

MINREX RESOURCES LIMITED

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**2016 ANNUAL REPORT ON THE
HEEMSKIRK PROJECT**

3 April 2015 – 2 April 2016

EL18/2011

AT GRANITE CREEK

TASMANIA, AUSTRALIA

DISTRIBUTION:

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Abstract

This Annual Report on the Heemskirk Project (EL18/2011) covers the period 3rd April 2015 to 2nd April 2016, the fourth year of the tenement.

The area contains numerous small old workings and occurrences of tin, tungsten, base metals and silver. Minrex Resources Limited (Minrex) considers that this large area of granitic terrain is prospective for the discovery of large low-grade tin deposits, concealed deposits and/or deposits of granite-associated metals that have not previously been sought.

Work to date includes a literature review of data held at Mineral Resources Tasmania, re-processing and analysis of the government airborne magnetic and radiometric geophysical data over the area and three field sampling programs, each of up to three weeks duration, that have collected a total of 102 rock chip and stream sediment samples. The fourth year work has comprised analysis of the previous results and completion of a three week long panned concentrate stream sampling program over a large part of the western and southern portions of the tenement – to bring the current tally to 79 panned stream sediment samples from the tenement. It was also found necessary to re-analyse all 102 of the samples, old and new, due to concern that their refractory tin minerals were not being accurately analysed by the previous assay method – with the new (laser ablation) assays being very much higher grade. Part of this year's program was delayed from the previous year due to disruptive track works and a lack of running water in creeks for the stream sediment sample panning.

The exploration remains ongoing with no definitive conclusions. In the fifth year of the exploration program, Minrex plans to:-

- Continue the systematic surface panned stream sediment sampling.
- Infill the stream sampling where the best results were previously obtained.

\$63,606 has been expended in the fourth year of the tenement, bringing total expenditure to date by Minrex on the Heemskirk Project (EL18/2011) to \$151,490. An exploration budget of \$44,000 is proposed for the fifth year of the tenement.

1. Introduction

This annual report summarises the results of exploration activities at the Heemskirk Project (EL18/2011), during the period 3rd April 2015 to 2nd April 2016; the fourth year of the tenement. EL18/2011 is held by Minrex Resources Limited (Minrex) and comprises an area of some 44 km², located to the north of Trial Harbour on the west coast of Tasmania, and some 16 km WNW of the township of Zeehan (Figure 1).

In its application Minrex undertook to complete a review and interpretation of previous exploration data, geophysics and rock chip geochemical surveys; in the first two years of the licence. In essence this work was all done in the first year of the tenement with a review of previous work having been completed, a re-processing and analysis of the government airborne magnetic and radiometric geophysical data over the Heemskirk area and two field reconnaissance trips, each of several days duration, that collected a total of 13 rock chip samples, 10 stream sediment samples and 30 panned stream sediment samples, and chemical analysis of these samples.

In the second and third years of the tenement, work was focussed on interpretation of the results from the geophysical reinterpretations and surface work, and planning for follow up work. It was necessary to contract local geological and sampling teams that could be mobilised to complete geological reconnaissance, sampling and mapping of the Heemskirk Project area. The remote location of the Project area, variable rainfall, difficult access and complications of completing useful work in the area; hindered completion of the next round of surface work in the third year (Figure 3).

In the current (fourth) year, a significant panned stream sediment sampling program has been completed over a large part of the western and southern portions of the tenement. Part of this stream sediment sampling was delayed from the previous (third) year due to disruptive track works in the area (to improve access) and a lack of running water in creeks for the stream sediment sample panning. It was also found necessary to re-analyse all 102 of the samples, old and new, due to concern that their refractory tin minerals were not being accurately analysed by the previous assay method – with the new assays being higher grade

for tungsten and very much higher grade for tin.

Minrex continues to consider the Heemskirk Project to be prospective for tin-tungsten mineralisation due to the presence of multiple small known deposits in the granitic and sedimentary rock sequences in the area. The remote location of the project, surficial cover sequences, vegetation and climate are all thought to have detracted from the application of modern exploration methods to the Project area previously.



Figure 1: E18/2011 Location and Tenement Plan.

The datum used throughout this report is GDA94.

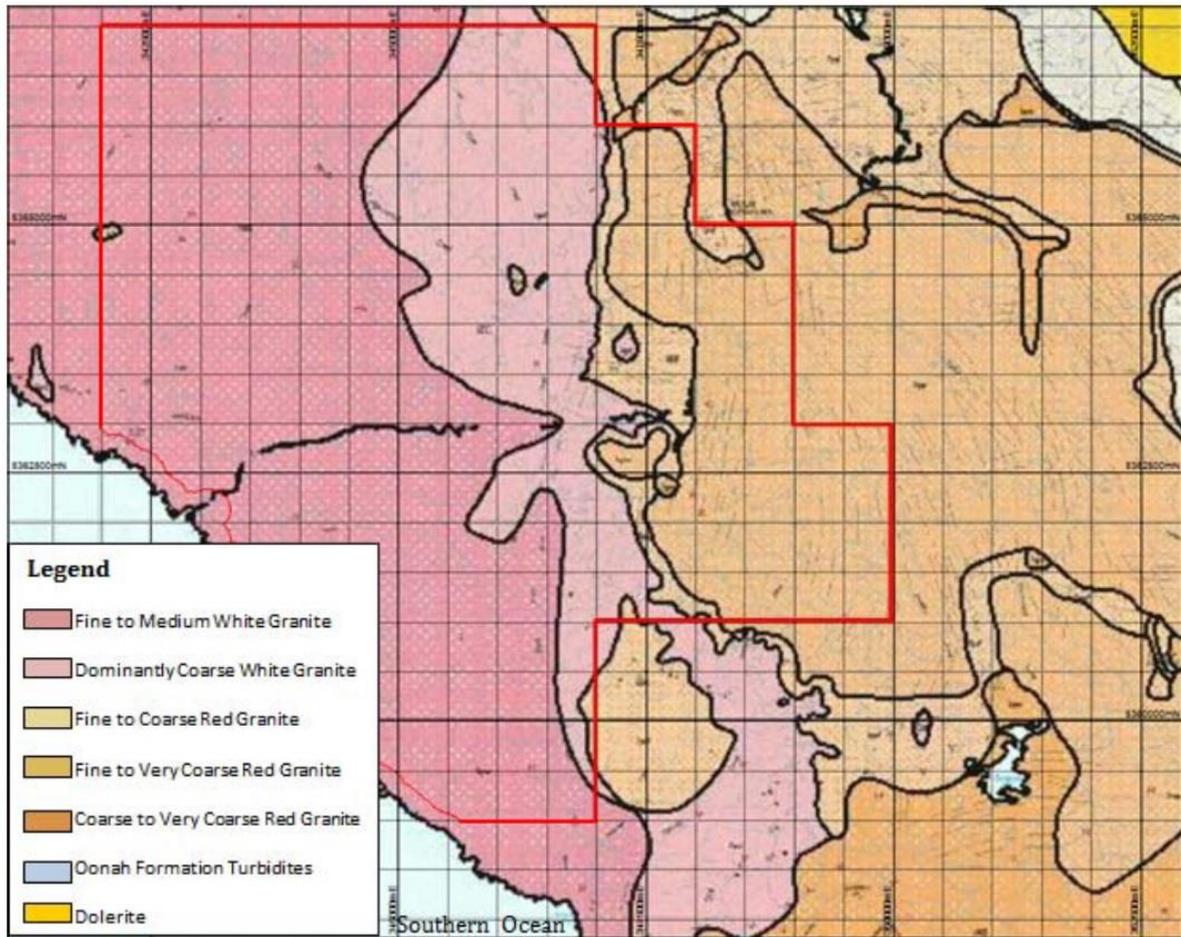


Figure 2: E18/2011 Generalised Geology



Figure 3: View of Typical Heemskirk Terrain

2. Review of Previous Work

Earlier exploration work in the Heemskirk Project (EL18/2011) is summarised in the report:-

- Previous Exploration Work & Initial Reconnaissance EL18/2011, by C. Allen, June 2012 (EL182011_2013A_02_reportB.pdf).

This literature review and report was commissioned by Minrex Resources Ltd (Minrex) early in 2012 to establish a chronology and history of past work in the area and includes the completion of an initial reconnaissance exploration program and collection of 23 samples (10 stream samples and 13 rock samples), which were assayed for gold, silver, base metals, molybdenum, nickel, titanium, tin and tungsten. The highest stream sediment result was 3ppm Sn and for the rock samples was 9ppm Sn (these two samples repeated at 3,820ppm Sn and 324ppm Sn when re-analysed by the laser ablation method in 2015, some 1270 and 36 times higher grade).

In October 2012, Muir reported on a re-processing and analysis of the government airborne geophysical data (magnetic and radiometric) over the Heemskirk area, as commissioned by Minrex. Full details of this regional geophysical work are within the report:-

- Processing of Airborne Geophysical Data over EL18/2011 (Heemskirk Project) by P. Muir, October 2012 (EL182011_2013A_03_reportC.pdf)

Work by Minrex in the first year of the tenement EL18/2011, was summarised in the report:-

- 2013 Annual Report on the Heemskirk Project EL18/2011, by K. Munro, March 2013 (EL182011_2013A_01_reportA.pdf). And also geochemistry files EL182011_2013A_04_geochemA and EL182011_2013A_05_geochemB.

Work by Minrex in the second year of the tenement EL18/2011, was documented in the report:-

- 2014 Annual Report on the Heemskirk Project EL18/2011, by K. Munro, March 2014 (EL182011_2014A_01_reportA.pdf).

Work by Minrex in the third year of the tenement EL18/2011, was documented in the report:-

- 2015 Annual Report on the Heemskirk Project EL18/2011, by K. Munro, March 2015 (EL182011_2015A_01_reportA.pdf).

The early exploration work by Minrex on the EL18/2011 Heemskirk Project area included; a literature review and report, a re-processing and analysis of the government airborne geophysical data (magnetic and radiometric) and an initial reconnaissance exploration of the area. This supplemented the general knowledge that the area was underlain by granitic rocks (Figure 2) and hosted numerous small historic mineral deposits of tin, tungsten, base metals and silver (Figure 4).

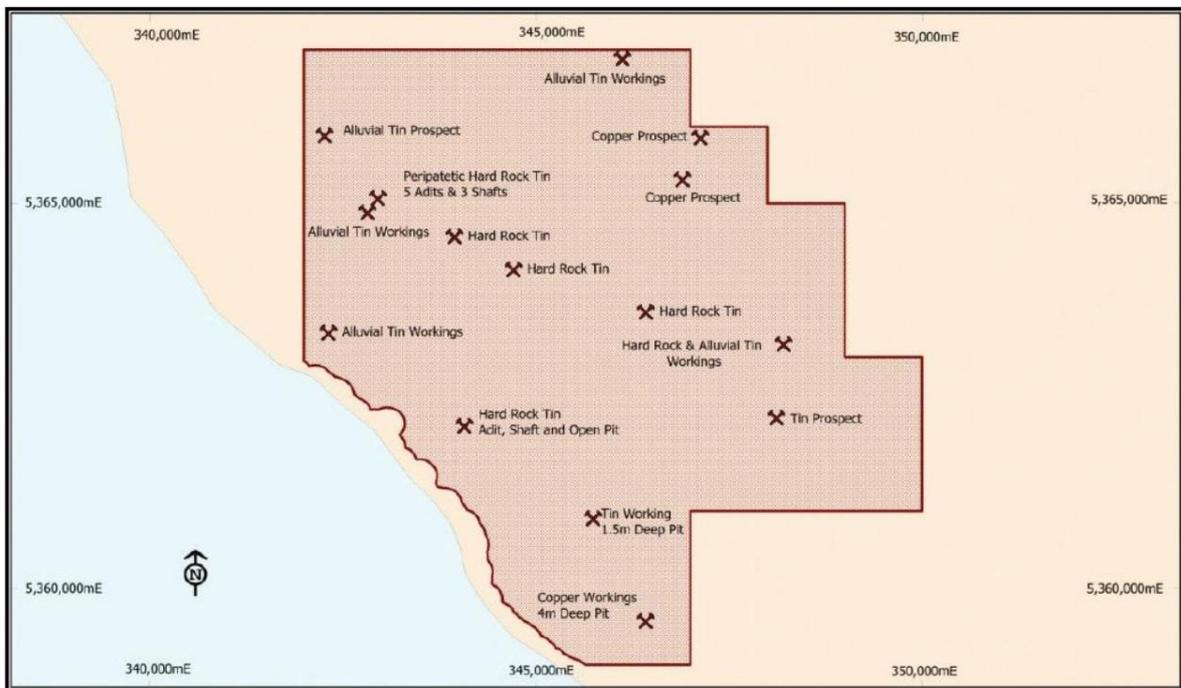


Figure 4: E18/2011 Location of Known Old Workings

Following the intensive first year study, analysis and reconnaissance it was decided to commence a systematic stream sediment sampling program over the entire tenement area. For this program, the tenement area was divided into four quadrants (named A to D) with each to be sampled in sequence. The samples to be taken by panning and screening large bulk stream sediment samples down to an approximately 100gm sample of heavy minerals.

The initial 30 stream sediment concentrates samples (Area A) in the northeast of the Project

area were then collected on drainages surrounding the historic workings of the McGuinness Mine (Figure 5). This exploration program aimed to confirm the effectiveness of the sampling technique and establish a statistical base from which to distinguish background from anomalous tenors for a range of metallic elements. The stream sediment concentrate samples were analysed for gold, silver, arsenic, molybdenum, tin and tungsten. The highest panned stream sediment sample result was only 118ppm Sn (re-analysis of this sample in 2015 gave a value of 6,610ppm Sn (56 times higher), using the laser ablation method).

During the third year of the tenement, work was focussed on interpretation of the results from the early geophysical reinterpretation and surface work, and planning for follow up exploration and sampling. The earlier results were drafted and analysed and considerable time was spent on review of the first year results, reporting, and planning. Consideration of the best next stage of work for this remote and difficult area was also on-going through the third year, along with work to identify a local consulting geologist and sampling personnel to continue the geological reconnaissance, sampling and mapping of the Heemskirk Project area.

Due to the remote location of the Project area, variable rainfall, difficult access and complications of completing useful work in the area the program planned for the third year was ultimately delayed and then incorporated into a larger program in the current (fourth) year of the licence. These delays were principally due to difficult access, weather, planned fire burns, track works and inadequate stream levels for sampling.

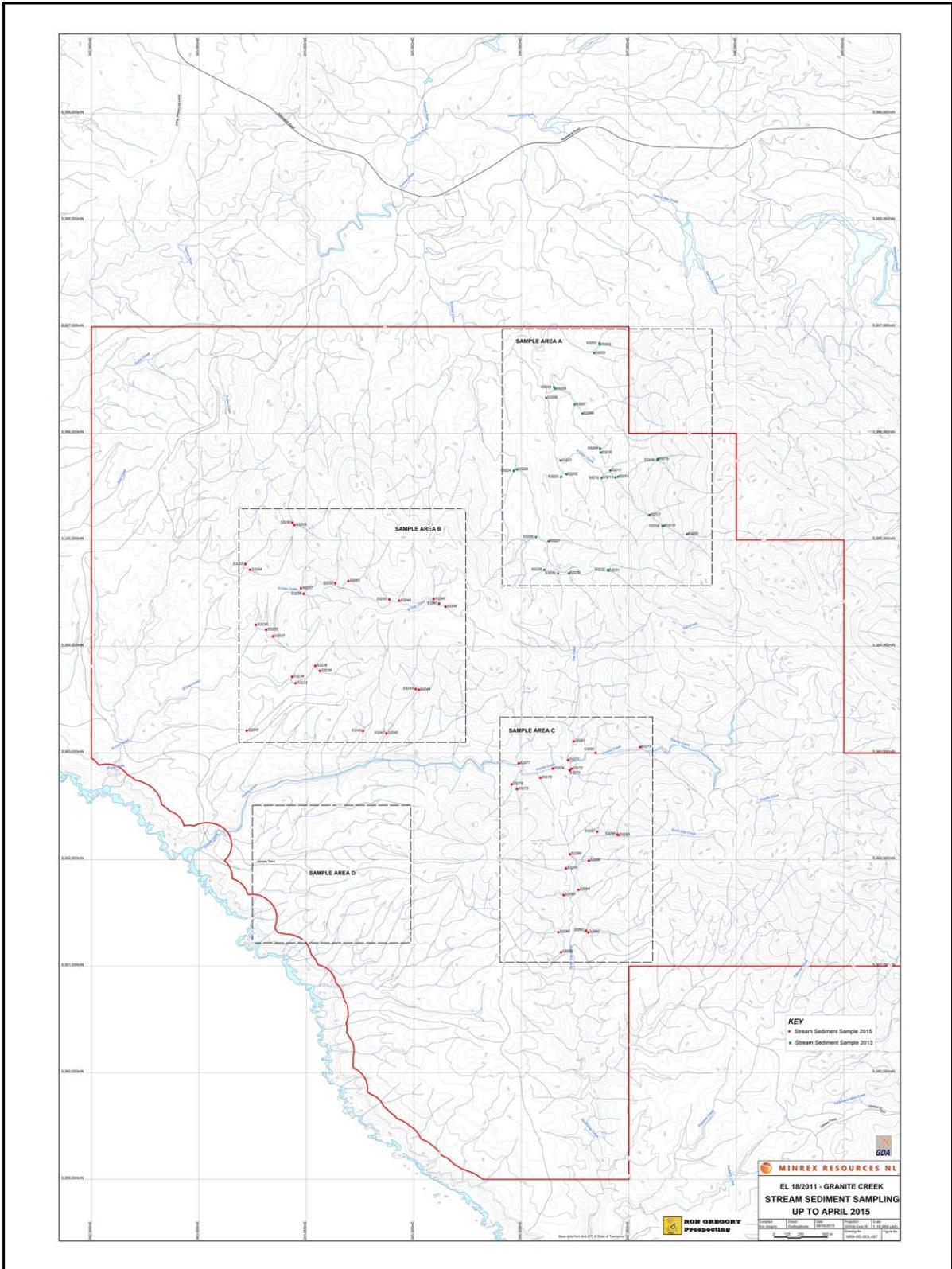


Figure 5: E18/2011 Location of Panned Stream Sediment Samples

3. Exploration Completed during the Report Period

Following the 2014 review of previous work, it was decided to continue with the panned stream sediment sampling work, which commenced in Area A in 2012. In February 2015, Ron Gregory Prospecting (Tasmania) was contracted to extend the panned concentrate stream sampling into Area B, and this was subsequently expanded to also include Area C (Figure 5). The earlier work (in Area A) was also completed by Ron Gregory Prospecting and it was thought that it would be most advantageous to use the same people, sampling methods and assay types during the new program to ensure that the old and new data sets were fully compatible.

Work was planned to commence when stream flow levels became sufficient with increasing rainfall in the autumn (March-April 2015). A Work Program Application was submitted to the Mineral Resources Tasmania Department on the 9th February 2015 and approval received on the 24th February. However, work could not commence at that time due to a new bridge being installed at the Granite Creek crossing (blocking the access track) and lower than usual rainfall over summer rendering most creeks dry through March 2015.

The new panned stream sediment sampling actually commenced with mobilisation to site and the commencement of sampling in Area B on the 10th April 2015 (Figure 6). Area B sampling then continued through the 15th April, when a break to obtain food and supplies was taken during very wet and windy weather. Sampling in Area B was then completed on the 16th April and a new campsite set up in Granville. Reconnaissance of Area C was followed by snow at low levels for 2-3 days. Sampling in Area C then commenced on the 20th April and was completed on the 29th April, with some time lost to breakdowns and heavy rain (Figure 8). Demobilisation was on the 30th April 2015, after some 17 days of field work and panned stream sediment sampling. The samples were packaged and dispatched to the Bureau Veritas Laboratory in Perth (formerly Ultra-trace) by Registered Post, on the 8th May and were received by the 15th May 2015. A number of maps were subsequently prepared by Ron Gregory along with documentation on the sampling methodology, old workings (Figure 7) and a number of photographs of the sampling sites (Figure 10), sampling work (Figure 9) and general location information.

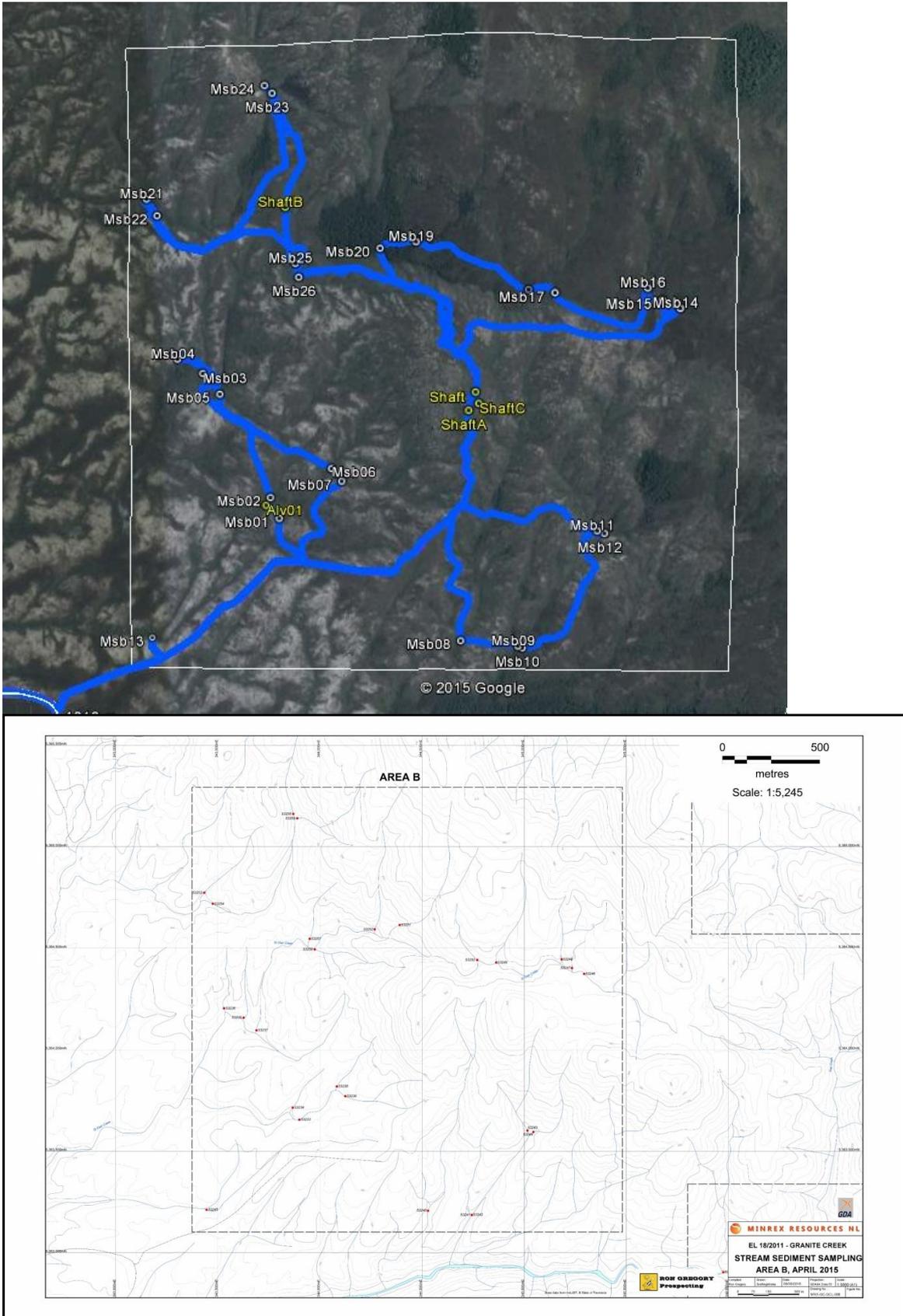


Figure 6: Photo and Plan of Area B Stream Sediment Sample Sites



Figure 7: E18/2011 Old Shafts in Area B

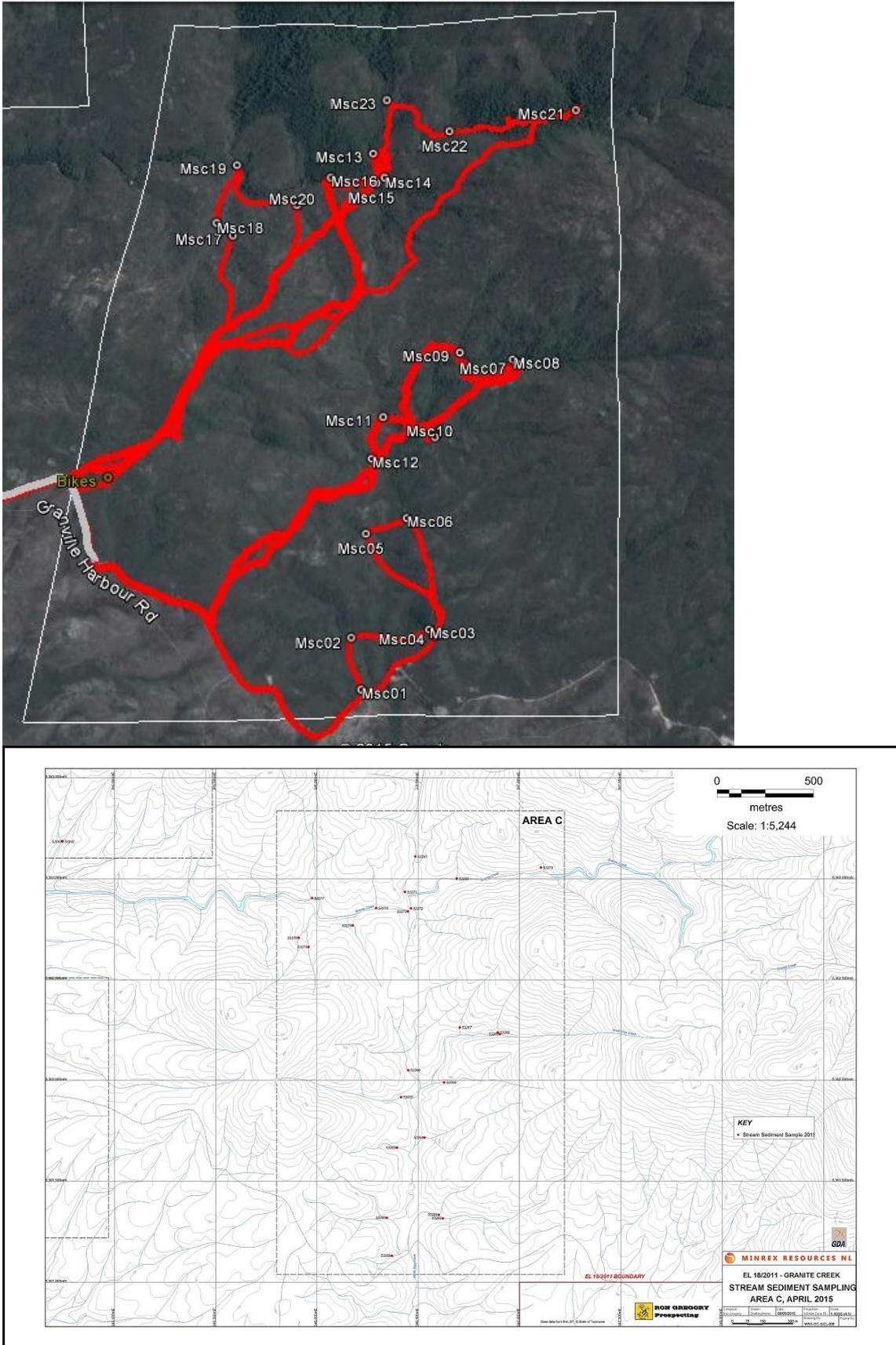


Figure 8: Photo and Plan of Area C Stream Sediment Sample Sites



Figure 9: Panning of Stream Sediment Samples 53265 and 53272 in Area C

The procedure utilised in the stream sediment sampling, in Areas A, B & C, was as follows:-

- Locate a suitable accessible sampling site within the vicinity of the proposed site – usually close to a branch from the main stream.
- Fill a 10 litre bucket with a representative sample of the stream gravels and fines, removing any rocks by hand. On occasions this could be from several smaller sites where sediments were scarce. A small shovel or sturdy scoop was used for the sampling. When a dry, overgrown, intermittent stream was sampled, this was only done where an obvious streambed with a visible break of slope on either side was present. Vegetation and any overburden were removed and a pit dug until rock was found, the sample was then collected from the sediments directly above the bedrock.
- At the same time the second person in the team filled out the paperwork, took GPS coordinates and marked the sample site with a sample id and took a photograph as a record.
- The samples were then sieved to remove the coarse fraction, with the same person always doing the sieving, and checking the sieve contents quickly for anything unusual. The samples were then panned to concentrate the heavy mineral grains, with the same person always doing the panning. To maintain consistency there was no alternating of samplers, as different people have different panning techniques.
- When water was not available at the sampling site, the bucket of sample was carried to the nearest watercourse, taking care as a bucket full of gravel is heavy (generally well over 10 kg).
- All gravels were then panned off, leaving only fine sediment. If something larger stayed in the pan, it was inspected.
- The sample fines were then placed in a plastic zip lock bag (plastic spoon works well), with a sample id ticket.
- The pan was rinsed into the sample bag until the pan was totally clean, to obtain all fines and heavy grains. As much water as possible was drained from the sample zip lock bag and the bag was then stored securely in the samplers backpack.
- All equipment was cleaned and rinsed thoroughly before leaving site. Any creek or surface disturbance was then restored before proceeding to the next site.



Figure 10: Granite Creek in Area C during 2015 Stream Sediment Sampling Program

The initial 23 stream and rock samples from 2012 were analysed at Bureau Veritas in Perth utilising an Aqua Regia digest followed by ICP-MS analysis for gold, silver, molybdenum, tin, tungsten and lead; and ICP-OE analysis for copper, nickel, titanium and zinc. Similarly, the initial 30 panned concentrate stream sediment samples were also digested by Aqua Regia digest followed by ICP-MS analysis for gold; with the remaining sample given an extended digest and reflux with a mixture of acids including Hydrofluoric, Nitric, Hydrochloric and Perchloric Acids. The elements silver, arsenic, molybdenum, tin and tungsten were then determined using an ICP-MS analysis.

The 49 samples from Areas B and C were submitted and initially analysed by the same assay method (Aqua Regia digest, then mixed acid digest and ICP-MS analysis) as the first batch from Area A, to ensure consistency in the results. But at the same time, the laboratory ran duplicate assays on 5 of the 49 samples using a total fusion method (using laser ablation). The initial assay results were received on the 2nd June (BV job u257019) and these demonstrated that the 5 samples repeated using a total fusion method returned very much higher tin results from this method (100-600 times higher), presumably due to an inadequate digest of the refractory tin-bearing grains (probably the mineral cassiterite).

This demonstration that the Aqua Regia and Mixed acid digest and reflux was not adequately digesting the tin bearing minerals, strongly indicated that all of the Heemskirk samples should be re-assayed using the new fused bead laser ablation method. Fortunately, the small residual ground samples (pulps) from the former sampling were also still held at the laboratory, along with the new sample pulps. Consequently, re-assaying of all 102 of the samples collected at Heemskirk to date, using the new total fusion laser ablation method was completed during September 2015 and the results returned in (BV job u259741).

The Fused Bead Laser Ablation ICP-MS uses high productivity robotic fusion technology with state of the art laser ablation and ICP-MS instruments to provide a fully extracted quantitative analysis for all elements. This method uses a flux (of 4% lithium nitrate), mixed at a ratio of 12:22 to form a glass bead. The elements Ag, As, Cu, Mo, Pb, Sn, W and Zn were then determined by laser ablation of the glass bead and read by ICP-MS. Sulphur was determined by XRF spectrometry on an oven dry sample.

Sample No.	Sample Type	Easting GDA	Northing GDA	S XRF %	Ag_LA ppm	As_LA ppm	Cu_LA ppm	Mo_LA ppm	Pb_LA ppm	Sn_LA ppm	W_LA ppm	Zn_LA ppm
550601	Str sed	343411	5361452	0.002	-0.1	0.8	4	0.2	2	62.6	1	20
550602	Str sed	343323	5362302	0.004	-0.1	1.8	-2	0.2	5	39.2	2.85	25
550603	Str sed	345865	5362723	0.002	-0.1	1.6	2	0.4	5	11.2	2.15	15
550604	Str sed	346343	5360962	0.035	0.9	14	4	0.4	75	85.8	2.5	370
550605	Str sed	342635	5364661	0.005	-0.1	1.2	-2	0.2	8	589	3.45	15
550606	Str sed	342180	5365718	0.024	0.2	7.8	14	1.6	48	3820	15.4	85
550607	Str sed	345918	5364696	0.003	-0.1	1.6	2	0.4	4	180	6.8	20
550608	Str sed	343802	5364358	0.002	-0.1	1	-2	0.2	3	7.4	1.65	20
550609	Str sed	345922	5366711	0.007	-0.1	2.4	4	1.4	10	570	10.4	50
550610	Str sed	346652	5365422	0.005	0.2	6.4	2	0.8	5	16	2.95	25
550650	Rock	343411	5361452	0.003	0.3	0.8	-2	0.6	2	451	16	25
550651	Rock	343282	5362124	0.006	0.2	2.2	4	0.4	7	36.4	3.4	25
550652	Rock	343813	5362554	0.013	-0.1	1.8	6	0.6	22	11.4	6.55	35
550653	Rock	345460	5361886	0.003	-0.1	1.6	4	2.2	5	69	847	100
550654	Rock	345922	5362217	0.008	0.2	2	4	0.6	11	324	17.2	65
550655	Rock	342822	5364900	0.01	0.1	2.2	4	0.8	19	486	7.45	30
550656	Rock	345772	5365650	0.005	-0.1	2.4	-2	0.8	2	1230	253	40
550657	Rock	344453	5363849	0.003	0.2	1.2	-2	0.8	8	686	6.7	55
550658	Rock	344454	5363676	0.003	-0.1	-0.2	-2	0.8	19	81.4	4.6	80
550659	Rock	343814	5364556	0.008	0.4	4.2	-2	1.6	9	48.6	8.7	70
550660	Rock	346907	5365324	1.14	2.1	30100	54	4.8	43	163	355	10
550661	Rock	347295	5366032	0.013	-0.1	47.6	-2	3.6	7	243	284	20
550662	Rock	347287	5366052	0.006	-0.1	7.8	-2	0.6	9	120	48.9	40

Table 1: 2015 Assay results (new) for 2012 stream and rock samples

The new 2015 (Table 1 - above) and old 2012 (Table 2 - below) analyses for the 10 stream sediment and 13 rock samples collected in 2012 are detailed.

Sample No.	Sample Type	Easting GDA	Northing GDA	Au(AR) ppb	Ag ppm	Cu ppm	Mo ppm	Ni ppm	Pb ppm	Sn ppm	Ti ppm	W ppm	Zn ppm
550601	Str sed	343411	5361452	-1	-0.05	2	-1	3	-1	0.3	-50	0.2	6
550602	Str sed	343323	5362302	-1	-0.05	1	-1	-1	2	0.5	-50	0.6	7
550603	Str sed	345865	5362723	-1	-0.05	2	-1	1	2	0.6	-50	0.3	6
550604	Str sed	346343	5360962	-1	0.65	5	-1	3	72	1.3	-50	0.3	319
550605	Str sed	342635	5364661	-1	-0.05	1	-1	1	5	0.9	-50	0.6	7
550606	Str sed	342180	5365718	-1	0.2	13	2	4	32	3.1	-50	1.9	52
550607	Str sed	345918	5364696	-1	-0.05	1	-1	4	3	0.6	-50	1.7	3
550608	Str sed	343802	5364358	-1	-0.05	-1	-1	1	1	0.3	-50	0.4	3
550609	Str sed	345922	5366711	-1	-0.05	6	1	1	6	1.8	100	1	20
550610	Str sed	346652	5365422	-1	-0.05	2	-1	3	4	0.6	-50	0.4	7
550650	Rock	343411	5361452	-1	0.5	3	-1	3	-1	7.4	-50	2.2	10
550651	Rock	343282	5362124	-1	0.1	2	-1	-1	4	2.2	-50	1	4
550652	Rock	343813	5362554	-1	-0.05	1	-1	2	15	0.9	-50	0.4	7
550653	Rock	345460	5361886	-1	-0.05	1	2	2	4	0.7	-50	32	6
550654	Rock	345922	5362217	-1	-0.05	-1	-1	1	9	9.2	-50	1.2	9
550655	Rock	342822	5364900	-1	0.05	1	-1	2	13	1.2	-50	0.4	5
550656	Rock	345772	5365650	-1	-0.05	2	-1	3	1	5	-50	77	4
550657	Rock	344453	5363849	3	-0.05	1	-1	3	7	3.2	-50	2.6	16
550658	Rock	344454	5363676	-1	-0.05	-1	-1	3	16	1.2	-50	0.8	6
550659	Rock	343814	5364556	-1	0.2	3	1	1	6	2.3	-50	1.2	8
550660	Rock	346907	5365324	1	2	54	4	2	40	5	-50	122	4
550661	Rock	347295	5366032	-1	-0.05	3	3	-1	5	7.6	-50	89.1	5
550662	Rock	347287	5366052	-1	-0.05	2	-1	1	7	3.9	-50	21.6	2

Table 2: 2012 Assay results (old) for 2012 stream and rock samples

To assess the difference between the 2012 acid digest analyses and the 2015 laser ablation analyses, on the same samples, the table below (Table 3) shows the average of all of the assays of the 23 initial reconnaissance samples. In summary, the difference is generally small for silver (Ag), base metals (Cu, Pb, Zn) and molybdenum (Mo), at generally about the same (copper) to double (zinc 240%), but these are on very low values (e.g. 22ppm versus 54ppm for zinc). However for tungsten (W) the new value is 5 times the old and for tin the new value is almost 160 times higher (406ppm versus only 3ppm Sn). This clearly shows the refractory nature of the tin and tungsten minerals and (almost certainly) that the bulk of the tin will be in the highly refractory mineral cassiterite.

2015		Ag_LA	Cu_LA	Mo_LA	Pb_LA	Sn_LA	W_LA	Zn_LA
Assays		ppm	ppm	ppm	ppm	ppm	ppm	ppm
Average		0.21	4.70	1.043	14.26	405.7	82.9	53.9
2012		Ag	Cu	Mo	Pb	Sn	W	Zn
Assays		ppm	ppm	ppm	ppm	ppm	ppm	ppm
Average		0.16	4.61	0.565	11.04	2.6	15.6	22.4
Difference		130%	102%	185%	129%	15604%	532%	240%

Table 3: Differences between 2012 and 2015 assay results - on the same samples

This report comprises the Annual Report on exploration completed at the Heemskirk Project (EL18/2011) during the period 3rd April 2015 to 2nd April 2016. The full report comprises one text document (PDF), three geochemistry files (CSV format), and one surface map showing all sample sites, drainage and topography, as follows.

EL182011_201604_A_01_AnnualReport.pdf

EL182011_201604_A_02_GeochemA.csv

EL182011_201604_A_03_GeochemB.csv

EL182011_201604_A_04_GeochemC.csv

EL182011_201604_A_05_SurfaceMap.pdf

4. Discussion of Results

A large amount of data was collected at Heemskirk (E18/2011) in the first year of the tenement. The subsequent years were initially orientated towards the collation, analysis and consideration of these results. A new surface reconnaissance, mapping and sampling field program has now been completed in the current (fourth) year of the tenement, in Area B in the northwest of the tenement, and also at Area C in the south of the tenement. The new (2015) assay data for the 23 stream and rock samples collected in 2012 is discussed below. The full new (2015) assay results for the 79 panned concentrate stream sediment samples collected in 2012 and 2015 is also discussed below.

Examining and analysing the combined (2012 and 2015) assay results for all 23 samples (10 stream and 13 rock samples), shows that silver is very low (maximum of 2.1ppm Ag), while arsenic, base metals, nickel, titanium and molybdenum are also low at generally only 1 to 50 ppm (with rare values up to 370ppm for zinc) for any of these elements. Only one rock sample shows any evidence of sulphide minerals, with sample (550660) from the 2012 rock sampling at the McGuinness Mine adit mouth seen to contain arsenopyrite and returning an assay of 1.1%S and 30,100ppm arsenic (and 2ppm silver).

On the other hand, both tin and tungsten values are relatively high, tin especially so with a highest value of 3,820ppm Sn and tungsten with a highest value of 847ppm W. In general the average grade of rock samples is twice that of stream samples for silver, base metals and molybdenum, suggesting that minerals bearing these elements are broken down in the environment. While tin values are 30 times higher in the stream samples suggesting relative accumulation of tin in streams. Although the population base (10 and 13 samples) is very small for a conclusive statistical comparison.

The full details of all new (2015) analyses of all 79 panned concentrate stream samples from Areas A, B and C are listed below in Table 4.

Sample No.	Easting GDA	Northing GDA	Location	Date	S XRF %	Ag_LA ppm	As_LA ppm	Cu_LA ppm	Mo_LA ppm	Pb_LA ppm	Sn_LA ppm	Sn_LA %	W_LA ppm	Zn_LA ppm
53201	346721	5366847	Area A	Nov-12	0.009	-0.1	4	-2	2.4	14	28100	2.81	88.1	15
53202	346729	5366840	Area A	Nov-12	0.007	-0.1	5.4	-2	0.8	7	2780	0.28	17.7	35
53203	346665	5366748	Area A	Nov-12	0.002	-0.1	0.8	2	0.8	7	1940	0.19	12.2	40
53204	346287	5366435	Area A	Nov-12	0.003	-0.1	-0.2	4	0.6	11	743	0.07	23.8	15
53205	346294	5366425	Area A	Nov-12	0.006	0.1	-0.2	-2	1.2	26	11000	1.10	122	30
53206	346229	5366333	Area A	Nov-12	0.006	0.2	1.6	-2	1.8	17	6610	0.66	199	85
53207	346472	5366268	Area A	Nov-12	0.002	-0.1	1.6	-2	0.2	4	677	0.07	6.55	30
53208	346570	5366190	Area A	Nov-12	0.004	-0.1	2.4	-2	0.4	5	248	0.02	10.1	50
53209	346724	5365864	Area A	Nov-12	0.003	0.2	2.4	-2	0.4	7	487	0.05	9.25	70
53211	346820	5365652	Area A	Nov-12	0.003	-0.1	1.2	6	0.6	6	689	0.07	12.2	25
53212	346739	5365581	Area A	Nov-12	0.002	0.4	3.2	10	0.4	5	554	0.06	9.35	35
53213	346860	5365584	Area A	Nov-12	0.004	0.3	7.2	6	0.6	6	38.8	0.00	7.3	40
53214	346894	5365598	Area A	Nov-12	0.004	-0.1	1.6	4	0.8	4	246	0.02	8.95	15
53215	347265	5365761	Area A	Nov-12	0.019	-0.1	2.8	2	0.8	6	733	0.07	33.1	20
53216	347266	5365751	Area A	Nov-12	0.004	-0.1	2	2	0.6	5	117	0.01	8.75	30
53217	347172	5365235	Area A	Nov-12	0.003	0.2	3.2	2	0.8	7	342	0.03	13.6	25
53218	347303	5365144	Area A	Nov-12	0.004	0.2	2.8	2	0.8	6	72.2	0.01	8	25
53219	347315	5365150	Area A	Nov-12	0.005	-0.1	2.4	-2	0.4	6	42.4	0.00	15	20
53221	346359	5365741	Area A	Dec-12	0.004	-0.1	2.8	4	0.6	5	916	0.09	29.1	35
53222	346418	5365612	Area A	Dec-12	0.002	-0.1	1.2	-2	-0.2	5	215	0.02	5.2	30
53223	346361	5365592	Area A	Dec-12	0.004	0.1	0.6	-2	0.6	5	1750	0.18	15.5	40
53224	345923	5365650	Area A	Nov-12	0.004	-0.1	1.2	-2	0.4	3	2410	0.24	14.4	35
53225	345956	5365661	Area A	Nov-12	0.003	-0.1	-0.2	2	0.6	8	5460	0.55	66.9	40
53226	346140	5365020	Area A	Nov-12	0.004	-0.1	-0.2	-2	0.4	7	10700	1.07	80.4	35
53227	346252	5364988	Area A	Nov-12	0.003	-0.1	1.6	-2	0.6	6	3050	0.31	60.6	35
53228	346214	5364719	Area A	Nov-12	0.002	-0.1	1.6	-2	0.4	4	404	0.04	11	35
53229	346335	5364685	Area A	Nov-12	0.002	-0.1	2.2	2	0.2	3	243	0.02	5.85	30
53230	346443	5364690	Area A	Nov-12	0.004	-0.1	1.4	-2	0.8	7	1560	0.16	109	35
53231	346788	5364715	Area A	Nov-12	0.006	0.1	7.6	2	0.8	7	254	0.03	10.9	35
53232	346789	5364723	Area A	Nov-12	0.006	0.1	3.4	-2	0.8	8	447	0.04	31.4	35
53233	343900	5363655	Area B	Apr-15	0.012	-0.1	1.4	2	0.2	2	5370	0.54	25.7	65
53234	343867	5363714	Area B	Apr-15	0.002	-0.1	-0.2	-2	0.4	3	1390	0.14	8.6	35
53235	343626	5364157	Area B	Apr-15	0.002	-0.1	0.6	2	-0.2	4	3270	0.33	17.2	40
53236	343531	5364203	Area B	Apr-15	0.002	-0.1	-0.2	-2	0.4	3	2130	0.21	13.2	50
53237	343689	5364095	Area B	Apr-15	0.004	-0.1	0.4	-2	-0.2	2	3940	0.39	14.5	25
53238	344083	5363819	Area B	Apr-15	0.005	-0.1	-0.2	4	3.2	4	11800	1.18	44.6	40
53239	344125	5363770	Area B	Apr-15	0.004	-0.1	-0.2	4	1	6	5200	0.52	28.4	55
53240	344529	5363206	Area B	Apr-15	0.004	-0.1	3.6	-2	0.6	3	680	0.07	7	55
53241	344744	5363185	Area B	Apr-15	0.005	-0.1	3.6	2	0.6	5	24300	2.43	75.9	55
53242	344744	5363185	Area B	Apr-15	0.007	-0.1	-0.2	-2	2.4	10	66500	6.65	269	60
53243	345017	5363601	Area B	Apr-15	0.004	-0.1	-0.2	-2	1.2	9	22600	2.26	100	55
53244	345046	5363594	Area B	Apr-15	0.004	-0.1	-0.2	-2	0.4	8	6170	0.62	100	35
53245	343445	5363211	Area B	Apr-15	0.003	-0.1	1	-2	0.2	2	4550	0.46	22.2	40

53246	345295	5364374	Area B	Apr-15	0.002	-0.1	-0.2	-2	1	8	5810	0.58	89.6	30
53247	345235	5364402	Area B	Apr-15	0.002	-0.1	1.2	-2	0.4	4	197	0.02	10.1	25
53248	345184	5364445	Area B	Apr-15	0.003	-0.1	1	-2	0.4	7	867	0.09	14.7	40
53249	344864	5364429	Area B	Apr-15	0.003	-0.1	1.8	-2	1.2	4	296	0.03	11.2	35
53250	344771	5364442	Area B	Apr-15	0.003	-0.1	-0.2	-2	0.4	5	2590	0.26	20.4	40
53251	344391	5364614	Area B	Apr-15	0.003	-0.1	0.8	-2	0.2	4	1450	0.15	12	40
53252	344268	5364593	Area B	Apr-15	0.003	-0.1	0.8	-2	0.4	2	683	0.07	8.65	50
53253	343433	5364773	Area B	Apr-15	0.004	-0.1	0.4	8	-0.2	5	390	0.04	11.4	40
53254	343475	5364719	Area B	Apr-15	0.06	-0.1	0.6	4	1.6	17	49500	4.95	213	85
53255	343889	5365140	Area B	Apr-15	0.005	-0.1	-0.2	-2	0.6	16	7110	0.71	45.1	65
53256	343870	5365161	Area B	Apr-15	0.009	-0.1	-0.2	-2	0.2	14	69100	6.91	284	90
53257	343950	5364546	Area B	Apr-15	0.003	-0.1	0.4	-2	0.6	4	2910	0.29	360	50
53258	343975	5364494	Area B	Apr-15	0.004	0.2	0.4	-2	-0.2	8	10700	1.07	58.3	50
53259	346370	5361130	Area C	Apr-15	0.005	0.1	1.8	-2	0.2	8	321	0.03	6.25	80
53260	346339	5361307	Area C	Apr-15	0.002	-0.1	1.8	4	3.6	5	345	0.03	8.5	40
53261	346601	5361333	Area C	Apr-15	0.002	-0.1	1.6	-2	0.2	5	1300	0.13	27.9	40
53262	346621	5361311	Area C	Apr-15	0.002	0.1	0.4	-2	0.4	4	1320	0.13	13.3	35
53263	346393	5361658	Area C	Apr-15	0.001	-0.1	2.2	-2	-0.2	3	126	0.01	3.55	30
53264	346531	5361709	Area C	Apr-15	0.002	-0.1	0.4	-2	1	6	2060	0.21	17.8	30
53265	346903	5362223	Area C	Apr-15	0.003	-0.1	2	-2	0.4	5	481	0.05	15.3	35
53266	346888	5362236	Area C	Apr-15	0.006	-0.1	1.6	-2	0.4	6	1120	0.11	36.5	75
53267	346714	5362262	Area C	Apr-15	0.004	0.2	2.2	-2	0.6	8	2080	0.21	58.4	35
53268	346629	5361980	Area C	Apr-15	0.003	0.1	-0.2	-2	-0.2	11	1630	0.16	22.3	30
53269	346456	5362050	Area C	Apr-15	0.004	-0.1	-0.2	-2	0.4	14	14200	1.42	94.7	60
53270	346416	5361911	Area C	Apr-15	0.004	-0.1	1.8	-2	0.4	4	258	0.03	9.15	30
53271	346434	5632934	Area C	Apr-15	0.005	-0.1	2.8	-2	1	5	5570	0.56	128	50
53272	346470	5362853	Area C	Apr-15	0.003	-0.1	1.4	-2	0.8	7	1790	0.18	47.4	65
53273	346444	5362835	Area C	Apr-15	0.006	-0.1	1.6	-2	1.4	11	5400	0.54	109	90
53274	346290	5362854	Area C	Apr-15	0.005	0.1	2.4	-2	-0.2	6	878	0.09	7.2	30
53275	345962	5362662	Area C	Apr-15	0.003	-0.1	1.6	-2	0.4	5	1370	0.14	13.5	35
53276	345907	5362707	Area C	Apr-15	0.006	-0.1	-0.2	-2	0.6	10	9640	0.96	70.5	35
53277	345976	5362903	Area C	Apr-15	0.002	-0.1	1.2	-2	0.6	9	3270	0.33	100	40
53278	346176	5362766	Area C	Apr-15	0.005	-0.1	0.4	-2	0.8	8	1210	0.12	25.5	30
53279	347105	5363055	Area C	Apr-15	0.005	-0.1	2.2	-2	-0.2	5	86	0.01	3.4	35
53280	346690	5363001	Area C	Apr-15	0.004	0.2	0.8	-2	0.6	10	1250	0.13	39.5	50
53281	346482	5363110	Area C	Apr-15	0.004	0.1	2	-2	0.6	6	992	0.10	28.7	50

Table 4: 2015 Assay results for all 79 panned concentrate stream sediment samples

average 2015 assay	S XRF %	Ag_LA ppm	As_LA ppm	Cu_LA ppm	Mo_LA ppm	Pb_LA ppm	Sn_LA ppm	Sn_LA %	W_LA ppm	Zn_LA ppm
	0.005	0.04	1.5	1.01	0.666	6.8	5684	0.57	48.1	41.8

Table 5: 2015 Average Assay results (new) for all 79 panned stream sediment samples

Examining and analysing the 2015 assay results for all 79 panned stream sediment concentrate samples (Tables 4 & 5), shows that sulphur (S) levels are very low – with only one sample over 0.02% sulphur – showing that sulphide minerals are virtually absent from the clastic stream deposits. Silver is also very low (maximum of 0.4ppm Ag), agreeing with its usual association with sulphide minerals, while arsenic, base metals and molybdenum are also all low at only 1 to 90 ppm, for any of these generally sulphide-associated elements. Some sulphide minerals are present in outcrop though as one sample (550660) from the 2012 rock sampling at the McGuinness Mine adit mouth was seen to contain arsenopyrite and returned an assay of 1.1%S and 30,100ppm arsenic (and 2ppm silver).

Comparison of the 2012 acid digest versus the 2015 laser ablation assay results shows that the results for most elements are similar, from both analysis methods, with the exception of tin and tungsten. The 2012 acid digest assay results for all 79 panned stream sediment concentrate samples confirm that gold and base metal values are low, with gold being very low (maximum of 5ppb Au), silver very low (a maximum of 1ppm Ag) and arsenic and molybdenum levels are also very low (maximum 12ppm As and 4.5ppm Mo).

Tungsten, presumably as the oxides scheelite and/or wolframite, is widely distributed but rarely occurs at over 100ppm and only averages 48ppm W in the 79 stream concentrate samples (2015 laser ablation analyses). In assays with high tin content, tungsten content remains at more modest levels, suggesting a background distribution of tungsten within the granite bedrock that is not necessarily related to discrete tin veins, trap sites and tin enrichment in sediments.

On the other hand tin values are high in the 2015 laser ablation analyses, at an average of 0.57% Sn for all 79 samples – with a highest value of 6.9% tin. Distinct zones with higher tin values seem to occur in the north of Area A, and in the west and south of Area B (Figure

11). A total of 22 of the 79 assay results are over 0.5% Sn.

There are now 102 analyses available from the Minrex work programs. These comprise an initial 10 stream sediment samples and 13 rock chip samples from sampling in proximity to old workings in 2012. And a total of 79 large panned concentrate stream sediment samples from drainages in Areas A, B & C in E18/2011. These analyses are detailed in Tables 1-5.

The sampling work is ongoing and it is planned to sample Area D in the coming year. Nonetheless, initial conclusions from these results include:-

Sulphide minerals and chalcophile elements are rare in the area. The granitic host rocks and weak greisenization, alteration and veining do not appear to have generated any large volume of alteration and sulphide minerals. All 79 panned heavy mineral samples contain negligible levels of sulphur – demonstrating that sulphide minerals have not been accumulated in the streams. Only one rock chip sample (550660) contained significant sulphide (arsenopyrite), assaying 1.1% sulphur (S), 30,100ppm arsenic (As) and 2ppm silver (Ag) – from a small vein at the main McGuinness adit workings. In accord with this observation all samples are low in chalcophile elements including:- copper, lead, zinc, molybdenum, silver and arsenic. The average levels of these elements in the 79 panned concentrate stream sediment samples is 1ppm copper, 7ppm lead, 42ppm zinc, 1ppm molybdenum and 1.5ppm arsenic.

In all 23 analyses were completed for gold (Au) in the initial 2012 stream sediment and rock chip sampling near workings and another 79 in the initial acid digest assaying of the panned stream sediment samples. None of these were anomalous for gold (highest value 5.4ppb Au) and this strongly suggests that gold is not present in any anomalous amounts in the mineralisation or sediments in the tenement. This is also in accord with the absence of sulphides and chalcophile elements.

Tungsten is present at levels up to 850ppm W in rock chip samples (550653) and up to 360ppm W in the panned concentrate stream sediment samples, but these are not significant or anomalous enough values to suggest major deposits. The average level of tungsten in all

79 panned stream sediment samples is only 48ppm W.

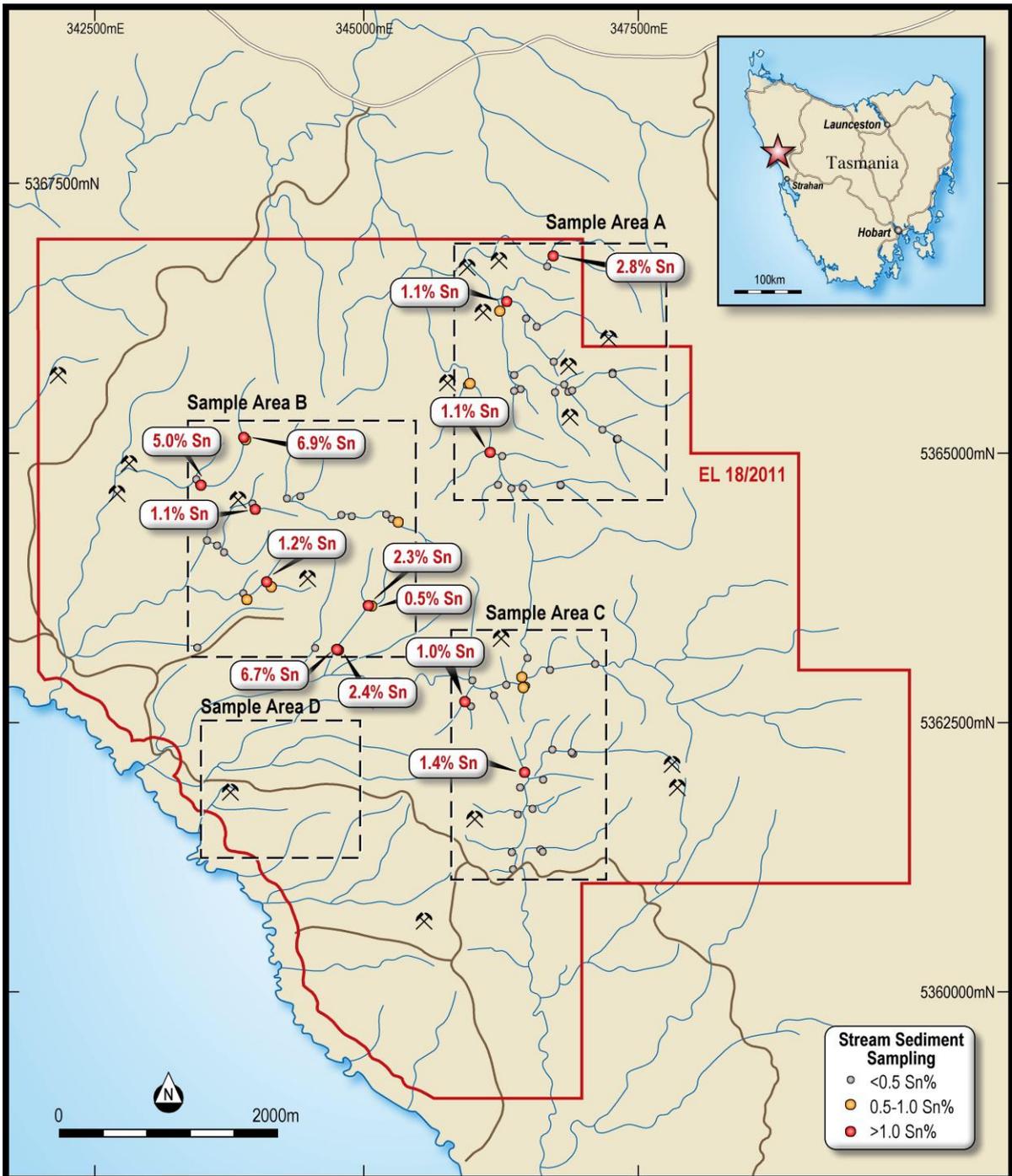


Figure 11: Plan showing Panned Stream Sediment Sampling Assay Results

To date in the sampling and assaying, tin is the only element that is present in anomalous quantities. The 79 panned concentrate stream sediment samples average 0.6% Sn and have a highest value of 6.9% Sn. By comparison the 2012 stream and rock sampling returned values up to only 3,820ppm in stream sediment and 1,230ppm in rock outcrop. On average

the stream sediment samples were twice the values of the rock chip samples, showing the propensity for tin to accumulate in streams.

Of the total 79 panned stream sediment samples from Areas A, B and C, 11 have values over 1% tin and another 11 have values between 0.5 and 1% tin, for a total of 22 (or 28%) of the samples being over 0.5% tin. The samples are panned concentrate samples and are therefore higher grade than the actual in-situ stream sediments; nonetheless, it is thought that the higher grade samples will be directly relatable to the bedrock areas with the highest distribution of contained tin minerals. A plan showing the 22 assays over 0.5% tin has been prepared and is included below as Figure 11. The full table of 2015 assay results (by laser ablation), for all 79 panned stream sediment samples (collected in 2012 and 2015), is also included above as Table 4.

The next stage of the exploration will include stream sediment sampling Area D and infill in Area B where the best results have been received to date. Also, sample residues have been retained and it is possible that future analyses may include other granite-associated elements such as lithium, thorium, uranium, zirconium, yttrium, dysprosium, scandium and other REE.

Further work is yet to be concluded in the area. To date the significance of the refined magnetic and radiometric anomalies (from 2012) is not yet able to be determined, and further follow-up activities are planned to test the precision of magnetic exploration vectors.

In conclusion, the exploration results to date suggest that tin is the only element present in anomalous quantities within the Heemskirk (E18/2011) tenement area. However, further sampling work is warranted and more extensive analysis work is also planned.

An exploration budget of \$44,000 is now proposed for the fifth year of the tenement.

5. Conclusions

In the first four years of exploration activities at the Heemskirk (EL18/2011) tenement, Minrex has completed a literature review, re-processing and analysis of the government airborne magnetic and radiometric geophysical data, surface reconnaissance, mapping and evaluation of old workings and initially collected and analysed 23 rock and stream sediment samples, for multiple metallic elements. Subsequently, two extensive field sampling programs, covering three of four defined areas, have collected 79 bulk panned stream sediment samples and analysed these for multiple metallic elements. Repeat assay work in 2015 confirmed that the early sample analyses were not accurate for tin and tungsten, due to a failure of the mixed acid digest to adequately digest cassiterite and, to a lesser extent, some of the tungsten present. All samples were re-analysed by the laser ablation of glass beads in 2015.

Three of the four planned stream sediment sampling programs have now been completed, with sampling of the fourth, and last, area due to start in 2016, as soon as the work program application (lodged 3rd March 2016) is approved, access is established and stream water levels are adequately high. To date it is too soon to produce definitive conclusions or results.

A total of \$63,607 has been expended on the project in the past year, versus the commitment made of \$31,000. A grand total of \$151,490 has now been expended on the Project, versus the minimum expenditure of \$79,000 which was committed for the first four years.

In the fifth year of the exploration program, Minrex plans to:-

- Continue the surface stream sediment sampling in Area D.
- Conduct infill stream sampling, where best results were returned previously.
- Conduct more detailed mapping in old workings and known alteration zones.
- Review other mineralisation models for potential granite-hosted mineralisation.

An exploration budget of \$44,000 is now proposed for the fifth year of the tenement.

6. Environment

Work completed during the year included cautious driving on the existing tracks within the tenement area, examining old workings and geology on foot and collecting some 49 samples by panning concentrate samples in stream beds. Any disturbance to stream beds, banks or access points by this hand-held sampling work was restored as soon as the sampling at each individual site was completed.

Every effort has been made to keep vehicle tyres, boots and sampling equipment free of weed seeds and possible plant and animal diseases.

None of these activities are thought to have caused any significant environmental damage or impact. Every care was taken not to damage plants, animals or the landscape and there was no spillage of fuels, rubbish or other chemicals.

During the programs there has been no camping or residing within the tenement area.

7. Expenditure

In its application for EL18/2011, Minrex Resources Limited undertook to complete a review and interpretation of previous exploration and geophysical data, logging of historic drill core, MMI and rock chip geochemical survey and detailed geological mapping of selected targets, in the first two years of the licence. A minimum expenditure of \$26,000 was also set for the first two years. A total of \$67,907 was actually expended in the first two years.

In the third year a total of \$19,976 was expended on review of the previous work, drafting, reporting, planning and co-ordination for the subsequent exploration program, versus a planned expenditure of \$22,000.

In this fourth year a total of \$63,607 was expended on review of the previous work, drafting, reporting, planning and conducting an extensive field program of panned concentrate stream sediment sampling, versus a planned expenditure of \$31,000.

A total of \$151,490 has therefore been expended by Minrex on EL18/2011 in the first four years, versus an expenditure commitment of \$79,000.

An exploration budget of \$44,000 is now proposed for the fifth year of the tenement.

8. References

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Keywords

Location:	Heemskirk, Granite Creek
Mineralisation type:	Skarn, veins, greisen, granite-hosted
Metals:	Tin, tungsten, base metals, copper, molybdenum, silver
Exploration methods:	Literature research, aeromagnetic, radiometric, geochemistry, geophysics, geological mapping, rock chip samples, stream sediment samples, panned stream sediment concentrate samples, assaying, analyses
Mine/prospect name:	Peripatetic Mine, McGuinness, Iron Blow, South Gap Creek
Stratigraphic Name:	Heemskirk Granite
Lithologic name:	Granite, skarn, vein, greisen
Datum:	GDA94