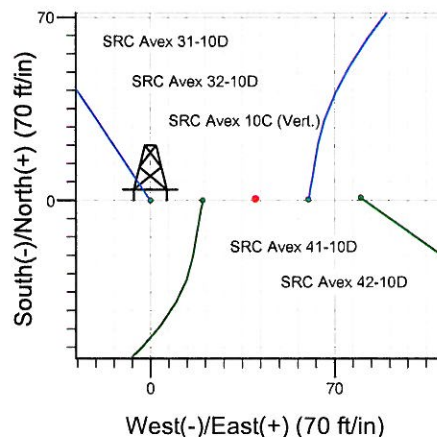
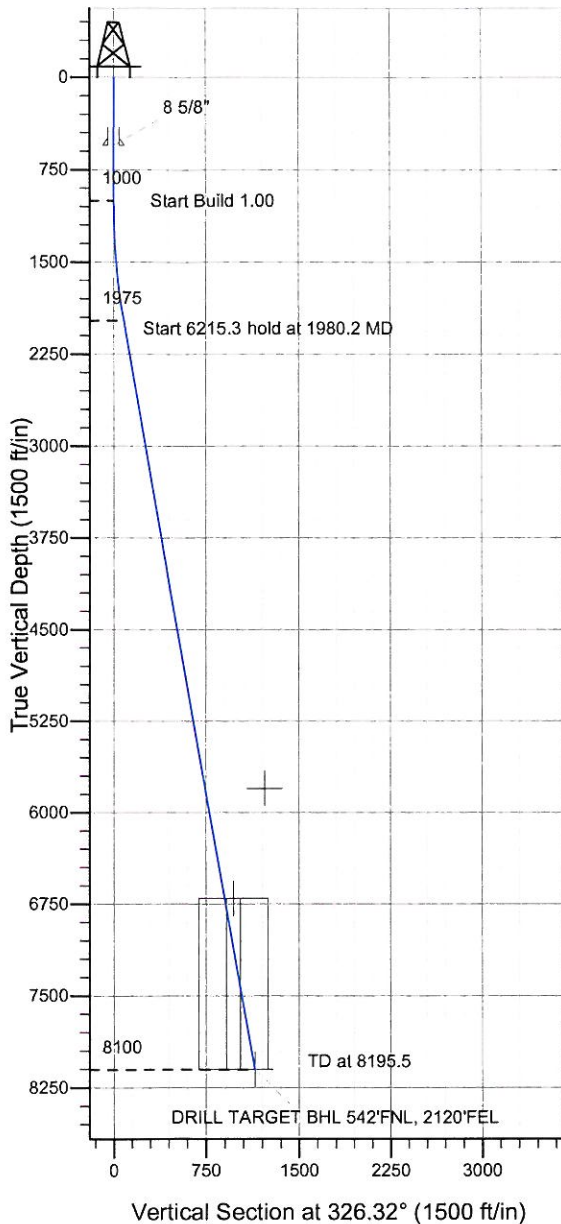
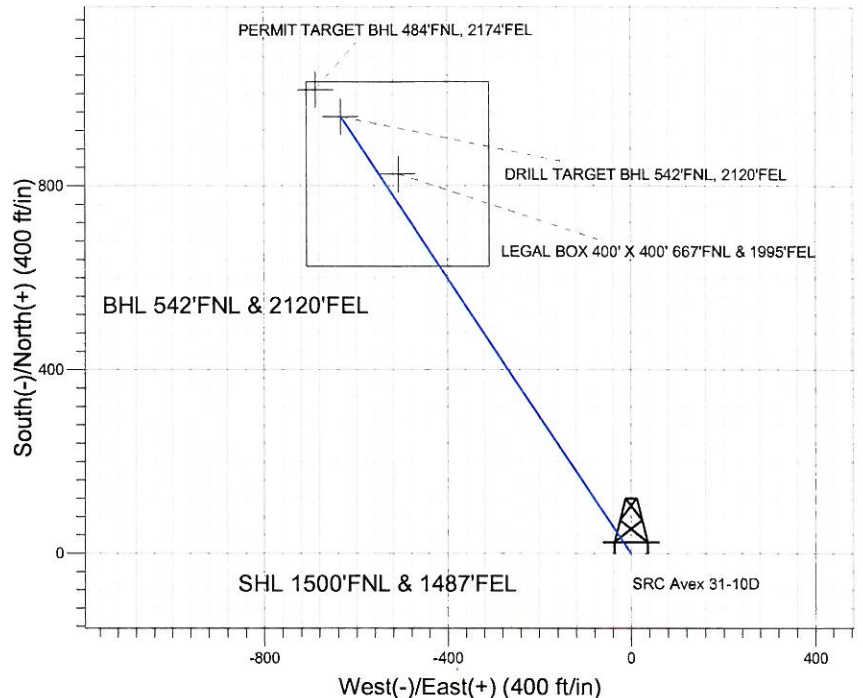


ENSIGN Directional

Well Name: SRC Avex 31-10D

Surface Location: SRC Avex 42-10D Pad Sec.10-T4N-R68W
 North American Datum 1983 US State Plane 1983 Colorado Northern Zone
 Ground Elevation: 5038.0
 +N/-S +E/-W Northing Easting Latitude Longitude Slot
 0.0 0.0 1363965.42 3143546.34 40.331342 -104.985111
 Original Well Elev WELL @ 5051.0ft (Original Well Elev)

Synergy Resources



SRC Avex 42-10D Pad Sec.10-T4N-R68W
 SRC Avex 31-10D
 Plan #1 (7-12-11)
 10:08, July 26 2011



Azimuths to True North
 Magnetic North: 8.96°

Magnetic Field
 Strength: 53057.8snT
 Dip Angle: 66.95°
 Date: 7/26/2011
 Model: IGRF2010

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
PERMIT TARGET BHL 484'FNL, 2174'FEL	5800.0	1008.1	-687.2	40.334109	-104.987576	Point
LEGAL BOX 400' X 400' 667'FNL & 1995'FEL	6700.0	825.1	-508.2	40.333607	-104.986934	Rectangle (Sides: L400.0 W400.0)
DRILL TARGET BHL 542'FNL, 2120'FEL	8100.0	950.1	-633.2	40.333950	-104.987382	Point

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1000.0	0.00	0.00	1000.0	0.0	0.0	0.00	0.00	0.0	
3	1980.2	9.80	326.32	1975.4	69.6	-46.4	1.00	326.32	83.6	
4	8195.5	9.80	326.32	8100.0	950.1	-633.2	0.00	0.00	1141.8	DRILL TARGET BHL 542'FNL, 2120'FEL



Directional

Synergy Resources

SEC.10-T4N-R68W

SRC Avex 42-10D Pad Sec.10-T4N-R68W

SRC Avex 31-10D

Wellbore #1

Plan: Plan #1 (7-12-11)

Standard Planning Report

26 July, 2011

Database: Landmark
Company: Synergy Resources
Project: SEC.10-T4N-R68W
Site: SRC Avex 42-10D Pad Sec.10-T4N-R68W
Well: SRC Avex 31-10D
Wellbore: Wellbore #1
Design: Plan #1 (7-12-11)

Local Co-ordinate Reference: Well SRC Avex 31-10D
TVD Reference: WELL @ 5051.0ft (Original Well Elev)
MD Reference: WELL @ 5051.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

Project SEC.10-T4N-R68W, Weld County, Colorado

Map System: US State Plane 1983
Geo Datum: North American Datum 1983
Map Zone: Colorado Northern Zone

System Datum: Mean Sea Level
 Using Well Reference Point
 Using geodetic scale factor

Site SRC Avex 42-10D Pad Sec.10-T4N-R68W

Site Position: Northing: 1,363,966.99 ft Latitude: 40.331345
From: Lat/Long Easting: 3,143,626.35 ft Longitude: -104.984824
Position Uncertainty: 0.0 ft Slot Radius: " Grid Convergence: 0.33 °

Well SRC Avex 31-10D

Well Position +N/-S -1.1 ft Northing: 1,363,965.42 ft Latitude: 40.331342
 +E/-W -80.0 ft Easting: 3,143,546.34 ft Longitude: -104.985111
Position Uncertainty 0.0 ft Wellhead Elevation: ft Ground Level: 5,038.0 ft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	7/26/2011	8.96	66.95	53,058

Design Plan #1 (7-12-11)

Audit Notes:

Version: Phase: PROTOTYPE Tie On Depth: 0.0

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	326.32

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,980.2	9.80	326.32	1,975.4	69.6	-46.4	1.00	1.00	0.00	326.32	
8,195.5	9.80	326.32	8,100.0	950.1	-633.2	0.00	0.00	0.00	0.00	DRILL TARGET B-

Database: Landmark
Company: Synergy Resources
Project: SEC.10-T4N-R68W
Site: SRC Avex 42-10D Pad Sec.10-T4N-R68W
Well: SRC Avex 31-10D
Wellbore: Wellbore #1
Design: Plan #1 (7-12-11)

Local Co-ordinate Reference: Well SRC Avex 31-10D
TVD Reference: WELL @ 5051.0ft (Original Well Elev)
MD Reference: WELL @ 5051.0ft (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
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
550.0	0.00	0.00	550.0	0.0	0.0	0.0	0.00	0.00	0.00
8 5/8"									
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
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	0.40	326.32	1,040.0	0.1	-0.1	0.1	1.00	1.00	0.00
1,080.0	0.80	326.32	1,080.0	0.5	-0.3	0.6	1.00	1.00	0.00
1,120.0	1.20	326.32	1,120.0	1.0	-0.7	1.3	1.00	1.00	0.00
1,160.0	1.60	326.32	1,160.0	1.9	-1.2	2.2	1.00	1.00	0.00
1,200.0	2.00	326.32	1,200.0	2.9	-1.9	3.5	1.00	1.00	0.00
1,240.0	2.40	326.32	1,239.9	4.2	-2.8	5.0	1.00	1.00	0.00
1,280.0	2.80	326.32	1,279.9	5.7	-3.8	6.8	1.00	1.00	0.00
1,320.0	3.20	326.32	1,319.8	7.4	-5.0	8.9	1.00	1.00	0.00
1,360.0	3.60	326.32	1,359.8	9.4	-6.3	11.3	1.00	1.00	0.00
1,400.0	4.00	326.32	1,399.7	11.6	-7.7	14.0	1.00	1.00	0.00
1,440.0	4.40	326.32	1,439.6	14.1	-9.4	16.9	1.00	1.00	0.00
1,480.0	4.80	326.32	1,479.4	16.7	-11.1	20.1	1.00	1.00	0.00
1,520.0	5.20	326.32	1,519.3	19.6	-13.1	23.6	1.00	1.00	0.00
1,560.0	5.60	326.32	1,559.1	22.8	-15.2	27.3	1.00	1.00	0.00
1,600.0	6.00	326.32	1,598.9	26.1	-17.4	31.4	1.00	1.00	0.00
1,640.0	6.40	326.32	1,638.7	29.7	-19.8	35.7	1.00	1.00	0.00
1,680.0	6.80	326.32	1,678.4	33.5	-22.4	40.3	1.00	1.00	0.00
1,720.0	7.20	326.32	1,718.1	37.6	-25.1	45.2	1.00	1.00	0.00
1,760.0	7.60	326.32	1,757.8	41.9	-27.9	50.3	1.00	1.00	0.00
1,800.0	8.00	326.32	1,797.4	46.4	-30.9	55.8	1.00	1.00	0.00
1,840.0	8.40	326.32	1,837.0	51.1	-34.1	61.5	1.00	1.00	0.00
1,880.0	8.80	326.32	1,876.5	56.1	-37.4	67.4	1.00	1.00	0.00
1,920.0	9.20	326.32	1,916.1	61.3	-40.9	73.7	1.00	1.00	0.00
1,960.0	9.60	326.32	1,955.5	66.8	-44.5	80.2	1.00	1.00	0.00
1,980.2	9.80	326.32	1,975.4	69.6	-46.4	83.6	1.00	1.00	0.00
2,000.0	9.80	326.32	1,994.9	72.4	-48.3	87.0	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well SRC Avex 31-10D
Company:	Synergy Resources	TVD Reference:	WELL @ 5051.0ft (Original Well Elev)
Project:	SEC.10-T4N-R68W	MD Reference:	WELL @ 5051.0ft (Original Well Elev)
Site:	SRC Avex 42-10D Pad Sec.10-T4N-R68W	North Reference:	True
Well:	SRC Avex 31-10D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (7-12-11)		

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)
2,040.0	9.80	326.32	2,034.4	78.1	-52.0	93.8	0.00	0.00	0.00
2,080.0	9.80	326.32	2,073.8	83.7	-55.8	100.6	0.00	0.00	0.00
2,120.0	9.80	326.32	2,113.2	89.4	-59.6	107.4	0.00	0.00	0.00
2,160.0	9.80	326.32	2,152.6	95.1	-63.4	114.3	0.00	0.00	0.00
2,200.0	9.80	326.32	2,192.0	100.7	-67.1	121.1	0.00	0.00	0.00
2,240.0	9.80	326.32	2,231.4	106.4	-70.9	127.9	0.00	0.00	0.00
2,280.0	9.80	326.32	2,270.8	112.1	-74.7	134.7	0.00	0.00	0.00
2,320.0	9.80	326.32	2,310.3	117.7	-78.5	141.5	0.00	0.00	0.00
2,360.0	9.80	326.32	2,349.7	123.4	-82.2	148.3	0.00	0.00	0.00
2,400.0	9.80	326.32	2,389.1	129.1	-86.0	155.1	0.00	0.00	0.00
2,440.0	9.80	326.32	2,428.5	134.7	-89.8	161.9	0.00	0.00	0.00
2,480.0	9.80	326.32	2,467.9	140.4	-93.6	168.7	0.00	0.00	0.00
2,520.0	9.80	326.32	2,507.3	146.1	-97.4	175.5	0.00	0.00	0.00
2,560.0	9.80	326.32	2,546.8	151.7	-101.1	182.3	0.00	0.00	0.00
2,600.0	9.80	326.32	2,586.2	157.4	-104.9	189.2	0.00	0.00	0.00
2,640.0	9.80	326.32	2,625.6	163.1	-108.7	196.0	0.00	0.00	0.00
2,680.0	9.80	326.32	2,665.0	168.7	-112.5	202.8	0.00	0.00	0.00
2,720.0	9.80	326.32	2,704.4	174.4	-116.2	209.6	0.00	0.00	0.00
2,760.0	9.80	326.32	2,743.8	180.1	-120.0	216.4	0.00	0.00	0.00
2,800.0	9.80	326.32	2,783.3	185.7	-123.8	223.2	0.00	0.00	0.00
2,840.0	9.80	326.32	2,822.7	191.4	-127.6	230.0	0.00	0.00	0.00
2,880.0	9.80	326.32	2,862.1	197.1	-131.3	236.8	0.00	0.00	0.00
2,920.0	9.80	326.32	2,901.5	202.7	-135.1	243.6	0.00	0.00	0.00
2,960.0	9.80	326.32	2,940.9	208.4	-138.9	250.4	0.00	0.00	0.00
3,000.0	9.80	326.32	2,980.3	214.1	-142.7	257.3	0.00	0.00	0.00
3,040.0	9.80	326.32	3,019.8	219.7	-146.4	264.1	0.00	0.00	0.00
3,080.0	9.80	326.32	3,059.2	225.4	-150.2	270.9	0.00	0.00	0.00
3,120.0	9.80	326.32	3,098.6	231.1	-154.0	277.7	0.00	0.00	0.00
3,160.0	9.80	326.32	3,138.0	236.7	-157.8	284.5	0.00	0.00	0.00
3,200.0	9.80	326.32	3,177.4	242.4	-161.6	291.3	0.00	0.00	0.00
3,240.0	9.80	326.32	3,216.8	248.1	-165.3	298.1	0.00	0.00	0.00
3,280.0	9.80	326.32	3,256.3	253.7	-169.1	304.9	0.00	0.00	0.00
3,320.0	9.80	326.32	3,295.7	259.4	-172.9	311.7	0.00	0.00	0.00
3,360.0	9.80	326.32	3,335.1	265.1	-176.7	318.5	0.00	0.00	0.00
3,400.0	9.80	326.32	3,374.5	270.7	-180.4	325.4	0.00	0.00	0.00
3,440.0	9.80	326.32	3,413.9	276.4	-184.2	332.2	0.00	0.00	0.00
3,480.0	9.80	326.32	3,453.3	282.1	-188.0	339.0	0.00	0.00	0.00
3,520.0	9.80	326.32	3,492.7	287.7	-191.8	345.8	0.00	0.00	0.00
3,560.0	9.80	326.32	3,532.2	293.4	-195.5	352.6	0.00	0.00	0.00
3,600.0	9.80	326.32	3,571.6	299.1	-199.3	359.4	0.00	0.00	0.00
3,640.0	9.80	326.32	3,611.0	304.7	-203.1	366.2	0.00	0.00	0.00
3,680.0	9.80	326.32	3,650.4	310.4	-206.9	373.0	0.00	0.00	0.00
3,720.0	9.80	326.32	3,689.8	316.1	-210.6	379.8	0.00	0.00	0.00
3,760.0	9.80	326.32	3,729.2	321.7	-214.4	386.6	0.00	0.00	0.00
3,800.0	9.80	326.32	3,768.7	327.4	-218.2	393.5	0.00	0.00	0.00
3,840.0	9.80	326.32	3,808.1	333.1	-222.0	400.3	0.00	0.00	0.00
3,880.0	9.80	326.32	3,847.5	338.7	-225.8	407.1	0.00	0.00	0.00
3,920.0	9.80	326.32	3,886.9	344.4	-229.5	413.9	0.00	0.00	0.00
3,960.0	9.80	326.32	3,926.3	350.1	-233.3	420.7	0.00	0.00	0.00
4,000.0	9.80	326.32	3,965.7	355.7	-237.1	427.5	0.00	0.00	0.00
4,040.0	9.80	326.32	4,005.2	361.4	-240.9	434.3	0.00	0.00	0.00
4,080.0	9.80	326.32	4,044.6	367.1	-244.6	441.1	0.00	0.00	0.00
4,120.0	9.80	326.32	4,084.0	372.7	-248.4	447.9	0.00	0.00	0.00
4,160.0	9.80	326.32	4,123.4	378.4	-252.2	454.7	0.00	0.00	0.00

Database: Landmark
Company: Synergy Resources
Project: SEC.10-T4N-R68W
Site: SRC Avex 42-10D Pad Sec.10-T4N-R68W
Well: SRC Avex 31-10D
Wellbore: Wellbore #1
Design: Plan #1 (7-12-11)

Local Co-ordinate Reference: Well SRC Avex 31-10D
TVD Reference: WELL @ 5051.0ft (Original Well Elev)
MD Reference: WELL @ 5051.0ft (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)
4,200.0	9.80	326.32	4,162.8	384.1	-256.0	461.6	0.00	0.00	0.00
4,240.0	9.80	326.32	4,202.2	389.7	-259.7	468.4	0.00	0.00	0.00
4,280.0	9.80	326.32	4,241.7	395.4	-263.5	475.2	0.00	0.00	0.00
4,320.0	9.80	326.32	4,281.1	401.1	-267.3	482.0	0.00	0.00	0.00
4,360.0	9.80	326.32	4,320.5	406.7	-271.1	488.8	0.00	0.00	0.00
4,400.0	9.80	326.32	4,359.9	412.4	-274.8	495.6	0.00	0.00	0.00
4,440.0	9.80	326.32	4,399.3	418.1	-278.6	502.4	0.00	0.00	0.00
4,480.0	9.80	326.32	4,438.7	423.7	-282.4	509.2	0.00	0.00	0.00
4,520.0	9.80	326.32	4,478.1	429.4	-286.2	516.0	0.00	0.00	0.00
4,560.0	9.80	326.32	4,517.6	435.1	-290.0	522.8	0.00	0.00	0.00
4,600.0	9.80	326.32	4,557.0	440.7	-293.7	529.7	0.00	0.00	0.00
4,640.0	9.80	326.32	4,596.4	446.4	-297.5	536.5	0.00	0.00	0.00
4,680.0	9.80	326.32	4,635.8	452.1	-301.3	543.3	0.00	0.00	0.00
4,720.0	9.80	326.32	4,675.2	457.7	-305.1	550.1	0.00	0.00	0.00
4,760.0	9.80	326.32	4,714.6	463.4	-308.8	556.9	0.00	0.00	0.00
4,800.0	9.80	326.32	4,754.1	469.1	-312.6	563.7	0.00	0.00	0.00
4,840.0	9.80	326.32	4,793.5	474.7	-316.4	570.5	0.00	0.00	0.00
4,880.0	9.80	326.32	4,832.9	480.4	-320.2	577.3	0.00	0.00	0.00
4,920.0	9.80	326.32	4,872.3	486.1	-323.9	584.1	0.00	0.00	0.00
4,960.0	9.80	326.32	4,911.7	491.7	-327.7	590.9	0.00	0.00	0.00
5,000.0	9.80	326.32	4,951.1	497.4	-331.5	597.7	0.00	0.00	0.00
5,040.0	9.80	326.32	4,990.6	503.1	-335.3	604.6	0.00	0.00	0.00
5,080.0	9.80	326.32	5,030.0	508.7	-339.1	611.4	0.00	0.00	0.00
5,120.0	9.80	326.32	5,069.4	514.4	-342.8	618.2	0.00	0.00	0.00
5,160.0	9.80	326.32	5,108.8	520.1	-346.6	625.0	0.00	0.00	0.00
5,200.0	9.80	326.32	5,148.2	525.7	-350.4	631.8	0.00	0.00	0.00
5,240.0	9.80	326.32	5,187.6	531.4	-354.2	638.6	0.00	0.00	0.00
5,280.0	9.80	326.32	5,227.1	537.1	-357.9	645.4	0.00	0.00	0.00
5,320.0	9.80	326.32	5,266.5	542.7	-361.7	652.2	0.00	0.00	0.00
5,360.0	9.80	326.32	5,305.9	548.4	-365.5	659.0	0.00	0.00	0.00
5,400.0	9.80	326.32	5,345.3	554.1	-369.3	665.8	0.00	0.00	0.00
5,440.0	9.80	326.32	5,384.7	559.7	-373.0	672.7	0.00	0.00	0.00
5,480.0	9.80	326.32	5,424.1	565.4	-376.8	679.5	0.00	0.00	0.00
5,520.0	9.80	326.32	5,463.6	571.1	-380.6	686.3	0.00	0.00	0.00
5,560.0	9.80	326.32	5,503.0	576.7	-384.4	693.1	0.00	0.00	0.00
5,600.0	9.80	326.32	5,542.4	582.4	-388.1	699.9	0.00	0.00	0.00
5,640.0	9.80	326.32	5,581.8	588.1	-391.9	706.7	0.00	0.00	0.00
5,680.0	9.80	326.32	5,621.2	593.7	-395.7	713.5	0.00	0.00	0.00
5,720.0	9.80	326.32	5,660.6	599.4	-399.5	720.3	0.00	0.00	0.00
5,760.0	9.80	326.32	5,700.0	605.1	-403.3	727.1	0.00	0.00	0.00
5,800.0	9.80	326.32	5,739.5	610.7	-407.0	733.9	0.00	0.00	0.00
5,840.0	9.80	326.32	5,778.9	616.4	-410.8	740.8	0.00	0.00	0.00
5,880.0	9.80	326.32	5,818.3	622.1	-414.6	747.6	0.00	0.00	0.00
5,920.0	9.80	326.32	5,857.7	627.7	-418.4	754.4	0.00	0.00	0.00
5,942.4	9.80	326.32	5,879.8	630.9	-420.5	758.2	0.00	0.00	0.00
PERMIT TARGET BHL 484'FNL, 2174'FEL									
5,960.0	9.80	326.32	5,897.1	633.4	-422.1	761.2	0.00	0.00	0.00
6,000.0	9.80	326.32	5,936.5	639.1	-425.9	768.0	0.00	0.00	0.00
6,040.0	9.80	326.32	5,976.0	644.7	-429.7	774.8	0.00	0.00	0.00
6,080.0	9.80	326.32	6,015.4	650.4	-433.5	781.6	0.00	0.00	0.00
6,120.0	9.80	326.32	6,054.8	656.1	-437.2	788.4	0.00	0.00	0.00
6,160.0	9.80	326.32	6,094.2	661.7	-441.0	795.2	0.00	0.00	0.00
6,200.0	9.80	326.32	6,133.6	667.4	-444.8	802.0	0.00	0.00	0.00
6,240.0	9.80	326.32	6,173.0	673.1	-448.6	808.9	0.00	0.00	0.00

Database: Landmark
Company: Synergy Resources
Project: SEC.10-T4N-R68W
Site: SRC Avex 42-10D Pad Sec.10-T4N-R68W
Well: SRC Avex 31-10D
Wellbore: Wellbore #1
Design: Plan #1 (7-12-11)

Local Co-ordinate Reference: Well SRC Avex 31-10D
TVD Reference: WELL @ 5051.0ft (Original Well Elev)
MD Reference: WELL @ 5051.0ft (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	9.80	326.32	6,212.5	678.7	-452.3	815.7	0.00	0.00	0.00
6,320.0	9.80	326.32	6,251.9	684.4	-456.1	822.5	0.00	0.00	0.00
6,360.0	9.80	326.32	6,291.3	690.1	-459.9	829.3	0.00	0.00	0.00
6,400.0	9.80	326.32	6,330.7	695.7	-463.7	836.1	0.00	0.00	0.00
6,440.0	9.80	326.32	6,370.1	701.4	-467.5	842.9	0.00	0.00	0.00
6,480.0	9.80	326.32	6,409.5	707.1	-471.2	849.7	0.00	0.00	0.00
6,520.0	9.80	326.32	6,449.0	712.7	-475.0	856.5	0.00	0.00	0.00
6,560.0	9.80	326.32	6,488.4	718.4	-478.8	863.3	0.00	0.00	0.00
6,600.0	9.80	326.32	6,527.8	724.1	-482.6	870.1	0.00	0.00	0.00
6,640.0	9.80	326.32	6,567.2	729.7	-486.3	877.0	0.00	0.00	0.00
6,680.0	9.80	326.32	6,606.6	735.4	-490.1	883.8	0.00	0.00	0.00
6,720.0	9.80	326.32	6,646.0	741.1	-493.9	890.6	0.00	0.00	0.00
6,760.0	9.80	326.32	6,685.4	746.7	-497.7	897.4	0.00	0.00	0.00
6,786.4	9.80	326.32	6,711.5	750.5	-500.2	901.9	0.00	0.00	0.00
LEGAL BOX 400' X 400' 667'FNL & 1995'FEL									
6,800.0	9.80	326.32	6,724.9	752.4	-501.4	904.2	0.00	0.00	0.00
6,840.0	9.80	326.32	6,764.3	758.1	-505.2	911.0	0.00	0.00	0.00
6,880.0	9.80	326.32	6,803.7	763.7	-509.0	917.8	0.00	0.00	0.00
6,920.0	9.80	326.32	6,843.1	769.4	-512.8	924.6	0.00	0.00	0.00
6,960.0	9.80	326.32	6,882.5	775.1	-516.6	931.4	0.00	0.00	0.00
7,000.0	9.80	326.32	6,921.9	780.7	-520.3	938.2	0.00	0.00	0.00
7,040.0	9.80	326.32	6,961.4	786.4	-524.1	945.1	0.00	0.00	0.00
7,080.0	9.80	326.32	7,000.8	792.1	-527.9	951.9	0.00	0.00	0.00
7,120.0	9.80	326.32	7,040.2	797.7	-531.7	958.7	0.00	0.00	0.00
7,160.0	9.80	326.32	7,079.6	803.4	-535.4	965.5	0.00	0.00	0.00
7,200.0	9.80	326.32	7,119.0	809.1	-539.2	972.3	0.00	0.00	0.00
7,240.0	9.80	326.32	7,158.4	814.7	-543.0	979.1	0.00	0.00	0.00
7,280.0	9.80	326.32	7,197.9	820.4	-546.8	985.9	0.00	0.00	0.00
7,320.0	9.80	326.32	7,237.3	826.1	-550.5	992.7	0.00	0.00	0.00
7,360.0	9.80	326.32	7,276.7	831.7	-554.3	999.5	0.00	0.00	0.00
7,400.0	9.80	326.32	7,316.1	837.4	-558.1	1,006.3	0.00	0.00	0.00
7,440.0	9.80	326.32	7,355.5	843.1	-561.9	1,013.1	0.00	0.00	0.00
7,480.0	9.80	326.32	7,394.9	848.7	-565.6	1,020.0	0.00	0.00	0.00
7,520.0	9.80	326.32	7,434.4	854.4	-569.4	1,026.8	0.00	0.00	0.00
7,560.0	9.80	326.32	7,473.8	860.1	-573.2	1,033.6	0.00	0.00	0.00
7,600.0	9.80	326.32	7,513.2	865.7	-577.0	1,040.4	0.00	0.00	0.00
7,640.0	9.80	326.32	7,552.6	871.4	-580.8	1,047.2	0.00	0.00	0.00
7,680.0	9.80	326.32	7,592.0	877.1	-584.5	1,054.0	0.00	0.00	0.00
7,720.0	9.80	326.32	7,631.4	882.7	-588.3	1,060.8	0.00	0.00	0.00
7,760.0	9.80	326.32	7,670.9	888.4	-592.1	1,067.6	0.00	0.00	0.00
7,800.0	9.80	326.32	7,710.3	894.1	-595.9	1,074.4	0.00	0.00	0.00
7,840.0	9.80	326.32	7,749.7	899.7	-599.6	1,081.2	0.00	0.00	0.00
7,880.0	9.80	326.32	7,789.1	905.4	-603.4	1,088.1	0.00	0.00	0.00
7,920.0	9.80	326.32	7,828.5	911.1	-607.2	1,094.9	0.00	0.00	0.00
7,960.0	9.80	326.32	7,867.9	916.7	-611.0	1,101.7	0.00	0.00	0.00
8,000.0	9.80	326.32	7,907.3	922.4	-614.7	1,108.5	0.00	0.00	0.00
8,040.0	9.80	326.32	7,946.8	928.1	-618.5	1,115.3	0.00	0.00	0.00
8,080.0	9.80	326.32	7,986.2	933.7	-622.3	1,122.1	0.00	0.00	0.00
8,120.0	9.80	326.32	8,025.6	939.4	-626.1	1,128.9	0.00	0.00	0.00
8,160.0	9.80	326.32	8,065.0	945.1	-629.8	1,135.7	0.00	0.00	0.00
8,195.5	9.80	326.32	8,100.0	950.1	-633.2	1,141.8	0.00	0.00	0.00

DRILL TARGET BHL 542'FNL, 2120'FEL

Database: Landmark
Company: Synergy Resources
Project: SEC.10-T4N-R68W
Site: SRC Avex 42-10D Pad Sec.10-T4N-R68W
Well: SRC Avex 31-10D
Wellbore: Wellbore #1
Design: Plan #1 (7-12-11)

Local Co-ordinate Reference: Well SRC Avex 31-10D
TVD Reference: WELL @ 5051.0ft (Original Well Elev)
MD Reference: WELL @ 5051.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

Targets

Target Name

- hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
LEGAL BOX 400' X 400' - plan misses target center by 75.9ft at 6786.4ft MD (6711.5 TVD, 750.5 N, -500.2 E) - Rectangle (sides W400.0 H400.0 D1,400.0)	0.00	0.00	6,700.0	825.1	-508.2	1,364,787.52	3,143,033.38	40.333607	-104.986934
DRILL TARGET BHL - plan hits target center - Point	0.00	0.00	8,100.0	950.1	-633.2	1,364,911.79	3,142,907.66	40.333950	-104.987382
PERMIT TARGET BH - plan misses target center by 468.8ft at 5942.4ft MD (5879.8 TVD, 630.9 N, -420.5 E) - Point	0.00	0.00	5,800.0	1,008.1	-687.2	1,364,969.43	3,142,853.31	40.334109	-104.987576

Casing Points

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



Directional

Synergy Resources

SEC.10-T4N-R68W

SRC Avex 42-10D Pad Sec.10-T4N-R68W

SRC Avex 31-10D

Wellbore #1

Plan #1 (7-12-11)

Anticollision Report

26 July, 2011

Company:	Synergy Resources
Project:	SEC.10-T4N-R68W
Reference Site:	SRC Avex 42-10D Pad Sec.10-T4N-R68W
Site Error:	0.0ft
Reference Well:	SRC Avex 31-10D
Well Error:	0.0ft
Reference Wellbore	Wellbore #1
Reference Design:	Plan #1 (7-12-11)

Local Co-ordinate Reference:	Well SRC Avex 31-10D
TVD Reference:	WELL @ 5051.0ft (Original Well Elev)
MD Reference:	WELL @ 5051.0ft (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	Plan #1 (7-12-11)		
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	7/26/2011		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	8,195.5	Plan #1 (7-12-11) (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
Offset Well - Wellbore - Design						
SRC Avex 42-10D Pad Sec.10-T4N-R68W						
SRC Avex 10C (Vert.) - Wellbore #1 - Design #1	1,000.0	1,000.0	40.1	35.9	9.401	CC, ES
SRC Avex 10C (Vert.) - Wellbore #1 - Design #1	1,300.0	1,299.9	44.9	39.3	8.014	SF
SRC Avex 32-10D - Wellbore #1 - Plan #1 (7-12-11)	999.8	999.9	19.8	15.6	4.713	CC
SRC Avex 32-10D - Wellbore #1 - Plan #1 (7-12-11)	1,000.0	1,000.0	19.8	15.6	4.712	ES
SRC Avex 32-10D - Wellbore #1 - Plan #1 (7-12-11)	1,100.0	1,099.9	21.0	16.4	4.555	SF

Offset Design													SRC Avex 42-10D Pad Sec.10-T4N-R68W - SRC Avex 10C (Vert.) - Wellbore #1 - Design #1		Offset Site Error:		0.0 ft
Survey Program: 0-MWD													Offset Well Error:		0.0 ft		
Reference		Offset		Semi Major Axis			Distance										
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning				
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)						
0.0	0.0	0.0	0.0	0.0	0.0	89.48	0.4	40.1	40.1								
100.0	100.0	100.0	100.0	0.1	0.1	89.48	0.4	40.1	40.1	39.9	0.22	178.628					
200.0	200.0	200.0	200.0	0.3	0.3	89.48	0.4	40.1	40.1	39.5	0.67	59.543					
300.0	300.0	300.0	300.0	0.6	0.6	89.48	0.4	40.1	40.1	39.0	1.12	35.726					
400.0	400.0	400.0	400.0	0.8	0.8	89.48	0.4	40.1	40.1	38.6	1.57	25.518					
500.0	500.0	500.0	500.0	1.0	1.0	89.48	0.4	40.1	40.1	38.1	2.02	19.848					
600.0	600.0	600.0	600.0	1.2	1.2	89.48	0.4	40.1	40.1	37.7	2.47	16.239					
700.0	700.0	700.0	700.0	1.5	1.5	89.48	0.4	40.1	40.1	37.2	2.92	13.741					
800.0	800.0	800.0	800.0	1.7	1.7	89.48	0.4	40.1	40.1	36.8	3.37	11.909					
900.0	900.0	900.0	900.0	1.9	1.9	89.48	0.4	40.1	40.1	36.3	3.82	10.508					
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	89.48	0.4	40.1	40.1	35.9	4.27	9.401	CC, ES				
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	124.19	0.4	40.1	40.6	35.9	4.72	8.614					
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	127.12	0.4	40.1	42.2	37.0	5.16	8.168					
1,300.0	1,299.9	1,299.9	1,299.9	2.8	2.8	131.54	0.4	40.1	44.9	39.3	5.61	8.014	SF				
1,400.0	1,399.7	1,399.7	1,399.7	3.0	3.0	136.83	0.4	40.1	49.2	43.1	6.05	8.130					
1,500.0	1,499.4	1,499.4	1,499.4	3.3	3.3	142.37	0.4	40.1	55.2	48.7	6.50	8.496					
1,600.0	1,598.9	1,598.9	1,598.9	3.5	3.5	147.65	0.4	40.1	63.1	56.1	6.94	9.087					
1,700.0	1,698.3	1,698.3	1,698.3	3.8	3.7	152.36	0.4	40.1	72.9	65.5	7.38	9.874					
1,800.0	1,797.4	1,797.4	1,797.4	4.0	3.9	156.41	0.4	40.1	84.7	76.9	7.82	10.826					
1,900.0	1,896.3	1,896.3	1,896.3	4.3	4.1	159.80	0.4	40.1	98.4	90.2	8.26	11.914					
1,980.2	1,975.4	1,975.4	1,975.4	4.6	4.3	162.10	0.4	40.1	110.8	102.2	8.61	12.869					
2,000.0	1,994.9	1,994.9	1,994.9	4.6	4.4	162.62	0.4	40.1	114.0	105.3	8.70	13.106					

Company: Synergy Resources
Project: SEC.10-T4N-R68W
Reference Site: SRC Avex 42-10D Pad Sec.10-T4N-R68W
Site Error: 0.0ft
Reference Well: SRC Avex 31-10D
Well Error: 0.0ft
Reference Wellbore: Wellbore #1
Reference Design: Plan #1 (7-12-11)

Local Co-ordinate Reference: Well SRC Avex 31-10D
TVD Reference: WELL @ 5051.0ft (Original Well Elev)
MD Reference: WELL @ 5051.0ft (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 SRC Avex 42-10D Pad Sec.10-T4N-R68W - SRC Avex 10C (Vert.) - Wellbore #1 - Design #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Minimum Separation (ft)	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)				Between Centres (ft)	Between Ellipses (ft)	
2,100.0	2,093.5	2,093.5	2,093.5	5.0	4.6	164.85	0.4	40.1	130.4	121.2	9.16	14.243		
2,200.0	2,192.0	2,192.0	2,192.0	5.3	4.8	166.59	0.4	40.1	146.9	137.3	9.61	15.286		
2,300.0	2,290.6	2,290.6	2,290.6	5.6	5.0	167.97	0.4	40.1	163.5	153.5	10.07	16.241		
2,400.0	2,389.1	2,389.1	2,389.1	6.0	5.3	169.10	0.4	40.1	180.2	169.7	10.53	17.118		
2,500.0	2,487.6	2,487.6	2,487.6	6.3	5.5	170.03	0.4	40.1	197.0	186.0	10.99	17.925		
2,600.0	2,586.2	2,586.2	2,586.2	6.7	5.7	170.82	0.4	40.1	213.8	202.3	11.45	18.669		
2,700.0	2,684.7	2,684.7	2,684.7	7.0	5.9	171.50	0.4	40.1	230.6	218.7	11.91	19.357		
2,800.0	2,783.3	2,783.3	2,783.3	7.4	6.1	172.08	0.4	40.1	247.5	235.1	12.38	19.994		
2,900.0	2,881.8	2,881.8	2,881.8	7.8	6.4	172.59	0.4	40.1	264.3	251.5	12.84	20.585		
3,000.0	2,980.3	2,980.3	2,980.3	8.1	6.6	173.04	0.4	40.1	281.2	267.9	13.31	21.135		
3,100.0	3,078.9	3,078.9	3,078.9	8.5	6.8	173.43	0.4	40.1	298.1	284.4	13.77	21.648		
3,200.0	3,177.4	3,177.4	3,177.4	8.9	7.0	173.79	0.4	40.1	315.1	300.8	14.24	22.127		
3,300.0	3,276.0	3,276.0	3,276.0	9.2	7.3	174.10	0.4	40.1	332.0	317.3	14.71	22.576		
3,400.0	3,374.5	3,374.5	3,374.5	9.6	7.5	174.39	0.4	40.1	348.9	333.8	15.17	22.998		
3,500.0	3,473.0	3,473.0	3,473.0	10.0	7.7	174.65	0.4	40.1	365.9	350.2	15.64	23.394		
3,600.0	3,571.6	3,571.6	3,571.6	10.4	7.9	174.89	0.4	40.1	382.8	366.7	16.11	23.766		
3,700.0	3,670.1	3,670.1	3,670.1	10.7	8.1	175.11	0.4	40.1	399.8	383.2	16.58	24.118		
3,800.0	3,768.7	3,768.7	3,768.7	11.1	8.4	175.31	0.4	40.1	416.8	399.7	17.05	24.450		
3,900.0	3,867.2	3,867.2	3,867.2	11.5	8.6	175.49	0.4	40.1	433.7	416.2	17.52	24.764		
4,000.0	3,965.7	3,965.7	3,965.7	11.9	8.8	175.66	0.4	40.1	450.7	432.7	17.98	25.061		
4,100.0	4,064.3	4,064.3	4,064.3	12.2	9.0	175.82	0.4	40.1	467.7	449.2	18.45	25.343		
4,200.0	4,162.8	4,162.8	4,162.8	12.6	9.2	175.96	0.4	40.1	484.7	465.8	18.92	25.611		
4,300.0	4,261.4	4,261.4	4,261.4	13.0	9.5	176.10	0.4	40.1	501.7	482.3	19.40	25.866		
4,400.0	4,359.9	4,359.9	4,359.9	13.4	9.7	176.23	0.4	40.1	518.7	498.8	19.87	26.108		
4,500.0	4,458.4	4,458.4	4,458.4	13.8	9.9	176.35	0.4	40.1	535.6	515.3	20.34	26.339		
4,600.0	4,557.0	4,557.0	4,557.0	14.2	10.1	176.46	0.4	40.1	552.6	531.8	20.81	26.560		
4,700.0	4,655.5	4,655.5	4,655.5	14.5	10.4	176.57	0.4	40.1	569.6	548.4	21.28	26.770		
4,800.0	4,754.1	4,754.1	4,754.1	14.9	10.6	176.67	0.4	40.1	586.6	564.9	21.75	26.972		
4,900.0	4,852.6	4,852.6	4,852.6	15.3	10.8	176.76	0.4	40.1	603.6	581.4	22.22	27.164		
5,000.0	4,951.1	4,951.1	4,951.1	15.7	11.0	176.85	0.4	40.1	620.6	597.9	22.69	27.349		
5,100.0	5,049.7	5,049.7	5,049.7	16.1	11.2	176.93	0.4	40.1	637.6	614.5	23.16	27.526		
5,200.0	5,148.2	5,148.2	5,148.2	16.5	11.5	177.01	0.4	40.1	654.6	631.0	23.64	27.695		
5,300.0	5,246.8	5,246.8	5,246.8	16.8	11.7	177.09	0.4	40.1	671.6	647.5	24.11	27.858		
5,400.0	5,345.3	5,345.3	5,345.3	17.2	11.9	177.16	0.4	40.1	688.6	664.0	24.58	28.015		
5,500.0	5,443.8	5,443.8	5,443.8	17.6	12.1	177.23	0.4	40.1	705.6	680.6	25.05	28.165		
5,600.0	5,542.4	5,542.4	5,542.4	18.0	12.3	177.29	0.4	40.1	722.6	697.1	25.53	28.310		
5,700.0	5,640.9	5,640.9	5,640.9	18.4	12.6	177.36	0.4	40.1	739.6	713.6	26.00	28.450		
5,800.0	5,739.5	5,739.5	5,739.5	18.8	12.8	177.42	0.4	40.1	756.7	730.2	26.47	28.584		
5,900.0	5,838.0	5,838.0	5,838.0	19.2	13.0	177.47	0.4	40.1	773.7	746.7	26.94	28.714		
6,000.0	5,936.5	5,936.5	5,936.5	19.5	13.2	177.53	0.4	40.1	790.7	763.3	27.42	28.839		
6,100.0	6,035.1	6,035.1	6,035.1	19.9	13.5	177.58	0.4	40.1	807.7	779.8	27.89	28.959		
6,200.0	6,133.6	6,133.6	6,133.6	20.3	13.7	177.63	0.4	40.1	824.7	796.3	28.36	29.076		
6,300.0	6,232.2	6,232.2	6,232.2	20.7	13.9	177.68	0.4	40.1	841.7	812.9	28.84	29.189		
6,400.0	6,330.7	6,330.7	6,330.7	21.1	14.1	177.72	0.4	40.1	858.7	829.4	29.31	29.298		
6,500.0	6,429.2	6,429.2	6,429.2	21.5	14.3	177.77	0.4	40.1	875.7	845.9	29.78	29.403		
6,600.0	6,527.8	6,527.8	6,527.8	21.9	14.6	177.81	0.4	40.1	892.7	862.5	30.26	29.505		
6,700.0	6,626.3	6,626.3	6,626.3	22.2	14.8	177.85	0.4	40.1	909.7	879.0	30.73	29.604		
6,800.0	6,724.9	6,724.9	6,724.9	22.6	15.0	177.89	0.4	40.1	926.8	895.6	31.20	29.700		
6,900.0	6,823.4	6,823.4	6,823.4	23.0	15.2	177.93	0.4	40.1	943.8	912.1	31.68	29.792		
7,000.0	6,921.9	6,921.9	6,921.9	23.4	15.4	177.97	0.4	40.1	960.8	928.6	32.15	29.882		
7,100.0	7,020.5	7,020.5	7,020.5	23.8	15.7	178.00	0.4	40.1	977.8	945.2	32.63	29.970		
7,200.0	7,119.0	7,119.0	7,119.0	24.2	15.9	178.04	0.4	40.1	994.8	961.7	33.10	30.054		

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

Company: Synergy Resources
Project: SEC.10-T4N-R68W
Reference Site: SRC Avex 42-10D Pad Sec.10-T4N-R68W
Site Error: 0.0ft
Reference Well: SRC Avex 31-10D
Well Error: 0.0ft
Reference Wellbore: Wellbore #1
Reference Design: Plan #1 (7-12-11)

Local Co-ordinate Reference: Well SRC Avex 31-10D
TVD Reference: WELL @ 5051.0ft (Original Well Elev)
MD Reference: WELL @ 5051.0ft (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 SRC Avex 42-10D Pad Sec.10-T4N-R68W - SRC Avex 10C (Vert.) - Wellbore #1 - Design #1													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		
7,300.0	7,217.6	7,217.6	7,217.6	24.6	16.1	178.07	0.4	40.1	1,011.8	978.3	33.57	30.137		
7,400.0	7,316.1	7,316.1	7,316.1	25.0	16.3	178.10	0.4	40.1	1,028.8	994.8	34.05	30.217		
7,500.0	7,414.6	7,414.6	7,414.6	25.3	16.6	178.13	0.4	40.1	1,045.9	1,011.3	34.52	30.294		
7,600.0	7,513.2	7,513.2	7,513.2	25.7	16.8	178.16	0.4	40.1	1,062.9	1,027.9	35.00	30.370		
7,700.0	7,611.7	7,611.7	7,611.7	26.1	17.0	178.19	0.4	40.1	1,079.9	1,044.4	35.47	30.443		
7,800.0	7,710.3	7,710.3	7,710.3	26.5	17.2	178.22	0.4	40.1	1,096.9	1,061.0	35.95	30.514		
7,900.0	7,808.8	7,808.8	7,808.8	26.9	17.4	178.25	0.4	40.1	1,113.9	1,077.5	36.42	30.584		
8,000.0	7,907.3	7,907.3	7,907.3	27.3	17.7	178.27	0.4	40.1	1,130.9	1,094.1	36.90	30.652		
8,100.0	8,005.9	8,005.9	8,005.9	27.7	17.9	178.30	0.4	40.1	1,148.0	1,110.6	37.37	30.717		
8,195.5	8,100.0	8,100.0	8,100.0	28.0	18.1	178.32	0.4	40.1	1,164.2	1,126.4	37.83	30.779		

Company: Synergy Resources
Project: SEC.10-T4N-R68W
Reference Site: SRC Avex 42-10D Pad Sec.10-T4N-R68W
Site Error: 0.0ft
Reference Well: SRC Avex 31-10D
Well Error: 0.0ft
Reference Wellbore: Wellbore #1
Reference Design: Plan #1 (7-12-11)

Local Co-ordinate Reference: Well SRC Avex 31-10D
TVD Reference: WELL @ 5051.0ft (Original Well Elev)
MD Reference: WELL @ 5051.0ft (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 SRC Avex 42-10D Pad Sec.10-T4N-R68W - SRC Avex 32-10D - Wellbore #1 - Plan #1 (7-12-11)													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)	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	
0.0	0.0	0.0	0.0	0.0	0.0	90.00	0.0	20.1	20.1					
100.0	100.0	100.0	100.0	0.1	0.1	90.00	0.0	20.1	20.1	19.8	0.22	89.310		
200.0	200.0	200.0	200.0	0.3	0.3	90.00	0.0	20.1	20.1	19.4	0.67	29.770		
300.0	300.0	300.0	300.0	0.6	0.6	90.00	0.0	20.1	20.1	19.0	1.12	17.862		
400.0	400.0	400.0	400.0	0.8	0.8	90.00	0.0	20.1	20.1	18.5	1.57	12.759		
500.0	500.0	500.0	500.0	1.0	1.0	90.00	0.0	20.1	20.1	18.1	2.02	9.923		
600.0	600.0	600.0	600.0	1.2	1.2	90.00	0.0	20.1	20.1	17.6	2.47	8.119		
700.0	700.0	700.0	700.0	1.5	1.5	90.00	0.0	20.1	20.1	17.2	2.92	6.870		
800.0	800.0	800.0	800.0	1.7	1.7	90.00	0.0	20.1	20.1	16.7	3.37	5.954		
900.0	900.0	900.1	900.0	1.9	1.9	92.47	-0.9	19.9	19.9	16.1	3.79	5.257		
999.8	999.8	999.9	999.8	2.1	2.1	100.00	-3.4	19.5	19.8	15.6	4.19	4.713 CC		
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	100.02	-3.4	19.5	19.8	15.6	4.20	4.712 ES		
1,100.0	1,100.0	1,099.9	1,099.7	2.4	2.2	147.44	-7.7	18.7	21.0	16.4	4.60	4.555 SF		
1,200.0	1,200.0	1,199.4	1,199.1	2.6	2.4	163.94	-13.7	17.7	25.7	20.7	5.02	5.115		
1,300.0	1,299.9	1,298.4	1,297.8	2.8	2.7	177.11	-21.3	16.3	34.8	29.3	5.45	6.375		
1,400.0	1,399.7	1,397.8	1,396.8	3.0	2.9	-173.89	-29.9	14.0	46.9	41.1	5.89	7.973		
1,500.0	1,499.4	1,497.0	1,495.5	3.3	3.1	-167.43	-38.5	9.9	60.9	54.6	6.33	9.623		
1,600.0	1,598.9	1,595.9	1,593.9	3.5	3.4	-162.52	-47.2	4.2	76.6	69.8	6.78	11.297		
1,700.0	1,698.3	1,694.5	1,691.8	3.8	3.6	-158.60	-55.9	-3.2	93.9	86.7	7.24	12.975		
1,800.0	1,797.4	1,792.7	1,789.2	4.0	3.9	-155.40	-64.7	-12.3	112.9	105.2	7.71	14.644		
1,900.0	1,896.3	1,890.5	1,886.1	4.3	4.2	-153.20	-73.4	-21.8	133.6	125.4	8.19	16.317		
1,980.2	1,975.4	1,968.7	1,963.6	4.6	4.4	-152.08	-80.4	-29.4	151.4	142.8	8.58	17.646		
2,000.0	1,994.9	1,987.9	1,982.7	4.6	4.5	-151.88	-82.1	-31.3	155.9	147.2	8.68	17.963		
2,100.0	2,093.5	2,085.2	2,079.2	5.0	4.8	-151.05	-90.8	-40.7	178.8	169.6	9.19	19.445		
2,200.0	2,192.0	2,182.6	2,175.6	5.3	5.1	-150.40	-99.5	-50.2	201.6	191.9	9.71	20.755		
2,300.0	2,290.6	2,279.9	2,272.1	5.6	5.4	-149.89	-108.2	-59.7	224.5	214.2	10.24	21.917		
2,400.0	2,389.1	2,377.2	2,368.6	6.0	5.7	-149.47	-116.9	-69.1	247.4	236.6	10.78	22.952		
2,500.0	2,487.6	2,474.6	2,465.1	6.3	6.0	-149.12	-125.6	-78.6	270.3	259.0	11.32	23.879		
2,600.0	2,586.2	2,571.9	2,561.6	6.7	6.3	-148.82	-134.3	-88.1	293.2	281.3	11.86	24.712		
2,700.0	2,684.7	2,669.2	2,658.0	7.0	6.6	-148.57	-142.9	-97.5	316.1	303.7	12.41	25.464		
2,800.0	2,783.3	2,766.6	2,754.5	7.4	6.9	-148.36	-151.6	-107.0	339.0	326.0	12.97	26.145		
2,900.0	2,881.8	2,863.9	2,851.0	7.8	7.2	-148.17	-160.3	-116.5	361.9	348.4	13.52	26.764		
3,000.0	2,980.3	2,961.2	2,947.5	8.1	7.6	-148.00	-169.0	-125.9	384.9	370.8	14.08	27.328		
3,100.0	3,078.9	3,058.5	3,043.9	8.5	7.9	-147.85	-177.7	-135.4	407.8	393.1	14.65	27.845		
3,200.0	3,177.4	3,155.9	3,140.4	8.9	8.2	-147.72	-186.4	-144.9	430.7	415.5	15.21	28.320		
3,300.0	3,276.0	3,253.2	3,236.9	9.2	8.5	-147.60	-195.1	-154.3	453.7	437.9	15.78	28.757		
3,400.0	3,374.5	3,350.5	3,333.4	9.6	8.8	-147.49	-203.8	-163.8	476.6	460.2	16.34	29.161		
3,500.0	3,473.0	3,447.9	3,429.9	10.0	9.2	-147.39	-212.5	-173.3	499.5	482.6	16.91	29.534		
3,600.0	3,571.6	3,545.2	3,526.3	10.4	9.5	-147.30	-221.2	-182.7	522.5	505.0	17.48	29.881		
3,700.0	3,670.1	3,642.5	3,622.8	10.7	9.8	-147.22	-229.9	-192.2	545.4	527.3	18.06	30.204		
3,800.0	3,768.7	3,739.9	3,719.3	11.1	10.1	-147.15	-238.6	-201.7	568.3	549.7	18.63	30.505		
3,900.0	3,867.2	3,837.2	3,815.8	11.5	10.5	-147.08	-247.2	-211.1	591.3	572.1	19.21	30.786		
4,000.0	3,965.7	3,934.5	3,912.3	11.9	10.8	-147.01	-255.9	-220.6	614.2	594.4	19.78	31.050		
4,100.0	4,064.3	4,031.9	4,008.7	12.2	11.1	-146.95	-264.6	-230.1	637.2	616.8	20.36	31.297		
4,200.0	4,162.8	4,129.2	4,105.2	12.6	11.4	-146.90	-273.3	-239.5	660.1	639.2	20.94	31.529		
4,300.0	4,261.4	4,226.5	4,201.7	13.0	11.8	-146.85	-282.0	-249.0	683.1	661.5	21.52	31.747		
4,400.0	4,359.9	4,323.8	4,298.2	13.4	12.1	-146.80	-290.7	-258.5	706.0	683.9	22.09	31.953		
4,500.0	4,458.4	4,421.2	4,394.6	13.8	12.4	-146.75	-299.4	-267.9	728.9	706.3	22.68	32.148		
4,600.0	4,557.0	4,518.5	4,491.1	14.2	12.7	-146.71	-308.1	-277.4	751.9	728.6	23.26	32.331		
4,700.0	4,655.5	4,615.8	4,587.6	14.5	13.1	-146.67	-316.8	-286.9	774.8	751.0	23.84	32.505		
4,800.0	4,754.1	4,713.2	4,684.1	14.9	13.4	-146.63	-325.5	-296.3	797.8	773.4	24.42	32.671		
4,900.0	4,852.6	4,810.5	4,780.6	15.3	13.7	-146.60	-334.2	-305.8	820.7	795.7	25.00	32.827		

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

Company: Synergy Resources
Project: SEC.10-T4N-R68W
Reference Site: SRC Avex 42-10D Pad Sec.10-T4N-R68W
Site Error: 0.0ft
Reference Well: SRC Avex 31-10D
Well Error: 0.0ft
Reference Wellbore: Wellbore #1
Reference Design: Plan #1 (7-12-11)

Local Co-ordinate Reference: Well SRC Avex 31-10D
TVD Reference: WELL @ 5051.0ft (Original Well Elev)
MD Reference: WELL @ 5051.0ft (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 SRC Avex 42-10D Pad Sec.10-T4N-R68W - SRC Avex 32-10D - Wellbore #1 - Plan #1 (7-12-11)													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		
5,000.0	4,951.1	4,907.8	4,877.0	15.7	14.1	-146.56	-342.8	-315.3	843.7	818.1	25.58	32.976		
5,100.0	5,049.7	5,005.2	4,973.5	16.1	14.4	-146.53	-351.5	-324.7	866.6	840.5	26.17	33.118		
5,200.0	5,148.2	5,102.5	5,070.0	16.5	14.7	-146.50	-360.2	-334.2	889.6	862.8	26.75	33.253		
5,300.0	5,246.8	5,199.8	5,166.5	16.8	15.0	-146.47	-368.9	-343.7	912.5	885.2	27.34	33.382		
5,400.0	5,345.3	5,297.2	5,263.0	17.2	15.4	-146.44	-377.6	-353.1	935.5	907.5	27.92	33.504		
5,500.0	5,443.8	5,394.5	5,359.4	17.6	15.7	-146.42	-386.3	-362.6	958.4	929.9	28.51	33.622		
5,600.0	5,542.4	5,491.8	5,455.9	18.0	16.0	-146.39	-395.0	-372.1	981.4	952.3	29.09	33.734		
5,700.0	5,640.9	5,589.1	5,552.4	18.4	16.4	-146.37	-403.7	-381.5	1,004.3	974.6	29.68	33.842		
5,800.0	5,739.5	5,686.5	5,648.9	18.8	16.7	-146.35	-412.4	-391.0	1,027.2	997.0	30.26	33.944		
5,900.0	5,838.0	5,783.8	5,745.3	19.2	17.0	-146.33	-421.1	-400.5	1,050.2	1,019.3	30.85	34.043		
6,000.0	5,936.5	5,881.1	5,841.8	19.5	17.4	-146.31	-429.8	-409.9	1,073.1	1,041.7	31.44	34.138		
6,100.0	6,035.1	5,978.5	5,938.3	19.9	17.7	-146.29	-438.5	-419.4	1,096.1	1,064.1	32.02	34.229		
6,200.0	6,133.6	6,075.8	6,034.8	20.3	18.0	-146.27	-447.1	-428.9	1,119.0	1,086.4	32.61	34.316		
6,300.0	6,232.2	6,173.1	6,131.3	20.7	18.3	-146.25	-455.8	-438.3	1,142.0	1,108.8	33.20	34.400		
6,400.0	6,330.7	6,270.5	6,227.7	21.1	18.7	-146.23	-464.5	-447.8	1,164.9	1,131.2	33.78	34.481		
6,500.0	6,429.2	6,367.8	6,324.2	21.5	19.0	-146.21	-473.2	-457.3	1,187.9	1,153.5	34.37	34.559		
6,600.0	6,527.8	6,465.1	6,420.7	21.9	19.3	-146.20	-481.9	-466.7	1,210.8	1,175.9	34.96	34.634		
6,700.0	6,626.3	6,562.4	6,517.2	22.2	19.7	-146.18	-490.6	-476.2	1,233.8	1,198.2	35.55	34.706		
6,800.0	6,724.9	6,659.8	6,613.6	22.6	20.0	-146.17	-499.3	-485.7	1,256.7	1,220.6	36.14	34.776		
6,900.0	6,823.4	6,757.1	6,710.1	23.0	20.3	-146.15	-508.0	-495.1	1,279.7	1,243.0	36.73	34.843		
7,000.0	6,921.9	6,854.4	6,806.6	23.4	20.7	-146.14	-516.7	-504.6	1,302.6	1,265.3	37.32	34.908		
7,100.0	7,020.5	6,951.8	6,903.1	23.8	21.0	-146.12	-525.4	-514.1	1,325.6	1,287.7	37.91	34.971		
7,200.0	7,119.0	7,049.1	6,999.6	24.2	21.3	-146.11	-534.1	-523.5	1,348.5	1,310.0	38.49	35.031		
7,300.0	7,217.6	7,146.4	7,096.0	24.6	21.7	-146.10	-542.8	-533.0	1,371.5	1,332.4	39.08	35.090		
7,400.0	7,316.1	7,243.8	7,192.5	25.0	22.0	-146.09	-551.4	-542.5	1,394.4	1,354.8	39.67	35.147		
7,500.0	7,414.6	7,341.1	7,289.0	25.3	22.3	-146.08	-560.1	-551.9	1,417.4	1,377.1	40.26	35.202		
7,600.0	7,513.2	7,438.4	7,385.5	25.7	22.6	-146.06	-568.8	-561.4	1,440.3	1,399.5	40.85	35.255		
7,700.0	7,611.7	7,535.8	7,482.0	26.1	23.0	-146.05	-577.5	-570.9	1,463.3	1,421.8	41.44	35.306		
7,800.0	7,710.3	7,633.1	7,578.4	26.5	23.3	-146.04	-586.2	-580.3	1,486.2	1,444.2	42.04	35.356		
7,900.0	7,808.8	7,730.4	7,674.9	26.9	23.6	-146.03	-594.9	-589.8	1,509.2	1,466.5	42.63	35.405		
8,000.0	7,907.3	7,827.7	7,771.4	27.3	24.0	-146.02	-603.6	-599.3	1,532.1	1,488.9	43.22	35.452		
8,100.0	8,005.9	7,925.1	7,867.9	27.7	24.3	-146.01	-612.3	-608.7	1,555.1	1,511.3	43.81	35.497		
8,195.5	8,100.0	8,018.0	7,960.0	28.0	24.6	-146.00	-620.6	-617.8	1,577.0	1,532.6	44.37	35.540		

Company: Synergy Resources
Project: SEC.10-T4N-R68W
Reference Site: SRC Avex 42-10D Pad Sec.10-T4N-R68W
Site Error: 0.0ft
Reference Well: SRC Avex 31-10D
Well Error: 0.0ft
Reference Wellbore: Wellbore #1
Reference Design: Plan #1 (7-12-11)

Local Co-ordinate Reference: Well SRC Avex 31-10D
TVD Reference: WELL @ 5051.0ft (Original Well Elev)
MD Reference: WELL @ 5051.0ft (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

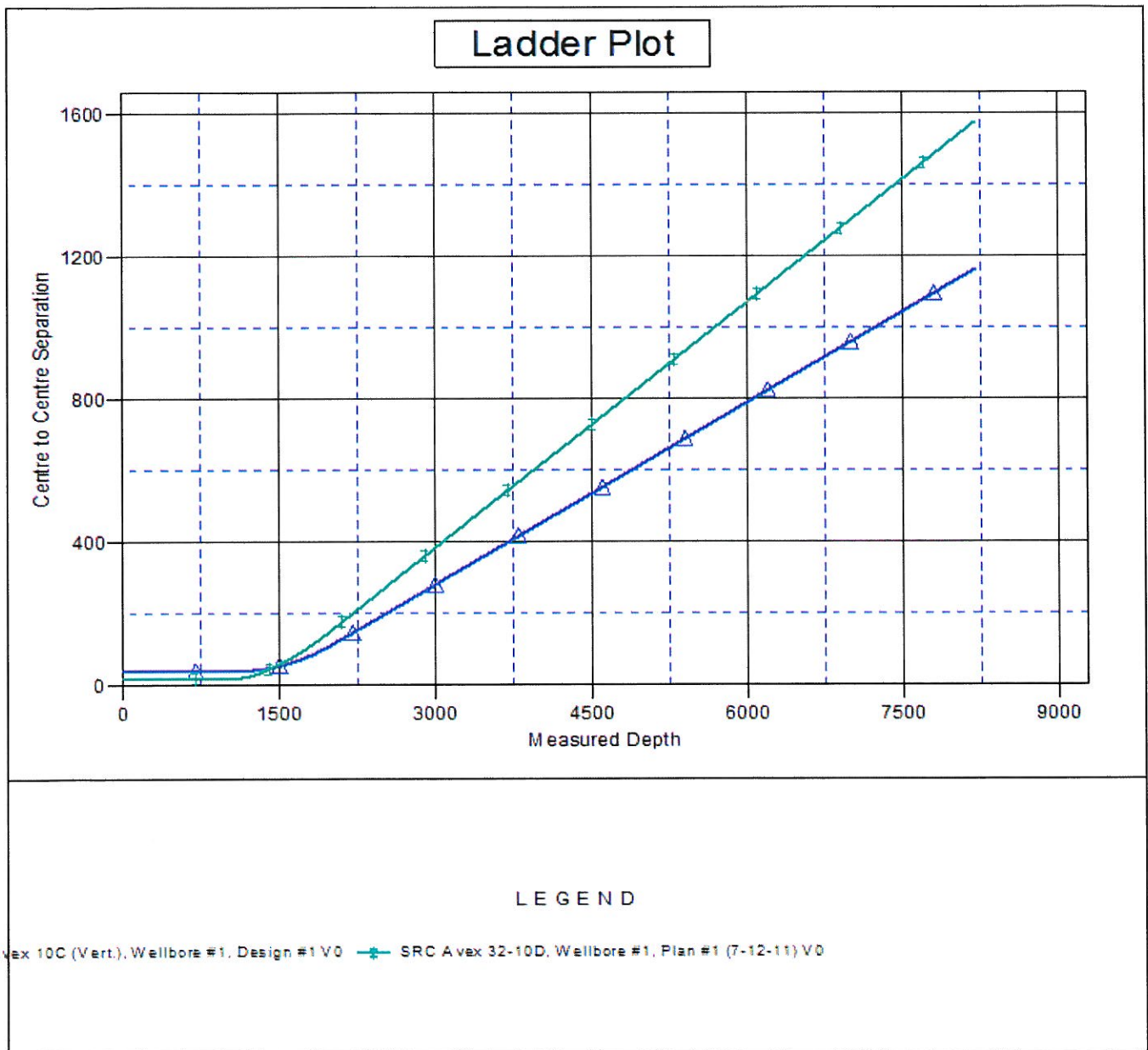
Reference Depths are relative to WELL @ 5051.0ft (Original Well Elev) Coordinates are relative to: SRC Avex 31-10D

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: 0.33°



Company: Synergy Resources
Project: SEC.10-T4N-R68W
Reference Site: SRC Avex 42-10D Pad Sec.10-T4N-R68W
Site Error: 0.0ft
Reference Well: SRC Avex 31-10D
Well Error: 0.0ft
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Output errors are at: 2.00 sigma
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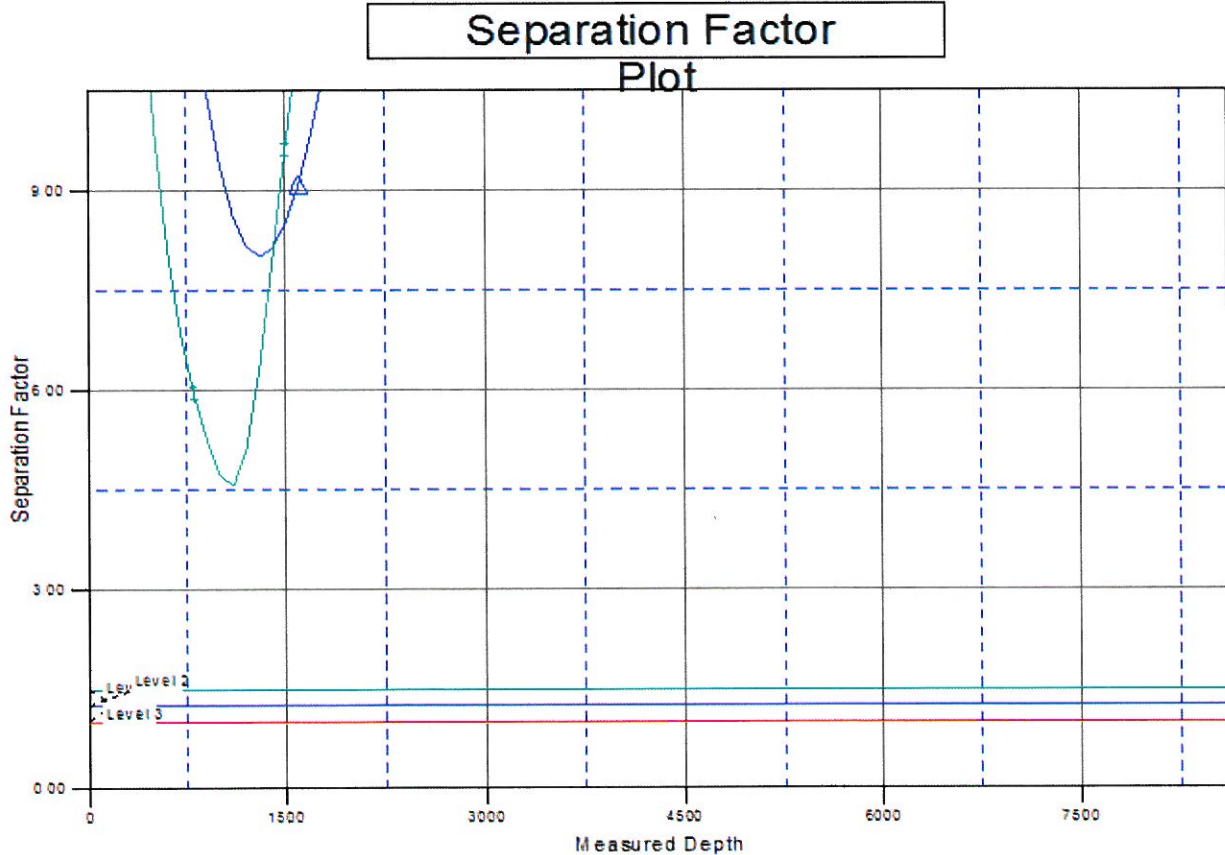
Reference Depths are relative to WELL @ 5051.0ft (Original Well Elev) Coordinates are relative to: SRC Avex 31-10D

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: 0.33°



LEGEND

Avex 10C (Vert), Wellbore #1, Design #1 V0 — SRC Avex 32-10D, Wellbore #1, Plan #1 (7-12-11) V0