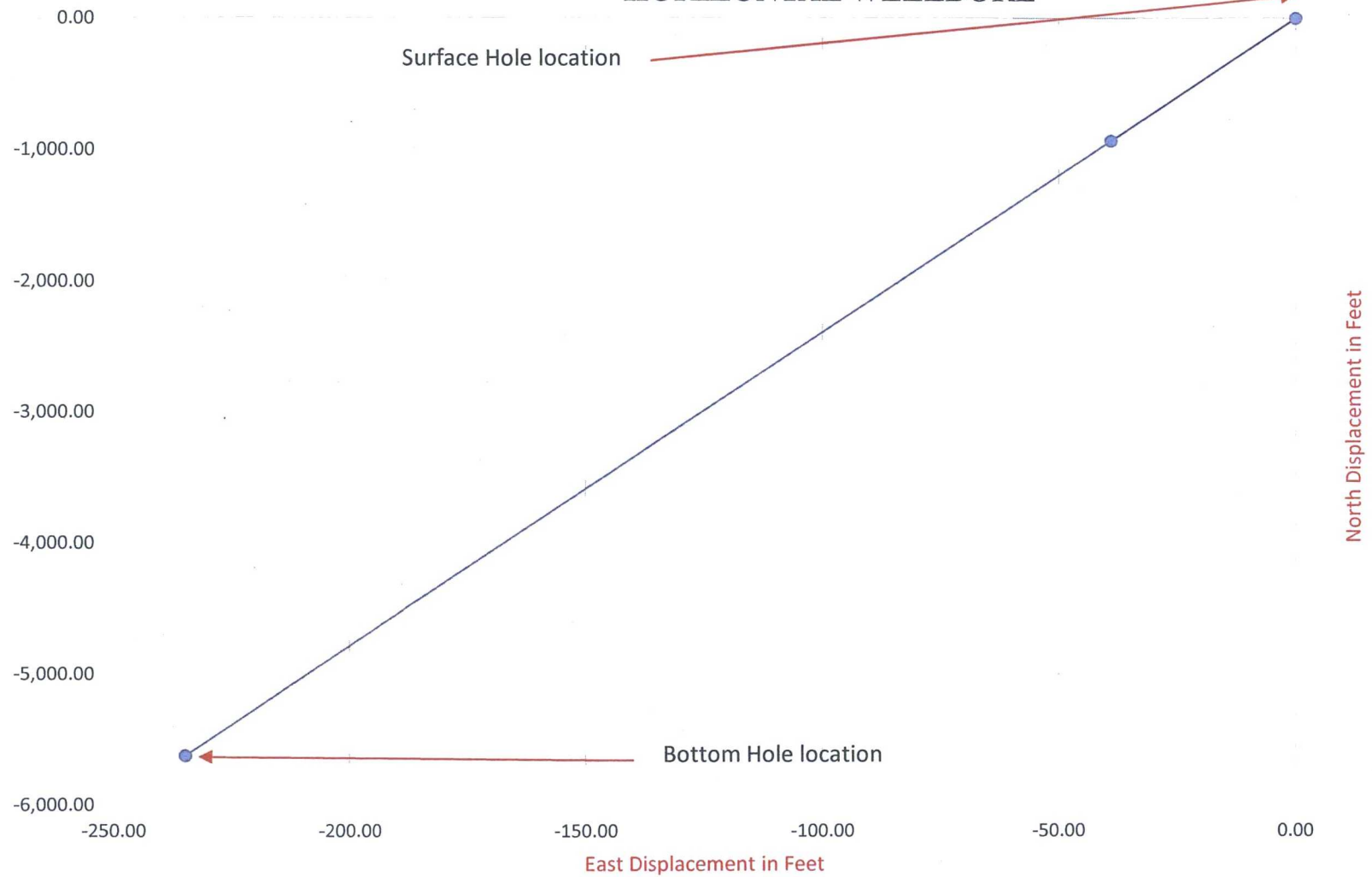
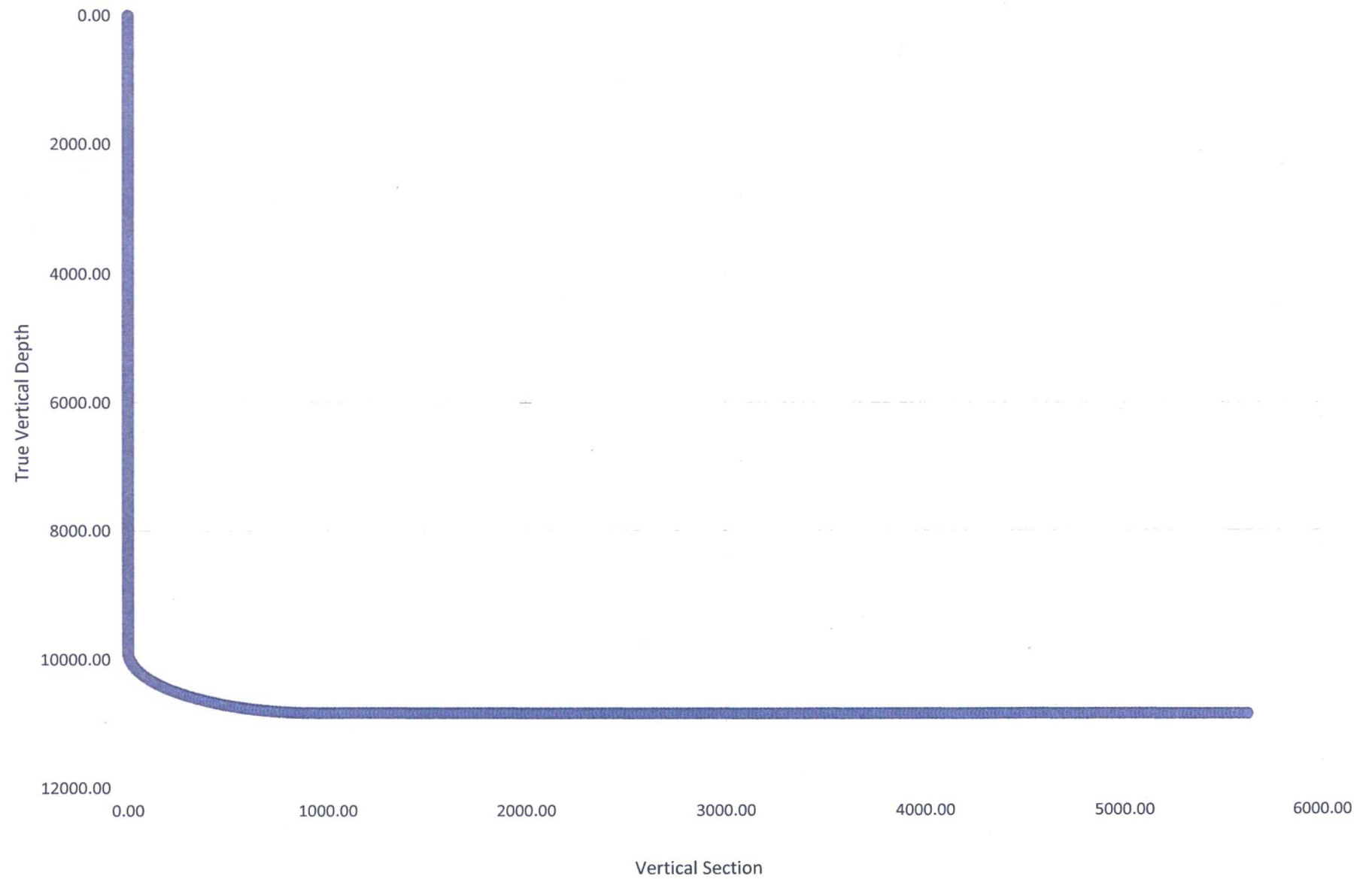


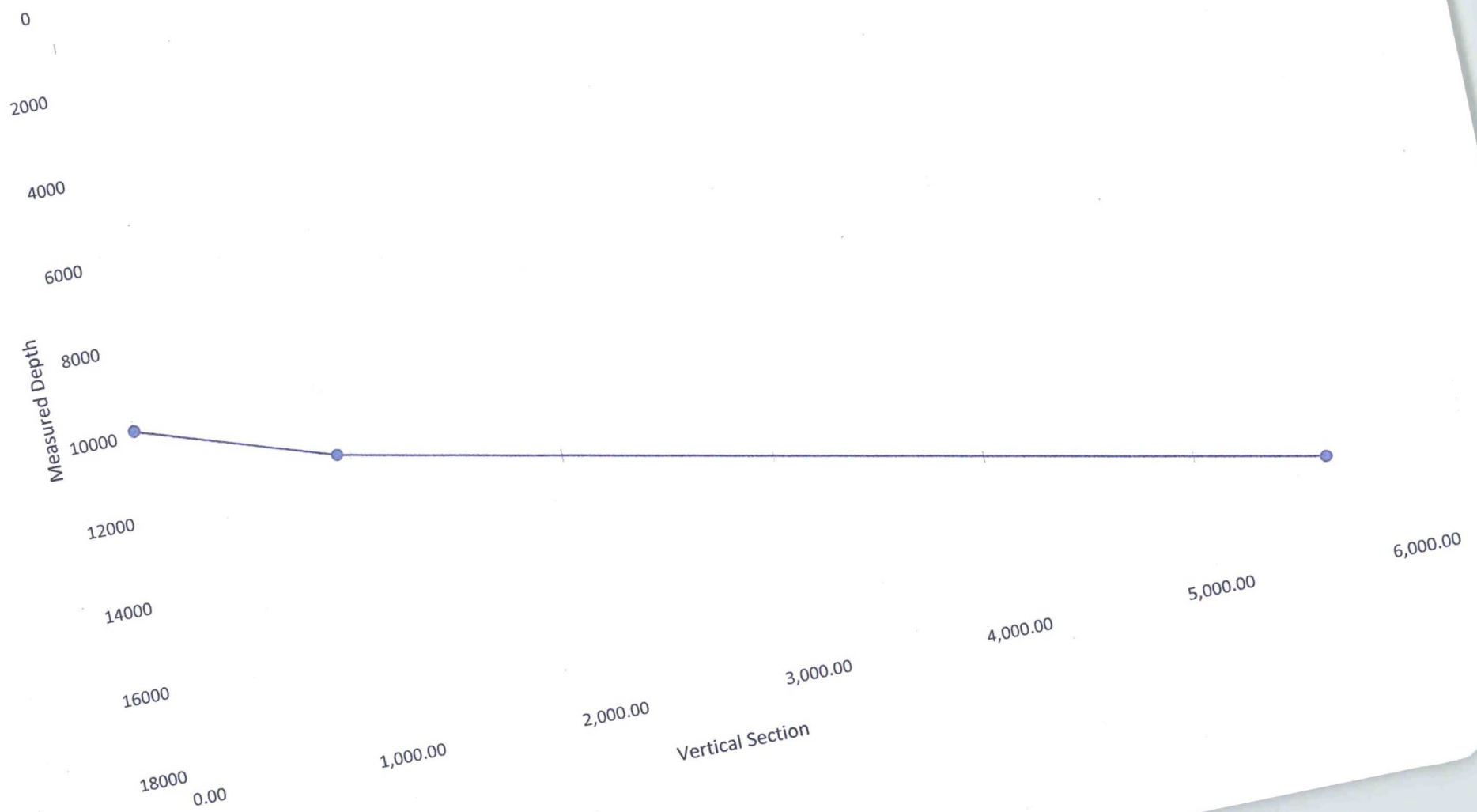
**Lea 9 Fed 4H
Plan View
HORIZONTAL WELLBORE**



Lea 9 Fed 4H
Horizontal Well



Lea 9 Fed 4H
Vertical Section against Measured Depth
HORIZONTAL WELLBORE



Lea 9 Fed 4H HORIZONTAL WELLBORE								Notes
MD	Inc	Az	TVD	N	E	DLS	V/S	
ft	deg	deg	ft	ft	ft	deg/100'	ft	
0	0	0	0.00	0.00	0.00			
9,873	0	0	9,873.00	0.00	0.00	0.00	0.00	
9,893	1.2	182.4	9,893.00	-0.21	0.00	6.00	0.21	
11,353	89.6	182.4	10,827.60	-934.00	-39.00	6.00	934.50	Intersection of Green sand
16,038	89.6	182.4	10,860.00	-5,619.80	-235.00	0.00	5,619.00	Wellbore dipping with sand


 27 Oct 2016

HOBBBS OCD

MAR 09 2017

RECEIVED

4H
Level
shing
Wolfcamp top
Wolfcamp top
3rd Bone Spring top
Bone Spring green intersection at 10833 (7" landin
Bone Spring green horizontal TD at 10864
Degree per 100 Feet

3627.1
-7275
10902.1 top
10827 btm
10860

SW/SW 4-20S-34E
SW/SW 9-20S-34E

Ground Location

Bottom Hole

2.666667

x (East)		y (North)		x (East)		y (North)	
Meters	Feet	Meters	Feet	Meters	Feet	Meters	Feet
634221.4	3607485.8	2080246.2	11832553.4	634149.5	3605773.6	2080010.4	11826937.4
-71.9		-1712.2		-235.8		-5616.0	
E/W		N/S		E/W		N/S	
2080011.7		11826958.5		2080246.2		11832553.4	
2080246.2		11832553.4		2080246.2		11832553.4	
0.00		0.00		0.00		0.00	
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0	15.60	182.40	10129.80	35.18	-35.15	-1.47	2080244.7	11832518.3	1.20	1.80	0.042	0.217	5.172	5.176	15	20.000	20.000	15.600	5.176	19.319	5.176	0.105	100.000	954.9
0	16.80	182.40	10149.01	40.76	-40.72	-1.71	2080244.5	11832512.7	1.20	1.80	0.042	0.234	5.575	5.580	16.2	20.000	20.000	16.800	5.580	19.206	5.580	0.105	100.000	954.9
0	18.00	182.40	10168.09	46.74	-46.70	-1.96	2080244.2	11832506.7	1.20	1.80	0.042	0.250	5.976	5.981	17.4	20.000	20.000	18.000	5.981	19.085	5.981	0.105	100.000	954.9
0	19.20	182.40	10187.05	53.12	-53.07	-2.22	2080243.7	11832500.4	1.20	1.80	0.042	0.267	6.374	6.379	18.6	20.000	20.000	19.200	6.379	18.955	6.379	0.105	100.000	954.9
0	20.40	182.40	10205.87	59.89	-59.84	-2.51	2080243.0	11832493.6	1.20	1.80	0.042	0.284	6.769	6.775	19.8	20.000	20.000	20.400	6.775	18.818	6.775	0.105	100.000	954.9
0	21.60	182.40	10224.54	67.06	-67.00	-2.81	2080243.4	11832486.4	1.20	1.80	0.042	0.300	7.161	7.167	21	20.000	20.000	21.600	7.167	18.672	7.167	0.105	100.000	954.9
0	22.80	182.40	10243.06	74.62	-74.55	-3.12	2080243.1	11832478.9	1.20	1.80	0.042	0.316	7.550	7.557	22.2	20.000	20.000	22.800	7.557	18.517	7.557	0.105	100.000	954.9
0	24.00	182.40	10261.41	82.56	-82.49	-3.46	2080242.7	11832470.9	1.20	1.80	0.042	0.333	7.936	7.943	23.4	20.000	20.000	24.000	7.943	18.355	7.943	0.105	100.000	954.9
0	25.20	182.40	10279.60	90.89	-90.81	-3.81	2080242.4	11832462.6	1.20	1.80	0.042	0.349	8.318	8.326	24.6	20.000	20.000	25.200	8.326	18.185	8.326	0.105	100.000	954.9
0	26.40	182.40	10297.60	99.59	-99.50	-4.17	2080242.0	11832453.9	1.20	1.80	0.042	0.365	8.697	8.705	25.8	20.000	20.000	26.400	8.705	18.006	8.705	0.105	100.000	954.9
0	27.60	182.40	10315.42	108.67	-108.57	-4.55	2080241.6	11832444.8	1.20	1.80	0.042	0.380	9.072	9.080	27	20.000	20.000	27.600	9.080	17.820	9.080	0.105	100.000	954.9
0	28.80	182.40	10333.05	118.12	-118.02	-4.95	2080241.2	11832435.4	1.20	1.80	0.042	0.396	9.443	9.451	28.2	20.000	20.000	28.800	9.451	17.626	9.451	0.105	100.000	954.9
0	30.00	182.40	10350.47	127.94	-127.83	-5.36	2080240.8	11832425.6	1.20	1.80	0.042	0.411	9.809	9.818	29.4	20.000	20.000	30.000	9.818	17.424	9.818	0.105	100.000	954.9
0	31.20	182.40	10367.69	138.12	-138.00	-5.78	2080240.4	11832415.4	1.20	1.80	0.042	0.426	10.172	10.181	30.6	20.000	20.000	31.200	10.181	17.215	10.181	0.105	100.000	954.9
0	32.40	182.40	10384.69	148.66	-148.53	-6.23	2080240.0	11832404.9	1.20	1.80	0.042	0.441	10.530	10.539	31.8	20.000	20.000	32.400	10.539	16.998	10.539	0.105	100.000	954.9
0	33.60	182.40	10401.46	159.55	-159.41	-6.68	2080239.5	11832394.0	1.20	1.80	0.042	0.456	10.883	10.893	33	20.000	20.000	33.600	10.893	16.773	10.893	0.105	100.000	954.9
0	34.80	182.40	10418.00	170.79	-170.64	-7.15	2080239.0	11832382.8	1.20	1.80	0.042	0.471	11.232	11.242	34.2	20.000	20.000	34.800	11.242	16.542	11.242	0.105	100.000	954.9
0	36.00	182.40	10434.30	182.38	-182.22	-7.64	2080238.6	11832371.2	1.20	1.80	0.042	0.485	11.575	11.586	35.4	20.000	20.000	36.000	11.586	16.303	11.586	0.105	100.000	954.9
0	37.20	182.40	10450.36	194.30	-194.13	-8.14	2080238.1	11832359.3	1.20	1.80	0.042	0.499	11.914	11.924	36.6	20.000	20.000	37.200	11.924	16.056	11.924	0.105	100.000	954.9
0	38.40	182.40	10466.16	206.56	-206.38	-8.65	2080237.5	11832347.0	1.20	1.80	0.042	0.513	12.247	12.258	37.8	20.000	20.000	38.400	12.258	15.803	12.258	0.105	100.000	954.9
0	39.60	182.40	10481.71	219.15	-218.96	-9.18	2080237.0	11832334.5	1.20	1.80	0.042	0.527	12.575	12.586	39	20.000	20.000	39.600	12.586	15.543	12.586	0.105	100.000	954.9
0	40.80	182.40	10496.98	232.06	-231.85	-9.72	2080236.5	11832321.6	1.20	1.80	0.042	0.541	12.898	12.909	40.2	20.000	20.000	40.800	12.909	15.276	12.909	0.105	100.000	954.9
0	42.00	182.40	10511.98	245.28	-245.07	-10.27	2080235.9	11832308.4	1.20	1.80	0.042	0.554	13.215	13.226	41.4	20.000	20.000	42.000	13.226	15.002	13.226	0.105	100.000	954.9
0	43.20	182.40	10526.71	258.82	-258.59	-10.84	2080235.4	11832294.8	1.20	1.80	0.042	0.567	13.526	13.538	42.6	20.000	20.000	43.200	13.538	14.722	13.538	0.105	100.000	954.9
0	44.40	182.40	10541.14	272.66	-272.42	-11.42	2080234.8	11832281.0	1.20	1.80	0.042	0.580	13.831	13.843	43.8	20.000	20.000	44.400	13.843	14.435	13.843	0.105	100.000	954.9
0	45.60	182.40	10555.28	286.81	-286.55	-12.01	2080234.2	11832266.9	1.20	1.80	0.042	0.592	14.130	14.142	45	20.000	20.000	45.600	14.142	14.142	14.142	0.105	100.000	954.9
0	46.80	182.40	10569.13	301.24	-300.98	-12.61	2080233.6	11832252.4	1.20	1.80	0.042	0.604	14.423	14.435	46.2	20.000	20.000	46.800	14.435	13.843	14.435	0.105	100.000	954.9
0	48.00	182.40	10582.66	315.96	-315.69	-13.23	2080233.0	11832237.7	1.20	1.80	0.042	0.616	14.709	14.722	47.4	20.000	20.000	48.000	14.722	13.538	14.722	0.105	100.000	954.9
0	49.20	182.40	10595.89	330.96	-330.67	-13.86	2080232.3	11832222.7	1.20	1.80	0.042	0.628	14.989	15.002	48.6	20.000	20.000	49.200	15.002	13.226	15.002	0.105	100.000	954.9
0	50.40	182.40	10608.80	346.24	-345.94	-14.50	2080231.7	11832207.5	1.20	1.80	0.042	0.640	15.263	15.276	49.8	20.000	20.000	50.400	15.276	12.909	15.276	0.105	100.000	954.9
0	51.60	182.40	10621.39	361.78	-361.47	-15.15	2080231.0	11832192.0	1.20	1.80	0.042	0.651	15.529	15.543	51	20.000	20.000	51.600	15.543	12.596	15.543	0.105	100.000	954.9
0	52.80	182.40	10633.64	377.59	-377.26	-15.81	2080230.4	11832176.2	1.20	1.80	0.042	0.662	15.789	15.803	52.2	20.000	20.000	52.800	15.803	12.258	15.803	0.105	100.000	954.9
0	54.00	182.40	10645.57	393.64	-393.30	-16.48	2080229.7	11832160.1	1.20	1.80	0.042	0.672	16.042	16.056	53.4	20.000	20.000	54.000	16.056	11.924	16.056	0.105	100.000	954.9
0	55.20	182.40	10657.15	409.95	-409.59	-17.17	2080229.0	11832143.8	1.20	1.80	0.042	0.683	16.288	16.303	54.6	20.000	20.000	55.200	16.303	11.586	16.303	0.105	100.000	954.9
0	56.40	182.40	10668.40	426.49	-426.11	-17.86	2080228.3	11832127.3	1.20	1.80	0.042	0.693	16.527	16.542	55.8	20.000	20.000	56.400	16.542	11.242	16.542	0.105	100.000	954.9
0	57.60	182.40	10679.29	443.26	-442.87	-18.56	2080227.6	11832110.6	1.20	1.80	0.042	0.702	16.759	16.773	57	20.000	20.000	57.600	16.773	10.893	16.773	0.105	100.000	954.9
0	58.80	182.40	10689.83	460.26	-459.85	-19.27	2080226.9	11832093.6	1.20	1.80	0.042	0.712	16.983	16.998	58.2	20.000	20.000	58.800	16.998	10.539	16.998	0.105	100.000	954.9
0	60.00	182.40	10700.01	477.47	-477.05	-19.99	2080226.2	11832076.4	1.20	1.80	0.042	0.721	17.200	17.215	59.4	20.000	20.000	60.000	17.215	10.181	17.215	0.105	100.000	954.9
0	61.20	182.40	10709.83	494.90	-494.46	-20.72	2080225.5	11832059.0	1.20	1.80	0.042	0.730	17.409	17.424	60.6	20.000	20.000	61.200	17.424	9.818	17.424	0.105	100.000	954.9
0	62.40	182.40	10719.28	512.52	-512.07	-21.46	2080224.7	11832041.3	1.20	1.80	0.042	0.738	17.611	17.626	61.8	20.000	20.000	62.400	17.626	9.451	17.626	0.105	100.000	954.9
0	63.60	182.40	10728.36	530.34	-529.88	-22.21	2080224.0	11832023.5	1.20	1.80	0.042	0.746	17.804	17.820	63	20.000	20.000	63.600	17.820	9.080	17.820	0.105	100.000	954.9
0	64.80	182.40	10737.06	548.35	-547.87	-22.96	2080223.2	11832005.6	1.20	1.80	0.042	0.754	17.991	18.006	64.2	20.000	20.000	64.800	18.006	8.705	18.006	0.105	100.000	954.9
0	66.00	182.40	10745.33	566.54	-566.04	-23.72	2080222.5	11831987.4	1.20	1.80	0.042	0.761	18.169	18.185	65.4	20.000	20.000	66.000	18.185	8.326	18.185	0.105	100.000	954.9
0	67.20	182.40	10753.33	584.89	-584.38	-24.49	2080221.7	11831969.0	1.20	1.80	0.042	0.769	18.339	18.355	66.6	20.000	20.000	67.200	18.355	7.943	18.355	0.105	100.000	954.9
0	68.40	182.40	10760.89	603.41	-602.88	-25.27	2080220.9	11831950.5	1.20	1.80	0.042	0.775	18.501	18.517	67.8	20.000	20.000	68.400	18.517	7.557	18.517	0.105	100.000	954.9
0	69.60	182.40	10768.05	622.08	-621.53	-26.05	2080220.1	11831931.9	1.20	1.80	0.042	0.782	18.655	18.672	69	20.000	20.000	69.600	18.672	7.167	18.672			

0	89.60	182.40	10855.38	4914.86	-4910.54	-205.81				2080040.4	11827642.9	0.00	0.00	0.042	0.837	19.982	20.000	89.6	20.000	20.000	20.000	89.600	20.000	0.140	20.000	0.105	100.000	954.9
0	89.60	182.40	10855.52	4934.85	-4930.53	-206.65				2080039.5	11827622.9	0.00	0.00	0.042	0.837	19.982	20.000	89.6	20.000	20.000	20.000	89.600	20.000	0.140	20.000	0.105	100.000	954.9
0	89.60	182.40	10855.66	4954.85	-4950.51	-207.49				2080038.7	11827602.9	0.00	0.00	0.042	0.837	19.982	20.000	89.6	20.000	20.000	20.000	89.600	20.000	0.140	20.000	0.105	100.000	954.9
0	89.60	182.40	10855.80	4974.85	-4970.49	-208.33				2080037.9	11827582.9	0.00	0.00	0.042	0.837	19.982	20.000	89.6	20.000	20.000	20.000	89.600	20.000	0.140	20.000	0.105	100.000	954.9
0	89.60	182.40	10855.94	4994.85	-4990.47	-209.16				2080037.0	11827563.0	0.00	0.00	0.042	0.837	19.982	20.000	89.6	20.000	20.000	20.000	89.600	20.000	0.140	20.000	0.105	100.000	954.9
0	89.60	182.40	10856.08	5014.85	-5010.45	-210.00				2080036.2	11827543.0	0.00	0.00	0.042	0.837	19.982	20.000	89.6	20.000	20.000	20.000	89.600	20.000	0.140	20.000	0.105	100.000	954.9
0	89.60	182.40	10856.22	5034.85	-5030.44	-210.84				2080035.4	11827523.0	0.00	0.00	0.042	0.837	19.982	20.000	89.6	20.000	20.000	20.000	89.600	20.000	0.140	20.000	0.105	100.000	954.9
0	89.60	182.40	10856.36	5054.85	-5050.42	-211.68				2080034.5	11827503.0	0.00	0.00	0.042	0.837	19.982	20.000	89.6	20.000	20.000	20.000	89.600	20.000	0.140	20.000	0.105	100.000	954.9
0	89.60	182.40	10856.50	5074.85	-5070.40	-212.51				2080033.7	11827483.0	0.00	0.00	0.042	0.837	19.982	20.000	89.6	20.000	20.000	20.000	89.600	20.000	0.140	20.000	0.105	100.000	954.9
0	89.60	182.40	10856.64	5094.85	-5090.38	-213.35				2080032.8	11827463.0	0.00	0.00	0.042	0.837	19.982	20.000	89.6	20.000	20.000	20.000	89.600	20.000	0.140	20.000	0.105	100.000	954.9
0	89.60	182.40	10856.78	5114.85	-5110.36	-214.19				2080032.0	11827443.1	0.00	0.00	0.042	0.837	19.982	20.000	89.6	20.000	20.000	20.000	89.600	20.000	0.140	20.000	0.105	100.000	954.9
0	89.60	182.40	10856.92	5134.85	-5130.35	-215.03				2080031.2	11827423.1	0.00	0.00	0.042	0.837	19.982	20.000	89.6	20.000	20.000	20.000	89.600	20.000	0.140	20.000	0.105	100.000	954.9
0	89.60	182.40	10857.06	5154.85	-5150.33	-215.86				2080030.3	11827403.1	0.00	0.00	0.042	0.837	19.982	20.000	89.6	20.000	20.000	20.000	89.600	20.000	0.140	20.000	0.105	100.000	954.9
0	89.60	182.40	10857.20	5174.85	-5170.31	-216.70				2080029.5	11827383.1	0.00	0.00	0.042	0.837	19.982	20.000	89.6	20.000	20.000	20.000	89.600						