

Appendix 4.1

Field peak shear vane strength, remoulded shear vane strength and calculated sensitivities are presented for all sensitive samples analysed in this study.

Omokoroa (OS1, OS2)

Sample	Peak Strength (Nm)	Peak Strength (kPa)	Remoulded Strength (Nm)	Remoulded Strength (kPa)	Sensitivity
OS1	68.0	106.2	6.0	9.4	11.3
OS1	64.0	100.0	7.0	10.9	9.1
OS1	58.0	90.6	5.0	7.8	11.6
OS1	57.0	89.0	4.0	6.2	14.3
OS1	50.0	78.1	5.0	7.8	10.0
Mean	59.4	92.8	5.4	8.4	11.3
std dev	6.9	10.8	1.1	1.8	1.9
std error	3.1	4.8	0.5	0.8	0.6

Sample	Peak Strength (Nm)	Peak Strength (kPa)	Remoulded Strength (Nm)	Remoulded Strength (kPa)	Sensitivity
OS2	70.0	109.3	4.0	6.2	17.5
OS2	60.0	93.7	5.0	7.8	12.0
OS2	55.0	85.9	5.0	7.8	11.0
OS2	42.0	65.6	3.0	4.7	14.0
OS2	34.0	53.1	4.0	6.2	8.5
OS2	44.0	68.7	2.0	3.1	22.0
OS2	36.0	56.2	2.0	3.1	18.0
OS2	45.0	70.3	4.0	6.2	11.3
OS2	40.0	62.5	2.0	3.1	20.0
Mean	47.3	73.9	3.4	5.4	14.9
std dev	11.9	18.6	1.2	1.9	4.6
std error	4.0	6.2	0.4	0.6	1.5

Te Puna (TPS1)

Sample	Peak Strength (Nm)	Peak shear strength (kPa)	Remoulded Strength (Nm)	Remoulded vane shear strength (kPa)	Sensitivity
TPS1	60.0	93.7	6.0	9.4	10.0
TPS1	66.0	103.1	6.0	9.4	11.0
TPS1	68.0	106.2	7.0	10.9	9.7
TPS1	86.0	134.3	9.0	14.1	9.6
TPS1	88.0	137.5	11.0	17.2	8.0
TPS1	76.0	118.7	7.0	10.9	10.9
TPS1	100.0	156.2	4.0	6.2	25.0
TPS1	86.0	134.3	8.0	12.5	10.8
TPS1	88.0	137.5	8.0	12.5	11.0
TPS1	72.0	112.5	11.0	17.2	6.5
TPS1	60.0	93.7	5.0	7.8	12.0
TPS1	90.0	140.6	12.0	18.7	7.5
Mean	78.3	122.4	7.8	12.2	11.0
Std Dev	13.1	20.5	2.5	3.9	4.7
Std Error	1.1	1.7	0.2	0.3	1.4

Pahoia Peninsula (PS1, PS2)

Sample	Peak Strength (Nm)	Peak Strength (kPa)	Remoulded Strength (Nm)	Remoulded Strength (kPa)	Sensitivity
PS1	45	70	4	6	11.25
PS1	47	73	5	8	9.40
PS1	47	73	5	8	9.40
PS1	44	69	5	8	8.80
PS1	43	67	6	9	7.17
PS1	42	66	4	6	10.50
PS1	49	77	5	8	9.80
PS1	45	70	4	6	11.25
PS1	48	75	5	8	9.60
PS1	44	69	4	6	11.00
PS1	42	66	4	6	10.50
PS1	39	61	4	6	9.75
PS1	48	75	4	6	12.00
PS1	47	73	3	5	15.67
PS1	43	67	3	5	14.33
PS1	46	72	3	5	15.33
PS1	43	67	4	6	10.75
PS1	30	47	3	5	10.00
PS1	40	62	4	6	10.00
PS1	50	78	4	6	12.50
PS1	46	72	3	5	15.33
Mean	44.2	69.0	4.1	6.4	11.2
St Dev	4.3	6.8	0.8	1.3	2.3
St Error	0.9	1.5	0.2	0.3	0.5

Sample	Peak Strength (Nm)	Peak Strength (kPa)	Remoulded Strength (Nm)	Remoulded Strength (kPa)	Sensitivity
PS2	52.0	81.2	5.0	7.8	10.4
PS2	50.0	78.1	6.0	9.4	8.3
PS2	42.0	65.6	4.0	6.2	10.5
PS2	52.0	81.2	6.0	9.4	8.7
PS2	44.0	68.7	5.0	7.8	8.8
PS2	44.0	68.7	4.0	6.2	11.0
PS2	52.0	81.2	6.0	9.4	8.7
PS2	42.0	65.6	6.0	9.4	7.0
PS2	44.0	68.7	5.0	7.8	8.8
PS2	38.0	59.4	4.0	6.2	9.5
PS2	52.0	81.2	5.0	7.8	10.4
PS2	50.0	78.1	4.0	6.2	12.5
PS2	48.0	75.0	4.0	6.2	12.0
PS2	52.0	81.2	5.0	7.8	10.4
PS2	45.0	70.3	5.0	7.8	9.0
Mean	47.1	73.6	4.9	7.7	9.2
St Dev	4.7	7.3	0.8	1.2	1.5
St Error	1.1	1.7	0.2	0.3	0.4