

Well Name: Pratt 24-2D

Surface Location: Pratt 14-2D Pad Sec.2-T4N-R68W
North American Datum 1983 US State Plane 1983 Colorado Northern Zone
Ground Elevation: 5003.0
Northing 1367080.52 Easting 3146341.80 Latitude 40.339848 Longitude -104.975018 Slot
Original Well Elev WELL @ 5016.0ft (Original Well Elev)

+N/-S 0.0
+E/-W 0.0

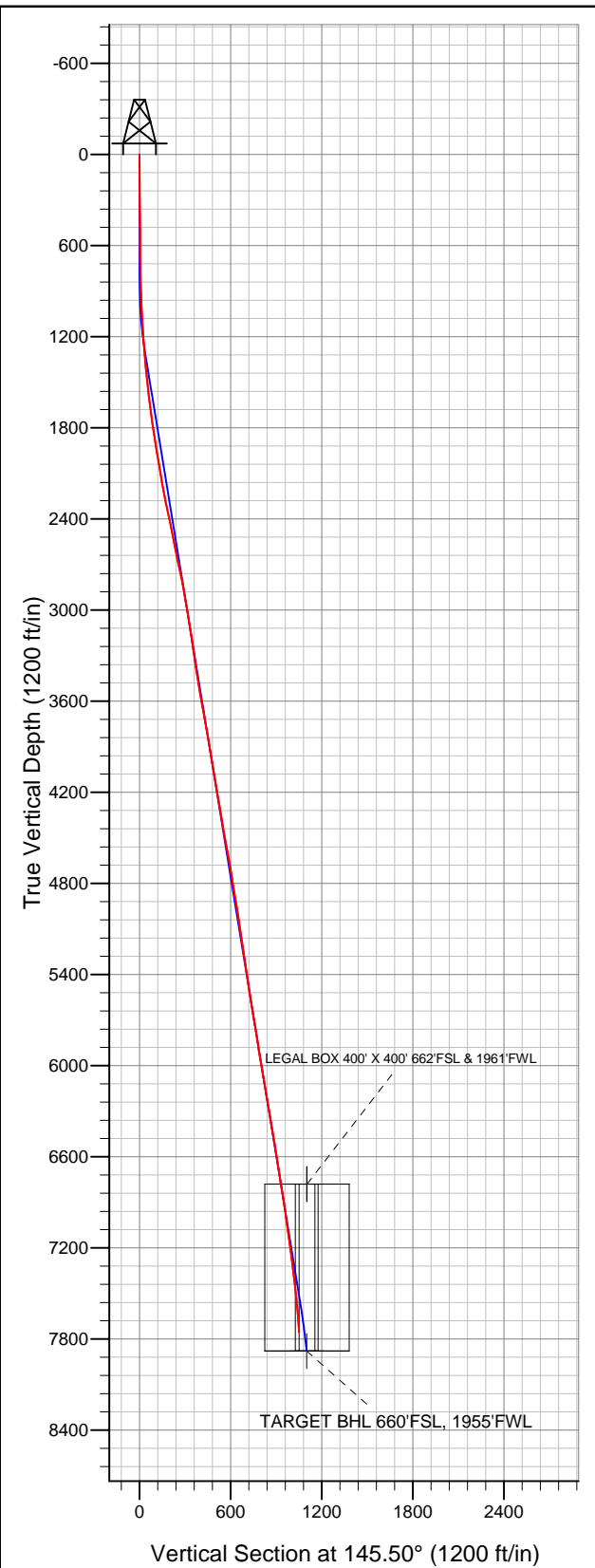
Northing 1367080.52

Easting 3146341.80

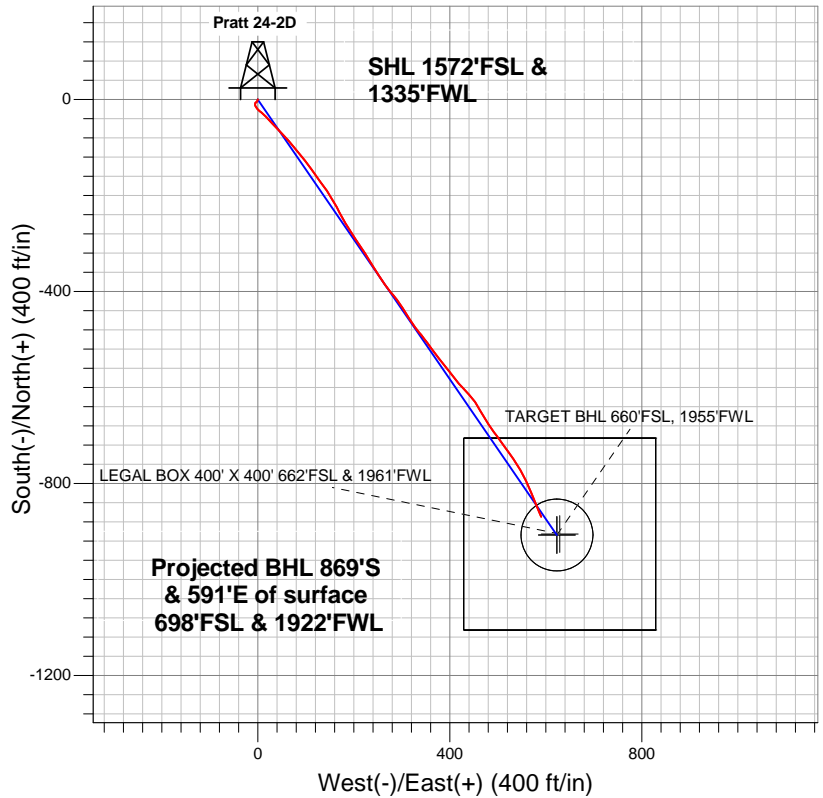
Latitude 40.339848

Longitude -104.975018

Slot



Synergy Resources



LEGEND

- △ Pratt 24-2D, Wellbore #1, Plan #2 (11-09-12) V0
- Wellbore #1
- Survey #1

Final Survey Plot

Projected Final Survey -
7840' MD & 7756' TVD @ 1051' VS
4.40 deg Inc 157.30 deg AZ

Project: SEC.2-T4N-R68W
Site: Pratt 14-2D Pad Sec.2-T4N-R68W
Well: Pratt 24-2D
Plan: Wellbore #1



Directional

Synergy Resources

SEC.2-T4N-R68W

Pratt 14-2D Pad Sec.2-T4N-R68W

Pratt 24-2D

Wellbore #1

Survey: Survey #1

Standard Survey Report

18 November, 2012

Company:	Synergy Resources	Local Co-ordinate Reference:	Well Pratt 24-2D
Project:	SEC.2-T4N-R68W	TVD Reference:	WELL @ 5016.0ft (Original Well Elev)
Site:	Pratt 14-2D Pad Sec.2-T4N-R68W	MD Reference:	WELL @ 5016.0ft (Original Well Elev)
Well:	Pratt 24-2D	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Project	SEC.2-T4N-R68W, 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	Pratt 14-2D Pad Sec.2-T4N-R68W		
Site Position:		Northing:	1,367,080.43ft
From:	Lat/Long	Easting:	3,146,261.80ft
Position Uncertainty:	0.0 ft	Slot Radius:	"
		Latitude:	40.339849
		Longitude:	-104.975305
		Grid Convergence:	0.34 °

Well	Pratt 24-2D		
Well Position	+N/-S	0.0 ft	Northing: 1,367,080.52 ft
	+E/-W	0.0 ft	Easting: 3,146,341.80 ft
Position Uncertainty	0.0 ft	Wellhead Elevation:	ft
		Latitude:	40.339848
		Longitude:	-104.975018
		Ground Level:	5,003.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	11/9/2012	8.78	66.92	52,928

Design	Wellbore #1				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.0	0.0	0.0	145.50	

Survey Program	Date	11/18/2012			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
250.0	7,840.0	Survey #1 (Wellbore #1)	MWD	MWD - Standard	

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	
250.0	0.80	189.90	250.0	-1.7	-0.3	1.2	0.32	0.32	0.00	
507.0	1.10	218.30	507.0	-5.4	-2.1	3.3	0.21	0.12	11.05	
571.0	1.10	285.60	570.9	-5.7	-3.1	3.0	1.90	0.00	105.16	
643.0	1.30	222.50	642.9	-6.2	-4.3	2.6	1.76	0.28	-87.64	
771.0	2.00	185.30	770.9	-9.5	-5.5	4.7	0.97	0.55	-29.06	
900.0	2.60	154.00	899.8	-14.3	-4.4	9.3	1.06	0.47	-24.26	
1,028.0	2.70	138.90	1,027.6	-19.2	-1.2	15.2	0.55	0.08	-11.80	
1,156.0	3.30	127.80	1,155.5	-23.7	3.7	21.7	0.65	0.47	-8.67	
1,284.0	4.70	130.80	1,283.2	-29.4	10.6	30.2	1.11	1.09	2.34	
1,413.0	5.90	137.60	1,411.6	-37.8	19.1	41.9	1.05	0.93	5.27	
1,541.0	6.40	136.40	1,538.9	-47.8	28.4	55.5	0.40	0.39	-0.94	
1,669.0	7.10	136.40	1,666.0	-58.7	38.8	70.3	0.55	0.55	0.00	

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Well:	Pratt 24-2D	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

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)
1,797.0	8.60	136.60	1,792.8	-71.4	50.8	87.6	1.17	1.17	0.16
1,926.0	9.10	138.70	1,920.2	-86.0	64.2	107.3	0.46	0.39	1.63
2,053.0	9.80	139.40	2,045.5	-101.8	77.8	128.0	0.56	0.55	0.55
2,182.0	9.90	141.80	2,172.6	-118.8	91.8	150.0	0.33	0.08	1.86
2,310.0	11.30	143.30	2,298.4	-137.5	106.1	173.5	1.11	1.09	1.17
2,438.0	12.30	144.50	2,423.7	-158.7	121.6	199.6	0.80	0.78	0.94
2,566.0	11.10	144.10	2,549.1	-179.8	136.7	225.6	0.94	-0.94	-0.31
2,697.0	12.10	148.50	2,677.4	-201.7	151.3	251.9	1.02	0.76	3.36
2,825.0	11.20	150.50	2,802.8	-224.0	164.4	277.7	0.77	-0.70	1.56
2,953.0	9.80	152.60	2,928.6	-244.5	175.5	300.9	1.13	-1.09	1.64
3,082.0	9.50	148.50	3,055.8	-263.3	186.2	322.4	0.58	-0.23	-3.18
3,209.0	8.20	147.60	3,181.3	-279.9	196.5	341.9	1.03	-1.02	-0.71
3,338.0	8.50	145.70	3,308.9	-295.5	206.8	360.7	0.32	0.23	-1.47
3,466.0	8.80	145.70	3,435.4	-311.4	217.6	379.9	0.23	0.23	0.00
3,595.0	9.80	149.60	3,562.7	-329.0	228.7	400.7	0.92	0.78	3.02
3,723.0	10.50	146.40	3,688.7	-348.1	240.7	423.3	0.70	0.55	-2.50
3,851.0	10.00	148.40	3,814.7	-367.3	253.0	446.0	0.48	-0.39	1.56
3,980.0	9.20	145.00	3,941.9	-385.3	264.8	467.5	0.76	-0.62	-2.64
4,108.0	9.50	140.10	4,068.2	-401.8	277.4	488.3	0.66	0.23	-3.83
4,236.0	10.10	142.40	4,194.3	-418.8	291.0	510.0	0.56	0.47	1.80
4,365.0	9.40	146.00	4,321.5	-436.5	303.8	531.8	0.72	-0.54	2.79
4,493.0	9.70	150.30	4,447.7	-454.5	315.0	553.0	0.60	0.23	3.36
4,619.0	9.80	144.70	4,571.9	-472.5	326.5	574.3	0.76	0.08	-4.44
4,748.0	10.40	139.60	4,698.9	-490.3	340.4	596.9	0.83	0.47	-3.95
4,876.0	9.00	144.10	4,825.0	-507.2	353.7	618.4	1.24	-1.09	3.52
5,005.0	9.30	144.30	4,952.4	-523.9	365.7	638.9	0.23	0.23	0.16
5,133.0	8.70	141.10	5,078.8	-539.8	377.8	658.9	0.61	-0.47	-2.50
5,261.0	8.60	140.30	5,205.4	-554.7	390.0	678.1	0.12	-0.08	-0.63
5,389.0	8.20	144.30	5,332.0	-569.5	401.5	696.7	0.55	-0.31	3.13
5,517.0	8.40	141.50	5,458.7	-584.2	412.6	715.2	0.35	0.16	-2.19
5,646.0	9.70	135.50	5,586.1	-599.3	426.1	735.3	1.24	1.01	-4.65
5,774.0	9.40	138.50	5,712.3	-614.9	440.6	756.3	0.45	-0.23	2.34
5,903.0	8.30	145.70	5,839.7	-630.4	452.8	776.0	1.21	-0.85	5.58
6,031.0	10.00	150.30	5,966.1	-647.7	463.5	796.4	1.44	1.33	3.59
6,160.0	9.70	149.60	6,093.2	-666.8	474.6	818.4	0.25	-0.23	-0.54
6,288.0	9.70	142.70	6,219.4	-684.7	486.6	839.9	0.91	0.00	-5.39
6,416.0	9.30	145.70	6,345.6	-701.8	498.9	861.0	0.50	-0.31	2.34
6,544.0	8.90	143.80	6,472.0	-718.4	510.6	881.2	0.39	-0.31	-1.48
6,672.0	9.60	143.80	6,598.4	-735.0	522.8	901.8	0.55	0.55	0.00
6,800.0	9.30	147.60	6,724.6	-752.3	534.6	922.8	0.54	-0.23	2.97
6,883.0	8.98	147.73	6,806.5	-763.4	541.7	936.0	0.39	-0.39	0.15
LEGAL BOX 400' X 400' 662'FSL & 1961'FWL - TARGET CIRCLE 660'FSL & 1955'FWL									
6,929.0	8.80	147.80	6,852.0	-769.5	545.5	943.1	0.39	-0.39	0.16
7,057.0	8.00	152.40	6,978.6	-785.6	554.8	961.7	0.82	-0.63	3.59
7,186.0	7.80	157.80	7,106.4	-801.7	562.3	979.2	0.60	-0.16	4.19
7,314.0	8.60	157.10	7,233.1	-818.6	569.3	997.0	0.63	0.63	-0.55
7,442.0	6.90	157.10	7,359.9	-834.5	576.0	1,013.9	1.33	-1.33	0.00
7,571.0	6.10	157.00	7,488.1	-847.9	581.7	1,028.2	0.62	-0.62	-0.08
7,699.0	4.70	157.80	7,615.5	-859.0	586.3	1,040.0	1.10	-1.09	0.63
7,796.0	4.40	157.30	7,712.2	-866.1	589.3	1,047.6	0.31	-0.31	-0.52
7,840.0	4.40	157.30	7,756.1	-869.2	590.6	1,050.9	0.00	0.00	0.00
TARGET BHL 660'FSL, 1955'FWL									

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Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Wellbore 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' - survey misses target center by 168.7ft at 6883.0ft MD (6806.5 TVD, -763.4 N, 541.7 E) - Rectangle (sides W400.0 H400.0 D1,100.0)	0.00	0.00	6,780.0	-905.1	629.4	1,366,179.21	3,146,976.52	40.337364	-104.972760
TARGET CIRCLE 660'FS - survey misses target center by 167.4ft at 6883.0ft MD (6806.5 TVD, -763.4 N, 541.7 E) - Circle (radius 75.0)	0.00	0.00	6,780.0	-907.1	623.4	1,366,177.17	3,146,970.53	40.337358	-104.972782
TARGET BHL 660'FS - survey misses target center by 133.6ft at 7840.0ft MD (7756.1 TVD, -869.2 N, 590.6 E) - Point	0.00	0.00	7,880.0	-907.1	623.4	1,366,177.17	3,146,970.49	40.337358	-104.972782

Checked By: _____ Approved By: _____ Date: _____