.7	4,309.6	34.4	22.9	-174.27	809.0	708.9	646.2	618.3	27.94	23.131		
4,600.0	4,187.8	4,583.3	4,402.7	35.4	23.6	-174.29	833.1	730.6	662.9	634.2	28.67	23.121		
4,700.0	4,275.5	4,681.9	4,495.8	36.4	24.2	-174.30	857.2	752.3	679.6	650.2	29.40	23.112		
4,800.0	4,363.2	4,780.5	4,589.0	37.3	24.9	-174.32	881.3	774.0	696.2	666.1	30.14	23.103		
4,900.0	4,450.9	4,879.1	4,682.1	38.3	25.5	-174.33	905.4	795.7	712.9	682.0	30.87	23.094		
5,000.0	4,538.5	4,977.7	4,775.2	39.3	26.2	-174.34	929.5	817.4	729.5	697.9	31.60	23.086		

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

Company: Synergy Resources
Project: SEC.8-T4N-R67W
Reference Site: Klein 44-8D Pad Sec.8-T4N-R67W
Site Error: 0.0ft
Reference Well: Klein 43-8D
Well Error: 0.0ft
Reference Wellbore: Wellbore #1
Reference Design: Plan #1 (5-03-11)

Local Co-ordinate Reference: Well Klein 43-8D
TVD Reference: WELL @ 4807.0ft (Original Well Elev)
MD Reference: WELL @ 4807.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: Landmark
Offset TVD Reference: Offset Datum

Offset Design Klein 44-8D Pad Sec.8-T4N-R67W - Klein 8DD - Wellbore #1 - Plan #1 (5-03-11)													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		
5,100.0	4,626.2	5,076.3	4,868.3	40.3	26.8	-174.36	953.6	839.2	746.2	713.9	32.33	23.078		
5,200.0	4,713.9	5,174.1	4,960.6	41.2	27.5	-174.37	977.5	860.7	762.8	729.8	33.06	23.072		
5,300.0	4,801.6	5,251.7	5,034.3	42.2	27.9	-174.39	995.6	877.1	780.9	747.2	33.70	23.176		
5,323.9	4,822.5	5,270.1	5,051.9	42.4	28.0	-174.40	999.7	880.7	785.6	751.8	33.84	23.214		
5,400.0	4,889.7	5,328.7	5,108.0	43.1	28.2	-174.45	1,012.2	892.0	800.7	766.3	34.38	23.290		
5,500.0	4,979.4	5,400.0	5,176.8	43.8	28.6	-174.52	1,026.2	904.6	819.7	784.7	35.00	23.421		
5,600.0	5,070.6	5,481.8	5,256.2	44.5	28.9	-174.60	1,040.7	917.7	837.9	802.3	35.58	23.550		
5,700.0	5,163.2	5,558.0	5,330.6	45.1	29.2	-174.66	1,052.7	928.5	855.3	819.2	36.08	23.704		
5,800.0	5,257.1	5,633.9	5,405.2	45.7	29.4	-174.73	1,063.2	937.9	871.8	835.3	36.52	23.873		
5,900.0	5,352.0	5,700.0	5,470.5	46.2	29.6	-174.79	1,071.1	945.0	887.6	850.7	36.87	24.073		
6,000.0	5,448.0	5,785.1	5,554.8	46.6	29.8	-174.86	1,079.6	952.7	902.4	865.2	37.19	24.263		
6,100.0	5,545.0	5,860.4	5,629.7	47.1	30.0	-174.92	1,085.6	958.2	916.4	879.0	37.42	24.487		
6,200.0	5,642.7	5,935.6	5,704.6	47.4	30.1	-174.98	1,090.2	962.3	929.5	891.9	37.59	24.728		
6,300.0	5,741.1	6,000.0	5,768.9	47.7	30.2	-175.03	1,092.9	964.7	941.9	904.2	37.67	25.001		
6,400.0	5,840.1	6,085.4	5,854.2	48.0	30.3	-175.10	1,094.9	966.5	953.2	915.5	37.72	25.272		
6,500.0	5,939.5	6,169.7	5,938.5	48.2	30.4	-175.16	1,095.1	966.7	963.5	925.8	37.70	25.558		
6,600.0	6,039.2	6,269.4	6,038.2	48.4	30.5	-175.21	1,095.1	966.7	970.8	933.2	37.66	25.780		
6,700.0	6,139.1	6,369.3	6,138.1	48.5	30.6	-175.23	1,095.1	966.7	974.7	937.1	37.57	25.942		
6,760.9	6,200.0	6,430.2	6,199.0	48.5	30.7	-130.62	1,095.1	966.7	975.3	937.8	37.50	26.012		
6,800.0	6,239.1	6,469.3	6,238.1	48.5	30.7	-130.62	1,095.1	966.7	975.3	937.7	37.61	25.935		
6,900.0	6,339.1	6,569.3	6,338.1	48.6	30.8	-130.62	1,095.1	966.7	975.3	937.4	37.90	25.733		
7,000.0	6,439.1	6,669.3	6,438.1	48.6	30.9	-130.62	1,095.1	966.7	975.3	937.1	38.20	25.532		
7,100.0	6,539.1	6,769.3	6,538.1	48.7	31.0	-130.62	1,095.1	966.7	975.3	936.8	38.50	25.333		
7,200.0	6,639.1	6,869.3	6,638.1	48.8	31.1	-130.62	1,095.1	966.7	975.3	936.5	38.80	25.134		
7,300.0	6,739.1	6,969.3	6,738.1	48.8	31.2	-130.62	1,095.1	966.7	975.3	936.2	39.11	24.938		
7,400.0	6,839.1	7,069.3	6,838.1	48.9	31.3	-130.62	1,095.1	966.7	975.3	935.9	39.42	24.742		
7,500.0	6,939.1	7,169.3	6,938.1	49.0	31.4	-130.62	1,095.1	966.7	975.3	935.6	39.73	24.548		
7,600.0	7,039.1	7,269.3	7,038.1	49.0	31.5	-130.62	1,095.1	966.7	975.3	935.3	40.05	24.356		
7,700.0	7,139.1	7,369.3	7,138.1	49.1	31.6	-130.62	1,095.1	966.7	975.3	935.0	40.36	24.165		
7,800.0	7,239.1	7,469.3	7,238.1	49.2	31.7	-130.62	1,095.1	966.7	975.3	934.6	40.68	23.975		
7,900.0	7,339.1	7,569.3	7,338.1	49.2	31.8	-130.62	1,095.1	966.7	975.3	934.3	41.00	23.787		
8,000.0	7,439.1	7,669.3	7,438.1	49.3	31.9	-130.62	1,095.1	966.7	975.3	934.0	41.33	23.601		
8,100.0	7,539.1	7,769.3	7,538.1	49.4	32.0	-130.62	1,095.1	966.7	975.3	933.7	41.65	23.416		
8,200.0	7,639.1	7,869.3	7,638.1	49.4	32.1	-130.62	1,095.1	966.7	975.3	933.3	41.98	23.233		
8,300.0	7,739.1	7,969.3	7,738.1	49.5	32.3	-130.62	1,095.1	966.7	975.3	933.0	42.31	23.051		
8,400.0	7,839.1	8,069.3	7,838.1	49.6	32.4	-130.62	1,095.1	966.7	975.3	932.7	42.64	22.872		
8,410.9	7,850.0	8,080.2	7,849.0	49.6	32.4	-130.62	1,095.1	966.7	975.3	932.6	42.68	22.852		

Company: Synergy Resources
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Well Error: 0.0ft
Reference Wellbore: Wellbore #1
Reference Design: Plan #1 (5-03-11)

Local Co-ordinate Reference: Well Klein 43-8D
TVD Reference: WELL @ 4807.0ft (Original Well Elev)
MD Reference: WELL @ 4807.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: Landmark
Offset TVD Reference: Offset Datum

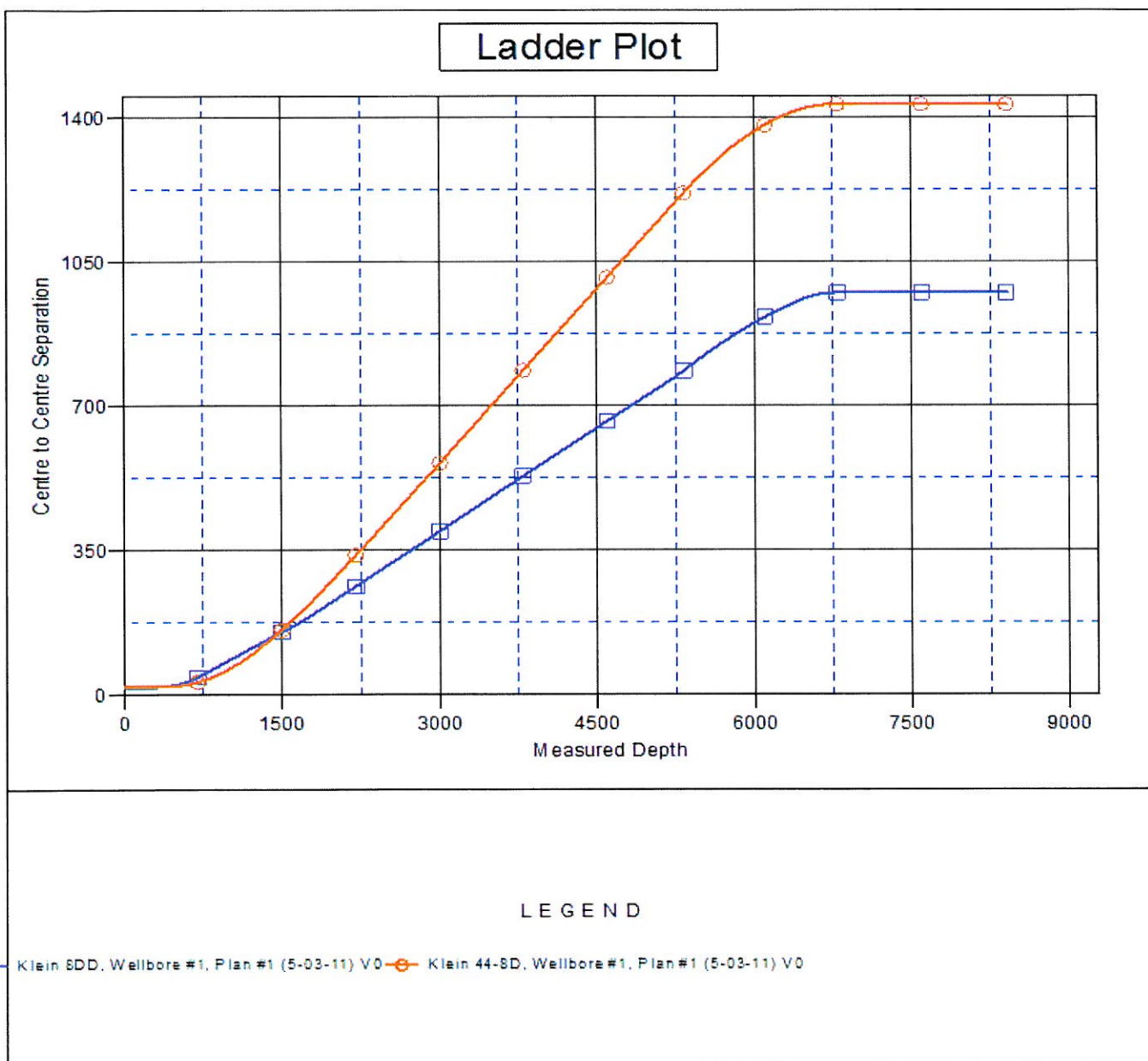
Reference Depths are relative to WELL @ 4807.0ft (Original Well Elev) Coordinates are relative to: Klein 43-8D

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: 0.38°



Company: Synergy Resources
Project: SEC.8-T4N-R67W
Reference Site: Klein 44-8D Pad Sec.8-T4N-R67W
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