APPENDIX III

Grain-Size Analysis Data

TABLE OF CONTENTS

LIST OF TABLES

1.0 INTRODUCTION

As of April 2000, GeoSea® is using a Malvern Mastersizer 2000 laser particle sizer for the grain-size analysis of sediments. This unit is state-of-the-art equipment. It is extremely accurate, the results are consistent, and it enables the determination of a large range of particle sizes using a single technique[1]. A laser particle sizer is also the most efficient way to analyze the large numbers of samples that are required in Sediment Trend Analysis. This Appendix describes the methodology used in our laboratory.

2.0 METHODOLOGY

2.1 Malvern Mastersizer 2000 laser particle sizer

The instrument is based on the principle of laser diffraction. Light from a low power helium-neon laser is used to form a collimated, monochromatic (red) beam of light which is the analyser beam. The unit also has a solid state blue light source. The shorter wavelength of the blue light allows for greater accuracy in the sub-micron range. Particles from sediment samples enter the beam via a dispersion tank that pumps the material, carried in water, through a sample cell. The resultant light scatter is incident onto the detector lens. The latter acts as a Fourier Transform Lens forming the far field diffraction patterns of the scattered light at its focal plane. Here a custom designed detector in the form of 52 concentric rings gathers the scattered light over a range of solid angles of scatter. When a particle is in the analyser beam its diffraction pattern is stationary and centred on the optical axis of the range lens. Un-scattered light is also focused onto an aperture on the detector. The total laser power exiting the optical system through this aperture enables measurement of the sample concentration.

In practice many particles are simultaneously present in the analyser beam and the scattered light measured on the detector is the sum of all individual patterns overlaid on the central axis. Our instrument is set to take 60,000 such measurements (snaps), which are then averaged to build up a light scattering characteristic for that sample based upon the population of individual particles. Applying the Mie theory of light scattering, the output from the detector is then processed by a computer, generating a final distribution.

Particles scatter light at angles related to their diameter (*i.e.*, the larger the particle, the smaller the angle of scatter and *vice versa*). Over the size range of interest, which is 0.02 micron (μ) and larger for this instrument, scattering is independent of the optical properties of the medium of suspension or the particles themselves. Through a process of constrained least squares fitting of theoretical scattering predictions to the observed data, the computer calculates a volume size distribution that would give rise to the observed scattering characteristics. No *a priori* information about the form of the size distribution

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[1]Most techniques to measure grain-size distributions require sand to be separated from the finer fractions; different analytical methods are used for each split (e.g., settling tube and sedigraph) and the two distributions are then merged together to obtain a complete distribution. Laser analysis does not require such a split, except when very coarse materials are present (coarse sand to gravel-sized fractions).

is assumed, allowing for the characterization of multi-modal distributions with high resolution.

2.2 Laboratory technique

GeoSea has developed a standard operating procedure (SOP) using the Malvern Mastersizer 2000 laser particle size analyser. This ensures that all parameters and variables will remain consistent throughout sample analysis. The methodology covers the range of sizes normally considered important in sediments, is relatively rapid and requires only small samples. No chemical pre-treatment of the samples is undertaken without prior request[2]. Our priority is to determine the size distribution of the naturally occurring sample.

Prior to every analysis, the Mastersizer 2000 automatically aligns the laser beam, and a background measurement of the suspension medium is taken. Samples are initially well mixed before obtaining a representative sub-sample for analysis. The amount of sediment required is about 2 to 4 grams for sands and 0.5 to 1 gram for silt and clay. Samples are introduced into the dispersion unit by wet sieving through a 1mm mesh, eliminating possible blockage of the pumping mechanism by particles that are too large. Disaggregation of the sample is achieved by both mechanical stirring and mild ultrasonic dispersion in the sample dispersion unit[3]. If material remains on the 1mm sieve then the weight percent for each of the coarse sizes (-2.0ϕ to 0.5ϕ[4]; 4.0mm to 0.7mm) is obtained by dry sieving at 0.5ϕ intervals.

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[2] Occasionally we are asked to remove organic matter by peroxide digestion, or carbonates by treatment with weak acid.

[3] GeoSea has conducted several experiments concerning the degree of ultrasonic dispersion that is desirable. If no ultrasonic dispersion is used, fine particles tend to remain as relatively large aggregates producing an erroneously coarse sediment distribution. With increasing ultrasonic disaggregation a distribution will tend to become increasingly finer as flocs become broken apart. Total disaggregation of the fine material may be desirable for some purposes, but for Sediment Trend Analysis we find that the flocs are best treated as part of the overall grain-size distribution. This is because flocs form particular sized particles that behave as separate entities in the transport regime, whereas total disaggregation would produce a grain-size distribution containing particle sizes that were not actually behaving independently during their transport and deposition. Although we find that increasing the degree of disaggregation changes the specific parameters of a grain-size distribution, it is insufficient to produce significant changes in the derived sediment trend statistics. The degree of ultrasonic dispersion presently used by GeoSea appears to be adequate to break apart the sediment into its component particle sizes without excessive damage to those sizes composed of flocculated material.

[4] ϕ (phi) is the unit of measure most commonly used in sediment size distributions where $\phi = -\frac{\log(mm)}{\log(2)}$.

Table 1: Grain-size scales for sediments.

U.S. Standard Sieve Mesh Number	Diameter (*mm*)	Diameter (*microns*)	Phi Value	Wentworth Size Class	Sediment Type
5 6 7 8 10	4.00 3.36 2.83 2.38 2.00		-2.00 -1.75 -1.50 -1.25 -1.00	Granule	GRAVEL
12 14 16 18	1.68 1.41 1.19 1.00		-0.75 -0.50 -0.25 0.00	Very Coarse Sand	SAND
20 25 30 35	0.84 0.71 0.59 0.50	840 710 590 500	0.25 0.50 0.75 1.00	Coarse Sand	
40 45 50 60	0.42 0.35 0.30 0.25	420 350 300 250	1.25 1.50 1.75 2.00	Medium Sand	
70 80 100 120	0.21 0.177 0.149 0.125	210 177 149 125	2.25 2.50 2.75 3.00	Fine Sand	
140 170 200 230	0.105 0.088 0.074 0.0625	105 88 74 62.5	3.25 3.50 3.75 4.00	Very Fine Sand	
270 325	0.053 0.044 0.037 0.031	53 44 37 31	4.25 4.50 4.75 5.00	Coarse Silt	MUD
	0.0156 0.0078 0.0039	15.6 7.8 3.9	6.00 7.00 8.00	Medium Silt Fine Silt Very Fine Silt	
	0.002 0.00098 0.00049 0.00024 0.00012 0.00006	2 0.98 0.49 0.24 0.12 0.06	9.00 10.00 11.00 12.00 13.00 14.00	Clay*	

(* The Clay/Silt boundary is sometimes taken at 2 microns, or 9 phi.)

2.3 Merge method

GeoSea has developed software that allows the dry-sieved weights and measurements from the laser unit to be merged into a final distribution within the range of -2.0ϕ to 15ϕ, in size bins of equal width (0.5 ϕ) in ϕ-space. The results from the Mastersizer 2000 consist of a set of 52 size bins, where the bin width is inversely proportional to the mean particle size in the bin, with the percentage of material in each bin. A summary of the merging process follows:

(1) Sieve data

Sieving is carried out at half-phi intervals from -2.0ϕ to 0.5ϕ. The weights are normalized and the percentage smaller than 0.5ϕ is used to renormalize the Malvern values using the methods described above. The portion of the lens data above 0.5ϕ is removed and replaced with sieve data.

2.4 Presentation of Results

Size distribution data are generally provided as both hard copy (Table 2) and as a PC computer file. The file format is as comma-separated ASCII values (*.csv) in which the data for each sample are contained in a single line. The first line in the file defines the variables and the phi scale, and is followed by the weight percentages for the samples. These files can be easily imported into a Microsoft Excel spreadsheet. The interpretation of the data is as follows: the weight percentage shown under a size heading is the amount of material found in a bin with size boundaries set by the previous size heading as the upper size limit and the current size heading as the lower limit. For example, the weight percent shown under the heading 1.5ϕ is the amount in the bin bounded by 1.0ϕ and 1.5ϕ. Because of the way the file is written the first size fraction in the list (-2.0ϕ) always has zero weight percent.

The hard copy (Table 2) consists of a printout of the data in spreadsheet form and, when requested, plots of each sample showing its histogram and cumulative curve in both phi and micron units.

APPENDIX III

Table 2: Grain-Size Analysis Data

Sample ID	Easting	Northing	Depth (ft)	Type	Mean	Sorting	Skewness	% Gravel	% Sand	% Mud
1	399302.8	5125738.4	317	S	2.81	1.533	1.844	0	87.44	12.56
2	400294.3	5125511.3	291	S	2.734	1.434	2.23	0	89.14	10.86
3	401298.3	5125284.4	262	S	2.407	0.987	3.188	0	95.48	4.52
4	402260.6	5125042.7	241	S	2.192	0.504	0.015	0	100	0
5	403174.8	5124837.5	206	S	2.4	1.034	3.074	0	94.9	5.1
6	404196.8	5124613.7	206	NS	0	0	0	0	0	0
7	405227.3	5124335.3	202	MS	3.722	2.039	0.383	0	61.56	38.44
8	406206.2	5124129.0	182	S	3.109	1.273	1.879	0	87.7	12.3
9	407107.8	5123899.4	162	S	3.113	1.325	1.851	0	87.33	12.67
10	408091.4	5123680.9	140	S	2.882	0.997	2.182	0	93.65	6.35
11	399621.6	5124792.7	315	MS	3.326	2.04	0.983	0	73.97	26.03
12	400558.2	5124554.9	291	S	2.481	1.105	2.999	0	94.19	5.81
13	401543.9	5124338.5	261	S	2.482	1.159	2.887	0	93.51	6.49
14	402576.2	5124088.2	236	S	2.418	1.071	3.064	0	94.57	5.43
15	403515.5	5123867.9	219	S	2.337	0.92	3.313	0	96.22	3.78
16	404471.9	5123641.7	211	S	2.749	1.492	2.002	0	87.05	12.95
17	405459.2	5123435.1	209	S	2.971	1.492	1.536	0	83.11	16.89
18	406426.5	5123205.5	178	SM	4.37	1.967	0.398	0	49.66	50.34
19	407418.7	5122987.0	160	MS	3.549	1.711	1.095	0	72	28
20	399920.5	5123780.8	313	S	2.538	1.206	2.675	0	93.18	6.82
21	400873.9	5123580.0	280	MS	3.967	2.234	0.602	0	59.26	40.74
22	401855.0	5123388.1	259	S	2.404	1.087	3.104	0	94.56	5.44
23	402827.7	5123129.8	237	S	2.422	1.014	3.097	0	95.09	4.91
24	403798.1	5122917.9	221	S	2.486	1.178	2.709	0	93.27	6.73
25	404757.6	5122686.5	207	S	2.395	1.001	3.106	0	95.28	4.72
26	405743.4	5122461.5	195	S	2.909	1.482	1.7	0	84.79	15.21
27	406733.2	5122244.7	174	MS	3.346	1.7	1.199	0	75.37	24.63
28	407727.8	5122007.5	154	MS	3.948	1.848	0.534	0	57.16	42.84
29	400176.5	5122813.5	310	MS	3.481	2.027	1.06	0	71.48	28.52
30	401203.0	5122621.1	275	S	2.683	1.473	2.104	0	87.8	12.2
31	402142.4	5122426.5	259	NS	0	0	0	0	0	0
32	403126.2	5122180.9	237	S	2.606	1.328	2.524	0	90.95	9.05
33	404070.0	5121954.9	220	S	2.463	1.194	2.84	0	93.2	6.8
34	405088.0	5121728.5	207	S	2.424	1.065	3.069	0	94.67	5.33
35	406026.5	5121504.9	194	MS	3.483	1.93	0.954	0	69.06	30.94
36	407017.3	5121240.3	178	MS	3.274	1.727	1.168	0	74.82	25.18
37	407981.3	5121071.0	144	S	2.608	1.54	1.662	0	85.24	14.76
38	400451.1	5121906.6	300	S	2.386	1.064	3.165	0	94.91	5.09
39	401450.6	5121568.4	278	S	3.03	1.758	1.563	0	80.61	19.39
40	402449.3	5121401.0	252	MS	3.24	1.932	1.266	0	75.97	24.03
41	403387.6	5121173.7	236	S	2.71	1.481	2.201	0	88.57	11.43
42	404398.4	5121008.2	218	S	2.501	1.155	2.934	0	93.76	6.24
43	405354.9	5120731.4	206	S	2.468	1.109	2.977	0	94.21	5.79
44	406343.7	5120506.2	197	S	2.556	1.224	2.61	0	92.48	7.52
45	407308.2	5120262.9	180	S	2.978	1.691	1.559	0	81.79	18.21
46	408296.6	5120114.2	157	S	2.667	1.578	1.638	0	84.52	15.48
47	399814.7	5121165.8	323	S	2.846	1.591	1.909	0	86.65	13.35
48	400842.4	5120958.5	298	NS	0	0	0	0	0	0
49	401788.1	5120686.1	277	S	2.89	1.563	1.773	0	84.06	15.94
50	402748.4	5120472.1	253	S	2.782	1.593	2.004	0	86.31	13.69
51	403675.1	5120275.5	240	S	2.418	1.084	3.049	0	94.44	5.56
52	404653.8	5120061.5	223	S	2.488	1.142	2.934	0	93.82	6.18
53	405661.1	5119827.8	209	S	2.356	1.05	3.017	0	95.38	4.62
54	406623.4	5119612.0	194	S	2.533	1.187	2.634	0	92.8	7.2
55	407641.6	5119278.9	180	S	2.688	1.418	2.153	0	88.49	11.51
56	408605.2	5119155.7	162	S	2.711	1.298	2.275	0	90.13	9.87
57	409558.8	5118953.8	144	S	2.256	1.053	2.427	0	94.75	5.25
58	400145.0	5120198.0	319	S	2.496	1.154	2.752	0	94.06	5.94
59	401102.1	5120011.5	302	MS	3.499	2.03	1.011	0	70.3	29.7
60	402034.5	5119740.4	276	MS	3.368	2.055	1.136	0	73.36	26.64
61	403036.7	5119556.2	253	MS	3.373	2.033	1.128	0	73.7	26.3
62	403992.7	5119308.8	237	S	2.556	1.293	2.668	0	91.88	8.12
63	404962.3	5119111.1	222	S	2.494	1.169	2.961	0	93.8	6.2
64	405946.1	5118877.2	210	S	2.686	1.401	2.216	0	89.21	10.79
65	406915.1	5118611.8	198	NS	0	0	0	0	0	0
66	407949.3	5118411.4	184	S	2.474	1.083	3.002	0	94.2	5.8
67	408915.3	5118177.2	167	S	2.758	1.403	2.127	0	88.26	11.74
68	409863.5	5117987.3	142	NS	0	0	0	0	0	0
69	400459.3	5119250.2	314	SM	4.402	2.113	0.196	0	48.03	51.97
70	401410.6	5119047.9	296	MS	3.448	1.965	1.103	0	72.53	27.47
71	402374.5	5118799.2	275	S	2.974	1.698	1.663	0	82.29	17.71
72	403332.2	5118589.7	253	MS	3.261	2.014	1.197	0	74.82	25.18
73	404300.8	5118373.8	237	S	2.668	1.362	2.397	0	90.45	9.55
74	405265.4	5118087.4	225	S	2.921	1.712	1.763	0	83.52	16.48
75	406240.6	5117918.0	213	S	2.852	1.521	1.968	0	86.3	13.7
76	407264.2	5117686.8	200	S	2.927	1.651	1.625	0	83	17
77	408231.7	5117467.0	186	S	2.458	1.16	2.904	0	93.48	6.52
78	409184.0	5117240.5	163	S	2.52	1.171	2.792	0	92.98	7.02
79	410207.2	5117006.0	148	S	2.047	0.842	2.763	0	97.25	2.75
80	411147.3	5116808.4	128	S	2.049	1.03	3.015	0	95.46	4.54
81	400746.4	5118340.6	316	S	2.573	1.228	2.647	0	93.06	6.94
82	401710.4	5118071.3	297	MS	3.375	1.952	1.165	0	74.03	25.97
83	402652.2	5117874.9	278	S	2.457	1.082	3.049	0	94.42	5.58
84	403666.7	5117630.1	259	MS	3.337	1.983	1.169	0	74	26
85	404651.1	5117412.1	241	S	2.682	1.419	2.36	0	89.5	10.5
86	405609.7	5117202.2	224	S	2.705	1.433	2.163	0	88.64	11.36
87	406576.5	5116952.8	215	S	2.58	1.27	2.693	0	92.12	7.88
88	407555.0	5116728.1	203	S	2.616	1.255	2.556	0	91.47	8.53
89	408522.7	5116514.3	183	S	2.546	1.197	2.777	0	92.76	7.24
90	409519.4	5116299.4	167	S	2.506	1.078	2.99	0	94.26	5.74
91	410410.3	5116066.2	153	S	1.75	0.523	0.004	0	100	0
92	411431.4	5115837.0	136	S	1.955	0.928	3.101	0	96.66	3.34
93	412418.1	5115640.9	122	S	2.506	0.574	-0.011	0	99.99	0.01
94	400997.1	5117334.1	313	MS	3.517	1.952	1.111	0	73.08	26.92
95	402026.1	5117149.9	294	S	2.422	1.092	3.001	0	94.3	5.7
96	403038.1	5116909.0	276	S	2.528	1.278	2.593	0	91.51	8.49
97	403901.6	5116713.9	260	S	2.698	1.454	2.301	0	88.89	11.11
98	404930.5	5116447.6	245	S	2.576	1.292	2.707	0	92.13	7.87
99	405885.5	5116253.1	233	S	2.452	0.966	3.167	0	95.72	4.28
100	406880.7	5115993.2	219	S	2.502	1.16	2.89	0	93.59	6.41
101	407883.9	5115807.8	205	S	2.573	1.256	2.712	0	92.29	7.71
102	408816.2	5115532.4	186	S	2.56	1.248	2.731	0	92.3	7.7
103	409799.4	5115317.0	172	S	2.24	0.501	0.012	0	100	0
104	410743.3	5115103.2	157	S	2.289	0.544	0.014	0	100	0
105	411736.4	5114876.7	142	S	2.468	0.846	3.124	0	96.77	3.23
106	412717.0	5114643.5	131	S	2.506	0.881	2.942	0	96.97	3.03
107	400320.6	5116613.7	327	MS	3.374	1.94	0.688	0	74.23	25.77
108	401319.2	5116373.2	312	S	3.073	1.652	1.58	0	83.39	16.61
109	402300.4	5116155.0	296	MS	3.433	2.038	1.097	0	72.5	27.5
110	403281.7	5115970.0	280	MS	3.885	2.204	0.67	0	61.55	38.45
111	404230.8	5115694.1	264	S	2.454	1.091	3.026	0	94.39	5.61
112	405251.2	5115506.7	246	S	2.44	1.124	2.968	0	94.01	5.99
113	406165.4	5115270.6	235	NS	0	0	0	0	0	0
114	407127.0	5115043.1	216	NS	0	0	0	0	0	0
115	408114.8	5114793.2	206	S	2.39	0.893	3.27	0	96.35	3.65
116	409074.7	5114603.4	194	S	2.465	0.959	3.172	0	95.68	4.32
117	410057.7	5114353.4	180	S	2.437	0.928	3.346	0	96.26	3.74
118	411031.1	5114139.4	163	S	2.3	0.542	0.015	0	100	0
119	412000.3	5113874.2	150	S	2.501	0.96	3.22	0	95.98	4.02
120	413020.2	5113691.1	133	S	2.498	0.881	3.055	0	96.93	3.07
121	400650.3	5115623.7	325	MS	3.388	1.909	1.007	0	74.99	25.01
122	401654.4	5115447.4	310	MS	3.642	2.074	0.823	0	69.03	30.97
123	402535.5	5115184.4	296	S	2.491	0.97	2.918	0	95.85	4.15
124	403530.9	5115006.8	281	S	2.555	1.227	2.726	0	92.49	7.51
125	404494.3	5114803.5	261	S	2.577	1.274	2.452	0	91.46	8.54
126	405462.3	5114579.6	234	NS	0	0	0	0	0	0
127	406489.9	5114322.2	234	S	2.414	0.98	3.171	0	95.55	4.45
128	407502.7	5114076.6	219	NS	0	0	0	0	0	0
129	408406.4	5113842.4	210	S	2.538	1.131	2.922	0	93.89	6.11
130	409365.0	5113625.0	198	S	2.487	0.97	3.24	0	95.73	4.22
131	400933.6	5114697.4	323	MS	3.876	2.1	0.634	0	63.74	36.26
132	401877.0	5114480.5	309	S	2.758	1.28	2.272	0	91.86	8.14

Sample ID	Easting	Northing	Depth (ft)	Type	Mean	Sorting	Skewness	% Gravel	% Sand	% Mud
133	402849.7	5114265.8	295	MS	3.58	2.052	0.931	0	69.37	30.63
134	403330.5	5113999.4	282	MS	3.167	1.846	1.409	0	79.49	20.51
135	404798.5	5113794.4	267	S	2.423	0.991	3.126	0	95.44	4.56
136	405814.0	5113585.9	250	S	3.093	1.805	1.561	0	80.94	19.06
137	401190.4	5113732.5	321	S	2.805	1.67	1.37	0	86.11	13.89
138	402154.7	5113500.7	308	S	2.904	1.418	1.836	0	89.36	10.64
139	399083.4	5126034.0	318	S	2.53	1.321	1.965	0	92.37	7.63
140	399994.9	5126455.5	292	S	2.511	1.2	2.798	0	93.48	6.52
141	401030.1	5126235.3	266	MS	3.363	1.971	1.16	0	73.54	26.46
142	401994.6	5125992.6	242	MS	3.773	2.296	0.393	0	58.69	41.31
143	402969.5	5125801.3	224	S	2.456	1.154	2.894	0	93.59	6.41
144	403948.7	5125571.0	208	MS	3.095	1.779	1.376	0	79.07	20.93
145	404869.1	5125369.4	194	S	2.738	1.223	2.363	0	91.7	8.3
146	405889.0	5125115.9	184	NS	0	0	0	0	0	0
147	406844.2	5124903.6	164	S	3.018	1.017	2.463	0	93.43	6.57
148	407857.6	5124667.1	135	S	2.677	0.559	-0.034	0	99.88	0.12
149	398710.5	5127638.2	320	S	2.811	1.665	1.357	0	84.8	15.2
150	399699.1	5127392.2	296	MS	3.553	2.052	0.956	0	69.37	30.63
151	400735.9	5127194.9	269	MS	3.318	1.947	1.166	0	74.2	25.8
152	401664.9	5126942.5	251	S	3.015	1.737	1.536	0	81.35	18.65
153	402680.4	5126732.5	230	MS	3.558	2.04	0.942	0	68.35	31.65
154	403616.9	5126496.7	215	MS	3.304	2.001	1.031	0	73.79	26.21
155	404604.0	5126289.5	200	MS	3.824	1.843	0.943	0	65.83	34.17
156	405575.9	5126103.7	184	S	3.418	1.491	1.552	0	80.76	19.24
157	406543.5	5125847.6	160	S	2.802	0.56	-0.016	0	99.27	0.73
158	407519.3	5125610.5	137	S	3.087	0.992	2.186	0	92.12	7.88
159	398475.8	5128550.6	317	MS	3.884	2.225	0.525	0	60.63	39.37
160	399459.6	5128347.2	295	MS	3.732	2.2	0.631	0	63.81	36.19
161	400454.6	5128117.9	274	MS	3.815	2.189	0.633	0	61.76	38.24
162	401402.4	5127936.9	274	SM	4.418	2.188	0.175	0	46.2	53.8
163	402352.0	5127675.7	233	MS	3.715	2.122	0.667	0	63.32	36.68
164	403372.6	5127461.8	215	MS	3.782	2.12	0.596	0	61.87	38.13
165	404333.6	5127246.2	215	S	2.768	1.212	2.254	0	92.02	7.98
166	405262.7	5127032.5	182	MS	3.793	1.689	1.054	0	69.76	30.24
167	406310.5	5126790.1	158	S	3.178	1.046	2.33	0	92.03	7.97
168	407278.7	5126563.7	135	S	3.21	1.035	2.057	0	89.5	10.5
169	398153.8	5129534.3	316	S	2.996	1.622	1.647	0	83.99	16.01
170	399173.5	5129275.5	294	MS	3.892	2.19	0.544	0	60.37	39.63
171	400110.1	5129096.4	276	S	2.808	1.49	2.062	0	87.39	12.61
172	401091.8	5128861.9	257	S	2.448	0.987	3.217	0	95.55	4.45
173	402081.6	5128641.3	237	S	2.612	1.3	2.399	0	91.09	8.91
174	403050.7	5128430.4	219	MS	3.261	1.842	1.228	0	75.87	24.13
175	404053.0	5128231.3	204	S	3.149	1.554	1.55	0	82.53	17.47
176	405006.1	5128008.2	185	MS	3.694	1.731	0.843	0	71.65	28.35
177	405945.5	5127783.6	162	S	3.041	0.817	2.104	0	94.97	5.03
178	406917.4	5127545.3	143	S	2.915	0.565	-0.018	0	98.15	1.85
179	407889.5	5127330.0	126	S	3.196	1.046	2.039	0	89.56	10.44
180	397860.1	5130458.7	305	MS	3.804	2.142	0.663	0	64.08	35.92
181	398844.1	5130305.4	287	MS	3.533	1.972	1	0	70.31	29.69
182	397781.0	5130063.9	268	S	2.546	1.16	2.713	0	93.43	6.57
183	400786.8	5129842.2	252	S	2.664	1.345	2.3	0	90.03	9.97
184	401738.4	5129635.9	237	NS	0	0	0	0	0	0
185	402739.9	5129384.4	218	MS	4.096	2.142	0.243	0	52.42	47.58
186	403732.8	5129196.6	208	MS	3.364	1.838	0.928	0	74.23	25.77
187	404716.7	5128973.0	189	S	3.372	1.211	1.938	0	85.79	14.21
188	405671.8	5128736.9	166	S	3.124	0.963	2.383	0	92.93	7.07
189	406634.4	5128500.3	142	S	2.904	0.572	-0.02	0	98.11	1.89
190	407645.8	5128257.8	127	S	3.056	0.78	1.986	0	95	5
191	399535.7	5131000.7	267	S	2.431	0.959	3.183	0	95.72	4.28
192	400524.1	5130755.8	252	S	2.746	1.4	2.04	0	88.69	11.31
193	401493.5	5130546.7	232	SM	4.49	2.078	0.177	0	45.37	54.63
194	402430.4	5130321.3	220	MS	3.611	2.047	0.77	0	67.01	32.99
195	403489.1	5130161.5	208	S	2.77	1.24	2.248	0	91.83	8.17
196	404395.6	5129922.8	192	S	3.384	1.322	1.684	0	83.02	16.98
197	405362.1	5129677.3	169	S	3.195	1.068	2.119	0	90.18	9.82
198	406366.2	5129355.7	147	S	2.971	0.774	2.01	0	95.97	4.03
199	407341.4	5129264.6	133	S	3.024	0.767	1.624	0	94.69	5.31
200	403141.5	5131067.1	206	S	3.029	1.704	1.244	0	81.15	18.85
201	404071.9	5130809.2	192	S	3.091	0.86	1.85	0	92.93	7.07
202	405074.1	5130581.9	171	S	3.133	0.858	1.836	0	92.11	7.89
203	406024.0	5130389.7	152	S	3.191	1.209	2.083	0	89.25	10.75
204	407040.8	5130158.5	137	S	2.961	0.81	2.078	0	95.61	4.39
205	406761.3	5131133.3	137	S	2.937	0.778	2.082	0	96.23	3.77
206	413499.0	5113546.7	129	NS	0	0	0	0	0	0
207	413357.8	5114090.8	129	S	2.394	0.559	0.018	0	100	0
208	413851.1	5113917.2	124	S	2.409	0.561	0.016	0	100	0
209	413277.7	5114594.2	124	S	2.404	0.56	0.014	0	100	0
210	413702.2	5114459.0	120	S	2.409	0.563	0.021	0	100	0
211	414169.8	5114316.7	116	S	2.428	0.573	0.021	0	99.99	0.01
212	414687.9	5114201.3	106	S	2.433	0.568	0.019	0	100	0
213	413087.9	5115017.8	124	S	2.334	0.554	0.03	0	100	0
214	413543.6	5114911.0	116	S	2.453	0.568	0.016	0	99.99	0.01
215	414064.2	5114806.9	116	S	2.438	0.571	0.016	0	99.99	0.01
216	414533.8	5114713.7	108	S	2.45	0.573	0.016	0	100	0
217	415005.2	5114560.2	102	S	2.367	0.525	0.021	0	100	0
218	412923.7	5115504.4	121	S	2.325	0.557	0.036	0	100	0
219	413423.4	5115414.4	114	S	2.389	0.557	0.025	0	100	0
220	413911.4	5115291.7	110	S	2.381	0.587	0.033	0	100	0
221	414376.8	5115197.9	104	S	2.437	0.576	0.024	0	100	0
222	414899.2	5115049.8	100	S	2.393	0.581	0.028	0	100	0
223	415363.7	5114926.0	95	S	2.37	0.566	0.042	0	99.99	0.01
224	415843.9	5114827.3	89	S	2.493	0.6	-0.013	0	100	0
225	412310.1	5116106.5	121	S	2.464	0.751	2.083	0	97.58	2.42
226	412796.4	5115990.7	118	S	2.341	0.555	0.039	0	100	0
227	413252.7	5115860.6	111	S	2.431	0.571	0.022	0	99.99	0.01
228	413765.9	5115751.9	107	S	2.437	0.577	0.025	0	100	0
229	414252.2	5115634.0	100	S	2.433	0.57	0.026	0	100	0
230	414743.5	5115526.3	96	S	2.38	0.569	0.031	0	99.99	0.01
231	415227.3	5115436.6	90	S	2.363	0.574	0.036	0	100	0
232	415706.3	5115303.8	86	S	2.451	0.593	0.017	0	100	0
233	416177.0	5115184.6	75	S	2.441	0.599	0.014	0	99.99	0.01
234	411649.6	5116691.9	121	S	1.997	0.947	3.079	0	96.24	3.76
235	412147.0	5116531.7	113	S	1.849	0.56	0.017	0	100	0
236	412632.8	5116436.9	113	S	2.429	0.713	1.871	0	97.99	2.01
237	413121.4	5116358.0	110	S	2.352	0.563	0.032	0	100	0
238	413611.8	5116253.9	102	S	2.448	0.575	0.016	0	100	0
239	414100.9	5116159.3	99	S	2.303	0.568	0.019	0	100	0
240	414573.2	5116024.3	91	S	2.343	0.581	0.01	0	100	0
241	415055.2	5115916.4	87	S	2.388	0.6	-0.008	0	100	0
242	415551.6	5115794.6	83	S	2.419	0.583	0.027	0	100	0
243	416039.0	5115680.3	78	S	2.399	0.583	0.035	0	99.99	0.01
244	416517.3	5115555.8	75	S	2.26	0.515	0.018	0	100	0
245	417012.6	5115436.8	73	S	2.351	0.569	0.035	0	100	0
246	411508.0	5117171.6	115	S	1.826	0.533	-0.019	0	100	0
247	411973.0	5117052.9	108	S	1.702	0.518	0.008	0	100	0
248	412504.2	5116948.2	104	S	1.754	0.512	0.009	0	100	0
249	412957.6	5116858.8	104	S	2.293	0.564	0.011	0	100	0
250	413460.8	5116712.8	100	S	2.29	0.569	0.016	0	100	0
251	413945.8	5116616.4	93	S	2.232	0.575	0.012	0	100	0
252	414433.2	5116510.1	90	S	2.159	0.596	0.015	0	100	0
253	414930.9	5116397.9	83	S	2.151	0.568	0.01	0	100	0
254	415397.5	5116262.2	80	S	2.409	0.611	-0.012	0	100	0
255	415897.7	5116170.3	78	S	2.312	0.521	0.024	0	99.99	0.01
256	416392.7	5116061.1	75	S	2.4	0.582	0.039	0	100	0
257	416859.2	5115943.3	69	S	2.432	0.546	0.037	0	100	0
258	417355.2	5115802.0	63	S	2.31	0.577	0.03	0	99.99	0.01
259	410853.4	5117782.9	123	S	1.858	0.561	0.007	0	100	0
260	411361.5	5117637.6	116	S	1.74	0.589	-0.053	0	100	0
261	411833.7	5117537.2	111	S	2.048	0.828	2.953	0	97.25	2.75
262	412318.0	5117400.1	104	S	2.011	0.824	3.034	0	97.44	2.56
263	412820.3	5117289.1	105	S	2.423	0.745	1.497	0	98.13	1.87
264	413282.0	5117182.3	100	S	2.274	0.589	0.005	0	100	

Sample ID	Easting	Northing	Depth (ft)	Type	Mean	Sorting	Skewness	% Gravel	% Sand	% Mud	Diameter(Φ)	-2	-1.5	-1	-0.5	0	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	12	12.5	13	13.5	14	14.5	15
											Diameter(μ)	4000	2828.4	2000	1414.2	1000	707.1	500	353.6	250	176.8	125	88.4	62.5	44.2	31.3	22.1	15.6	11	7.8	5.5	3.9	2.8	2	1.4	1	0.7	0.5	0.35	0.24	0.18	0.12	0.09	0.06	0.03	0.02
265	413782.2	5117076.9	95	S	1.994	0.586	0.015	0	100	0		0	0	0	0	0	0	3.8	16.6	30	29.5	16	3.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
266	414276.2	5116963.3	88	S	2.068	0.574	-0.002	0	100	0		0	0	0	0	0	0	2.4	14.1	29	31.3	18.4	4.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
267	414765.3	5116862.3	85	S	2.273	0.583	0.02	0	100	0		0	0	0	0	0	0	0.6	8.4	23.5	32	24.4	9.7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
268	415248.4	5116741.7	81	S	2.276	0.586	0.017	0	100	0		0	0	0	0	0	0	0.6	8.4	23.3	31.9	24.5	9.8	1.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
269	415721.4	5116640.4	77	S	2.417	0.59	0.032	0	99.99	0.01		0	0	0	0	0	0	0.1	5.4	19.2	30.8	27.7	13.8	2.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
270	416216.2	5116530.4	75	S	2.349	0.56	0.042	0	100	0		0	0	0	0	0	0	0	5.9	21.4	32.9	27	11.2	1.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
271	416710.6	5116414.6	73	S	2.476	0.591	0.014	0	99.99	0.01		0	0	0	0	0	0	0	4.4	17.3	29.8	28.9	15.7	3.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
272	417200.0	5116300.7	69	S	2.45	0.595	0.019	0	99.99	0.01		0	0	0	0	0	0	0	4.9	18.2	30	28.2	15	3.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
273	417681.7	5116193.4	66	S	2.281	0.572	0.015	0	100	0		0	0	0	0	0	0	0.4	7.9	23.4	32.6	24.9	9.6	0.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
274	418177.6	5116095.0	65	S	2.069	0.603	0.011	0	100	0		0	0	0	0	0	0	3.1	14.5	28	29.9	18.4	5.8	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
276	411179.8	5118146.6	107	S	1.756	0.53	-0.008	0	100	0		0	0	0	0	0	0.3	7	24.4	35.6	24.9	7.3	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
277	411688.1	5117983.8	106	S	2.158	0.804	2.067	0	97.63	2.37		0	0	0	0	0	0	2.6	13.5	27.7	29.9	18	5.1	0.1	0	0.4	0.7	0.5	0.2	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
278	412177.8	5117886.4	101	S	2.246	1.033	2.794	0	95.12	4.88		0	0	0	0	0	0	1.8	13.1	29.2	31	16.3	3.4	0	0	0.8	1.1	0.8	0.5	0.4	0.4	0.4	0.2	0	0	0	0	0	0	0	0	0	0	0	0	
279	412651.0	5117780.9	100	S	2.368	1.148	2.511	0	94.2	5.8		0	0	0	0	0	0	2.2	12.1	25	28.6	19	6.5	0.5	0	0.6	1.2	1.1	0.7	0.6	0.5	0.5	0.3	0	0	0	0	0	0	0	0	0	0	0	0	
280	413148.1	5117663.0	96	S	2.177	0.574	0	0	100	0		0	0	0	0	0	0	1.2	10.8	26.3	32.3	21.8	7	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
281	413643.3	5117560.6	78	S	1.926	0.526	0.032	0	100	0		0	0	0	0	0	0	3	18.1	34.5	30.5	12.3	1.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
282	414129.6	5117442.8	76	S	1.617	0.527	0.02	0	100	0		0	0	0	0	0	0.8	11	29.6	34.8	19.4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
283	414601.3	5117341.5	75	S	1.618	0.566	0.025	0	100	0		0	0	0	0	0	1.4	12.5	28.2	32.1	19.8	5.5	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
284	415084.4	5117219.7	75	S	2.25	0.602	-0.001	0	100	0		0	0	0	0	0	0	1.1	9.5	23.7	31.1	23.6	9.5	1.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
285	415572.4	5117099.7	72	S	2.258	0.559	0.022	0	100	0		0	0	0	0	0	0	0.4	8.1	24.3	33.3	24.4	8.6	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
286	416062.5	5117004.7	72	S	2.202	0.511	0.013	0	100	0		0	0	0	0	0	0	0.2	7.8	26.9	36.7	22.8	5.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
287	416570.3	5116874.4	67	S	2.429	0.593	0.023	0	99.99	0.01		0	0	0	0	0	0	0.1	5.3	18.8	30.5	27.9	14.3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
288	417053.6	5116768.2	67	S	2.254	0.56	0.009	0	100	0		0	0	0	0	0	0	0.7	8.8	24	32.3	24	9.1	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
289	417522.2	5116678.4	64	S	2.304	0.575	0.018	0	100	0		0	0	0	0	0	0	0.4	7.4	22.6	32.4	25.5	10.3	1.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
290	418006.8	5116574.8	63	S	2.226	0.604	-0.031	0	100	0		0	0	0	0	0	0	1.6	10	24	31.1	23.2	9	0.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
291	418499.5	5116453.7	60	S	1.898	0.62	0.03	0	100	0		0	0	0	0	0	0.4	6.6	19.7	29.7	26.4	13.6	3.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
292	410125.4	5118788.1	131	NS	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
293	410558.7	5118669.1	121	S	2.453	1.563	1.668	0	84.86	15.14		0	0	0	0	0	0.5	7.5	18.1	23.7	19.4	10	3.4	1.9	2.7	3	2.4	1.7	1.3	1.1	0.9	0.7	0.4	0.2	0	0	0	0	0	0	0	0	0	0	0	
294	411053.3	5118603.7	113	S	2.047	1.146	2.492	0	93.21	6.79		0	0	0	0	0	0.3	7.3	21.6	30.4	23.3	8.9	1	0	1	1.5	1.1	0.7	0.6	0.6	0.5	0.3	0.1	0	0	0	0	0	0	0	0	0	0	0	0	
295	411552.7	5118467.2	101	S	2.44	1.502	1.956	0	83.69	11.31		0	0	0	0	0	0.4	5.8	15.9	23.9	22.7	13.9	4.9	0.8	0.7	1.5	1.8	1.6	1.4	1.2	1	0.8	0.5	0.2	0	0	0	0	0	0	0	0	0	0	0	
296	411998.5	5118355.0	94	S	2.137	0.591	0.004	0	100	0		0	0	0	0	0	0	1.9	12.3	26.9	31.2	20.4	6.6	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
297	412500.6	5118232.0	96	S	2.237	0.82	1.953	0	97.49	2.51		0	0	0	0	0	0	1.9	12.1	25.9	29.8	19.7	7	0.9	0	0.6	0.7	0.4	0.2	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
298	412993.4	5118136.7	88	S	2.196	0.685	1.1	0	98.78	1.22		0	0	0	0	0	0	1.6	11.7	26.2	30.9	20.6	7	0.5	0	0.2	0.6	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
299	413496.4	5118031.8	77	S	1.76	0.564	0.016	0	100	0		0	0	0	0	0	0.4	8.2	24.1	33.1	24.4	8.8	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
300	413973.3	5117912.4	56	S	1.72	0.524	-0.003	0	100	0		0	0	0	0	0	0.3	7.8	25.8	35.9	23.6	6.2	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
301	414461.8	5117813.2	57	S	1.701	0.588	0.001	0	100	0		0	0	0	0	0	1.3	10.4	25.3	31.8	22.4	8	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
302	414943.0	5117705.1	63	S	1.613	0.524	0.018	0	100	0		0	0	0	0	0	0.8	11.1	29.8	34.9	19.3	3.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
303	415448.7	5117582.5	71	S	2.249	0.608	-0.014	0	100	0		0	0	0	0	0	0	1.3	9.6	23.5	30.9	23.6	9.6	1.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
304	415910.2	5117485.5	68	S	2.351	0.588	0.027	0	99.99	0.01		0	0	0	0	0	0	0.3	6.7	21.2	31.5	26.3	11.9	1.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
305	416404.4	5117364.3	63	S	2.326	0.575	0.038	0	100	0		0	0	0	0	0	0	0.2	6.9	22.1	32.3	25.9	10.9	1.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
306	416894.0	5117267.0	63	S	2.294	0.614	0.005	0	99.99	0.01		0	0	0	0	0	0	1	8.7	22.4	30.5	24.4	10.9	1.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
307	417370.6	5117132.4	62	S	2.209	0.594	0.003	0	100	0		0	0	0	0	0	0	1.3	10.4	25	31.5	22.5	8.3	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
308	417872.6	5117030.2	60	S	2.197	0.606	-0.009	0	100	0		0	0	0	0	0	0	1.7	10.8	24.9	30.9	22.2	8.3	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
309	418365.7	5116916.3	59	S	2.029	0.607	-0.017	0	100	0		0	0	0	0	0	0.1	3.9	15.5	28.4	29.4	17.3	4.9	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
310	418835.6	5116822.5	57	S	2.051	0.63	0.024	0	100	0		0	0	0	0	0	0.1	4	15.4	27.4	28.5	17.8	5.9	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
311	419333.9	5116693.7	56	S	2.019	0.595	0.01	0	100	0		0	0	0	0	0	0	3.7	15.9	29.1	29.5	16.9	4.5	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
312	409918.1	5119308.0	125	SM	4.24	2.136	0.216	0	47.2	52.8		0	0	0	0	0	0.3	2.9	6.7	9	8.5	6.7	8.1	6.8	7.5	7.6	7.2	6.7	6.1	5.3	4.4	3.3	2.3	1.4	0.4	0	0	0	0	0	0	0	0	0	0	
313	410397.0	5119172.8	112	MS	2.849	1.847	1.133	0	75.41	24.59		0	0	0	0	0	0.6	7.3	16.1	19.6	15.1	7.9	4.2	4.3	5	4.7	3.6	2.7	2.3	2	1.6	1.2	0.7	0.4	0	0	0	0	0	0	0	0	0	0	0	
314	410887.5	5119067.8	101	S	2.455	1.545	1.477	0	84.08	15.92		0	0	0	0	0	0.8	8.6	18.4	22.2	17	8.7	4.2	3.8	4.2	3.5	2.3	1.5	1.1	1	0.8	0.6	0.3	0.1	0	0	0	0	0	0	0	0	0	0	0	
315	411391.3	5118944.8	94	S	1.917	0.735	1.407	0	97.54	2.46		0	0	0	0	0	0.2	6.4	20.9	31.6	25.7	10.9	1.7	0	0.7	1	0.6	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
316	411849.5	5118876.4	89	S	2.475	1.023	1.845	0	95.12	4.88		0	0	0	0	0	0	2.1	9.8	20.1	25.5	21.5	11.9	3.9	0.7	0.5	0.9	0.9	0.6	0.4	0.3	0.2	0.1	0	0	0	0	0	0	0	0	0	0	0	0	
317	412374.3	5118724.4	88	S	2.199	0.776	0.769	0	98.66	1.34		0	0	0	0	0	0.1	3.8	13.5	23.7	26.3	19.4	9.2	2.4	0.1	0.2	0.4	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
318	412854.5	5118618.6	81	S	2.246	0.783	1.588	0	98.01	1.99		0	0	0	0	0	0	1.9	11.6	25	29.5	20.6	7.9	1.1	0	0.2	0.6	0.5	0.3	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
319	413340.5	5118509.2	78	S	1.798	0.571	0.032	0	100	0		0	0	0	0	0	0.3	7.4	22.9	32.8	25.3	9.9	1.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
320	413832.9	5118387.2	65	S	2.046	0.575	-0.01	0	100	0		0	0	0	0	0	0	2.8	14.7	29.2	31	17.8	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
321	414329.7	5118306.3	47	S	1.707	0.524	0	0	100	0		0	0	0	0	0	0.4	8.1	26.3	35.9	23.1	5.8	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
322	414801.6	5118167.3	51	S	1.657	0.533	-0.015	0	100	0		0	0	0	0	0	0.8	9.8	27.8	35.1	21.2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
323	415290.1	5118078.9	59	S	1.719	0.52	0.018	0	100	0		0	0	0	0	0	0.2	7.6	26.2	36.2	23.4	6	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
324	415786.8	5117961.7	63	S	2.264	0.599	0.006	0	100	0		0	0	0	0	0	0	1	5	23.4	31.3	24	9.8	1.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
325	416249.3	5117860.6	63	S	2.39	0.599	0.004	0	100	0		0	0	0	0	0	0	0.3	6.2	19.6	30.6	27	13.3	2.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
326	416749.6	5117728.0	60	S	2.262	0.607	0.004	0	100	0		0	0	0	0	0	0	1.2	9.3	23.3	30.9	23.7	9.9	1.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
327	417244.9	5117625.9	58	S	2.143	0.597	0.01	0	100	0		0	0	0	0	0	0	2	12.2	28.6	31	20.5	6.9	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
328	417737.1	5117512.5	58	S	2.13	0.591	0.012	0	100	0		0	0	0	0	0	0	2	12.5	27.1	31.1	20.2	6.5	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
329	418216.5	5117427.4	56	S	2.113	0.599	0.007	0	100	0		0	0	0	0	0	0	2.4	13.1	27.1	30.6	19.7	6.3	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
330	418706.0	5117292.7	55	S	2.059	0.628	0.042	0	100	0		0	0	0	0	0	0.1	3.8	15.2	27.6	28.7	17.8	6	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
331	419185.1	5117179.1	54	S	2.049	0.622	0.038	0	100	0		0	0	0	0	0	0.1	3.8	15.4	27.8	28.8	17.6	5.7	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
332	419685.4	5117076.5	53	S	2.13	0.634	0.017	0	100	0		0	0	0	0	0	0	3	13.3	25.8	29.1	19.9	7.6	0.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
334	409763.0	5119790.8	112	MS	3.053	1.807	0.81	0	71.35	28.65		0	0	0	0	0	1.4	6.8	12.8	14.9	11.9	8.1	7.1	7.9	7.9	6.2	4.1	2.6	2.1	1.8	1.5	1.1	0.7	0.3	0	0	0	0	0	0	0	0	0	0	0	
335	410259.3	5119658.9	100	S	2.508	1.656	1.476	0	82.68	17.32		0	0	0	0	0	0.9	8.9	18.7	22.2	16.5	8.1	3.7	3.3	3.8	3.3	2.4	1.8	1.6	1.4	1.1	0.8	0.5	0.2	0	0	0	0	0	0	0	0	0	0	0	
336	410755.0	5119546.7	92	S	2.38	1.305	1.204	0	88.21	11.79		0	0	0	0	0	1	8.4	17.3	20.4	16.1	10.3	7.6	8.7	5.1	2.9	1.1	0.5	0.5	0.5	0.5	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	
337	411241.6	5119433.5	86	S	2.023	0.937	1.419	0	95.99	4.01		0	0	0	0	0	0.6	8.5	20.6	26.3	21	11.2	4.8	2.6	1.8	1	0.4	0.1	0.2	0.2	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
338	411723.5	5119354.7	81	S	2.408	0.79	0.76	0	98.31	1.69		0	0	0	0	0	0	1.9	9.1	19.4	25.8	23.1	13.8	4.8	0.5	0	0.4	0.5	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
339	412217.9	5119204.4	79	S	2.829	1.443	1.258	0	85.32	14.68		0	0	0	0.1	0.3	0.8	2.9	8.2	15.1	19.5	18.3	12.8	6.9	3.3	2.2	2.2	2.1	1.7	1.1	0.7	0.5	0.3	0.2	0	0	0	0	0	0	0	0	0	0	0	
340	412689.0	5119085.4	82	S	2.63	1.023	1.533	0	94.05	5.95		0	0	0	0	0	0	1.4	7.6	16.7	23.1	22.4	15.4	7.1	2	0.5	0.6	0.9	0.7	0.5	0.3	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	
341	413185.2	5118994.9	72	S	2.221	0.609	0.008	0	100	0		0	0	0	0	0	0	1.5	10.4	24.4	30.7	22.7	9	1.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
342	413683.0	5118881.7	65	S	1.827	0.593	0.065	0	100	0		0	0	0	0	0	0.3	7.3	22.1	31.6	25.3	11.1	1.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
343	414175.1	5118768.1	55	S	2.019	0.599	-0.025	0	100	0		0	0	0	0	0	0.1	3.8	15.7	28.9	29.6	17.1	4.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
344	414649.4	5118648.8	45	S	1.921	0.525	0.015	0	100	0		0	0	0	0	0	0	3.2	18.1	34.5	30.5	12.1	1.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
345	415137.0	5118570.4	49	S	1.78	0.531	0.019	0	100	0		0	0	0	0	0	0.2	6.3	23.7	35.6	25.6	8	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
346	415620.4	5118453.5	60	S	1.765	0.514	0.008	0	100	0		0	0	0	0	0	0.1	6.1	24.3	36.7	25.3	7	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
347	416111.3	5118357.9	65	S	2.226	0.579	0.016	0	100	0		0	0	0	0	0	0	0.8	9.6	24.9	32.2	23.2	8.3	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
348	416604.0	5118220.0	60	S	2.217	0.624	0.029	0	100	0		0	0	0	0	0	0	1.8	10.8	24.4	30	22.1	9.2	1.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
349	417101.1	5118104.8	57	S	2.122	0.589	0.012	0	100	0		0	0	0	0	0	0	2	12.7	27.4	31.2	19.9	6.2	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
350	417567.4	5118000.7	56	S	2.179	0.605	0.016	0	100	0		0	0	0	0	0	0	1.8	11.4	25.6	30.8	21.5	7.9	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
351	418065.0	5117892.1	54	S	2.044	0.574	0.003	0	100	0		0	0	0	0	0	0	2.7	14.8	29.5	30.9	17.6	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
352	418549.7	5117770.5	53	S	2.128	0.601	0.033	0	100	0		0	0	0	0	0	0	2.2	12.8	27	30.6	19.9	6.7	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
353	419037.1	5117665.1	52	S	2.228	0.621	0.001	0	100	0		0	0	0	0	0	0	1.7	10.4	23.9	30.2	22.7	9.4	1.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
354	419525.7	5117553.8	51	S	2.172	0.646	-0.003	0	100	0		0	0	0	0	0	0	2.8	12.3	24.5	28.9	21.1	8.7	1.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
355	420010.9	5117435.3	49	S	2.238	0.625	-0.048	0	100	0		0	0	0	0	0	0	1.9	10.2	23.1	30	23.4	9.9	1.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
356	420512.1	5117334.6	46	S	2.346	0.589	-0.059	0	100	0		0	0	0	0	0	0	0.6	6.9	20.6	31.3	26.9	12	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
357	408670.3	5120456.8	117	S	1.985	0.931	2.773	0	95.35	4.65		0	0	0	0	0	0	4.7	21.1	34.6	25.9	8.1	0.5	0	1	1.3	0.7	0.3	0.3	0.3	0.3	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	
358	409133.2	5120375.4	100	MS	2.673	1.713	1.123	0	79.91	20.09		0	0	0	0	0	1.9	9.5	16.6	17.4	12.5	7.9	6.8	7	5.9	3.8	2.3	1.8	1.7	1.6	1.2	0.8	0.4	0.2	0	0	0	0	0	0	0	0	0	0	0	
359	409622.9	5120250.7	94	S	2.312	1.398	1.532	0	87.43	12.57		0	0	0	0	0	1.1	9.3	19.3	22.7	17	8.8	4.7	4.2	4.1	2.9	1.6	0.9	0.7	0.7	0.6	0.4	0.2	0	0	0	0	0	0	0	0	0	0	0	0	
360	410104.7	5120119.6	92	S	2.374	1.307	1.15	0	86.75	13.25		0	0	0	0	0	0.8	8.4	17.9	21.4	16.3	9.2	6.2	6.2	5.6	3.7	1.6	0.6	0.4	0.4	0.4	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	
361	410587.0	5120032.0	86	MS	4.117	1.894	0.222	0	51.8	48.2		0	0	0	0.1	0.5	1.2	2.2	3.3	4.7	6.8	9.4	11.5	11.6	9.8	7.7	6.5	5.9	5.4	4.5	3.4	2.3	1.4	0.7	0.1	0	0	0	0	0	0	0	0	0	0	
362	411065.1	5119929.7	78	S	1.851	0.82	0.89	0	97.73	2.27		0	0	0	0	0	1.4	11.2	23.2	26.9	19.5	9.4	3.7	2	1.4	0.7	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
363	411566.6	5119788.3	76	S	2.515	1.082	1.261	0	92.78	7.22		0	0	0	0	0	0.1	3.5	11	18.6	21.6	18.6	12.5	6.5	2.8	1.2	0.3	0.7	0.6	0.4	0.3	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	
364	412088.6	5119687.6	74	MS	3.458	1.866	0.837	0	68.81	31.19		0	0	0	0	0	0	2.1	7.5	13.5	16.2	14.2	9.5	5.5	3.8	4.1	4.8	5	4.4	3.4	2.3	1.4	0.9	0.5	0.1	0	0	0	0	0	0	0	0	0	0	
365	412538.9	5119607.4	66	MS	3.478	1.657	0.942	0	72.07	27.93		0	0	0	0	0	0.2	1.5	4.5	9.4	14.3	16.6	14.9	10.3	6	3.9	3.6	3.7	3.4	2.7	1.8	1.2	0.7	0.4	0	0	0	0	0	0	0	0	0	0	0	
366	413060.4	5119474.8	71	S	2.4	0.754	1.281	0	98.42	1.58		0	0	0	0	0	0	0.8	7.8	20.6	29.1	24.8	12.3	2.7	0	0	0.4	0.6	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
367	413523.1	5119360.3	66	S	2.171	0.621	0.016	0	100	0		0	0	0	0	0	0	2.3	12	25.3	30	21.1	8.1	0.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
368	414010.6	5119251.5	58	S	2.113	0.598	0.028	0	100	0		0	0	0	0	0	0	2.3	13.3	27.4	30.5	19.5	6.3	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
369	414521.8	5119142.4	50	S	1.885	0.598	0.041	0	100	0		0	0	0	0	0	0.3	6.2	20.1	30.9	26.7	12.8	2.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
370	415001.7	5119014.7	44	S	1.92	0.572	0.034	0	100	0		0	0	0	0	0	0	4.7	19	31.7	28.4	13.5	2.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
371	415483.7	5118918.6	57	S	1.922	0.584	0.056	0	100	0		0	0	0	0	0	0.1	4.9	19.1	31.4	27.9	13.5	2.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
372	415991.8	5118791.2	61	S	1.767	0.571	0.025	0	100	0		0	0	0	0	0	0.5	8.3	23.9	32.7	24.4	9.1	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
373	416469.5	5118708.9	69	S	1.97	0.578	0.033	0	100	0		0	0	0	0	0	0	3.9	17.4	30.8	29.3	15.1	3.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
374	416957.0	5118584.8	57	S	1.978	0.583	0.012	0	100	0		0	0	0	0	0	0	4	17.1	30.3	29.4	15.5	3.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
375	417430.2	5118475.3	54	S	2.146	0.619	0.032	0	100	0		0	0	0	0	0	0	2.4	12.7	26	29.9	20.3	7.5	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
376	417929.7	5118358.3	54	S	2.078	0.584	-0.006	0	100	0		0	0	0	0	0	0	2.6	13.9	28.3	30.9	18.7	5.2	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
377	418406.6	5118245.8	52	S	2.161	0.612	0.025	0	100	0		0	0	0	0	0	0	2.1	12.1	25.9	30.3	20.9	7.7	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
378	418904.5	5118150.4	50	S	2.249	0.604	-0.012	0	100	0		0	0	0	0	0	0	1.2	9.5	23.6	31.1	23.7	9.6	1.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
379	419396.7	5118033.6	49	S	2.226	0.614	-0.039	0	100	0		0	0	0	0	0	0	1.8	10.2	23.7	30.6	23.1	9.3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
380	419864.6	5117923.7	50	S	2.355	0.595	-0.059	0	100	0		0	0	0	0	0	0	0.6	6.8	20.3	30.9	27	12.4	1.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
381	420357.2	5117806.4	43	S	2.335	0.585	-0.051	0	100	0		0	0	0	0	0	0	0.5	7	20.9	31.6	26.8	11.6	1.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
382	420838.7	5117692.2	39	S	2.376	0.534	-0.015	0	100	0		0	0	0	0	0	0	0	4.4	19.7	34.5	29.1	11	0.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
383	408500.7	5120954.3	117	S	1.865	0.657	1.679	0	98.11	1.89		0	0	0	0	0	0	4.9	22.2	35.9	26.4	8	0.4	0	0.3	0.9	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
384	408984.3	5120850.4	80	S	1.475	0.735	0.827	0	98.47	1.53		0	0	0	0	0	0.6	8.8	22.1	28.9	22.7	11	3.2	0.9	0.7	0.5	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
385	409480.9	5120722.0	70	MS	3.139	1.96	0.969	0	71.44	28.56		0	0	0	0	0	0.3	5.1	12.8	17.8	16	10	5.2	3.7	4	4.3	4.2	3.8	3.4	2.9	2.2	1.6	1	0.5	0.1	0	0	0	0	0	0	0	0	0	0	
386	409967.4	5120608.7	83	MS	3.854	1.668	0.277	0	58.28	41.72		0	0	0	0.4	1	1.4	1.6	2	3.4	6.6	11.1	14.9	15.4	12.7	8.7	5.6	3.9	3.1	2.5	2	1.4	0.9	0.5	0.1	0	0	0	0	0	0	0	0	0	0	
387	410449.9	5120498.5	80	S	2.037	0.956	0.507	0	95.34	4.66		0	0	0	0	0	1	9.9	20.8	24.2	18.1	10.2	6.2	4.6	3	1.3	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
388	410945.0	5120404.2	75	MS	3.52	1.713	0.701	0	69.68	30.32		0	0	0	0.1	0.4	1.1	2.4	4.5	7.5	11.1	14.5	15.2	12.3	7.9	4.6	3.5	3.4	3.3	2.7	1.9	1.3	0.8	0.4	0.1	0	0	0	0	0	0	0	0	0	0	
389	411431.4	5120278.5	70	MS	3.438	1.709	0.791	0	71.36	28.64		0	0	0	0.1	0.4	0.9	2.1	4.8	8.9	13.3	15.6	14.3	10.4	6.6	4.5	3.8	3.5	3.1	2.4	1.8	1.2	0.8	0.4	0.1	0	0	0	0	0	0	0	0	0	0	
390	411905.6	5120169.7	66	MS	3.775	1.7	0.769	0	66.38	33.62		0	0	0	0.2	0.3	0.4	0.6	1.9	5.8	11.6	16.4	16.5	12.2	7.2	4.5	4.1	4.3	4.1	3.3	2.4	1.6	1	0.6	0.1	0	0	0	0	0	0	0	0	0	0	
391	412395.3	5120069.7	62	MS	3.311	1.615	0.953	0	77.89	22.11		0	0	0	0.5	0.9	0.6	0.7	3.1	9	16.1	19.8	16.9	9.9	4.3	2.4	2.8	3.3	3.1	2.3	1.5	0.9	0.6	0.3	0	0	0	0	0	0	0	0	0	0	0	
392	412880.8	5119963.2	59	S	2.216	0.754	0.693	0	99.05	0.95		0	0	0	0	0	0	3.4	13.1	23.5	26.4	20	9.8	2.5	0	0	0.4	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
393	413394.0	5119796.7	64	MS	3.432	1.806	0.957	0	72.02	27.98		0	0	0	0	0	0.2	1.6	5.8	12.2	17.1	16.8	11.8	6.1	3.2	3.2	4.1	4.5	4.1	3.2	2.2	1.4	0.9	0.5	0.1	0	0	0	0	0	0	0	0	0	0	
394	413842.6	5119691.4	54	S	2.248	0.614	-0.046	0	100	0		0	0	0	0	0	0	1.6	9.7	23.1	30.6	23.8	9.5	1.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
395	414335.0	5119608.2	57	MS	3.939	2.024	0.39	0	52.35	47.65		0	0	0	0	0	0.1	2.7	7.3	10.8	10.8	8.1	6	6.1	7.5	8.4	7.9	6.6	5.1	3.7	2.8	2.1	1.6	1	0.4	0	0	0	0	0	0	0	0	0	0	
396	414838.2	5119489.7	57	S	2.033	0.592	0.046	0	100	0		0	0	0	0	0	0	3.2	15.7	29.3	29.7	17	4.7	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
397	415339.8	5119380.8	57	S	2.084	0.659	0.094	0	100	0		0	0	0	0	0	0	4.1	15.5	26.2	27.1	18.2	7.5	1.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
398	415817.4	5119284.8	60	S	2.163	0.612	0.036	0	100	0		0	0	0	0	0	0	2	12.1	25.9	30.3	20.8	7.7	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Sample ID	Easting	Northing	Depth (ft)	Type	Mean	Sorting	Skewness	% Gravel	% Sand	% Mud	Diameter(Φ)	-2	-1.5	-1	-0.5	0	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	12	12.5	13	13.5	14	14.5	15
											Diameter(μ)	4000	2828.4	2000	1414.2	1000	707.1	500	353.6	250	176.8	125	88.4	62.5	44.2	31.3	22.1	15.6	11	7.8	5.5	3.9	2.8	2	1.4	1	0.7	0.5	0.35	0.24	0.18	0.12	0.09	0.06	0.04	0.03
399	416305.1	5119182.1	57	S	1.846	0.583	0.036	0	100	0		0	0	0	0	0	0.3	6.6	21.4	31.9	26.2	11.6	1.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
400	416786.1	5119048.0	55	S	1.985	0.589	0.056	0	100	0		0	0	0	0	0	0	3.9	17.2	30.2	28.9	15.5	3.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
401	417277.4	5118960.8	55	S	1.87	0.537	0.012	0	100	0		0	0	0	0	0	0	4.5	20.2	34.5	28.6	10.8	1.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
402	417762.5	5118847.6	53	S	2.036	0.586	0.024	0	100	0		0	0	0	0	0	0	3.1	15.4	29.3	30.1	17.3	4.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
403	418276.3	5118742.3	52	S	1.99	0.581	0.027	0	100	0		0	0	0	0	0	0	3.7	16.8	30.3	29.5	15.8	3.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
404	418756.1	5118632.2	49	S	2.063	0.59	-0.003	0	100	0		0	0	0	0	0	0	2.9	14.5	28.4	30.4	18.3	5.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
405	419220.1	5118511.6	48	S	2.216	0.613	-0.032	0	100	0		0	0	0	0	0	0	1.8	10.5	24	30.5	22.8	9	0.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
406	419721.8	5118398.9	45	S	2.344	0.578	-0.042	0	100	0		0	0	0	0	0	0	0.4	6.6	20.8	31.9	27	11.6	1.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
407	420232.1	5118302.2	41	S	2.31	0.581	-0.033	0	100	0		0	0	0	0	0	0	0.6	7.5	21.9	32	26	10.7	1.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
408	420706.0	5118180.4	35	S	2.321	0.579	-0.023	0	100	0		0	0	0	0	0	0	0.5	7.2	21.7	32	26.2	11	1.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
409	421175.1	5118072.4	29	S	2.309	0.588	-0.026	0	100	0		0	0	0	0	0	0	0.6	7.7	22	31.7	25.7	10.8	1.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
410	421673.3	5117933.1	24	S	2.194	0.584	-0.031	0	100	0		0	0	0	0	0	0	1.4	10.5	25.3	31.9	22.5	7.7	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
411	408861.3	5121310.1	87	S	1.927	0.571	0.014	0	100	0		0	0	0	0	0	0.1	4.5	18.5	31.7	28.9	13.7	2.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
412	409332.4	5121192.8	68	S	1.819	0.57	0.033	0	100	0		0	0	0	0	0	0.2	6.9	22.2	32.7	28	10.4	1.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
413	409820.7	5121091.4	75	MS	3.038	1.768	0.862	0	73.83	26.17		0	0	0	0	0	1.6	6	11.4	14.4	13.6	10.9	8.5	7.1	6.1	5.1	4	3.1	2.4	1.9	1.4	0.9	0.6	0.3	0	0	0	0	0	0	0	0	0	0	0	0
414	410309.7	5120979.2	79	MS	3.823	1.811	0.24	0	57.67	42.33		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0
415	410805.2	5120862.9	73	MS	3.329	1.62	0.654	0	74.49	25.51		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0
416	411267.3	5120748.9	66	MS	3.494	1.569	0.824	0	72.53	27.47		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0
417	411759.6	5120632.6	62	S	2.609	0.838	0.546	0	97.74	2.26		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0
418	412272.2	5120545.4	58	S	2.632	0.774	1.616	0	97.61	2.39		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0
419	412729.0	5120433.9	55	S	2.377	0.602	-0.057	0	99.99	0.01		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0
420	413233.8	5120322.4	58	S	2.442	0.796	1.474	0	97.86	2.14		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0
421	413702.0	5120219.3	56	S	2.742	1.205	1.59	0	92.67	7.33		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0
422	414168.4	5120074.3	53	S	2.318	0.599	-0.052	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
423	414662.3	5119958.9	52	S	2.347	0.594	-0.053	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
424	415168.0	5119851.7	52	S	2.191	0.6	-0.002	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
425	415670.3	5119750.6	61	S	2.317	0.629	-0.067	0	99.99	0.01		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0
426	416152.4	5119668.9	55	S	2.134	0.596	0.01	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
427	416684.9	5119536.1	55	S	1.938	0.587	0.032	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
428	417133.4	5119424.2	53	S	1.902	0.591	0.058	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
429	417629.4	5119317.9	53	S	2.001	0.592	0.022	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
430	418123.2	5119209.4	51	S	1.963	0.636	0.055	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
431	418591.8	5119100.0	48	S	1.93	0.601	0.028	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
432	419106.1	5118999.6	46	S	2.31	0.591	-0.041	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
433	419588.3	5118882.9	42	S	2.371	0.532	-0.016	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
434	420084.5	5118757.8	39	S	2.263	0.589	-0.029	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
435	420563.3	5118637.1	33	S	2.335	0.58	-0.021	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
436	421030.2	5118544.0	28	S	2.401	0.59	-0.027	0	99.99	0.01		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0
437	421541.6	5118413.5	21	S	2.218	0.595	-0.035	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
438	422014.7	5118322.8	12	S	2.349	0.694	-0.529	0	99.99	0.01		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0
439	408683.7	5121780.6	123	S	2.631	1.416	1.671	0	87.25	12.75		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0
440	409174.0	5121673.9	95	S	2.498	1.207	2	0	92.41	7.59		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0
441	409670.7	5121551.4	77	S	1.937	0.605	0.074	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
442	410168.7	5121464.2	73	S	2.739	1.405	1.438	0	87.55	12.45		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0
443	410653.0	5121344.4	69	MS	3.457	1.645	0.636	0	71.75	28.25		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0
444	411145.4	5121239.5	64	MS	3.604	1.834	0.613	0	68.21	31.79		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0
445	411630.9	5121118.6	57	S	2.418	0.654	-0.064	0	99.98	0.02		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0
446	412116.1	5121000.1	59	S	2.307	0.586	-0.037	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
447	412578.1	5120907.1	57	S	2.283	0.577	-0.017	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
448	413059.0	5120804.2	55	S	2.155	0.531	-0.019	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
449	413567.9	5120700.6	55	S	2.371	0.588	-0.031	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
450	414042.3	5120562.3	55	S	2.432	0.591	-0.057	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
451	414531.0	5120462.0	53	S	2.297	0.584	-0.051	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
452	415017.3	5120345.1	53	S	2.178	0.535	-0.017	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
453	415502.1	5120226.9	63	S	2.035	0.535	0.009	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
454	415999.1	5120101.4	60	S	1.93	0.528	0.028	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
455	416498.4	5120010.5	56	S	2.234	0.531	-0.013	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
456	416996.3	5119895.2	52	S	2.179	0.583	-0.003	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
457	417480.0	5119774.8	49	S	2.135	0.594	-0.009	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
458	417955.5	5119692.1	46	S	2.142	0.566	-0.02	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
459	418449.9	5119565.1	46	S	2.097	0.613	-0.026	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
460	418936.0	5119468.0	44	S	2.105	0.63	-0.038	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
461	419422.4	5119357.3	41	S	2.349	0.578	-0.028	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
462	419912.0	5119240.0	37	S	2.357	0.528	-0.013	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
463	420402.4	5119119.1	34	S	2.321	0.577	-0.042	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
464	420889.6	5119033.5	28	S	2.322	0.588	-0.029	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
465	421376.5	5118897.3	21	S	2.275	0.59	-0.016	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
466	421879.8	5118804.4	12	S	2.028	0.534	0.001	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
468	408545.7	5122291.7	129	MS	3.865	1.869	0.546	0	57.57	42.43		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0
469	409014.9	5122159.2	111	MS	3.637	1.783	0.704	0	63.28	36.72		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0
470	409548.7	5122066.6	88	S	2.425	1.278	1.401	0	88.94	11.06		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0
471	410008.5	5121938.4	75	S	2.245	0.851	0.894	0	97.06	2.94		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0
472	410495.1	5121835.0	64	S	2.099	0.802	0.668	0	98.81	1.19		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0
473	410987.9	5121708.0	60	S	2.727	1.266	0.812	0	89.96	10.04		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0
474	411471.3	5121606.8	56	S	2.501	0.626	-0.081	0	99.98	0.02		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0
475	411966.1	5121502.5	55	S	2.266	0.591	-0.027	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
476	412451.2	5121373.3	53	S	2.678	1.516	1.647	0	85.75	14.25		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0
477	412896.5	5121274.5	50	S	2.164	0.593	0.008	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
478	413408.2	5121154.0	54	S	2.206	0.704	1.767	0	98.13	1.87		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0
479	413877.6	5121053.8	58	S	2.188	0.577	-0.024	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
480	414386.2	5120924.4	60	S	2.277	0.583	-0.042	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
482	415359.2	5120712.3	72	S	1.865	0.507	0.008	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
483	415839.5	5120590.1	83	NS	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
484	416342.1	5120497.3	52	S	2.125	0.572	-0.021	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
485	416840.4	5120389.8	46	S	2.053	0.583	0.003	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
486	417355.4	5120262.4	48	S	2.095	0.578	-0.024	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
487	417829.4	5120161.2	42	S	2.081	0.659	-0.055	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
488	418302.7	5120038.6	39	S	2.028	0.647	-0.039	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
489	418802.0	5119936.0	38	S	2.127	0.645	-0.039	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
490	419282.5	5119826.5	36	S	2.07	0.664	0.003	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
491	419775.1	5119719.3	33	S	2.222	0.623	-0.082	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
492	420270.8	5119594.7	31	S	2.295	0.596	-0.046	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
493	420746.6	5119498.5	26	S	2.262	0.603	-0.061	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
494	421232.5	5119377.8	18	S	2.406	0.598	-0.03	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
495	421721.2	5119282.7	8	S	1.931	0.593	-0.021	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
496	408381.2	5122781.3	129	MS	4.144	1.995	0.178	0	50.1	49.9		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0
497	408849.0	5122637.7	110	S	2.495	1.06	1.923	0	94.23	5.77		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0
498	409352.9	5122526.8	88	S	2.698	1.36	1.431	0	87.04	12.96		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0
499	409909.9	5122414.5	72	S	2.526	1.226	1.521	0	91.06	8.94		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0
500	410362.2	5122305.0	66	S	2.164	0.861	0.73	0	97.36	2.64		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0
501	410852.3	5122194.1	57	S	2.871	1.339	0.853	0	86.5	13.5		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0
502	411336.3	5122082.7	53	S	2.519	0.916	0.495	0	97.22	2.78		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0
503	411828.7	5121980.2	54	S	2.371	0.591	-0.034	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
504	412309.2	5121859.4	50	S	2.172	0.585	-0.026	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
505	412803.1	5121743.8	50	S	2.176	0.59	-0.011	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
506	413253.3	5121643.2	52	S	2.223	0.516	0.01	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
507	413745.7	5121508.7	55	S	1.898	0.524	0.03	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
508	414226.7	5121385.1	62	S	2.321	0.526	-0.02	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
509	414733.5	5121271.9	62	S	2.115	0.532	-0.019	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
510	415234.3	5121199.6	68	S	2.043	0.535	-0.017	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
511	415723.9	5121091.2	61	S	1.732	0.586	0.002	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
512	416203.0	5120970.8	52	S	1.728	0.598	-0.02	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
513	416682.9	5120855.7	45	S	1.634	0.642	0.051	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
514	417159.9	5120736.6	38	S	2.252	0.568	-0.039	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
515	417755.0	5120630.8	30	S	2.289	0.604	-0.046	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
516	418635.1	5120424.7	33	S	2.084	0.542	-0.041	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
517	419133.4	5120318.5	32	S	2.07	0.624	-0.059	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
518	419626.6	5120192.8	30	S	2.155	0.576	-0.041	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
519	420096.9	5120090.6	28	S	2.164	0.617	-0.04	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
520	420589.7	5119970.9	20	S	2.253	0.619	-0.05	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
521	421090.4	5119847.6	15	S	2.25	0.66	-0.378	0	99.99	0.01		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0
523	408721.1	5123107.5	114	S	2.782	1.194	1.769	0	89.87	10.13		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0
524	409198.8	5123018.2	93	S	2.547	1.032	1.399	0	93.83	6.17		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0
525	409717.1	5122910.7	77	MS	3.586	1.741	0.611	0	66.8	33.2		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0
526	410192.5	5122776.0	66	S	2.731	1.165	1.437	0	90.69	9.31		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0
527	410697.5	5122667.3	61	S	2.897	1.323	0.738	0	87.8	12.2		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0
528	411176.0	5122550.6	54	S	2.369	0.974	0.277	0	97.77	2.23		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0
529	411662.7	5122461.3	50	S	2.337	0.663	-0.064	0	99.99	0.01		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0
530	412166.2	5122327.1	52	S	2.202	0.599	-0.037	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
531	412645.2	5122242.7	49	S	2.081	0.622	-0.095	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
532	413132.7	5122120.1	51	S	2.244	0.518	-0.013	0	100	0		0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
533	413615.8	5122005.3	53	S	1.762	0.522	-0.006	0	100	0		0	0	0	0	0	0.2	6.5	24.2	36.1	25.2	7.2	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Sample ID	Easting	Northing	Depth (ft)	Type	Mean	Sorting	Skewness	% Gravel	% Sand	% Mud
534	414079.2	5121895.7	57	S	2.149	0.568	-0.017	0	100	0
535	414541.8	5121791.4	65	S	2.344	0.522	-0.008	0	100	0
536	415067.9	5121670.2	67	S	2.292	0.513	-0.004	0	100	0
537	415601.9	5121543.3	61	S	1.924	0.532	0.012	0	100	0
538	416009.1	5121423.2	43	S	1.902	0.528	0.006	0	100	0
539	416547.2	5121312.4	41	S	1.923	0.521	-0.008	0	100	0
540	417055.3	5121257.2	38	S	1.763	0.54	-0.04	0	100	0
541	417525.5	5121128.1	37	S	2.134	0.524	-0.019	0	100	0
542	418011.4	5120994.0	42	S	2.15	0.63	-0.45	0	100	0
543	418498.8	5120878.9	28	S	2.235	0.591	-0.037	0	100	0
544	418972.5	5120788.0	25	S	2.171	0.586	-0.006	0	100	0
545	419505.8	5120668.3	23	S	2.138	0.58	0.004	0	100	0
546	419975.0	5120576.9	20	S	2.17	0.57	0.007	0	100	0
547	420460.6	5120447.1	15	S	2.088	0.531	0.024	0	100	0
549	423845.9	5119683.3	27	S	1.916	0.957	3.47	0	95.67	4.33
550	408565.8	5123612.7	121	S	2.739	1.102	2.265	0	93.71	6.29
551	409052.3	5123501.2	99	S	2.84	1.18	1.56	0	88.25	11.75
552	409578.5	5123375.9	87	S	2.865	1.154	1.027	0	88.12	11.88
553	410041.4	5123273.1	71	S	2.502	0.94	1.318	0	95.96	4.04
554	410549.9	5123151.2	60	S	2.793	1.174	0.775	0	91.49	8.51
555	411028.3	5123032.7	55	S	2.591	1.04	0.762	0	94.67	5.33
556	411520.1	5122923.0	50	S	2.784	1.407	1.573	0	86.83	13.17
557	412002.4	5122812.3	49	S	2.62	1.218	1.785	0	90.95	9.05
558	412471.3	5122690.5	48	S	2.235	0.598	-0.039	0	100	0
559	412984.4	5122595.0	48	S	2.26	0.528	-0.029	0	100	0
560	413477.8	5122478.9	46	S	2.103	0.524	0.012	0	100	0
561	413952.3	5122370.2	52	S	1.787	0.471	0.012	0	100	0
562	414431.1	5122263.9	54	S	1.758	0.474	0.018	0	100	0
563	414882.1	5122128.3	65	S	2.197	0.522	-0.014	0	100	0
564	415413.2	5121990.9	63	S	2.154	0.524	-0.003	0	100	0
565	415929.3	5121929.2	59	S	2.055	0.516	-0.002	0	100	0
566	416339.2	5121796.5	38	S	1.901	0.472	0	0	100	0
567	416930.4	5121718.6	39	S	1.745	0.718	1.365	0	98	2
568	417403.3	5121608.0	42	S	1.828	0.466	0.001	0	100	0
569	417888.2	5121493.4	33	S	2.126	0.519	-0.002	0	100	0
570	418357.2	5121365.5	44	S	2.138	0.584	-0.068	0	100	0
571	418835.9	5121277.5	38	S	2.07	0.584	-0.023	0	100	0
572	419315.8	5121154.9	37	S	2.291	0.58	-0.022	0	100	0
573	419806.4	5121035.1	22	S	2.158	0.589	-0.012	0	100	0
574	420296.0	5120922.6	25	S	2.184	0.606	0.015	0	100	0
575	420781.8	5120810.2	20	S	2.14	0.573	-0.016	0	100	0
576	421248.2	5120697.5	6	S	1.677	0.588	-0.045	0	100	0
577	423215.2	5120260.5	11	S	2.757	1.715	1.544	0	81.34	18.66
578	423728.2	5120164.1	33	S	1.329	0.422	-0.006	0	100	0
579	408437.8	5124041.5	123	S	2.624	0.576	-0.024	0	99.84	0.16
580	408906.3	5123986.5	109	MS	3.398	1.751	0.452	0	69.57	30.43
581	409416.0	5123874.9	93	S	2.983	1.151	1.261	0	86.35	13.65
582	409917.0	5123751.3	75	S	2.726	1.168	1.261	0	91.43	8.57
583	410407.2	5123627.2	62	S	2.404	0.856	0.988	0	97.31	2.69
584	410884.6	5123524.2	57	S	2.377	0.824	0.946	0	98.05	1.95
585	411394.1	5123419.7	50	S	2.16	0.763	0.675	0	99.16	0.84
586	411870.8	5123298.3	50	S	2.183	0.657	0.021	0	100	0
587	412361.3	5123186.3	47	S	2.57	1.188	1.954	0	92.74	7.26
588	412853.9	5123076.7	47	S	2.298	0.578	-0.012	0	100	0
589	413348.2	5122967.8	48	S	2.301	0.553	0.003	0	100	0
590	413817.1	5122845.7	48	MS	3.354	1.922	0.791	0	68.41	31.59
591	414292.0	5122731.5	50	S	1.986	0.468	0.01	0	100	0
592	415755.3	5122410.1	68	S	1.88	0.521	0.022	0	100	0
593	416263.4	5122290.0	59	S	1.653	0.516	0.009	0	100	0
594	416794.9	5122171.4	39	S	1.616	0.47	0.006	0	100	0
595	417232.7	5122082.3	40	S	1.768	0.476	0.011	0	100	0
596	417737.0	5121964.8	39	S	1.84	0.474	-0.006	0	100	0
597	418233.9	5121853.0	34	S	2.088	0.466	0.015	0	100	0
598	418718.0	5121744.6	30	S	2.184	0.506	0.016	0	100	0
599	419210.5	5121640.3	27	S	2.114	0.519	0.006	0	100	0
600	419657.2	5121514.6	26	S	2.148	0.528	-0.013	0	100	0
601	420133.4	5121397.5	27	S	2.206	0.588	0.005	0	100	0
602	420662.2	5121279.1	22	S	2.183	0.533	-0.012	0	100	0
603	421148.5	5121172.7	11	S	1.99	0.463	0.003	0	100	0
604	421617.1	5121070.1	11	S	1.824	0.514	-0.018	0	100	0
605	423076.7	5120727.3	32	S	1.805	0.464	-0.004	0	100	0
606	423573.3	5120610.1	37	S	1.068	0.737	3.161	0	99.18	0.82
607	424077.2	5120486.4	53	S	0.899	0.546	-0.431	0.87	99.13	0
608	408317.6	5124542.5	124	S	3.036	0.987	2.024	0	92.11	7.89
609	408836.9	5124387.4	115	MS	3.532	1.585	0.695	0	69.91	30.09
610	409293.2	5124315.2	99	S	2.917	1.057	1.361	0	89.28	10.72
611	409792.7	5124179.6	79	S	2.637	0.998	0.586	0	94.41	5.59
612	410285.3	5124072.4	63	S	2.459	0.796	0.744	0	98.42	1.58
613	410751.0	5123981.1	58	S	2.514	0.938	1.364	0	95.92	4.08
614	411224.9	5123868.0	52	S	2.123	0.684	0.879	0	99.11	0.89
615	411719.2	5123763.1	48	S	2.094	0.675	0.072	0	99.99	0.01
616	412215.4	5123652.2	45	S	2.298	0.617	-0.04	0	100	0
617	412707.2	5123543.2	46	S	2.322	0.595	-0.055	0	100	0
618	413140.9	5123412.7	41	S	2.284	0.58	-0.027	0	100	0
619	413680.5	5123331.5	46	S	2.237	0.528	-0.049	0	100	0
620	414150.6	5123192.9	43	S	2.239	0.502	0.009	0	100	0
621	417107.0	5122534.4	62	S	1.675	0.429	-0.01	0	100	0
622	417620.8	5122449.4	42	S	1.562	0.463	0.011	0	100	0
623	418083.2	5122347.7	46	S	1.747	0.431	0.001	0	100	0
624	418561.2	5122210.4	43	S	1.778	0.466	0.003	0	100	0
625	419054.2	5122081.9	31	S	1.698	0.518	-0.009	0	100	0
626	419574.5	5121999.3	26	S	2.155	0.471	0.025	0	100	0
627	420019.3	5121869.4	25	S	2.041	0.511	0.001	0	100	0
628	420523.7	5121761.1	19	S	2.06	0.518	-0.016	0	100	0
630	421469.7	5121544.7	9	S	1.925	0.463	0.001	0	100	0
632	422459.9	5121315.1	20	S	1.577	0.466	0.001	0	100	0
633	422905.0	5121190.2	36	S	1.385	0.677	3.476	0	99.29	0.71
634	423418.6	5121108.7	55	S	0.759	0.844	-0.02	0	100	0
635	423899.6	5120973.9	53	S	1.193	0.569	0.076	0	100	0
636	408147.5	5125009.2	127	S	2.968	0.759	1.549	0	95.19	4.81
637	408682.1	5124906.0	118	S	3.16	1.075	1.522	0	86.05	13.95
638	409129.3	5124796.1	108	NS	0	0	0	0	0	0
639	409645.9	5124674.1	88	MS	3.451	1.382	0.759	0	71.21	28.79
640	410135.3	5124591.1	69	S	2.471	0.865	0.503	0	97.53	2.47
641	410596.8	5124464.8	58	S	2.598	0.835	1.043	0	97.27	2.73
642	411084.0	5124331.5	54	S	2.317	0.728	1.156	0	98.66	1.34
643	411569.0	5124241.6	50	S	2.009	0.654	0.098	0	100	0
644	412073.9	5124131.2	47	S	1.993	0.657	0.073	0	100	0
645	412561.3	5124012.7	45	S	2.051	0.585	0.029	0	100	0
646	413017.6	5123896.9	39	S	1.98	0.602	0.034	0	100	0
647	413518.5	5123793.1	40	S	2.135	0.605	-0.039	0	100	0
648	417937.0	5122813.6	51	S	1.464	0.51	0.011	0	100	0
649	418407.2	5122693.1	59	S	1.187	0.521	0.041	0	100	0
650	418893.8	5122589.4	60	S	1.756	0.511	0.009	0	100	0
651	419372.1	5122477.0	47	S	1.715	0.467	0.004	0	100	0
652	419858.0	5122353.1	40	S	1.872	0.426	0.018	0	100	0
653	420339.4	5122255.0	32	S	2.253	0.509	0.002	0	100	0
654	420836.4	5122149.6	21	S	1.917	0.429	0.004	0	100	0
655	421338.2	5122029.9	15	S	1.805	0.463	0.004	0	100	0
656	421807.2	5121898.1	18	S	1.806	0.427	0.001	0	100	0
657	422303.8	5121794.0	35	S	1.534	0.504	-0.009	0	100	0
658	422798.0	5121687.0	63	S	2.195	1.224	2.153	0	92.79	7.21
659	423278.9	5121577.8	68	S	1.591	0.564	0.035	0	100	0
660	423772.6	5121471.5	44	S	2.147	0.5	0.024	0	100	0
661	424260.5	5121352.1	36	S	1.824	0.469	0	0	100	0
662	408498.8	5125391.5	122	S	3.173	1.299	0.819	0	83.62	16.38
663	408983.1	5125289.9	102	S	3.14	1.094	1.485	0	86.08	13.92
664	409477.9	5125165.6	102	MS	3.333	1.367	1.321	0	78.53	21.47
665	409968.9	5125069.5	82	S	2.862	1.135	0.984	0	89.73	10.27
666	410434.2	5124948.3	64	S	2.567	0.682	-0.077	0	99.22	0.78
667	410937.9	5124847.9	53	S	2.4	0.77	-0.492	0	99.59	0.41
669	411890.3	5124602.8	42	S	2.227	0.628	-0.026	0	100	0

Sample ID	Easting	Northing	Depth (ft)	Type	Mean	Sorting	Skewness	% Gravel	% Sand	% Mud
670	412390.6	5124496.3	43	S	2.124	0.634	0.01	0	100	0
671	412902.7	5124416.5	37	S	2.072	0.596	0.009	0	100	0
672	413380.3	5124277.8	39	S	1.843	0.593	0.047	0	100	0
673	418765.7	5123062.7	74	S	1.525	0.461	0.021	0	100	0
674	419229.3	5122941.5	78	S	1.349	0.538	-0.007	0	100	0
675	419714.2	5122830.8	66	S	1.211	0.498	0.022	0	100	0
676	420220.9	5122746.6	64	S	1.503	0.459	0.021	0	100	0
677	420716.9	5122626.9	66	S	1.593	0.472	0.003	0	100	0
678	421197.4	5122499.7	68	S	1.645	0.47	-0.005	0	100	0
679	421673.8	5122365.4	66	S	1.895	0.705	1.546	0	100	0
680	422173.4	5122270.8	78	S	1.991	1.261	1.665	0	98.15	1.85
681	422635.6	5122161.8	78	S	1.055	0.755	0.284	0	93.88	6.12
682	423147.5	5122052.2	60	S	1.092	0.62	-0.376	0	99.92	0.08
683	423605.5	5121932.6	46	S	0.899	0.594	-0.298	0.66	99.34	0
684	424091.9	5121835.9	41	S	1.11	0.695	-0.187	0.39	99.61	0
685	424604.2	5121690.7	36	S	1.556	0.459	0.009	0	100	0
686	408363.2	5125905.4	116	S	3.034	0.807	1.585	0	100	0
687	408820.1	5125794.2	20	S	2.788	0.584	-0.024	0	93.5	6.5
688	409293.4	5125653.6	103	MS	3.311	1.26	0.731	0	98.95	1.05
689	409832.3	5125550.4	88	MS	3.501	1.357	0.481	0	78.47	21.53
690	410317.3	5125436.3	71	S	2.599	0.816	1.05	0	70.65	29.35
691	410803.0	5125330.0	57	S	2.36	0.697	-0.056	0	97.19	2.81
692	411288.7	5125217.9	47	S	2.33	0.634	-0.08	0	99.85	0.15
693	411805.7	5125083.1	44	S	2.406	0.612	-0.058	0	100	0
694	412258.9	5124985.3	39	S	2.281	0.622	-0.05	0	100	0
695	412759.8	5124858.3	37	S	2.272	0.596	-0.042	0	100	0
696	413243.8	5124763.7	40	S	2.074	0.59	-0.032	0	100	0
697	419574.5	5123310.1	92	S	1.558	0.567	0.015	0	100	0
698	420050.1	5123219.8	100	S	1.634	0.516	0.005	0	100	0
699	420539.9	5123110.3	85	S	1.3	0.541	-0.034	0	100	0
700	421056.5	5122988.5	86	S	1.386	0.461	0.007	0	100	0
701	421514.6	5122882.5	82	S	1.363	0.506	0.009	0	100	0
702	422024.8	5122777.0	80	S	1.506	0.476	0.006	0	100	0
703	422486.9	5122659.6	68	S	1.027	0.647	-0.807	0	100	0
704	422962.2	5122542.8	63	S	0.919	0.542	-0.058	1.29	98.71	0
705	423484.0	5122437.8	62	S	1.228	1.339	1.388	0	100	0
706	423965.8	5122305.4	54	S	0.82	0.826	-0.681	3.28	91.47	5.24
707	424444.6	5122197.6	48	S	1.14	0.536	-0.013	3.83	96.17	0
708	408240.5	5126348.9	120	S	3.017	0.722	1.762	0	100	0
709	408700.0	5126249.2	116	S	3.046	0.963	2.045	0	95.79	4.21
710	409192.4	5126154.2	101	S	2.774	0.588	-0.038	0	92.46	7.54
711	409671.0	5126011.3	96	NS	0	0	0	0	99.05	0.95
712	410127.3	5125911.3	83	S	2.848	1.088	0.553	0	0	0
713	410630.7	5125786.3	67	S	2.586	0.805	0.876	0	90.99	9.01
714	411108.2	5125687.6	55	S	2.413	0.753	-0.6	0	97.32	2.68
715	411603.0	5125580.6	49	S	2.302	0.607	-0.038	0	99.73	0.27
716	412086.0	5125461.4	40	S	2.331	0.635	-0.057	0	100	0
717	412560.0	5125350.9	39	S	2.336	0.607	-0.042	0	100	0
718	413080.6	5125248.2	41	S	2.224	0.739	-0.07	0	100	0
719	413550.1	5125124.2	31	S	2.243	0.605	-0.057	0	99.98	0.02
720	419908.5	5123644.3	100	S	1.606	0.476	0.008	0	100	0
721	420386.5	5123554.0	85	S	1.686	0.468	-0.007	0	100	0
722	420864.6	5123460.8	87	S	1.349	0.518	-0.006	0	100	0
723	421306.6	5123367.4	80	S	1.546	0.465	0.005	0	100	0
724	421854.7	5123253.7	79	S	1.445	0.475	-0.003	0	100	0
725	422338.1	5123155.1	89	S	1.604	0.939	3.153	0	100	0
726	422823.5	5123020.8	76	S	1.308	0.515	0.009	0	96.61	3.39
727	423313.3	5122903.8	62	S	1.423	0.524	-0.004	0	100	0
728	423797.8	5122792.2	55	MS	2.294	2.384	1.222	0	100	0
729	424283.6	5122684.2	63	MS	3.006	2.457	0.561	0.37	76.48	23.15
730	424761.4	5122563.9	40	S	1.075	0.595	-0.074	0	64.41	35.59
731	408039.1	5126853.8	121	S	2.967	0.759	1.559	0	100	0
732	408558.3	5126728.0	113	S	3.086	0.985	1.989	0	95.46	4.54
733	409036.2	5126584.9	111	S	3.072	0.933	1.476	0	91.5	8.5
734	409540.3	5126508.2	101	NS	0	0	0	0	90.15	9.85
735	410010.7	5126353.5	91	S	3.065	0.945	1.141	0	0	0
736	410542.0	5126282.6	78	S	2.775	1.041	0.429	0	88.21	11.79
737	411001.0	5126157.7	65	S	2.39	0.81	1.034	0	92.79	7.21
738	411503.2	5126048.5	54	S	2.294	0.649	-0.034	0	98.09	1.91
739	411974.3	5125937.8	48	S	2.266	0.726	-0.091	0	99.99	0.01
740	412455.0	5125825.1	43	S	2.159	0.641	-0.012	0	99.98	0.02
741	412945.2	5125707.1	40	S	2.187	0.613	-0.012	0	100	0
742	413481.1	5125598.6	37	S	2.146	0.618	-0.022	0	100	0
743	413920.8	5125474.4	37	S	2.05	0.614	-0.001	0	100	0
744	420235.5	5124022.2	43	S	1.524	0.573	0.028	0	100	0
745	420722.6	5123927.6	39	S	2.085	0.508	0.013	0	100	0
746	421231.5	5123826.8	39	S	1.712	0.57	-0.03	0	100	0
747	421706.1	5123727.2	46	S	1.786	0.462	0.005	0	100	0
748	422175.2	5123583.5	46	S	1.726	0.466	-0.003	0	100	0
749	422673.3	5123473.4	32	S	1.468	0.429	-0.013	0	100	0
750	423167.7	5123395.0	16	S	1.708	0.464	0.006	0	100	0
751	423650.0	5123279.9	21	S	2.013	0.515	0.015	0	100	0
752	424142.3	5123160.5	13	S	1.619	0.751	3.858	0	100	0
753	424626.0	5123055.0	20	MS	3.374	2.088	0.789	0	98.92	1.08
754	425119.3	5122953.5	16	S	2.301	1.204	2.573	0	65.67	34.33
755	408373.6	5127242.2	116	S	3.009	0.743	1.469	0	94.07	5.93
756	408895.5	5127066.8	111	S	3.055	0.849	1.721	0	94.97	5.03
757	409385.6	5127028.1	101	S	3.101	0.936	1.466	0	93.02	6.98
758	409838.2	5126858.5	100	S	2.964	0.761	1.434	0	89.62	10.38
759	410345.4	5126760.7	86	S	2.979	0.915	1.316	0	94.93	5.07
760	410838.9	5126646.6	79	S	2.788	0.872	1.132	0	91.18	8.82
761	411313.0	5126533.4	68	S	2.592	0.848	1.045	0	94.16	5.84
762	411784.3	5126396.4	57	S	2.372	0.632	-0.048	0	96.71	3.29
763	412300.3	5126262.9	49	S	2.335	0.611	-0.028	0	99.99	0.01
764	412784.5	5126160.6	47	S	2.261	0.608	-0.017	0	99.99	0.01
765	413258.6	5126065.9	45	S	2.166	0.607	-0.022	0	100	0
766	413759.3	5125956.0	39	S	2.13	0.616	-0.013	0	100	0
767	414241.2	5125839.7	34	S	2.104	0.603	-0.009	0	100	0
768	414732.7	5125729.9	32	S	1.95	0.588	0.031	0	100	0
769	420074.2	5124522.1	8	S	1.818	1.042	3.279	0	100	0
770	420571.9	5124420.8	20	S	1.667	0.425	0.001	0	95.32	4.68
771	421061.4	5124294.6	19	S	1.623	0.463	0.009	0	100	0
772	421563.2	5124189.6	17	S	1.798	0.507	0.011	0	100	0
773	423988.0	5123622.0	4	S	2.065	0.514	0.008	0	100	0
774	424465.8	5123438.5	2	S	2.333	0.6	-0.039	0	100	0
775	424985.3	5123428.4	6	S	1.696	0.461	0.004	0	100	0
776	408240.3	5127697.3	115	S	3.025	0.801	1.745	0	100	0
777	408742.5	5127547.2	116	S	3.015	0.787	1.639	0	94.49	5.51
778	409207.8	5127480.2	104	S	2.979	0.787	1.528	0	94.51	5.49
779	409719.8	5127342.1	100	S	3.026	0.869	1.741	0	94.67	5.33
780	410167.1	5127227.2	71	MS	3.614	1.499	1.259	0	93.21	6.79
781	410658.6	5127125.1	82	S	2.798	0.87	1.394	0	73.24	26.76
782	411170.5	5127021.6	74	S	2.675	0.857	1.291	0	94.83	5.17
783	411636.7	5126894.6	65	S	2.429	0.68	-0.023	0	95.98	4.02
784	412155.7	5126729.0	53	S	2.259	0.611	-0.013	0	99.71	0.29
786	413131.6	5126531.8	46	S	2.205	0.596	-0.035	0	100	0
787	413618.4	5126420.5	42	S	2.226	0.601	-0.034	0	100	0
788	414125.4	5126310.0	39	S	2.097	0.592	-0.022	0	100	0
789	414602.2	5126215.6	35	S	2.029	0.585	0.017	0	100	0
790	415082.4	5126105.7	36	S	2.141	0.585	-0.015	0	100	0
791	420326.0	5125035.1	2	S	1.583	0.423	-0.005	0	100	0
792	420436.7	5124869.1	6	S	1.544	0.433	-0.011	0	100	0
793	420948.6	5124779.6	10	S	1.461	0.516	-0.001	0	100	0
794	421433.3	5124664.2	14	S	1.72	0.476	0.008	0	100	0
795	408115.0	5128183.9	118	S	3.274	1.099	1.711	0	100	0
796	408632.7	5128035.7	117	MS	3.627	1.488	1.322	0	85.58	14.42
797	409084.6	5127975.6	104	S	2.851	0.893	-0.161	0	74.73	25.27
798	409559.0	5127815.1	100	S	3.02	0.815	1.665	0	95.97	4.03
799	410067.2	5127681.6	92	S	3.025	0.915	1.468	0	93.95	6.05
800	410587.6	5127573.3	87	S	2.881	0.795	1.479	0	91.49	8.51
801	411044.3	5127491.6	65	S	2.822	0.757	1.258	0	95.48	4.52
802	411544.7	5127371.1	68	S	2.488	0.666	-0.019	0	96.34	3.66

Sample ID	Easting	Northing	Depth (ft)	Type	Mean	Sorting	Skewness	% Gravel	% Sand	% Mud
803	412028.9	5127247.0	63	S	2.492	0.76	1.195	0	98.28	1.72
804	412513.8	5127143.6	60	S	2.307	0.609	-0.027	0	100	0
805	413008.4	5127004.5	49	S	2.342	0.589	-0.032	0	100	0
806	413466.8	5126900.3	47	S	2.303	0.599	-0.045	0	100	0
807	413951.5	5126807.4	43	S	2.264	0.592	-0.03	0	100	0
808	414464.8	5126682.4	40	S	2.194	0.6	-0.017	0	100	0
809	414929.8	5126601.7	36	S	2.11	0.6	-0.013	0	100	0
810	420290.7	5125387.6	21	S	1.538	0.461	0.002	0	100	0
811	407965.0	5128651.4	121	S	2.929	0.584	0.001	0	97.36	2.64
812	408469.7	5128528.8	117	NS	0	0	0	0	0	0
813	408933.5	5128417.2	110	S	2.861	0.584	-0.015	0	98.28	1.72
814	409421.2	5128298.8	102	S	3.122	1.018	2.069	0	90.72	9.28
815	409884.1	5128177.4	92	S	3.074	0.964	2.008	0	91.84	8.16
816	410368.7	5128092.8	88	S	2.931	0.789	1.519	0	95.03	4.97
817	410844.6	5127948.7	83	S	2.802	0.783	1.534	0	96.4	3.6
818	411344.3	5127863.4	79	S	2.797	0.815	0.994	0	94.84	5.16
819	411870.9	5127691.9	69	S	2.809	1.135	1.819	0	92.02	7.98
820	412364.8	5127607.1	63	S	2.666	0.748	1.279	0	97.75	2.25
821	412839.9	5127518.1	59	S	2.44	0.565	-0.02	0	100	0
822	413331.4	5127401.8	52	S	2.301	0.581	-0.023	0	100	0
823	413826.4	5127279.7	52	S	2.35	0.595	-0.033	0	100	0
824	414289.1	5127175.8	44	S	2.277	0.586	-0.015	0	100	0
825	414815.1	5127057.7	44	S	2.213	0.598	-0.02	0	100	0
826	415282.8	5126931.1	38	S	2.282	0.588	-0.02	0	100	0
827	408310.3	5129006.6	114	S	2.89	0.581	0.017	0	100	0
828	408769.8	5128883.4	111	S	3.072	0.833	1.665	0	97.88	2.12
829	409277.0	5128791.6	101	S	3.136	0.839	1.74	0	92.69	7.31
830	409763.3	5128657.9	96	S	3.018	0.85	1.765	0	91.83	8.17
831	410296.4	5128520.0	83	S	3	0.956	2.009	0	93.6	6.4
832	410765.9	5128440.4	79	S	2.916	0.792	1.506	0	93.26	6.74
833	411260.4	5128321.3	80	S	2.72	0.778	1.579	0	95.05	4.95
834	411746.8	5128201.4	74	S	2.692	0.741	1.183	0	97.1	2.9
835	412205.1	5128103.0	72	S	2.705	0.824	1.184	0	97.38	2.62
836	412688.5	5127996.8	65	S	2.577	0.766	1.385	0	96.06	3.94
837	413179.6	5127902.3	58	S	2.472	0.575	-0.006	0	97.75	2.25
838	413661.3	5127771.4	55	S	2.435	0.578	-0.018	0	100	0
839	414152.7	5127660.8	50	S	2.353	0.577	-0.008	0	99.99	0.01
840	414622.5	5127533.3	44	S	2.295	0.588	-0.016	0	100	0
841	415128.2	5127471.7	41	S	2.355	0.586	-0.005	0	100	0
842	415598.7	5127307.3	34	S	2.347	0.583	-0.024	0	100	0
843	408142.3	5129491.2	116	S	2.872	0.574	0.016	0	98.27	1.73
844	408651.0	5129354.6	112	S	3.011	0.765	1.601	0	94.87	5.13
845	409126.6	5129263.3	102	S	2.951	0.584	-0.02	0	97.15	2.85
846	409638.5	5129147.4	102	S	2.971	0.827	1.789	0	94.77	5.23
847	410121.3	5129037.9	90	S	2.954	0.945	2.405	0	94.6	5.4
848	410596.2	5128912.3	90	NS	0	0	0	0	0	0
849	411133.9	5128805.4	90	S	2.593	0.566	-0.012	0	99.98	0.02
850	411587.4	5128690.9	80	S	2.719	0.734	1.369	0	97.45	2.55
851	412063.6	5128563.7	74	S	2.825	0.937	1.479	0	93.29	6.71
852	412550.2	5128462.2	65	S	2.861	0.893	1.195	0	92.84	7.16
853	413038.0	5128364.2	58	S	2.6	0.733	1.268	0	98.08	1.92
854	413519.6	5128220.6	55	S	2.531	0.595	-0.012	0	99.92	0.08
855	414001.0	5128135.1	49	S	2.457	0.576	0.002	0	100	0
856	414491.4	5128017.5	45	S	2.385	0.577	0.001	0	100	0
857	414978.2	5127899.0	41	S	2.389	0.575	-0.009	0	100	0
858	415447.5	5127785.9	36	S	2.378	0.573	-0.01	0	100	0
859	408000.0	5129962.2	116	S	3.012	0.822	1.795	0	94.3	5.7
860	408487.8	5129854.3	116	S	3.122	0.97	2.081	0	91.49	8.51
861	408988.1	5129752.0	107	S	3.007	0.6	1.643	0	94.27	5.73
862	409466.6	5129623.4	102	S	2.991	0.766	1.559	0	94.94	5.06
863	409965.0	5129501.4	94	S	2.906	0.737	1.559	0	96.41	3.59
864	410441.0	5129406.6	91	S	2.901	0.825	1.605	0	95.51	4.49
865	410933.3	5129290.7	85	S	2.739	0.573	0.006	0	99.36	0.64
866	411431.7	5129181.1	81	S	3.032	1.223	1.791	0	88.21	11.79
867	411929.4	5129061.2	76	S	2.769	0.826	1.185	0	94.99	5.01
868	412399.0	5128961.6	72	S	2.707	0.83	1.757	0	96.41	3.59
869	412881.7	5128836.8	58	S	2.67	0.811	1.647	0	96.92	3.08
870	413336.7	5128743.3	60	S	2.603	0.722	1.34	0	98.2	1.8
871	413519.1	5128622.8	54	S	2.688	0.732	1.352	0	97.77	2.23
872	414303.8	5128509.5	50	S	2.563	0.583	-0.006	0	99.92	0.08
873	414800.9	5128394.2	45	S	2.438	0.577	-0.009	0	99.99	0.01
874	415277.3	5128273.4	39	S	2.452	0.57	-0.001	0	99.99	0.01
875	415776.2	5128170.2	34	S	2.43	0.526	-0.011	0	100	0
876	407883.2	5130429.6	124	S	2.97	0.772	1.994	0	95.93	4.07
877	408345.6	5130350.8	111	S	2.856	0.575	0.014	0	98.44	1.56
878	408841.6	5130196.8	102	S	2.93	0.777	1.663	0	95.71	4.29
879	409319.0	5130109.3	95	S	2.841	0.572	0.016	0	98.64	1.36
880	409834.7	5129987.0	90	S	3.028	0.887	1.907	0	93.48	6.52
881	410284.0	5129901.5	84	S	2.919	0.773	1.674	0	95.91	4.09
882	410797.3	5129769.3	82	S	2.904	0.772	1.679	0	96.08	3.92
883	411286.5	5129656.7	79	S	2.898	0.903	1.831	0	94.49	5.51
884	411776.7	5129536.9	77	S	2.724	0.737	1.355	0	97.18	2.82
885	412262.0	5129426.7	69	S	2.697	0.734	1.404	0	97.62	2.38
886	412741.9	5129310.3	66	S	2.721	0.734	1.275	0	97.49	2.51
887	413239.4	5129197.2	60	S	2.677	0.73	1.294	0	97.82	2.18
888	413726.2	5129088.6	54	S	3.049	1.29	1.64	0	88.09	11.91
889	414182.6	5129007.5	50	S	2.533	0.583	-0.007	0	99.98	0.02
890	414676.4	5128864.1	46	S	2.538	0.578	-0.006	0	99.99	0.01
891	415161.7	5128747.2	46	S	2.525	0.566	-0.012	0	99.99	0.01
892	415650.9	5128629.8	38	S	2.558	0.564	-0.014	0	99.99	0.01
893	407741.8	5130889.4	122	NS	0	0	0	0	0	0
894	408203.4	5130796.8	115	S	2.84	0.562	0.012	0	98.87	1.13
895	408678.0	5130668.9	108	S	3.005	0.889	1.916	0	94.08	5.92
896	409194.5	5130600.4	100	S	2.862	0.767	1.696	0	96.5	3.5
897	409681.6	5130452.3	94	S	2.917	0.804	1.752	0	95.57	4.43
898	410157.0	5130354.1	92	S	3.155	1.114	2.104	0	89.96	10.04
899	410659.7	5130246.0	85	S	2.847	0.574	0.018	0	98.52	1.48
900	411144.6	5130121.2	81	S	2.84	0.781	1.715	0	96.48	3.52
901	411647.0	5130002.7	79	S	2.767	0.754	1.59	0	97.11	2.89
902	414820.8	5122370.6	64	S	1.729	0.472	0.019	0	100	0
903	415103.2	5122327.3	67	S	2.228	0.51	0.007	0	100	0
904	414531.6	5122685.2	51	S	1.449	0.567	0.046	0	100	0
905	414783.5	5122624.5	36	S	2.075	1.117	2.812	0	94.04	5.96
906	415021.1	5122548.4	64	S	1.656	0.51	0.028	0	100	0
907	415259.5	5122500.4	70	S	2.097	0.852	1.871	0	97.81	2.19
908	415502.4	5122455.9	71	S	1.877	0.574	-0.004	0	100	0
909	414461.3	5122931.8	47	S	1.81	0.524	-0.01	0	100	0
910	414711.9	5122855.0	45	S	1.916	0.501	0.01	0	100	0
911	414953.9	5122808.7	55	S	2.014	0.475	0.014	0	100	0
912	415206.7	5122750.9	65	S	1.894	0.509	0.012	0	100	0
913	415430.2	5122707.9	75	S	2.047	0.712	1.125	0	98.62	1.38
914	415679.5	5122644.8	77	S	2.081	0.513	0.01	0	100	0
915	415916.3	5122572.4	75	S	2.209	1.367	1.814	0	91.45	8.55
916	414378.7	5123186.1	45	S	2.683	1.379	2.125	0	88.41	11.59
917	414620.9	5123102.5	45	S	1.819	0.463	-0.004	0	100	0
918	414873.2	5123045.0	42	S	1.743	0.516	0.02	0	100	0
919	415100.8	5122987.3	48	S	1.733	0.474	0.007	0	100	0
920	415382.6	5122938.7	60	S	1.649	0.527	0.002	0	100	0
921	415624.9	5122887.0	78	S	1.259	0.621	0.02	0	100	0
922	415870.0	5122836.0	83	S	2.178	0.523	0.003	0	100	0
923	416103.2	5122773.7	79	S	1.843	0.51	-0.004	0	100	0
924	416353.4	5122714.9	66	S	2.133	0.516	0.006	0	100	0
925	416657.2	5122664.0	64	S	1.988	0.471	0.004	0	100	0
926	414046.8	5123472.7	43	S	2.249	0.514	-0.006	0	100	0
927	414298.1	5123406.3	41	S	2.18	0.518	-0.02	0	100	0
928	414565.2	5123346.5	41	S	2.052	0.503	0.012	0	100	0
929	414810.5	5123285.8	40	S	1.975	0.463	0.005	0	100	0
930	415049.5	5123232.4	44	S	1.678	0.52	-0.003	0	100	0
931	415291.5	5123170.0	42	S	1.54	0.529	-0.019	0	100	0
932	415541.4	5123123.1	55	S	1.726	0.571	-0.015	0	100	0
933	415783.5	5123079.2	75	S	1.458	0.507	0.012	0	100	0
934	416023.0	5123016.3	86	S	2.104	0.513	0.02	0	100	0

Diameter(Φ)	-2	-1.5	-1	-0.5	0	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	12	12.5	13	13.5	14	14.5	15
Diameter(μ)	4000	2828.4	2000	1414.2	1000	707.1	500	353.6	250	176.8	125	88.4	62.5	44.2	31.3	22.1	15.6	11	7.8	5.5	3.9	2.8	2	1.4	1	0.7	0.5	0.35	0.24	0.18	0.12	0.09	0.06	0.05	0.02

Sample ID	Easting	Northing	Depth (ft)	Type	Mean	Sorting	Skewness	% Gravel	% Sand	% Mud	Diameter(Φ) Diameter(μ)	-2 4000	-1.5 2828.4	-1 2000	-0.5 1414.2	0 1000	0.5 707.1	1 500	1.5 353.6	2 250	2.5 176.8	3 125	3.5 88.4	4 62.5	4.5 44.2	5 31.3	5.5 22.1	6 15.6	6.5 11	7 7.8	7.5 5.5	8 3.9	8.5 2.8	9 2	9.5 1.4	10 1	10.5 0.7	11 0.5	11.5 0.35	12 0.24	12.5 0.18	13 0.12	13.5 0.09	14 0.06	14.5 0.03	15 0.02
935	416274.1	5122962.8	80	S	1.717	0.474	-0.007	0	100	0		0	0	0	0	0	0.1	5.7	26.5	40.1	23.4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
936	416523.9	5122903.9	68	S	1.888	0.466	-0.012	0	100	0		0	0	0	0	0	0	2	18	39.3	31.7	8.6	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
937	416803.2	5122838.8	62	S	1.822	0.522	-0.027	0	100	0		0	0	0	0	0	0.1	5.1	21.7	35.9	27.7	8.9	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
938	417065.1	5122777.5	51	S	1.595	0.476	0.002	0	100	0		0	0	0	0	0	0.4	9.6	32	38.3	17.5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
939	413975.9	5123684.7	36	S	2.261	0.518	-0.018	0	100	0		0	0	0	0	0	0	0.2	6.5	24.2	36.3	25.4	7	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
940	414256.2	5123660.2	37	S	2.194	0.517	-0.01	0	100	0		0	0	0	0	0	0	0.4	8.2	26.9	36.3	22.6	5.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
941	414482.6	5123579.5	38	S	2.234	0.509	0.009	0	100	0		0	0	0	0	0	0	0.1	6.8	25.6	36.9	24.2	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
942	414755.3	5123517.3	37	S	2.094	0.509	0.027	0	100	0		0	0	0	0	0	0	0.7	11.2	31	35.5	18.3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
943	414981.3	5123466.5	36	S	2.075	0.506	0.014	0	100	0		0	0	0	0	0	0	0.8	11.8	31.6	35.4	17.6	2.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
944	415193.7	5123423.0	40	S	1.908	0.466	-0.001	0	100	0		0	0	0	0	0	0	1.7	17.1	38.9	32.5	9.3	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
945	415451.9	5123343.7	42	S	1.685	0.516	-0.009	0	100	0		0	0	0	0	0	0.4	8.5	27.1	36.3	22.4	4.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
946	415733.9	5123325.5	50	S	1.61	0.514	-0.002	0	100	0		0	0	0	0	0	0.7	10.8	30	35.6	19.2	3.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
947	415982.4	5123255.9	72	S	1.632	0.511	0	0	100	0		0	0	0	0	0	0.6	10	29.3	36.1	20.1	3.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
948	416230.9	5123194.1	82	S	1.981	0.59	-0.044	0	100	0		0	0	0	0	0	0.2	4.3	16.6	29.8	29.6	15.9	3.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
949	416458.7	5123156.4	80	S	2.172	0.518	-0.02	0	100	0		0	0	0	0	0	0	0.5	8.8	27.6	38.1	21.8	4.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
950	416708.5	5123101.7	66	S	1.989	0.528	-0.015	0	100	0		0	0	0	0	0	0	2.3	15.4	32.8	32.5	14.8	1.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
951	416947.6	5123043.6	59	S	1.857	0.51	-0.002	0	100	0		0	0	0	0	0	0	3.9	20.5	36.2	29	9.6	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
952	417171.5	5122968.4	62	S	1.947	0.515	0.003	0	100	0		0	0	0	0	0	0	2.5	16.9	34.6	31.8	12.8	1.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
953	417470.7	5122935.8	59	S	1.531	0.519	-0.006	0	100	0		0	0	0	0	0	1.5	13.8	32.1	33.8	16.2	2.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
954	417672.9	5122858.5	61	S	1.595	0.426	0.005	0	100	0		0	0	0	0	0	0.1	7	33.9	42.4	15.5	0.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
955	413671.6	5123999.8	35	S	2.082	0.582	-0.01	0	100	0		0	0	0	0	0	0	2.4	13.7	28.3	31.1	18.9	5.2	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
956	413913.2	5123947.1	34	S	2.128	0.582	-0.033	0	100	0		0	0	0	0	0	0	2	12.4	27	31.5	20.5	6.2	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
957	414179.7	5123873.7	34	S	2.165	0.577	-0.038	0	100	0		0	0	0	0	0	0	1.5	11.1	26.2	32.1	21.7	6.8	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
958	414412.5	5123842.2	38	S	2.272	0.521	-0.022	0	100	0		0	0	0	0	0	0	0.2	8.3	23.7	36.1	25.8	7.4	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
959	414662.4	5123756.5	36	S	2.21	0.514	0.01	0	100	0		0	0	0	0	0	0	0.2	7.7	26.5	36.5	23.1	5.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
960	414908.2	5123712.5	33	S	1.94	0.464	0.002	0	100	0		0	0	0	0	0	0	1.2	15.6	38.2	33.9	10.4	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
961	415147.7	5123662.1	35	S	1.692	0.429	0.004	0	100	0		0	0	0	0	0	0	4.3	28.1	44.3	21.1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
962	415381.7	5123589.7	35	S	1.628	0.429	0.005	0	100	0		0	0	0	0	0	0	6.1	31.9	43.1	17.4	1.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
963	415631.5	5123538.5	43	S	1.562	0.528	-0.021	0	100	0		0	0	0	0	0	1.5	12.9	30.8	34.1	17.6	2.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
964	415887.6	5123489.1	59	S	1.699	0.477	-0.005	0	100	0		0	0	0	0	0	0.1	8.3	27.3	39.7	22.5	3.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
965	416139.4	5123426.6	70	S	1.732	0.519	-0.017	0	100	0		0	0	0	0	0	0.3	7.2	25.3	36.4	24.2	6.2	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
966	416360.3	5123399.8	74	S	0.827	0.928	-0.459	8.07	91.59	0.34		2.9	2.3	2.7	3.5	5.8	13.9	24.9	22.7	14.1	5.3	0.8	0	0.1	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
967	416642.3	5123342.8	70	S	2.109	0.471	0.007	0	100	0		0	0	0	0	0	0	0.3	8.8	31.7	38.9	18	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
968	416850.2	5123285.9	60	S	2.114	0.466	0.006	0	100	0		0	0	0	0	0	0	0.2	8.5	31.5	39.3	18.2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
969	417115.3	5123211.2	61	S	2.265	0.472	0.011	0	100	0		0	0	0	0	0	0	0	4.4	24.4	40.2	25.6	5.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
970	417344.9	5123180.3	58	S	2.124	0.461	0.016	0	100	0		0	0	0	0	0	0	0.1	7.9	31.4	39.9	18.5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
971	417605.2	5123106.1	60	S	1.951	0.528	-0.032	0	100	0		0	0	0	0	0	0	3	16.6	33.6	31.7	13.4	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
973	418090.9	5123008.0	58	S	1.49	0.515	0.002	0	100	0		0	0	0	0	0	1.8	15.3	33.5	33	14.4	1.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
974	413860.8	5124164.7	35	S	1.925	0.535	0.017	0	100	0		0	0	0	0	0	0	3.4	18.1	33.9	30.2	12.6	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
975	414100.4	5124097.2	33	S	2.07	0.589	-0.002	0	100	0		0	0	0	0	0	0	2.8	14.3	28.3	30.5	15.5	6.2	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
976	414345.3	5124062.0	36	S	2.125	0.587	-0.002	0	100	0		0	0	0	0	0	0	2	12.6	27.2	31.2	20.2	6.3	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
977	414589.4	5124015.0	35	S	2.109	0.529	-0.009	0	100	0		0	0	0	0	0	0	1	11.3	29.6	34.7	19.3	3.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
978	414835.4	5123954.4	34	S	2.179	0.527	-0.015	0	100	0		0	0	0	0	0	0	0.6	9	27.2	35.5	22.1	5.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
979	415082.1	5123878.2	32	S	2.085	0.507	0.001	0	100	0		0	0	0	0	0	0	0.8	11.4	31.1	35.6	18.1	2.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
980	415290.6	5123855.6	36	S	1.881	0.464	-0.006	0	100	0		0	0	0	0	0	0	2	18.3	39.6	31.4	8.3	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
981	415540.5	5123774.7	30	S	1.591	0.47	0.013	0	100	0		0	0	0	0	0	0.3	9.5	32.5	38.5	17.1	1.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
982	415815.8	5123704.7	50	S	1.324	0.47	0.006	0	100	0		0	0	0	0	0	3.1	21.4	40	28.5	6.7	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
983	416085.7	5123673.0	66	MS	3.668	2.284	0.285	0	53.49	46.51		0	0	0	0	0	2.3	8	12.8	12.5	7.8	3.4	2.4	3.5	5.7	6.9	7.3	7.1	6.3	4.9	3.5	2.2	1.3	0.7	0.1	0	0	0	0	0	0	0	0	0	0	0
984	416321.1	5123646.5	64	S	1.908	0.469	0.002	0	100	0		0	0	0	0	0	0	1.8	17.2	38.7	32.3	9.4	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
985	416577.2	5123568.1	64	S	1.77	0.523	0	0	100	0		0	0	0	0	0	0.2	8.3	24	36.1	25.5	7.4	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
986	416804.4	5123521.3	66	S	2.008	0.514	0.003	0	100	0		0	0	0	0	0	0	1.6	14.4	33.2	33.6	15.1	1.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
987	417057.6	5123468.9	57	S	2.124	0.466	0.01	0	100	0		0	0	0	0	0	0	0.2	8.2	31.1	39.5	18.6	2.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
988	417300.5	5123391.7	60	S	2.235	0.468	0.012	0	100	0		0	0	0	0	0	0	0	4.9	25.8	40.6	24.1	4.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
989	417538.2	5123362.0	56	S	2.084	0.465	0.007	0	100	0		0	0	0	0	0	0	0.3	9.5	33	38.7	16.7	1.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
990	417767.9	5123281.7	62	S	1.937	0.463	0.002	0	100	0		0	0	0	0	0	0	1.2	15.6	38.4	33.8	10.2	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
991	418012.3	5123237.7	58	S	1.828	0.469	-0.003	0	100	0		0	0	0	0	0	0	3	21.1	40.1	28.8	6.7	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
992	418262.4	5123185.0	65	S	1.51	0.532	-0.024	0	100	0		0	0	0	0	0	2.2	14.8	32	32.9	15.7	2.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
993	418518.8	5123125.0	69	S	1.6	0.524	0.009	0	100	0		0	0	0	0	0	0.9	11.5	30.1	34.8	15.5	3.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
994	413784.7	5124398.8	34	S	2.067	0.577	-0.007	0	100	0		0	0	0	0	0	0	2.5	14.1	28.8	31.1	18.4	4.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
995	414031.1	5124326.6	33	S	1.927	0.527	-0.024	0	100	0		0	0	0	0	0	0	3.1	16	34.4	30.5	12.4	1.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
996	414279.8	5124324.0	33	S	2.026	0.576	0.016	0	100	0		0	0	0	0	0	0	2.9	15.5	29.9	30.5	16.9	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
997	414538.4	5124241.7	34	S	2.176	0.534	-0.008	0	100	0		0	0	0	0	0	0	0.7	9.3	27.2	35	21.9	5.5	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
998	414783.9	5124173.9	35	S	2.274	0.598	-0.02	0	100	0		0	0	0	0	0	0	0.9	8.7	23	31.3	24.5	10.1	1.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
999	415029.7	5124122.2	30	S	1.876	0.534	0.015	0	100	0		0	0	0	0	0	0	4.3	20	34.6	28.8	10.9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000	415247.5	5124062.5	31	S	2.043	0.585	-0.009	0	100	0		0	0	0	0	0	0	3.1	14.9	29	30.4	17.7	4.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1001	415503.5	5124007.7	30	S	1.832	0.529	0.004	0	100	0		0	0	0	0	0	0.1	5	21.6	35.4	27.6	9.4	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1002	415746.3	5123947.7	30	S	1.609	0.514	0.012	0	100	0		0	0	0	0	0	0.7	10.9	30.1	35.4	19.1	3.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1003	415983.3	5123888.4	25	NS	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1004	416225.0	5123814.7	85	S	0.807	0.812	-1.342	11.99	88.01	0		6.4	2.6	2.9	2.7	2.9	7.4	33	28	12.1	1.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1005	416484.3	5123821.9	57	S	1.862	0.468	-0.007	0	100	0		0	0	0	0	0	0	2.4	19.3	39.7	30.4	7.8	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1006	416739.2	5123746.3	54	S	2.04	0.517	0.006	0	100	0		0	0	0	0	0	0	1.4	13.4	32.2	34.1	16.3	2.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1007	416962.4	5123677.7	62	S	1.921	0.508	-0.004	0	100	0		0	0	0	0	0	0	2.7	17.8	35.4	31.3	11.7	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1008	417201.9	5123626.2	58	S	2.072	0.528	-0.021	0	100	0		0	0	0	0	0	0	1.4	12.4	30.6	34.3	17.9	3.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1009	417438.7	5123581.9	56	S	1.759	0.514	0.013	0	100	0		0	0	0	0	0	0.1	6.3	24.7	36.6	25	6.8	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1010	417719.1	5123523.8	40	S	1.897	0.527	-0.008	0	100	0		0	0	0	0	0	0	3.7	18.9	34.7	29.9	11.4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1011	417924.0	5123483.3	56	S	2.032	0.507	-0.001	0	100	0		0	0	0	0	0	0	1.2	13.3	32.8	34.6	15.9	1.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1012	418184.9	5123415.0	64	S	1.828	0.471	0.012	0	100	0		0	0	0	0	0	0	3	21.2	40	28.5	6.9	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1013	418459.8	5123348.3	66	S	1.747	0.427	0.01	0	100	0		0	0	0	0	0	0	2.9	24.8	44.9	24.2	2.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1014	418691.0	5123324.2	65	S	1.585	0.471	-0.005	0	100	0		0	0	0	0	0	0.4	9.8	32.5	38.4	17	1.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1015	418962.4	5123238.5	75	S	1.506	0.512	0.007	0	100	0		0	0	0	0	0	1.6	14.6	33.4	33.5	14.9	1.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1016	413755.7	5124630.2	34	S	2.072	0.605	-0.021	0	100	0		0	0	0	0	0	0	3.2	14.3	27.6	30	18.7	5.6	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1017	413959.0	5124599.2	32	S	2.151	0.6	0.005	0	100	0		0	0	0	0	0	0	2	12.1	26.2	30.8	20.9	7.2	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1018	414231.7	5124527.1	33	S	1.903	0.574	0.001	0	100	0		0	0	0	0	0	0.1	5.2	19.3	31.7	28.2	13.1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1019	414472.9	5124455.4	34	S	1.931	0.589	0.03	0	100	0		0	0	0	0	0	0.1	5	18.7	30.9	28.1	14	2.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1020	414710.0	5124411.6	34	S	1.906	0.596	0.017	0	100	0		0	0	0	0	0	0.2	5.8	19.3	30.7	27.4	13.6	2.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1021	414944.1	5124353.5	33	S	1.723	0.601	-0.008	0	100	0		0	0	0	0	0	1.4	10.1	24.3	31.3	23	8.8	0.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1022	415188.6	5124307.2	30	S	1.964	0.576	0.045	0	100	0		0	0	0	0	0	0	3.9	17.7	31.1	29.1	14.8	3.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1023	415428.7	5124237.1	30	S	1.899	0.525	0.006	0	100	0		0	0	0	0	0	0	3.8	18.9	34.8	29.9	11.4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1024	415664.9	5124189.1	28	S	1.883	0.535	0.016	0	100	0		0	0	0	0	0	0	4.2	19.7	34.6	29	11.1	1.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1025	415925.0	5124127.7	26	S	1.697	0.516	0.002	0	100	0		0	0	0	0	0	0.3	8.2	26.9	36.3	22.7	5.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1026	416150.4	5124077.5	28	S	1.666	0.513	0.021	0	100	0		0	0	0	0	0	0.4	8.9	28.2	36.3	21.3	4.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1027	416407.7	5124024.5	61	MS	3.638	2.169	0.455	0	59.27	40.73		0	0	0	0	0	1.6	5.6	10	12.3	11.2	8.1	5.5	4.6	4.9	5.5	5.9	6	5.5	4.6	3.4	2.3	1.4	0.7	0.1	0	0	0	0	0	0	0	0	0	0	0
1028	416627.5	5123985.1	50	S	1.827	0.56	-0.003	0	100	0		0	0	0	0	0	0.2	6.4	21.8	33.1	26.7	10.5	0.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1029	416907.7	5123942.5	48	S	1.886	0.514	-0.005	0	100	0		0	0	0	0	0	0	3.5	19.3	35.6	30	10.7	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1030	417145.0	5123880.9	50	S	2.02	0.515	-0.013	0	100	0		0	0	0	0	0	0	1.6	13.9	32.7	33.9	15.6	1.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1031	417386.9	5123817.4	45	S	1.969	0.532	-0.014	0	100	0		0	0	0	0	0	0	2.8	16.2	33.1	31.8	14.1	1.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1032	417606.8	5123751.8	47	S	1.97	0.476	0.008	0	100	0		0	0	0	0	0	0	1.2	14.6	36.6	34.4	12.1	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1033	417850.6	5123721.9	56	S	1.915	0.469	0.001	0	100	0		0	0	0	0	0	0	1.7	16.9	38.5	32.6	9.7	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1034	418094.6	5123619.5	55	S	1.766	0.514	-0.027	0	100	0		0	0	0	0	0	0.2	6.2	23.9	36.7	25.7	6.9	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1035	418319.3	5123612.8	51	S	1.854	0.463	-0.005	0	100	0		0	0	0	0	0	0	2.4	19.7	40.2	30.1	7.3	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1036	418609.4	5123526.8	64	S	1.623	0.472	-0.004	0	100	0		0	0	0	0	0	0.3	8.4	30.9	39.2	18.8	2.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1037	418877.9	5123472.5	66	S	1.734	0.471	0.013	0	100	0		0	0	0	0	0	0	5	25.9	40.4	24	4.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1038	419082.6	5123416.2	72	S	1.307	0.539	-0.032	0	100	0		0	0	0	0	0.2	6.2	22.1	34.7	26.9	9.1	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1039	413867.4	5124816.6	32	S	2.051	0.624	-0.012	0	100	0		0	0	0	0	0	0.2	4	15	27.5	29	18	5.7	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1040	414156.4	5124750.0	32	S	2.018	0.595	-0.015	0	100	0		0	0	0	0	0	0.1	3.7	15.7	29.1	29.7	17	4.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1041	414403.9	5124722.9	35	S	2.115	0.591	-0.001	0	100	0		0	0	0	0	0	0	2.2	12.9	27.3	31	19.8	6.2	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1042	414638.8	5124645.7	35	S	2.102	0.538	-0.006	0	100	0		0	0	0	0	0	0	1.3	11.7	29.5	34	19	4.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1043	414877.0	5124588.7	33	S	1.866	0.587	-0.004	0	100	0		0	0	0	0	0	0.3	6.4	20.4	31.5	27	12.3	1.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1044	415104.3	5124553.9	33	S	1.998	0.604	0.028	0	100	0		0	0	0	0	0	0.1	4.2	16.7	29.3	28.7	16.2	4.4	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1045	415342.6	5124472.5	30	S	2.033	0.589	0.033	0	100	0		0	0	0	0	0	0	3.2	15.6	29.3	29.8	17.1	4.7	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1046	415585.8	5124417.9	29	S	1.766	0.591	0.022	0	100	0		0	0	0	0	0	0.8	8.9	23.5	31.7	24.1	9.6	1.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1047	415822.8	5124368.7	28	S	1.852	0.58	0.055	0	100	0		0	0	0	0	0	0.2	6.4	21.3	32	26.3	11.6	1.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1048	416072.4	5124303.3	26	S	1.793	0.572	0.043	0	100	0		0	0	0	0	0	0.3	7.6	23.2	32.7	25	9.8	1.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1049	416328.7	5124264.0	23	S	1.948	0.533	0.022	0	100	0		0	0	0	0	0	0	2.9	17.2	33.7	30.9	13.3	1.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1050	416799.1	5124162.2	45	S	1.842	0.517	-0.007	0	100	0		0	0	0	0	0	0	4.5	21.1	36	28.3	9.4	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1051	417072.5	5124111.4	45	S	1.915	0.579	-0.033	0	100	0		0	0	0	0	0	0.2	5.2	18.6	31.2	23.6	13.7	2.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1052	417296.2	5124079.7	45	S	2.14	0.571	-0.084	0	100	0		0	0	0	0	0	0	1.8	11.3	26.7	32.7	21.2	5.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1053	417559.1	5124014.8	37	S	1.701	0.474	0.018	0	100	0		0	0	0	0	0	0.1	6	27.5	39.9	22.4	3.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1054	417805.1	5123955.4	36	S	1.948	0.511	0.005	0	100	0		0	0	0	0	0	0	2.3	16.8	34.8	32	12.7	1.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1055	418026.8	5123878.5	38	S	1.962	0.468	0.011	0	100	0		0	0	0	0	0	0	1.1	14.7	37.4	34.5	11.4	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1056	418263.4	5123829.8	41	S	1.94	0.464	-0.002	0	100	0		0	0	0	0	0	0	1.3	15.5	38.2	33.9	10.4	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1057	418514.7	5123805.2	50	S	1.896	0.458	-0.002	0	100	0		0	0	0	0	0	0	1.6	17.5	39.8	32.2	8.5	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1058	418704.2	5123719.1	48	S	1.879	0.467	0.001	0	100	0		0	0	0	0	0	0	2.1	18.5	39.5	31.1	8.3	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1059	419021.9	5123673.9	62	S	1.805	0.471	0.02	0	100	0		0	0	0	0	0	0	3.4	22.4	40.3	27.4	6.2	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1060	419241.7	5123593.5	65	S	1.602	0.467	0.015	0	100	0		0	0	0	0	0	0.2	8.9	32.1	39	17.6	1.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1061	419497.4	5123542.4	75	S	1.623	0.475	0.008	0	100	0		0	0	0	0	0	0.3	8.6	30.9	38.8	18.8	2.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1062	413808.8	5125065.6	36	S	2.123	0.618	-0.022	0	100	0		0	0	0	0	0	0	2.8	13	26.2	30	20.1	7	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1063	414050.5	5125006.9	31	S	2.135	0.611	0	0	100	0		0	0	0	0	0	0	2.5	12.7	26.2	30.2	20.4	7.1	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1064	414324.8	5124959.0	34	S	2.095	0.592	0.002	0	100	0		0	0	0	0	0	0	2.5	13.6	27.7	30.7	19.2	5.8	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1065	414571.0	5124884.5	35	S	2.113	0.596	0.001	0	100	0		0	0	0	0	0	0	2.4	13.1	27.2	30.7	19.8	6.3	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1066	414816.3	5124826.8	35	S	2.128	0.62	0.024	0	100	0		0	0	0	0	0	0	2.7	13.1	26.4	29.7	19.9	7.2	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1067	415050.6	5124761.6	33	S	1.92	0.533	0.022	0	100	0		0	0	0	0	0	0	3.4	18.3	34.1	30.1	12.3	1.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Sample ID	Easting	Northing	Depth (ft)	Type	Mean	Sorting	Skewness	% Gravel	% Sand	% Mud	Diameter(Φ) Diameter(μ)	-2 4000	-1.5 2828.4	-1 2000	-0.5 1414.2	0 1000	0.5 707.1	1 500	1.5 353.6	2 250	2.5 176.8	3 125	3.5 88.4	4 62.5	4.5 44.2	5 31.3	5.5 22.1	6 15.6	6.5 11	7 7.8	7.5 5.5	8 3.9	8.5 2.8	9 2	9.5 1.4	10 1	10.5 0.7	11 0.5	11.5 0.35	12 0.24	12.5 0.18	13 0.12	13.5 0.09	14 0.06	14.5 0.03	15 0.02
1068	415269.5	5124723.9	33	S	1.87	0.588	0.024	0	100	0		0	0	0	0	0	0.2	8.3	20.5	31.4	26.8	12.3	2.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1069	415542.5	5124666.5	30	S	1.852	0.578	0.027	0	100	0		0	0	0	0	0	0.2	6.4	21.1	32.1	26.6	11.6	1.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1070	415752.0	5124602.8	29	S	1.945	0.61	0.039	0	100	0		0	0	0	0	0	0.2	5.3	18.4	29.8	27.4	14.7	3.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1071	416005.4	5124570.1	27	S	2.087	0.536	0.001	0	100	0		0	0	0	0	0	0	1.4	12.2	30.1	33.9	18.4	3.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1072	416268.3	5124499.1	24	S	2.224	0.58	0.007	0	100	0		0	0	0	0	0	0	0.9	9.7	24.9	32.1	23.2	8.4	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1073	416619.8	5124570.0	0	S	1.972	0.516	0.011	0	100	0		0	0	0	0	0	0	2.1	15.9	34	32.4	13.7	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1074	416961.7	5124358.5	45	S	2.247	1.236	2.184	0	91.37	8.63		0	0	0	0	0	0.1	5	17.3	27.9	25.4	12.7	2.7	0	0.6	1.8	1.9	1.4	0.9	0.7	0.5	0.3	0.1	0	0	0	0	0	0	0	0	0	0	0	0	
1075	417241.9	5124318.3	42	S	1.931	0.586	0.007	0	100	0		0	0	0	0	0	0.1	5	18.5	30.8	28.4	14.2	2.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1076	417496.7	5124230.8	43	S	2.252	0.521	-0.044	0	100	0		0	0	0	0	0	0	0.3	6.8	24.3	36.2	25.1	6.8	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1077	417736.5	5124174.6	35	S	1.643	0.519	0.036	0	100	0		0	0	0	0	0	0.5	9.9	29.1	35.6	20.3	4.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1078	417938.4	5124139.3	32	S	1.915	0.47	-0.011	0	100	0		0	0	0	0	0	0	1.7	16.8	38.4	32.7	9.7	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1079	418220.3	5124050.4	33	S	2.039	0.473	0.004	0	100	0		0	0	0	0	0	0	0.7	11.6	34.4	36.9	14.8	1.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1080	418436.4	5124021.1	31	S	1.954	0.517	-0.013	0	100	0		0	0	0	0	0	0	2.5	16.5	34.2	32.1	13.1	1.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1081	418685.1	5123963.3	38	S	1.924	0.471	-0.002	0	100	0		0	0	0	0	0	0	1.6	16.5	38.2	33	10.1	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1082	418929.9	5123887.2	40	S	1.941	0.47	0.003	0	100	0		0	0	0	0	0	0	1.4	15.7	37.8	33.7	10.7	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1083	419176.1	5123859.1	48	S	1.867	0.46	-0.001	0	100	0		0	0	0	0	0	0	2	19	40.2	30.7	7.6	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1084	419414.5	5123779.0	55	S	1.803	0.509	0.023	0	100	0		0	0	0	0	0	0	4.9	22.9	36.9	26.8	7.9	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1085	419642.4	5123726.5	67	S	1.673	0.557	0.014	0	100	0		0	0	0	0	0	0.8	10.6	26.8	33.1	21.8	6.4	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1086	414215.2	5125159.2	31	S	1.993	0.622	0.062	0	100	0		0	0	0	0	0	0.1	4.7	17.2	28.8	27.8	15.9	4.8	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1087	414481.1	5125141.0	34	S	1.992	0.577	0.015	0	100	0		0	0	0	0	0	0	3.6	16.6	30.3	29.8	15.9	3.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1088	414736.5	5125073.6	35	S	1.993	0.582	0.012	0	100	0		0	0	0	0	0	0	3.7	16.6	30.1	29.7	16	3.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1089	414981.8	5125021.9	34	S	1.987	0.583	0.042	0	100	0		0	0	0	0	0	0	3.8	17	30.3	29.3	15.6	3.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1090	415209.8	5124950.7	34	S	1.935	0.569	0.038	0	100	0		0	0	0	0	0	0	4.3	18.5	31.6	28.9	14	2.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1091	415432.1	5124909.5	33	S	1.958	0.562	0.044	0	100	0		0	0	0	0	0	0	4.2	17.9	30.8	28.8	14.7	3.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1092	415697.4	5124838.5	30	S	1.785	0.592	0.013	0	100	0		0	0	0	0	0	0.7	8.4	22.9	31.7	24.7	10.1	1.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1093	415893.8	5124777.9	27	S	2.026	0.598	0.007	0	100	0		0	0	0	0	0	0	3.6	15.7	28.9	29.5	17.1	4.7	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1094	416193.8	5124736.8	23	S	2.108	0.586	-0.001	0	100	0		0	0	0	0	0	0	2.2	13.1	27.7	31.1	19.6	5.9	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1095	416413.9	5124687.3	18	S	2.167	0.657	-0.024	0	100	0		0	0	0	0	0	0.1	3.1	12.6	24.3	28.2	21	9	1.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1096	417140.5	5124520.0	41	S	1.872	0.509	-0.001	0	100	0		0	0	0	0	0	0	3.6	19.8	36.2	29.6	10	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1097	417366.6	5124484.2	43	S	2.702	1.594	1.583	0	84.35	15.65		0	0	0	0	0	0.1	3.9	12.5	21.1	22.6	15.7	6.6	1.4	0.9	2.2	2.9	2.8	2.2	1.6	1.1	0.8	0.5	0.2	0	0	0	0	0	0	0	0	0	0	0	
1098	417674.1	5124422.8	40	S	2.442	0.968	2.792	0	95.63	4.37		0	0	0	0	0	0	0.3	6.5	22.4	33.7	24.6	7.6	0.3	0	0.3	1.1	1	0.5	0.3	0.3	0.5	0.2	0	0	0	0	0	0	0	0	0	0	0	0	
1099	417876.8	5124369.9	33	S	2.256	0.51	-0.028	0	100	0		0	0	0	0	0	0	0.1	6.3	24.4	36.9	25.3	6.5	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1100	418135.0	5124275.4	31	S	2.274	0.471	0.004	0	100	0		0	0	0	0	0	0	0	4.1	23.8	40.3	26.1	5.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1101	418377.3	5124250.8	31	S	2.23	0.521	-0.039	0	100	0		0	0	0	0	0	0	0.3	7.3	25.2	36.2	24.3	6.3	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1102	418636.0	5124191.7	32	S	2.119	0.508	0.016	0	100	0		0	0	0	0	0	0	0.5	10.3	30.1	36	19.4	3.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1103	418861.6	5124133.0	30	S	2.143	0.519	0.012	0	100	0		0	0	0	0	0	0	0.6	9.9	28.9	35.6	20.5	4.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1104	419092.1	5124099.6	32	S	1.971	0.521	0.017	0	100	0		0	0	0	0	0	0	2.3	16.1	33.8	32.1	13.8	1.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1105	419335.0	5124017.6	37	S	1.769	0.506	0.013	0	100	0		0	0	0	0	0	0	5.7	24.3	37.2	25.5	6.8	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1106	419578.0	5124016.5	49	S	1.614	0.479	-0.013	0	100	0		0	0	0	0	0	0.4	9.1	30.9	38.5	18.5	2.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1107	419828.7	5123931.5	56	S	1.692	0.432	0.004	0	100	0		0	0	0	0	0	0	4.4	28.1	44	21.1	2.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1108	414416.9	5125363.5	31	S	2.08	0.603	0.014	0	100	0		0	0	0	0	0	0	3	14.3	27.7	29.9	18.7	5.8	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1109	414643.7	5125317.5	35	S	1.967	0.603	0.036	0	100	0		0	0	0	0	0	0.1	4.7	17.7	29.8	28.2	15.2	3.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1110	414883.1	5125270.6	31	S	1.981	0.587	0.043	0	100	0		0	0	0	0	0	0	4	17.2	30.3	29	15.5	3.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1111	415134.7	5125199.2	30	S	2.04	0.591	0.035	0	100	0		0	0	0	0	0	0	3.1	15.4	29.1	29.8	17.3	4.8	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1112	415367.7	5125122.6	30	S	1.903	0.579	0.014	0	100	0		0	0	0	0	0	0.1	5.3	19.4	31.5	28	13.2	2.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1113	415613.2	5125088.2	29	S	2.052	0.597	0.025	0	100	0		0	0	0	0	0	0	3.2	15	28.6	29.8	17.8	5.2	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1114	415865.5	5125038.2	24	S	2.028	0.578	0.006	0	100	0		0	0	0	0	0	0	3.1	15.4	29.6	30.4	17.1	4.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1115	416105.8	5124981.9	18	S	1.981	0.52	0.002	0	100	0		0	0	0	0	0	0	2.1	15.6	33.6	32.6	14.2	1.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1117	416617.8	5124906.0	0	S	2.123	0.528	0.012	0	100	0		0	0	0	0	0	0	0.8	10.9	29.3	34.7	19.7	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1118	417317.7	5124725.1	25	S	1.636	0.465	0.012	0	100	0		0	0	0	0	0	0.1	7.7	30.6	39.8	19.2	2.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1119	417565.9	5124639.5	37	MS	3.081	1.834	1.072	0	73.99	26.01		0	0	0	0	0	0.1	3.5	11.1	18.4	19.2	13.1	5.8	2.3	2.6	4.1	4.7	4.3	3.4	2.5	1.7	1.1	0.7	0.4	0	0	0	0	0	0	0	0	0	0	0	
1120	417816.1	5124601.2	36	S	2.016	0.625	-0.066	0	100	0		0	0	0	0	0	0.3	4.7	15.8	27.6	28.7	17.5	5.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1121	418048.8	5124529.2	33	S	2.745	1.552	1.606	0	84.37	15.63		0	0	0	0	0	0	2.8	11.5	20.7	23	16.6	7.4	2	1.3	2.4	2.9	2.6	2	1.4	1	0.7	0.5	0.3	0	0	0	0	0	0	0	0	0	0	0	
1122	418296.3	5124485.1	31	S	2.149	0.534	-0.023	0	100	0		0	0	0	0	0	0	0.9	10.1	28	34.9	21	4.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1123	418547.8	5124431.9	29	S	2.326	0.517	-0.026	0	100	0		0	0	0	0	0	0	0	4.9	21.6	36	27.9	8.9	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1124	418774.7	5124361.9	28	S	2.239	0.527	-0.04	0	100	0		0	0	0	0	0	0	0.4	7.3	24.8	35.8	24.6	6.7	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1125	419031.8	5124316.7	26	S	1.84	0.574	0.03	0	100	0		0	0	0	0	0	0.2	6.5	21.6	32.3	26.4	11.2	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1126	419269.8	5124250.1	33	S	1.614	0.52	0.001	0	100	0		0	0	0	0	0	0.8	10.9	29.7	35.3	19.4	3.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1127	419509.0	5124199.0	45	S	1.665	0.469	0.007	0	100	0		0	0	0	0	0	0.1	7	29.1	39.9	20.7	2.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1128	419757.7	5124157.2	30	S	1.586	0.503	-0.766	0.69	99.31	0		0.3	0.1	0.1	0.4	0.6	0.9	10.7	28.6	34.4	19.4	3.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1129	420001.3	5124101.6	34	S	1.829	0.915	3.315	0	96.28	3.72		0	0	0	0	0	0.1	6.9	27.1	37.5	20.9	3.5	0	0	0.4	0.8	0.6	0.2	0.3	0.4	0.4	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	
1130	414584.6	5125562.2	37	S	2.135	0.64	-0.002	0	100	0		0	0	0	0	0	0.1	3.1	13.1	25.5	29	20.1	7.6	0.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1131	414809.7	5125509.5	34	S	1.902	0.6	0.017	0	100	0		0	0	0	0	0	0.3	6	19.4	30.5	27.2	13.5	2.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1132	415048.4	5125462.7	34	S	1.936	0.533	0.025	0	100	0		0	0	0	0	0	0	3.1	17.7	33.9	30.6	12.8	1.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1133	415303.1	5125385.2	33	S	1.927	0.577	0.05	0	100	0		0	0	0	0	0	0	4.7	18.9	31.5	28.3	13.7	2.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1134	415542.2	5125332.4	29	S	2.059	0.595	0.001	0	100	0		0	0	0	0	0	0	3.1	14.7	28.3	30.1	18.1	5.2	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1135	415780.5	5125282.6	27	S	2.019	0.582	0.006	0	100	0		0	0	0	0	0	0	3.4	15.7	29.6	30.1	16.8	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1136	416019.5	5125227.5	20	S	2.006	0.534	0.015	0	100	0		0	0	0	0	0	0	2.2	15	32.3	32.4	15.4	2.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1137	416279.7	5125156.5	17	S	2.41	0.698	-0.883	0	99.99	0.01		0	0	0	0.5	0.7	0.2	0.5	5.4	17	28.4	28.1	15.5	3.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1138	416641.8	5125105.0	0	S	2.008	0.514	0.013	0	100	0		0	0	0	0	0	0	1.6	14.5	33.3	33.4	15	1.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1139	417480.7	5124883.3	36	MS	4.059	2.077	0.357	0	52.62	47.38		0	0	0	0	0	0	2.1	6.5	10.4	11.2	9.2	6.9	5.9	6.1	6.5	6.6	6.6	6.1	5.2	[illegible]	2.3	1.8	1	0.2	0	0	0	0	0	0	0	0	0	0	
1140	417733.3	5124853.1	39	S	2.142	0.577	-0.022	0	100	0		0	0	0	0	0	0	1.7	11.8	26.9	32	20.9	6.3	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1141	417977.8	5124767.7	31	S	2.47	1.335	2.009	0	90.87	9.13		0	0	0	0	0	0	3.8	13.5	22.8	24.3	17.1	7.4	1.5	0.3	1.2	1.8	1.7	1.3	0.9	0.7	0.5	0.3	0.1	0	0	0	0	0	0	0	0	0	0	0	
1142	418256.7	5124731.6	31	S	2.197	0.534	-0.02	0	100	0		0	0	0	0	0	0	0.6	8.8	26.4	35.1	22.8	6	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1143	418462.7	5124664.3	29	S	2.912	1.459	1.644	0	85.19	14.81		0	0	0	0	0	0	0.7	6.7	16.9	24	21.4	11.8	3.5	0.8	1.8	3	2.9	2.1	1.4	0.9	0.7	0.5	0.3	0	0	0	0	0	0	0	0	0	0	0	
1144	418704.9	5124610.1	28	S	2.113	0.6	-0.025	0	100	0		0	0	0	0	0	0	2.6	13.1	26.8	30.5	20	6.4	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1145	418940.2	5124557.5	27	S	1.777	0.522	0.006	0	100	0		0	0	0	0	0	0.1	6.1	23.7	36.1	25.7	7.6	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1146	419229.2	5124482.7	27	S	1.74	0.516	-0.003	0	100	0		0	0	0	0	0	0.2	6.9	25.1	36.6	24.5	6.3	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1147	419450.5	5124457.3	30	S	1.656	0.531	-0.013	0	100	0		0	0	0	0	0	0.8	9.8	27.9	35.2	21.2	4.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1148	419685.8	5124416.3	23	S	1.781	0.475	-0.003	0	100	0		0	0	0	0	0	0	4.2	23.4	40	26.4	5.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1149	419833.5	5124293.3	12	S	1.812	0.517	-0.001	0	100	0		0	0	0	0	0	0	5.1	22.3	36.3	27.2	8.4	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1150	415004.2	5125674.3	37	S	2.026	0.589	0.014	0	100	0		0	0	0	0	0	0	3.4	15.6	29.3	29.9	17.1	4.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1151	415236.8	5125603.7	32	S	2.068	0.598	0.012	0	100	0		0	0	0	0	0	0	3	14.5	28.2	30.1	18.3	5.4	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1152	415466.0	5125560.0	33	S	2.046	0.572	0.009	0	100	0		0	0	0	0	0	0	2.6	14.8	29.6	31	17.6	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1153	415720.2	5125499.9	29	S	2.078	0.58	0.003	0	100	0		0	0	0	0	0	0	2.4	13.9	28.5	31	18.7	5.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1154	415948.9	5125447.2	23	S	2.136	0.581	0.002	0	100	0		0	0	0	0	0	0	1.7	12.2	27.2	31.6	20.5	6.3	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1155	416198.4	5125402.1	16	S	1.93	0.536	-0.005	0	100	0		0	0	0	0	0	0	3.4	17.8	33.7	30.5	12.8	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1156	416699.8	5125220.0	0	S	1.917	0.472	0.002	0	100	0		0	0	0	0	0	0	1.7	16.9	38.3	32.6	9.9	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1157	417660.7	5125080.5	29	S	2.545	1.675	1.636	0	83.65	16.35		0	0	0	0	0	0.3	6.7	17.4	23.8	20.3	10.7	3.1	0.8	1.6	2.5	2.7	2.4	2	1.7	1.3	0.9	0.5	0.3	0	0	0	0	0	0	0	0	0	0	0	
1158	417890.5	5125030.6	35	S	1.94	1.088	2.628	0	94.93	5.07		0	0	0	0	0	0.8	9.3	23.4	30	21.8	8.3	1	0	0.4	1	0.9	0.7	0.6	0.5	0.4	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	
1159	418152.1	5124976.8	30	S	1.675	0.556	0.042	0	100	0		0	0	0	0	0	0.7	10.4	27.1	33.3	21.5	6.4	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1160	418440.8	5124870.9	27	S	2.446	0.879	2.013	0	96.83	3.17		0	0	0	0	0	0	0.8	7.5	20.4	29.4	24.9	11.6	1.9	0	0	0.8	1	0.6	0.3	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1161	418640.4	5124883.7	56	S	2.076	0.707	0.956	0	98.97	1.03		0	0	0	0	0	0.1	4	15.5	27.5	28.2	17.3	5.6	0.5	0	0.1	0.5	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1162	418887.9	5124787.4	27	S	1.832	0.69	1.324	0	98.57	1.43		0	0	0	0	0	0.4	7.9	23	31.9	24.4	9.7	1.1	0	0.1	0.6	0.5	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1163	419119.6	5124730.2	26	S	1.866	0.521	0.012	0	100	0		0	0	0	0	0	0	4.1	20.2	35.5	28.9	10.2	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1164	419396.0	5124674.2	28	S	1.873	0.586	0.036	0	100	0		0	0	0	0	0	0.2	6.1	20.5	31.6	26.9	12.3	2.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1165	419610.6	5124634.9	22	S	1.914	0.524	0.004	0	100	0		0	0	0	0	0	0	3.3	18.3	34.6	30.5	11.9	1.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1166	419767.3	5124480.2	15	S	1.905	0.52	0.006	0	100	0		0	0	0	0	0	0	3.3	18.6	35.1	30.3	11.4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1167	415155.6	5125867.8	38	S	2.032	0.603	0.001	0	100	0		0	0	0	0	0	0	3.7	15.6	28.6	29.4	17.3	4.9	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1168	415390.4	5125807.3	37	S	2.11	0.592	0	0	100	0		0	0	0	0	0	0	2.3	13.2	27.4	30.8	19.7	6.1	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1169	415641.3	5125740.0	31	S	2.173	0.606	-0.003	0	100	0		0	0	0	0	0	0	1.9	11.6	25.5	30.7	21.5	7.8	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1170	415894.0	5125695.4	26	S	2.173	0.575	-0.035	0	100	0		0	0	0	0	0	0	1.4	10.8	26.1	32.3	22	7	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1171	416132.3	5125644.4	20	S	1.857	0.54	-0.005	0	100	0		0	0	0	0	0	0.1	4.9	20.5	34.5	28.2	10.5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1172	416364.2	5125590.6	16	S	1.727	0.513	-0.001	0	100	0		0	0	0	0	0	0.2	7.1	25.8	36.7	23.9	5.9	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1173	416748.8	5125594.0	0	S	1.703	0.473	0.007	0	100	0		0	0	0	0	0	0.1	6	27.3	40.1	22.6	3.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1174	418050.7	5125200.9	31	S	1.659	0.548	0.03	0	100	0		0	0	0	0	0	0.7	10.7	27.8	33.6	21.2	5.8	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1175	418341.9	5125135.2	29	S	2.007	1.19	2.262	0	93.43	6.57		0	0	0	0	0	1	10.6	22.6	27	20.1	9.2	2.2	0.3	0.8	1.2	1.1	0.9	0.8	0.6	0.5	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	
1176	418571.1	5125087.8	28	S	2.461	1.48	2.005	0	87.8	12.2		0	0	0	0	0	0	3.9	15.3	26.3	25.2	13.5	3.2	0	0.6	1.9	2.2	2	1.6	1.3	1	0.7	0.4	0.2	0	0	0	0	0	0	0	0	0	0	0	
1177	418838.0	5125011.4	27	S	1.942	0.529	0.009	0	100	0		0	0	0	0	0	0	3	17.3	33.9	31.1	13	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1178	419068.0	5124974.8	26	S	1.88	0.473	-0.007	0	100	0		0	0	0	0	0	0	2.3	18.6	39	31	8.6	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1179	419305.9	5124924.9	25	S	1.952	0.527	0.009	0	100	0		0	0	0	0	0	0	2.7	16.9	33.8	31.4	13.3	1.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1180	419531.9	5124875.6	19	S	1.787	0.53	0.029	0	100	0		0	0	0	0	0	0.1	6.1	23.5	35.6	25.7	8.1	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1181	415325.4	5126040.0	36	S	2.128	0.595	0	0	100	0		0	0	0	0	0	0	2.2	12.6	26.9	30.9	20.2	6.6	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1182	415576.2	5125994.9	32	S	2.217	0.606	-0.017	0	100	0		0	0	0	0	0	0	1.6	10.4	24.3	30.9	22.8	8.9	0.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1183	415816.6	5125930.2	30	S	2.222	0.591	-0.034	0	100	0		0	0	0	0	0	0	1.3	9.9	24.3	31.6	23.3	8.6	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1184	416052.6	5125873.3	23	S	1.98	0.573	0.022	0	100	0		0	0	0	0	0	0	3.7	17	30.7	29.8	15.5	3.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1185	416296.0	5125827.0	18	S	2.4	0.599	-0.071	0	100	0		0	0	0	0	0	0	0.5	6	18.9	30.2	27.9	13.9	2.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1186	416647.8	5125852.0	0	S	1.785	0.534	0.004	0	100	0		0	0	0	0	0	0.2	6.3	23.3	35.3	25.8	8.2	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1187	418243.2	5125387.8	25	S	1.779	0.514	-0.009	0	100	0		0	0	0	0	0	0.1	5.8	23.6	36.7	26	7.3	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1188	418506.8	5125340.1	26	S	1.92	0.852	2.851	0	96.82	3.18		0	0	0	0	0	0.1	5.4	22.1	34.7	25.7	8.1	0.5	0	0.4	0.9	0.6	0.2	0.2	0.3	0.3	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	
1189	418746.0	5125279.4	21	S	1.712	0.47	0.001	0	100	0		0	0	0	0	0	0	5.6	26.8	40.4	23.1	3.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1190	419274.3	5125121.0	16	S	1.824	0.524	-0.004	0	100	0		0	0	0	0	0	0.1	5.1	21.8	35.8	27.5	9	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1191	419594.8	5125237.0	0	S	2.015	0.58	0.024	0	100	0		0	0	0	0	0	0	3.2	16	29.9	30	16.6	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1192	415508.7	5126214.7	34	S	2.131	0.606	0	0	100	0		0	0	0	0	0	0	2.4	12.8	28.4	30.4	20.3	6.9	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1193	415731.1	5126167.4	32	S	2.222	0.593	-0.022	0	100	0		0	0	0	0	0	0	1.3	10	24.4	31.5	23.2	8.6	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1194	415994.3	5126131.0	26	S	2.199	0.535	-0.018	0	100	0		0	0	0	0	0	0	0.6	8.7	26.3	35.1	22.8	6	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1195	416223.2	5126065.9	26	S	2.038	0.539	0.006	0	100	0		0	0	0	0	0	0	1.9	14	31.3	32.9	16.7	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1196	416477.0	5126007.5	26	S	1.808	0.53	0.003	0	100	0		0	0	0	0	0	0.1	5.6	22.5	35.5	26.7	8.7	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1197	416708.5	5125964.0	0	S	1.85	0.523	-0.016	0	100	0		0	0	0	0	0	0	4.5	20.7	35.5	28.5	9.8	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1198	418409.3	5125576.0	12	S	1.738	0.503	0	0	100	0		0	0	0	0	0	0.1	6.6	25.4	37.1	24.4	6	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1199	418640.0	5125420.9	15	S	1.557	0.431	0	0	100	0		0	0	0	0	0	0.2	8.8	35.7	40.7	13.8	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1200	415437.3	5126443.8	35	S	2.229	0.6	-0.024	0	100	0		0	0	0	0	0	0	1.4	9.9	24	31.2	23.3	9	0.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Sample ID	Easting	Northing	Depth (ft)	Type	Mean	Sorting	Skewness	% Gravel	% Sand	% Mud	Diameter(Φ)	-2	-1.5	-1	-0.5	0	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	12	12.5	13	13.5	14	14.5	15
											Diameter(μ)	4000	2828.4	2000	1414.2	1000	707.1	500	353.6	250	176.8	125	88.4	62.5	44.2	31.3	22.1	15.6	11	7.8	5.5	3.9	2.8	2	1.4	1	0.7	0.5	0.36	0.24	0.18	0.12	0.09	0.06	0.04	0.03
1201	415664.7	5126417.5	35	S	2.282	0.589	-0.022	0	100	0		0	0	0	0	0	0	0.8	8.4	22.8	31.7	25	10.1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1202	415910.7	5126367.1	30	S	2.271	0.578	-0.023	0	100	0		0	0	0	0	0	0	0.7	8.4	23.3	32.3	24.9	9.5	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1203	416150.8	5126310.7	23	S	2.139	0.534	-0.015	0	100	0		0	0	0	0	0	0	0.9	10.4	28.4	34.8	20.5	4.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1204	416393.8	5126238.8	20	S	2.189	0.536	-0.031	0	100	0		0	0	0	0	0	0	0.7	9	26.5	35	22.6	5.8	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1205	416687.8	5126210.0	0	S	1.883	0.474	-0.004	0	100	0		0	0	0	0	0	0	2.3	18.5	38.8	31.1	8.7	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1206	415588.5	5126648.7	35	S	2.281	0.588	-0.024	0	100	0		0	0	0	0	0	0	0.8	8.4	22.8	31.8	24.9	10	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1207	415834.5	5126597.0	22	S	2.291	0.577	-0.014	0	100	0		0	0	0	0	0	0	0.5	7.8	22.7	32.3	25.4	10	0.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1208	416068.4	5126534.2	27	S	2.191	0.527	-0.021	0	100	0		0	0	0	0	0	0	0.5	8.6	26.7	35.6	22.5	5.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1209	416328.1	5126484.7	21	S	2.214	0.575	-0.023	0	100	0		0	0	0	0	0	0	1	9.7	25	32.4	23.2	8	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1210	416549.0	5126410.2	12	S	1.877	0.51	-0.002	0	100	0		0	0	0	0	0	0	3.5	19.6	36	29.7	10.3	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1211	416804.9	5126386.1	0	S	1.939	0.472	-0.011	0	100	0		0	0	0	0	0	0	1.5	15.8	37.6	33.6	10.7	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1212	415762.2	5126837.1	35	S	2.323	0.576	-0.019	0	100	0		0	0	0	0	0	0	0.4	7	21.7	32.2	26.4	10.9	1.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1213	416007.6	5126780.0	30	S	2.326	0.571	-0.021	0	100	0		0	0	0	0	0	0	0.3	6.8	21.6	32.4	26.6	10.9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1214	416258.0	5126709.8	24	S	2.045	0.576	-0.002	0	100	0		0	0	0	0	0	0	2.8	14.8	29.3	30.8	17.7	4.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1215	416495.6	5126671.4	20	S	2.169	0.533	-0.021	0	100	0		0	0	0	0	0	0	0.7	9.5	27.4	35.1	21.7	5.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1216	416806.8	5126642.0	0	S	1.769	0.467	0.016	0	100	0		0	0	0	0	0	0	4.1	24.1	40.7	25.8	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1217	415684.1	5127079.0	38	S	2.374	0.57	-0.005	0	100	0		0	0	0	0	0	0	0.1	5.8	20.2	32.1	27.8	12.3	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1218	415918.5	5126993.5	33	S	2.299	0.57	-0.007	0	100	0		0	0	0	0	0	0	0.4	7.4	22.6	32.6	25.7	10	0.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1219	416178.1	5126967.3	27	S	2.285	0.574	-0.018	0	100	0		0	0	0	0	0	0	0.5	7.9	22.9	32.4	25.3	9.8	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1220	416420.3	5126907.9	21	S	2.064	0.533	-0.004	0	100	0		0	0	0	0	0	0	1.5	12.9	30.8	33.8	17.6	3.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1221	416655.7	5126862.4	14	S	1.868	0.533	0.007	0	100	0		0	0	0	0	0	0	4.4	20.2	34.8	28.7	10.6	0.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1222	416901.3	5126808.3	0	S	1.633	0.43	0	0	100	0		0	0	0	0	0	0	6	31.6	43.1	17.7	1.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1223	415835.0	5127260.0	37	S	2.373	0.568	0.005	0	100	0		0	0	0	0	0	0	0.1	5.7	20.3	32.2	27.7	12.2	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1224	416121.2	5127218.5	33	S	2.375	0.566	-0.007	0	100	0		0	0	0	0	0	0	0.1	5.6	20.2	32.2	27.9	12.2	1.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1225	416352.8	5127168.8	26	S	2.119	0.57	-0.006	0	100	0		0	0	0	0	0	0	1.7	12.5	27.9	32	20	5.6	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1226	416579.8	5127116.2	22	S	2.141	0.575	-0.027	0	100	0		0	0	0	0	0	0	1.6	11.9	27	32	20.9	6.3	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1228	415740.3	5127473.5	36	S	2.341	0.573	-0.017	0	100	0		0	0	0	0	0	0	0.3	6.5	21.2	32.3	26.9	11.3	1.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1229	416016.3	5127430.9	34	S	2.32	0.573	-0.018	0	100	0		0	0	0	0	0	0	0.4	7	21.8	32.4	26.3	10.7	1.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1230	416252.2	5127400.9	29	S	2.416	0.523	-0.007	0	100	0		0	0	0	0	0	0	0	3.3	18.2	34.6	30.7	12	1.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1231	416500.1	5127334.3	22	S	1.974	0.524	0.018	0	100	0		0	0	0	0	0	0	2.3	16.1	33.7	32	13.9	1.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1232	416741.5	5127280.9	13	S	1.86	0.526	0.008	0	100	0		0	0	0	0	0	0	4.3	20.5	35.3	28.6	10.2	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1233	416997.8	5127230.4	0	S	1.705	0.463	0.006	0	100	0		0	0	0	0	0	0	5.5	27.3	40.8	22.7	3.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1234	415980.9	5127683.9	36	S	2.373	0.568	-0.006	0	100	0		0	0	0	0	0	0	0.1	5.7	20.2	32.2	27.8	12.2	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1235	416199.6	5127628.7	22	S	2.369	0.52	-0.007	0	100	0		0	0	0	0	0	0	0	4.1	20	35.4	29.3	10.3	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1236	416428.2	5127577.3	26	S	2.25	0.527	0.002	0	100	0		0	0	0	0	0	0	0.2	7	24.8	35.7	24.6	7.1	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1239	416117.6	5127858.8	35	S	2.308	0.567	-0.016	0	100	0		0	0	0	0	0	0	0.4	7.1	22.3	32.7	26.1	10.2	0.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1240	416365.3	5127839.9	30	S	2.461	0.518	-0.007	0	100	0		0	0	0	0	0	0	0	2.4	16.4	34	32.2	13.4	1.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1243	416040.9	5128107.2	37	S	2.342	0.525	-0.014	0	100	0		0	0	0	0	0	0	0	4.8	21	35.4	28.3	9.6	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1247	416221.6	5128296.7	36	S	2.507	0.511	-0.008	0	100	0		0	0	0	0	0	0	0	1.6	14.5	33.2	33.7	15	1.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1251	416157.2	5128516.8	30	S	2.403	0.561	0.003	0	100	0		0	0	0	0	0	0	0	4.9	19.3	32.2	28.7	12.9	1.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1252	416384.7	5128470.4	33	S	2.491	0.515	-0.004	0	100	0		0	0	0	0	0	0	0	1.9	15.1	33.5	33.1	14.5	1.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1500	416975.8	5127585.0	0	S	1.759	0.465	0.003	0	100	0		0	0	0	0	0	0	4.3	24.5	40.9	25.4	4.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1501	417107.8	5127490.0	0	S	1.723	0.481	-0.006	0	100	0		0	0	0	0	0	0.1	5.8	26.1	39.5	23.7	4.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1502	416890.8	5127025.0	0	S	1.705	0.468	0.005	0	100	0		0	0	0	0	0	0	5.7	27.3	40.5	22.7	3.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1503	416942.8	5126633.0	0	S	1.668	0.432	0.003	0	100	0		0	0	0	0	0	0	5	29.5	43.7	19.8	1.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1504	416880.8	5126208.0	0	S	1.775	0.425	0.002	0	100	0		0	0	0	0	0	0	2.4	23	45	26	3.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1505	416835.8	5125963.0	0	S	1.628	0.463	0.009	0	100	0		0	0	0	0	0	0.1	7.9	31	39.8	18.8	2.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1506	416826.8	5125768.0	0	S	1.627	0.428	-0.002	0	100	0		0	0	0	0	0	0	8.1	31.9	43.2	17.3	1.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1507	416831.8	5125369.0	0	S	1.525	0.469	0.006	0	100	0		0	0	0	0	0	0.6	12	35.1	36.8	14.1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1508	416830.8	5125078.0	0	S	1.754	0.512	0.014	0	100	0		0	0	0	0	0	0.1	6.3	24.8	36.8	24.9	6.6	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1509	416335.8	5124698.0	0	S	1.612	0.461	0.009	0	100	0		0	0	0	0	0	0.2	8.3	31.8	39.7	18	1.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1510	416919.8	5124689.0	0	S	1.669	0.512	0.015	0	100	0		0	0	0	0	0	0.3	8.8	28.1	36.4	21.5	4.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1511	416712.8	5124425.0	0	S	1.965	0.515	0.016	0	100	0		0	0	0	0	0	0	2.1	16.2	34.3	32.2	13.4	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1512	418342.8	5125740.0	0	S	1.593	0.472	-0.009	0	100	0		0	0	0	0	0	0.4	9.5	32.1	38.6	17.4	1.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1513	418445.8	5125753.0	0	S	1.493	0.464	-0.003	0	100	0		0	0	0	0	0	0.8	13.2	36.4	36	12.6	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1514	421493.8	5120657.0	0	S	1.804	0.472	0.006	0	100	0		0	0	0	0	0	0	3.6	22.3	40.1	27.5	6.2	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1515	420681.8	5120216.0	0	S	2.141	0.463	0.021	0	100	0		0	0	0	0	0	0	0.1	7.5	30.5	39.9	19.4	2.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1516	422073.8	5119391.0	0	S	2.088	0.507	0.018	0	100	0		0	0	0	0	0	0	0.7	11.3	31.2	35.6	18.1	2.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1517	421290.8	5120509.0	0	S	2.058	0.427	0.011	0	100	0		0	0	0	0	0	0	0.1	8.5	35.9	40.9	13.6	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1518	421073.8	5120375.0	0	S	2.117	0.516	0.023	0	100	0		0	0	0	0	0	0	0.6	10.6	30	35.4	19.3	3.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1519	422264.8	5118786.0	0	S	2.134	0.475	0.02	0	100	0		0	0	0	0	0	0	0.2	8.3	30.5	38.9	19.3	2.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1520	422339.8	5118600.0	0	S	2.08	0.51	0.022	0	100	0		0	0	0	0	0	0	0.8	11.7	31.4	35.2	17.8	2.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1521	422176.8	5118971.0	0	S	2.21	0.516	0.014	0	100	0		0	0	0	0	0	0	0.2	7.8	26.5	38.3	23.1	5.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1523	422133.8	5119174.0	0	S	2.089	0.473	0.012	0	100	0		0	0	0	0	0	0	0.4	9.7	32.5	38.2	17.1	1.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	