Job and Sample Information:					
Job No(s):	2023-0720				
Client Order No/Reference:	SSF-064983				
Date Sample(s) Received:	20 th July 2023				
Lab Code	Client Code				
See below	See below				

Methods

Particle size distribution by dry sieving and Folk and Ward

Analytical Procedures

Particle Size Distribution

The samples were dried and sieved through a stack of 17 standard sieves. The size fractions were weighed and the data processed according to Folk and Ward methodology, using a macro to calculate the grain size statistics (Gradistat Version 9.1).

Results

The results are presented in the following tables:

Report Number: 2023-0720Billy Baa PSA

Table 1 – Particle Size Data

Station ID	% > 8 mm	% 8 – 4 mm	% 4 – 2 mm	% 2 – 1 mm	% 1 - 0.5 mm	% 0.5 - 0.25 mm	% 0.25- 0.125 mm	% 0.125- 0.063 mm	% < 0.063 mm	Degree of sorting	Degree of skewness	Degree of kurtosis	Folk Triangle
A1	4.8	2.5	3.8	7.3	6.3	10.3	23.3	28.2	13.5	Very Poorly Sorted	Very Coarse Skewed	Very Leptokurtic	Fine Sand
A2	1.3	0.4	2.9	6.7	6.1	13.9	22.4	27.0	19.2	Very Poorly Sorted	Symmetrical	Very Leptokurtic	Fine Sand
A3	0.0	1.0	1.7	3.7	3.3	13.9	27.2	30.5	18.7	Poorly Sorted	Symmetrical	Very Leptokurtic	Very Fine Sand
A4	1.8	1.0	2.5	6.1	5.5	19.8	24.3	24.1	15.0	Poorly Sorted	Symmetrical	Very Leptokurtic	Fine Sand
A5	0.0	0.8	1.0	2.3	3.3	11.6	37.4	29.6	14.2	Poorly Sorted	Symmetrical	Very Leptokurtic	Fine Sand
B1	8.6	4.0	8.1	10.0	9.4	18.3	26.6	10.9	4.0	Very Poorly Sorted	Very Coarse Skewed	Mesokurtic	Medium Sand
B2	2.2	1.0	2.2	3.8	2.7	13.8	25.0	29.0	20.4	Very Poorly Sorted	Symmetrical	Very Leptokurtic	Very Fine Sand
B3	0.7	1.1	1.7	2.3	3.5	18.1	30.9	24.6	17.0	Poorly Sorted	Fine Skewed	Very Leptokurtic	Fine Sand
B4	0.0	0.3	1.8	2.2	2.6	14.2	33.4	30.2	15.2	Poorly Sorted	Symmetrical	Very Leptokurtic	Fine Sand
B5	0.0	1.0	1.6	3.2	3.0	14.9	26.5	27.7	22.2	Poorly Sorted	Fine Skewed	Very Leptokurtic	Very Fine Sand
C1	0.0	0.2	3.1	5.4	3.1	17.1	27.4	25.7	18.0	Poorly Sorted	Fine Skewed	Very Leptokurtic	Fine Sand
C2	2.7	3.5	5.6	7.6	5.8	18.8	32.8	16.4	6.6	Very Poorly Sorted	Very Coarse Skewed	Very Leptokurtic	Medium Sand
С3	0.4	0.4	2.0	4.0	3.0	20.1	30.4	22.4	17.4	Poorly Sorted	Fine Skewed	Very Leptokurtic	Fine Sand
C4	0.0	0.8	1.7	3.5	4.3	17.3	38.1	23.9	10.4	Poorly Sorted	Symmetrical	Very Leptokurtic	Fine Sand
C5	0.0	0.2	2.9	7.4	5.2	18.1	28.6	23.2	14.4	Poorly Sorted	Symmetrical	Very Leptokurtic	Fine Sand

Table 2 – Particle Size Summary Statistics	A1	A2	A3	A4	A5
>2mm (%)	11.07	4.68	2.66	5.30	1.73
<63µm (%)	13.42	19.18	18.71	14.94	14.12
Mean (mm)	0.236	0.148	0.119	0.182	0.137
Std dev (mm)	0.006	0.005	0.004	0.004	0.003
Phi	2.084	2.753	3.074	2.456	2.868
Wentworth classification	Fine Sand	Fine Sand	Very Fine Sand	Fine Sand	Fine Sand
	Medium Gravelly	Slightly Very Fine	Slightly Very Fine	Very Fine Gravelly	Slightly Very Fine
Classification description	Coarse Silty Very	Gravelly Fine Silty	Gravelly Coarse Silty	Coarse Silty Fine	Gravelly Coarse Silty
	Fine Sand	Very Fine Sand	Very Fine Sand	Sand	Fine Sand

Table 2 cont'd – Particle Size Summary Statistics	B1	B2	В3	B4	В5
>2mm (%)	20.79	5.39	3.46	2.12	2.58
<63µm (%)	4.02	20.35	16.98	15.22	22.17
Mean (mm)	0.481	0.114	0.138	0.137	0.104
Std dev (mm)	0.005	0.004	0.003	0.003	0.004
Phi	1.057	3.139	2.859	2.872	3.271
Wentworth classification	Medium Sand	Very Fine Sand	Fine Sand	Fine Sand	Very Fine Sand
Classification description	Very Fine Gravelly Fine Sand	Medium Gravelly Very Coarse Silty Very Fine Sand	Slightly Very Fine Gravelly Coarse Silty Fine Sand	Slightly Very Fine Gravelly Coarse Silty Fine Sand	Slightly Very Fine Gravelly Very Coarse Silty Very Fine Sand

Table 2 cont'd – Particle Size Summary Statistics	C1	C2	C3	C4	C5
>2mm (%)	3.32	11.87	2.78	2.48	3.08
<63µm (%)	18.01	6.63	17.33	10.34	14.41
Mean (mm)	0.132	0.314	0.139	0.163	0.175
Std dev (mm)	0.004	0.004	0.003	0.003	0.004
Phi	2.927	1.671	2.851	2.616	2.516
Wentworth classification	Fine Sand	Medium Sand	Fine Sand	Fine Sand	Fine Sand
Classification description	Slightly Very Fine Gravelly Very Coarse Silty Fine Sand	Very Fine Gravelly Fine Sand	Slightly Very Fine Gravelly Very Coarse Silty Fine Sand	Slightly Very Fine Gravelly Coarse Silty Fine Sand	Slightly Very Fine Gravelly Very Coarse Silty Fine Sand