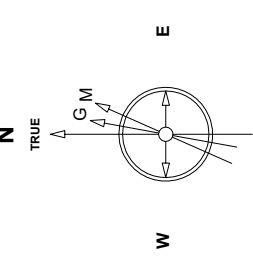


Great Western Operating Company, LLC

Location	Colorado	Slot	N18 - Postle IC 09-142HC
Field	Wattenburg	Well	Postle IC 09-142HC
Installation	Postle West	Wellbore	Postle IC 09-142HC (AWB)

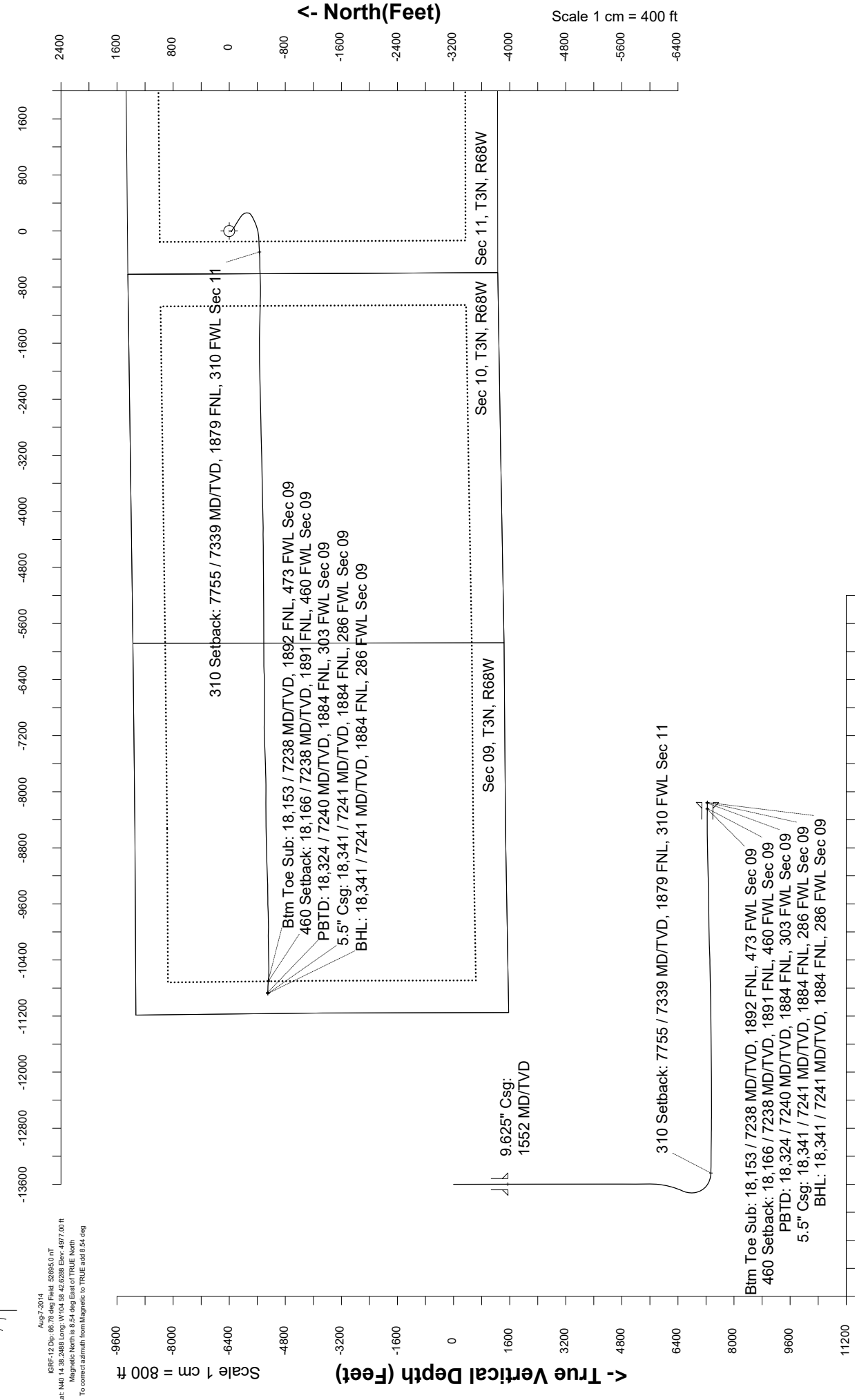
Created by: rmmount
 Date plotted: 12-May-2020
 Plot reference is Postle IC 09-142HC (AWB).
 Ref wellpath is Postle IC 09-142HC (AWP#1).
 Coordinates are in Feet reference N18 - Postle IC 09-142HC.
 True Vertical Depths are reference Rig Datum.
 Measured Depths are reference Rig Datum.
 Rig Datum: Actual Datum #1
 Rig Datum to Mean Sea Level: 4997.00 ft.
 Plot North is aligned to TRUE North.



Aug 7, 2014
 IGRF-12.Dat (62.78 deg Field) S2685.0.0.T
 Lat: N40 14.38 2488 Long: W104 58 42.6288 Elev: 4977.00 ft
 Magnetic North is 8.54 deg East of TRUE North
 To correct azimuth from Magnetic to TRUE add 8.54 deg

Scale 1 cm = 400 ft

Scale 1 cm = 400 ft



Scale 1 cm = 800 ft

Vertical Section (Feet) ->

Azimuth 267.10 with reference 0.00 N, 0.00 E from N18 - Postle IC 09-142HC

← North(Feet)

Scale 1 cm = 400 ft

Scale 1 cm = 800 ft

← True Vertical Depth (Feet)

Great Western Operating Co, LLC
 Directional Survey Report
 Wellpath: Postle IC 09-142HC
 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	6.10	14.00	0.00	0.00	0.00	0.00
92.00	0.31	6.10	92.00	0.21	0.02	0.40	-0.03
180.00	0.35	232.15	180.00	0.28	-0.16	0.69	0.15
272.00	0.79	203.76	271.99	-0.47	-0.64	0.55	0.66
364.00	1.19	177.40	363.98	-2.01	-0.85	0.65	0.95
454.00	1.80	178.19	453.95	-4.35	-0.77	0.68	0.99
544.00	2.42	184.25	543.89	-7.66	-0.86	0.73	1.25
634.00	2.24	168.87	633.81	-11.28	-0.66	0.72	1.23
724.00	2.29	164.91	723.74	-14.74	0.14	0.18	0.60
813.00	2.07	167.38	812.68	-18.03	0.96	0.27	-0.04
903.00	1.85	172.21	902.63	-21.05	1.51	0.31	-0.44
993.00	1.80	177.40	992.58	-23.90	1.77	0.19	-0.56
1083.00	1.23	194.62	1082.55	-26.25	1.59	0.80	-0.26
1173.00	1.36	202.53	1172.53	-28.17	0.94	0.25	0.49
1263.00	0.97	208.33	1262.51	-29.83	0.17	0.45	1.34
1353.00	0.26	208.42	1352.50	-30.68	-0.29	0.79	1.84
1443.00	0.31	268.45	1442.50	-30.87	-0.63	0.32	2.19
1501.00	0.09	278.03	1500.50	-30.86	-0.83	0.38	2.40
1576.00	0.47	345.61	1575.50	-30.56	-0.97	0.59	2.51
1666.00	0.09	280.88	1665.50	-30.19	-1.13	0.49	2.66
1756.00	0.06	210.55	1755.50	-30.21	-1.22	0.10	2.75
1845.00	0.41	36.04	1844.50	-30.00	-1.06	0.53	2.58
1935.00	0.07	221.86	1934.50	-29.78	-0.91	0.53	2.41
2024.00	0.18	271.70	2023.50	-29.81	-1.08	0.16	2.59
2113.00	0.16	300.49	2112.50	-29.75	-1.33	0.10	2.83
2203.00	0.13	214.11	2202.50	-29.77	-1.50	0.22	3.00
2292.00	0.31	22.15	2291.50	-29.63	-1.46	0.49	2.96
2381.00	0.10	214.39	2380.50	-29.47	-1.41	0.46	2.90
2471.00	0.07	121.53	2470.50	-29.56	-1.41	0.14	2.91
2561.00	0.09	271.03	2560.50	-29.59	-1.44	0.17	2.93
2650.00	0.11	188.50	2649.50	-29.67	-1.52	0.15	3.02
2740.00	0.06	10.70	2739.50	-29.71	-1.52	0.19	3.02
2829.00	0.15	281.09	2828.50	-29.64	-1.63	0.18	3.13
2919.00	0.10	8.59	2918.50	-29.54	-1.73	0.20	3.23
3009.00	0.20	263.89	3008.50	-29.48	-1.88	0.27	3.37
3098.00	0.19	257.51	3097.50	-29.53	-2.18	0.03	3.67
3187.00	0.50	255.74	3186.49	-29.66	-2.70	0.35	4.19
3277.00	0.26	286.37	3276.49	-29.70	-3.27	0.34	4.77
3367.00	0.26	84.22	3366.49	-29.62	-3.26	0.57	4.76
3456.00	0.14	301.68	3455.49	-29.54	-3.16	0.43	4.65
3545.00	0.19	237.60	3544.49	-29.56	-3.37	0.20	4.87
3635.00	0.11	309.97	3634.49	-29.59	-3.57	0.21	5.06
3725.00	0.03	135.17	3724.49	-29.55	-3.62	0.16	5.11
3814.00	0.06	157.48	3813.49	-29.61	-3.58	0.04	5.08
3904.00	0.28	251.75	3903.49	-29.72	-3.77	0.32	5.27
3993.00	0.43	201.12	3992.49	-30.10	-4.10	0.37	5.62
4083.00	0.23	151.63	4082.49	-30.58	-4.13	0.37	5.68
4172.00	0.10	285.16	4171.49	-30.71	-4.12	0.35	5.67
4261.00	0.15	12.28	4260.49	-30.58	-4.17	0.20	5.72
4351.00	0.07	238.94	4350.49	-30.49	-4.20	0.23	5.73
4441.00	0.07	10.77	4440.49	-30.47	-4.23	0.14	5.77
4530.00	0.11	196.14	4529.49	-30.49	-4.25	0.20	5.79
4620.00	0.20	244.18	4619.49	-30.65	-4.41	0.17	5.96
4709.00	0.06	156.24	4708.49	-30.76	-4.53	0.23	6.08
4799.00	0.09	26.54	4798.49	-30.74	-4.48	0.15	6.03
4889.00	0.10	28.18	4888.49	-30.60	-4.41	0.00	5.96
4978.00	0.10	297.49	4977.49	-30.50	-4.45	0.16	5.98
5068.00	0.11	359.28	5067.49	-30.38	-4.52	0.12	6.05
5157.00	0.16	241.15	5156.49	-30.35	-4.63	0.26	6.16
5247.00	0.10	34.69	5246.49	-30.35	-4.69	0.28	6.22
5337.00	0.14	28.58	5336.49	-30.19	-4.60	0.05	6.12
5426.00	0.07	274.40	5425.49	-30.09	-4.60	0.20	6.11
5515.00	0.21	271.46	5514.49	-30.08	-4.81	0.16	6.33
5605.00	0.34	237.81	5604.48	-30.22	-5.21	0.22	6.73
5695.00	2.27	126.22	5694.46	-31.41	-3.99	2.68	5.58

MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	DLS [deg/100ft]	Vertical Section[ft]
5784.00	6.02	126.96	5783.21	-35.26	1.16	4.21	0.63
5874.00	8.04	126.09	5872.53	-41.81	10.02	2.25	-7.89
5964.00	10.65	124.11	5961.33	-50.18	21.99	2.92	-19.42
6053.00	13.80	124.12	6048.30	-60.75	37.59	3.54	-34.47
6143.00	17.28	120.15	6135.00	-73.49	58.04	4.04	-54.25
6233.00	18.49	121.83	6220.65	-87.73	81.73	1.46	-77.18
6322.00	21.34	121.20	6304.32	-103.56	107.58	3.21	-102.20
6412.00	24.59	121.47	6387.17	-121.83	137.56	3.61	-131.22
6501.00	27.03	122.31	6467.29	-142.31	170.45	2.77	-163.03
6591.00	29.41	124.08	6546.59	-165.62	206.04	2.80	-197.40
6680.00	24.10	140.96	6626.15	-192.04	235.65	10.36	-225.63
6770.00	20.05	157.21	6709.61	-220.57	253.23	8.10	-241.74
6859.00	17.30	177.23	6794.00	-247.89	259.78	7.79	-246.90
6949.00	21.98	194.58	6878.81	-277.60	256.19	8.26	-241.81
7038.00	24.13	229.96	6961.09	-305.56	237.98	15.53	-222.21
7128.00	30.22	242.17	7041.18	-328.00	203.80	9.14	-186.94
7217.00	37.92	243.35	7114.85	-350.76	159.49	8.68	-141.53
7307.00	46.83	247.76	7181.29	-375.64	104.27	10.43	-85.12
7396.00	56.68	254.23	7236.35	-398.10	38.24	12.44	-18.04
7485.00	65.20	261.11	7279.58	-414.50	-37.67	11.71	58.60
7575.00	73.76	266.18	7311.11	-423.71	-121.34	10.87	142.63
7664.00	80.67	269.73	7330.80	-426.77	-208.01	8.68	229.35
7754.00	88.31	265.81	7339.44	-430.27	-297.44	9.53	318.84
7844.00	89.45	267.93	7341.20	-435.18	-387.29	2.67	408.82
7933.00	89.75	268.65	7341.82	-437.84	-476.24	0.88	497.79
8022.00	89.75	269.70	7342.21	-439.12	-565.23	1.18	586.73
8112.00	89.42	269.24	7342.86	-439.95	-655.23	0.63	676.65
8202.00	89.32	265.30	7343.85	-444.24	-745.10	4.38	766.63
8291.00	88.98	271.60	7345.17	-446.64	-834.01	7.09	855.55
8381.00	89.23	271.06	7346.58	-444.55	-923.98	0.66	945.29
8470.00	89.14	271.47	7347.85	-442.59	-1012.95	0.47	1034.05
8560.00	89.29	270.30	7349.08	-441.20	-1102.93	1.31	1123.84
8649.00	89.20	272.10	7350.25	-439.34	-1191.89	2.02	1212.60
8739.00	89.23	271.14	7351.48	-436.79	-1281.85	1.07	1302.31
8828.00	89.23	271.53	7352.68	-434.72	-1370.82	0.44	1391.06
8918.00	89.14	270.20	7353.96	-433.36	-1460.80	1.48	1480.86
9007.00	88.98	270.33	7355.42	-432.95	-1549.78	0.23	1569.71
9097.00	90.49	271.01	7355.84	-431.90	-1639.77	1.84	1659.53
9187.00	89.38	270.52	7355.94	-430.70	-1729.76	1.35	1749.34
9276.00	89.26	269.51	7357.00	-430.67	-1818.75	1.14	1838.22
9365.00	89.57	268.72	7357.90	-432.05	-1907.74	0.95	1927.16
9455.00	88.71	268.55	7359.25	-434.19	-1997.70	0.97	2017.12
9544.00	88.89	268.25	7361.12	-436.67	-2086.65	0.39	2106.08
9634.00	90.22	268.60	7361.82	-439.15	-2176.61	1.53	2196.05
9723.00	90.03	268.50	7361.62	-441.40	-2265.58	0.24	2285.02
9813.00	89.82	268.89	7361.74	-443.45	-2355.56	0.49	2374.98
9903.00	90.25	268.85	7361.69	-445.22	-2445.54	0.48	2464.94
9992.00	90.49	268.47	7361.11	-447.31	-2534.51	0.50	2553.90
10082.00	90.55	268.37	7360.29	-449.79	-2624.47	0.13	2643.88
10171.00	90.86	268.73	7359.20	-452.04	-2713.44	0.53	2732.84
10261.00	90.52	269.03	7358.12	-453.80	-2803.41	0.50	2822.79
10351.00	90.68	269.04	7357.17	-455.31	-2893.40	0.18	2912.73
10440.00	90.71	268.57	7356.09	-457.17	-2982.37	0.53	3001.69
10529.00	90.65	268.16	7355.04	-459.71	-3071.33	0.47	3090.66
10619.00	90.52	268.35	7354.12	-462.45	-3161.28	0.26	3180.64
10708.00	90.55	268.65	7353.29	-464.78	-3250.25	0.34	3269.61
10798.00	91.05	269.10	7352.03	-466.55	-3340.22	0.75	3359.55
10888.00	90.58	269.14	7350.75	-467.93	-3430.20	0.52	3449.49
10978.00	90.98	269.66	7349.53	-468.87	-3520.19	0.73	3539.41
11067.00	90.77	268.69	7348.17	-470.15	-3609.17	1.12	3628.34
11157.00	89.82	268.72	7347.70	-472.19	-3699.14	1.06	3718.30
11246.00	89.97	268.28	7347.87	-474.52	-3788.11	0.52	3807.27
11336.00	89.94	269.10	7347.94	-476.57	-3878.09	0.91	3897.24
11426.00	90.18	268.61	7347.84	-478.37	-3968.07	0.61	3987.19
11515.00	90.65	268.87	7347.20	-480.33	-4057.04	0.60	4076.16
11605.00	90.55	268.00	7346.26	-482.79	-4147.00	0.97	4166.12
11695.00	90.37	270.40	7345.53	-484.04	-4236.99	2.67	4256.05
11784.00	90.86	270.19	7344.58	-483.58	-4325.98	0.60	4344.91
11874.00	90.95	268.87	7343.16	-484.32	-4415.96	1.47	4434.82
11964.00	90.46	269.67	7342.05	-485.47	-4505.95	1.04	4524.74
12053.00	90.77	269.58	7341.09	-486.05	-4594.94	0.36	4613.65
12143.00	90.61	269.53	7340.01	-486.75	-4684.93	0.19	4703.56
12232.00	90.68	269.62	7339.01	-487.41	-4773.92	0.13	4792.47

MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	DLS [deg/100ft]	Vertical Section[ft]
12322.00	90.74	269.58	7337.89	-488.04	-4863.91	0.08	4882.38
12411.00	90.68	269.67	7336.79	-488.62	-4952.91	0.12	4971.29
12501.00	90.68	269.51	7335.72	-489.27	-5042.90	0.18	5061.20
12590.00	90.80	269.48	7334.57	-490.05	-5131.89	0.14	5150.11
12679.00	90.77	269.63	7333.35	-490.74	-5220.87	0.17	5239.02
12769.00	90.62	269.70	7332.26	-491.27	-5310.87	0.18	5328.92
12859.00	90.98	269.92	7331.00	-491.57	-5400.86	0.47	5418.82
12948.00	91.26	269.59	7329.26	-491.95	-5489.84	0.49	5507.70
13038.00	91.20	269.71	7327.33	-492.50	-5579.82	0.15	5597.59
13127.00	90.80	269.80	7325.78	-492.88	-5668.80	0.46	5686.48
13217.00	91.02	269.67	7324.35	-493.29	-5758.79	0.28	5776.38
13306.00	91.35	269.79	7322.51	-493.71	-5847.77	0.39	5865.26
13396.00	90.80	270.18	7320.82	-493.74	-5937.75	0.75	5955.13
13485.00	91.63	270.07	7318.93	-493.54	-6026.73	0.94	6043.99
13575.00	91.14	269.65	7316.76	-493.76	-6116.70	0.72	6133.86
13665.00	91.54	270.14	7314.65	-493.93	-6206.68	0.70	6223.72
13754.00	90.89	264.87	7312.77	-497.80	-6295.54	5.96	6312.67
13843.00	91.94	268.42	7310.57	-503.01	-6384.35	4.16	6401.62
13933.00	91.94	270.40	7307.52	-503.93	-6474.29	2.20	6491.50
14022.00	91.20	269.90	7305.08	-503.70	-6563.25	1.00	6580.34
14112.00	93.14	270.52	7301.67	-503.37	-6653.18	2.26	6670.13
14201.00	92.06	270.67	7297.64	-502.45	-6742.09	1.23	6758.87
14291.00	92.12	270.82	7294.35	-501.28	-6832.02	0.18	6848.63
14381.00	91.97	270.41	7291.14	-500.31	-6921.96	0.48	6938.41
14470.00	91.08	269.99	7288.77	-500.00	-7010.92	1.11	7027.24
14557.00	89.45	269.98	7288.37	-500.02	-7097.92	1.87	7114.13
14647.00	91.29	270.24	7287.79	-499.85	-7187.91	2.06	7204.00
14737.00	90.80	267.18	7286.15	-501.88	-7277.86	3.44	7293.94
14826.00	90.89	265.71	7284.84	-507.39	-7366.68	1.65	7382.92
14916.00	90.74	267.94	7283.56	-512.38	-7456.53	2.48	7472.90
15006.00	91.32	268.74	7281.94	-514.98	-7546.47	1.10	7562.87
15095.00	90.68	268.61	7280.38	-517.04	-7635.44	0.73	7651.82
15185.00	90.89	268.51	7279.15	-519.30	-7725.40	0.26	7741.78
15275.00	90.92	268.01	7277.73	-522.04	-7815.35	0.56	7831.75
15364.00	90.49	269.13	7276.64	-524.26	-7904.31	1.35	7920.71
15454.00	90.80	271.56	7275.62	-523.72	-7994.30	2.72	8010.56
15544.00	90.98	271.75	7274.22	-521.12	-8084.25	0.29	8100.26
15634.00	90.83	269.25	7272.80	-520.33	-8174.23	2.78	8190.08
15723.00	90.74	268.81	7271.58	-521.84	-8263.20	0.50	8279.03
15813.00	90.89	269.02	7270.30	-523.54	-8353.18	0.29	8368.97
15902.00	91.17	268.91	7268.70	-525.15	-8442.15	0.34	8457.91
15992.00	91.23	268.78	7266.82	-526.96	-8532.11	0.16	8547.85
16082.00	91.14	268.61	7264.96	-529.01	-8622.07	0.21	8637.79
16171.00	90.92	268.74	7263.36	-531.07	-8711.03	0.29	8726.75
16261.00	91.45	269.57	7261.50	-532.40	-8801.00	1.09	8816.67
16350.00	91.23	269.20	7259.41	-533.35	-8889.97	0.48	8905.57
16439.00	91.45	269.57	7257.33	-534.31	-8978.94	0.48	8994.48
16529.00	91.17	266.60	7255.27	-537.31	-9068.86	3.31	9084.43
16618.00	91.48	266.80	7253.22	-542.44	-9157.69	0.41	9173.40
16708.00	91.41	267.62	7250.95	-546.81	-9247.55	0.91	9263.37
16797.00	91.29	269.70	7248.85	-548.90	-9336.50	2.34	9352.31
16887.00	91.32	269.59	7246.80	-549.45	-9426.47	0.13	9442.20
16976.00	91.42	269.41	7244.67	-550.23	-9515.44	0.23	9531.10
17066.00	91.39	269.71	7242.47	-550.92	-9605.41	0.33	9620.99
17156.00	91.26	267.36	7240.38	-553.22	-9695.35	2.61	9710.93
17245.00	91.35	266.08	7238.36	-558.31	-9784.18	1.44	9799.90
17334.00	90.49	270.94	7236.93	-560.62	-9873.11	5.54	9888.83
17424.00	89.48	272.13	7236.95	-558.21	-9963.08	1.73	9978.56
17513.00	89.91	269.46	7237.43	-556.98	-10052.06	3.04	10067.37
17602.00	90.12	269.10	7237.40	-558.10	-10141.05	0.47	10156.30
17692.00	90.18	269.17	7237.17	-559.46	-10231.04	0.10	10246.24
17781.00	90.18	268.35	7236.89	-561.38	-10320.02	0.92	10335.21
17871.00	90.86	269.41	7236.07	-563.14	-10410.00	1.40	10425.16
17960.00	90.15	268.78	7235.29	-564.55	-10498.98	1.07	10514.10
18050.00	89.11	271.44	7235.87	-564.37	-10588.97	3.17	10603.96
18140.00	88.49	274.70	7237.75	-559.56	-10678.81	3.69	10693.44
18239.00	89.48	272.91	7239.51	-552.99	-10777.57	2.07	10791.74
18317.00	89.26	269.66	7240.36	-551.24	-10855.53	4.18	10869.52
18341.00	89.26	269.66	7240.67	-551.38	-10879.53	0.00	10893.50