
Unaly Hill Vanadium Project

High Grade Vanadium Magnetic Concentrates Produced

Highlights:

- **Consistent vanadium grades and recoveries across the three mineralised zones tested**
 - **192% to 367% vanadium upgrade**
 - **V₂O₅ Grades up to 1.46% achieved**
 - **Lower grade mineralised zone beneficiates exceptionally well**
 - **Ore below a nominal cut-off grade shown to beneficiate to similar grades as high-grade zones**
- **Excellent rejection of gangue minerals**
 - **Up to 99.5% rejection for silica**
 - **Up to 99.0% rejection for alumina**
 - **Up to 99.3% rejection for calcium**

Surefire Resources NL (**ASX:SRN**, “the Company” or “**SRN**”) is pleased to announce the results from preliminary metallurgical testwork on diamond drill core samples from its Unaly Hill Vanadium Project, Western Australia. The testwork was performed at the Iron Ore Technical Centre, part of ALS Metallurgy, Wangarra, Western Australia, on composites developed from three main vandiferous mineralised zones intersected by diamond drill hole UHDM001.

Magnetic separation was shown to be very effective, with significant vanadium grade improvements and high gangue rejection exhibited for all composites. With the metallurgical testwork and RC drilling programme (results of which are pending) the Company continues to advance its Unaly Hill project towards a Scoping Study level of evaluation of its economic potential.

Metallurgical Testwork Details

The metallurgical testwork program was developed and supervised by METS Engineering Group and was undertaken on HQ diamond drill core from the July drilling campaign. Three composites were developed from quarter core intervals, each composite consisted of fresh material from the main mineralised zones intersected by UHDM001. The quarter core intervals for each composite were selected to include a spread across the mineralisation and to target the average grade of each mineralised zone present.

The main objective of the testwork was to assess the response of the Unaly Hill ore to conventional processing methods used for similar vanadium deposits. Magnetic beneficiation is the primary focus of this testwork program with sighter extraction tests planned to follow.

Magnetic Beneficiation Testwork

Magnetic beneficiation testwork provides information on the vanadium grade and recovery to the magnetic concentrate. Davis Tube Recovery (DTR) tests were conducted to assess the grind size sensitivity and magnetic field intensity sensitivity for each composite. The DTR results for Composite 1, Composite 2 and Composite 3 tests for the 106 and 45 µm grind sizes are summarised in Tables 1, 2 and 3 respectively.

The grade and recovery of the magnetic concentrate were relatively insensitive to the magnetic field strength over the range tested indicating the potential to achieve similar results with lower field strengths. The optimum grind size was found to be around 106 µm which is relatively standard and is considered a good result in these preliminary stages. Notably, Composite 1, the lowest feed grade, achieved excellent vanadium upgrade considering the higher percentage of gangue minerals present in the feed.

Low Intensity Magnetic Separation (LIMS) testing is planned next, with results expected in the coming weeks. LIMS tests are larger in scale and will provide a better indication of how magnetic separation will perform in a plant.

Table 1: Composite 1 results

P ₈₀ 106 µm											
Gauss	Mass (%)	V ₂ O ₅ (%)		Fe (%)		TiO ₂ (%)		SiO ₂ (%)		Al ₂ O ₃ (%)	
		G	R	G	R	G	R	G	R	G	R
Feed	N/A	0.40	-	21.47	-	6.21	-	32.40	-	17.95	-
2000	20.1	1.39	72.5	60.44	56.7	9.84	33.8	2.00	1.3	1.74	2.0
3000	20.1	1.38	74.7	60.28	56.7	9.83	37.3	2.05	1.3	1.74	2.0
4000	20.2	1.33	71.8	58.32	56.2	9.89	34.1	2.65	1.6	2.09	2.4
P ₈₀ 45 µm											
2000	19.0	1.46	71.9	63.12	56.3	9.11	29.9	0.92	0.5	0.99	1.0
3000	19.0	1.46	71.6	63.04	56.3	9.09	29.9	1.00	0.6	0.99	1.0
4000	19.2	1.45	72.0	62.98	56.6	9.11	30.2	1.06	0.6	1.00	1.1

Table 2: Composite 2 results

P ₈₀ 106 µm											
Gauss	Mass (%)	V ₂ O ₅ (%)		Fe (%)		TiO ₂ (%)		SiO ₂ (%)		Al ₂ O ₃ (%)	
		G	R	G	R	G	R	G	R	G	R
Feed	N/A	0.49	-	26.45	-	7.69	-	26.80	-	16.00	-
2000	27.4	1.43	80.5	60.85	63.4	10.85	43.3	2.00	2.0	1.37	2.3
3000	27.5	1.42	80.5	60.52	63.6	10.85	43.3	2.06	2.1	1.42	2.4
4000	27.5	1.41	80.2	59.83	63.1	10.90	43.1	2.15	2.1	1.48	2.5
P ₈₀ 45 µm											
2000	25.7	1.46	77.5	62.38	60.4	10.20	37.3	1.26	1.2	0.85	1.3
3000	25.7	1.45	77.5	62.17	60.4	10.25	37.6	1.31	1.2	0.88	1.4
4000	25.8	1.45	78.1	61.83	61.1	10.25	38.5	1.33	1.3	0.89	1.4

G-Grade in %

R-Recovery in %

Table 3: Composite 3 results

P₈₀ 106 µm											
Gauss	Mass (%)	V₂O₅ (%)		Fe (%)		TiO₂ (%)		SiO₂ (%)		Al₂O₃ (%)	
		G	R	G	R	G	R	G	R	G	R
Feed	N/A	0.63	-	33.53	-	9.00	-	20.20	-	11.00	-
2000	37.9	1.33	79.8	60.25	67.7	11.30	48.1	1.39	2.6	1.34	4.6
3000	38.1	1.33	79.8	60.24	67.8	11.45	48.4	1.44	2.7	1.45	4.9
4000	38.1	1.33	80.2	59.95	67.4	11.35	48.9	1.46	2.8	1.31	4.6
P₈₀ 45 µm											
2000	35.3	1.41	78.3	63.00	65.8	10.20	40.4	0.81	1.4	0.83	2.7
3000	35.3	1.40	77.8	62.61	65.4	10.10	39.8	0.83	1.4	0.84	2.7
4000	35.5	1.38	78.4	61.49	65.5	10.05	39.8	0.92	1.6	0.83	2.7

G-Grade in %

R-Recovery in %

Further Metallurgical Testing

Metallurgical testwork is ongoing with further magnetic beneficiation work for all composites planned for the coming weeks. Salt roast testwork to assess the recoverable vanadium from the magnetic concentrate will follow the conclusion of beneficiation testing.

Project Background

The Unaly Hill Vanadium project licence area, E57/1068 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 a 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.

For further information, contact:

Vladimir Nikolaenko

Executive Chairman

Competent Person

The information in this report that relates to the Processing and Metallurgy for the Unaly Hill Vanadium Project is based on and fairly represents, information and supporting documentation compiled by Damian Connelly who is a Fellow of The Australasian Institute of Mining and Metallurgy and a full-time employee of METS Engineering Group. Damian Connelly has sufficient experience relevant to the style of mineralisation 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 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Damian Connelly consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.