

30-025-43890

HOBBS OCD

FEB 13 2018

Company: **Special Energy Corporatio**Job # **178134**Proposed Azimuth: **179.46**Field: **Sec 17-12S-38E**API # **30-25-43890**Target Inclination: **90.24**County: **Lea County**License # **30-25-43890**Well Name: **Decker #1H**Spud Date: **4-Sep-17**Total Magnetic Corre: **5.95**y Reference: **Grid North****RECEIVED**
CATHEDRAL

No.	Tool Type	Survey (S o	Survey Depth (ft)	Incl (°)	Azimuth (°)	Course Lgth(ft)	TVD (ft)	VS (ft)	Coordinates		Closure		DLS (°/100')	Bld Rate (°/100')	Wlk Rate (°/100')
									North (ft)	East (ft)	Dist (ft)	Ang (°)			
0	TIE-IN	Gyro	0	0.00	0.00	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	TIE-IN	Gyro	186.00	0.80	313.90	186	185.99	-0.91	0.90	-0.94	1.30	313.90	0.43	0.43	-24.78
0	TIE-IN	Gyro	249.00	0.80	319.10	63	248.99	-1.55	1.54	-1.54	2.18	314.95	0.12	0.00	8.25
0	TIE-IN	Gyro	448.00	1.00	293.10	199	447.96	-3.31	3.27	-4.05	5.20	308.93	0.23	0.10	-13.07
0	TIE-IN	Gyro	513.00	1.00	293.10	65	512.95	-3.76	3.71	-5.09	6.30	306.11	0.00	0.00	0.00
0	TIE-IN	Gyro	697.00	0.80	276.80	184	696.93	-4.57	4.50	-7.84	9.04	299.82	0.18	-0.11	-8.86
0	TIE-IN	Gyro	869.00	0.60	254.90	172	868.92	-4.50	4.40	-9.91	10.84	293.97	0.19	-0.12	-12.73
0	TIE-IN	Gyro	995.00	0.20	294.70	126	994.92	-4.42	4.32	-10.74	11.58	291.93	0.37	-0.32	31.59
0	TIE-IN	Gyro	1057.00	0.20	276.80	62	1056.92	-4.48	4.38	-10.95	11.79	291.81	0.10	0.00	-28.87
0	TIE-IN	Gyro	1211.00	0.20	173.20	154	1210.91	-4.25	4.15	-11.18	11.93	290.35	0.20	0.00	-67.27
0	TIE-IN	Gyro	1396.00	0.20	234.80	185	1395.91	-3.75	3.64	-11.41	11.97	287.70	0.11	0.00	33.30
0	TIE-IN	Gyro	1595.00	0.40	215.50	199	1594.91	-2.99	2.87	-12.10	12.43	283.37	0.11	0.10	-9.70
0	TIE-IN	Gyro	1723.00	0.30	238.40	128	1722.91	-2.45	2.34	-12.64	12.85	280.47	0.13	-0.08	17.89
0	TIE-IN	Gyro	1916.00	0.30	209.10	193	1915.91	-1.75	1.63	-13.32	13.42	276.97	0.08	0.00	-15.18
0	TIE-IN	Gyro	1979.00	0.20	187.50	63	1978.91	-1.50	1.38	-13.41	13.48	275.86	0.22	-0.16	-34.29
0	TIE-IN	Gyro	2049.00	0.20	187.50	70	2048.90	-1.26	1.13	-13.44	13.49	274.82	0.00	0.00	0.00
0	TIE-IN	Gyro	2192.00	0.70	233.60	143	2191.90	-0.50	0.37	-14.18	14.18	271.49	0.41	0.35	32.24
1	HTR	S	2306.00	0.90	227.60	114	2305.89	0.50	-0.65	-15.40	15.41	267.59	0.19	0.18	-5.26
2	HTR	S	2349.00	0.90	241.10	43	2348.88	0.89	-1.04	-15.95	15.98	266.27	0.49	0.00	31.40
3	HTR	S	2392.00	0.80	202.30	43	2391.88	1.33	-1.48	-16.35	16.42	264.82	1.33	-0.23	-90.23
4	HTR	S	2435.00	0.60	173.80	43	2434.88	1.83	-1.98	-16.44	16.56	263.12	0.92	-0.47	-66.28
5	HTR	S	2480.00	0.70	78.30	45	2479.87	2.01	-2.16	-16.15	16.29	262.38	2.14	0.22	-212.22
6	HTR	S	2523.00	0.70	82.20	43	2522.87	1.92	-2.07	-15.63	15.77	262.45	0.11	0.00	9.07
7	HTR	S	2565.00	0.80	89.60	42	2564.87	1.89	-2.04	-15.08	15.22	262.32	0.33	0.24	17.62
8	HTR	S	2608.00	0.80	92.20	43	2607.86	1.91	-2.04	-14.48	14.63	261.96	0.08	0.00	6.05
9	HTR	S	2650.00	1.10	94.10	42	2649.86	1.95	-2.09	-13.79	13.95	261.40	0.72	0.71	4.52
10	HTR	S	2693.00	1.00	84.20	43	2692.85	1.95	-2.08	-13.00	13.17	260.93	0.48	-0.23	-23.02
11	HTR	S	2736.00	1.10	105.20	43	2735.84	2.03	-2.15	-12.23	12.42	260.05	0.92	0.23	48.84
12	HTR	S	2778.00	0.70	93.90	42	2777.84	2.16	-2.27	-11.59	11.81	258.92	1.04	-0.95	-26.90
13	HTR	S	2821.00	0.70	16.40	43	2820.84	1.93	-2.04	-11.25	11.43	259.74	2.04	0.00	-180.23
14	HTR	S	2864.00	0.80	23.10	43	2863.83	1.40	-1.51	-11.06	11.16	262.24	0.31	0.23	15.58
15	HTR	S	2907.00	0.50	32.10	43	2906.83	0.97	-1.07	-10.84	10.90	264.35	0.73	-0.70	20.93
16	HTR	S	2949.00	0.50	60.60	42	2948.83	0.73	-0.83	-10.59	10.62	265.53	0.59	0.00	67.86
17	HTR	S	2992.00	0.70	82.40	43	2991.82	0.60	-0.70	-10.16	10.19	266.06	0.70	0.47	50.70
18	HTR	S	3034.00	0.80	88.10	42	3033.82	0.57	-0.66	-9.61	9.64	266.09	0.30	0.24	13.57
19	HTR	S	3077.00	1.00	89.80	43	3076.82	0.56	-0.65	-8.94	8.96	265.87	0.47	0.47	3.95
20	HTR	S	3119.00	1.10	84.80	42	3118.81	0.53	-0.61	-8.17	8.19	265.74	0.32	0.24	-11.90
21	HTR	S	3162.00	1.70	82.60	43	3161.80	0.42	-0.49	-7.13	7.14	266.08	1.40	1.40	-5.12
22	HTR	S	3205.00	1.50	64.90	43	3204.78	0.11	-0.17	-5.99	5.99	268.40	1.23	-0.47	-41.16
23	HTR	S	3248.00	1.20	20.00	43	3247.77	-0.54	0.49	-5.32	5.34	275.31	2.48	-0.70	-104.42
24	HTR	S	3290.00	1.60	17.70	42	3289.76	-1.51	1.47	-4.99	5.20	286.37	0.96	0.95	-5.48
25	HTR	S	3333.00	1.30	13.70	43	3332.74	-2.56	2.51	-4.69	5.32	298.15	0.74	-0.70	-9.30
26	HTR	S	3376.00	0.60	252.70	43	3375.74	-2.96	2.92	-4.79	5.61	301.34	3.93	-1.63	555.81
27	HTR	S	3418.00	0.90	278.20	42	3417.73	-2.95	2.90	-5.33	6.07	298.55	1.05	0.71	60.71
28	HTR	S	3461.00	1.10	284.00	43	3460.73	-3.11	3.05	-6.07	6.79	296.69	0.52	0.47	13.49
29	HTR	S	3504.00	1.30	294.80	43	3503.72	-3.42	3.35	-6.91	7.68	295.89	0.70	0.47	25.12
30	HTR	S	3546.00	0.90	291.60	42	3545.71	-3.75	3.67	-7.65	8.48	295.66	0.96	-0.95	-7.62
31	HTR	S	3589.00	1.00	113.40	43	3588.71	-3.72	3.65	-7.62	8.45	295.60	4.42	0.23	-414.42
32	HTR	S	3631.00	1.20	107.20	42	3630.70	-3.44	3.37	-6.86	7.65	296.19	0.55	0.48	-14.76
33	HTR	S	3674.00	1.10	110.80	43	3673.69	-3.15	3.09	-6.05	6.79	297.11	0.29	-0.23	8.37
34	HTR	S	3717.00	1.20	113.00	43	3716.68	-2.82	2.77	-5.24	5.93	297.86	0.25	0.23	5.12
35	HTR	S	3760.00	1.10	109.70	43	3759.68	-2.50	2.46	-4.44	5.08	298.95	0.28	-0.23	-7.67
36	HTR	S	3802.00	1.20	109.10	42	3801.67	-2.21	2.18	-3.65	4.25	300.84	0.24	0.24	-1.43
37	HTR	S	3845.00	1.20	102.50	43	3844.66	-1.96	1.93	-2.78	3.39	304.79	0.32	0.00	-15.35
38	HTR	S	3888.00	1.00	104.50	43	3887.65	-1.76	1.74	-1.98	2.64	311.34	0.47	-0.47	4.65
39	HTR	S	3930.00	1.10	136.80	42	3929.64	-1.37	1.36	-1.35	1.91	315.16	1.41	0.24	76.90
40	HTR	S	3973.00	0.80	169.20	43	3972.64	-0.77	0.76	-1.01	1.26	306.96	1.40	-0.70	75.35
41	HTR	S	4015.00	0.70	161.70	42	4014.63	-0.24	0.23	-0.87	0.90	284.61	0.33	-0.24	-17.86
42	HTR	S	4058.00	1.00	179.90	43	4057.63	0.39	-0.40	-0.79	0.88	243.34	0.93	0.70	42.33
43	HTR	S	4101.00	1.00	169.80	43	4100.62	1.13	-1.14	-0.72	1.35	212.36	0.41	0.00	-23.49
44	HTR	S	4144.00	0.40	354.00	43	4143.62	1.36	-1.36	-0.67	1.52	206.29	3.25	-1.40	428.37
45	HTR	S	4187.00	0.40	355.80	43	4186.62	1.06	-1.06	-0.70	1.27	213.35	0.03	0.00	4.19
46	HTR	S	4229.00	0.50	1.80	42	4228.62	0.73	-0.73	-0.70	1.02	223.85	0.26	0.24	14.29
47	HTR	S	4272.00	0.30	354.00	43	4271.62	0.43	-0.43	-0.71	0.83	238.59	0.48	-0.47	-18.14
48	HTR	S	4314.00	0.50	343.90	42	4313.62	0.14	-0.15	-0.77	0.79	259.14	0.50	0.48	-24.05
49	HTR	S	4357.00	0.90	156.60	43	4356.61	0.27	-0.28	-0.69	0.74	248.08	3.25	0.93	-435.58
50	HTR	S	4400.00	4.10	175.80	43	4399.57	2.12	-2.12	-0.44	2.17	191.81	7.59	7.44	44.65
51	HTR	S	4442.00	6.50	185.90	42	4441.39	5.98	-5.98	-0.58	6.01	185.52	6.11	5.71	24.05
52	HTR	S	4485.00	9.90	183.70	43	4483.94	12.09	-12.10	-1.07	12.14	185.04	7.94	7.91	-5.12
53	HTR	S	4528.00	12.60	181.00	43	4526.11	20.46	-20.48	-1.39	20.52	183.88	6.40	6.28	-6.28
54	HTR	S	4570.00	17.00	178.60	42	4566.71	31.19	-31.20	-1.32	31.23	182.42	10.58	10.48	-5.71
55	HTR	S	4616.00	20.80	180.20	46	4610.22	46.08	-46.09	-1.18	46.11	181.47	8.34	8.26	3.48

Provide signature page for
directional survey

Company: **Special Energy Corporatio**
Field: **Sec 17-12S-38E**
County: **Lea County**
Well Name: **Decker #1H**
Total Magnetic Corre: **5.95**

Job # **178134**
API # **30-25-43890**
License # **30-25-43890**
Spud Date: **4-Sep-17**
y Reference: **Grid North**

Proposed Azimuth: **179.46**
Target Inclination: **90.24**



No.	Tool Type	Survey e (S o	Survey Depth (ft)	Incl (°)	Azimuth (°)	Course Lgth(ft)	TVD (ft)	VS (ft)	Coordinates		Closure		DLS (°/100')	Bld Rate (°/100')	Wlk Rate (°/100')
									North (ft)	East (ft)	Dist (ft)	Ang (°)			
56	HTR	S	4659.00	23.30	180.00	43	4650.07	62.22	-62.24	-1.21	62.25	181.11	5.82	5.81	-0.47
57	HTR	S	4701.00	26.10	178.70	42	4688.23	79.77	-79.78	-1.00	79.79	180.72	6.79	6.67	-3.10
58	HTR	S	4743.00	29.20	177.50	42	4725.43	99.25	-99.26	-0.34	99.26	180.20	7.50	7.38	-2.86
59	HTR	S	4786.00	32.00	176.90	43	4762.43	121.12	-121.12	0.73	121.12	179.65	6.55	6.51	-1.40
60	HTR	S	4829.00	34.40	177.00	43	4798.41	144.64	-144.63	1.98	144.64	179.21	5.58	5.58	0.23
61	HTR	S	4871.00	36.00	179.40	42	4832.73	168.84	-168.82	2.73	168.84	179.07	5.04	3.81	5.71
62	HTR	S	4914.00	38.40	181.70	43	4866.98	194.83	-194.81	2.47	194.83	179.27	6.45	5.58	5.35
63	HTR	S	4956.00	42.00	182.70	42	4899.06	221.90	-221.90	1.42	221.90	179.63	8.71	8.57	2.38
64	HTR	S	4999.00	43.30	183.80	43	4930.68	250.97	-250.98	-0.23	250.98	180.05	3.48	3.02	2.56
65	HTR	S	5041.00	42.60	183.00	42	4961.43	279.52	-279.55	-1.93	279.55	180.40	2.11	-1.67	-1.90
66	HTR	S	5084.00	42.50	183.00	43	4993.10	308.54	-308.59	-3.45	308.61	180.64	0.23	-0.23	0.00
67	HTR	S	5127.00	43.90	181.60	43	5024.45	337.94	-338.00	-4.63	338.03	180.78	3.95	3.26	-3.26
68	HTR	S	5169.00	48.70	179.50	42	5053.46	368.28	-368.35	-4.90	368.38	180.76	11.99	11.43	-5.00
69	HTR	S	5212.00	52.90	178.70	43	5080.63	401.60	-401.66	-4.37	401.68	180.62	9.87	9.77	-1.86
70	HTR	S	5255.00	58.00	178.70	43	5105.01	437.00	-437.05	-3.57	437.07	180.47	11.86	11.86	0.00
71	HTR	S	5297.00	62.70	178.90	42	5125.78	473.49	-473.54	-2.80	473.54	180.34	11.20	11.19	0.48
72	HTR	S	5340.00	66.50	179.30	43	5144.22	512.32	-512.37	-2.20	512.37	180.25	8.88	8.84	0.93
73	HTR	S	5383.00	71.60	178.80	43	5159.59	552.47	-552.51	-1.53	552.51	180.16	11.91	11.86	-1.16
74	HTR	S	5425.00	76.50	178.50	42	5171.13	592.83	-592.86	-0.57	592.86	180.06	11.69	11.67	-0.71
75	HTR	S	5468.00	80.40	178.90	43	5179.74	634.95	-634.97	0.38	634.97	179.97	9.12	9.07	0.93
76	HTR	S	5511.00	84.30	179.90	43	5185.46	677.56	-677.58	0.82	677.58	179.93	9.36	9.07	2.33
77	HTR	S	5553.00	88.20	180.20	42	5188.21	719.46	-719.48	0.79	719.48	179.94	9.31	9.29	0.71
78	HTR	S	5596.00	88.80	180.00	43	5189.33	762.44	-762.47	0.71	762.47	179.95	1.47	1.40	-0.47
79	HTR	S	5638.00	88.60	180.00	42	5190.28	804.43	-804.46	0.71	804.46	179.95	0.48	-0.48	0.00
80	HTR	S	5681.00	88.50	179.90	43	5191.37	847.41	-847.44	0.75	847.44	179.95	0.33	-0.23	-0.23
81	HTR	S	5724.00	88.40	179.40	43	5192.54	890.40	-890.43	1.01	890.43	179.93	1.19	-0.23	-1.16
82	HTR	S	5767.00	88.00	179.20	43	5193.89	933.37	-933.40	1.54	933.40	179.91	1.04	-0.93	-0.47
83	HTR	S	5809.00	87.90	179.20	42	5195.39	975.35	-975.37	2.12	975.37	179.88	0.24	-0.24	0.00
84	HTR	S	5852.00	87.70	179.10	43	5197.04	1018.32	-1018.33	2.76	1018.34	179.84	0.52	-0.47	-0.23
85	HTR	S	5894.00	87.70	179.00	42	5198.73	1060.28	-1060.29	3.46	1060.30	179.81	0.24	0.00	-0.24
86	HTR	S	5937.00	89.60	180.10	43	5199.74	1103.27	-1103.28	3.79	1103.29	179.80	5.11	4.42	2.56
87	HTR	S	5980.00	90.40	179.30	43	5199.74	1146.26	-1146.28	4.02	1146.28	179.80	2.63	1.86	-1.86
88	HTR	S	6023.00	90.00	178.80	43	5199.59	1189.26	-1189.27	4.73	1189.28	179.77	1.49	-0.93	-1.16
89	HTR	S	6066.00	89.80	178.70	43	5199.66	1232.26	-1232.26	5.67	1232.27	179.74	0.52	-0.47	-0.23
90	HTR	S	6108.00	88.70	178.90	42	5200.21	1274.25	-1274.25	6.55	1274.26	179.71	2.66	-2.62	0.48
91	HTR	S	6151.00	87.10	179.10	43	5201.79	1317.22	-1317.21	7.30	1317.23	179.68	3.75	-3.72	0.47
92	HTR	S	6194.00	87.20	178.80	43	5203.93	1360.17	-1360.15	8.09	1360.17	179.66	0.73	0.23	-0.70
93	HTR	S	6236.00	87.20	179.10	42	5205.98	1402.11	-1402.09	8.86	1402.12	179.64	0.71	0.00	0.71
94	HTR	S	6279.00	88.50	178.80	43	5207.59	1445.08	-1445.05	9.64	1445.09	179.62	3.10	3.02	-0.70
95	HTR	S	6322.00	89.50	179.50	43	5208.34	1488.07	-1488.04	10.28	1488.08	179.60	2.84	2.33	1.63
96	HTR	S	6363.00	89.30	179.30	41	5208.77	1529.07	-1529.04	10.71	1529.08	179.60	0.69	-0.49	-0.49
97	HTR	S	6406.00	89.30	179.40	43	5209.30	1572.07	-1572.03	11.20	1572.07	179.59	0.23	0.00	0.23
98	HTR	S	6449.00	90.00	178.60	43	5209.56	1615.06	-1615.02	11.95	1615.07	179.58	2.47	1.63	-1.86
99	HTR	S	6491.00	89.90	178.10	42	5209.60	1657.06	-1657.01	13.16	1657.06	179.55	1.21	-0.24	-1.19
100	HTR	S	6534.00	89.90	178.10	43	5209.67	1700.04	-1699.98	14.58	1700.05	179.51	0.00	0.00	0.00
101	HTR	S	6577.00	89.90	179.00	43	5209.75	1743.04	-1742.97	15.67	1743.04	179.48	2.09	0.00	2.09
102	HTR	S	6620.00	90.50	179.60	43	5209.60	1786.04	-1785.96	16.20	1786.04	179.48	1.97	1.40	1.40
103	HTR	S	6662.00	91.60	180.30	42	5208.83	1828.03	-1827.96	16.23	1828.03	179.49	3.10	2.62	1.67
104	HTR	S	6705.00	91.50	179.60	43	5207.66	1871.01	-1870.94	16.27	1871.01	179.50	1.64	-0.23	-1.63
105	HTR	S	6747.00	91.00	178.70	42	5206.75	1913.00	-1912.93	16.89	1913.00	179.49	2.45	-1.19	-2.14
106	HTR	S	6790.00	90.70	178.90	43	5206.11	1955.99	-1955.91	17.79	1955.99	179.48	0.84	-0.70	0.47
107	HTR	S	6833.00	90.50	178.60	43	5205.66	1998.99	-1998.90	18.73	1998.99	179.46	0.84	-0.47	-0.70
108	HTR	S	6875.00	90.80	178.40	42	5205.18	2040.98	-2040.88	19.83	2040.98	179.44	0.86	0.71	-0.48
109	HTR	S	6918.00	91.20	179.10	43	5204.43	2083.97	-2083.86	20.77	2083.97	179.43	1.87	0.93	1.63
110	HTR	S	6961.00	91.40	178.50	43	5203.46	2126.95	-2126.84	21.67	2126.95	179.42	1.47	0.47	-1.40
111	HTR	S	7003.00	91.40	178.40	42	5202.43	2168.93	-2168.82	22.81	2168.94	179.40	0.24	0.00	-0.24
112	HTR	S	7046.00	91.40	178.40	43	5201.38	2211.91	-2211.79	24.01	2211.92	179.38	0.00	0.00	0.00
113	HTR	S	7089.00	91.30	178.90	43	5200.37	2254.90	-2254.76	25.02	2254.90	179.36	1.19	-0.23	1.16
114	HTR	S	7132.00	86.50	177.40	43	5201.19	2297.86	-2297.72	26.41	2297.87	179.34	11.69	-11.16	-3.49
115	HTR	S	7174.00	84.40	176.20	42	5204.52	2339.68	-2339.52	28.74	2339.69	179.30	5.75	-5.00	-2.86
116	HTR	S	7217.00	85.70	176.30	43	5208.23	2382.46	-2382.26	31.54	2382.47	179.24	3.03	3.02	0.23
117	HTR	S	7260.00	87.10	177.10	43	5210.93	2425.32	-2425.11	34.01	2425.35	179.20	3.75	3.26	1.86
118	HTR	S	7302.00	88.50	178.40	42	5212.55	2467.27	-2467.04	35.66	2467.30	179.17	4.55	3.33	3.10
119	HTR	S	7345.00	89.50	178.90	43	5213.30	2510.26	-2510.02	36.67	2510.29	179.16	2.60	2.33	1.16
120	HTR	S	7388.00	90.10	178.70	43	5213.45	2553.25	-2553.01	37.57	2553.29	179.16	1.47	1.40	-0.47
121	HTR	S	7431.00	90.30	178.50	43	5213.30	2596.25	-2596.00	38.63	2596.29	179.15	0.66	0.47	-0.47
122	HTR	S	7473.00	91.30	180.40	42	5212.71	2638.24	-2637.99	39.03	2638.28	179.15	5.11	2.38	4.52
123	HTR	S	7515.00	91.20	179.90	42	5211.79	2680.23	-2679.98	38.92	2680.26	179.17	1.21	-0.24	-1.19
124	HTR	S	7558.00	90.50	179.40	43	5211.16	2723.22	-2722.97	39.18	2723.26	179.18	2.00	-1.63	-1.16
125	HTR	S	7601.00	90.60	178.60	43	5210.74	2766.22	-2765.97	39.93	2766.25	179.17	1.87	0.23	-1.86
126	HTR	S	7643.00	90.90	178.80	42	5210.19	2808.21	-2807.95	40.88	2808.25	179.17	0.86	0.71	0.48
127	HTR	S	7686.00	91.40	179.30	43	5209.33	2851.20	-2850.94	41.60	2851.24	179.16	1.64	1.16	1.16
128	HTR	S	7732.00	91.30	179.10	46	5208.25	2897.19	-2896.92	42.24	2897.23	179.16	0.49	-0.22	-0.43

Company: **Special Energy Corporatio**

Field: **Sec 17-12S-38E**

County: **Lea County**

Well Name: **Decker #1H**

Total Magnetic Corre: **5.95**

Job # **178134**

API # **30-25-43890**

License # **30-25-43890**

Spud Date: **4-Sep-17**

y Reference: **Grid North**

Proposed Azimuth: **179.46**

Target Inclination: **90.24**



No.	Tool Type	Survey e (S o	Survey Depth (ft)	Incl (°)	Azimuth (°)	Course Lgth(ft)	TVD (ft)	VS (ft)	Coordinates		Closure		DLS (°/100')	Bld Rate (°/100')	Wlk Rate (°/100')
									North (ft)	East (ft)	Dist (ft)	Ang (°)			
129	HTR	S	7775.00	91.10	178.70	43	5207.35	2940.18	-2939.90	43.06	2940.22	179.16	1.04	-0.47	-0.93
130	HTR	S	7817.00	91.30	179.00	42	5206.47	2982.16	-2981.88	43.91	2982.21	179.16	0.86	0.48	0.71
131	HTR	S	7860.00	91.40	179.20	43	5205.45	3025.15	-3024.87	44.58	3025.19	179.16	0.52	0.23	0.47
132	HTR	S	7902.00	91.10	178.70	42	5204.54	3067.14	-3066.85	45.35	3067.18	179.15	1.39	-0.71	-1.19
133	HTR	S	7944.00	90.70	178.20	42	5203.88	3109.13	-3108.83	46.49	3109.18	179.14	1.52	-0.95	-1.19
134	HTR	S	7987.00	90.40	178.00	43	5203.46	3152.11	-3151.80	47.91	3152.17	179.13	0.84	-0.70	-0.47
135	HTR	S	8030.00	90.30	179.20	43	5203.20	3195.11	-3194.79	48.96	3195.16	179.12	2.80	-0.23	2.79
136	HTR	S	8073.00	90.50	179.30	43	5202.90	3238.11	-3237.78	49.53	3238.16	179.12	0.52	0.47	0.23
137	HTR	S	8115.00	90.80	179.70	42	5202.43	3280.10	-3279.78	49.89	3280.16	179.13	1.19	0.71	0.95
138	HTR	S	8158.00	90.70	179.70	43	5201.86	3323.10	-3322.77	50.12	3323.15	179.14	0.23	-0.23	0.00
139	HTR	S	8201.00	90.50	179.00	43	5201.41	3366.10	-3365.77	50.61	3366.15	179.14	1.69	-0.47	-1.63
140	HTR	S	8243.00	90.50	180.10	42	5201.05	3408.09	-3407.77	50.94	3408.15	179.14	2.62	0.00	2.62
141	HTR	S	8286.00	90.90	180.10	43	5200.52	3451.09	-3450.76	50.86	3451.14	179.16	0.93	0.93	0.00
142	HTR	S	8329.00	91.30	180.10	43	5199.70	3494.08	-3493.75	50.79	3494.12	179.17	0.93	0.93	0.00
143	HTR	S	8372.00	91.30	180.20	43	5198.72	3537.06	-3536.74	50.67	3537.11	179.18	0.23	0.00	0.23
144	HTR	S	8414.00	91.50	180.90	42	5197.69	3579.04	-3578.73	50.27	3579.08	179.20	1.73	0.48	1.67
145	HTR	S	8457.00	90.10	179.60	43	5197.09	3622.03	-3621.72	50.08	3622.07	179.21	4.44	-3.26	-3.02
146	HTR	S	8499.00	89.50	179.10	42	5197.24	3664.03	-3663.72	50.56	3664.07	179.21	1.86	-1.43	-1.19
147	HTR	S	8545.00	89.10	179.00	46	5197.80	3710.03	-3709.71	51.32	3710.06	179.21	0.90	-0.87	-0.22
148	HTR	S	8588.00	89.40	179.50	43	5198.36	3753.02	-3752.70	51.89	3753.06	179.21	1.36	0.70	1.16
149	HTR	S	8630.00	89.50	179.20	42	5198.77	3795.02	-3794.70	52.36	3795.06	179.21	0.75	0.24	-0.71
150	HTR	S	8673.00	89.80	179.40	43	5199.03	3838.02	-3837.69	52.89	3838.06	179.21	0.84	0.70	0.47
151	HTR	S	8716.00	90.20	179.60	43	5199.03	3881.02	-3880.69	53.26	3881.06	179.21	1.04	0.93	0.47
152	HTR	S	8760.00	89.80	180.40	44	5199.03	3925.02	-3924.69	53.26	3925.05	179.22	2.03	-0.91	1.82
153	HTR	S	8802.00	89.60	180.80	42	5199.25	3967.01	-3966.69	52.82	3967.04	179.24	1.06	-0.48	0.95
154	HTR	S	8845.00	89.90	180.60	43	5199.44	4010.00	-4009.68	52.30	4010.02	179.25	0.84	0.70	-0.47
155	HTR	S	8888.00	90.70	180.60	43	5199.21	4052.99	-4052.68	51.85	4053.01	179.27	1.86	1.86	0.00
156	HTR	S	8930.00	91.20	180.60	42	5198.52	4094.97	-4094.67	51.41	4094.99	179.28	1.19	1.19	0.00
157	HTR	S	8973.00	91.30	180.10	43	5197.58	4137.96	-4137.66	51.14	4137.98	179.29	1.19	0.23	-1.16
158	HTR	S	9016.00	91.40	180.50	43	5196.57	4180.94	-4180.65	50.92	4180.96	179.30	0.96	0.23	0.93
159	HTR	S	9058.00	91.50	179.70	42	5195.50	4222.93	-4222.63	50.85	4222.94	179.31	1.92	0.24	-1.90
160	HTR	S	9101.00	89.90	179.40	43	5194.98	4265.92	-4265.63	51.18	4265.94	179.31	3.79	-3.72	-0.70
161	HTR	S	9144.00	90.00	179.40	43	5195.01	4308.92	-4308.63	51.63	4308.94	179.31	0.23	0.23	0.00
162	HTR	S	9188.00	90.20	179.10	44	5194.94	4352.92	-4352.62	52.21	4352.93	179.31	0.82	0.45	-0.68
163	HTR	S	9231.00	90.50	179.10	43	5194.68	4395.92	-4395.62	52.89	4395.93	179.31	0.70	0.70	0.00
164	HTR	S	9274.00	90.90	179.00	43	5194.15	4438.91	-4438.61	53.60	4438.93	179.31	0.96	0.93	-0.23
165	HTR	S	9316.00	90.90	178.70	42	5193.49	4480.91	-4480.59	54.44	4480.92	179.30	0.71	0.00	-0.71
166	HTR	S	9359.00	90.40	178.30	43	5193.00	4523.90	-4523.58	55.57	4523.92	179.30	1.49	-1.16	-0.93
167	HTR	S	9402.00	88.90	178.20	43	5193.26	4566.89	-4566.55	56.88	4566.91	179.29	3.50	-3.49	-0.23
168	HTR	S	9444.00	88.90	178.30	42	5194.07	4608.87	-4608.53	58.16	4608.89	179.28	0.24	0.00	0.24
169	HTR	S	9487.00	89.00	177.30	43	5194.86	4651.84	-4651.49	59.81	4651.87	179.26	2.34	0.23	-2.33
170	HTR	S	9530.00	89.30	177.70	43	5195.50	4694.81	-4694.44	61.69	4694.85	179.25	1.16	0.70	0.93
171	HTR	S	9572.00	89.10	178.80	42	5196.08	4736.80	-4736.42	62.97	4736.83	179.24	2.66	-0.48	2.62
172	HTR	S	9615.00	89.00	179.30	43	5196.80	4779.79	-4779.40	63.68	4779.83	179.24	1.19	-0.23	1.16
173	HTR	S	9657.00	89.10	179.00	42	5197.49	4821.79	-4821.39	64.31	4821.82	179.24	0.75	0.24	-0.71
174	HTR	S	9699.00	89.20	178.70	42	5198.12	4863.78	-4863.38	65.15	4863.82	179.23	0.75	0.24	-0.71
175	HTR	S	9742.00	89.20	178.90	43	5198.72	4906.77	-4906.37	66.05	4906.81	179.23	0.47	0.00	0.47
176	HTR	S	9784.00	89.30	179.40	42	5199.27	4948.77	-4948.36	66.67	4948.81	179.23	1.21	0.24	1.19
177	HTR	S	9827.00	89.10	179.90	43	5199.87	4991.76	-4991.35	66.93	4991.80	179.23	1.25	-0.47	1.16
178	HTR	S	9870.00	89.30	179.80	43	5200.47	5034.76	-5034.35	67.05	5034.80	179.24	0.52	0.47	-0.23
179	HTR	S	9912.00	89.40	179.70	42	5200.94	5076.75	-5076.35	67.23	5076.79	179.24	0.34	0.24	-0.24
180	HTR	S	9955.00	89.60	179.60	43	5201.32	5119.75	-5119.34	67.49	5119.79	179.24	0.52	0.47	-0.23
181	HTR	S	9998.00	89.50	178.70	43	5201.66	5162.75	-5162.34	68.13	5162.79	179.24	2.11	-0.23	-2.09
182	PTB		10032.00	89.50	178.60	34	5201.95	5196.74	-5196.33	68.93	5196.78	179.24	0.29	0.00	-0.29