

APPENDIX D
AHIMS Search Results

AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref Number : 3330a

Client Service ID : 127951

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
52-4-0195	M1 (BCSC1)	AGD	56	227940	6148310	Open site	Destroyed	Artefact : -		100467,10139 0
	<u>Contact</u>									
	<u>Recorders</u>									
52-4-0264	Peppertree Burial 01 (stone arrangement)	GDA	56	227335	6150132	Open site	Valid	Stone Arrangement : 1	2687,2976	
	<u>Contact</u>									
	<u>Recorders</u>									
52-4-0265	Peppertree Scarred Tree 02	GDA	56	227874	6150107	Open site	Valid	Modified Tree (Carved or Scarred) : -		
	<u>Contact</u>									
	<u>Recorders</u>									
52-4-0266	BCSC AS1	AGD	56	226352	6147944	Open site	Valid	Artefact : 8		
	<u>Contact</u>									
	<u>Recorders</u>									
52-4-0267	BCSC AS2	AGD	56	226371	6147950	Open site	Valid	Artefact : 2		
	<u>Contact</u>									
	<u>Recorders</u>									
52-4-0268	BCSC AS3	AGD	56	226381	6147968	Open site	Valid	Artefact : 2		
	<u>Contact</u>									
	<u>Recorders</u>									
52-4-0269	BCSC AS4	AGD	56	226380	6148020	Open site	Valid	Artefact : 22		
	<u>Contact</u>									
	<u>Recorders</u>									
52-4-0270	BCSC IF2	AGD	56	226284	6147952	Open site	Valid	Artefact : 1		
	<u>Contact</u>									
	<u>Recorders</u>									
52-4-0271	BCSC IF3	AGD	56	226206	6147767	Open site	Valid	Artefact : 1		
	<u>Contact</u>									
	<u>Recorders</u>									
52-4-0272	BCSC IF4	AGD	56	226182	6147840	Open site	Valid	Artefact : 1		
	<u>Contact</u>									
	<u>Recorders</u>									
52-4-0273	BCSC IF7	AGD	56	226313	6147951	Open site	Valid	Artefact : 1		
	<u>Contact</u>									
	<u>Recorders</u>									
52-4-0274	BCSC IF8	AGD	56	226313	6147951	Open site	Valid	Artefact : 1		
	<u>Contact</u>									
	<u>Recorders</u>									
52-4-0275	BCSC IF9	AGD	56	226333	6147978	Open site	Valid	Artefact : 1		
	<u>Contact</u>									
	<u>Recorders</u>									
52-4-0276	BCSC IF11	GDA	56	226354	6147952	Open site	Valid	Artefact : 1		
	<u>Contact</u>									
	<u>Recorders</u>									
52-4-0277	BCSC IF12	AGD	56	226357	6147961	Open site	Valid	Artefact : 1		
	<u>Contact</u>									
	<u>Recorders</u>									
52-4-0278	BCSC IF13	AGD	56	226359	6147974	Open site	Valid	Artefact : 1		
	<u>Contact</u>									
	<u>Recorders</u>									

Report generated by AHIMS Web Service on 11/03/2014 for Kirwan Williams for the following area at Datum :GDA, Zone : 56, Eastings : 225000 - 230000, Northings : 6147000 - 6162000 with a Buffer of 50 meters. Additional Info : To inform Archaeological work in the vicinity. Number of Aboriginal sites and Aboriginal objects found is 65

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SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
52-4-0279	BCSC IF14	AGD	56	226386	6147978	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
52-4-0263	BCSC IF 1	GDA	56	226967	6147161	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
48-4-0086	DP1056566 Lot 11/1	AGD	56	225675	6148350	Open site	Valid	Artefact : 12		99346,99362
	<u>Contact</u> T Russell	<u>Recorders</u>						<u>Permits</u>	2536,2675,2676	
48-4-0087	DP1056566 Lot 11/2	AGD	56	226075	6148875	Open site	Valid	Artefact : 37		99346,99362
	<u>Contact</u> T Russell	<u>Recorders</u>						<u>Permits</u>	2536,2675,2676	
48-4-0088	DP1056566 Lot 11/3	AGD	56	226000	6148750	Open site	Valid	Artefact : 3		99346,99362
	<u>Contact</u> T Russell	<u>Recorders</u>						<u>Permits</u>	2536,2675,2676	
48-4-0089	DP1056566 Lot 12/1	AGD	56	225875	6147475	Open site	Valid	Artefact : 21		99346,99362
	<u>Contact</u> T Russell	<u>Recorders</u>						<u>Permits</u>		
48-4-0090	DP1056566 Lot 12/2	AGD	56	225875	6147625	Open site	Valid	Artefact : 8		99346,99362
	<u>Contact</u> T Russell	<u>Recorders</u>						<u>Permits</u>		
48-4-0091	DP1056566 Lot 12/3	AGD	56	225875	6147625	Open site	Valid	Artefact : 8		99346,99362
	<u>Contact</u> T Russell	<u>Recorders</u>						<u>Permits</u>		
48-4-0092	DP1056566 Lot 12/IF1	AGD	56	225800	6147780	Open site	Valid	Artefact : 1		99346,99362
	<u>Contact</u> T Russell	<u>Recorders</u>						<u>Permits</u>		
48-4-0093	DP1056566 Lot 12/IF2	AGD	56	225750	6147800	Open site	Valid	Artefact : 1		99346,99362
	<u>Contact</u> T Russell	<u>Recorders</u>						<u>Permits</u>		
52-4-0246	M2	GDA	56	227783	6148128	Open site	Valid	Artefact : 3		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
52-4-0291	MQ 19	GDA	56	227498	6150292	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
52-4-0292	MQ 20	GDA	56	227952	6150239	Open site	Destroyed	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
52-4-0293	MQ 21	GDA	56	228103	6150306	Open site	Destroyed	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
52-4-0294	MQ 22	GDA	56	228292	6149943	Open site	Destroyed	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
52-4-0295	MQ 23	GDA	56	227565	6150191	Open site	Destroyed	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
52-4-0296	MQ 24	GDA	56	227864	6150067	Open site	Destroyed	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		

Report generated by AHIMS Web Service on 11/03/2014 for Kirwan Williams for the following area at Datum :GDA, Zone : 56, Eastings : 225000 - 230000, Northings : 6147000 - 6162000 with a Buffer of 50 meters. Additional Info : To inform Archaeological work in the vicinity. Number of Aboriginal sites and Aboriginal objects found is 65

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AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref Number : 3330a

Client Service ID : 127951

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
52-4-0297	MQ 25	GDA	56	229040	6149327	Open site	Destroyed	Artefact : 1		
	Contact	Recorders		ERM Australia Pty Ltd-Pyrmont						Permits
52-4-0298	MQ 26	GDA	56	228833	6149949	Open site	Destroyed	Artefact : 1		
	Contact	Recorders		ERM Australia Pty Ltd-Pyrmont						Permits
52-4-0299	MQ 27	GDA	56	227770	6150502	Open site	Valid	Artefact : 1		
	Contact	Recorders		ERM Australia Pty Ltd-Pyrmont						Permits
52-4-0300	MQ 28	GDA	56	228264	6150468	Open site	Destroyed	Artefact : 1		
	Contact	Recorders		ERM Australia Pty Ltd-Pyrmont						Permits
52-4-0301	MQ 29	GDA	56	228330	6150417	Open site	Destroyed	Artefact : 1		
	Contact	Recorders		ERM Australia Pty Ltd-Pyrmont						Permits
52-4-0341	MC-IF-003	GDA	56	228903	6156732	Open site	Valid	Artefact : 1		
	Contact	Recorders		Kayandel Archaeological Services						Permits
52-4-0342	MC-IF-001	GDA	56	228508	6156820	Open site	Valid	Artefact : 1		
	Contact	Recorders		Kayandel Archaeological Services						Permits
52-4-0343	MC-IF-004	GDA	56	229084	6156559	Open site	Valid	Artefact : 1		
	Contact	Recorders		Kayandel Archaeological Services						Permits
52-4-0344	MC-IF-002	GDA	56	228637	6156728	Open site	Valid	Artefact : 1		
	Contact	Recorders		Kayandel Archaeological Services						Permits
52-4-0326	HSP14	GDA	56	225474	6158896	Open site	Valid	Artefact : 1		
	Contact	Recorders		Navin Officer Heritage Consultants Pty Ltd,Doctor.Rebecca Parkes						Permits
52-4-0330	HSP30	GDA	56	228237	6160275	Open site	Valid	Artefact : 1		
	Contact	Recorders		Navin Officer Heritage Consultants Pty Ltd,Doctor.Rebecca Parkes						Permits
52-4-0315	HSP 29 (+30)	GDA	56	228097	6160132	Open site	Valid	Artefact : 1		
	Contact	Recorders		Navin Officer Heritage Consultants Pty Ltd						Permits
51-6-0711	HSP 26	GDA	56	225103	6158677	Open site	Valid	Artefact : 1		
	Contact	Recorders		Navin Officer Heritage Consultants Pty Ltd						Permits
52-4-0143	MSQ 1	GDA	56	228406	6149690	Open site	Destroyed	Artefact : -		
	Contact	Recorders		Mr.Chris Lange,ERM Australia Pty Ltd-Pyrmont						Permits
52-4-0144	MSQ2	GDA	56	228292	6149943	Open site	Destroyed	Artefact : 3		
	Contact	Recorders		Mr.Chris Lange,ERM Australia Pty Ltd-Pyrmont						Permits
52-4-0145	MSQ3	GDA	56	228625	6149982	Open site	Destroyed	Artefact : 1		
	Contact	Recorders		Mr.Chris Lange,ERM Australia Pty Ltd-Pyrmont						Permits
52-4-0146	MSQ4	GDA	56	228608	6150001	Open site	Destroyed	Artefact : 1		
	Contact	Recorders		Mr.Chris Lange,ERM Australia Pty Ltd-Pyrmont						Permits

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Extensive search - Site list report

Your Ref Number : 3330a
Client Service ID : 127951

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
52-4-0147	MSQ5	GDA	56	228557	6149936	Open site	Destroyed	Artefact : 1		
	<u>Contact</u>									<u>Permits</u>
52-4-0148	MSQ6	GDA	56	227050	6150950	Open site	Valid	Artefact : 2		
	<u>Contact</u>									<u>Permits</u>
52-4-0149	MSQ7	GDA	56	227735	6150380	Open site	Valid	Artefact : 2		
	<u>Contact</u>									<u>Permits</u>
52-4-0150	MSQ8	GDA	56	227353	6150223	Open site	Destroyed	Artefact : 9		
	<u>Contact</u>									<u>Permits</u>
52-4-0151	MSQ9	GDA	56	227297	6150151	Open site	Destroyed	Artefact : 4		
	<u>Contact</u>									<u>Permits</u>
52-4-0152	MSQ10	GDA	56	227252	6150208	Open site	Destroyed	Artefact : 2		
	<u>Contact</u>									<u>Permits</u>
52-4-0153	MSQ11	GDA	56	227153	6150213	Open site	Destroyed	Artefact : 8		
	<u>Contact</u>									<u>Permits</u>
52-4-0154	MSQ12	GDA	56	227213	6150319	Open site	Destroyed	Artefact : 1		
	<u>Contact</u>									<u>Permits</u>
52-4-0155	MSQ13	GDA	56	227153	6150213	Open site	Destroyed	Artefact : 4		
	<u>Contact</u>									<u>Permits</u>
52-4-0156	MSQ14	GDA	56	227414	6150203	Open site	Destroyed	Artefact : 1		
	<u>Contact</u>									<u>Permits</u>
52-4-0157	MSQ15	GDA	56	227383	6150181	Open site	Destroyed	Artefact : 1		
	<u>Contact</u>									<u>Permits</u>
52-4-0158	MSQ16	GDA	56	227447	6150191	Open site	Destroyed	Artefact : 2		
	<u>Contact</u>									<u>Permits</u>
52-4-0159	MSQ17	GDA	56	227198	6150283	Open site	Destroyed	Artefact : 3		
	<u>Contact</u>									<u>Permits</u>
52-4-0160	MSQ18	GDA	56	228576	6150429	Open site	Destroyed	Artefact : -		
	<u>Contact</u>									<u>Permits</u>
52-4-0161	BCSC1	GDA	56	227944	6148309	Open site	Destroyed	Artefact : -		100467
	<u>Contact</u>								<u>Permits</u>	2687,2976

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AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref Number : 3330b

Client Service ID : 127955

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
51-6-0527	MRN 53	AGD	55	771612	6154199	Open site	Valid	Artefact : 4		100779
	Contact	Recorders	Umwelt (Australia) Pty Limited							
51-6-0528	MRN 54	AGD	55	770697	6154339	Open site	Valid	Artefact : 12		100779
	Contact	Recorders	Umwelt (Australia) Pty Limited							
51-6-0533	MRN 59	AGD	55	771915	6154303	Open site	Valid	Artefact : 1	2760,2963	100779
	Contact	Recorders	Umwelt (Australia) Pty Limited							
51-6-0687	MRN PAD1	GDA	55	772003	6154380	Open site	Valid	Potential Archaeological Deposit (PAD) : 1	2760,2963	102348
	Contact	Recorders	Janice Wilson							
51-6-0688	MRN PAD2	GDA	55	770980	6154500	Open site	Valid	Potential Archaeological Deposit (PAD) : 1		102348
	Contact	Recorders	Janice Wilson							
51-6-0689	MRN PAD3	GDA	55	770793	6154712	Open site	Valid	Potential Archaeological Deposit (PAD) : 1		102348
	Contact	Recorders	Janice Wilson							
51-6-0690	MRN PAD4	GDA	55	770777	6154748	Open site	Valid	Potential Archaeological Deposit (PAD) : 1		102348
	Contact	Recorders	Janice Wilson							
51-6-0691	MRN PAD5	GDA	55	770870	6154866	Open site	Valid	Potential Archaeological Deposit (PAD) : 1		102348
	Contact	Recorders	Janice Wilson							
51-6-0693	MRN80	GDA	55	770940	6154890	Open site	Valid	Artefact : 53		102348
	Contact	Recorders	Umwelt (Australia) Pty Limited							
51-6-0694	MRN81	GDA	55	770782	6154705	Open site	Valid	Artefact : 1	3116	102348
	Contact	Recorders	Umwelt (Australia) Pty Limited							
51-6-0059	Marulan Quarry 1	AGD	55	771860	6152890	Open site	Valid	Artefact : -	Open Camp Site	1995,99404
	Contact	Recorders	Peter Higgins,J Klavin,Kerry Navin							
51-6-0093	MF 1 - Winfarthing Road	AGD	55	765080	6151200	Open site	Valid	Artefact : -	Isolated Find	99404,102090, 102091,10209 2
	Contact	Recorders	Mr.Charles Dearling							

Report generated by AHIMS Web Service on 11/03/2014 for Kirwan Williams for the following area at Datum :GDA, Zone : 55, Eastings : 765000 - 772000, Northings : 6147000 - 6162000 with a Buffer of 50 meters. Additional Info : To inform Archaeological work in the vicinity. Number of Aboriginal sites and Aboriginal objects found is 92

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AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref Number : 3330b
Client Service ID : 127955

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
51-6-0094	MF 3 - Narambulla Creek	AGD	55	765870	6151120	Open site	Valid	Artefact : -	Open Camp Site	99404,102090, 102091,10209 2
	<u>Contact</u>									
51-6-0095	MF 2 - Winfarthing Road	AGD	55	765190	6151120	Open site	Valid	Artefact : -	Isolated Find	99404,102090, 102091,10209 2
	<u>Contact</u>									
51-6-0096	MF 4 - Narambulla Creek	AGD	55	765950	6150620	Open site	Valid	Artefact : -	Open Camp Site	99404,102090, 102091,10209 2
	<u>Contact</u>									
51-6-0097	MF 5 - Narambulla Creek	AGD	55	765700	6150360	Open site	Valid	Artefact : -	Open Camp Site	99404,102090, 102091,10209 2
	<u>Contact</u>									
51-6-0098	MF 6 - Narambulla Creek	AGD	55	765590	6150170	Open site	Valid	Artefact : -	Isolated Find	99404,102090, 102091,10209 2
	<u>Contact</u>									
51-6-0074	MAS1	AGD	55	771450	6157600	Open site	Valid	Artefact : -	Open Camp Site	99404
	<u>Contact</u>									
51-6-0075	MIF 1	AGD	55	771900	6157800	Open site	Valid	Artefact : -	Isolated Find	99323,99404
	<u>Contact</u>									
51-6-0076	MAS 4	AGD	55	771400	6157280	Open site	Valid	Artefact : -	Open Camp Site	99404
	<u>Contact</u>									
51-6-0077	MAS 5	AGD	55	771450	6157320	Open site	Valid	Artefact : -	Open Camp Site	99404
	<u>Contact</u>									
51-6-0079	MAS 3	AGD	55	771300	6157250	Open site	Valid	Artefact : -	Open Camp Site	99404
	<u>Contact</u>									
51-6-0080	MAS 2	AGD	55	771300	6157320	Open site	Valid	Artefact : -	Open Camp Site	99404
	<u>Contact</u>									
51-6-0066	G11 (Towrang)	AGD	55	765950	6158450	Open site	Valid	Artefact : -	Open Camp Site	3112,99404
	<u>Contact</u>									
51-6-0068	G13 (Towrang)	AGD	55	768800	6159650	Open site	Valid	Artefact : -	Open Camp Site	3112,99404
	<u>Contact</u>									
51-6-0247	MRN6	AGD	55	770551	6154084	Open site	Valid	Artefact : 3		

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Extensive search - Site list report

Your Ref Number : 3330b

Client Service ID : 127955

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
	<u>Contact</u>	Searle	<u>Recorders</u>	Mr.Graham Houghton				<u>Permits</u>		
51-6-0248	MRN7	AGD	55	771306	6154825	Open site	Valid	Artefact : 5		100615,100637
	<u>Contact</u>	Searle	<u>Recorders</u>	Mr.Graham Houghton				<u>Permits</u>	2760	
51-6-0249	MRN8	AGD	55	771061	6153668	Open site	Valid	Modified Tree (Carved or Scarred) : 1		
	<u>Contact</u>	Searle	<u>Recorders</u>	Mr.Graham Houghton				<u>Permits</u>		
51-6-0250	MRN9	AGD	55	771252	6153592	Open site	Valid	Stone Arrangement : -		
	<u>Contact</u>	Mr.Bill Hardie	<u>Recorders</u>	Mr.Graham Houghton				<u>Permits</u>		
51-6-0251	MRN 10	AGD	55	771106	6153698	Open site	Valid	Modified Tree (Carved or Scarred) : -		
	<u>Contact</u>	Searle	<u>Recorders</u>	Mr.Graham Houghton				<u>Permits</u>		
51-6-0252	MRN 11	AGD	55	771093	6153692	Open site	Valid	Modified Tree (Carved or Scarred) : -		
	<u>Contact</u>	Searle	<u>Recorders</u>	Mr.Graham Houghton				<u>Permits</u>		
51-6-0253	MRN 12	AGD	55	771508	6154097	Open site	Valid	Artefact : 2		
	<u>Contact</u>	Searle	<u>Recorders</u>	Mr.Graham Houghton				<u>Permits</u>		
51-6-0254	MRN 13	AGD	55	771280	6153826	Open site	Valid	Artefact : 20		
	<u>Contact</u>	Searle	<u>Recorders</u>	Mr.Graham Houghton				<u>Permits</u>		
51-6-0255	MRN14	AGD	55	771473	6153969	Open site	Valid	Artefact : 7		
	<u>Contact</u>	Searle	<u>Recorders</u>	Mr.Graham Houghton				<u>Permits</u>		
51-6-0261	MRN20	AGD	55	771379	6154194	Open site	Valid	Artefact : 2		100614
	<u>Contact</u>	Searle	<u>Recorders</u>	Mr.Graham Houghton				<u>Permits</u>		
51-6-0262	MRN21	AGD	55	771559	6153669	Open site	Valid	Artefact : 1		
	<u>Contact</u>	Searle	<u>Recorders</u>	Mr.Graham Houghton				<u>Permits</u>		
51-6-0263	MRN22	AGD	55	771713	6153691	Open site	Valid	Artefact : 11		
	<u>Contact</u>	Searle	<u>Recorders</u>	Mr.Graham Houghton				<u>Permits</u>		
51-6-0264	MRN23	AGD	55	771379	6154194	Open site	Valid	Modified Tree (Carved or Scarred) : -		100614
	<u>Contact</u>	Searle	<u>Recorders</u>	Mr.Graham Houghton				<u>Permits</u>		
51-6-0266	MRN25	AGD	55	771243	6156345	Open site	Valid	Artefact : 10		100613,100615,100637,101183,101402

Report generated by AHIMS Web Service on 11/03/2014 for Kirwan Williams for the following area at Datum :GDA, Zone : 55, Eastings : 765000 - 772000, Northings : 6147000 - 6162000 with a Buffer of 50 meters. Additional Info : To inform Archaeological work in the vicinity. Number of Aboriginal sites and Aboriginal objects found is 92

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AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref Number : 3330b
Client Service ID : 127955

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
	<u>Contact</u> Searle	<u>Recorders</u>						<u>Permits</u>		
51-6-0272	MRN31	AGD	55	771622	6155609	Open site	Valid	Modified Tree (Carved or Scarred) : -	2760,2761	100613
	<u>Contact</u> Searle	<u>Recorders</u>						<u>Permits</u>		
51-6-0273	MRN32	AGD	55	771622	6155602	Open site	Valid	Stone Arrangement : -		100613
	<u>Contact</u> Searle	<u>Recorders</u>						<u>Permits</u>		
51-6-0274	MRN33	AGD	55	771484	6155470	Open site	Valid	Artefact : 1		100613,10061 5,100637,1010 34,101183
	<u>Contact</u> Searle	<u>Recorders</u>						<u>Permits</u>	2760,2761	
51-6-0608	MRN 53 (duplicate copy 51-0527)	AGD	55	771612	6154199	Open site	Valid	Artefact : 4		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>	2963	
51-6-0625	MRN64	AGD	55	771357	6154669	Open site	Valid	Artefact : -		101034
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
51-6-0627	MRN66	AGD	55	771136	6156243	Open site	Valid	Artefact : -		101034
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
51-6-0629	MRN68	AGD	55	771098	6155887	Open site	Valid	Artefact : -		101034
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
51-6-0634	MRN74	AGD	55	770981	6155531	Open site	Valid	Modified Tree (Carved or Scarred) : 1		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
51-6-0635	MRN75	AGD	55	771126	6153963	Open site	Valid	Modified Tree (Carved or Scarred) : 1		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
51-6-0636	MRN76	AGD	55	771409	6153691	Open site	Valid	Modified Tree (Carved or Scarred) : 1		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
51-6-0637	MRN77	AGD	55	770207	6155168	Open site	Valid	Artefact : -		101034
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
51-6-0648	MRN79	AGD	55	771360	6156291	Open site	Valid	Artefact : 22		101183,10164 5
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>	3116	

Report generated by AHIMS Web Service on 11/03/2014 for Kirwan Williams for the following area at Datum :GDA, Zone : 55, Eastings : 765000 - 772000, Northings : 6147000 - 6162000 with a Buffer of 50 meters. Additional Info : To inform Archaeological work in the vicinity. Number of Aboriginal sites and Aboriginal objects found is 92

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AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref Number : 3330b
Client Service ID : 127955

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
51-6-0649	MRN 77	AGD	55	770207	6155168	Open site	Valid	Potential Archaeological Deposit (PAD) : 1		100779
	<u>Contact</u>								<u>Permits</u>	
51-6-0704	MRN85	GDA	55	771793	6152895	Open site	Valid	Artefact : 1		
	<u>Contact</u>								<u>Permits</u>	
51-6-0706	MRN83	GDA	55	771622	6153881	Open site	Valid	Artefact : 1		
	<u>Contact</u>								<u>Permits</u>	
51-6-0735	HSP12A	GDA	55	765034	6154885	Open site	Valid	Artefact : 1		
	<u>Contact</u>								<u>Permits</u>	
51-6-0736	HSP13	GDA	55	766483	6155214	Open site	Valid	Artefact : 1		
	<u>Contact</u>								<u>Permits</u>	
51-6-0708	HSP12	GDA	55	765047	6154880	Open site	Valid	Artefact : 1		
	<u>Contact</u>								<u>Permits</u>	
51-6-0359	LA 4	AGD	55	764878	6155641	Open site	Valid	Artefact : 1		99620
	<u>Contact</u> Searle								<u>Permits</u>	
51-6-0360	LA 5	AGD	55	764948	6155447	Open site	Valid	Artefact : 2		99620
	<u>Contact</u> Searle								<u>Permits</u>	
51-6-0361	LA 6	AGD	55	765035	6155560	Open site	Valid	Artefact : 5		99620
	<u>Contact</u> Searle								<u>Permits</u>	
51-6-0362	LA 7	AGD	55	765089	6155622	Open site	Valid	Artefact : 1		99620
	<u>Contact</u> Searle								<u>Permits</u>	
51-6-0363	LA 8	AGD	55	764948	6155447	Open site	Valid	Artefact : 2		99620
	<u>Contact</u> Searle								<u>Permits</u>	
51-6-0364	LA 9	AGD	55	765842	6154786	Open site	Valid	Artefact : 3		99620
	<u>Contact</u> Searle								<u>Permits</u>	
51-6-0365	LA 10	AGD	55	765751	6154621	Open site	Valid	Artefact : 3		99620
	<u>Contact</u> Searle								<u>Permits</u>	
51-6-0366	LA 11	AGD	55	765744	6154485	Open site	Valid	Artefact : 2		99620
	<u>Contact</u> Searle								<u>Permits</u>	
51-6-0367	LA 12	AGD	55	765925	6154430	Open site	Valid	Artefact : -		99620
	<u>Contact</u> Searle								<u>Permits</u>	
51-6-0368	LA 13	AGD	55	765960	6154320	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : 1		99620
	<u>Contact</u> Searle								<u>Permits</u>	

Report generated by AHIMS Web Service on 11/03/2014 for Kirwan Williams for the following area at Datum :GDA, Zone : 55, Eastings : 765000 - 772000, Northings : 6147000 - 6162000 with a Buffer of 50 meters. Additional Info : To inform Archaeological work in the vicinity. Number of Aboriginal sites and Aboriginal objects found is 92

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AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref Number : 3330b
Client Service ID : 127955

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
51-6-0369	LA 14	AGD	55	765811	6154212	Open site	Valid	Artefact : 2		99620
	<u>Contact</u> Searle	<u>Recorders</u>		Archaeological Heritage Surveys				<u>Permits</u>		
51-6-0370	LA 15	AGD	55	766030	6154205	Open site	Valid	Artefact : 3		99620
	<u>Contact</u> Searle	<u>Recorders</u>		Archaeological Heritage Surveys				<u>Permits</u>		
51-6-0371	LA 16	AGD	55	765925	6154500	Open site	Valid	Artefact : -		99620
	<u>Contact</u> Searle	<u>Recorders</u>		Archaeological Heritage Surveys				<u>Permits</u>		
51-6-0372	LA 17	AGD	55	766414	6154154	Open site	Valid	Artefact : -, Stone Quarry : 1		99620
	<u>Contact</u> Searle	<u>Recorders</u>		Archaeological Heritage Surveys				<u>Permits</u>		
51-6-0373	LA 18	AGD	55	766595	6154290	Open site	Valid	Artefact : 2		99620
	<u>Contact</u> Searle	<u>Recorders</u>		Archaeological Heritage Surveys				<u>Permits</u>		
51-6-0374	LA 19	AGD	55	766936	6154706	Open site	Valid	Artefact : 2		99620
	<u>Contact</u> Searle	<u>Recorders</u>		Archaeological Heritage Surveys				<u>Permits</u>		
51-6-0375	LA 20	AGD	55	767695	6154796	Open site	Valid	Artefact : 1		99620
	<u>Contact</u> Searle	<u>Recorders</u>		Archaeological Heritage Surveys				<u>Permits</u>		
51-6-0376	LA 21	AGD	55	767806	6154217	Open site	Valid	Artefact : 1		99620
	<u>Contact</u> Searle	<u>Recorders</u>		Archaeological Heritage Surveys				<u>Permits</u>		
51-6-0377	LA 22	AGD	55	767897	6154150	Open site	Valid	Artefact : 1		99620
	<u>Contact</u> Searle	<u>Recorders</u>		Archaeological Heritage Surveys				<u>Permits</u>		
51-6-0378	LA 23	AGD	55	769978	6153907	Open site	Valid	Artefact : 2		99620
	<u>Contact</u> Searle	<u>Recorders</u>		Archaeological Heritage Surveys				<u>Permits</u>		
51-6-0379	LA 24	AGD	55	770092	6154057	Open site	Valid	Artefact : 4		99620
	<u>Contact</u> Searle	<u>Recorders</u>		Archaeological Heritage Surveys				<u>Permits</u>		
51-6-0380	LA 25	AGD	55	770140	6153984	Open site	Valid	Artefact : 4		99620
	<u>Contact</u> Searle	<u>Recorders</u>		Archaeological Heritage Surveys				<u>Permits</u>		
51-6-0381	LA 26	AGD	55	770030	6153824	Open site	Valid	Artefact : 1		99620
	<u>Contact</u> Searle	<u>Recorders</u>		Archaeological Heritage Surveys				<u>Permits</u>		
51-6-0382	LA 27	AGD	55	770306	6154223	Open site	Valid	Artefact : 1		99620
	<u>Contact</u> Searle	<u>Recorders</u>		Archaeological Heritage Surveys				<u>Permits</u>		
51-6-0383	LA 28	AGD	55	770416	6154303	Open site	Valid	Artefact : 1		99620
	<u>Contact</u> Searle	<u>Recorders</u>		Archaeological Heritage Surveys				<u>Permits</u>		
51-6-0384	LA 29	AGD	55	770648	6154528	Open site	Valid	Artefact : 12		99620
	<u>Contact</u> Searle	<u>Recorders</u>		Archaeological Heritage Surveys				<u>Permits</u>		
51-6-0385	LA 30	AGD	55	770405	6154872	Open site	Valid	Artefact : -		99620
	<u>Contact</u> Searle	<u>Recorders</u>		Archaeological Heritage Surveys				<u>Permits</u>		

Report generated by AHIMS Web Service on 11/03/2014 for Kirwan Williams for the following area at Datum :GDA, Zone : 55, Eastings : 765000 - 772000, Northings : 6147000 - 6162000 with a Buffer of 50 meters. Additional Info : To inform Archaeological work in the vicinity. Number of Aboriginal sites and Aboriginal objects found is 92

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AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref Number : 3330b
Client Service ID : 127955

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
51-6-0386	LA 31	AGD	55	770149	6157993	Open site	Valid	Artefact : 6		99620
	<u>Contact</u> Searle	<u>Recorders</u>	Archaeological Heritage Surveys <u>Permits</u>							
51-6-0387	LA 32	AGD	55	770355	6157884	Open site	Valid	Artefact : 1		99620
	<u>Contact</u> Searle	<u>Recorders</u>	Archaeological Heritage Surveys <u>Permits</u>							
51-6-0388	LA 33	AGD	55	771087	6157544	Open site	Valid	Artefact : 1		99620
	<u>Contact</u> Searle	<u>Recorders</u>	Archaeological Heritage Surveys <u>Permits</u>							
51-6-0428	Winfarthing Road - Isolated Find - WRIF1	AGD	55	765994	6150702	Open site	Valid	Artefact : 1		
	<u>Contact</u> T Russell	<u>Recorders</u>	Navin Officer Heritage Consultants Pty Ltd <u>Permits</u>							
51-6-0429	Winfarthing Road - WR2	AGD	55	765920	6150600	Open site	Valid	Artefact : -		
	<u>Contact</u> T Russell	<u>Recorders</u>	Navin Officer Heritage Consultants Pty Ltd <u>Permits</u>							
51-6-0430	Winfarthing Road - WR3	AGD	55	765672	6149673	Open site	Valid	Artefact : 3		
	<u>Contact</u> T Russell	<u>Recorders</u>	Navin Officer Heritage Consultants Pty Ltd <u>Permits</u>							
51-6-0414	Loorica Road 1	AGD	55	766004	6161609	Open site	Valid	Hearth : 1		
	<u>Contact</u> Searle	<u>Recorders</u>	Mr.Mark Brettschneider <u>Permits</u>							
51-6-0422	Winfarthing Road - WR 1	GDA	55	765887	6150772	Open site	Valid	Artefact : 14		
	<u>Contact</u> Searle	<u>Recorders</u>	Navin Officer Heritage Consultants Pty Ltd <u>Permits</u>							

Report generated by AHIMS Web Service on 11/03/2014 for Kirwan Williams for the following area at Datum :GDA, Zone : 55, Eastings : 765000 - 772000, Northings : 6147000 - 6162000 with a Buffer of 50 meters. Additional Info : To inform Archaeological work in the vicinity. Number of Aboriginal sites and Aboriginal objects found is 92

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AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref Number : 3330c

Client Service ID : 127956

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
51-6-0091	Marulan 6	AGD	55	774310	6153270	Open site	Valid	Artefact : -	Open Camp Site	3605,99404
	Contact	Recorders	Mrs.Caryll Sefton Permits							
51-6-0457	Marulan T1 S2	AGD	55	772737	6154670	Open site	Valid	Artefact : 20		100614
	Contact Searle	Recorders	Umwelt (Australia) Pty Limited Permits							
51-6-0458	Marulan T1 S3	AGD	55	772940	6154663	Open site	Valid	Artefact : 2		100614
	Contact Searle	Recorders	Umwelt (Australia) Pty Limited Permits							
51-6-0459	Marulan T1 S4	AGD	55	772938	6154692	Open site	Valid	Artefact : 1		100614
	Contact Searle	Recorders	Umwelt (Australia) Pty Limited Permits							
51-6-0460	Marulan T1 S5	AGD	55	773044	6154674	Open site	Valid	Artefact : 6		100614
	Contact Searle	Recorders	Umwelt (Australia) Pty Limited Permits							
51-6-0461	Marulan T1 S6	AGD	55	773166	6154689	Open site	Valid	Artefact : 1		100614
	Contact T Russell	Recorders	Umwelt (Australia) Pty Limited Permits							
51-6-0462	Marulan T1 S7	AGD	55	773226	6154711	Open site	Valid	Grinding Groove : 1		100614
	Contact T Russell	Recorders	Umwelt (Australia) Pty Limited Permits							
51-6-0463	Marulan T1 S8	AGD	55	773240	6154960	Open site	Valid	Artefact : 3		100614
	Contact Searle	Recorders	Umwelt (Australia) Pty Limited Permits							
51-6-0464	Marulan T1 S9	AGD	55	773312	6154703	Open site	Valid	Artefact : 1		100614
	Contact Searle	Recorders	Umwelt (Australia) Pty Limited Permits							
51-6-0465	Marulan T5 S1	AGD	55	772250	6154716	Open site	Valid	Artefact : 1		100614
	Contact Searle	Recorders	Umwelt (Australia) Pty Limited Permits							
51-6-0466	T5S2	AGD	55	772238	6154707	Open site	Valid	Artefact : 1		100614
	Contact T Russell	Recorders	Umwelt (Australia) Pty Limited Permits							
51-6-0467	Marulan T6 S1	AGD	55	772216	6152641	Open site	Valid	Artefact : 1		100614
	Contact T Russell	Recorders	Umwelt (Australia) Pty Limited Permits							
51-6-0468	Marulan T6 S2	AGD	55	772010	6153579	Open site	Valid	Artefact : 1		100614
	Contact T Russell	Recorders	Umwelt (Australia) Pty Limited Permits							
51-6-0469	Marulan T6 S4	AGD	55	772089	6153660	Open site	Valid	Artefact : 1		100614
	Contact T Russell	Recorders	Umwelt (Australia) Pty Limited Permits							
51-6-0470	Marulan T6 S3	AGD	55	771997	6153599	Open site	Valid	Artefact : 1		100614
	Contact T Russell	Recorders	Umwelt (Australia) Pty Limited Permits							
51-6-0456	Marulan T1 S1	AGD	55	772277	6154747	Open site	Valid	Artefact : 1		100614
	Contact Searle	Recorders	Umwelt (Australia) Pty Limited Permits							
51-6-0282	MRN41	AGD	55	772484	6154904	Open site	Valid	Artefact : 23		
	Contact Searle	Recorders	Mr.Graham Houghton Permits							

Report generated by AHIMS Web Service on 11/03/2014 for Kirwan Williams for the following area at Datum :GDA, Zone : 55, Eastings : 772000 - 775000, Northings : 6147000 - 6162000 with a Buffer of 50 meters. Additional Info : To inform Archaeological work in the vicinity. Number of Aboriginal sites and Aboriginal objects found is 107

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AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref Number : 3330c
Client Service ID : 127956

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
51-6-0526	Joarimin Creek South	AGD	55	773000	6154740	Open site	Valid	Artefact : 415, Potential Archaeological Deposit (PAD) : 1		100779
	<u>Contact</u>	<u>Recorders</u>	Umwelt (Australia) Pty Limited					<u>Permits</u>	2760,2963	
51-6-0529	MRN 55	AGD	55	772562	6154395	Open site	Valid	Artefact : 6		100779
	<u>Contact</u>	<u>Recorders</u>	Umwelt (Australia) Pty Limited					<u>Permits</u>	2760,2963	
51-6-0531	MRN 57	AGD	55	772277	6154604	Open site	Valid	Artefact : 2		100779
	<u>Contact</u>	<u>Recorders</u>	Umwelt (Australia) Pty Limited					<u>Permits</u>	2760,2963	
51-6-0532	MRN 58	AGD	55	772245	6154419	Open site	Valid	Artefact : 7		100779
	<u>Contact</u>	<u>Recorders</u>	Umwelt (Australia) Pty Limited					<u>Permits</u>	2760,2963	
51-6-0533	MRN 59	AGD	55	771915	6154303	Open site	Valid	Artefact : 1		100779
	<u>Contact</u>	<u>Recorders</u>	Umwelt (Australia) Pty Limited					<u>Permits</u>	2760,2963	
51-6-0530	MRN 56	AGD	55	772276	6154249	Open site	Valid	Artefact : 10		100779
	<u>Contact</u>	<u>Recorders</u>	Umwelt (Australia) Pty Limited					<u>Permits</u>	2760,2963	
51-6-0534	Marulan T1 S1a	AGD	55	772277	6154747	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>	Umwelt (Australia) Pty Limited					<u>Permits</u>		
51-6-0535	Marulan T1 S2a	AGD	55	772737	6154670	Open site	Valid	Artefact : 20		
	<u>Contact</u>	<u>Recorders</u>	Umwelt (Australia) Pty Limited					<u>Permits</u>		
51-6-0536	Marulan T1 S3a	AGD	55	772940	6154663	Open site	Valid	Artefact : 2		
	<u>Contact</u>	<u>Recorders</u>	Umwelt (Australia) Pty Limited					<u>Permits</u>		
51-6-0537	Marulan T1 S4a	AGD	55	772938	6154692	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>	Umwelt (Australia) Pty Limited					<u>Permits</u>		
51-6-0687	MRN PAD1	GDA	55	772003	6154380	Open site	Valid	Potential Archaeological Deposit (PAD) : 1		102348
	<u>Contact</u>	<u>Recorders</u>	Janice Wilson					<u>Permits</u>		
57-3-0234	Millendale Creek;	AGD	55	774880	6161071	Open site	Valid	Artefact : -	Open Camp Site	
	<u>Contact</u>	<u>Recorders</u>	Mr.Doug Williams,P Spears,Ms.Sue Feary					<u>Permits</u>	87	
51-6-0059	Marulan Quarry 1	AGD	55	771860	6152890	Open site	Valid	Artefact : -	Open Camp Site	1995,99404
	<u>Contact</u>	<u>Recorders</u>	Peter Higgins,J Klavin,Kerry Navin					<u>Permits</u>		
51-6-0086	Marulan 1	AGD	55	774500	6153130	Open site	Valid	Artefact : -	Open Camp Site	99404
	<u>Contact</u>	<u>Recorders</u>	Mrs.Caryll Sefton					<u>Permits</u>		
51-6-0087	Marulan 2	AGD	55	774530	6153100	Open site	Valid	Artefact : -	Open Camp Site	99404
	<u>Contact</u>	<u>Recorders</u>	Mrs.Caryll Sefton					<u>Permits</u>		
51-6-0088	Marulan 3	AGD	55	774630	6153170	Open site	Valid	Artefact : -	Open Camp Site	99404

Report generated by AHIMS Web Service on 11/03/2014 for Kirwan Williams for the following area at Datum :GDA, Zone : 55, Eastings : 772000 - 775000, Northings : 6147000 - 6162000 with a Buffer of 50 meters. Additional Info : To inform Archaeological work in the vicinity. Number of Aboriginal sites and Aboriginal objects found is 107

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AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref Number : 3330c

Client Service ID : 127956

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
51-6-0089	Marulan 4	AGD	55	774510	6153000	Open site	Valid	Artefact : -	Open Camp Site	99404
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
51-6-0090	Marulan 5	AGD	55	774380	6153800	Open site	Valid	Artefact : -	Open Camp Site	99404
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
51-6-0092	Marulan 7	AGD	55	774220	6153450	Open site	Valid	Artefact : -	Open Camp Site	99404
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
51-6-0103	Isolated Find 1	AGD	55	774500	6153170	Open site	Valid	Artefact : -	Isolated Find	99404
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
51-6-0104	Isolated Find 4	AGD	55	774550	6152900	Open site	Valid	Artefact : -	Isolated Find	
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
51-6-0105	Marulan ER Site 1	AGD	55	774500	6153220	Open site	Valid	Artefact : -	Open Camp Site	99404
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
51-6-0075	MIF 1	AGD	55	771900	6157800	Open site	Valid	Artefact : -	Isolated Find	99323,99404
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
51-6-0114	Joarimin	AGD	55	774710	6158610	Open site	Valid	Artefact : -		99404
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
51-6-0060	Marulan Quarry 2	AGD	55	772450	6153000	Open site	Valid	Artefact : -	Open Camp Site	1995,99404,10 0613,100615,1 00637,101183
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>	2760,2761	
51-6-0242	MRN1	AGD	55	773179	6153116	Open site	Valid	Artefact : 3		
	<u>Contact</u> Searle	<u>Recorders</u>						<u>Permits</u>		
51-6-0243	MRN2	AGD	55	773077	6153038	Open site	Valid	Artefact : 6		
	<u>Contact</u> Searle	<u>Recorders</u>						<u>Permits</u>		
51-6-0244	MRN3	AGD	55	773043	6152939	Open site	Valid	Artefact : 8		
	<u>Contact</u> Searle	<u>Recorders</u>						<u>Permits</u>		
51-6-0245	MRN4	AGD	55	772313	6152581	Open site	Valid	Artefact : 6		100614
	<u>Contact</u> Searle	<u>Recorders</u>						<u>Permits</u>		
51-6-0246	MRN5	AGD	55	772404	6152969	Open site	Valid	Artefact : 6		100613,10061 5,100637,1011 83
	<u>Contact</u> Searle	<u>Recorders</u>						<u>Permits</u>	2760,2761	
51-6-0256	MRN15	AGD	55	771943	6154215	Open site	Valid	Artefact : 32		100779
	<u>Contact</u> Searle	<u>Recorders</u>						<u>Permits</u>	2760,2963	
51-6-0257	MRN16	AGD	55	772268	6154312	Open site	Valid	Artefact : 1		

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Extensive search - Site list report

Your Ref Number : 3330c
Client Service ID : 127956

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
	Contact	Searle	Recorders	Mr.Graham Houghton				Permits		
51-6-0258	MRN17	AGD	55	772419	6154447	Open site	Valid	Artefact : 4		
	Contact	Searle	Recorders	Mr.Graham Houghton				Permits		
51-6-0259	MRN18	AGD	55	772327	6153801	Open site	Valid	Artefact : 1		
	Contact	Searle	Recorders	Mr.Graham Houghton				Permits		
51-6-0260	MRN19	AGD	55	772518	6153894	Open site	Valid	Artefact : 1		
	Contact	Searle	Recorders	Mr.Graham Houghton				Permits		
51-6-0265	MRN24	AGD	55	771946	6153098	Open site	Valid	Artefact : 1		
	Contact	Searle	Recorders	Mr.Graham Houghton				Permits		
51-6-0267	MRN26	AGD	55	772059	6155842	Open site	Valid	Artefact : 1		100613,10061 5,100637,1011 83
	Contact	Searle	Recorders	Mr.Graham Houghton				Permits	2760,2761	
51-6-0268	MRN27	AGD	55	772232	6155840	Open site	Valid	Artefact : 153		100613,10061 5,100637,1011 83,101402
	Contact	Searle	Recorders	Mr.Graham Houghton				Permits	2760,2761	
51-6-0269	MRN28	AGD	55	772784	6155926	Open site	Valid	Artefact : 3		100613,10061 5,100637,1010 34,101183,101 402
	Contact	Searle	Recorders	Mr.Graham Houghton				Permits	2760,2761	
51-6-0270	MRN29	AGD	55	773675	6156234	Open site	Valid	Artefact : 30		
	Contact	Searle	Recorders	Mr.Graham Houghton				Permits		
51-6-0271	MRN30	AGD	55	772067	6155501	Open site	Valid	Artefact : 1		
	Contact	Searle	Recorders	Mr.Graham Houghton				Permits		
51-6-0275	MRN34	AGD	55	772295	6155142	Open site	Valid	Artefact : 30		
	Contact	Searle	Recorders	Mr.Graham Houghton				Permits		
51-6-0276	MRN35	AGD	55	773340	6155286	Open site	Valid	Artefact : 1		100613,10061 5,100637,1010 34,101183
	Contact	Searle	Recorders	Mr.Graham Houghton				Permits	2760,2761	
51-6-0277	MRN36	AGD	55	773255	6155299	Open site	Valid	Artefact : 3		100613,10061 5,100637,1010 34
	Contact	Searle	Recorders	Mr.Graham Houghton				Permits	2760,2761	

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Your Ref Number : 3330c
Client Service ID : 127956

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
51-6-0278	MRN37	AGD	55	773251	6155251	Open site	Valid	Artefact : 1		100613,10061 5,100637,1010 34,101183
	<u>Contact</u>	Searle	<u>Recorders</u>	Mr.Graham Houghton				<u>Permits</u>	2760,2761	
51-6-0279	MRN38	AGD	55	772284	6154878	Open site	Valid	Artefact : 1		
	<u>Contact</u>	Searle	<u>Recorders</u>	Mr.Graham Houghton				<u>Permits</u>		
51-6-0280	MRN39	AGD	55	772446	6154865	Open site	Valid	Artefact : 3		
	<u>Contact</u>	Searle	<u>Recorders</u>	Mr.Graham Houghton				<u>Permits</u>		
51-6-0281	MRN40	AGD	55	772486	6154771	Open site	Valid	Artefact : 25		
	<u>Contact</u>	Searle	<u>Recorders</u>	Mr.Graham Houghton				<u>Permits</u>		
51-6-0283	MRN42	AGD	55	772598	6154873	Open site	Valid	Artefact : 10		
	<u>Contact</u>	Searle	<u>Recorders</u>	Mr.Graham Houghton				<u>Permits</u>		
51-6-0284	MRN43	AGD	55	772719	6154744	Open site	Valid	Artefact : 10		
	<u>Contact</u>	Searle	<u>Recorders</u>	Mr.Graham Houghton				<u>Permits</u>		
51-6-0285	MRN44	AGD	55	772901	6154842	Open site	Valid	Artefact : 6		
	<u>Contact</u>	Searle	<u>Recorders</u>	Mr.Graham Houghton				<u>Permits</u>		
51-6-0286	MRN45	AGD	55	772982	6154825	Open site	Valid	Artefact : 3		
	<u>Contact</u>	Searle	<u>Recorders</u>	Mr.Graham Houghton				<u>Permits</u>		
51-6-0287	MRN46	AGD	55	773309	6154841	Open site	Valid	Artefact : 2		
	<u>Contact</u>	Searle	<u>Recorders</u>	Mr.Graham Houghton				<u>Permits</u>		
51-6-0288	MRN47	AGD	55	773860	6155644	Open site	Valid	Artefact : 11		
	<u>Contact</u>	Searle	<u>Recorders</u>	Mr.Graham Houghton				<u>Permits</u>		
51-6-0289	MRN48	AGD	55	772161	6155992	Open site	Valid	Artefact : 2		100613,10061 5,100637,1010 34,101183
	<u>Contact</u>	Searle	<u>Recorders</u>	Mr.Graham Houghton				<u>Permits</u>	2760,2761	
51-6-0290	MRN49	AGD	55	772377	6156399	Open site	Valid	Modified Tree (Carved or Scarred) : -		
	<u>Contact</u>	Searle	<u>Recorders</u>	Mr.Graham Houghton				<u>Permits</u>		
51-6-0291	MRN50	AGD	55	772321	6155564	Open site	Valid	Artefact : 6		
	<u>Contact</u>	Searle	<u>Recorders</u>	Mr.Graham Houghton				<u>Permits</u>		
51-6-0292	MRN51	AGD	55	772334	6155662	Open site	Valid	Modified Tree (Carved or Scarred) : -		
	<u>Contact</u>	Searle	<u>Recorders</u>	Mr.Graham Houghton				<u>Permits</u>		

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Your Ref Number : 3330c

Client Service ID : 127956

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
51-6-0293	MRN52	AGD	55	772516	6155170	Open site	Valid	Artefact : 1		100613,100615,101034,101183
	<u>Contact</u>	Searle	<u>Recorders</u>	Mr.Graham Houghton				<u>Permits</u>	2760,2761	
51-6-0621	MRN60	AGD	55	772118	6156552	Open site	Valid	Artefact : 1		101034
	<u>Contact</u>		<u>Recorders</u>	Umwelt (Australia) Pty Limited				<u>Permits</u>		
51-6-0622	MRN61	AGD	55	772028	6155544	Open site	Valid	Artefact : -		101034
	<u>Contact</u>		<u>Recorders</u>	Umwelt (Australia) Pty Limited				<u>Permits</u>		
51-6-0623	MRN62	AGD	55	772072	6156534	Open site	Valid	Artefact : -		101034
	<u>Contact</u>		<u>Recorders</u>	Umwelt (Australia) Pty Limited				<u>Permits</u>		
51-6-0638	MRN73	AGD	55	772847	6152659	Open site	Valid	Artefact : -		
	<u>Contact</u>		<u>Recorders</u>	Umwelt (Australia) Pty Limited				<u>Permits</u>		
51-6-0624	MRN63	AGD	55	772044	6156170	Open site	Valid	Artefact : 1		101034
	<u>Contact</u>		<u>Recorders</u>	Umwelt (Australia) Pty Limited				<u>Permits</u>		
51-6-0626	MRN65	AGD	55	771960	6155515	Open site	Valid	Artefact : -		101034
	<u>Contact</u>		<u>Recorders</u>	Umwelt (Australia) Pty Limited				<u>Permits</u>		
51-6-0628	MRN67	AGD	55	772764	6152846	Open site	Valid	Artefact : -		101034
	<u>Contact</u>		<u>Recorders</u>	Umwelt (Australia) Pty Limited				<u>Permits</u>		
51-6-0630	MRN69	AGD	55	772511	6154929	Open site	Valid	Artefact : -		
	<u>Contact</u>		<u>Recorders</u>	Umwelt (Australia) Pty Limited				<u>Permits</u>		
51-6-0631	MRN70	AGD	55	772755	6152859	Open site	Valid	Artefact : -		101034
	<u>Contact</u>		<u>Recorders</u>	Umwelt (Australia) Pty Limited				<u>Permits</u>		
51-6-0632	MRN71	AGD	55	772797	6152713	Open site	Valid	Artefact : -		101034
	<u>Contact</u>		<u>Recorders</u>	Umwelt (Australia) Pty Limited				<u>Permits</u>		
51-6-0633	MRN72	AGD	55	772868	6152814	Open site	Valid	Artefact : -		
	<u>Contact</u>		<u>Recorders</u>	Umwelt (Australia) Pty Limited				<u>Permits</u>		
51-6-0647	MRN78	AGD	55	772650	6154940	Open site	Valid	Artefact : 7		100403,101645
	<u>Contact</u>		<u>Recorders</u>	Umwelt (Australia) Pty Limited				<u>Permits</u>	3116	
51-6-0705	MRN82	GDA	55	772955	6153079	Open site	Valid	Artefact : 1		
	<u>Contact</u>		<u>Recorders</u>	Umwelt (Australia) Pty Limited				<u>Permits</u>		
51-6-0707	MRN84	GDA	55	772089	6153292	Open site	Valid	Artefact : 1		
	<u>Contact</u>		<u>Recorders</u>	Umwelt (Australia) Pty Limited				<u>Permits</u>		
51-6-0737	HSP17	GDA	55	772905	6157718	Open site	Valid	Artefact : 1		
	<u>Contact</u>		<u>Recorders</u>	Navin Officer Heritage Consultants Pty Ltd,Doctor.Rebecca Parkes				<u>Permits</u>		

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Your Ref Number : 3330c

Client Service ID : 127956

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
51-6-0741	HSP23	GDA	55	772119	6157322	Open site	Valid	Artefact : 1, Potential Archaeological Deposit (PAD) : 1		
	<u>Contact</u>	<u>Recorders</u>	Navin Officer Heritage Consultants Pty Ltd, Doctor.Rebecca Parkes					<u>Permits</u>		
51-6-0742	HSP24	GDA	55	772476	6157513	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>	Navin Officer Heritage Consultants Pty Ltd, Doctor.Rebecca Parkes					<u>Permits</u>		
51-6-0743	HSP25	GDA	55	773699	6158037	Open site	Valid	Artefact : 1, Potential Archaeological Deposit (PAD) : 1		
	<u>Contact</u>	<u>Recorders</u>	Navin Officer Heritage Consultants Pty Ltd, Doctor.Rebecca Parkes					<u>Permits</u>		
51-6-0744	HSP26	GDA	55	774854	6158581	Open site	Valid	Artefact : 1, Potential Archaeological Deposit (PAD) : 1		
	<u>Contact</u>	<u>Recorders</u>	Navin Officer Heritage Consultants Pty Ltd, Doctor.Rebecca Parkes					<u>Permits</u>		
51-6-0746	HSP28	GDA	55	773309	6157867	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>	Navin Officer Heritage Consultants Pty Ltd, Doctor.Rebecca Parkes					<u>Permits</u>		
51-6-0697	Telstra Marulan 3/A	AGD	55	774043	6154729	Open site	Valid	Artefact : 11		
	<u>Contact</u>	<u>Recorders</u>	Mr.Peter Kuskie, South East Archaeology					<u>Permits</u>		
51-6-0698	Telstra Marulan 7/A	AGD	55	773447	6154672	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>	Mr.Peter Kuskie, South East Archaeology					<u>Permits</u>		
51-6-0699	Telstra Marulan 9/A	AGD	55	773130	6154458	Open site	Valid	Artefact : 8		
	<u>Contact</u>	<u>Recorders</u>	Mr.Peter Kuskie, South East Archaeology					<u>Permits</u>		
51-6-0700	Telstra Marulan 10/A	AGD	55	773105	6154377	Open site	Valid	Artefact : 6		
	<u>Contact</u>	<u>Recorders</u>	Mr.Peter Kuskie, South East Archaeology					<u>Permits</u>		
51-6-0701	Telstra Marulan 12/A	AGD	55	772905	6154385	Open site	Valid	Artefact : 3		
	<u>Contact</u>	<u>Recorders</u>	Mr.Peter Kuskie, South East Archaeology					<u>Permits</u>		
51-6-0709	HSP17(23-24)	GDA	55	772837	6157693	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>	Navin Officer Heritage Consultants Pty Ltd					<u>Permits</u>		
51-6-0101	Isolated Find 2	AGD	55	774550	6152900	Open site	Valid	Artefact : -	Isolated Find	99404
	<u>Contact</u>	<u>Recorders</u>	Mrs.Caryll Sefton					<u>Permits</u>		
51-6-0409	MW 2	AGD	55	773191	6154544	Open site	Valid	Artefact : 1		102089
	<u>Contact</u> T Russell	<u>Recorders</u>	Doctor.Tim Owen					<u>Permits</u>		
51-6-0410	MW 3	AGD	55	772787	6154421	Open site	Valid	Artefact : 1		102089
	<u>Contact</u> T Russell	<u>Recorders</u>	Doctor.Tim Owen					<u>Permits</u>		
51-6-0411	MW 4	AGD	55	772877	6154401	Open site	Valid	Artefact : 1		102089
	<u>Contact</u> T Russell	<u>Recorders</u>	Doctor.Tim Owen					<u>Permits</u>		

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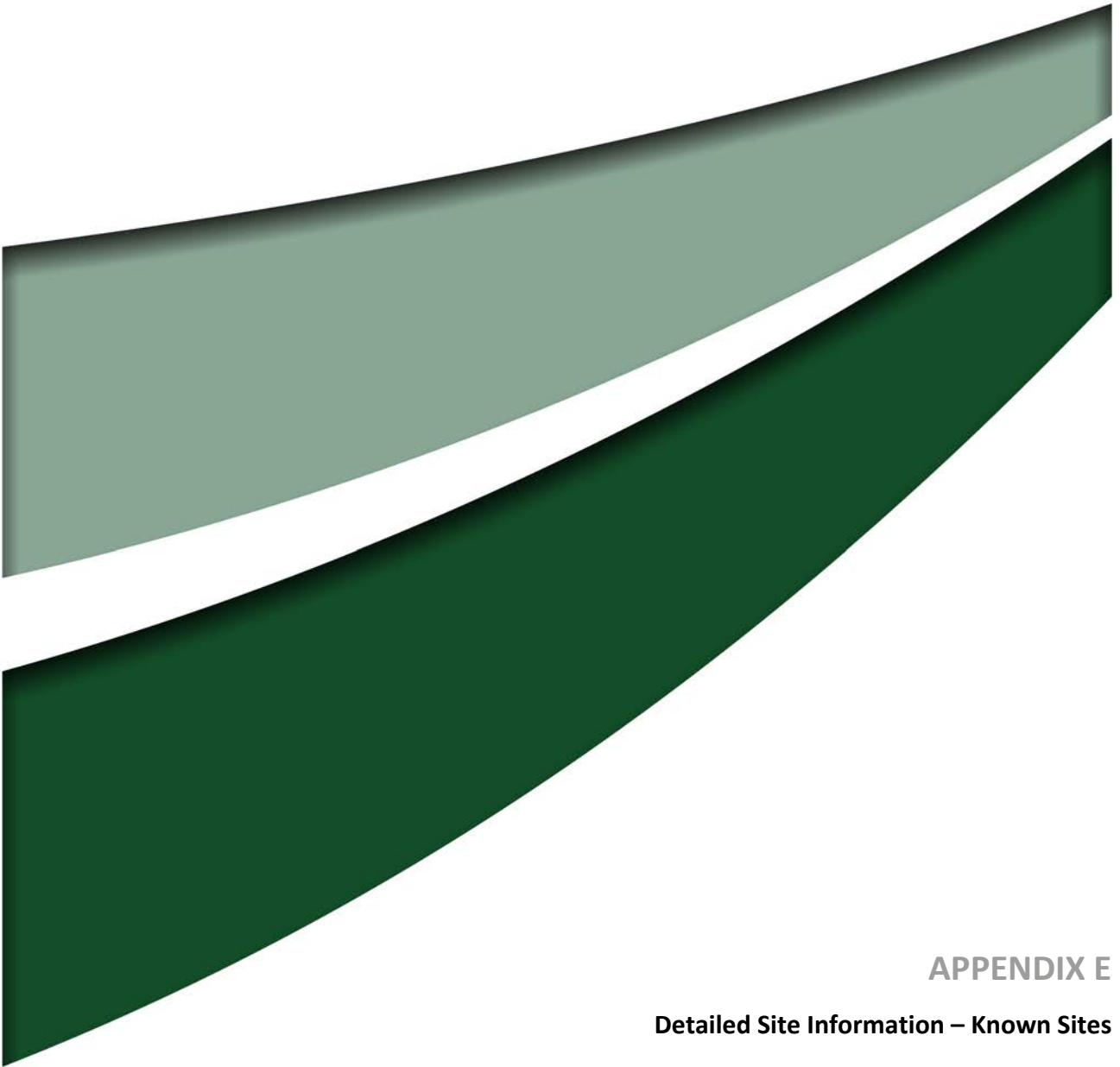
Extensive search - Site list report

Your Ref Number : 3330c
Client Service ID : 127956

<u>SiteID</u>	<u>SiteName</u>	<u>Datum</u>	<u>Zone</u>	<u>Easting</u>	<u>Northing</u>	<u>Context</u>	<u>Site Status</u>	<u>SiteFeatures</u>	<u>SiteTypes</u>	<u>Reports</u>
51-6-0412	MW1	AGD	55	774019	6154627	Open site	Valid	Artefact : 1		102089
	<u>Contact</u>			<u>Recorders</u>				<u>Permits</u>		
	T Russell			Doctor.Tim Owen						

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APPENDIX E

Detailed Site Information – Known Sites

Table 1 – Detailed Site Information

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0066	G11 (Towrang)	Artefact Scatter	5	Not supplied	Unknown	Unknown	Open paddock	McIntyre 1992
51-6-0068	G13 (Towrang)	Artefact Scatter	3	Not supplied	High	Possible	Basal slope, margin of Narrambulla Creek	McIntyre 1992
51-6-0059	Marulan Quarry 1	Artefact Scatter	3	8 X 6	Unknown	Unknown	Lower slope of spurline knoll	Navin 1990
51-6-0060	Marulan Quarry 2	Artefact Scatter	9	Exposure 1: 7 X 7 Exposure 1: 90 m south of exposure 2 Exposure 3: 70 m south of exposure 1	Unknown	Unknown	Lower slope of spurline knoll	Navin 1990
51-6-0074	MAS1	Artefact Scatter	6	15 X 20	Unknown	Unknown	NE facing slope	Johnston 1995
51-6-0075	MIF1	Artefact Scatter	1	Not supplied	Unknown	Unknown	Ridge crest	Johnston 1995
51-6-0076	MAS4	Artefact Scatter	6	Not supplied	Unknown	Unknown	SE facing slope	Johnston 1995
51-6-0079	MAS3	Artefact Scatter	6	50 X 50	Unknown	Unknown	SE facing slope	Johnston 1995
51-6-0077	MAS5	Artefact Scatter	2	5 X 5	Unknown	Unknown	Upper slope of spur-line	Johnston 1995

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0080	MAS2	Artefact Scatter	14	80 X 50	Unknown	Unknown	NE facing slope	Johnston 1995
51-6-0086	Marulan 1	Artefact Scatter	13	40 x 15	Unknown	Unknown	Upper bench above Marulan Creek	Sefton 1996
51-6-0087	Marulan 2	Artefact Scatter	7	80 x 15	Unknown	Unknown	Upper bank of tributary of Marulan Creek	Sefton 1996
51-6-0088	Marulan 3	Artefact Scatter	9	40 x 15	Unknown	Unknown	Upper bench above Marulan Creek	Sefton 1996
51-6-0089	Marulan 4	Artefact Scatter	13	Exposure 1 3 x 5 Exposure 2 5 x 1	Unknown	Unknown	Upper bench adjacent to Marulan Creek	Sefton 1996
51-6-0090	Marulan 5	Artefact Scatter	11 (further 10 artefacts outside surveyed area)	20 x 20	Unknown	Unknown	Upper bench adjacent to Marulan Creek	Sefton 1996
51-6-0091	Marulan 6	Artefact Scatter	6	12 x 10	Unknown	Unknown	Upper bench adjacent to Marulan Creek	Sefton 1996
51-6-0092	Marulan 7	Artefact Scatter	4	Unknown	Unknown	Unknown	Upper bench above Marulan Creek	Sefton 1996
51-6-0101	Isolated Find 2	Isolated Find	1	Exposure	Unknown	Unknown	Bench adjacent to Marulan Creek	Sefton 1996
51-6-0103	Isolated Find 1	Isolated Find	1	Exposure	Unknown	Unknown	Bench adjacent to Marulan Creek	Sefton 1996

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0114	Joarimin Creek 1	Artefact Scatter	25	Exposure 1 east side of creek 3 x 2, Exposure 2 west side of creek 115 m x not specified	Unknown	Unknown	East and west banks of Joarimin Creek	Edmonds 1999
51-6-0093	MF 1 - Winfarthing Road	Isolated Find	1	Unknown	Unknown	Unknown	Broad saddle	Dearling 1997
51-6-0095	MF 2 - Winfarthing Road	Isolated Find	1	Unknown	Unknown	Unknown	Broad saddle	Dearling 1997
51-6-0094	MF 3 - Narambulla Creek	Artefact Scatter	2	Unknown	Unknown	Unknown	Mid-slope of low spur	Dearling 1997
51-6-0096	MF 4 - Narambulla Creek	Artefact Scatter	100+	150 x 30	Likely	Likely	Terrace on bank of Narambulla Creek	Dearling 1997
51-6-0097	MF 5 - Narambulla Creek	Artefact Scatter	3	Unknown	Unknown	Unknown	Track on narrow terrace above Narambulla Creek	Dearling 1997
51-6-0098	MF 6 - Narambulla Creek	Isolated Find	1	Unknown	Unknown	Unknown	Track on narrow terrace above Narambulla Creek	Dearling 1997
51-6-0412	MW1	Isolated Find	1	Unknown	Unlikely	Unlikely	Simple slope	ERM 2004
51-6-0409	MW2	Isolated Find	1	Unknown	Unlikely	Unlikely	Simple slope	ERM 2004

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0410	MW3	Isolated Find	1	Unknown	Unlikely	Unlikely	Simple slope	ERM 2004
51-6-0411	MW4	Artefact Scatter	12	20 x 4-2 exposures	Probable	Probable	Simple slope	ERM 2004
48-4-0086	DP1056566 Lot 11/1	Artefact Scatter	12	200 x 5	Likely	Likely	Tangarang Creek margin	Williams 2004
48-4-0087	DP1056566 Lot 11/2	Artefact Scatter	38	200 x 5-3 exposures	Likely	Likely	Gentle simple slope to creek margin	Williams 2004
48-4-0088	DP1056566 Lot 11/3	Artefact Scatter	31	250 x 200 (potentially)	Likely	Likely	Creek flats and creek margins	Williams 2004
48-4-0089	DP1056566 Lot 12/1	Artefact Scatter	42	200 X 10	Likely	Likely	Simple slope to ridge crest	Williams 2004
48-4-0090	DP1056566 Lot 12/2	Artefact Scatter	8	20 x 5	Likely	Likely	Spur Crest	Williams 2004
48-4-0091	DP1056566 Lot 12/3	Artefact Scatter	8	150 x 20	Likely	Likely	Spur Crest	Williams 2004
48-4-0092	DP1056566 Lot 12/IF1	Isolated Find	1	1 x 1	Likely	Likely	Spur Crest	Williams 2004
48-4-0093	DP1056566 Lot 12/IF2	Isolated Find	1	200 x 50 (Potentially)	Likely	Likely	Spur Crest	Williams 2004
51-6-0359	LA4 ⁶	Isolated Find	1	Artefact location	Moderate	Moderate	Margin of Osborne Creek	Saunders 2005
51-6-0360	LA5	Artefact Scatter	2	6 x 4	Moderate	Low	Margin of drainage line	Saunders 2005

^{6 6} LA1 to LA3 did not appear on the AHIMS search as they fell outside the search area and are not included in this data.

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0361	LA6	Artefact Scatter	5	20 x 3	Moderate	Low	Crest of ridge feature on basal slope	Saunders 2005
51-6-0362	LA7	Isolated Find	1	Artefact location	Low	Nil	Ridge feature on basal slope	Saunders 2005
51-6-0363	LA8	Artefact Scatter	2	35 x 3	Low	Low	Margin of drainage line	Saunders 2005
51-6-0364	LA9	Artefact Scatter	3	6 x 6	Low	Low	Upper slope of spur	Saunders 2005
51-6-0365	LA10	Artefact Scatter	3	12 x 4	Moderate	Moderate	Mid-slope of spur	Saunders 2005
51-6-0366	LA11	Artefact Scatter	2	12 x 2	Moderate	Low	Upper slope of spur	Saunders 2005
51-6-0367	LA12	Artefact Scatter	51-100	80 x 12	Moderate	High	Margin of drainage line	Saunders 2005
51-6-0368	LA13	Artefact Scatter	21-50	60 x 30	Low	Low	Crest of ridge above Narrambulla Creek	Saunders 2005
51-6-0369	LA14	Artefact Scatter	2	50 x 2	Low	Low	Low spur crest	Saunders 2005
51-6-0370	LA15	Artefact Scatter	3	35 x 8	Moderate	Low	Basal slope, margin of Narrambulla Creek	Saunders 2005
51-6-0371	LA16	Artefact Scatter	100+	60 x 15	Moderate	Low	Basal slope	Saunders 2005

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0372	LA17	Artefact Scatter, possible modified tree	51-100	270 x 30	High	Low	Saddle, slopes, hill crest	Saunders 2005
51-6-0373	LA18	Artefact Scatter	2	2 x 2	Moderate	Low	Crest of spur/slope	Saunders 2005
51-6-0374	LA19	Artefact Scatter	2	2 x 2	Moderate	Low	Margin of drainage line	Saunders 2005
51-6-0375	LA20	Isolated Find	1	Artefact location	Low	Nil	Lower slope of spur	Saunders 2005
51-6-0376	LA21	Isolated Find	1	Artefact location	Low	Nil	Spur crest	Saunders 2005
51-6-0377	LA22	Isolated Find	1	Artefact location	Low	Nil	Mid-slope of spur	Saunders 2005
51-6-0378	LA23	Artefact Scatter	2	5 x 4	Moderate	Moderate	Creek margin	Saunders 2005
51-6-0379	LA24	Artefact Scatter	2	5 x 5	Moderate	Moderate	Basal slope	Saunders 2005
51-6-0380	LA25	Artefact Scatter	2	15 x 4	Moderate	Moderate	Creek margin/ terrace	Saunders 2005
51-6-0381	LA26	Isolated Find	1	Artefact location	Moderate	Moderate	Creek margin	Saunders 2005
51-6-0382	LA27	Isolated Find	1	Artefact location	Moderate	Moderate	Creek margin/ terrace	Saunders 2005

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0383	LA28	Isolated Find	1	Artefact location	Moderate	Moderate	Creek margin/ terrace	Saunders 2005
51-6-0384	LA29	Artefact Scatter	12	6 x 2	Moderate	Moderate	Creek margin/ terrace	Saunders 2005
51-6-0385	LA30	Artefact Scatter	11-20	50 x 20	Low	Low	Slope of low knoll on spur	Saunders 2005
51-6-0386	LA31	Artefact Scatter	8	50 x 20	High	Low	Basal slope/ creek margin	Saunders 2005
51-6-0387	LA32	Isolated Find	1	Artefact location	Low	Low	Basal slope of spur	Saunders 2005
51-6-0388	LA33	Isolated Find	1	Artefact location	Low	Low	Basal slope of hill	Saunders 2005
52-4-0195	M1 (BSCS1)	Artefact Scatter	31	5 separate exposures	Moderate	Low	Depression associated with minor drainage lines	ERM 2006
51-6-0456	Marulan T1 S1	Isolated find	1	Artefact location	Low potential for sub-surface artefacts due to disturbances and the shallow nature of the remaining soil profile.	No PAD due to shallow soil profile, past European land use practises and erosional processes.	Spur/Slope, confluence of two third order streams.	Umwelt 2006

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0457	Marulan T1 S2	Artefact Scatter			The site is located in a disturbed context and the sediments are not stable washing north and west down a slight gradient. The amount of artefacts indicate the probability of further artefacts in the subsurface	It is expected that no archaeological integrity will be retained due to the high levels of disturbance from erosional processes and past land use practises hence the site is assessed as having no PAD.	Ridge, 100 metres east of third order tributary of Joarimin Creek	Umwelt 2006
51-6-0458	Marulan T1 S3	Artefact Scatter	2		The site is located in a disturbed context (on a vehicle track) and the sediments are not stable, washing north and west down-slope	Site expected to retain no archaeological integrity as the artefacts were located on the hard packed clay surface. Assessed to be no PAD or further artefacts due to erosional processes.	Ridge, 125 metres south of Joarimin Creek	Umwelt 2006
51-6-0459	Marulan T1 S4	Isolated find	1	Artefact location	The site is located in a disturbed context (on a vehicle track) and the sediments are not stable, washing north and west down-slope.	The site was assessed as being unlikely to retain PAD due to the disturbed nature of the soil profile from prior land use practises.	Ridge, Joarimin Creek is approximately 35-50 metres north of the site where it is a fourth order stream.	Umwelt 2006

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0460	Marulan T1 S5	Artefact Scatter	6		The site is located in a disturbed context (on a vehicle track) and the sediments are not stable, washing north and west down-slope.	It is assessed that there may be small numbers of subsurface artefacts in the general area of the site; however, due to prior disturbance it is assessed that there is no likelihood of a PAD.	Ridge, Joarimin Creek is approximately 100 metres north of the site where it is a fourth order stream.	Umwelt 2006
51-6-0461	Marulan T1 S6	Isolated find	1	Artefact location	The site is located in a very disturbed context and the sediments are not stable washing north and west down a slight gradient.	Due to the lack of artefactual material in this highly disturbed area it is assessed that further artefacts in a sub-surface context are unlikely. PAD is also unlikely due to the high levels of disturbance.	Ridge, Joarimin Creek is approximately 25 – 35 metres north of the site where it is a fourth order stream.	Umwelt 2006

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0462	Marulan T1 S7	Grinding Bowl	1	Artefact location	The bowl is on an outcrop of stone it has been more readily exposed to the elements because of vegetation clearance in the paddock around it; it is probably weathering at a faster rate than in the past and will continue to do so.	Due to prior land use practises, the soil profile surrounding the artefact is expected to be disturbed and therefore to retain no archaeological integrity (PAD). Other archaeological evidence such as stone artefacts may be retained in a subsurface context in the soils around the grinding dish.	Ridge, Joarimin Creek is approximately 25 – 35 metres north of the site where it is a fourth order stream	Umwelt 2006
51-6-0463	Marulan T1 S8	Artefact Scatter	6		The site is located in a disturbed context, on and just adjacent to a vehicle track.	Little potential for PAD. Low numbers of subsurface artefacts are assessed as possible within the deeper soil profile beside the road.	Ridge, 100-125m from Joarimin Creek which is a fourth order stream directly north of the site.	Umwelt 2006

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0464	Marulan T1 S9	Isolated find	1	Artefact location	The site is located in a disturbed context, on a vehicle track which has had an underground cable laid under it.	As no artefacts were brought to the surface during cable excavation. It is assessed that there is low potential for subsurface artefacts. There is no likelihood of PAD due to the high levels of disturbance.	Ridge, Joarimin Creek is approximately 25 – 35 metres north of the site where it is a fourth order stream.	Umwelt 2006
51-6-0465	Marulan T5 S1	Isolated find	1	Artefact location	The site is located in a disturbed context and the sediments are not stable, washing east and southeast down a slight gradient.	It was assessed that the general area has only a low potential for subsurface artefacts and that PAD is highly unlikely due to prior ground disturbance.	Spur, Joarimin Creek is approximately 200 metres north and a third order tributary of the same creek is located approximately 250 metres to the east	Umwelt 2006
51-6-0466	T5S2	Isolated find	1	Artefact location	It was assessed that the general area has only a low potential for subsurface artefacts.	PAD is highly unlikely due to prior ground disturbance.	Crest, Joarimin Creek is approximately 200 metres north and a third order tributary of the same creek is located approximately 250 metres to the east	Umwelt 2006

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0467	Marulan T6 S1	Isolated find	1	Artefact location	The high levels of disturbance from vegetation clearance and soil loss through erosional processes. There is a possibility that low levels of subsurface artefacts may be present at the site	It is unlikely that the area contains any archaeological integrity and thus PAD.	Crest, site is located between to first order drainages of Marulan Creek	Umwelt 2006
51-6-0468	Marulan T6 S2	Isolated find	1	Artefact location	It is highly unlikely that further artefacts will be located in this area in a subsurface context	The area retains no archaeological integrity and thus will retain no PAD.	Rocky outcrop, A first order drainage associated with Joarimin Creek is 25m south east of the site, Joarimin Creek itself is located 150m north of the site and Marulan Creek is located 130m south east of the site.	Umwelt 2006
51-6-0470	Marulan T6 S3	Isolated find	1	4 x 1.5 metres	Remnant soils around the flake were shallow to skeletal sands with very little potential for subsurface artefacts.	No likelihood of PAD.	Slope, 25 metres from Joarimin Creek.	Umwelt 2006

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0469	Marulan T6 S4	Isolated find	1	Artefact location	The site is located in a disturbed context and the sediments are not stable, washing southeast down a slight gradient	It is highly unlikely that further artefacts will be located in this area in a subsurface context and the area retains no archaeological integrity and thus will not retain PAD.	Foot-slope, 50 metres from Joarimin Creek.	Umwelt 2006
51-6-0534	Marulan T1 S1a				Reburial location for artefacts collected from Marulan T1S1		N/A	Umwelt 2013
51-6-0535	Marulan T1 S2a				Reburial location for artefacts collected from Marulan T1S2		N/A	Umwelt 2013
51-6-0536	Marulan T1 S3a				Reburial location for artefacts collected from Marulan T1S3		N/A	Umwelt 2013
51-6-0537	Marulan T1 S4a				Reburial location for artefacts collected from Marulan T1S4		N/A	Umwelt 2013

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0687	MRN PAD1	PAD			Incorporates the area of riparian corridor to the north of a tributary of Joarimin Creek. The area has been totally cleared and is heavily grassed. No surface artefacts were exposed in this area. The PAD is identified as extending from 5 metres north of the current creek bank (the area beside the creek bank is recent alluvial deposit) to 50 metres north of the creek bank. It is assessed that the PAD area extends to the east and west along the riparian corridor in this general area	One of the major determinants of this area being assessed as PAD is its proximity to the MRN15 site which has artefacts in a surface and subsurface context and the likelihood that the creek-line in this area retained semi-permanent water in a chain of ponds context.	Lower slope, 0-50 metres from Joarimin Creek.	Umwelt 2010

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0688	MRN PAD2	PAD			Incorporates an area of two adjoining spur crests encircled to the south-west and north by a tributary of Joarimin Creek. The area has been totally cleared and is heavily grassed. No surface artefacts were exposed in this area.	The PAD is identified as extending along the whole of the survey transect in this area and is assessed as incorporating the extremities of the MRN54 site (the NMZS location) which had few surface artefacts but over 1300 subsurface artefacts. It is predicted that subsurface artefact numbers will be relatively low in the eastern and northern extremities of the area	Ridge Crest, 125 metres from Joarimin Creek.	Umwelt 2010

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0689	MRN PAD3	PAD			Incorporates an area of gentle slope to the north of the MRN54 site and MRN PAD2 and to the south and east of a tributary of Joarimin Creek. MRN PAD3 is the northerly extension of PAD2 and has only been identified separately as it is a different ATU. The area has been totally cleared and is heavily grassed. No surface artefacts were exposed in this area.	The PAD is identified as extending along the whole of the survey transect in this area and is assessed as incorporating the extremities of the MRN54 site (the North Marulan Zone Substation location) which had few surface artefacts but over 1300 subsurface artefacts. It is predicted that subsurface artefact numbers will be relatively low in this area	Lower Slope, 50 metres from Joarimin Creek	Umwelt 2010

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0690	MRN PAD4	PAD			Incorporates an area of gentle slope in the riparian corridor to the north of the MRN54 site and PAD 2 and PAD3 and to the south and east of a tributary of Joarimin Creek. PAD4 is the northerly extension of PAD2 and PAD3 and has only been identified separately as it is a different ATU. The area has been totally cleared and is heavily grassed. No surface artefacts were exposed in this area.	The PAD is identified as extending along the whole of the survey transect in this area and is assessed as incorporating the extremities of the MRN54 site which had few surface artefacts but over 1300 subsurface artefacts. It is predicted that subsurface artefact numbers will be relatively low in this area	Lower Slope, to the south and east of a tributary of Joarimin Creek	Umwelt 2010

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0691	MRN PAD5	PAD			Is at the base of the foot-slope and between the foot-slope and the creek-line. In this area the creek-line has been prevented from migrating by rock outcropping along a small section of the creek bank. Behind and to the north of the outcropping rock there is an area approximately 50 metres by 50 metres that has not been scoured and as it is better drained has not been as badly affected by cattle trampling as the majority of the riparian corridor along the northern bank of the tributary.	It is possible that this area has retained a relatively intact soil profile, though it is unlikely that this soil profile will retain stratigraphic integrity however it is possible that some spatial integrity may remain.	Terrace, 40 metres from Joarimin Creek	Umwelt 2010

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0526	Joarimin Creek South	Artefact Scatter and PAD	<p>Surface Collection = 111</p> <p>Subsurface Testing= 287</p> <p>Total = 398</p>	960 metres (e/w) x 200 metres (e/w)	The Joarimin Creek South site incorporates the previously recorded MRN40 (#51-6-0281), MRN43 (51-6-0284), Marulan T1S2 to T1S9 (#51-6-0457 to 0464) sites.	The site area is delineated to the south, east and west as being the area where the artefact density is higher than the general background scatter (thought to be approximately 1 artefact every 10 m ²). To the north Joarimin Creek has been selected as the boundary for convenience, as at this time, further investigation is required on the northern side of the creek to assess which areas may have a similar artefact density.	A gentle slope, spur crest, very gentle slope, riparian corridor immediately adjacent to Joarimin Creek.	<p>Umwelt 2007</p> <p>Umwelt 2007a</p> <p>Umwelt 2007b</p> <p>Umwelt 2007c</p> <p>Umwelt 2007d</p> <p>Umwelt 2013</p>
51-6-0242	MRN1	Artefact Scatter	3	4 metres x 4 metres	The site is in open woodland and is in poor condition due to water erosion and trampling by cattle.	Due to the degree of erosion and prior disturbance it is assessed that PAD is unlikely.	Foot-slope, northern bank of Marulan Creek	Umwelt 2005

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0243	MRN2	Artefact Scatter	6		The site has suffered sheet erosion and trampling by cattle.	Due to the degree of erosion and prior disturbance, it is assessed that PAD is unlikely.	Foot-slope, southern bank of a tributary of Marulan Creek	Umwelt 2005
51-6-0244	MRN3	Artefact Scatter	8	5 metres x 5 metres	The site has suffered sheet erosion and trampling by cattle.	Due to the degree of erosion and prior disturbance, it is assessed that PAD is unlikely.	Foot-slope, southern bank of Marulan Creek	Umwelt 2005
51-6-0245	MRN4	Artefact Scatter	6		The site has been subject to scouring from slope-wash and stock trampling.	Due to the degree of erosion and prior disturbance, it is assessed that PAD is unlikely.	Low spur separating two tributaries of Marulan Creek.	Umwelt 2005
51-6-0246	MRN5	Artefact Scatter	Originally recorded as 6 artefacts subsequently 2 artefacts were collected from the surface		A north-south fence-line runs through the site to the east and there are several stringybarks which are used as shade trees by stock and kangaroos. This activity has destabilised the soil surface and instigated localised sheet erosion.	Due to the degree of erosion and prior disturbance, it is assessed that PAD is unlikely.	The site is located on a low saddle with a south-westerly aspect overlooking the head of a shallow valley to the west which contains a tributary of Marulan Creek 400 metres distant.	Umwelt 2005

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0247	MRN6	Artefact Scatter	3		Site is relatively stable at present but has been subject to prior erosion.	It is possible that further artefacts may exist in this general area in a subsurface context.	Northerly facing lower slope of a low ridge 200 metres from a tributary of Marulan Creek	Umwelt 2005
51-6-0248	MRN7	Artefact Scatter	5		The origin of these artefacts is impossible to determine as there is extensive sheet erosion along the creek banks upstream of this location and the artefacts may have been washed from any of these areas.	PAD is not applicable to this site	Within the channel of a tributary of Joarimin Creek.	Umwelt 2005
51-6-0249	MRN8	Scarred Tree					Low spur crest 200 metres from a tributary of Joarimin Creek	Umwelt 2005

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0250	MRN9	Stone Arrangement	A stone arrangement with a parallel alignment of stones 13.8 m long on its southern side and 8.7 m long on its northern side with an average distance between the lines of 2.6 m. The lines of stones close at their western end where they expand slightly into a bulbous shape 3.9 m in diameter. It is possible that this section may once have had a stone circle, however, some stones have been moved by stock trampling and this cannot be known for certain.		Grazing/land clearance, slope wash, movement of stones by stock trampling	Due to the skeletal nature of the soil in this area PAD is assessed as highly unlikely.	Lower slope, 300 metres from a tributary of Joarimin Creek	Umwelt 2005

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0251	MRN 10	Scarred Tree					Spur crest, 200 metres from a tributary of Joarimin Creek	Umwelt 2005
51-6-0252	MRN 11	Scarred Tree					Spur crest, 200 metres from a tributary of Joarimin Creek	Umwelt 2005
51-6-0253	MRN 12	Artefact Scatter	2		Grazing/pastoral/tree clearance, erosion, trampling	Due to the skeletal nature of the soil it is assessed that PAD is highly unlikely	Crest, 250 metres from Joarimin Creek	Umwelt 2005
51-6-0254	MRN 13	Artefact Scatter	20		Pastoral/grazing/land clearance, erosion, creek channel entrenchment and widening	The extensive erosion and skeletal remnant soils in this area indicate that it is highly unlikely that PAD exists in the area.	Along both foot-slopes/banks of a tributary of Joarimin Creek. The eastern bank rises steeply to a heavily wooded spur and has suffered significant sheet erosion, while the western bank rises more gently and is generally covered in grassland	Umwelt 2005
51-6-0255	MRN14	Artefact Scatter	7		It is possible that small numbers of artefacts may exist in a subsurface context away from the erosion in this area	It is unlikely that subsurface artefacts would retain stratigraphic integrity due to prior disturbance (land clearance, slope wash, stock trampling.	On the foot-slope/ banks of Joarimin Creek	Umwelt 2005

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0256	MRN15	Artefact Scatter	Originally recorded as 2 Surface Artefacts' Subsequently 20 artefacts were recovered through subsurface testing		It is likely that small numbers of artefacts may exist in a subsurface context away from the erosion in this area	It is unlikely that they would retain stratigraphic integrity due to prior disturbance (land clearance, slope wash, stock trampling.	Foot-slope adjacent to Joarimin Creek	Umwelt 2005
51-6-0257	MRN16	Isolated Find	1	Artefact location	Pastoral/ Grazing/erosion, cattle trampling, creek entrenchment and widening	Due to the low number of artefacts and extensive prior disturbance PAD is assessed as highly unlikely.	Foot-slope adjacent to a tributary of Joarimin Creek	Umwelt 2005
51-6-0258	MRN17	Artefact Scatter	4	5 metres x 5 metres	Grazing/ pastoral/sheet-wash, trampling	Due to the degree of erosion and prior disturbance it is assessed that PAD is highly unlikely in this area.	Foot-slope adjacent to a tributary of Joarimin Creek	Umwelt 2005
51-6-0259	MRN18	Isolated Find	1	Artefact location	Grazing/Pastoral/land clearance, sheet-wash, erosion, trampling, creek entrenchment and widening	Due to the low number of artefacts and extensive prior disturbance PAD is assessed as highly unlikely.	On the foot-slope/ banks of Joarimin Creek	Umwelt 2005

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0260	MRN19	Isolated Find	1	Artefact location	Pastoral/ grazing/land clearance, erosion, creek entrenchment and widening	Due to the low number of artefacts and extensive prior disturbance PAD is assessed as highly unlikely.	On the foot-slope/ banks of Joarimin Creek	Umwelt 2005
51-6-0261	MRN20	Artefact Scatter	2		Grazing/ pastoral/erosion	Due to the skeletal nature of the soil in this area PAD is assessed as highly unlikely.	Ridge crest approximately 400 metres from Joarimin Creek	Umwelt 2005
51-6-0262	MRN21	Isolated Find	1	Artefact location	Grazing/ pastoral/slope-wash/trampling	Due to the low number of artefacts and skeletal soil PAD is assessed as highly unlikely.	Mid-slope above a tributary of Joarimin Creek	Umwelt 2005
51-6-0263	MRN22	Artefact Scatter	10	5 metres x 4 metres	Grazing/ pastoral/land clearance, slope-wash	Due to the low numbers of artefacts and degree of prior disturbance associated PAD is assessed as unlikely.	Located on a crest at the head of a minor tributary of Joarimin Creek.	Umwelt 2005
51-6-0264	MRN23	Scarred Tree					Spur crest approximately 500 metres from a tributary of Joarimin Creek	Umwelt 2005
51-6-0265	MRN24	Isolated Find	1	Artefact location	Uncleared area of rock outcrop/stock trampling	Due to skeletal soil in this area PAD is assessed as highly unlikely	Crest above Marulan Creek	Umwelt 2005

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0266	MRN25	Artefact Scatter	Originally recorded as having 10 artefacts, subsequently 3 artefacts were collected from the surface and 421 artefacts were recovered through subsurface testing, a total of 424 artefacts	100 metres x 100 metres	The location of the artefacts in the spoil heaps suggests that this area retains a light scatter of artefacts in a subsurface context.	The degree of disturbance indicates that there is little possibility of stratigraphic integrity.	Located on the lower slope/foot-slope boundary adjacent to an upper tributary of Lockyersleigh Creek	Umwelt 2005
51-6-0267	MRN26	Isolated Find	Originally recorded as a single surface artefact. Subsequently 4 artefacts were collected from the surface with a further 4 artefacts recovered by subsurface testing, a total of 8 artefacts.	Artefact location	Power easement and grazing/area has been bulldozed and subject to erosion and trampling also wombat burrowing	Due to the low number of artefacts and extensive prior disturbance PAD is assessed as highly unlikely.	Crest approximately 150 metres from a tributary of Joarimin Creek	Umwelt 2005

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0268	MRN27	Artefact Scatter	Originally recorded as having 150+ artefacts, subsequently 369 artefacts were collected from the surface with a further 1314 artefacts recovered by subsurface testing, a total of 1683 artefacts.	100 metres x 50 metres	It is highly likely that relatively large numbers of artefacts still remain in a subsurface context between the active wombat burrows	Due to the degree of prior disturbance it is assessed that the area does not retain stratigraphic integrity.	Upper, middle and lower slope above a tributary of Joarimin Creek	Umwelt 2005
51-6-0269	MRN28	Artefact Scatter	Originally recorded as 3 artefacts. Subsequently 9 artefacts were collected from the surface with a further 2 artefacts recovered by subsurface testing, a total of 11 artefacts.	75 metres x 25-50 metres	It is likely that small numbers of artefacts still remain in a subsurface context between the active wombat burrows	Due to the degree of prior disturbance it is assessed that the area does not retain stratigraphic integrity.	Spur crest approximately 500 metres from Joarimin Creek	Umwelt 2005

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0270	MRN29	Artefact Scatter	30	50 metres x 50 metres	It is possible that small numbers of artefacts may be located in this area in a subsurface context away from the eroded areas	Due to prior disturbance it is highly unlikely they would have stratigraphic integrity.	On the lower slope above a tributary of Joarimin Creek.	Umwelt 2005
51-6-0271	MRN30	Isolated Find	1	Artefact location	Pastoral/ grazing/land clearance, erosion	Due to the low number of artefacts and extensive prior disturbance PAD is assessed as highly unlikely.	Crest approximately 500 metres from Joarimin Creek	Umwelt 2005
51-6-0274	MRN33	Isolated Find	Originally recorded as a single artefact, subsequently 1 artefact was collected from the surface with a further 2 artefacts recovered through subsurface testing, a total of 3 artefacts.	Artefact location	It is possible that low numbers of artefacts may be located in a subsurface context in this area	Archaeological integrity is highly unlikely due to prior disturbance.	Foot of a spur slope 400 metres from a tributary of Joarimin Creek	Umwelt 2005

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0275	MRN34	Artefact Scatter	30+	500 metres x 500 metres	It is possible that very low numbers of artefacts may exist in this area in a subsurface context	The very high degree of disturbance indicates that they would have little likelihood of stratigraphic integrity.	The site is located on a lower slope/foot-slope boundary of a low spur above a tributary of Joarimin Creek.	Umwelt 2005
51-6-0276	MRN35	Isolated Find	Originally recorded as a single artefact, subsequently 3 artefacts were collected from the surface.	Artefact location	Grazing/land clearance, erosion	The shallow nature of the soil in this area suggests that PAD is unlikely.	The site is located in an exposure on an upper slope above Joarimin Creek.	Umwelt 2005
51-6-0277	MRN36	Artefact Scatter	Originally recorded as 3 artefacts, subsequently 8 artefacts were collected from the surface and 1 artefact from subsurface testing, a total of 9 artefacts.		grazing/clearing, slope-wash, road	Due to the degree of erosion, the shallow nature of the soil and prior disturbance PAD is assessed as highly unlikely.		Umwelt 2005
51-6-0278	MRN37	Isolated Find	1	Artefact location	Pastoral/ grazing /land clearance/slope wash, trampling	Due to the shallow soils and disturbed (cultivated) nature of this area PAD is highly unlikely.	Mid-slope of a spur approximately 250 metres from Joarimin Creek	Umwelt 2005

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0279	MRN38	Isolated Find	1	Artefact location	Pastoral/grazing/slope wash, trampling	It is likely that there will be small numbers of artefacts in this area in a subsurface context.	Located on the foot-slope approximately 15 metres from Joarimin Creek	Umwelt 2005
51-6-0280	MRN39	Artefact Scatter	3		It is possible that low numbers of artefacts may be located in this area in a subsurface context	Due to prior disturbance it is unlikely that the area retains stratigraphic integrity.	Located on the foot-slope approximately 10 metres from Joarimin Creek	Umwelt 2005
51-6-0281	MRN40	Artefact Scatter	25		It is possible that low numbers of artefacts may be located in this area in a subsurface context	Due to prior disturbance it is unlikely that the area retains stratigraphic integrity.	Located within a large area of sheet erosion 50 by 100 m on the foot-slope along the southern bank of Joarimin Creek	Umwelt 2005
51-6-0282	MRN41	Artefact Scatter	23		It is possible that low numbers of artefacts may be located in this area in a subsurface context.	Due to prior disturbance it is unlikely that the area retains stratigraphic integrity.	Located on the foot-slope along the northern bank of Joarimin Creek	Umwelt 2005
51-6-0283	MRN42	Artefact Scatter	10		It is possible that low numbers of artefacts may be located in this area in a subsurface context.	Due to prior disturbance it is unlikely that the area retains stratigraphic integrity.	Located on the top of the B clay horizon where water runoff is cutting back into a pre-existing erosion gully which feeds into Joarimin Creek from the north. The scatter can be traced for about 50 m along the edge of the gully.	Umwelt 2005

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0284	MRN43	Artefact Scatter	10		It is possible that low numbers of artefacts may be located in this area in a subsurface context.	Due to prior disturbance it is unlikely that the area retains stratigraphic integrity.	The site is on the foot-slope on the southern side of Joarimin creek	Umwelt 2005
51-6-0285	MRN44	Artefact Scatter	6			As the artefacts have washed into the area their specific place of origin is indeterminate and the assessment of the likelihood of PAD in the area of the artefacts is not relevant.	Joarimin Creek channel	Umwelt 2005
51-6-0286	MRN45	Artefact Scatter	3		The location of the artefacts within the spoil suggests that there are likely to be low numbers of artefacts within this area in a subsurface context.	Due to prior disturbance it is unlikely that the area retains stratigraphic integrity.	Located on spoil excavated from a wombat burrow on the foot-slope on the northern side of Joarimin Creek.	Umwelt 2005
51-6-0287	MRN46	Artefact Scatter	2		It is possible that low numbers of artefacts may be located in this area in a subsurface context.	Due to prior disturbance it is unlikely that the area retains stratigraphic integrity.	Located within an area of sheet erosion on the foot-slope on the northern bank of Joarimin Creek	Umwelt 2005

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0288	MRN47	Artefact Scatter	11	100 metres x 100 metres	It is possible that low numbers of artefacts may be located in this area in a subsurface context.	Due to prior disturbance it is unlikely that the area retains stratigraphic integrity	Mid-slope 100 metres north of Joarimin Creek	Umwelt 2005
51-6-0289	MRN48	Artefact Scatter	Originally recorded as having 2 artefacts, subsequently no artefacts were collected from the surface but 5 artefacts were recovered through subsurface testing.			Due to the low numbers of artefacts in an extensive area of disturbance it is assessed that PAD is unlikely.	Spur crest 500 metres from Joarimin Creek	Umwelt 2005
51-6-0290	MRN49	Scarred Tree				Due to prior disturbance and erosion in this area PAD is assessed as highly unlikely.	Mid-slope of ridge 500 metres from Joarimin Creek	Umwelt 2005
51-6-0291	MRN50	Artefact Scatter	5	100 metres x 100 metres		Due to low numbers of artefacts and extensive prior disturbance PAD is assessed as highly unlikely.	Located on a low spur crest between two deeply eroded ephemeral tributaries of Joarimin Creek.	Umwelt 2005

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0292	MRN51	Scarred Tree					Located on a low spur crest between two deeply eroded ephemeral tributaries of Joarimin Creek.	Umwelt 2005
51-6-0293	MRN52	Isolated Find	1	Artefact location	It is likely that there will be small numbers of artefacts in this area in a subsurface context.	Prior disturbance suggests that the artefacts will not have stratigraphic integrity.	Foot-slope 20 metres from the northern bank of a tributary of Joarimin Creek	Umwelt 2005
51-6-0527	MRN 53	Artefact Scatter	Originally recorded as having 4 artefacts, subsequently no artefacts were able to be collected from the surface, however 2 artefacts were recovered through subsurface testing			There was no stratigraphic integrity within the soil profile and no spatial integrity within the A1 and upper A2 soil horizons.	Located on a gentle slope approximately 35 metres south of a drainage depression which feeds into Joarimin Creek.	Umwelt 2005 Umwelt 2007a Umwelt 2007b Umwelt 2007c Umwelt 2007d Umwelt 2013

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0528	MRN 54	Artefact Scatter	Originally recorded as having 12 artefacts, subsequently no artefacts were collected from the surface but 1392 were recovered through subsurface testing.			There was no stratigraphic integrity within the soil profile and no spatial integrity within the A1 and upper A2 soil horizons.	Spur crest and adjacent slope 150 metres west of a second order tributary of Joarimin Creek	Umwelt 2005 Umwelt 2007a Umwelt 2007b Umwelt 2007c Umwelt 2007d Umwelt 2013
51-6-0529	MRN 55	Artefact Scatter	Originally recorded as having 6 artefacts, subsequently no artefacts were collected from the surface, however 13 artefacts were recovered by subsurface testing.			There was no stratigraphic integrity within the soil profile and no spatial integrity within the A1 and upper A2 soil horizons.	Gentle slope 70 metres south-south-west of the confluence of two second order tributaries of Joarimin Creek.	Umwelt 2005 Umwelt 2007a Umwelt 2007b Umwelt 2007c Umwelt 2007d Umwelt 2013

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0530	MRN 56	Artefact Scatter	Originally recorded as having 10 artefacts, subsequently no artefacts were collected from the surface, however 13 artefacts were recovered through subsurface testing.			There was no stratigraphic integrity within the soil profile and no spatial integrity within the A1 and upper A2 soil horizons.	A gentle slope within a riparian corridor 60 metres south of a second order tributary of Joarimin Creek.	Umwelt 2005 Umwelt 2007a Umwelt 2007b Umwelt 2007c Umwelt 2007d Umwelt 2013
51-6-0531	MRN 57	Artefact Scatter	Originally recorded as having 2 artefacts subsequently no artefacts were collected from the surface , however 2 artefacts were recovered through subsurface testing.			Due to the degree of disturbance observable from the excavation of the square it was assessed the location retained no likelihood of stratigraphic or spatial integrity.	Located on the upper slope of a low rocky spur, 70 metres to the west of a second order, ephemeral tributary of Joarimin Creek.	Umwelt 2005 Umwelt 2007a Umwelt 2007b Umwelt 2007c Umwelt 2007d Umwelt 2013

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0532	MRN 58	Artefact Scatter	Originally recorded as having 7 artefacts subsequently no artefacts were collected from the surface however 13 artefacts were located through subsurface testing.			It was assessed that none of these artefacts retained stratigraphic or spatial integrity based on the history of slope wash in the area and high levels of bioturbation.	Located on a lower slope of a rocky spur overlooking the foot-slope and flats of a second order tributary of Joarimin Creek which flowed approximately 125 metres to the east.	Umwelt 2005 Umwelt 2007a Umwelt 2007b Umwelt 2007c Umwelt 2007d Umwelt 2013

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0533	MRN 59	Isolated Find	Originally recorded as having 1 artefact, subsequently no artefacts were collected from the surface however a single artefact was recovered through subsurface testing.	Artefact location		It was assessed that the A1 was very recent in nature and was made up of colluvial deposit and leave litter which had filled an exposure left after the erosion of the prior A1 and the majority of the A2 and the down-slope movement of the small boulders that were once held in place by these soils. The artefact was assessed as being in a secondary depositional environment having washed into the area from upslope.	Located on a south-westerly facing lower slope of a rocky spur and 60 metres north of a minor, ephemeral tributary of Joarimin Creek.	Umwelt 2005 2007a 2007b Umwelt 2007c Umwelt 2007d Umwelt 2013

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0621	MRN60	Isolated Find	Originally recorded as having 1 artefact, subsequently no artefacts were collected from the surface however a single artefact was recovered through subsurface testing.	Artefact location		The soil profile indicated that the A1 was recent and had formed over a remnant A2, or in some cases even this was missing, with humic topsoil over bedrock/decomposing bedrock. It was assessed that there may never have been a deep soil profile in this area or, if one had existed that it was most probably lost following tree clearance.	Located on a high point on a rocky ridge crest within deep sands	Umwelt 2007 Umwelt 2007a Umwelt 2007b Umwelt 2007c Umwelt 2013

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0622	MRN61	Artefact Scatter	Originally recorded as having 4 artefacts, subsequently no artefacts were collected from the surface however 4 artefacts were recovered through subsurface testing.			The soil profile on the crest indicated that the A1 was generally missing with leaf litter over a remnant A2, over bedrock/decomposing bedrock. It was assessed that there may never have been a deep soil profile in this area or, if one had existed that it was lost following tree clearance. On the slopes the soil profile was still interpreted as newly forming A1 over remnant A2.	High point on a rocky spur crest	Umwelt 2007 Umwelt 2007a Umwelt 2007b Umwelt 2007c Umwelt 2013

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0623	MRN62	Artefact Scatter	Originally recorded as having 20 artefacts, subsequently 6 artefacts were collected from the surface and 17 artefacts were recovered through subsurface testing. A total of 23 artefacts.			There was no stratigraphic integrity within the soil profile and no spatial integrity within the A1 and upper A2 soil horizons.	Ridge crest	Umwelt 2007 Umwelt 2007a Umwelt 2007b Umwelt 2007c Umwelt 2013
51-6-0624	MRN63	Isolated Find	Originally recorded as having 1 artefact, subsequently no artefacts were collected from the surface however a single artefact was recovered through subsurface testing.	Artefact location		The soil profile indicated that the A1 was recent and had formed over a remnant A2, or in some cases even this was missing with humic topsoil over bedrock/decomposing bedrock. It was assessed that there may never have been a deep soil profile in this area or, if one had existed that it was lost following tree clearance.	High point on rocky ridge crest	Umwelt 2007 Umwelt 2007a Umwelt 2007b Umwelt 2007c Umwelt 2013

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0625	MRN64	Artefact Scatter	Originally recorded as having 19 artefacts, subsequently 6 artefacts were collected from the surface and 16 artefacts were recovered through subsurface testing. A total of 22 artefacts.			Stratigraphic integrity is not likely across the grid due to processes such as bioturbation, disturbance of the soil profile by ripping, tree clearance and slope wash. It is possible, however, that some spatial integrity may be found in the lower A2 soil horizon.	Location was on a spur crest and adjacent spur slope within an area identified as a siliceous dyke 25 metres from a minor tributary of Joarimin Creek	Umwelt 2007 Umwelt 2007a Umwelt 2007b Umwelt 2007c Umwelt 2013
51-6-0626	MRN65	Artefact Scatter	Originally recorded as having 2 artefacts, subsequently no artefacts were collected from the surface however 2 artefacts were recovered through subsurface testing.			There was no stratigraphic integrity within the soil profile and no spatial integrity within the A1 and upper A2 soil horizons.	Location was on a gentle, mid and lower slope within deep sands.	Umwelt 2007 Umwelt 2007a Umwelt 2007b Umwelt 2007c Umwelt 2013

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0627	MRN66	Artefact Scatter	Originally recorded as having 6 artefacts, subsequently no artefacts were collected from the surface however 2 artefacts were recovered through subsurface testing.			The artefact in the A1 is unlikely to have stratigraphic or spatial integrity; however, it is possible that the artefacts from the A2 may have some spatial integrity.	Very gentle slope within the catchment of Lockyersleigh Creek	Umwelt 2007 Umwelt 2007a Umwelt 2007b Umwelt 2007c Umwelt 2013
51-6-0628	MRN67	Artefact Scatter	Originally recorded as having 5 artefacts, subsequently no artefacts were collected from the surface however 5 artefacts were recovered through subsurface testing.			All five artefacts were located in Spit 2 and within remnant A2 soil horizon. The artefacts were located in squares where local rock outcrop had acted to retain the soil and artefacts it contained, or that were washed down slope and into the area.	Location was on a gentle slope within the riparian corridor of Lockyersleigh Creek	Umwelt 2007 Umwelt 2007a Umwelt 2007b Umwelt 2007c Umwelt 2013

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0629	MRN68	Artefact Scatter	Originally recorded as having 8 artefacts, subsequently no artefacts were collected from the surface however 13 artefacts were recovered through subsurface testing.			The artefact in the A1 is unlikely to have stratigraphic or spatial integrity; however, it is possible that the artefacts from the A2 may have some spatial integrity.	Location was on a gentle mid-slope	Umwelt 2007 Umwelt 2007a Umwelt 2007b Umwelt 2007c Umwelt 2013
51-6-0630	MRN69	Artefact Scatter	Originally recorded as having 245 artefacts, subsequently no artefacts were collected from the surface however 270 artefacts were recovered through subsurface testing.			It is most likely that the few artefacts in the A1 soil profile have been reworked (due to tree clearance and slope-wash) whilst the artefacts in the lower spits may have some spatial integrity.	Location was on a slightly elevated, but low gradient area between two minor drainage depressions that feed into Joarimin Creek approximately 150 metres distant.	Umwelt 2007 Umwelt 2007a Umwelt 2007b Umwelt 2007c Umwelt 2013

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0631	MRN70	Isolated Find	Originally recorded as having 1 artefact, subsequently no artefacts were collected from the surface however a single artefact was recovered through subsurface testing.	Artefact location		The A1 soil profile is very recent in nature. The A2 appears truncated with the upper A2 missing. The soil profile indicates that the slope has suffered considerable loss of topsoil most likely initiated by tree clearance in the past and exacerbated by grazing during drought conditions.	Very gentle slope approximately 150 metres from Marulan Creek	Umwelt 2007 Umwelt 2007a Umwelt 2007b Umwelt 2007c Umwelt 2013

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0632	MRN71	Artefact Scatter	Originally recorded as having 2 artefacts, subsequently no artefacts were collected from the surface however 2 artefacts were recovered through subsurface testing.			The A2 soil profile appears truncated and was very shallow. There were no historic finds within the A2 soil horizon indicating that it may be at least partially intact and that it may retain some integrity. Overall the soil profile is very shallow and the underlying Marulan Granite, in its decomposed and partially decomposed state, can be seen outcropping in the creek bank from 10 to 20 cm below the current ground surface.	Location was on a very gentle foot-slope within the riparian corridor on the south-eastern bank of Marulan Creek	Umwelt 2007 Umwelt 2007a Umwelt 2007b Umwelt 2007c Umwelt 2013

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0633	MRN72	Artefact Scatter	Originally recorded as having 3 artefacts, subsequently no artefacts were collected from the surface however 6 artefacts were recovered through subsurface testing.			This soil profile is probably recent and reworked. There were no historic finds within the A2 soil horizon indicating that it may be at least partially intact, though the amount of disturbance evident in the area related to tree removal suggests that there will be little likelihood of integrity.	Location was on a very low gradient foot-slope within the riparian corridor on the north-western side of Marulan Creek	Umwelt 2007 Umwelt 2007a Umwelt 2007b Umwelt 2007c Umwelt 2013
51-6-0638	MRN73	Artefact Scatter	Originally recorded as having 738 artefacts, subsequently no artefacts were collected from the surface however 761 artefacts were recovered through subsurface testing.			It was assessed that the A1 was recent and had formed over a very thin layer of remnant A2.	This artefact scatter was recorded during the subsurface investigation of the township of Old Marulan which is located on a gentle lower slope south of Marulan Creek	Umwelt 2007 Umwelt 2007a Umwelt 2007b Umwelt 2007c Umwelt 2013

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0634	MRN74	Scarred Tree						Umwelt 2007 Umwelt 2007a Umwelt 2007b Umwelt 2007c Umwelt 2013
51-6-0635	MRN75	Scarred Tree					The tree is on the upper mid-slope of a spur	Umwelt 2007 Umwelt 2007a Umwelt 2007b Umwelt 2007c Umwelt 2013
51-6-0636	MRN76	Scarred Tree					The tree is on the edge of the spur crest	Umwelt 2007 Umwelt 2007a Umwelt 2007b Umwelt 2007c Umwelt 2013
51-6-0637	MRN77	Artefact Scatter	Originally recorded as having 10 artefacts, subsequently 3 artefacts were collected from the surface.			The artefacts are located within a very disturbed context (rabbit warren).	Spur crest and adjacent slope 200 metres east of a first order tributary of Joarimin Creek.	Umwelt 2007 Umwelt 2007a Umwelt 2007b Umwelt 2007c Umwelt 2013
51-6-0649	MRN 77	PAD associated with above site.						

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0647	MRN78	Artefact Scatter	Originally recorded as having 5 artefacts, subsequently 1 artefact was collected from the surface with a further 8 artefacts recovered through subsurface testing. A total of 9 artefacts.				Lower slope 150 metres from Joarimin Creek	Umwelt 2009
51-6-0648	MRN79	Artefact Scatter	Originally recorded as having 30 artefacts, subsequently no artefacts were collected from the surface with 39 artefacts recovered through subsurface testing.				Lower slope 120 metres from Lockyersleigh Creek	Umwelt 2009

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0693	MRN80 (formerly MRN PAD 5)	Artefact Scatter	Originally recorded as having 53 artefacts, subsequently no artefacts were collected from the surface with 50 artefacts recovered through subsurface testing.	50 metres x 50 metres			Lower slope 40 metres from Joarimin Creek	Umwelt 2010
51-6-0694	MRN81 (formerly MRN PAD 3)	Isolated Find	Originally recorded as having 1 artefact, subsequently no artefacts were collected from the surface however a single artefact was recovered through subsurface testing.				Mid-slope 100 metres from Joarimin Creek	Umwelt 2010

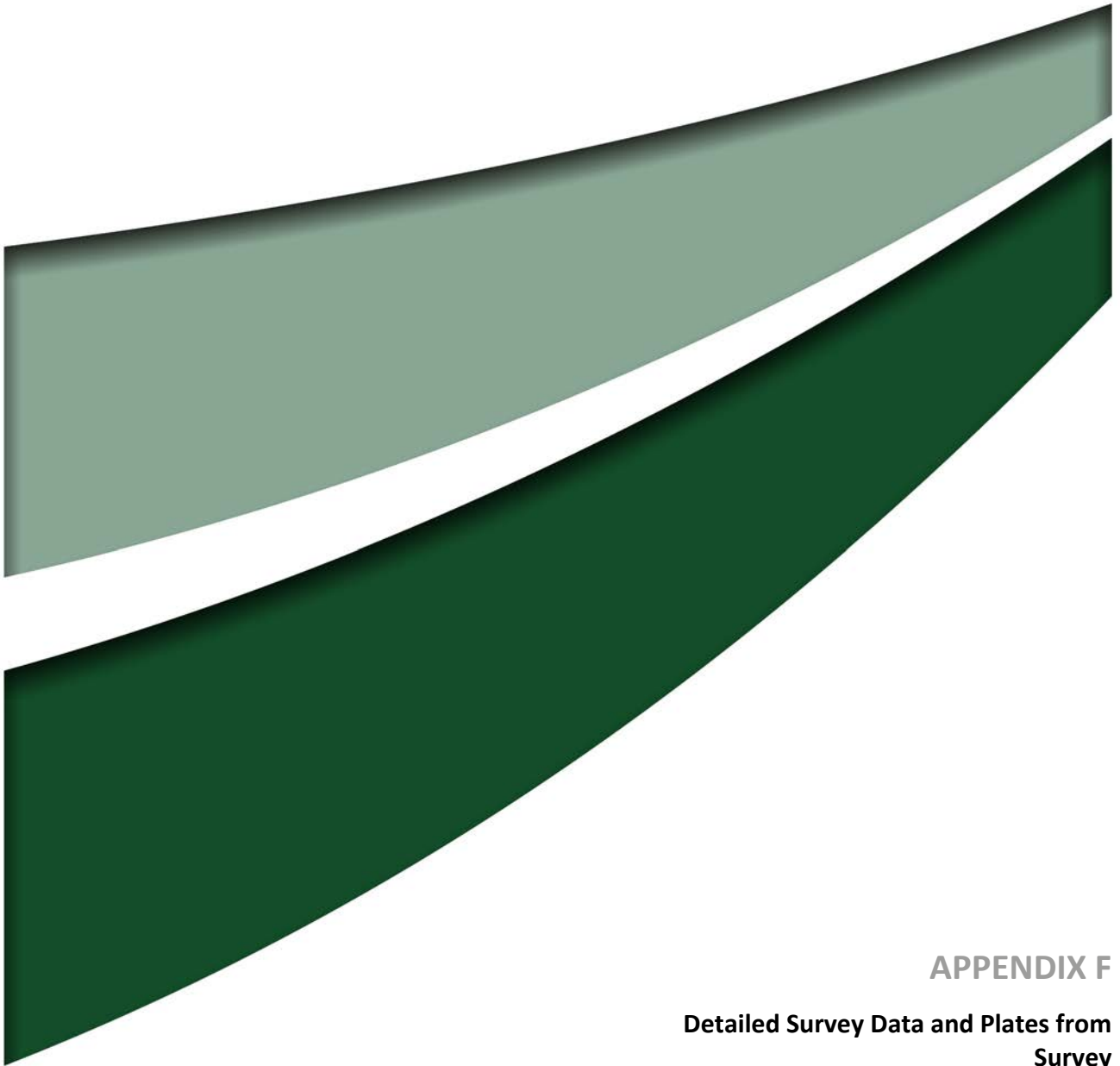
AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0705	MRN82	Artefact Scatter	6	30 metres x 5 metres		There is the potential that a low density scatter of artefacts may extend into the adjoining areas of the same landform unit but is not currently visible.	Lower slope 45 metres from an unnamed tributary of Joarimin Creek	Umwelt 2012
51-6-0706	MRN83	Isolated Find	1	Artefact location		Due to the shallow soils and disturbed nature of this area PAD is highly unlikely.	Lower slope of a spur 380 metres from Joarimin Creek	Umwelt 2012
51-6-0707	MRN84	Artefact Scatter	3	5 metres x 2 metres		Due to the shallow soils and disturbed (eroded) nature of this area PAD is highly unlikely.	Upper slope of a ridge approximately 230 metres from Marulan Creek	Umwelt 2012
51-6-0704	MRN85	Isolated Find	1	10 metres x 6 metres		Due to the shallow soils and disturbed (eroded) nature of this area PAD is highly unlikely.	Spur crest approximately 50 metres from Marulan Creek	Umwelt 2012
51-6-0747	GL1 - Gunlake Quarry 1	Artefact Scatter	6	Unknown	Unknown	Unknown	Erosion Scald on saddle	Australian Archaeological Survey Consultants 2007
51-6-0748	GL2 - Gunlake Quarry 2	Artefact Scatter	6	Unknown	Unknown	Unknown	Gently sloping dirt track	Australian Archaeological Survey Consultants 2007

AHIMS #	Site Name	Site Type	Total Artefact Numbers	Visible Site Dimensions	Potential for Subsurface Artefacts	Likelihood of PAD (subsurface artefacts with integrity)	Landform	Report Reference
51-6-0749	GL3 - Gunlake Quarry 3	Artefact Scatter	3	Unknown	Unknown	Unknown	Erosion scald on a gently sloping flat	Australian Archaeological Survey Consultants 2007
51-6-0750	GL123 (Gunlake Quarry)	Relocated GL1, GL2 and GL3	15	Unknown	Unknown	Unknown	Unknown	Australian Archaeological Survey Consultants 2007

Table 2 Sites in the Marulan Area Proposed for Conservation (excluding sites within the Approved Project Area which are listed in Table 8.1 in the main text)

Author	Sites conserved/ AHIMS #	Northing	Easting	Site type	Geology	Landform	Potential PAD
Saunders (2005) Osborne Creek Conservation Zone	LA2	764601	6155621 (AGD)	Artefact scatter (50-100)	Lockyersleigh Granite	Basal slope, creek margin	High
	LA3	764770	6155626 (AGD)	Artefact scatter (74+)		Creek margin	Moderate to high
	LA4 51-6-0359	764878	6155641 (AGD)	Isolated find		Creek margin	Moderate
	LA6 51-6-0361	765035	6155560 (AGD)	Artefact scatter (5)		Crest of ridge on basal slope	Moderate
	LA7 51-6-0362	765089	6155622 (AGD)	Isolated find			Low
Saunders (2005) Narambulla Creek Conservation Zone	LA12 51-6-0367	765925	6154430 (AGD)	Artefact scatter (50-100)	Lockyersleigh Granite	Basal slope, creek margin	Moderate to high
	LA16 51-6-0371	765925	6154500 (AGD)	Artefact scatter (100+)		Basal slope	Moderate
	LA17 51-6-0372	765414	6154154 (AGD)	Artefact scatter (50-100) Scarred Tree		Saddle, slope, hillcrest	High
ERM (2004)	MW3 51-6-0410	772787	6154421 (AGD)	Isolated find	Bindook Porphyry	Basal slope	Low
	MW4 51-6-0411	772877	6154401 (AGD)	Artefact Scatter (12)			
	MW5			Isolated find			
Dearling (1997) Narambulla Creek	MF4 51-6-0096	772450	6153000 (AGD)	Artefact scatter (100+)	Residual deposits of clayey coarse to fine grained sand and sandy clay	Creek margin	Moderate to high

Author	Sites conserved/ AHIMS #	Northing	Easting	Site type	Geology	Landform	Potential PAD
AASC (2008) Gunlake Quarry	GLI,2,3 (RELOCATED ARTEFACTS) 51-6- 0750	772269	6159941 (AGD)	Artefacts Scatter	Billyrambija Dolerite and Barralier Ignimbrite	N/A	N/A
Peppertree ERM (2011) Tangarang Creek	MSQ6 52-4-0148 MSQ7 52-4-0149 MQ27 52-4-0299	227050 227735 227770	6150950 (GDA) 6150380 (GDA) 6150502(GDA)	Artefact scatter (2) Artefact scatter (9) Artefact scatter (29)	Marulan Granite	Creek margin Creek bed Creek margin	Low



APPENDIX F

Detailed Survey Data and Plates from
Survey

Transect Plates	ATUs	Total Survey Area in m ² approx	Transect Description	Prior Disturbance and Erosion	Ground Surface % Visibility General	Additional Areas of Exposure in m ² (LXW)/100 x % vis)	Site/PAD Located	Proposed Impact
ATU1 Plate 1 Plate 2	4BP	4000	<p>Transect started at N boundary of Granite Pit Area at the fenceline at 770978 6158066. The transect headed downslope, in a SSW direction across a lower slope. Gradient on the slope was 1 degree and aspect was to the SSW.</p> <p>The transect covered the lower slope landform between two tributaries of Lockyersleigh Creek. The area had been heavily cleared with trees only located along the tributary channels. There were numerous stumps within the grasslands.</p> <p>The transect ended at the confluence of the tributaries at 770874 6157968 and intersected with transects LCK1A and LCK1B.</p>	<p>Area has been cleared and impacted by grazing animals - sheep and cattle.</p> <p>Downslope movement of sandy soils.</p> <p>Fencing.</p>	0%	<p>770978 6158066 Exposure 5m x 2m visibility 100% = 10m²</p> <p>Total exposure = 10m².</p>	NA	<p>Dam wall construction</p> <p>Submersion by dam water</p>
ATU2 Plate 3 Plate 4 Plate 5 Plate 6	2LG 4BP 6BP 6LG	44150	<p>770564 6157970 heading up lower slope on N side of the tributary of Lockyersleigh Creek. Gradient 1 degree. In Lockyersleigh Granite. 15m upslope of creek crossed a bench of negligible gradient approximately 30 m in width. This area was assessed as PAD (PAD5). This area had been heavily cleared and there was some rubbish present and some patches of thistles in areas of more recent disturbance. It is not though that this area would retain stratigraphic integrity but it would be suitable as a camp site. This is an area of colluvial aggradation from the steep slope to the N.</p> <p>The PAD ended and the midslope began at 770619 6158006. Gradient increased to 2 to 4 degrees. Visibility 10%</p> <p>770673 6158035 started up the steep upper slope – gradient 4 increasing to 8 degrees. Still granite outcrops. Visibility 20%.</p> <p>Small area of visibility associated with an ants' nest at break of slope (770673 6158035).</p> <p>Transect ended on rocky spur crest of granite and aplite at 770740 6158062.</p> <p>770483 6157936 Commenced on S side of tributary of Lockyersleigh Creek heading upslope across lower slope in a SW direction. Gradient 1 to 2 degrees. The lower slope has been heavily cleared and there are only a few scattered eucalypts away from the creekline. Visibility 0%.</p> <p>Continued up slope and crossed midslope and upper slope of spur. Gradient increasing to 2 to 3 degrees. Crossed an unformed track at 770249 6157812 that afforded some visibility but no artefacts were observed, however, there were some non-artefactual quartz pebbles noted.</p> <p>Crossed fenceline at 770238 6157791 and continued to SW.</p> <p>Crossed a second formed track at 770224 6157783 on the spur crest and crossed ATU7 at this point. Continued across the spur crest and then downslope just SE of a set of cattle yards. Cleared grasslands interspersed with eucalypts. Visibility 0%. Lots of granite boulders around stock yards. Gradient 2 to 1 degree.</p> <p>Exposure in gateway of cattle yards at 770119 6157671, but no artefacts were observed. Crossed fence at 770137 6157669 moving downslope through grassland. Visibility still 0%.</p> <p>Crossed a rabbit warren at 770152 6157654 that afforded some visibility but no artefacts were observed.</p>	<p>Area has been cleared and impacted by grazing animals - sheep and cattle.</p> <p>Downslope movement of sandy soils.</p> <p>Fencing.</p> <p>Formed and unformed tracks.</p>	<p>0% to S of tributary (630m approx.)</p> <p>0 to 20% N of tributary (250m approx.)</p>	<p>770249 6157812 Track 0.6m x 50m visibility 100% = 30m².</p> <p>770224 6157783 Track 3m x 50m visibility 100% = 150m².</p> <p>770119 6157671 exposure 0.5 x 2m visibility 100% = 1m².</p> <p>770152 6157654 rabbit warren 5m x 4m visibility 50% = 10m².</p> <p>770152 6157654 cattle track 50m x 0.3m visibility 80% = 32m².</p> <p>770673 6158035 ants' nest 1m x 1.25m visibility 30% = 0.4m².</p> <p>Total exposure = 223.4m².</p>	PAD5 area 770588 6157969 770608 6157975 770612 6158021 770596 6158032 770580 6158004 770573 6157995 770562 6157983 770571 6157977	Quarry

Transect Plates	ATUs	Total Survey Area in m ² approx	Transect Description	Prior Disturbance and Erosion	Ground Surface % Visibility General	Additional Areas of Exposure in m ² (LXW)/100 x % vis)	Site/PAD Located	Proposed Impact
			<p>Followed a cattle track upslope for 50m until it left the transect area and then crossed low rocky spur crest at 770004 61577507.</p> <p>Continued downslope across heavily grasses upper mid and lower slope. On lower slope running sub-parallel to broad grassy waterway surveyed as LCK5A. Visibility 0%. Gradient 3 to 1 degree.</p> <p>Transect finished at 769885 6157410 at intersection with LCK5A.</p> <p>There were no artefacts or sites observed. There was one PAD (PAD5) recorded on a bench on the lower slope the N side of Lockyersleigh Creek.</p>					
ATU3 Plate 7 Plate 8	6LG	20000	<p>770224 6157783 Commenced on N side of spur crest close to intersection with ATU7 and intersection of three fencelines - heading N. Grassland with occasional eucalypts and small granite outcrops in Lockyersleigh granite – 0% visibility.</p> <p>Crossed fenceline at 770211 6157873.</p> <p>Crossed upper slope and midslope gradient 3 degrees. Crossed minor tributary and borehole to complete transect at corner post of fenceline on N boundary of Granite Pit Area at 770193 6158227.</p> <p>There were no artefacts, sites or PADs observed.</p>	<p>Area has been cleared and impacted by grazing animals - sheep and cattle.</p> <p>Downslope movement of sandy soils.</p> <p>Fencing.</p>	0%	0m ² .	N/A	Quarry
ATU4 Plate 9 Plate 10	6LG	20500	<p>77067 6157840 Commenced transect on spur crest from intersection with ATU7. Heading across broad crest in a WNW direction. Grassland with occasional eucalypt and granite outcrop in Lockyersleigh Granite. 0% visibility</p> <p>Crossed fenceline at 77061 6157858 and then downslope - visibility increased to 5%.</p> <p>Crossed dam at 769937 6158037 on upper slope. Lots of scoured areas, tracks and exposures around the dam. All inspected no artefacts observed. However a small number of quartz pebbles – non-artefactual were observed. Crossed E end of ATU 4 at this point.</p> <p>Continued downslope and crossed the ends of a number of minor spurs visibility still 5%.</p> <p>Transect ended at fenceline and N boundary of Granite Pit Area at 769975 61558261.</p> <p>There were no artefacts, sites or PADs observed.</p>	<p>Area has been lightly cleared and impacted by grazing animals - sheep and cattle.</p> <p>Downslope movement of sandy soils.</p> <p>Dam construction</p>	0 to 5%	<p>769937 6158037 scours around dam (combined) 5m x 25m visibility 100% = 125m².</p> <p>769937 6158037 track down to dam 10m x 5m visibility 60% = 30m².</p> <p>Total exposure = 155m².</p>	N/A	Quarry and Bund
ATU5 Plate 11 Plate 12	4LG, 6LG	12000	<p>770546 6157658 Commenced transect on spur crest at intersection with ATU7 and unformed track heading across spur crest in a NNW direction. In Lockyersleigh Granite – some granite outcrops at start and multiple scours. Area cleared grassland with a few dead eucalypts.</p> <p>Gradual slope of 2 then 1 degree on upper and midslope. Cleared grassland with a few eucalypts.</p> <p>Crossed formed track at 770519 6157893. Across lower slope to end at tributary of Lockyersleigh Creek at 770516 6157935. Scour at creek and increased visibility to 5% on lower slope.</p> <p>There were no artefacts, sites or PADs observed.</p>	<p>Area has been cleared and impacted by grazing animals - sheep and cattle.</p> <p>Slope wash/scouring.</p> <p>Formed and unformed tracks</p>	<p>0% (140m)</p> <p>5% (100m)</p>	<p>770546 6157658 unformed track 0.6m x 50m visibility 100% = 30m².</p> <p>770519 6157893 formed track 3m x 50m visibility 100% = 150m².</p> <p>Total exposure = 180m².</p>		

Transect Plates	ATUs	Total Survey Area in m ² approx	Transect Description	Prior Disturbance and Erosion	Ground Surface % Visibility General	Additional Areas of Exposure in m ² (LXW)/100 x % vis	Site/PAD Located	Proposed Impact
ATU6 Plate 13 Plate 14 Plate 15 Plate 16 Plate 17 Plate 18	4BP, 6BP	24000	<p>770800 6157918 Commenced transect on S side of tributary of Lockyersleigh Creek (LCK1A) heading in a SSE direction up and across the lower slope. Gradient 1 degree. Area cleared grasslands with patches of eucalypts.</p> <p>Crossed track at 770828 6157925. Track 3m wide. Checked 50m of track. No artefacts observed.</p> <p>Passed tree with a scar. Scar inspected all agreed that the tree was too young and that the scar was natural (in background of Plate 13).</p> <p>Continued upslope and onto a low gradient spur – rockier – Bindook Porphyry – visibility patchy but increasing to 5%.</p> <p>Exposure under tree at break of slope on edge of spur crest at 770862 6157841. Topsoil gravelly and scour caused by slope wash. Seven stone artefacts (3 broken flakes, 1 retouched flake and 3 cores manufactured from silcrete, quartz, dolerite) observed within the scour area (4m x 4m) downslope of the tree. Gradient 3 degrees aspect WNW to tributary of Lockyersleigh Creek and approximately 100m from tributary.</p> <p>Possibility of low numbers of artefacts subsurface. Lots of natural quartz exposed in this area. Site named LKAS1.</p> <p>Crossed bench on spur crest adjacent to LKAS1 and approximately 40 metres from LKAS1 there was a second scour under a tree and an additional 7 artefacts (4 flakes, 1 broken flake, one retouched flake and 1 core manufactured from silcrete, quartz and chert) were exposed in an area approximately 5m by 4m. This scatter was also recorded as LKAS1 with the bench area between recorded as PAD3.</p> <p>The area of PAD3 was approximately 40 metres by 40 metres and between the following MGA coordinates:</p> <p>770932 6157783</p> <p>770901 6157782</p> <p>770880 6157795</p> <p>770866 6157819</p> <p>770863 6157845</p> <p>770886 6157835</p> <p>770924 6157780</p> <p>Crossed broad drainage channel at 770919 6157831. Visibility back to 0% and less than 1 degree gradient. Headed ENE up a steep 3 to 6 degree short mid to upper slope to end at fenceline at 771004 6157802. The final 300 metres of the transect were outside the Granite Pit Area footprint.</p> <p>There was one artefact scatter site recorded (LKAS1) which had associated PAD (PAD3).</p>	Area has been cleared and impacted by grazing animals - sheep and cattle. Slope wash/scouring. Downslope movement of sandy soils. Formed track	0% (50m) 5% (430m)	770828 6157925 Track 3m x 50m visibility 100% = 150m ² . 770862 6157841 Scour 4m x 4m visibility 60% = 9.6m ² . Total exposure = 159.6m ² .	LKAS1 - 770862 6157841 PAD3	Quarry Dam Wall Inundation

Transect Plates	ATUs	Total Survey Area in m ² approx	Transect Description	Prior Disturbance and Erosion	Ground Surface % Visibility General	Additional Areas of Exposure in m ² (LXW)/100 x % vis	Site/PAD Located	Proposed Impact
ATU7 Plate 19 Plate 20 Plate 21 Plate 22 Plate 23 Plate 24 Plate 25 Plate 26 Plate 27	2LG, 4LG, 4BP, 6LG	75000	<p>771120 6157447 Commenced transect from N of Haul Road transect heading upslope to E towards fenceline on upper midslope on E boundary of Granite Pit Area. Leaving Lockyersleigh Granite and entering Bindook Porphyry. Gradient 3 to 4 degrees lots of rock outcrop interspersed by grasslands and an open eucalypt woodland. Visibility 5%.</p> <p>Crossed two areas with scours at 771145 6157439 but no artefacts observed.</p> <p>Just before E fenceline the gradient reduces to less than 1 degree and the transect crosses a bench on the upper midslope slope before ending at the fenceline at 771200 6157422 at the base of the upper slope. There is a large scour at the fence. Transect does not proceed past fenceline into uncleared area.</p> <p>Returned to 771120 6157447 and continued transect heading W and moving from Bindook Porphyry into the Lockyersleigh Granite downslope and onto along a gently undulating spur crest. The spur crest has been heavily cleared and in mainly grassland with occasional eucalypts.</p> <p>Crossed scour in granite sand at 770928 6157528. No artefacts observed.</p> <p>Crossed rocky spur crest at 770855 6157551 where visibility increased to 20%. There were several small granite boulders in this area which surrounded a level space assessed as a PAD (PAD4). The area was cooled by a breeze from the SW which was refreshing in summer but extremely cold in winter. This area was also the N end of ATU8.</p> <p>Downslope and to the N and approximately 50m N of the transect a tall eucalypt with a scar on its S side was observed. The tree was recorded as LKST4 and assessed as possibly cultural in origin. It was agreed to have the tree assessed by an arborist. The tree was located at 770873 6157602.</p> <p>Continued along broad spur crest to W and visibility decreased to 0% in grassland.</p> <p>Crossed a scour on the spur crest at 770687 6157639 which afforded some visibility but there were no artefacts observed.</p> <p>At 770548 6157661 crossed the S end of ATU5 which is approximately halfway on the transect. 50m W of ATU5 intersection transect intersects with an unformed track which is on the crest of the spur and thus follows the transect. The track provides two areas of visibility each 30cms wide for a length of approximately 300m where it then becomes a formed track at a point where three tracks meet and the transect passes through a gateway at 770233 6157775. This point is at the convergence of ATU2, ATU3 and ATU7.</p> <p>The formed track is 3m wide and provides 100% visibility for approximately 400m along the spur crest. Passed end of ATU4 at 770067 6157840 and passed through gate at 770058 6157838. Stock yards noted to the S of track.</p> <p>Left track and headed to W still on spur crest and past LKST1 which was recorded on the Bund Transect at 769870 6157833. Transect ended at</p>	<p>Scours around trees.</p> <p>Area has been cleared and impacted by grazing animals - sheep and cattle.</p> <p>Downslope movement of sandy soils.</p> <p>Formed and unformed tracks.</p>	<p>0% (1150m)</p> <p>5% (300m)</p> <p>20% (50m)</p>	<p>771145 6157439 Two scours 0.1m x 1m visibility 60% = 0.6m².</p> <p>0.5mx 2m visibility 100% = 1m².</p> <p>Scour at E fenceline 771200 6157422 10m x 10m visibility 50% = 50m².</p> <p>Scour at 770928 6157528 6m x 4m visibility 90% = 21.6m².</p> <p>Scour at 770687 6157639</p> <p>0.5 x 1m visibility 75% = 0.38m².</p> <p>770548 6157661 to 770233 6157775 track 60cm x 300m visibility 100% = 180m².</p> <p>770233 6157775 to 769837 6157811 track 3m x 400m visibility 100% = 1200m².</p> <p>Total exposure = 1453.1m².</p>	<p>PAD4 Area</p> <p>770852 6157541</p> <p>770860 6157530</p> <p>770848 6157526</p> <p>770834 6167527</p> <p>770826 6157535</p> <p>770830 6157540</p> <p>770834 6157549</p> <p>770844 6157547</p> <p>LKST1 - 769870 6157833</p> <p>LKST2 - 770873 6157602</p>	<p>Quarry</p> <p>Bund Quarry</p>

Transect Plates	ATUs	Total Survey Area in m ² approx	Transect Description	Prior Disturbance and Erosion	Ground Surface % Visibility General	Additional Areas of Exposure in m ² (LXW)/100 x % vis)	Site/PAD Located	Proposed Impact
			fenceline at 769837 6157811. There were no artefacts observed along the transect despite fairly good visibility at the W end. There was one PAD (PAD4) recorded and two possible scarred trees LKST1 (previously recorded on the Bund transect) and LKST2.					
ATU8 Plate 28 Plate 29	2LG, 6LG	45000	770314 6157269 Commencing at intersect with the Bund transect and heading upslope in a NNE direction across lower, mid and upper slope of low spur. Gradient 2 degrees visibility 0%. Continued over rocky crest then headed downslope with gradient increasing to 3 degrees. Some granite outcrop on rocky crest and slope. Transect then headed up main spur slope associated with E-W spur that crosses whole Granite Pit Area from E to W. Still cleared grassland with occasional eucalypt. Transect ended at 770855 6157551 on rocky spur crest and intersect with ATU7. Visibility 20% in this area. There were no artefacts or sites observed. PAD4 was recorded at 770855 6157551 (end of transect for ATU9) during the ATU7 survey. LKST4 was downslope of the end of ATU8 but was not within the transect.	Area has been cleared and impacted by grazing animals - sheep and cattle. Downslope movement of sandy soils.	0% (850m) 20% (50m)	Total exposure = 0m ²	PAD4 - 770855 6157551 (previously recorded during ATU7 survey).	Quarry
ATU9 Plate 30 Plate 31	6LG	17500	770004 615328 Commencing at E boundary of Granite Pit Area heading ENE on low gradient slope between LCK5A and LCK5B. Cleared grassland with occasional eucalypt. Gradient 2 degrees increasing to 4 degrees moving upslope. Crossed rabbit warren at 770268 6157283 which provided a small area of visibility however no artefact were observed. Transect them moved slightly cross slope and gradient decreased to <1 degree. Visibility still 0%. Transect ended at 770314 6157269 where it intersected with ATU8. Gradient back to 2 degrees.	Area has been cleared and impacted by grazing animals - sheep and cattle. Downslope movement of sandy soils. Rabbit warren.	0%	770268 6157283 rabbit warren 2m x 5m visibility 30% = 3m ² . Total exposure 3m ² .	N/A	Partial - Quarry
ATU10 Plate 32 Plate 33 Plate 34 Plate 35 Plate 36	4BP, 6LG	60000	771089 6157193 Commencing at fenceline on upper midslope. Gradient 3 to 4 degrees aspect to SW. Heading upslope in Bindook Porphyry. Visibility 0%. Lots of small outcropping boulders of Bindook Porphyry. A few mature eucalypts but no modified trees. 771108 6157241 gradient increases to 5 then 8 degrees as transect heads upslope across the lower upper slope. Eucalypts increase to open woodland and rockiness increases. Visibility remains 0%. A wombat burrow was crossed at 771121 6157275. The wombat burrow exposed very rocky soils to a depth of just 30cm. The top 20cms being rocky and the bottom 10 cms sandy. At 771133 6157315 the slope levels out to a bench that was approximately 130m wide with a gradient of <1 degree. The slope then increased to 1 degree one the mid upper slope. There were numerous exposures on the bench and mid upper slope	Area has been cleared and impacted by grazing animals - sheep and cattle. Multiple wombat burrows. Depth of granite soil/sand up to 0.3m exposed by burrowing. Sheep and cattle tracks. Downslope movement of sandy soils. Construction of Main Southern Railway	0%	771121 6157275 Wombat burrow 0.5m x 0.5m visibility 100% = 0.25m ² . 771133 6157315 to 771202 6157411 six exposures combined = 61.5m ² . 770832 6157072 Graded track – 50 m x 3m visibility 100% = 150m ² . 770509 6156592 Wombat burrows – 4m x 2m visibility 50% = 4m ² . 770460 6156545 Scours associated with trees – 12m	PAD2	Haul Road and Overburden Emplacement

Transect Plates	ATUs	Total Survey Area in m ² approx	Transect Description	Prior Disturbance and Erosion	Ground Surface % Visibility General	Additional Areas of Exposure in m ² (LXW)/100 x % vis)	Site/PAD Located	Proposed Impact
			<p>which showed that the soil was shallow. No artefacts were observed.</p> <p>At 771202 6157411 the N section of the transect ended at the intersection with ATU7 and the fenceline at the E boundary of the Granite Pit Area.</p> <p>771089 6157193 Commencing second stage of the transect at fenceline on upper midslope where N section started. Gradient 3 degrees aspect to SW. Heading downslope in Bindook Porphyry.</p> <p>Lots of small outcropping boulders of Bindook Porphyry. Several mature eucalypts but no modified trees.</p> <p>770884 6155978 From intersection with ATU11 moving downslope in a SW direction following spur crest to east of LCK6. Gradient 3 degrees to 1 degree. Aspect generally south to south-west. Crossing in Lockyersleigh Granite.</p> <p>Crossed graded track at 770832 6157072.</p> <p>Lots of granite tors outcropping on spur crest. Cleared grassland with very few trees. Several relatively large granite tors.</p> <p>770476 6155801 Multiple larger granite tors that provide shade from afternoon sun. Possible PAD but likely soil profile will be shallow (PAD2).</p> <p>At southern end of transect a small stand of mature eucalypts. No modified trees. Large boulder at 770460 6156545. Provides shelter from wind.</p> <p>Transect ended at Main Southern Railway on lower slope of spur at 770456 6156470.</p> <p>There were no artefacts or sites observed. There was one PAD recorded on the spur crest.</p>			<p>x 1m visibility 30% = 3.6m².</p> <p>Total exposure = 219.1m².</p>		
ATU11 Plate 37 Plate 38	6LG	36000	<p>770773 6156373 Transect commenced at Main Southern Railway on lower slope heading upslope. Gradient 1 degree, aspect south. All trees cleared. Multiple small granite lichen covered tors in cleared grassland.</p> <p>At 770776 6155467 gradient increases to 1-2 degrees and the granite tors are slightly larger in size. Multiple flat granite outcrops were observed within the grassland. All were checked for artefacts but none were observed. There were occasional isolated eucalypts. Some sheep camps and rabbit burrows under trees provided areas of visibility on the upper lower slope.</p> <p>Crossed pipeline on lower midslope at 770798 5156624. Small wombat burrow associated with pipeline. Then crossed formed track and headed up midslope.</p> <p>Scours were encountered under two eucalypts and these were checked but no artefacts were observed.</p> <p>Small rocky crest crossed at 770827 6156815. Visibility improved to 30%. Tree cover increasing and soils skeletal.</p> <p>Sheep camp and cattle wallow at 770830 6156847 beside track. Granite and Bindook porphyry outcropping with an occasional small aplite boulder. Drops slightly into minor saddle and crosses main graded track at 770855 6155978.</p>	<p>Construction of Main Southern Railway</p> <p>Vegetation clearance.</p> <p>Downslope movement of sandy soils.</p> <p>Pipeline construction.</p>	0%	<p>770776 6156552</p> <p>Sheep camp and rabbit burrows 30m x 30m visibility 5% = 45m².</p> <p>770798 6156624</p> <p>Pipeline and wombat burrow – 2m x 1m visibility 100% = 2m².</p> <p>Formed track 0.2m x 50m visibility 100% = 10m².</p> <p>770828 6156781</p> <p>Scours on midslope 2m x 3m and 1m x 3m visibility 50% = 4.5m.</p> <p>770827 615681</p> <p>Rocky crest 20m x 20m visibility 30% = 120m².</p> <p>770830 6156847</p> <p>Sheep camp and cattle wallow 2m x 2m visibility 50% = 2m².</p>		

Transect Plates	ATUs	Total Survey Area in m ² approx	Transect Description	Prior Disturbance and Erosion	Ground Surface % Visibility General	Additional Areas of Exposure in m ² (LXW)/100 x % vis)	Site/PAD Located	Proposed Impact
			End at 770884 6157109 on upper midslope at intersection with ATU10. There were no artefacts, sites or PADs observed.			Track 50m x 2m visibility 50% = 50m ² . 770855 6155978 Main graded track 50m x 3m visibility 50% = 75m ² . Total exposure = 308.5m ² .		
ATU12 Plate 39 Plate 40	6LG 4LG	27500	769987 6156624 Transect commenced at fence on Main Southern Railway on lower slope heading upslope. Gradient 1 degree, aspect south. All trees cleared. Multiple small granite lichen covered tors in cleared grassland. Continuing along small spur to the west of a tributary of Lockyersleigh Creek, gradient initially increases to 1 to 2 degrees and then levels out to 1 degree again. Area heavily grassed and despite historic vegetation clearance relatively large numbers of mature eucalypts were encountered (none of which exhibited cultural scarring). Scours were encountered under several eucalypts these were inspected but no artefacts were observed. Gradient then increased to 1 to 2 degrees while crossing a minor tributary at 770183 6156975 and then levelled out to 1 degree on spur crest. Gradient varies from 1 to 2 degrees. All exposures around granite tors were checked for artefacts but none were observed. End at 770884 6157119 on upper midslope near fenceline There were no artefacts, sites or PADs observed.	Construction of Main Southern Railway Vegetation clearance. Downslope movement of sandy soils.	0	Vicinity of 770080 6156774 Multiple scours on spur crest 2m x 3m, 1m x 3m, 5m x 2m, 4m x 3m and 3m x 2m visibility 50% = 18.5 m ² . 770183 6156975 cattle track 50m x 0.5m visibility 80% = 20m ² . Total exposure = 38.5m ² .	N/A	Partial Quarry Overburden Emplacement
ATU13 Plate 41 Plate 42 Plate 43 Plate 44 Plate 45 Plate 46	R6LG 6LG	40500	Transect begins at fenceline in NW corner of project area (770320 6158158). Heading upslope on eastern bank of Lockyersleigh Creek. Initially the transect progressed from the lower slope/footslope boundary opposite LA31 (refer to LCK1A) up a moderate slope towards a granite outcrop of large extent. Slope 1-2 degrees, some small rabbit burrows and scours among individual boulders (very orange, coarse sand). Three artefacts (a quartz core and a two quartz broken flakes) were observed eroding from the eastern bank of the tributary of Lockyersleigh Creek at 770307 6158174. These were recorded as LA31E. A bench was crossed between the lower slope and midslope. A further 8 artefacts were recorded (cores, flakes, broken flakes and flaked pieces of quartz and quartzite) were recorded around the base of outcropping granite tors. The artefacts were located in spoil from rabbit burrows and were recorded as part of LA31E. The bench area was assessed as PAD (PAD1E). Upon descent back towards creek upon a slope of gentler gradient (but much better vegetated), an unsuccessful search was made for previously registered site LA32. A wide flattish area (fully cleared of vegetation) draining the saddle between two rocky spurs was traversed. Entire area covered 100% by thistle and grass. Foothslope of the second rocky spur passed below a second extensive outcrop of granite but very little visibility until large scour at 770878	Area has been cleared and impacted by grazing animals- sheep and cattle. Sheep and cattle tracks. Downslope movement of sandy soils.	Variable 0-10% average 5%	Erosion scour – 20m x 10m visibility 60% = 120m ² . Cattle track/Ants' nest – 0.3m x 60m visibility 80% = 14.4m ² . Total exposure = 134.4m ² .	LA32 Isolated Find (not located) LA31E/PAD1E	Partial Quarry, water infrastructure, bund

Transect Plates	ATUs	Total Survey Area in m ² approx	Transect Description	Prior Disturbance and Erosion	Ground Surface % Visibility General	Additional Areas of Exposure in m ² (LXW)/100 x % vis)	Site/PAD Located	Proposed Impact
			6157986 20m x 10m, thin, yellow silty sand. Followed northern bank of creek (cattle track and ant nest).Transect ended at fence 770766 6158107					
LCK1A Plate 47 Plate 48 Plate 49 Plate 50 Plate 51 Plate 52 Plate 53 Plate 54 Plate 56 Plate 57	R6BP, R6LG	47500	<p>Commenced at fenceline in NW corner of Granite Pit Area. Heading upstream along tributary of Lockyersleigh Creek. Both sides of creek subject to survey.</p> <p>770300 6158200 Northern transect</p> <p>Commencing at fenceline on lower slope /footslope boundary within LA31E. Aspect SW and gradient 3 degrees. Lots of granite boulders in area and on slopes above.</p> <p>Crossed area of artefacts in scour on bank of creek recorded as LA31E and below PAD1E.</p> <p>The creekline is entrenched 3 to 5m deep and 3m wide and appears to be spring fed at the start of the transect. There has been lot of cattle trampling in this area due to the green pick available from the spring fed area. The creek channel has been bogged by cattle.</p> <p>Footslope relatively steep on northern side of creek no areas suitable for campsites. Crossed a number of areas of cattle wallows, wombat burrows, scours and ants' nets that afforded some visibility. Lots of granite boulders on slope and numerous eucalypts.</p> <p>770468 6158051 crossed previously recorded location of site LA32. The recorded location was 30m upslope of the creekline. There was a rabbit warren in this area which provided some visibility but the previously recorded isolated find could not be located. Gradient was 2 – 3 degrees and artefact could have been washed away or reburied by spoil from rabbit burrowing.</p> <p>Crossed a minor tributary at 770412 6157999 which had a scoured bank.</p> <p>Crossed another minor tributary at 770493 6157985. Rubbish in creek channel. Ants' nest and scour.</p> <p>Cattle camp 770554 6157496 provided extra visibility. Rubbish on creek banks.</p> <p>Ants' nest and scour at 770598 6157930 otherwise visibility decreasing to 0%.</p> <p>770625 6157937 From this point creek channel became indiscernible – area of colluvial/alluvial deposition.</p> <p>770669 6157905 Creek channel contains a number of small, shallow ponds and then goes back to being indiscernible. There is a rocky spur to the north.</p> <p>770734 6157918 Back to chain of ponds morphology – crossing base of spur and eucalypts more abundant. Moving into Bindook Porphyry.</p> <p>770760 6157942 Cattle track and ants' nest expose fractured dolerite – not artefactual may be dyke in area.</p> <p>770802 6157942 Crossed a scour on the footslope/bank of creek that provided visibility.</p> <p>770853 6157945 Creek channel is again entrenched to 3m, channel 4m</p>	<p>Area has been cleared and impacted by grazing animals- sheep and cattle.</p> <p>Multiple wombat burrows in banks.</p> <p>Creek bank scouring.</p> <p>Depth of granite sand up to 2m exposed by burrowing.</p> <p>Sheep and cattle tracks.</p> <p>Downslope movement of sandy soils.</p> <p>Prior use of area for rubbish dump and removal of rubbish dump.</p>	Variable 0 to 10% average 5%	<p>Northern Transect</p> <p>770308 6158174</p> <p>770308 6158174</p> <p>Scours on creek bank – 20m x 30m visibility 80% = 480m².</p> <p>770334 6158137</p> <p>Cattle wallows – 3m x 3m visibility 100% = 9m².</p> <p>770400 6158016 Ants' nest 1m x 2m visibility 100% = 2m².</p> <p>770438 6158007</p> <p>Scour – 2m x 1.5m visibility 60% = 1.8m².</p> <p>770412 6157999</p> <p>Scoured creek bank – 6m x 3m visibility 100% = 18m².</p> <p>770493 6157985. Ants nest and scour – 6m x 2m visibility 75% = 9m².</p> <p>770468 6158051</p> <p>Rabbit warren in LA32 – 4m x 4m visibility 30% = 4.8m².</p> <p>770554 6157496</p> <p>Cattle camp – 9m x 2m visibility 50% = 9m².</p> <p>770598 6157930</p> <p>Ants' nest and scour – 2m x 1m visibility 50% = 1m².</p> <p>770760 6157942</p> <p>Cattle track and ants' nest – 10m x 3m visibility 85% = 25.5m².</p> <p>Ongoing cattle track – 0.3m x 30m visibility 100% = 9m².</p> <p>770802 6157942</p> <p>Scour 770802 6157942 – 3m x 2m visibility 100% = 6m².</p> <p>770868 6157972</p> <p>Eroded gully – 8m x 2m visibility</p>	<p>Northern Transect</p> <p>770307 6158174</p> <p>770359 6158155</p> <p>LA31E</p> <p>LA32 Isolated Find (not located)</p> <p>Southern Transect</p> <p>770293 6158151</p> <p>LA31W Artefact Scatter</p> <p>PAD1W</p> <p>770196 6158225</p> <p>770212 6158108</p> <p>770228 6158054</p> <p>770301 6158034</p> <p>770338 6158022</p> <p>770262 6158126</p> <p>770263 6158210</p> <p>770593 6157907</p> <p>LK1F2 Isolated Find</p>	Quarry, water infrastructure, bund

Transect Plates	ATUs	Total Survey Area in m ² approx	Transect Description	Prior Disturbance and Erosion	Ground Surface % Visibility General	Additional Areas of Exposure in m ² (LXW)/100 x % vis)	Site/PAD Located	Proposed Impact
			<p>wide and grassed with no water. There is an island in centre with creek in two channels at this point.</p> <p>770868 6157972 crossed an eroded gully at the point where LCK1A meets LCK1B.</p> <p>770884 6157975 From this point cleared grassland with mature eucalypts along creekline on the lower slope. Steep banks of creekline scoured with multiple quartz pebbles exposed – not artefactual. Followed cattle track on gentle lower slope that provided a small area of visibility. Creek channel gradually becoming indiscernible as gradient increases to fenceline at N boundary of Granite Pit Area.</p> <p>771110 6158029 transect ended at fenceline.</p> <p>There were no artefacts, sites or PADs observed, however, the transect did cross the previously recorded LA32 site area.</p> <p>770200 6158200 Southern Transect</p> <p>On western side of the tributary an area of deep orange sand with multiple granite tors was encountered at the start of the transect. This was the area of the previously recorded artefact scatter site LA31 (hereafter LA31W). Eight artefacts were recorded exposed by wombat burrowing over an area 200m along the creekline and 200m back from the creekline (and just through the a north-south fenceline running from the northern boundary fenceline and mostly within the orange sand. This area between and encompassing the artefacts was recorded as PAD (PAD1W). The surface artefacts were exposed on the lower slope, footslope and the steeper bank dropping down to the creekline. Aspect was to NE and gradient 2 to 3 degrees.</p> <p>A rubbish dump had previously been located within the site area with the majority of the artefacts were recorded to the west and below what had previously been the rubbish dump (refer to Section 5.5 for site and artefact details).</p> <p>There was a large amount of rubbish within the entrenched creekline and the lower slope footslope was grassland with occasional mature eucalypts. The footslope was relatively steep (3 degrees) and the lower slope 1 degree.</p> <p>Followed a cattle track on top of creek bank which provided some exposure. Crossed several ants' nests.</p> <p>7708483 6157971 Creek channel is again entrenched to 3m, channel 4m wide and grassed with no water. There is an island in centre with creek in two channels at this point. Heading ENE.</p> <p>Track running to ENE of terrace – area 100m long and 2m wide inspected, at 770593 6157907 an isolated find LKIF2 (quartz core) was located exposed on the track (refer to Section 5.5 for details).</p> <p>Further 150m x 3m of track followed before it left creek.</p> <p>770629 615629 Creek channel becomes indiscernible. Some rock outcrop – Bindook Porphyry. Lower slope heavily grassed with large mature eucalypts.</p> <p>770683 6157899 Followed cattle track on lower slope/creek bank.</p> <p>770861 615792 Creek channel becomes entrenched again with</p>			<p>100% = 16m².</p> <p>770884 6157975</p> <p>Cattle track 0.3 x 40m visibility 100% = 12m².</p> <p>770390 6157995</p> <p>Ants' nest – 2m x 2m visibility 100% = 4m².</p> <p>770415 6157987</p> <p>Cattle track 0.6 x 50m visibility 100% = 30m².</p> <p>770438 6157991</p> <p>Ants' nest – 2.5m x 2.5m visibility 100% = 6.25m².</p> <p>770683 6157899</p> <p>Cattle track – 10m x 0.6m visibility 100% = 6m².</p> <p>Graded track – 100m x 2m and 150m X 3m visibility 100% = 650m².</p> <p>770699 6157895 – scour 4m x 2m visibility 100% = 8m².</p> <p>771054 6157992 – ants' nest 2m x 2.5m visibility 100% = 5m².</p> <p>Total exposure = 1300.4m².</p>		

Transect Plates	ATUs	Total Survey Area in m ² approx	Transect Description	Prior Disturbance and Erosion	Ground Surface % Visibility General	Additional Areas of Exposure in m ² (LXW)/100 x % vis)	Site/PAD Located	Proposed Impact
			remnant island in centre. Transect crossing lower slope. 770997 6157955 Creek channel becomes broader and shallower. Transect ends at fenceline at N boundary of Granite Pit Area at 771110 6158029.					
LCK1B Plate 58	R6BP	8000	770868 6157972 Commenced from intersection with LCK1A heading N and upstream and upstream across short lower, and midslope. Tributary confluence eroded but becomes shallow grassy channel away from confluence. Visibility 0-5%. Gradient 1 to 3 degrees and aspect to S. Mature eucalypts growing on slope beside tributary channel. Crossed a small scour at 770882 6158070 that provided better ground surface visibility. Transect ended at fenceline on N border of Granite Pit Area at 770886 6158077. There were no artefacts, sites or PADs observed.	Area has been cleared and impacted by grazing animals- sheep and cattle. Downslope movement of alluvium and colluvium.	0%	770868 6157972 Eroded gully – 8m x 2m visibility 100% = 16m ² . 770882 6158070 Scour – 2m x 1m visibility 100% = 2m ² . Total exposure = 18m2.	N/A	Partial - Quarry
LCK2 Plate 59 Plate 60 Plate 61 Plate 62	R6LG	7500	770103 6158037 Commencing upstream and heading N and downstream towards the fenceline. Broad grassy shallow channel. Heavily cleared area. Gradient 3 degrees and aspect to N. Visibility 2%. Occasional small granite tor. Finished at 770094 6158248 on lower midslope. There were no artefacts, sites or PADs observed. Two artefacts were, however, located when moving between LCK2 and LCK3 transects. The site was recorded as LKAS6 and contained a broken silcrete flake and a granite grindstone.	Area has been cleared and impacted by grazing animals- sheep and cattle. Downslope movement of sandy soils.	2%	0m ² . Total exposure = 0m ² .	Between LCK2 and LCK3 770067 6158242 LKAS6	Partial –Quarry for southern part of transect LKAS6 in vegetation buffer zone
LCK3 Plate 63	R6LG	4200	769883 6158284 Commencing near fenceline and heading upstream on lower slope. Broad grassy shallow channel. Heavily cleared area. Gradient 3 degrees and aspect to N. Visibility 10%. Finished at 769858 6158149 on midslope. There were no artefacts, sites or PADs observed.	Area has been cleared and impacted by grazing animals- sheep and cattle. Downslope movement of sandy soils.	10%	0m ² . Total exposure = 0m ² .	N/A	Partial - Bund
LCK4 Plate 64	R6LG	6500	769832 6158062 Commencing at fenceline on W boundary of Granite Pit Area and heading upstream. Cleared grassland with occasional granite outcrop and no trees. Crossed lower slope and midslope of low spur. 0% visibility. Crossed dam and ATU4 at 769937 6158037. Multiple exposures around dam however no artefacts were observed. Transect ended on midslope at 769974 6157996. There were no artefacts, sites or PADs observed.	Area has been lightly cleared and impacted by grazing animals - sheep and cattle. Downslope movement of sandy soils. Dam construction	0%	769937 6158037 scours around dam (combined) 5m x 25m visibility 100% = 125m ² . Total exposure = 125m ² .	N/A	Partial - Bund
LCK5A Plate 66	R6LG	32000	769912 6157377 Commenced at WSW end heading upstream – tributary flowing to WSW. Gradient 1 to 2 degrees aspect SSW. In Lockyersleigh Granite. Broad, grassy channel with occasional granite tors associated with	Area has been cleared and impacted by grazing animals- sheep and cattle. Rabbit warrens.	0%	770286 6157442 Rabbit warren – 6m x 8m visibility 50% = 14.4.m ² . 770286 6157442 Cattle track leading from rabbit	N/A	Quarry and Bund

Transect Plates	ATUs	Total Survey Area in m ² approx	Transect Description	Prior Disturbance and Erosion	Ground Surface % Visibility General	Additional Areas of Exposure in m ² (LXW)/100 x % vis)	Site/PAD Located	Proposed Impact
			<p>ATU2 to N and ATU 9 to S. Rabbit warrens in boulders.</p> <p>Crossed dam at 770411 6157446. Lots of quartz pebbles exposed. May be from earlier geology – not artefactual.</p> <p>770472 6157417 Crossed two adjacent areas of wombat burrows.</p> <p>770351 6157418 crossed another rabbit warren at end of transect. Granite rubble exposed in burrows.</p> <p>There were no artefacts, sites or PADs observed.</p>	Dam construction.		<p>warren to dam – 10m x 0.75 m visibility 90% = 6.75m².</p> <p>770411 6157446</p> <p>Exposure around dam – 20m x 5m visibility 100% = 100m².</p> <p>770472 6157417 Wombat burrows – 10m x 20m visibility 75% = 150m².</p> <p>Wombat burrows – 5m x 8m visibility 100% = 40m².</p> <p>770351 6157418 Rabbit warren 6m x 3m visibility 60% = 10.8m².</p> <p>Total exposure = 321.95m².</p>		
<p>LCK5B</p> <p>Plate 67</p> <p>Plate 68</p> <p>Plate 69</p> <p>Plate 70</p>	R6LG	4000	<p>770136 6157179 Commenced at SE end of transect heading downstream - tributary flowing to NW.</p> <p>Broad grassy channel in Lockyersleigh Granite. Gradient 2 to 3 degrees. Aspect to NW.</p> <p>770131 6157194 Crossed fence and entered midslope. Multiple granite outcrops either side of creek channel.</p> <p>Two artefacts were observed in a minor scour at 770086 6157218 on the southern side of the tributary to the east of some large boulders which provided protection from the wind. The site was called LKAS5 and contained one broken dolerite flake and one silcrete flake.</p> <p>No scouring of channel banks or entrenchment of channel.</p> <p>Lots of large skinks and eastern grey kangaroos observed.</p> <p>Finish at 770055 6157260.</p> <p>There was one site (LKAS5) and no PADs observed.</p>	<p>Area has been cleared and impacted by grazing animals- sheep and cattle.</p> <p>Downslope movement of sandy soils.</p> <p>Fencing</p>	0%	<p>770084 6157194</p> <p>Scour – 1m x 1m visibility 80% = 0.8m².</p> <p>770086 6157218</p> <p>Scour – 0.5m x 0.2m visibility 60% = 0.06 m²</p> <p>Total exposure = 0.86m².</p>	<p>770086 6157218</p> <p>LKAS5</p>	<p>Partial Bund</p> <p>LKAS5 in vegetation buffer</p>
<p>LCK6</p> <p>Plate 71</p>	R6LG	40000	<p>770689 6157107 Heading downstream and downslope from graded track. Gradient 3 degrees to 1 degree on lower slope. Aspect generally south-west. Visibility 0%.</p> <p>The creek channel was wide and grassy and there were numerous short tributaries entering from the east and west that drained between localised low spurs. Lots of small granite tors outcrop on the low spurs on either side of the tributary channel.</p> <p>There was no water noted within the tributary or side tributaries. A swampy area was encountered on the lower slope and within the tributary channel at 770215 6156759. The swamp area was approx. 100m N-S by 20m E-W. The swamp was full of rushes. In this area the water flow had been slowed by the construction of the Main Southern Railway downstream and colluvial/alluvial build up behind the railway had formed the swamp.</p> <p>For the final 400m of the transect across the lower slope the creek channel becomes indistinguishable due to deposition of alluvial and colluvial sands behind the Main Southern Railway. Visibility still 0%.</p> <p>Lots of large skinks and eastern grey kangaroos observed.</p>	<p>Area has been cleared and impacted by grazing animals- sheep and cattle.</p> <p>Multiple wombat burrows in banks. Depth of granite sand up to 1m exposed by burrowing.</p> <p>Sheep and cattle tracks.</p> <p>Downslope movement of sandy soils.</p> <p>Construction of Main Southern Railway.</p>	0%	<p>770556 6157043</p> <p>Wombat burrows – 3m x 2m 100% visibility = 6m².</p> <p>770533 6157036</p> <p>Wombat and rabbit burrows – 6m x 2m 100% visibility = 12m².</p> <p>770520 6157026</p> <p>Cattle tracks – 0.2m = x 40m 60% visibility = 4.8m².</p> <p>770520 6157006</p> <p>Wombat burrows – 50m x 25m 75% visibility = 937.5m².</p> <p>770320 6155945</p> <p>Scour below trees – 8m x 2m visibility 70% = 11.2m².</p>	N/A	Overburden Emplacement

Transect Plates	ATUs	Total Survey Area in m ² approx	Transect Description	Prior Disturbance and Erosion	Ground Surface % Visibility General	Additional Areas of Exposure in m ² (LXW)/100 x % vis)	Site/PAD Located	Proposed Impact
			<p>Transect ended at Main Southern Railway on lower slope at 770123 6156557.</p> <p>There were no artefacts, sites or PADs observed.</p>			<p>770159 6156676</p> <p>Wombat burrows – 4m x 4m 100% visibility = 16m².</p> <p>Total exposure = 987.5m².</p>		
<p>LCK7A</p> <p>Plate 72</p> <p>Plate 73</p> <p>Plate 74</p> <p>Plate 75</p> <p>Plate 76</p> <p>Plate 77</p> <p>Plate 78</p>	R6BP	30000	<p>771009 6156910 Commenced on midslope heading downstream. Tributary channel broad grassy and rocky – Bindook Porphyry. Gradient 1 - 3 degrees. Aspect south. Cleared grassland with occasional isolated eucalypts.</p> <p>Just to the west of the Transect was an area of approximately 40 wombat burrows. An isolated quartz retouched flake was located on wombat spoil within the burrows at 771002 6156845. The site was named LKIF3.</p> <p>At lower midslope crossed formed track. On western side of creek – 7 wombat burrows in deeper granite sand – depth at minimum 50cm. No rock outcrop.</p> <p>Crossed historic pipeline excavation at 770986 6156722.</p> <p>Scour below mature eucalypt and cattle wallow and track provide 50 to 70% visibility.</p> <p>One large wombat burrow behind contour bank on western side of creek at 770979 6156573 – isolated find on wombat spoil. 1 quartz broken flake exposed by wombat burrowing (LKIF1).</p> <p>Burrow 0.6m deep. Artefact on spoil.</p> <p>PAD assessed as unlikely as the artefact was located in colluvial build up behind the contour bank and was most likely derived from upslope</p> <p>Checked dam on lower slope no visibility, heavily grassed. Some minor creek bank scouring and sheep tracks on eastern side of tributary. A few empty ponds in channel.</p> <p>Tributary channel not discernible in its lower reaches at southern end of transect as heavily grassed and infilled with colluvial and alluvial deposits from slopes above and to the east that have backed back behind the Main Southern Railway in this area of low gradient – 1 degree.</p> <p>Transect ended at 770895 6156345.</p> <p>There was one isolated find recorded. There were no PADs identified.</p>	<p>Area has been cleared and impacted by grazing animals- sheep and cattle.</p> <p>Downslope movement of sandy soils.</p> <p>Sheep tracks along both sides of the creekline.</p> <p>Wombat burrows.</p> <p>Dam construction.</p> <p>Crossed by graded track at Pipeline excavation.</p> <p>Contour bank.</p> <p>Construction of Main Southern Railway</p>	0%	<p>771024 6156870</p> <p>Scour – 0.5m x 5m 100% visibility = 2.5m²</p> <p>771029 6155847</p> <p>Formed track 0.8m x 20m visibility 50% = 20m²</p> <p>Wombat burrows – 15m x 15m visibility 50% = 112.5 m².</p> <p>Pipeline excavation – 4m x 1m visibility 100% = 4m².</p> <p>770980 6256576</p> <p>Scour – 10m x 8m – visibility 50% = 40m².</p> <p>Cattle wallow and sheep track – 30m x 4m visibility 75% = 90m².</p> <p>Sheep track 50m x 0.8m visibility 80% = 32m².</p> <p>770946 6156414</p> <p>Creek bank scouring and sheep track on lower slope – 1m x 30m plus 3m x 5m visibility 100% = 45m².</p> <p>Total exposure = 346m².</p>	<p>770979 6156573</p> <p>770979 6156573</p> <p>LKIF1</p> <p>771002 6156845</p> <p>LKIF3</p>	<p>Minor impact N section by haul road and overburden emplacement.</p> <p>LKIF1 not impacted</p> <p>LKIF3 one edge of overburden emplacement area</p>
<p>LCK7B</p> <p>Plate 79</p> <p>Plate 80</p> <p>Plate 81</p>	R6BP	12500	<p>7701038 6156240 Commenced transect below dam in the Approved Project Area heading downstream in a WSW direction across the lower slope following the Lockyersleigh Creek tributary. Water no longer flowing in this section of the creekline as it has been cut off by the dam. Scours were encountered on both sides of the creek in this area.</p> <p>An artefact scatter was located 15m to the W of the dam wall and within a scour on the SE side of the creek (LKAS3). Four artefacts were observed – 1 quartz retouched flake, 1 quartz flake, 1 quartz broken flake and 1 dolerite flake. The transect crossed through a fence within the site area and continued downstream. Approximately 20 metres downstream it crossed a second fence into the Granite Pit Area at</p>	<p>Area has been cleared and impacted by grazing animals- sheep and cattle.</p> <p>Downslope movement of sandy soils.</p> <p>Construction of Main Southern Railway.</p> <p>Fencing.</p>	0%	<p>7701038 6156240</p> <p>Scour 10m x 2m visibility 100% = 20m².</p> <p>Total exposure = 20m².</p>	<p>771038 6156240</p> <p>LKAS3</p> <p>PAD6</p> <p>770999 6156317</p> <p>770983 6156281</p>	Water Management Infrastructure

Transect Plates	ATUs	Total Survey Area in m ² approx	Transect Description	Prior Disturbance and Erosion	Ground Surface % Visibility General	Additional Areas of Exposure in m ² (LXW)/100 x % vis)	Site/PAD Located	Proposed Impact
			<p>7701029 6156249.</p> <p>The transect continued downstream across the lower slope and footslope gradient 1 degree. Aspect SW – transect crossed cleared grassland with occasional mature eucalypts.</p> <p>An area of PAD (PAD6) was noted at the confluence of LCK7B and LCK7A.</p> <p>Tributary channel not discernible for most of the remainder of the transect beyond the confluence. Area is grassed and infilled with colluvial and alluvial deposits from slopes above that have backed back behind the Main Southern Railway.</p> <p>Transect ended at MSR at 770774 6156360.</p>				<p>770958</p> <p>6156245</p> <p>770906</p> <p>6156267</p> <p>770945</p> <p>6156293</p> <p>770989</p> <p>6156320</p>	
<p>LCK8</p> <p>Plate 82</p> <p>Plate 83</p> <p>Plate 84</p> <p>Plate 85</p>	<p>R6LG</p> <p>6LG</p> <p>R6BP</p> <p>6BP</p>	40000	<p>770707 6157870 Commenced transect at intersection with LCK1AS transect and followed tributary channel upslope across lower slope in an ESE direction.</p> <p>Crossed Track 3 transect east of LKIF2 and LKAS4 and encountered a scour within the tributary channel at 770741 6157828. Continued upstream and upslope across lower slope - gradient 2 to 3 degrees and aspect to the NW.</p> <p>Passed between sites LKAS1 (ATU6 transect) and LKAS2 (Track 3 transect).</p> <p>Area is cleared grasslands with an occasional mature eucalypt. Bindook Porphyry outcropping to SE and Lockyersleigh Granite to SW.</p> <p>Crossed scour at 770770 6157778.</p> <p>Crossed a natural pond at 770660 6157763.</p> <p>At the start of the midslope crossed natural pond that had been excavated to form a dam at the intersection of LCK8 and a minor tributary at 770846 6157709. A natural depression at this point. There were several exposures around the dam.</p> <p>On the midslope the tributary channel became much broader, grassy and indistinct. The transect passed to the NE of LKST2 and ended on the upper midslope at 770972 6157514.</p>	<p>Area has been cleared and impacted by grazing animals- sheep and cattle.</p> <p>Downslope movement of sandy soils.</p> <p>Creek bank scouring.</p> <p>Dam excavation.</p>	<p>0 to 5%</p> <p>Average 2.5%</p>	<p>770741 6157828</p> <p>Scour 20m x 5m visibility 100% = 100m².</p> <p>770770 6157778 Scour 3m x 1m visibility 100% = 3m².</p> <p>770846 6157709 exposures around dam 6m x 1m visibility 100% = 6m².</p> <p>Total exposure = 109m².</p>	N/A	Quarry
<p>Haul Road</p> <p>Plate86</p> <p>Plate 87</p>	<p>6LG</p> <p>6BP</p>	22500	<p>771106 6156916 Commencing at fenceline between Approved Project Area and Granite Pit Area heading NW. Exposures along fenceline from stock trails and kangaroos going under fence. No artefacts.</p> <p>Moving across midslope and upslope. Cleared grassland with a few mature eucalypts and lots of logs.</p> <p>Crossed area of active wombat burrows at 771036 6156796. Sandy silty soil exposed to a depth of 60 cms in this area which is in the Bindook Porphyry. No artefacts observed.</p> <p>Second area of active wombat burrows at 770960 6157166 and 20 metres WSW of fenceline and gate at N end of transect. No artefacts observed.</p> <p>Third area of wombat burrow beneath a tree slightly upslope of end of transect inspected at 770868 6157461.</p>	<p>Area has been cleared and impacted by grazing animals- sheep and cattle.</p> <p>Stock tracks</p> <p>Fencing</p> <p>Wombat burrows</p>	0%	<p>771106 6156916 Exposure tracks 20m x 0.5 m visibility 100% = 10m².</p> <p>771036 6156796 Wombat burrows 8m x 8m visibility 50% = 32m².</p> <p>770960 6157166 Wombat burrows 7m x 1.5m visibility 100% = 10.5m².</p> <p>770868 6157461 Wombat burrows 4m x 2m visibility 80% = 6.4m².</p> <p>Total exposure = 58.9m².</p>	<p>N/A within Granite Pit Area</p> <p>MRN25 in Approved Project Area and outside of transect</p>	Haul Road

Transect Plates	ATUs	Total Survey Area in m ² approx	Transect Description	Prior Disturbance and Erosion	Ground Surface % Visibility General	Additional Areas of Exposure in m ² (LXW)/100 x % vis)	Site/PAD Located	Proposed Impact
			Transect finished on upper midslope at 770868 6157420. There were no artefacts, sites or PADs observed.					
Bund Plate 88 Plate 89 Plate 90	6LG	90000	<p>770013 6156648 Commencing at southern end of bund on lower slope 50m N of Main Southern Railway. Heading NNE and upslope on lower slope. Gradient 1 degree increasing to 2 degrees on midslope. Open eucalypt woodland interspersed by cleared grasslands. Most trees mature. Visibility 0%.</p> <p>770136 6157179 Crossed LCK5B tributary flowing to NW and then round dog leg at 769990 6157403 to cross LCK5A tributary flowing to SSW.</p> <p>Heading upslope and then cross-slope on a rocky slope with occasional granite tors and mature eucalypts interspersed by grasslands.</p> <p>Crossed graded track on crest at 769879 6157833 and just before fenceline a modified tree was observed at 769879 6157833. The tree was located 8m SE of the fenceline and 10m NW of the track. The scar was recorded as a possible shield or gunyah roofing scar. The tree was a mature eucalypt.</p> <p>Crossed fence and headed downslope across upper mid and lower slope. This area was heavily cleared grassland with occasional granite tors and a gradient of 3 to 2 degrees and aspect to N.</p> <p>Visibility increased to 5%.</p> <p>Cattle camp at 769890 6157873. Some topsoil exposure and presence of small quart pebbles. Not artefactual.</p> <p>Crossed a low rocky crest at 769885 6158074 and visibility increased to 15% in an area 25m x 25m due to slight scouring. The crest was just S of LCK4.</p> <p>Continued downslope to fenceline crossed LCK3 and turned to the E finishing to W of LCK2 on fenceline at 769897 6158284.</p> <p>There were no artefacts or PADs observed. There was one modified tree recorded.</p>	<p>Construction of Main Southern Railway</p> <p>Area has been cleared and impacted by grazing animals- sheep and cattle.</p> <p>Downslope movement of sandy soils.</p> <p>Wombat burrows.</p> <p>Dam construction.</p> <p>Graded track.</p>	<p>0% (1300m)</p> <p>5% (500m)</p>	<p>769879 6157833 Grader track 50 m x 2.5m visibility 100% = 125m².</p> <p>769890 6157873 Cattle camp – 20m x 30m visibility 50% = 300m².</p> <p>769885 6158074 – Scour</p> <p>25m x 25m visibility 15% = 93.75m².</p> <p>Total exposure = 518.75m².</p>	Modified Tree LKST1	Bund
Track 1 Plate 91			<p>Transect commenced at Main Southern Railway 770588 6156433 on lower slope heading upslope. Gradient <1 degree, aspect south. All trees cleared. Small granite outcrop in centre of transect 770826 6156644. Track follows course of gas pipeline.</p> <p>Exposure 1 770661 6156551 15m x 0.1m cattle track shallow coarse sand occasional chunks of ignimbrite</p> <p>Exposure 2 770742 6156581 15m x 15m area of wombat burrows associated with pipeline. Shallow coarse sand occasional chunks of ignimbrite.</p> <p>Exposure 3 770968 6156706 50m x 20m area of wombat burrows associated with small drainage line. Shallow coarse sand occasional chunks of ignimbrite.</p> <p>End transect at 771052 6156758 at fence</p> <p>There were no artefacts, sites or PADs observed.</p>	<p>Installation of gas pipeline</p> <p>Vegetation clearance</p> <p>Pastoral activity</p> <p>Vehicle movement</p> <p>Construction of Main Southern Railway</p> <p>Wombat burrowing</p>	0%	<p>Variable visibility length of track (0-80% for approximately 650m x 3m) = 780m²</p> <p>Exposure 1 15m x 0.3m cattle track visibility 80%= 3.6m²</p> <p>Exposure 2 770742 6156581 15m x 15m visibility 95%= 213.75m²</p> <p>Exposure 3 770968 6156706 50m x 20m visibility 85%= 850m²</p> <p>Total exposure = 1847.35m²</p>	No	Nil

Transect Plates	ATUs	Total Survey Area in m ² approx	Transect Description	Prior Disturbance and Erosion	Ground Surface % Visibility General	Additional Areas of Exposure in m ² (LXW)/100 x % vis)	Site/PAD Located	Proposed Impact
Track 2 Plate 92			<p>Transect commenced at 771080 6156772 on lower slope heading across slope. Gradient <1 degree, aspect south-west. Trees mostly cleared. Crossed small drainage at 771037 6156840.</p> <p>Some mature vegetation but mostly regrowth.</p> <p>Track traverses small sandy ridge above small drainage to the east before descending onto a small saddle between the sandy ridge to the south and a rocky spur to the north. The rocky spur displays numerous outcroppings of granite to the south of the track. All slopes gentle gradient of <1 degree.</p> <p>Transect follows spur crest until intersection with another vehicle track at 770447 6157164 adjacent to fenceline to the north.</p> <p>Exposure 1 771010 6156840 70m x 50m Large area of wombat burrows to west of track. No artefacts located. Fairly deep coarse orange-yellow sand.</p> <p>Exposure 2 770789 6157104 75m x 3m within two tracks incised by travelling vehicles</p> <p>Exposure 3 770456 6157151 15m x 3m Short area of 100% visibility width of track.</p> <p>End transect at 770447 6157164 at track intersection adjacent to fence</p> <p>There were no artefacts, sites or PADs observed.</p>	<p>Vegetation clearance</p> <p>Pastoral activity</p> <p>Vehicle movement</p> <p>Wombat burrowing</p>	0%	<p>Variable visibility length of track (0-80% for approximately 750m x 3m) = 900m²</p> <p>Exposure 1 70m x 50m wombat habitat 10 - 100% visibility= 1925m²</p> <p>Exposure 2 770742 6156581 75m x 3m variable visibility across the 3 metre width of track 0-100%= 123.75m²</p> <p>Exposure 3 770968 6156706 15m x 3m visibility 100% = 45m²</p> <p>Total exposure = 2993.75m²</p>	No	Quarry, Overburden Emplacement
Track 3 Plate 93 Plate 94 Plate 95 Plate 96 Plate 97 Plate 98 Plate 99			<p>Transect started from fenceline on upper slope at 770259 6157772. Transect progresses in a north-easterly direction down a gentle slope of <1 degree to where a small drainage line crosses the track and begins to follow the lower slope along the southern bank of a tributary of Lockyersleigh Creek parallel and occasionally within to LCK1AS transect.</p> <p>Soils mostly shallow grey silty sand with conglomerate pebbles in proximity to the creek. Higher upslope at the beginning of transect soils coarse orange yellow sand.</p> <p>At 770593 6157907 an isolated quartz core was encountered exposed on the road (LKIF2) which was also recorded on Transect LCK1As.</p> <p>At 770666 6157889 two quartz cores approximately 2m apart were located exposed on the track (LKAS4).</p> <p>The transect followed the lower slope landform and the tributary of Lockyersleigh Creek landform to end in the north-eastern corner of the project area at 771221 6158006</p>	<p>Vegetation clearance</p> <p>Pastoral activity</p> <p>Vehicle movement</p>	0%	<p>Visibility variable (50%) along length of track (approximately 1000m x 3m) = 1500m²</p> <p>Total exposure = 1500m²</p>	LKAS4 770666 6157889	Quarry
MRN25 and PAD Plate 100 Plate 101 Plate 102	4BP	N/A	<p>MRN25 was inspected on both the first and last day of the survey. MRN25 was surveyed as part of the Approved Project Area and has been previously subsurface tested (refer to Section 5.5.2 for details).</p>	<p>Area has been cleared and impacted by grazing animals- sheep and cattle.</p> <p>Wombat burrows</p>	N/A	N/A	MRN25 and PAD	Haul Road



PLATE 1

ATU1 Start of transect looking downslope across lower slope to Lockyersleigh Creek tributary confluence (facing SW)



PLATE 2

Approximately 50 metres south-west of end of transect facing upstream across area of tributary confluence (facing NE)



PLATE 3

ATU2 Start of transect on rocky crest in Bindook Porphyry and outside project impact footprint (facing WSW)



PLATE 4

ATU2 Looking downslope over midslope, lower slope of spur towards Lockyersleigh Creek. PAD5 on bench on lower slope above tributary of Lockyersleigh Creek (facing SSW).



PLATE 5

ATU2 Looking upslope from tributary of Lockyersleigh Creek towards spurline that crosses the Proposed Granite Pit Area from east to west (facing SSW)



PLATE 6

ATU2 Looking upslope from southern end of the transect over lower, mid and upper slope of spurline that crosses the Proposed Granite Pit Area from east to west (facing NE)



PLATE 7

ATU3 Looking downslope from start of transect on spurline that crosses the Proposed Granite Pit Area from east to west (facing N)



PLATE 8

ATU3 Looking upslope from southern end of the transect across the lower, mid and upper slope of spurline that crosses the Proposed Granite Pit Area from east to west (facing S)



PLATE 9

ATU4 Looking downslope from start of transect on spurline that crosses the Proposed Granite Pit Area from east to west (facing NNW)



PLATE 10

ATU4 Looking upslope from southern end of the transect across the lower, mid and upper slope of spurline that crosses the Proposed Granite Pit Area from east to west (facing SSE)



PLATE 11

ATU5 Looking downslope from start of transect on spurline that crosses the Proposed Granite Pit Area from east to west (facing N)



PLATE 12

ATU5 Looking upslope from southern end of the transect across the lower, mid and upper slope of spurline that crosses the Proposed Granite Pit Area from east to west (facing SSE)



PLATE 13

ATU6 Start of transect looking upslope from a tributary of Lockyersleigh Creek and across lower slope (tree with scar in background not culturally modified) (facing SSE)



PLATE 14

ATU6 LKAS1 Artefacts exposed in scour below tree on edge of low spur crest. Recorded as LKAS1 (facing N)



PLATE 15

ATU6 Area recorded as PAD3 on bench on low spur crest and between two artefact scatters recorded as LKAS1 (facing NNW)



PLATE 16

ATU6 Second area of artefacts exposed and recorded as part of LKAS1 (facing NW)



PLATE 17
ATU6 PAD3 area with second artefact scatter recorded
as LKAS1 in left centre of photograph (facing NNE)



PLATE 18
ATU6 Looking upslope across the mid and upper slope which
fall outside the Proposed Granite Pit Area impact footprint
(facing NE)



PLATE 19
ATU7 Eastern end of the transect looking upslope across the mid
and upper slope of the spur which is outside the Proposed Granite
Pit Area impact footprint (flag marks centre of transect - facing E)



PLATE 20
ATU7 Looking along the crest of the spurline that crosses
the Proposed Granite Pit Area from east to west (facing W)



PLATE 21
ATU7 Looking across the area recorded as PAD4 upslope
of LKST2(facing NW)



PLATE 22
ATU7 Scarred tree LKST2 (facing N)



PLATE 23
ATU7 Close up of scar (LKST2) (facing N)



PLATE 24
ATU7 Track on spur crest that provided improved visibility (facing W)



PLATE 25
ATU7 Western end of transect on spur crest approaching
LKST1 (facing ENE)



PLATE 26
ATU7 Scarred Tree LKST1 (facing SW)



PLATE 27
ATU7 Close up of scar (LKST1) and poor condition
of the tree (facing W)



PLATE 28
ATU8 Facing downslope across lower slope from the
intersection with ATU9 (facing SSW)



PLATE 29
ATU8/PAD4 End of transect at intersection with ATU7 and
PAD4 on the crest of the spurline that crosses the
Proposed Granite Pit Area from east to west (facing WSW)



PLATE 30
ATU9 From start of transect looking upslope across the
lower slope to the intersection with ATU8 (facing NNE)



PLATE 31
ATU9 From end of transect at intersection with ATU8 looking
down and across the lower slope (facing WSW)



PLATE 32
ATU10 Mid and upper slope section of transect (facing NE)



PLATE 33
ATU10 Rocky spur crest recorded as PAD2 (facing SSW)



PLATE 34
ATU 10 Balancing tors on the south-western edge of PAD2 (facing NE)



PLATE 35
ATU 10 Southern end of ATU10 (facing SSW - November 2015)



PLATE 36
ATU 10 Southern end of ATU10 (facing NNE - June 2015)



PLATE 37
ATU11 Upper slope section (facing N)



PLATE 38
ATU11 Mid and lower slope section (facing S)



PLATE 39
ATU12 Start of transect heading upslope on lower slope (facing NNW)



PLATE 40
ATU12 Northern end of transect on midslope (facing NE)



PLATE 41

ATU13 View from tributary of Lockyersleigh Creek upslope at start of transect. Note spring in creek and cavernous tor (facing ENE)



PLATE 42

ATU13, LA31E and PAD1E From lower upper slope across midslope to PAD1N. Artefacts recorded in location of person seated and PAD area is between vehicles and survey participants (facing WSW)



PLATE 43

ATU13 From crest on upper slope across mid and lower slope to tributary of Lockyersleigh Creek. LA31W and PAD1W in area of orange sand on opposite side of creekline (facing WNW)



PLATE 44

ATU13 Cavernous weathering of granite tor upslope of LA31E/PAD1E (facing WNE)



PLATE 45
LA31E Quartzite flake located on western edge of LA31E



PLATE 46
LA31E Quartz pebble core located exposed on northern bank of creek and within Transect LCK1A



PLATE 47
LCK1A North of Tributary Central section of transect showing exposure related to an ants' nest and stock tracks (NNE)



PLATE 48
LCK1A North of Tributary north-eastern section of transect (facing NNE)



PLATE 49

LCK1A South of Tributary Start of transect at fenceline on northern boundary of Proposed Granite Pit Area. In area where tributary flows between LA31E/PAD1E and LA31W/PAD1W (facing NNE)



PLATE 50

LA31W and PAD1W Artefacts (marked by flags) exposed by wombat burrows within LA31W. The area upslope of the wombat burrows was recorded as PAD1W (facing NNW)



PLATE 51

LA31W and PAD1W From south-eastern end of LA31W/PAD1W area. Artefacts were exposed by wombat burrowing in the deep orange sands across this area (facing NNW)



PLATE 52

LA31W and PAD1W Artefacts were recorded in scours beneath two trees 200 metres west of the tributary of Lockyersleigh Creek. PAD1W was recorded from the trees in the photo to the east to the tributary of Lockyersleigh Creek (facing NNW)



PLATE 53
LA31W Quartz flake located on wombat burrow spoil toward south-south-eastern end of LA31W/PAD1W area (facing NNW)



PLATE 54
LA31W Quartz flake (facing NNW)



PLATE 55
LCK1A South of Tributary Central section of transect (facing NE)



PLATE 56
LCK1A South of Tributary Central section of transect (facing NE)



PLATE 57
LCK1A South of Tributary North-eastern section of transect (facing NNE)



PLATE 58
LCK1B From confluence with LCK1A (facing N)



PLATE 59
LCK2 Looking downslope across the mid and lower slope. Tributary is a broad, shallow grassy depression (facing N)



PLATE 60
LKASS Two artefacts were located between Transects LCK2 and LCK3. Area of site (facing W)



PLATE 61
LKA55 Grindstone



PLATE 62
LKA55 Broken silcrete flake



PLATE 63
LCK3 Looking downslope across the mid and lower slope.
Tributary is a broad, shallow grassy depression (facing N)



PLATE 64
LCK4 Looking upslope across lower and midslope towards a dam.
Tributary is a broad, shallow grassy depression (facing N)



PLATE 65

LCK5A Looking upslope across lower and midslope.
Tributary is a broad, shallow grassy depression (facing NE)



PLATE 66

LCK5A Rabbit burrows provided some area of exposure around
granite tors (facing NNW)



PLATE 67

LCK5B Looking downstream across mid and lower slope.
Tributary is a broad, shallow grassy depression (facing NNW)



PLATE 68

LCK5B Looking upstream across lower and midslope.
Tributary is a broad, shallow grassy depression (facing SSE)



PLATE 69
LKAS5 Dolerite broken flake



PLATE 70
LKAS5 Silcrete flake



PLATE 71
LCK6 Facing upstream from lower to mid and upper slope.
Tributary is a broad, shallow grassy depression (facing NNE)



PLATE 72
LCK7A Start of transect where it intersects with the Haul Road
transect (facing NNW)



PLATE 73
LKIF3 Quartz flake exposed by wombat burrowing on the
midslope to west of LCK7a



PLATE 74
LCK7A Wombat burrows on upper lower slope (facing WSW)



PLATE 75
LCK7A Scours on creekline on lower slope (facing ESE)



PLATE 76
LCK7A Southern section where creekline becomes
indistinct (facing SSW)

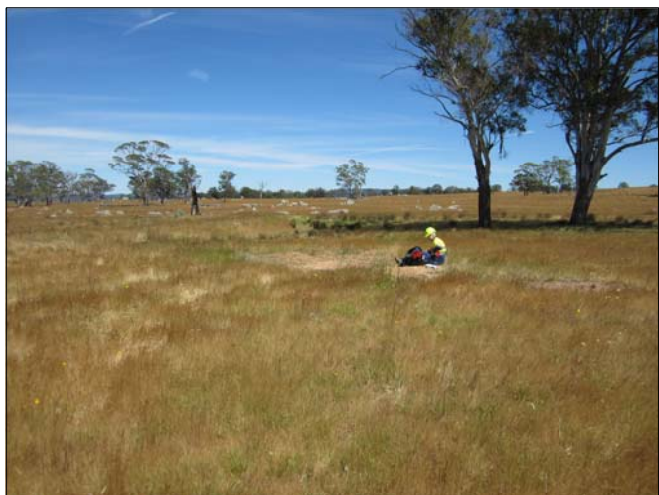


PLATE 77
Area of LKIF1. One quartz flake was located in a
scour behind a contour bank (facing WNW)



PLATE 78
LKIF1 Quartz flake



PLATE 79
LKAS3 Artefact scatter located at the start of LCK7B (facing SSW)



PLATE 80
LKAS3 Quartz core



PLATE 81
PAD5 Located within the confluence of LCK7A and
LCK7B (facing SW)



PLATE 82
LCK8 Start of transect looking upstream across lower
and midslope (facing SE)



PLATE 83
LCK8 Scour in creekline on lower slope (facing SE)



PLATE 84
LCK8 Pond on lower slope (facing SE)



PLATE 85
LCK8 Looking toward end of transect across midslope (facing S)



PLATE 86
Haul Road Start of transect on upper midslope showing
wombat burrows (facing NNW)



PLATE 87
Haul Road looking upslope across upper lower slope
and midslope (facing NW)



PLATE 88
Bund Start of transect heading upslope across lower
and midslope (facing NW)



PLATE 89

Bund Upper slope section on southern side of main spur crest (facing N)



PLATE 90

Bund Looking over upper, mid and lower slope and towards northern boundary of Proposed Granite Pit Area and tributary of Lockyersleigh Creek (facing N)



PLATE 91

Track 1 Western section of Track 1 transect. The track provided additional visibility along two wheel tracks and multiple scours and wombat burrows across the lower and midslope (facing NE)



PLATE 92

Track 2 Start of Track 2 transect. The track provided additional visibility along two wheel tracks and multiple scours and wombat burrows across the lower and midslope (facing W)



PLATE 93

Track 3 Start of Track 3 The track provided additional visibility for the 2 to 3 metre width of the track across the upper mid and lower slope (facing NE)



PLATE 94

Track 3 LKAS4 (two quartz cores) were located exposed on the track



PLATE 95

Track 3 LKAS4 Quartz core located exposed on track



PLATE 96

Track 3 LKIF2 was located on Track 3 on the lower slope/riparian corridor interface (facing S)



PLATE 97
Track 3 LKIF2 Quartz core located exposed on track



PLATE 98
Track 3 LKAS2 was located 30 metres upslope of Track 3 in rabbit warren spoil associated with what appeared to be a old garden. Artefacts located in area between tree and vehicle (facing NE)



PLATE 99
Track 3 LKAS2 Quartz artefacts



PLATE 100
MRN25 site area (facing NW)



PLATE 101
MRN25 Inspection of wombat burrows to locate surface artefacts (facing NE)



PLATE 102
MRN25 Large chert flake exposed on wombat burrow spoil



PLATE 103
Joarimin Creek Conservation Corridor - Photograph of the landscape within the Joarimin Creek Conservation Corridor on the southern side of Joarimin Creek. This area is proposed to as part of an extensive Cultural Heritage Management Zone (facing N)



PLATE 104
Joarimin Creek Conservation Corridor - Photograph of the MRN69 site within the Joarimin Creek Conservation Corridor and on the northern side of Joarimin Creek. This area is proposed to as part of an extensive Cultural Heritage Management Zone (facing S)



PLATE 105

Grinding bowl site (Marulan T1-S7) located within the Joarimin Creek Conservation Corridor on the southern side of Joarimin Creek. This site is proposed for inclusion as part of an extensive Cultural Heritage Management Zone (facing N)



PLATE 106

Part of the MRN15 site and associated PAD1. This site and PAD1 area are proposed for inclusion as part of an extensive Cultural Heritage Management Zone (facing WNW)