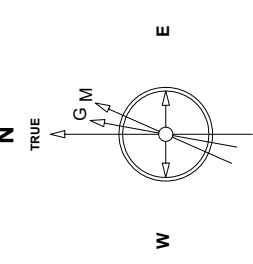


Great Western Operating Company, LLC

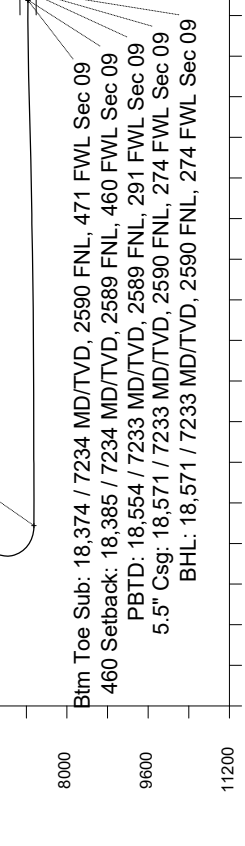
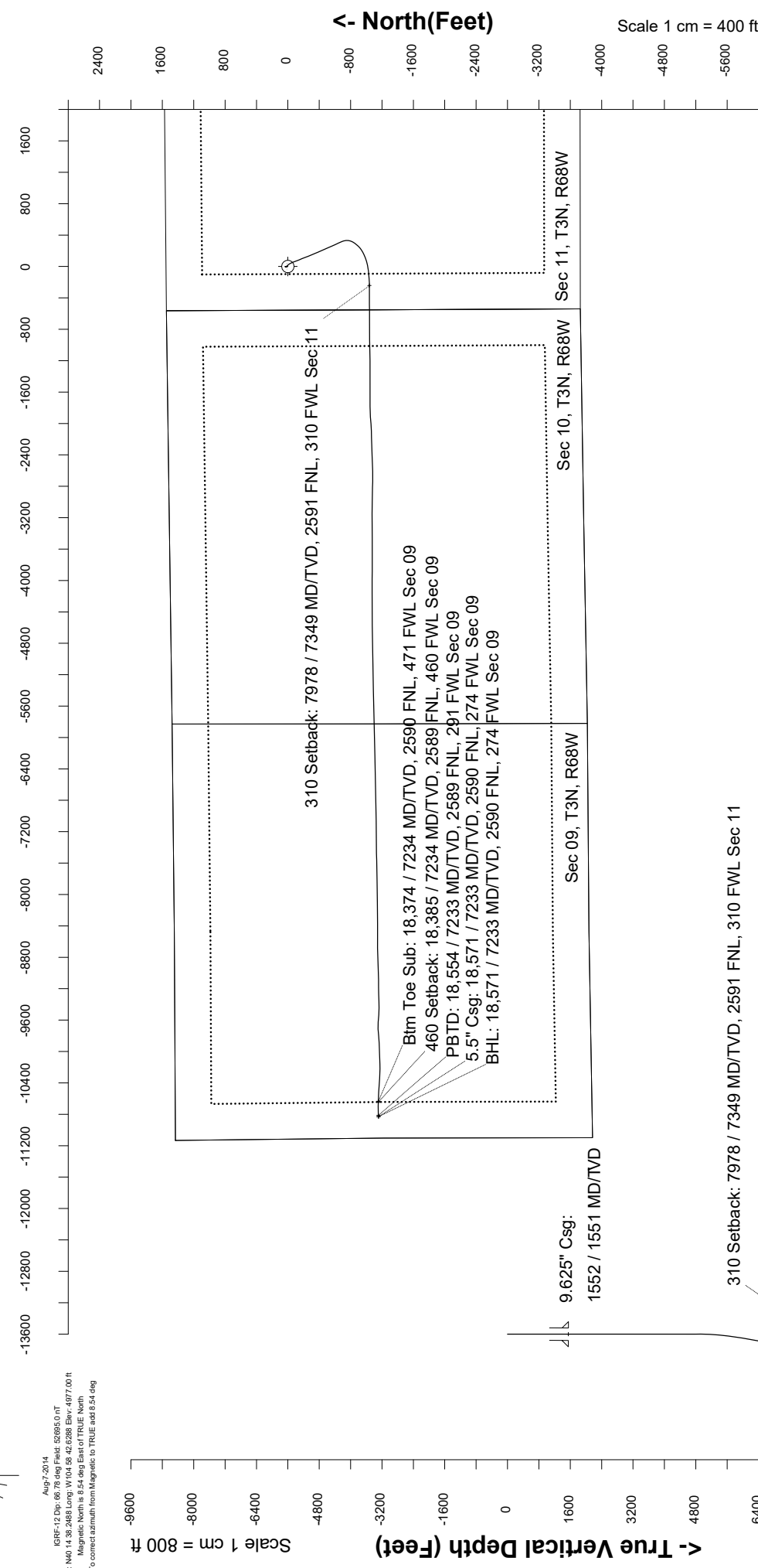
Location	Colorado	Slot	C08 - Postle IC 09-182HC
Field	Wattenburg	Well	Postle IC 09-182HC
Installation	Postle West	Wellbore	Postle IC 09-182HC (AWB)

Created by: nmount
 Date plotted: 27-Apr-2020
 Plot reference is Postle IC 09-182HC (AWB).
 Ref wellpath is Postle IC 09-182HC (AWP#1).
 Coordinates are in Feet reference C08 - Postle IC 09-182HC.
 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: N49 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
Vertical Section (Feet) ->
 Azimuth 263.91 with reference 0.00 N, 0.00 E from C08 - Postle IC 09-182HC

Scale 1 cm = 400 ft

Scale 1 cm = 800 ft

Great Western Operating Co, LLC
 Directional Survey Report
 Wellpath: Postle IC 09-182HC
 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	0.00
14.00	0.00	5.04	14.00	0.00	0.00	0.00	0.00
92.00	0.40	5.04	92.00	0.27	0.02	0.00	-0.05
180.00	0.44	352.56	180.00	0.91	0.01	0.00	-0.10
272.00	0.48	344.12	271.99	1.63	-0.14	0.00	-0.03
364.00	0.79	328.13	363.99	2.54	-0.58	0.00	0.31
454.00	1.27	355.90	453.97	4.06	-0.98	0.00	0.55
544.00	2.20	359.33	543.93	6.79	-1.07	0.00	0.35
634.00	2.37	3.90	633.86	10.37	-0.97	0.00	-0.14
724.00	2.72	11.28	723.77	14.32	-0.42	0.00	-1.10
813.00	2.77	8.38	812.67	18.52	0.30	0.00	-2.27
903.00	2.77	356.96	902.57	22.84	0.50	0.00	-2.92
993.00	2.15	348.96	992.48	26.67	0.07	0.00	-2.89
1083.00	1.85	350.28	1082.43	29.76	-0.50	0.00	-2.66
1173.00	0.44	325.14	1172.41	31.48	-0.95	0.00	-2.40
1263.00	0.22	220.02	1262.41	31.63	-1.25	0.00	-2.11
1353.00	0.40	218.00	1352.40	31.25	-1.56	0.00	-1.76
1443.00	0.40	141.27	1442.40	30.75	-1.56	0.00	-1.72
1501.00	0.62	135.65	1500.40	30.37	-1.21	0.00	-2.02
1601.00	0.25	140.02	1600.40	29.82	-0.69	0.00	-2.48
1670.00	0.03	111.29	1669.40	29.70	-0.58	0.00	-2.58
1759.00	0.09	305.46	1758.40	29.73	-0.61	0.00	-2.54
1849.00	0.22	196.55	1848.40	29.60	-0.72	0.00	-2.42
1939.00	0.09	223.48	1938.40	29.39	-0.82	0.00	-2.30
2028.00	0.09	298.01	2027.40	29.37	-0.93	0.00	-2.19
2118.00	0.13	273.48	2117.40	29.41	-1.09	0.00	-2.03
2208.00	0.26	212.60	2207.40	29.24	-1.30	0.00	-1.81
2297.00	0.23	191.79	2296.40	28.90	-1.45	0.00	-1.62
2387.00	0.28	245.85	2386.39	28.63	-1.69	0.00	-1.36
2477.00	0.19	263.54	2476.39	28.52	-2.04	0.00	-1.00
2567.00	0.03	45.58	2566.39	28.52	-2.17	0.00	-0.87
2656.00	0.17	183.20	2655.39	28.41	-2.16	0.00	-0.87
2746.00	0.20	239.63	2745.39	28.20	-2.30	0.00	-0.70
2836.00	0.68	215.45	2835.39	27.68	-2.75	0.00	-0.21
2925.00	0.25	305.47	2924.39	27.36	-3.21	0.00	0.29
3015.00	0.15	234.28	3014.39	27.41	-3.47	0.00	0.54
3105.00	0.96	34.69	3104.38	27.96	-3.13	0.00	0.15
3194.00	1.98	32.05	3193.35	29.88	-1.89	0.00	-1.29
3284.00	0.63	312.91	3283.33	31.53	-1.43	0.00	-1.92
3373.00	0.04	8.64	3372.33	31.89	-1.78	0.00	-1.61
3463.00	0.07	350.94	3462.33	31.98	-1.79	0.00	-1.62
3552.00	0.07	285.69	3551.33	32.05	-1.85	0.00	-1.56
3642.00	0.14	218.12	3641.33	31.98	-1.97	0.00	-1.43
3731.00	0.54	49.50	3730.33	32.16	-1.72	0.00	-1.70
3821.00	0.65	180.25	3820.33	31.93	-1.40	0.00	-2.00
3911.00	0.17	234.45	3910.32	31.34	-1.51	0.00	-1.83
4000.00	0.29	235.43	3999.32	31.14	-1.80	0.00	-1.51
4090.00	0.83	213.48	4089.32	30.46	-2.35	0.00	-0.90
4180.00	0.04	219.57	4179.32	29.89	-2.73	0.00	-0.46
4269.00	0.03	273.94	4268.32	29.87	-2.77	0.00	-0.41
4359.00	0.10	309.18	4358.32	29.92	-2.86	0.00	-0.34
4449.00	0.03	98.93	4448.32	29.97	-2.89	0.00	-0.30
4539.00	0.10	270.13	4538.32	29.97	-2.95	0.00	-0.25
4628.00	0.06	87.06	4627.32	29.97	-2.98	0.00	-0.22
4718.00	0.09	296.70	4717.32	30.00	-3.00	0.00	-0.20
4808.00	0.10	286.65	4807.32	30.06	-3.13	0.00	-0.07
4897.00	0.07	258.34	4896.32	30.07	-3.26	0.00	0.05
4987.00	1.54	170.07	4986.31	28.87	-3.11	0.00	0.03
5077.00	4.60	162.75	5076.17	24.23	-1.83	0.00	-0.75
5167.00	6.61	150.69	5165.73	16.26	1.78	0.00	-3.49
5256.00	7.48	138.11	5254.07	7.48	8.16	0.00	-8.90
5346.00	10.87	136.35	5342.90	-3.02	17.93	0.00	-17.51
5436.00	16.49	140.44	5430.32	-19.02	31.93	0.00	-29.73
5526.00	18.35	158.07	5516.24	-42.03	45.37	0.00	-40.65
5615.00	20.96	158.48	5600.05	-69.84	56.44	0.00	-48.71
5705.00	24.63	158.64	5683.01	-102.29	69.18	0.00	-57.94
5795.00	26.44	158.94	5764.21	-138.46	83.21	0.00	-68.05

MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	DLS [deg/100ft]	Vertical Section[ft]
5884.00	28.01	158.23	5843.35	-176.36	98.09	0.00	-78.82
5974.00	30.06	159.56	5922.04	-217.11	113.80	0.00	-90.12
6064.00	31.21	160.11	5999.48	-260.16	129.60	0.00	-101.27
6154.00	31.50	156.34	6076.34	-303.63	146.97	0.00	-113.93
6243.00	31.51	156.00	6152.22	-346.17	165.76	0.00	-128.10
6333.00	31.99	156.42	6228.75	-389.51	184.87	0.00	-142.50
6423.00	31.76	156.51	6305.18	-433.08	203.84	0.00	-156.75
6513.00	31.93	156.65	6381.63	-476.66	222.72	0.00	-170.89
6602.00	31.78	156.62	6457.23	-519.78	241.35	0.00	-184.84
6692.00	31.82	156.18	6533.72	-563.23	260.33	0.00	-199.11
6782.00	32.07	155.34	6610.09	-606.65	279.88	0.00	-213.95
6871.00	31.85	155.39	6685.60	-649.48	299.52	0.00	-228.93
6961.00	32.19	157.16	6761.91	-693.16	318.72	0.00	-243.38
7051.00	32.91	173.73	6837.92	-739.65	330.72	0.00	-250.38
7141.00	30.42	194.35	6914.74	-786.17	327.73	0.00	-242.48
7230.00	33.93	210.01	6990.20	-829.60	309.69	0.00	-219.93
7320.00	38.78	218.69	7062.71	-873.40	279.47	0.00	-185.23
7409.00	44.78	228.37	7129.11	-916.07	238.53	0.00	-140.00
7499.00	48.42	241.73	7191.09	-953.17	185.05	0.00	-82.88
7588.00	56.68	247.47	7245.19	-983.25	121.24	0.00	-16.24
7678.00	66.17	254.41	7288.23	-1008.80	46.62	0.00	60.67
7768.00	72.94	263.82	7319.71	-1024.55	-36.06	0.00	144.55
7858.00	81.57	264.43	7339.55	-1033.52	-123.30	0.00	232.25
7947.00	87.54	268.66	7347.99	-1038.83	-211.68	0.00	320.69
8037.00	90.43	270.20	7349.59	-1039.73	-301.65	0.00	410.25
8127.00	90.12	269.56	7349.15	-1039.92	-391.64	0.00	499.76
8216.00	90.65	269.98	7348.56	-1040.27	-480.64	0.00	588.29
8306.00	88.92	269.16	7348.89	-1040.95	-570.63	0.00	677.85
8396.00	89.45	270.56	7350.17	-1041.17	-660.62	0.00	767.35
8486.00	89.38	268.51	7351.09	-1041.90	-750.61	0.00	856.91
8575.00	89.51	270.22	7351.95	-1042.89	-839.60	0.00	945.50
8665.00	91.02	270.34	7351.54	-1042.45	-929.59	0.00	1034.94
8755.00	90.34	268.69	7350.47	-1043.21	-1019.58	0.00	1124.50
8844.00	90.37	268.43	7349.92	-1045.45	-1108.55	0.00	1213.20
8934.00	90.40	269.89	7349.31	-1046.76	-1198.53	0.00	1302.82
9024.00	90.09	269.65	7348.93	-1047.13	-1288.53	0.00	1392.35
9114.00	90.03	269.83	7348.84	-1047.53	-1378.53	0.00	1481.88
9203.00	90.49	270.26	7348.43	-1047.46	-1467.53	0.00	1570.37
9293.00	90.43	270.19	7347.71	-1047.11	-1557.53	0.00	1659.82
9383.00	89.82	269.72	7347.51	-1047.18	-1647.53	0.00	1749.32
9472.00	89.78	269.24	7347.82	-1047.99	-1736.52	0.00	1837.90
9562.00	90.18	270.35	7347.85	-1048.31	-1826.52	0.00	1927.43
9652.00	89.94	264.51	7347.76	-1052.35	-1916.39	0.00	2017.22
9741.00	89.75	265.52	7348.00	-1060.08	-2005.05	0.00	2106.20
9831.00	89.75	269.42	7348.39	-1064.05	-2094.95	0.00	2196.01
9921.00	89.42	268.02	7349.05	-1066.06	-2184.92	0.00	2285.69
10010.00	90.49	268.27	7349.12	-1068.94	-2273.87	0.00	2374.44
10100.00	91.02	268.75	7347.93	-1071.28	-2363.83	0.00	2464.14
10190.00	88.74	265.88	7348.12	-1075.50	-2453.72	0.00	2553.97
10279.00	91.11	267.58	7348.23	-1080.57	-2542.56	0.00	2642.85
10369.00	91.32	270.83	7346.33	-1081.82	-2632.52	0.00	2732.44
10459.00	90.89	271.27	7344.59	-1080.17	-2722.49	0.00	2821.72
10548.00	90.77	270.83	7343.30	-1078.54	-2811.47	0.00	2910.02
10638.00	90.65	270.87	7342.19	-1077.21	-2901.45	0.00	2999.35
10728.00	90.74	271.24	7341.09	-1075.55	-2991.43	0.00	3088.65
10817.00	90.46	270.33	7340.16	-1074.33	-3080.41	0.00	3177.00
10907.00	89.88	269.69	7339.90	-1074.32	-3170.41	0.00	3266.49
10997.00	89.75	269.91	7340.19	-1074.63	-3260.41	0.00	3356.02
11087.00	89.17	270.00	7341.03	-1074.70	-3350.41	0.00	3445.51
11176.00	89.11	269.52	7342.37	-1075.07	-3439.39	0.00	3534.04
11266.00	89.14	269.29	7343.74	-1076.01	-3529.38	0.00	3623.61
11355.00	90.68	270.23	7343.88	-1076.38	-3618.37	0.00	3712.15
11445.00	90.37	270.13	7343.06	-1076.10	-3708.37	0.00	3801.60
11535.00	90.68	270.21	7342.23	-1075.83	-3798.37	0.00	3891.06
11624.00	90.65	270.30	7341.20	-1075.43	-3887.36	0.00	3979.51
11714.00	90.74	270.28	7340.11	-1074.98	-3977.35	0.00	4068.95
11804.00	90.77	270.12	7338.92	-1074.66	-4067.34	0.00	4158.40
11893.00	90.71	270.03	7337.77	-1074.55	-4156.34	0.00	4246.88
11983.00	90.49	270.09	7336.83	-1074.45	-4246.33	0.00	4336.35
12073.00	90.40	269.08	7336.13	-1075.11	-4336.32	0.00	4425.91
12162.00	90.31	268.92	7335.58	-1076.66	-4425.31	0.00	4514.56
12252.00	90.46	269.45	7334.98	-1077.94	-4515.30	0.00	4604.17
12342.00	90.49	269.21	7334.23	-1078.99	-4605.29	0.00	4693.77
12432.00	90.43	269.38	7333.51	-1080.10	-4695.28	0.00	4783.37

MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	DLS [deg/100ft]	Vertical Section[ft]
12521.00	90.15	269.12	7333.06	-1081.26	-4784.27	0.00	4871.98
12611.00	90.52	269.36	7332.53	-1082.46	-4874.26	0.00	4961.59
12701.00	90.55	269.34	7331.69	-1083.48	-4964.25	0.00	5051.18
12791.00	90.77	269.74	7330.65	-1084.20	-5054.24	0.00	5140.74
12881.00	90.55	269.37	7329.62	-1084.90	-5144.23	0.00	5230.30
12970.00	90.62	269.21	7328.71	-1086.00	-5233.22	0.00	5318.90
13060.00	90.62	269.46	7327.74	-1087.05	-5323.21	0.00	5408.49
13150.00	91.63	268.67	7325.97	-1088.52	-5413.18	0.00	5498.11
13239.00	91.35	268.52	7323.65	-1090.70	-5502.12	0.00	5586.78
13329.00	91.42	268.56	7321.48	-1092.99	-5592.06	0.00	5676.46
13419.00	91.69	269.05	7319.04	-1094.87	-5682.01	0.00	5766.10
13508.00	91.38	268.43	7316.65	-1096.82	-5770.96	0.00	5854.75
13598.00	91.02	268.46	7314.77	-1099.26	-5860.90	0.00	5944.45
13688.00	91.35	268.17	7312.91	-1101.91	-5950.85	0.00	6034.16
13778.00	90.49	268.18	7311.46	-1104.78	-6040.79	0.00	6123.90
13867.00	90.86	268.53	7310.41	-1107.33	-6129.75	0.00	6212.63
13957.00	90.74	268.73	7309.16	-1109.48	-6219.71	0.00	6302.31
14047.00	90.37	268.19	7308.28	-1111.90	-6309.67	0.00	6392.03
14137.00	90.98	268.20	7307.22	-1114.73	-6399.62	0.00	6481.77
14226.00	91.29	268.52	7305.46	-1117.28	-6488.57	0.00	6570.48
14316.00	91.20	268.41	7303.51	-1119.69	-6578.51	0.00	6660.18
14406.00	91.29	269.35	7301.55	-1121.45	-6668.48	0.00	6749.82
14495.00	91.42	269.71	7299.45	-1122.18	-6757.45	0.00	6838.36
14585.00	91.48	269.52	7297.17	-1122.79	-6847.42	0.00	6927.89
14674.00	90.31	269.13	7295.78	-1123.83	-6936.40	0.00	7016.48
14764.00	90.62	269.89	7295.05	-1124.60	-7026.39	0.00	7106.05
14854.00	90.68	269.23	7294.03	-1125.29	-7116.38	0.00	7195.60
14944.00	90.46	269.07	7293.13	-1126.63	-7206.37	0.00	7285.22
15033.00	91.78	269.72	7291.39	-1127.57	-7295.34	0.00	7373.80
15123.00	91.60	268.91	7288.74	-1128.64	-7385.30	0.00	7463.36
15212.00	91.02	269.86	7286.70	-1129.60	-7474.27	0.00	7551.92
15302.00	91.14	267.26	7285.01	-1131.86	-7564.21	0.00	7641.60
15392.00	91.14	269.15	7283.21	-1134.68	-7654.15	0.00	7731.33
15481.00	91.17	269.31	7281.42	-1135.87	-7743.12	0.00	7819.93
15571.00	89.85	269.03	7280.62	-1137.18	-7833.11	0.00	7909.54
15661.00	90.99	269.23	7279.96	-1138.54	-7923.09	0.00	7999.17
15751.00	91.05	268.91	7278.36	-1140.01	-8013.07	0.00	8088.79
15840.00	92.25	269.84	7275.80	-1140.98	-8102.02	0.00	8177.34
15930.00	92.15	269.62	7272.34	-1141.40	-8191.95	0.00	8266.81
16020.00	91.88	269.38	7269.18	-1142.18	-8281.89	0.00	8356.33
16110.00	91.85	269.31	7266.25	-1143.21	-8371.84	0.00	8445.88
16199.00	91.94	269.38	7263.30	-1144.23	-8460.79	0.00	8534.43
16289.00	92.06	270.59	7260.16	-1144.25	-8550.73	0.00	8623.87
16379.00	91.91	269.34	7257.05	-1144.31	-8640.67	0.00	8713.31
16469.00	91.94	269.24	7254.02	-1145.42	-8730.62	0.00	8802.86
16556.00	92.49	268.95	7250.66	-1146.80	-8817.54	0.00	8894.44
16646.00	91.26	267.31	7247.71	-1149.73	-8907.44	0.00	8979.15
16735.00	91.17	267.25	7245.83	-1153.95	-8996.32	0.00	9067.97
16825.00	91.23	269.60	7243.94	-1156.43	-9086.26	0.00	9157.67
16915.00	91.48	270.09	7241.81	-1156.67	-9176.23	0.00	9247.16
17005.00	91.54	268.85	7239.44	-1157.50	-9266.20	0.00	9336.70
17094.00	91.17	267.16	7237.34	-1160.60	-9355.11	0.00	9425.45
17184.00	90.03	269.92	7236.40	-1162.89	-9445.07	0.00	9515.14
17274.00	90.68	275.08	7235.84	-1158.97	-9534.95	0.00	9604.10
17364.00	89.23	274.71	7235.91	-1151.29	-9624.62	0.00	9692.44
17453.00	89.35	266.73	7237.01	-1150.17	-9713.54	0.00	9780.74
17543.00	90.34	264.54	7237.26	-1157.02	-9803.27	0.00	9870.69
17633.00	91.23	266.54	7236.02	-1164.02	-9892.98	0.00	9960.64
17722.00	91.32	268.66	7234.04	-1167.74	-9981.88	0.00	10049.43
17812.00	89.38	267.61	7233.49	-1170.67	-10071.82	0.00	10139.18
17901.00	90.18	268.91	7233.83	-1173.38	-10160.78	0.00	10227.92
17991.00	89.97	270.99	7233.72	-1173.45	-10250.77	0.00	10317.41
18081.00	90.06	273.62	7233.69	-1169.84	-10340.69	0.00	10406.44
18170.00	89.94	274.11	7233.69	-1163.84	-10429.49	0.00	10494.10
18260.00	89.97	272.98	7233.76	-1158.27	-10519.31	0.00	10582.83
18350.00	90.09	271.73	7233.72	-1154.57	-10609.24	0.00	10671.85
18439.00	90.25	271.56	7233.45	-1152.02	-10698.20	0.00	10760.04
18529.00	89.97	267.47	7233.28	-1152.78	-10788.18	0.00	10849.59
18547.00	90.18	266.00	7233.26	-1153.80	-10806.15	0.00	10867.57
18571.00	90.18	266.00	7233.18	-1155.48	-10830.09	0.00	10891.55