

DATA SHEET FOR SOIL & REGOLITH CHARACTERISATION - Smap						SMap 1.0
<b>Project/ident</b>		<b>Observer</b>		<b>Obsvn type</b>	Pit	
<b>Profile No</b>		<b>Date</b>		<b>NZMS 260 GR</b>	2807105	
<b>Grid Ref.</b>		<i>GPS ref</i>			6137165	
<b>Slope</b>				Elevation		
<b>Aspect (compass-23°)</b>				<b>Region</b>		
<b>Location</b>	Taylor Road, Ongaonga					
<b>Soil Name</b>	Twyford (6g)					Representative
<b>Management</b>		<b>Landuse</b>	Calf-rearing			
<b>Landscape</b>		<b>Landform</b>	Low terrace	<b>Landform adj</b>	Remnant	Land Elemt
<b>Microtop</b>		<b>Parent material</b>				
<b>Vegetation</b>	Pasture	<b>Vege2</b>				
<b>Notes</b>						
	1	2	3	4	5	6
<b>Functional Horizons</b>	tLw	Lw	Lw	VLI		
<b>Hor. Desig.</b>	Ap	Bw	BC	2C		
<b>Depth (base) cm</b>	15	30	50	100+		
<b>Moisture</b>						
<b>Matrix colour</b>	10YR4/2	10YR5/4	10YR5/4	5Y6/2		
<b>%</b>						
<b>Mottle 1</b>			7.5YR5/8			
<b>Abund %</b>			5			
<b>Size</b>			4-8			
<b>Contrast</b>						
<b>Mottle2</b>						
<b>Abund2</b>						
<b>Size2</b>						
<b>Contrast2</b>						
<b>Texture</b>	ZL	ZL	SL	SL		
<b>%clay</b>	22	20	15	15		
<b>%sand</b>	20	22	65	65		
<b>%stones</b>	0	0	0	65		
<b>Stone size</b>						
<b>Apedal/Pedal type</b>	P	P	P	A - SG		
<b>Ped shape</b>	Poly (75%)	Poly (75%)	Block & prism (60%)			
<b>Size class &lt;40mm</b>						
<b>Size range (mm)</b>						
<b>0-10 mm (vF &amp; F)</b>	√					
<b>10-20 mm (M)</b>		√	√ Block (40%)			
<b>20-60 mm (C)</b>			√ Prism (60%)			
<b>60-200 mm (vC&amp;xC)</b>						
<b>&gt;200 mm (G)</b>						
<b>SSize method</b>						
<b>Soil strength</b>	w	w	w			
<b>Ped strength</b>						
<b>Failure</b>	semi	semi				
<b>Stickiness</b>						
<b>Coatings - kind</b>						
<b>Abundance</b>						
<b>Distinctness</b>						
<b>Particle Packing</b>				Loose		
<b>Root abund &lt;2mm</b>						
<b>Root abund &gt;2mm</b>						
<b>Permeability Est</b>	mr	m	m	m		
<b>NaF test</b>						
<b>Soil material</b>						
<b>Notes</b>						
<b>Drainage</b>	Mod Well	<b>Subgroup</b>	BOT	<b>Soil depth class</b>	md	<b>Texture</b>
<b>Dpth Slow</b>	999	<b>P Root Depth</b>	100	<b>Root Barrier</b>	N	Z/L
<b>PM Class</b>	Mg	<b>Rok class</b>		<b>Rok cla - fines</b>	Hs	<b>Texture Gp60</b>
<b>Permeability</b>	m	<b>PM Origin upper</b>	AI	<b>PM Origin lower</b>	AI	L

DATA SHEET FOR SOIL & REGOLITH CHARACTERISATION - Smap							SMap 1.0	
Project/ident				Observer			Obsvsn type	Pit
Profile No				Date			NZMS 260 GR	2801745
Grid Ref.				GPS ref				6137235
Slope				Elevation				
Aspect (compass-23°)				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	VLi					
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			Obsvsn type	Pit
Profile No				Date			NZMS 260 GR	2806365
Grid Ref.				GPS ref				6140820
Slope						Elevation		
Aspect (compass-23°)						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		
Funcnional Horizons	tSLw	SLw	VAI					
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		Obsvsn type	Pit
Profile No				Date		NZMS 260 GR	2803035
Grid Ref.				GPS ref			6138125
Slope				Elevation			
Aspect (compass-23°)				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	VLI			
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		Obsvsn type		Pit
Profile No		Date		NZMS 260 GR		2796135
Grid Ref.		GPS ref				6148205
Slope			Elevation			
Aspect (compass-23°)			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	VLi			
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	
<b>Project/ident</b>				<b>Observer</b>			<b>Obsvsn type</b>	Pit
<b>Profile No</b>				<b>Date</b>			<b>NZMS 260 GR</b>	2800905
<b>Grid Ref.</b>				<i>GPS ref</i>				6137595
<b>Slope</b>						<b>Elevation</b>		
<b>Aspect (compass-23°)</b>						<b>Region</b>		
<b>Location</b>	Taylor Road adjacent to Ongaonga Golf Course							
<b>Soil Name</b>	Argyll (58a)						<b>Representative</b>	
<b>Management</b>			<b>Landuse</b>	Roadside				
<b>Landscape</b>			<b>Landform</b>	Floodplain	<b>Landform adj</b>	Mound/bar	<b>Land Elemt</b>	
<b>Microtop</b>			<b>Parent material</b>	Alluvium				
<b>Vegetation</b>	Grass	<b>Vege2</b>						
<b>Notes</b>								
	1	2	3	4	5	6		
<b>Functional Horizons</b>	tSAI	SAI	VAI					
<b>Hor. Desig.</b>	Ap	C	2C					
<b>Depth (base) cm</b>	10	25	100+					
<b>Moisture</b>								
<b>Matrix colour</b>	2.5Y4/3	2.5Y5/4	2.5Y5/4					
<b>%</b>								
<b>Mottle 1</b>								
<b>Abund %</b>								
<b>Size</b>								
<b>Contrast</b>								
<b>Mottle2</b>								
<b>Abund2</b>								
<b>Size2</b>								
<b>Contrast2</b>								
<b>Texture</b>	LS	S	S					
<b>%clay</b>	5	2	2					
<b>%sand</b>	75	92	92					
<b>%stones</b>	10	20	65					
<b>Stone size</b>								
<b>Apedal/Pedal type</b>	P (25%)	A - SG	A - SG					
<b>Ped shape</b>	Poly							
<b>Size class &lt;40mm</b>								
<b>Size range (mm)</b>								
<b>0-10 mm (vF &amp; F)</b>	√ (vF)							
<b>10-20 mm (M)</b>								
<b>20-60 mm (C)</b>								
<b>60-200 mm (vC&amp;xC)</b>								
<b>&gt;200 mm (G)</b>								
<b>Ssize method</b>								
<b>Soil strength</b>	w							
<b>Ped strength</b>								
<b>Failure</b>								
<b>Stickiness</b>								
<b>Coatings - kind</b>								
<b>Abundance</b>								
<b>Distinctness</b>								
<b>Particle Packing</b>			Loose					
<b>Root abund &lt;2mm</b>								
<b>Root abund &gt;2mm</b>								
<b>Permeability Est</b>	vr	vr	vr					
<b>NaF test</b>								
<b>Soil material</b>								
<b>Notes</b>								
<b>Drainage</b>	Well	<b>Subgroup</b>	RST	<b>Soil depth class</b>	S	<b>Texture</b>		
<b>Dpth Slow</b>	999	<b>P Root Depth</b>	90	<b>Root Barrier</b>	N		S	
<b>PM Class</b>	Mr	<b>Rok class</b>	Hs	<b>Rok cla - fines</b>	Hs	<b>TextureGp60</b>		
<b>Permeability</b>	r	PM Origin upper	Al	PM Origin lower	Al		S	



DATA SHEET FOR SOIL & REGOLITH CHARACTERISATION - Smap						SMap 1.0
Project/ident		Observer		Obsvsn type	Pit	
Profile No		Date		NZMS 260 GR	2808245	
Grid Ref.		GPS ref			6144085	
Slope			Elevation			
Aspect (compass-23°)			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
<b>Project/ident</b>				<b>Observer</b>			<i>Auger</i>
<b>Profile No</b>				<b>Date</b>			Map sheet
<b>Grid Ref.</b>				GPS ref			<b>Projection</b>
<b>Slope</b>				Elevation			NZMG
<b>Aspect (compass-23°)</b>				<b>Region</b>			
Location	Pettit Valley Road						
Soil Name	Tikokino, 74g						Representative
<b>Management</b>			<b>Landuse</b>	Roadside			
<b>Landscape</b>			<b>Landform</b>	Low terrace	<b>Landform adj</b>		
<b>Microtop</b>			<b>Parent material</b>	Alluvium			<b>Land Elemt</b>
<b>Vegetation</b>			<b>Vege2</b>				
<b>Notes</b>							
	1	2	3	4	5	6	
Sampled (tick)	tSLw	SLw	VAI				
<b>Hor. Desig.</b>	Ap	Bw	2C				
<b>Depth (base) cm</b>	15	40	100+				
<b>Moisture</b>							
<b>Matrix colour</b>	7.5YR3/2	10YR5/4	N6/0				
%							
<b>Mottle 1</b>							
Abund %							
Size							
Contrast							
<b>Mottle2</b>							
Abund2							
Size2							
Contrast2							
<b>Texture</b>	ZL	ZL	S				
<b>%clay</b>	22	22	2				
<b>%sand</b>	20	20	92				
<b>%stones</b>	5	5	70				
Stone size							
<b>Apedal/Pedal type</b>	P - 85%	P - 75%	A - SG				
<b>Ped shape</b>	Poly	Poly					
<b>Size class &lt;40mm</b>							
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							
<b>Soil strength</b>	W	W					
<b>Ped strength</b>							
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							
<b>Notes</b>							
<b>Drainage</b>	Well	<b>Subgroup</b>	BLT	<b>Soil depth class</b>	S	<b>Texture</b>	
<b>Dpth Slow</b>	999	<b>P Root Depth</b>	100	<b>Root Barrier</b>	N	<b>Z/S</b>	
<b>PM Class</b>	Mr	<b>Rok class</b>	Hs	<b>Rok cla - fines</b>	Hs	<b>TextureGp60</b>	
<b>Permeability</b>	m/r	PM Origin upper	Al	PM Origin lower	Al	Z/S	

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

DATA SHEET FOR SOIL & REGOLITH CHARACTERISATION - Smap						SMap 1.0		
<b>Project/ident</b>					<b>Observer</b>		<b>Obsvsn type</b>	Cutting
<b>Profile No</b>					<b>Date</b>		<b>Map sheet</b>	
<b>Grid Ref.</b>	2794165	6130082	<i>GPS ref</i>		<b>Projection</b>	NZMG		
<b>Slope</b>					<b>Elevation</b>			
<b>Aspect (compass-23°)</b>					<b>Region</b>			
<b>Location</b>	S.H.50. South of Ashcott							
<b>Soil Name</b>	Mangatewai, 73g						<b>Representative</b>	
<b>Management</b>		<b>Landuse</b>	Roadside					
<b>Landscape</b>		<b>Landform</b>	Int. terrace	<b>Landform adj</b>		<b>Land Elemt</b>		
<b>Microtop</b>	Parent material							
<b>Vegetation</b>	Vege2							
<b>Notes</b>								
	1	2	3	4	5	6		
<b>Sampled (tick)</b>	tLEw	LEw	VLI	VAI				
<b>Hor. Desig.</b>	Ah	Bw	Bw(g)	Bw(h)				
<b>Depth (base) cm</b>	10	25	80	100+				
<b>Moisture</b>								
<b>Matrix colour</b>	7.5YR3/2	7.5YR5/4	7.5YR5/4	7.5YR4/4				
<b>%</b>								
<b>Mottle 1</b>			2.5Y7/2	5YR4/6				
<b>Abund %</b>			5%	20%				
<b>Size</b>								
<b>Contrast</b>								
<b>Mottle2</b>			10YR5/6					
<b>Abund2</b>			2%					
<b>Size2</b>								
<b>Contrast2</b>								
<b>Texture</b>	SL	SL	SL	LS				
<b>%clay</b>	12	12	10	2				
<b>%sand</b>	60	60	80	92				
<b>%stones</b>	20%	20%	70%	70%				
<b>Stone size</b>								
<b>Apedal/Pedal type</b>	P - 85%	P - 85%	A - SG	A - SG				
<b>Ped shape</b>	Crumb	Crumb						
<b>Size class &lt;40mm</b>								
<b>Size range (mm)</b>								
<b>0-10 mm (vF &amp; F)</b>	vF	vF						
<b>10-20 mm (M)</b>								
<b>20-60 mm (C)</b>								
<b>60-200 mm (vC&amp;xC)</b>								
<b>&gt;200 mm (G)</b>								
<b>Ssize method</b>								
<b>Soil strength</b>	Wak	Weak						
<b>Ped strength</b>								
<b>Failure</b>								
<b>Stickiness</b>								
<b>Coatings - kind</b>					Cutans			
<b>Abundance</b>								
<b>Distinctness</b>								
<b>Particle Packing</b>			Compact	Compact				
<b>Root abund &lt;2mm</b>								
<b>Root abund &gt;2mm</b>								
<b>Permeability Est</b>	r	r	m	s				
<b>NaF test</b>	3							
<b>Soil material</b>								
<b>Notes</b>	Horizon 4 (Bw(h)) is a cutanic horizon							
<b>Drainage</b>	Imp	<b>Subgroup</b>	PIM	<b>Soil depth class</b>	MD	<b>Texture</b>		
<b>Dpth Slow</b>	80	<b>P Root Depth</b>	80	<b>Root Barrier</b>	Pn	<b>L/S</b>		
<b>PM Class</b>	Ms	<b>Rok class</b>	NA	<b>Rok cla - fines</b>	Hs	<b>TextureGp60</b>		
<b>Permeability</b>	m/s	PM Origin upper	Lo	PM Origin lower	Al	L/S		

DATA SHEET FOR SOIL & REGOLITH CHARACTERISATION - Smap						SMap 1.0
<b>Project/ident</b>					<b>Observer</b>	
<b>Profile No</b>					<b>Date</b>	
<b>Grid Ref.</b>	2803186	6125646	<i>GPS ref</i>		<b>Obsvsn type</b>	Auger
<b>Slope</b>					Elevation	
<b>Aspect (compass-23°)</b>					<b>Region</b>	
Location	Station Road, Takapau					
Soil Name	Taniwha, 75					Representative
<b>Management</b>		<b>Landuse</b>	Pastoral			
<b>Landscape</b>		<b>Landform</b>	Int terrace	<b>Landform adj</b>		<b>Land Elemt</b>
<b>Microtop</b>		<b>Parent material</b>	Loess alluvium over aggradational outwash gravels			
<b>Vegetation</b>	Pasture	<b>Vege2</b>				
<b>Notes</b>						
	1	2	3	4	5	6
Sampled (tick)	tLw	Lw	LCs	LCf	Lw	
<b>Hor. Desig.</b>	Apg	Btgp	Bgp	BCx(g)	2C	
<b>Depth (base) cm</b>	15	30	50	80	100+	
<b>Moisture</b>						
<b>Matrix colour</b>	10YR5/2	5Y7/2	2.5Y7/2	2.5Y7/2	5Y7/2	
<b>%</b>		7.5YR5/8				
<b>Mottle 1</b>		2-4	5Y7/6	10YR5/6	7.5YR5/8	
<b>Abund %</b>		10	20	30	15	
<b>Size</b>			3-8	10-15	2-4	
<b>Contrast</b>						
<b>Mottle2</b>			7.5YR5/8	5Y7/6		
<b>Abund2</b>			15	10		
<b>Size2</b>			2-4	3-8		
<b>Contrast2</b>						
<b>Texture</b>	ZL	ZL	ZL	ZL	LZ	
<b>%clay</b>	24	33	33	20	17	
<b>%sand</b>	5	5	5	30	35	
<b>%stones</b>	0	0	0	0	0	
<b>Stone size</b>						
<b>Apedal/Pedal type</b>	P - 85	P	A - massive	A - massive	A - SG	
<b>Ped shape</b>	Poly					
<b>Size class &lt;40mm</b>						
<b>Size range (mm)</b>						
0-10 mm (vF & F)	F					
10-20 mm (M)		M				
20-60 mm (C)						
60-200 mm (vC&xC)						
>200 mm (G)						
<b>Ssize method</b>						
<b>Soil strength</b>	W	W	SF	F	W	
<b>Ped strength</b>						
<b>Failure</b>	Semi	Semi	Semi	Brittle	Semi	
<b>Stickiness</b>						
<b>Coatings - kind</b>		CC (lots)				
<b>Abundance</b>						
<b>Distinctness</b>						
<b>Particle Packing</b>						
<b>Root abund &lt;2mm</b>						
<b>Root abund &gt;2mm</b>						
<b>Permeability Est</b>	vr	ms	s	s	m	
<b>NaF test</b>						
<b>Soil material</b>						
<b>Notes</b>	Horizon 2 (Btgp) is argillic. Horizon 4 (BCx(g)) is a fragipan.					
<b>Drainage</b>	Poor	<b>Subgroup</b>	PPJX	<b>Soil depth class</b>	MD	<b>Texture</b>
<b>Dpth Slow</b>	30	<b>P Root Depth</b>	50	<b>Root Barrier</b>	Pn	<b>Z</b>
<b>PM Class</b>	Md	<b>Rok class</b>	Hs	<b>Rok cla - fines</b>	Hs	<b>TextureGp60</b>
<b>Permeability</b>	m/s	PM Origin upper	Al	PM Origin lower	Al	Z

DATA SHEET FOR SOIL & REGOLITH CHARACTERISATION - Smap							SMap 1.0	
<b>Project/ident</b>				<b>Observer</b>			<b>Obsvsn type</b>	Auger
<b>Profile No</b>				<b>Date</b>			<b>Map sheet</b>	
<b>Grid Ref.</b>				<b>GPS ref</b>			<b>Projection</b>	NZMG
<b>Slope</b>						<b>Elevation</b>		
<b>Aspect (compass-23°)</b>						<b>Region</b>		
<b>Location</b>	Argyll East Road, Tikokino							
<b>Soil Name</b>	Mangatewai, 73						<b>Representative</b>	
<b>Management</b>			<b>Landuse</b>	Roadside				
<b>Landscape</b>			<b>Landform</b>	Int terrace	<b>Landform adj</b>			<b>Land Elemt</b>
<b>Microtop</b>			<b>Parent material</b>	Loess alluvium over aggradational outwash gravels				
<b>Vegetation</b>	Grass		<b>Vege2</b>					
<b>Notes</b>								
	1	2	3	4	5	6		
<b>Sampled (tick)</b>	tLw	Lw	LCs	LCf				
<b>Hor. Desig.</b>	Ah	Bw(g)	BC(g)	BC(x)(g)				
<b>Depth (base) cm</b>	15	30	55	100+				
<b>Moisture</b>								
<b>Matrix colour</b>	10YR4/2	10YR5/4	2.5Y7/2	5Y7/2				
<b>%</b>								
<b>Mottle 1</b>			5Y7/6	5Y7/6				
<b>Abund %</b>			25	40				
<b>Size</b>			3-8	5-15				
<b>Contrast</b>								
<b>Mottle2</b>								
<b>Abund2</b>								
<b>Size2</b>								
<b>Contrast2</b>								
<b>Texture</b>	SL	SL	ZL	ZL				
<b>%clay</b>	15	15	22	22				
<b>%sand</b>	65	65	15	15				
<b>%stones</b>	0	0	0	0				
<b>Stone size</b>								
<b>Apedal/Pedal type</b>	P - 80	P - 75	A - massive	A - massive				
<b>Ped shape</b>	Poly	Blocky						
<b>Size class &lt;40mm</b>								
<b>Size range (mm)</b>								
<b>0-10 mm (vF &amp; F)</b>	F							
<b>10-20 mm (M)</b>		√						
<b>20-60 mm (C)</b>			√					
<b>60-200 mm (vC&amp;xC)</b>								
<b>&gt;200 mm (G)</b>								
<b>Ssize method</b>								
<b>Soil strength</b>	W	W	SF	SF				
<b>Ped strength</b>	Semi	Semi	Semi	Brittle				
<b>Failure</b>								
<b>Stickiness</b>								
<b>Coatings - kind</b>								
<b>Abundance</b>								
<b>Distinctness</b>								
<b>Particle Packing</b>								
<b>Root abund &lt;2mm</b>								
<b>Root abund &gt;2mm</b>								
<b>Permeability Est</b>	r	m	ms	s				
<b>NaF test</b>								
<b>Soil material</b>								
<b>Notes</b>	Horizon 4 (BCx(g)) contains a fragipan but is not cemented.							
<b>Drainage</b>	Imperfect	<b>Subgroup</b>	PIM	<b>Soil depth class</b>	MD	<b>Texture</b>		
<b>Dpth Slow</b>	55	<b>P Root Depth</b>	55	<b>Root Barrier</b>	Pn	<b>L</b>		
<b>PM Class</b>	Md	<b>Rok class</b>	NA	<b>Rok cla - fines</b>	Hs	<b>TextureGp60</b>		
<b>Permeability</b>	m/s	PM Origin upper	Al	PM Origin lower	Al	<b>L</b>		

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

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

DATA SHEET FOR SOIL & REGOLITH CHARACTERISATION - Smap						SMap 1.0
<b>Project/ident</b>		<b>Observer</b>		<b>Obsvsn type</b>	Auger	
<b>Profile No</b>		<b>Date</b>		Map sheet		
<b>Grid Ref.</b>		<i>GPS ref</i>		<b>Projection</b>	NZMG	
<b>Slope</b>			Elevation			
<b>Aspect (compass-23°)</b>			<b>Region</b>			
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		
<b>Hor. Desig.</b>	Ap	Bw	BC(g)	BCg(x)		
<b>Depth (base) cm</b>	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		
<b>%clay</b>	18	18	18	15		
<b>%sand</b>	45	45	60	55		
<b>%stones</b>	0	0	0	0		
Stone size						
<b>Apedal/Pedal type</b>	P - 40%	P - 50%	A - massive	A - massive		
Ped shape	Poly	Poly				
<b>Size class &lt;40mm</b>						
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						
<b>Soil strength</b>	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.					
<b>Drainage</b>	Mod well	<b>Subgroup</b>	PIT	<b>Soil depth class</b>	MD	<b>Texture</b>
<b>Dpth Slow</b>	65	<b>P Root Depth</b>	65	<b>Root Barrier</b>	Ln	<b>L</b>
<b>PM Class</b>	Md	<b>Rok class</b>	NA	<b>Rok cla - fines</b>	Hs	<b>TextureGp60</b>
<b>Permeability</b>	m/s	PM Origin upper	Al	PM Origin lower	Al	L

DATA SHEET FOR SOIL & REGOLITH CHARACTERISATION - Smap						SMap 1.0
<b>Project/ident</b>		<b>Observer</b>		<b>Obsvsn type</b>		<i>Pit Auger Cutting</i>
<b>Profile No</b>		<b>Date</b>		Map sheet		
<b>Grid Ref.</b>		<i>GPS ref</i>		<b>Projection</b>		<i>NZMG/NZTM</i>
<b>Slope</b>			Elevation			<i>GPS/Map/Alti meter</i>
<b>Aspect (compass-23°)</b>			<b>Region</b>			
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)						
<b>Hor. Desig.</b>						
<b>Depth (base) cm</b>						
Moisture						
Matrix colour						
%						
Mottle 1						
Abund %						
Size						
Contrast						
Mottle2						
Abund2						
Size2						
Contrast2						
Texture						
<b>%clay</b>						
<b>%sand</b>						
<b>%stones</b>						
Stone size						
<b>Apedal/Pedal type</b>						
Ped shape						
<b>Size class &lt;40mm</b>						
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						
<b>Soil strength</b>						
Ped strength						
Failure						
Stickiness						
Coatings - kind						
Abundance						
Distinctness						
Particle Packing						
Root abund <2mm						
Root abund >2mm						
Permeability Est						
NaF test						
Soil material						
Notes						
<b>Drainage</b>		<b>Subgroup</b>		<b>Soil depth class</b>		<b>Texture</b>
<b>Dpth Slow</b>		<b>P Root Depth</b>		<b>Root Barrier</b>		
<b>PM Class</b>		<b>Rok class</b>		<b>Rok cla - fines</b>		<b>TextureGp60</b>

Permeability		PM Origin upper		PM Origin lower		
<b>DATA SHEET FOR SOIL &amp; REGOLITH CHARACTERISATION - Smap</b>						SMap 1.0
Project/ident			Observer		Obsvsn type	Pit Auger Cutting
Profile No			Date		Map sheet	
Grid Ref.			GPS ref		Projection	NZMG/NZTM
Slope				Elevation		GPS/Map/Altimeter
Aspect (compass-23°)				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		

<b>PM Class</b>		<b>Rok class</b>		<b>Rok cla - fines</b>		<b>TextureGp60</b>
<b>Permeability</b>		PM Origin upper		PM Origin lower		
<b>DATA SHEET FOR SOIL &amp; REGOLITH CHARACTERISATION - Smap</b>						SMap 1.0
<b>Project/ident</b>			<b>Observer</b>		<b>Obsvn type</b>	Pit Auger Cutting
<b>Profile No</b>			<b>Date</b>		Map sheet	
<b>Grid Ref.</b>			<i>GPS ref</i>		<b>Projection</b>	NZMG/NZTM GPS/Map/Alti meter
<b>Slope</b>				Elevation		
<b>Aspect (compass-23°)</b>				<b>Region</b>		
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)						
<b>Hor. Desig.</b>						
<b>Depth (base) cm</b>						
Moisture						
Matrix colour						
%						
Mottle 1						
Abund %						
Size						
Contrast						
Mottle2						
Abund2						
Size2						
Contrast2						
Texture						
%clay						
%sand						
%stones						
Stone size						
<b>Apedal/Pedal type</b>						
Ped shape						
<b>Size class &lt;40mm</b>						
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						
<b>Soil strength</b>						
Ped strength						
Failure						
Stickiness						
Coatings - kind						
Abundance						
Distinctness						
Particle Packing						
Root abund <2mm						
Root abund >2mm						
Permeability Est						
NaF test						
Soil material						
Notes						
<b>Drainage</b>		<b>Subgroup</b>		<b>Soil depth class</b>		<b>Texture</b>

<b>Dpth Slow</b>		<b>P Root Depth</b>		<b>Root Barrier</b>		
<b>PM Class</b>		<b>Rok class</b>		<b>Rok cla - fines</b>		<b>TextureGp60</b>
<b>Permeability</b>		PM Origin upper		PM Origin lower		
<b>DATA SHEET FOR SOIL &amp; REGOLITH CHARACTERISATION - Smap</b>						SMap 1.0
<b>Project/ident</b>		<b>Observer</b>		<b>Obsvn type</b>		Pit Auger Cutting
<b>Profile No</b>		<b>Date</b>		Map sheet		
<b>Grid Ref.</b>		GPS ref		<b>Projection</b>		NZMG/NZTM
<b>Slope</b>				Elevation		GPS/Map/Alti meter
<b>Aspect (compass-23°)</b>				<b>Region</b>		
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)						
<b>Hor. Desig.</b>						
<b>Depth (base) cm</b>						
Moisture						
Matrix colour						
%						
Mottle 1						
Abund %						
Size						
Contrast						
Mottle2						
Abund2						
Size2						
Contrast2						
Texture						
<b>%clay</b>						
<b>%sand</b>						
<b>%stones</b>						
Stone size						
<b>Apedal/Pedal type</b>						
Ped shape						
<b>Size class &lt;40mm</b>						
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						
<b>Soil strength</b>						
Ped strength						
Failure						
Stickiness						
Coatings - kind						
Abundance						
Distinctness						
Particle Packing						
Root abund <2mm						
Root abund >2mm						
Permeability Est						
NaF test						
Soil material						
Notes						

<b>Drainage</b>		<b>Subgroup</b>		<b>Soil depth class</b>		<b>Texture</b>
<b>Dpth Slow</b>		<b>P Root Depth</b>		<b>Root Barrier</b>		
<b>PM Class</b>		<b>Rok class</b>		<b>Rok cla - fines</b>		<b>TextureGp60</b>
<b>Permeability</b>		PM Origin upper		PM Origin lower		
<b>DATA SHEET FOR SOIL &amp; REGOLITH CHARACTERISATION - Smap</b>						SMap 1.0
<b>Project/ident</b>		<b>Observer</b>		<b>Obsvn type</b>		Pit Auger Cutting
<b>Profile No</b>		<b>Date</b>		Map sheet		
<b>Grid Ref.</b>		GPS ref		<b>Projection</b>		NZMG/NZTM
<b>Slope</b>				Elevation		GPS/Map/Alti meter
<b>Aspect (compass-23°)</b>				<b>Region</b>		
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)						
<b>Hor. Desig.</b>						
<b>Depth (base) cm</b>						
Moisture						
Matrix colour						
%						
Mottle 1						
Abund %						
Size						
Contrast						
Mottle2						
Abund2						
Size2						
Contrast2						
Texture						
<b>%clay</b>						
<b>%sand</b>						
<b>%stones</b>						
Stone size						
<b>Apedal/Pedal type</b>						
Ped shape						
<b>Size class &lt;40mm</b>						
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						
<b>Soil strength</b>						
Ped strength						
Failure						
Stickiness						
Coatings - kind						
Abundance						
Distinctness						
Particle Packing						
Root abund <2mm						
Root abund >2mm						
Permeability Est						
NaF test						
Soil material						
Notes						

<b>Drainage</b>		<b>Subgroup</b>		<b>Soil depth class</b>		<b>Texture</b>
<b>Dpth Slow</b>		<b>P Root Depth</b>		<b>Root Barrier</b>		
<b>PM Class</b>		<b>Rok class</b>		<b>Rok cla - fines</b>		<b>TextureGp60</b>
<b>Permeability</b>		PM Origin upper		PM Origin lower		
<b>DATA SHEET FOR SOIL &amp; REGOLITH CHARACTERISATION - Smap</b>						SMap 1.0
<b>Project/ident</b>		<b>Observer</b>		<b>Obsvn type</b>		Pit/Auger/Cutting
<b>Profile No</b>		<b>Date</b>		Map sheet		
<b>Grid Ref.</b>			GPS ref	<b>Projection</b>		NZMG/NZTM GPS/Map/Alti meter
<b>Slope</b>				Elevation		
<b>Aspect (compass-23°)</b>				<b>Region</b>		
Location						
Soil Name						Representative
<b>Management</b>		<b>Landuse</b>				
<b>Landscape</b>		<b>Landform</b>		<b>Landform adj</b>		<b>Land Elemt</b>
<b>Microtop</b>		<b>Parent material</b>				
<b>Vegetation</b>		<b>Vege2</b>				
Notes						
	1	2	3	4	5	6
Sampled (tick)						
<b>Hor. Desig.</b>						
<b>Depth (base) cm</b>						
Moisture						
Matrix colour						
%						
Mottle 1						
Abund %						
Size						
Contrast						
Mottle2						
Abund2						
Size2						
Contrast2						
Texture						
<b>%clay</b>						
<b>%sand</b>						
<b>%stones</b>						
Stone size						
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Particle Packing						
Root abund <2mm						
Root abund >2mm						
Permeability Est						
NaF test						
Soil material						

Notes						
<b>Drainage</b>		<b>Subgroup</b>		<b>Soil depth class</b>		<b>Texture</b>
<b>Dpth Slow</b>		<b>P Root Depth</b>		<b>Root Barrier</b>		
<b>PM Class</b>		<b>Rok class</b>		<b>Rok cla - fines</b>		<b>TextureGp60</b>
<b>Permeability</b>		PM Origin upper		PM Origin lower		
<b>DATA SHEET FOR SOIL &amp; REGOLITH CHARACTERISATION - Smap</b>						SMap 1.0
<b>Project/ident</b>				<b>Observer</b>		<b>Obsvn type</b>
<b>Profile No</b>				<b>Date</b>		Map sheet
<b>Grid Ref.</b>			<i>GPS ref</i>		<b>Projection</b>	NZMG/NZTM GPS/Map/Alti meter
<b>Slope</b>				<b>Elevation</b>		
<b>Aspect (compass-23°)</b>				<b>Region</b>		
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)						
<b>Hor. Desig.</b>						
<b>Depth (base) cm</b>						
Moisture						
Matrix colour						
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Size						
Contrast						
Mottle2						
Abund2						
Size2						
Contrast2						
Texture						
%clay						
%sand						
%stones						
Stone size						
<b>Apedal/Pedal type</b>						
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<b>Size class &lt;40mm</b>						
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0-10 mm (vF & F)						
10-20 mm (M)						
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Failure						
Stickiness						
Coatings - kind						
Abundance						
Distinctness						
Particle Packing						
Root abund <2mm						
Root abund >2mm						
Permeability Est						
NaF test						

Soil material						
Notes						
<b>Drainage</b>		<b>Subgroup</b>		<b>Soil depth class</b>		<b>Texture</b>
<b>Dpth Slow</b>		<b>P Root Depth</b>		<b>Root Barrier</b>		
<b>PM Class</b>		<b>Rok class</b>		<b>Rok cla - fines</b>		<b>TextureGp60</b>
<b>Permeability</b>		PM Origin upper		PM Origin lower		
<b>DATA SHEET FOR SOIL &amp; REGOLITH CHARACTERISATION - Smap</b>						SMap 1.0
<b>Project/ident</b>			<b>Observer</b>		<b>Obsvsn type</b>	Pit Auger Cutting
<b>Profile No</b>			<b>Date</b>		Map sheet	
<b>Grid Ref.</b>			GPS ref		<b>Projection</b>	NZMG/NZTM
<b>Slope</b>				Elevation		GPS/Map/Altimeter
<b>Aspect (compass-23°)</b>				<b>Region</b>		
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)						
<b>Hor. Desig.</b>						
<b>Depth (base) cm</b>						
Moisture						
Matrix colour						
%						
Mottle 1						
Abund %						
Size						
Contrast						
Mottle2						
Abund2						
Size2						
Contrast2						
Texture						
<b>%clay</b>						
<b>%sand</b>						
<b>%stones</b>						
Stone size						
<b>Apedal/Pedal type</b>						
Ped shape						
<b>Size class &lt;40mm</b>						
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						
<b>Soil strength</b>						
Ped strength						
Failure						
Stickiness						
Coatings - kind						
Abundance						
Distinctness						
Particle Packing						
Root abund <2mm						
Root abund >2mm						
Permeability Est						

NaF test						
Soil material						
Notes						
<b>Drainage</b>		<b>Subgroup</b>		<b>Soil depth class</b>		<b>Texture</b>
<b>Dpth Slow</b>		<b>P Root Depth</b>		<b>Root Barrier</b>		
<b>PM Class</b>		<b>Rok class</b>		<b>Rok cla - fines</b>		<b>TextureGp60</b>
<b>Permeability</b>		PM Origin upper		PM Origin lower		