



Total Directional
Services, LLC
USA Operations

Final MWD Survey Certification

Lea County, New Mexico

Client: Devon Energy

Well Name: Chincoteague 8-5 Fed Com 232H

Total Job No: 2019-391-129

API No: 30-025-45700

Start Date: 06/29/2019

End Date: 07/15/2019

Measured Start Depth: 120 feet

Measured End Depth: 18,286 feet

Vertical Section from well center at TD: 7,663 feet

HOBBS OCD
JAN 06 2020
RECEIVED

I, Trey Beeson, MWD Operator, hereby certify that; I am employed by Total Directional Services, LLC and we conducted or supervised the taking of these open hole MWD surveys at the request of this client. This data is true, correct, complete and within the limitations of the tool as set forth by Total Directional Services, LLC. I am authorized and qualified to make this report and have reviewed this report and find that it conforms to the principals and procedures as set forth by Total Directional Services, LLC.

Date: 07/13/2019

Signed: *Trey Beeson*

DIRECTIONAL SURVEY REPORT

Company name: Devon Energy

Start date: 06/29/2019

Well name: Chincoteague 8-5 Fed Com 232H

End date: 07/15/2019

Field: Delaware Basin, Bone Springs (Wolf Camp)

Proposed direction: 359.59

Rig: Cactus 129

Declination: 6.46

API/UWI: 30-025-45700

North Reference: Grid

State/Province: New Mexico

Latitude/Longitude: 32.145308 / -103.7026

County/Parish: Lea

KB: 3468.2

Location SWNW / 2470 FNL / 895 FWL

SVY	Depth	Inc	Azm	TVD	NS	EW	VS	CD	CA	DLS	CL	Temp
Tiein	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	90.00	0.00		0.0
1	197.00	0.60	122.40	197.00	-0.55	0.87	-0.56	1.03	122.40	0.30	197.00	159.8
2	228.00	0.60	121.80	227.99	-0.73	1.15	-0.73	1.36	122.33	0.02	31.00	159.8
3	326.00	0.70	116.20	325.99	-1.26	2.12	-1.28	2.47	120.73	0.12	98.00	159.8
4	418.00	0.70	112.40	417.98	-1.72	3.14	-1.74	3.58	118.72	0.05	92.00	159.8
5	509.00	0.80	113.60	508.97	-2.19	4.24	-2.22	4.77	117.30	0.11	91.00	159.8
6	601.00	0.80	113.60	600.96	-2.70	5.42	-2.74	6.05	116.52	0.00	92.00	159.8
7	693.00	0.80	120.40	692.96	-3.28	6.56	-3.33	7.34	116.60	0.10	92.00	159.8
8	792.00	0.80	114.10	791.95	-3.92	7.79	-3.97	8.72	116.71	0.09	99.00	159.8
9	970.00	0.90	136.80	969.93	-5.44	9.88	-5.51	11.28	118.86	0.20	178.00	159.8
10	1062.00	0.80	145.20	1061.92	-6.50	10.74	-6.57	12.55	121.18	0.17	92.00	159.8
11	1154.00	1.00	146.30	1153.91	-7.69	11.55	-7.77	13.88	123.66	0.22	92.00	159.8
12	1247.00	0.80	152.80	1246.89	-8.95	12.30	-9.03	15.21	126.03	0.24	93.00	159.8
13	1339.00	0.70	150.50	1338.89	-10.01	12.87	-10.10	16.30	127.87	0.11	92.00	102.2
14	1430.00	0.60	158.60	1429.88	-10.93	13.31	-11.03	17.23	129.39	0.15	91.00	104.0
15	1523.00	0.40	141.60	1522.88	-11.64	13.69	-11.74	17.97	130.37	0.27	93.00	105.8
16	1614.00	0.30	131.50	1613.88	-12.05	14.07	-12.15	18.52	130.57	0.13	91.00	105.8
17	1710.00	0.30	128.00	1709.87	-12.37	14.46	-12.47	19.03	130.55	0.02	96.00	107.6
18	1805.00	0.30	108.60	1804.87	-12.60	14.89	-12.71	19.50	130.24	0.11	95.00	109.4
19	1901.00	0.30	84.50	1900.87	-12.66	15.38	-12.77	19.92	129.46	0.13	96.00	109.4
20	1996.00	0.70	81.20	1995.87	-12.54	16.20	-12.66	20.49	127.76	0.42	95.00	109.4
21	2091.00	1.70	99.20	2090.85	-12.68	18.16	-12.81	22.15	124.92	1.11	95.00	111.2
22	2187.00	2.20	103.60	2186.79	-13.34	21.36	-13.49	25.18	121.99	0.54	96.00	113.0
23	2282.00	2.10	97.80	2281.72	-14.01	24.86	-14.18	28.53	119.40	0.25	95.00	113.0
24	2378.00	3.30	92.10	2377.61	-14.35	29.36	-14.56	32.68	116.04	1.28	96.00	113.0
25	2473.00	4.80	91.40	2472.37	-14.54	36.07	-14.80	38.89	111.96	1.58	95.00	113.0
26	2568.00	5.20	91.30	2567.01	-14.74	44.34	-15.06	46.73	108.39	0.42	95.00	113.0
27	2664.00	5.80	89.30	2662.57	-14.78	53.54	-15.16	55.55	105.43	0.66	96.00	113.0
28	2759.00	6.40	91.60	2757.03	-14.87	63.64	-15.32	65.35	103.15	0.68	95.00	113.0
29	2854.00	7.50	94.10	2851.33	-15.46	75.11	-16.00	76.69	101.63	1.20	95.00	114.8
30	2950.00	8.80	96.10	2946.36	-16.69	88.66	-17.32	90.22	100.66	1.39	96.00	114.8
31	3045.00	9.00	93.10	3040.22	-17.86	103.31	-18.60	104.84	99.81	0.53	95.00	116.6
32	3141.00	9.90	92.50	3134.91	-18.63	119.05	-19.48	120.50	98.89	0.94	96.00	116.6
33	3236.00	10.80	93.70	3228.37	-19.56	136.09	-20.53	137.49	98.18	0.97	95.00	118.4
34	3331.00	11.30	95.20	3321.61	-20.98	154.25	-22.08	155.67	97.74	0.61	95.00	118.4

35	3427.00	11.40	94.20	3415.73	-22.52	173.07	-23.76	174.53	97.41	0.23	96.00	118.4
36	3522.00	12.30	92.90	3508.70	-23.72	192.54	-25.10	194.00	97.02	0.99	95.00	120.2
37	3617.00	12.80	94.00	3601.43	-24.97	213.15	-26.49	214.61	96.68	0.58	95.00	123.8
38	3713.00	13.70	97.30	3694.88	-27.16	235.03	-28.84	236.60	96.59	1.22	96.00	123.8
39	3808.00	13.80	99.70	3787.16	-30.49	257.36	-32.33	259.16	96.76	0.61	95.00	125.6
40	3903.00	13.50	101.00	3879.47	-34.52	279.41	-36.52	281.54	97.04	0.45	95.00	127.4
41	3999.00	13.20	100.70	3972.88	-38.69	301.18	-40.85	303.66	97.32	0.32	96.00	127.4
42	4094.00	13.50	100.20	4065.31	-42.67	322.76	-44.98	325.56	97.53	0.34	95.00	127.4
43	4189.00	14.90	102.30	4157.41	-47.24	345.60	-49.71	348.82	97.78	1.57	95.00	127.4
44	4285.00	14.60	105.30	4250.25	-53.06	369.33	-55.70	373.13	98.17	0.85	96.00	127.4
45	4380.00	14.10	106.20	4342.28	-59.45	391.99	-62.25	396.48	98.62	0.58	95.00	129.2
46	4476.00	12.80	103.80	4435.65	-65.24	413.55	-68.20	418.67	98.97	1.47	96.00	129.2
47	4571.00	12.10	102.70	4528.41	-69.94	433.49	-73.04	439.09	99.17	0.78	95.00	129.2
48	4612.00	12.20	102.40	4568.49	-71.82	441.91	-74.98	447.71	99.23	0.29	41.00	129.2
49	4699.00	12.40	103.50	4653.50	-75.97	459.97	-79.26	466.20	99.38	0.35	87.00	96.8
50	4763.00	13.10	102.30	4715.92	-79.12	473.74	-82.51	480.30	99.48	1.17	64.00	98.6
51	4858.00	13.50	100.90	4808.37	-83.51	495.15	-87.05	502.14	99.57	0.54	95.00	100.4
52	4953.00	13.00	100.60	4900.84	-87.58	516.54	-91.27	523.91	99.62	0.53	95.00	102.2
53	5049.00	12.70	100.20	4994.44	-91.43	537.54	-95.27	545.26	99.65	0.33	96.00	104.0
54	5144.00	12.40	98.50	5087.17	-94.79	557.90	-98.78	565.90	99.64	0.50	95.00	104.0
55	5239.00	12.40	96.60	5179.95	-97.47	578.12	-101.60	586.28	99.57	0.43	95.00	105.8
56	5334.00	12.30	95.20	5272.75	-99.56	598.33	-103.84	606.56	99.45	0.33	95.00	107.6
57	5429.00	11.90	94.00	5365.64	-101.16	618.18	-105.58	626.40	99.29	0.50	95.00	109.4
58	5525.00	12.10	94.10	5459.55	-102.57	638.09	-107.13	646.28	99.13	0.21	96.00	109.4
59	5620.00	13.40	96.00	5552.20	-104.43	658.97	-109.14	667.19	99.00	1.44	95.00	111.2
60	5715.00	14.50	99.60	5644.40	-107.56	681.65	-112.44	690.08	98.97	1.47	95.00	113.0
61	5811.00	14.70	100.60	5737.30	-111.81	705.47	-116.85	714.27	99.01	0.34	96.00	114.8
62	5906.00	14.70	99.40	5829.19	-115.99	729.21	-121.21	738.38	99.04	0.32	95.00	114.8
63	6001.00	14.90	98.60	5921.04	-119.79	753.18	-125.18	762.64	99.04	0.30	95.00	116.6
64	6097.00	14.50	105.60	6013.90	-124.87	776.96	-130.42	786.93	99.13	1.90	96.00	116.6
65	6192.00	13.90	105.70	6106.00	-131.15	799.40	-136.87	810.08	99.32	0.63	95.00	118.4
66	6288.00	13.30	105.00	6199.31	-137.13	821.16	-143.00	832.54	99.48	0.65	96.00	120.2
67	6383.00	13.30	106.10	6291.76	-142.99	842.22	-149.01	854.27	99.64	0.27	95.00	120.2
68	6478.00	13.00	106.80	6384.27	-149.11	862.95	-155.28	875.73	99.80	0.36	95.00	122.0
69	6573.00	12.40	106.40	6476.95	-155.08	882.96	-161.39	896.48	99.96	0.64	95.00	122.0
70	6669.00	12.50	106.20	6570.69	-160.89	902.83	-167.34	917.05	100.10	0.11	96.00	123.8
71	6764.00	12.10	105.20	6663.51	-166.36	922.31	-172.96	937.19	100.23	0.48	95.00	123.8
72	6859.00	11.60	104.60	6756.48	-171.38	941.16	-178.11	956.63	100.32	0.54	95.00	125.6
73	6955.00	10.90	104.60	6850.64	-176.10	959.28	-182.96	975.31	100.40	0.73	96.00	125.6
74	7050.00	10.10	104.60	6944.05	-180.47	976.03	-187.45	992.58	100.48	0.84	95.00	125.6
75	7145.00	9.00	103.10	7037.73	-184.25	991.33	-191.34	1008.31	100.53	1.19	95.00	127.4
76	7241.00	8.80	103.40	7132.57	-187.66	1005.79	-194.85	1023.15	100.57	0.21	96.00	127.4
77	7336.00	7.80	102.10	7226.58	-190.69	1019.16	-197.98	1036.85	100.60	1.07	95.00	127.4
78	7431.00	7.60	103.20	7320.72	-193.48	1031.58	-200.85	1049.57	100.62	0.26	95.00	127.4
79	7527.00	8.80	100.80	7415.74	-196.30	1044.98	-203.78	1063.26	100.64	1.30	96.00	127.4
80	7622.00	8.50	101.00	7509.66	-199.00	1059.01	-206.58	1077.54	100.64	0.32	95.00	127.4
81	7717.00	7.90	101.70	7603.68	-201.67	1072.29	-209.34	1091.09	100.65	0.64	95.00	129.2
82	7812.00	7.60	102.00	7697.82	-204.30	1084.83	-212.06	1103.90	100.67	0.32	95.00	129.2

83	7908.00	7.40	102.30	7792.99	-206.93	1097.08	-214.78	1116.43	100.68	0.21	96.00	129.2
84	8003.00	6.90	103.60	7887.26	-209.58	1108.60	-217.51	1128.24	100.71	0.55	95.00	129.2
85	8098.00	6.50	103.90	7981.61	-212.21	1119.37	-220.22	1139.31	100.73	0.42	95.00	131.0
86	8194.00	4.80	110.60	8077.14	-214.93	1128.41	-223.00	1148.69	100.78	1.90	96.00	131.0
87	8289.00	3.50	124.40	8171.89	-217.97	1134.52	-226.08	1155.27	100.88	1.72	95.00	131.0
88	8384.00	1.90	133.90	8266.78	-220.70	1138.05	-228.84	1159.25	100.98	1.74	95.00	132.8
89	8480.00	0.90	108.40	8362.75	-222.04	1139.91	-230.19	1161.33	101.02	1.20	96.00	132.8
90	8575.00	0.40	93.20	8457.75	-222.30	1140.95	-230.45	1162.40	101.03	0.55	95.00	134.6
91	8671.00	0.20	228.80	8553.74	-222.42	1141.16	-230.58	1162.63	101.03	0.58	96.00	136.4
92	8766.00	0.50	251.40	8648.74	-222.67	1140.64	-230.82	1162.17	101.05	0.34	95.00	136.4
93	8861.00	0.40	13.60	8743.74	-222.48	1140.32	-230.63	1161.82	101.04	0.83	95.00	138.2
94	8957.00	0.90	9.60	8839.74	-221.41	1140.53	-229.56	1161.82	100.99	0.52	96.00	138.2
95	9052.00	1.10	359.60	8934.72	-219.76	1140.65	-227.92	1161.62	100.91	0.28	95.00	140.0
96	9148.00	0.80	316.60	9030.71	-218.35	1140.18	-226.50	1160.90	100.84	0.78	96.00	140.0
97	9243.00	1.80	314.10	9125.68	-216.83	1138.65	-224.97	1159.11	100.78	1.05	95.00	141.8
98	9338.00	0.90	333.30	9220.66	-215.13	1137.25	-223.26	1157.41	100.71	1.05	95.00	141.8
99	9434.00	1.40	149.70	9316.65	-215.46	1137.50	-223.60	1157.73	100.73	2.39	96.00	141.8
100	9529.00	1.60	164.00	9411.62	-217.74	1138.45	-225.88	1159.09	100.83	0.45	95.00	141.8
101	9624.00	1.30	167.10	9506.59	-220.07	1139.06	-228.21	1160.12	100.93	0.33	95.00	143.6
102	9719.00	1.20	167.10	9601.56	-222.09	1139.52	-230.24	1160.96	101.03	0.11	95.00	143.6
103	9815.00	0.80	195.90	9697.55	-223.71	1139.56	-231.86	1161.31	101.11	0.66	96.00	134.6
104	9909.00	1.00	221.40	9791.54	-224.96	1138.84	-233.10	1160.84	101.17	0.47	94.00	136.4
105	10005.00	1.50	180.90	9887.52	-226.84	1138.26	-234.98	1160.65	101.27	1.03	96.00	138.2
106	10100.00	5.70	7.60	9982.39	-223.40	1138.87	-231.55	1160.57	101.10	7.57	95.00	138.2
107	10195.00	17.20	14.70	10075.35	-205.08	1143.07	-213.25	1161.32	100.17	12.17	95.00	136.4
108	10291.00	26.20	13.00	10164.45	-170.63	1151.46	-178.87	1164.03	98.43	9.40	96.00	140.0
109	10386.00	33.00	7.00	10247.02	-124.45	1159.34	-132.75	1166.00	96.13	7.80	95.00	141.8
110	10482.00	41.50	3.90	10323.38	-66.66	1164.70	-75.00	1166.60	93.28	9.06	96.00	141.8
111	10577.00	49.80	0.20	10389.74	1.15	1166.97	-7.20	1166.97	89.94	9.17	95.00	145.4
112	10672.00	58.20	359.10	10445.53	77.93	1166.46	69.58	1169.06	86.18	8.89	95.00	145.4
113	10767.00	66.20	357.40	10489.80	161.86	1163.85	153.52	1175.05	82.08	8.57	95.00	145.4
114	10863.00	76.70	358.30	10520.30	252.68	1160.46	244.37	1187.65	77.72	10.97	96.00	147.2
115	10923.00	83.70	359.10	10530.51	311.75	1159.13	303.45	1200.32	74.95	11.74	60.00	141.8
116	10986.00	88.00	359.00	10535.07	374.56	1158.09	366.26	1217.15	72.08	6.83	63.00	140.0
117	11081.00	88.60	359.30	10537.88	469.51	1156.68	461.22	1248.33	67.91	0.71	95.00	145.4
118	11176.00	88.10	357.90	10540.62	564.44	1154.36	556.16	1284.96	63.94	1.56	95.00	143.6
119	11271.00	89.50	358.40	10542.61	659.36	1151.29	651.11	1326.74	60.20	1.56	95.00	143.6
120	11367.00	88.00	357.10	10544.70	755.26	1147.52	747.03	1373.77	56.65	2.07	96.00	141.8
121	11462.00	88.40	357.20	10547.69	850.10	1142.80	841.90	1424.31	53.36	0.43	95.00	141.8
122	11558.00	89.50	356.90	10549.45	945.95	1137.86	937.79	1479.72	50.26	1.19	96.00	145.4
123	11653.00	89.50	357.90	10550.28	1040.85	1133.55	1032.71	1538.93	47.44	1.05	95.00	145.4
124	11748.00	89.90	359.30	10550.77	1135.82	1131.23	1127.69	1603.05	44.88	1.53	95.00	145.4
125	11844.00	88.80	358.30	10551.86	1231.79	1129.22	1223.68	1671.06	42.51	1.55	96.00	145.4
126	11939.00	88.60	357.40	10554.02	1326.70	1125.66	1318.61	1739.89	40.31	0.97	95.00	147.2
127	12034.00	89.20	356.90	10555.84	1421.56	1120.94	1413.50	1810.34	38.26	0.82	95.00	149.0
128	12130.00	88.80	357.80	10557.52	1517.44	1116.50	1509.41	1883.93	36.34	1.03	96.00	147.2
129	12225.00	89.70	0.80	10558.76	1612.41	1115.34	1604.39	1960.58	34.67	3.30	95.00	147.2
130	12320.00	89.90	1.70	10559.09	1707.39	1117.41	1699.35	2040.54	33.20	0.97	95.00	147.2

131	12416.00	90.20	1.60	10559.01	1803.35	1120.18	1795.29	2122.94	31.85	0.33	96.00	149.0
132	12511.00	90.50	1.80	10558.43	1898.31	1122.99	1890.22	2205.60	30.61	0.38	95.00	149.0
133	12606.00	90.20	1.90	10557.85	1993.25	1126.06	1985.15	2289.34	29.46	0.33	95.00	149.0
134	12701.00	89.50	2.20	10558.10	2088.19	1129.46	2080.06	2374.07	28.41	0.80	95.00	150.8
135	12797.00	88.40	1.20	10559.86	2184.13	1132.31	2175.97	2460.19	27.40	1.55	96.00	152.6
136	12892.00	88.60	0.90	10562.34	2279.08	1134.05	2270.91	2545.64	26.45	0.38	95.00	152.6
137	12987.00	89.70	3.20	10563.75	2374.00	1137.44	2365.80	2632.43	25.60	2.68	95.00	154.4
138	13083.00	89.10	2.80	10564.76	2469.87	1142.47	2461.63	2721.30	24.82	0.75	96.00	154.4
139	13178.00	88.80	0.80	10566.50	2564.80	1145.45	2556.54	2808.96	24.07	2.13	95.00	156.2
140	13273.00	88.80	358.80	10568.49	2659.77	1145.12	2651.51	2895.81	23.29	2.10	95.00	158.2
141	13369.00	89.70	359.10	10569.75	2755.75	1143.36	2747.49	2983.52	22.53	0.99	96.00	156.2
142	13464.00	89.80	358.10	10570.16	2850.72	1141.04	2842.48	3070.60	21.81	1.06	95.00	156.2
143	13559.00	90.50	357.30	10569.91	2945.64	1137.23	2937.43	3157.54	21.11	1.12	95.00	158.0
144	13655.00	90.60	357.40	10568.99	3041.53	1132.79	3033.35	3245.63	20.43	0.15	96.00	158.0
145	13750.00	91.50	359.00	10567.25	3136.46	1129.81	3128.30	3333.75	19.81	1.93	95.00	159.8
146	13846.00	91.60	359.00	10564.65	3232.41	1128.13	3224.26	3423.62	19.24	0.10	96.00	158.0
147	13941.00	89.00	357.80	10564.15	3327.37	1125.48	3319.23	3512.56	18.69	3.01	95.00	159.8
148	14036.00	90.20	358.40	10564.82	3422.31	1122.33	3414.19	3601.64	18.16	1.41	95.00	161.6
149	14132.00	90.40	358.50	10564.31	3518.27	1119.73	3510.17	3692.16	17.65	0.23	96.00	159.8
150	14227.00	89.30	0.20	10564.56	3613.26	1118.66	3605.16	3782.47	17.20	2.13	95.00	159.8
151	14321.00	87.80	359.90	10566.94	3707.23	1118.74	3699.13	3872.35	16.79	1.63	94.00	161.6
152	14417.00	87.60	357.90	10570.80	3803.13	1116.90	3795.04	3963.74	16.37	2.09	96.00	161.6
153	14512.00	88.60	357.30	10573.94	3897.99	1112.92	3889.93	4053.76	15.93	1.23	95.00	163.4
154	14607.00	89.80	358.80	10575.27	3992.92	1109.69	3984.88	4144.25	15.53	2.02	95.00	165.2
155	14703.00	88.80	358.70	10576.44	4088.89	1107.59	4080.86	4236.25	15.16	1.05	96.00	163.4
156	14798.00	89.60	359.30	10577.77	4183.87	1105.94	4175.85	4327.57	14.81	1.05	95.00	165.2
157	14894.00	90.30	358.20	10577.85	4279.84	1103.84	4271.83	4419.90	14.46	1.36	96.00	165.2
158	14989.00	91.30	356.30	10576.53	4374.72	1099.28	4366.74	4510.72	14.11	2.26	95.00	165.2
159	15084.00	90.70	358.30	10574.87	4469.59	1094.81	4461.64	4601.72	13.76	2.20	95.00	165.2
160	15180.00	90.20	359.00	10574.12	4565.56	1092.55	4557.63	4694.47	13.46	0.90	96.00	165.2
161	15275.00	90.10	358.70	10573.87	4660.54	1090.64	4652.62	4786.46	13.17	0.33	95.00	154.4
162	15370.00	88.20	359.70	10575.28	4755.52	1089.32	4747.60	4878.68	12.90	2.26	95.00	154.4
163	15465.00	88.40	0.20	10578.09	4850.48	1089.23	4842.56	4971.27	12.66	0.57	95.00	154.4
164	15561.00	88.80	359.70	10580.44	4946.45	1089.15	4938.53	5064.94	12.42	0.67	96.00	158.0
165	15656.00	89.30	359.50	10582.02	5041.43	1088.49	5033.51	5157.60	12.18	0.57	95.00	158.0
166	15751.00	89.60	359.90	10582.93	5136.42	1087.99	5128.51	5250.39	11.96	0.53	95.00	158.0
167	15846.00	89.20	359.20	10583.92	5231.42	1087.24	5223.50	5343.20	11.74	0.85	95.00	158.0
168	15942.00	89.40	359.50	10585.09	5327.40	1086.15	5319.49	5437.00	11.52	0.38	96.00	159.8
169	16037.00	90.00	359.50	10585.59	5422.40	1085.33	5414.49	5529.95	11.32	0.63	95.00	161.6
170	16132.00	89.90	359.30	10585.68	5517.39	1084.33	5509.49	5622.93	11.12	0.24	95.00	161.6
171	16228.00	90.70	359.10	10585.17	5613.38	1082.99	5605.49	5716.90	10.92	0.86	96.00	161.6
172	16323.00	89.50	0.50	10585.01	5708.37	1082.66	5700.48	5810.14	10.74	1.94	95.00	161.6
173	16418.00	89.40	0.60	10585.92	5803.37	1083.57	5795.46	5903.66	10.58	0.15	95.00	161.6
174	16513.00	89.50	0.70	10586.83	5898.36	1084.65	5890.44	5997.25	10.42	0.15	95.00	163.4
175	16608.00	89.80	0.00	10587.41	5993.35	1085.23	5985.43	6090.81	10.26	0.80	95.00	163.4
176	16703.00	90.10	359.60	10587.49	6088.35	1084.90	6080.43	6184.26	10.10	0.53	95.00	163.4
177	16799.00	90.60	359.50	10586.91	6184.35	1084.14	6176.43	6278.65	9.94	0.53	96.00	165.2
178	16894.00	89.40	1.00	10586.91	6279.34	1084.56	6271.42	6372.31	9.80	2.02	95.00	163.4

179	16990.00	89.60	1.50	10587.75	6375.31	1086.65	6367.37	6467.26	9.67	0.56	96.00	163.4
180	17085.00	90.00	0.50	10588.08	6470.30	1088.31	6462.34	6561.19	9.55	1.13	95.00	165.2
181	17180.00	88.50	0.20	10589.32	6565.28	1088.89	6557.32	6654.97	9.42	1.61	95.00	165.2
182	17275.00	89.30	360.00	10591.14	6660.27	1089.06	6652.30	6748.72	9.29	0.87	95.00	165.2
183	17370.00	89.80	0.00	10591.89	6755.26	1089.06	6747.30	6842.49	9.16	0.53	95.00	167.0
184	17466.00	90.10	359.30	10591.97	6851.26	1088.47	6843.30	6937.18	9.03	0.79	96.00	167.0
185	17561.00	90.40	358.90	10591.56	6946.25	1086.98	6938.29	7030.78	8.89	0.53	95.00	168.8
186	17656.00	88.40	360.00	10592.55	7041.23	1086.06	7033.28	7124.50	8.77	2.40	95.00	167.0
187	17751.00	88.90	359.70	10594.79	7136.20	1085.82	7128.25	7218.34	8.65	0.61	95.00	168.8
188	17847.00	89.60	359.30	10596.05	7232.19	1084.98	7224.24	7313.12	8.53	0.84	96.00	168.8
189	17942.00	90.20	359.50	10596.21	7327.19	1083.98	7319.24	7406.93	8.42	0.67	95.00	170.6
190	18037.00	90.90	359.30	10595.30	7422.17	1082.99	7414.24	7500.77	8.30	0.77	95.00	170.6
191	18133.00	90.70	358.50	10593.96	7518.15	1081.15	7510.22	7595.49	8.18	0.86	96.00	172.4
192	18230.00	90.70	358.70	10592.78	7615.11	1078.78	7607.20	7691.14	8.06	0.21	97.00	170.6
PTB	18286.00	90.70	358.70	10592.09	7671.09	1077.51	7663.19	7746.40	8.00	0.00	56.00	170.6