



**Serpentine Ridge  
Exploration Licence 45/2010**

**Partial Surrender Report for the period 30/05/2011 to 30/05/2017**

S Owen  
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Venture Minerals Ltd  
PO Box 8234  
Subiaco East WA 6008

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# 1 Summary

Approximately 15 km<sup>2</sup> of EL45/2010 has been delineated for relinquishment. The surrendered area is peripheral to known tin, tungsten, nickel, copper, lead, zinc, silver, PGE, gold and iron ore prospects and deposits. Venture Minerals conducted rock (2 samples), stream sediment (11 samples) and soil (153 samples) sampling in the surrendered area and all data is supplied in Appendices A, B and C of this report.

# 2 Introduction

Exploration Licence 45/2010 is located within the tin-tungsten province of western Tasmania and includes part of the Meredith Granite's southern margin. The Meredith Granite is part of a suite of Devonian granites which is very important to tin-tungsten mineralization in Tasmania, and deposits associated with this suite include Renison Bell (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% WO<sub>3</sub>). EL45/2010 is situated immediately east of Venture's EL21/2005 which includes the Main and No.2 Sn-W-magnetite deposits at Mt Lindsay and the Livingstone and Reward Sn-W-Fe deposits in the Stanley River area. EL45/2010 includes part of the Wilson River Ultramafic Complex which is prospective for nickel and PGM mineralisation. Most of the streams draining the Wilson River Ultramafic Complex were prospected and mined for alluvial osmiridium in the early 1900s, with some alluvial deposits also yielding small amounts of gold.

# 3 Location and Access

The surrendered area from EL45/2010 covers c. 15 km<sup>2</sup> and is located 100-130 km by road southwest of the port of Burnie, and c. 20 km by road from the nearest town Tullah (Figure 1). The licence is covered by the Pieman 1:100,000 map sheet, and Parsons and Roseberry 1:25,000 map sheets. Topography is moderately rugged, the most notable topographic features comprising Serpentine Ridge and Websterite Hill. Average annual rainfall is approximately 2000 mm and vegetation is dominated by temperate rainforest, with dense scrub over ultramafic and granitic basement, and in areas of regenerating forest.

The bitumen HEC Pieman Road and Transend transmission lines traverse the southern part of the surrendered area, and a mixture of HEC, forestry and mineral exploration roads provide reasonable access south of the Wilson River. Access to the northern part of the licence is currently best obtained via a 4WD road from the Wilson River over Websterite Hill to the upper Harmen area, or by helicopter. Principal land uses include State Forest, Regional Reserve, and Forest Reserve. Parts of the State Forest area south of the Pieman Road are periodically being logged.

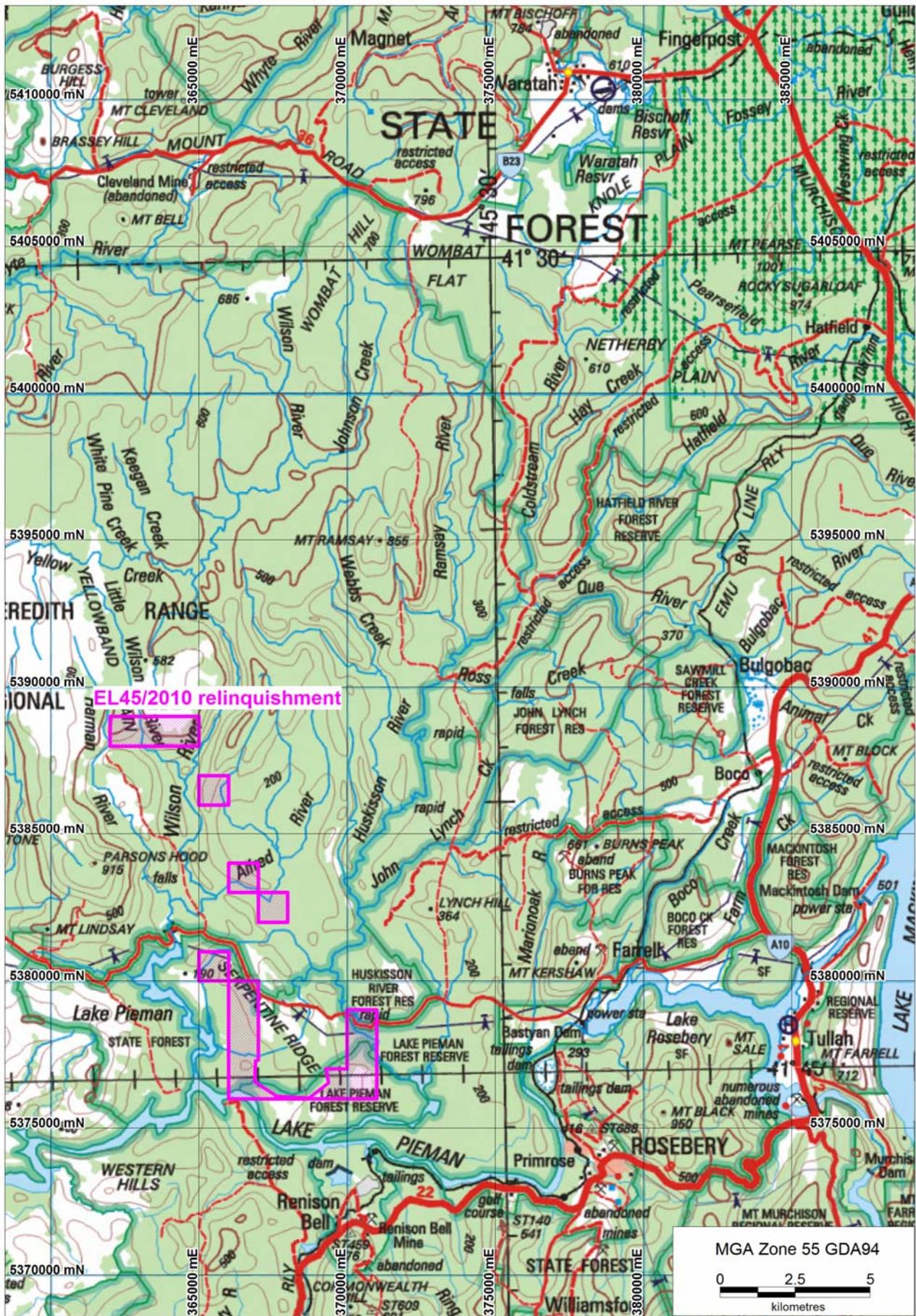


Figure 1: Location Map EL45/2010 Partial Surrender 2017

## 4 Geological Setting

EL45/2010 is situated in the Dundas Trough of western Tasmania and underlain from west to east by the Crimson Creek Formation, the Wilson River Ultramafic Complex (“WRUC”), the Dundas and Gordon groups, and the Eldon Group (Figure 2). Sedimentary stratigraphy is moderately dipping to vertical. The Meredith Granite rims the northern extent of the licence and dips away at a modest angle beneath the sedimentary and ultramafic units, albeit complicated by numerous irregular granitic dykes, shelves and apophyses. Preliminary interpretation suggests several phases of granite intrusion culminating in late stage quartz-tourmaline veining and the localised development of quartz-tourmaline-topaz greisen and siderite-sericite greisen.

The Neoproterozoic - Early Cambrian Crimson Creek Formation comprises mainly of thin to thick bedded greenish grey lithic sandstones, siltstones and mudstones with scattered horizons of laminated to thin bedded light grey, green and pink felsic to mafic tuffites and thin to thick bedded calcareous sandstones, and rare tholeiitic basalt flows. Total thickness in the Mt Lindsay area is estimated at c. 5000 m, and EL45/2010 includes a narrow strip of the Crimson Creek Formation along its western edge (Figure 2).

The WRUC occupies the central NW-trending spine of the licence and general interpretation is that the WRUC is entirely fault bounded, the lower margin against Crimson Creek Formation, the upper margin against Devonian conglomerate, quartz arenite, siltstone and marl of the Eldon Group with localised slivers of the Ordovician Gordon Limestone. Radiometric dates are not available for the WRUC and a Neoproterozoic to Cambrian age has been estimated according to stratigraphic constraints (e.g. Brown 1986). A major episode of folding during the Devonian formed the northwest to north trending Huskisson Syncline, and contact metamorphism indicates emplacement of the WRUC into the current stratigraphic position prior to the intrusion of the Meredith Granite around 370 Ma. Vein and replacement-style tin and tungsten mineralization appears to be associated regionally with the intrusion of the Meredith Granite. The WRUC is part of a group of similar ultramafic bodies scattered along the Dundas and Adamsfield troughs in northwestern and western Tasmania. The WRUC is one of the largest exposed ultramafic bodies in the Dundas Trough at approx. 17 km long and up to 2 km wide, and was probably continuous with the Mt Stewart ultramafic body ca. 11 km to the north-northwest before intrusion of the Meredith Granite. Brown (1986) identified two petrogenetically distinct ultramafic successions within the WRUC, namely the Layered Dunite-Harzburgite succession (LDH) comprising dunite, orthopyroxene-bearing dunite, and harzburgite layered on a 10 mm to 400 mm scale, and the Layered Pyroxene-Dunite succession (LPD) consisting of thinly (<150 mm) layered orthopyroxenite, olivine orthopyroxenite, and dunite. Both units are partially serpentinised. Chromite is a ubiquitous accessory phase (1-5%) in the LDH, occurring as disseminated grains and locally in discontinuous laminations up to ca. 1-2 mm thick and 1-2 m long. The LPD has less chromite (1-2%) which is more common in the dunite layers. PGE-rich chromite nodules have been identified in the LDH of the Serpentine Ridge area (Brown 1986). The western 100-150 m of the LDH in the Harman River area consists of interlayered dunite and pyroxene-bearing dunite, and the eastern part layered harzburgite with minor thin dunite layers (Brown 1986). According to Brown (1986) serpentinite shears or faults separate the LDH and LPD everywhere and the original relationship of the two successions is unclear. The exposed WRUC is dominated by the LDH sequence. Two small, unfaulted blocks of LPD have been mapped by Brown (1986) in the Websterite Hill area and the

southern part of the complex comprises LPD. Work by Venture also suggests slivers of a third unit, the Layered Pyroxenite-Peridotite and associated Gabbro (LPG) succession recognised by Brown (1986) elsewhere in western Tasmania, may be present on the eastern edge of the WRUC in the Limestone Creek and Little Wilson River areas. The LPG as defined by Brown (1986) comprises disrupted blocks of layered orthopyroxenite in peridotite intruded by massive two-pyroxene gabbro.

Brown (1986) proposed intrusion of ultramafic bodies into the opening Dundas Trough during the Early Cambrian followed by tectonic re-emplacement prior to the Devonian. The presence of serpentinite pebbles and abundant detrital chromite within Huskisson Group sedimentary rocks at Merton Hill (Adamus observations) and Red Lead Conglomerate of the correlative Dundas Group in the Mt Razorback area (Brown 1986) suggests exposure and partial erosion of the ultramafic complexes prior to the Middle Cambrian.

Quaternary fluvio-glacial sediments and Quaternary-Recent alluvial gravels cover minor parts of the WRUC. Osmiridium, gold, and chromite are locally concentrated in the Quaternary-Recent alluvial gravels. Patches of laterite and saprolite are locally present over the WRUC representing a mixture of in situ relicts of a more extensive Tertiary lateritic blanket and Quaternary-Recent colluvial-alluvial deposits. Goethitic soils are widespread over Serpentine Ridge and the Websterite Hill area.

Significant deformation is recognised in the Crimson Creek Formation with narrow zones of bedding-parallel isoclinal folding with an associated S<sub>0</sub>-parallel cleavage (S<sub>1</sub>), and a later generation of metre-scale gentle to open folds with north to north northeast striking axial planes and crenulation cleavage (S<sub>2</sub>).

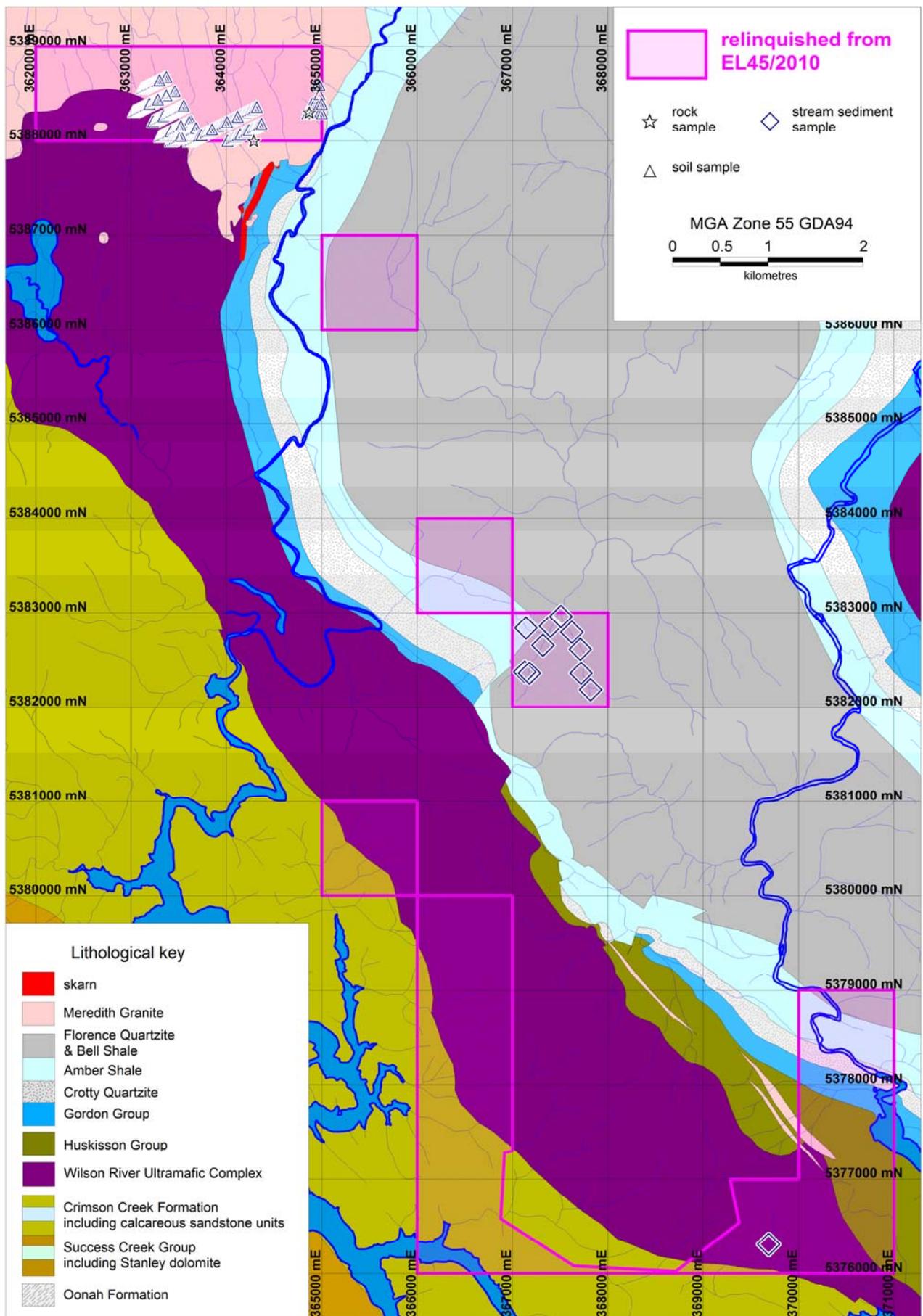


Figure 2: Basement geology and sampling location map

## 5 Exploration and Mining History

Osmiridium was first reported in Tasmania from the Wilson River valley in the 1876 by Surveyor-General Sprent, and the Riley, Trinder, Three Mile, Lippy Jane, Fowler, Sweeney, Osmiridium and Gold creeks were later extensively worked for detrital osmiridium. An exact osmiridium production figure for the Serpentine Ridge – Wilson River area is not available, but of the total 31,100 oz produced from Tasmania between 1910 and 1968 (first and last reported production) around half came from the Adamsfield area ca. 120 km to the southeast and much of the rest from the Heazlewood-Bald Hill area near Waratah approx. 30 km to the north. The detrital osmiridium typically occurs as flaky nuggets up to a few millimetres dimension, and petrographic work (Callina NL 1985-1990, Brown 1986) on material from the Riley Creek area also indicates occurrence as inclusions within chromite grains from the ultramafic basement. Numerous workers have identified small chromite lenses up to 20-30 mm thick and 1-2 m long within the ultramafics, and analyses of some primary chromitites indicate highly anomalous PGM levels (Brown 1986).

There was additionally minor alluvial tin and gold production from the Wilson and Huskisson valleys and during the 1970-1980s the area in the vicinity of the Meredith Granite was extensively explored for tin and tungsten mineralization. Tin-bearing alluvial gravels occur in many streams on the north eastern side of Serpentine Ridge, including Barnes, Sweeney and Tin creeks and Alfred River. Occurrences of primary tin mineralization were identified in the Harman River and Merton Hill areas, and Reid (1921) reported narrow dykes of tinstone-bearing quartz-feldspar porphyry cropping out in the vicinity of Tin Creek and Merton Hill.

The source of the alluvial gold was not thoroughly investigated and while most is probably reworked from glacial gravels, work by Callina NL in the 1980s suggested there could also be an ultramafic source. Significant gold mineralization has not been reported from any of the identified tin prospects within EL45/2010, although it was not commonly assayed.

Lateritic nickel and cobalt mineralization was identified in the southern Serpentine Ridge area by Aberfoyle in the late 1960s by a program that included hand auger drilling and man-portable coring (5 core holes) to a maximum depth of 30 ft. Grades of up to ca. 2% Ni and 1.5% Co were obtained from thin (<1-5 m) patches of laterite and in the underlying saprolitic serpentinite assays of >0.5% Ni were commonly obtained. There was no systematic investigation for Ni-sulphide mineralization beyond the Serpentine Ridge area (Camp 30 area of Aberfoyle). Variably serpentinised dunite from the Wilson River ultramafic complex typically assay c. 0.2-0.4% Ni although Brown (1986) could not detect nickel in the silicate phases.

Adamus Resources Ltd explored the area for nickel sulphides in the mid-2000s, conducting rock chip, stream sediment and soil sampling. Relict nickel-rich lateritic soils made it very difficult to interpret the results and clear primary nickel targets could not be delineated.

An extensive database of open file exploration reports covering the relinquished area is available from Mineral Resources Tasmania.

## 6 2011-2017 Exploration Activities

Venture Minerals conducted rock (2 samples), stream sediment (11 samples) and soil (153 samples) sampling in the surrendered area and all data is supplied in Appendices A, B and C of

this report. Basement geology interpretation and sample locations are shown in Figure 2. The sampling showed the presence of Sn in soil anomalism associated with quartz+tourmaline greisen in the Meredith Granite in the Little Wilson River area, and most likely alluvial gold sources in the Tobin Creek area.

## **7 Conclusions**

The surrendered area is peripheral to known tin, tungsten, nickel, copper, lead, zinc, silver, PGE, gold and iron ore prospects and deposits but is no longer considered sufficiently prospective to retain.

## 8 Bibliography

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

Nye, P. B., 1929. The Osmiridium Deposits of the Adamsfield District. Tasmania Department of Mines. Geological Survey Bulletin 39.

Reid, A. M., 1921. Osmiridium in Tasmania. Tasmania Department of Mines, Geological Survey Bulletin 32.

# **Appendix A: Rock Sample Results**

Appendix A: Rock Sample Results

H0002	Version		3							
H0003	Date_generated		24/5/2017							
H0004	Reporting_period_end_date		30/5/2017							
H0005	State		TAS							
H0100	Tenement		EL45/2010							
H0101	Tenement_holder		Venture Minerals Ltd							
H0102	Project_name		Mt Lindsay							
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		3637 Rosebury, 3638 Parsons							
H0200	Start_date_of_data_acquisition		30/5/2011							
H0201	End_date_of_data_acquisition		24/5/2017							
H0202	Data_format		SG3							
H0203	Number_of_data_records		2							
H0204	Date_of_metadata_update		24/5/2017							
H0500	Feature_Located		Sample Point							
H0501	Geodetic_datum		GDA94							
H0502	Vertical_datum		not applicable							
H0503	Projection		MGA							
H0531	Projection_zone		55							
H0532	Surveying_instrument		Garmin GPS62s							
H0533	Surveying_Company		Venture Minerals Ltd							
H0600	Sample_code		ROCK							
H0601	Sample_type		rock chip							
H0602	Sample_description		see data							
H0700	Sample_preparation_code		PREP-21							
H0701	Sample_preparation_details		dry, crush, LM5 pulverise to approx P80 <75 microns							
H0702	Job_no		see data							
H0800	Assay_code		ICP61, B-ICP69, XRF12 (see Ascheme)							
H0801	Assay_company		ALS Global							
H0802	Assay_description		B by 2 acid digest with ICP OES finish for B-ICP69, Al, As, Ba, Ca, Cl, Co, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, S, Si, Sn, Ti, U, V, W & Zn by XRF on fused disks lithium metab							
H0900	Remarks:		- indicates below lower analytical limit, -999 indicates not analysed, -1111 indicates above upper analytical limit							
H1000	Sample	Prospect	E_MGA55	N_MGA55	Stype	Description	Ascheme	Batch	Sn_XRF12	Sn_ICP61
H1001			metres	metres					ppm	ppm
D	THBW020	Big Wilson	364287	5388009	outcrop	series of 1-5mm tuV in icg FG. 2 veins 6cm apart sampled	ICP61,ICP69	AD15029687	-999	-10
D	LWWD001	Little Wilson	364869	5388310	float	contact between FG and qtz-rich rock. Contact can be accurately mapped to within 3-4m of this location. Small amount of qzSS float. Large slabs of FG outcrop w/ small creek running along contact. Single piece of tu-rich greisen float was found	ICP61,ICP69,XRF15b	AD12219931	60	20
EOF										

Appendix A: Rock Sample Results

W_XRF12	W_ICP61	Ag	Al	As	B	Ba	Be	Bi	Ca	Cr	Cu	Fe	K	Mg	Mn	Na	P	Pb	Rb	S	Sc	Si	Sr	Ta	Th	Ti	Tl	U	V	Y	Zn	Zr	
ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	%	ppm	%	ppm	ppm	ppm	%	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
-999	-10	-0.5	2.94	-10	30	198	0.9	-999	0.036	24	4	0.84	2.25	0.03	232	0.39	50	10	260	-0.01	2	41.2	30	15	8	0.066	-10	-9	40	43	21	158	
20	-10	-0.5	2.03	-100	220	-100	2	3	0.086	100	10	2.47	0.083	0.223	200	-999	-100	-999	-999	0.18	-999	41.9	-999	-999	-999	0.072	-999	10	-100	-999	20	-999	

# **Appendix B: Soil Sample Results**

### Appendix B: Soil Sample Results

H0002	Version		3																
H0003	Date_generated	24/5/2017																	
H0004	Reporting_period_end_date	30/5/2017																	
H0005	State	TAS																	
H0100	Tenement	EL45/2010																	
H0101	Tenement_holder	Venture Minerals Ltd																	
H0102	Project_name	Mt Lindsay																	
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	3637 Rosebury, 3638 Parsons																	
H0200	Start_date_of_data_acquisition	30/5/2011																	
H0201	End_date_of_data_acquisition	24/5/2017																	
H0202	Data_format	SG3																	
H0203	Number_of_data_records		153																
H0204	Date_of_metadata_update	24/5/2017																	
H0500	Feature_Located	Sample Point																	
H0501	Geodetic_datum	GDA94																	
H0502	Vertical_datum	not applicable																	
H0503	Projection	MGA																	
H0531	Projection_zone		55																
H0532	Surveying_instrument	Garmin GPS62																	
H0533	Surveying_Company	Venture Minerals Ltd																	
H0600	Sample_code	SOIL																	
H0601	Sample_type	soil sample																	
H0602	Sample_description	see data																	
H0700	Sample_preparation_code	PREP-21																	
H0701	Sample_preparation_details	dry & LM2 pulverise to approx P80 <75 microns																	
H0702	Job_no	see data																	
H0800	Assay_code	MS61, B-ICP69, XRF05																	
H0801	Assay_company	ALS Global																	
H0802	Assay_description1	XRF05 = XRF on pressed powder disks																	
H0803	Assay_description2	B-ICP69 = 2 acid digest with ICP OES finish for B																	
H0804	Assay_description3	MS61 = 4 acid digest including HF with MS finish																	
H0900	Remarks:	- indicates below lower analytical limit, -999 indicates not analysed, -1111 indicates above upper analytical limit																	
H1000	Sample	Sample_type	E_MGA55	N_MGA55	Depth	Colour	Horizon	Description	Batch	Sn	Sn	W	Ag	Al	As				
H1001			metres	metres	cm					ppm	ppm	ppm	ppm	%	ppm				
H1002										XRF05	MS61	MS61	MS61	MS61	MS61				
D	BWA005	hand augered -3mm soil	363440	5388019	15	DB	a/b/c	gravely rocky silt	AD13021488	399	75.3	10.5	0.03	1.87	60				
D	BWA007	hand augered -3mm soil	363480	5388040	20	LB	b/c	silty clay	AD13021488	20	16.2	7	0.02	1.36	12				
D	BWA008	hand augered -3mm soil	363500	5388050	10	DB	a/c	rocky silt	AD13021488	253	51.6	7.7	0.03	1.68	24.1				
D	BWA011	hand augered -3mm soil	363560	5388081	30	B	b	gravely clay, rock base	AD13021488	124	20.2	4.5	0.02	1.93	7.4				
D	BWA012	hand augered -3mm soil	363580	5388092	30	GB	b/c	gravely clay, rock base	AD13021488	40	11.7	3.1	0.02	1.47	5.6				
D	BWA013	hand augered -3mm soil	363600	5388102	25	LB	b/c	silty clay, rock base	AD13021488	30	7.6	2.7	0.01	1.73	3.6				
D	BWA014	hand augered -3mm soil	363620	5388112	45	LGB	c	sandy gravels	AD13021488	8	1.8	2.1	-0.01	2.23	1.3				
D	BWA015	hand augered -3mm soil	363640	5388122	30	LB	c	sandy gravels, rock base	AD13021488	8	1.6	1.8	0.04	2.78	2				
D	BWA016	hand augered -3mm soil	363660	5388132	40	OB	c	gravely sand	AD13021488	19	6.7	3.5	0.02	6.56	1.6				
D	BWA017	hand augered -3mm soil	363681	5388143	20	B	b/c	gravely silt	AD13021488	53	3.4	1.7	0.03	4.31	3.1				
D	BWA023	hand augered -3mm soil	363739	5388071	15	DB	b	gravely silt	AD13021488	57	1.9	2.4	0.01	3.78	1.3				
D	BWA024	hand augered -3mm soil	363761	5388082	20	G	b	gravely silt	AD13021488	14	5.5	3.4	-0.01	5.41	2.2				

**Appendix B: Soil Sample Results**

H1000	Sample	Sample_type	E_MGA55	N_MGA55	Depth	Colour	Horizon	Description	Batch	Sn	Sn	W	Ag	Al	As
H1001			metres	metres	cm					ppm	ppm	ppm	ppm	%	ppm
H1002										XRF05	MS61	MS61	MS61	MS61	MS61
D	BWA025	hand augered -3mm soil	363784	5388094	20	LG	b	silty sand	AD13021488	5	3.2	1.6	0.02	4.16	1.4
D	BWA026	hand augered -3mm soil	363806	5388105	15	GB	b	gravely silt	AD13021488	5	2.7	17.5	0.01	6.04	2.3
D	BWA027	hand augered -3mm soil	363828	5388116	20	DB	b	gravely silt	AD13021488	6	2.3	3.4	0.02	4.54	1.8
D	BWA028	hand augered -3mm soil	363850	5388128	20	B	b	gravely silt, rock base	AD13021488	5	3.2	2.2	-0.01	5.76	2.7
D	BWA029	hand augered -3mm soil	363873	5388139	30	B	b	clay	AD13021488	7	4.3	3.1	0.03	7.2	4.7
D	BWA030	hand augered -3mm soil	363895	5388150	25	DB	b	clay	AD13021488	10	6.9	4.5	0.01	7.56	7.2
D	BWA031	hand augered -3mm soil	363917	5388161	25	GB	b	gravely silt	AD13021488	5	1.7	1.6	-0.01	3.54	1.5
D	BWA032	hand augered -3mm soil	363940	5388173	25	DB	b	silt, gravel base	AD13021488	7	3.4	2	0.01	6.12	1.6
D	BWA033	hand augered -3mm soil	363962	5388184	25	B	b	silty clay	AD13021488	14	7.1	3.6	-0.01	6.2	2.9
D	BWA034	hand augered -3mm soil	363984	5388195	20	B	b/c	gravely silt, rock base	AD13021488	9	3.6	2.5	0.01	5.55	3
D	BWA035	hand augered -3mm soil	364007	5388207	20	OB	b/c	gravely clay, rock base	AD13021488	11	5.1	2.6	-0.01	6.02	3.5
D	BWA036	hand augered -3mm soil	364029	5388218	20	OB	b/c	gravely clay, rock base	AD13021488	19	9.4	3.5	0.02	7.34	4.2
D	BWA037	hand augered -3mm soil	364051	5388229	20	B	b	gravely silt	AD13021488	8	3.9	2.2	-0.01	6.7	2.9
D	BWA038	hand augered -3mm soil	364073	5388241	30	DB	b	silty clay, some gravels	AD13021488	11	5.4	2.9	0.02	6.32	2.7
D	BWA039	hand augered -3mm soil	364096	5388252	25	OB	b	gravely silt	AD13021488	7	3.1	3.7	0.01	6	2.3
D	BWA040	hand augered -3mm soil	364118	5388263	20	GB	b/c	gravely silt, rock base	AD13021488	8	1.2	1.4	0.02	3.71	1.2
D	BWA041	hand augered -3mm soil	364140	5388274	40	DB	a/c	gravely organic silt	AD13021488	9	1.5	1.2	0.03	1.72	1.6
D	BWA043	hand augered -3mm soil	364185	5388297	45	LG	b/c	gravely silt	AD13021488	17	10.6	4.8	0.01	2.23	0.9
D	BWA044	hand augered -3mm soil	364207	5388308	30	OB	b	silty clay	AD13021488	17	8.2	4.2	0.02	7.12	2.5
D	BWA045	hand augered -3mm soil	364230	5388320	15	DB	a/c	silty organics, gravel/rock base	AD13021488	14	3.9	2.7	0.02	3.85	1.2
D	BWA046	hand augered -3mm soil	364252	5388331	30	G	b/c	gravely silt	AD13021488	8	1.8	2.2	0.02	3.28	1.5
D	BWA047	hand augered -3mm soil	364274	5388342	25	DB	b	silt, some gravels	AD13021488	17	4.9	6.6	0.03	3.43	1.8
D	BWA048	hand augered -3mm soil	364296	5388354	30	G	b	gravely silt	AD13021488	30	14.3	6.3	0.01	4.12	1.4
D	BWA049	hand augered -3mm soil	364319	5388365	20	G	b/c	gravely silt	AD13021488	35	8.1	4.3	-0.01	3.52	1.1
D	BWA074	hand augered -3mm soil	364011	5388009	40	LB	B	gravely clay	AD13013650	9	3	3.3	0.02	4.11	1.7
D	BWA075	hand augered -3mm soil	364033	5388020	45	OB	B/C	gravely clay	AD13013650	9	4.9	3.1	0.05	7.44	11.2
D	BWA076	hand augered -3mm soil	364055	5388032	35	OB	C	sandy gravels	AD13013650	5	4.8	2	0.05	7.41	5.2
D	BWA077	hand augered -3mm soil	364078	5388043	70	OB	B/C	gravel wet mud	AD13013650	13	4.7	2.8	0.02	5.73	1.8
D	BWA078	hand augered -3mm soil	364100	5388054	35	B	C	gravely silt	AD13013650	14	4.2	3.1	0.01	4.92	1
D	BWA079	hand augered -3mm soil	364122	5388066	25	OB	B	gravely organic loam	AD13013650	16	1.5	1.7	0.02	2.32	0.5
D	BWA080	hand augered -3mm soil	364145	5388077	25	OB	B	gravely organic loam	AD13013650	24	2.9	2.7	0.03	3.37	0.7
D	BWA081	hand augered -3mm soil	364167	5388088	30	O	G	gravely clay	AD13013650	29	10	5.6	0.06	7.63	2.6
D	BWA082	hand augered -3mm soil	364189	5388099	40	G?	B/C	gravely sand	AD13013650	6	1.6	2.2	0.05	3.62	0.7
D	BWA083	hand augered -3mm soil	364211	5388111	15	DB	B	organic loam	AD13013650	10	1.1	0.7	0.04	1.79	1.6
D	BWA084	hand augered -3mm soil	364234	5388122	40	LB	B	silty sand	AD13013650	11	2.4	4.4	0.04	3.01	0.6
D	BWA085	hand augered -3mm soil	364256	5388133	25	G	C	gravely	AD13013650	83	7.6	4.1	0.02	4.28	0.6
D	BWA086	hand augered -3mm soil	364278	5388145	10	G	A/C	organic gravels	AD13013650	19	4.7	3.1	0.04	3.41	0.5
D	BWA087	hand augered -3mm soil	364301	5388156	5	B	B	organic gravels	AD13013650	10	7.3	2.8	0.03	4.93	0.8
D	BWA088	hand augered -3mm soil	364323	5388167	15	G	B	gravely clay	AD13013650	15	9.6	3.9	0.03	5.43	0.9
D	BWA089	hand augered -3mm soil	364345	5388179	40	O	B	gravely clay	AD13013650	22	19.1	5	0.07	7.72	4.2
D	BWA090	hand augered -3mm soil	364367	5388190	25	B	C?	silty gravels	AD13013650	9	3.6	3.1	0.04	4.43	0.6
D	LWS013	hand augered -3mm soil	364950	5388600	35	B	B	organic silty soil, rock base	AD12249133	11	2	1.7	0.03	0.95	5.8
D	LWS014	hand augered -3mm soil	364975	5388600	35	B	B	clay	AD12249133	5	1.8	1.3	0.01	0.8	3.9
D	LWS026	hand augered -3mm soil	364975	5388500	25	B	A	organic soil, rock base	AD12249133	12	1.9	0.6	0.03	0.26	2.1
D	LWS038	hand augered -3mm soil	364900	5388400	20	DB	A	organic soil, rock base	AD12249133	12	0.9	0.4	0.05	0.29	1.5
D	LWS039	hand augered -3mm soil	364925	5388400	15	B	A	organic clay, gravel base	AD12249133	11	0.6	0.4	0.03	0.14	1
D	LWS040	hand augered -3mm soil	364950	5388400	15	B	A	organic clay, rock base	AD12249133	13	1	0.5	0.06	0.29	1.5
D	LWS041	hand augered -3mm soil	364975	5388400	15	B	A	organic gravely soil, rock base	AD12249133	12	3	0.8	0.05	0.21	2.5

**Appendix B: Soil Sample Results**

H1000	Sample	Sample_type	E_MGA55	N_MGA55	Depth	Colour	Horizon	Description	Batch	Sn	Sn	W	Ag	Al	As
H1001			metres	metres	cm					ppm	ppm	ppm	ppm	%	ppm
H1002										XRF05	MS61	MS61	MS61	MS61	MS61
D	LWS042	hand augered -3mm soil	365000	5388400	20	B	B	organic clay, rock base	AD12249133	11	0.9	0.3	0.05	0.1	1.3
D	LWS053	hand augered -3mm soil	364850	5388300	30	GB	A	gravely organic soil, rock base	AD12249133	7	1.1	0.5	0.02	2.32	0.7
D	LWS054	hand augered -3mm soil	364875	5388300	30	B	B	gravely clay	AD12249133	9	1.2	1.3	0.02	3.14	0.6
D	LWS055	hand augered -3mm soil	364900	5388300	10	B	A	organic clay, gravel base	AD12249133	16	2.9	2.2	0.04	0.65	2.1
D	LWS056	hand augered -3mm soil	364925	5388300	35	B	A/B	organic clay, rock base	AD12249133	18	7.3	3	0.17	1.05	10
D	LWS057	hand augered -3mm soil	364950	5388300	20	BG	A	sandy clay, rock base	AD12249133	11	1.6	0.6	0.07	0.52	1
D	LWS058	hand augered -3mm soil	364975	5388300	20	B	B	clay soil, rock base	AD12249133	14	1	0.4	0.05	0.26	1
D	LWS059	hand augered -3mm soil	365000	5388300	25	GB	A	organic sandy soil, rock base	AD12249133	13	2.5	0.8	0.05	0.3	2.5
D	WWS001	hand augered -3mm soil	363119	5388564	40	bn	B	gravely silt	AD12249133	15	4.9	3.3	0.14	7.02	4.3
D	WWS002	hand augered -3mm soil	363137	5388573	30	bn	B	gravely silt	AD12249133	10	4.8	2.7	0.1	5.62	1.1
D	WWS003	hand augered -3mm soil	363155	5388582	15	og-bn	B	cy w/ rock base	AD12249133	9	3.1	2	0.07	4.07	3.9
D	WWS004	hand augered -3mm soil	363172	5388591	20	og-bn	B	silty cy	AD12249133	122	5.9	4.4	0.12	7.34	4.4
D	WWS005	hand augered -3mm soil	363190	5388600	20	bn	B/C	gravely silt	AD12249133	20	4.6	4.7	0.1	6.1	2.7
D	WWS006	hand augered -3mm soil	363208	5388609	45	gy	B/C	gravely sand	AD12249133	32	6.8	6.1	0.1	5	0.8
D	WWS007	hand augered -3mm soil	363226	5388618	45	dgy	B/C	gravely sand	AD12249133	234	2.8	6.7	0.06	2.57	0.2
D	WWS008	hand augered -3mm soil	363244	5388627	20	gy	B/C	gravely sand	AD12249133	31	4	6.5	0.09	4.92	0.8
D	WWS009	hand augered -3mm soil	363262	5388635	30	gy	B/C	gravely sand	AD12249133	219	9.8	7	0.06	4.93	0.6
D	WWS010	hand augered -3mm soil	363280	5388644	40	gy	B	gravely silt	AD12249133	49	13.1	6.9	0.09	6.28	0.9
D	WWS011	hand augered -3mm soil	363298	5388653	45	bn	B	gravely silt	AD12249133	58	10.5	5.3	0.23	6.27	0.9
D	WWS012	hand augered -3mm soil	363316	5388662	25	gy	B/C	gravely sand	AD12249133	13	4.6	3.6	0.05	5.76	0.7
D	WWS013	hand augered -3mm soil	363334	5388671	35	gy	B/C	gravely sand	AD12249133	9	2.4	4	0.04	3.42	0.5
D	WWS014	hand augered -3mm soil	363352	5388680	35	gy	B/C	gravely sand	AD12249133	10	2.7	3	0.03	4.6	1.3
D	WWS015	hand augered -3mm soil	363370	5388689	30	gy	B/C	gravely sand	AD12249133	10	1.3	3.6	0.04	1.35	0.2
D	WWS016	hand augered -3mm soil	363032	5388318	10	dbn	A	organic-rich soil-rocky	AD12249133	10	0.3	0.5	0.02	0.17	0.4
D	WWS017	hand augered -3mm soil	363050	5388327	5	dbn	A	organic-rich soil-rocky	AD12249133	16	5.5	1.9	0.03	0.57	4.1
D	WWS018	hand augered -3mm soil	363067	5388335	5	dbn	A	organic-rich soil-rocky	AD12249133	13	2.4	1.2	0.03	0.45	2.6
D	WWS019	hand augered -3mm soil	363085	5388344	15	dbn	A/B	organic-rich soil-rocky	AD12249133	16	13.2	18.1	0.08	0.79	32.2
D	WWS020	hand augered -3mm soil	363103	5388354	30	lbn	B	organic-rich	AD12249133	131	9.3	13.6	0.08	4.34	1
D	WWS021	hand augered -3mm soil	363121	5388363	40	gy-bn	B	sandy silt	AD12249133	323	8.6	10.7	0.06	3.58	0.6
D	WWS022	hand augered -3mm soil	363139	5388372	30	gy	B	gravely sand	AD12249133	141	2.9	5.7	0.04	2.58	0.4
D	WWS023	hand augered -3mm soil	363157	5388381	20	gy-bn	B/C	rocky sandy soil	AD12249133	824	9.5	11.7	0.09	4.74	0.5
D	WWS024	hand augered -3mm soil	363175	5388390	20	gy-bn	B/C	rocky sandy soil	AD12249133	90	9.3	5.3	0.08	3.36	0.8
D	WWS025	hand augered -3mm soil	363192	5388399	30	dbn	B/C	organic-rich, silty sand	AD12249133	16	4.1	6.7	0.08	3.34	0.8
D	WWS026	hand augered -3mm soil	363210	5388408	40	og-gy	B	gravely silt	AD12249133	29	17.5	7.6	0.06	5.88	2.3
D	WWS027	hand augered -3mm soil	363228	5388417	60	gy	B	gravely sand	AD12249133	118	8.7	5.1	0.04	4.57	0.4
D	WWS028	hand augered -3mm soil	363246	5388426	25	gy	B	gravely sand	AD12249133	36	6.9	6.3	0.05	3.96	0.3
D	WWS029	hand augered -3mm soil	363264	5388435	3	gy-bn	B	sandy soil	AD12249133	161	7.6	3.5	0.04	3.51	0.5
D	WWS030	hand augered -3mm soil	363282	5388444	25	gy	B	sandy soil	AD12249133	183	13.4	3.7	0.04	3.48	0.6
D	WWS031	hand augered -3mm soil	363300	5388453	20	gy-bn	B	gravely silt	AD12249133	75	5.5	3.2	0.03	3.04	0.6
D	WWS032	hand augered -3mm soil	363317	5388462	40	dbn	B	gravely sandy silt-rock base	AD12249133	150	5.4	3	0.03	3.11	0.4
D	WWS033	hand augered -3mm soil	363335	5388471	35	bn-gy	A/B	gravely silt	AD12249133	99	3.5	2.4	0.02	2.67	0.5
D	WWS034	hand augered -3mm soil	363353	5388480	40	dbn	B/C	gravely silt	AD12249133	181	3.5	2.7	0.02	2.93	0.7
D	WWS035	hand augered -3mm soil	363371	5388489	45	dbn	B	gravely silty sand	AD12249133	45	2.8	3.3	0.05	3.44	0.4
D	WWS036	hand augered -3mm soil	363389	5388498	30	dbn	B	gravely silt	AD12249133	45	4.3	3.8	0.03	3.88	0.4
D	WWS037	hand augered -3mm soil	363407	5388507	25	gy-bn	B	gravely silt-rock base	AD12249133	13	3.2	2.3	0.03	3.91	0.5
D	WWS038	hand augered -3mm soil	363425	5388516	40	dbn	A/B	gravely sandy silt	AD12249133	14	2.3	2.7	0.03	3.1	0.5
D	WWS039	hand augered -3mm soil	363442	5388525	40	dbn	B	gravely silt	AD12249133	14	2.9	1.8	0.03	4.34	0.6
D	WWS040	hand augered -3mm soil	363460	5388534	20	dbn	B	gravely silt	AD12249133	10	4	6.5	0.05	5.2	1.2

**Appendix B: Soil Sample Results**

H1000	Sample	Sample_type	E_MGA55	N_MGA55	Depth	Colour	Horizon	Description	Batch	Sn	Sn	W	Ag	Al	As
H1001			metres	metres	cm					ppm	ppm	ppm	ppm	%	ppm
H1002										XRF05	MS61	MS61	MS61	MS61	MS61
D	WWS041	hand augered -3mm soil	363232	5388216	10	dbn	A/B	organic cy-rock base	AD12249133	109	37.5	38.9	0.08	1.64	14.1
D	WWS042	hand augered -3mm soil	363250	5388225	15	bn	A/B	organic cy-gravelly	AD12249133	49	13.6	14.7	0.08	1.15	11.8
D	WWS043	hand augered -3mm soil	363268	5388234	5	dbn	A/B/C	organic-rich soil	AD12249133	27	8.9	20.1	0.05	1.02	13
D	WWS044	hand augered -3mm soil	363286	5388243	5	dbn	A/B/C	organic-rich soil	AD12249133	80	19.1	26.3	0.06	1.42	49.5
D	WWS045	hand augered -3mm soil	363303	5388252	20	dbn	A/B	organic-rich soil	AD12249133	14	1.7	6.7	0.02	0.34	3
D	WWS046	hand augered -3mm soil	363321	5388261	30	lbn	B	cy	AD12249133	26	13.7	13.6	0.05	2.04	10.3
D	WWS047	hand augered -3mm soil	363339	5388270	5	bn	A/C	organic-rich soil	AD12249133	21	10.2	33.3	0.06	1.12	14.6
D	WWS048	hand augered -3mm soil	363357	5388279	20	bn	B/C	rocky cy	AD12249133	104	17.4	43.5	0.08	1.8	10.6
D	WWS049	hand augered -3mm soil	363375	5388288	10	bn	B/C	organic rocky silt	AD12249133	81	19.7	24.1	0.06	2.98	12.2
D	WWS050	hand augered -3mm soil	363392	5388297	15	dbn	B/C	gravely sandy soil	AD12249133	62	4.1	9.1	0.03	2.45	2.7
D	WWS051	hand augered -3mm soil	363410	5388307	10	bn	B/C	gravely silty cy	AD12249133	164	13.1	9.8	0.09	3.11	6.9
D	WWS052	hand augered -3mm soil	363428	5388316	35	lbn	B	gravely cy	AD12249133	86	7.4	7.1	0.03	4.76	3.1
D	WWS053	hand augered -3mm soil	363446	5388325	20	bn	B	gravely silt	AD12249133	45	7.6	4.5	0.01	4.51	3.4
D	WWS054	hand augered -3mm soil	363464	5388334	25	dgy	B/C	gravely silt	AD12249133	64	5.4	2.8	0.01	4.03	2.8
D	WWS055	hand augered -3mm soil	363482	5388343	40	bn	B	gravely silt	AD12249133	159	18.4	7.2	0.03	4.06	7.3
D	WWS056	hand augered -3mm soil	363500	5388352	40	lbn	B	sandy silt	AD12249133	98	5.3	7.9	0.04	4	4.9
D	WWS057	hand augered -3mm soil	363517	5388361	20	gy	B/C	sandy silt	AD12249133	59	7.4	6.5	0.05	3.87	0.7
D	WWS058	hand augered -3mm soil	363535	5388370	30	gy-bn	B	sandy silt	AD12249133	14	3.7	3.3	0.11	4.41	0.7
D	WWS059	hand augered -3mm soil	363553	5388379	30	gy-bn	B/C	sandy silt	AD12249133	17	4.7	3	0.04	3.76	0.9
D	WWS060	hand augered -3mm soil	363308	5388056	15	dbn	A/B	organic silt	AD12249133	23	4.9	7.5	0.06	1.32	7.3
D	WWS061	hand augered -3mm soil	363326	5388065	25	dbn	A/B	organic-rich soil	AD12249133	46	7.4	8.8	0.05	1.85	11.3
D	WWS062	hand augered -3mm soil	363344	5388074	15	dbn	A/B	organic-rich, gravely soil	AD12249133	35	6.7	9.7	0.06	1.35	18
D	WWS063	hand augered -3mm soil	363362	5388083	5	dbn	A/B	organic-rich, gravely soil	AD12249133	15	6.2	12.1	0.05	0.7	13.8
D	WWS064	hand augered -3mm soil	363380	5388092	10	dbn	A/B	organic-rich, gravely soil	AD12249133	-5	3.1	1.3	0.06	0.76	2.6
D	WWS065	hand augered -3mm soil	363397	5388101	30	dbn	A/B	organic-rich, gravely soil	AD12249133	9	7.4	4.5	0.08	0.91	4.3
D	WWS066	hand augered -3mm soil	363415	5388110	10	dbn	A/B	organic-rich, gravely soil	AD12249133	16	9.4	4.3	0.07	1.61	6.5
D	WWS067	hand augered -3mm soil	363433	5388119	20	dbn	A/B	organic-rich, gravely soil-rock base	AD12249133	36	10.4	4.4	0.05	4.39	5.1
D	WWS068	hand augered -3mm soil	363451	5388128	10	bn	B	gravely silt	AD12249133	7	4.7	7.1	0.07	2.39	14.9
D	WWS069	hand augered -3mm soil	363469	5388137	20	bn	B	gravely cy, some organics	AD12249133	31	8.6	4.7	0.06	2.67	8.7
D	WWS070	hand augered -3mm soil	363487	5388146	15	gy-bn	B/C	silt, rock base	AD12249133	6	2.3	0.9	0.04	1.22	1.6
D	WWS071	hand augered -3mm soil	363505	5388155	20	lbn	B/C	rocky cy	AD12249133	30	15.7	4.8	0.06	2.64	5
D	WWS072	hand augered -3mm soil	363523	5388164	15	bn	B	cy-rock base	AD12249133	21	12.3	13.2	0.05	2.35	4.4
D	WWS073	hand augered -3mm soil	363540	5388173	15	bn	B	cy-rock base	AD12249133	95	7.6	4.4	0.05	1.37	4.5
D	WWS074	hand augered -3mm soil	363558	5388181	20	dbn	B	gravely silt	AD12249133	340	11.5	7.1	0.05	3.1	4.7
D	WWS075	hand augered -3mm soil	363576	5388190	20	gy	B	gravely silt	AD12249133	15	2.3	2.3	0.03	3.6	0.7
D	WWS076	hand augered -3mm soil	363594	5388199	40	gy	B	gravely sandy silt	AD12249133	10	3.8	4.1	0.03	4.51	0.6
D	WWS077	hand augered -3mm soil	363612	5388208	15	lgy-bn	B/C	gravely sandy silt	AD12249133	10	3.4	3.7	0.04	6.09	1.3
D	WWS078	hand augered -3mm soil	363630	5388217	25	dbn-gy	B/C	gravely silty sand	AD12249133	8	2.5	4.3	0.06	5.31	0.7
D	WWS085	hand augered -3mm soil	363609	5388007	25	bn-gy	B	sandy cy	AD12249133	55	5.2	5.4	0.03	3.08	1.2
D	WWS086	hand augered -3mm soil	363627	5388016	30	bn	B/C	gravely silty cy	AD12249133	34	5.2	7.4	0.04	2.75	2.9
D	WWS087	hand augered -3mm soil	363645	5388025	30	gy-bn	B	silty cy	AD12249133	71	8.4	9.1	0.03	3.45	4.7
D	WWS088	hand augered -3mm soil	363663	5388034	20	bn	B	silty cy w/ organics	AD12249133	123	13.1	7.6	0.05	3	4.7
D	WWS089	hand augered -3mm soil	363681	5388043	15	bn	B	silty cy- rock base	AD12249133	623	14.1	11.1	0.04	3.49	2.8
D	WWS090	hand augered -3mm soil	363698	5388052	30	lbn	B	sandy cy	AD12249133	13	3.1	4.7	0.03	4.66	1.7
D	WWS091	hand augered -3mm soil	363716	5388062	30	lbn-gy	B	silty cy	AD12249133	14	2.7	3.4	0.01	4.26	2
EOF															



**Appendix B: Soil Sample Results**

H1000	Sample	B	Ba	Be	Bi	Ca	Ce	Cd	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni
H1001		ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm
H1002		B-ICP69	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61
D	BWA025	50	150	2.1	0.05	0.07	113	-0.02	0.8	29	3.6	3.6	0.49	11.55	0.13	2.7	0.012	4.21	51.3	16.1	0.04	66	0.6	0.57	11.4	8.9
D	BWA026	40	210	1.37	0.11	0.11	164	-0.02	1.1	39	4.99	1.3	1.14	22.2	0.18	4	0.007	4.22	72.3	21	0.05	80	4.21	0.87	19.1	6.4
D	BWA027	60	190	1.3	0.08	0.1	186	0.02	0.9	41	6.78	2.5	1.15	15.9	0.2	4.4	0.008	3.66	82.4	21.1	0.06	145	1.64	0.77	14.6	6
D	BWA028	50	260	1.75	0.1	0.12	186.5	-0.02	0.7	22	10.4	1.5	0.96	19.55	0.24	3.1	0.01	4.62	83.2	29.3	0.05	101	0.76	1.12	10.5	4.1
D	BWA029	50	130	1.92	0.18	0.08	115	0.04	1.4	37	11.3	2.3	3.27	22.2	0.27	3.2	0.023	2.65	51.4	59.4	0.08	120	1.82	0.69	19.9	5.8
D	BWA030	40	110	1.72	0.27	0.05	77.4	0.04	1.2	40	14.35	2.4	5.13	36.5	0.55	2.5	0.035	1.87	35.7	69.6	0.09	71	2.21	0.28	26.4	5.9
D	BWA031	40	190	0.56	0.04	0.04	120	0.02	0.4	12	2.81	1.4	0.77	9.14	0.13	2.7	-0.005	3.64	54.6	14.3	0.02	81	0.4	0.41	11	2.9
D	BWA032	30	280	1.05	0.09	0.05	137.5	0.02	0.6	9	8.16	0.8	0.66	21.4	0.22	3.9	-0.005	4.57	63.9	23.3	0.04	77	0.85	0.55	15.6	3.4
D	BWA033	70	150	2	0.2	0.11	119	0.04	0.8	18	12.7	2.8	1.63	35.6	0.21	4.6	0.016	3.65	53.2	36.3	0.06	126	1.83	0.85	26.5	4.3
D	BWA034	50	240	1.15	0.11	0.07	105.5	0.04	0.8	18	6.09	2.6	1.38	19.25	0.17	4.2	0.011	4.07	48.6	18.3	0.05	93	0.93	0.58	16.9	4.1
D	BWA035	70	150	1.55	0.15	0.11	145.5	0.02	1.1	28	7.89	1.6	2.44	25.1	0.33	4.5	0.023	3.5	65.6	34	0.05	170	1.55	0.82	21.4	5
D	BWA036	60	220	2.35	0.17	0.1	135	0.02	1.6	24	13.05	1.5	2.77	26.5	0.29	3.8	0.084	3.82	61.5	59.6	0.1	236	1.55	0.69	21.6	5.2
D	BWA037	60	250	1.58	0.12	0.12	104.5	0.03	0.9	16	9.95	1.3	2.04	25.4	0.36	3.9	0.013	4.19	49.7	32.3	0.06	228	1.46	0.86	19.5	4
D	BWA038	40	220	1.88	0.12	0.16	122.5	0.02	1.4	24	11.05	1.6	1.77	30.2	0.33	3.5	0.022	3.88	58.5	38.3	0.11	158	3.2	0.87	20.7	4.7
D	BWA039	40	270	1.3	0.08	0.08	87.2	0.02	0.6	9	6.86	0.8	1.63	22.6	0.25	3.9	0.009	4.28	41.9	27.7	0.03	96	1.21	0.74	18.2	3.1
D	BWA040	30	230	0.78	0.04	0.09	96	-0.02	0.4	10	3.06	0.8	0.57	9.13	0.2	2.7	-0.005	3.9	44.3	13.2	0.02	80	0.34	0.7	7.1	3.2
D	BWA041	20	90	0.62	0.08	0.11	137	0.02	0.5	22	1.43	2.3	1.4	5.37	0.24	4.3	0.009	1.39	61.8	14.1	0.04	186	0.8	0.39	9.3	4.3
D	BWA043	70	70	0.96	0.07	0.04	165	-0.02	0.5	12	2.43	1.2	0.77	8.49	0.29	5.5	0.227	1.43	71.7	21.5	0.04	129	0.33	0.31	22.3	3.8
D	BWA044	50	160	1.72	0.32	0.08	136	-0.02	0.8	14	13	1.4	3.36	35	0.35	5.3	0.17	3.3	61	44.6	0.09	158	3.36	0.91	25.1	2.9
D	BWA045	50	120	1.5	0.06	0.12	105	0.1	0.6	18	3.3	2.2	1.05	14.3	0.33	2.5	0.029	2.96	46.5	13.1	0.06	139	0.79	0.93	15.1	3.1
D	BWA046	50	110	1.11	0.03	0.13	66.4	0.02	0.2	6	2.43	1.1	0.76	9.15	0.26	2.3	-0.005	2.89	29	13.9	0.03	99	0.31	0.77	8.8	1.9
D	BWA047	-10	120	1.28	0.07	0.09	138.5	0.07	0.3	11	3.34	3.2	0.59	10.7	0.32	5.8	0.04	3.01	61.2	17.1	0.03	110	0.98	0.56	20.2	2.3
D	BWA048	100	130	1.44	0.09	0.05	121.5	-0.02	0.4	10	5.37	1.3	0.79	16.05	0.31	4.2	0.144	2.91	54.2	19.9	0.03	111	1.33	0.48	16.9	2.7
D	BWA049	120	130	1.38	0.07	0.06	95.4	-0.02	0.4	12	3.13	1.4	0.81	11.15	0.31	4.5	0.038	3.15	42.6	15.2	0.03	105	0.63	0.6	15.8	2.4
D	BWA074	90	130	0.86	0.15	0.04	256	-0.02	1	24	3.34	1.6	0.87	16	0.39	4.4	0.01	2.02	116	28.9	0.04	59	1.02	0.17	27.2	4.3
D	BWA075	40	240	1.2	0.28	0.02	138.5	-0.02	0.9	13	7.82	2.2	2.46	27.4	0.3	3.6	0.026	3.66	61.3	42.3	0.06	86	3.11	0.28	23	2.8
D	BWA076	20	330	1.8	0.13	0.06	120	0.03	2.3	18	9.52	2.9	2.9	25	0.38	3.2	0.026	4.49	56.5	49.1	0.12	149	2.03	0.64	23.6	5.1
D	BWA077	60	150	2.35	0.14	0.1	128.5	-0.02	0.7	8	8.99	1.6	0.6	19.55	0.3	2.8	0.035	3.89	60.4	44.8	0.04	75	0.74	0.97	13.5	2.6
D	BWA078	90	150	1.83	0.08	0.12	162	-0.02	0.5	9	5.58	1.3	0.72	17.2	0.33	4.3	0.031	3.87	70.2	23.7	0.03	99	0.71	0.93	14.2	2.1
D	BWA079	110	80	1.23	0.03	0.08	156	0.02	0.4	10	1.75	1.3	0.54	7.09	0.28	3.6	0.01	2.06	67.8	20.9	0.02	88	0.31	0.49	8.6	1.5
D	BWA080	160	120	1.81	0.05	0.12	166	-0.02	0.6	13	2.78	2.1	1.07	10.55	0.33	4.7	0.016	2.85	73.1	20.7	0.03	156	0.59	0.7	13.2	4.6
D	BWA081	40	180	1.9	0.87	0.12	112.5	0.02	1.1	14	13.25	2.1	3.56	37.4	0.23	4.1	0.184	3.08	50.2	63.5	0.08	133	2.85	0.79	28.5	3.2
D	BWA082	40	200	1.17	0.01	0.13	198.5	-0.02	0.3	9	1.93	1.2	0.53	9.65	0.28	3.6	0.007	3.38	89.6	13.3	0.02	100	0.69	0.71	15.5	1.2
D	BWA083	10	70	0.47	0.08	0.1	24.7	0.07	0.8	16	1.51	2.9	0.51	5.95	0.09	1	0.012	1.03	12.4	6.1	0.07	60	0.89	0.3	5.2	2.8
D	BWA084	90	110	0.92	0.02	0.12	282	-0.02	0.7	23	1.94	1.8	1.32	9.88	0.41	6.4	0.01	2.55	124.5	14.4	0.02	205	0.92	0.56	19.9	3.2
D	BWA085	50	200	0.78	0.04	0.07	131.5	-0.02	0.6	12	3.29	1.3	1.17	14.05	0.24	3.9	0.018	3.72	59.3	17.7	0.02	132	0.73	0.62	14.9	2.3
D	BWA086	120	120	1.51	0.08	0.19	167.5	0.1	0.7	14	2.45	3.3	1.13	10.6	0.27	4.6	0.028	2.62	75.2	13.3	0.03	186	0.75	0.73	16.7	3
D	BWA087	70	210	1.21	0.11	0.06	114.5	0.02	0.6	8	7.72	1.8	1.01	16.65	0.21	3.1	0.079	3.37	52.2	19.3	0.06	111	0.71	0.47	13.4	2.2
D	BWA088	80	210	1.75	0.11	0.11	123.5	-0.02	0.5	10	9.34	1.5	0.83	19.95	0.24	4.3	0.077	3.86	56.4	19.6	0.04	120	1.27	0.87	18.5	2.2
D	BWA089	50	150	1.77	0.98	0.08	76.1	-0.02	1.1	14	14.55	1.9	6.23	60.2	0.34	2.6	0.257	2.84	32.7	60.5	0.08	97	4.67	0.64	36	4
D	BWA090	80	130	1.55	0.09	0.17	175	-0.02	0.5	11	4.25	1.2	0.79	15.4	0.3	4.5	0.028	3.26	77.4	17.6	0.03	112	1.39	0.8	17.1	1.9
D	LWS013	30	70	0.13	0.11	0.04	33.1	0.04	0.9	73	0.9	2.7	1.05	6.07	0.13	3.6	0.007	0.3	17.6	18.4	0.05	93	0.79	0.04	9	3.9
D	LWS014	20	50	0.1	0.1	0.06	18.1	-0.02	0.5	101	0.84	2	0.92	4.55	0.09	2.7	0.013	0.27	10.6	16.9	0.04	70	0.55	0.05	6.1	3.3
D	LWS026	20	20	0.06	0.11	0.21	9.67	0.04	0.5	192	0.2	2.4	0.82	1.21	0.15	1.6	0.013	0.1	4.7	7.7	0.05	96	0.51	0.03	4.2	2.7
D	LWS038	40	20	0.07	0.08	0.2	10.75	0.07	0.7	46	0.19	5.9	1.19	1.15	0.17	2.3	0.009	0.14	5.1	9.8	0.07	156	0.43	0.04	2.6	3.5
D	LWS039	30	10	-0.05	0.04	0.13	5.01	0.02	0.6	54	0.13	2.3	0.98	0.65	0.12	1.5	0.005	0.05	2.4	9.1	0.05	119	0.46	0.02	2.3	2.5
D	LWS040	20	20	-0.05	0.06	0.44	5.18	0.1	0.8	39	0.13	5.7	1.08	0.94	0.12	1.3	0.006	0.08	2.6	4.1	0.06	134	0.56	0.03	2.6	3.4
D	LWS041	10	10	-0.05	0.07	0.43	6.58	0.03	0.8	188	0.25	3.2	1.55	1.43	0.19	1.9	0.01	0.07	3	8.9	0.03	177	0.63	0.03	4.3	3.5

**Appendix B: Soil Sample Results**

H1000	Sample	B	Ba	Be	Bi	Ca	Ce	Cd	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni
H1001		ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm
H1002		B-ICP69	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61									
D	LWS042	10	10	-0.05	0.06	0.23	5.76	0.05	0.6	187	0.15	2.5	1.31	0.61	0.22	1.2	0.005	0.05	2.9	8.3	0.04	164	0.47	0.02	1.5	5
D	LWS053	10	130	0.85	0.04	0.06	41.6	0.04	0.6	9	1.45	1.6	1.15	6.25	0.35	1.4	0.006	2.05	19.6	14.9	0.02	127	0.73	0.37	3.4	2.6
D	LWS054	40	120	1.4	0.04	0.09	127	-0.02	0.2	4	2.21	0.7	0.38	8.34	0.36	2.9	-0.005	2.84	57.5	14.8	0.01	54	0.59	0.53	4.9	0.7
D	LWS055	10	40	0.34	0.1	0.21	43.3	0.04	1.1	23	0.63	6.1	2.42	2.66	0.32	2	0.01	0.41	20.1	7.1	0.08	293	1.14	0.09	4	5.4
D	LWS056	10	40	0.13	0.29	0.12	26.5	0.03	0.8	104	0.51	5.8	2.77	8.08	0.08	2.8	0.029	0.22	16.3	10.1	0.04	134	0.84	0.03	9.1	6.6
D	LWS057	20	60	0.09	0.02	0.04	16.8	0.02	0.5	38	0.48	1.7	0.84	1.78	-0.05	4.3	-0.005	0.38	8.6	12.3	0.03	105	0.36	0.04	5.8	4.4
D	LWS058	10	10	-0.05	0.03	0.23	6.74	0.03	0.6	59	0.2	6.7	1.59	0.74	-0.05	1.5	-0.005	0.07	3.2	5.8	0.05	193	0.51	0.02	2.3	10.1
D	LWS059	10	10	-0.05	0.09	0.13	7.42	-0.02	0.5	189	0.19	4.1	0.89	1.87	-0.05	1.8	-0.005	0.06	3.7	6.8	0.03	89	0.5	0.05	5.2	5.6
D	WWS001	170	190	3.52	0.15	0.08	131	0.13	3.8	44	13.35	3.1	2.22	19.3	0.34	2.9	0.149	3.6	64.8	38.4	0.1	2190	0.82	0.91	14.1	4.3
D	WWS002	110	170	2.25	0.08	0.08	117.5	0.02	0.7	8	14.8	1.9	1.06	18.05	0.24	3.1	0.069	3.74	50	36.1	0.08	151	0.45	0.99	14.7	3.1
D	WWS003	50	80	1.5	0.08	0.05	43.7	0.04	4.1	18	13.85	2.1	3.02	13.2	0.12	3.3	0.018	2.18	18	41.8	0.07	2760	0.41	0.52	12.1	2.6
D	WWS004	70	130	3.82	0.41	0.09	110	0.06	5.4	42	16.75	3.7	3.79	19.6	0.29	2.8	0.223	2.78	45.7	76.7	0.08	1760	1.56	0.75	14.2	5.4
D	WWS005	130	150	3.04	0.26	0.09	128	0.03	1.7	15	13.8	2.5	2.79	19.1	0.24	3.2	0.139	3.05	55.8	59.2	0.07	987	1.03	0.76	16.3	2.9
D	WWS006	180	140	2.11	0.11	0.1	164.5	0.03	0.6	16	7.35	2.1	0.93	16.7	0.28	3.7	0.136	3.16	71	29.9	0.07	132	0.44	0.8	20.3	3.4
D	WWS007	180	90	2.42	0.07	0.08	166	0.02	0.6	25	2.66	1.7	0.95	7.76	0.28	3.9	0.018	2	71.8	22.5	0.03	120	0.39	0.54	24.3	3.2
D	WWS008	140	150	2.6	0.05	0.08	151	0.06	0.4	9	6.65	1.1	0.64	15.65	0.27	4.1	0.028	3.64	65.7	23.2	0.05	86	0.36	0.86	24.3	1.7
D	WWS009	140	110	2.47	0.05	0.07	179	-0.02	0.7	22	9.65	0.9	0.7	18.45	0.3	4.9	0.137	2.9	76.4	34	0.06	109	0.6	0.69	26.4	2.7
D	WWS010	140	120	2.83	0.07	0.09	177	-0.02	0.7	16	14.55	1.3	0.82	25.8	0.31	5.2	0.138	3.54	74.8	38.1	0.06	118	0.75	0.88	27.8	2.4
D	WWS011	140	120	2.88	0.09	0.1	202	-0.02	0.9	23	15.4	1.3	0.95	23	0.37	4.5	0.102	3.71	84.1	46.9	0.06	113	0.68	0.96	22	4
D	WWS012	140	120	2.27	0.03	0.08	166	-0.02	0.6	15	10.8	0.8	0.64	19.9	0.32	3.8	0.012	4.03	69.2	31.1	0.04	78	0.51	0.86	16.1	1.9
D	WWS013	220	70	2.91	0.02	0.12	184.5	-0.02	0.7	27	3.46	1.5	1.22	9.82	0.34	4.8	-0.005	2.28	76.2	19.4	0.03	150	0.66	0.93	18.4	3.7
D	WWS014	200	110	2.95	0.01	0.11	110	-0.02	0.6	17	5.49	1.6	1.63	12.2	0.29	3	-0.005	3.81	46.4	19.5	0.02	195	0.61	1.04	11.1	3.9
D	WWS015	210	30	2.34	-0.01	0.07	139.5	-0.02	0.4	16	1.28	1.2	0.95	4.64	0.27	3	-0.005	0.84	57.5	20.2	0.02	116	0.4	0.4	12.2	2.6
D	WWS016	10	10	0.07	0.01	0.07	4.6	0.05	6.6	572	0.59	2.4	0.53	0.65	-0.05	0.1	-0.005	0.17	1.9	1	0.42	122	0.09	0.06	0.6	88.1
D	WWS017	20	30	0.18	0.16	0.59	9.59	0.15	91.1	8220	0.97	6.8	3.63	2.12	0.13	0.4	0.041	0.3	4	3.4	1.25	4050	0.28	0.09	1.8	549
D	WWS018	20	20	0.11	0.22	0.37	7.58	0.15	83.5	2210	0.77	5.9	2.23	1.48	0.07	0.3	0.017	0.22	3.3	2.3	1.1	1280	0.25	0.08	1.1	296
D	WWS019	10	40	0.57	0.32	0.16	13.95	0.18	388	-1111	1.03	4.5	19.05	2.55	0.6	0.4	0.075	0.4	5.5	6.4	4.61	4400	0.67	0.08	1.9	2550
D	WWS020	70	130	2.07	0.14	0.04	72.8	0.04	3.7	242	14.4	3	0.97	13.25	0.17	3.2	0.124	2.87	32.3	25.7	0.11	173	0.41	0.58	10.8	24.1
D	WWS021	60	120	1.51	0.08	0.02	106.5	-0.02	1.7	363	10.25	2.7	0.82	10.9	0.22	3.2	0.092	2.65	46.7	21.3	0.07	109	0.35	0.39	8.8	19.6
D	WWS022	40	80	0.7	0.03	0.02	116.5	-0.02	0.5	51	2.59	1	0.65	7.57	0.23	3.8	0.012	2.5	50.2	19.4	0.02	78	0.38	0.36	14.2	12.2
D	WWS023	90	100	2.41	0.06	0.02	64.3	-0.02	0.8	20	17.75	3.2	0.64	15.25	0.15	3.4	0.128	2.42	27.8	29.7	0.09	113	0.18	0.23	12.5	2.6
D	WWS024	60	80	1.8	0.06	0.07	41.3	0.03	0.7	34	5.76	3.3	0.77	9.92	0.12	3.7	0.102	2.21	17.8	14.1	0.04	115	0.35	0.7	11.8	3.8
D	WWS025	160	40	1.63	0.09	0.05	36.2	0.03	0.7	30	4.16	3.9	0.72	11.2	0.12	3.2	0.067	2.23	15.4	11.4	0.05	85	0.29	0.56	13.3	3.5
D	WWS026	90	140	2.71	0.21	0.03	81	-0.02	0.8	15	14.1	2.3	1.81	23.2	0.2	3.5	0.321	2.42	35.5	28	0.1	90	1.34	0.32	18.7	4
D	WWS027	80	140	1.59	0.06	0.05	159.5	-0.02	0.5	27	7.54	1.8	0.62	16.55	0.32	3.7	0.106	3.25	68.5	17.8	0.05	85	0.44	0.56	14.9	3.8
D	WWS028	80	110	1.69	0.07	0.08	175.5	0.02	0.5	27	6.87	2	0.58	13.7	0.31	4.7	0.039	2.58	77.8	19.3	0.07	72	0.32	0.45	19.5	2.7
D	WWS029	60	90	1.17	0.07	0.03	62.7	-0.02	0.3	12	6.04	1.3	0.5	12	0.14	2.9	0.06	2.38	27.4	22.1	0.04	65	0.19	0.33	11.8	1.6
D	WWS030	60	100	1.42	0.05	0.02	94.5	-0.02	0.4	13	8.84	1.1	0.72	11.7	0.21	2.6	0.163	2.01	40.9	25.7	0.06	116	0.27	0.2	9.9	1.9
D	WWS031	50	50	1.11	0.08	0.04	51.5	-0.02	0.3	19	6.23	1	0.44	9.98	0.14	3.4	0.034	2.22	22.4	18	0.03	65	0.24	0.37	12	2.2
D	WWS032	50	50	1.15	0.07	0.03	54.5	-0.02	0.2	14	5.79	0.9	0.55	9.83	0.16	3.2	0.041	2.35	23.5	14.8	0.03	77	0.31	0.39	10.3	1.8
D	WWS033	50	30	1.05	0.07	0.04	65.3	-0.02	0.2	13	4.5	0.9	0.73	8.91	0.19	2.6	0.024	2.1	27.8	12.1	0.02	95	0.3	0.4	8.4	1.8
D	WWS034	70	30	1.32	0.05	0.04	70.6	0.03	0.3	16	4.65	1	0.7	9.32	0.18	2.9	0.027	2.44	30.1	11.3	0.02	91	0.33	0.47	8.4	2.7
D	WWS035	100	50	2.21	0.07	0.06	151	-0.02	0.3	20	5.3	1.2	0.74	11.25	0.36	2.9	0.02	2.85	63.4	12.2	0.02	92	0.45	0.57	9.1	3
D	WWS036	100	60	1.74	0.06	0.06	139	-0.02	0.3	15	6.09	0.9	0.61	13.45	0.34	3.9	0.033	3.09	57.9	14.1	0.02	82	0.52	0.67	14	1.7
D	WWS037	80	60	1.72	0.04	0.07	140.5	-0.02	0.3	15	5.39	1	0.59	12	0.33	3.3	-0.005	3.21	58.9	15.2	0.02	73	0.31	0.73	8.6	2.5
D	WWS038	80	60	1.6	0.03	0.06	139.5	-0.02	0.4	20	4.19	0.8	0.73	9.91	0.33	3.1	-0.005	2.35	57.6	14	0.02	90	0.49	0.68	11.5	3.9
D	WWS039	200	100	2.47	0.03	0.08	322	-0.02	0.3	16	6.5	0.6	0.66	14.45	0.64	3.8	0.006	3.62	136.5	14.8	0.02	94	0.46	0.78	9.5	1.9
D	WWS040	180	100	3.98	0.04	0.22	209	0.02	0.6	28	6.42	1.5	0.8	17.25	0.47	5.7	-0.005	3.35	91.7	15.3	0.05	121	0.95	1.56	22.9	3.8

**Appendix B: Soil Sample Results**

H1000	Sample	B	Ba	Be	Bi	Ca	Ce	Cd	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	
H1001		ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	
H1002		B-ICP69	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	
D	WWS041	20	50	1.21	1.5	0.61	29.9	0.09	335	-1111	2.36	4.5	19.15	4.86	0.87	1.2	0.095	0.31	12.1	7.6	4.84	3200	0.7	0.13	5	4020	
D	WWS042	10	30	0.32	0.86	0.55	13.55	0.05	458	-1111	1.1	3.1	27.1	3.87	1.12	0.6	0.05	0.19	5.9	6.2	5.11	2300	1.01	0.09	2.6	2240	
D	WWS043	70	30	0.24	1.94	0.36	7.01	0.1	342	-1111	0.6	3.7	17.7	3.73	0.65	0.4	0.059	0.12	3.1	3.3	8.47	2730	0.56	0.05	1.6	2530	
D	WWS044	20	40	1.51	0.84	0.62	8.35	0.07	594	-1111	1.17	3.2	22.6	6.01	0.76	0.4	0.062	0.2	3.5	5.1	4.25	6240	1	0.08	2.3	1990	
D	WWS045	40	20	0.13	0.24	0.36	3.94	0.17	223	1650	1.28	4.6	4.75	1.47	0.21	0.2	0.014	0.19	1.7	1.8	3.28	4300	0.27	0.08	0.8	979	
D	WWS046	20	20	0.33	0.57	1.67	8.96	-0.02	395	-1111	1.32	1	19.5	5.09	0.68	0.3	0.161	0.11	3.6	15.6	8.2	2190	0.5	0.19	1.6	1110	
D	WWS047	30	40	1.01	0.5	0.26	20	0.08	428	-1111	1.27	3.9	17.95	5.01	0.64	0.9	0.103	0.28	8.2	14.8	5.78	4010	0.8	0.09	5	2220	
D	WWS048	50	70	1.13	0.47	0.26	45.9	0.11	432	-1111	1.86	3.3	17.1	6	0.63	1.7	0.117	0.76	18.6	8.8	5.97	4190	0.75	0.24	6.6	2580	
D	WWS049	60	70	2.48	0.66	0.27	59.8	0.08	320	-1111	4.51	4.9	13.55	8.3	0.62	2	0.112	1.12	23.9	21	4.97	2760	0.67	0.42	9.7	2100	
D	WWS050	70	70	1.17	0.16	0.36	38.1	0.07	85.7	-1111	3.17	2.6	5.26	6.54	0.27	1.7	0.014	1.8	16.6	11.4	4.82	1440	0.46	0.54	6.5	521	
D	WWS051	80	70	1.67	0.51	0.29	66	0.04	140.5	-1111	4.63	3	8.1	7.77	0.38	2.2	0.054	1.83	28.4	12.9	3.87	1900	0.55	0.64	8.8	783	
D	WWS052	60	100	2.1	0.2	0.28	97.7	-0.02	49.1	-1111	9.75	1	4.08	14.55	0.3	3.5	0.047	3.03	42.6	29.6	3.11	350	0.48	0.89	13.4	339	
D	WWS053	80	120	2.01	0.15	0.21	119.5	-0.02	30.1	7000	9.84	0.9	2.69	15.2	0.29	2.7	0.034	3.11	51.4	25.1	2.27	419	0.46	0.73	8.8	206	
D	WWS054	70	110	1.55	0.07	0.21	172.5	-0.02	34.2	-1111	6.09	0.6	2.05	11.6	0.35	1.9	0.018	3.02	74.5	18.8	3	292	0.18	0.72	4.6	168.5	
D	WWS055	60	70	1.65	0.52	0.59	92.3	-0.02	76.5	-1111	5.64	1.9	5.38	12.55	0.33	1.4	0.092	1.8	39.8	24.6	6.4	570	0.55	0.49	5.7	515	
D	WWS056	40	70	1.41	0.57	0.75	95.5	-0.02	35	4560	6.37	0.9	3.83	14.7	0.29	1.8	0.061	2.03	41.2	24.2	6.52	406	0.68	0.56	6.9	354	
D	WWS057	50	70	1.56	0.08	0.06	84	0.03	0.8	87	5.23	1.2	0.42	12.45	0.15	3.9	0.067	3.1	37.2	15.8	0.07	60	0.42	0.62	17.3	5.9	
D	WWS058	40	100	1.44	0.05	0.06	113.5	0.03	0.6	43	7.39	0.8	0.42	15.05	0.2	4.4	0.029	3.43	47.7	19.4	0.06	58	0.33	0.63	17.7	3.8	
D	WWS059	50	100	1.26	0.05	0.05	63	-0.02	0.7	47	5.41	1.2	0.82	12.9	0.12	4.2	0.05	2.66	27	22	0.04	103	0.42	0.58	15.7	4.3	
D	WWS060	20	50	0.57	0.49	0.57	13	0.12	301	-1111	1.77	4.6	10.75	4.36	0.39	0.6	0.041	0.27	5.4	6.7	7.61	4960	1.73	0.15	2.6	2820	
D	WWS061	10	50	1.37	0.49	0.1	22	0.13	274	6770	2.14	4	8.02	5.53	0.2	0.9	0.063	0.72	9.2	10.3	5.64	3170	2.12	0.32	4.4	3570	
D	WWS062	20	60	1.41	0.57	0.2	30.4	0.13	476	-1111	1.43	5.1	12.5	5.27	0.26	1	0.057	0.53	12.6	5	8.07	4420	0.91	0.21	3.3	3160	
D	WWS063	30	30	0.38	0.27	0.42	7.4	0.13	277	-1111	1.12	7.6	12.1	3.09	0.17	0.3	0.077	0.19	3.3	2.1	7.39	4910	0.64	0.07	1.4	2210	
D	WWS064	10	50	0.12	0.24	0.44	5.36	0.24	323	-1111	1.57	10.2	11.55	3.44	0.17	0.2	0.026	0.14	2.4	2.2	3.78	8030	0.47	0.06	0.9	1210	
D	WWS065	10	30	0.19	0.38	1.9	7.85	0.11	281	-1111	1.01	7.4	14.5	4.53	0.19	0.3	0.067	0.11	3.3	3.8	7.75	2980	0.6	0.07	1	1035	
D	WWS066	10	50	0.72	0.32	0.93	12.15	0.19	213	-1111	2.24	5.5	11.85	4.78	0.18	0.4	0.053	0.23	5.7	7.7	5.81	4170	0.51	0.12	1.9	2110	
D	WWS067	40	90	1.95	0.32	0.65	86.5	0.09	131.5	-1111	6.81	3.5	6.22	10.95	0.4	1.8	0.07	1.53	36.6	27.9	4.38	2120	0.57	0.48	6.8	1570	
D	WWS068	10	40	0.53	0.39	0.49	19.75	0.06	349	-1111	1.78	3.2	24.2	6.89	1.09	0.7	0.06	0.7	8.4	4.8	3.33	1920	1.23	0.25	2.8	2420	
D	WWS069	20	30	0.32	0.27	0.94	21.1	0.03	308	-1111	1.64	3.3	19	9.42	0.58	0.8	0.047	0.36	9.1	5.7	6.43	2020	1.05	0.18	3	1115	
D	WWS070	10	10	0.17	0.08	4.23	7.94	0.04	73.5	-1111	1.01	1.9	5.94	3.42	0.18	0.5	0.011	0.15	3.8	2.8	11.5	1300	0.45	0.18	1.7	568	
D	WWS071	140	40	1	0.16	1.59	19.3	0.02	247	-1111	2.33	5.5	14.4	7.24	0.39	0.9	0.038	0.85	8.5	5.7	6.25	2060	0.71	0.52	3.2	833	
D	WWS072	20	40	0.72	0.16	1.86	25.6	0.02	139	-1111	1.83	2.1	10.35	6.53	0.31	1.2	0.044	0.72	11.4	8.1	8.1	933	0.51	0.51	3.7	879	
D	WWS073	10	20	0.49	0.52	2.34	13.85	0.07	147.5	8430	1.61	11.1	8.41	3.7	0.27	0.5	0.042	0.21	6.5	6.6	11.45	1730	0.4	0.22	2.1	686	
D	WWS074	30	100	1.51	0.22	0.35	89.5	0.16	109.5	-1111	5.38	3.6	8.24	8.75	0.35	1.5	0.035	1.78	39.8	13.1	4.09	1060	0.43	0.55	6.1	672	
D	WWS075	30	120	1.04	0.04	1.1	128.5	0.03	30.9	6460	2.52	1.5	2.53	9.41	0.28	3.5	0.006	2.78	56.7	8.5	4.67	435	0.29	0.76	12.4	244	
D	WWS076	40	160	1.44	0.03	0.22	177	-0.02	8.5	654	4.13	1	0.96	12.95	0.29	4.4	0.018	3.94	77.9	12.5	1.53	177	0.37	0.89	18.4	75.9	
D	WWS077	50	170	2.2	0.07	0.15	193	0.02	1.2	76	4.94	0.8	1.04	18.75	0.29	4.5	0.01	4.38	82.9	17	0.07	65	0.73	1.46	20.6	6.9	
D	WWS078	50	140	2.44	0.03	0.14	175.5	-0.02	0.8	55	4.98	0.7	0.56	14.25	0.27	4.2	-0.005	4.17	74.4	14.7	0.04	74	0.38	1.38	18.6	4.5	
D	WWS085	50	100	1.14	0.25	0.8	82.1	-0.02	58.1	3330	10.65	1.3	3.95	7.73	0.21	1.9	0.022	2.16	35.9	15.3	7.73	683	0.28	0.53	6.8	299	
D	WWS086	30	100	1.34	0.67	0.61	62.6	0.07	148	5350	7.22	2.4	6.75	7.32	0.23	1.4	0.041	1.74	27	12.1	7.49	1990	0.28	0.45	4.6	695	
D	WWS087	30	90	1.64	0.74	0.58	62	0.02	79.3	6370	6.37	1.3	5.72	8.47	0.31	1.3	0.04	2.39	27.5	13	7.23	707	0.28	0.61	5.7	487	
D	WWS088	60	110	1.43	0.52	0.43	72.9	-0.02	70.9	4200	8.21	2	5.37	7.38	0.23	1.1	0.045	1.93	33	15.2	7.05	1080	0.23	0.46	3.7	411	
D	WWS089	50	100	2.15	0.3	0.58	111	0.04	139	6230	34.1	3.2	7.86	10.2	0.45	1.6	0.078	1.63	53.7	27.2	6.62	1520	0.31	0.42	7.2	724	
D	WWS090	20	140	1.4	0.07	0.54	173.5	-0.02	40.4	2730	19.45	1.7	3.11	12.65	0.27	2.9	0.016	3.19	77.8	16.5	4.38	594	0.28	0.79	14.8	213	
D	WWS091	20	160	1.15	0.06	0.47	150	-0.02	43.6	7610	17.8	1.3	3.61	11.6	0.26	2.5	0.018	2.91	68.7	15.1	4.82	428	0.27	0.89	10.8	266	
EOF																											



**Appendix B: Soil Sample Results**

H1000	Sample	P	Pb	Re	Rb	S	Sb	Sc	Se	Sr	Ta	Te	Th	Ti	Tl	U	V	Y	Zn	Zr
H1001		ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
H1002		MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61
D	BWA025	100	19.5	0.002	217	0.01	0.46	1.8	2	24.8	1.09	-0.05	30.9	0.092	0.91	2.6	3	20.1	4	68
D	BWA026	160	21.1	-0.002	241	0.02	0.34	3.4	2	25	2.08	-0.05	46.1	0.156	1.04	4.2	10	25.2	7	103
D	BWA027	220	17.6	-0.002	206	0.03	0.33	2.8	2	23	1.55	-0.05	51.9	0.139	0.92	4.1	8	31.8	8	115.5
D	BWA028	240	19.3	0.002	261	0.02	0.33	2.7	2	30.7	1.02	-0.05	51.8	0.094	1.18	3.5	6	26.1	8	83
D	BWA029	300	23.5	0.002	178.5	0.07	0.37	5.6	4	21.6	1.91	-0.05	36	0.159	0.93	8.3	15	21.4	23	81.4
D	BWA030	310	28.4	0.002	137	0.1	0.43	5.7	3	18.7	2.53	-0.05	24	0.213	0.7	6.5	28	14.3	21	64.2
D	BWA031	120	12.9	0.002	174	0.01	0.25	2.1	1	21.8	0.9	-0.05	33.3	0.097	0.74	2.7	3	19.5	4	73
D	BWA032	190	20.1	-0.002	247	0.03	0.28	3.1	1	30.5	1.41	-0.05	38.2	0.139	1.1	4.2	7	18.5	7	107
D	BWA033	220	21.1	0.002	242	0.04	0.42	4.6	2	26.5	2.84	-0.05	33.9	0.219	1.09	5	18	28	13	118
D	BWA034	160	17.4	-0.002	225	0.02	0.31	3.6	1	30.3	1.46	-0.05	29.4	0.16	0.98	3.8	11	18.7	12	114
D	BWA035	190	21.1	-0.002	220	0.03	0.38	4	2	24.7	2.16	-0.05	43.9	0.182	1	5	16	28	15	121.5
D	BWA036	230	21.7	-0.002	254	0.03	0.53	6.2	2	26.8	2.13	-0.05	44.1	0.171	1.23	6.1	16	22.2	34	100
D	BWA037	190	21.9	-0.002	238	0.02	0.31	3.5	2	29.4	1.79	-0.05	30.7	0.182	1.13	5.2	14	18.5	13	107.5
D	BWA038	260	22.2	-0.002	232	0.05	0.28	4.6	1	26.9	1.88	-0.05	34.7	0.195	1.07	4.5	16	19.6	14	94.8
D	BWA039	120	17.6	0.002	226	0.02	0.29	3.4	1	29.9	1.6	-0.05	24.9	0.182	1.03	4	13	17.6	9	108.5
D	BWA040	110	14.4	-0.002	202	0.01	0.3	1.1	1	24.9	0.67	-0.05	25.9	0.072	0.87	1.9	2	14.7	4	71.6
D	BWA041	170	8.6	-0.002	69.8	0.04	0.29	1	1	18	0.9	-0.05	37.5	0.105	0.29	2.9	3	21.9	4	110.5
D	BWA043	120	6	-0.002	91.2	0.01	0.75	2.1	1	8.6	2.4	-0.05	41.7	0.16	0.48	3.4	3	25	23	138
D	BWA044	150	22.8	-0.002	221	0.04	0.44	4.6	2	20.9	2.81	-0.05	39.6	0.188	1.07	4.4	20	20.9	38	133
D	BWA045	170	13.8	-0.002	185.5	0.08	0.31	2.1	1	22.4	1.81	-0.05	29.7	0.105	0.74	2.6	4	15.9	10	61.6
D	BWA046	80	10	-0.002	172.5	0.02	0.5	1.2	1	20.7	1.18	-0.05	18.5	0.053	0.71	1.8	1	11.1	6	55.5
D	BWA047	120	13.1	-0.002	182.5	0.02	0.52	2.2	1	18.5	2.55	-0.05	36.4	0.136	0.76	3.5	4	18.4	10	138
D	BWA048	110	10.9	0.002	197.5	0.02	0.81	2.7	1	16	2.23	-0.05	32.4	0.118	0.86	3	5	21.2	13	103.5
D	BWA049	100	12.6	-0.002	207	0.01	0.79	2.3	1	17.6	2.05	-0.05	25.4	0.11	0.88	2.9	3	19.1	6	112
D	BWA074	240	10.8	0.003	103.5	0.02	0.27	4.2	2	28.1	2.28	-0.05	56.6	0.28	0.48	3.8	12	22.4	7	142.5
D	BWA075	200	19.4	0.002	181	0.02	0.47	4.3	2	25.6	2.02	-0.05	38.7	0.234	0.91	3.8	20	14.2	14	112
D	BWA076	300	26.7	0.002	260	0.03	0.27	6.4	2	28.2	1.94	-0.05	36.7	0.219	1.13	5	18	13.8	32	101
D	BWA077	310	17.6	0.002	251	0.03	0.36	3	2	20	1.49	-0.05	34.3	0.097	1.21	5.4	6	19.9	15	80.2
D	BWA078	200	15.9	0.002	233	0.01	0.38	2.1	1	20.4	1.63	-0.05	40.8	0.114	1.04	3.8	6	21.7	14	127.5
D	BWA079	170	9.6	0.002	117.5	0.02	0.37	1.2	1	12	0.94	-0.05	38.3	0.08	0.49	2.9	2	18.9	10	109.5
D	BWA080	170	12.6	0.002	160	0.01	0.47	2	2	17	1.61	-0.05	41	0.112	0.71	4	3	25.8	11	134.5
D	BWA081	130	18.8	-0.002	192.5	0.03	0.4	4.1	3	25.7	2.6	-0.05	28.6	0.269	0.88	4.5	30	18.6	27	117
D	BWA082	150	11.7	0.003	156	0.02	0.19	1.9	1	27.4	1.32	-0.05	45.4	0.167	0.66	2.9	3	21.1	14	105
D	BWA083	280	11.6	-0.002	57.2	0.16	0.31	1.2	1	16.6	0.43	-0.05	7	0.064	0.26	1.5	5	4.6	12	33.9
D	BWA084	190	10.7	0.002	127	0.01	0.26	2.2	2	19.3	2	-0.05	64.2	0.217	0.53	4.9	6	38	14	199
D	BWA085	110	12.8	0.002	183	0.01	0.27	1.8	1	23.5	1.42	-0.05	29.5	0.146	0.79	3.2	7	21.3	9	112
D	BWA086	250	14.4	0.002	144	0.03	0.49	2.1	2	25.5	1.96	-0.05	36.7	0.147	0.56	3.2	4	25.3	17	135
D	BWA087	190	13.4	0.002	193	0.03	0.63	2.6	1	20.5	1.32	-0.05	26.1	0.124	0.89	2.3	6	16	44	88.3
D	BWA088	170	14.2	0.002	234	0.03	0.41	2.8	1	26.2	1.92	-0.05	28.1	0.161	1.01	3.3	7	18.2	12	118.5
D	BWA089	110	25.4	0.002	187	0.04	0.54	4.3	2	20.5	3.99	-0.05	22.1	0.309	0.85	4.5	44	13.6	21	71.5
D	BWA090	190	16	-0.002	183	0.05	0.31	2.1	1	21.8	2.01	-0.05	45.4	0.133	0.77	4.4	6	26.1	25	126.5
D	LWS013	370	8.3	0.002	11.2	0.03	0.73	1.9	1	19.1	0.53	-0.05	4.2	0.271	0.06	1.3	34	5.7	3	115
D	LWS014	330	5.5	-0.002	12.1	0.03	0.49	1.2	1	13.2	0.34	-0.05	2.9	0.183	0.05	1	22	4.8	3	85.9
D	LWS026	260	4	-0.002	3.9	0.07	0.21	0.6	-1	12.1	0.2	-0.05	2.4	0.112	0.02	0.5	10	4.4	9	48.3
D	LWS038	320	8.1	-0.002	4.6	0.08	0.31	0.9	-1	20.7	0.15	-0.05	2.6	0.091	0.02	0.7	7	2.6	18	75
D	LWS039	190	4.1	-0.002	1.8	0.05	0.22	0.5	-1	15.5	0.11	-0.05	1.4	0.094	-0.02	0.5	5	2.1	3	54.6
D	LWS040	670	7.2	-0.002	2.4	0.14	0.24	0.5	-1	34.3	0.18	-0.05	1.2	0.093	0.02	0.4	9	1.9	15	43.3
D	LWS041	280	3.3	-0.002	2.5	0.05	0.26	0.6	-1	9.3	0.24	-0.05	1.5	0.147	0.02	0.6	15	4.6	9	65.4

**Appendix B: Soil Sample Results**

H1000	Sample	P	Pb	Re	Rb	S	Sb	Sc	Se	Sr	Ta	Te	Th	Ti	Tl	U	V	Y	Zn	Zr
H1001		ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
H1002		MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61
D	LWS042	320	5.4	0.002	1.6	0.06	0.24	0.4	-1	9.5	0.07	-0.05	1.3	0.055	-0.02	0.4	6	3.2	8	41.2
D	LWS053	130	8.4	-0.002	97.9	0.02	0.17	0.7	-1	14.1	0.33	-0.05	10.4	0.046	0.43	1	3	6.6	4	35.3
D	LWS054	200	10.7	-0.002	151	0.02	0.19	0.9	-1	14	0.5	-0.05	30.4	0.06	0.59	2	3	14.8	2	70.9
D	LWS055	520	9.4	0.002	16.2	0.09	0.3	0.8	-1	19.8	0.32	-0.05	10.2	0.085	0.08	1	6	7.2	15	58.7
D	LWS056	590	10	-0.002	8.3	0.06	0.59	1.5	1	14.4	0.64	-0.05	4.7	0.287	0.04	1.5	43	5.2	9	98.4
D	LWS057	160	2	-0.002	11.4	0.02	0.17	1.2	-1	16.2	0.39	-0.05	3.3	0.211	0.04	1.3	17	3.8	3	149.5
D	LWS058	470	5.3	-0.002	2	0.1	0.17	0.5	-1	20.7	0.13	-0.05	1.6	0.079	-0.02	0.5	7	2.5	6	57
D	LWS059	370	4.6	-0.002	1.9	0.05	0.19	0.8	-1	10.7	0.32	-0.05	1.8	0.191	-0.02	0.7	19	3.7	9	65.9
D	WWS001	330	27.1	-0.002	266	0.1	0.59	4.2	5	20	1.86	0.05	30.9	0.079	1.43	18.3	7	34.1	65	77.7
D	WWS002	180	13.9	-0.002	274	0.03	0.69	3.1	2	19.2	1.68	-0.05	25.7	0.072	1.24	3.8	4	21.1	12	78
D	WWS003	120	24.1	-0.002	178.5	0.03	0.88	2.2	1	7.8	1.43	-0.05	11.8	0.041	0.98	4.4	2	19.7	19	68.7
D	WWS004	210	38.3	-0.002	207	0.09	0.75	5.4	6	18.3	1.87	0.06	32.1	0.089	1.6	23.4	10	27.5	57	70.9
D	WWS005	160	33.3	-0.002	217	0.06	0.69	3.3	2	20.4	2.11	0.05	32	0.106	1.06	6.7	8	18.4	19	83.5
D	WWS006	150	13.6	-0.002	213	0.02	0.9	3.2	2	23.9	2.75	-0.05	39.5	0.128	1.03	3.4	5	22.5	13	95.2
D	WWS007	140	9.6	-0.002	131.5	0.02	0.88	3.1	1	20.1	3.08	-0.05	41.9	0.157	0.57	3.4	3	22.3	6	105
D	WWS008	140	14.1	-0.002	253	0.02	0.64	3.6	1	24.4	3.15	-0.05	36	0.137	1.08	3.3	4	19.6	7	109
D	WWS009	140	10.9	-0.002	220	0.01	1.23	3.8	2	16.3	3.28	-0.05	42	0.163	0.93	4.2	5	25.2	9	125
D	WWS010	140	12.9	-0.002	265	0.02	0.74	4.7	2	17.6	3.44	-0.05	42	0.169	1.17	5.3	7	30.6	13	131
D	WWS011	170	14.8	-0.002	274	0.04	0.62	4.1	2	17.8	2.75	-0.05	48.3	0.139	1.2	5.4	8	32.1	10	109.5
D	WWS012	140	15.9	-0.002	288	0.01	0.42	3.3	2	17.3	2.06	-0.05	41.3	0.094	1.26	4.1	5	26	9	93
D	WWS013	150	11.7	-0.002	153	0.02	0.41	2.6	2	13.3	2.43	-0.05	46.3	0.121	0.62	4.3	3	30.9	5	114.5
D	WWS014	120	14.5	-0.002	247	0.01	0.45	2.1	1	19.1	1.61	0.06	28.9	0.073	1.04	3.1	3	24.2	4	76.1
D	WWS015	100	4.1	-0.002	50.9	0.01	0.32	1.9	1	7.1	1.49	0.05	34.5	0.104	0.21	3.3	3	23.9	4	73.8
D	WWS016	160	2.6	-0.002	6.3	0.15	0.09	0.4	-1	19	-0.05	-0.05	1	0.008	0.03	0.2	2	1.2	36	3.3
D	WWS017	230	18.9	-0.002	11.1	0.14	0.32	1.4	2	43.5	0.15	-0.05	2	0.031	0.1	0.3	16	2.4	146	12.8
D	WWS018	200	38	-0.002	8.4	0.16	0.35	1.3	1	36.1	0.09	-0.05	1.4	0.036	0.05	0.2	10	1.7	68	11.9
D	WWS019	170	16.1	-0.002	17.5	0.09	1.27	4.9	4	23.6	0.14	0.16	2.4	0.036	0.29	0.5	42	2.8	228	13.4
D	WWS020	90	12.4	-0.002	204	0.02	1.12	2	2	11.7	1.44	-0.05	15.1	0.055	1	3	3	17.4	23	66.6
D	WWS021	100	9.4	-0.002	169.5	0.02	1.27	1.6	1	9.3	1.16	-0.05	21.7	0.048	0.8	3.1	2	18.6	27	69.6
D	WWS022	90	8	-0.002	107	0.01	0.62	1.5	1	11.3	1.36	-0.05	26.4	0.105	0.48	2.3	2	18.9	2	92.4
D	WWS023	60	8.1	-0.002	191	0.01	2.15	2.6	1	7.4	1.9	-0.05	11.6	0.05	1.03	3.5	2	19.8	15	66.5
D	WWS024	60	9.2	-0.002	159	0.02	0.66	1.8	1	13.9	1.79	-0.05	5.8	0.041	0.76	2.3	1	14.8	11	69.2
D	WWS025	70	9.3	-0.002	167.5	0.03	0.54	2.7	-1	11.9	1.86	-0.05	7.7	0.044	0.65	2.2	2	12	8	62.6
D	WWS026	70	5.7	0.002	209	0.01	2.56	3.4	-1	10.5	2.81	-0.05	17.6	0.097	1.05	3.2	8	20.3	18	75.6
D	WWS027	120	10.5	-0.002	229	0.01	0.8	2.8	1	20.5	1.66	-0.05	32	0.098	0.91	3.2	4	24.2	8	91.3
D	WWS028	140	8.9	-0.002	179.5	0.02	0.76	3.1	-1	25	1.9	-0.05	34.6	0.142	0.7	3.6	4	23.1	7	115
D	WWS029	70	8.3	-0.002	177.5	0.01	0.83	2	-1	15	1.44	-0.05	11.1	0.057	0.71	2.3	2	17.8	7	60.8
D	WWS030	80	5.7	-0.002	171.5	0.01	1.57	2	-1	10.3	1.15	-0.05	18.7	0.051	0.77	2.5	2	18.4	12	58.9
D	WWS031	60	8.3	-0.002	169.5	0.01	0.85	1.8	-1	8.5	1.38	-0.05	10.8	0.064	0.68	2.6	2	17.9	6	68.9
D	WWS032	70	9.4	-0.002	175.5	0.03	0.59	1.8	-1	7.3	1.25	-0.05	12.8	0.054	0.74	2.7	2	16.5	5	63.7
D	WWS033	70	8.6	-0.002	158	0.03	0.52	1.5	-1	5.5	1.02	-0.05	15.8	0.046	0.64	2.6	2	17	4	55.4
D	WWS034	70	10.1	-0.002	175.5	0.02	0.43	1.6	-1	5.6	1.03	-0.05	17.7	0.048	0.7	2.7	2	17.3	5	64.7
D	WWS035	120	11.4	-0.002	198	0.03	0.38	1.8	-1	8.7	1.14	-0.05	36.8	0.058	0.74	3.3	2	23.8	4	68.2
D	WWS036	110	11.9	-0.002	223	0.01	0.4	2.2	-1	11.4	1.69	0.06	32.1	0.082	0.88	3.6	3	25.2	4	89.6
D	WWS037	110	11.7	-0.002	233	0.02	0.28	1.8	-1	10.2	1.14	-0.05	34	0.048	0.9	3.5	2	23.1	4	72
D	WWS038	120	9.6	-0.002	166	0.03	0.31	2.1	-1	10	1.44	-0.05	32.5	0.082	0.65	3.4	4	21.7	3	74.1
D	WWS039	230	13.8	-0.002	259	0.02	0.36	2.2	1	14.8	1.24	0.06	80.4	0.069	0.98	4.8	3	42.3	4	97.9
D	WWS040	190	17	-0.002	244	0.03	0.49	3.4	2	24.3	2.78	-0.05	52.5	0.135	0.94	5.3	4	31.9	7	146

**Appendix B: Soil Sample Results**

H1000	Sample	P	Pb	Re	Rb	S	Sb	Sc	Se	Sr	Ta	Te	Th	Ti	Tl	U	V	Y	Zn	Zr
H1001		ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
H1002		MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61	MS61
D	WWS041	90	18.9	-0.002	18.3	0.04	1.64	11.3	4	19.2	0.47	0.35	4.9	0.087	0.27	1.3	87	9.2	297	37.8
D	WWS042	60	14.4	-0.002	11	0.03	1.05	5.9	4	11.5	0.2	0.39	2.8	0.056	0.09	0.5	110	2.4	334	19.4
D	WWS043	100	11.6	-0.002	6.1	0.05	0.84	5.7	4	30.1	0.11	0.24	1.3	0.042	0.09	0.2	96	1.7	286	17.4
D	WWS044	90	10.9	-0.002	10.7	0.04	1.15	7.5	3	19.6	0.13	0.34	1.8	0.041	0.24	0.4	87	1.6	279	14
D	WWS045	170	22.5	-0.002	7	0.1	0.37	2.2	1	42.8	0.07	0.09	0.6	0.022	0.07	0.2	10	1.1	69	6
D	WWS046	40	4.6	-0.002	5.5	0.02	2.03	17.9	3	8.4	0.12	0.24	1.6	0.045	0.11	0.3	101	1.9	243	12.6
D	WWS047	100	13.7	-0.002	15.5	0.05	1.84	5.2	4	29.1	0.39	0.18	4.7	0.056	0.23	0.8	82	4.6	365	26.1
D	WWS048	90	14.8	-0.002	47.6	0.04	2.19	6.8	6	23	0.66	0.25	8.2	0.066	0.28	1.8	72	10.2	367	45.8
D	WWS049	100	19.6	-0.002	77.2	0.04	2.11	7.9	4	16.3	1.17	0.16	11.1	0.068	0.5	3.8	56	17.3	231	50.2
D	WWS050	90	12.4	-0.002	121.5	0.02	1.28	3.8	2	26.9	0.76	0.06	8.3	0.055	0.55	1.3	32	8.5	122	40.2
D	WWS051	90	16.4	-0.002	129	0.03	1.5	4.8	3	18.2	1.03	0.1	14.9	0.073	0.6	1.8	41	13	158	52
D	WWS052	80	18.3	-0.002	214	0.01	0.84	4.5	3	16	1.64	0.08	23.5	0.098	0.93	2.8	25	15.8	139	83.9
D	WWS053	110	18.2	-0.002	216	0.02	0.59	3.2	2	17.2	1.18	0.1	29.9	0.065	0.89	2.9	16	16.9	64	66
D	WWS054	130	11.8	-0.002	209	0.02	0.55	3.1	4	14.4	0.63	0.08	42.9	0.039	0.84	2.6	24	21	104	48.1
D	WWS055	100	13.5	-0.002	121.5	0.04	1.17	7	5	10.9	0.67	0.06	22.7	0.052	0.49	2.3	53	17.2	213	33
D	WWS056	90	13.8	-0.002	141	0.03	0.86	8.7	2	11	0.8	0.06	23.2	0.061	0.55	2.2	31	16.8	71	41.7
D	WWS057	70	12.8	-0.002	205	0.01	0.53	2.3	1	13.5	1.91	0.06	18.3	0.088	0.84	2.9	2	19.5	8	85.4
D	WWS058	110	12.2	-0.002	238	0.02	0.49	2.6	2	22	2.03	-0.05	23.9	0.086	0.98	3.7	3	24.3	6	98.4
D	WWS059	70	9.3	-0.002	184	0.02	0.57	2.2	1	15.2	1.96	0.05	14	0.081	0.78	3.2	2	23.6	5	85.8
D	WWS060	130	17.5	-0.002	14.3	0.06	0.7	3.1	2	23.7	0.22	0.12	2.2	0.052	0.27	0.5	31	3.5	209	19.7
D	WWS061	150	19	0.002	34.3	0.08	0.97	2.7	2	17.6	0.38	-0.05	4.3	0.048	0.2	0.9	21	6.3	156	26.2
D	WWS062	100	11.7	-0.002	23.9	0.05	1.01	3.2	2	21.7	0.27	-0.05	5.8	0.05	0.24	1	36	5.7	316	29.2
D	WWS063	170	19.4	-0.002	9	0.1	1.57	2.7	2	44.4	0.1	-0.05	1.6	0.034	0.12	0.3	34	1.8	254	10.6
D	WWS064	170	30.5	-0.002	5.7	0.13	0.38	3.7	2	65.5	0.07	-0.05	0.9	0.03	0.17	0.2	44	1.4	215	7.4
D	WWS065	110	11.2	0.002	5.3	0.06	0.67	6.2	1	23.9	0.07	0.05	1.3	0.03	0.08	0.2	59	1.9	260	10.5
D	WWS066	160	16.7	0.002	11.2	0.08	0.7	7.8	2	19.9	0.18	-0.05	2.7	0.038	0.31	0.9	44	9.9	214	13.9
D	WWS067	160	16.2	-0.002	108.5	0.06	0.65	5.1	3	26.9	0.79	-0.05	19.6	0.064	0.65	3.2	34	16.4	151	47.7
D	WWS068	70	8.7	-0.002	37.3	0.02	1.13	7.6	7	12.8	0.2	0.28	5.4	0.045	0.18	0.6	95	3.3	322	23
D	WWS069	60	6.6	-0.002	18.6	0.02	0.86	9.6	11	8.9	0.25	0.22	4.8	0.08	0.13	0.5	145	4.1	512	29.2
D	WWS070	50	4.3	-0.002	7.7	0.02	0.56	21.6	3	9.4	0.18	0.08	1.6	0.044	0.03	0.2	58	2.4	97	15.5
D	WWS071	60	8.7	-0.002	37.4	0.02	0.69	11.6	5	17.7	0.28	0.14	4.4	0.052	0.16	0.5	77	3.9	236	27.2
D	WWS072	60	6.5	-0.002	30.9	0.03	0.96	15.3	4	17.5	0.3	0.14	4.5	0.057	0.12	0.6	78	5.4	204	36.5
D	WWS073	70	13.5	-0.002	10.3	0.04	0.93	16.7	3	13.9	0.19	0.11	1.9	0.039	0.15	0.4	48	3	130	17.1
D	WWS074	140	17.5	-0.002	108.5	0.06	0.93	4.7	4	37.1	0.68	0.1	20.8	0.059	0.52	2.1	43	11.7	156	41.3
D	WWS075	120	10.5	-0.002	167.5	0.02	0.34	10.4	3	24.4	1.3	0.06	29.5	0.109	0.66	2.4	33	17.1	63	98.2
D	WWS076	120	12.2	-0.002	234	0.01	0.51	4.9	2	21.3	1.91	0.1	39.6	0.143	0.93	3.2	8	20.8	13	112.5
D	WWS077	150	19.6	-0.002	267	0.02	0.42	3.5	2	28.4	2.36	-0.05	46.9	0.138	1.19	4.7	6	25.3	6	112.5
D	WWS078	140	13.9	-0.002	276	0.01	0.37	3.2	2	29.3	2.19	-0.05	42.4	0.119	1.12	3.7	4	23.8	5	106.5
D	WWS085	70	9	-0.002	133	0.01	0.63	10.7	1	12.8	0.69	-0.05	18.8	0.057	0.55	1.6	25	13.1	71	49.8
D	WWS086	90	9.5	-0.002	103	0.03	0.73	10.8	2	16.2	0.48	-0.05	13.7	0.041	0.58	1.8	28	11.2	96	40.8
D	WWS087	70	10.3	-0.002	133.5	0.01	0.71	10.1	2	16	0.55	-0.05	14	0.046	0.57	1.6	30	11.3	100	37.5
D	WWS088	100	9.5	-0.002	111.5	0.02	0.6	10	2	16	0.35	-0.05	15.8	0.036	0.53	2.3	26	12.7	86	31.2
D	WWS089	120	12.2	-0.002	117	0.03	0.78	11.9	3	22.1	0.61	0.06	18.3	0.071	0.57	3.3	35	19	122	50
D	WWS090	130	13	-0.002	213	0.02	0.44	8.7	2	22.3	1.08	0.06	37.3	0.155	0.8	2.1	25	18.6	48	89.9
D	WWS091	120	11.7	-0.002	152	0.02	0.48	7.4	3	23.3	0.74	0.09	32.2	0.124	0.6	1.8	41	16.5	109	80.1
EOF																				

# **Appendix C: Stream Sediment Sample Results**

Appendix C: Stream Sediment Sample Results

H0002	Version		3			
H0003	Date_generated		24/5/2017			
H0004	Reporting_period_end_date		30/5/2017			
H0005	State		TAS			
H0100	Tenement		EL45/2010			
H0101	Tenement_holder		Venture Minerals Ltd			
H0102	Project_name		Mt Lindsay			
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		3637 Rosebury, 3638 Parsons			
H0200	Start_date_of_data_acquisition		30/5/2011			
H0201	End_date_of_data_acquisition		24/5/2017			
H0202	Data_format		SG3			
H0203	Number_of_data_records		11			
H0204	Date_of_metadata_update		24/5/2017			
H0500	Feature_Located		Sample Point			
H0501	Geodetic_datum		GDA94			
H0502	Vertical_datum		not applicable			
H0503	Projection		MGA			
H0531	Projection_zone		55			
H0532	Surveying_instrument		Garmin GPS62s			
H0533	Surveying_Company		Venture Minerals Ltd			
H0600	Sample_code		STREAM SED			
H0601	Sample_type		Panned Stream Sediment			
H0602	Sample_description		-3mm sieved and panned concentrate			
H0700	Sample_preparation_code		PREP-21			
H0701	Sample_preparation_details		dry & LM5 pulverise to approx P80 <75 microns			
H0702	Job_no		see data			
H0800	Assay_code		see Ascheme field			
H0801	Assay_company		ALS Global, Venture Minerals			
H0802	Assay_description1		XRF05 = Sn by XRF on pressed powder disks			
H0803	Assay_description2		B-ICP69 = 2 acid digest with ICP OES finish for B			
H0804	Assay_description3		MS61 = 4 acid digest including HF with MS finish			
H0805	Assay_description4		ICP61 = 4 acid digest including HF with ICPAES finish			
H0806	Assay_description5		VMS-Delta = portable Olympus Delta Premium 50 XRF using factory calibration			
H0900	Remarks:		- indicates below lower analytical limit, -999 indicates not analysed, -1111 indicates above upper analytical limit			
H1000	Sample	Prospect	E_MGA55	N_MGA55	Sampling_description	Lith_description
H1001			metres	metres		
H1002						
D	RYSS002	Riley Creek	369687	5376326	6.4mm seive, 3x panned concentrate	mud-rich sediment w/ sig. dbn ww weak-moderately magnetic angular SS cobbles, granular rd-wt qz gravels & minor coarse gravels of nodular RLC
D	TCSS001	Tobin Creek	367510	5382979	-3.2mm panned concentrate	sandstone & siltstone outcrop in river bed, +3mm reject = qz and SST, pan conc dom chromite (non-mag)
D	TCSS002	Tobin Creek	367624	5382815	-3.2mm panned concentrate	bedded or foliated dgy ?qz-rich siltstone with minor ?mica exposed in creek, mod-very weathered, pan conc chromite rich, +3mm reject = qz & siltstone fragments
D	TCSS003	Tobin Creek	367712	5382632	-3.2mm panned concentrate	dgy qz siltstone outcrop in creek (same lith as TCSS002), minor foliation/fissility in fresh rock, only clasts = siltstone, no exotics such as granite, pan conc less chromite than prev localities, +3mm reject = qz & siltstone

Appendix C: Stream Sediment Sample Results

D	TCSS004	Tobin Creek	367400	5382879	-3.2mm panned concentrate	float includes cm-wt fine grained ?quartzite, hard bn ?bt altered spotted hornfels with ?am veinlets & ?py patches, pan conc is chromite-rich, +3mm reject = qz, sandstone
D	TCSS005	Tobin Creek	367142	5382859	-3.2mm panned concentrate	na
D	TCSS006	Tobin Creek	367320	5382674	-3.2mm panned concentrate	na
D	TCSS007	Tobin Creek	367721	5382377	-3.2mm panned concentrate	bedded mod weathered siltstone exposure in creek, pan conc is chromite rich, +3mm reject qz & siltstone
D	TCSS009	Tobin Creek	367821	5382200	-3.2mm panned concentrate	minor mudstone float & outcrop, pan conc has minor chromite, +3mm reject = qz & mudstone fragments
D	TCSS025	Tobin Creek	367130	5382391	-3.2mm panned concentrate	na
D	TCSS026	Tobin Creek	367178	5382377	-3.2mm panned concentrate	na
EOF						



Appendix C: Stream Sediment Sample Results

D	TCSS004	moderate river & moderate slope, main Alfred River runs south of small creek at co-ords that enters from the east	VMS-Delta, ICP61,ICP69,XRF05,PGM24	pXRF20141213, AD14197656	9260	360	50	-10	-0.5	0.061	0.007
D	TCSS005		VMS-Delta, ICP61,ICP69,XRF05,PGM24	pXRF20141213, AD14197656	2270	160	20	-10	-0.5	2.41	0.009
D	TCSS006		VMS-Delta, ICP61,ICP69,XRF05,PGM24	pXRF20141213, AD14197656	697	50	-10	-10	-0.5	0.198	0.005
D	TCSS007	small, slow flowing muddy creek with minor sand	VMS-Delta, ICP61,ICP69,XRF05,PGM24	pXRF20141213, AD14197656	5950	260	30	-10	-0.5	0.067	0.024
D	TCSS009	small, very slow flowing creek, partly underground	VMS-Delta, ICP61,ICP69,XRF05,PGM24	pXRF20141213, AD14197656	1530	80	40	-10	-0.5	-0.001	0.023
D	TCSS025		VMS-Delta, ICP61,ICP69,XRF05,PGM24	pXRF20141213, AD14197656	303	60	10	-10	-0.5	-999	-999
D	TCSS026		VMS-Delta, ICP61,ICP69,XRF05,PGM24	pXRF20141213, AD14197656	256	20	-10	-10	-0.5	-0.001	-0.005
EOF											



Appendix C: Stream Sediment Sample Results

D	TCSS004	-0.001	2.955	-9	140	69	-0.5	-9	-9	392	-9	-9	41000	-999	1	3.073	60	-999	-999	-9	-999	0.244	220	-999	2.62	845	-9	0.02	19	-9	79
D	TCSS005	-0.001	1.161	3	230	59	-0.5	-9	-9	-9	-9	128	15398	-999	1	2.122	40	-999	-999	-9	-999	0.195	-9	-999	1.94	420	-9	0.03	17	-9	39
D	TCSS006	-0.001	-9	-9	-10	-9	-0.5	-9	-9	-9	-9	116	16448	-999	-1	1.16	40	-999	-999	-9	-999	0.072	-9	-999	2.22	473	-9	0.01	16	-9	37
D	TCSS007	0.001	2.696	5	170	77	-0.5	-9	-9	143	7	-9	37776	-999	1	5.221	60	-999	-999	-9	-999	0.722	117	-999	2.63	793	-9	0.03	21	-9	80
D	TCSS009	-0.001	2.241	-9	380	75	0.5	-9	-9	185	-9	-9	34957	-999	1	2.119	30	-999	-999	-9	-999	0.47	115	-999	1.43	640	-9	0.05	10	-9	60
D	TCSS025	-999	-9	2	10	-9	-0.5	-9	-9	-9	-9	67	15261	-999	1	0.381	20	-999	-999	-9	-999	0.006	-9	-999	1.37	370	22	0.01	23	-9	55
D	TCSS026	-0.001	2.31	2	-10	-9	-0.5	-9	-9	-9	-9	-9	61498	-999	-1	4.171	50	-999	-999	-9	-999	0.28	-9	-999	2.93	913	-9	0.01	14	-9	67
EOF																															



Appendix C: Stream Sediment Sample Results

D	TCSS004	260	10	-9	-999	18	0.01	-9	2	-9	12.708	30	16	-999	97	0.486	-10	10	93	182	240	1755	Cr >1% ULD by ICP61, Sn >5000ppm ULD by XRF05
D	TCSS005	220	7	-9	-999	17	0.01	-9	2	-9	14.922	14	11	-999	13	0.306	-10	9	45	140	121	556	Cr >1% ULD by ICP61
D	TCSS006	40	11	-9	-999	10	-0.01	-9	2	-9	18.294	13	17	-999	-9	0.489	-10	12	54	13	126	2339	Cr >1% ULD by ICP61
D	TCSS007	170	10	-9	-999	39	-0.01	-9	3	-9	10.989	20	11	-999	60	0.324	-10	17	94	551	220	226	Cr >1% ULD by ICP61, Sn >5000ppm ULD by XRF05
D	TCSS009	250	-9	-9	-999	19	-0.01	-9	3	-9	12.991	11	7	-999	29	0.214	-10	14	75	310	144	108	Cr >1% ULD by ICP61
D	TCSS025	40	-9	-9	-999	8	-0.01	-9	2	-9	16.997	14	12	-999	-9	0.599	-10	18	46	33	115	6215	Cr >1% ULD by ICP61, insufficient sample for PGM24
D	TCSS026	50	8	-9	-999	22	-0.01	-9	3	-9	10.801	15	6	-999	7	0.118	-10	10	81	10	222	82	Cr >1% ULD by ICP61
EOF																							