SURVEY TITLE:

SITE LOCATION:

Profile No.	Map Sheet No.	Eastings	Northings	Described By	Profile Date	Photo Taken	No. of Layers
0–9	0–9	0–9	0–9	0–9	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec	profile 1 site 2 both profile & site 3	1–5

Nature(s) of Exposure: auger 1, pit 2, batter 3, gully 4, core sample 5, other 6

Card No.: 1

Salt Action

Salinity Soil Data Card

Geology Map Code

TOPOGRAPHY

Slope Morphology: waxing 1, waning 2, maximal 3, minimal 4

Ground Cover %: 0–9

Slope Percent: 0–9

Slope Estimated 1 or Measured 2

Map Type: GDA, AMG

Aspect: N, NW, NE, W, E, SW, SE, S

Position in Landform Element: upper 1, mid 2, lower 3

Erosion Hazard: slight 1, moderate 2, high 3, very high 4, extreme 5

Landform Element

alcove	43	lake	55
backplain	31	landslide	20
bank	25	levee	8
bar	6	lunette	13
beach	26	maar	53
beach ridge	7	mound	15
bench	19	oxbow	57
berm	29	pan/playa	56
blow-out	59	pediment	22
channel bench	33	pit	60
cirque	50	plain	30
cliff	5	prior stream	9
cone	3	rock flat	34
crater	51	rock platform	35
cut face	28	scald	36
cut-over surface	39	scarp	18
dam	16	scree	24
drainage depression	41	scroll	10
dune	11	sink hole/doline	52
embankment	14	stream channel	46
estuary	44	streambed	45
fan	27	summit surface	2
fill top	40	swale	47
flood-out	32	swamp	58
footslope	21	talus	23
foredune	12	tidal creek	48
gully	42	tidal flat	37
hillcrest	1	tor	4
hillslope	17	trench	49
lagoon	54	valley flat	38

LITHOLOGY

Choose up to three for each

Locational Accuracy: 1:250,000 3, 1:100,000 4, 1:50,000 5, 1:25,000 6, GPS 14, Survey 15

Identification Method: personal assessment 1, geology map 2, both assessment & map 3

Solum P.M.	Substrate	Solum P.M.	Substrate	Solum P.M.	Substrate
1 not identified 1		23 limestone 23		45 coarse-basic 45	
2 **unconsolidated** 2		24 tuff 24		46 fine-acidic 46	
3 gravel 3		25 breccia 25		47 fine-intermediate 47	
4 sand 4		26 greywacke 26		48 fine-basic 48	
5 silt 5		27 arkose 27		49 serpentine 49	
6 clay 6		28 dolomite 28		50 gabbro 50	
7 organic material 7		29 calcrete 29		51 dolerite 51	
8 alluvium 8		30 aeolianite 30		52 diorite 52	
9 colluvium 9		31 chert 31		53 syenite 53	
10 lacustrine 10		32 jasper 32		54 granodiorite 54	
11 aeolian 11		33 **metamorphic** 33		55 adamellite 55	
12 marine 12		34 gneiss 34		56 granite 56	
13 calcareous sand 13		35 schist/phyllite 35		57 aplite 57	
14 fill 14		36 slate 36		58 quartz porphyry 58	
15 mud 15		37 hornfels 37		59 basalt 59	
16 till 16		38 quartzite 38		60 andesite 60	
17 **sedimentary** 17		39 greenstone 39		61 trachyte 61	
18 shale 18		40 amphibolite 40		62 rhyolite 62	
19 siltstone/mudstone 19		41 marble 41		63 obsidian 63	
20 sandstone-quartz 20		42 **igneous** 42		64 scoria 64	
21 sandstone-lithic 21		43 coarse-acidic 43		65 ash 65	
22 conglomerate 22		44 coarse-intermediate 44		66 agglomerate 66	
				67 other 67	

Rock Outcrop: nil 1, <2% 2, 2 - 10% 3, 10 - 20% 4, 20 - 50% 5, >50% 6

Substrate Strength: weak 1, moderately strong 2, strong 3

Weathering & Alteration: ferruginised 1, kaolinised 2, silicified 3, calcified 4, fresh rock 5, faintly weathered rock 6, slightly weathered rock 7, mod. weathered rock 8, highly weathered rock 9, structured saprolite 10, massive saprolite 11, other 12

Example only
do not use to record data

HYDROLOGY

Free Water	Site Exposure	Run-on	Run-off
none 1		1 none	1
above soil 2	Exposed 1	2 low	2
below soil 3	Sheltered 2	3 moderate	3
		4 high	4
		5 very high	5

Depth: 0–9

Profile Drainage: very poorly drained 1, poorly drained 2, imperfectly drained 3, mod. well drained 4, well drained 5, rapidly drained 6

LAND USE VEG. SPECIES

SALT OUTBREAK VEG. SPECIES

SURFACE CONDITION(S)

Wet	Dry
1 gravelly	1
2 cracked	2
3 self-mulched	3
4 loose	4
5 soft	5
6 firm	6
7 hardset	7
8 surface crust	8
9 trampled	9
10 poached	10
11 recently cultivated	11
12 water repellent	12
13 other disturbance	13

LAND USE

Site	General Area	G.S.G.
1 national/state parks	1	B B B
2 timber/scrub/unused	2	C C
3 logged native forest	3	D D
4 hardwood plantation	4	E E E
5 softwood plantation	5	G G G
6 volun./native pasture	6	H H H
7 improved pasture	7	K K K
8 cropping	8	L L
9 orchard/vineyard	9	N M
10 vegetables/flowers	10	P P P
11 urban	11	R R
12 industrial	12	S S S
13 quarry/mining	13	T Z
14 other	14	W
		X
		Y
		affinity with

SITE DISTURBANCE(S): natural disturbance 1, no effect. disturbance 2, limited clearing 3, extensive clearing 4, cleared, no cultivation 5, occasional cultivation 6, rain-fed cultivation 7, irrigated cultivation 8, highly disturbed 9

Aust Class: O, SO, GG, SG, FAMILY, C

DATA TO BECOME PUBLIC: AFTER Checking, 1 year, 3 years, On notification, Never

SITE FIELD NOTES

SALINITY: no salting evident 1, salting evident 2, strongly evident 3

SALT OUTBREAK MAPPING	EM MEASUREMENT 1 Type	Horiz. ms/m	Vert. ms/m	EM MEASUREMENT 2 Type	Horiz. ms/m	Vert. ms/m
0–9	0–9	0–9	0–9	0–9	0–9	0–9

Please do not mark this space.

LAYER STATUS:

LAYER FIELD NOTES / BARCODE

	Lower	Horizon	Colour
1	0 1 2 3 4 5 6 7 8 9	A B C AB AC BC D E F O P R 1 2 3 4 5 6 7	dark 1, red 2, orange 3, yellow 4, brown 5, pale 6, grey 7, gley 8
2	0 1 2 3 4 5 6 7 8 9	A B C AB AC BC D E F O P R 1 2 3 4 5 6 7	dark 1, red 2, orange 3, yellow 4, brown 5, pale 6, grey 7, gley 8
3	0 1 2 3 4 5 6 7 8 9	A B C AB AC BC D E F O P R 1 2 3 4 5 6 7	dark 1, red 2, orange 3, yellow 4, brown 5, pale 6, grey 7, gley 8
4	0 1 2 3 4 5 6 7 8 9	A B C AB AC BC D E F O P R 1 2 3 4 5 6 7	dark 1, red 2, orange 3, yellow 4, brown 5, pale 6, grey 7, gley 8
5	0 1 2 3 4 5 6 7 8 9	A B C AB AC BC D E F O P R 1 2 3 4 5 6 7	dark 1, red 2, orange 3, yellow 4, brown 5, pale 6, grey 7, gley 8

Horizon: Imped-ing; Suffix: a b c d e f g h i k m n p q r s t w x y z ?

Example only
do not use to record data

FIELD TEXTURE

Texture Grade	1	2	3	4	5
sand	1	1	1	1	1
loamy sand	2	2	2	2	2
clayey sand	3	3	3	3	3
sandy loam	4	4	4	4	4
loam	5	5	5	5	5
silty loam	6	6	6	6	6
sandy clay loam	7	7	7	7	7
clay loam	8	8	8	8	8
clay loam sandy	9	9	9	9	9
silty clay loam	10	10	10	10	10
sandy clay	11	11	11	11	11
silty clay	12	12	12	12	12
clay	13	13	13	13	13
fibric peat	14	14	14	14	14
hemic peat	15	15	15	15	15
sapric peat	16	16	16	16	16

Sand Fraction	1	2	3	4	5
coarse	1	1	1	1	1
fine	2	2	2	2	2

Clay Fraction	1	2	3	4	5
light	1	1	1	1	1
light medium	2	2	2	2	2
medium	3	3	3	3	3
medium heavy	4	4	4	4	4
heavy	5	5	5	5	5

MOTTLES

Colour	1	2	3	4	5
dark	1	1	1	1	1
red	2	2	2	2	2
orange	3	3	3	3	3
yellow	4	4	4	4	4
brown	5	5	5	5	5
pale	6	6	6	6	6
grey	7	7	7	7	7
gley	8	8	8	8	8

Abundance	1	2	3	4	5
0%	1	1	1	1	1
<2%	2	2	2	2	2
2 - 10%	3	3	3	3	3
10 - 20%	4	4	4	4	4
20 - 50%	5	5	5	5	5

STRUCTURE

Grade of Pedality	1	2	3	4	5
single-grained	1	1	1	1	1
massive	2	2	2	2	2
weak pedality	3	3	3	3	3
moderate pedality	4	4	4	4	4
strong pedality	5	5	5	5	5

Dominant Ped Shape	1	2	3	4	5
platy	1	1	1	1	1
lenticular	2	2	2	2	2
prismatic	3	3	3	3	3
columnar	4	4	4	4	4
angular blocky	5	5	5	5	5
sub-ang. blocky	6	6	6	6	6
polyhedral	7	7	7	7	7
granular	8	8	8	8	8
crumb	9	9	9	9	9
round	10	10	10	10	10

Dominant Ped Size	1	2	3	4	5
<2mm	1	1	1	1	1
2 - 5mm	2	2	2	2	2
5 - 10mm	3	3	3	3	3
10 - 20mm	4	4	4	4	4
20 - 50mm	5	5	5	5	5
50 - 100mm	6	6	6	6	6
100 - 200mm	7	7	7	7	7
200 - 500mm	8	8	8	8	8
>500mm	9	9	9	9	9

FABRIC	1	2	3	4	5
sandy	1	1	1	1	1
earthy	2	2	2	2	2
rough-faced peds	3	3	3	3	3
smooth-faced peds	4	4	4	4	4

PERMEABILITY	1	2	3	4	5
very slow	1	1	1	1	1
slow	2	2	2	2	2
moderate	3	3	3	3	3
rapid	4	4	4	4	4

SOIL WATER STATUS	1	2	3	4	5
dry	1	1	1	1	1
mod. moist	2	2	2	2	2
moist	3	3	3	3	3
wet	4	4	4	4	4

pH Testing Method	
Raupach	1
pH meter	2
test strip	3

pH	1	2	3	4	5
0 1 2 3 4 5 6 7 8 9					

EC	Measurement units ds/m 1	ms/m 2			
	1	2	3	4	5
0 1 2 3 4 5 6 7 8 9					

CRACKS	Amount	1	2	3	4	5
	none	1	1	1	1	1
	evident	2	2	2	2	2

MACROPORES	Amount	1	2	3	4	5
	none	1	1	1	1	1
	few (<1/10 x 10 mm)	2	2	2	2	2
	common (1-5/10 x 10 mm)	3	3	3	3	3
	many (>5/10 x 10 mm)	4	4	4	4	4

FRAGMENTS	Amount	1	2	3	4	5
	none	1	1	1	1	1
	very few (<2%)	2	2	2	2	2
	few (2-10%)	3	3	3	3	3
	common (10-20%)	4	4	4	4	4
	many (20-50%)	5	5	5	5	5
	abundant (50-90%)	6	6	6	6	6
	very abundant (>90%)	7	7	7	7	7

SUBSTRATE

Upper
0 1 2 3 4 5 6 7 8 9

LAYER BOUNDARY	Distinctiveness	1	2	3	4	5
	not evident	1	1	1	1	1
	sharp (<5 mm)	2	2	2	2	2
	abrupt (5-20 mm)	3	3	3	3	3
	clear (20-50 mm)	4	4	4	4	4
	gradual (50-100 mm)	5	5	5	5	5
	diffuse (>100 mm)	6	6	6	6	6

Base of Observation	
layer continues	1
soil continues	2
equipment refusal	3
bedrock reached	4

SAMPLE TAKEN	1	2	3	4	5
disturbed	3	3	3	3	3
undisturbed	4	4	4	4	4
bulked	6	6	6	6	6
bulk density	7	7	7	7	7

Segregation Type	1	2	3	4	5
not evident	1	1	1	1	1
calcareous	2	2	2	2	2
gypseous	3	3	3	3	3
manganiferous	4	4	4	4	4
ferruginous	5	5	5	5	5
ferromanganiferous	6	6	6	6	6
organic	7	7	7	7	7
not identified	8	8	8	8	8
other	9	9	9	9	9

Segregation Amount	1	2	3	4	5
none	1	1	1	1	1
very few (<2%)	2	2	2	2	2
few (2-10%)	3	3	3	3	3
common (10-20%)	4	4	4	4	4
many (20-50%)	5	5	5	5	5
abundant (>50%)	6	6	6	6	6

FIELD SOIL TESTS					
$AgNO_3$	1	2	3	4	5
no precipitate	1	1	1	1	1
light precipitate	2	2	2	2	2
conspic. white precip.	3	3	3	3	3
HCl	1	2	3	4	5
no effervescence	1	1	1	1	1
audible/slight efferv.	2	2	2	2	2
strong effervescence	5	5	5	5	5
Field Dilatency	1	2	3	4	5
none	1	1	1	1	1
very slow	2	2	2	2	2
slow	3	3	3	3	3
rapid	4	4	4	4	4
Crumb Test	1	2	3	4	5
no change	1	1	1	1	1
aggregates slake	2	2	2	2	2
aggregates disperse	3	3	3	3	3
worked bolus disperses	4	4	4	4	4

TYPE OF PROFILE ASSESSMENT – 1 only	
random	1
bulked	2
map checking	3
opportunistic	4
curiosity/unusual soil	5
boundary checking	6
preplanned	7
transect/catena	8
grid	9

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NSW SOIL AND LAND INFORMATION SYSTEM