

**MINREX RESOURCES NL**

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**2015 ANNUAL REPORT ON THE  
HEEMSKIRK PROJECT**

**3 April 2014 – 2 April 2015**

**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 2014 to 2<sup>nd</sup> April 2015, the third year of the tenement.

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

Work to date (the first three 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 third year work has comprised analysis of the previous results and design, planning and co-ordination for the delayed subsequent exploration program. A program of stream sediment sampling has been planned (to follow up the earlier stream sediment sampling) but this has not yet commenced due to planned track works in the area (to improve access) and a lack of running water in creeks for the stream sediment sample panning.

Although this is the third year of the exploration program, it is too soon to produce definitive conclusions. In the fourth 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.

\$19,761 has been expended in the third year of the tenement, bringing total expenditure to date by Minrex on the Heemskirk Project (EL18/2011) to \$87,883.

An exploration budget of \$31,000 is proposed for the fourth 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 2014 to 2<sup>nd</sup> April 2015; the third 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 of \$26,000 was also set for the first two years. 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 53 rock chip and stream sediment samples, and chemical analysis of these samples. A total of \$46,976 was expended in the first year.

In the second and third years 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. It has been necessary to contract local geological and sampling teams that can 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; have hindered completion of the next round of surface work within the current year. Ron Gregory Prospecting of Tasmania has been contracted to complete the next round of stream sediment sampling but has been delayed in starting this work due to track work and inadequate stream levels for sampling.

An exploration budget of \$31,000 is now proposed for the fourth 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.

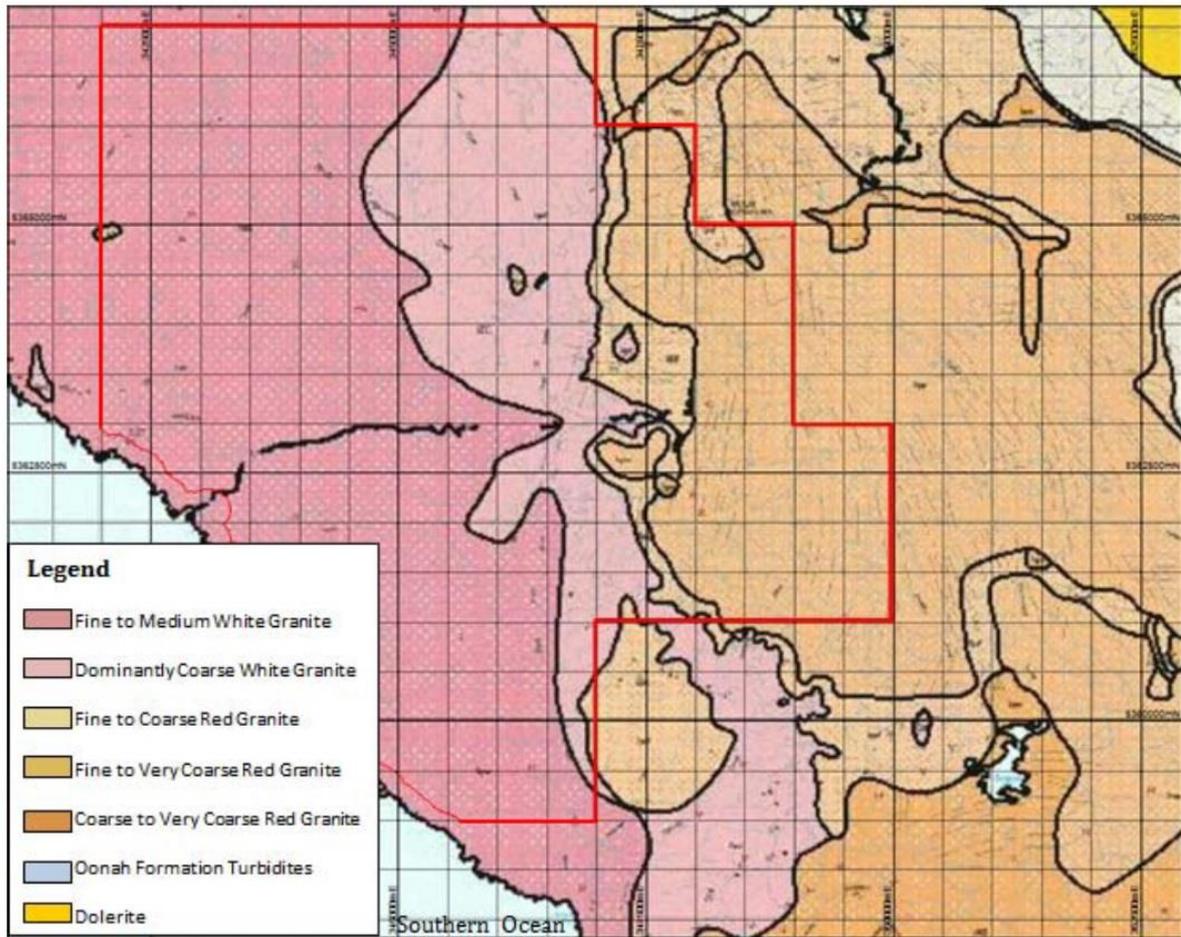


Figure 2: Heemskirk Generalised Geology



Figure 3: View of Typical Heemskirk Terrain

## **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). 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).

### 3. Exploration Completed during the Report Period

As discussed above, 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 and hosted numerous small historic mineral deposits of tin, tungsten, copper and gold.

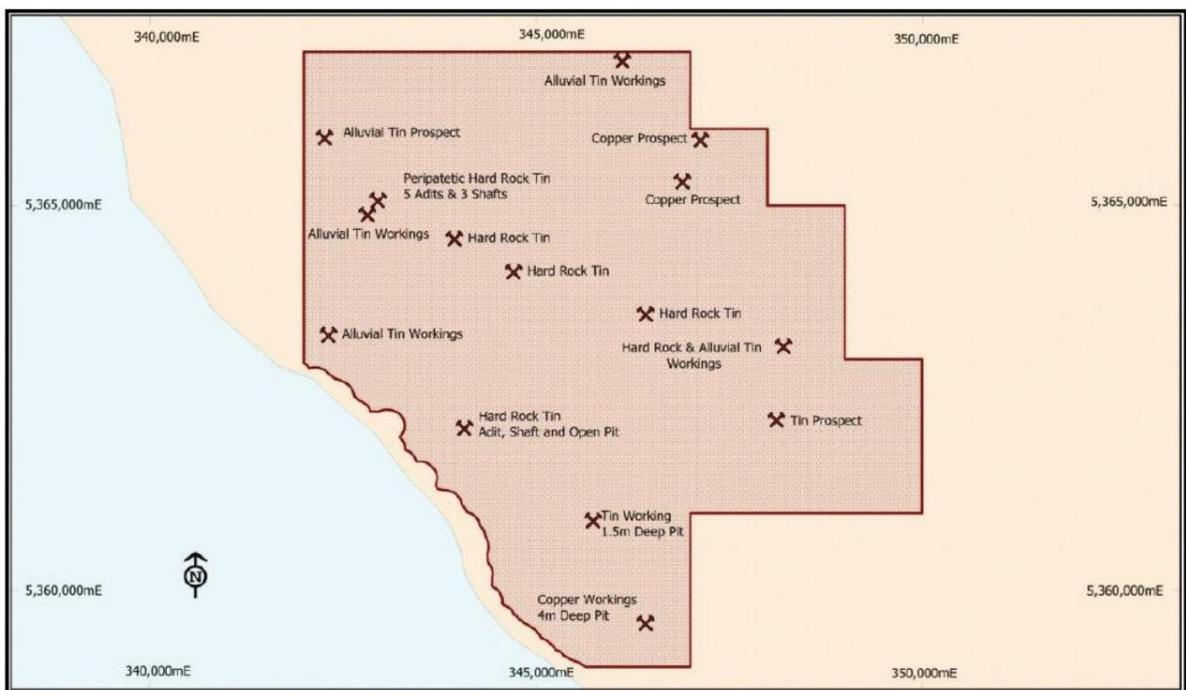


Figure 4: Heemskirk Location of Known Old Workings

Following the intensive first year study and analysis 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 a large bulk creek sediment sample 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 McGuiness

Mine. 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 (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 and the early 2013 field program was completed just prior to the end of the year. During this current third 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. 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 has also been 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.

It has been necessary to contract local geological and sampling teams that can be mobilised, on appropriate occasions and in favourable weather conditions, 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; have hindered completion of the next round of surface work within the current year. Ron Gregory Prospecting of Tasmania has been contracted to complete the next round of stream sediment sampling (Area B) but has been delayed in starting this work due to track work and inadequate stream levels for sampling.

An exploration budget of \$31,000 is now proposed for the fourth year of the tenement.

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

A large amount of data was collected at Heemskirk in the first year of the tenement. The second and third years have been more orientated towards the collation, analysis and consideration of these results. A new surface reconnaissance, mapping and sampling field program has been contracted to commence, at Area B in the northwest of the tenement, but has been delayed due to track work and inadequate stream levels for sampling. This work is planned to commence in the very near future, 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 (Area B) follow-up stream sediment concentrate sampling program on drainages surrounding historic workings, including the Peripatetic Mine, aims to utilise these sampling techniques to further test the tenement for a range of metallic elements.

## **5. Conclusions**

In the first three 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. Only one of four planned stream sediment sampling programs has yet been completed, with sampling of the second area due to start as soon as access is established and stream water levels are adequately high.

A total of \$87,883 has now been expended on the Project, versus the minimum expenditure of \$48,000 which was committed for the first three years.

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

In the fourth 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.
- Review other mineralisation models for potential granite-hosted mineralisation.

An exploration budget of \$31,000 is proposed for the fourth 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 minimum expenditure of \$26,000 was also set for the first two years. A total of \$46,976 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.

A total of \$87,883 has therefore been expended by Minrex on EL18/2011 in the first three years, versus an expenditure commitment of \$48,000.

An exploration budget of \$31,000 is proposed for the fourth 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).

Munro, K, 2014: 2014 Annual Report on the Heemskirk Project EL18/2011. March 2014 (EL182011\_2014A\_01\_ReportA.pdf).

## **Keywords**

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