	ct Code: cy Name:	Regional REG CSIRO Divi	Site ID: sion of Soils (		Observation ID	: 1
	nformatior	<u>1</u>				
Desc.	By:	G. Smith		Locality:		gate on new road west of Yarro Thirlestone turnoff:
		09/08/70 Sheet No. : 805 145.55 -21.5333333333		Elevation: Rainfall: Runoff: Drainage:	No Data 480 Slow Well drained	
<u>Geolo</u> Expos Geol.	sureType:	Undisturbed so Qs	il core	Conf. Sub. is Pare Substrate Materia		Data sturbed soil core, Sandstone
Rel/SI	n. Type: Type:	Undulating rise No Data No Data 0 %	es 9-30m 3-10%	Pattern Type: Relief: Slope Category: Aspect:	Rises 24 metres No Data No Data	
<u>Surfa</u>	ce Soil Co	ndition (dry):	Loose			
<u>Erosi</u>	<u>on:</u> Classificati					
ASC ( All neo Site D	Confidence cessary ana	ytical data are a			ipal Profile Form Soil Group: ed animals	n: Gn2.11 Red earth
		Tall Strata -	Tree, 3.01-6m, S	parse. *Species includ	des - Eucalyptus p	pellita, Eucalyptus species, Grev
Profil	<u>ce Coarse</u> e Morphol	<u>Fragments:</u> ogy				
<u>Surfa</u>	ce Coarse	Fragments: ogy n Dark red	l (2.5YR3/5-Moist		; ; Sandy clay loa	bellita, Eucalyptus species, Grev m (Light); Massive grade of
<u>Surfa</u> Profil	<u>ce Coarse</u> e Morphol	Fragments: ogy Dark red structure m Dark red	l (2.5YR3/5-Moist e; Dry; Loose con: l (2.5YR3/6-Moist	); Red (2.5YR4/5-Dry) sistence; Clear change	; ; Sandy clay loa e to -	
Surfa Profil A11	i <mark>ce Coarse</mark> e Morphol 0 - 0.05 n	Fragments: ogy Dark red structure m Dark red Dry; Lo m Dark red	l (2.5YR3/5-Moist ; Dry; Loose con: l (2.5YR3/6-Moist ose consistence; l (2.5YR3/8-Moist	); Red (2.5YR4/5-Dry) sistence; Clear change ); Red (2.5YR4/6-Dry) Gradual change to -	; ; Sandy clay loa e to - ; ; Sandy loam (H ; ; Sandy clay loa	m (Light); Massive grade of
Surfa Profil A11 A12	ce Coarse e Morphol 0 - 0.05 n 0.05 - 0.1	Fragments:   ogy   Dark red   structure   m Dark red   Dry; Lo   n Dark red   structure   n Dark red   structure   n   Dark red   n Dark red   n Dark red   n Dark red   n Dark red	I (2.5YR3/5-Moist e; Dry; Loose cons I (2.5YR3/6-Moist ose consistence; I (2.5YR3/8-Moist e; Dry; Strong con	); Red (2.5YR4/5-Dry) sistence; Clear change ); Red (2.5YR4/6-Dry) Gradual change to - ); Red (2.5YR4/7-Dry) isistence; Gradual cha ; Sandy clay loam; Ma	; ; Sandy clay loa e to - ; ; Sandy loam (H ; ; Sandy clay loa nge to -	m (Light); Massive grade of leavy); Massive grade of structu
Surfa Profil A11 A12 B1	ce Coarse e Morphol 0 - 0.05 n 0.05 - 0.1 0.1 - 0.2 i	Fragments:   ogy   n Dark reconstruction   m Dark reconstruction   m Dark reconstruction   n Red (100)	d (2.5YR3/5-Moist e; Dry; Loose cons d (2.5YR3/6-Moist ose consistence; d (2.5YR3/8-Moist e; Dry; Strong con d (10R3/8-Moist); onsistence; Gradu	); Red (2.5YR4/5-Dry) sistence; Clear change ); Red (2.5YR4/6-Dry) Gradual change to - ); Red (2.5YR4/7-Dry) sistence; Gradual cha ; Sandy clay loam; Ma ual change to - ndy clay loam; Massive	; ; Sandy clay loa e to - ; ; Sandy loam (H ; ; Sandy clay loa nge to - assive grade of str	m (Light); Massive grade of leavy); Massive grade of structu m (Light); Massive grade of
Surfa Profil A11 A12 B1 B1	ce Coarse e Morphol 0 - 0.05 n 0.05 - 0.1 0.1 - 0.2 n 0.2 - 0.3 n	Fragments:   ogy   n Dark red   structure   m Dark red   Dry; Lo   n Dark red   n Red (10   strong c n   n Red (10   strong c n   n Red (10	d (2.5YR3/5-Moist e; Dry; Loose cons d (2.5YR3/6-Moist ose consistence; d (2.5YR3/8-Moist e; Dry; Strong con d (10R3/8-Moist); onsistence; Gradu R4/8-Moist); ; Sar onsistence; Gradu	); Red (2.5YR4/5-Dry) sistence; Clear change ); Red (2.5YR4/6-Dry) Gradual change to - ); Red (2.5YR4/7-Dry) sistence; Gradual cha ; Sandy clay loam; Ma ual change to - ndy clay loam; Massive ual change to -	; ; Sandy clay loa e to - ; ; Sandy loam (H ; ; Sandy clay loa nge to - ussive grade of structu	m (Light); Massive grade of leavy); Massive grade of structu m (Light); Massive grade of ructure; Earthy fabric; Dry; Very
Surfa Profil A11 A12 B1 B1 B1 B1	<b>ce Coarse</b> <b>e Morphol</b> 0 - 0.05 n 0.05 - 0.1 0.1 - 0.2 n 0.2 - 0.3 n 0.3 - 0.4 n	Fragments:ogyDark recstructuremDark recDark recDark recnDark recstructurenDark recstructurenDark recstructurenRed (10Very structurenDark rec	d (2.5YR3/5-Moist e; Dry; Loose cons d (2.5YR3/6-Moist ose consistence; d (2.5YR3/8-Moist e; Dry; Strong cons d (10R3/8-Moist); onsistence; Gradu R4/8-Moist); ; Sar onsistence; Gradu R4/8-Moist); ; Sar ong consistence; d (10R3/8-Moist); ong consistence;	); Red (2.5YR4/5-Dry) sistence; Clear change ); Red (2.5YR4/6-Dry) Gradual change to - ); Red (2.5YR4/7-Dry) sistence; Gradual cha ; Sandy clay loam; Massive ual change to - ndy clay loam; Massive ual change to - ndy clay loam (Heavy); Gradual change to - ; Sandy clay loam (He	; ; Sandy clay loa e to - ; ; Sandy loam (F ; ; Sandy clay loa inge to - issive grade of structu e grade of structu ; Massive grade of avy); Massive grade of	m (Light); Massive grade of leavy); Massive grade of structu m (Light); Massive grade of ructure; Earthy fabric; Dry; Very re; Earthy fabric; Dry; Very
Surfa Profil A11 A12 B1 B1 B1 B1 B21	<b>ce Coarse</b> <b>e Morphol</b> 0 - 0.05 n 0.05 - 0.1 0.1 - 0.2 n 0.2 - 0.3 n 0.3 - 0.4 n 0.4 - 0.5 n	Fragments:ogyDark red structuremDark red Dry; LomDark red structuremDark red structuremDark red strong cmRed (10 strong cmRed (10 very structuremRed (10 very structuremDark red strong cmRed (10 very structuremDark red strong cmRed (10 very structuremDark red changemRed (10	d (2.5YR3/5-Moist e; Dry; Loose cons d (2.5YR3/6-Moist ose consistence; d (2.5YR3/8-Moist) e; Dry; Strong cons d (10R3/8-Moist); onsistence; Gradu R4/8-Moist); ; Sar ong consistence; d (10R3/8-Moist); ong consistence; to - R4/8-Moist); ; Sar ong consistence; to -	); Red (2.5YR4/5-Dry) sistence; Clear change ); Red (2.5YR4/6-Dry) Gradual change to - ); Red (2.5YR4/7-Dry) sistence; Gradual cha ; Sandy clay loam; Massive ual change to - ndy clay loam; Massive ual change to - ndy clay loam (Heavy); Gradual change to - ; Sandy clay loam (Heavy); Gradual change to -	; ; Sandy clay loa e to - ; ; Sandy loam (H ; ; Sandy clay loa nge to - assive grade of structu ; Massive grade of avy); Massive grade of ceous, Medium (2) ; Massive grade of	m (Light); Massive grade of leavy); Massive grade of structu m (Light); Massive grade of ructure; Earthy fabric; Dry; Very re; Earthy fabric; Dry; Very of structure; Earthy fabric; Dry; ade of structure; Earthy fabric; Dry;
Surfa     Profil     A11     A12     B1     B1     B1     B1     B21     B21	<b>ce Coarse</b> <b>e Morphol</b> 0 - 0.05 n 0.05 - 0.1 0.1 - 0.2 n 0.2 - 0.3 n 0.3 - 0.4 n 0.4 - 0.5 n 0.5 - 0.6 n	Fragments:OgyDark recstructuremDark recmDark recnDark recnDark recnDark recnDark recnRed (10strong cRed (10nRed (10Very structureDry; StructuremDark recmRed (10Very structureVery structuremRed (10Very structureVery structuremRed (10)Very structureNmRed (10)Very structureNmRed (10)	d (2.5YR3/5-Moist e; Dry; Loose cons d (2.5YR3/6-Moist ose consistence; d (2.5YR3/8-Moist e; Dry; Strong cons d (10R3/8-Moist); onsistence; Gradu R4/8-Moist); ; Sar ong consistence; d (10R3/8-Moist); ong consistence; to - R4/8-Moist); ; Sar ong consistence; to - R4/8-Moist); ; Sar	); Red (2.5YR4/5-Dry) sistence; Clear change ); Red (2.5YR4/6-Dry) Gradual change to - ); Red (2.5YR4/7-Dry) sistence; Gradual cha ; Sandy clay loam; Massive ual change to - ndy clay loam; Massive ual change to - indy clay loam (Heavy); Gradual change to - ; Sandy clay loam (Heavy); Few (2 - 10 %), Argilla ndy clay loam (Heavy);	; ; Sandy clay loa e to - ; ; Sandy loam (H ; ; Sandy clay loa nge to - assive grade of structu ; Massive grade of avy); Massive grade of avy); Massive grade of aceous, Medium ( ; Massive grade of	m (Light); Massive grade of leavy); Massive grade of structu m (Light); Massive grade of ructure; Earthy fabric; Dry; Very re; Earthy fabric; Dry; Very of structure; Earthy fabric; Dry; ade of structure; Earthy fabric; Dry; 2 -6 mm), Nodules; Gradual of structure; Earthy fabric; Dry;
Surfa     Profil     A11     A12     B1     B1     B21     B21     B21	<b>ce Coarse</b> <b>e Morphol</b> 0 - 0.05 n 0.05 - 0.1 0.1 - 0.2 n 0.2 - 0.3 n 0.3 - 0.4 n 0.4 - 0.5 n 0.5 - 0.6 n 0.6 - 0.75	Fragments:ogyDark recmDark recmDark recDory; LoDark recmDark recmDark recmDark recmDark recnDark recnRed (10Very structureNnDark recmRed (10Very structureDry; StructuremRed (10Very structureVery structuremRed (10Very structureConsisteemRed (10consisteeNmRed (10	d (2.5YR3/5-Moist e; Dry; Loose cons d (2.5YR3/6-Moist ose consistence; d (2.5YR3/8-Moist) e; Dry; Strong cons d (10R3/8-Moist); onsistence; Gradu R4/8-Moist); ; Sar ong consistence; d (10R3/8-Moist); ong consistence; to - R4/8-Moist); ; Sar ong consistence; to - R4/8-Moist); ; Sar nce; Few (2 - 10 R4/8-Moist); ; Sar	); Red (2.5YR4/5-Dry) sistence; Clear change ); Red (2.5YR4/6-Dry) Gradual change to - ); Red (2.5YR4/7-Dry) sistence; Gradual cha ; Sandy clay loam; Massive ual change to - ndy clay loam; Massive ual change to - indy clay loam (Heavy); Gradual change to - ; Sandy clay loam (Heavy); Few (2 - 10 %), Argilla ndy clay loam (Heavy); Few (2 - 10 %), Argilla ndy clay loam (Heavy); %), Argillaceous, Coar ndy clay loam (Heavy);	; ; Sandy clay loa e to - ; ; Sandy loam (F ; ; Sandy clay loa inge to - issive grade of structu grade of structu ; Massive grade of ceous, Medium (2 ; Massive grade of ceous, Medium (2 ; Massive grade of se (6 - 20 mm), N ; Massive grade of	m (Light); Massive grade of leavy); Massive grade of structu m (Light); Massive grade of ructure; Earthy fabric; Dry; Very re; Earthy fabric; Dry; Very of structure; Earthy fabric; Dry; ade of structure; Earthy fabric; Dry; 2 -6 mm), Nodules; Gradual of structure; Earthy fabric; Dry; 2 -6 mm), Nodules; Gradual

Project Code: RE	egional EG Site ID: T149 Observation ID: 1 SIRO Division of Soils (QLD)
B22 1.5 - 1.8 m	Red (10R4/8-Moist); ; Fine sandy clay loam; Massive grade of structure; Dry; Strong consistence; Few (2 - 10 %), Argillaceous, Coarse (6 - 20 mm), Nodules; Gradual change to -
B22 1.8 - 2.1 m	Red (10R4/8-Moist); ; Fine sandy clay loam; Massive grade of structure; Dry; Strong consistence; Few (2 - 10 %), Argillaceous, Coarse (6 - 20 mm), Nodules; Gradual change to -
2.1 - 2.4 m	Red (10R4/8-Moist); ; Fine sandy clay loam; Massive grade of structure; Strong consistence; Common (10 - 20 %), Argillaceous, Coarse (6 - 20 mm), Nodules; Gradual change to -
2.4 - 2.55 m	Red (10R4/8-Moist); ; Fine sandy clay loam; Massive grade of structure; Strong consistence; Many (20 - 50 %), , Coarse (6 - 20 mm), Concretions; Gradual change to -
2.55 - 2.7 m	Red (10R4/8-Moist); ; Fine sandy clay loam; Massive grade of structure; 2-10%, Sandstone, coarse fragments; Many (20 - 50 %), , Coarse (6 - 20 mm), Nodules; Gradual change to -
2.7 - 3 m	Red (10R4/8-Moist); ; Fine sandy clay loam; Massive grade of structure; Rigid consistence; 2-10%, Sandstone, coarse fragments; Few (2 - 10 %), , Coarse (6 - 20 mm), Nodules; Gradual change to -
3 - 3.3 m	Red (10R4/8-Moist); ; Fine sandy clay loam; Massive grade of structure; Rigid consistence; 2- 10%, Sandstone, coarse fragments; Few (2 - 10 %), , Coarse (6 - 20 mm), Nodules; Gradual change to -
3.3 - 3.6 m	Red (10R4/8-Moist); ; Fine sandy clay loam; Massive grade of structure; Very strong consistence; Gradual change to -
3.6 - 3.9 m	Red (10R4/8-Moist); ; Fine sandy clay loam; Massive grade of structure; Very strong consistence; 0-2%, Sandstone, coarse fragments; Gradual change to -
3.9 - 4.2 m	Red (10R4/8-Moist); ; Fine sandy clay loam; Massive grade of structure; Very strong consistence; 0-2%, Sandstone, coarse fragments; Very few (0 - 2 %), Argillaceous, , Nodules; Gradual change to -
4.2 - 4.5 m	Red (10R4/8-Moist); ; Fine sandy clay loam; Massive grade of structure; Very strong consistence; Gradual change to -
4.5 - 4.8 m	Red (10R4/8-Moist); ; Fine sandy clay loam; Massive grade of structure; Very strong consistence; Gradual change to -
4.8 - 5.1 m	Red (10R4/8-Moist); ; Fine sandy clay loam; Massive grade of structure; Very strong consistence; 0-2%, Sandstone, coarse fragments; Gradual change to -
5.1 - 5.4 m	Red (10R4/8-Moist); ; Fine sandy clay loam; Massive grade of structure; Very strong consistence; Few (2 - 10 %), Argillaceous, Very coarse (20 - 60 mm), Nodules; Gradual change to -
5.4 - 5.7 m	Red (10R4/8-Moist); ; Fine sandy clay loam; Massive grade of structure; Very strong consistence; Gradual change to -
5.7 - 6 m	Red (10R4/8-Moist); ; Fine sandy clay loam; Massive grade of structure; Very strong consistence; Gradual change to -
6 - 6.5 m	Red (10R4/8-Moist); ; Sandy loam; Massive grade of structure; Strong consistence; Gradual change to -
6.5 - 6.75 m	Red (10R4/8-Moist); ; Loamy sand; Massive grade of structure; Strong consistence; Gradual change to -
Marphalagiaal Nata	-

## Morphological Notes

Observation Notes 0-5CM A12 MATERIAL ADMIXED: Site Notes

Project Name:	Regional		
	0	Cite ID.	T4 40
Project Code:	REG	Site ID:	T149
Agency Name:	CSIRO Divis	sion of Soils (C	QLD)

Observation ID: 1

## Laboratory Test Results:

Depth	pН	1:5 EC		nangeable		Na	Exchangeable	CEC	ECEC	ESP
m		dS/m	ca I	Иg	К	Na Cmol (·	Acidity +)/kg			%
0 0 05	0 54	0.0004	4.45	0.05	0.05	0.00	0.45		E 4 E	
0 - 0.05	6.5A	0.026A	1.4B	0.95	0.25	0.09	2.4F		5.1F	
0.05 - 0.1	6.6A	0.017A	2.2B	0.67	0.2	0.14	1.3F		4.5F	
0.1 - 0.2 0.2 - 0.3	6.5A 6.5A	0.02A 0.014A	1.7B 1.4B	0.52 0.26	0.16 0.14	0.12 0.12	1.2F 1F		3.7F 2.9F	
0.2 - 0.3 0.3 - 0.4	6.5A	0.014A 0.017A	1.4B 1.5B	0.20	0.14	0.12	1.1F		2.9F 3.1F	
0.3 - 0.4 0.4 - 0.5	6.5A	0.017A 0.014A	1.50	0.22	0.12	0.14	1.16		3. IF	
0.4 - 0.5 0.5 - 0.6	6.4A	0.014A 0.014A								
0.6 - 0.75	6.4A	0.014A	1.6B	0.21	0.03	0.14	0.6F		2.6F	
0.75 - 0.9	6.5A	0.014A	1.00	0.21	0.05	0.14	0.01		2.01	
0.9 - 1.2	6.5A	0.014A								
1.2 - 1.5	6.6A	0.011A								
1.5 - 1.8	6.5A	0.011A								
1.8 - 2.1	6.6A	0.011A								
2.1 - 2.4	6.7A	0.011A								
2.4 - 2.55	6.8A	0.011A								
2.55 - 2.7	6.8A	0.014A	1.8B	0.23	0.03	0.22				
2.7 - 3	6.8A	0.014A				•				
3 - 3.3	6.8A	0.014A								
3.3 - 3.6	6.6A	0.011A								
3.6 - 3.9	6.7A	0.011A								
3.9 - 4.2	6.7A	0.011A								
4.2 - 4.5	6.9A	0.014A	2.3B	0.37	0.03	0.22	1F		3.9F	
4.5 - 4.8	6.9A	0.014A								
4.8 - 5.1	6.8A	0.017A								
5.1 - 5.4	6.7A	0.017A								
5.4 - 5.7	6.8A	0.02A								
5.7 - 6	7A	0.017A								
6 - 6.5	6.9A	0.017A								
6.5 - 6.75	6.7A	0.023A	0.56B	2.6	0.03	0.35	0.6F		4.1F	
Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Tota K	l Bulk Density	Particle GV CS	FS S	alysis Silt Clay
m	%	%	mg/kg	%	%	%	Mg/m3		%	

		С	Р	Р	N	к	Density	GV	CS	FS	Silt	Clay
m	%	%	mg/kg	%	%	%	Mg/m3			%		
0 - 0.05		0.79D	5.2B	0.009A	0.05A	0.06A		0	48A	34	4	14
0.05 - 0.1		0.39D	2.6B	0.009A	0.03A	0.06A		õ	46A	33	4	17
0.1 - 0.2		0.21D	-	0.007A		0.06A		0	44A	33	4	18
0.2 - 0.3		0.26D		0.007A		0.06A		0	45A	32	4	19
0.3 - 0.4		0.12D			0.01A			0	42A	32	4	21
0.4 - 0.5												
0.5 - 0.6												
0.6 - 0.75		0.06D		0.005A	0.01A	0.06A		<2	39A	31	4	25
0.75 - 0.9												
0.9 - 1.2												
1.2 - 1.5												
1.5 - 1.8				0.006A		0.05A		<2	33A	34	5	28
1.8 - 2.1								<2	29A	37	5	29
2.1 - 2.4												
2.4 - 2.55												
2.55 - 2.7								2	35A	34	6	25
2.7 - 3												

Project Nam Project Cod Agency Nar	e: RE		Si vision of		T149 _D)		Observ	ation ID	): 1	I			
3 - 3.3													
3.3 - 3.6													
3.6 - 3.9													
3.9 - 4.2				0.0074					~		~~	•	
4.2 - 4.5				0.007A		0.06	A	•	<2	34A	29	6	
4.5 - 4.8													
4.8 - 5.1													
5.1 - 5.4													
5.4 - 5.7													
5.7 - 6													
6 - 6.5									.0	444	24	F	
6.5 - 6.75								•	<2	44A	34	5	
Depth	COLE		Grav	/imetric/Vol	umetric W	ater Cont	ents			K sat	к	unsat	
m		Sat.	0.05 Bar		0.5 Bar  - m3/m3	1 Bar	5 Bar	15 Bar		mm/h	r	nm/h	
0 - 0.05													
0.05 - 0.1													
0.1 - 0.2													
0.2 - 0.3													
0.3 - 0.4													
0.4 - 0.5													
0.5 - 0.6													
0.6 - 0.75													
0.75 - 0.9													
0.9 - 1.2 1.2 - 1.5													
1.2 - 1.3													
1.8 - 2.1													
2.1 - 2.4													
2.4 - 2.55													
2.55 - 2.7													
2.7 - 3													
3 - 3.3													
3.3 - 3.6													
3.6 - 3.9													
3.9 - 4.2													
4.2 - 4.5													
4.5 - 4.8													
4.8 - 5.1													
5.1 - 5.4													
5.4 - 5.7													
5.7 - 6													
6 - 6.5													

Project Name:	Regional		
Project Code:	REG	Site ID:	T149
Agency Name:	<b>CSIRO</b> Division	of Soils (C	QLD)

Observation ID: 1

## Laboratory Analyses Completed for this profile

10A1 12_HF_CU 12_HF_FE 12_HF_ZN 13C1_FE 15A2_CA	Total sulfur - X-ray fluorescence Total element - Cu(mg/kg) - HF/HCIO4 Digest Total element - Fe(%) - HF/HCIO4 Digest Total element - Zn(mg/kg) - HF/HCIO4 Digest Citrate/dithionite-extractable iron, aluminium, Manganese and Silicon Exchangeable bases (Ca2+,Mg2+,Na+,K+) - 1M ammonium chloride at pH 7.0, pretreatment for soluble salts
15A2_K	Exchangeable bases- 1M ammonium chloride at pH 7.0, pretreatment for soluble salts
15A2_MG	Exchangeable bases- 1M ammonium chloride at pH 7.0, pretreatment for soluble salts
15A2_NA 15G_C	Exchangeable bases- 1M ammonium chloride at pH 7.0, pretreatment for soluble salts Exchange acidity (hydrogen and aluminium) - meq per 100g of soil - By 1M KCl exch. acidity by titration to pH 8.4
15J1	Effective CEC
17A1	Total potassium - X-ray fluorescence
3A1	EC of 1:5 soil/water extract
4A1	pH of 1:5 soil/water suspension
6A1_UC	Organic carbon (%) - Uncorrected Walkley and Black method
7A2	Total nitrogen - semimicro Kjeldahl, automated colour
9A1	Total phosphorus - X-ray fluorescence
9G_BSES	Available P (mg/kg) - Acid P - 0.005M H2SO4 (BSES)
MIN_EC P10 CF C	Exchange Capacity - Minerology Clay (%) - Coventry and Fett pipette method
P10_CF_C	Coarse sand (%) - Coventry and Fett pipette method
P10 CF FS	Fine sand (%) - Coventry and Fett pipette method
P10 CF Z	Silt (%) - Coventry and Fett pipette method
P10_GRAV	Gravel (%)
XRD_C_Hm	Hematite - X-Ray Diffraction
XRD_C_II	Illite - X-Ray Diffraction
XRD_C_ls	Interstratified clay minerals - X-Ray Diffraction
XRD_C_K2O	K2O - X-Ray Diffraction or Clay Fraction (air dry)
XRD_C_Ka	Kaolin - X-Ray Diffraction
XRD_C_Qz	Quartz - X-Ray Diffraction