



**Post Office Creek  
Exploration Licence 33/2007**

**Annual Report for the period 28/08/2011 to 28/08/2012**

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# 1 Summary

Exploration Licence 33/2007 located in western Tasmania is prospective for tin, tungsten and magnetite skarns within meta-sedimentary rocks adjacent to the Meredith Granite and greisen-style Sn and W mineralisation within the Meredith Granite. Historic exploration indicates potential for exposed Sn and W greisens, and evaluation of stratigraphic and magnetic information suggests potential also for skarn and carbonate replacement mineralisation.

Venture Minerals' exploration activities during 2011-2012 comprised mapping, soil, stream sediment and rock chip sampling over magnetic highs in the Oonah Formation and Success Creek Group within northern part of the licence, and sampling upstream of the Supergrunt anomaly in the southern part of EL33/2007. The field programme is helicopter supported and at the time of writing still in progress. It is expected that the field work will be completed by late August and results will be reviewed ready for follow-up mapping and surface sampling during the summer of 2012-2013.

## 2 Introduction

Exploration Licence 33/2007 is situated in the tin-tungsten province of western Tasmania and covers the south eastern contact metamorphic aureole of the Meredith Granite. The Meredith Granite is part of a suite of Devonian granites which is very important to tin-tungsten mineralization in Tasmania: Deposits associated with this suite include the world class Renison Bell tin mine (26 Mt at 1.46% Sn), Mount Bischoff (10.54 Mt at 1.1% Sn), Cleveland (12.4 Mt at 0.62% Sn, 0.25% Cu) and King Island (17 Mt at 0.85% W<sub>03</sub>). Cleveland and Mount Bischoff are situated around the northern margin of the Meredith Granite, and Renison Bell is associated with the smaller Pine Hill Granite c. 15 km to the southeast of the Meredith Granite.

## 3 Location and Access

Exploration Licence 33/2007 covers a narrow north trending 64 km<sup>2</sup> strip of rugged land extending from c. 3 to 20 km south southeast of the Savage River magnetite mine. The Whyte River crosses the western boundary of the licence. Access is currently restricted to foot or helicopter.

Elevation within the licence ranges from 100 m above median sea level where the Whyte River winds along the western boundary up to 792 m at the top of Mount Meredith in the northern part of the license and 781 m for Mt Livingstone in the south of the license. Average annual rainfall is c. 2000 mm and vegetation is dominated by temperate rainforest, with patches of dense sub-alpine scrub over granitic basement and in areas of regenerating forest.



Figure 1: EL33/2007 Location Plan

## 4 Exploration and Mining History

Alluvial gold exploration and mining commenced in the district during the 1880's and placer gold workings are widespread in the Whyte and Rocky rivers immediately to the west of EL33/2007. Most recently, Goldstream Mining NL (1996 – 2001) focused its activities in the area exploring for gold hosted by Proterozoic iron formation. They identified a broad polymetallic (As, Pb, Sb, Ag, Bi) stream sediment anomaly located to the east of the Rocky River workings near the western boundary of EL33/2007. This anomaly was thought to be indicative of sediment hosted 'Carlin style' gold but was not significant enough to warrant further work.

Previous exploration work in the area covered by EL33/2007 for Sn and W is limited and much of the tenement remains under explored for these two metals. Aberfoyle Exploration Pty Ltd (1979 – 1981) explored for Sn and W mineralization mostly to the northeast of EL33/2007 which culminated in the discovery of a magnetite-amphibole and garnet skarn with anomalous Sn and W values at Mount Youngbuck. No significant work was done with the area now covered by EL33/2007.

During the 1983 to 1985 period Industrial and Mining Investigations Pty Ltd completed significant stream sediment sampling campaign to the north and west of current EL33/2007 and noted anomalous gold values. Sn and W results from tributaries to the Whyte and Rocky rivers were generally low, with the exception of the Supergrunt anomaly (222 ppm Sn, 222 ppm W, 730 ppm As, 245 ppm Cu, 410 ppm Zn and 55 ppm Pb) located in a large tributary to Rocky River just (<100 m) within the margin of the Meredith Granite. IMI was not able to follow this anomaly upstream and concluded that source of the anomaly was either in the immediate vicinity of the stream sediment sample or pluming from one of the small unsampled tributaries from the west of the main creek.

## 5 Regional Geology

From west to east EL33/2007 is underlain by Keith Schist or correlates, Oonah Formation (c. 1200 m thick) and finally Meredith Granite. Wedges of meta-sedimentary rocks assignable to the Success Creek Group are interpreted by Venture Minerals to be present between the Oonah Fm and Meredith Granite in the northern and southern parts of the licence.

Carbonate units within the Oonah Formation, the Success Creek Group, and the Crimson Creek Formation adjacent to the Meredith Granite are the targets for skarn-hosted Sn, W and magnetite mineralisation. Carbonate units have not been previously mapped in the area but carbonates and distal skarn facies are typically topographically recessive and can require careful mapping to recognize. Three topographically recessive north trending magnetic ridges are present adjacent to the Meredith Granite margin in the north of EL33/2007 and warrant detailed prospecting for carbonate and distal skarn alteration. The limited historic stream sediment sampling suggests that skarn mineralisation, if present, does not extend to surface.

Mapping indicates there are several textural and compositional phases of the Meredith Granite in the Supergrunt area (southern EL33/2007) but alteration is limited to small nodules of tourmaline-quartz greisen. Tourmaline and quartz veins are uncommon and thin, with rare sheeted vein zones. Some large float boulders of coarse grained tourmaline-quartz greisen were observed but the source could not be located.

## 6 2011-2012 Anniversary Year Exploration Activities

Venture's exploration activities during the 2012 anniversary year has been focussed on soil and stream sediment sampling over magnetic targets in the Oonah and Success Creek Group adjacent to the Meredith Granite in the northern part of EL33/2007. A helicopter supported mapping, soil, stream sediment and rock chip sampling program is currently in progress. Some 15 sites have been selected for panned stream sediment sampling. Soil samples are being collected by hand auger at 50m intervals along lines spaced approx. 250m apart for a total of c. 100-150 samples. Sample locations are as shown in Figure 2. Vegetation is dense (regrowth) in the area and progress has proved very slow: Field work is expected to be completed by the end of August and results will be reported in the 2013 annual report.

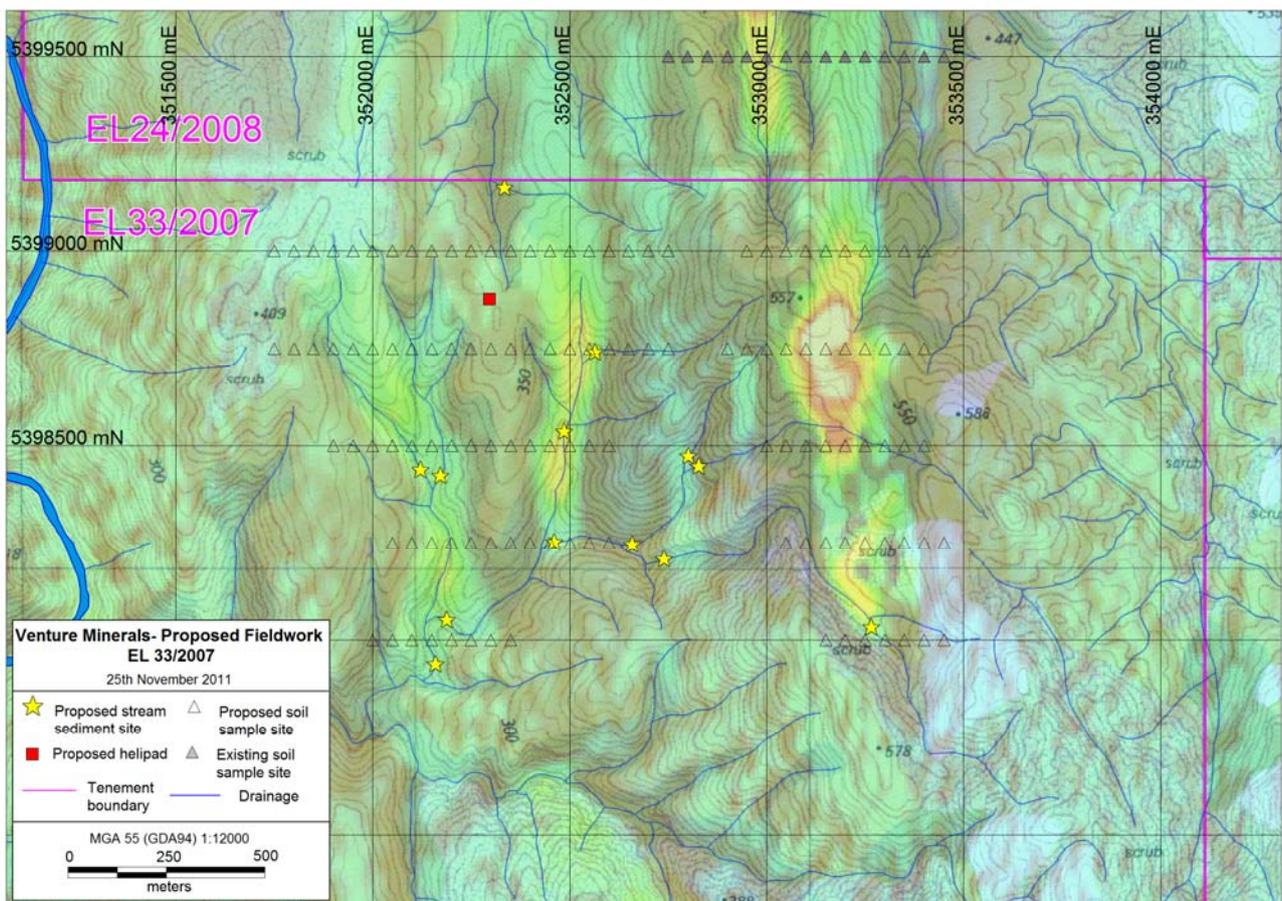


Figure 2: Mt Meredith soil and stream sediment sample locations (programme in progress) on aeromagnetic image & 10m topographic contours.

Stream sediment sampling at the Supergrunt prospect during the 2010-2011 summer identified strong Sn-W anomalism in the Rocky River and a northern tributary (Figure 3). Soil sampling over the Supergrunt area identified only low level B, Rb and Li anomalism in the Meredith Granite and immediately adjacent Oonah Formation, and follow-up work is not proposed at this stage. Instead a helicopter supported stream sediment sampling programme is in progress targeting the sites shown in Figure 3 upstream of Supergrunt. While it is most likely the Sn and W stream anomalism is due to alluvial concentration from cassiterite and/or wolframite bearing veins or greisens within the Meredith Granite, elevated As, Cu and Zn in the stream sediments suggests there may be some local source of mineralisation.

High resolution World View 2 satellite imagery was obtained (data collected January 2012) and is currently being orthorectified. The imagery will be used in conjunction with geochemical, magnetic and a LiDAR DTM to refine geological interpretation and target assessment within EL33/2007.

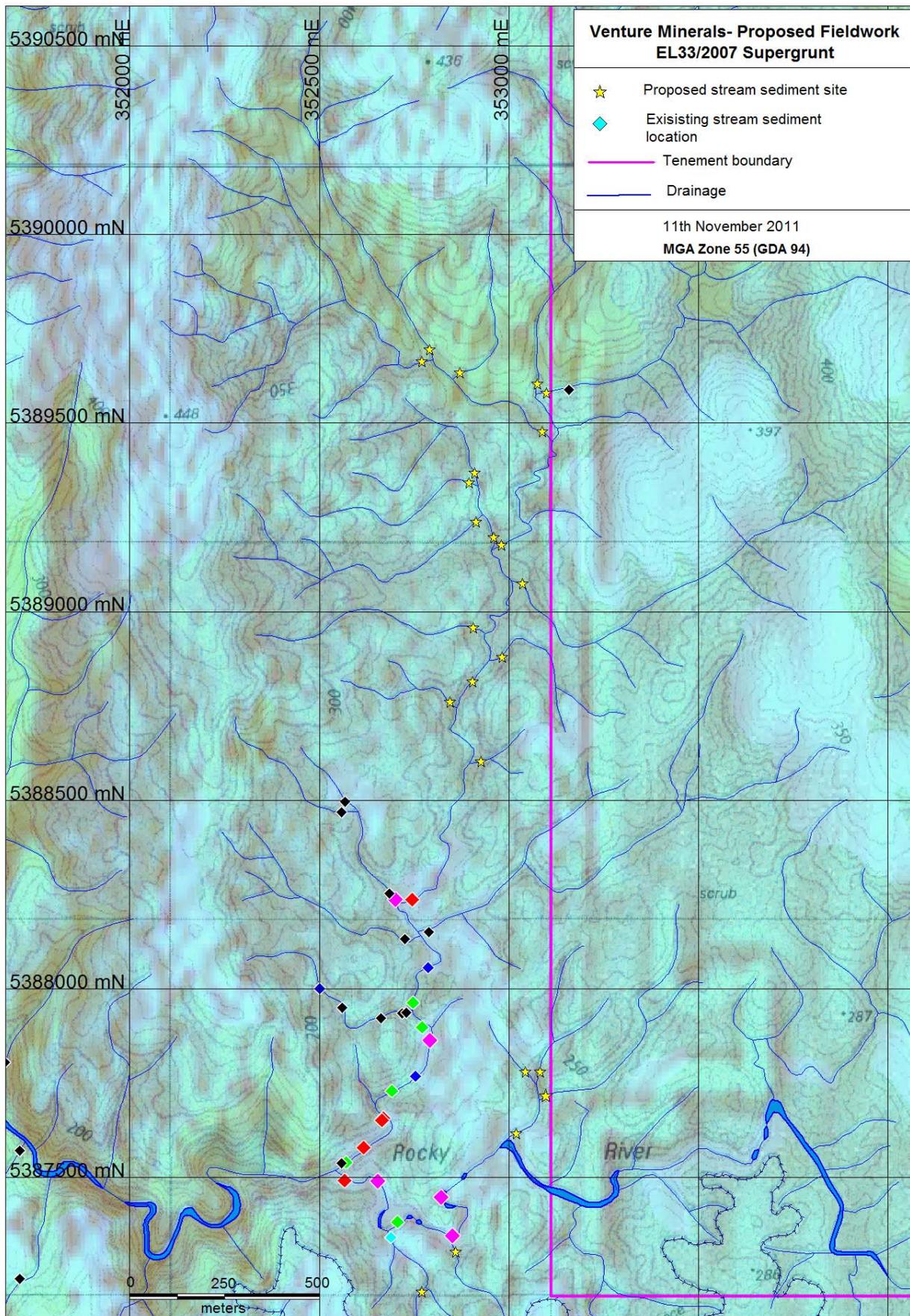


Figure 3: Supergrunt stream sediment sample locations (programme in progress) on aeromagnetic image & 10m topographic contours.

## 7 Conclusions and Recommendations

Venture's exploration activities within EL33/2007 during 2011-2012 were focussed on mapping, stream sediment and soil sampling of magnetic Sn-W skarn targets in the Oonah Formation and Success Creek Group within the northern part of the licence. The Supergrunt stream sediment anomaly (222 ppm Sn, 222 ppm W, 730 ppm As, 245 ppm Cu, 410 ppm Zn and 55 ppm Pb) is also being followed up with a stream sediment sampling programme. The field programme is helicopter supported and at the time of writing still in progress. It is expected that the field work will be completed by late August and results will be reviewed ready for follow-up mapping and surface sampling during the summer of 2012-2013. It is also recommended that the Success Creek Group and Oonah Formation in the Mt Livingstone area in the southern part of EL33/2007 be subject to soil sampling during the 2013 anniversary year.

## 8 Bibliography

Bishop, J., 2008. Renison West Project, Exploration Licence 33/2007 Post Office Creek, First Annual Technical Report for the period 28/08/2007 to 28/08/2008. Unpublished report for Mineral Resources Tasmania.

Brown, A. V., 1986. Geology of the Dundas – Mt Lindsay – Mt Youngbuck region. Tasmania Department of Mines. Geological Survey Bulletin 62.

Geological Survey of Tasmania, 1991. Corinna. Geological Atlas 1:50,000 Series. Tasmania Department of Resources and Energy, Division of Mines & Mineral Resources.

Grant, E. B., 2009. Post Office Creek, Exploration Licence 33/2007, Annual Report for the period 28/08/2008 to 28/08/2009. Unpublished report for Mineral Resources Tasmania.

Joyce, R. M., 1981. Meredith Granite Project, Progress Report for the Six Months Ending April 20 1981. Aberfoyle Exploration Pty Ltd. Unpublished report for Tasmanian Department of Mines (MRT Report No. 81-1565).

Lockhart, J. D., 1976. Exploration licence 11/75 Mount Stewart Area, Tasmania. Report on Field Season Activity 1975-1976. Australia and New Zealand Exploration Company. Unpublished report for Tasmanian Department of Mines (MRT Report No. 76-1179).

Owen, S., 2010. Post Office Creek, Exploration Licence 33/2007, Annual Report for the period 28/08/2009 to 28/08/2010. Unpublished report for Mineral Resources Tasmania.

Owen, S. & Joughin, S., 2011. Post Office Creek, Exploration Licence 33/2007, Annual Report for the period 28/08/2010 to 28/08/2011. Unpublished report for Mineral Resources Tasmania.

Penny, B. G., Shannon, C. H. C., Vanzino, L., 1984. Report on Investigations within Exploration Licence 4/61 West Coast, Tasmania. Summer Field Season 1983-1984. Industrial and Mining Investigations Pty Ltd. Unpublished report for Tasmanian Department of Mines (MRT Report No. 84-2262).

Sise, J. R., 1985. Final Report Exploration Licence 16/78 Meredith, Tasmania. Aberfoyle Exploration Pty Ltd. Unpublished report for Tasmanian Department of Mines (MRT Report No. 85-2390).

EL33/2007 Appendix A: Soil Sample Locations

H0002	Version	3								
H0003	Date_generated	19/07/2012								
H0004	Reporting_period_end_date	28/08/2012								
H0005	State	TAS								
H0100	Tenement	EL33/2007								
H0101	Tenement_holder	Venture Minerals Ltd								
H0102	Project_name	Mt Meredith								
H0106	Tenement_operator	Venture Minerals Ltd								
H0150	250K_map_sheet	SK5503 Burnie								
H0151	100K_map_sheet	7914 Pieman								
H0152	50K_map_sheet	na								
H0153	25K_map_sheet	3438 Livingstone, 3439 Meredith								
H0200	Start_date_of_data_acquisition	28/08/2011								
H0201	End_date_of_data_acquisition	19/07/2012								
H0202	Data_format	SG3								
H0203	Number_of_data_records	78								
H0204	Date_of_metadata_update	19/07/2012								
H0500	Feature_Located	Sample Point								
H0501	Geodetic_datum	GDA94								
H0502	Vertical_datum	not applicable								
H0503	Projection	MGA								
H0531	Projection_zone	55								
H0532	Surveying_instrument	see data								
H0533	Surveying_Company	Venture Minerals Ltd								
H0600	Sample_code	SOIL								
H0601	Sample_type	hand augered -3mm soil								
H0602	Sample_description	see data								
H1000	Sample	E_MGA55	N_MGA55	Surv_accuracy	Flora		Depth_cm	Horizon	Colour	Description
H1001		metres	metres	metres						
D	PXS160	353350	5398000	5	TT/leatherwood/pandani		20	B	LG	sandy organic
D	PXS161	353300	5398000	9	Horizontal/leatherwood/laurel		30	A/B	DB	organic silty soil
D	PXS162	535250	5398000	10	Bauera		20	A/B	LG	sandy loam
D	PXS163	353400	5398125	4	Bauera		20	A	DB	organic gravelly soil
D	PXS164	353350	5398125	8	Bauera/TT		20	A/B	DB	organic gravelly soil
D	PXS165	353300	5398125	5	leatherwood/CG/celery top		30	A/B	LG	sandy loam
D	PXS166	353250	5398125	6	CG/TT/laurel		35	A	DB	sandy organic soil
D	PXS167	353200	5398125	8	CG/laurel/leatherwood		40	B	GB	sandy organic gravel
D	PXS168	353150	5398125	12	Bauera/TT		30	B	GB	organic sandy soil
D	PXS169	353100	5398125	7	Bauera/TT		20	A/B	LG	sandy loam
D	PXS170	353150	5398000	4	Bauera/TT		40	B	LG	sandy loam
D	PXS171	353200	5398000	8	Bauera		30	B	RB	sandy organic loam
D	PXS172	353050	5398250	10	TT/leatherwood		20	A/B	GB	organic sandy soil
D	PXS173	353100	5398250	7	Horizontal/laurel		20	B	DB	sandy organic loam
D	PXS174	353150	5398250	5	TT/celery top/CG		20	B	LB	sandy loam
D	PXS175	353200	5398250	6	TT/CG		20	A/B	LG	organic gravelly soil
D	PXS176	353250	5398250	7	TT/CG/eucalypt		40	B	LG	sandy loam
D	PXS177	353300	5398250	7	TT/leatherwood/eucalypt		20	A/B	RB	organic rich soil
D	PXS178	353350	5398250	7	Bauera/banksia		30	A/B	B	sandy organic
D	PXS179	353400	5398250	5	Bauera/TT		10	A	DB	gravelly organic soil
D	PXS183	353450	5398250	3	Banksia/misc scrub		20	A	DB	organic rich soil
D	PXS184	353400	5398375	8	CG/TT		30	B	BG	sandy organic soil

EL33/2007 Appendix A: Soil Sample Locations

H1000	Sample	E_MGA55	N_MGA55	Surv_accuracy	Flora	Depth_cm	Horizon	Colour	Description
H1001		metres	metres	metres					
D	PXS185	353350	5398375	8	CG/horizontal/myrtle	30	B	GB	sandy gravely organic soil
D	PXS186	353300	5398375	5	CG/eucalypt/banksia	35	B	G	sandy with gravel base
D	PXS187	353250	5398375	4	CG/ferns/horizontal	30	B	GB	organic gravely soil
D	PXS188	353200	5398375	6	Pandani/horizontal/celery top	30	B	B	silty organic soil with gravel base
D	PXS189	353150	5398375	4	Pandani/myrtle/CG	20	B	LG	silty soil with gravel base
D	PXS190	353100	5398375	6	Celery top/horizontal/CG	30	B	LG	silty soil with gravel base
D	PXS191	353100	5398500	11	Horizontal	50	B	GO	clay
D	PXS192	353050	5398500	8	Horizontal	20	A/B	B	gravely rocky organic
D	PXS193	353000	5398500	6	More horizontal	15	A/B	G	silty organic soil with rocky base
D	PXS194	353000	5398625	7	Pandani/horizontal	30	B	BG	gravely soil with rocky base
D	PXS195	353050	5398625	13	Pandani/horizontal	15	B	LB	clay with rock base
D	PXS196	353100	5398625	6	Horizontal/celery top	15	A/B	GB	organic rich soil with rock base
D	PXS197	353150	5398625	4	Myrtle/celery top	45	A/B	G	gravely clay
D	PXS198	353150	5398500	5	Myrtle/horizontal	45	B	LGB	clay, rocky base
D	PXS199	353200	5398500	6	Pandani/horizontal	15	B	GB	organic silty soil, rocky base
D	PXS200	353250	5398500	7	Pandani/horizontal	20	B	GB	silty sandy soil, rocky base
D	PXS201	353300	5398500	5	Ferns/horizontal/celery top	30	B	GB	silty sandy soil, gravely base
D	PXS202	353350	5398500	6	Horizontal	30	B	DB	gravely organic soil, rocky base
D	PXS206	353400	5398500	5	Horizontal/bauera	25	B	B	gravely organic soil
D	PXS207	353150	5398750	9	Sassafras, Myrtle, Horizontal	30	B/C	lgy	smooth clay, rocky base
D	PXS208	353200	5398750	10	Myrtle, Leatherwood, Sassafras	40	B/C	gy-bn	clay, rocky base. Minor fe-weathering.
D	PXS209	353250	5398750	9	Myrtle, Leatherwood, Sassafras, Celery top	35	B	gy-bn	clay
D	PXS210	353300	5398750	11	Myrtle, Sassafras, Leatherwood	25	B	lbn	clay
D	PXS211	353350	5398750	5	Ferns, Blackwood, Myrtle	25	B/C	bn	clay, rocky base.
D	PXS212	353400	5398750	8	Myrtle, Cutty Grass, Sassafras, Leatherwood	25	B	dbn	gravelly clay
D	PXS213	353400	5398625	13	Ferns, Myrtle, Pandani, Tea Tree	35	B/C	gy-bn	gravelly and sandy soil.
D	PXS214	353350	5398625	9	Myrtle, Fern, Tea Tree, Wattle	40	B	bn	sandy clay
D	PXS215	353300	5398625	10	Horizontal, Sassafras, Myrtle, Tea Tree	25	B	lbn	clay
D	PXS216	353250	5398625	22	Sassafras, Leatherwood, Myrtle, Laurel	35	B/C	dbn	clay, rocky base.
D	PXS217	353200	5398625	10	Horizontal, Sassafras, Myrtle	40	B	lbn-gy	clay + organics
D	PXS218	352950	5398750	16	Horizontal, laurel, pandani	40	B	dbn	organic rich
D	PXS219	353000	5398750	13	Horizontal, tea tree, Myrtle, Sassafras	30	B	gy	smooth clay
D	PXS220	353050	5398750	10	Myrtle, Leatherwood, Sassafras	20	B	bn	clay
D	PXS221	353100	5398750	10	Sassafras, Horizontal, Myrtle	30	B	lbn	clay. Sloppy at base
D	PXS222	353400	5399000	21	Sassafras, laurel, horizontal	30	B	gy-bn	gravelly clay, on bank of a creek
D	PXS223	353350	5399000	14	Sassafras, Leatherwood, Pandani	10	B	bn	organic rich
D	PXS224	353300	5399000	9	Sassafras, Myrtle, Leatherwood	15	B	lbn	clay
D	PXS225	353250	5399000	9	Myrtle, sassafras, pandani	30	B	dbn	organic rich
D	PXS226	353200	5399000	13	Myrtle, sassafras, pandani	25	B/C	dbn	organic rich
D	PXS227	353150	5399000	14	laurel, myrtle, leatherwood	35	B	dbn	organic rich
D	PXS228	353100	5399000	17	eucalypt, baura, blackwood	10	B/C	dbn	gravelly clay
D	PXS229	353050	5399000	10	myrtle, blackwood, leatherwood, tea tree	45	B	dbn	organic rich. Quartzite float nearby
D	PXS230	353000	5399000	8	horizontal, baura, leatherwood	10	B/C	dbn	organic rich
D	PXS231	352950	5399000	9	baura	10	B/C	gy-bn	gravelly base
D	PXS232	352925	5398875	15	pandani, horizontal	35	B/C	bn	
D	PXS233	352975	5398875	21	horizontal, myrtle	10	B/C	gy-bn	organic rich
D	PXS234	353025	5398875	12	celery top pine, leatherwood, pandani	35	B	lgy	gravelly sand
D	PXS235	353075	5398875	16	Sassafras, Myrtle, Leatherwood	25	B/C	gy	gravelly
D	PXS236	353125	5398875	22	myrtle, laurel, leatherwood	30	B	bn	clay, organic rich

**EL33/2007 Appendix A: Soil Sample Locations**

H1000	Sample	E_MGA55	N_MGA55	Surv_accuracy	Flora	Depth_cm	Horizon	Colour	Description
H1001		metres	metres	metres					
D	PXS243	351750	5399000	3	Button grass/Banksia	35	B/C	DB	organic gravelly soil
D	PXS247	351800	5399000	3	Button grass/Banksia	35	B/C	DB	organic gravelly soil
D	PXS248	351850	5399000	3	Button grass/Banksia	40	B	GB	gravelly soil
D	PXS249	351900	5399000	4	Button grass/Banksia/Tea Tree	35	B	G	silty soil, some gravels
D	PXS250	351950	5399000	3	Button grass/Banksia	20	B	GB	silty organic soil
D	PXS251	352000	5399000	8	Bauera/Eucalypt	15	B	DB	organic soil, rock base
D	PXS252	352050	5399000	7	Bauera/banksia	40	A	G	silty soil
EOF									