

13 September 2018

ASX Announcement ASX Codes: SRN and SRNOB

#### **ASSAYS RECEIVED**

#### **Unaly Hill Vanadium**

- 3 zones of vanadiferous magnetite intersected
  - O 40.5m @ 0.36% V₂O₅, 5.53% TiO₂ and 19.4% Fe from 108.65m
  - o 69.5m @ 0.42% V<sub>2</sub>O<sub>5</sub>, 6.19% TiO<sub>2</sub> and 22.77% Fe from 182.50m
  - 50.8m @ 0.55% V₂O₅, 8.07% TiO₂ and 29.88% Fe from 298.20m
    - Including 9m @ 0.89% V₂O₅, 12.95% TiO₂ and 45.33% Fe from 306m
- Metallurgical testwork underway
- RC drilling campaign planned to confirm and expand previous exploration work towards resource definition

Surefire Resources NL ("SRN") executed a single HQ diamond drill hole which was completed at a depth of 345.5m. The hole, UHDM001, was drilled to acquire sufficient core sample to advance metallurgical testing. The hole intersected three consistent zones of extensive mineralisation occurring as course, euhedral magnetite in a chloritic gabbro. The mineralisation graded from moderate-heavily disseminated, to matrix and massive concentrations of cumulate magnetite.

The three consistent zones of vanadiferous magnetite intersected (Figure 1) returned assay results of:

- 40.5m @ 0.36% V<sub>2</sub>O<sub>5</sub>, 5.53% TiO<sub>2</sub> and 19.4% Fe from 108.65m
- $\circ$  69.5m @ 0.42%  $V_2O_5$ , 6.19%  $TiO_2$  and 22.77% Fe from 182.50m
- 50.8m @ 0.55% V₂O₅, 8.07% TiO₂ and 29.88% Fe from 298.20m
  - Including 9m @ 0.89% V<sub>2</sub>O<sub>5</sub>, 12.95% TiO<sub>2</sub> and 45.33% Fe from 306m

The selection of meterages for the composites for metallurgical process work as well as sample ½ core sections for comminution testwork has been completed and the next stage of metallurgical testwork is underway with results expected in the next quarter.

Historical testwork on the Unaly Hill mineralisation has previously confirmed a high-grade vanadium concentrate can be produced from the Unaly Hill mineralisation. A comprehensive metallurgical test work program has been designed for the new mineralised core and the Company has engaged metallurgical consultancy company METS Engineering of West Perth, to manage the testwork program in conjunction with ALS Metallurgy Pty Ltd (ALS) part of the ALS Global group specialising in assay and metallurgical process work.

The second stage of the Unaly Hill drill program has now commenced and consists of more extensive RC drilling that will test additional magnetic anomalies and areas of potential higher-grade mineralisation. Southern Geoscience (SGC) produced the original target drill hole model plots and were engaged to analyse and assess the detailed geophysical data available for the areas north of the 2010 drilling program. The previous SGC generated target drill holes intersected significant high-grade vanadium mineralisation and provided a sound targeting rationale.



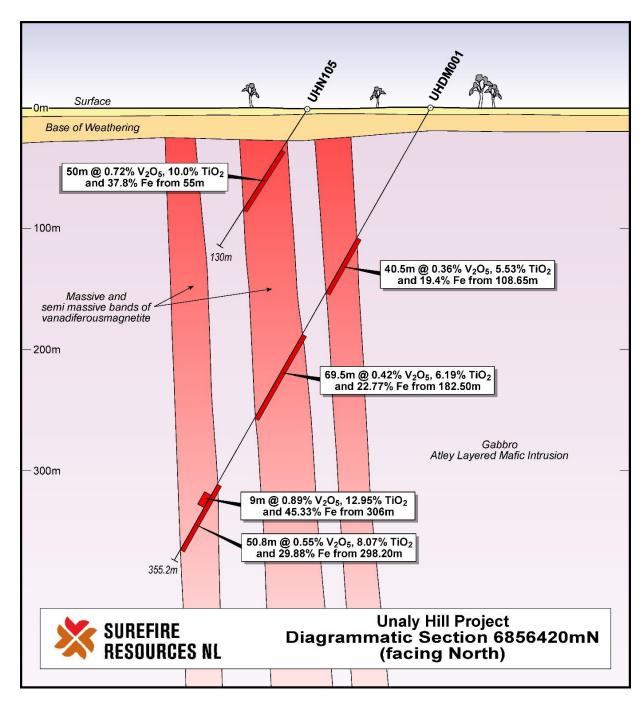


Figure 1. Diagrammatic section of results for UHDM001, with results from 2010 RC hole UHN105 for comparison.



#### **Geological Setting**

The Unaly Hill Vanadium project licence area, E57/1068 (Figure 2) lies within the Atley Igneous Complex located approximately 48 km south of Sandstone in the East Murchison Mineral field of Western Australia. The Atley Intrusion is a layered gabbroic body that is elongate in an NNE/SSW orientation and runs along the axis of the regional scale Youanmi Fault, a regionally dominant geological feature.

It has a maximum thickness of 4.5 km and there are exposures over a strike length of 17 km. The compositional layers recognized are gabbro, leucogabbro, pyroxenite (completely altered to talc, chlorite and tremolite), anorthosite and magnetite rock. The iron-vanadium-titanium mineralisation is situated within cyclical cumulous layers within the intrusive complex.

The Company has previously established a substantial vanadium mineralised zone from drilling 3 kilometres of magnetic anomaly corresponding with the cumulous magnetite layers within the intrusive. The mineralisation remains open at depth and along strike and over 7 km of strike length of the magnetic anomaly remains undrilled.

#### **Competent Persons Statement**

The information in this announcement that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Tony Donaghy who is a Registered Professional Geoscientist (P.Geo) with the Association of Professional Geoscientists of Ontario (APGO), a Recognised Professional Organisation. Mr Donaghy is a technical advisor to the Company. Mr Donaghy has sufficient experience which is relevant to the style and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves. Mr Donaghy consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

#### Forward Looking Statements Disclaimer

This announcement contains forward-looking statements that involve a number of risks and uncertainties. These forward-looking statements are expressed in good faith and believed to have a reasonable basis. These statements reflect current expectations, intentions or strategies regarding the future and assumptions based on currently available information. Should one or more of the risks or uncertainties materialise, or should underlying assumptions prove incorrect, actual results may vary from the expectations, intentions and strategies described in this announcement. No obligation is assumed to update forward looking statements if these beliefs, opinions and estimates should change or to reflect other future developments.



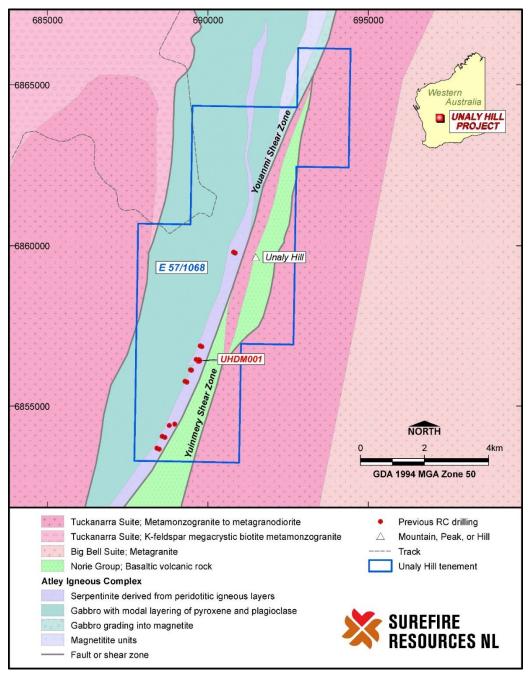


Figure 2. Geology map of the Unaly Hill project within the Atley Igneous Complex showing the location of drill hole UHDM001 relative to the 2010 RC drilling program.



# JORC Code Table 1 for Unaly Hill Project

### **Section 1 Sampling Techniques and Data**

(Criteria in this section apply to all succeeding sections.)

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Samples were crushed and dried and then pulverised s >85% of sample is -75um.  Multi-element analysis was completed using ME-MSt MS and ICP AES (44 elements using a four-acid dige technique.  A prepared sample (0.66 g) was fused with a fluxing a and then poured into a platinum mould. The resultant was in turn analysed by XRF spectrometry (24 element  A single HQ diameter diamond drill hole  Drill cores were measured and assessed against drill determine whether any core loss had occurred. No appreciable core loss was measured through the miner intervals.  Quarter core was cut, crushed to >70% less than 6mm split, and the split pulverized so that >85% of sample 75um. 25g of pulverized material was analyzed.  100% core recovery was obtained  Drill core has been geologically logged to a level of deemed appropriate for mineral exploration, with deta entered into an Excel based Geological Database.  Drill logs record lithology, mineralogy, mineralisation weathering, colour and other appropriate features. All logging is quantitative.  The drill hole reported was logged in full	



Criteria	JORC Code explanation	Commentary		
Sub- sampling techniques	If core, whether cut or sawn and whether quarter, half or all core taken.	Diamond core was marked up for quarter core diamond sawing.		
and sample preparation	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	No non-core drilling is reported		
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	The entire drill hole was transported to the external sample preparation/assay laboratory.  The sample preparation of samples followed industry best practice. All samples were pulverized to a minimum of 85% passing 75 microns.  Samples were crushed to -6mm and then pulverised.  Samples were then split and a split sent for analysis.  Sample sizes and preparation techniques employed are considered to be appropriate for the generation of exploration results.		
	Quality control procedures adopted for all sub- sampling stages to maximise representivity of samples.	The external laboratory's QA/QC procedures involved the use of appropriate standards, duplicates and blanks which are inserted into sample batches at a frequency deemed appropriate for the exploration results.		
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.	Sample size was approximately 1kg – 2kg in weight.		
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Given the exploration stage nature of this work the sample sizes are deemed appropriate.		
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	The analytical technique used a 4 acid digest on 1-2 metriquarter core samples.  The HQ diamond drill core from UHDM001 was deliver to ALS Technical Centre in Wangara for metallurgical testwork and assay.  Multi-element analysis was completed using ME-MS61 MS and ICP AES (44 elements using a four-acid digest) technique.  A prepared sample (0.66 g) was fused and then poured in platinum mould. The resultant disk was in turn analysed XRF spectrometry (24 elements).  These techniques are considered total.		
	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	No geophysical results are reported.		
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	The Company has relied upon the Laboratory for standards and QA/QC.  The external laboratory used maintains their own process of QA/QC using standards, sample duplicates and blanks.  Review of the external laboratory quality QA/QC reports, has shown no sample preparation issues, acceptable levels of accuracy and precision and no bias in the analytical datasets.		
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	The sampling techniques were reviewed in the field by an external consultant.  Significant intersections of the diamond core were visually verified by the Managing Director.		
	The use of twinned holes.	There have been no twinned holes to date.		
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	All primary data is recorded in specifically designed templates. Assay data from the external laboratory was received in spreadsheets and downloaded directly into an Excel based Geological Database.		
	Discuss any adjustment to assay data.	No adjustments have been made to the assay data.		



Criteria	JORC Code explanation	Commentary		
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Drill hole collar was located by GPS. Elevation value is in AHD. Expected accuracy was +/- 3m for northing and easting and +/-10m for elevation coordinates.		
	Specification of the grid system used.	Drill hole location is reported using the GDA94_MGAz50 grid system.		
	Quality and adequacy of topographic control.	Drill hole collar was located by GPS. Elevation value is in AHD. Expected accuracy was +/-10m for elevation coordinates.		
Data spacing and distribution	Data spacing for reporting of Exploration Results.	A single drill hole is reported.		
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	The data spacing is considered sufficient to assume geological and grade continuity. It is expected that further drilling will allow the estimation of Mineral Resources.		
	Whether sample compositing has been applied.	No compositing of samples has been applied.		
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	The drill hole was angled perpendicular to the strike of the target horizon to achieve unbiased sampling of the target horizon.		
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	Drill intersections are not true widths.		
Sample security	The measures taken to ensure sample security.	Chain of custody for samples was managed by the company and the Laboratory.  Logging of Diamond drill core was undertaken in the field, and core was then transported to the laboratory in its entirety for core sawing and sample preparation at the laboratory.		
Audits or The results of any audits or reviews of sampling techniques and data.		Sample preparation followed industry best practice at the commercial laboratory facility. QA/QC of assay analyses shows there are no issues with sampling, analytical techniques or results.		

## **Section 2 Reporting of Exploration Results**

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary	
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	The exploration results in this report relate to Exploration Licences E57/1068.  This EL is 100% owned by Surefire Resources NL.	
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	Tenure in the form of Exploration Licences with standard 5- year expiry dates which may be renewed.  There are no known impediments to obtaining a licence to operate in this area.	
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Previous regional exploration on the project was undertaken by the company and included, geophysical surveys, geochemical surveys, rock sampling and RC drilling.  Historical geophysical surveys included an airborne (helicopter) magnetic survey. Geochemical surveys included soil sampling.  A detailed assessment of the historic data is in progress. No significant issues with the data have been detected to-date.	
Geology	Deposit type, geological setting and style of mineralisation.	The Project occurs within the Atley Igneous Complex in the East Murchison Mineral field of Western Australia. The Atley Intrusion is a layered gabbroic body that is elongate	



Criteria	JORC Code explanation	Commentary		
		in an NNE/SSW orientation and runs along the axis of the regional scale Youanmi Fault, a regionally dominant geological feature.  Further drilling and assaying is required to fully assess the geology and style of mineralisation.  Mineralogy and petrology studies completed suggest that host rocks at Unaly Hill are magnetite cumulate layers within gabbros in a layered mafic complex.  The targeted deposit type and style of mineralisation is Fe-Ti-V) magmatic magnetite layered systems.		
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length.	Refer to Table 2 of this report where drill hole collar and downhole orientation and depth information is tabulated.		
If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.		No information has been excluded.		
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	Where assays were composited for summary purposes, all assays were weighted by drill interval. No high-grade cuts have been applied to the sample data reported.		
	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	Where assays were composited for summary purposes, all assays were weighted by drill interval		
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent values are used.		
Relationship between mineralisation widths and	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	The orientation of mineralization relative to the drill hole is depicted in figures 1 and 2.  Drill intersections are not true widths.		
intercept lengths	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	All drill hole results reported are downhole length, true widths are unknown.		
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Appropriate diagrams are included in the main body of this report.		
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	Reporting of the drill results is considered balanced.		
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples — size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	No additional meaningful and material exploration data has been excluded from this report.		



Criteria	JORC Code explanation	Commentary	
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).	Further regional exploration related work planned for the Project includes ongoing RC percussion and/or diamond drilling to be undertaken on priority targets identified.	
Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.		These diagrams are included in the main body of this report.	



## **Table Two - Drill Collar Attributes**

Hole Name	Easting	Northing	RL (m)	Dip (Degrees)	Azimuth (Degrees)	Depth (m)
UHDM001	689723	6856418	450	-60	280	354.5

Grid system is GDA94(MGA), zone 50