

**MINREX RESOURCES NL**

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**2014 ANNUAL REPORT ON THE  
HEEMSKIRK PROJECT**

**3 April 2013 – 2 April 2014**

**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 3<sup>rd</sup> April 2013 to 2<sup>nd</sup> April 2014, the second 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.

Work to date (in the first two years of the tenement) 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. The second year work has been principally concerned with interpretation of the previous results, drafting, reporting, planning and co-ordination for the planned subsequent exploration program.

As this is only the second year of the exploration program, it is too soon to produce definitive conclusions or results. In the third 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.
- Consider more conclusive geophysical or remote sensing methods that will allow better definition of potential mineralised zones and structures.

\$18,351 has been expended in the second year of the tenement, bringing total expenditure to date by Minrex on the Heemskirk Project (EL18/2011) to \$73,614.

An exploration budget of \$20,000 is proposed for the third year of the tenement.

## **1. Introduction**

This annual report briefly summarises the results of exploration activities at the Heemskirk Project – EL18/2011, during the period 3<sup>rd</sup> April 2013 to 2<sup>nd</sup> April 2014; the second year of the tenement. EL18/2011 is held by Minrex Resources NL (Minrex) and comprises an area of some 44 km<sup>2</sup>, 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 data, geophysics and rock chip geochemical surveys; in the first two years of the licence. A minimum expenditure commitment of \$20,000 was set for year two of the licence. In essence 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 53 rock chip and stream sediment samples, and chemical analysis of these samples..

In the current (second) year of the tenement, work has been focussed on interpretation of the results from the first year geophysics and surface work and planning for follow up work. A local Consulting Geologist has been contacted to continue the geological reconnaissance, sampling and mapping of the Heemskirk Project area. However, the remote location, difficult access and complications of completing useful work in the area, have hindered completion of the next round of surface work within the current year.

An exploration budget of \$20,000 is proposed for the third year of the tenement.

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 large granitic area is also considered prospective for other granite-hosted metal deposits 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 Location and Tenement Plan.

The datum used throughout this report is GDA94.

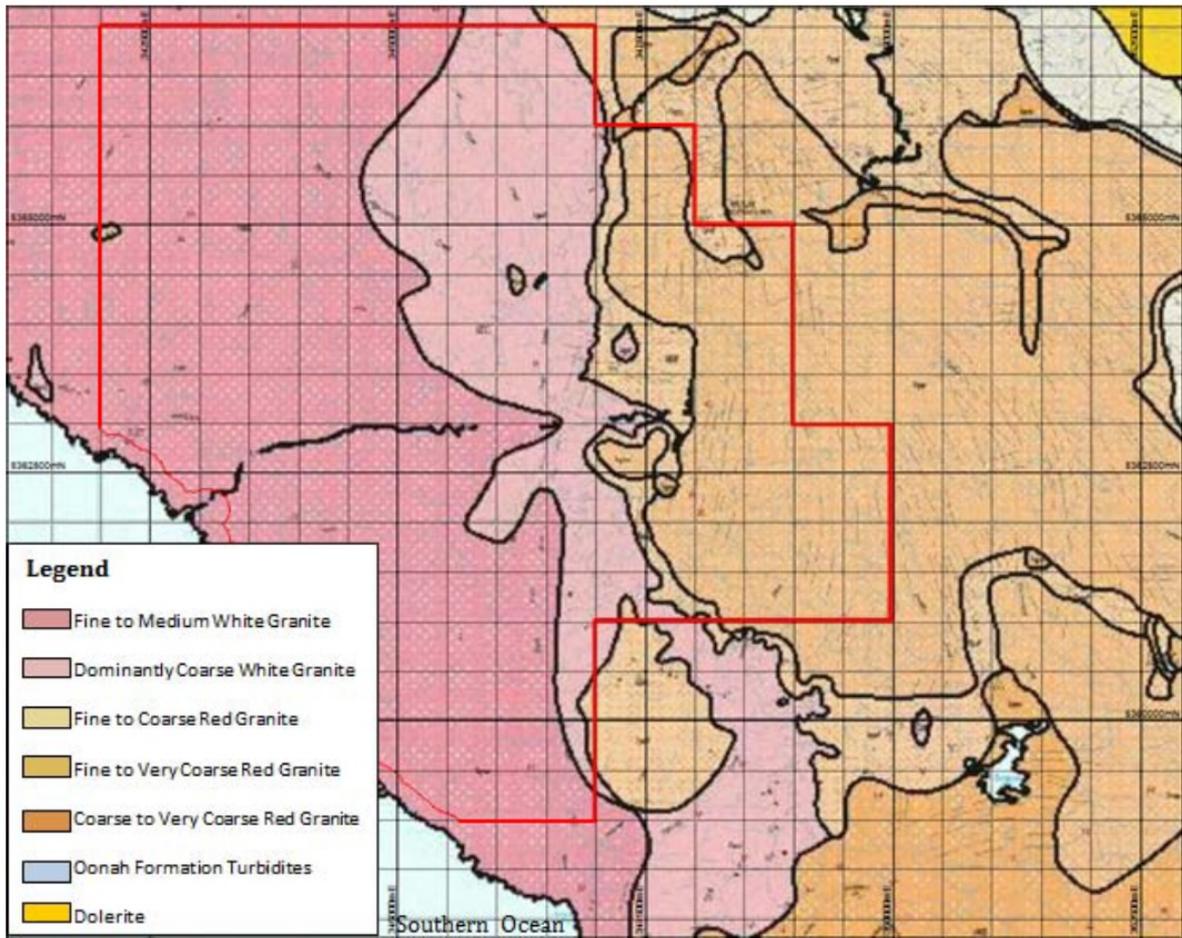


Figure 2: Heemskirk Generalised Geology

## **2. Review of Previous Work**

Earlier exploration 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\_2013A\_02\_reportB.pdf).

This literature review and report was commissioned by 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.

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. 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 documented in the report:-

- 2013 Annual Report on the Heemskirk Project EL18/2011, by K. Munro, March 2013 (EL182011\_2013A\_01\_reportA.pdf).

### 3. Exploration Completed during the Report Period

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).

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 (Muir, 2012).

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).

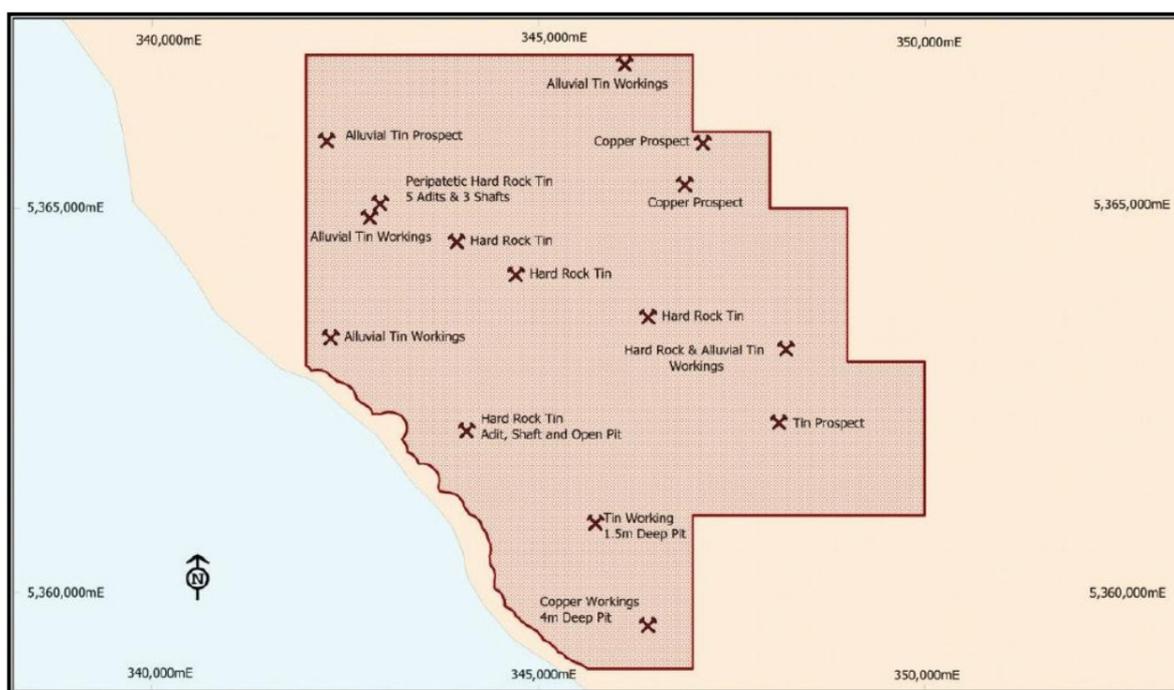


Figure 3: Heemskirk Location of Known Old Workings

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.

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.



Figure 4: Heemskirk Location of Old Workings on Topography

Subsequently, a follow-up, 30 samples, stream sediment sampling program was completed on drainages surrounding historic workings, including the Peripatetic and McGuinness Mines. This exploration program aimed 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.

The stream sediment samples were analysed for gold, silver, arsenic, molybdenum, tin and tungsten (Figure 5). These assays were lodged last year.

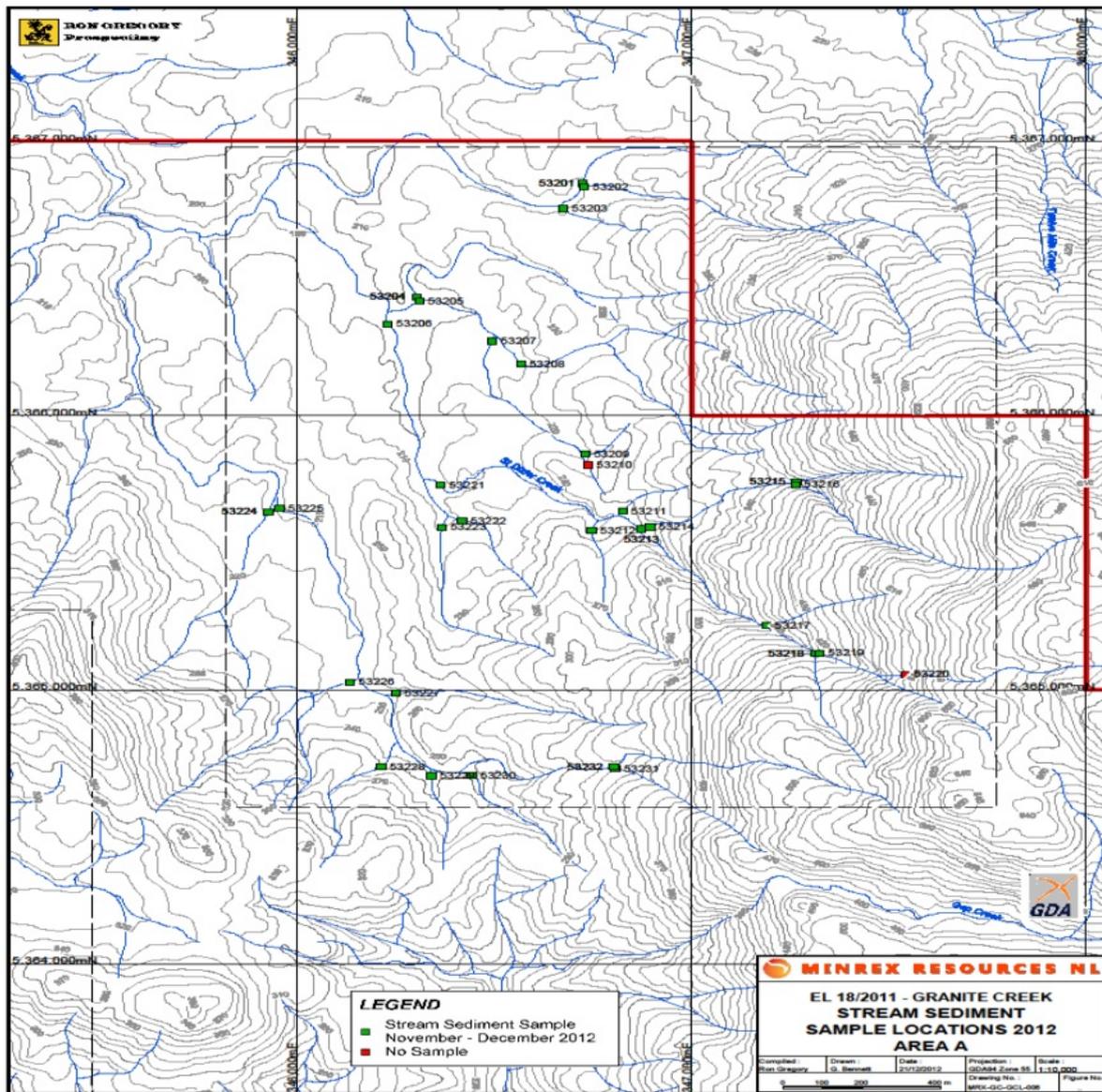


Figure 5: Heemskirk Stream Sediment Locations

As discussed above, several reports and two field programs were completed during the first year of the tenement (EL18/2011). And the early 2013 field program was completed just prior to the end of the previous year. During this second year of the tenement these results were drafted (Figures 4 and 5) 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 has also been on-going through the second year, along with work to identify a local Consulting Geologist to continue the geological reconnaissance, sampling and mapping of the Heemskirk Project area.

#### **4. Discussion of Results**

A large amount of data was collected at Heemskirk in the first year of the tenement. The second year has been more orientated towards the collation, analysis and consideration of these results. A new surface reconnaissance, mapping and sampling field program is planned for the coming year, to build on these early (but inconclusive) results.

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 planned (third stage) follow-up detailed stream sediment sampling program on drainages surrounding historic workings, including the Peripatetic and McGuinness Mines, aims to utilise these sampling techniques to further test the tenement for a range of metallic elements.

## **5. Conclusions**

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

\$18,351 has been expended during the second year, versus the minimum expenditure of \$20,000.

To date it is too soon to produce definitive conclusions or results.

In the third 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.

An exploration budget of \$20,000 is proposed for the third year of the tenement.

## **6. Environment**

No surface work was completed in the tenement during the current year. Therefore, there has been no environmental impact or damage, due to exploration activities, in the area during the period.

## **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 combined minimum expenditure of \$46,000 was set for the first two years.

A total of \$55,263 was expended in the first year, with \$18,351 expended in the second year.

A total of \$73,614 has therefore been expended on EL18/2011 in the first two years.

An exploration budget of \$20,000 is proposed for the third year of the tenement.

## **8. References**

Allen, C, 2012: Previous Exploration Work & Initial Reconnaissance EL18/2011. June 2012 (EL182011\_2013A\_02\_ReportB.pdf)

Muir, P, 2012: Processing of Airborne Geophysical Data over EL18/2011 (Heemskirk Project). October 2012 (EL182011\_2013A\_03\_ReportC.pdf)

Munro, K, 2013: 2013 Annual Report on the Heemskirk Project EL18/2011. March 2013 (EL182011\_2013A\_01\_ReportA.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, aeromagnetism, radiometrics, geochemistry, geophysics, geological mapping, rock chip samples, stream sediment samples
Mine/prospect name:	Peripatetic Mine, McGuinness, Iron Blow, South Gap Creek
Stratigraphic Name:	Heemskirk Granite
Lithologic name:	Granite