APPENDIX 2: GEOLOGICAL FIELD NOTES

Table A2.1: Geological logging definitions.

Lithology		**Description**		**Minerals**	
aluv	alluvium	aeol	aeolian	cal	calcite
brec	breccia	aluv	alluvial	cbn	carbon
calc	calcite	anas	anastomosing	cly	clay
cglm	conglomerate	bed	bedded	dol	dolomite
clay	clay	brec	brecciated	grt	goethite
clcr	calcrete	cg	coarse grained	gyp	gypsum
colv	colluvium	cly	clayey	hal	halite
evap	evaporite	cob	cobbled	hm	haematite
grt	granite	cry	crystalline	kaol	kaolinite
gvl	gravel	eff	efflorescent	pla	plagioclase
lag	lag	eq	equigranular	mno	manganese oxide
lmst	limestone	fen	fenestral voids	qtz	quartz
marl	marl	fg	fine grained	ser	sericite
qzte	quartzite	fol	foliated		
sand	sand	fos	fossiliferous		
sdst	sandstone	frac	fractured		
shle	shale	frf	fracture filling		
silt	silt	gilg	gilgai		
spar	spar calcite	grty	gritty		
tucl	clastic tufa	gvy	gravelly		
tufa	tufa	hm	haematitic		
		hw	highly weathered		
		ind	indurated		
		lam	laminated		
		mas	massive		
		mbl	microbial		
		mcrt	micritic		
		mot	mottled		
		nod	nodular		
		onc	oncoidal		
		org	organic		
		pal	pallid		
		phc	phytoclastic		
		phm	phytohermal		
		qzte	quartzite		
		sili	siliceous		
		sin	sinuous		
		slty	silty		
		sndy	sandy		
		sodc	sodic		
		spar	sparry		
		unc	unconsolidated		
		vein	veined		
		vug	vuggy		

Table A2.1: Geological logging definitions (cont.).

Colour		**Code**	
bl	black	Czm	"Cainozoic" mound spring
br	brown	Hm	Holocene alluvium
gy	grey	Kmb	Bulldog Shale
or	orange	Kmc	Cadna owie Formation
pi	pink	Qa	Quaternary alluvium
pu	purple	Qev	Quaternary evaporitic crust
rd	red	Qm	Quaternary mound spring sediment
ta	tan	Qma	Quaternary mound spring alluvium
wh	white	Qmf	Quaternary mound spring framestone
ye	yellow	Qmp	Quaternary mound spring platform carbonate
		Qmt	Quaternary mound spring tail
		Qps	Quaternary mound spring platform sediment
		Qpt	Telford Gravel
		Qs	Quaternary aeolian sand
		Qsm	Quaternary mound spring sand
		Ts	Tertiary sandstone
		Unk	Unknown

Table A2.2: Geological field notes.

Name	Datum	Zone	Easting	Northing	Code	Lith1	Desc1	Lith2	Desc2	Desc3	Col1	Col2	Min1	Min2	Min3	Min4	Dip	Strike	Sample	Description
Billa Kalina	GDA94	53	644870	6740066	Qm	tufa	phm				ta	br	cal	kaol	qtz	hal	10	220	MSRS001	Phytohermal tufa - reed casting and salt filled fractures. Tan brown in colour massive appearance. Surface possibly weather affected. Edge of pool structure
Billa Kalina	GDA94	53	644867	6740059	Qm	tufa	phm				ta	or	cal	kaol	qtz		52	200	MSRS002	Phytohermal tufa - prominent reed/ root casting, steeply dipping edge of mound southern side tan/ orange brown. Semi layered appearance (lobate?)
Billa Kalina	GDA94	53	644867	6740061	Qm	tufa	phm				ta	br	cal	kaol	qtz		19	233		
Billa Kalina	GDA94	53	644862	6740064	Qm	tufa	phm				ta	br	cal	kaol	qtz		48	252		Very good example of reed/ root casting between horizontal laminations of $CaCO_3$. Steeply dipping edge of mound

Table A2.2: Geological field notes (cont.).

Name	Datum	Zone	Easting	Northing	Code	Lith1	Desc1	Lith2	Desc2	Desc3	Col1	Col2	Min1	Min2	Min3	Min4	Dip	Strike	Sample	Description
Billa Kalina	GDA94	53	644870	6740056	Qm	tufa					wh	gy	cal	kaol	qtz				MSRS003	Older pallid tufa underneath drape of younger tufa. Pale grey in colour. Darker in fractures. Appears possibly phytohermal but compressed.
Billa Kalina	GDA94	53	644874	6740058	Qm	tufa	onc		phm		ta	br	cal	kaol	qtz	grt	6	180	MSRS004	Oncoidal tufa. Halfway along mound. Oncoids 0.5-1cm in diam. Dense tufa, grey on fracture surface. Fe_2O_3 in cavities. Possibly old breakout tail
Billa Kalina	GDA94	53	644876	6740061	Qm	tufa														Possibly old breakout tail
Billa Kalina	GDA94	53	644879	6740058	Qm	tufa	phm				br	bl	cal	mno	kaol	grt		278	MSRS005	MnO rich Fe_2O_3 lined vein in tufa. Vein has anastomosing habit general strike of 278deg. Surrounded by phytohermal tufa. Cavity filling of $CaCO_3$ of salt.

Table A2.2: Geological field notes (cont.).

Name	Datum	Zone	Easting	Northing	Code	Lith1	Desc1	Lith2	Desc2	Desc3	Col1	Col2	Min1	Min2	Min3	Min4	Dip	Strike	Sample	Description
Billa Kalina	GDA94	53	644890	6740067	Qps	silt	sndy		aeol	gvy	gy	br	cal	hal	qtz	cbn				Loose dry sandy silt. Alluvial and /or aeolian sediments. Covers mound to top of rim. Salted crusting developed on surface approx. 1cm thick. Crumbly and easily broken. V angular tufa gravel in sediment - grey tan approx. 1mm-20mm diam.
Billa Kalina	GDA94	53	644889	6740068	Qps	aluv	slty	sand	aeol	gvy	gy	br	cal	hal	qtz	cbn	10	260		
Billa Kalina	GDA94	53	644883	6740075	Qps	aluv	slty	sand	aeol	gvy	gy	br	cal	hal	qtz	cbn	6	42		
Billa Kalina	GDA94	53	644875	6740075	Qps	aluv	slty	sand	aeol	gvy	gy	br	cal	hal	qtz	cbn				Aeolian/ alluvial sediment. Thins to start revealing underlying tufa.
Billa Kalina	GDA94	53	644869	6740071	Qm	tufa	phm				ta	br	cal	kaol	qtz	hal				Head of current tail
Billa Kalina	GDA94	53	644863	6740067	Qm	tufa	phm										20	280		
Billa Kalina	GDA94	53	644861	6740060	Qm	tufa	phm										50	270		

Table A2.2: Geological field notes (cont.).

Name	Datum	Zone	Easting	Northing	Code	Lith1	Desc1	Lith2	Desc2	Desc3	Col1	Col2	Min1	Min2	Min3	Min4	Dip	Strike	Sample	Description
Billa Kalina	GDA94	53	644882	6740070	Qps	silt	aluv	sand	aeol	gvy	gy	br	cal	hal	qtz	cbn			MSRS006	Loose dry sandy silt. Alluvial and /or aeolian sediments. Covers mound to top of rim. Salted crusting developed on surface approx. 1cm thick. Crumbly and easily broken. V angular tufa gravel in sediment - grey tan approx. 1mm-20mm diam. Thin at this point (approx. 10cm)
Billa Kalina	GDA94	53	644847	6739907	Qa	clcr	nod	clay	aluv	sndy	wh	ta	cal	qtz	kaol					N. side of river bed. Start of calcrete horizon. ~. 2m below ground surface. Approx. 2m in thickness. Nodular texture. "Rod-like structure 0.5 - 2cm diam. Prob. root casts Generally vertical or sinuous. Soil infill btw calcrete nodules. Radial deposition in rods. MnO flecks in calcrete follows laminated fabric.

Table A2.2: Geological field notes (cont.).

Name	Datum	Zone	Easting	Northing	Code	Lith1	Desc1	Lith2	Desc2	Desc3	Col1	Col2	Min1	Min2	Min3	Min4	Dip	Strike	Sample	Description
Billa Kalina	GDA94	53	645013	6739947	Qa	clcr	nod	clay	aluv	sndy	wh	ta	cal	qtz	kaol					Northern side of river bed. Start of calcrete horizon. Approx. 2m below ground surface. Approx. 2m in thickness. Nodular calcrete. Nodular texture. "Rod-like structure 0.5 - 2cm diam. Prob. root casts Generally vertical or sinuous horizontal. Soil infill btw calcrete nodules. Radial deposition in rods. MnO flecks in calcrete follows laminated fabric.
Billa Kalina	GDA94	53	644703	6740266	Qa	silt	sndy	gvl	tufa	qzte	or	ta	qtz	cal						Alluvial and aeolian silt and sand with quartzite and tufa gibber and grit on surface. Aeolian lunettes at the base of shrubs common. Also root castings of calcrete

Table A2.2: Geological field notes (cont.).

Name	Datum	Zone	Easting	Northing	Code	Lith1	Desc1	Lith2	Desc2	Desc3	Col1	Col2	Min1	Min2	Min3	Min4	Dip	Strike	Sample	Description
Billa Kalina	GDA94	53	644890	6740079	Qmf	silt	cly	tufa	unc		gy		cal	qtz	kaol					Damp soil at base of main mound. May not have been present in October 2008. Salt efflorescence and possible erosion.
Billa Kalina	GDA94	53	644901	6740043	Qa	silt	cly		sodc	gilg	gy	ta	cly	qtz	cal					"Broken" ground composed of grey silty clayey sodic soil. Part of old bore drain. Un-vegetated.
Billa Kalina	GDA94	53	644925	6740021	Qmt	tufa	fen		mas	frac	gy	ta	cal						MSRS008	Mound spring tufa. Possible tail - dense massive with fenestral vugs and tabular cracking on surface. Dark tan grey, fine grained
Billa Kalina	GDA94	53	644925	6740021	Qmt	tufa	cly		brec	mot	gy	wh	cal	cly						V. fractured (or desiccated) clayey limestone (podsol). Anast. fractures with carbonaceous fracture fill. Near horizontal bedding. Also present as vertical fracture fill (large fractures) in overlying layer

Table A2.2: Geological field notes (cont.).

Name	Datum	Zone	Easting	Northing	Code	Lith1	Desc1	Lith2	Desc2	Desc3	Col1	Col2	Min1	Min2	Min3	Min4	Dip	Strike	Sample	Description
Billa Kalina	GDA94	53	644940	6740079	Qmt	tufa	fen		mas	frac	gy	ta	cal							Mound spring tufa. Possible tail - dense massive with fenestral vugs and tabular cracking on surface. Dark tan grey, fine grained
Billa Kalina	GDA94	53	644940	6740079	Qmt	tufa	cly		brec	mot	gy	wh	cal	cly						V. fractured (or desiccated) clayey limestone of calcareous pod sol. Anast. fractures with carbonaceous fracture fill. Tan grey to grey in colour. Near horizontal bedding. Also present as vertical fracture fill (large fractures) in overlying layer
Billa Kalina	GDA94	53	644931	6739995	Qmt	tufa	mas		frac	fen	or	ta	cal	grt	mno		9	180		Dense, Fe_2O_3 stained massive tufa on angle. MnO fracture-fill. Mound spring tufa. Possible tail - dense massive with fenestral vugs and tabular cracking on surface, fine grained

Table A2.2: Geological field notes (cont.).

Name	Datum	Zone	Easting	Northing	Code	Lith1	Desc1	Lith2	Desc2	Desc3	Col1	Col2	Min1	Min2	Min3	Min4	Dip	Strike	Sample	Description
Billa Kalina	GDA94	53	644934	6739997	Qmt	tufa	frac		fg	mas	bl		cal	mno					MSRS009	Black, MnO stained limestone tufa sub-crop. Appears fractured. Massive, fine grained. No apparent vugs
Billa Kalina	GDA94	53	644901	6739977	Qmf	silt	org	tufa	unc	phm	ta	gy	qtz	cal						Second vent in system. Tufa appears less consolidated; most of mound composed (on surface) of semi-consolidated soil/tufa. Some more consolidated layers of apparently harder tufa below unconsolidated material
Billa Kalina	GDA94	53	644883	6739952	Qmt	tufa	phc		fen	frac	or	pu	cal	hm	grt	dol			MSRS010	Orange tan to purple red phytoclastic tufa with possible dolomite content. Tabular fracture with blocky tabular (angular conglomerate) texture on weathered surfaces. Dense and massive with fenestral vugs

Table A2.2: Geological field notes (cont.).

Name	Datum	Zone	Easting	Northing	Code	Lith1	Desc1	Lith2	Desc2	Desc3	Col1	Col2	Min1	Min2	Min3	Min4	Dip	Strike	Sample	Description
Billa Kalina	GDA94	53	644898	6739948	Qmt	tufa	phc		fen	frac	or	pu	cal	hm	grt	dol				Orange tan to purple red phytoclastic tufa with possible dolomite content. Tabular fracture with blocky tabular (angular conglomerate) texture on weathered surfaces. Dense and massive with fenestral vugs
Billa Kalina	GDA94	53	644910	6739951	Qmt	tufa	phc		fen	frac	or	pu	cal	hm	grt	dol				Orange tan to purple red phytoclastic tufa with possible dolomite content. Tabular fracture with blocky tabular (angular conglomerate) texture on weathered surfaces. Dense and massive with fenestral vugs

Table A2.2: Geological field notes (cont.).

Name	Datum	Zone	Easting	Northing	Code	Lith1	Desc1	Lith2	Desc2	Desc3	Col1	Col2	Min1	Min2	Min3	Min4	Dip	Strike	Sample	Description
Billa Kalina	GDA94	53	644915	6739961	Qmt	tufa	phc		onc	frac	or	pu	cal	hm	grt	mno				Orange tan to purple red phytoclastic tufa with possible dolomite content. Tabular fracture with blocky tabular (angular conglomerate) texture on weathered surfaces. Dense and massive with fenestral vugs. MnO fracture fill around possible oncoidal beds.
Billa Kalina	GDA94	53	644599	6740135	Qs	sand	aeol	gvl	tufa		or	ta	qtz	cal						Top of sand dune to north of spring complex. Aeolian sand with thorn bush vegetation. Efflorescence on southern side of dune. Dark grey phytohermal tufa rubble with fragments up to 30cm diameter washing out of base.
Billa Kalina	GDA94	53	644585	6740145	Qs	sand	aeol	gvl	tufa		or	ta	qtz	cal					MSRS012	Grey phytohermal tufa rubble at base of sand dune. Very vuggy with reed castings.

Table A2.2: Geological field notes (cont.).

Name	Datum	Zone	Easting	Northing	Code	Lith1	Desc1	Lith2	Desc2	Desc3	Col1	Col2	Min1	Min2	Min3	Min4	Dip	Strike	Sample	Description
Billa Kalina	GDA94	53	644771	6740291	Qs	sand	aeol				ta	ye	qtz					180		Large aeolian lunette with shrub vegetation. Area to south; looks sandier aeolian sand cover with lunettes at base of shrubs. Dune is triangular with point to south.
Billa Kalina	GDA94	53	644769	6740292	Qs	sand	aeol				ta	ye	qtz							Edge of aeolian sand/ dune cover. Area to south looks like reworked aeolian sand/ bore drain alluvial silts and clays. Cracked surface and grasses.
Billa Kalina	GDA94	53	644854	6740288	Qa	aluv	sndy	sand	aeol	slty	ta	ye	qtz	cly						Aeolian silt and alluvial clays of bore drain. Cracked tan/ brown clays and wash-outs around shrubs.
Billa Kalina	GDA94	53	644924	6740251	Qa	aluv	sndy	sand	aeol	slty	ta	ye	qtz	cly						Aeolian silt and alluvial clays of bore drain. Cracked tan/ brown clays and wash-outs around shrubs.

Table A2.2: Geological field notes (cont.).

Name	Datum	Zone	Easting	Northing	Code	Lith1	Desc1	Lith2	Desc2	Desc3	Col1	Col2	Min1	Min2	Min3	Min4	Dip	Strike	Sample	Description
Billa Kalina	GDA94	53	644997	6740236	Qa	aluv	sndy	sand	aeol	gvy	ta	ye	qtz	cly						Aeolian silt and alluvial clays of bore drain. Cracked tan/ brown clays and wash-outs around shrubs. Grey tufa gravel and quartzite gibber and grit on surface
Billa Kalina	GDA94	53	645023	6740224	Qm	tufa	phm		vug		gy	ta	cal							Large pile or sub-crop of phytohermal tufa
Billa Kalina	GDA94	53	645051	6740209	Qa	clay	aluv	silt	frac	grty	ta	ye	cly	qtz	cal					Alluvial clay/silt. Desiccation cracking. Minor tufa grit/ rubble
Billa Kalina	GDA94	53	645126	6740180	Qa	clay	aluv	silt	frac		ta	ye	cly	qtz						Alluvial clay/silt. Desiccation cracking.
Billa Kalina	GDA94	53	645256	6740105	Qa	clay	aluv	silt	frac		ta	ye	cly	qtz						Alluvial clay/silt. Desiccation cracking. Edge of river. River dry at this point
Billa Kalina	GDA94	53	645239	6740039	Ha	gvl	aluv	sand	slty		br	ta	qtz	cly						Modern alluvial gravels and sands of Margaret river. Edge of where water in river stops downstream of springs.

Table A2.2: Geological field notes (cont.).

Name	Datum	Zone	Easting	Northing	Code	Lith1	Desc1	Lith2	Desc2	Desc3	Col1	Col2	Min1	Min2	Min3	Min4	Dip	Strike	Sample	Description
Billa Kalina	GDA94	53	644874	6740065	Qm	silt	cly	sand	org		br	bl	qtz	kaol	cal				MSRS014	Pool silt. High in organic matter. Possibly Fe2S present. Grit and sand particles also present. Grey and tan colour. Centre of pool.
Billa Kalina	GDA94	53	644886	6740082	Qmp	silt	cly	tufa	unc		br	gy	cal	qtz	kaol	hal			MSRS0015	Detrital tufa and alluvial clay wetted by presence of new vent opening. Salt encrustation and goethite on surface.
Beresford	GDA94	53	661634	6761604	Qm	tufa	phm		onc		gy	ta	cal				8	331		Outcrop of reed cast and oncoidal tufa approx. 0.5m to top of water
Beresford	GDA94	53	661626	6761597	Qm	tufa	phm		onc		gy	ta	cal				2	284		Outcrop of reed cast and oncoidal tufa
Beresford	GDA94	53	661628	6761609	Qm	tufa	phm		onc		gy	ta	cal				14	330		Frame stone of reed cast and oncoidal tufa. Halfway down mound

Table A2.2: Geological field notes (cont.).

Name	Datum	Zone	Easting	Northing	Code	Lith1	Desc1	Lith2	Desc2	Desc3	Col1	Col2	Min1	Min2	Min3	Min4	Dip	Strike	Sample	Description
Beresford	GDA94	53	661628	6761620	Qm	tufa	onc				gy	ta	cal				4	340	LBSRS001	Oncoidal tufa near base of mound. Mass. fabric apparent. Smoothed surface. Oncoids btw 0.5-1cm diam. Mass. micritic cement.
Beresford	GDA94	53	661628	6761616	Qm	tufa	onc				gy	ta	cal				10	330		
Beresford	GDA94	53	661652	6761631	Qm	tucl	gvy	cglm	cob	cly	ta	gy	cal	qtz	kaol					Carbonate platform. Clayey silt and clastic tufa cobbles and gravel. Frags composed of larger framest. pieces or oncoids that have migrated downslope. Matrix unconsol. clayey silt. Micritic. Platform generally flat. Underlain by consolidated clastic tufa or oncoidal tufa.
Beresford	GDA94	53	661660	6761635	Qm	tucl	gvy	cglm	cob	cly	ta	gy	cal	qtz	kaol				LBSRS002	Clastic tufa. Consolidated tan grey white in colour. Massive fabric. Detrital frags in matrix. Well rounded qtz and tufa gravels.

Table A2.2: Geological field notes (cont.).

Name	Datum	Zone	Easting	Northing	Code	Lith1	Desc1	Lith2	Desc2	Desc3	Col1	Col2	Min1	Min2	Min3	Min4	Dip	Strike	Sample	Description
Beresford	GDA94	53	661668	6761716	Kmb	shle	fol	tufa	mbl	lam	ta	wh	cal	qtz	ser	grt			LBSRS003	Bulldog shale outcrop. Base of carbonate platform. Blocky fracture to flaky fracture. Highly weathered. Evidence of microbial tufa on upper surfaces of bulldog shale.
Beresford	GDA94	53	661695	6761665	Qa	aluv	sndy	clay	gvy	slty	ta	gy	cal	qtz	kaol	hal				Fine alluvial with sand and gravel. Wet with efflorescence. On south side of carbonate platform btw dry alluvial.
Beresford	GDA94	53	661791	6761587	Kmb	shle	fol		ind	cly	ta	br	cal	qtz	ser					Bulldog shale outcrop
Beresford	GDA94	53	661799	6761535	Kmb	shle	fol		ind	cly	ta	br	cal	qtz	ser					Bulldog shale outcrop
Beresford	GDA94	53	661811	6761494	Kmb	shle	fol		ind	cly	ta	br	cal	qtz	ser					Bulldog shale outcrop
Beresford	GDA94	53	661798	6761475	Kmb	shle	fol		ind	cly	ta	br	cal	qtz	ser					Bulldog shale outcrop
Beresford	GDA94	53	661778	6761451	Kmb	shle	fol		ind	cly	ta	br	cal	qtz	ser					Bulldog shale outcrop
Beresford	GDA94	53	661743	6761474	Kmb	shle	fol		ind	cly	ta	br	cal	qtz	ser					Bulldog shale outcrop

Table A2.2: Geological field notes (cont.).

Name	Datum	Zone	Easting	Northing	Code	Lith1	Desc1	Lith2	Desc2	Desc3	Col1	Col2	Min1	Min2	Min3	Min4	Dip	Strike	Sample	Description
Beresford	GDA94	53	661698	6761470	Kmb	shle	pal		hw	cly	wh	gy	cal	qtz	ser					Very weathered Bulldog shale outcrop. Honey comb weathering texture. Pallid grey colour Clay rich
Beresford	GDA94	53	661708	6761435	Kmb	shle	fol		ind	cly	ta	br	cal	qtz	ser					Bulldog shale outcrop
Beresford	GDA94	53	661687	6761418	Kmb	shle	fol		ind	cly	ta	br	cal	qtz	ser					Bulldog shale outcrop
Beresford	GDA94	53	661614	6761470	Qa	aluv	cly	lag	slty	gvy	ta	wh	kaol	cal	qtz					Grey alluvial silty and clayey. Angular cobble and gravel lag. Possibly BDS residual soil (?) silica lag and clastic tufa.
Beresford	GDA94	53	661577	6761479	Kmb	shle	fol		ind	cly	ta	br	cal	qtz	ser					Bulldog shale outcrop
Beresford	GDA94	53	661565	6761494	Kmb	shle	fol	calc	frf		ta	br	cal	qtz	ser					Very foliated and fractured Bulldog Shale. $CaCO_3$ fracture-fill. Foliation looks acuate. Poss. Rotation structural deformation (?)
Beresford	GDA94	53	661524	6761515	Kmb	shle	fol				ta	br	cal	qtz	ser					Highly fractured/shattered Bulldog Shale outcrop

Table A2.2: Geological field notes (cont.).

Name	Datum	Zone	Easting	Northing	Code	Lith1	Desc1	Lith2	Desc2	Desc3	Col1	Col2	Min1	Min2	Min3	Min4	Dip	Strike	Sample	Description
Beresford	GDA94	53	661518	6761527	Kmb	shle	fol				ta	br	cal	qtz	ser					Highly fractured/shattered Bulldog Shale outcrop
Beresford	GDA94	53	661513	6761565	Kmb	shle	fol				ta	br	cal	qtz	ser					Highly fractured/shattered Bulldog Shale outcrop
Beresford	GDA94	53	661480	6761564	Kmb	shle	fol			cly	ta	br	cal	qtz	ser					Bulldog shale outcrop
Beresford	GDA94	53	661457	6761561	Kmb	shle	fol			cly	ta	br	cal	qtz	ser					Bulldog shale outcrop
Beresford	GDA94	53	661548	6761576	Kmb	shle	pal		hw	cly	wh	gy	cal	qtz	ser					Very weathered Bulldog shale outcrop. Honey comb weathering texture. Pallid grey colour Clay rich
Beresford	GDA94	53	661670	6761618	Qmf	tufa	onc				gy	ta	cal	cly	qtz				LBSRS007	Actively formed oncoidal tufa from active tail. Thin plates of carbonate accumulation parallel to slope of mound. Contains gastropod shells and organic matter acting as nuclei for carbonate precipitation.

Table A2.2: Geological field notes (cont.).

Name	Datum	Zone	Easting	Northing	Code	Lith1	Desc1	Lith2	Desc2	Desc3	Col1	Col2	Min1	Min2	Min3	Min4	Dip	Strike	Sample	Description
Beresford	GDA94	53	661801	6762000	Qa	aluv	cly	gvl			ta		cly	kaol						Clayey alluvial silt. Desiccation cracking. Rounded quartzite and Bulldog Shale gibber approx. 10-100mm diameter.
Beresford	GDA94	53	661716	6761750	Qmt	tufa	fen		mas		br		cal	cly					LBSRS008	Compacted limestone. Fenestral vugs with botryoidal cement infill. Tan grey in colour. Approximately 0.5m thick. Tail limestone.
Beresford	GDA94	53	661716	6761750	Qmt	tufa	cly		brec	mot	gy	wh	cal	cly					LBSRS009	In situ brecciation or dehydration fracturing. Highly weathered carbonaceous rock or pod sol beneath LBSRS008. Pallid grey mottled with tan. Clay rich
Beresford	GDA94	53	661645	6761685	Qmt	tufa	spar		vug	anas	ta	br	cal	cly					LBSRS010	Sparry very vuggy algal? Limestone tufa. Anastomosing habit with carbonate clay infill. Tan brown in colour. Middle of carbonate platform

Table A2.2: Geological field notes (cont.).

Name	Datum	Zone	Easting	Northing	Code	Lith1	Desc1	Lith2	Desc2	Desc3	Col1	Col2	Min1	Min2	Min3	Min4	Dip	Strike	Sample	Description
Beresford	GDA94	53	661628	6761616	Qma	silt					gy	br	cal	cbn	qtz				LBSRS011	Pool silt. High in organic matter. Possibly Fe_2S present. Grit and sand particles also present. Approximately 20cm below water surface. Edge of pool.
Beresford	GDA94	54	661629	6761599	Qmf	tufa	phm		vug		gy								LBSRS012	Grey phytohermal tufa. Top of little Beresford Hill mound. Very vuggy with reed castings. Castings point to southwest - flow direction. Parts underlain by broken fractured clayey tufa and anastomosing fracture fill. Crumbly grey tan to grey.
Beresford	GDA94	53	661437	6761607	Kmb	marl	fg		mas		bl	gy	cal	qtz	ser				LBSRS0013	Outcrop of "Bulldog Shale" limestone. Blocky fracture. Dark grey in colour.
Beresford	GDA94	53	661771	6761526	Kmb	marl	fg		mas		bl	gy	cal	qtz	ser				LBSRS0014	Outcrop of "Bulldog Shale" limestone. Blocky fracture. Dark grey in colour.

Table A2.2: Geological field notes (cont.).

Name	Datum	Zone	Easting	Northing	Code	Lith1	Desc1	Lith2	Desc2	Desc3	Col1	Col2	Min1	Min2	Min3	Min4	Dip	Strike	Sample	Description
Beresford	GDA94	53	661659	6761753	Qmp	tufa	brec		mot		gy	wh	cal					62		Outcrop of clastic tufa on little Beresford platform. All outcrops approx. 30cm high and has 20m extent. Mottled tufa with botryoidal spar calcite infill in places. Pink massive glassy fracture fill
Beresford	GDA94	53	661656	6761744	Qmp	tufa	brec		mot		gy	wh	cal					127		Outcrop of clastic tufa on little Beresford platform. All outcrops approx. 30cm high and has 10m extent. Mottled grey/ white tufa with botryoidal spar calcite infill in places. Pink massive glassy fracture fill
Warburton	GDA94	53	662355	6760458	Qm	tufa	phm				gy	bl	cal	cbn					WSRS001	Tufa, phytohermal textures (reed casts) tufa dark grey - high organic content? Massive fabric approx. 1m above salt encrustation on surface

Table A2.2: Geological field notes (cont.).

Name	Datum	Zone	Easting	Northing	Code	Lith1	Desc1	Lith2	Desc2	Desc3	Col1	Col2	Min1	Min2	Min3	Min4	Dip	Strike	Sample	Description
Warburton	GDA94	53	662358	6760470	Qm	tufa	phm				gy	bl	cal	cbn			0		WSRS002 WSRS003	Phytohermal tufa approx. 1.5m above water height.
Warburton	GDA94	53	662366	6760474	Qm	tufa	phm				gy	bl	cal	cbn			0			Phytohermal tufa approx. 0.4m above water height.
Warburton	GDA94	53	662363	6760479	Qm	tufa	phm				gy	bl	cal	cbn			10	324		Phytohermal tufa approx. 1.2m above water height.
Warburton	GDA94	53	662335	6760475	Qps	silt	sndy		gvy		ta	br	cal	qtz	kaol					Clastic alluvial material - fine sand and gravel. Possibly large tufa component. Side of Warburton spring crusted on surface.
Warburton	GDA94	53	662295	6760624	Qm	tufa	onc	sand	cly	eff	gy	br	cal	qtz	hal					Thin oncoidal tufa layer on clayey sand. Grey with reed castings.
Warburton	GDA94	53	662334	6760660	Qm	tufa	mbl	sand	cly		gy	or	cal							Edge of carbonate platform. Microbial tufa approx. 0.5m thick over fine alluvial sand. Seep at base of breakaway in sand.

Table A2.2: Geological field notes (cont.).

Name	Datum	Zone	Easting	Northing	Code	Lith1	Desc1	Lith2	Desc2	Desc3	Col1	Col2	Min1	Min2	Min3	Min4	Dip	Strike	Sample	Description
Warburton	GDA94	53	662341	6760698	Qa	aluv	sndy	sand	slty	gvy	ta	br	qtz	cal	kaol	hal				Alluvial silty sand with gravel. Salt encrustation on surface. Old tail approx. 1m wide nearby.
Warburton	GDA94	53	662300	6760572	Qa	aluv	gvy	clay	sndy		or	br								"Lineament" in alluvial plain. Composed of angular Bulldog shale fragments. Alluvial is a mud cracked sandy clay
Warburton	GDA94	53	662221	6761016	Kmb	shle	fol			cly	ta	br	cal	qtz	ser					Bulldog shale sub-crop
Warburton	GDA94	53	662187	6761080	Kmb	shle	fol		fos	cly	ta	br	cal	qtz	ser					Bulldog shale outcrop - mostly shellfish fossils. Contact with Beresford hill limestone at base of hill
Warburton	GDA94	53	662106	6761087	Kmb	shle	fol	Colv	gvy	cly	ta	br	cal	qtz	ser					possible Bulldog shale outcrop in Beresford hill colluvium on scree slope
Warburton	GDA94	53	662104	6761021	Kmb	shle	pal		hw	cly	wh	gy	cal	qtz	ser					very weathered Bulldog shale outcrop at base of Beresford hill

Table A2.2: Geological field notes (cont.).

Name	Datum	Zone	Easting	Northing	Code	Lith1	Desc1	Lith2	Desc2	Desc3	Col1	Col2	Min1	Min2	Min3	Min4	Dip	Strike	Sample	Description
Warburton	GDA94	53	662108	6760926	Qa	aluv	cly		gvy		ta	br	qtz	cal	kaol					Edge of Beresford hill alluvial and "playa" alluvial. Probably reworked.
Warburton	GDA94	53	662144	6760674	Qa	aluv	sndy		gvy	eff	ta	br	qtz	kaol	cal	hal				Fine sand alluvial and gravel approx. 70m from Warburton spring complex. Salt crust 0.2-0.4cm thick.
Warburton	GDA94	53	662032	6760539	Qa	aluv	cly		eff		or	br	qtz	kaol	cal	hal				Moist alluvial clay with 0.1mm thick efflorescent crust
Warburton	GDA94	53	662022	6760446	Qa	aluv	eff	sand	slty	gvy	ta	or	qtz	kaol	cal	hal				Damp alluvial silty sand with Bulldog Shale gravel. Near end of tail central approx. 300m from mound
Warburton	GDA94	53	662297	6760206	Qa	aluv	cly		eff		or	br	qtz	kaol	cal	hal				Moist alluvial clay south side of end of tail. Salt crust on surface.
Warburton	GDA94	53	662304	6760337	Qa	aluv	sndy	sand	slty	eff	gy	br								Dry alluvial silty sand near extinct mound south side and 70m from active mound. 3mm thick salt crust.

Table A2.2: Geological field notes (cont.).

Name	Datum	Zone	Easting	Northing	Code	Lith1	Desc1	Lith2	Desc2	Desc3	Col1	Col2	Min1	Min2	Min3	Min4	Dip	Strike	Sample	Description
Warburton	GDA94	53	662379	6760363	Qa	clcr	nod	clay	slty		ye	or	cal	grt					WSRS004	Goethite stained nodular calcrete? Small outcrop at base of old dune or mound Nodules 1-2cm in diam. Massie fabric
Warburton	GDA94	53	662400	6760439	Qps	tucl	gvy	cglm	eff	cly	ta	gy	cal	qtz	kaol	hal				Unconsolidated clastic tufa on south side of Warburton spring. Angular gravel of phytohermal tufa. Efflorescence crusting - indicative of moisture underneath?
Warburton	GDA94	53	662553	6760384	Qa	aluv	cly		cly		rd	br								Cracked alluvial clay pan. Bushes but no grass. 20m from edge of carbonate platform
Warburton	GDA94	53	662613	6766314	Kmb	shle	cly	Colv	gvy		ta	br	cal	qtz	ser					Edge of Bulldog Shale. North side of Warburton Hill. Angular gravel gibber with alluvial clay. Some colluvial cobbles from Warburton hill

Table A2.2: Geological field notes (cont.).

Name	Datum	Zone	Easting	Northing	Code	Lith1	Desc1	Lith2	Desc2	Desc3	Col1	Col2	Min1	Min2	Min3	Min4	Dip	Strike	Sample	Description
Warburton	GDA94	53	662864	6760218	Czm	tufa	mbl		frf		ta		cal	mno						Microbial tufa feature and microbial vein fills with MnO staining (late fracture?)
Warburton	GDA94	53	662739	6760284	Czm	tufa	onc		mcrt	lam	ta		cal							Oncoidal tufa underneath laminated micritic tufa. Near top of Warburton hill
Warburton	GDA94	53	662631	6760272	Kmb	shle	hw						kaol	cal	qtz					Bulldog Shale sub-crop on north side of Warburton hill
Warburton	GDA94	53	662558	6760484	Qa	aluv	cly		slty		ta		kaol	cal	hal					Alluvial silty clay east of Warburton spring. Cracked and dry on surface. Succulent plants on surface suggest salty groundwater beneath.
Warburton	GDA94	53	662517	6760530	Qa	aluv	cly		slty		ta		kaol	cal	hal					Alluvial silty clay east of Warburton spring. Cracked and dry on surface. Succulent plants on surface suggest salty groundwater beneath.

Table A2.2: Geological field notes (cont.).

Name	Datum	Zone	Easting	Northing	Code	Lith1	Desc1	Lith2	Desc2	Desc3	Col1	Col2	Min1	Min2	Min3	Min4	Dip	Strike	Sample	Description
Warburton	GDA94	53	662469	6760526	Qa	clay	mcrt	gvl			gy		cal							Unconsolidated micritic clay with tufa gravel. Approx. 50m from Warburton spring
Warburton	GDA94	53	662388	6760524	Qm	tufa	onc				gy	ta	cal						WSRS005	Oncoidal tufa approx. 20m north east of Warburton spring. Consolidated, very hard, massive texture. On small "mound on breakaway to east.
Warburton	GDA94	53	662344	6760354	Qma	silt					gy	br	cal	cbn	qtz				WSRS006	Unconsolidated fine organic silt from old mound pool. Cool below surface with thin crust. Otherwise dry.
Warburton	GDA94	53	662414	6760395	Qm	tufa	phm	aluv	sndy		gy		cal	qtz					WSRS007	Thin (10cm) layer of consolidated phytohermal tufa above well graded alluvial and aeolian sediments. Abundant cavities. (Prob. reed casts). Approx. 4om from active vent south side.

Table A2.2: Geological field notes (cont.).

Name	Datum	Zone	Easting	Northing	Code	Lith1	Desc1	Lith2	Desc2	Desc3	Col1	Col2	Min1	Min2	Min3	Min4	Dip	Strike	Sample	Description
Warburton	GDA94	53	662380	6760540	Qm	aluv	cly	tufa	phm	mcrt	gy	ta	cal	qtz						Micritic unconsolidated clay under consolidated phytohermal tufa. Moist in drainage channel on edge of platform breakaway.
Warburton	GDA94	53	662453	6760631	Unk	grt	mas		cry	eq	rd	pu	qtz	pla	hm				WSRS008	Small erratic of haematitic granitic intrusive. Highly crystalline, mass, equigranular texture. Feldspar dominant.
Warburton	GDA94	53	662191	6760653	Qs	sand	aeol				rd	br	qtz	cal						Unconsolidated aeolian sand
Warburton	GDA94	53	662238	6760731	Qs	sand	aeol				rd	br	qtz	cal						Unconsolidated aeolian sand
Warburton	GDA94	53	661594	6761567	Qps	tucl	gvy													clastic tufa
Warburton	GDA94	53	661764	6760953	Kmb	shle														Bulldog shale sub/outcrop
Warburton	GDA94	53	661743	6760968	Kmb	shle														Bulldog shale sub/outcrop
Warburton	GDA94	53	661721	6760986	Kmb	shle														Bulldog shale sub/outcrop
Warburton	GDA94	53	661688	6761010	Kmb	shle														Bulldog shale sub/outcrop
Warburton	GDA94	53	661657	6761042	Kmb	shle														Bulldog shale sub/outcrop

Table A2.2: Geological field notes (cont.).

Name	Datum	Zone	Easting	Northing	Code	Lith1	Desc1	Lith2	Desc2	Desc3	Col1	Col2	Min1	Min2	Min3	Min4	Dip	Strike	Sample	Description
Warburton	GDA94	53	661658	6761109	Kmb	shle														Bulldog shale sub/outcrop
Warburton	GDA94	53	661626	6761164	Kmb	shle														Bulldog shale sub/outcrop
Warburton	GDA94	53	661791	6761587	Kmb	shle														Bulldog shale sub/outcrop
Warburton	GDA94	53	661782	6760923	Kmb	shle														Bulldog shale sub/outcrop
Warburton	GDA94	53	662312	6760355	Qmt	tufa	phm		fen		ta	br	cal						WSRS0014	Microbial and phytohermal tufa bed. South of Current Warburton tail. Oncoidal and thrombolytic textures nucleating on reeds. Hard, dense tan/grey tufa approx. 1.5m higher than current tail

Table A2.2: Geological field notes (cont.).

Name	Datum	Zone	Easting	Northing	Code	Lith1	Desc1	Lith2	Desc2	Desc3	Col1	Col2	Min1	Min2	Min3	Min4	Dip	Strike	Sample	Description
Warburton	GDA94	53	662327	6760362	Qmt	tufa	phm		fen		ta	or	cal	grt					WSRS0015	Microbial and phytohermal tufa bed. South of Current Warburton tail. Oncoidal and thrombolytic textures nucleating on reeds. Hard, dense tufa. Heavy goethite impregnation mainly in fenestral voids. Top layer (1cm thick) has no goethite approx. 1.5m higher than current tail
Warburton	GDA94	53	662325	6760621	Qmp	spar	lam		cry	vug	wh	ta	cal	mno	grt		31	134	WSRS0016	Break-away ridge to east of vent. Approx. 1m high. Floe stone spar in outcrop. Still shows fenestral vugs (?) and microbial texture. Iron and manganese rich laminations. Possible lineament/ fault

Table A2.2: Geological field notes (cont.).

Name	Datum	Zone	Easting	Northing	Code	Lith1	Desc1	Lith2	Desc2	Desc3	Col1	Col2	Min1	Min2	Min3	Min4	Dip	Strike	Sample	Description
Warburton	GDA94	53	662408	6760396	Qm	tufa	onc				gy	ta	cal						WSRS005	Previously sampled. Appears on northeast-southwest lineament. Oncoidal tufa approx. 20m north east of Warburton spring. Consolidated, very hard, massive texture. On small "mound on breakaway to east.
Warburton	GDA94	53	662412	6760336	Qmp	clcr	mas		frac	lam	or	ta	cal	grt			59	6	WSRS0017	Tilted, laminated goethitic carbonate outcrop. X-cutting fractures filled with spar. Anastomosing micro-fractures also filled with spar.
Warburton	GDA94	53	662339	6760335	Qmp	tufa	phm		frac		ta	br	cal				90	334		Western edge of carbonate platform. Phytohermal tufa ledge that has slumped. Some sparry floe stone in vertical fractures present

Table A2.2: Geological field notes (cont.).

Name	Datum	Zone	Easting	Northing	Code	Lith1	Desc1	Lith2	Desc2	Desc3	Col1	Col2	Min1	Min2	Min3	Min4	Dip	Strike	Sample	Description
Warburton	GDA94	53	662332	6760353	Qmp	tufa	phm		vug		ta	br	cal							Very large reed castings in slumped tufa between 0.5 and 2cm in diameter. Generally oval shaped
Warburton	GDA94	53	662310	6760485	Qmp	spar	lam	tufa	cry	sin	wh	ta	cal	mno			66	248	WSRS0018	Very thick (5cm) veins of sparry calcite. Occ. veins of MnO. Between vents on Warburton platform. Vein curves slightly.
Warburton	GDA94	53	662229	6766579	Qmp	tufa	frac				ta	br	cal					230		Line of phragmites growing in possible fracture
Warburton	GDA94	53	662184	6760569	Qmp	tufa	phm	spar	frac		ta	or	cal	grt			18	155		Titled phytohermal tufa. Goethite staining underneath. Microfractures/ voids filled with spar
Warburton	GDA94	53	662190	6760653	Qmp	tufa	frac	spar	lam		ta	pi	cal	mno						Spar calcite and MnO fracture fill in microbial (?) tufa. Fracture fill is blocky. Vertical veins and conformable layer veins between beds of tufa.

Table A2.2: Geological field notes (cont.).

Name	Datum	Zone	Easting	Northing	Code	Lith1	Desc1	Lith2	Desc2	Desc3	Col1	Col2	Min1	Min2	Min3	Min4	Dip	Strike	Sample	Description
Warburton	GDA94	53	662239	676720	Qmp	spar	sin	tufa	frac		ta	wh	cal	mno			90	12		Thick (10cm) spar calcite veins. Vertical fracture fills. Generally sinuous habit but general strike of 12deg. Carbonate platform has block fracture and sinuous carbonate spar fill between blocks.
Warburton	GDA94	53	662239	6760715	Qmp	spar	sin	tufa	frac		ta	wh	cal	mno			90	250		Thick (10cm) spar calcite veins. Vertical fracture-fill. Generally sinuous habit but general strike of 250deg. Carbonate platform has block fracture and sinuous carbonate spar fill between blocks.
Strangways	GDA94	53	650223	6772255	Qmf	tufa	phm		vug		br	gy	cal							Extinct mound with well-developed drape and micro-terracing. Appeared well vegetated at formation. Drape broken in places to reveal inner outcrop.

Table A2.2: Geological field notes (cont.).

Name	Datum	Zone	Easting	Northing	Code	Lith1	Desc1	Lith2	Desc2	Desc3	Col1	Col2	Min1	Min2	Min3	Min4	Dip	Strike	Sample	Description
Strangways	GDA94	53	650068	6772211	Qmf	tufa	phm		vug		bl	br	cal						SSRS0003	Phytohermal tufa on top surface of mound. Half-way down slope. Very vesicular and plate-like deposition form on mound. Dip conformable with mound surface.
Strangways	GDA94	53	650087	6772208	Qmf	tufa	phm		vug		bl	br	cal	gyp					SSRS0004	Tufa re-cemented with gypsum. Near edge of apparent relict breakout. Gypsum euhedral, approx. 1-5mm length crystals. Rock very vesicular but roughly conformable to mound shape. Semi consolidated
Strangways	GDA94	53	650093	6772222	Qmf	tufa	phm	spar	vug	cly	br	or	cal	grt	mno				SSRS0002	Phytohermal tufa with horizontal, partly sparry reed casts on underside of framestone rim. Sparry laminae conformable to mound apparent. MnO. Some pallid clay

Table A2.2: Geological field notes (cont.).

Name	Datum	Zone	Easting	Northing	Code	Lith1	Desc1	Lith2	Desc2	Desc3	Col1	Col2	Min1	Min2	Min3	Min4	Dip	Strike	Sample	Description
Strangways	GDA94	53	650081	6772214	Qmt	sand	slty		mas	vug	ye	or	qtz	grt					SSRS0001	Partly consolidated goethitic-stained silt and sand in the middle of mound. Generally massive appearance although subtle bedding possible. Vugs elongated approx. 1-2mm in diameter evident on fracture. Unconsolidated component fills large breakout exposure on northern side
Strangways	GDA94	53	650076	6772207	Qmf	tufa	phm		vug		bl	br	cal				20	310		Phytohermal tufa on top surface of mound. Very vesicular and plate-like deposition form on mound. Dip conformable with mound surface.

Table A2.2: Geological field notes (cont.).

Name	Datum	Zone	Easting	Northing	Code	Lith1	Desc1	Lith2	Desc2	Desc3	Col1	Col2	Min1	Min2	Min3	Min4	Dip	Strike	Sample	Description
Strangways	GDA94	53	650076	6772210	Qmf	tufa	phm		vug		bl	br	cal						SSRS0005	Drapestone tufa on upper surface of mound. Vuggy with reed castings. MnO present iron precipitate in fracture present.
Strangways	GDA94	53	650092	6772192	Qmf	tufa	phm		vug		bl	br	cal				20			Phytohermal tufa on top surface of mound. Very vesicular and plate-like deposition form on mound. Dip conformable with mound surface.
Coward	GDA94	53	674419,		6745702	tufa	vug	spar	anas	mbl	tsa	gy	cal							Microbial micritic tufa with thick laminated to anastomosing (lattice-like) sparry cement and fine grained clotted and microbial micritic groundmass.

Table A2.3: Trend measurements for calcite veins at Warburton Spring (Karlstrom pers. comm., 2011).

Line	Label	Veins/Joints	Location Name	DATUM Zone	Zone	Easting	Northing	Trend
Line 2	JJ	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662240	6760719	0
Line 1	O	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662312	6760624	10
Line 2	AA	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662266	6760666	10
Line 1	E	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662349	6760561	15
Line 1	G	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662340	6760569	20
Line 2	KK	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662241	6760710	20
Line 1	K	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662330	6760598	30
Line 1	O	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662312	6760624	30
Line 1	W	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662259	6760650	30
Line 2	GG	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662251	6760706	40
Line 2	KK	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662241	6760710	40
Line 2	FF	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662254	6760706	45
Line 2	II	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662245	6760716	45
Line 1	U	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662265	6760645	50
Line 2	CC	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662269	6760678	50
Line 1	D	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662351	6760565	65
Line 1	C	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662353	6760562	70
Line 2	JJ	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662240	6760719	80
Line 2	DD	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662270	6760680	70
Line 2	DD	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662270	6760680	70
Line 1	H	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662336	6760574	80
Line 1	I	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662335	6760579	80
Line 2	EE	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662263	6760681	80
Line 1	G	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662340	6760569	90
Line 1	F	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662342	6760565	275

Table A2.3: Trend measurements for calcite veins at Warburton Spring (Karlstrom pers. comm., 2011) (cont.).

Line	Label	Veins/Joints	Location Name	DATUM Zone	Zone	Easting	Northing	Trend
Line 1	Q	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662304	6760635	275
Line 1	V	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662265	6760645	275
Line 2	KK	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662241	6760710	275
Line 1	I	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662335	6760579	280
Line 1	T	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662290	6760636	280
Line 1	V	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662265	6760645	280
Line 2	AA	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662266	6760666	280
Line 1	P	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662310	6760629	285
Line 1	R	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662300	6760637	290
Line 2	DD	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662270	6760680	290
Line 2	FF	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662254	6760706	295
Line 2	HH	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662247	6760710	295
Line 1	B	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662355	6760557	300
Line 1	N	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662315	6760619	300
Line 1	K	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662330	6760598	310
Line 1	M	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662321	6760614	310
Line 1	O	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662312	6760624	310
Line 2	BB	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662268	6760675	310
Line 1	F	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662342	6760565	320
Line 1	G	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662340	6760569	320
Line 1	J	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662335	6760591	320
Line 1	S	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662293	6760631	320
Line 1	U	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662273	6760644	320
Line 1	K	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662330	6760598	325
Line 1	L	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662328	6760606	325

Table A2.3: Trend measurements for calcite veins at Warburton Spring (Karlstrom pers. comm., 2011) (cont.).

Line	Label	Veins/Joints	Location Name	DATUM Zone	Zone	Easting	Northing	Trend
Line 2	KK	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662241	6760710	325
Line 1	A	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662361	6760553	330
Line 1	S	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662293	6760631	330
Line 1	W	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662259	6760650	330
Line 1	J	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662335	6760591	340
Line 1	K	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662330	6760598	340
Line 2	KK	$CaCO_3$ vein	Warburton Spring	GDA	53 J	662241	6760710	350