



# Stone Energy Corporation

Mary Prospect  
Tracy Pad  
Tracy 4H - Slot 4

OH

Design: As Drilled

## Standard Survey Report

06 November, 2014



[www.scientificdrilling.com](http://www.scientificdrilling.com)

06/02/2017



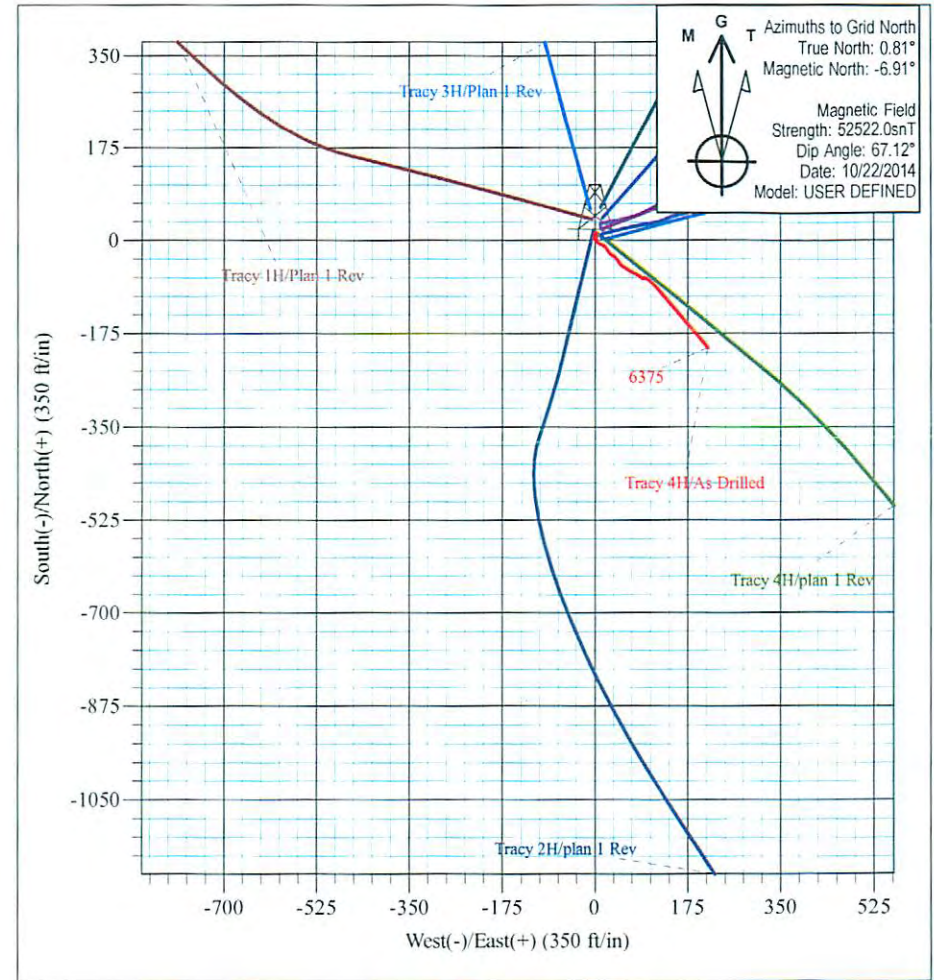
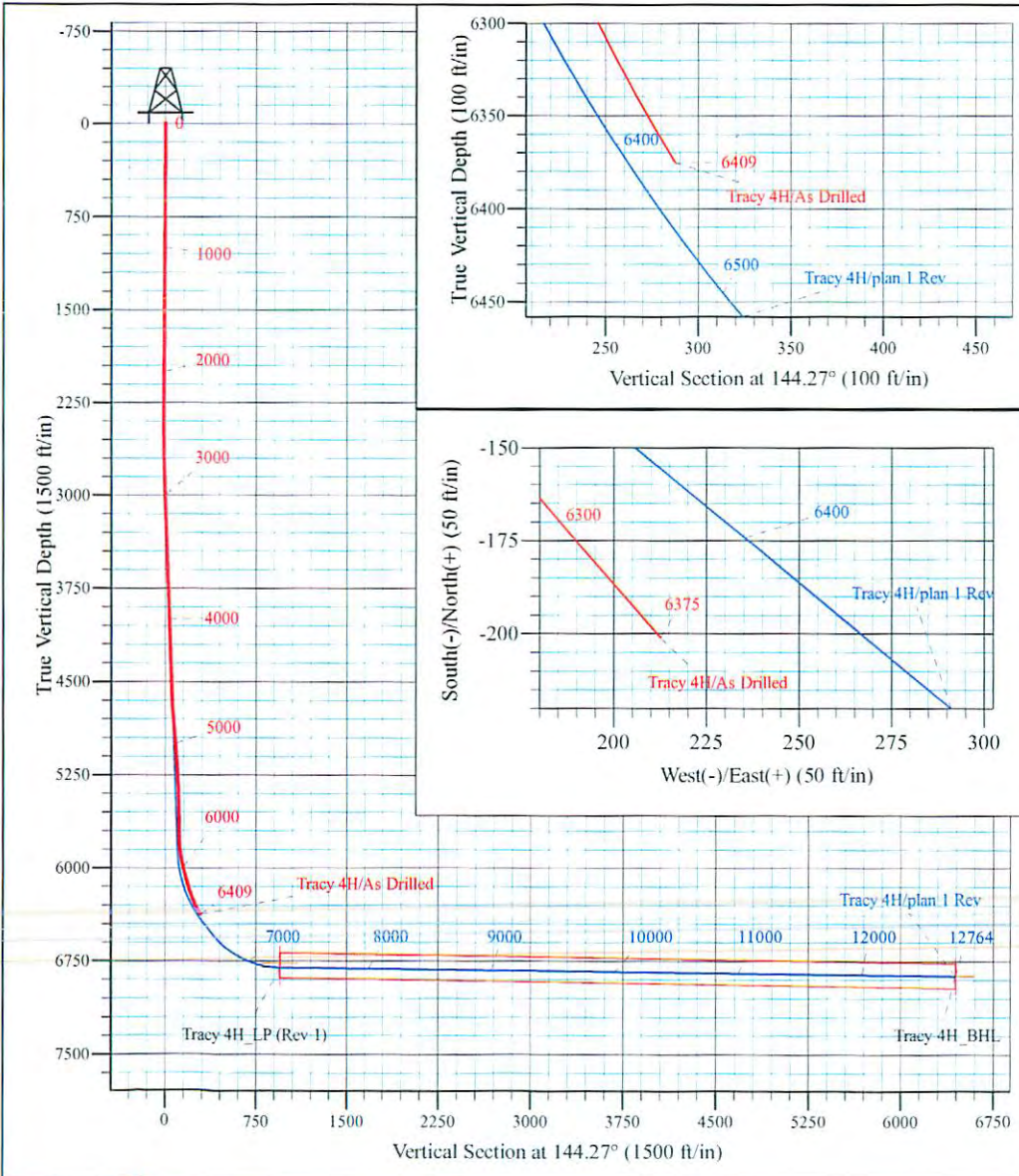
Tracy Pad  
 Tracy 4H  
 As Drilled  
 GL 1101' & KB 10' @ 1111.00ft (Highlands 2)  
 Mary Prospect

PROJECT DETAILS:  
 Geodetic System: US State Plane 1927 (Exact solution)  
 Datum: NAD 1927 (NADCON CONUS)  
 Ellipsoid: Clarke 1866  
 Zone: West Virginia North 4701  
 System Datum: Mean Sea Level



WELL DETAILS: Tracy 4H

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	410101.34	1644312.18	39° 37' 8.771 N	80° 45' 45.615 W



Shane Rhodes  
 14:20, November 06 2014  
 Scientific Drilling International  
 124 Vista Drive  
 Charleroi, PA 15022



Scientific Drilling International  
Survey Report



<b>Company:</b>	Stone Energy Corporation	<b>Local Co-ordinate Reference:</b>	Well Tracy 4H - Slot 4
<b>Project:</b>	Mary Prospect	<b>TVD Reference:</b>	GL 1101' & KB 10' @ 1111.00ft (Highlands 2)
<b>Site:</b>	Tracy Pad	<b>MD Reference:</b>	GL 1101' & KB 10' @ 1111.00ft (Highlands 2)
<b>Well:</b>	Tracy 4H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Northeast District

<b>Project</b>	Mary Prospect, Wetzel County, West Virginia		
<b>Map System:</b>	US State Plane 1927 (Exact solution)	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 (NADCON CONUS)		
<b>Map Zone:</b>	West Virginia North 4701		

<b>Site</b>	Tracy Pad				
<b>Site Position:</b>		<b>Northing:</b>	410,140.88 usft	<b>Latitude:</b>	39° 37' 9.161 N
<b>From:</b>	Map	<b>Easting:</b>	1,644,306.16 usft	<b>Longitude:</b>	80° 45' 45.699 W
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	13-3/16 "	<b>Grid Convergence:</b>	-0.81 °

<b>Well</b>	Tracy 4H - Slot 4					
<b>Well Position</b>	<b>+N-S</b>	0.00 ft	<b>Northing:</b>	410,101.34 usft	<b>Latitude:</b>	39° 37' 8.771 N
	<b>+E-W</b>	0.00 ft	<b>Easting:</b>	1,644,312.18 usft	<b>Longitude:</b>	80° 45' 45.615 W
<b>Position Uncertainty</b>		0.00 ft	<b>Wellhead Elevation:</b>	0.00 ft	<b>Ground Level:</b>	1,101.00 ft

<b>Wellbore</b>	OH				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	User Defined	9/25/2014	-7.70	67.13	52,533
	User Defined	10/22/2014	-7.71	67.12	52,522

<b>Design</b>	As Drilled				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N-S (ft)</b>	<b>+E-W (ft)</b>	<b>Direction (°)</b>	
	0.00	0.00	0.00	144.27	

<b>Survey Program</b>	<b>Date</b>	11/6/2014			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
10.00	2,396.88	Survey #1 - SDI Gyro (OH)	SDI Standard Keeper 103	SDI Standard Wireline Keeper ver 1.0.3	
2,482.00	6,409.00	Survey #2 - SDI MWD (OH)	SDI MWD	SDI MWD - Standard ver 1.0.1	

<b>Survey</b>										
<b>Measured Depth (ft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (ft)</b>	<b>+N-S (ft)</b>	<b>+E-W (ft)</b>	<b>Vertical Section (ft)</b>	<b>Dogleg Rate (°/100usft)</b>	<b>Build Rate (°/100usft)</b>	<b>Turn Rate (°/100usft)</b>	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.00	0.00	360.00	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>First SDI Gyro @ 10 MD</b>										
100.00	0.37	320.17	100.00	0.22	-0.19	-0.29	0.41	0.41	0.00	0.00
200.00	0.43	319.53	200.00	0.76	-0.64	-0.99	0.06	0.06	-0.64	-0.64
300.00	0.35	306.05	299.99	1.22	-1.13	-1.65	0.12	-0.08	-13.48	-13.48
400.00	0.25	341.00	399.99	1.61	-1.44	-2.15	0.20	-0.10	34.95	34.95
500.00	0.31	328.80	499.99	2.05	-1.66	-2.63	0.08	0.06	-12.20	-12.20



Scientific Drilling International  
Survey Report



<b>Company:</b>	Stone Energy Corporation	<b>Local Co-ordinate Reference:</b>	Well Tracy 4H - Slot 4
<b>Project:</b>	Mary Prospect	<b>TVD Reference:</b>	GL 1101' & KB 10' @ 1111.00ft (Highlands 2)
<b>Site:</b>	Tracy Pad	<b>MD Reference:</b>	GL 1101' & KB 10' @ 1111.00ft (Highlands 2)
<b>Well:</b>	Tracy 4H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Northeast District

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
600.00	0.28	300.11	599.99	2.40	-2.01	-3.12	0.15	-0.03	-28.69	
700.00	0.10	335.10	699.99	2.60	-2.26	-3.43	0.21	-0.18	34.99	
800.00	0.14	49.17	799.99	2.76	-2.20	-3.53	0.15	0.04	74.07	
900.00	0.12	354.44	899.99	2.94	-2.12	-3.63	0.12	-0.02	-54.73	
1,000.00	0.07	3.32	999.99	3.11	-2.12	-3.76	0.05	-0.05	8.88	
1,100.00	0.03	32.40	1,099.99	3.19	-2.11	-3.82	0.05	-0.04	29.08	
1,200.00	0.32	21.47	1,199.99	3.47	-1.99	-3.98	0.29	0.29	-10.93	
1,300.00	0.45	15.48	1,299.99	4.11	-1.78	-4.38	0.14	0.13	-5.99	
1,400.00	0.49	8.15	1,399.98	4.91	-1.62	-4.93	0.07	0.04	-7.33	
1,500.00	0.49	357.84	1,499.98	5.77	-1.57	-5.60	0.09	0.00	-10.31	
1,600.00	0.39	17.04	1,599.98	6.52	-1.49	-6.16	0.18	-0.10	19.20	
1,700.00	0.52	19.90	1,699.97	7.27	-1.24	-6.62	0.13	0.13	2.86	
1,800.00	0.58	19.52	1,799.97	8.17	-0.91	-7.17	0.06	0.06	-0.38	
1,900.00	0.45	12.22	1,899.97	9.03	-0.66	-7.72	0.15	-0.13	-7.30	
2,000.00	0.52	21.15	1,999.96	9.84	-0.41	-8.23	0.10	0.07	8.93	
2,100.00	0.36	21.07	2,099.96	10.56	-0.14	-8.65	0.16	-0.16	-0.08	
2,200.00	0.49	17.41	2,199.96	11.26	0.10	-9.08	0.13	0.13	-3.66	
2,300.00	0.57	18.41	2,299.95	12.14	0.39	-9.63	0.08	0.08	1.00	
2,396.00	0.63	20.32	2,395.95	13.09	0.72	-10.20	0.07	0.06	1.99	
<b>Last SDI Gyro @ 2396 MD</b>										
2,396.88	0.63	20.34	2,396.83	13.10	0.73	-10.21	0.07	0.06	1.80	
2,482.00	0.72	31.40	2,481.94	13.99	1.17	-10.68	0.19	0.11	12.99	
<b>First SDI MWD @ 2482 MD</b>										
2,576.00	0.61	141.67	2,575.94	14.10	1.79	-10.41	1.16	-0.12	117.31	
2,670.00	2.22	181.27	2,669.91	11.89	2.06	-8.45	1.91	1.71	42.13	
2,764.00	2.56	182.18	2,763.82	7.97	1.94	-5.34	0.36	0.36	0.97	
2,858.00	2.42	182.85	2,857.74	3.89	1.76	-2.13	0.15	-0.15	0.71	
2,952.00	1.85	162.47	2,951.67	0.46	2.12	0.86	1.00	-0.61	-21.68	
3,047.00	1.95	154.52	3,046.62	-2.46	3.27	3.91	0.30	0.11	-8.37	
3,141.00	2.21	125.61	3,140.56	-4.96	5.43	7.20	1.14	0.28	-30.76	
3,235.00	2.32	114.26	3,234.49	-6.79	8.64	10.56	0.49	0.12	-12.07	
3,330.00	2.36	118.17	3,329.41	-8.51	12.12	13.98	0.17	0.04	4.12	
3,424.00	2.17	112.58	3,423.33	-10.11	15.47	17.24	0.31	-0.20	-5.95	
3,518.00	2.16	135.97	3,517.27	-12.06	18.34	20.50	0.93	-0.01	24.88	
3,612.00	2.35	147.17	3,611.20	-14.96	20.62	24.18	0.51	0.20	11.91	
3,708.00	2.24	147.75	3,707.12	-18.20	22.69	28.02	0.12	-0.11	0.60	
3,802.00	1.98	144.82	3,801.06	-21.08	24.60	31.48	0.30	-0.28	-3.12	
3,896.00	2.11	132.80	3,895.00	-23.58	26.81	34.80	0.48	0.14	-12.79	
3,990.00	2.20	131.31	3,988.93	-25.95	29.43	38.25	0.11	0.10	-1.59	
4,084.00	1.59	143.29	4,082.88	-28.18	31.57	41.31	0.77	-0.65	12.74	
4,178.00	1.90	111.71	4,176.84	-29.80	33.80	43.93	1.06	0.33	-33.60	
4,272.00	1.42	106.65	4,270.80	-30.71	36.36	46.17	0.53	-0.51	-5.38	
4,366.00	1.24	145.46	4,364.77	-31.89	38.05	48.11	0.96	-0.19	41.29	
4,460.00	1.95	143.08	4,458.74	-34.00	39.59	50.72	0.76	0.76	-2.53	



<b>Company:</b>	Stone Energy Corporation	<b>Local Co-ordinate Reference:</b>	Well Tracy 4H - Slot 4
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<b>Well:</b>	Tracy 4H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Northeast District

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
4,554.00	2.32	141.57	4,552.67	-36.77	41.73	54.22	0.40	0.39	-1.61	
4,648.00	2.92	152.66	4,646.57	-40.39	44.02	58.49	0.83	0.64	11.80	
4,742.00	3.52	140.25	4,740.43	-44.73	46.96	63.74	0.97	0.64	-13.20	
4,838.00	4.65	124.43	4,836.18	-49.20	52.05	70.34	1.65	1.18	-16.48	
4,932.00	5.18	124.91	4,929.84	-53.78	58.68	77.93	0.57	0.56	0.51	
5,026.00	5.24	120.02	5,023.45	-58.36	65.87	85.84	0.48	0.06	-5.20	
5,120.00	5.07	114.87	5,117.07	-62.25	73.36	93.38	0.52	-0.18	-5.48	
5,214.00	4.09	117.78	5,210.77	-65.56	80.09	99.99	1.07	-1.04	3.10	
5,309.00	3.00	130.41	5,305.59	-68.75	84.98	105.44	1.40	-1.15	13.29	
5,403.00	1.52	115.28	5,399.51	-70.88	87.98	108.92	1.68	-1.57	-16.10	
5,497.00	1.29	94.98	5,493.48	-71.51	90.17	110.70	0.58	-0.24	-21.60	
5,591.00	1.56	91.72	5,587.45	-71.64	92.50	112.17	0.30	0.29	-3.47	
5,685.00	1.55	85.03	5,681.42	-71.56	95.04	113.60	0.19	-0.01	-7.12	
5,779.00	2.60	124.59	5,775.36	-72.66	98.07	116.25	1.83	1.12	42.09	
5,873.00	6.42	132.95	5,869.05	-77.46	103.67	123.42	4.11	4.06	8.89	
5,904.00	8.81	130.95	5,899.78	-80.19	106.73	127.43	7.76	7.71	-6.45	
5,935.00	10.93	134.30	5,930.32	-83.80	110.63	132.63	7.08	6.84	10.81	
5,967.00	12.34	136.20	5,961.66	-88.39	115.17	139.01	4.57	4.41	5.94	
5,998.00	13.44	137.02	5,991.88	-93.42	119.92	145.86	3.60	3.55	2.65	
6,030.00	14.50	139.55	6,022.93	-99.19	125.05	153.54	3.82	3.31	7.91	
6,061.00	14.30	142.28	6,052.96	-105.17	129.91	161.24	2.28	-0.65	8.81	
6,092.00	15.39	141.21	6,082.92	-111.40	134.83	169.17	3.63	3.52	-3.45	
6,124.00	16.20	140.77	6,113.71	-118.17	140.31	177.87	2.56	2.53	-1.38	
6,155.00	16.62	138.74	6,143.45	-124.85	145.97	186.60	2.29	1.35	-6.55	
6,186.00	18.32	138.02	6,173.02	-131.81	152.15	195.85	5.53	5.48	-2.32	
6,218.00	19.49	138.63	6,203.29	-139.55	159.05	206.16	3.71	3.66	1.91	
6,249.00	21.51	137.81	6,232.33	-147.65	166.28	216.96	6.58	6.52	-2.65	
6,281.00	22.90	140.49	6,261.96	-156.80	174.18	229.00	5.37	4.34	8.38	
6,312.00	24.83	139.30	6,290.31	-166.39	182.27	241.51	6.42	6.23	-3.84	
6,344.00	27.38	138.84	6,319.04	-177.02	191.49	255.53	7.99	7.97	-1.44	
<b>Last SDI MWD @ 6344 MD</b>										
6,409.00	31.98	138.84	6,375.50	-201.25	212.67	287.56	7.08	7.08	0.00	
<b>Projection to Bit @ 6409 MD</b>										

Design Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
10.00	10.00	0.00	0.00	First SDI Gyro @ 10 MD	
2,396.00	2,395.95	13.09	0.72	Last SDI Gyro @ 2396 MD	
2,482.00	2,481.94	13.99	1.17	First SDI MWD @ 2482 MD	
6,344.00	6,319.04	-177.02	191.49	Last SDI MWD @ 6344 MD	
6,409.00	6,375.50	-201.25	212.67	Projection to Bit @ 6409 MD	