MINREX RESOURCES NL

LinQ House
Level 1, 17 Ord Street
West Perth, WA, 6005

2013 ANNUAL REPORT ON THE

HEEMSKIRK PROJECT

3 April 2012 – 2 April 2013

EL18/2011

AT GRANITE CREEK

TASMANIA, AUSTRALIA

DISTRIBUTION:

Mineral Resources Tasmania- Hobart

Minrex Resources NL - Perth

Author: Kieron Munro

Consulting Geologist

24th March 2013

TABLE OF CONTENTS

FIGURES

Abstract

This Annual Report on the Heemskirk Project (EL18/2011) covers the period 3rd April 2012 to 2nd April 2013, the first year of the tenement.

The area contains many small old workings and occurrences of tin, tungsten, copper and gold. Minrex Resources NL (Minrex) considers that the area is prospective for the discovery of new deposits, large low-grade deposits, concealed deposits and/or deposits of metals that previously have not been sought in the area.

In exploring the area, Minrex is seeking to utilise remote sensing and geophysical methods, in conjunction with prospect-based field work and geochemistry.

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 Heemskirk area and two field reconnaissance trips, each of several days duration, that have collected a total of 53 rock chip and stream sediment samples (and chemical analysis of these samples).

As this is the first year of the exploration program, it is too soon to produce definitive conclusions or results. In the second year of the exploration program, Minrex plans to:-

- Continue the surface stream sediment sampling, especially around old workings.
- Conduct more detailed mapping in old workings and known alteration zones.
- Seek out more conclusive geophysical or remote sensing methods that will allow better definition of potential mineralised zones and structures.

Site work has been by light vehicle on existing tracks and foot traverses, no environmental damage or impact has been incurred in the project area in the period of this report.

Total expenditure to date by Minrex on the Heemskirk Project (EL18/2011) totals $46,976.

1. Introduction

This annual report briefly summarises the results of exploration activities at the Heemskirk Project – EL18/2011, during the period 3rd April 2012 to 2nd April 2013. EL18/2011 is held by Minrex NL and comprises an area of some 44 km^2, located to the north of Trial Harbour on the west coast of Tasmania, and some 16 km WNW of the township of Zeehan.

In its application Minrex 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. In essence this has all been done in the first year 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 have collected a total of 53 rock chip and stream sediment samples (and chemical analysis of these samples). A total of $46,976 has been expended in the first year.

More detail on the exploration activities is contained within the following two reports:-

- Previous Exploration Work & Initial Reconnaissance EL18/2011, by C. Allen, June 2012 (EL182011_2013AR_02_ReportB.pdf)
- Processing of Airborne Geophysical Data over EL18/2011 (Heemskirk Project) by P. Muir, October 2012 (EL182011_2013AR_03_ReportC.pdf)

Minrex considers 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 large granitic area is also considered prospective for granite-hosted uranium deposits (alaskite-type) for which little exploration is thought to have occurred in the past. 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: Heemskirk Project Location and Tenement Plan.

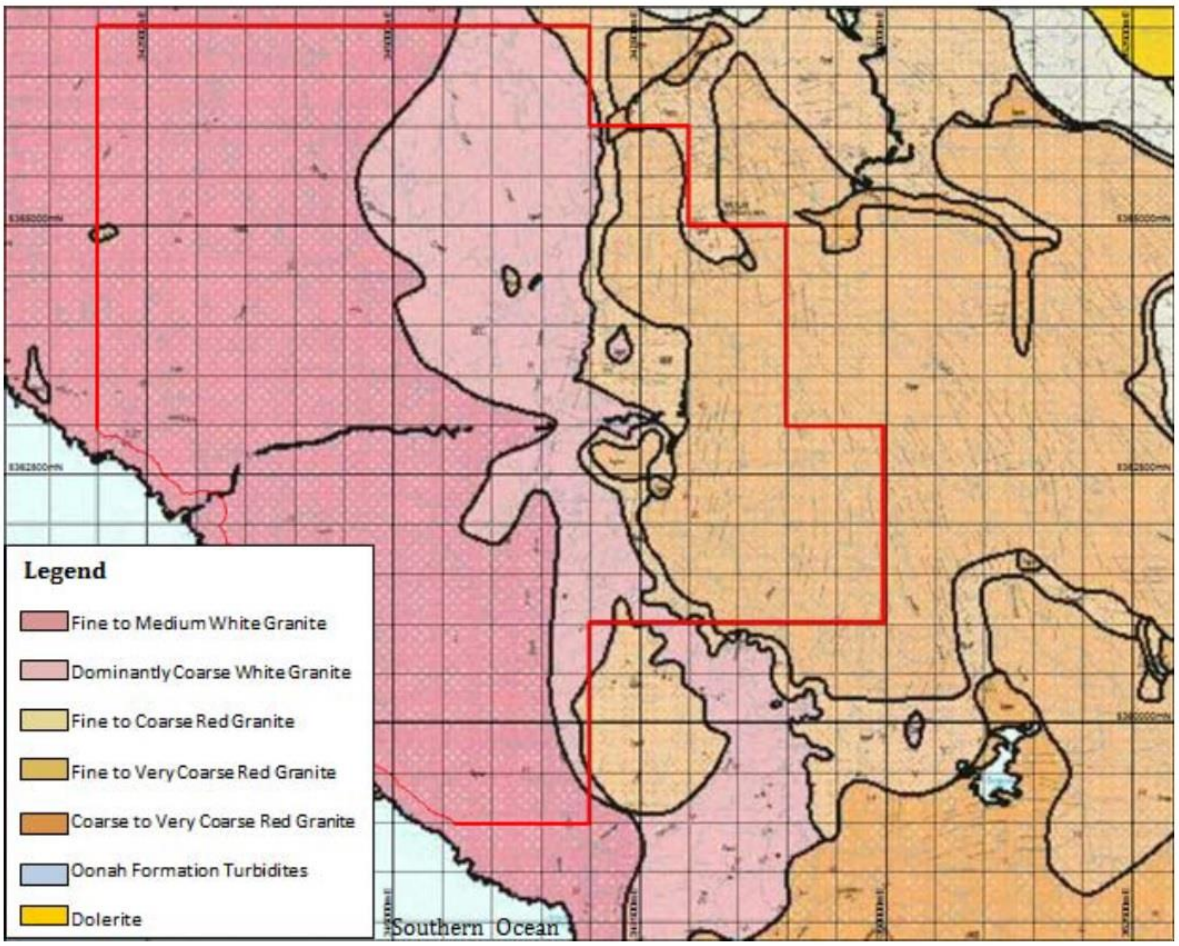

Figure 2: Heemskirk Project Generalised Geology

2. Review of Previous Work

Previous work in the area of the Heemskirk Project (EL18/2011) is summarised in the report:-

- Previous Exploration Work & Initial Reconnaissance EL18/2011, by C. Allen, June 2012 (EL182011_2013AR_02_reportB.pdf).

This literature review and report was commissioned by Minrex early in 2012 to complete a review of past work in the area and carry out initial reconnaissance exploration.

In essence, Allen found that the area contains many small, but rich, tin oxide bodies associated with various vein types. Activity in the area has been sporadic over the past century and systematic regional exploration has not been conducted in modern times.

Several relevant Open File reports, covering previous tenements in the area, were located at the offices of Mineral Resources Tasmania (MRT). Drilling was completed on the Peripatetic Mine by Geophoto Resources in 1970, which suggested that the tin mineralisation did not extend at depth.

Full details of this previous work are within the above named report (Allen, 2012).

As this is the first anniversary of the tenement EL18/2011, then no prior exploration exists for this tenement (EL18/2011) and all work completed to date, that is in the past year, is summarised herein.

3. Exploration Completed during the Report Period

3.1 Literature Review

As discussed above, a literature review and report was commissioned by Minrex early in 2012. Full details of this previous work are within the report (Allen, 2012).

- Previous Exploration Work & Initial Reconnaissance EL18/2011, by C. Allen, June 2012 (EL182011_2013AR_02_reportB.pdf).

3.2 Regional Exploration Activities

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 Resources NL.

EL18/2011 lies wholly within the Heemskirk Granite outcrop; white granite occupies the western two-thirds of the EL, while the eastern third is underlain by red granite. Tin mineralisation is typically associated with the white phase of the granite.

Regionally the Heemskirk Granite generates a comparatively low magnetic profile, bounded by a strong magnetic aureole in surrounding country rocks. Larger tin deposits in northwest Tasmania are commonly associated with prominent magnetic anomalies, located peripherally to granite intrusions within their magnetic aureoles. However, the area covered by EL18/2011 does not extend beyond the granite outcrop and hence does not exhibit a strong magnetic aureole.

Muir concluded that - given the low magnetic relief within the granite, the likely size of a deposit and the 200m aeromagnetic line spacing, any magnetic response directly associated with tin mineralisation in the Heemskirk Project (EL18/2011) is likely to be both small and subtle.

Regionally, the Heemskirk Granite outcrop is associated with a stronger radiometric signal compared with surrounding country rock. Also the eastern half (red granite) exhibits a significantly higher radiometric signal compared with the western half (white granite). Individual drainage channels near the coast have stronger radiometric responses, consistent with selective erosion from radiometrically active portions of the granite and subsequent deposition in local drainages and along the adjacent coastline.

Uranium to thorium channel ratio analysis (U/Th) outlines a broad (1-2km wide) diffuse zone of low U/Th ratios stretching across the northern section of EL18/2011, these might be indicative of zones more prospective for tin mineralisation.

Muir concluded that the processing and analysis had not generated any targets of note. The existing geochemical data is too sporadic for drawing reliable conclusions about the relationship between mineralisation and the geophysical observations.

Full details of this regional geophysical work are within the report (Muir, 2012).

- Processing of Airborne Geophysical Data over EL18/2011 (Heemskirk Project) by P. Muir, October 2012 (EL182011_2013AR_03_reportC.pdf)

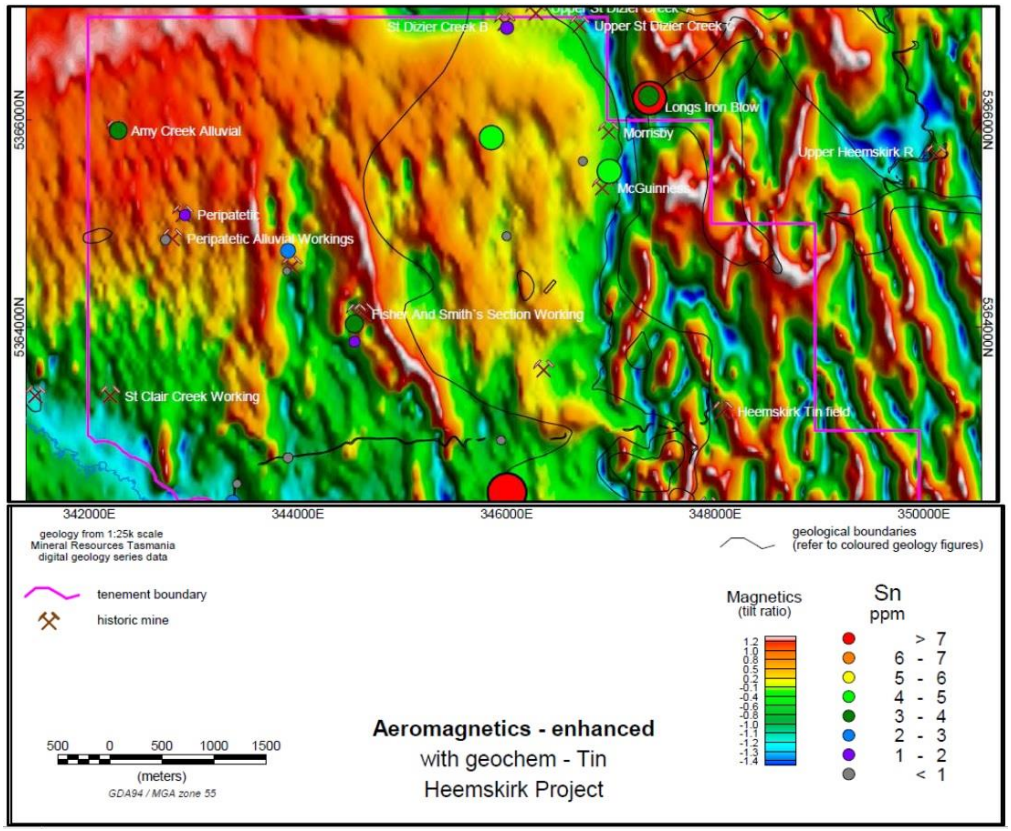

Figure 3: Heemskirk Project Aeromagnetic Image - enhanced

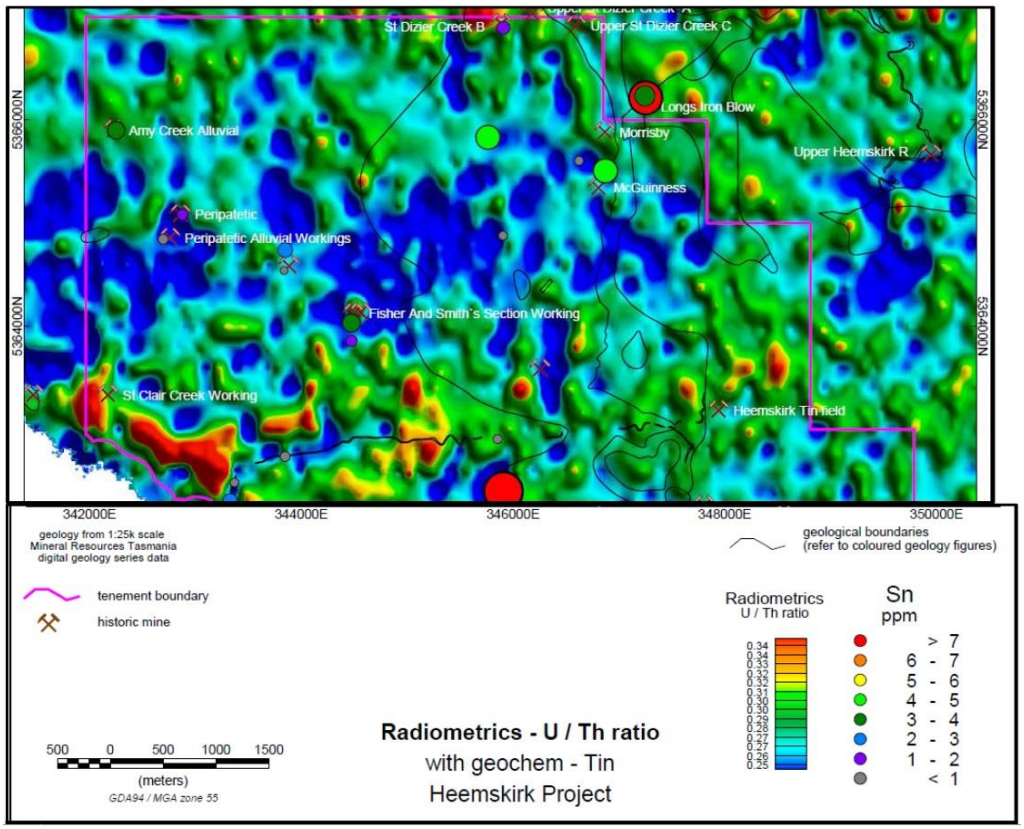

Figure 4: Heemskirk Project Radiometrics – U/Th ratio

3.3 Prospect-based Exploration Activities

In addition to the literature review, discussed above, the work completed by Allen 2012 included an initial reconnaissance exploration of the Heemskirk Project (EL18/2011), as commissioned by Minrex early in 2012. Full details of this previous work are within the report (Allen, 2012).

- Previous Exploration Work & Initial Reconnaissance EL18/2011, by C. Allen, June 2012 (EL182011_2013AR_02_reportB.pdf).

This field work included several days in the field locating, examining and sampling historic workings and geology. The area has contained many small, but rich, tin oxide bodies associated with various vein types. Many (14) old workings were located, named and unnamed, and examined, with these generally thought to date from between 1876 and 1900.

Thirteen rock chip samples were collected and 10 stream sediment samples, with these all analysed for gold, silver, copper, molybdenum, nickel, lead, tin, titanium, tungsten and zinc. This was intended to be an initial reconnaissance and determination of background anomalism levels. The results are presented in the file:- (EL182011_2013AR_04_geochemA.csv).

Vein hosted and replacement mineralisation was noted at the McGuinness and Iron Blow workings and a large area of sericitic alteration was seen immediately to the west of South Gap Creek. These areas having been specifically identified as worthy of further inspection and having the potential to be associated with larger mineralised systems.

Allen concluded that future exploration activities should be concentrated on the McGuiness, Iron Blow and South Gap areas, specifically for tin, silver and molybdenum mineralisation.

Full details of the prospect-based exploration activities are within the report (Allen, 2012).

- Previous Exploration Work & Initial Reconnaissance EL18/2011, by C. Allen, June

2012 (EL182011_2013AR_02_reportB.pdf).

Subsequently, a follow-up detailed stream sediment sampling program has commenced, starting with drainages surrounding historic workings, including the Peripatetic and McGuiness Mines. This initial exploration program aims to confirm the effectiveness of these sampling techniques and establish a statistical base from which to distinguish background from anomalous tenors for a range of metallic elements.

To date some 30 stream sediment samples have been collected and analysed for gold, silver, arsenic, molybdenum, tin and tungsten. The full program remains underway and hence there is no report on this work as yet. However, the current geochemical results are included in the file:- (EL182011_2013AR_05_geochemB.csv).

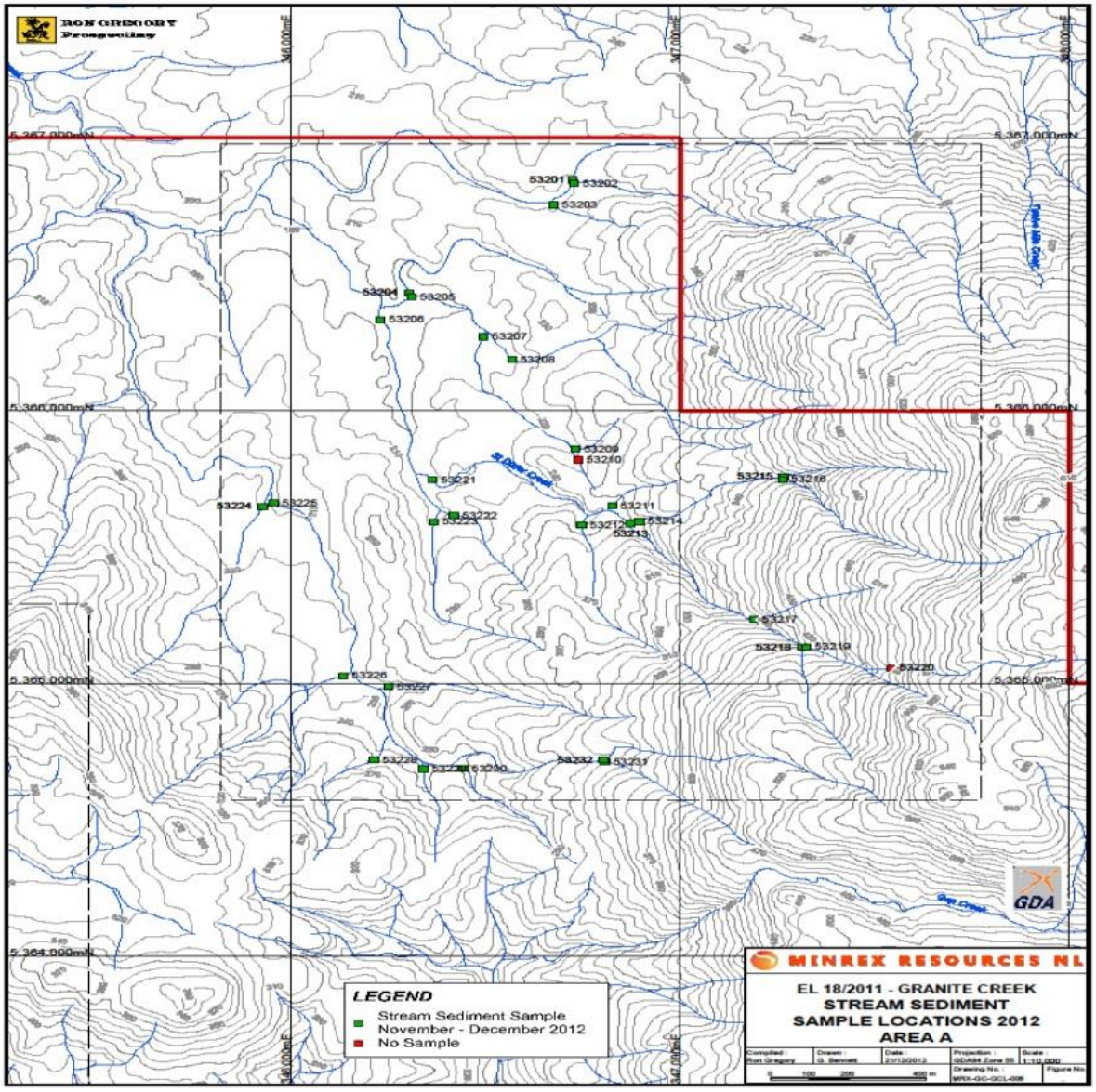

Figure 5: Heemskirk Project Stream Sediment Locations

4. Discussion of Results

The re-processing and analysis of the government airborne geophysical data (magnetic and radiometric) over the Heemskirk area determined the following salient observations:-

- There is a likely association of tin mineralisation in the area with subtle variations in the magnetic signature, linked to magnetite concentration within the more prospective white granite phase.
- Practical application of Tilt Derivative techniques could be employed to enhance subtle magnetic features within the granite.
- Identification of a 1.5km long Tilt-enhanced anomaly near the Peripatetic Mine, together with subtle magnetic anomalies, to the east and south of Fisher and Smiths Section Workings.
- Identification of a radiometric high, proximal to known mineralisation at Fisher and Smiths Section Workings.
- The potential use of U/Th ratios as an exploration vector, together with the presence of low U/Th ratios along the northern sections of EL18/2011, encompassing the McGuiness and Peripatetic Mines.

Whereas the significance of the refined magnetic and radiometric anomalies is not able to be determined at this stage, further follow-up activities are planned to test the precision of such magnetic exploration vectors.

The follow-up detailed stream sediment sampling program on drainages surrounding historic workings, including the Peripatetic and McGuiness Mines, aims to confirm the effectiveness of these sampling techniques and establish a statistical base from which to distinguish background from anomalous tenors for a range of metallic elements.

5. Conclusions

In the first year 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 collected and analysed some 53 rock and stream sediment samples, for multiple metallic elements.

As this is the first year of the exploration program, it is too soon to produce definitive conclusions or results.

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

- Continue the surface stream sediment sampling, especially around old workings.
- Conduct more detailed mapping in old workings and known alteration zones.
- Seek out more definitive geophysical or remote sensing methods that will allow better definition of potential mineralised zones and structures.
- Review other mineralisation models for potential granite-hosted mineralisation.

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 53 samples from stream beds and chips from rock outcrops (mostly in old workings). None of these activities are thought to have caused any environmental damage or impact. Every care was taken not to damage plants, animals or cause any 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 NL 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.

In essence this work has all been done in the first year of the licence; 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 have collected a total of 53 rock chip and stream sediment samples (and chemical analysis of these samples).

A total of $46,976 has been expended in the first year.

8. References

Allen, C, 2012: Previous Exploration Work & Initial Reconnaissance EL18/2011. June 2012 (EL182011_2013AR_02_ReportB.pdf)

Muir, P, 2012: Processing of Airborne Geophysical Data over EL18/2011 (Heemskirk Project). October 2012 (EL182011_2013AR_03_ReportC.pdf)

Keywords

Location:	Heemskirk, Granite Creek
Mineralisation type:	Skarn, veins, greisen, granite-hosted, alaskite
Metals:	Tin, tungsten, copper, molybdenum, gold, silver
Exploration methods:	Literature research, aeromagnetics, radiometrics, geochemistry, geophysics, geological mapping, rock chip samples, stream sediment samples
Mine/prospect name:	Peripatetic Mine, McGuiness, Iron Blow, South Gap Creek
Stratigraphic Name:	Heemskirk Granite
Lithologic name:	Granite