

# TELEDRIIFT

P.O.Box 94395 \* Oklahoma City, OK 73143-4395 Ph : 405-631-4882

ISSUING AGENCY	CERTIFICATION NUMBER
Teledrift Company	841318

State of Texas,

I, Bradley Aden, certify that I am employed by TELEDRIIFT and I did conduct or supervise the taking of survey data started on 08 MAY 18 for the UL G 1 28 Unit 2H well from a depth of 0' to a depth of 6986'. This data is true, correct, complete and within the limitations of the tools as set forth by TELEDRIIFT. I am authorized and qualified to make this report and this survey was conducted at the request of Elevation, for the UL G 1 28 Unit 2H well in Andrews. I have reviewed this report and find that it conforms to the principles and procedures as set forth by TELEDRIIFT.

NAME: Bradley Aden	TITLE: Service Tech
SIGNATURE: <i>Bradley Aden</i>	

NAME: David Jackson	TITLE: Monitoring Tech
SIGNATURE: <i>David Jackson</i>	

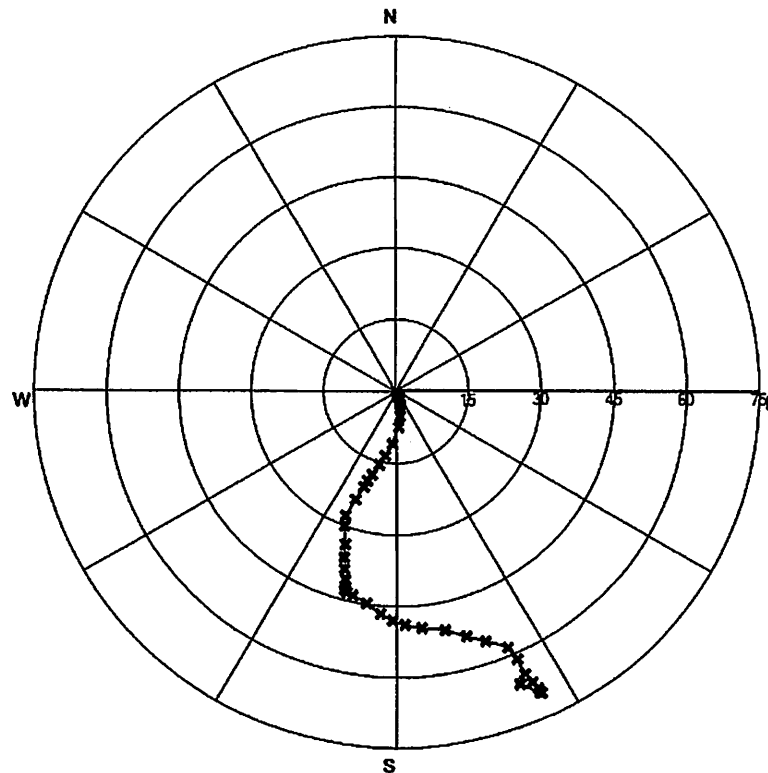
NAME: David Terrell	TITLE: Manager
SIGNATURE: <i>David Terrell</i>	



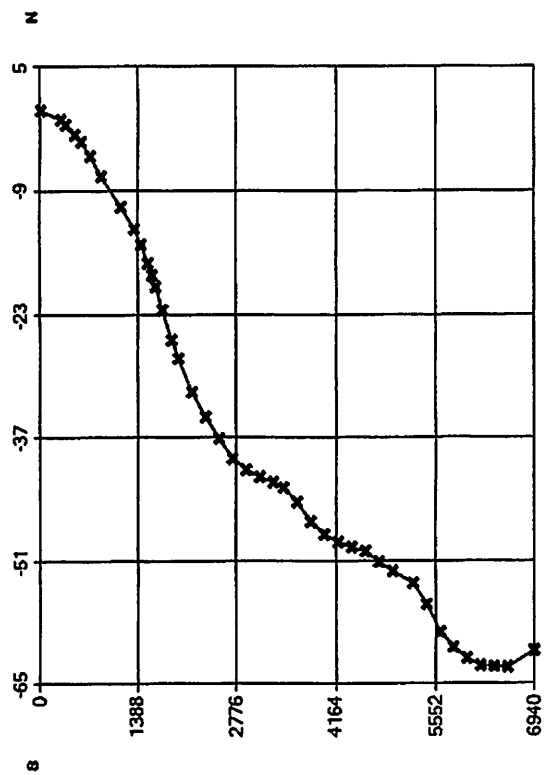
TELEDRIFT  
P.O.Box 94395  
Oklahoma City, OK 73143-4395  
Ph : 405-631-4882

Survey FileName : OrionLynx-08MAY18.psd  
Tool Type : PROSHOT  
Job ID : OrionLynx  
Well Name : UL G 1 28 Unit 2H  
Company : Elevation  
Contractor : Orion Lynx  
API Number : 18135 00347760  
Location : Andrews  
Start Date : 08 MAY 18  
North Correction : 8.96

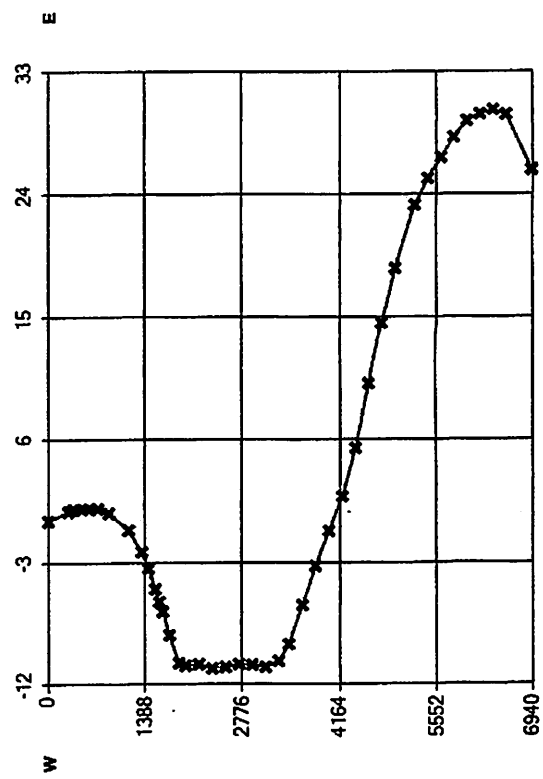
TVD CROSS SECTION LOOKING DOWN



TVD CROSS SECTION LOOKING WEST



TVD CROSS SECTION LOOKING NORTH



**RECORD OF TVD SURVEY**  
**Calculated by Minimum Curvature Method**

MEAS. DEPTH	TOOL OFFSET	SURVEY DEPTH	DRIFT ANGLE	AZIMUTH	T.V.D.	N-S Drift	E-W Drift
0	0	0	0	0	0	0	0
338	50	288	0.5	147	288	-1.05	0.68
409	50	359	0.5	179	359	-1.62	0.85
538	50	488	0.5	179	488	-2.75	0.87
630	50	580	0.5	180	580	-3.55	0.88
761.51	50	711.51	0.9	180	711.5	-5.16	0.88
918.45	50	868.45	0.8	197	868.42	-7.44	0.56
1202.92	50	1152.92	0.7	202	1152.87	-10.95	-0.67
1391.66	50	1341.66	1.1	219	1341.59	-13.43	-2.24
1487	50	1437	1.5	211	1436.91	-15.21	-3.46
1582.36	50	1532.36	1.6	221	1532.24	-17.28	-4.98
1638	50	1588	1.7	212	1587.86	-18.57	-5.93
1688	50	1638	1.7	207	1637.84	-19.86	-6.66
1783	50	1733	2.1	218	1732.79	-22.49	-8.37
1919	50	1869	1.3	200	1868.73	-25.9	-10.43
2015	50	1965	1.3	170	1964.71	-28	-10.61
2204	50	2154	1.1	189	2153.67	-31.9	-10.52
2394	50	2344	0.6	180	2343.65	-34.7	-10.81
2584	50	2534	0.9	177	2533.63	-37.18	-10.73
2772	50	2722	0.5	171	2721.62	-39.46	-10.52
2962	50	2912	0.3	201	2911.62	-40.74	-10.57
3151	50	3101	0.2	176	3100.62	-41.53	-10.72
3340	50	3290	0.3	122	3289.62	-42.12	-10.28
3484	50	3434	0.8	115	3433.61	-42.74	-9.05
3674	50	3624	1.2	124	3623.58	-44.41	-6.2
3863	50	3813	1	130	3812.55	-46.58	-3.3
4053	50	4003	0.8	106	4002.53	-48.01	-0.75
4244	50	4194	0.8	111	4193.51	-48.86	1.78
4434	50	4384	1.4	92	4383.47	-49.42	5.34
4624	50	4574	1.5	99	4573.41	-49.89	10.12
4814	50	4764	1.3	112	4763.35	-51.09	14.57
5004	50	4954	1.2	97	4953.31	-52.14	18.54
5287	50	5237	0.8	121	5236.27	-53.52	23.17

5475	50	5425	1.2	155	5424.24	-55.98	25.13
5665	50	5615	0.9	153	5614.21	-59.11	26.65
5848	50	5798	0.6	119	5797.19	-60.86	28.14
6038	50	5988	0.5	156	5987.18	-62.1	29.35
6227	50	6177	0.1	112	6176.18	-62.92	29.84
6418	50	6368	0.1	107	6367.18	-63.03	30.15
6608	50	6558	0.3	269	6557.18	-63.09	29.81
6979	50	6929	1.1	301	6928.15	-61.27	25.79
6986	50	6936	0.6	301	6935.15	-61.22	25.7

Notes :

Depth is in feet

All azimuths are referenced to GRID NORTH and corrected with the north correction above



**MWD SURVEY CERTIFICATION**  
**Legacy Directional Drilling, LLC.**

State Of Texas

County Of Andrews

I, Mark L. Miller certify that; I am employed by Legacy Directional Drilling, LLC.;  
that I did on the day(s) of May 31, 2018 through June 7, 2018 conduct  
or supervise the taking of a MWD survey from a depth of 7,151 feet to a depth of  
12,782 feet; that the data is true, correct, complete and within the limitations of the  
tool set forth by Legacy Directional Drilling, LLC.; that I am authorized and qualified to make this report;  
that this survey was conducted at the request of Elevation Resources LLC for the  
UL G 1-28 Unit 2H ST01 Well, A.P.I. No. 42-003-47760-0001 in  
Emma (Mississippian) Field and that I have reviewed this report and find that  
it conforms to the principles and procedures set forth by Legacy Directional Drilling, LLC.

A handwritten signature in black ink, appearing to read 'Mark L. Miller', written over a horizontal line.

Surveyor's Signature

MLWD Technical Director

Title



**MWD SURVEY CERTIFICATION**  
**Legacy Directional Drilling, LLC.**

State Of Texas

County Of Andrews

I, Mark L. Miller certify that; I am employed by Legacy Directional Drilling, LLC.;  
that I did on the day(s) of June 13, 2018 through June 22, 2018 conduct  
or supervise the taking of a MWD survey from a depth of 7,151 feet to a depth of  
17,585 feet; that the data is true, correct, complete and within the limitations of the  
tool set forth by Legacy Directional Drilling, LLC.; that I am authorized and qualified to make this report;  
that this survey was conducted at the request of Elevation Resources LLC for the  
UL G 1-28 Unit 2H ST03 Well, A.P.I. No. 42-003-47760-0003 in  
Emma (Mississippian) Field and that I have reviewed this report and find that  
it conforms to the principles and procedures set forth by Legacy Directional Drilling, LLC.

A handwritten signature in black ink, appearing to read 'Mark L. Miller', written over a horizontal line.

Surveyor's Signature

MLWD Technical Director

Title



# Directional Survey Report

Company Name: ELEVATION RESOURCES LLC  
Well Name: UL G 1-28 UNIT 2H ST03  
Field: EMMA (MISSISSIPPIAN)  
Rig ID: ORION LYNX

State/Prov: TX  
County: Andrews  
Location: 11 Miles S direction from Andrews  
API/UWI: 42-003-47760-0003

Survey Company: Legacy Directional  
Job Number: MD180036  
Latitude: 32° 9' 58.068" N  
Longitude: 102° 30' 13.45" W

Proposed Azimuth: 167.49°  
Declination: 9.08°  
North Reference: GRID  
KB: 3152 FT

Svy	Depth	Inc	Azm	TVD	NS	EW	VS	DLS	CL	CD	CA	Temp
Tie-In	6936	0.60	301.00	6935.10	-61.21	25.70	65.32	0.00	0.00	66.39	157.22	0
1	7151	1.58	76.92	7150.08	-59.96	27.62	64.52	0.96	215.00	66.02	155.27	120.6
2	7341	1.54	80.86	7340.01	-58.96	32.69	64.64	0.06	190.00	67.42	150.99	127.7
3	7531	1.55	80.59	7529.94	-58.14	37.75	64.93	0.01	190.00	69.32	147.00	134.9
4	7721	1.53	309.83	7719.91	-56.09	38.34	63.06	1.47	190.00	67.94	145.65	142.0
5	7910	1.45	306.66	7908.84	-53.05	34.48	59.26	0.06	189.00	63.27	146.97	142.0
6	8100	0.55	9.85	8098.82	-50.71	32.71	56.59	0.68	190.00	60.35	147.18	142.0
7	8290	0.90	42.59	8288.80	-48.72	33.88	54.90	0.28	190.00	59.34	145.19	149.1
8	8479	0.82	71.12	8477.78	-47.18	36.16	53.90	0.23	189.00	59.45	142.54	149.1
9	8670	0.62	124.33	8668.77	-47.33	38.31	54.50	0.35	191.00	60.89	141.01	149.1
10	8860	0.68	130.62	8858.75	-48.64	40.01	56.15	0.05	190.00	62.98	140.56	156.3
11	9049	0.73	138.14	9047.74	-50.24	41.70	58.08	0.04	189.00	65.29	140.31	156.3
12	9239	0.65	155.39	9237.73	-52.09	42.98	60.16	0.13	190.00	67.53	140.47	149.1
13	9428	1.86	99.62	9426.68	-53.58	46.45	62.37	0.84	189.00	70.91	139.07	134.9
14	9617	2.71	111.23	9615.53	-55.71	53.64	66.00	0.51	189.00	77.34	138.08	134.9
15	9807	1.89	179.68	9805.41	-60.47	57.85	71.56	1.41	190.00	83.68	136.27	149.1
16	9844	1.98	174.92	9842.39	-61.72	57.91	72.79	0.50	37.00	84.63	136.82	149.1
17	9910	5.59	196.14	9908.24	-65.94	57.12	76.75	5.78	66.00	87.24	139.10	134.9
18	10005	19.04	201.32	10000.84	-84.91	50.16	93.76	14.19	95.00	98.82	149.43	142.0
19	10101	26.66	202.13	10089.24	-119.50	36.34	124.53	7.94	96.00	124.90	163.09	142.0
20	10195	32.15	180.51	10171.33	-164.20	28.14	166.40	12.63	94.00	166.60	170.28	149.1
21	10290	37.82	168.87	10249.22	-218.16	33.55	220.25	9.20	95.00	220.72	171.26	149.1
22	10386	44.27	164.48	10321.60	-279.40	48.21	283.21	7.36	96.00	283.53	170.21	149.1
23	10480	52.89	167.90	10383.74	-347.80	64.88	353.60	9.56	94.00	353.80	169.43	149.1
24	10572	57.97	152.21	10436.14	-418.52	90.88	428.26	15.07	92.00	428.27	167.75	149.1
25	10664	69.58	162.93	10476.83	-494.66	121.90	509.32	16.38	92.00	509.46	166.16	149.1
26	10706	62.84	166.52	10493.76	-531.70	132.04	547.68	17.85	42.00	547.85	166.05	163.4
27	10737	67.30	167.37	10506.83	-559.08	138.39	575.78	14.60	31.00	575.95	166.10	170.6
28	10801	75.43	165.79	10527.26	-618.01	152.47	636.36	12.92	64.00	636.54	166.14	170.6
29	10833	79.97	165.33	10534.08	-648.28	160.27	667.60	14.26	32.00	667.80	166.11	170.6
30	10865	84.34	165.36	10538.44	-678.94	168.28	699.27	13.66	32.00	699.49	166.08	170.6
31	10897	85.73	164.97	10541.21	-709.76	176.45	731.13	4.51	32.00	731.36	166.04	170.6
32	10929	88.80	166.34	10542.74	-740.72	184.36	763.07	10.50	32.00	763.32	166.02	170.6
33	10960	93.03	167.90	10542.24	-770.93	191.27	794.06	14.54	31.00	794.30	166.07	170.6



Svy	Depth	Inc	Azm	TVD	NS	EW	VS	DLS	CL	CD	CA	Temp
34	10892	93.03	169.87	10540.55	-802.27	197.49	826.00	5.52	32.00	826.22	168.17	177.7
35	11088	89.38	172.63	10538.53	-897.08	212.25	921.76	4.89	96.00	921.85	168.69	177.7
36	11183	88.01	171.88	10540.70	-891.17	225.21	1016.42	1.75	95.00	1016.43	167.20	177.7
37	11279	87.65	172.51	10544.33	-1086.18	238.40	1112.04	0.94	96.00	1112.04	167.62	177.7
38	11375	88.21	164.62	10547.80	-1180.14	257.41	1207.88	8.23	96.00	1207.89	167.70	177.7
39	11471	89.10	165.16	10550.06	-1272.80	282.43	1303.75	1.08	96.00	1303.75	167.49	177.7
40	11566	89.80	166.94	10550.97	-1364.99	305.33	1398.72	2.01	95.00	1398.72	167.39	177.7
41	11662	87.31	165.99	10553.39	-1458.28	327.78	1494.66	2.78	96.00	1494.67	167.33	184.9
42	11758	86.92	164.86	10558.22	-1551.07	351.91	1590.48	1.24	96.00	1590.49	167.22	184.9
43	11854	85.60	163.52	10564.49	-1643.24	378.01	1686.11	1.96	96.00	1686.16	167.05	184.9
44	11950	88.21	163.77	10569.67	-1735.21	405.00	1781.74	2.73	96.00	1781.85	168.88	184.9
45	12045	87.28	165.87	10573.41	-1826.82	429.85	1876.56	2.42	95.00	1876.71	168.76	184.9
46	12141	86.02	170.81	10579.02	-1920.65	449.22	1972.35	5.30	96.00	1972.48	168.84	184.9
47	12237	86.27	175.76	10585.48	-2015.74	460.42	2067.62	5.15	96.00	2067.66	167.13	184.9
48	12332	86.02	173.38	10591.87	-2110.10	469.38	2161.67	2.51	95.00	2161.67	167.46	184.9
49	12428	86.33	167.33	10598.28	-2204.49	485.43	2257.29	6.30	96.00	2257.30	167.58	184.9
50	12524	88.35	168.18	10602.73	-2298.19	505.76	2353.18	2.28	96.00	2353.19	167.59	177.7
51	12619	88.74	168.56	10605.14	-2391.21	524.91	2448.14	0.57	95.00	2448.15	167.62	177.7
52	12715	87.09	168.83	10608.64	-2485.29	543.71	2544.05	1.74	96.00	2544.07	167.66	177.7
53	12811	87.42	169.15	10613.23	-2579.41	562.03	2639.91	0.48	96.00	2639.93	167.71	177.7
54	12906	87.62	167.03	10617.34	-2672.27	581.81	2734.81	2.24	95.00	2734.83	167.72	177.7
55	13003	87.73	167.08	10621.28	-2766.73	603.32	2831.73	0.12	97.00	2831.75	167.70	177.7
56	13098	87.34	168.78	10625.37	-2859.54	623.17	2926.63	1.83	95.00	2926.66	167.71	177.7
57	13194	87.34	170.33	10629.82	-2953.84	640.56	3022.47	1.61	96.00	3022.50	167.76	177.7
58	13289	87.25	168.41	10634.30	-3047.11	658.06	3117.30	2.02	95.00	3117.35	167.81	184.9
59	13385	87.70	165.98	10638.53	-3140.62	679.31	3213.20	2.57	96.00	3213.25	167.79	184.9
60	13480	87.26	165.09	10642.71	-3232.52	703.02	3308.05	1.04	95.00	3308.08	167.73	184.9
61	13576	88.77	163.83	10646.04	-3324.95	728.72	3403.86	2.05	96.00	3403.87	167.64	184.9
62	13672	89.02	163.46	10647.89	-3417.05	755.75	3499.62	0.47	96.00	3499.62	167.53	192.0
63	13768	89.02	166.12	10649.53	-3509.66	780.93	3595.49	2.77	96.00	3595.49	167.46	184.9
64	13864	88.21	167.33	10651.85	-3603.07	802.97	3691.46	1.52	96.00	3691.46	167.44	192.0
65	13960	85.91	167.24	10656.77	-3696.58	824.07	3787.32	2.40	96.00	3787.32	167.43	192.0
66	14055	87.82	170.18	10661.97	-3789.59	842.63	3882.14	3.69	95.00	3882.14	167.46	192.0
67	14151	86.08	167.18	10667.08	-3883.58	861.45	3977.97	3.61	96.00	3977.97	167.49	192.0
68	14247	87.98	169.78	10672.05	-3977.50	880.59	4073.82	3.35	96.00	4073.82	167.52	192.0
69	14343	86.36	167.24	10676.79	-4071.46	899.69	4169.67	3.14	96.00	4169.67	167.54	192.0
70	14438	88.52	169.63	10681.04	-4164.42	918.71	4264.55	3.39	95.00	4264.56	167.56	192.0
71	14534	84.95	167.77	10686.51	-4258.39	937.48	4360.36	4.19	96.00	4360.36	167.58	192.0
72	14630	84.73	167.54	10695.14	-4351.79	957.92	4455.97	0.33	96.00	4455.97	167.59	199.1

Svy	Depth	Inc	Azm	TVD	NS	EW	VS	DLS	CL	CD	CA	Temp
73	14728	86.19	166.62	10702.74	-4445.06	979.32	4551.66	1.80	96.00	4551.66	167.58	192.0
74	14822	87.09	167.03	10708.36	-4538.37	1001.16	4647.49	1.03	96.00	4647.49	167.56	192.0
75	14918	87.20	168.85	10713.15	-4631.77	1022.83	4743.36	0.22	96.00	4743.36	167.55	192.0
76	15014	87.00	165.80	10718.00	-4724.93	1045.50	4839.22	1.11	96.00	4839.22	167.52	199.1
77	15110	89.02	166.82	10721.34	-4818.14	1068.20	4935.13	2.36	96.00	4935.13	167.50	192.0
78	15205	87.08	167.45	10724.59	-4910.70	1089.34	5030.07	2.17	95.00	5030.07	167.49	192.0
79	15301	87.56	169.25	10729.09	-5004.61	1108.70	5125.95	1.94	96.00	5125.95	167.51	184.9
80	15397	85.60	169.03	10734.82	-5098.72	1126.76	5221.73	2.05	96.00	5221.74	167.54	192.0
81	15493	86.10	169.07	10741.77	-5192.73	1144.94	5317.45	0.52	96.00	5317.45	167.57	199.1
82	15589	86.97	169.94	10747.57	-5286.94	1162.40	5413.21	1.28	96.00	5413.22	167.60	199.1
83	15684	87.26	170.03	10752.35	-5380.38	1178.90	5508.00	0.32	95.00	5508.02	167.64	199.1
84	15780	86.69	167.95	10757.42	-5474.47	1197.20	5603.83	2.24	96.00	5603.85	167.66	199.1
85	15876	86.92	167.22	10762.77	-5568.08	1217.81	5699.68	0.80	96.00	5699.70	167.66	199.1
86	15972	86.95	164.67	10767.90	-5661.07	1241.09	5795.50	2.65	96.00	5795.52	167.63	199.1
87	16068	87.42	163.29	10772.62	-5753.23	1267.55	5891.20	1.52	96.00	5891.21	167.58	192.0
88	16164	87.37	164.60	10776.98	-5845.39	1294.07	5986.91	1.36	96.00	5986.91	167.52	199.1
89	16260	85.45	164.81	10782.99	-5937.80	1319.35	6082.61	2.01	96.00	6082.61	167.47	199.1
90	16356	86.54	169.39	10788.02	-6031.21	1340.73	6178.44	5.75	96.00	6178.44	167.47	199.1
91	16451	87.14	168.36	10791.61	-6124.36	1359.05	6273.34	1.83	95.00	6273.34	167.49	199.1
92	16547	86.66	171.50	10795.12	-6218.80	1375.82	6369.17	3.63	96.00	6369.17	167.53	192.0
93	16644	86.83	173.44	10798.94	-6314.88	1388.52	6465.72	2.75	97.00	6465.73	167.60	199.1
94	16739	84.85	171.99	10805.83	-6408.86	1400.53	6560.07	2.58	95.00	6560.10	167.67	199.1
95	16835	85.52	168.86	10813.89	-6503.17	1416.45	6655.59	3.32	96.00	6655.64	167.71	199.1
96	16931	86.42	169.54	10820.64	-6597.24	1434.39	6751.31	1.17	96.00	6751.37	167.73	199.1
97	17026	86.30	165.90	10826.67	-6689.86	1454.55	6846.10	3.83	95.00	6846.17	167.73	199.1
98	17122	89.05	166.87	10830.57	-6783.08	1477.13	6942.00	3.04	96.00	6942.05	167.71	192.0
99	17218	86.36	165.72	10834.41	-6876.26	1499.85	7037.89	3.05	96.00	7037.93	167.70	199.1
100	17314	87.08	167.23	10839.90	-6969.44	1522.26	7133.71	1.74	96.00	7133.75	167.68	199.1
101	17409	87.48	168.32	10844.41	-7062.18	1542.36	7228.60	1.22	95.00	7228.64	167.68	206.3
102	17505	87.25	166.76	10848.83	-7155.82	1563.05	7324.50	1.64	96.00	7324.54	167.68	206.3
PTB	17585	87.25	166.76	10852.66	-7233.60	1581.35	7404.39	0.00	80.00	7404.43	167.67	