DATA SHEET FOR SOIL & REGOLITH CHARACTERISATION - Smap						SMap 1.0
Project/ident		**Observer**		**Obsvn type**		Pit
Profile No		**Date**		**NZMS 260 GR**		2807105
Grid Ref.		*GPS ref*				6137165
Slope			Elevation			
Aspect (compass-23º)			**Region**			
Location	Taylor Road, Ongaonga					
Soil Name	Twyford (6g)					Representative
Management		Landuse	Calf-rearing			
Landscape		Landform	Low terrace	Landform adj	Remnant	Land Elemt
Microtop		Parent material				
Vegetation	Pasture	Vege2				
Notes						

	1	2	3	4	5	6
Functional Horizons	tLw	Lw	Lw	VLl		
Hor. Desig.	Ap	Bw	BC	2C		
Depth (base) cm	15	30	50	100+		
Moisture						
Matrix colour	10YR4/2	10YR5/4	10YR5/4	5Y6/2		
%						
Mottle 1			7.5YR5/8			
Abund %			5			
Size			4-8			
Contrast						
Mottle2						
Abund2						
Size2						
Contrast2						
Texture	ZL	ZL	SL	SL		
%clay	22	20	15	15		
%sand	20	22	65	65		
%stones	0	0	0	65		
Stone size						
Apedal/Pedal type	P	P	P	A - SG		
Ped shape	Poly (75%)	Poly (75%)	Block & prism (60%)			
Size class <40mm						
Size range (mm)						
0-10 mm (vF & F)	√					
10-20 mm (M)		√	√ Block (40%)			
20-60 mm (C)			√ Prism (60%)			
60-200 mm (vC&xC)						
>200 mm (G)						
SSize method						
Soil strength	w	w	w			
Ped strength						
Failure	semi	semi				
Stickiness						
Coatings - kind						
Abundance						
Distinctness						
Particle Packing				Loose		
Root abund <2mm						
Root abund >2mm						
Permeability Est	mr	m	m	m		
NaF test						
Soil material						
Notes						

Drainage	Mod Well	**Subgroup**	BOT	**Soil depth class**	md	**Texture**
Dpth Slow	999	**P Root Depth**	100	**Root Barrier**	N	Z/L
PM Class	Mg	**Rok class**		**Rok cla - fines**	Hs	**Texture Gp60**
Permeability	m	PM Origin upper	Al	PM Origin lower	Al	L

DATA SHEET FOR SOIL & REGOLITH CHARACTERISATION - Smap						SMap 1.0
Project/ident			**Observer**		**Obsvn type**	Pit
Profile No			**Date**		**NZMS 260 GR**	2801745
Grid Ref.			*GPS ref*			6137235
Slope				Elevation		
Aspect (compass-23º)				**Region**		
Location	Taylor Road, Ongaonga					
Soil Name	Hastings (14g)					Representative
Management		Landuse	Calf-rearing			
Landscape		Landform	Floodplain	Landform adj	Backplain	Land Elemt
Microtop		Parent material	Alluvium			
Vegetation	Pasture	Vege2				
Notes						

	1	2	3	4	5	6
Functional Horizons	tLw	Lw	VLl			
Hor. Desig.	Ap	Bw(g)	2Cr			
Depth (base) cm	15	50	100+			
Moisture						
Matrix colour	10YR4/2	2.5Y5/3	5Y6/2			
%						
Mottle 1		5Y6/2				
Abund %		20				
Size		4-8				
Contrast						
Mottle2		7.5YR5/8				
Abund2		2				
Size2		2-4				
Contrast2						
Texture	ZL	ZL	SL			
%clay	22	22	15			
%sand	15	20	65			
%stones	0	0	65			
Stone size						
Apedal/Pedal type	P	P	A - SG			
Ped shape	Poly (70%)	Blk, Prism 50%				
Size class <40mm						
Size range (mm)						
0-10 mm (vF & F)	√					
10-20 mm (M)		√ Block (60%)				
20-60 mm (C)		√ Prism (40%)				
60-200 mm (vC&xC)						
>200 mm (G)						
SSize method						
Soil strength	w	w				
Ped strength						
Failure						
Stickiness						
Coatings - kind						
Abundance						
Distinctness						
Particle Packing			Loose			
Root abund <2mm						
Root abund >2mm						
Permeability Est	vr	m	m			
NaF test						
Soil material						
Notes						

Drainage	Imp	**Subgroup**	BOM	**Soil depth class**	md	**Texture**
Dpth Slow	999	**P Root Depth**	100	**Root Barrier**	N	Z/L
PM Class	Mg	**Rok class**		**Rok cla - fines**	Hs	**TextureGp60**
Permeability	m	PM Origin upper	Al	PM Origin lower	Al	L

DATA SHEET FOR SOIL & REGOLITH CHARACTERISATION - Smap						SMap 1.0
Project/ident			**Observer**		**Obsvn type**	Pit
Profile No			**Date**		**NZMS 260 GR**	2806365
Grid Ref.			*GPS ref*			6140820
Slope				Elevation		
Aspect (compass-23º)				**Region**		
Location	Plantation Roadend					
Soil Name	Irongate (21g)					Representative
Management		Landuse	Dairy farm			
Landscape		Landform	Floodplain	Landform adj	Basin	Land Elemt
Microtop		Parent material				
Vegetation	Pasture	Vege2				
Notes						

	1	2	3	4	5	6
Funcational Horizons	tSLw	SLw	VAl			
Hor. Desig.	Ap	Bgg	2Cg			
Depth (base) cm	10	35	100+			
Moisture						
Matrix colour	10YR4/3	7.5Y7/1	5Y6/2			
%						
Mottle 1		7.5YR5/8	7.5YR5/8			
Abund %		10	15			
Size		3-6	5-15			
Contrast						
Mottle2						
Abund2						
Size2						
Contrast2						
Texture	SL	SL	LS			
%clay	17	10	2			
%sand	55	60	75			
%stones	15	15	70			
Stone size						
Apedal/Pedal type	P	P	A - SG			
Ped shape	Blocky (75%)	Blk, Prism 50%				
Size class <40mm						
Size range (mm)						
0-10 mm (vF & F)	√					
10-20 mm (M)	√	√				
20-60 mm (C)		√				
60-200 mm (vC&xC)						
>200 mm (G)						
SSize method						
Soil strength	w	w				
Ped strength						
Failure						
Stickiness						
Coatings - kind						
Abundance						
Distinctness						
Particle Packing			compact			
Root abund <2mm						
Root abund >2mm						
Permeability Est	r	m	vr			
NaF test						
Soil material						
Notes						

Drainage	Poor (rising)	**Subgroup**	GOT	**Soil depth class**	s	**Texture**
Dpth Slow	999	**P Root Depth**	10	**Root Barrier**	A	L/S
PM Class	Mr	**Rok class**	Hs	**Rok cla - fines**	Hs	**TextureGp60**
Permeability	r	PM Origin upper	Al	PM Origin lower	Al	L/S

DATA SHEET FOR SOIL & REGOLITH CHARACTERISATION - Smap						SMap 1.0
Project/ident			**Observer**		**Obsvn type**	Pit
Profile No			**Date**		**NZMS 260 GR**	2803035
Grid Ref.			*GPS ref*			6138125
Slope				Elevation		
Aspect (compass-23º)				**Region**		
Location	Buchanan Farm, Ongaonga					
Soil Name	Okawa (29g)					Representative
Management		Landuse	Bull-beef			
Landscape	Ohakean aggradational terrace			Landform	Alluvial fan	Land Elemt
Microtop		Parent material	Alluvium - reworked loess & tephra			
Vegetation	Pasture	Vege2				
Notes	Horizon 4 acts as an aquaclude - artesian springs. Also a big area of BOM within the unit mapped as 29g here.					

	1	2	3	4	5	6
Functional Horizons	tLw	Lw	Lw	VLl		
Hor. Desig.	Ap	Bw	BCg	2C		
Depth (base) cm	15	25	40	100+		
Moisture						
Matrix colour	10YR4/2	2.5Y7/2	5Y7/2	5Y6/2		
%						
Mottle 1			7.5YR6/6			
Abund %			25			
Size			4-6			
Contrast						
Mottle2			7.5YR5/8			
Abund2			10			
Size2			2-4			
Contrast2						
Texture	ZL	ZL	SL	SL		
%clay	22	20	15	15		
%sand	20	20	85	85		
%stones	0	0	0	70		
Stone size						
Apedal/Pedal type	P	P	P	A - SG		
Ped shape	Poly	Poly	Poly & Prism			
Size class <40mm						
Size range (mm)						
0-10 mm (vF & F)	√	√				
10-20 mm (M)		√	√			
20-60 mm (C)			√			
60-200 mm (vC&xC)						
>200 mm (G)						
SSize method						
Soil strength	w	w	w			
Ped strength	w	w	w			
Failure	semi	semi				
Stickiness						
Coatings - kind				Silt coats		
Abundance				25%		
Distinctness						
Particle Packing				Compact		
Root abund <2mm						
Root abund >2mm						
Permeability Est	vr	m	m	s		
NaF test						
Soil material						
Notes						

Drainage	Poor	**Subgroup**	GOT	**Soil depth class**	s	**Texture**
Dpth Slow	40	**P Root Depth**	40	**Root Barrier**	Pn	Z/L
PM Class	Mr	**Rok class**	Hs	**Rok cla - fines**	Hs	**TextureGp60**
Permeability	m/s	PM Origin upper	Al	PM Origin lower	Al	L

DATA SHEET FOR SOIL & REGOLITH CHARACTERISATION - Smap						SMap 1.0
Project/ident			**Observer**		**Obsvn type**	Cutting
Profile No			**Date**		**NZMS 260 GR**	2808765
Grid Ref.			*GPS ref*			6152635
Slope				Elevation		
Aspect (compass-23º)				**Region**		
Location	State Highway 50					
Soil Name	Takapau (39g)					Representative
Management		Landuse				
Landscape	Ohakean aggradational terrace			Landform	Terrace tread	Land Elemt
Microtop		Parent material	Alluvium - reworked tephra & loess over glacial outwash gravels			
Vegetation		Vege2				
Notes						

	1	2	3	4	5	6
Functional Horizons	tLEw	Lw	VLl			
Hor. Desig.	Ap	Bw	2C			
Depth (base) cm	10	30	200+			
Moisture						
Matrix colour	10YR4/2	7.5YR5/4	10YR5/4			
%						
Mottle 1						
Abund %						
Size						
Contrast						
Mottle2						
Abund2						
Size2						
Contrast2						
Texture	ZL	ZL	LS			
%clay	20	20	5			
%sand	25	25	75			
%stones	0	10	65			
Stone size		10-50mm	10-50mm			
Apedal/Pedal type	A - Earthy	P (60)	A - SG			
Ped shape	Crumb	Poly + Prism				
Size class <40mm						
Size range (mm)						
0-10 mm (vF & F)	√ vF	√ Poly (40%)				
10-20 mm (M)						
20-60 mm (C)		√ Prism (60%)				
60-200 mm (vC&xC)						
>200 mm (G)						
SSize method						
Soil strength	w	w				
Ped strength						
Failure						
Stickiness						
Coatings - kind						
Abundance						
Distinctness						
Particle Packing			Loose			
Root abund <2mm						
Root abund >2mm						
Permeability Est	r	m	m			
NaF test	3-4	3-4				
Soil material						
Notes						

Drainage	vr	**Subgroup**	BLT	**Soil depth class**	s	**Texture**
Dpth Slow	999	**P Root Depth**		**Root Barrier**	N	L/S
PM Class	Mr	**Rok class**	Hs	**Rok cla - fines**	Hs	**TextureGp60**
Permeability	m	PM Origin upper	Al	PM Origin lower	Al	L/S

DATA SHEET FOR SOIL & REGOLITH CHARACTERISATION - Smap						SMap 1.0
Project/ident			**Observer**		**Obsvn type**	Pit
Profile No			**Date**		**NZMS 260 GR**	2796135
Grid Ref.			*GPS ref*			6148205
Slope				Elevation		
Aspect (compass-23º)				**Region**		
Location	Upper Makaroro Road					
Soil Name	Kopua (40)					Representative
Management		Landuse	Bull-beef			
Landscape	Pre-Ohakea aggradational terrace			Landform	Terrace tread	Land Elemt
Microtop		Parent material	Loess over aggradational outwash gravels			
Vegetation	Pasture	Vege2				
Notes						

	1	2	3	4	5	6
Functional Horizons	tLEw	LEw	VLl			
Hor. Desig.	Ap	Bw	2C			
Depth (base) cm	15	45	100+			
Moisture						
Matrix colour	7.5YR4/2	7.5YR5/4	10YR5/4			
%						
Mottle 1						
Abund %						
Size						
Contrast						
Mottle2						
Abund2						
Size2						
Contrast2						
Texture	SL	SL	ZL			
%clay	15	15	25			
%sand	65	65	20			
%stones	0	1	30			
Stone size						
Apedal/Pedal type	A - Earthy	P (60%)	A - SG			
Ped shape	Crumb	Poly & prism				
Size class <40mm						
Size range (mm)						
0-10 mm (vF & F)	√ (vF)	√ (Poly 70%)				
10-20 mm (M)						
20-60 mm (C)		√ (Prism 30%)				
60-200 mm (vC&xC)						
>200 mm (G)						
SSize method						
Soil strength	w	w				
Ped strength						
Failure						
Stickiness						
Coatings - kind						
Abundance						
Distinctness						
Particle Packing			Compact			
Root abund <2mm						
Root abund >2mm						
Permeability Est	r	r	ms			
NaF test	5	5				
Soil material						
Notes						

Drainage	Well	**Subgroup**	LOT	**Soil depth class**	md	**Texture**
Dpth Slow	999	**P Root Depth**	90	**Root Barrier**	N	L
PM Class	Mg	**Rok class**		**Rok cla - fines**	Hs	**TextureGp60**
Permeability	m	PM Origin upper	Lo	PM Origin lower	Al	L

DATA SHEET FOR SOIL & REGOLITH CHARACTERISATION - Smap						SMap 1.0
Project/ident			**Observer**		**Obsvn type**	Cutting
Profile No			**Date**		**NZMS 260 GR**	2804700
Grid Ref.			*GPS ref*			6143545
Slope				Elevation		
Aspect (compass-23º)				**Region**		
Location	Intersection of Waipawa River and State Highway 50					
Soil Name	Tukituki (56a)					Representative
Management		Landuse	River-side			
Landscape		Landform		Landform adj		Land Elemt
Microtop		Parent material	Alluvium			
Vegetation	Willows	Vege2				
Notes						

	1	2	3	4	5	6
Functional Horizons	VAl					
Hor. Desig.	C					
Depth (base) cm	100+					
Moisture						
Matrix colour	5Y6/2					
%						
Mottle 1						
Abund %						
Size						
Contrast						
Mottle2						
Abund2						
Size2						
Contrast2						
Texture	S					
%clay	2					
%sand	92					
%stones	50-65%					
Stone size	10-50mm					
Apedal/Pedal type	A-SG					
Ped shape						
Size class <40mm						
Size range (mm)						
0-10 mm (vF & F)						
10-20 mm (M)						
20-60 mm (C)						
60-200 mm (vC&xC)						
>200 mm (G)						
SSize method						
Soil strength						
Ped strength						
Failure						
Stickiness						
Coatings - kind						
Abundance						
Distinctness						
Particle Packing	Loose					
Root abund <2mm						
Root abund >2mm						
Permeability Est	vr					
NaF test						
Soil material						
Notes						

Drainage	Well	**Subgroup**	WF	**Soil depth class**	vs	**Texture**
Dpth Slow	999	**P Root Depth**	100	**Root Barrier**	N	S
PM Class	Mr	**Rok class**	Hs	**Rok cla - fines**	Hs	**TextureGp60**
Permeability	r	PM Origin upper	Al	PM Origin lower	Al	S

DATA SHEET FOR SOIL & REGOLITH CHARACTERISATION - Smap						SMap 1.0
Project/ident			**Observer**		**Obsvn type**	Pit
Profile No			**Date**		**NZMS 260 GR**	2800565
Grid Ref.			*GPS ref*			6137780
Slope				Elevation		
Aspect (compass-23º)				**Region**		
Location	SH50, adjacent to Ongaonga Golf Course					
Soil Name	Argyll (58)					Representative
Management		Landuse	Roadside			
Landscape		Landform	Floodplain	Landform adj		Land Elemt
Microtop		Parent material	Alluvium			
Vegetation	Grass	Vege2				
Notes						

	1	2	3	4	5	6
Functional Horizons	tAl	VAl				
Hor. Desig.	Ap	2C				
Depth (base) cm	5	100+				
Moisture						
Matrix colour	2.5Y4/3	2.5Y5/4				
%						
Mottle 1						
Abund %						
Size						
Contrast						
Mottle2						
Abund2						
Size2						
Contrast2						
Texture	LS	S				
%clay	5	5				
%sand	75	95				
%stones	0	65				
Stone size						
Apedal/Pedal type	P (25%)	A - SG				
Ped shape						
Size class <40mm						
Size range (mm)						
0-10 mm (vF & F)	√					
10-20 mm (M)						
20-60 mm (C)						
60-200 mm (vC&xC)						
>200 mm (G)						
SSize method						
Soil strength	w					
Ped strength						
Failure						
Stickiness						
Coatings - kind						
Abundance						
Distinctness						
Particle Packing		Loose				
Root abund <2mm						
Root abund >2mm						
Permeability Est	vr	vr				
NaF test						
Soil material						
Notes						

Drainage	Well	**Subgroup**	RST	**Soil depth class**	vs	**Texture**
Dpth Slow	999	**P Root Depth**	90	**Root Barrier**	N	S
PM Class	Mr	**Rok class**	Hs	**Rok cla - fines**	Hs	**TextureGp60**
Permeability	r	PM Origin upper	Al	PM Origin lower	Al	S

DATA SHEET FOR SOIL & REGOLITH CHARACTERISATION - Smap						SMap 1.0
Project/ident			**Observer**		**Obsvn type**	Pit
Profile No			**Date**		**NZMS 260 GR**	2800905
Grid Ref.			*GPS ref*			6137595
Slope				Elevation		
Aspect (compass-23º)				**Region**		
Location	Taylor Road adjacent to Ongaonga Golf Course					
Soil Name	Argyll (58a)					Representative
Management		Landuse	Roadside			
Landscape		Landform	Floodplain	Landform adj	Mound/bar	Land Elemt
Microtop		Parent material	Alluvium			
Vegetation	Grass	Vege2				
Notes						

	1	2	3	4	5	6
Functional Horizons	tSAl	SAl	VAl			
Hor. Desig.	Ap	C	2C			
Depth (base) cm	10	25	100+			
Moisture						
Matrix colour	2.5Y4/3	2.5Y5/4	2.5Y5/4			
%						
Mottle 1						
Abund %						
Size						
Contrast						
Mottle2						
Abund2						
Size2						
Contrast2						
Texture	LS	S	S			
%clay	5	2	2			
%sand	75	92	92			
%stones	10	20	65			
Stone size						
Apedal/Pedal type	P (25%)	A - SG	A - SG			
Ped shape	Poly					
Size class <40mm						
Size range (mm)						
0-10 mm (vF & F)	√ (vF)					
10-20 mm (M)						
20-60 mm (C)						
60-200 mm (vC&xC)						
>200 mm (G)						
SSize method						
Soil strength	w					
Ped strength						
Failure						
Stickiness						
Coatings - kind						
Abundance						
Distinctness						
Particle Packing			Loose			
Root abund <2mm						
Root abund >2mm						
Permeability Est	vr	vr	vr			
NaF test						
Soil material						
Notes						

Drainage	Well	**Subgroup**	RST	**Soil depth class**	S	**Texture**
Dpth Slow	999	**P Root Depth**	90	**Root Barrier**	N	S
PM Class	Mr	**Rok class**	Hs	**Rok cla - fines**	Hs	**TextureGp60**
Permeability	r	PM Origin upper	Al	PM Origin lower	Al	S

DATA SHEET FOR SOIL & REGOLITH CHARACTERISATION - Smap						SMap 1.0
Project/ident			**Observer**		**Obsvn type**	Pit
Profile No			**Date**		**NZMS 260 GR**	2808205
Grid Ref.			*GPS ref*			6143925
Slope				Elevation		
Aspect (compass-23º)				**Region**		
Location	Lower Makaroro Road					
Soil Name	Upokororo (59)					Representative
Management		Landuse	Bull-beef			
Landscape	Ohakean aggradational terrace			Landform	Low end of tce	Land Elemt
Microtop		Parent material	Alluvium over reworked loess over Ohakean aggradational gravels			
Vegetation	Pasture	Vege2				
Notes						

	1	2	3	4	5	6
Functional Horizons	tLw	Lw	Lw			
Hor. Desig.	Ap	Bw	BC			
Depth (base) cm	15	60	100+			
Moisture						
Matrix colour	10YR4/2	10YR5/4	10YR5/4			
%						
Mottle 1						
Abund %						
Size						
Contrast						
Mottle2						
Abund2						
Size2						
Contrast2						
Texture	SL	SL	SL			
%clay	16	14	12			
%sand	60	70	80			
%stones	0	0	0			
Stone size						
Apedal/Pedal type	P (75%)	P (65%)	P (50%)			
Ped shape	Poly	Poly & prism	Prism			
Size class <40mm						
Size range (mm)						
0-10 mm (vF & F)	√	√ (Poly 40%)				
10-20 mm (M)		√ (Prism 60%)				
20-60 mm (C)			√ (50%)			
60-200 mm (vC&xC)			√ (50%)			
>200 mm (G)						
SSize method						
Soil strength	w	w				
Ped strength	w	w				
Failure	semi	semi				
Stickiness						
Coatings - kind	no	no				
Abundance						
Distinctness						
Particle Packing						
Root abund <2mm						
Root abund >2mm						
Permeability Est	vr	m	m			
NaF test						
Soil material						
Notes						

Drainage	Well	**Subgroup**	BOT	**Soil depth class**	D	**Texture**
Dpth Slow	999	**P Root Depth**	90	**Root Barrier**	N	L
PM Class	Md	**Rok class**		**Rok cla - fines**	Hs	**TextureGp60**
Permeability	m	PM Origin upper	Al	PM Origin lower	Al	L

DATA SHEET FOR SOIL & REGOLITH CHARACTERISATION - Smap						SMap 1.0
Project/ident			**Observer**		**Obsvn type**	Pit
Profile No			**Date**		**NZMS 260 GR**	2808245
Grid Ref.			*GPS ref*			6144085
Slope				Elevation		
Aspect (compass-23º)				**Region**		
Location	Lower Makaroro Road					
Soil Name	Willowbrook (64)					Representative
Management		Landuse	Dairy farm			
Landscape	Ohakean aggradational terrace			Landform	Low part of tce	Land Elemt
Microtop		Parent material	Alluvium over reworked loess on Ohakean aggradational gravels			
Vegetation	Pasture	Vege2				
Notes						

	1	2	3	4	5	6
Functional Horizons	tLw	Lw	Lw	Al	Lw	Lw
Hor. Desig.	Ap	Bgp	1BCgp	2BCgp	3BC(x)	3BC
Depth (base) cm	20	45	60	80	95	120+
Moisture	Moist	Moist	Moist			
Matrix colour	10YR4/2	5Y7/2	2.5Y6/3	5Y6/2	2.5Y6/4	2.5Y6/4
%						
Mottle 1		7.5YR5/4	7.5YR5/8	7.5YR5/8		
Abund %		15	20	20		
Size		2-4	5-10	5-10		
Contrast						
Mottle2				5YR4/8		
Abund2				15		
Size2				2-4		
Contrast2						
Texture	ZL	ZL	SL	LS	SL	SL
%clay	20	20	10	8	10	10
%sand	35	40	75	70	75	75
%stones	0	0	0	0	0	0
Stone size						
Apedal/Pedal type	P (75%)	P (75%)	P (20%)	A -SG	A - Massive	A - Massive
Ped shape	Poly	Block & prism	Prism			
Size class <40mm						
Size range (mm)						
0-10 mm (vF & F)	√					
10-20 mm (M)		√ (Block 60%)				
20-60 mm (C)		√ (Prism 40%)	√			
60-200 mm (vC&xC)						
>200 mm (G)						
SSize method						
Soil strength	w	w	sf	w	sf	w
Ped strength						
Failure	semi	semi	semi	semi	brittle	semi
Stickiness						
Coatings - kind						
Abundance						
Distinctness						
Particle Packing						
Root abund <2mm						
Root abund >2mm						
Permeability Est	vr	m	ms	r	s	m
NaF test						
Soil material						
Notes						

Drainage	Poor (perched)	**Subgroup**	PPT	**Soil depth class**	D	**Texture**
Dpth Slow	80	**P Root Depth**	80	**Root Barrier**	Pan	Z/L
PM Class	Md	**Rok class**		**Rok cla - fines**	Hs	**TextureGp60**
Permeability	m/s	PM Origin upper	Al	PM Origin lower	Al	L

DATA SHEET FOR SOIL & REGOLITH CHARACTERISATION - Smap						SMap 1.0
Project/ident			**Observer**		**Obsvn type**	*Auger*
Profile No			**Date**		Map sheet	
Grid Ref.			GPS ref		**Projection**	NZMG
Slope				Elevation		
Aspect (compass-23º)				**Region**		
Location	Pettit Valley Road					
Soil Name	Tikokino, 74g					Representative
Management		Landuse	Roadside			
Landscape		Landform	Low terrace	Landform adj		Land Elemt
Microtop		Parent material	Alluvium			
Vegetation		Vege2				
Notes						
	1	2	3	4	5	6
Sampled (tick)	tSLw	SLw	VAl			
Hor. Desig.	Ap	Bw	2C			
Depth (base) cm	15	40	100+			
Moisture						
Matrix colour	7.5YR3/2	10YR5/4	N6/0			
%						
Mottle 1						
Abund %						
Size						
Contrast						
Mottle2						
Abund2						
Size2						
Contrast2						
Texture	ZL	ZL	S			
%clay	22	22	2			
%sand	20	20	92			
%stones	5	5	70			
Stone size						
Apedal/Pedal type	P - 85%	P - 75%	A - SG			
Ped shape	Poly	Poly				
Size class <40mm						
Size range (mm)						
0-10 mm (vF & F)	√	√				
10-20 mm (M)						
20-60 mm (C)						
60-200 mm (vC&xC)						
>200 mm (G)						
SSize method						
Soil strength	W	W				
Ped strength						
Failure						
Stickiness						
Coatings - kind						
Abundance						
Distinctness						
Particle Packing			Loose			
Root abund <2mm						
Root abund >2mm						
Permeability Est	r	m	vr			
NaF test		4				
Soil material						
Notes						
Drainage	Well	**Subgroup**	BLT	**Soil depth class**	S	**Texture**
Dpth Slow	999	**P Root Depth**	100	**Root Barrier**	N	**Z/S**
PM Class	Mr	**Rok class**	Hs	**Rok cla - fines**	Hs	**TextureGp60**
Permeability	m/r	PM Origin upper	Al	PM Origin lower	Al	Z/S

DATA SHEET FOR SOIL & REGOLITH CHARACTERISATION - Smap						SMap 1.0
Project/ident			**Observer**		**Obsvn type**	*Cutting*
Profile No			**Date**		Map sheet	
Grid Ref.	2788646	6134402	GPS ref		**Projection**	NZMG
Slope	8-15°			Elevation		
Aspect (compass-23º)				**Region**		
Location	Corner of Mill Road & Ashley Clinton Road					
Soil Name	Mangatahi, 42					Representative
Management		Landuse	Roadside			
Landscape		Landform	High terrace	Landform adj		Land Elemt
Microtop		Parent material	Loess over aggradational gravels			
Vegetation		Vege2				
Notes						
	1	2	3	4	5	6
Sampled (tick)	tLEw	Lw	VYc	LCf		
Hor. Desig.	Ah	Bw(g)	2Bt	3BCx		
Depth (base) cm	10	40	65	100+		
Moisture						
Matrix colour	7.5YR3/2	2.5Y5/4	5YR4/6	2.5Y7/2		
%						
Mottle 1		5Y7/2	10YR8/3*			
Abund %		2%	25			
Size		2-3	5-15			
Contrast						
Mottle2		7.5YR5/8				
Abund2		2%				
Size2		2-3				
Contrast2						
Texture	ZL	ZL	SCL			
%clay	20	20	30			
%sand	20	20	65			
%stones	0	0	65			
Stone size						
Apedal/Pedal type	P - 85%	P - 70%	A - massive	A - massive		
Ped shape	Crumb	Poly				
Size class <40mm						
Size range (mm)						
0-10 mm (vF & F)	vF	F				
10-20 mm (M)						
20-60 mm (C)						
60-200 mm (vC&xC)						
>200 mm (G)						
SSize method						
Soil strength	Weak	Weak	Slightly firm	Firm		
Ped strength						
Failure						
Stickiness						
Coatings - kind			Clay coats, Fe			
Abundance						
Distinctness						
Particle Packing			Compact			
Root abund <2mm						
Root abund >2mm						
Permeability Est	r	m	s	s		
NaF test						
Soil material						
Notes	Horizon 3 (2Bt) is argillic with a possibility of the straw colour being jarosite. Horizon 4 (3BCx) contains a duripan.					
Drainage	Imperfect	**Subgroup**	PUM	**Soil depth class**	MD	**Texture**
Dpth Slow	40	**P Root Depth**	65	**Root Barrier**	Pn	**Z/L**
PM Class	Mg	**Rok class**	NA	**Rok cla - fines**	Hs	**TextureGp60**
Permeability	m/s	PM Origin upper	Lo	PM Origin lower	Al	Z/L

DATA SHEET FOR SOIL & REGOLITH CHARACTERISATION - Smap						SMap 1.0
Project/ident			**Observer**		**Obsvn type**	*Cutting*
Profile No			**Date**		Map sheet	
Grid Ref.	2794165	6130082	*GPS ref*		**Projection**	*NZMG*
Slope				Elevation		
Aspect (compass-23º)				**Region**		
Location	S.H.50. South of Ashcott					
Soil Name	Mangatewai, 73g					Representative
Management		Landuse	Roadside			
Landscape		Landform	Int. terrace	Landform adj		Land Elemt
Microtop		Parent material				
Vegetation		Vege2				
Notes						

	1	2	3	4	5	6
Sampled (tick)	tLEw	LEw	VLI	VAI		
Hor. Desig.	Ah	Bw	Bw(g)	Bw(h)		
Depth (base) cm	10	25	80	100+		
Moisture						
Matrix colour	7.5YR3/2	7.5YR5/4	7.5YR5/4	7.5YR4/4		
%						
Mottle 1			2.5Y7/2	5YR4/6		
Abund %			5%	20%		
Size						
Contrast						
Mottle2			10YR5/6			
Abund2			2%			
Size2						
Contrast2						
Texture	SL	SL	SL	LS		
%clay	12	12	10	2		
%sand	60	60	80	92		
%stones	20%	20%	70%	70%		
Stone size						
Apedal/Pedal type	P - 85%	P - 85%	A - SG	A - SG		
Ped shape	Crumb	Crumb				
Size class <40mm						
Size range (mm)						
0-10 mm (vF & F)	vF	vF				
10-20 mm (M)						
20-60 mm (C)						
60-200 mm (vC&xC)						
>200 mm (G)						
SSize method						
Soil strength	Wak	Weak				
Ped strength						
Failure						
Stickiness						
Coatings - kind				Cutans		
Abundance						
Distinctness						
Particle Packing			Compact	Compact		
Root abund <2mm						
Root abund >2mm						
Permeability Est	r	r	m	s		
NaF test		3				
Soil material						
Notes	Horizon 4 (Bw(h)) is a cutanic horizon					

Drainage	Imp	**Subgroup**	PIM	**Soil depth class**	MD	**Texture**
Dpth Slow	80	**P Root Depth**	80	**Root Barrier**	Pn	**L/S**
PM Class	Ms	**Rok class**	NA	**Rok cla - fines**	Hs	**TextureGp60**
Permeability	m/s	PM Origin upper	Lo	PM Origin lower	Al	L/S

DATA SHEET FOR SOIL & REGOLITH CHARACTERISATION - Smap						SMap 1.0
Project/ident			**Observer**		**Obsvn type**	*Auger*
Profile No			**Date**		Map sheet	
Grid Ref.	2803186	6125646	*GPS ref*		**Projection**	*NZMG*
Slope				Elevation		
Aspect (compass-23º)				**Region**		
Location	Station Road, Takapau					
Soil Name	Taniwha, 75					Representative
Management		Landuse	Pastoral			
Landscape		Landform	Int terrace	Landform adj		Land Elemt
Microtop		Parent material	Loess alluvium over aggradational outwash gravels			
Vegetation	Pasture	Vege2				
Notes						

	1	2	3	4	5	6
Sampled (tick)	tLw	Lw	LCs	LCf	Lw	
Hor. Desig.	Apg	Btgp	Bgp	BCx(g)	2C	
Depth (base) cm	15	30	50	80	100+	
Moisture						
Matrix colour	10YR5/2	5Y7/2	2.5Y7/2	2.5Y7/2	5Y7/2	
%		7.5YR5/8				
Mottle 1		2-4	5Y7/6	10YR5/6	7.5YR5/8	
Abund %		10	20	30	15	
Size			3-8	10-15	2-4	
Contrast						
Mottle2			7.5YR5/8	5Y7/6		
Abund2			15	10		
Size2			2-4	3-8		
Contrast2						
Texture	ZL	ZL	ZL	ZL	LZ	
%clay	24	33	33	20	17	
%sand	5	5	5	30	35	
%stones	0	0	0	0	0	
Stone size						
Apedal/Pedal type	P - 85	P	A - massive	A - massive	A - SG	
Ped shape	Poly					
Size class <40mm						
Size range (mm)						
0-10 mm (vF & F)	F					
10-20 mm (M)		M				
20-60 mm (C)						
60-200 mm (vC&xC)						
>200 mm (G)						
SSize method						
Soil strength	W	W	SF	F	W	
Ped strength						
Failure	Semi	Semi	Semi	Brittle	Semi	
Stickiness						
Coatings - kind		CC (lots)				
Abundance						
Distinctness						
Particle Packing						
Root abund <2mm						
Root abund >2mm						
Permeability Est	vr	ms	s	s	m	
NaF test						
Soil material						
Notes	Horizon 2 (Btgp) is argillic. Horizon 4 (BCx(g)) is a fragipan.					

Drainage	Poor	**Subgroup**	PPJX	**Soil depth class**	MD	**Texture**
Dpth Slow	30	**P Root Depth**	50	**Root Barrier**	Pn	**Z**
PM Class	Md	**Rok class**	Hs	**Rok cla - fines**	Hs	**TextureGp60**
Permeability	m/s	PM Origin upper	Al	PM Origin lower	Al	Z

DATA SHEET FOR SOIL & REGOLITH CHARACTERISATION - Smap						SMap 1.0
Project/ident			**Observer**		**Obsvn type**	*Auger*
Profile No			**Date**		Map sheet	
Grid Ref.			*GPS ref*		**Projection**	*NZMG*
Slope				Elevation		
Aspect (compass-23º)				**Region**		
Location	Argyll East Road, Tikokino					
Soil Name	Mangatewai, 73					Representative
Management		Landuse	Roadside			
Landscape		Landform	Int terrace	Landform adj		Land Elemt
Microtop		Parent material	Loess alluvium over aggradational outwash gravels			
Vegetation	Grass	Vege2				
Notes						

	1	2	3	4	5	6
Sampled (tick)	tLw	Lw	LCs	LCf		
Hor. Desig.	Ah	Bw(g)	BC(g)	BC(x)(g)		
Depth (base) cm	15	30	55	100+		
Moisture						
Matrix colour	10YR4/2	10YR5/4	2.5Y7/2	5Y7/2		
%						
Mottle 1			5Y7/6	5Y7/6		
Abund %			25	40		
Size			3-8	5-15		
Contrast						
Mottle2						
Abund2						
Size2						
Contrast2						
Texture	SL	SL	ZL	ZL		
%clay	15	15	22	22		
%sand	65	65	15	15		
%stones	0	0	0	0		
Stone size						
Apedal/Pedal type	P - 80	P - 75	A - massive	A - massive		
Ped shape	Poly	Blocky				
Size class <40mm						
Size range (mm)						
0-10 mm (vF & F)	F					
10-20 mm (M)		√				
20-60 mm (C)			√			
60-200 mm (vC&xC)						
>200 mm (G)						
SSize method						
Soil strength	W	W	SF	SF		
Ped strength	Semi	Semi	Semi	Brittle		
Failure						
Stickiness						
Coatings - kind						
Abundance						
Distinctness						
Particle Packing						
Root abund <2mm						
Root abund >2mm						
Permeability Est	r	m	ms	s		
NaF test						
Soil material						
Notes	Horizon 4 (BCx(g)) contains a fragipan but is not cemented.					

Drainage	Imperfect	**Subgroup**	PIM	**Soil depth class**	MD	**Texture**
Dpth Slow	55	**P Root Depth**	55	**Root Barrier**	Pn	**L**
PM Class	Md	**Rok class**	NA	**Rok cla - fines**	Hs	**TextureGp60**
Permeability	m/s	PM Origin upper	Al	PM Origin lower	Al	L

DATA SHEET FOR SOIL & REGOLITH CHARACTERISATION - Smap						SMap 1.0
Project/ident			**Observer**		**Obsvn type**	*Auger*
Profile No			**Date**		Map sheet	
Grid Ref.	2805135	6144983	*GPS ref*		**Projection**	*NZMG*
Slope				Elevation		
Aspect (compass-23º)				**Region**		
Location	Corner of S.H. 50 and Makororo Road					
Soil Name	Tikokino, 74					Representative
Management		Landuse	Roadside			
Landscape		Landform	Int terrace	Landform adj		Land Elemt
Microtop		Parent material	Loess alluvium over aggradational outwash gravels			
Vegetation	Grass	Vege2				
Notes						
	1	2	3	4	5	6
Sampled (tick)	tLw	Lw	Lw	VAl		
Hor. Desig.	Ap	Bw	Bw(g)	2C		
Depth (base) cm	15	40	50	100+		
Moisture						
Matrix colour	10YR4/2	10YR5/4	10YR5/4	N6/0		
%						
Mottle 1			2.5Y7/2			
Abund %			10			
Size			2-4			
Contrast						
Mottle2						
Abund2						
Size2						
Contrast2						
Texture	ZL	ZL	ZL	LS		
%clay	22	22	22	5		
%sand	20	20	20	65		
%stones	0	0	0	65		
Stone size						
Apedal/Pedal type	P - 85%	P - 75	P - 75	A - SG		
Ped shape	Poly	Poly	Poly			
Size class <40mm						
Size range (mm)						
0-10 mm (vF & F)	F					
10-20 mm (M)		√	√			
20-60 mm (C)						
60-200 mm (vC&xC)						
>200 mm (G)						
SSize method						
Soil strength	W	W	W			
Ped strength	Semi	Semi	Semi			
Failure						
Stickiness						
Coatings - kind						
Abundance						
Distinctness						
Particle Packing				Loose		
Root abund <2mm						
Root abund >2mm						
Permeability Est	vr	m	m	r		
NaF test						
Soil material						
Notes						
Drainage	Imp	**Subgroup**	BOM	**Soil depth class**	MD	**Texture**
Dpth Slow	999	**P Root Depth**	999	**Root Barrier**	N	**Z/S**
PM Class	Mg	**Rok class**	NA	**Rok cla - fines**	Hs	**TextureGp60**
Permeability	m/r	PM Origin upper	Al	PM Origin lower	Al	Z/S

DATA SHEET FOR SOIL & REGOLITH CHARACTERISATION - Smap						SMap 1.0
Project/ident			**Observer**		**Obsvn type**	*Auger*
Profile No			**Date**		Map sheet	
Grid Ref.			*GPS ref*		**Projection**	*NZMG*
Slope				Elevation		
Aspect (compass-23º)				**Region**		
Location	Butlers Road, Tikokino					
Soil Name	Poporangi, 32g					Representative
Management		Landuse	Roadside			
Landscape		Landform	Int terrace	Landform adj	Hollow	Land Elemt
Microtop		Parent material	Loess alluvium on aggradational outwash gravels			
Vegetation	Grass	Vege2				
Notes						
	1	2	3	4	5	6
Sampled (tick)	tLw	Lw	LCs	LCf	VAl	
Hor. Desig.	Ah	Bg	BCg(x)	BCx(g)	2C	
Depth (base) cm	15	30	45	65	100+	
Moisture						
Matrix colour	10YR4/2	5Y7/2	5Y7/2	5Y7/2	5Y6/2	
%						
Mottle 1		7.5YR5/8	7.5YR5/8	7.5YR5/8		
Abund %		10	10	10		
Size		2-4	2-4	2-4		
Contrast						
Mottle2			5Y7/6	5Y7/6		
Abund2			15	25		
Size2			4-8	5-15		
Contrast2						
Texture	ZL	ZL	ZL	ZL	LS	
%clay	21	19	19	19	2	
%sand	20	20	20	20	92	
%stones	0	0	0	0	65	
Stone size						
Apedal/Pedal type	P - 85%	P - 75%	P - 25%	A - massive	A - SG	
Ped shape	Poly	Poly	Prism			
Size class <40mm						
Size range (mm)						
0-10 mm (vF & F)	F	F				
10-20 mm (M)						
20-60 mm (C)			√			
60-200 mm (vC&xC)						
>200 mm (G)						
SSize method						
Soil strength	W	W	SF	SF		
Ped strength	Semi	Semi	Semi	Brittle		
Failure						
Stickiness						
Coatings - kind		MnFe SG				
Abundance		<1%				
Distinctness						
Particle Packing					Loose	
Root abund <2mm						
Root abund >2mm						
Permeability Est	vr	m	ms	s	r	
NaF test						
Soil material						
Notes						
Drainage	Poor	**Subgroup**	PPX	**Soil depth class**	MD	**Texture**
Dpth Slow	45	**P Root Depth**	45	**Root Barrier**	Pn	**Z/S**
PM Class	Ms	**Rok class**	NA	**Rok cla - fines**	Hs	**TextureGp60**
Permeability	m/s	PM Origin upper	Al	PM Origin lower	Al	Z

DATA SHEET FOR SOIL & REGOLITH CHARACTERISATION - Smap						SMap 1.0
Project/ident			**Observer**		**Obsvn type**	*Auger*
Profile No			**Date**		Map sheet	
Grid Ref.			*GPS ref*		**Projection**	*NZMG*
Slope				Elevation		
Aspect (compass-23º)				**Region**		
Location	Private access off Tikokino Road					
Soil Name	Ruataniwha, 60					Representative
Management		Landuse	Market gardening & apples			
Landscape		Landform	Int terrace	Landform adj		Land Elemt
Microtop		Parent material	Alluvium			
Vegetation	Grass & onions	Vege2				
Notes						
	1	2	3	4	5	6
Sampled (tick)	tLw	Lw	LCs	LCs		
Hor. Desig.	Ap	Bw	BC(g)	BCg(x)		
Depth (base) cm	15	65	90	100+		
Moisture						
Matrix colour	10YR4/2	2.5Y5/4	2.5Y5/4	5Y7/2		
%						
Mottle 1			2.5Y7/2	7.5YR5/8		
Abund %			10	25		
Size				5-10		
Contrast						
Mottle2						
Abund2						
Size2						
Contrast2						
Texture	CL	CL	CL	SL		
%clay	18	18	18	15		
%sand	45	45	60	55		
%stones	0	0	0	0		
Stone size						
Apedal/Pedal type	P - 40%	P - 50%	A - massive	A - massive		
Ped shape	Poly	Poly				
Size class <40mm						
Size range (mm)						
0-10 mm (vF & F)	F	F				
10-20 mm (M)						
20-60 mm (C)						
60-200 mm (vC&xC)						
>200 mm (G)						
SSize method						
Soil strength	W	W	SF	SF		
Ped strength						
Failure	Semi	Semi	Semi	Semi		
Stickiness						
Coatings - kind						
Abundance						
Distinctness						
Particle Packing						
Root abund <2mm						
Root abund >2mm						
Permeability Est	m	m	ms	s		
NaF test						
Soil material						
Notes	The structure in the Ap is very degraded due to land use and vulnerability of the soil. No cemented pan found.					
Drainage	Mod well	**Subgroup**	PIT	**Soil depth class**	MD	**Texture**
Dpth Slow	65	**P Root Depth**	65	**Root Barrier**	Ln	**L**
PM Class	Md	**Rok class**	NA	**Rok cla - fines**	Hs	**TextureGp60**
Permeability	m/s	PM Origin upper	Al	PM Origin lower	Al	L

DATA SHEET FOR SOIL & REGOLITH CHARACTERISATION - Smap						SMap 1.0
Project/ident			**Observer**		**Obsvn type**	*Pit|Auger|Cutting*
Profile No			**Date**		Map sheet	
Grid Ref.			*GPS ref*		**Projection**	*NZMG/NZTM*
Slope				Elevation		*GPS/Map/Altimeter*
Aspect (compass-23º)				**Region**		
Location						
Soil Name						Representative
Management		Landuse				
Landscape		Landform		Landform adj		Land Elemt
Microtop		Parent material				
Vegetation		Vege2				
Notes						

	1	2	3	4	5	6
Sampled (tick)						
Hor. Desig.						
Depth (base) cm						
Moisture						
Matrix colour						
%						
Mottle 1						
Abund %						
Size						
Contrast						
Mottle2						
Abund2						
Size2						
Contrast2						
Texture						
%clay						
%sand						
%stones						
Stone size						
Apedal/Pedal type						
Ped shape						
Size class <40mm						
Size range (mm)						
0-10 mm (vF & F)						
10-20 mm (M)						
20-60 mm (C)						
60-200 mm (vC&xC)						
>200 mm (G)						
SSize method						
Soil strength						
Ped strength						
Failure						
Stickiness						
Coatings - kind						
Abundance						
Distinctness						
Particle Packing						
Root abund <2mm						
Root abund >2mm						
Permeability Est						
NaF test						
Soil material						
Notes						

Drainage		**Subgroup**		**Soil depth class**		**Texture**
Dpth Slow		**P Root Depth**		**Root Barrier**		
PM Class		**Rok class**		**Rok cla - fines**		**TextureGp60**

Permeability		PM Origin upper		PM Origin lower		
DATA SHEET FOR SOIL & REGOLITH CHARACTERISATION - Smap						SMap 1.0
Project/ident			**Observer**		**Obsvn type**	*Pit|Auger|Cutting*
Profile No			**Date**		Map sheet	
Grid Ref.			*GPS ref*		**Projection**	*NZMG/NZTM*
Slope				Elevation		*GPS/Map/Altimeter*
Aspect (compass-23º)				**Region**		
Location						
Soil Name						Representative
Management		Landuse				
Landscape		Landform		Landform adj		Land Elemt
Microtop		Parent material				
Vegetation		Vege2				
Notes						
	1	2	3	4	5	6
Sampled (tick)						
Hor. Desig.						
Depth (base) cm						
Moisture						
Matrix colour						
%						
Mottle 1						
Abund %						
Size						
Contrast						
Mottle2						
Abund2						
Size2						
Contrast2						
Texture						
%clay						
%sand						
%stones						
Stone size						
Apedal/Pedal type						
Ped shape						
Size class <40mm						
Size range (mm)						
0-10 mm (vF & F)						
10-20 mm (M)						
20-60 mm (C)						
60-200 mm (vC&xC)						
>200 mm (G)						
SSize method						
Soil strength						
Ped strength						
Failure						
Stickiness						
Coatings - kind						
Abundance						
Distinctness						
Particle Packing						
Root abund <2mm						
Root abund >2mm						
Permeability Est						
NaF test						
Soil material						
Notes						
Drainage		**Subgroup**		**Soil depth class**		**Texture**
Dpth Slow		**P Root Depth**		**Root Barrier**		

PM Class		**Rok class**		**Rok cla - fines**		**TextureGp60**
Permeability		PM Origin upper		PM Origin lower		
DATA SHEET FOR SOIL & REGOLITH CHARACTERISATION - Smap						SMap 1.0
Project/ident			**Observer**		**Obsvn type**	*Pit|Auger|Cutting*
Profile No			**Date**		Map sheet	
Grid Ref.			*GPS ref*		**Projection**	*NZMG/NZTM*
Slope				Elevation		*GPS/Map/Altimeter*
Aspect (compass-23º)				**Region**		
Location						
Soil Name						Representative
Management		Landuse				
Landscape		Landform		Landform adj		Land Elemt
Microtop		Parent material				
Vegetation		Vege2				
Notes						
	1	2	3	4	5	6
Sampled (tick)						
Hor. Desig.						
Depth (base) cm						
Moisture						
Matrix colour						
%						
Mottle 1						
Abund %						
Size						
Contrast						
Mottle2						
Abund2						
Size2						
Contrast2						
Texture						
%clay						
%sand						
%stones						
Stone size						
Apedal/Pedal type						
Ped shape						
Size class <40mm						
Size range (mm)						
0-10 mm (vF & F)						
10-20 mm (M)						
20-60 mm (C)						
60-200 mm (vC&xC)						
>200 mm (G)						
SSize method						
Soil strength						
Ped strength						
Failure						
Stickiness						
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Abundance						
Distinctness						
Particle Packing						
Root abund <2mm						
Root abund >2mm						
Permeability Est						
NaF test						
Soil material						
Notes						
Drainage		**Subgroup**		**Soil depth class**		**Texture**

Dpth Slow		**P Root Depth**		**Root Barrier**		
PM Class		**Rok class**		**Rok cla - fines**		**TextureGp60**
Permeability		PM Origin upper		PM Origin lower		
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Profile No			**Date**		Map sheet	
Grid Ref.			*GPS ref*		**Projection**	*NZMG/NZTM*
Slope				Elevation		*GPS/Map/Altimeter*
Aspect (compass-23º)				**Region**		
Location						
Soil Name						Representative
Management		Landuse				
Landscape		Landform		Landform adj		Land Elemt
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	1	2	3	4	5	6
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Slope				Elevation		*GPS/Map/Altimeter*
Aspect (compass-23°)				**Region**		
Location						
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