BSAL Soil Data Cards

SITE LOCATION: SOUTH OF CREEK PROFILE MAP DETAILS **SURVEY DETAILS** Profile No. Map Sheet No. **Eastings Northings** Described By **Profile Date** Photo Taken (1) No. of Layers 0000 O dan dub O O profile (1 site (2 QQQQQQ**@**Q@QQQQQQQQQQQQQ**@**Q**@** both profile & site 1 3333333333333333333 (2) 444444444444 4 May Moy 4 @ (3) auger (1 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5555 (5) (Jun) (Dec) (5) (5) pit @ 4 6666 660 66 batter 3 77 7 gully 4 ❸ ❸ ❸ ❸ ❸ ❸ ❸ ❸ ❸ ❸ ❸ ❸ ❸ ❸ ❸ ❸ ❸ 8888 (8) 88 core sample (5) 99999999999999999 9 9 9 other 6 NSW SOII Potential BSAL? (1) Site type (1) BIOPHYSICAL STRATEGIC AGRICULTURAL AND LAND checked (1 detailed @ ves (1) no @ LAND SOIL DATA CARD **INFORMATION** exclusion 3 **SYSTEM** SOIL **LANDFORM ELEMENT (1) VEGETATION** TYPE **Vegetation Community (1)** A.S.C. alcove (43) Please MARK sink hole/doline (52 cone (3) footslope 21 ox-bow (57) LIKE THIS ONLY: unknown (1 backplain (31) crater (51) foredune 12 pan/playa 56 5 stream channel (46 0 rainforest (2) hank (25) cut face (28) gully 42 pediment 22 streambed 45 0 wet sclerophyll forest 3 bar 6 cut-over surface 39 hillcrest ① pit (60) summit surface (2) Use 2B pencil Α dry sclerophyll forest 4 beach (26) hillslope (17) dam (16) plain (30) swale 47 SO No pen or biro woodland grass u'storev (5) beach ridge (7) B drainage depression 41 lagoon 54 prior stream (9) swamp 58 **Fully erase** woodland shrub u'storev 6 bench (19) dune (11) lake 55 rock flat (34) talus 23 mistakes D tall shrubland (7 berm (29) embankment (14) landslide (20) rock platform 35 GG tidal creek (48 Make no P low shrubland ® blow-out 59 estuary 44 levee (8) scald (36) tidal flat 37 strav marks heath (9) channel bench 33 fan (27) Junette (13) scarp (18) tor 4 Numbers in () A SG grassland/herbland @ cirque (50) fill top (40) maar (53) scree 24 trench 49 show max. H swamp complex (11) cliff (5) flood-out 32 mound (15) scroll 10 entries allowed valley flat B littoral complex (12 LITHOLOGY **TOPOGRAPHY** no vegetation 13 E A M **Growth Forms (4)** Substrate (3) Slope Percent Site Morphology (1) N tree @ not identified T limestone coarse-basic 0 tree mallee (2) unconsolidated (2) tuff 24) fine-acidio 46 **D D D D** crest 2 shrub 3 gravel 3 breccia (25) fine-intermediate 47 (2) (2) (2) hillock (3 W mallee shrub 4 sand 4 greywacke (26) fine-basic (48) (3) (3) (3) ridge 4 C heath shrub (5) (5) silt upper slope 5 arkose (27) serpentine (49 (4) (4) (4) G.S.G. chenopod shrub (6) gabbro clay 6 dolomite (28) (50 (5) (5) (5) midslope 6 (A) hummock grass @ organic material (7) calcrete dolerite 29 (51) 6 6 simple slope (7 BBB tussock grass @ alluvium (8) aeolianite (30) diorite (52 77.7 lower slope ® 00 sod grass 9 colluvium (9) chert (31) (53 svenite (8)(8)(8) open depression (9 00 sedge 10 (10) lacustrine iasper (32) granodiorite (54 99.9 closed depression (10 rush (11 E E aeolian (11) metamorphic (33) adamellite (55 **Slope Measurement** Slope Morphology (1) <u>எ</u> எ எ forb (12) marine (12) aneiss (34) granite (56 Method (1) ED CED CED fern/cycad (13 calcareous sand (13) schist/phyllite (35) (57 aplite inclinometer 3 waxing I (K) (K) (K) moss (14 fill (14) slate (36) quartz porphyry (58 Abnev level 4 waning 2 00 lichen (15 (15) mud hornfels (37) basalt (59 total station (5) maximal 3 (M) (M) liverwort (16 till (16) quartzite (38) andesite 60 RTK GPS © minimal @ PPP vine (17 sedimentary (IP) areenstone (39) trachyte (61 LIDAR CO Aspect (1) ® ® shale (18) amphibolite (40) 62 Microrelief Type (1) rhvolite LAND USE (1) (S) (S) (S siltstone/mudstone 19 marble (41) obsidian (63 N none @ CD CD national/state parks (T sandstone-quartz (20) igneous (42) scoria (64 normal gilgai ② NW NE W timber/scrub/unused @ crabhole gilgai 3 sandstone-lithic (21) coarse-acidio (43) ash 65 Œ X logged native forest 3 conglomerate coarse-intermediate (44) agglomerate (66 linear gilgai 4 SW SE hardwood plantation 4 67 other lattice gilgai (5) (5) affinity softwood plantation (5) Identification Method (1) melonhole gilgai 6 **HYDROLOGY** with volun./native pasture 6 personal assessment (T other 9 improved pasture geology map @ Profile Drainage (1) Permeability (1) Depth (1) & Extent (1) cropping ® both assessment & map 3 very poorly drained very slowly permeable ≤ 500 mm depth ① orchard/vineyard 9 Rock Outcrop % (1) poorly drained 2 slowly permeable > 500 mm depth 2 vegetables/flowers 10 nil >20-30% 5 imperfectly drained 3 moderately permeable 3 < 50% area (T urban (11 <2% ② >30-50% ⑥ mod, well-drained highly permeable 4 > 50% area (2 industrial (12) 2-10% (3) >50% (7) well-drained (5) SITE FIELD NOTES quarry/mining (13) >10-20% (4) rapidly drained 6 other 14 **Surface Condition** SITE CONDITION Current (2) Wet (2) Dry (2) Site Disturbance(s) (2) cracked (2) Ground natural disturbance ① self-mulched 3 3 3 Cover % no effective disturbance 2 loose 4 4 4 limited clearing 3 00 soft 5 (5) (5) extensive clearing T T T firm @ 6 6 cleared, no cultivation (2) (2 hardset (7) (7) occasional cultivation 6 3 3 surface crust ® 8 8 rainfed cultivation (7) 4 4 trampled 9 9 irrigated cultivation ® 5 5 poached 10 (10) highly disturbed (9) (6) (6) recently cultivated (11) Photo file name/s: (7)(7)water repellent (12) (12) 8 6 gravelly (1) other (13) (13) (13) Please do not mark this space. 4640

SURVEY TITLE: RIXS CREEK BSAL

1781 NCS

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SITE LOCATION: ADJACENT TO TRACK **PROFILE MAP DETAILS SURVEY DETAILS** Profile No. Map Sheet No. **Eastings Northings** Described By **Profile Date** Photo Taken (1) No. of Layers 0000 O Jan Jul O O profile (1 site (2 both profile & site 1 33333333333333333 3 3 3 3 3 4 Mm (m) 3 3 Nature of Exposure (2) (2) 4 (10) (10) (4) (20) (3) auger (1 5555555555555555 5555 (5) Jun Oeo (5) (5) pit (2 4 669 6 6 batter 3 **(E)** O O 7 gully 4 8888 88 core sample 5 999999999999999999 9 9 other 6 NSW SOIL Potential BSAL? (1) Site type (1) BIOPHYSICAL STRATEGIC AGRICULTURAL checked (1 AND LAND yes ① no e detailed @ LAND SOIL DATA CARD INFORMATION exclusion (3) **SYSTEM** SOIL **LANDFORM ELEMENT (1) VEGETATION** TYPE **Vegetation Community (1)** A.S.C alcove 43 Please MARK sink hole/doline 52 cone (3) footslope (21) ox-bow (57) LIKE THIS ONLY: backplain (31) unknown (1 crater (51) foredune (12) pan/playa 56 5 stream channel (46 0 rainforest (2 bank (25) cut face (28) gully 42 pediment (22) streambed 45 0 wet sclerophyll forest 3 bar 6 cut-over surface 39 hillcrest ① nit (60) summit surface (2) Use 2B pencil A dry sclerophyll forest 4 beach (26) dam (16) hillslope @ plain (30) swale (47) SO No pen or biro woodland grass u'storey 5 beach ridge 7 drainage depression (41) B lagoon 54 prior stream (9) swamp 58 Fully erase woodland shrub u'storey 6 bench (19) dune 11 lake (55) rock flat 34 talus 23 E mistakes tall shrubland (7 berm (29) embankment (14) landslide 20 rock platform 35 tidal creek 48 GG Make no 5 low shrubland (8) blow-out 59 estuary 44 levee ® scald (36) tidal flat (37 stray marks heath (9 channel bench (33) fan (27) lunette (13) A scarp (18) tor (4) Numbers in () SG grassland/herbland @ cirque (50) fill top (40) maar (53) scree (24) trench 49 show max. H swamp complex (11 cliff (5) flood-out (32) mound (15) scroll 10 valley flat 38 entries allowed 8 littoral complex (12 LITHOLOGY **TOPOGRAPHY** no vegetation (13 6 A Growth Forms (4) Substrate (3) Site Morphology (1) **Slope Percent** N not identified tree CT limestone (23 coarse-basic 45 0 tree mallee (2 L unconsolidated (2) tuff (24) fine-acidic 46 **D D D D** crest 2 shrub 3 3 (25) gravel breccia fine-intermediate (47 22.2 hillock (3 W mallee shrub 4 sand 4 greywacke (26) fine-basic (48 (3)(3)(3)ridge 4 C heath shrub (5) (5) silt (27) arkose serpentine (49 (4) (4) (4) upper slope 5 G.S.G. chenopod shrub 6 clay gabbro 5 5.5 midslope 6 (6) dolomite (28) (50 (A) hummock grass @ organic material (7) calcrete (29) dolerite (51 666 simple slope T BBB tussock grass @ alluvium 8 aeolianite (30) diorite (52 7 .7 lower slope 00 sod grass 9 colluvium (9) chert (31) svenite (53 (8)(8)(8) open depression (9) (D) (D) sedge 10 lacustrine (10) (32) granodiorite iasper (54 99.9 closed depression 10 ® ® ® rush (11) (TT) aeolian metamorphic (33) adamellite (55 Slope Measurement Slope Morphology (1) <u>எ</u> எ forb (12 marine (12) (34) (56) aneiss granite Method (1) ED CED CED fern/cycad (13 13 calcareous sand schist/phyllite (35) aplite (57 inclinometer 3 waxing (1 (K) (K) (K) moss (14 (14) 36) slate quartz porphyry (58) Abney level 4 waning @ 00 lichen (15 (15) mud hornfels (37) basalt (59 total station (5) maximal 3 (M) (M) liverwort (16 till (16) quartzite (38) andesite (60 RTK GPS © minimal 4 PPP vine (17 sedimentary (TOTAL) greenstone LIDAR Aspect (1) (39) trachyte (61 BB Microrelief Type (1) shale (18) amphibolite 40 rhyolite 62 LAND USE (1) (S) (S) (S siltstone/mudstone 41) marble obsidian (63 N none @ CD CD national/state parks (1 sandstone-quartz (20) (42) normal gilgai ② igneous scoria (64 NW NE W timber/scrub/unused (2) sandstone-lithic (21) coarse-acidic (43) ash (65 crabhole gilgai 3 Œ (X) logged native forest 3 conglomerate coarse-intermediate 44 SE (22) agglomerate 66 linear gilgai 4 SW hardwood plantation 4 other (67 lattice gilgai 5 (3) softwood plantation (5) affinity Identification Method (1) melonhole gilgai 6 **HYDROLOGY** with volun./native pasture 6 personal assessment (T other (9) improved pasture geology map Profile Drainage (1) Permeability (1) Depth (1) & Extent (1) cropping ® both assessment & map 3 very poorly drained ① T very slowly permeable ≤ 500 mm depth ☐ orchard/vineyard 9 slowly permeable Rock Outcrop % (1) poorly drained 2 > 500 mm depth (2) vegetables/flowers 10 nil >20-30% 5 imperfectly drained moderately permeable 3 < 50% area (T urban 11 <2% ② >30-50% ⑥ > 50% area @ mod. well-drained (4) highly permeable industrial (12) 2-10% (3) >50% (7 well-drained (5) SITE FIELD NOTES quarry/mining 3 >10-20% 4 rapidly drained 6 other 14 **Surface Condition** SITE CONDITION Current (2) Wet (2) Dry (2) Site Disturbance(s) (2) cracked (2) Ground natural disturbance (1) self-mulched 3 3 3 Cover % no effective disturbance 2 4 loose 4 4 limited clearing 3 000 soft 5 (5) (5) extensive clearing () (1) (1) firm 🚳 6 6 cleared, no cultivation hardset (7) (2) (2 (7) occasional cultivation 6 3 3 surface crust ® 8 8 rainfed cultivation (7) 44 trampled (9) 9 irrigated cultivation ® (5) (5) poached 10 highly disturbed 9 (6) (6) recently cultivated (11) Photo file name/s: (12) (7)(7)water repellent (12) 8 6 gravelly ① other (13) (13) Please do not mark this space. 4641

SURVEY TITLE: RIXS CREEK BSAL

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20 —	S	C C C	22.2 ur 33.3 3	disturbed				fied ② ② rate ③ ③					7 7 7 (B)			Grade 1 sand 1		
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21 —	R		5 5 5 5 6 6 6 6	Base of Obse	continue:	_		terial 5 5 artz 6 6			Amount (1 per		1 2 3 D (1) (1)			sand 3		
	A		D D D D		continue			spar 7 7			very few		200			loam ©		
22 —	Ė		8 8 8		ent refusa			rete ® ®					3 3 3		-			66
			MOTTLES Sub-c		k reached	d 🎱		one 9 9 xite 10 10			common (10- many (20-		4 4 4 6 5 5 5 6) (T) (T) (B) (B)
23 —	1	2 3 4 5	Abundance 1 2	3 4 5			sh	nells 111 111	O CO CO	ID (II)	abundant (>	50%)	666	66	clay loam	sandy @	999	99
25 —		6 6 6 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	not evident 6 6 <2% 2 2	0666				coal 12 12 nice 13 13			Strength (1 per		1 2 3 D (1) (1)					
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24 —			ALCO LOUIS AND				0	ther (18) (18	18 (18)	18 (18)	Form (1 per	layer)	1 2 3	4 5		clay ①	3 43 (6	(3)
		2 3 4 5		3 4 5	P			/er) Sur. 1 2%) ② ②			soft segrega							14 14 15 15
25 —	Œ		dark 🗇 🗇				few (2-10	0%) 333	333	33	fragr	nents C	333	33	saprio	peat @	6 (16) (16)	16 16
								0%) 4 4					444					
26 —				333				0%)					5 5 5		C			
	(5)	5 6 5	brown 5 5	555	VE	ery abu	indant (>90	0%) 7 7		D D	root li	nings C		77	Clay Fra	ction 1	2 3	4 5
07		06666						/er) Sur. 1			Size (1 per l		888		light ma	-		
27 —			0 ,					nm) ② ②			fine (<2	2 mm) C	DOO	D D	me	edium @	3 3	33
	_	2 3 4 5	Contrast 1 2	3 4 5		e grav	el (20-60 n	mm) 3 3	333	33	medium (2-6	mm) C	222	22	medium I	heavy @	D 4 4	44
28 —								nm) 4 4 nm) 5 5			coarse (6-20 v coarse (20-6					neavy C	5 6	6 5
			prominent 3 3								ext coarse (>6						1	
29 —																		

SITE LOCATION: SOUTH OF DAM PROFILE MAP DETAILS **SURVEY DETAILS** Profile No. Map Sheet No. Eastings Northings Described By **Profile Date** Photo Taken (1) No. of Layers 0000 0000 0000 0 O Jan Jul O O site (2 0 QQQQ@QQ@@QQ@QQQQQQ@@@@Q@@@@Q@ both profile & site 1 Nature of Exposure (2) 2 (3) auger (1 5555555555555 5555 6666 (5) Jun Oeo (5) (5) pit @ (Idea 66666666666666666666 66 batter 3 (16) (5) O O gully 4 7 888888888888888888 888 (8) 88 core sample 5 999999999999999999 9 9 9 other 6 **NSW SOIL** Potential BSAL? (1) Site type (1) BIOPHYSICAL STRATEGIC AGRICULTURAL AND LAND ves ① detailed @ no @ **INFORMATION** LAND SOIL DATA CARD exclusion 3 **SYSTEM** SOIL **VEGETATION LANDFORM ELEMENT (1)** TYPE Please MARK A.S.C **Vegetation Community (1)** alcove (43) cone (3) footslope (21) ox-bow (57) sink hole/doline (52 LIKE THIS ONLY: unknown (1 backplain 31) crater (51) foredune (12) pan/playa 56 5 stream channel 46 0 rainforest 2 bank 25 cut face (28) gully 42 pediment (22) streambed 45 0 wet sclerophyll forest 3 bar 6 cut-over surface 39 hillcrest ① pit (60) summit surface (2) Use 2B pencil dry sclerophyll forest 4 A beach (26) hillslope @ dam (16) swale (47) plain (30) No pen or biro SO woodland grass u'storey 5 beach ridge (7) drainage depression (41) lagoon 54 prior stream (9) swamp 58 8 Fully erase woodland shrub u'storey 6 bench (19) dune 11 lake 55 rock flat 34 talus (23 mistakes E tall shrubland (7 berm (29) embankment (14) landslide (20) rock platform 35 tidal creek 48 GG Make no 5 low shrubland ® blow-out 59 estuary (44) levee (8) scald (36) tidal flat (37 stray marks heath (9) channel bench (33) fan (27) lunette (13) scarp (18) tor (4) Numbers in () A SG grassland/herbland cirque 50 fill top (40) maar (53) scree 24 trench 49 show max. H swamp complex (11) cliff (5) flood-out 32 mound (15) scroll 10 valley flat 38 entries allowed littoral complex (12 B LITHOLOGY TOPOGRAPHY F no vegetation (13 E A M Growth Forms (4) Substrate (3) Site Morphology (1) **Slope Percent** N limestone tree I not identified coarse-basic 45 0 0.00 L 0 tree mallee ② unconsolidated 2 tuff 24) ① ① **③**·① fine-acidic 46 crest (2 shrub 3 gravel (3) breccia (25) fine-intermediate (47 22.2 hillock 3 W mallee shrub 4 sand 4 (26) fine-basic greywacke (48 (3)(3)(3)ridge 4 C heath shrub (5 (5) silt arkose (27) serpentine (49 (4) (4) (4) upper slope 5 chenopod shrub (6) 5 5.5 G.S.G. clay 6 dolomite (28) gabbro (50 midslope 6 A hummock grass @ organic material calcrete dolerite 7 29 (51 666 simple slope (7 BBB tussock grass 🚳 alluvium (8) aeolianite (30) diorite (52 lower slope @ 00 sod grass 9 colluvium 9 chert (31) svenite (53 (B) (B) open depression (9) (D) (D) sedge (10 (10) lacustrine iasper (32) granodiorite (54 99.9 closed depression @ TO TO TE rush (11 aeolian (11) metamorphic (33) adamellite (55 Slope Measurement Slope Morphology (1) **@ @ @** forb (12) marine (12) aneiss (34) granite (56 Method (1) E E E fern/cycad (13 calcareous sand (13) schist/phyllite (35) aplite (57 waxing (1 moss (14) fill (14) slate (36) quartz porphyry (58 Abney level 4 waning @ D D lichen (15 mud (15) hornfels (37) basalt (59 total station (5) maximal 3 OD OD liverwort (16) till (16) quartzite (38) andesite (60 RTK GPS 6 minimal 4 P P P Aspect (1) vine (17 sedimentary 92 areenstone (39) trachyte (61 LIDAR @ Microrelief Type (1) BB shale (18) amphibolite (40) (62 rhvolite LAND USE (1) **S S S** siltstone/mudstone (19) (41) obsidian (63 N marble none @ T Z national/state parks (1 sandstone-quartz (20) igneous (42) scoria (64 normal gilgai ② NW NE W timber/scrub/unused (2) sandstone-lithic (21) coarse-acidic (43) ash (65 crabhole gilgai 3 E ∞ logged native forest 3 SE conglomerate coarse-intermediate (44) agglomerate (66 linear gilgai 4 SW 9 hardwood plantation 4 (67 lattice gilgai 5 (3) other softwood plantation (5) affinity **Identification Method (1)** melonhole gilgai 6 **HYDROLOGY** with volun./native pasture 6 personal assessment (1 other 9 improved pasture @ geology map Profile Drainage (1) Permeability (1) Depth (1) & Extent (1) cropping ® both assessment & map ③ very poorly drained ① very slowly permeable ≤ 500 mm depth ☐ orchard/vineyard 9 poorly drained 2 slowly permeable > 500 mm depth ② Rock Outcrop % (1) imperfectly drained 3 moderately permeable 3 vegetables/flowers (10 nil >20-30% (5) < 50% area (1) <2% ② >30-50% ⑥ urban (11 > 50% area (2 mod well-drained highly permeable 4 industrial (12 2-10% ③ >50% (7) well-drained (5) SITE FIELD NOTES quarry/mining 13 rapidly drained 6 >10-20% 4 other 14 **Surface Condition** Expected SITE CONDITION Current (2) Wet (2) Dry (2) Site Disturbance(s) (2) cracked 2 Ground natural disturbance (1 self-mulched 3 3 3 Cover % no effective disturbance 2 loose 4 4 4 limited clearing (3) soft (5) (5) (5) 6 firm @ (6) cleared, no cultivation 22 hardset 7 7 occasional cultivation 6 3 3 surface crust ® (8) (8) rainfed cultivation (7) **4 4** trampled 9 (9) irrigated cultivation (8) (5) (5 poached (10) (10) Photo file name/s: highly disturbed 9 6 6 recently cultivated 1 TOT water repellent 12 (12) 8 8 gravelly ① other 13 13 (13) Please do not mark this space. 4626

SURVEY TITLE: RILY, S. LREEK, B.S.A.L.

© NCS

cm		mm 0 10	0 20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
1 -		LAYER	STATUS		COLOU	JR (M	unsell	, 1994)	Field pH		L	AYER NO	TES		Fi	eld pH To	est M	ethod	(1)
		Lower	Horizon		Moist Mu	nsell	Dry I	Munsell	(1 per layer)) 1				1 1 1		Raup	ach 🍯	etest s	trip ③
2 —								69 17 0 B 2 1									eter (2)		
		2222						D 25 2	2.2						n	o effervesce			D D
3 —	1	33.33	AB P			3 @		3 3	3.3					1 1 1		ble/slight eff			
	ľ	4 4·4 4 5 5·5 6	(BO)			4 4 5	G Y	4 4 6 5	4 • 4							g effervesce oundary [
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4 —		77.77 38.33				77		(T) (T) (B) (B)	7·7 8·8							not evid sharp (<5 n			
		9 9 9				ه ها			9.9						al	orupt (5-20 n	,		
5 —		Lower	Horizon		Moist Mu			Munsell	Field pH							ear (20-50 n			
								B 2 1	①·① ①·①		1 1					ial (50-100 n fuse (>100 n			
6 —		22.22	4000 3		73 Y P	2.5 2	7.5 Y	P 25 2	2.2							STRI	JCTL	JRE	
	2	3 3·3 3 4 4·4 4	AB P		(T)	344	(N) (GY)	(3) (3) (4) (4)	3 • 3						Grade	of Pedality single-grai			
7 —		5 5 5	60		©	5	<u>G</u>	55	5.6	-						0 0			
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		(7) (7) (8) (8) (8) (8)				77		(T) (T) (B) (B)	7°7 8°8						me	oderate peda strong peda			
8 —		9999							9.9	_								2 3	
		Lower	Horizon) (T)	Moist Mu			Munsell	Field pH										
9 —		Control of the Contro	3												ro	ugh-faced p	-		
			4003	3				P 25 2	2.2		1 1					ooth-faced p			
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40	L	9999		1					99•9					555		angular bloc	-		
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17 —	5	4 4 4	AD (B)		GY	44	GY	4 4	4.4			SEC		GATIO	OR OTHER DESIGNATION.	So	il Wate	er Statu	S
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18 —					lui.														
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19 —	s	9 9 9 9 Upper	Depth (m)		Sampl	e Taken		CO	9•9 ARSE FRA	THE RESERVE AND ADDRESS.	ITS			3 3 3 4 4 4				39 39 3 9 4) 4) 4	
	lü	00.00			per layer) 1	2 3	4 5	Type (1 per	ayer) Sur 1	2	3 4 5	ferr	uginous	555	5 5		TEXT	TURE	
20 —	B		① ① ① ① ②		disturbed ③				dent 📵 🍱 fied ② ②					6666		Texture G		per layer	
20 —	S	33.33	33.33	D	bulked @	66	66	as subst	rate 3 3	03	3333	not ic	dentified	888	3	S	and C	DOO	D D
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	1	2 3 4 5	Colour 1	2	3 4 5			very few (<	2%) ② ②	00	222		nodules	222	2 2	hemic	peat d	5 (15) (15)	(E) (E)
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26 —		4444	yellow @		444			ndant (50-90						6 6 6		D	fine C	222	22
)			5 5 5 6 6 6			undant (>9) ze (1 per la)								Clay Frac		1 2 3 D (1) (1)	
27 —	7		grey	DO			fine g	ravel (2-6 r	nm) 🗇 🗇	DO	DOO	Size (1 pe	er layer)	1 2 3	4 5	light med	dium C	222	22
	8	2 3 4 5			3 4 5	200		avel (6-20 r						① ① ⑤				3 3 3	
28 —	1				3 4 5 ① ① ① ①			s (60-200 r						333		medium he		4) (4) (4 5) (6) (6)	
20 —	2	2222	distinct @	2	0000		stones	(200-600 r	nm) 5 5	5	555	v coarse (20	0-60 mm)	444	4 4	D			
	(3)	33333	prominent C	D (3	<u> </u>		bould	ers (>600 r	nm) © @	00	666	ext coarse	(>60 mm)	555	(5) (5)	D			
29 —																			

SITE LOCATION: OPEN PADDOCK PROFILE MAP DETAILS **SURVEY DETAILS** Profile No. Map Sheet No. Eastings Northings Described By **Profile Date** Photo Taken (1) No. of Layers 0000 profile ① site 2 both profile & site @ 1 (2) 3 auger (1 55555555555555555555 5555 5 Jun Oec 5 5 pit @ 4 6666 (6) 66 batter 3 **653** (7) TT gully 4 888888888888888888888888888 8888 (8) 88 core sample (5) 9999999999999999 9 other 6 **NSW SOIL** Potential BSAL? (1) Site type (1) BIOPHYSICAL STRATEGIC AGRICULTURAL AND LAND checked @ ves (1) no @ detailed (2 LAND SOIL DATA CARD **INFORMATION** exclusion (3 **SYSTEM** SOIL **VEGETATION LANDFORM ELEMENT (1)** TYPE Please MARK **Vegetation Community (1)** A.S.C alcove (43) cone (3) footslope (21) sink hole/doline (5) LIKE THIS ONLY: unknown (T backplain (31) crater (51) foredune 12 5 pan/playa 56 stream channel 46 0 rainforest 2 bank (25) cut face (28) gully 42 pediment (22) streambed (45 0 wet sclerophyll forest 3 bar 6 cut-over surface 39 hillcrest ① summit surface 2 pit (60) Use 2B pencil A dry sclerophyll forest 4 beach (26) hillslope @ dam (16) plain (30) swale 47 SO No pen or biro woodland grass u'storey 5 beach ridge (7) drainage depression 41 lagoon 54 prior stream (9) swamp (58 B **Fully erase** woodland shrub u'storey 6 bench (19) dune 11 lake 55 rock flat (34) talus 23 mistakes tall shrubland (7 berm (29) embankment (14) landslide 200 rock platform 35 GG tidal creek (48) Make no low shrubland ® blow-out 59 estuary (44) levee (8) scald (36) tidal flat 37 stray marks heath 9 channel bench (33) fan (27) Numbers in () lunette (13) scarp (18) tor 4 SG grassland/herbland @ cirque (50) fill top 40 maar (53) scree (24) trench (49 show max. swamp complex (11) cliff (5) flood-out 32 entries allowed mound (15) scroll (10) valley flat 38 littoral complex (12 LITHOLOGY **TOPOGRAPHY** F no vegetation (13 A Growth Forms (4) Substrate (3) **Slope Percent** Site Morphology (1) limestone tree @ not identified coarse-basic (45 00.00 flat (1 tree mallee 2 unconsolidated 2 tuff 24) fine-acidic (46) **D D D D** crest (2 shrub 3 gravel (3) breccia (25) fine-intermediate (47 (2) (2) (2) hillock (3 mallee shrub 4 sand 4 greywacke (26) fine-basic (48) (3) (3) (3) ridge 4 C heath shrub (5 (5) silt arkose (27) serpentine (10 (4) (4) (4) upper slope 5 GSG chenonod shrub (6) clay (6) dolomite (28) gabbro (50 (5) (5) (5) midslope 65 (A) hummock grass @ organic material dolerite 7 calcrete 29 (51 6 6 6 simple slope (7 BBB tussock grass @ alluvium (8) aeolianite (30) (52 diorite 77.7 lower slope (8 colluvium 00 sod grass 9 9 chert (31) (53 svenite (B) (B) (B) open depression (9) 00 sedge (10 closed depression 10 lacustrine (10) iasper (32) granodiorite (54 99.9 FFF rush (11 aeolian (11) metamorphic (33) adamellite (55 **Slope Measurement** Slope Morphology (1) (G) (G) (G forb (12) granite marine (12) aneiss (34) (56 Method (1) E CE fern/cycad (13 calcareous sand (13) schist/phyllite (35) (57 aplite inclinometer 3 waxing (1 moss (14) fill (14) (36) (58 slate quartz porphyry Abney level 4 waning @ TO TO lichen (15 mud (15) hornfels (37) basalt (59 total station (5) maximal 3 M M liverwort (16 till (16) quartzite (38) andesite 60 RTK GPS 6 minimal 4 P P P vine (17) sedimentary (17) areenstone (39) trachyte (61 LIDAR Aspect (1) BB shale (18) amphibolite (40) (62 Microrelief Type (1) rhvolite LAND USE (1) **S S** siltstone/mudstone (19) (41) (63 marble obsidian N Tnational/state parks (1 sandstone-quartz (20) igneous (42) scoria (64 normal gilgai ② OW NE crabhole gilgai 3 W timber/scrub/unused @ sandstone-lithic (21) coarse-acidic (43) ash 65 W E \propto logged native forest 3 conglomerate coarse-intermediate (44) agglomerate (66 linear gilgai 4 SW SE (Y) hardwood plantation 4 other 67 lattice gilgai 5 (5) affinity softwood plantation (5) Identification Method (1) melonhole gilgai 6 **HYDROLOGY** with volun./native pasture (6) personal assessment (1) other 9 improved pasture geology map Profile Drainage (1) Permeability (1) Depth (1) & Extent (1) cropping (8) both assessment & map 3 very poorly drained ① very slowly permeable ≤ 500 mm depth ☐ orchard/vineyard (9) slowly permeable > 500 mm depth 2 Rock Outcrop % (1) poorly drained (2) vegetables/flowers (10 imperfectly drained 3 nil >20-30% (5 moderately permeable 3 < 50% area (T urban (11 <2% ② >30-50% ⑥ > 50% area @ mod. well-drained (4) highly permeable 4 industrial (12 2-10% ③ >50% (7 well-drained 5 SITE FIELD NOTES quarry/mining 13 >10-20% 4 rapidly drained 6 other (14 **Surface Condition** Expected SITE CONDITION Current (2) Wet (2) Dry (2) Site Disturbance(s) (2) cracked 2 Ground natural disturbance (1) self-mulched 3 3 3 Cover % no effective disturbance 2 loose 4 4 4 limited clearing 3 (ID) (ID) soft (5) (5) (5) (6) extensive clearing (49) (1) (1) firm G (6) cleared, no cultivation 2 2 hardset 7 7 occasional cultivation 6 33 surface crust ® (8) 8 rainfed cultivation (7) 44 trampled (9) 9 irrigated cultivation ® (5) (5) poached (10) (10) highly disturbed (9) 6 6 recently cultivated (11) Photo file name/s: (7)(7)water repellent 12 (12) 8 8 gravelly ① other 13 (9) (9 13 (13) Please do not mark this space.

SURVEY TITLE: RILXS, CREEK, BSAL

SON

cm		mm 0 10	20	30 40	50	60	70	80	90	100	110 1	20	130	140	150	160	170	180
1 -		LAYER S	STATUS	COLOU	IR (Mu	nsell,	1994)	Field pH		LA	YER NOT	ES		Fie			Method	
		Lower	Horizon	Moist Mu				(1 per layer)	1 ,	1 1	1 1 1		1 - 1				test	strip 3
2 —			2 (2) (1) (2) (3) (B) (F) (2) (meter (
	П		4003	3 73 Y P	25 2	7.5 Y		2.2							efferves	cence	DOC	
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4 –		7 7.7 7 8 8 8 8			77		(T) (T) (B) (B)	7·7 8·8										
		9999						9.9						ab	rupt (5-20	mm)	3 3	33
5 —		Lower	Horizon (2) (A) (D) (1)	Moist Mu			/lunsell	Field pH	2 ,		T T	1 1	F F				3 4 4 5 5 6	
			3 B F 2														5 6 6	
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٦		9999	Hariman	84-1-4 84v	man!!	Dent	A. man all	9·9 Field pH	2								1 2 3	
		Lower ①	Horizon ②	Moist Mu 2.5 R BG			Munsell BG 17 0	O·@	3				1 1			-		
9 —			3 (b) (F) (a)					D D • D					1 1		0	•	3 3 6	
		2 2 2 2 3 3 3	4 C O 3		2.5 (2) (3) (3) (3)		P 25 2 3 3	②·② ③·③				De	minant (oth-faced		4 4 4 Sub-dom	
10 —	3	4 4 4	AD B		4	GY	44	4.4				1	2 3 4	5	ou one		1 2 3	4 5
		(5) (5) (5) (6) (6) (6)	BC		5 5 6 6	G	(5) (5) (6) (6)	5 • 5					D (1) 2 (2) (2)		platy lenticula			
11 -							77						3 3 3		prismat		3333	
		8888			88		88	8.8			1 1 1		444		column		4 4 4	
12 —	H	9 9 9 9 Lower	Horizon	Moist Mu	insell	Dry I	Viunsell	9·9 Field pH					5 5 5 6 6		ingular blub-ang. b		5 5 5 6 6 6	
			2 A D D	1 25 B 6	(T) (D)	2.5 B	BG 17 0	0.0				7			polyhed	ral		
40			3 6 7 2 3 4 0 0 3					① ①·① ②·②					3 3 3 3 9 9 9 9 9		granula crumb	100	3 3 3 9 9 3	
13 —	l _a	3 3 3 3	AB P		33		33	The state of the s					10 (10 (10		round			
	4	4 4 4	AO B	GY	4	GY	44						ominant (Ped Si	ze	Sub-dom	
14 —		(5) (5) (5) (6) (6) (6)	(BC)	G	(5) (5) (6) (6)	G	(5) (5) (6) (6)			1 1			2 3 4 1 1 1	5	<2 mr	n	1 2 3	
		7 7.7			77		77	7.7				2	222	2	2-5 mr	n	222	222
15 —		8 8 8 8 9 9 9 9			88		88	3 •3					3 3 3 4 4 4		5-10 m		3 3 3 4 4 4	
	Н	Lower	Horizon	Moist Mu	ınsell	Dry	Munsell	Field pH		1 1	0.00		5 5 5		20-50 m		5 5 E	
16 —			2 A D D					0.0					6 6 6		50-100 r		666	
			(3) (B) (F) (20) (4) (C) (O) (3)								1 10 1		7 7 7 3 8 8		100-200 200-500		(T)	
17 —	5		AB P		33	10 N	33	3.3					999		> 500 m		999	
17 –	۲	4 4 4 4 5 5 5 5		G Y	4 4 5 5	GY G	4 4 5 5			-	SEGF	REG	ATIO	NS			ter State	
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18 —		7 7·7 7 8 8·8 8			77 88		(7) (7) (8) (8)						(1) (1) (2) (2) (2)				① ① ①	
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19 —	S	Upper	Depth (m)		e Taken	4 5		ARSE FRAC		4 5	manganife				THE RESERVE OF THE PERSON NAMED IN		444	D 4 4
	U	(D) (D) (D)	\bigcirc	disturbed 3							terrug ferromanganii		5 5 5 6 6 6				TURE per laye	r)
20 —	B	(C) (C) (C)	22.22	undisturbed 4	44	44	not ident	ified 2 2	220	22	or	ganic			Texture	Grade	1 2 3	3 4 5
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21 —	R	55.55	5555	Base of Obs	servatio	n (1)	as parent ma	terial 5 5	5 5	55	Amount (1 per	layer)	1 2 3	4 5	claye	y sand	333	3 3 3
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22 -	E	0000	9999		ck reach	ned 4					common (10-							
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25 —		2 3 4 5 1 1 1 1 1		2 3 4 5		,		2%) ② ② 0%) ③ ③					2 2 2 3 3 3					5 (15 (15) 6 (16) (16)
	(2	00000	red ②	2222			mon (10-2	0%) 4 4	44	44	cr	/stals	444	44	Sand F	raction	1 2 3	3 4 5
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20 —	(5	5555	brown 5	5555				0%) ⑦ ⑦										
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27 —)		7777 8888				mm) ① ① mm) ② ②			Size (1 per l		1 2 3 ① ① ①					222
	1	2 3 4 5	Contrast 1	2 3 4 5	coa	rse grav	vel (20-60 r	mm) 3 3	33	33	medium (2-6	mm)	222	22	medium	heavy	4 4 0	4 4 4
28 —					1			mm) 4 4			coarse (6-20 v coarse (20-6					heavy	55	5 5 6
		33333									ext coarse (>6							
29 —																		

SITE LOCATION: OPEN PADDOCK **PROFILE MAP DETAILS SURVEY DETAILS** Profile No. Map Sheet No. Eastings Northings Described By **Profile Date** Photo Taken (1) No. of Layers 000000 0000 profile (T O dan dun o o site (2 QQQQQQQQQQQQQQQQQQQQQQQQQ both profile & site @ 1 333333333333333333333 3 3 3 3 3 Mm 0 3 3 Nature of Exposure (2) 2 44444444444 4 May (Nov 4) @ auger (1 (33) 5555 6666 5555555555555 (5) (Jun (Dec) (5) (5) pit @ 4 (6) 6 6 batter 3 (5) O O 7 gully 4 (8) 88 core sample 5 99999999999999999 9 9 9 other 6 NSW SOIL Potential BSAL? (1) Site type (1) BIOPHYSICAL STRATEGIC AGRICULTURAL AND LAND checked (1 ves ① no @ detailed @ **INFORMATION** LAND SOIL DATA CARD exclusion 3 SYSTEM SOIL **VEGETATION** LANDFORM ELEMENT (1) TYPE Please MARK **Vegetation Community (1)** sink hole/doline (52 A.S.C alcove (43) cone (3) footslope 21 ox-bow (57) LIKE THIS ONLY: unknown (T backplain (31) crater (51) foredune 12 pan/playa 56 5 stream channel (46 0 rainforest 2 bank (25) cut face (28) gully 42 pediment 22 streambed 45 0 wet sclerophyll forest 3 bar 6 cut-over surface 39 hillcrest ① pit (60) summit surface (2) Use 2B pencil A dry sclerophyll forest 4 beach 26 hillslope @ dam (16) plain 30 swale (47) No pen or biro SO woodland grass u'storey 5 beach ridge (7) drainage depression 41 lagoon 54 prior stream (9) swamp 58 D Fully erase woodland shrub u'storey 6 bench (19) dune 11 lake 55 rock flat 34 talus 23 mistakes = tall shrubland (7 berm (29) embankment (14) landslide (20) rock platform 35 tidal creek 48 GG Make no 5 low shrubland ® blow-out 59 estuary 44 levee (8) scald (36) tidal flat (37 stray marks heath 9 channel bench 33 fan (27) lunette (13) scarp (18) tor 4 Numbers in () A SG grassland/herbland @ cirque (50) fill top (40) maar (53) scree (24) trench 49 show max. H swamp complex (11) cliff (5) flood-out 32 mound (15) scroll 10 entries allowed valley flat 38 littoral complex (12 B LITHOLOGY TOPOGRAPHY F no vegetation (13 E A M Growth Forms (4) Substrate (3) Site Morphology (1) Slope Percent N limestone tree (1 not identified T coarse-basic 45 0 L tree mallee (2) unconsolidated (2) tuff 24) fine-acidic 46 **D D D D** crest 2 shrub 3 gravel (3) breccia (25) fine-intermediate (47 22.2 hillock (3 W mallee shrub 4 sand 4 greywacke (26) fine-basic (48 (3)(3)(3)ridge 4 C heath shrub (5) (5) silt arkose (27) serpentine (49 4 4.4 upper slope 5 GSG chenonod shrub (6) gabbro midslope @ clay (6) dolomite (28) (50 (5) (5) (5) (A) hummock grass @ organic material 7 calcrete dolerite 29 (51 666 simple slope T BBB tussock grass @ alluvium (8) aeolianite (30) diorite (52 77.7 lower slope (8 00 sod grass 9 colluvium (9) chert (31) syenite (53 (B) (B) (B) open depression (9 00 sedge 10 lacustrine (10) iasper (32) granodiorite (54 9 .9 closed depression @ E E E rush (11 aeolian (11) metamorphic (33) adamellite (55 Slope Measurement Slope Morphology (1) (G) (G) forb (12) marine (12) aneiss (34) granite (56 Method (1) E E E fern/cycad (13 calcareous sand (13) schist/phyllite (35) (57 aplite inclinometer 3 waxing (1 (K) (K) (K) moss (14) fill (14) slate (36) quartz porphyry (58 Abney level 4 waning @ D D lichen (15 (15) mud hornfels (37) basalt (59 total station (5) maximal 3 M M liverwort (16 till (16) quartzite (38) andesite (60 RTK GPS © minimal 4 PPP vine (17) sedimentary Aspect (1) GHA areenstone (39) trachyte (61 LIDAR @ BB shale (18) amphibolite (40) (62 Microrelief Type (1) rhvolite LAND USE (1) **S S** siltstone/mudstone (19) marble (41) obsidian (63 N (T) (Z) national/state parks (T sandstone-quartz (20) scoria igneous (42) (64 normal gilgai ② NW NE W timber/scrub/unused @ sandstone-lithic (21) coarse-acidic (43) ash (65 crabhole gilgai 3 Œ ∞ logged native forest 3 conglomerate SE coarse-intermediate (44) agglomerate (66 linear gilgai 4 SW hardwood plantation 4 Y other lattice gilgai 5 (3) affinity softwood plantation (5) Identification Method (1) melonhole gilgai 6 **HYDROLOGY** with volun./native pasture (6) personal assessment (T other 9 improved pasture geology map @ Profile Drainage (1) Permeability (1) Depth (1) & Extent (1) cropping 3 ≤ 500 mm depth ① both assessment & map 3 very poorly drained very slowly permeable orchard/vineyard 9 Rock Outcrop % (1) poorly drained 2 slowly permeable 2 > 500 mm depth 2 vegetables/flowers 10 nil >20-30% (5 imperfectly drained (3) moderately permeable 3 < 50% area (T <2% ② >30-50% ⑥ urban (11 > 50% area @ mod well-drained (4) highly permeable 4 industrial (12 2-10% (3) >50% (7 well-drained (5) SITE FIELD NOTES quarry/mining 13 >10-20% 4 rapidly drained 6 other (14 **Surface Condition** SITE CONDITION Current (2) Wet (2) Dry (2) Site Disturbance(s) (2) cracked (2) Ground natural disturbance self-mulched 3 3 3 Cover % no effective disturbance (2) loose 4 4 4 limited clearing 3 (D) (D) soft (5) (5) (5) extensive clearing (49) (1) (1) 6 (6) firm 663 cleared, no cultivation (2) (2 hardset (7) 7 occasional cultivation 6 33 surface crust ® (8) 8 rainfed cultivation (7) 4 4 trampled (9) 9 irrigated cultivation ® 5 5 (10) poached (10) highly disturbed (9) 6 6 recently cultivated (11) Photo file name/s: 77 water repellent (12) (12) 8 8 gravelly ① other (13) (13) (9) (9 (13) Please do not mark this space. 4645

SURVEY TITLE: RILXS, CREEK, BSAL

NCS Pearson

cm		mm 0 10	20 30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
1 -		LAYER S	STATUS	COLOU	R (Mu	nsell,	1994)	Field pH		LA	YER NO	TES		Fie	eld pH	Test I	/lethod	(1)
		Lower	Horizon	Moist Mun				-	1		100					•	test s	strip ③
2 —																neter (
		22.22	40033	75 Y P	2.5	75 Y	P 25 2	2.2							efferveso	ence (DOC	
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	ı.	5 5 5	BC)		5 5	G	5	5.5									nctiven	
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	2	4444	AD (R)		3 4	GY	44	4.4									DOC	
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8 —		8888			88		88	8.8									5 6 5	
	H	① ① ① ①	Horizon	Moist Mur	rsell	Dry N	lunsell	9•9 Field pH	3								1 2 3 1 1 1	
9 _			2 A D D C	(B) (B) (B)	1.7 0	25 R	BG 17 0	0.0							e	arthy (2 2 3	22
9 —			3 B F 2 2 4 0 0 3 3				B 2 1 P 25 2	① ①·① ②·②			1 1					•	3 3 3 4 4 4	
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		00.00	2 A D D 1	25 B 66 C	1700	2.5 B	BG (1.7) (D)	@·@							polyhedr	Person	700	
13 —			3 B F 2 2 4 C O 3 3					① ①·① ②·②					(B)		granula crumb		3 3 3 9 9 9	
13 —	la	3 3 3	AB (P)	The second secon	333		33	3.3					10 10 10		round		10 10 11	
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14 —		5 5·5 5 6 6·6 6	(BC)		5 5	G	(5) (5) (6) (6)	(5)·(5) (6)·(6)				1	2 3 4		<2 mn	-	1 2 3	
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	H	Lower	Horizon	Moist Mu	nsell	Dry I	Viunsell	Field pH			1 1		555		20-50 m	1000	5 5 5	
16 —											1 1				50-100 n	CO CO O ACO	666	
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21 —	R	5 5 5	5555	Base of Obs	ervatio	n (1)	as parent mat	terial 5 5	5 5	5 5	Amount (1	oer layer)	1 2 3	4 5	clayey	sand	333	3 3
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20	I	(8) (8) (8)	888	equipme				rete ® ®					333				6 6	
22 —	E	AND DESCRIPTION OF THE PERSON NAMED IN	9999		ck reach	ed 4		one 9 9										
			MOTTLES Sub-					ixite 100 100 nells 110 111					5 5 5 6 6 6				(B) (B) (B) (G) (G) (G) (G) (G) (G) (G) (G) (G) (G	
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26 —		5555		5555				0%)			La Contraction							
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)	distinct 2 0	2 2 2 2 3 3 3 3				mm)										
29 —																		,

OPEN PADDOCK SITE LOCATION: PROFILE MAP DETAILS **SURVEY DETAILS** Profile No. Map Sheet No. Eastings Northings Described By **Profile Date** Photo Taken (1) No. of Layers 0000 0000 0000000 O Jan Jul O O profile (T site (2 QQQQ@QQQ@QQQ@QQQQQQQQQ<mark>@Q</mark>@@@@ both profile & site 1 3 3 3 3 6 An 0 3 3 Nature of Exposure (2) (2) 444444444444 4 May Nov 4 @ (138) 5555555555555555 5555 (5) (Jun (Dec) (5) (5) pit @ 4 6666 (6) 66 batter 3 (5) DO 7 gully 4 88888888888888888888888 888 (8) 88 core sample (5) 9999999999999 9 9 9 other 6 NSW SOIL Potential BSAL? (1) Site type (1) BIOPHYSICAL STRATEGIC AGRICULTURAL AND LAND checked (T ves (1) detailed @ no 🗪 LAND SOIL DATA CARD **INFORMATION** exclusion 3 **SYSTEM** SOIL **LANDFORM ELEMENT (1) VEGETATION** TYPE Please MARK **Vegetation Community (1)** A.S.C alcove (43) footslope 21 ox-bow (57) sink hole/doline 52 LIKE THIS ONLY: pan/playa 56 unknown (1 backplain (31) crater (51) foredune 12 D stream channel (46 0 rainforest 2 bank 25 cut face (28) gully 42 pediment 22 streambed (45 E wet sclerophyll forest 3 bar 6 cut-over surface 39 hillcrest ① nit (60) summit surface (2) Use 2B pencil A dry sclerophyll forest 4 beach (26) dam (16) hillslope (17) plain (30) swale 47 SO No pen or biro woodland grass u'storey 5 beach ridge (7) B drainage depression (41) lagoon 54 prior stream (9) swamp (58 **Fully erase** woodland shrub u'storey 6 bench (19) dune 11 lake 55 rock flat (34) talus 23 A mistakes tall shrubland (7 berm (29) embankment (14) landslide (20) rock platform 35 tidal creek 48 GG Make no H low shrubland ® blow-out 59 estuary (44) levee (8) scald (36) tidal flat (37 strav marks heath 9 channel bench (33) fan (27) lunette (13) scarp (18) tor 4 Numbers in () C SG grassland/herbland @ cirque (50) fill top (40) maar (53) scree (24) trench 49 show max. D swamp complex (11) cliff (5) flood-out 32 mound (15) scroll 10 entries allowed valley flat 38 B littoral complex (12 F LITHOLOGY **TOPOGRAPHY** no vegetation (13 E A Substrate (3) Growth Forms (4) Site Morphology (1) **Slope Percent** L tree (T not identified limestone coarse-basic (45 0 0 . L N tree mallee 2 unconsolidated (2) tuff 24) fine-acidic 46 **D D D D** crest 2 shrub 3 grave (3) breccia (25) fine-intermediate 47 (2) (2) (2) hillock (3 mallee shrub 4 sand 4 greywacke (26) fine-basic (48 (3) (3) (3) ridge 4 C heath shrub (5 silt (5) arkose (27) serpentine (49 4 4.4 upper slope 5 GSG chenonod shrub (6) clav 6 dolomite (28) gabbro (50 (5) (5) (5) midslope 6 hummock grass @ organic material calcrete dolerite 7 29 (51 6 6 6 simple slope T BBB tussock grass @ alluvium (8) aeolianite (30) (52 diorite 7 9.7 lower slope @ 00 sod grass 9 colluvium 9 chert (31) (53 svenite (8) (8) (8) open depression 9 00 sedge (10 granodiorite lacustrine iasper (32) (54 99.9 closed depression (10 E E E rush (11 aeolian (11) metamorphic (33) adamellite (55 **Slope Measurement** Slope Morphology (1) (G) (G) forb (12) marine (12) aneiss (34) granite (56 Method (1) E E E fern/cycad (13 calcareous sand (13) schist/phyllite (35) (57 aplite inclinometer 3 waxing @ moss (14) fill (14) slate (36) (58 Abney level 4 quartz porphyry waning @ O O lichen (15 mud (15) hornfels (37) basalt (59 total station (5) maximal 3 M M liverwort (16 till (16) quartzite (38) andesite (60 RTK GPS © minimal 4 PPP vine 17 sedimentary (3) areenstone (39) trachyte (61 LIDAR @ Aspect (1) BB shale (18) amphibolite (40) (62 Microrelief Type (1) rhvolite LAND USE (1) (S) (S) (S siltstone/mudstone (19) marble (41) obsidian (63 N \mathbb{C} national/state parks (1 sandstone-quartz (20) igneous (42) scoria (64 normal gilgai ② NW NE W coarse-acidic crabhole gilgai 3 timber/scrub/unused (2) sandstone-lithic (21) (43) ash (65 E ∞ logged native forest 3 conglomerate coarse-intermediate (44) agglomerate (66 linear gilgai 4 SW SE hardwood plantation 4 Y (67 other lattice gilgai 3 (5) affinity softwood plantation 5 Identification Method (1) melonhole gilgai 6 **HYDROLOGY** with volun./native pasture (6) personal assessment (1 other 9 improved pasture geology map Profile Drainage (1) Permeability (1) Depth (1) & Extent (1) cropping ® both assessment & map 3 very poorly drained very slowly permeable ≤ 500 mm depth ① > 500 mm depth 2 orchard/vineyard 9 Rock Outcrop % (1) poorly drained 2 slowly permeable vegetables/flowers 10 nil >20-30% (5 imperfectly drained (3) moderately permeable 3 < 50% area (T <2% ② >30-50% ⑥ urban (11 > 50% area @ mod well-drained 4 highly permeable 4 industrial (12 2-10% ③ >50% (7 well-drained @ SITE FIELD NOTES quarry/mining (13) >10-20% 4 rapidly drained 6 other (14 **Surface Condition** SITE CONDITION Current (2) Wet (2) Dry (2) Site Disturbance(s) (2) cracked (2) Ground natural disturbance (1) self-mulched 3 3 3 Cover % no effective disturbance (2) loose 4 4 4 limited clearing 3 soft 5 (5) (5) extensive clearing (4) (1) (1) 6 6 firm (6) cleared, no cultivation @ 2 2 hardset (7) 7 occasional cultivation 6 33 surface crust ® (8) 8 rainfed cultivation @ 4 4 trampled 9 9 irrigated cultivation (8) 5 5 poached (10) (10) highly disturbed (9) 6 6 recently cultivated 1 Photo file name/s: 777 water repellent (12) (12) 88 gravelly ① 9 9 other (13) (13) (13) Please do not mark this space. 4646

SURVEY TITLE: RILXS, CREEK, BSAL

17814 NCS Pearson

cm	- 1	mm 0	1	0	20	30	40	50	60	70	80	90		100	110 12	0 130	140	150	160	170	180
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		77	77					77		$\mathcal{O}\mathcal{O}$	7.7						7	moderate ped			
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28 —									cobbles	(60-200 r (200-600 r	mm) 4 4 mm) 5 3	1) (4 1) (5	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	4 4 5 5	coarse (6-20 v coarse (20-60	mm) 3 3 0			eavy 5) (5) (5)	55
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29 —																					

OPEN PADDOCK SITE LOCATION: PROFILE MAP DETAILS **SURVEY DETAILS** Profile No. Map Sheet No. Eastings **Northings Described By Profile Date** Photo Taken (1) No. of Layers 0000 O Jan Jul O O profile (1 site 2 QQQQ@QQQQQQQQQQQQ**@**Q@@@@@ both profile & site 1 3333333333333333333333 (2) 444444444444444 444 4 May Moy 4 @ (FEE 5555 (5) Jun (0e) (5) (5) nit @ 4 6666 (450) 6 6 batter 3 (5) 7 T T gully 4 88888888888888888888888 8888 88 core sample (5) 9999999999999999999 (9) 9 9 other (6 NSW SOIL Potential BSAL? (1) Site type (1) BIOPHYSICAL STRATEGIC AGRICULTURAL AND LAND yes ① no 🚳 detailed @ LAND SOIL DATA CARD **INFORMATION** exclusion 3 **SYSTEM** SOIL LANDFORM ELEMENT (1) **VEGETATION** TYPE **Vegetation Community (1)** A.S.C alcove 43 Please MARK cone (3) footslope (21) ox-bow (57) sink hole/doline (52 LIKE THIS ONLY: backplain (31) unknown (T crater (51) foredune (12) pan/playa 56 stream channel (46) 0 rainforest (2 bank (25) cut face (28) aully (42) pediment 22 streambed (45) H wet sclerophyll forest 3 bar 6 cut-over surface 39 hillcrest ① pit (60) summit surface (2) Use 2B pencil A dry sclerophyll forest 4 beach (26) dam (16) hillslope @ plain (30) swale (47) SO No pen or biro woodland grass u'storey 5 beach ridge (7) drainage depression (41) B lagoon 54 prior stream (9) swamp (58) **Fully erase** woodland shrub u'storey 6 bench (19) dune (11) lake 55 rock flat 34 talus 23 A mistakes tall shrubland (7 berm (29) landslide @ embankment (14) rock platform 35 GG tidal creek (48) Make no H low shrubland (8) blow-out 59 estuary 44 levee (8) scald (36) tidal flat (37 stray marks heath 9 channel bench 33 fan (27) Numbers in () lunette (13) scarp (18) tor 4 C SG grassland/herbland @ cirque (50) fill top (40) maar (53) scree (24) trench (49 show max. D swamp complex (11) cliff (5) flood-out 32 mound (15) scroll 10 entries allowed valley flat 38 B littoral complex (12 LITHOLOGY **TOPOGRAPHY** FAMI no vegetation (13 E Growth Forms (4) Substrate (3) Slope Percent Site Morphology (1) N tree (1 not identified limestone coarse-basic (45 flat (1 tree mallee 2 Y 0 unconsolidated (2) tuff (24) fine-acidic 46 (T) (T) (T) crest (2 shrub (3 3 (25) gravel breccia fine-intermediate (47 (2) (2) (2) hillock (3 V mallee shrub 4 greywacke sand 4 (26) fine-basic (48 (3) (3) (3) ridge 4 Ċ heath shrub (5 silt (5) arkose (27) serpentine (49 (4) upper slope 5 G.S.G. chenopod shrub 6 clay (6) gabbro dolomite (28) (50 (5) (5) (5) midslope @ A hummock grass @ organic material (7) calcrete dolerite (29) (51 666 simple slope (7 BBB tussock grass @ alluvium (8) aeolianite (30) diorite (52 77.7 lower slope ® 00 sod grass 9 colluvium (9) chert 31) svenite (53 (8) (8) open depression (9 00 sedge 10 lacustrine (10) (32) iasper granodiorite (54 99.9 closed depression (10) D D E rush (11 aeolian (11) metamorphic (33) adamellite (55 **Slope Measurement** Slope Morphology (1) തതര forb (12 marine (12) aneiss (34) granite (56 Method (1) E CE fern/cycad 13 calcareous sand (13) schist/phyllite (57 aplite inclinometer 3 waxing @ (B) (B) (B) moss (14) (14) slate (36) quartz porphyry (58 Abnev level 4 waning 2 (D) lichen 15 (15) mud hornfels (37) basalt (59 total station (5) maximal 3 liverwort (16) (16) till quartzite (38) andesite (60 RTK GPS © minimal 4 PPP vine (17 sedimentary (A-76) greenstone (39) trachyte (61 LIDAR Aspect (1) BB shale (18) amphibolite 40 (62 Microrelief Type (1) rhvolite LAND USE (1) S S S siltstone/mudstone marble 41) obsidian (63 N national/state parks I sandstone-quartz (20) (42) igneous scoria (64 normal gilgai ② NW NE W timber/scrub/unused (2) sandstone-lithic (21) coarse-acidic (43) ash (65) crabhole gilgai 3 E X logged native forest 3 conglomerate coarse-intermediate 44 (22) agglomerate (66 linear gilgai 4 SW SE hardwood plantation 4 other 67 lattice gilgai 5 (\$) softwood plantation (5) affinity Identification Method (1) melonhole gilgai 6 **HYDROLOGY** with C volun./native pasture 6 personal assessment (T other 9 geology map @ improved pasture Profile Drainage (1) Permeability (1) Depth (1) & Extent (1) cropping ® both assessment & map 3 ≤ 500 mm depth ☐ very poorly drained very slowly permeable orchard/vineyard 9 Rock Outcrop % (1) poorly drained @ slowly permeable > 500 mm depth (2) vegetables/flowers @ nil >20-30% 5 moderately permeable 3 imperfectly drained (3) < 50% area CT urban 11 <2% ② >30-50% ⑥ mod, well-drained (4) highly permeable 4 > 50% area @ industrial (12) 2-10% (3) >50% (7 well-drained 55 SITE FIELD NOTES quarry/mining 133 >10-20% (4) rapidly drained 6 other 14 **Surface Condition** SITE CONDITION Current (2) Wet (2) Dry (2) Site Disturbance(s) (2) cracked (2) Ground natural disturbance (1) self-mulched 3 3 3 Cover % no effective disturbance 2 loose 4 4 4 limited clearing 3 soft 5 (5) (5) firm @ 6 (6) cleared, no cultivation hardset (7) (2) (2 (7) occasional cultivation 6 (3) (3) surface crust ® (8) 8 rainfed cultivation (7) 44 trampled (9) 9 irrigated cultivation ® (5) (5 poached 10 (10) highly disturbed 9 6 6 recently cultivated (11) Photo file name/s: (12) (7)(7)water repellent (12) 88 gravelly ① other (13) (13) (13) Please do not mark this space.

SURVEY TITLE: RILX, S. C.R.E.E.K. B.S.A.L.

17814 NCS P

LAYER NATE PRIOR Michigan	cm		mm 0 10	20	30	40	50	60	70	80	9	0 100		110 1	20	130	140	150	160	170	180
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22 2 2 2 red 2 2 2 2 2 common (10-20%) 4 4 4 4 4 4 crystals 4 4 4 4 4 5 crystals 4 4 4 4 4 5 crystals 4 4 4 4 4 5 crystals 4 4 4 4 4 4 4 5 crystals 4 4 4 4 4 4 4 5 crystals 4 4 4 4 4 4 4 5 crystals 4 4 4 4 4 4 4 4 5 crystals 4 4 4 4 4 4 4 4 5 crystals 4 4 4 4 4 4 4 4 4 5 crystals 4 4 4 4 4 4 4 4 5 crystals 4 4 4 4 4 4 4 4 4 5 crystals 4 4 4 4 4 4 4 4 5 crystals 4 4 4 4 4 4 4 4 5 crystals 4 4 4 4 4 4 4 4 4 4 4 5 crystals 4 4 4 4 4 4 4 4 4 4 4 5 crystals 4 4 4 4 4 4 4 4 4 4 4 4 4 4 5 crystals 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	25 —						-	١													
26— 4 4 4 4 4 yellow brown 5 5 5 5 5 very abundant (50-90%) 6 5 6 6 5 6 concretions 6 6 6 6 6 fine 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		(2	00000	red	22	0000			mon (10-2	0%) 4	4) (444	4		ystals	444	4	4 Sand F	raction	1 2	3 4 5
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8 8 8 8 9 gley 8 8 8 8 9 gravel (6-20 mm) 2 2 2 2 2 2 fine (<2 mm) 1 1 1 medium 3 3 3 3 3 medium (2-6 mm) 2 2 2 2 2 2 medium heavy 4 4 4 4 4 4 coarse (6-20 mm) 3 3 3 3 3 3 medium (2-6 mm) 2 2 2 2 2 2 medium heavy 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	27 -																				
28 — ①①①①① faint ①①①①① cobbles (60-200 mm) ④ ④ ④ ④ ④ ④ coarse (6-20 mm) ③ ③ ③ ③ ③ heavy ⑤ ⑥ ⑤ ⑤ ⑤ ② ② ② ② ② ② ② ② ② ② ② ② ② ② ②		3		gley	88	0 8 8 8		gra	avel (6-20 r	mm) ② (2)	222	2	fine (<	2 mm)	DOO	000	D r	nedium	33	333
20222 distinct 22222 stones (200-600 mm) 5 5 5 5 5 v coarse (20-60 mm) 4 4 4 4 4 3 3 3 3 3 3 prominent 3 3 3 3 3 boulders (>600 mm) 6 6 6 6 ext coarse (>60 mm) 5 5 5 5	28			faint	DO																
	20 -							stones	(200-600 r	mm) (5) (5)	5 5 5	<u>5</u> v	coarse (20-6	0 mm	444	4	4			
	20	<u></u>	ی رق رق رق رق	o prominent	ق بعا	ر في رفي رفي		bould	010 (2000 [1111)	س (ا ته ته ته	9 ري	AL COMISE (>C	N IIIII	ع رق رق رق) رق ر	الع			

OPEN PADDOCK SITE LOCATION: **PROFILE MAP DETAILS SURVEY DETAILS** Profile No. Map Sheet No. Eastings **Northings** Described By **Profile Date** Photo Taken (1) No. of Layer 000000 00000profile (T site (2 0 both profile & site @ 1 3333333333333333333 2 4 May Nov 4 @ (3) auger 1 555555555555555 5,555 (5) Jun Oeo (5) (5) nit @ (40) 6666 (6) 6 6 batter 3 (5) (7) (7)(7)gully 4 3333 88 (8) core sample 5 **9999999999999999**9 other 6 Potential BSAL? (1) Site type (1) BIOPHYSICAL STRATEGIC AGRICULTURAL checked ① AND LAND yes ① detailed @ no 🝩 LAND SOIL DATA CARD **INFORMATION** exclusion (3) **SYSTEM** SOIL LANDFORM ELEMENT (1) **VEGETATION** TYPE **Vegetation Community (1)** Please MARK A.S.C alcove 43 cone (3) footslope 21 ox-bow (57) sink hole/doline (52) LIKE THIS ONLY: backplain (31) unknown (T crater (51) foredune (12) pan/playa 56 stream channel 46 5 0 rainforest (2) hank (25) cut face (28) gully 42 pediment (22) streambed (45) 0 wet sclerophyll forest 3 bar 6 hillcrest ① cut-over surface (39) pit 60 summit surface (2) Use 2B pencil A dry sclerophyll forest 4 beach (26) dam 16 hillslope @ plain (30) swale (47) No pen or biro SO voodland grass u'storey 5 beach ridge ① drainage depression (41) lagoon 54 B prior stream (9) swamp 58 Fully erase woodland shrub u'storey 6 bench (19) dune (11) lake (55) rock flat (34) talus 23 mistakes E tall shrubland (7) berm (29) embankment (14) landslide 20 rock platform (35) tidal creek 48 GG Make no S low shrubland (8) blow-out 59 estuary 44 levee ® scald 36 tidal flat (37 stray marks heath 9 channel bench 33 fan 27 lunette (13) tor (4) Numbers in () A scarp (18) SG grassland/herbland @ cirque (50) fill top (40) maar (53) scree (24) trench 49 show max. H swamp complex (11) cliff (5) flood-out (32) mound (15) scroll (10) valley flat 38 entries allowed C littoral complex (12 LITHOLOGY **TOPOGRAPHY** no vegetation (13 E A M I **Growth Forms (4)** Substrate (3) Site Morphology (1) Slope Percent N not identified tree @ limestone coarse-basic (45 00.00 tree mallee ② 0 unconsolidated (2) triff (24) fine-acidic (46 crest 2 shrub (3) gravel (3) breccia 25) fine-intermediate (47 22.2 hillock 3 W mallee shrub 4 4 sand greywacke fine-basic (48 (3) (3) (3) ridge 4 C heath shrub (5 silt (5) arkose (27) (49 serpentine (4) (4) (4) upper slope 5 G.S.G. chenopod shrub 6 6 clay dolomite (28) gabbro (50 (5) (3) (5) midslope 6 (A) hummock grass @ organic material (7) calcrete (29) dolerite **(51)** simple slope T 666 BBB tussock grass @ alluvium 8 aeolianite 30 diorite (52 777 lower slope @ 00 sod grass (9) colluvium 9 chert (31) syenite (53 8 8 8 open depression (9) 00 sedge 10 10 lacustrine (32) granodiorite (54 iasper 99.9 closed depression 10 ® ® ® rush (11) aeolian (11) metamorphic (33) adamellite (55 Slope Measurement Slope Morphology (1) തതര forb (12) marine (12) (34) (56 gneiss granite Method (1) ED CED CED fern/cycad (13 13 calcareous sand schist/phyllite 35) aplite (57 inclinometer waxing (1 (K) (K) moss (14 (14) slate (36) quartz porphyry (58 Abnev level 4 waning @ O O lichen (15 (15) mud hornfels (37) basalt (59 total station (5) maximal (3) liverwort (16) (16) (60 RTK GPS 6 till quartzite (38) andesite minimal 4 PPP vine (17 sedimentary (H-72) greenstone (39) trachyte (61 LIDAR @ Aspect (1) BB (18) amphibolite shale 40 rhyolite 62 Microrelief Type (1) LAND USE (1) S S S siltstone/mudstone 19 marble (41) obsidian (63 N CD CD national/state parks (1 sandstone-quartz 20 normal gilgai 2 ianeous (42) scoria (64 NW NE W timber/scrub/unused (2) sandstone-lithic (21) coarse-acidic (43) ash (65 crabhole gilgai 3 W E X logged native forest 3 conglomerate (22) coarse-intermediate (44) agglomerate (66 linear gilgai 4 SW SE hardwood plantation 4 other lattice gilgai 5 (5) softwood plantation (5) affinity Identification Method (1) melonhole gilgai 6 **HYDROLOGY** with C volun./native pasture 6 personal assessment (1 other (9) improved pasture geology map Profile Drainage (1) Permeability (1) Depth (1) & Extent (1) cropping ® both assessment & map 3 very poorly drained ① very slowly permeable ≤ 500 mm depth ① orchard/vineyard 9 slowly permeable Rock Outcrop % (1) poorly drained (2) > 500 mm depth ② nil >20-30% 5 vegetables/flowers (10 imperfectly drained 3 moderately permeable 3 ≤ 50% area ① urban II <2% ② >30-50% ⑥ mod, well-drained highly permeable 4 50% area (2 industrial (12 2-10% (3) >50% (7) well-drained (5) SITE FIELD NOTES quarry/mining 13 >10-20% 4 rapidly drained 6 other 14 **Surface Condition** SITE CONDITION Current (2) Wet (2) Dry (2) Site Disturbance(s) (2) cracked (2) (2) Ground natural disturbance (1 self-mulched 3 3 (3) Cover % no effective disturbance 2 4 4 loose 4 limited clearing 3 **(1)** soft 5 (5) (5) extensive clearing (1) (1) (6) 6 firm @ cleared, no cultivation 659 hardset (7) (7) (2) (2 occasional cultivation 6 (3) (3) surface crust ® (8) (8) rainfed cultivation (7 44 trampled 9 9 irrigated cultivation ® (5) (5) poached (10) highly disturbed (9) 6 6 recently cultivated 1 Photo file name/s: (12) (7)(7)water repellent (12) 88 gravelly ① (13) Please do not mark this space.

SURVEY TITLE: RILXS CREEK BSAL

NCS Pearson

cm		mm 0 10	20 3	0 40	50	60	70	80	90 10	110	0 120	130	140	150 160	170	180
1 -		LAYERS	STATUS	COLOU	JR (Mu	ınsell	1994)	Field pH	BE SHOW	LAYER	NOTES		Fie	eld pH Test	Method	(1)
		Lower	Horizon	Moist Mu				(1 per layer)	1					Raupach		strip ③
2 —			2 6 D 6 C										United St	pH meter		
		2222	4003	D 75 Y P	2.5	7.5 Y	P 25 2	2.2						effervescence	DOO	
3 —	11	3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4	AB P		(4) (4)	(N) (GY)	(3) (3) (4) (4)	3·3 4·4						le/slight efferv. effervescence		
	ľ	5 5 5	B O		5 5	G	5	5.5						undary Dis		
4 —		6 6 6			66		66	60.6				1 1 1		(1 per layer) not evident		
		7 7·7 7 8 8·8 8			(T) (T) (B) (B)		(7) (7) (8) (8)	7·7 8·8						sharp (<5 mm)		
		9999						9.9						rupt (5-20 mm)		
5 —		Lower (1)	Horizon ②	Moist Mu			Munsell BG (1-7) (0)	Field pH	2	1				ear (20-50 mm) al (50-100 mm)		
		D D.D	3 6 F 6	D (5) (8) (B)	20	5 @	B 21	D • D						use (>100 mm)	666	
6 —		2 2 2 2 3 3 3 3	4 © 0 3 C		25 2 3 3		P 25 2 3 65	2·2 3·3			1 1		Grade	STRUC of Pedality (1)		4 5
	2	4444	AD (R)		4	GY	44	4.4						single-grained		
7 —		5 5 5 5 6 6 6 6	(BC)		(5) (5) (6) (6)	G	(5) (5) (6) (6)	5·5 6·6						massive weak pedality	222	
					77			3. 7					mo	derate pedality		
8 —		8888			33		88	8.8		To be				strong pedality		
	Н	① ① ① ①	Horizon	Moist Mu	ınsell	Dry I	Viunsell	9·9 Field pH	3						1 2 3	
9 _		@ O O @	2 A D D C	D 25 B BG	170	2.5 R	BG (17) (0)	0.0						earthy	2 2	022
9 —			3				B 2 1	① ①·① ②·②					1	igh-faced peds oth-faced peds		
	3	3 3 3	AB (P)		33		33	3.3				Dominant (Ped Shape	Sub-dom	
10 —	10	4 4 4	AC R			GY	4 4	4.4				1 2 3 4	5	plate	1 2 3	
		5 5 5 5 6 6 6 6	BO		(5) (5) (6) (6)	G	6 6	5.5 6.6					100	platy lenticular	222	
11 —		7 7.7			7		$\mathcal{D}\mathcal{D}$	7.7				3 3 3 3		prismatic	333	
		8 8 8 9 9 9 9			88		3 3	9.9				4 4 4 4 5 5 5 5		columnar ngular blocky	4 4 4 5 5 5	
12 —		Lower	Horizon	Moist Mu			Munsell	Field pH	4			6 6 6	6 su	ub-ang. blocky	666	0 6
			2 A D D C C C C C C C C C C C C C C C C C									7 7 7 7 3 3 3 3		polyhedral granular	777	
13 —			4003					2.2				9999		crumb	999	
	1	3 3 3	AB P		33		33	3.3				10 (10 (10		round	10 10 1	
14 —	Ι.	4 4·4 4 5 5·5 5	AD (R)		4 4 5 5	GY G	4 4 5 5	4 • 4 5 • 5			-	Dominant (5	Ped Size	Sub-dom	
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		7 7·7 7 8 8·8 8			77		(7) (7) (8) (8)	7·7 8·8				2 2 2 2 3 3 3 3		2-5 mm 5-10 mm	222	
15 —		9999						9.9				4444	4	10-20 mm	444	DAA
		Lower	Horizon ② A D 1	Moist Mu			Munsell	Field pH				5 5 5 5 6 6 6 6		20-50 mm 50-100 mm	5 5 5 6 6 6	
16 —	l		3 8 6 2											100-200 mm	000	
			40030											200-500 mm	3 3 3	
17 —	5	4 4·4 4		(T) (N) (CY)	44		3 3 4 4				VOLUMENT COMMENTS			> 500 mm	(ater State	THE RESERVE OF THE PERSON NAMED IN
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18 —	ı	6 6 6 6 7 7 7 7	Children and the Control of the Cont				6 6 7 7			Туре		er) 1 2 3 ent 🗐 🗊 🗇		dry	1 2 3	
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19 —	-	9 9 9 9 Upper	Rooting Depth (m)	Sample	e Taken		CO	9.9		m	0,1	us 3 3 3 us 4 4 6				
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20 —	B		① ① ① ① ② ② ② ②	disturbed ③							-	us 6 6 6		(1 eac	h per laye	
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22 —	E		9999		nent refu ock reach				(B)			%) 3 3 6 %) 4 4 4		sandy clay loan		
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	2	2222	<2% ②	2222			pun	nice 13 13	13 13 13	13	we	ak ① ① @		sandy clay	TO COLOR	
24 —		3 3 3 3 4 4 4 4		3 3 3 3 4 4 4 4					14 14 14 18 18 18			ng ② ② ② ② ② er) 1 2 3			1 12 12 1	
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	3	3333	orange 3	3 3 3 3		r	many (20-50	0%) 5 5	555	5	vei	ns 5 5 5	5 5	coarse	(D)	DOD
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27 —			0 ,									er) 1 2 3				
	1	2 3 4 5		8 8 8 8 2 3 4 5					0222			m) ① ① ① ④ m) ② ② ②		medium medium heavy	3 3 3 G	
28 —			faint ①			cobble	s (60-200 r	nm) 4 4	444	Coar	rse (6-20 m	m) 3333	3 3	heav	(5) (6) (8)	
)	distinct 2 (2 2 2 2 3 3 3 3								m) 4 4 4 m) 5 5 5				
29 —									Andrew or Description		- Committee of the Comm	THE RESERVE OF THE PARTY OF THE				

OPEN PADDOCK SITE LOCATION: **PROFILE MAP DETAILS** SURVEY DETAILS Profile No. Map Sheet No. Eastings Northings Described By **Profile Date** Photo Taken (1) No. of Layer 0000 0000 O Jan Jul O O (1) (1) (Feb) (Aun) (3) (1) site (2 both profile & site 1 3 3 3 3 3 6 0 0 3 3 Nature of Exposure (2) 2 4444444444 4 May (Toy 4) auger (1 (B) 55555555555555555 5555 (5) Jun Oec (5) (5) pit @ 4 6666666666666666666 6666 (6) 66 batter 3 (5) OOOOOOOOOOOOOOOOO 7 TT gully 4 8888888888888 8888 (8) 88 core sample 5 99999999999999999 (9) 9 9 other 6 **NSW SOIL** Potential BSAL? (1) Site type (1) BIOPHYSICAL STRATEGIC AGRICULTURAL AND LAND checked @ detailed 2 yes 📻 no (2) LAND SOIL DATA CARD **INFORMATION** exclusion (3 **SYSTEM** SOIL **VEGETATION LANDFORM ELEMENT (1)** TYPE Please MARK sink hole/doline 52 A.S.C **Vegetation Community (1)** alcove (43) footslope (21) ox-bow (57) LIKE THIS ONLY: pan/playa 56 unknown (1 backplain (31) crater (51) foredune 12 stream channel (46) C 0 rainforest 2 bank 25 cut face (28) gully 42 pediment (22) streambed 45 H wet sclerophyll forest 3 bar 6 cut-over surface 39 hillcrest ① nit (60) summit surface (2) Use 2B pencil A dry sclerophyll forest 4 beach (26) hillslope @ dam (16) plain (30) swale (47) No pen or biro SO woodland grass u'storey 5 beach ridge ① B drainage depression 41 lagoon 54 prior stream (9) swamp 58 **Fully erase** woodland shrub u'storey 6 bench (19) dune 11 lake 55 rock flat 34 talus 23 mistakes tall shrubland (7 berm (29) embankment (14) landslide (20) rock platform 35 tidal creek 48 GG Make no low shrubland ® blow-out 59 estuary 44 levee (8) scald (36) tidal flat (37 stray marks heath 9 channel bench (33) fan (27) lunette (13) scarp (18) tor (4) Numbers in () SG grassland/herbland @0 cirque (50) fill top 40 maar (53) scree 24 trench 49 show max. swamp complex 11 cliff (5) flood-out 32 mound (15) scroll 10 entries allowed valley flat 38 littoral complex (12 F LITHOLOGY **TOPOGRAPHY** no vegetation (13) A M **Growth Forms (4)** Substrate (3) Site Morphology (1) **Slope Percent** tree (1 not identified limestone coarse-basic 0 0 . flat I tree mallee ② unconsolidated 2 tuff 24) fine-acidic 46 **D D D D** crest 2 shrub 3 gravel 3 breccia (25) fine-intermediate 47 22.2 hillock (3) mallee shrub 4 sand 4 greywacke (26) fine-basic (48 (3)(3)(3)ridge 4 C heath shrub (5) (5) silt arkose (27) sementine (49 (4) (4) (4) upper slope 5 GSG chenopod shrub (6) 5 5.5 midslope @ clay 6 dolomite (28) gabbro (50 (A) hummock grass @ organic material 7 calcrete dolerite 29 (51 666 simple slope 7 BBB tussock grass @ alluvium (8) aeolianite (30) diorite (52 77.7 lower slope (8) 00 sod grass 9 colluvium 9 chert (31) (53 svenite (8) (8) open depression (9) 00 sedge (10 granodiorite (10) lacustrine iasper (32) (54 99.9 closed depression (10 E E E rush (11 aeolian (11) metamorphic (33) adamellite (55 Slope Measurement Slope Morphology (1) തതര forb (12) marine (12) (34) granite (56 Method (1) E E E fern/cvcad (13 calcareous sand (13) schist/phyllite (35) aplite (57 inclinometer 3 waxing @ moss (14) fill (14) slate (36) (58 Abney level 4 quartz porphyry waning (2) DD lichen (15 mud (15) hornfels (37) basalt (59 total station (5) maximal 3 M M liverwort (16 quartzite till (16) (38) andesite (60 RTK GPS 6 minimal 4 P P P vine (17 sedimentary Aspect (1) 1 areenstone (39) trachyte (61 LIDAR @ Microrelief Type (1) BB shale (18) amphibolite (40) (62 rhvolite LAND USE (1) **S S** siltstone/mudstone (19) marble **(41)** obsidian (63 N none @ T C national/state parks (1 normal gilgai ② sandstone-quartz (20) igneous (42) scoria (64 NW (NE) W timber/scrub/unused (2) sandstone-lithic (21) coarse-acidic (43) ash (65 crabhole gilgai 3 W Œ \propto logged native forest 3 conglomerate coarse-intermediate 44 SE (22) agglomerate (66 linear gilgai 4 SW hardwood plantation (4) other lattice gilgai 5 S affinity softwood plantation 5 Identification Method (1) melonhole gilgai 6 **HYDROLOGY** with C volun./native pasture (6) personal assessment (T other 9 improved pasture @ geology map Profile Drainage (1) Permeability (1) Depth (1) & Extent (1) cropping ® both assessment & map ③ very poorly drained very slowly permeable ≤ 500 mm depth ① orchard/vineyard 9 poorly drained ② slowly permeable @ > 500 mm depth (2) Rock Outcrop % (1) vegetables/flowers 10 nil >20-30% 5 imperfectly drained (3) moderately permeable 3 < 50% area (T) <2% ② >30-50% ⑥ urban (11 mod. well-drained (4) > 50% area (2) highly permeable 4 industrial (12 2-10% (3) >50% (7) well-drained 5 SITE FIELD NOTES quarry/mining (13) >10-20% 4 rapidly drained 6 other (14 **Surface Condition** SITE CONDITION Current (2) Wet (2) Dry (2) Site Disturbance(s) (2) cracked (2) Ground natural disturbance T self-mulched 3 3 3 Cover % no effective disturbance (2) loose 4 4 4 limited clearing 3 soft 5 (0) (0) (5) (5) extensive clearing (1) (1) 6 6 firm @ cleared, no cultivation (2) (2 hardset (7) 7 occasional cultivation 6 33 surface crust ® (8) 8 rainfed cultivation (7 44 trampled 9 9 irrigated cultivation ® 5 5 poached 10 (10) highly disturbed (9) 6 6 recently cultivated 11 Photo file name/s: 777 water repellent (12) (12) 88 gravelly ① other (13) (13) (13) Please do not mark this space.

SURVEY TITLE: RIXS CREEK, BSAL

NCS Pearson

cm		mm 0 10	20	30	40	50	60	70	80	90	100	110 1	20	130	140	150	160	170	180
1 -		LAYER	STATUS		COLO	JR (M	unsell	, 1994)	Field pH		LA	ER NOT	ES		Fie	eld pH	est l	/lethod	(1)
		Lower	Horizon		Moist Mu			Munsell	(1 per layer)	1 ,		T 1 T	1 1				pach (D test	strip ③
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5 —		Lower	Horizoi		Moist Mu			Munsell	Field pH	2 ,		1 1			cle	ear (20-50	mm)	4 4 4	4 4
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TRACK ALONG RIDGE SITE LOCATION: PROFILE MAP DETAILS **SURVEY DETAILS** Profile No. Map Sheet No. Eastings Northings Described By **Profile Date** Photo Taken (1) No. of Layer T profile site 2 both profile & site 1 (2) 4444444444444444444444 (4) (May (Nov) (4) (4) (3) auger I 55555555555555555 5555 pit @ (5) Jun Dec (5) (5) (4) 666666666666666666 6666 (6) 66 batter 3 (5) (7) 77 gully 4 8888888888888888888 3333 (8) 88 core sample (5 999999999999999999 (9) other 6 NSW SOIL Potential BSAL? (1) Site type (1) BIOPHYSICAL STRATEGIC AGRICULTURAL AND LAND ves (1) detailed @ no @ LAND SOIL DATA CARD **INFORMATION** exclusion 3 **SYSTEM** SOIL **LANDFORM ELEMENT (1) VEGETATION** TYPE Please MARK A.S.C **Vegetation Community (1)** alcove (43) cone (3) footslope 21 sink hole/doline (52 LIKE THIS ONLY: crater 51 backplain (31) C unknown (1 foredune (12) pan/playa 56 stream channel 46 0 rainforest 2 bank (25) cut face (28) gully 42 pediment (22) streambed (45) H wet sclerophyll forest 3 har 6 cut-over surface (39) hillcrest (1) nit (60) summit surface (2) Use 2B pencil A dry sclerophyll forest 4 beach (26) hillslope @ dam (16) plain (30) swale 47 SO No pen or biro woodland grass u'storey 5 B beach ridge (7) drainage depression 41 lagoon 54 prior stream (9) swamp 58 **Fully erase** woodland shrub u'storey 6 bench 19 dune 11 lake 55 rock flat (34) talus 23 mistakes A tall shrubland @ berm (29) embankment 114 landslide 20 rock platform 35 GG tidal creek (48) Make no low shrubland ® H blow-out 59 estuary (44) levee (8) scald (36) tidal flat (37) strav marks heath (9 channel bench (33) fan (27) lunette (13) scarp (18) tor 4 Numbers in () E SG grassland/herbland @ cirque 50 fill top 40 maar (53) scree (24) trench (49 show max. 0 swamp complex (11) cliff (5) flood-out 32 mound (15) entries allowed scroll (10) valley flat 38 littoral complex (12 B LITHOLOGY F **TOPOGRAPHY** no vegetation (13) E A M I Growth Forms (4) Substrate (3) **Slope Percent** Site Morphology (1) L not identified tree (1 limestone coarse-basic (45 flat (1 L 0 tree mallee ② unconsolidated 2 tuff (24) fine-acidic crest 2 shrub 3 gravel 3 breccia (25) fine-intermediate (47 (2)(2) hillock (3 W mallee shrub 4 (4) greywacke sand (26) fine-basic (48 (3) (3) (3) ridge 4 C heath shrub (5) (5) silt arkose (27) serpentine (49 44.4 upper slope G.S.G. chenopod shrub (6) clay 6 dolomite (28) gabbro (50 (5) (5) (5) midslope 6 (A) hummock grass @ organic material dolerite 7 calcrete 29 (51) 6 6 6 simple slope (7) BBB tussock grass @ alluvium (8) aeolianite (30) (52 diorite (7)(7)(7)lower slope ® 00 sod grass (9) colluvium 9 chert (31) (53 svenite (B) (B) (B) open depression 9 00 sedge (10 lacustrine (10) iasper (32) granodiorite (54 closed depression 10 99.9 (E) (E) (E rush (11 aeolian (11) metamorphic (33) adamellite (55 Slope Measurement Slope Morphology (1) @ @ @ forb (12) marine (12) (34) granite (56 Method (1) aneiss ED CED CED fern/cycad (13 calcareous sand (13) schist/phyllite (35) (57 aplite inclinometer 3 waxing @ moss (14) fill (14) (36) (58 slate quartz porphyry Abney level 4 waning 2 T T lichen (15 mud (15) hornfels (37) basalt (59 total station (5) maximal 3 M M liverwort (16 till (16) quartzite (38) andesite (60 RTK GPS 6 minimal 4 P P P vine (17 sedimentary areenstone (39) trachyte (61 LIDAR @ Aspect (1) BB shale (18) amphibolite (40) (62 Microrelief Type (1) rhvolite LAND USE (1) S S S siltstone/mudstone (19) (41) marble obsidian (63 N none @ CD CD national/state parks (1 sandstone-quartz (20) ianeous (42) scoria (64 normal gilgai ② OW NE crabhole gilgai 3 W timber/scrub/unused (2) sandstone-lithic (21) coarse-acidic (43) ash (65 Œ ∞ logged native forest 3 conglomerate coarse-intermediate (44) agglomerate (66 linear gilgai 4 SW SE hardwood plantation 4 Y other (5) lattice gilgai (5) softwood plantation (5) affinity Identification Method (1) melonhole gilgai 6 **HYDROLOGY** volun./native pasture 6 personal assessment (1 with other 9 improved pasture geology map @ Profile Drainage (1) Permeability (1) Depth (1) & Extent (1) cropping ® both assessment & map 3 very poorly drained very slowly permeable ≤ 500 mm depth ☐ orchard/vineyard 9 Rock Outcrop % (1) slowly permeable > 500 mm depth ② poorly drained (2) vegetables/flowers (10 imperfectly drained (3) nil >20-30% (5 moderately permeable 3 < 50% area (T) <2% ② >30-50% ⑥ urban (11 mod, well-drained highly permeable 4 > 50% area 2 well-drained 5 industrial (12 2-10% ③ >50% (7) SITE FIELD NOTES quarry/mining (13) >10-20% 4 rapidly drained 6 other (14 **Surface Condition** Expected SITE CONDITION Current (2) Wet (2) Dry (2) Site Disturbance(s) (2) cracked 2 Ground natural disturbance (1 self-mulched 3 3 (3) Cover % no effective disturbance 2 4 4 loose 4 (II) limited clearing (3) soft (5) (5) (5) 6 firm @ (6) cleared, no cultivation 22 hardset (7) 7 occasional cultivation 6 3 3 surface crust ® (8) (8) rainfed cultivation (7) 44 trampled (9) 9 irrigated cultivation (8) (5) (5 poached (10) (10) highly disturbed (9) 6 6 recently cultivated 11 Photo file name/s: TOT water repellent (12) (12) 8 8 gravelly ① other 13 13 (13) Please do not mark this space.

SURVEY TITLE: RILXS CREEK, BSAL.

© NCS Pear

4		mm 0 10	20 30	40	50 60	70	80	90 100	110 12	0 130	140 1	150 160	170 180
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RIDGE NEAR TRIG STATION SITE LOCATION: PROFILE MAP DETAILS SURVEY DETAILS Profile No. Map Sheet No. Eastings Northings Described By **Profile Date** Photo Taken (1) No. of Layers 0000 profile (1 1 1 Feb Au 1 site (2 0 both profile & site 1 (2) 3 5565555555555 5555 5 Jun Oeo (5) (5) pit @ 6666 6 6 batter 3 (5) OOOOOOOOOOOOOOOOOOO (7) TT gully 4 88888888888888888 888 (8) (8) (8) core sample 5 9999999999999999 other (6 NSW SOIL Potential BSAL? (1) Site type (1) **BIOPHYSICAL STRATEGIC AGRICULTURAL** AND LAND yes ① no @ detailed @ LAND SOIL DATA CARD **INFORMATION** exclusion 3 **SYSTEM** SOIL **LANDFORM ELEMENT (1) VEGETATION** TYPE Please MARK A.S.C **Vegetation Community (1)** alcove 43 footslope 21 sink hole/doline (52 LIKE THIS ONLY: backplain 31 5 crater (51) foredune (12) pan/playa 56 stream channel 46 0 rainforest (2 bank (25) cut face (28) aully (42) pediment (22) streamhed (45) 0 wet sclerophyll forest 3 bar (6) cut-over surface (39) hillcrest (1) pit (60) summit surface (2) Use 2B pencil A dry sclerophyll forest 4 beach (26) dam (16) hillslope @ plain 30 swale 47 No pen or biro SO B woodland grass u'storey 5 beach ridge ① drainage depression 41 lagoon 54 prior stream (9) swamp 58 **Fully erase** woodland shrub u'storey 6 bench (19) dune (11) lake (55) rock flat 34 talus 23 mistakes E embankment 11 tall shrubland (7 berm 29 landslide 200 tidal creek (48) rock platform (35) Make no GG 0 low shrubland ® blow-out (59) estuary (44) levee (8) scald (36) tidal flat (37) strav marks heath 9 Numbers in () channel bench (33) fan (27) lunette (13) scarp (18) tor (4) A SG grassland/herbland @ cirque 50 fill top 40 maar (53) scree (24) trench (49 show max. H swamp complex (11) cliff 5 flood-out 32 entries allowed mound (15) scroll 10 valley flat 38 B littoral complex (12 LITHOLOGY **TOPOGRAPHY** no vegetation (13 F A M Growth Forms (4) Substrate (3) **Slope Percent** Site Morphology (1) L tree @ not identified limestone coarse-basic 00.00 flat (1 tree mallee ② L 0 unconsolidated (2) tuff (24) fine-acidic (46 ① ① ·① crest (2 shrub 3 3 (25) breccia gravel fine-intermediate (47 (2) (2) (2) hillock (3) U mallee shrub (4) sand (4) greywacke (26) fine-basic (48 (3) (3) (3) ridge @ C heath shrub (5) silt (5) arkose (27) serpentine (49) 44.4 upper slope 5 G.S.G. chenopod shrub (6) clay 6 dolomite (28) gabbro (50 (5) (5) (5) midslope 6 A hummock grass @ organic material 7 calcrete (29) dolerite (51) simple slope (T 6 6 6 BBB tussock grass @ aeolianite alluvium (8) (30) (52 diorite $(7)(7)\cdot(7)$ lower slope ® 00 sod grass (9) colluvium (9) (31) (53 chert svenite (8)(8) open depression 9 m m granodiorite sedge 10 lacustrine (10) jasper (32) (54 closed depression 10 99.9 TO TO TE rush (11) aeolian 11 metamorphic (33) adamellite (55 Slope Measurement Slope Morphology (1) **@ @ @** forb (12 marine (12) gneiss (34) granite (56) Method (1) E CE fern/cycad (13 13) calcareous sand schist/phyllite (35) (57 aplite inclinometer (3) waxing @ (K) (K) (K moss (14 fill (14) slate (36) quartz porphyry (58 Abney level 4 waning 2 O O lichen (15 mud (15) hornfels (37) total station 5 maximal 3 basalt OD OD liverwort 16 till 16) quartzite (38) andesite (60 RTK GPS © minimal 4 e e e vine (17 sedimentary greenstone (39) trachyte 61 LIDAR Aspect (1) (R) (R) shale (18) amphibolite (40) rhyolite (62 Microrelief Type (1) LAND USE (1) ദാദാദ siltstone/mudstone (19) marble (41) obsidian (63 N **D Z** national/state parks (1 sandstone-quartz 20 igneous (42) scoria (64 normal gilgai ② W NE W timber/scrub/unused 2 sandstone-lithic coarse-acidic (43) ash (65 crabhole gilgai 3 W E agglomerate ∞ logged native forest 3 conglomerate (22) coarse-intermediate 44 66 SE linear gilgai (4) SW hardwood plantation 4 other Y lattice gilgai 3 (5) affinity softwood plantation (5) Identification Method (1) melonhole gilgai 6 **HYDROLOGY** with volun./native pasture personal assessment (1 other 9 improved pasture @ geology map Profile Drainage (1) Permeability (1) Depth (1) & Extent (1) cropping ® both assessment & map 3 very slowly permeable (1 very poorly drained (1) ≤ 500 mm depth ① slowly permeable orchard/vineyard 9 Rock Outcrop % (1) poorly drained > 500 mm depth ② vegetables/flowers (10 nil (1) >20-30% (5 imperfectly drained 3 moderately permeable 3 < 50% area (T <2% ② >30-50% ⑥ urban (11 mod. well-drained 4 highly permeable 4 > 50% area ② industrial (12 2-10% >50% (7) well-drained 5 SITE FIELD NOTES quarry/mining (13) >10-20% (4) rapidly drained 6 other 14 **Surface Condition** SITE CONDITION Expected Current (2) Wet (2) Dry (2) cracked 2 Site Disturbance(s) (2) Ground natural disturbance (1 self-mulched 3 3 3 Cover % no effective disturbance (2) (4) loose (4) (4) limited clearing 3 CON COS soft (5) (5) (5) firm @ 6 6 cleared, no cultivation hardset @ 22 T occasional cultivation (6) 333 surface crust ® 8 8 rainfed cultivation (7) 4 4 trampled (9) 9 irrigated cultivation (8) (5) (5 poached (10) (10) highly disturbed (9) 6 for recently cultivated 1 Photo file name/s: water repellent (12) (12) 77 88 gravelly (1) Please do not mark this space.

SURVEY TITLE: RILXS CREEK BSAL

© NCS

cm		mm 0 10	20 30	40	50	60	70	80	90	100	110	120	130	140	150 160	170	180
1 -		LAYER S	STATUS	COLOU	IR (Mun	sell, 19	994)	Field pH		LA	YER NOT	ES		Fie	eld pH Tes		
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8 —		3 3 3 3			88		88	8.8							strong pedalit	y (5) (5) (6	55
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27 —			0 ,					m) ① ①			Size (1 per	layer)	1 2 3	4 5	light mediu		222
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28 —		$\begin{array}{c} 0 & \bigcirc 0 & \bigcirc 0 & \bigcirc 0 \\ 0 & \bigcirc 0 & \bigcirc 0 & \bigcirc 0 \\ \end{array}$	The second secon	\mathbb{C}				m) 4 4 m) 5 5			coarse (6-2 v coarse (20-6					y 5 5 C	5 5
			prominent 3								ext coarse (>6						174
29 —																	

OF TRIG STATION DONNSLOPE SITE LOCATION: PROFILE MAP DETAILS **SURVEY DETAILS** Profile No. Map Sheet No. Eastings Northings Described By **Profile Date** Photo Taken (1) No. of Layers 0000 O dan dun o o profile (1 (1) (T) (Feb) (Aug) (T) site 2 both profile & site 1 3333333333333333333 3 3 3 3 3 6 Nature of Exposure (2) (2) 4444444444444444444 (4) May (Nov) (4) (4) (3) auger I pit @ 5 Jun Oec 5 5 4 6666 6 6 batter 3 (7) 77 gully 4 88888888888888888 8888 (8) (8) (8) core sample 5 99999999999999999 other 6 **NSW SOIL** Potential BSAL? (1) Site type (1) BIOPHYSICAL STRATEGIC AGRICULTURAL AND LAND ves (1) detailed @ no @ LAND SOIL DATA CARD **INFORMATION** exclusion 3 **SYSTEM** SOIL **LANDFORM ELEMENT (1) VEGETATION** TYPE Please MARK A.S.C **Vegetation Community (1)** alcove (43) cone (3) footslope 21 sink hole/doline (52 LIKE THIS ONLY: backplain 31 5 unknown (1 crater (51) foredune (12) pan/playa 56 stream channel 46 0 rainforest 2 bank (25) cut face (28) gully 42 pediment (22) streambed (45) 0 bar 6 wet sclerophyll forest 3 cut-over surface (39) hillcrest (1) nit (60) summit surface (2) Use 2B pencil A dry sclerophyll forest 4 beach (26) dam (16) hillslope 178 plain (30) swale 47 SO No pen or biro B woodland grass u'storey 5 beach ridge (7) drainage depression 41 lagoon 54 prior stream (9) swamp 58 **Fully erase** woodland shrub u'storey 6 bench 19 lake 55 dune 11 rock flat 34 talus 23 mistakes F tall shrubland (7 berm (29) embankment 11 landslide 20 GG rock platform (35) tidal creek (48) Make no N low shrubland ® blow-out 59 estuary (44) levee (8) scald (36) tidal flat 37 strav marks heath (9 Numbers in () channel bench (33) fan (27) lunette (13) scarp (18) A tor (4) SG grassland/herbland @ cirque 50 fill top 40 maar 53 scree (24) trench (49 show max. H swamp complex 11 cliff (5) flood-out 32 entries allowed mound (15) scroll 10 valley flat 38 B littoral complex (12 LITHOLOGY **TOPOGRAPHY** F no vegetation (13) 6 M Growth Forms (4) Substrate (3) **Slope Percent** Site Morphology (1) 6 tree @ not identified limestone 00.00 flat (T L 0 tree mallee 2 unconsolidated 2 tuff (24) fine-acidic **D D D D** crest (2 shrub 3 3 breccia (25) gravel fine-intermediate (47 **2**·2) hillock 3 W mallee shrub 4 (4) sand greywacke (26) fine-basic (48 (3) (3) (3) ridge 4 C heath shrub (5 (5) silt arkose (27) serpentine (49) 4 .4 upper slope 5 G.S.G. chenopod shrub (6) clay 6 dolomite (28) gabbro (50 (5) (5) (5) midslope @ (A) hummock grass @ organic material 7 calcrete 29 dolerite (51) 666 simple slope (7 BBB tussock grass ® alluvium 8 aeolianite 30 (52) diorite 77.7 lower slope ® 00 sod grass (9) colluvium (9) chert (31) (53 svenite (8)(8)(8) open depression (9) 00 sedge (10 granodiorite lacustrine (10) iasper (32) (54 closed depression 10 99.9 E E rush (11 aeolian (11) metamorphic (33) adamellite (55 Slope Measurement Slope Morphology (1) @ @ @ forb (12) marine (12) (34) granite (56 Method (1) aneiss ED CED CED fern/cycad (13 calcareous sand (13) schist/phyllite (35) aplite (57 inclinometer 3 waxing (1 CO CO CC moss (14) fill (14) (36) quartz porphyry slate (58 Abney level 4 waning @ 00 lichen (15 mud (15) hornfels (37) basalt (59 total station 5 maximal 3 M M liverwort (16) till (16) quartzite (38) andesite 60 RTK GPS © minimal 4 P P P vine (17 sedimentary (HP) greenstone (39) trachyte (61 LIDAR Aspect (1) ® ® (18) amphibolite 40 shale (62 Microrelief Type (1) rhyolite LAND USE (1) S S S siltstone/mudstone (19) marble (41) obsidian (63 N (T) (Z) national/state parks (1 sandstone-quartz (20) igneous (42) scoria (64 normal gilgai 2 W NE W timber/scrub/unused (2) sandstone-lithic (21) coarse-acidic (43) ash (65 crabhole gilgai 3 W E ∞ logged native forest 3 conglomerate coarse-intermediate (44) agglomerate 66 SE linear gilgai (4) SW hardwood plantation 4 Y other lattice gilgai 5 (5) affinity softwood plantation (5) Identification Method (1) melonhole gilgai 6 **HYDROLOGY** with C volun./native pasture personal assessment (1 other 9 improved pasture @ geology map Profile Drainage (1) Permeability (1) Depth (1) & Extent (1) very slowly permeable cropping ® both assessment & map 3 very poorly drained ≤ 500 mm depth ☐ slowly permeable orchard/vineyard 9 Rock Outcrop % (1) poorly drained @ > 500 mm depth ② vegetables/flowers (10 nil >20-30% (5 imperfectly drained 3 moderately permeable 3 < 50% area (T <2% ② >30-50% ⑥ urban (11 mod. well-drained (4) highly permeable 4 > 50% area @ industrial (12 2-10% ③ >50% (7) well-drained 5 SITE FIELD NOTES quarry/mining (13) >10-20% 4 rapidly drained 6 other 14 **Surface Condition** Expected SITE CONDITION Current (2) Wet (2) Dry (2) Site Disturbance(s) (2) cracked 2 Ground natural disturbance self-mulched 3 (3) (3) Cover % no effective disturbance 2 4 loose 4 4 limited clearing 3 (10) soft (5) (5) (5) firm @ 6 6 cleared, no cultivation 22 hardset 7 7 occasional cultivation 6 3 3 surface crust ® (8) rainfed cultivation (7) **4 4** trampled (9) 9 irrigated cultivation ® (5) (5) poached (10) (10) highly disturbed (9) 6 6 recently cultivated 1 Photo file name/s: TT water repellent (12) (12) 8 8 gravelly ① other 13 9 9 (13) (13) Please do not mark this space. 4636

SURVEY TITLE: RILXS, CREEK, BSAL

© NCS Pears

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SOUTH EAST OF DAM SITE LOCATION: PROFILE MAP DETAILS **SURVEY DETAILS** Eastings Profile No. Map Sheet No. Northings **Described By Profile Date** Photo Taken (1) No. of Layers O Jan Jun O O profile (1 D @ D D D B D D B D D D D D D B D D D (1) (1) (Feb) (Aun) (1) site (2 QQQQ@QQQ@QQQQQQQ 2222226600022 both profile & site 1 333333333333333333 3 3 3 3 3 6 Mature of Exposure (2) (2) 4444444444444444 444 4 May Moy 4 @ (3) 5555 (5) Jun Oeo (5) (5) pit @ 6666666666666666 66666 (6) 6 6 batter 3 (5) (7) (7) (7)(7) T T gully 4 8888 88 core sample (5) (9) (9) (9 other 6 NSW SOIL Potential BSAL? (1) Site type (1) BIOPHYSICAL STRATEGIC AGRICULTURAL AND LAND ves (1) no 🚳 detailed @ LAND SOIL DATA CARD **INFORMATION** exclusion (3) **SYSTEM** SOIL **VEGETATION LANDFORM ELEMENT (1)** TYPE **Vegetation Community (1)** A.S.C. alcove 43 Please MARK cone (3) footslope (21) ox-bow (57) sink hole/doline (52 LIKE THIS ONLY: unknown (T backplain (31) 5 crater (51) foredune (12) pan/playa 56 stream channel 46 0 rainforest (2 hank (25) cut face (28) aully (42) pediment 22 streambed (45) 0 wet sclerophyll forest 3 bar (6) cut-over surface 39 hillcrest ① pit (60) summit surface (2) Use 2B pencil A dry sclerophyll forest 4 beach (26) dam (16) hillslope @ plain (30) swale 47 so No pen or biro woodland grass u'storey 5 beach ridge ① drainage depression (41) B lagoon 54 prior stream (9) swamp (58 Fully erase woodland shrub u'storey 6 bench (19) dune (11) lake (55) rock flat 34 talus 23 E mistakes tall shrubland (7 herm (29) embankment (14) landslide 20 GG rock platform 35 tidal creek (48) Make no 5 low shrubland (8) blow-out 59 estuary 44 levee ® scald (36) tidal flat (37) strav marks heath 9 channel bench 33 fan 27 Numbers in () A lunette (13) scarp (18) tor (4) SG grassland/herbland @ cirque 50 fill top (40) maar (53) scree (24) trench 49 show max. H swamp complex 11 cliff 5 flood-out (32) mound (15) scroll 10 valley flat 38 entries allowed B littoral complex (12 LITHOLOGY TOPOGRAPHY FAMI no vegetation (13) E **Growth Forms (4)** Substrate (3) Site Morphology (1) **Slope Percent** _ not identified tree @ limestone coarse-basic 0 0.00 flat (T tree mallee 2 Y 0 unconsolidated (2) tuff (24) fine-acidic 46 **D D D D** crest (2 shrub (3 gravel 3 (25) breccia fine-intermediate 47 (2) (2) (2) hillock (3 W mallee shrub 4 sand 4 greywacke (26) fine-basic (48 (3)(3)(3)ridge 4 C heath shrub (5) silt (5) arkose (27) upper slope 5 serpentine (49 4 4.4 G.S.G. chenopod shrub 6 clay 6 gabbro dolomite (28) (50 (5) (5) (5) midslope 6 hummock grass @ A organic material (7) calcrete (29) dolerite (51) 66.6 simple slope (7) BBB tussock grass @ alluvium (8) aeolianite (30) diorite (52 77.7 lower slope @ 00 sod grass 9 colluvium 9 chert (31) svenite (53 (8) (8) open depression 9 00 sedge (10 lacustrine 10 (32) iasper granodiorite (54 999 closed depression (10) ® ® Œ rush (11 aeolian (11) metamorphic (33) adamellite (55 Slope Measurement Slope Morphology (1) **@ @ @** forb (12) marine (12) gneiss (34) (56 granite Method (1) கை க calcareous sand fern/cycad (13 (13) schist/phyllite (35) aplite (57 inclinometer 3 waxing (1 (K) (K) (K) moss 14 (14) slate (36) quartz porphyry (58 Abney level 4 waning 2 O O lichen (15 (15) mud hornfels (37) basalt (59 total station (5) maximal 3 liverwort 16 (16) till quartzite (38) andesite (60 RTK GPS © minimal @ PPP vine (17 sedimentary 61.74 areenstone (39) trachyte (61 LIDAR @ Aspect (1) (R) (R) (18) shale amphibolite 40 rhyolite (62 Microrelief Type (1) LAND USE (1) (S) (S) (S marble siltstone/mudstone (41) obsidian (63 N none national/state parks I sandstone-quartz (20) ianeous (42) scoria (64 normal gilgai ② NW NE W timber/scrub/unused 2 sandstone-lithic (21) coarse-acidic (43) ash (65 crabhole gilgai 3 E X logged native forest (3) conglomerate (22) coarse-intermediate (44) agglomerate (66 linear gilgai 4 SW SE Y hardwood plantation 4 lattice gilgai 5 other (67 (\$) affinity softwood plantation (5) Identification Method (1) melonhole gilgai 6 **HYDROLOGY** with volun./native pasture 6 personal assessment (1 other 9 improved pasture geology map (2) Profile Drainage (1) Permeability (1) Depth (1) & Extent (1) cropping (8) both assessment & map @ very poorly drained ① ≤ 500 mm depth ☐ very slowly permeable Rock Outcrop % (1) orchard/vineyard 9 poorly drained (2) slowly permeable @ > 500 mm depth 2 vegetables/flowers (10 nil >20-30% (5 imperfectly drained 3 moderately permeable 3 < 50% area (T urban (11 <2% ② >30-50% ⑤ mod, well-drained highly permeable 4 > 50% area @ industrial (12) 2-10% (3) >50% (7) well-drained (5) SITE FIELD NOTES quarry/mining (13) >10-20% (4) rapidly drained 6 other (14 **Surface Condition** SITE CONDITION Current (2) Wet (2) Dry (2) Site Disturbance(s) (2) cracked (2) Ground natural disturbance self-mulched 3 (3) 3 Cover % no effective disturbance (2) 4 loose 4 4 limited clearing 3 0 soft (5) (5) (5) extensive clearing firm 669 6 (6) cleared, no cultivation 22 hardset (7) (7) occasional cultivation (6) (3) (3 surface crust ® (8) 8 rainfed cultivation (7) 44 trampled 9 9 irrigated cultivation ® 5 5 poached (10) highly disturbed (9) 6 6 recently cultivated 1 Photo file name/s: 77 water repellent (12) (12) 8 8 gravelly ① 13 Please do not mark this space.

SURVEY TITLE: RILXS, CREEK, BSAL

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SITE LOCATION: OPEN PADDOCK PROFILE MAP DETAILS SURVEY DETAILS Profile No. Map Sheet No. **Eastings Northings Described By Profile Date** Photo Taken (1) No. of Layer 0000000 00000profile (T site (2 (0) QQQQQQQQQQQQQQQQQQQQQQQ both profile & site @ 1 3333333333333333333333 3 3 3 3 3 60 00 3 3 Nature of Exposure (2) 2 4 May (Nov 4) auger (1 5555555555555 5555 (5) Jun Dec (5) (5) pit @ (4) 6666 6 66 batter 3 (5) (7) T T gully 4 BBBBBBBBBBBBB (8) (8) (8) (8) (8) (8) core sample 5 other 6 NSW SOIL Potential BSAL? (1) Site type (1) BIOPHYSICAL STRATEGIC AGRICULTURAL checked @ AND LAND yes ① detailed (2 no @ LAND SOIL DATA CARD **INFORMATION** exclusion 3 **SYSTEM** SOIL **VEGETATION LANDFORM ELEMENT (1)** TYPE Please MARK **Vegetation Community (1)** A.S.C alcove 43 cone (3) footslope (21) ox-bow (57) sink hole/doline (52) LIKE THIS ONLY: backplain (31) 5 unknown (1 crater (51) foredune (12) pan/playa 56 stream channel (46 0 rainforest (2 hank (25) cut face (28) aully (42) pediment (22) streamhed (45 0 wet sclerophyll forest 3 bar (6) cut-over surface (39) hillcrest ① pit (60) summit surface (2) Use 2B pencil A dry sclerophyll forest 4 beach (26) dam (16) hillslope 179 swale (47) plain (30) SO No pen or biro woodland grass u'storey 5 beach ridge (7) drainage depression (41) B lagoon 54 prior stream (9) swamp 58 Fully erase woodland shrub u'storey 6 bench (19) dune (11) lake (55) rock flat 34 talus (23 mistakes tall shrubland (7 berm (29) embankment (14) landslide 20 rock platform (35) tidal creek 48 GG Make no low shrubland (8) blow-out 59 estuary 44 levee ® scald (36) tidal flat (37 stray marks heath 9 channel bench 33 fan 27 lunette (13) scarp (18) tor (4) Numbers in () SG grassland/herbland @ cirque 50 fill top 40 maar (53) scree (24) trench 49 show max. swamp complex (11) cliff (5) flood-out (32) mound (15) scroll (10) valley flat 38 entries allowed littoral complex 12 LITHOLOGY TOPOGRAPHY no vegetation (13 Growth Forms (4) Substrate (3) Site Morphology (1) **Slope Percent** not identified tree I limestone coarse-basic (45 0 0 tree mallee 2 unconsolidated (2) tuff (24) fine-acidic (46 crest 2 shrub (3 grave 3 (25) breccia fine-intermediate (47 22.2 hillock 3 mallee shrub 4 sand (4) greywacke (26) fine-basic (48 (3)(3)(3)ridge 4 С heath shrub (5 silt (5) arkose (27) serpentine (49 (4) (4) (4) upper slope 5 G.S.G. chenopod shrub 6 clay (6) dolomite gabbro (28) (50) (5) (5) (5) midslope 6 (A) hummock grass @ organic material (7) calcrete (29) dolerite (51 666 simple slope (7 BBBB aeolianite tussock grass @ alluvium 8 30 diorite (52 lower slope 00 sod grass 9 colluvium 9 chert (31) svenite (53 (8) @ (8) open depression 9 000 sedge (10 lacustrine 10 (32) granodiorite (54 iasper 99.9 closed depression @ **DDE** rush (11) aeolian (11) metamorphic (33) adamellite (55 **Slope Measurement** Slope Morphology (1) തതര forb (12 marine (12) gneiss (34) (56 granite Method (1) TO COT COT fern/cycad (13) calcareous sand (13) schist/phyllite (35) aplite (57 waxing (1 inclinometer 3 (K) (K) moss (14) fill (14) slate (36) Abney level 4 quartz porphyry (58 waning @ D D lichen (15 (15) mud hornfels (37) basalt (59 total station (5) maximal (3 OD OD liverwort (16) (16) till quartzite (38) andesite (60 RTK GPS (6) minimal 4 PPP vine (17) sedimentary (Hill) greenstone (39) trachyte 61 LIDAR @ Aspect (1) (R) (R) (18) Microrelief Type (1) shale amphibolite 40 rhyolite 62 LAND USE (1) **S S** marble siltstone/mudstone (41) obsidian 63 N none @ national/state parks (1 sandstone-quartz 200 (42) (64 normal gilgai 2 ianeous scoria NW NE W timber/scrub/unused (2) sandstone-lithic (21) coarse-acidic (43) ash (65 crabhole gilgai 3 W Œ X logged native forest 3 conglomerate (22) coarse-intermediate (44) agglomerate 66 SE linear gilgai 4 SW hardwood plantation 4 other (67 lattice gilgai 5 S affinity softwood plantation (5) Identification Method (1) melonhole gilgai 6 **HYDROLOGY** with C volun./native pasture 6 personal assessment (1 other (9) improved pasture geology map Profile Drainage (1) Permeability (1) Depth (1) & Extent (1) cropping (8) both assessment & map 3 very poorly drained ① very slowly permeable ① ≤ 500 mm depth ☐ Rock Outcrop % (1) slowly permeable orchard/vineyard (9) poorly drained (2) > 500 mm depth (2) vegetables/flowers @ nil >20-30% (5 imperfectly drained 3 moderately permeable 3 < 50% area (T urban (11 <2% ② >30-50% ⑥ mod, well-drained > 50% area (2 highly permeable industrial (12 2-10% (3) >50% (7) well-drained (5) SITE FIELD NOTES quarry/mining 13 >10-20% (4) rapidly drained 6 other (14 **Surface Condition** SITE CONDITION Current (2) Wet (2) Dry (2) Site Disturbance(s) (2) cracked (2) (2) Ground natural disturbance self-mulched 3 (3) (3) Cover % no effective disturbance 2 loose 4 4 4 limited clearing 3 (40) (F) soft (5) (5) (5) firm @ 6 (6) cleared, no cultivation hardset (7) (2) (2 (7) occasional cultivation 6 (3) (3) surface crust ® (8) 8 rainfed cultivation (7) 44 trampled (9) 9 irrigated cultivation ® (5) (5 poached (10) highly disturbed 9 6 6 recently cultivated 1 Photo file name/s: 777 water repellent (12) (12) 8 8 gravelly ① Please do not mark this space.

SURVEY TITLE: RILXS CREEK, BSAL

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cm	m	nm 0 10	20	30	40	50	60	70	80		90 100	0	110	20	130	140	150	160	170	180
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29 —																				

NORTH OF CREEK SITE LOCATION: PROFILE MAP DETAILS SURVEY DETAILS Profile No. Map Sheet No. Eastings Northings Described By **Profile Date** Photo Taken (1) No. of Layers 0000 site (2 both profile & site 1 (2) 44444444444444 600 auger (1 55555555555555 5555 5 Jun Oec 5 5 pit 📟 4 6666 6 6 batter 3 (5) (7) OT gully 4 8888888888888888888888888 (8) 88 core sample (5) 9 (9) (9 other 6 NSW SOIL Potential BSAL? (1) Site type (1) BIOPHYSICAL STRATEGIC AGRICULTURAL AND LAND checked (T ves ① detailed no @ LAND SOIL DATA CARD **INFORMATION** exclusion 3 **SYSTEM** SOIL **LANDFORM ELEMENT (1) VEGETATION** TYPE Please MARK A.S.C. **Vegetation Community (1)** alcove (43) cone (3) footslope 21 sink hole/doline 52 LIKE THIS ONLY: unknown ① crater 51 backplain (31) foredune 12 pan/playa 56 stream channel (46 5 0 rainforest (2) bank (25) cut face (28) gully 42 pediment (22) streambed (45 0 wet sclerophyll forest 3 bar 6 cut-over surface (39) hillcrest (1) summit surface (2) nit (60) Use 2B pencil A dry sclerophyll forest 4 beach (26) hillslope @ dam (16) plain (30) swale 47 SO No pen or biro B woodland grass u'storey 5 beach ridge (7) drainage depression 41 lagoon 54 prior stream (9) swamp 58 Fully erase woodland shrub u'storey 6 bench 19 dune 11 lake 55 rock flat (34) talus 23 mistakes C tall shrubland (7 berm (29) embankment (14) landslide 20 rock platform 35 tidal creek 48 GG Make no R low shrubland ® blow-out 59 estuary (44) levee (8) tidal flat (37 scald (36) stray marks heath (9) channel bench (33) fan (27) lunette (13) scarp (18) tor 4 Numbers in () A SG grassland/herbland @ cirque 50 fill top 40 maar (53) scree (24) trench 49 show max. 6 swamp complex 11 cliff (5) flood-out 32 scroll 10 entries allowed mound (15) valley flat 38 B littoral complex (12 LITHOLOGY **TOPOGRAPHY** F no vegetation (13) E A M Growth Forms (4) Substrate (3) **Slope Percent** Site Morphology (1) 7 tree @ not identified limestone coarse-basic (45 (D) (D) (M) L tree mallee 2 unconsolidated 0 2 tuff (24) fine-acidic (46 **D D D D** crest 2 shrub (3 3 breccia (25) gravel fine-intermediate (47 (2) (2) (2) hillock 3 W mallee shrub 4 sand (4) greywacke (26) fine-basic (48 (3) (3) (3) ridge 4 C heath shrub (5 (5) silt arkose (27) serpentine (49 4 .4 upper slope 5 midslope 6 G.S.G. chenopod shrub 6 clay (6) dolomite (28) gabbro (50 (5) (5) (5) A hummock grass @ organic material dolerite T calcrete (29) (51 666 simple slope T BBB tussock grass @ alluvium (8) aeolianite (30) (52 diorite 77.7 lower slope 00 sod grass (9) colluvium (9) chert (31) (53 svenite (8) (8) open depression (9) Φ sedge (10 lacustrine (10) iasper (32) granodiorite (54 99.9 closed depression @ E E E rush (11) aeolian (11) metamorphic (33) adamellite (55 **Slope Measurement** Slope Morphology (1) @ @ @ forb (12) marine (12) aneiss (34) granite (56 Method (1) E E E fern/cycad (13) calcareous sand (13) schist/phyllite (35) (57 aplite inclinometer 3 waxing a (K) (K) (K moss (14) (14) (36) (58 Abney level 4 fill slate quartz porphyry waning (2 O O lichen (15 mud (15) hornfels (37) basalt (59 total station (5) maximal 3 liverwort 16 till 16 quartzite (38) andesite (60 RTK GPS 6 minimal @ P P P Aspect (1) vine (17 sedimentary (TA greenstone (39) trachyte (61 LIDAR @ (18) amphibolite (40) 62 (R) (R) shale Microrelief Type (1) rhvolite LAND USE (1) ड़ा ड़ा ड siltstone/mudstone (19) (41) obsidian (63 marble N none @ (T) (Z) national/state parks (T sandstone-quartz (20) ianeous (42) scoria (64 normal gilgai 2 NW NE W timber/scrub/unused @ sandstone-lithic (21) coarse-acidic (43) ash (65 crabhole gilgai 3 E SE ∞ logged native forest 3 conglomerate coarse-intermediate (44) agglomerate (66 linear gilgai 4 SW hardwood plantation 4 (67 3 Y other lattice gilgai (5) affinity softwood plantation 5 Identification Method (1) melonhole gilgai 6 **HYDROLOGY** with volun./native pasture 6 personal assessment (1 other 9 improved pasture @ geology map Profile Drainage (1) Permeability (1) Depth (1) & Extent (1) cropping ® both assessment & map 3 very poorly drained ① very slowly permeable ≤ 500 mm depth ① orchard/vineyard (9) Rock Outcrop % (1) poorly drained 2 slowly permeable > 500 mm depth 2 vegetables/flowers (10 imperfectly drained 3 moderately permeable 3 nil >20-30% (5 < 50% area (T <2% ② >30-50% ⑥ urban (11 > 50% area @ mod well-drained highly permeable 4 industrial (12 2-10% ③ >50% (7) well-drained 5 SITE FIELD NOTES rapidly drained 6 quarry/mining (13) >10-20% (4) other 14 **Surface Condition** Expected SITE CONDITION Current (2) Wet (2) Dry (2) cracked 2 Site Disturbance(s) (2) Ground natural disturbance (1 self-mulched 3 3 (3) Cover % no effective disturbance 2 4 4 loose 4 limited clearing 3 (D) (O) soft (5) (5) (5) (6) firm @ (6) cleared, no cultivation hardset 7 7 22 occasional cultivation 6 3 3 surface crust ® (8) rainfed cultivation (7) 44 trampled (9) (9) irrigated cultivation (8) (5) (5 poached (10) (10) Photo file name/s: highly disturbed 9 6 6 recently cultivated 1 water repellent 12 (12) 777 8 8 gravelly ① other 13 13) (13) Please do not mark this space. 4627

SURVEY TITLE: RILXS, CREEK, BSAL

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		② ②· ② ③ ③·③		4 © © C	3 3		2.5 (3)		(P) (2.5) (S) (3) (3)	2·2 3·3							no efferves dible/slight			
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4 —		77.7	7						77	7.7							not e	vident		100
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5 —		Lower		Horizon ② A D		Moist M		-	Munsell BG 17 0	Field pH	2	- 1			1 1		clear (20-5 dual (50-10	,		
				3 6 F						1.000							iffuse (>10	,		
6 —		2 2 · 2 · 3 · 3 · 3		4 © 0 C	3 3		3		P 25 2 3 6	②·② ③·③			1 1 1			Grac	ST le of Peda		1 2 3	4 5
	2	4 4.4	4	AC B		GY	4	GY	44	4.4							single-g	rained		000
7 —		5 5 · · · · · · · · · · · · · · · · · ·		(BC)		G	(5) (5) (6) (6)	G	(5) (5) (6)	(5)·(5)					1 1				2 2 2 3 3 3	
		7 7.7	7				77		\bigcirc	7.7						r	noderate p	edality	4 4	44
8 —		8 8 · 8 9 9 · 9					88		3 3	8.8 9.9					1 1				5 6 5 1 2 3	
		Lower		Horizor		Moist M			Munsell	Field pH	3							_	DOO	
9 —			_							©.© (D.(D.(D.							rough-face		233	
		2 2 2		4 C O C	3 3		25 (2) (3) (3)		P 25 2 3 3	②·② ③·③				De	mineral (nooth-face			
10 —	3	4 4 4		AD (R)		GY	4	GY	4	4.4				1	minant (2 3 4	5	Ped Sh	ape	Sub-domi	
		5 5·5 6 6·6		BC		G	6 6	G	(5) (5) (6) (6)	5· 6							platy		① ① ① ① ②	
11 —		7 7.7	7					- 1	\bigcirc	9 •7				3	3 3 3	3	prisma	tic	333	33
		8 8 8 9 9 9					88		88	8.8 9.9					4 4 4 5 5 5		column angular b		4 4 4 5 5 5	
12 —		Lower		Horizor		Moist M			Munsell	Field pH	4			6	6	6	sub-ang. b	locky	6 6	66
				2 A D C					6 ① ① ① B ② ①	0.0 1.0 1.0			1 1 1		7 7 7 3 3 3		polyhed		777 88	
13 —	١.	2 2 • 2 3 3 • 3		4 C C C	3 3	75 Y C 10 (N)			P 25 2	2.2			1 1		999		cruml	0	999	
	4	4 4 4		AD B		(EX)	44		3 3 4 4	3·3 4·4				-	minant (_	Ped Si		10 10 10 Sub-domi	
14 —		5 5·5 6 6·6		(BC)		G	5 5 6 6		5 5 6 6	5 • 5 6 • 6					2 3 4 1) (1) (1)	5	<2 m	~	1 2 3	
		7 7.0	7						00	7.7							2-5 m		222	
15 —		3 8 8 9 9 9					88		88	8 · 8 9 · 9					3 3 3 4 4 4		5-10 m 10-20 r		3 3 3 4 4 4	
	Г	Lower		Horizor		Moist M			Munsell	Field pH	5			6	5	5	20-50 r	nm	5 5 5	5 5
16 —		and the second second		2 A D C						D.O							50-100 100-200		6 6 6 7 7 7	
		22.2	2	4000			25 2	7.5 Y	P 25 2	2.2				30	888	8	200-500	mm	888	88
17 —	5	3 3·3 4 4·4				(ID) (N) (GY)	4 4		3 3 4 4	3·3 4·4			CEOF		9 9 9 A TIO		> 500 r			
		5 5 · 5 6 6 · 6				G	(5) (5) (6) (6)		55	5.5			SEGF				(per laye	r)
18 —		77.7		Estimated					6 6 7 7	6·6 7·7			Type (1 per la not ev		1 2 3			dry	1 2 3	
	ı	8 8 8 9 9 9		the second secon			88		88	8·8 9·9					222				222	
19 —	s	Upper		Depth (m)	_		ole Taker			ARSE FRAC	MENTS		manganife	rous (4 4	4	4	wet	444	
	U				_	3 per layer) 1 disturbed 3							ferrugi ferromanganif		5 5 5 6 6 6		The state of the state of		(TURE per layer)
20 —	B	22.2	2	@ @ @ @	2) ur	ndisturbed @		44	not identi	fied 2 2	22	22	org	anic (DOT	7	Texture	Grade	1 2 3	4 5
	T			3 3 · 3 · 4 · 4 · 4 · 4		bulked @ulk density @			as rock out	rate 3 3 crop 4 4	44	44		other (3 8 8 9 9 9	9	Joam		① ① ②	
21 —	R	5 5 5	(5)	5 5 5 6 6 6 6	5	Base of Ob		on (1)		erial 5 5 artz 6 6			Amount (1 per	ayer)	1 2 3	4	5 claye	y sand	333	33
	A	7 7.7	7	DD.D	7	S	oil contin	ues 🍩	felds	spar 7 7			very few (4 4 4 5 5 5	
22 —	Ė			(B) (B) (B) (C) (D) (D) (D) (D) (D) (D) (D) (D) (D) (D			ment ref			rete 8 8			few (2- common (10-		3 3 3				6 6 7 7 7	
		Dominant (1)	MOTTLES S	Sub-c	dominant (1)		bau	xite 10 10	10 10	10 10	many (20-	50%) (5 5 5	(5)	5 cla	y loam	888	3 3
23 —				not evident C		2 3 4 5				ells ① ①			abundant (> Strength (1 per	50%) (6 6 6 1 2 3	4	6 clay loar		9999	
	2	222	2	<2%	2) (2	0000	D		pun	nice (13) (13	13 13	13 13)	veak (DOO	D	→ san	dy clay	TO CO	TO CO
24 —		3 3 3				3) (3) (3) (4) (4) (4)				ood (14) (14) ther (18) (18)					2 2 2 1 2 3	_			12 12 12 13 69 6	
		5 5 5				5555			nt (1 per lay				soft segrega					ic peat	14 14 14	14 14
25 —			1	dark		2 3 4 5 D D D D	_		very few (<2 few (2-10	2%) @ @ 0%)					2 2 2 3 3 3				(15) (15) (15) (16) (16) (16)	
		2 2 2				2 2 2 2 3 3 3 3			mon (10-20 many (20-50				cry	stals (444	4	Sand F	raction	1 2 3	4 5
26 —	4	444	4	yellow	4) (4	D 4D 4D 4		abur	dant (50-90	0%) 6 6	66	66			5 5 5 6 6 6				① ① ②	
		(5) (5) (5) (6) (6) (6)				5 5 5 5 6 6 6			undant (>90 e (1 per lay			7 7 4 5			7 7 7 3 8 8				1 2 3	
27 —	T		7	grey	7) (7			fine g	ravel (2-6 n	nm) ① ①	10	11 11	Size (1 per la	yer)	1 2 3	4	5 light m	nedium		22
	1	2 3 4				3 8 8 8 2 3 4 5		gra arse grav	avel (6-20 n vel (20-60 n	nm) ② ②	22	22	fine (<2 medium (2-6				1) m	nedium	3333	33
28 —		1 (1)	1	faint C	DO	DOO		cobble	s (60-200 n	nm) 4 4	44	44	coarse (6-20	mm) (3 3 3	3	3		555	
		2 2 2 3 3 3		distinct C		D		stones bould	(200-600 n ers (>600 n	nm)	(5) (5) (6) (6)	5 5 6 6	v coarse (20-60 ext coarse (>60	mm) (4 4 4 5 5 5	(A) (B) (B) (B) (B) (B) (B) (B) (B) (B) (B	<u>4</u>)			(4)
29 —	-							AND PERSONAL PROPERTY AND PERSONS ASSESSMENT OF THE PERSONS ASSESSMENT ASSESSMENT ASSESSMENT ASSESSMENT ASSESSMENT ASSESSM												

NORTH OF CREEK SITE LOCATION: PROFILE MAP DETAILS SURVEY DETAILS Profile No. Map Sheet No. Northings **Eastings** Described By **Profile Date** Photo Taken (1) No. of Layers 0000 profile ① site (2 0 both profile & site 1 (2) 44444444444444444 5 Jun Oeo 5 5 pit @ 4 6666 6 6 batter 3 (5) (7 77 gully 4 (8) (B) (B) core sample (5) other 6 NSW SOIL Potential BSAL? (1) Site type (1) BIOPHYSICAL STRATEGIC AGRICULTURAL AND LAND yes ① no 📟 detailed 2 LAND SOIL DATA CARD **INFORMATION** exclusion 3 **SYSTEM** SOIL **VEGETATION LANDFORM ELEMENT (1)** TYPE Please MARK A.S.C. **Vegetation Community (1)** alcove 43 footslope 21 ox-bow (57) sink hole/doline (52 LIKE THIS ONLY: backplain 31 5 unknown (1 crater (51) foredune 12 pan/playa 56 stream channel 46 0 rainforest (2 bank (25) cut face (28) gully 42 pediment (22) streamhed (45 0 wet sclerophyll forest 3 bar 6 cut-over surface (39) hillcrest (1) pit (60) summit surface 2 Use 2B pencil A dry sclerophyll forest 4 beach (26) dam (16) hillslope 17 plain 30 swale (47 No pen or biro SO woodland grass u'storey 5 beach ridge 7 drainage depression 41 lagoon 54 prior stream (9) swamp 58 B **Fully erase** woodland shrub u'storey 6 bench (19) dune 11 lake 55 rock flat 34 talus (23 mistakes tall shrubland (7 berm 29 embankment (14) landslide (20) rock platform (35) tidal creek (48) Make no GG low shrubland ® blow-out (59) estuary (44) levee (8) scald 36 tidal flat 37 stray marks Numbers in () heath (9) channel bench (33) fan 27 lunette (13) scarp (18) tor (4) SG grassland/herbland @ cirque (50) fill top 40 maar (53) scree 24 trench 49 show max. swamp complex 11 cliff 5 entries allowed flood-out 32 mound (15) scroll 10 valley flat littoral complex 12 LITHOLOGY **TOPOGRAPHY** no vegetation (13 A Growth Forms (4) Substrate (3) Site Morphology (1) Slope Percent tree (1 not identified coarse-basic tree mallee ② unconsolidated (2) tuff (24) (46 crest 2 fine-acidic **D D D D** shrub 3 (3) (25) gravel breccia fine-intermediate (47 22.2 hillock 3 mallee shrub (4 sand (4) greywacke (26) fine-basic (48 33.3 ridge 4 C heath shrub (5 silt (5) arkose (27) serpentine 49 (4) (4)·(4) upper slope (5 G.S.G. chenopod shrub 6 clay 6 dolomite (28) gabbro (50 (5) (5) (5) midslope 6 hummock grass @ organic material (7) calcrete (29) dolerite (51) simple slope (7 66.6 BBB tussock grass ® alluvium (52 (8) aeolianite (30) diorite $(7)(7)\cdot(7)$ lower slope (8 00 (53 sod grass 9 colluvium (9) chert (31) syenite (B)·(B) open depression (9) 00 closed depression 10 sedge 10 lacustrine (10) jasper granodiorite (54 (32) 99.9 Œ Œ Œ rush (11 aeolian (11) metamorphic (33) adamellite (55 Slope Measurement Slope Morphology (1) തതര forb (12) marine (12) (56 aneiss (34) granite Method (1) ED CED CED fern/cycad (13) (13) schist/phyllite calcareous sand (35) aplite (57 waxing (1 inclinometer 3 (K) (K) (K moss (14 fill (14) slate (36) quartz porphyry (58 Abney level 4 waning @ \Box lichen (15) (15) total station (5) mud hornfels (37) basalt (59 maximal 3 liverwort (16 (16) quartzite (38) andesite (60 RTK GPS © minimal 4 PPE vine 17 sedimentary LIDAR @ Aspect (1) GEB. areenstone (39) trachyte (61 (R) (R) shale (18) amphibolite (40) rhvolite (62 Microrelief Type (1) LAND USE (1) (3) (3) (5) siltstone/mudstone (19) marble (41) obsidian (63 N O O national/state parks (1 sandstone-quartz 20 64 normal gilgai ② (W) NE igneous (42) scoria W timber/scrub/unused 2 sandstone-lithic (21) coarse-acidic (43) ash (65 crabhole gilgai 3 W E ∞ logged native forest 3 agglomerate 66 SE conglomerate (22) coarse-intermediate (44) linear gilgai (4) SW hardwood plantation 4 Y other lattice gilgai (5) (5) softwood plantation 5 affinity **Identification Method (1)** melonhole gilgai 6 **HYDROLOGY** with volun./native pasture 6 personal assessment (1 other 9 improved pasture geology map @ Profile Drainage (1) Permeability (1) Depth (1) & Extent (1) both assessment & map 3 cropping ® very slowly permeable (1 very poorly drained ≤ 500 mm depth ① slowly permeable orchard/vineyard 9 poorly drained (2) Rock Outcrop % (1) > 500 mm depth ② vegetables/flowers (10 nil >20-30% (5) imperfectly drained 3 moderately permeable 3 ≤ 50% area € urban II <2% ② >30-50% ⑥ mod. well-drained @ > 50% area @ highly permeable 4 2-10% ③ >50% 🗇 industrial (12 well-drained (5 SITE FIELD NOTES quarry/mining (13) >10-20% 4 rapidly drained 6 other 14 **Surface Condition** SITE CONDITION Current (2) Wet (2) Dry (2) Site Disturbance(s) (2) cracked 2 self-mulched 3 3 natural disturbance (1 3 Cover % no effective disturbance (2) loose (4) (4) (4) limited clearing 3 GEORGI (MAI) soft 5 (5) (5) firm @ 6 6 cleared, no cultivation 22 hardset (7 7 occasional cultivation 6 33 surface crust ® 8 8 rainfed cultivation (7) (4) (4) trampled (9) (9) irrigated cultivation (8) (5) (5 poached (10) (10) highly disturbed (9) 6 recently cultivated 1 Photo file name/s: 77 water repellent (12) (12) gravelly ① 8 8 Please do not mark this space. 4628

SURVEY TITLE: RIXS CREEK BSAL

cm		mm 0 10	20	30	40	50	60	70	80	90	100	110 1	20	130	140	150 10	0 170	180
1 -		LAYER	STATUS		COLO	JR (M	unsell,	1994)	Field pH		LA	YER NOT	S		Fi	eld pH Te		
		Lower (1)	Horizon	_	Moist Mu			lunsell	(1 per layer)	1 ,				1 1		Raupa pH met		est strip 3
2 —		D D • D	3 B E C	22	5 @ B	21	(5) YB (B 2 1	D D • D							НС	1(1)	
		2 2 2 2 3 3 3 3	4 0 0 0 AB P	3 3		2.5 22	75 Y	P 25 2 3 3	2·2 3·3		1 1					o effervescen ble/slight effe		
3 —	1	4444	AC R		GY	44	GY	44	4.4						stron	g effervescen	ce 3 3	333
		5 5 5 6 6 6	(BC)		©	(5) (5) (6) (6)	G	(5) (5) (6) (6)	5·5 66·6						BC	(1 per laye		eness 3 4 5
4 —						77		00	7.7							not evide		D D D
		8 8 8 9 9 9 9				88		88	8.8 9.9						al	orupt (5-20 m	,	
5 —		Lower (1)	Horizon		Moist Mu			/lunsell	Field pH	2		1 1 1		1 1		lear (20-50 m ual (50-100 m	,	
		D D.D D	3 B F C	22	5 8 B	21	(5) YB (B 2 1	D.D							fuse (>100 m	n) 6 6	
6 —		2 2 2 2 3 3 3 3	4 0 0 0 AB (P)	3 3	75 Y P	25 2 3 6		P 25 2 3 3	②·② ③·③						Grade	STRU of Pedality	1) 1 2	3 4 5
	2	4 4 4	AC R		GY	4	GY	44	4.4							single-grain	ed 1 1	000
7 —		5 5 5 5 6 6 6 6	B O		©	(5) (5) (6) (6)	G	(5) (5) (6) (6)	5·6									222 333
		00.00				77		$\mathcal{O}\mathcal{O}$	7.7						m	oderate pedal		
8 —		8 8 8 9 9 9				88		88	9.9							strong pedal	1) 1 2	
		Lower O O O	Horizor		Moist Mu			/lunsell	Field pH	3								① ① ① ② ② ②
9 —		D D.D D	3 (B) (F) (6)	2	5 @ B	21	(5) YB (B 2 1	D D D							ough-faced pe	ds 3 3	333
		2 2·2 2 3 3·3 3	4 C O C	3 3		25 (2) (3) (3)		P 25 2 3 3	②·② ③·③				Do	minant (ooth-faced pe		(4) (4) (4) ominant (1)
10 —	3	4 4 4 4	AD B		GY	4 @	GY	44	4.4				1	2 3 4	5	-	1 2	3 4 5
		5 5 5 5 6 6 6 6	(BC)		G	5 6 6	G	(5) (5) (6) (6)	5·65 6·6	1 1	- I			D (D) (D) (D) (D) (D) (D) (D) (D) (D) (D		platy lenticular		
11 —		77.77						77	7					3 3 3		prismatic		3 3 3 4 4 4
		3 3 3 3 9 9 9 9			27	33		رق رق	8·8 9·9					4 4 4 5 5 5		columnar angular block		555
12 —		Lower O O	Horizor		Moist Mu			Munsell	Field pH	4	1 1			6 6 6 7 7 7		sub-ang, block polyhedral		666
			3 B F	22	5 MB	21	(5) YB (B 2 1	D • D				® (888	8	granular	33	333
13 —	١	2 2·2 2 3 3·3 3		3 3	75 Y P 110 N		(7.5) (Y) (I) (II) (II)	P 25 2 3 3	②·② ③·③					9 9 9 10 10 10		crumb round		999
	4	4 4 4 4	AD (R)		GY	44	GY	4 4	4.4				Do	minant (1)	Ped Size	Sub-d	ominant (1)
14 —		5 5·5 5 6 6·6 6			©	(5) (5) (6) (6)	G	(5) (5) (6) (6)	5·5 6·6					2 3 4 D (1) (1)	5	<2 mm		3 4 5
		77.77				77		77	7.7					2 (2 (2 3 (3 (3		2-5 mm		222 333
15 —		9 9 9			-3				9.9					4 4 4		5-10 mm 10-20 mm		444
		Lower O O	Horizon		Moist Mu			Munsell	Field pH	5				5 5 5		20-50 mm 50-100 mm		5 5 5 6 6 6
16 —			3 B E	2 2	(5) (MB (B)	21	(5) YB	B 2 1	D D • T				7			100-200 mm	77	
	_	2 2·2 2 3 3·3 3		3 3	75 Y P 10 N		(75 Y) (10 N)	P 25 2 3 3						8 8 9 9 9 9		200-500 mm > 500 mm		(B)
17 —	5		The state of the s		(CY)	44	GY	4 4	4.4			SEGF	EG	ATIO	NS	Soil	Water St	atus
		5 5 5 6 6 6 6	The second second		G	(5) (5) (6) (6)		5 5 6 6				Type (1 per la					1 2	3 4 5
18 —		7 7 7 7 8 8 8 8				77		7 7 8 8										(D)
	L	9999	Rooting						9•9					3 3 3				333
19 —	S	Upper O O O	Depth (m)		Sampl per layer) 1	le Taken			ARSE FRAC		4 5	manganife ferrugi		4 4 4 5 5 5		THE RESIDENCE OF THE PARTY OF T	EXTUR	444
	B			DO	listurbed 3	33	33	not evid	dent 🕮 🎟		D D	ferromanganif	erous (666	6	(1 e	ach per la	yer)
20 —	S	2 2·2 2 3 3·3 3	33.3	3	bulked 6	66	66		fied ② ② rate ③ ③					7 7 7 3 8 8		Texture Gr		3 4 5
	T	4 4 4 4 5 5 5 5	444	4 bul		77	77	as rock out	crop 4 4	44	4 4		other (999	9 9	D loamy sa	nd 2 2	222
21 —	R	6666	666	6	laye	er contin	ues 🗇	qu	artz 6 6	66	66		none (DOI	D (I)	sandy lo	am 4 4	3 3 3 4 4 4
	T						ues 🥮 usal ③		spar 7 7 rete 8 8			very few (,	2 2 2 3 3 3				5 5 5 6 6 6
22 —	E	9999	999	9	bedro	ock reac	hed 4	ironst	one 9 9	999	99	common (10-	20%)	4 4	4	sandy clay lo	am 7 7	
	1	Dominant (1) 2 3 4 5			ominant (1) 3 4 5				ixite 110 110 inells 111 111			many (20- abundant (>				clay loam sai		(B)
23 —												Strength (1 per	ayer)	1 2 3	4 5	silty clay lo	am 10 10	10 10 10
0.1	3	02222	2-10%	3 3	0000				nice 13 13 ood 14 14					D (1) (1) (2) (2) (2) (2)				
24 —		4 4 4 4 5 5 5 5			4 4 4 5 5 5		Amour		ther 18 18 /er) Sur. 1			Form (1 per l						(3) (13) (13) (14) (14) (14)
	1	2 3 4 5	Colour	1 2	3 4 5			very few (<	2%) ② ②	220	22	noc	dules (222	2 2	hemic p	eat (15) (15	15 (15) (15)
25 —							com		0%) 3 3 0%) 4 4					3 3 3		sapric p Sand Fract		3 4 5
	3	3333	orange	3 3	3333		n	nany (20-50	0%) 5 5	550	55		eins (5 5 5	5 6	coa	se ① ①	
26 —		(4) (4) (4) (5) (5) (5) (5)			4 4 4 5 5 5				0%)					6 6 6 7 7 7		Clay Fract		3 4 5
-	6	6666	pale	6 6	666		Siz	e (1 per lay	er) Sur. 1	2 3	4 5	tul	ules (888	3 3	D li	ght ① 🎟	
27 —		07777	gley		0000		gra	avel (6-20 r	nm) ② ②	22	22		mm) (DOC	D CD C	D medi	um 3 3	(2) (2) (2) (3) (3) (3)
	1	2 3 4 5			3 4 5	-	0	,	nm) 3 3 nm) 4 4			medium (2-6 coarse (6-20				medium he		4 4 4 5 5 5
28 —	2	2222	distinct	2 2	222		stones	(200-600 r	nm) 5 5	55	5 5	v coarse (20-60	mm) (4 4 4	4	D	.vy @ @	ر في رفي رفي
	3	3333	prominent C	3 3	333		boulde	ers (>600 r	nm) 6 6	66	66	ext coarse (>60	mm) (5 5 5	(E) (E)	D		
29 -																		

OPEN PADDOCK SITE LOCATION: PROFILE MAP DETAILS **SURVEY DETAILS** Profile No. Map Sheet No. Eastings Northings Described By **Profile Date** Photo Taken (1) No. of Layers site (2 both profile & site 1 33 🚳 3 3 📾 3 🚳 3 3 3 3 3 3 3 3 3 3 (2) 444444444444444444 (3) auger (1 5555 (5) (Jun) (Dec) (5) (5) pit @ 6666 6 6 6 batter 3 (5) OOOOOOOOOOOOOOOOOOO (7) 777 gully 4 888888888888888888888 3333 (8) 88 core sample (5) 9999999999999999 9 9.9 other 6 NSW SOIL Potential BSAL? (1) Site type (1) BIOPHYSICAL STRATEGIC AGRICULTURAL AND LAND ves ① detailed (2 no @ **INFORMATION** LAND SOIL DATA CARD exclusion 3 **SYSTEM** SOIL **LANDFORM ELEMENT (1) VEGETATION** TYPE Please MARK sink hole/doline 52 A.S.C **Vegetation Community (1)** alcove (43) footslope 21) ox-bow (57) LIKE THIS ONLY: unknown (1 backplain (31) crater (51) foredune 12 pan/playa 56 5 stream channel (46 0 rainforest 2 bank (25) cut face (28) gully 42 pediment (22) streambed 45 0 wet sclerophyll forest 3 bar 6 cut-over surface 39 hillcrest ① summit surface (2) pit (60) Use 2B pencil A dry sclerophyll forest 4 beach (26) hillslope (17) dam (16) plain (30) swale 47 No pen or biro SO woodland grass u'storey 5 beach ridge 7 drainage depression 41 lagoon 54 prior stream (9) swamp 58 B **Fully erase** woodland shrub u'storey 6 bench (19) dune 11 lake 55 rock flat (34) talus 23 mistakes tall shrubland (7 berm (29) embankment (14) landslide (20) rock platform 35 tidal creek 48 GG Make no low shrubland ® blow-out 59 estuary (44) levee (8) tidal flat (37 scald (36) stray marks heath (9) channel bench (33) fan (27) lunette (13) scarp (18) tor (4) Numbers in () SG grassland/herbland cirque 50 fill top 40 maar (53) scree (24) trench 49 show max. swamp complex 11 cliff (5) flood-out 32 mound 15 scroll 10 entries allowed valley flat littoral complex (12 LITHOLOGY **TOPOGRAPHY** F no vegetation (13 A M Growth Forms (4) Site Morphology (1) Substrate (3) **Slope Percent** tree @ not identified limeston coarse-basic 00.00 tree mallee 2 unconsolidated 2 tuff (24) fine-acidic 46 (D) (D) (D) crest 2 shrub 3 gravel 3 breccia 25) fine-intermediate 47 (2) (2) (2) hillock (3 mallee shrub 4 sand 4 greywacke (26) fine-basic (48 (3)(3)(3)ridge 4 C heath shrub (5 (5) silt arkose (27) serpentine (49 (4) (4) (4) upper slope 5 chenopod shrub 6 G.S.G. clay 6 dolomite (28) gabbro (50 (5) (5) (5) midslope 6 A hummock grass @ organic material calcrete dolerite 7 29 (51 6 6 simple slope T BBB tussock grass 🕮 alluvium (8) aeolianite (30) (52 diorite 77.7 lower slope (8) 00 sod grass (9) colluvium (9) chert (31) (53 svenite (8)(8) open depression (9 00 sedge (10) lacustrine (10) iasper (32) granodiorite (54 99.9 closed depression @ E E E rush (11) aeolian (11) metamorphic (33) adamellite (55 Slope Measurement Slope Morphology (1) @ @ @ forb (12) granite marine (12) aneiss (34) (56 Method (1) ED CED CED fern/cycad (13) calcareous sand (13) schist/phyllite (35) (57 aplite waxing (1 inclinometer 3 moss (14) fill (14) (36) (58 Abnev level 4 slate quartz porphyry waning @ DO lichen (15 mud (15) hornfels (37) basalt (59 total station (5) maximal 3 OD OD liverwort (16) till (16) quartzite (38) andesite 60 RTK GPS 6 minimal 4 PPE Aspect (1) vine (17) sedimentary (17) areenstone (39) trachyte (61 LIDAR @ ® ® shale (18) amphibolite (40) (62 Microrelief Type (1) rhvolite LAND USE (1) (S) (S) (S siltstone/mudstone (19) (41) obsidian (63 N marble none @ 000 national/state parks (1 normal gilgai ② sandstone-quartz (20) ianeous (42) scoria (64 NW NE sandstone-lithic W timber/scrub/unused 2 (21) coarse-acidic (43) ash (65 crabhole gilgai 3 Œ ∞ logged native forest 3 SE conglomerate coarse-intermediate (44) agglomerate (66 linear gilgai 4 SW hardwood plantation 4 (67 (3) Y other lattice gilgai (5) softwood plantation (5) affinity Identification Method (1) melonhole gilgai 6 **HYDROLOGY** with C volun./native pasture 6 personal assessment (1 other 9 improved pasture @ geology map @ Profile Drainage (1) Permeability (1) Depth (1) & Extent (1) cropping ® both assessment & map 3 very poorly drained ① very slowly permeable ≤ 500 mm depth ① orchard/vineyard 9 poorly drained 2 slowly permeable > 500 mm depth ② **Rock Outcrop % (1)** vegetables/flowers (10 imperfectly drained moderately permeable 3 nil >20-30% (5 < 50% area (T) <2% ② >30-50% ⑥ urban (11 > 50% area @ mod. well-drained (4) highly permeable 4 well-drained 5 industrial (12 2-10% ③ >50% (7) SITE FIELD NOTES quarry/mining 133 >10-20% 4 rapidly drained 6 other 14 **Surface Condition** Expected SITE CONDITION Current (2) Wet (2) Dry (2) Site Disturbance(s) (2) cracked 2 Ground natural disturbance (self-mulched 3 3 3 Cover % no effective disturbance 2 loose 4 4 4 **(1)** limited clearing 3 soft (5) (5) (5) (6) firm @ (6) cleared, no cultivation 22 hardset 7 7 occasional cultivation 6 3 3 surface crust ® (8) (8) rainfed cultivation (7) 44 trampled 9 9 irrigated cultivation (8) (5) (5 poached (10) (10) Photo file name/s: highly disturbed (9) 6 6 recently cultivated 1 TT water repellent (12) (12) **B B** gravelly ① 9 9 other 13 (13) (13) Please do not mark this space. 4630

SURVEY TITLE: RIVKS, CREEK, BSAL

cm	popular		0 20 3				80	90 100	110 12		140	150 160	170	180
' 7		LAYER	STATUS	COLOUR (Munsell	, 1994)	Field pH	L	AYER NOTE	S	Fie	eld pH Test	Method	1 (1)
		Lower	Horizon	Moist Munsell	Dry	Munsell	(1 per layer)	1 , ,	r r r			Raupach	① test	strip 3
0		@ @ •① @		25 R BG 17 C	D 2.5 R	BG (1-7) (10)	@·@					pH meter	2	
2 —			3 B F 2 2	5 8 B 2 C	D (5) (YB)	B 21	D • D	1 1 1	1 1 1	1 T D I		HCI (1)	
		22002	40033	75 Y P 25 C	2) 7.5 Y	P 2.5 2	2.2	1 1 1	1 1 1	1 1 E E	no	effervescence	D D D	
	4	33.33	AB P	N 3 (10 N	33	3.3	1 1 1	T T T	1 1 6 6	audibl	le/slight efferv.	222	022
3 —		4 4·4 4	AC (F)	GY @ C	4D GY	44	4.4	1 1 1	1 1 1		strong	effervescence	3333	033
		5 5 5	(BC)	G 50	5 0	5 5	5.5				Bou	undary Dist	inctive	ness
		6666		6	60	66	6.6	1 1 1	1 1 1			(1 per layer)		
4 —		77.77		\bigcirc	7)	77	7.7	1 1 1	1 1 1	1 1 1 1		not evident	D D D	
		8888		8	8)	88	8.8		L I I		5	sharp (<5 mm)	222	000
		9 9 9 9					9.9				abr	rupt (5-20 mm)	333	033
5 —		Lower	Horizon	Moist Munsell	Dry	Munsell	Field pH	2		1 7 1 7	cle	ear (20-50 mm)		D (D)
			2 A D 6 1	® ® ® ⊕	0 25 B	BG (1.7) (1)	0.0				gradua	al (50-100 mm)	5 5 6	55
			3 B F 2 2	D (B) (B) (2) (D (TB)	B 2 1					diffu	use (>100 mm)		066
6 —		22.22	40033	D 75 9 P 25 C	2 75 0	P 25 2	2.2		1 1 1			STRUC		
		33.33	AB P	10 N 3 C	3 (M) (M)	33	3.3				Grade	of Pedality (1)	1 2 3	4 5
	4	4 4 4 4	AD (B)	GY @	GY	4 4	4.4					single-grained	D D D	DOO
7 —		5 5 6 5	BO	G 5 C	5 G	5 5	5.5					massive	222	000
		6666		6	60	66	6.6					weak pedality	333	D33
				\bigcirc	7)		7.7				mod	derate pedality	444	D D D
8 —		8 8 8		3	8)	88	8.8					strong pedality	5 5 5	5 5
0		9999		100	10.9		9.9					Fabric (1)	1 2 3	3 4 5
		Lower	Horizon	Moist Munsell	Dry	Munsell	Field pH	3				sandy	D D C	
9 _		● ●・○ ●		B B B T7	0 25 B	BG 1.7 ①	0.0					earthy	222	222
9 —			3 6 F 6 7	D (5) (B) (B) (C) (C)	D 5 MB	B 2 1					rou	igh-faced peds	333	D 33 33
		22.22	40003	D 75 @ P 25 C	2 7.5 (Y)	P 25 2	2.2				smoo	oth-faced peds	444	D (D) (D)
	0	3 3.3 3	AB P	10 N 3 C	3 (10 (N)	33	3.3			Dominant (1) F	Ped Shape	Sub-dom	inant (1)
10 —	3	4 4 4	AO (R)	GY 4	G Y	44	4.4	1 1 1		1 2 3 4	5		1 2 3	
		5 5.5 5		G 69 0								platy	000	
		6666		6		66	6.6			@@@@		lenticular	222	
11 —				7	7)	77	7.7			3333	3	prismatic	333	D 3 3
		8 8 8		(3)	8)	3 3	8.8			4444	4	columnar	4 4 4	D (D) (D)
		9999		157			9.9			5555	(5) aı	ngular blocky	5 5 6	D (5) (5)
12 —		Lower	Horizon	Moist Munsel	Dry	Munsell	Field pH	4		6666	© su	ib-ang. blocky	666	D 6 6
		0000		D 3 B 6 17 C	0 25 B	BG 1.7 0	0.0					polyhedral	777	DOD
				5 (B) (B) (2) (888	B	granular	333	888
13 —		22.22	(A) (C) (C) (C)	D 7.5 👺 P 2.5 (2 75 9	P 25 2	2.2			9999		crumb	999	999
	1	33.33	AB P	(II) (II) (II) (II)	3 (11) (N)	33	3.3	7 7 7		10 10 10 10	(ID)	round	D CD CD	10 10
	14	4 4 4	AD (B)	GY 4	GY	4 4	4.4			Dominant	1)	Ped Size	Sub-don	ninant (1)
14 —		5 5 5	BC	G (8)	5 G	5 5	5.5			1 2 3 4	5		1 2 3	3 4 5
		6666		6	6	66	6.6				(D)	<2 mm	000	DOD
				\bigcirc	70		7.7			@@@@	2	2-5 mm	220	222
15 —		8888		3	8	8 8	8.8			33333	3	5-10 mm	333	3 3 3
13 –		9999		(2)		147	9.9			4444	4	10-20 mm	440	4 4 4
		Lower	Horizon	Moist Munsel	Dry	Munsell	Field pH	5		5555	5	20-50 mm	5 5	5 5 5
16 —				D 25 B 66 17 (6666	0 6	50-100 mm	66	666
16 —		D D·D I	3 B F 2 C	2 5 MB B 2 C	D TB	B 2 1	D·D·D			0000		100-200 mm	0000	
		22.22	000000	3 73 Y P 23 (2 7.5 (Y)	P 25 2	2.2			8888	3	200-500 mm	88	888
	5	33.33	AB P	11 (1) (2)	3 (10 (N)	33	3.3			9999	9	> 500 mm	999	999
17 —	P	4 4 4	AD B	GY 4 (4) GY	44	4.4		CECD	EGATIO	NIC	Soil W	ater Stat	us
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29 —														

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