

VICTORY BORE VANADIUM PROJECT UPDATE

Key Points:

- Positive mineralogical characteristics confirmed from a detailed petrographic study.
- Study shows the Victory Bore magnetite deposit is able to provide a clean vanadium concentrate with low titanium and deleterious elements.
- Scanning Electron Microscope (SEM) show spot grade vanadium within the magnetite ranging from 1.8% to 3.9% V_2O_5 .
- Presence of ilmenite and magnetite identified with majority of ilmenite occurring as coarse exsolution lamellae indicating this will be easy to separate from the magnetite.
- The Company is encouraged by these results which follows the significant resource upgrade to 321Mt for Victory Bore/ Unaly Hill (ASX announcement 1st February 2023) making it one of the largest undeveloped Vanadium resources in Australia.
- The Company continues to evaluate the resource for the emerging Vanadium storage battery market

Surefire Resources NL ("**Surefire**" or "the **Company**") is pleased to provide an update on its 100% owned Victory Bore Vanadium project is favourably located approximately 520 Km north-east from Perth in the emerging Mid-West mining district in WA.

As part of the Company's continued evaluation of the resource, a detailed petrographic study was undertaken on samples collected from within the Main and Central Lodes within the vanadium mineralised resource structures at Victory Bore, see Figure 1. The Main and Central lodes have significant true widths of continuous and homogeneous vanadium grades as follows:

- Main Lode (up to 59m in true width, to a grade of up to $0.48\% V_2O_5$)
- Central Lode (up to 55m in true width, to a grade of up to 0.42% V₂O₅)

Surefire Resources Managing Director, Paul Burton, commented "these results continue to build the Victory Bore project into a world class resource which will be ideally suited for the emerging Vanadium Redox Battery sector. I am very pleased to have joined Surefire at this potentially transformational stage of the Company and its projects."

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Figure 1 Schematic stacked cross sections showing massive ore widths and along strike continuity

The detailed petrographic study was completed by Diamantina Laboratories with thin section analysis caried out by Mr R Townsend. The study highlighted and confirmed the following:

- The core samples consistently display coarse ilmenite (titanium iron oxide, FeTiO₃), in exsolution lamellae and very low intrinsic ilmenite or other gangue elements in the magnetite. (Exsolution lamellae of ilmenite result from unmixing: When a titanium magnetite melt cools slowly the titanium separates from magnetite to form separate planar titanium bodies, in crystallographically controlled orientation); and
- Scanning Electron Microscopy (SEM) of magnetite, completed by the CSIRO Perth, provide spot vanadium grades ranging from 1.8% to 3.9% V₂O₅.

These positive outputs are important for future considerations of beneficiation treatment of the resource and for planning by the Company in developing the project.

This study concluded that with the coarse ilmenite there was good metallurgical separation of ilmenite from magnetite and the SEM confirmed that most of the vanadium occurs within the magnetite. As a result, the Victory Bore magnetite hosts relatively clean intrinsic vanadium, (refer to the tables on figures 2-5 below) which should enable a simpler and cleaner separation in processing.

Examples of the crystallographic ilmenite exsolution lamellae, with weight percentage grades within the magnetite are as shown in figures 1 to 4 below:



Figure 2 Image of ilmenite exsolution lamellae in magnetite with magnetite mineral analysis sample VBRC018 – Main Lode - Hole coordinates, x=695024 y=6782048 from 126m to 127m, $1m @ 0.8\% V_2O_5$ (- bd - = below detection)



Figure 3 Image of ilmenite exsolution lamellae in magnetite with magnetite mineral analysis sample VBRC011 – Main Lode - Hole coordinates, x=695024 y=6782048 from 30 to 31m 1m @ 0.62% V₂O₅ (bd = below detection)



Figure 4 Image of ilmenite exsolution lamellae in magnetite with magnetite mineral analysis sample VBRC020 – Central Lode - Hole coordinates, x=694938 y=6872054 from 41 to 42m 1m @ 0.56% V₂O₅ (bd = below detection)

<u>exsolution iln</u>	nenite	SEM A	nalysis
	1 San And	Oxide	WT%
magnetite	Carl Carles	TiO2	0.5
		FeO	97.5
1. 1. 1.	The second	V2O5	2.0
	ACTION	MgO	- bd -
and the second second	the second	Al2O3	- bd -
exsolution	The states	SiO2	- bd -
itimenite	ALANDA	CaO	- bd -
	A CONTRACTOR OF A CONTRACTOR	ZnO	- bd -
9696	200		
SEM MAG: 160x HV: 20 kV WD: 10.0 mm	Px: 0.94 µm		
Magnetite/ ilmenite in hornble	ende		

Figure 5 Image of ilmenite exsolution lamellae in magnetite with magnetite mineral analysis sample VBRC010 – Central Lode - Hole coordinates, x=694938 y=6872054 from 118 to 119m 1m @ 0.06% V₂O₅ (bd = below detection)

The Company recently announced a significant upgrade to the Victory Bore resource (ASX announcement 1^{st} February 2023) (Figure 1) with an increase of 56% to bring the Victory Bore/Unaly Hill combined total to **321Mt** @ **0.40%** V₂O₅ making it one of the largest undeveloped Vanadium resources in Australia with significant continuity of mineralisation.

Next Steps

The Company is reviewing proposals for Pre-Feasibility Studies (PFS) for Victory Bore, and in parallel plans to undertake further analysis of the magnetite, along and across the Main and Central Lodes, to establish the intrinsic grade and suitability of the material for Vanadium Redox Flow batteries.

Authorised for ASX release by Vladimir Nikolaenko, Executive Chairman.

For further information please contact: **Paul Burton Managing Director** +61 (0)8 6331 6330 <u>info@surefireresources.com.au</u> The company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

Competent Person Statement:

The information in this report that relates to exploration results has been reviewed, compiled and fairly represented by Mr Horst Prumm, a Member of the Australian Institute of Mining and Metallurgy ('AusIMM') and the Australian Institute of Geoscience ('AIG') and a fulltime employee of Prumm Corporation Pty Ltd. Mr Prumm has sufficient experience relevant to the style of mineralisation and type of deposits under consideration 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 Prumm consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

Forward Looking Statements:

This announcement contains 'forward-looking information' that is based on the Company's expectations, estimates and projections as of the date on which the statements were made. This forward-looking information includes, among other things, statements with respect to the Company's business strategy, plans, development, objectives, performance, outlook, growth, cash flow, projections, targets and expectations, mineral reserves and resources, results of exploration and related expenses. Generally, this forward-looking information can be identified by the use of forward-looking terminology such as 'outlook', 'anticipate', 'project', 'target', 'potential', 'likely', 'believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could', 'should', 'scheduled', 'will', 'plan', 'forecast', 'evolve' and similar expressions. Persons reading this announcement are cautioned that such statements are only predictions, and that the Company's actual future results or performance may be materially different. Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the Company's actual results, level of activity, performance or achievements to be materially different from those expressed or implied by such forward-looking information.

JORC Code, 2012 Edition: Section 1: Sampling Techniques and Data

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

Criteria	Commentary
Sampling Techniques	Reverse Circulation ("RC") drilling was carried out with an RCD250 drilling rig with a Deck mounted Sullair 1150/350 compressor coupled to a Sullair 1350/500 Auxiliary compressor and 2400cfm/950psi Air Research booster. Rig mounted sampling system with twin sample collection chambers and a Sandvik cone splitter. 4 ½ inch drill pipe with 5 inch face sampling hammer. The holes were drilled to 140mm diameter. Standard rig mounted sampling system was employed. Samples were taken from the collar (0m). Sampling was continuous to the end of hole depth. Each metre was geologically logged and assayed by hand-held XRF, assayed for mag sus. and recorded. Each metre was chip trayed and kept in storage. Drill collar positions were captured using a DGPS to 10mm accuracy. Each metre of samples was split with a three-tier rifle splitter mounted beneath the cyclone on the drill rig. Metre samples were collected in green mining bags and calico bags. Each metre was also sieved and collected in a chip tray for geological logging. Samples were composited to 2m manually using a 50% riffle splitter. The 2m composite samples were delivered to Nagrom Laboratories in Kelmscott by Surefire staff for assay of vanadium and multi- element assay.

Drilling techniques	62 X 140mm RC holes were drilled for a total of 5,189 metres. The Reverse circulation rig used a downhole hammer and face sampling button bit.
	Sample piles were recorded for each 6m rod. Rods were counted when pulled at the end of each hole. Given the relatively short hole length, no down hole surveying instruments were used.
Drill sample recovery	Geologist supervising the drilling program recorded each metre as it was drilled. Geological logs, samples logs, daily drill logs, and sample piles all recorded hole depths. No aberrations were found.
	All logs of sampling and drilling lengths matched.
	Each metre was recovered. No redrilling was necessary. No biases were recorded.
Logging	Drill cuttings were geologically logged to the level of detail deemed appropriate for mineral exploration, with details entered into a geological database.
	Drilling logs record weathering, oxidation, mineralogy, colour, texture, structure accessory minerals sulphides and mineralisation. All logging is quantitative.
	The drill holes reported were logged in full.
Sub-sampling	No core drilling carried out.
sample preparation	Three tier riffle splitters were used to take one metre samples. Samples were combined to form 2m composites using a 50% riffle splitter.
	All samples were transported to the Nagrom sample preparation/assay laboratory Kelmscott. The sample preparation followed industry best practise. All samples pulverised to 75um passing 85%.
	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.
	Sample size was approximately 2kg – 3kg in weight. Field duplicates, standards and blanks were inserted at a random rate of approximately 1 per 20 samples. Given the nature of this resource, the sample sizes are deemed appropriate.
Quality of assay data and laboratory tests	The analytical technique utilised the Nagrom KM-2209-064256 method for Al, Al2O3 Co CoO Cr Cr2O3 Cu CuO Fe Fe2O3 Ni NiO P P2O5 S SO3 Si using Method XRF104 for result units as percentages. LOI used the TGA 002 method to percent units.
	The Laboratory has provided standards and QA/QC additional to that of Surefire. The external laboratory used maintains their own process of QA/QC using standards, and blanks. Review of the external laboratory quality QA/QC reports and Surefire external laboratory quality QA/QC reports and Surefire external laboratory quality QA/QC reports has shown no sample preparation issues with acceptable levels of accuracy and precision and no bias in the analytical datasets.
Verification of	The sampling techniques were reviewed in the field by an external consultant.
sampling and	No twinned holes were drilled.
	All data is recorded in specifically designed templates. Assay data was received in spreadsheets and downloaded into geological database.
	The analysis of Vanadium was provided by the laboratory as V and V2O5. No other adjustments were made to the data on receipt from the assay laboratory.
Location of Data Points	Initial drill hole collars were located with a Garman GPS. Final collar locations were located using a digital GPS, accuracy +/- 10mm.
	Drill hole location is reported using the GDA94_MGAz50 grid system.
	Drill hole collar was located by GPS. Elevation value is in AHD.
Data spacing and distribution	RC holes were drilled at approximately 25m across strike and 100m line spacings.
	The data spacing is considered sufficient to assume geological and grade continuity. It is expected that this drilling will allow the estimation of Inferred and Measured Mineral Resources.
1	Complex were competited from 2m according to supervising goologist

Orientation of	The drill hole was angled perpendicular to the strike of the target horizon to achieve unbiased sampling of the target
data in relation	horizon.
to geological	
structure	Drill intersections are not true widths.
Sample security	Chain of custody of samples was managed by the company and the laboratory. Logging and sampling were carried out
	in the field at the time of drilling.
Audits or reviews	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 in this section apply to all succeeding sections.)

Criteria	Commentary
Mineral tenement and land tenure status	The exploration results in this report relate to Exploration Licence E57/1036. This EL is 100% owned by Surefire Resources NL and is currently a M in application - M57/656.
	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	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	The Project occurs within the Atley Igneous Complex in the East
	Murchison Mineral field of Western Australia. The Atley
	Intrusion is an Anorthosite 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. 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 historical magnetite layers within intrusive Anorthosite, gabbro and ultra mafics. The targeted deposit type and style of mineralisation is a Fe-Ti-V magnetite system.
Drill hole Information	Refer to Table 1 of this report where drill hole collar and downhole orientation and depth information is tabulated No information has been excluded.
Data aggregation methods	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 assays were composited for summary purposes, all assays were weighted by drill interval.
	No metal equivalent values are used
Relationship between mineralisation widths and intercent lengths	The orientation of mineralization relative to the drill hole is depicted in figures. Drill intersections are not true widths.
	All drill hole results reported are downhole length, true widths are approximately 82.6% of the down hole widths.
	All drill hole results reported are downhole length, true widths are shown on figure 3 and in the text.
Diagrams	Appropriate diagrams are included in the main body of this report.
Balanced Reporting	Reporting of the drill results is considered balanced.
Other substantive exploration data	No additional meaningful and material exploration data has been excluded from this report.
Further work	Resource estimation and a prefeasibility work is planned for the Project which may require additional RC percussion and/or diamond drilling to be undertaken.

Section 3: Estimation and Reporting of Mineral Resources

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

Criteria	Commentary
Database integrity	The drill hole database is maintained by Surefire Resources NL
	The Competent Person has verified the internal referential integrity of the database. In total 136 drill-holes were available to assist with resource model development.
	Some historic drill holes required verification of location and elevation and adjusted to known and relatively flat topographic surface.
	No other significant errors or concerns were encountered.
Site visits	A site visit has not yet been undertaken to the specific Victory Bore location by the Competent Person responsible for the resource estimation. The competent person has visited the very near vicinity of Victory Bore in the past and is very familiar with the general terrane. The Competent Person has also relied upon reports from different personnel including Surefire representatives that have visited and worked at the Victory Bore deposit location. The site is at a very early stage of development with limited features currently observable.
Geological interpretation	Some mapping, geomagnetic surveys and subsequent geologic interpretation has been carried out to capture both the geological and structural information used to guide resource modelling at Victory Bore. A precursor interpreted structural mapping study carried out by Surefire Resources NL shows a clear relationship between observable strong linear magnetic anomalies and Vanadium mineralization. Mineralization modelling has been guided by the combined geological and structural information as is currently available.
	Mineralisation envelopes were interpreted in E-W and plan (bench) section slices using all available drill hole data. A nominal 0.1-0.0.15% V_2O_5 edge lower cut-off was initially used to delineate anomalous Vanadiferous mineralization. The mineralization developed was also locally partially adjusted to capture and delineate the extends of mineralization in sub-optimally drilled areas.
	The mineralisation envelopes are contained within a reasonably scaled, interpreted geological and structurally mapped package that is confirmed to correlate with the majority of samples / observed V_2O_5 mineralization.
Dimensions	The majority of the geologically interpreted Victory Bore mineralised occurrence has an approximate 7200m strike length. The mineralisation interpreted width ranges from approximately 30 m to 150 m depending on the zone observed. Mineralization in the majority of the deposit area extends and has been modelled to a depth of approximately 250 m below topographic surface. Mineralisation has been modelled commencing immediately below current topographic surface.
Estimation and modelling techniques	All available RC drilling data was used to build the mineralisation model and for guiding Mineral Resource estimation. Recent verification RC drilling carried out by Surefire has also enabled some of the estimated resources to be assigned a higher level of resource estimation confidence and therefore higher level of resource reporting classification.
	Surefire has acquired new assay information from recent drilling programs. An updated drilling, geological logging and assay database was used to define and model the mineralised domains for Vanadium (V ₂ O ₅ %).
	The majority of drill collar positions have been surveyed. Newly drilled holes were accurately DGPS surveyed by Surefire. Some of the historic collar positions were adjusted according to Topographic DTM surface data. Some historical un-surveyed drill hole collar elevations were draped onto a 'pre-mining' topographic DTM surface and were checked in order to match the known surveyed drilling. The survey control for collar positions is considered adequate for the estimation of resources as stated.
	The mineralised domains were interpreted from the drilling data and Geomagnetic data provided by Surefire. Sets of cross-sectional 3D strings were generated throughout the deposit area in the E-W orientation. These were then used to interpret and connect to generate 3D wire-frames. The resulting V_2O_5 mineralization wire-frame domain was then used for statistical analysis and grade estimation. The development of mineralization wire-frame was tightly controlled and not extended (extrapolated) beyond 1 average section spacing from the last drill-hole 'point of observation' but some extension was permitted where clear geomagnetic mapping data showed clear extensions of V_2O_5 mineralization.
	A set of wire-frame weathering surfaces and broad material type wire-frames were also modelled to highlight the near surface highly weathered thin material as well as the underlying transitional material types. These material types were used to assign basic bulk density characteristics for the deposit.

	Spatial statistical analysis was carried out on the main V2O5 assay data item. Sample data was composited to two (2) metre down-hole intervals initially based on the assayed V2O5 item intervals. This also included equivalent compositing for the ancillary Fe, Al2O3, TiO2, SiO2 and other minor items. The composite probability distributions were interrogated for each element to review localized average grades, composite 'outlier' values and related coefficient of variation levels.
	The main V₂O₅ composite item was used to generate both down-hole and where possible longer range between hole semi-variograms models to establish interpolation ranges and relative nugget and sill ratios used in Ordinary Kriging interpolation for block model grade assignment.
	One (1) block model was constructed for the total deposit area combining the basic lithology and mineralization modelling for the main V ₂ O ₅ item. The Block model was constructed using a 3D array of blocks with dimensions of using 5.0 m x 20.0 m x 5.0 m (E-W, N-S, Bench) block cells coded with the mineralisation wire-frames.
	The Block Model coordinate boundaries (GDA94 MGA Zone 50) are;
	693100m E to 696400m E - (660 x 5 m blocks)
	6867400m N to 6874700m N - (365 x 20 m blocks)
	150 m RL to 480 m RL - (66 x 5.0 m benches)
	The Ordinary Kriging (OK) interpolation method was used for the estimation of the main V₂O₅ item using variogram parameters defined separately from the geostatistical analysis of each mineralization zone.
	The kriging interpolated grades for mineralization zone used different interpolation parameters as determined from an independent domain variography analysis. No extrapolation of grades outside the mineralization wire- frame was permitted. Min of 1 composite selected – Max of 24 composites within search ellipsoid. Max of 2 composites per hole allowed. Search ellipsoids based on Semi-Variograms Showing search ellipsoid ranges of approximately 300m (long), 150m (Down-Dip) and 20m (across) ranges. A minor outlier 'distance of restriction' approach was applied during the interpolation process for all items in selected domains in order to reduce the unwanted spatial influence of very high-grade outlier composite samples. The distance of restriction was set at 40m and with the grade threshold value set within an approximate the 99th to 99.5th percentile level.
	Dry Bulk Density ("density") was initially assigned by mineralization domain with the designation of values assigned representing the average bulk density for each material type. This broad assignment was then overprinted by down-hole probe Bulk Density measurement data (consolidated to ~5100 measurements) composited and interpolated to block model using 'Nearest Neighbour' interpolation.
Moisture	All tonnages are reported on a dry basis.
Cut-off parameters	A 0.3% V2O5 lower cut-off has been applied to reported tonnes and grade. This cut-off is considered in line with current mineralization type, likely favourable processing route and the Vanadium price in conjunction with associated possibly recoverable beneficial elements such as TiO2 and Al2O3.
Mining factors or assumptions	It is assumed the majority of the deposit will be mined using open pit mining methods as the deposit outcrops at surface. Detailed grade control will refine resource and expected reserve detail prior to any mining activity.
Metallurgical factors or assumptions	Metallurgical recovery assumptions have not been used, however reasonable mineral recovery levels are expected through magnetic media separation based on an early-stage understanding of the likely metallurgical characteristics of the known mineral species observed from drill samples and preliminary laboratory bench scale concentrate recovery tests as well as some Davis Tube Recovery Tests showing initial good Vanadium concentrate recoveries.
Environmental factors or	The resource is located in an area of historic mining. It is assumed no significant environmental factors would
Bulk density	Dry Bulk Density (DBD) has been determined from a very large number of down-hole densitometer
	measurements taken as part of the recent Surefire drilling program.
	The bulk densities measured appear sufficiently variable considering the distribution of the mineralization zones and are deemed representative for the rock material and mineralization types described for the Victory Bore denosit
	The density measurements have been averaged in deposit areas according to the geologically logged material type characterization where densitometer readings are not available. Locally where measurement data is
	available these have been interpolated locally into the block model.

	The bulk density values applied in the deposit are: Highly weathered zone = 2.22 – 2.34 t/m3, Transitional Zone =
	2.57 -2.74 t/m3 and Fresh / Sulphide Zone = 2.98 -3.42 t/m3. Locally the nearest neighbour assigned values can be
	both slightly higher and lower than the averages shown here.
Classification	The classification was considered appropriate on the basis of drill hole spacing, sample interval, geological
	interpretation, and representativeness of all available assay data.
	The classification criteria has also employed multiple 'ancillary' interpolation parameters including 'distance of
	composite to model block' (DIST1), 'number of composite available within the search ellipsoid' (COMP1) for each
	block interpolation and the local kriging variance' (KERR1) for each block. The DIST1, COMP1 and KERR1 item
	values are 'condensed into a 'quality of estimate' (QLTY) item.
	From the final QLTY item a 3D 'consolidated' Resource Category wireframe was developed. This was then applied
	to the RCAT Resource Reporting Item in the block model.
	Classification of the resources has been assigned by the Competent Person and includes a series of project specific
	'modifying factors' appropriate for the Resource estimation.
	A small amount of Measured Resources is estimated with some Indicated Resources. The majority of
	mineralization is in outer more sparsely drilled zones being classified as Inferred. The Measured Resource com
	ponent is restricted to some of the more densely drilled zones where reliable grade continuity is observed where
	local estimated variance is lowest. Also considered is the very good metallurgical processing recovery information
	thus far measured for the mineralized material tested at laboratory scale and in Davis Tube Recovery Testing.
Audits or reviews	The mineral Resource model and estimation has been internally reviewed by Surefire. No major concerns relating
	to the assumptions or estimation findings or classification issues have been identified.
Discussion of relative	The Competent Person considers the mineral resource to be a robust and reliable global estimate of the
accuracy/ confidence	contained V ₂ O ₅ and related mineralization. The estimation has been constrained within defined mineralisation
	wire-frames.
	The Resource classification applied to the Resource reflects the Competent Person's confidence in the estimate.

¹ Refer to ASX release by HGM (formerly Quest Minerals Limited) (ASX:QNL) on 29 June 2017.

¹ Refer to the Company's ASX Release on 21 November 2011. The Inferred Mineral Resource at Unaly Hill was prepared (October 2011) by Mr. Vladilslav Trashliev of Gemcom, (an independent geological consultancy company) and Mr. Andrew Bewsher from BM Geological Services PL was the Competent Person responsible for the Independent Audit of the Mineral Resource.