

30-025-44692

HOBBS CO

AUG 16 2018

RECEIVED



Directional Survey Report

Company: Centennial Resource Production, LLC

Well: Cheddar 3BS Federal Com 1H

County: Lea

State: New Mexico

Field: Billbrey Basin; Third Bone Spring

Rig: H&P 850

Service Co: Gordon Technologies LLC.

Job #: GT180256

Survey Calc: Minimum Curvature

Well Surface Location

Latitude: 32.414016

Longitude: -103.704182

Reference: NAD 1927

Y (Northing) 514,921.80

X (Easting) 735,487.16

Field Engr: Fidel Garcia

Derik Richard

Report Date Jul 03 2018

Time: 03:07

Mag Reference: True North

Mag Correction: 7.11

Vert Sect. Azi: 359.72

Perm Datum Mean Sea Level

Depth Ref Rotary Table

RKB Height: 25

GL Elev: 3664

Survey	MD	Inc	Azimuth	TVD	VS	Rectangular Offsets		Course	DLS	Temp	Closure
Tie In	0	0	0	0	0	NS	EW	Length	0	0	Distance
1	183.00	0.40	8.95	183.00	0.50	0.50	0.09	183.00	0.25	0.00	0.00
2	247.00	0.90	85.95	246.99	1.12	1.12	0.74	84.00	0.90	0.00	0.00
3	332.00	1.30	123.95	331.98	0.84	0.85	2.15	85.00	1.32	0.00	0.00
4	419.00	0.80	47.95	418.97	0.69	0.71	3.42	87.00	1.55	0.00	0.00
5	608.00	1.20	311.95	607.95	2.90	2.92	2.92	189.00	0.80	0.00	0.00
6	677.00	1.30	66.95	676.94	3.69	3.71	3.11	69.00	3.06	0.00	0.00
7	765.00	0.98	57.80	764.92	4.48	4.50	4.66	88.00	0.42	92.00	0.00
8	857.00	1.29	58.19	856.91	5.43	5.46	6.21	92.00	0.34	99.14	0.00
9	948.00	0.67	48.88	947.89	6.32	6.35	7.48	91.00	0.70	99.14	0.00
10	1040.00	0.40	19.50	1039.89	6.97	7.01	7.99	92.00	0.41	106.29	0.00
11	1131.00	0.28	68.44	1130.89	7.35	7.39	8.30	91.00	0.33	106.29	0.00
12	1220.00	0.20	5.68	1219.89	7.58	7.62	8.52	89.00	0.29	106.29	0.00
13	1312.00	0.31	358.52	1311.88	7.99	8.03	8.53	92.00	0.12	113.43	0.00
14	1403.00	0.19	14.36	1402.88	8.38	8.43	8.56	91.00	0.15	113.43	0.00
15	1497.00	0.33	44.84	1496.88	8.73	8.77	8.79	94.00	0.20	120.57	0.00
16	1591.00	0.35	46.35	1590.88	9.11	9.16	9.19	94.00	0.02	120.57	0.00
17	1685.00	0.37	48.37	1684.88	9.51	9.56	9.63	94.00	0.03	113.43	0.00
18	1779.00	0.42	54.85	1778.88	9.91	9.96	10.13	94.00	0.07	113.43	0.00
19	1874.00	0.37	26.09	1873.88	10.38	10.43	10.55	95.00	0.21	113.43	0.00
20	1968.00	0.54	42.61	1967.87	10.98	11.03	10.99	94.00	0.23	113.43	0.00
21	2062.00	0.93	80.27	2061.86	11.68	11.74	11.95	94.00	0.48	113.43	0.00
22	2156.00	1.13	81.90	2155.85	12.49	12.55	13.43	94.00	0.22	120.57	0.00
23	2250.00	1.17	60.82	2249.83	13.39	13.46	15.08	94.00	0.05	113.43	0.00
24	2344.00	1.30	61.73	2343.81	14.35	14.44	16.86	94.00	0.14	120.57	0.00
25	2438.00	1.24	58.50	2437.79	15.38	15.47	18.68	94.00	0.10	120.57	0.00
26	2532.00	1.41	60.49	2531.76	16.47	16.57	20.54	94.00	0.19	120.57	0.00
27	2626.00	1.09	66.74	2625.74	17.39	17.50	22.37	94.00	0.37	120.57	0.00
28	2720.00	0.25	128.11	2719.73	17.61	17.72	23.35	94.00	1.06	120.57	0.00
29	2814.00	0.66	213.08	2813.73	17.03	17.14	23.21	94.00	0.73	120.57	0.00
30	2908.00	0.48	186.21	2907.72	16.19	16.30	22.88	94.00	0.34	120.57	0.00
31	3002.00	0.29	156.78	3001.72	15.57	15.68	22.93	94.00	0.29	120.57	0.00
32	3096.00	0.61	185.29	3095.72	14.95	15.06	23.13	94.00	0.24	127.71	0.00
33	3191.00	0.77	227.62	3190.71	14.11	14.22	22.76	95.00	0.74	127.71	0.00
34	3285.00	0.92	239.30	3284.70	13.31	13.41	21.65	94.00	0.24	127.71	0.00
35	3379.00	0.45	191.04	3378.70	12.56	12.67	20.93	94.00	0.75	127.71	0.00
36	3473.00	0.63	110.33	3472.70	12.02	12.12	21.34	94.00	0.76	127.71	0.00
37	3567.00	0.92	164.41	3566.69	11.11	11.22	22.03	94.00	0.80	127.71	0.00
38	3661.00	1.62	175.76	3660.66	9.06	9.17	22.33	94.00	0.79	127.71	0.00
39	3755.00	1.60	182.94	3754.63	6.42	6.53	22.36	94.00	0.22	127.71	0.00
40	3849.00	0.68	169.02	3848.61	4.56	4.67	22.40	94.00	1.01	127.71	0.00
41	3942.00	0.28	91.87	3941.80	4.01	4.12	22.72	93.00	0.72	134.86	0.00
42	4036.00	0.08	230.61	4035.60	3.96	4.07	22.88	94.00	0.35	134.86	0.00
43	4131.00	0.49	197.65	4130.60	3.53	3.65	22.71	95.00	0.45	134.86	0.00
44	4225.00	0.73	145.57	4224.60	2.66	2.77	22.92	94.00	0.61	134.86	0.00
45	4319.00	0.94	151.45	4318.59	1.48	1.60	23.83	94.00	0.24	134.86	0.00
46	4413.00	0.89	224.73	4412.58	0.29	0.40	23.48	94.00	1.16	134.86	0.00
47	4431.00	0.92	228.10	4430.58	0.09	0.21	23.28	18.00	0.34	134.86	0.00
48	4601.00	1.10	250.95	4600.55	-1.34	-1.24	20.72	170.00	0.26	106.29	0.00
49	4695.00	1.01	250.56	4694.54	-1.90	-1.81	19.09	94.00	0.10	106.29	0.00
50	4789.00	0.88	242.74	4788.52	-2.50	-2.42	17.66	94.00	0.19	106.29	0.00
51	4883.00	0.84	245.33	4882.51	-3.11	-3.03	16.39	94.00	0.06	113.43	0.00
52	4977.00	1.12	241.36	4976.50	-3.83	-3.76	14.86	94.00	0.31	113.43	0.00
53	5071.00	0.97	258.83	5070.48	-4.42	-4.36	13.38	94.00	0.37	113.43	0.00
54	5165.00	1.02	251.26	5164.47	-4.84	-4.78	11.80	94.00	0.15	113.43	0.00
55	5259.00	1.13	260.58	5258.45	-5.25	-5.20	10.10	94.00	0.22	113.43	0.00
56	5354.00	1.09	259.86	5353.43	-5.55	-5.51	8.28	95.00	0.04	113.43	0.00
57	5448.00	1.10	267.46	5447.42	-5.74	-5.71	6.50	94.00	0.15	113.43	0.00
58	5542.00	0.91	273.47	5541.40	-5.73	-5.70	4.85	94.00	0.23	113.43	0.00
59	5636.00	0.90	264.80	5635.39	-5.74	-5.73	3.37	94.00	0.15	113.43	0.00

60	5730.00	1.01	277.82	5729.38	-5.69	-5.68	1.82	94.00	0.26	113.43	0.00
61	5824.00	0.76	276.82	5823.37	-5.49	-5.49	0.38	94.00	0.27	113.43	0.00
62	5918.00	0.87	278.04	5917.36	-5.31	-5.32	-0.95	94.00	0.12	113.43	0.00
63	6012.00	0.72	301.39	6011.35	-4.90	-4.91	-2.18	94.00	0.38	113.43	0.00
64	6106.00	0.75	302.40	6105.34	-4.26	-4.27	-3.18	94.00	0.03	113.43	0.00
65	6200.00	0.97	221.16	6199.33	-4.52	-4.54	-4.23	94.00	1.20	113.43	0.00
66	6294.00	2.54	202.18	6293.29	-7.04	-7.07	-5.54	94.00	1.76	113.43	0.00
67	6388.00	3.75	196.80	6387.14	-11.91	-11.94	-7.21	94.00	1.32	113.43	0.00
68	6482.00	4.43	196.43	6480.90	-18.32	-18.37	-9.13	94.00	0.72	120.57	0.00
69	6576.00	4.93	187.04	6574.59	-25.81	-25.86	-10.65	94.00	0.97	120.57	0.00
70	6670.00	5.19	185.63	6668.22	-34.04	-34.10	-11.56	94.00	0.31	120.57	0.00
71	6764.00	5.17	185.78	6761.84	-42.48	-42.54	-12.40	94.00	0.03	120.57	0.00
72	6858.00	5.36	184.68	6855.44	-51.07	-51.13	-13.19	94.00	0.23	120.57	0.00
73	6952.00	5.39	185.51	6949.03	-59.83	-59.90	-13.97	94.00	0.09	120.57	0.00
74	7046.00	5.42	186.65	7042.61	-68.63	-68.71	-14.91	94.00	0.12	120.57	0.00
75	7140.00	5.50	185.50	7136.19	-77.52	-77.60	-15.85	94.00	0.14	120.57	0.00
76	7234.00	5.44	185.47	7229.76	-86.44	-86.52	-16.71	94.00	0.06	120.57	0.00
77	7328.00	5.55	192.20	7323.33	-95.31	-95.40	-18.10	94.00	0.70	120.57	0.00
78	7422.00	5.44	199.00	7416.90	-103.95	-104.06	-20.51	94.00	0.70	120.57	0.00
79	7516.00	5.27	196.93	7510.49	-112.28	-112.40	-23.21	94.00	0.27	127.71	0.00
80	7610.00	5.32	200.08	7604.09	-120.49	-120.62	-25.97	94.00	0.31	120.57	0.00
81	7704.00	4.96	200.31	7697.71	-128.38	-128.52	-28.87	94.00	0.38	120.57	0.00
82	7798.00	4.97	201.08	7791.35	-135.98	-136.13	-31.75	94.00	0.07	120.57	0.00
83	7892.00	5.11	203.09	7884.99	-143.61	-143.79	-34.86	94.00	0.24	127.71	0.00
84	7986.00	5.68	201.73	7978.57	-151.77	-151.96	-38.22	94.00	0.62	127.71	0.00
85	8080.00	5.52	199.78	8072.13	-160.33	-160.53	-41.47	94.00	0.26	127.71	0.00
86	8174.00	4.90	194.14	8165.74	-168.46	-168.68	-43.98	94.00	0.85	127.71	0.00
87	8268.00	4.33	185.45	8259.43	-175.88	-176.11	-45.30	94.00	0.96	127.71	0.00
88	8362.00	3.22	186.04	8353.23	-182.04	-182.26	-45.92	94.00	1.18	127.71	0.00
89	8456.00	2.72	187.12	8447.10	-186.87	-187.10	-46.47	94.00	0.54	127.71	0.00
90	8550.00	2.35	200.86	8541.01	-190.88	-191.12	-47.43	94.00	0.75	127.71	0.00
91	8645.00	1.23	217.65	8635.98	-193.50	-193.74	-48.75	95.00	1.29	127.71	0.00
92	8739.00	1.02	224.38	8729.95	-194.89	-195.14	-49.95	94.00	0.26	134.86	0.00
93	8833.00	0.51	188.55	8823.94	-195.90	-196.15	-50.60	94.00	0.72	134.86	0.00
94	8927.00	1.29	171.83	8917.92	-197.36	-197.61	-50.51	94.00	0.88	134.86	0.00
95	9021.00	1.12	160.62	9011.90	-199.26	-199.51	-50.06	94.00	0.30	134.86	0.00
96	9115.00	1.05	186.22	9105.89	-200.99	-201.23	-49.84	94.00	0.52	134.86	0.00
97	9209.00	1.10	171.47	9199.87	-202.74	-202.98	-49.80	94.00	0.30	134.86	0.00
98	9303.00	0.40	296.61	9293.87	-203.48	-203.73	-49.96	94.00	1.46	134.86	0.00
99	9397.00	0.84	23.67	9387.86	-202.70	-202.95	-49.98	94.00	0.97	134.86	0.00
100	9491.00	1.04	358.80	9481.85	-201.22	-201.47	-49.72	94.00	0.48	134.86	0.00
101	9585.00	1.23	305.39	9575.83	-199.78	-200.03	-50.58	94.00	1.10	142.00	0.00
102	9678.00	0.71	304.14	9668.82	-198.87	-199.13	-51.85	93.00	0.56	142.00	0.00
103	9772.00	1.22	305.33	9762.81	-197.96	-198.22	-53.15	94.00	0.64	142.00	0.00
104	9866.00	0.54	336.97	9856.80	-196.97	-197.24	-54.14	94.00	0.86	142.00	0.00
105	9960.00	0.16	9.46	9950.79	-196.43	-196.70	-54.29	94.00	0.44	142.00	0.00
106	10053.00	0.48	129.96	10043.79	-196.55	-196.82	-53.97	93.00	0.62	142.00	0.00
107	10147.00	0.34	211.52	10137.79	-197.05	-197.31	-53.82	94.00	0.58	142.00	0.00
108	10241.00	1.09	68.29	10231.79	-196.96	-197.22	-53.13	94.00	1.47	142.00	0.00
109	10335.00	0.79	129.44	10325.78	-197.04	-197.30	-51.80	94.00	1.05	142.00	0.00
110	10429.00	1.36	180.04	10419.76	-198.57	-198.83	-51.30	94.00	1.12	149.14	0.00
111	10523.00	1.55	206.30	10513.73	-200.83	-201.08	-51.87	94.00	0.73	142.00	0.00
112	10617.00	0.91	226.66	10607.71	-202.47	-202.73	-52.97	94.00	0.81	142.00	0.00
113	10711.00	0.56	213.42	10701.70	-203.36	-203.63	-53.77	94.00	0.41	149.14	0.00
114	10805.00	0.95	228.12	10795.69	-204.26	-204.53	-54.60	94.00	0.46	149.14	0.00
115	10900.00	1.53	32.68	10890.88	-203.72	-203.99	-54.50	95.00	2.59	149.14	0.00
116	10990.00	1.56	17.70	10980.65	-201.55	-201.81	-53.48	90.00	0.45	134.86	0.00
117	11082.00	1.05	6.11	11072.63	-199.52	-199.78	-53.01	92.00	0.62	142.00	0.00
118	11178.00	8.98	1.78	11168.18	-191.14	-191.40	-52.68	96.00	8.26	142.00	0.00
119	11210.00	14.02	3.24	11199.53	-184.78	-185.03	-52.39	32.00	15.78	142.00	0.00
120	11241.00	18.13	3.25	11229.31	-176.21	-176.47	-51.90	31.00	13.26	142.00	0.00
121	11273.00	19.96	358.03	11259.56	-165.78	-166.03	-51.81	32.00	7.81	142.00	0.00
122	11304.00	22.28	357.24	11288.48	-154.62	-154.88	-52.27	31.00	7.54	142.00	0.00
123	11335.00	24.51	357.74	11316.93	-142.32	-142.58	-52.81	31.00	7.22	142.00	0.00
124	11367.00	26.11	358.14	11345.86	-128.65	-128.91	-53.30	32.00	5.03	142.00	0.00
125	11398.00	29.13	1.04	11373.32	-114.28	-114.54	-53.38	31.00	10.66	142.00	0.00
126	11430.00	32.94	1.82	11400.74	-97.79	-98.05	-52.97	32.00	11.97	142.00	0.00
127	11461.00	35.66	2.19	11426.34	-80.34	-80.60	-52.35	31.00	8.80	142.00	0.00
128	11508.00	40.80	2.61	11463.25	-51.30	-51.55	-51.13	47.00	10.95	142.00	0.00
129	11555.00	46.49	2.62	11497.25	-18.91	-19.15	-49.65	47.00	12.11	149.14	0.00
130	11603.00	50.89	2.64	11528.92	17.09	16.85	-48.00	48.00	9.17	149.14	0.00
131	11650.00	54.94	2.82	11557.26	54.52	54.30	-46.21	47.00	8.82	149.14	0.00
132	11697.00	57.98	3.94	11583.23	93.61	93.40	-43.89	47.00	6.77	149.14	0.00
133	11744.00	61.62	4.19	11608.86	134.11	133.91	-41.01	47.00	7.76	149.14	0.00
134	11791.00	66.03	3.23	11627.59	176.18	175.99	-38.29	47.00	9.56	149.14	0.00
135	11838.00	70.76	1.94	11644.89	219.81	219.63	-36.33	47.00	10.38	149.14	0.00
136	11885.00	73.55	1.47	11659.29	264.51	264.34	-35.00	47.00	6.01	149.14	0.00
137	11932.00	79.32	1.13	11670.31	310.17	310.00	-33.96	47.00	12.30	149.14	0.00
138	11979.00	0.00	0.74	11703.68	337.81	337.66	-33.42	47.00	168.77	149.14	0.00
139	12055.00	88.88	0.99	11752.66	385.84	385.68	-32.59	76.00	116.95	142.00	0.00
140	12149.00	90.36	0.75	11753.28	479.81	479.67	-31.16	94.00	1.60	149.14	0.00
141	12243.00	91.85	0.54	11751.47	573.78	573.64	-30.10	94.00	1.60	149.14	0.00

142	12337.00	82.02	359.35	11748.30	667.73	667.59	-30.19	94.00	1.28	149.14	0.00
143	12431.00	91.54	358.41	11745.38	761.67	761.52	-32.03	94.00	1.12	0.00	0.00
144	12524.00	91.34	358.12	11743.04	854.61	854.45	-34.84	93.00	0.38	0.00	0.00
145	12618.00	93.06	357.70	11739.43	948.49	948.31	-38.27	94.00	1.88	149.14	0.00
146	12713.00	91.74	358.00	11735.45	1043.35	1043.16	-41.83	95.00	1.42	149.14	0.00
147	12807.00	91.26	358.25	11732.99	1137.28	1137.08	-44.90	94.00	0.58	149.14	0.00
148	12900.00	90.45	358.48	11731.60	1230.25	1230.03	-47.56	93.00	0.91	149.14	0.00
149	12994.00	89.50	357.90	11731.64	1324.21	1323.98	-50.53	94.00	1.18	156.29	0.00
150	13088.00	90.70	357.45	11731.48	1418.15	1417.90	-54.34	94.00	1.36	156.29	0.00
151	13182.00	0.00	357.17	11790.88	1478.21	1477.95	-57.01	94.00	96.49	156.29	0.00
152	13276.00	0.00	357.72	11884.88	1478.21	1477.95	-57.01	94.00	0.00	156.29	0.00
153	13370.00	90.73	357.18	11944.21	1538.27	1537.99	-59.99	94.00	96.52	156.29	0.00
154	13464.00	92.22	357.10	11941.79	1632.14	1631.84	-64.70	94.00	1.59	156.29	0.00
155	13558.00	91.34	358.02	11938.87	1726.02	1725.71	-68.70	94.00	1.35	0.00	0.00
156	13652.00	90.14	358.50	11937.66	1819.98	1819.65	-71.55	94.00	1.37	156.29	0.00
157	13747.00	88.09	0.20	11939.13	1914.96	1914.63	-72.63	95.00	2.80	156.29	0.00
158	13802.00	88.88	0.03	11940.58	1969.94	1969.61	-72.52	55.00	1.47	156.29	0.00
159	13841.00	89.33	359.92	11941.19	2008.93	2008.60	-72.54	39.00	1.19	156.29	0.00
160	13888.00	90.06	359.74	11941.44	2055.93	2055.60	-72.68	47.00	1.60	156.29	0.00
161	13934.00	90.64	359.52	11941.16	2101.93	2101.60	-72.97	46.00	1.35	156.29	0.00
162	13982.00	89.72	359.61	11941.01	2149.93	2149.60	-73.34	48.00	1.93	156.29	0.00
163	14028.00	88.60	0.32	11941.68	2195.92	2195.59	-73.36	46.00	2.88	156.29	0.00
164	14076.00	89.30	0.30	11942.56	2243.91	2243.58	-73.11	48.00	1.46	163.43	0.00
165	14123.00	88.35	1.52	11943.53	2290.89	2290.57	-72.36	47.00	3.29	163.43	0.00
166	14217.00	89.52	1.25	11945.27	2384.83	2384.52	-70.09	94.00	1.28	163.43	0.00
167	14311.00	88.96	1.52	11946.52	2478.79	2478.48	-67.82	94.00	0.66	163.43	0.00
168	14405.00	88.40	1.69	11948.68	2572.71	2572.42	-65.18	94.00	0.62	163.43	0.00
169	14499.00	89.36	1.06	11950.52	2666.65	2666.38	-62.93	94.00	1.22	170.57	0.00
170	14593.00	88.21	1.03	11952.52	2760.60	2760.34	-61.21	94.00	1.22	170.57	0.00
171	14688.00	87.39	1.03	11956.16	2855.51	2855.25	-59.51	95.00	0.86	170.57	0.00
172	14782.00	87.93	0.33	11960.00	2949.42	2949.17	-58.39	94.00	0.94	170.57	0.00
173	14876.00	87.93	0.45	11963.40	3043.35	3043.10	-57.75	94.00	0.13	170.57	0.00
174	14970.00	88.91	359.84	11965.99	3137.31	3137.06	-57.52	94.00	1.23	170.57	0.00
175	15064.00	88.48	0.14	11968.12	3231.28	3231.04	-57.53	94.00	0.55	170.57	0.00
176	15157.00	89.50	359.38	11969.75	3324.27	3324.02	-57.92	93.00	1.36	170.57	0.00
177	15252.00	89.41	359.68	11970.65	3419.26	3419.01	-58.70	95.00	0.33	170.57	0.00
178	15346.00	90.64	358.93	11970.61	3513.26	3513.01	-59.84	94.00	1.53	170.57	0.00
179	15440.00	0.00	359.53	12030.03	3573.33	3573.08	-60.96	94.00	96.43	170.57	0.00
180	15534.00	91.37	358.87	12088.96	3633.68	3633.42	-62.15	94.00	97.20	170.57	0.00
181	15628.00	91.09	358.83	12086.94	3727.65	3727.38	-64.04	94.00	0.30	163.43	0.00
182	15722.00	91.91	358.57	12084.48	3821.60	3821.32	-66.17	94.00	0.92	163.43	0.00
183	15816.00	91.82	358.31	12081.42	3915.53	3915.24	-68.73	94.00	0.29	163.43	0.00
184	15910.00	92.05	358.41	12079.83	3962.49	3962.19	-70.07	47.00	0.53	156.29	0.00
185	15910.00	90.98	358.55	12078.59	4009.46	4009.16	-71.32	47.00	2.30	163.43	0.00
186	15942.00	89.92	359.43	12078.34	4041.45	4041.15	-71.88	32.00	4.31	163.43	0.00
187	15973.00	88.91	0.18	12078.66	4072.45	4072.15	-71.99	31.00	4.06	163.43	0.00
188	16004.00	88.79	0.52	12079.28	4103.44	4103.14	-71.80	31.00	1.16	163.43	0.00
189	16036.00	88.49	1.24	12080.04	4135.43	4135.13	-71.31	32.00	2.44	163.43	0.00
190	16067.00	87.70	1.68	12081.07	4166.40	4166.10	-70.52	31.00	2.92	163.43	0.00
191	16098.00	87.39	1.78	12082.40	4197.35	4197.06	-69.58	31.00	1.05	163.43	0.00
192	16130.00	87.78	1.80	12083.74	4229.30	4229.02	-68.64	32.00	1.34	0.00	0.00
193	16193.00	87.59	2.08	12086.29	4292.21	4291.93	-66.82	63.00	0.82	163.43	0.00
194	16286.00	87.70	1.47	12090.11	4385.07	4384.81	-63.74	93.00	0.67	163.43	0.00
195	16381.00	87.81	2.57	12093.83	4479.92	4479.68	-60.40	95.00	1.16	163.43	0.00
196	16475.00	88.49	1.94	12096.87	4573.78	4573.55	-56.70	94.00	0.99	163.43	0.00
197	16569.00	89.55	1.35	12098.47	4667.71	4667.50	-54.00	94.00	1.29	163.43	0.00
198	16663.00	90.53	1.07	12098.41	4761.67	4761.48	-52.02	94.00	1.08	163.43	0.00
199	16757.00	90.34	1.12	12097.70	4855.64	4855.46	-50.22	94.00	0.21	170.57	0.00
200	16851.00	90.39	1.07	12097.10	4949.62	4949.44	-48.42	94.00	0.08	170.57	0.00
201	16945.00	91.43	0.66	12095.60	5043.58	5043.41	-47.01	94.00	1.19	170.57	0.00
202	17039.00	91.09	0.74	12093.54	5137.55	5137.38	-45.86	94.00	0.37	170.57	0.00
203	17133.00	90.06	0.40	12092.59	5231.53	5231.37	-44.92	94.00	1.15	170.57	0.00
204	17227.00	90.67	0.10	12091.99	5325.52	5325.37	-44.51	94.00	0.72	170.57	0.00
205	17321.00	90.98	0.84	12090.64	5419.50	5419.36	-43.74	94.00	0.65	170.57	0.00
206	17415.00	90.36	1.53	12089.54	5513.47	5513.33	-41.80	94.00	0.99	170.57	0.00
207	17509.00	90.90	0.66	12088.51	5607.43	5607.30	-40.00	94.00	1.09	170.57	0.00
208	17603.00	90.20	0.15	12087.61	5701.42	5701.30	-39.34	94.00	0.92	170.57	0.00
209	17698.00	89.10	0.28	12088.19	5796.41	5796.29	-38.98	95.00	1.17	170.57	0.00
210	17729.00	88.04	359.90	12088.96	5827.40	5827.28	-38.93	31.00	3.63	177.71	0.00
211	17792.00	88.41	1.09	12090.91	5890.37	5890.25	-38.39	63.00	1.98	177.71	0.00
212	17886.00	88.80	358.67	12093.20	5984.33	5984.21	-38.58	94.00	2.61	177.71	0.00
213	17980.00	89.61	357.88	12094.50	6078.29	6078.16	-41.41	94.00	1.20	177.71	0.00
214	18074.00	89.55	357.71	12095.19	6172.23	6172.09	-45.03	94.00	0.19	177.71	0.00
215	18168.00	88.96	357.28	12096.42	6266.15	6265.99	-49.14	94.00	0.78	177.71	0.00
216	18265.00	89.22	358.67	12097.96	6363.10	6362.91	-52.57	97.00	1.46	170.57	0.00
217	18359.00	89.75	0.10	12098.80	6457.09	6456.90	-53.57	94.00	1.62	0.00	0.00
218	18453.00	91.15	359.88	12098.06	6551.08	6550.90	-53.59	94.00	1.51	170.57	0.00
219	18547.00	91.57	358.97	12095.83	6645.05	6644.86	-54.53	94.00	1.07	170.57	0.00
220	18641.00	90.25	0.13	12094.34	6739.04	6738.85	-55.27	94.00	1.87	170.57	0.00
221	18735.00	90.67	1.28	12093.58	6833.02	6832.83	-54.12	94.00	1.30	170.57	0.00
222	18828.00	91.04	0.25	12092.20	6925.99	6925.81	-52.87	93.00	1.18	0.00	0.00
223	18922.00	90.34	359.93	12091.06	7019.98	7019.81	-52.73	94.00	0.82	177.71	0.00

224	19016.00	90.17	0.85	12090.65	7113.97	7113.80	-52.09	94.00	1.00	177.71	0.00
225	19111.00	89.47	2.14	12090.94	7208.92	7208.77	-49.61	95.00	1.54	177.71	0.00
226	19204.00	89.86	1.34	12091.49	7301.86	7301.72	-46.78	93.00	0.96	177.71	0.00
227	19298.00	89.92	0.26	12091.67	7395.84	7395.71	-45.47	94.00	1.15	177.71	0.00
228	19392.00	90.34	359.41	12091.46	7489.84	7489.71	-45.74	94.00	1.01	177.71	0.00
229	19486.00	89.83	359.95	12091.32	7583.84	7583.71	-46.27	94.00	0.79	177.71	0.00
230	19580.00	90.00	1.68	12091.46	7677.82	7677.69	-44.93	94.00	1.85	177.71	0.00
231	19674.00	90.17	0.83	12091.32	7771.79	7771.67	-42.87	94.00	0.92	177.71	0.00
232	19768.00	89.69	1.14	12091.43	7865.76	7865.66	-41.26	94.00	0.61	177.71	0.00
233	19862.00	90.03	1.08	12091.66	7959.74	7959.64	-39.45	94.00	0.37	177.71	0.00
234	19956.00	90.22	0.46	12091.46	8053.72	8053.63	-38.20	94.00	0.67	177.71	0.00
235	20050.00	90.00	1.10	12091.27	8147.70	8147.62	-36.92	94.00	0.72	177.71	0.00
236	20144.00	90.67	0.31	12090.73	8241.69	8241.61	-35.77	94.00	1.10	177.71	0.00
237	20238.00	91.09	359.51	12089.28	8335.67	8335.60	-35.92	94.00	0.96	177.71	0.00
238	20332.00	91.63	359.50	12087.05	8429.65	8429.57	-36.73	94.00	0.57	170.57	0.00
239	20380.00	90.90	359.96	12085.99	8477.63	8477.55	-36.95	48.00	1.80	177.71	0.00
240	20426.00	91.15	359.78	12085.17	8523.63	8523.55	-37.06	46.00	0.67	177.71	0.00
241	20520.00	90.11	0.32	12084.13	8617.62	8617.54	-36.98	94.00	1.25	177.71	0.00
242	20613.00	89.72	0.83	12084.27	8710.61	8710.54	-36.20	93.00	0.54	177.71	0.00
243	20658.00	89.66	0.20	12084.52	8755.60	8755.53	-35.88	45.00	0.96	177.71	0.00
244	20707.00	89.97	359.85	12084.67	8804.60	8804.53	-35.86	49.00	0.95	177.71	0.00
245	20752.00	89.36	0.15	12084.94	8849.60	8849.53	-35.86	45.00	1.51	177.71	0.00
246	20801.00	88.80	359.43	12085.72	8898.60	8898.53	-36.04	49.00	1.86	177.71	0.00
247	20895.00	89.58	359.10	12087.05	8992.58	8992.51	-37.24	94.00	0.90	177.71	0.00
248	20940.00	89.86	358.84	12087.27	9037.58	9037.50	-38.05	45.00	0.85	177.71	0.00
249	20989.00	90.25	358.77	12087.23	9086.57	9086.49	-39.07	49.00	0.81	177.71	0.00
250	21083.00	89.08	357.77	12087.78	9180.54	9180.44	-41.91	94.00	1.64	177.71	0.00
251	21177.00	89.94	357.05	12088.58	9274.48	9274.34	-46.16	94.00	1.19	184.86	0.00
252	21271.00	90.73	356.87	12088.03	9368.34	9368.21	-51.14	94.00	0.86	184.86	0.00
253	21365.00	91.32	356.77	12088.35	9462.21	9462.05	-56.36	94.00	0.64	184.86	0.00
254	21460.00	91.71	355.93	12083.84	9557.01	9556.82	-62.40	95.00	0.97	184.86	0.00
255	21554.00	92.30	355.06	12080.55	9650.70	9650.47	-69.78	94.00	1.12	184.86	0.00
256	21613.00	92.55	354.60	12078.05	9709.43	9709.18	-75.09	59.00	0.89	184.86	0.00
257	21669.00	92.55	354.60	12075.56	9765.15	9764.87	-80.36	56.00	0.00	0.00	0.00