

Provide Signature Page for
Directional Survey

NM OIL CONSERVATION
ARTESIA DISTRICT

OCT 02 2018

30.015-43928

RECEIVED



Job #: 61217
Client: CHEVRON Wellbore Name
Well: HH SO P2 B 22HA OWB
Field: WOLFCAMP
Rig: PATTERSON 815
Phoenix Rep: METCALF/ DAWSON

North Type: Grid
Total Correction: 7.36 degrees
Target TVD: 9200 feet
Vertical Section Dir.: 1.39 degrees
Dip Angle: 59.77
TMF: 0.47982
TGF: 1.0000

SURVEY DATA

No.	Date	Time	M. Depth	Bit to DU	MD	INC	AZM	C.I.	TVD	VS	N/-S	E/-W	DLS	B./D.	BHA
0	xxx	xxx	456.00	xxx	433.5	1.60	132.00	*****	433.44	-0.52	-0.65	5.48	*****	*****	*****
1	6-Jun	13:24	607	75	532	1.94	109.27	99	531.89	-1.92	-2.12	8.08	0.78	0.35	1
2	6-Jun	13:25	668	75	593	2.36	111.38	61	592.85	-2.67	-2.92	10.22	0.70	0.69	1
3	6-Jun	15:37	761	75	686	5.30	109.11	93	685.63	-4.63	-5.02	16.06	3.16	3.16	1
4	6-Jun	17:58	855	75	780	8.08	104.89	94	778.98	-7.50	-8.14	26.55	3.00	2.96	1
5	6-Jun	20:56	947	75	872	8.30	106.19	92	870.05	-10.70	-11.66	39.18	0.31	0.24	1
6	6-Jun	22:30	1042	75	967	6.88	108.84	95	964.21	-14.16	-15.41	51.15	1.54	-1.49	1
7	7-Jun	0:24	1197	75	1062	6.36	103.47	95	1058.58	-16.97	-18.47	61.65	0.85	-0.55	1
8	7-Jun	1:43	1231	75	1156	6.00	91.87	94	1152.04	-18.10	-19.84	71.62	1.38	-0.38	1
9	7-Jun	3:02	1326	75	1251	6.67	92.35	95	1246.46	-18.23	-20.23	82.10	0.71	0.71	1
10	7-Jun	4:29	1421	75	1346	6.05	86.89	95	1340.87	-17.93	-20.18	92.61	0.91	-0.65	1
11	7-Jun	5:11	1515	75	1440	6.23	80.52	94	1434.33	-16.58	-19.08	102.59	0.75	0.19	1
12	7-Jun	6:56	1610	75	1535	5.92	83.02	95	1528.80	-14.90	-17.63	112.54	0.43	-0.33	1
13	7-Jun	7:43	1705	75	1630	5.05	85.75	95	1623.36	-13.77	-16.73	121.57	0.96	-0.92	1
14	7-Jun	8:34	1800	75	1725	5.90	85.01	95	1717.93	-12.82	-15.99	130.60	0.90	0.89	1
15	7-Jun	9:21	1894	75	1819	6.91	84.32	94	1811.34	-11.59	-15.01	141.04	1.08	1.07	1
16	7-Jun	11:46	1988	75	1913	5.59	87.26	94	1904.78	-10.56	-14.23	151.24	1.44	-1.40	1
17	7-Jun	13:04	2089	75	2008	4.04	87.78	95	1999.44	-10.02	-13.88	159.21	1.63	-1.63	1
18	7-Jun	14:08	2177	75	2102	3.80	88.19	94	2093.22	-9.63	-13.66	165.63	0.26	-0.26	1
19	7-Jun	15:03	2272	75	2197	3.85	86.89	95	2188.01	-9.21	-13.38	171.96	0.11	0.05	1
20	7-Jun	16:02	2367	75	2292	4.06	87.26	95	2282.79	-8.72	-13.05	178.51	0.22	0.22	1
21	7-Jun	17:13	2556	75	2481	4.29	82.04	(189)	2471.28	-7.09	-11.75	192.19	0.23	0.12	1
22	7-Jun	17:53	2651	75	2576	4.37	80.49	95	2566.01	-5.82	-10.66	199.28	0.15	0.08	1
23	7-Jun	18:53	2746	75	2671	5.18	82.27	95	2660.68	-4.46	-9.49	207.10	0.87	0.85	1
24	7-Jun	19:29	2840	75	2765	6.04	85.22	94	2754.23	-3.26	-8.50	216.23	0.96	0.91	1
25	7-Jun	20:12	2935	75	2860	6.07	86.12	95	2848.70	-2.26	-7.75	226.22	0.10	0.03	1
26	7-Jun	20:55	3030	75	2955	5.73	85.32	95	2943.20	-1.29	-7.02	235.96	0.37	-0.36	1
27	7-Jun	21:52	3125	75	3050	5.80	83.51	95	3037.72	-0.13	-6.09	245.46	0.21	0.07	1
28	7-Jun	22:57	3314	75	3239	6.11	82.01	(189)	3225.70	2.81	-3.61	264.91	0.18	0.16	1
29	7-Jun	23:38	3409	75	3334	6.32	81.05	95	3320.14	4.58	-2.10	275.08	0.25	0.22	1
30	8-Jun	1:03	3504	75	3429	6.01	84.30	95	3414.59	6.13	-0.79	285.19	0.49	-0.33	1
31	8-Jun	2:23	3599	75	3524	4.61	95.89	95	3509.18	6.44	-0.69	293.94	1.85	-1.47	1
32	8-Jun	3:48	3694	75	3619	2.66	114.18	95	3603.99	5.29	-1.98	299.75	2.36	-2.05	1
33	8-Jun	4:34	3788	75	3713	1.31	135.55	94	3697.93	3.70	-3.64	302.49	1.61	-1.44	1
34	8-Jun	5:36	3883	75	3808	0.96	143.83	95	3792.91	2.31	-5.06	303.72	0.41	-0.37	1
35	8-Jun	6:41	3977	75	3902	0.32	198.67	94	3886.91	1.43	-5.94	304.10	0.87	-0.68	1
36	8-Jun	9:57	4167	75	4092	0.45	183.68	(190)	4076.90	0.18	-7.19	303.88	0.09	0.07	1
37	8-Jun	12:44	4357	75	4282	0.43	200.56	(190)	4266.90	-1.24	-8.60	303.59	0.07	-0.01	1
38	8-Jun	14:24	4452	75	4377	0.53	210.79	95	4361.90	-1.96	-9.32	303.24	0.14	0.11	1
39	8-Jun	15:58	4546	75	4471	0.64	208.51	94	4455.89	-2.80	-10.15	302.76	0.12	0.12	1
40	8-Jun	18:42	4641	75	4566	0.64	216.77	95	4550.88	-3.71	-11.04	302.19	0.10	0.00	1
41	8-Jun	20:04	4736	75	4661	0.67	229.08	95	4645.88	-4.51	-11.83	301.45	0.15	0.03	1
42	8-Jun	23:01	4926	75	4851	1.05	237.76	(190)	4835.86	-6.23	-13.49	299.14	0.21	0.20	1
43	9-Jun	0:32	5020	75	4945	1.15	233.02	94	4929.84	-7.29	-14.51	297.66	0.14	0.11	1
44	9-Jun	2:00	5115	75	5040	1.32	227.61	95	5024.82	-8.64	-15.82	296.09	0.22	0.18	1
45	9-Jun	7:26	5304	75	5229	1.59	228.07	(189)	5213.76	-11.94	-19.04	292.53	0.14	0.14	1
46	9-Jun	12:00	5399	75	5324	1.50	246.89	95	5308.72	-13.36	-20.41	290.41	0.54	-0.09	1
47	9-Jun	15:15	5493	75	5418	1.35	263.43	94	5402.69	-14.03	-21.02	288.18	0.46	-0.16	1
48	10-Jun	13:55	5588	75	5513	1.70	256.70	95	5497.66	-14.54	-21.47	285.69	0.41	0.37	2
49	10-Jun	14:34	5683	75	5608	1.94	254.63	95	5592.61	-15.36	-22.23	282.77	0.26	0.25	2
50	10-Jun	21:32	5778	75	5703	0.59	272.69	95	5687.59	-15.81	-22.63	280.73	1.46	-1.42	2
51	10-Jun	23:38	5873	75	5798	1.69	64.46	95	5782.58	-15.17	-22.00	281.51	2.34	1.16	2
52	11-Jun	1:58	5968	75	5893	1.50	63.09	95	5877.54	-13.94	-20.83	283.88	0.20	-0.20	2
53	11-Jun	3:48	6062	75	5987	1.32	58.53	94	5971.51	-12.77	-19.71	285.90	0.23	-0.19	2
54	11-Jun	5:44	6157	75	6082	1.14	45.41	95	6066.49	-11.50	-18.48	287.51	0.35	-0.19	2
55	11-Jun	8:40	6251	75	6176	0.85	53.65	94	6160.47	-10.40	-17.41	288.73	0.34	-0.31	2
56	11-Jun	10:46	6346	75	6271	0.78	72.11	95	6255.46	-9.75	-16.79	289.92	0.28	-0.07	2
57	11-Jun	13:52	6441	75	6366	0.62	56.60	95	6350.46	-9.25	-16.31	290.96	0.26	-0.17	2
58	11-Jun	16:06	6536	75	6461	0.50	45.45	95	6445.45	-8.66	-15.74	291.69	0.17	-0.13	2
59	11-Jun	18:48	6631	75	6556	0.54	40.87	95	6540.45	-8.01	-15.11	292.27	0.06	0.04	2
60	11-Jun	21:44	6725	75	6650	0.42	29.34	94	6634.45	-7.37	-14.47	292.73	0.16	-0.13	2
61	12-Jun	0:28	6820	75	6745	0.38	11.21	95	6729.44	-6.75	-13.86	292.97	0.14	-0.04	2
62	12-Jun	3:50	6915	75	6840	0.29	297.13	95	6824.44	-6.33	-13.44	292.81	0.43	-0.09	2
63	12-Jun	7:19	7010	75	6935	0.17	284.06	95	6919.44	-6.20	-13.30	292.46	0.14	-0.13	2
64	12-Jun	9:42	7104	75	7029	0.20	295.50	94	7013.44	-6.10	-13.19	292.18	0.05	0.03	2
65	12-Jun	11:28	7199	75	7124	0.26	8.71	95	7108.44	-5.82	-12.91	292.06	0.29	0.06	2
66	12-Jun	15:03	7294	75	7219	0.32	358.50	95	7203.44	-5.34	-12.43	292.09	0.08	0.06	2
67	12-Jun	18:23	7389	75	7314	0.31	3.08	95	7298.44	-4.82	-11.91	292.09	0.03	-0.01	2
68	12-Jun	20:21	7484	75	7409	0.30	36.92	95	7393.44	-4.36	-11.45	292.26	0.19	-0.01	2
69	12-Jun	22:18	7579	75	7504	0.46	134.29	95	7488.44	-4.42	-11.52	292.68	0.61	0.17	2
70	13-Jun	1:12	7675	75	7600	0.83	142.26	96	7584.43	-5.22	-12.34	293.38	0.40	0.39	2
71	13-Jun	3:57	7770	75	7695	1.46	136.37	95	7679.41	-6.61	-13.76	294.64	0.67	0.66	2
72	13-Jun	7:52	7865	75	7790	2.05	143.19	95	7774.36	-8.80	-16.00	296.49	0.66	0.62	2

SURVEY DATA																
No.	Date	Time	M. Depth	Bit to DU	MD	INC	AZM	C.L	TVD	VS	N-S	E-W	DLS	B/D.	BHA	
73	13-Jun	10:35	7960	75	7885	2.29	151.52	95	7869.30	-11.78	-19.02	298.41	0.42	0.25	2	
74	13-Jun	12:55	8055	75	7980	2.57	155.05	95	7964.21	-15.33	-22.62	300.22	0.33	0.29	2	
75	13-Jun	17:01	8150	75	8075	2.93	160.73	95	8059.10	-19.51	-26.85	301.92	0.47	0.38	2	
76	13-Jun	19:48	8244	75	8169	2.99	164.67	94	8152.98	-24.11	-31.48	303.36	0.23	0.06	2	
77	13-Jun	22:37	8339	75	8264	2.87	167.76	95	8247.85	-28.80	-36.19	304.52	0.21	-0.13	2	
78	14-Jun	1:38	8434	75	8359	2.84	168.80	95	8342.73	-33.40	-40.83	305.48	0.06	-0.03	2	
79	14-Jun	3:30	8500	75	8425	2.96	170.50	66	8408.65	-36.67	-44.11	306.08	0.22	0.18	2	
80	15-Jun	10:35	8558	56	8502	3.09	176.30	77	8485.54	-40.69	-48.14	306.54	0.43	0.17	3	
81	15-Jun	13:34	8606	56	8550	1.91	188.72	48	8533.50	-42.77	-50.22	306.50	2.69	-2.46	3	
82	15-Jun	16:16	8653	56	8597	0.94	252.74	47	8580.48	-43.67	-51.11	306.01	3.66	-2.06	3	
83	16-Jun	0:23	8700	56	8644	3.37	331.74	47	8627.45	-42.60	-50.01	304.99	7.07	5.17	3	
84	16-Jun	3:07	8747	56	8691	7.02	346.22	47	8674.25	-38.62	-46.00	303.65	8.19	7.77	3	
85	16-Jun	5:16	8795	56	8739	11.86	352.12	48	8721.59	-30.92	-38.26	302.28	10.27	10.08	3	
86	16-Jun	7:36	8842	56	8786	18.57	356.56	47	8766.92	-18.68	-25.99	301.17	14.48	14.28	3	
87	16-Jun	9:27	8890	56	8834	25.14	358.32	48	8811.45	-0.86	-8.15	300.41	13.75	13.69	3	
88	16-Jun	13:25	8984	56	8928	40.18	357.03	94	8890.36	49.60	42.38	298.24	16.02	16.00	3	
89	16-Jun	16:04	9063	56	9007	52.80	355.29	79	8944.64	106.53	99.42	294.32	16.05	15.97	3	
90	5-Jan	0:02	9155	57	9098	58.84	351.25	91	8995.75	180.99	174.11	285.41	7.58	6.64	4	
91	5-Jan	0:34	9203	57	9146	63.92	354.87	48	9018.74	222.66	215.92	280.35	12.48	10.58	4	
92	5-Jan	2:02	9250	57	9193	69.88	355.92	47	9037.18	265.63	258.99	276.89	12.85	12.68	4	
93	5-Jan	3:34	9297	57	9240	75.60	356.93	47	9051.12	310.33	303.77	274.10	12.34	12.17	4	
94	5-Jan	4:57	9344	57	9287	77.70	358.09	47	9061.97	355.95	349.45	272.12	5.07	4.47	4	
95	5-Jan	6:02	9392	57	9335	79.73	0.83	48	9071.36	402.99	396.52	271.68	7.02	4.23	4	
96	5-Jan	7:29	9439	57	9382	80.05	1.78	47	9079.61	449.26	442.77	272.73	2.10	0.68	4	
97	5-Jan	8:48	9487	57	9430	81.68	1.23	48	9087.23	496.65	490.15	273.97	3.58	3.40	4	
98	5-Jan	10:34	9581	57	9524	91.61	0.71	94	9092.73	590.37	583.85	275.56	10.58	10.56	4	
99	5-Jan	13:14	9676	57	9619	91.26	1.41	95	9090.35	685.33	678.81	277.32	0.82	-0.37	4	
100	5-Jan	14:37	9770	57	9713	91.04	0.16	94	9088.46	779.31	772.78	278.60	1.35	-0.23	4	
101	5-Jan	16:26	9865	57	9808	87.19	1.59	95	9089.93	874.27	867.73	280.05	4.32	-4.05	4	
102	5-Jan	17:58	9959	57	9902	86.32	0.63	94	9095.25	968.12	961.56	281.87	1.38	-0.93	4	
103	5-Jan	21:06	10054	57	9997	87.07	358.90	95	9100.73	1062.92	1056.40	281.48	1.98	0.79	4	
104	5-Jan	22:25	10149	57	10092	88.16	358.55	95	9104.68	1157.73	1151.29	279.37	1.20	1.15	4	
105	6-Jan	0:13	10243	57	10186	90.22	359.33	94	9106.01	1251.63	1245.26	277.63	2.34	2.19	4	
106	6-Jan	1:17	10338	57	10281	90.32	359.75	95	9105.56	1346.58	1340.26	276.87	0.45	0.11	4	
107	6-Jan	2:37	10433	57	10376	91.52	359.67	95	9104.04	1441.53	1435.24	276.39	1.27	1.26	4	
108	6-Jan	4:16	10528	57	10471	92.61	0.33	95	9100.61	1536.43	1530.18	276.39	1.34	1.15	4	
109	6-Jan	7:07	10623	57	10566	91.20	0.51	95	9097.45	1631.36	1625.12	277.08	1.50	-1.48	4	
110	6-Jan	8:35	10718	57	10661	91.64	359.71	95	9095.10	1726.31	1720.09	277.27	0.96	0.46	4	
111	6-Jan	10:01	10812	57	10755	89.32	359.51	94	9094.31	1820.26	1814.08	276.63	2.48	-2.47	4	
112	6-Jan	11:15	10907	57	10850	87.49	358.85	95	9096.96	1915.14	1909.03	275.27	2.05	-1.93	4	
113	6-Jan	12:38	11000	57	10943	86.94	358.21	93	9101.48	2007.92	2001.89	272.88	0.91	-0.59	4	
114	6-Jan	14:15	11092	57	11035	87.06	358.17	92	9106.29	2099.65	2093.72	269.98	0.14	0.13	4	
115	6-Jan	15:30	11185	57	11128	89.85	358.91	93	9108.80	2192.49	2186.64	267.61	3.10	3.00	4	
116	6-Jan	16:37	11277	57	11220	90.04	358.58	92	9108.89	2284.39	2278.62	265.60	0.41	0.21	4	
117	6-Jan	17:47	11370	57	11313	89.13	357.99	93	9109.56	2377.25	2371.57	262.82	1.17	-0.98	4	
118	6-Jan	18:51	11462	57	11405	88.44	357.62	92	9111.51	2469.05	2463.48	259.29	0.85	-0.75	4	
119	6-Jan	20:49	11554	57	11497	89.01	358.60	92	9113.56	2560.87	2555.41	256.26	1.23	0.62	4	
120	6-Jan	22:05	11647	57	11590	89.70	359.48	93	9114.60	2653.79	2648.39	254.70	1.20	0.74	4	
121	6-Jan	23:16	11740	57	11683	89.19	359.42	93	9115.51	2746.73	2741.38	253.81	0.55	-0.55	4	
122	7-Jan	1:33	11832	57	11775	89.99	359.84	92	9116.16	2838.68	2833.38	253.22	0.98	0.87	4	
123	7-Jan	2:57	11927	57	11870	90.81	359.84	95	9115.50	2933.65	2928.37	252.95	0.86	0.86	4	
124	7-Jan	4:16	12021	57	11964	91.49	359.92	94	9113.61	3027.59	3022.35	252.75	0.73	0.72	4	
125	7-Jan	6:30	12116	57	12059	91.95	1.70	95	9110.76	3122.54	3117.30	254.10	1.93	0.48	4	
126	7-Jan	8:09	12210	57	12153	87.60	1.26	94	9111.13	3216.52	3211.24	256.52	4.65	-4.63	4	
127	7-Jan	17:12	12304	57	12247	86.88	1.16	94	9115.66	3310.41	3305.11	258.51	0.77	-0.77	4	
128	7-Jan	19:40	12399	57	12342	86.98	1.00	95	9120.75	3405.27	3399.96	260.29	0.20	0.11	4	
129	7-Jan	21:12	12493	57	12436	86.46	0.58	94	9126.12	3499.11	3493.79	261.59	0.71	-0.55	4	
130	7-Jan	23:11	12587	57	12530	88.96	359.27	94	9129.88	3593.00	3587.71	261.46	3.00	2.66	4	
131	8-Jan	0:49	12682	57	12625	89.19	358.33	95	9131.41	3687.89	3682.68	259.47	1.02	0.24	4	
132	8-Jan	2:06	12775	57	12718	87.59	357.57	93	9134.03	3780.68	3775.58	256.15	1.90	-1.72	4	
133	8-Jan	3:57	12870	57	12813	93.54	359.00	95	9133.09	3875.49	3870.48	253.31	6.44	6.26	4	
134	8-Jan	6:22	12964	57	12907	89.36	359.65	94	9130.71	3969.38	3964.42	252.20	4.50	-4.45	4	
135	8-Jan	8:41	13058	57	13001	86.44	359.93	94	9134.16	4063.27	4058.35	251.86	3.12	-3.11	4	
136	8-Jan	10:51	13153	57	13096	90.69	1.21	95	9136.53	4158.20	4153.29	252.80	4.67	4.47	4	
137	8-Jan	14:49	13247	57	13190	89.28	0.39	94	9136.56	4252.19	4247.28	254.11	1.74	-1.50	4	
138	9-Jan	19:11	13341	57	13284	86.22	359.85	94	9140.25	4346.09	4341.20	254.31	3.31	-3.26	5	
139	9-Jan	21:19	13436	57	13379	85.40	359.14	95	9147.19	4440.78	4435.94	253.48	1.14	-0.86	5	
140	10-Jan	0:24	13531	57	13474	87.37	358.55	95	9153.18	4535.49	4530.72	251.56	2.16	2.07	5	
141	10-Jan	2:12	13625	57	13568	89.99	358.50	94	9155.35	4629.34	4624.66	249.15	2.79	2.79	5	
142	10-Jan	3:16	13720	57	13663	92.43	359.55	95	9153.34	4724.23	4719.62	247.53	2.80	2.57	5	
143	10-Jan	5:45	13814	57	13757	88.95	358.30	94	9152.21	4818.12	4813.58	245.77	3.93	-3.70	5	
144	10-Jan	7:04	13908	57	13851	89.39	358.50	94	9153.57	4911.98	4907.53	243.14	0.51	0.47	5	
145	10-Jan	8:24	14003	57	13946	91.73	359.23	95	9152.64	5006.88	5002.50	241.26	2.58	2.46	5	
146	10-Jan	11:48	14097	57	14040	89.62	359.36	94	9151.53	5100.80	5096.48	240.10	2.25	-2.24	5	
147	10-Jan	12:44	14192	57	14135	90.70	0.09	95	9151.27	5195.76	5191.48	239.65	1.37	1.14	5	
148	10-Jan	14:35	14286	57	14229	89.44	1.06	94	9151.15	5289.75	5285.47	240.59	1.69	-1.34	5	
149	10-Jan	16:02	14381	57	14324	90.59	1.54	95	9151.13	5384.75	5380.44	242.75	1.31	1.21	5	
150	10-Jan	18:10	14475	57	14418	88.60	2.87	94	9151.79	5478.73	5474.36	246.36	2.55	-2.12	5	
151	10-Jan	19:19	14569	57	14512	91.05	3.78	94	9152.08	5572.67	5568.20	251.81	2.78	2.61	5	

SURVEY DATA															
No.	Date	Time	M. Depth	Bit to DU	MD	INC	AZM	C.L	TVD	VS	N-/S	E-/W	DLS	B./D.	BHA
159	11-Jan	17:13	15325	57	15268	90.27	356.69	95	9157.65	6327.25	6323.42	234.59	0.66	0.54	5
160	11-Jan	19:32	15419	57	15362	90.67	356.46	94	9156.88	6420.91	6417.25	228.98	0.49	0.43	5
161	11-Jan	21:53	15513	57	15456	90.21	356.18	94	9156.16	6514.54	6511.05	222.94	0.57	-0.49	5
162	12-Jan	0:38	15608	57	15551	90.52	359.32	95	9155.56	6609.34	6605.96	219.21	3.32	0.33	5
163	12-Jan	1:44	15702	57	15645	89.56	358.10	94	9155.49	6703.23	6699.94	217.10	1.65	-1.02	5
164	12-Jan	5:46	15796	57	15739	88.74	358.82	94	9156.88	6797.10	6793.89	214.57	1.16	-0.87	5
165	12-Jan	8:33	15891	57	15834	89.84	2.47	95	9158.06	6892.06	6888.86	215.64	4.01	1.16	5
166	12-Jan	9:45	15985	57	15928	91.35	3.46	94	9157.09	6986.02	6982.73	220.50	1.92	1.61	5
167	12-Jan	10:39	16080	57	16023	88.81	359.23	95	9156.95	7080.99	7077.67	222.73	5.19	-2.67	5
168	12-Jan	14:18	16174	57	16117	89.22	2.05	94	9158.57	7174.96	7171.64	223.78	3.03	0.44	5
169	12-Jan	16:48	16269	57	16212	90.36	4.36	95	9158.92	7269.90	7266.48	229.09	2.71	1.20	5
170	12-Jan	17:52	16363	57	16306	90.04	5.40	94	9158.59	7363.73	7360.14	237.09	1.16	-0.34	5
171	12-Jan	18:41	16458	57	16401	91.55	4.62	95	9157.27	7458.52	7454.77	245.39	1.79	1.59	5
172	12-Jan	20:42	16552	57	16495	90.18	2.73	94	9155.85	7552.43	7548.55	251.41	2.48	-1.46	5
173	13-Jan	0:30	16647	57	16590	89.79	0.61	95	9155.88	7647.43	7643.51	254.18	2.27	-0.41	5
174	13-Jan	2:30	16741	57	16684	89.58	2.17	94	9156.39	7741.42	7737.48	256.46	1.67	-0.22	5
175	13-Jan	3:40	16836	57	16779	88.51	0.72	95	9157.98	7836.40	7832.43	258.85	1.90	-1.13	5
176	13-Jan	4:45	16931	57	16874	89.87	0.20	95	9159.32	7931.38	7927.41	259.62	1.53	1.43	5
177	13-Jan	6:00	17025	57	16968	89.22	357.79	94	9160.07	8025.29	8021.39	257.97	2.66	-0.69	5
178	13-Jan	8:33	17120	57	17063	89.35	359.86	95	9161.25	8120.18	8116.36	256.02	2.18	0.14	5
179	13-Jan	9:57	17215	57	17158	91.44	0.97	95	9160.60	8215.16	8211.35	256.71	2.49	2.20	5
180	13-Jan	12:30	17310	57	17253	91.92	359.64	95	9157.81	8310.10	8306.30	257.21	1.49	0.51	5
181	13-Jan	14:29	17404	57	17347	90.49	359.99	94	9155.84	8404.04	8400.28	256.91	1.57	-1.52	5
182	13-Jan	17:50	17499	57	17442	84.27	358.98	95	9160.18	8498.84	8495.13	256.06	6.63	-6.55	5
183	13-Jan	19:35	17594	57	17537	83.61	357.41	95	9170.21	8593.16	8589.54	253.08	1.78	-0.69	5
184	14-Jan	0:20	17689	57	17632	88.55	359.00	95	9176.70	8687.76	8684.24	250.12	5.46	5.20	5
185	14-Jan	1:45	17784	57	17727	88.65	357.99	95	9179.02	8782.60	8779.18	247.63	1.07	0.11	5
186	14-Jan	4:00	17878	57	17821	88.71	357.66	94	9181.19	8876.40	8873.09	244.06	0.36	0.06	5
187	19-Jan	10:27	17922	56	17866	89.85	0.08	45	9181.75	8921.35	8918.07	243.17	5.94	2.53	6
188	21-Jan	3:35	17970	56	17914	87.03	357.19	48	9183.06	8969.26	8966.03	242.03	8.41	-5.87	6
189	21-Jan	4:10	18005	56	17949	87.16	356.07	35	9184.83	9004.10	9000.92	239.98	3.22	0.37	6
190	21-Jan	6:42	18099	56	18043	89.62	354.94	94	9187.47	9097.56	9094.59	232.61	2.88	2.62	6
191	21-Jan	8:37	18194	56	18138	90.52	354.50	95	9187.36	9191.91	9189.19	223.87	1.05	0.95	6
192	21-Jan	12:02	18257	56	18201	90.93	353.96	63	9186.56	9254.42	9251.86	217.54	1.08	0.65	6
193	21-Jan	14:53	18352	56	18296	88.12	352.57	95	9187.35	9348.45	9346.19	206.40	3.30	-2.96	6
194	21-Jan	17:37	18446	56	18390	89.39	356.09	94	9189.39	9441.70	9439.69	197.11	3.98	1.35	6
195	21-Jan	18:32	18541	56	18485	88.94	354.52	95	9190.77	9536.15	9534.36	189.34	1.72	-0.47	6
196	21-Jan	21:01	18636	56	18580	90.52	358.30	95	9191.22	9630.77	9629.15	183.39	4.31	1.66	6
197	21-Jan	23:02	18730	56	18674	89.84	359.59	94	9190.93	9724.68	9723.13	181.66	1.55	-0.72	6
198	22-Jan	0:15	18825	56	18769	89.82	358.78	95	9191.21	9819.61	9818.12	180.31	0.85	-0.02	6
199	22-Jan	2:45	18919	56	18863	91.02	2.21	94	9190.52	9913.58	9912.10	181.12	3.87	1.28	6
200	22-Jan	3:50	19014	56	18958	91.13	1.60	95	9188.74	10008.56	10007.03	184.28	0.65	0.12	6
201	22-Jan	5:03	19109	56	19053	91.35	0.99	95	9186.68	10103.53	10101.98	186.43	0.68	0.23	6
202	22-Jan	7:21	19203	56	19147	89.79	1.30	94	9185.75	10197.52	10195.96	188.30	1.69	-1.66	6
203	22-Jan	15:29	19298	56	19242	90.65	1.70	95	9185.38	10292.52	10290.92	190.79	1.00	0.91	6
204	22-Jan	17:13	19393	56	19337	90.66	0.19	95	9184.30	10387.51	10385.90	192.36	1.59	0.01	6
205	22-Jan	18:49	19488	56	19432	91.22	359.88	95	9182.74	10482.47	10480.89	192.42	0.67	0.59	6
206	22-Jan	20:02	19583	56	19527	91.29	359.49	95	9180.66	10577.41	10575.86	191.89	0.42	0.07	6
207	22-Jan	21:05	19642	56	19586	91.50	359.44	59	9179.22	10636.36	10634.84	191.34	0.37	0.36	6
PTB	22-Jan	21:05	19698	56	19642	91.50	359.44	56	9177.75	10692.30	10690.82	190.80	0.00	0.00	6