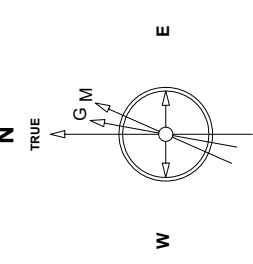


Great Western Operating Company, LLC

Location	Colorado	Slot	N14 - Postle IC 09-099HN
Field	Wattenburg	Well	Postle IC 09-099HN
Installation	Postle West	Wellbore	Postle IC 09-099HN (AWB)

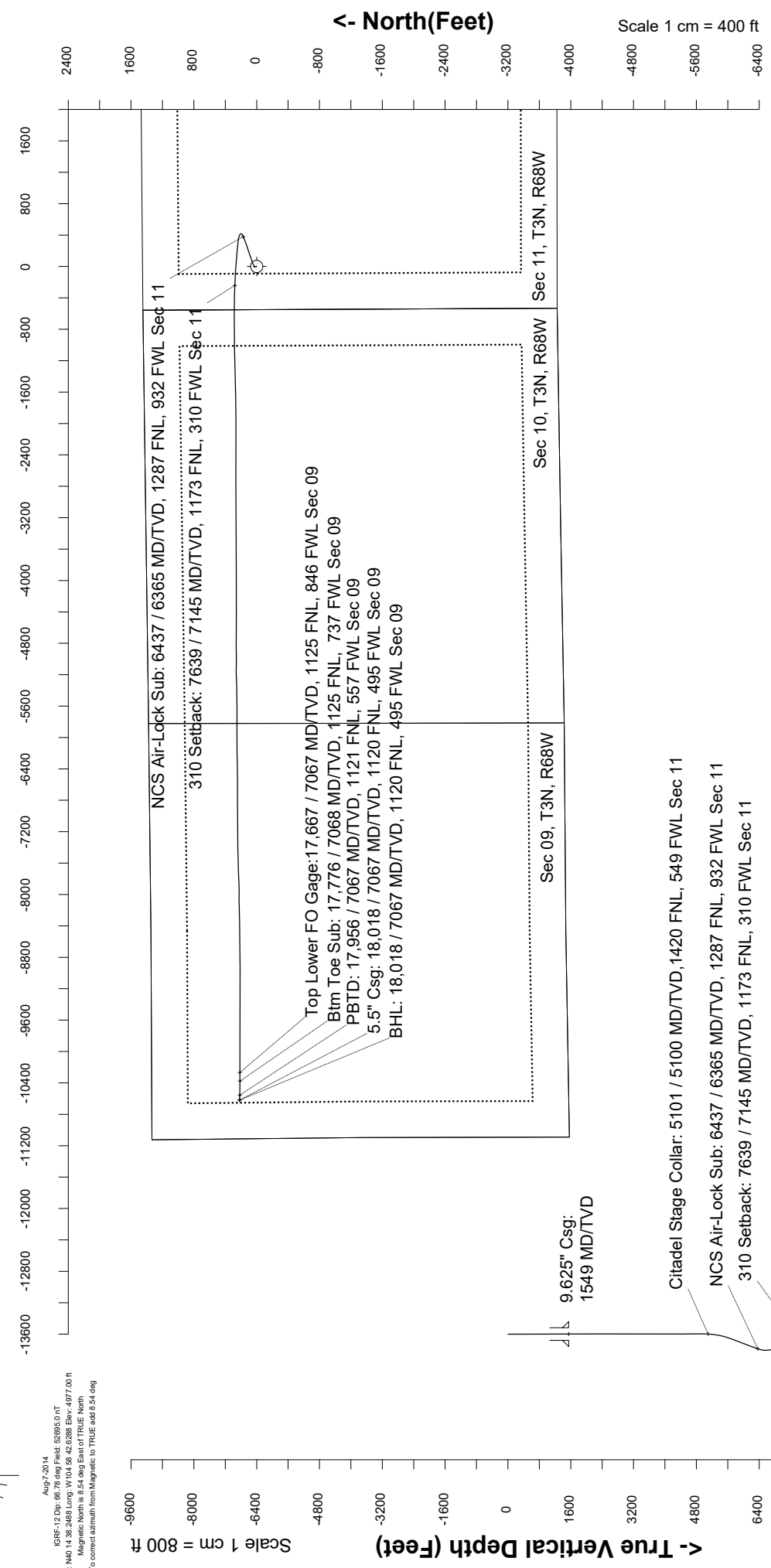
Created by: rmount
 Date plotted: 16-Jun-2020
 Plot reference is Postle IC 09-099HN (AWB).
 Ref wellpath is Postle IC 09-099HN (AWP#1).
 Coordinates are in Feet reference N14 - Postle IC 09-099HN.
 True Vertical Depths are reference Rig Datum.
 Measured Depths are reference Rig Datum.
 Rig Datum: Actual Datum #1
 Rig Datum to Mean Sea Level: 4997.00 ft.
 Plot North is aligned to TRUE North.



Aug 7, 2014
 IGRF-12.Dat (62.76 deg Field, 52695.0 ft)
 Lat: N40 14.38 2488 Long: W104 58 42.6288 Elev: 4977.00 ft
 Magnetic North is 9.54 deg East of TRUE North
 To correct azimuth from Magnetic to TRUE add 8.54 deg

Scale 1 cm = 400 ft

Scale 1 cm = 800 ft



← North(Feet)

Scale 1 cm = 400 ft

Scale 1 cm = 800 ft

Vertical Section (Feet) ->

Azimuth 271.17 with reference 0.00 N, 0.00 E from N14 - Postle IC 09-099HN

Great Western Operating Co, LLC
 Directional Survey Report
 Wellpath: Postle IC 09-099HN
 MDs and TVDs are from Rig Floor 4997.0ft above Mean Sea Level

MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	DLS [deg/100ft]	Vertical Section[ft]
0.00	0.00	0.00	0.00	0.00	0.00		0.00
14.00	0.00	36.86	14.00	0.00	0.00	==>	0.00
91.00	0.26	36.86	91.00	0.14	0.10	0.34	-0.10
178.00	0.48	34.92	178.00	0.60	0.43	0.25	-0.42
270.00	0.79	338.50	269.99	1.50	0.42	0.72	-0.39
363.00	1.05	358.10	362.98	2.95	0.16	0.44	-0.10
452.00	1.71	17.43	451.96	5.03	0.53	0.90	-0.42
542.00	2.07	11.19	541.91	7.91	1.25	0.46	-1.08
632.00	1.67	345.09	631.86	10.77	1.22	1.03	-1.00
722.00	1.98	344.12	721.81	13.53	0.46	0.35	-0.18
812.00	2.29	345.44	811.75	16.77	-0.42	0.35	0.76
902.00	2.11	2.84	901.69	20.16	-0.79	0.77	1.20
992.00	2.29	358.71	991.62	23.62	-0.75	0.27	1.23
1082.00	1.80	1.09	1081.56	26.83	-0.76	0.55	1.31
1172.00	1.14	350.54	1171.53	29.12	-0.88	0.79	1.47
1262.00	0.18	79.22	1261.53	30.03	-0.89	1.28	1.50
1352.00	0.26	4.25	1351.53	30.26	-0.73	0.31	1.35
1442.00	0.26	223.01	1441.53	30.32	-0.86	0.55	1.48
1498.00	0.31	195.50	1497.52	30.08	-0.98	0.26	1.60
1619.00	0.03	35.11	1618.52	29.79	-1.05	0.28	1.66
1709.00	0.18	206.67	1708.52	29.68	-1.10	0.23	1.71
1798.00	0.22	345.16	1797.52	29.72	-1.21	0.42	1.82
1887.00	0.10	257.46	1886.52	29.87	-1.33	0.27	1.94
1977.00	0.47	228.18	1976.52	29.61	-1.68	0.43	2.29
2066.00	0.29	202.66	2065.52	29.16	-2.04	0.27	2.64
2156.00	0.47	218.69	2155.52	28.66	-2.36	0.23	2.94
2245.00	0.29	200.92	2244.52	28.16	-2.67	0.24	3.24
2334.00	0.11	258.46	2333.52	27.94	-2.83	0.28	3.40
2424.00	0.29	323.84	2423.52	28.10	-3.05	0.29	3.62
2514.00	0.46	276.80	2513.51	28.33	-3.54	0.37	4.12
2603.00	0.14	152.78	2602.51	28.27	-3.85	0.62	4.43
2693.00	0.33	277.92	2692.51	28.21	-4.06	0.47	4.63
2782.00	0.27	256.92	2781.51	28.20	-4.51	0.14	5.09
2872.00	0.17	198.03	2871.51	28.02	-4.76	0.26	5.33
2962.00	0.31	49.32	2961.51	28.06	-4.62	0.52	5.19
3051.00	2.43	54.12	3050.48	29.32	-2.91	2.38	3.50
3141.00	2.00	39.52	3140.41	31.65	-0.36	0.78	1.01
3230.00	0.44	288.96	3229.40	32.96	0.30	2.46	0.37
3320.00	0.51	267.07	3319.39	33.05	-0.42	0.21	1.10
3409.00	0.32	86.63	3408.39	33.04	-0.57	0.93	1.24
3498.00	0.25	112.64	3497.39	32.98	-0.14	0.16	0.82
3588.00	0.22	202.87	3587.39	32.75	-0.03	0.37	0.70
3678.00	0.09	228.76	3677.39	32.54	-0.15	0.16	0.81
3767.00	0.18	263.28	3766.39	32.48	-0.34	0.13	1.00
3857.00	0.19	256.23	3856.39	32.43	-0.63	0.03	1.29
3946.00	0.44	253.13	3945.39	32.30	-1.10	0.28	1.76
4036.00	0.38	219.80	4035.38	31.97	-1.62	0.27	2.27
4125.00	0.22	256.18	4124.38	31.70	-1.97	0.27	2.62
4214.00	0.22	267.31	4213.38	31.65	-2.31	0.05	2.96
4304.00	0.11	347.19	4303.38	31.73	-2.50	0.25	3.15
4394.00	0.15	210.05	4393.38	31.71	-2.58	0.27	3.23
4483.00	0.06	258.62	4482.38	31.60	-2.68	0.13	3.33
4573.00	0.18	274.79	4572.38	31.60	-2.87	0.14	3.52
4662.00	0.25	320.95	4661.38	31.76	-3.13	0.20	3.78
4752.00	0.04	284.52	4751.38	31.92	-3.29	0.24	3.94
4842.00	0.13	296.38	4841.38	31.98	-3.41	0.10	4.06
4931.00	0.14	335.23	4930.38	32.12	-3.54	0.10	4.20
5021.00	0.56	52.71	5020.38	32.49	-3.24	0.61	3.90
5110.00	2.90	64.27	5109.33	33.73	-0.87	2.64	1.55
5200.00	6.65	66.23	5199.00	36.82	5.96	4.17	-5.20
5290.00	9.15	71.66	5288.14	41.17	17.52	2.90	-16.68
5379.00	12.14	70.40	5375.60	46.54	33.06	3.37	-32.10
5468.00	14.70	71.08	5462.17	53.34	52.56	2.88	-51.46
5558.00	17.25	70.58	5548.68	61.48	75.95	2.84	-74.68
5648.00	20.07	69.43	5633.94	71.34	103.00	3.16	-101.52

MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	DLS [deg/100ft]	Vertical Section[ft]
5737.00	22.41	71.43	5716.89	82.11	133.38	2.75	-131.68
5827.00	22.33	70.31	5800.12	93.34	165.74	0.48	-163.80
5917.00	22.06	70.87	5883.45	104.64	197.81	0.38	-195.63
6006.00	21.78	71.72	5966.02	115.29	229.28	0.48	-226.87
6096.00	21.23	71.19	6049.75	125.79	260.55	0.65	-257.93
6186.00	22.34	69.91	6133.32	136.91	292.04	1.34	-289.19
6275.00	22.16	70.36	6215.70	148.37	323.74	0.28	-320.64
6365.00	22.27	69.83	6299.02	159.95	355.73	0.25	-352.39
6454.00	21.52	63.37	6381.61	173.09	386.16	2.83	-382.55
6544.00	13.53	50.24	6467.39	187.25	409.06	9.85	-405.15
6633.00	8.33	5.06	6554.90	200.36	417.65	10.83	-413.47
6723.00	11.26	306.96	6643.77	212.16	411.19	10.91	-406.77
6812.00	16.55	289.96	6730.17	221.73	392.31	7.45	-387.70
6902.00	24.74	284.63	6814.33	230.87	361.98	9.33	-357.19
6992.00	34.22	276.22	6892.62	238.39	318.48	11.47	-313.55
7081.00	42.85	273.68	6962.17	243.06	263.30	9.86	-258.28
7170.00	51.46	275.31	7022.64	248.23	198.31	9.77	-193.21
7260.00	60.62	275.53	7072.86	255.28	124.08	10.18	-118.84
7349.00	69.89	274.12	7110.08	262.04	43.63	10.51	-38.27
7439.00	79.26	273.98	7133.99	268.15	-42.82	10.41	48.28
7528.00	87.57	272.98	7144.19	273.51	-130.99	9.40	136.55
7573.00	90.34	272.93	7145.01	275.83	-175.92	6.16	181.51
7618.00	90.06	271.91	7144.85	277.73	-220.88	2.35	226.50
7707.00	90.09	272.25	7144.73	280.96	-309.82	0.38	315.49
7797.00	89.26	271.02	7145.24	283.53	-399.78	1.65	405.48
7886.00	89.48	270.03	7146.22	284.34	-488.77	1.14	494.47
7976.00	89.48	270.00	7147.04	284.37	-578.77	0.03	584.45
8065.00	90.86	270.32	7146.77	284.61	-667.76	1.59	673.43
8155.00	89.91	269.81	7146.17	284.72	-757.76	1.20	763.41
8244.00	90.55	269.80	7145.81	284.41	-846.76	0.72	852.39
8334.00	90.65	270.29	7144.87	284.48	-936.75	0.56	942.36
8423.00	89.57	269.06	7144.70	283.98	-1025.75	1.84	1031.33
8513.00	89.82	267.50	7145.18	281.28	-1115.70	1.76	1121.21
8602.00	89.75	268.11	7145.51	277.87	-1204.64	0.69	1210.06
8692.00	90.25	268.20	7145.51	274.97	-1294.59	0.56	1299.93
8781.00	89.88	269.09	7145.41	272.87	-1383.56	1.08	1388.84
8871.00	89.85	269.10	7145.62	271.44	-1473.55	0.04	1478.79
8960.00	90.06	269.53	7145.69	270.38	-1562.55	0.54	1567.74
9050.00	89.29	268.83	7146.20	269.09	-1652.53	1.16	1657.68
9140.00	89.78	269.09	7146.93	267.46	-1742.52	0.62	1747.61
9229.00	90.31	269.12	7146.86	266.07	-1831.50	0.60	1836.55
9318.00	89.94	268.81	7146.67	264.46	-1920.49	0.54	1925.49
9408.00	90.28	270.48	7146.50	263.90	-2010.48	1.89	2015.45
9497.00	90.40	270.47	7145.97	264.64	-2099.48	0.14	2104.44
9587.00	90.68	270.47	7145.12	265.38	-2189.47	0.31	2194.43
9676.00	89.69	269.64	7144.83	265.47	-2278.47	1.45	2283.41
9766.00	90.12	270.13	7144.98	265.28	-2368.47	0.72	2373.39
9856.00	90.43	269.72	7144.55	265.17	-2458.47	0.57	2463.37
9945.00	90.12	269.86	7144.12	264.84	-2547.47	0.38	2552.34
10035.00	89.94	269.37	7144.08	264.24	-2637.46	0.58	2642.31
10124.00	89.60	269.36	7144.43	263.25	-2726.46	0.38	2731.26
10214.00	90.92	271.34	7144.03	263.80	-2816.45	2.64	2821.25
10304.00	89.45	269.18	7143.73	264.21	-2906.44	2.90	2911.23
10393.00	91.02	269.91	7143.37	263.50	-2995.43	1.95	3000.19
10482.00	89.29	270.81	7143.13	264.06	-3084.43	2.19	3089.17
10572.00	90.43	270.11	7143.35	264.78	-3174.42	1.49	3179.16
10661.00	89.20	268.68	7143.64	263.84	-3263.41	2.12	3268.12
10751.00	90.06	269.19	7144.22	262.17	-3353.39	1.11	3358.04
10841.00	89.45	269.13	7144.60	260.85	-3443.38	0.68	3447.99
10931.00	89.45	269.10	7145.47	259.46	-3533.37	0.03	3537.93
11020.00	91.42	270.80	7144.79	259.38	-3622.36	2.92	3626.90
11110.00	89.69	269.71	7143.92	259.78	-3712.35	2.27	3716.88
11199.00	90.68	269.71	7143.63	259.33	-3801.34	1.11	3805.84
11289.00	90.31	270.19	7142.85	259.25	-3891.34	0.67	3895.82
11379.00	90.58	270.88	7142.15	260.09	-3981.33	0.82	3985.81
11469.00	89.88	269.65	7141.79	260.51	-4071.33	1.57	4075.80
11558.00	89.85	269.88	7142.00	260.15	-4160.33	0.26	4164.77
11648.00	89.69	269.60	7142.36	259.74	-4250.33	0.36	4254.74
11737.00	90.43	270.37	7142.27	259.71	-4339.32	1.20	4343.72
11827.00	90.46	269.88	7141.57	259.91	-4429.32	0.55	4433.70
11917.00	91.29	270.61	7140.20	260.30	-4519.31	1.23	4523.68
12006.00	91.29	270.44	7138.19	261.11	-4608.28	0.19	4612.65

MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	DLS [deg/100ft]	Vertical Section[ft]
12096.00	90.74	269.74	7136.60	261.25	-4698.27	0.99	4702.62
12185.00	90.92	270.15	7135.31	261.17	-4787.26	0.50	4791.59
12275.00	91.54	269.34	7133.38	260.77	-4877.23	1.13	4881.54
12364.00	90.86	269.45	7131.52	259.83	-4966.21	0.77	4970.48
12454.00	91.60	270.38	7129.58	259.69	-5056.19	1.32	5060.43
12543.00	91.48	270.55	7127.19	260.42	-5145.15	0.23	5149.40
12589.00	91.48	269.08	7126.00	260.27	-5191.14	3.19	5195.37
12678.00	90.92	267.23	7124.14	257.40	-5280.07	2.17	5284.22
12768.00	91.20	267.80	7122.47	253.50	-5369.97	0.71	5374.02
12858.00	91.11	269.77	7120.66	251.59	-5459.92	2.19	5463.92
12947.00	91.60	269.87	7118.56	251.31	-5548.90	0.56	5552.87
13037.00	91.48	269.68	7116.14	250.96	-5638.86	0.25	5642.81
13126.00	92.25	270.09	7113.24	250.78	-5727.82	0.98	5731.74
13216.00	91.78	270.25	7110.08	251.05	-5817.76	0.55	5821.67
13305.00	91.72	270.24	7107.36	251.43	-5906.72	0.07	5910.62
13395.00	91.48	269.32	7104.84	251.08	-5996.68	1.06	6000.55
13484.00	91.32	269.40	7102.67	250.09	-6085.65	0.20	6089.48
13574.00	91.45	269.68	7100.49	249.37	-6175.62	0.34	6179.42
13663.00	90.65	268.80	7098.86	248.19	-6264.59	1.34	6268.35
13753.00	90.80	269.20	7097.73	246.62	-6354.57	0.47	6358.28
13842.00	90.65	268.80	7096.60	245.06	-6443.55	0.48	6447.21
13932.00	90.95	269.97	7095.34	244.10	-6533.54	1.34	6537.16
14021.00	90.71	269.60	7094.05	243.76	-6622.53	0.50	6626.12
14111.00	91.42	269.49	7092.38	243.05	-6712.51	0.80	6716.07
14200.00	90.62	270.90	7090.80	243.35	-6801.49	1.82	6805.04
14290.00	90.37	268.75	7090.02	243.08	-6891.48	2.40	6895.01
14379.00	94.68	272.08	7086.10	243.72	-6980.36	6.12	6983.88
14469.00	90.22	269.59	7082.25	245.02	-7070.24	5.67	7073.76
14559.00	90.40	268.45	7081.76	243.48	-7160.22	1.28	7163.70
14649.00	90.18	268.92	7081.31	241.42	-7250.20	0.58	7253.61
14738.00	90.09	268.64	7081.10	239.52	-7339.17	0.33	7342.53
14828.00	90.89	269.76	7080.33	238.27	-7429.16	1.53	7432.48
14917.00	90.55	268.63	7079.21	237.02	-7518.14	1.33	7521.41
15007.00	90.92	268.77	7078.06	234.97	-7608.11	0.44	7611.32
15097.00	90.86	267.67	7076.66	232.18	-7698.06	1.22	7701.19
15186.00	91.08	267.75	7075.15	228.62	-7786.97	0.26	7790.02
15276.00	91.20	267.67	7073.36	225.03	-7876.88	0.16	7879.84
15366.00	91.38	270.45	7071.33	223.55	-7966.84	3.09	7969.74
15456.00	90.74	270.02	7069.67	223.92	-8056.82	0.86	8059.71
15545.00	90.46	269.29	7068.74	223.38	-8145.82	0.88	8148.68
15635.00	90.46	268.73	7068.01	221.83	-8235.80	0.62	8238.61
15724.00	90.62	269.38	7067.18	220.36	-8324.78	0.75	8327.55
15814.00	89.32	266.13	7067.22	216.84	-8414.70	3.89	8417.37
15904.00	89.11	269.80	7068.46	213.64	-8504.62	4.08	8507.21
15994.00	89.60	269.96	7069.47	213.45	-8594.61	0.57	8597.18
16083.00	90.25	270.69	7069.59	213.96	-8683.61	1.10	8686.17
16172.00	90.12	269.68	7069.30	214.25	-8772.61	1.14	8775.15
16262.00	89.91	269.03	7069.27	213.23	-8862.60	0.76	8865.11
16351.00	89.97	269.26	7069.37	211.90	-8951.59	0.27	8954.05
16441.00	89.97	269.47	7069.41	210.91	-9041.59	0.23	9044.01
16530.00	90.18	270.22	7069.30	210.67	-9130.58	0.88	9132.98
16620.00	90.65	270.73	7068.65	211.41	-9220.58	0.77	9222.97
16709.00	90.43	270.19	7067.81	212.13	-9309.57	0.66	9311.96
16799.00	90.43	270.03	7067.13	212.30	-9399.57	0.18	9401.94
16888.00	90.34	269.79	7066.53	212.16	-9488.57	0.29	9490.92
16977.00	90.34	270.50	7066.01	212.39	-9577.56	0.80	9579.90
17067.00	89.66	269.81	7066.01	212.63	-9667.56	1.08	9669.89
17157.00	90.06	270.49	7066.23	212.86	-9757.56	0.88	9759.87
17246.00	90.18	270.26	7066.04	213.45	-9846.56	0.29	9848.86
17336.00	89.78	269.76	7066.07	213.46	-9936.56	0.71	9938.85
17425.00	89.63	270.23	7066.53	213.45	-10025.56	0.55	10027.83
17514.00	89.94	270.41	7066.86	213.95	-10114.56	0.40	10116.82
17604.00	89.97	269.74	7066.93	214.07	-10204.55	0.75	10206.80
17693.00	89.42	268.99	7067.41	213.08	-10293.55	1.04	10295.75
17783.00	90.06	270.41	7067.82	212.61	-10383.54	1.73	10385.72
17872.00	90.31	271.54	7067.53	214.13	-10472.53	1.30	10474.72
17962.00	90.25	270.76	7067.09	215.93	-10562.51	0.87	10564.71
17993.00	90.40	270.87	7066.91	216.37	-10593.50	0.60	10595.71
18018.00	90.40	270.87	7066.74	216.75	-10618.50	==>	10620.71