WHITE KNIGHT SILICA SANDS

NOVA PROJECT

12 October 2021

ASX ANNOUNCEMENT

Maiden Nova Mineral Resource Estimate

- **Inferred Mineral Resource estimate completed at Suvo's Nova silica sand project and reported in accordance with the 2012 JORC Code guidelines**
- **216Mt Inferred Mineral Resource comprising silica glass sand, silica flour and coarse silica sand**
- **Silica glass sand of 132Mt @ 99.24% SiO_2, low deleterious elements including Fe_2O_3 of 0.05%, TiO_2 of 0.04% and Al_2O_3 of 0.36%**
- **60Mt of silica flour and 24Mt of coarse silica sand suitable for foundry applications**
- **2020-21 drill program tested approximately 15% of total tenure, most holes drilled to approximately 20m ended in white silica sands**
- **Nova is unique in its product size range allowing the development of various products for a wide range of both domestic and international markets**
- **Nova project is 100% owned by Suvo and is afforded excellent infrastructure with the Dampier-Bunbury gas pipeline within the tenements and the Eneabba to Geraldton Port rail line only 1.2km to the West**
- **Further drilling is planned to extend and increase the resource, bulk samples to be used in metallurgical test work and final product generation**
- **Scoping study works have been commissioned with Primero**

SUVO STRATEGIC MINERALS LIMITED

ABN: 97 140 316 463

CORPORATE DETAILS:

ASX: SUV

DIRECTORS:

Robert Martin
Executive Chairman

Aaron Banks
Executive Director

Dr Ian Wilson
Non-Executive Director

CONTACT DETAILS:

Level 9
182 St Georges Terrace
Perth, Western Australia
6000

P +61 (8) 9389 4495

E info@suvo.com.au

W www.suvo.com.au

Australian kaolin producer and silica sand exploration company, **Suvo Strategic Minerals Limited** ('Suvo or the Company'), is pleased to announce its maiden Mineral Resource estimate at their 100% owned Nova Silica sand project. Test work has shown that the various sands can be suitable for use in glass manufacturing, foundry applications and as a filler or for wellhead cement additives.

Suvo Executive Chairman Robert Martin commented *"The outstanding results from our maiden JORC Resource at Nova has demonstrated that the extra time appropriated to undertake more detailed testing by Suvo was worth the wait. Achieving a 216Mt resource with low deleterious elements from approximately 15% of our granted tenure is truly amazing. Suvo now has one of the best if not the best silica resources in the Midwest. I would like to thank shareholders for their patience and congratulate the staff and consultants for their diligence in working towards these results. Nova's numbers allude to the true potential of this deposit and we as a team are focussed on unlocking that considerable value. Nova's maiden Inferred Mineral Resource is the first step towards commercialising what we believe will be a world class asset. The board and management team look forward to updating the market as further developments occur."*

Mineral Resource Estimate

A Mineral Resource estimate has been completed for the Nova silica deposit by CSA Global Pty Ltd (CSA) and has been reported in accordance with the JORC Code, suitable for public reporting.

		Product Tonnes Mt	SiO_2 %	Al_2O_3 %	Fe_2O_3 %	TiO_2 %
Silica Sand - Glass	-0.6 +0.15mm	132	99.24	0.36	0.05	0.04

Table 1 : Silica glass sand (-0.6 + 0.15mm) Inferred Mineral Resource

Samples from 51 air core holes drilled during 2020 and 2021 were used in the estimating and reporting of a Mineral Resource based on three silica sand size fractions which represent commercial markets for silica. The designations are represented below :

- Coarse silica sand -1.0 + 0.6mm
- Silica glass sand -0.6 + 0.15mm
- Silica flour -0.15 + 0.075mm

The Mineral Resource has been classified as Inferred as it was considered sufficiently informed by geological and sampling data to imply geological and grade continuity between data points.

This classification is based upon assessment and understanding of the deposit style, geological and grade continuity, drillhole spacing, input data quality (including drill collar surveys and bulk density) and interpolation parameters using Inverse Distance Weighting (IDW). Note that the Mineral Resources are constrained within the tenement boundaries and are reported as million metric tonnes of final product. Differences may occur due to rounding.

The Nova silica sand project has an Inferred Mineral Resource of silica glass sand of 132Mt @ 99.24% SiO_2, 0.36% Al_2O_3 , 0.05% Fe_2O_3 and 0.04% TiO_2. This sand product has been attritioned and sized, with heavy and / or magnetic minerals removed by heavy liquid and magnetic separation methods.

In the production of glass there is the need for silica to be composed of over 98% SiO_2, of the appropriate diameter and with low iron content. The Nova sand is well placed among its peers in regard of silica and deleterious elements for the stage of its development.

		Product Tonnes Mt	SiO_2 %	Al_2O_3 %	Fe_2O_3 %	TiO_2 %
Silica Flour	-0.15 +0.075mm	60	96.97	1.12	0.42	0.72

Table 2 : Silica flour (-0.15 + 0.075mm) Inferred Mineral Resource

Silica flour is used in a variety of specialised applications due to its particle size. Most silica flour is produced by the grinding of silica sand feed stock. The Nova deposit has an unusual amount of this finer silica which to date has only been processed by attritioning and sizing. Metallurgical test work will improve the product specifications as density and magnetic separation methods will remove deleterious elements not removed by sizing alone.

		Product Tonnes Mt	SiO_2 %	Al_2O_3 %	Fe_2O_3 %	TiO_2 %
Silica Sand - Coarse	-1mm +0.6mm	24	98.97	0.51	0.12	0.05

Table 3 : Silica coarse sand (-1.0 + 0.6mm) Inferred Mineral Resource

Coarse sand is often used as foundry sand in the production of sand moulds for the casting of metals. It is preferable to have rounded to sub-rounded silica grains with medium to high sphericity, as this improves flowability of the mould during formation and allows for higher permeability after the metal has been poured

Refer to the attached Mineral Resource estimate for further details.

Further Work

Some of the existing drill samples from the 2020-2021 drill program still remain untested, these will be evaluated based on the current model, and some will be sent for analysis to better close of the mineralisation presently identified.

More drilling has been planned for Nova with the focus being to expand mineralisation to the north and south of the current resource extents. It is apparent from the current drilling that future drilling at Nova needs to be deeper than 20 metres as some historical holes drilled by RGC had white sands to 50m. These drill programs have already been applied for and will be conducted in the coming months. This work will increase the size and confidence level of the resource.

Part of this program will be to collect a bulk sample for metallurgical test work that will more closely replicate production scale processes. The result of these tests will be to better frame the likely operation and the final silica products which can be used for marketing.

Of the three silica products specified above only the silica glass sand has been properly evaluated by density and magnetic separation. Further metallurgical sampling of a larger sample will complete this work on the coarse silica sand and silica flour fractions to better identify likely product specifications.

Presently only the deeper white/cream sand has been modelled. Silica sand is also present at surface as evidence by the auger sampling and a lot of the air core holes. Infill drilling will further refine this occurrence and allows its inclusion in future estimates. Almost certainly other construction sand will also be encountered in the formation.

Primero has been engaged to conduct a scoping level study on the Nova silica project. Their scope will include the development and costing of a flow sheet for a process plant to produce suitable quality silica products.

Tenure, Location, History

The 100% owned Nova Silica Sands Project is located 300km north of Perth, Western Australia. The project comprises four granted exploration licences (E70/5001, E70/5322, E70/5323 and E70/5324) for 169km^2.

Access to the project is by the Brand Highway approximately 15km south of Eneabba. Numerous well-established tracks that service the Dampier to Bunbury Natural Gas pipeline cross the tenure. A rail line is located just to the west of the tenement.

Nova is located on the Eneabba Plain whose sandy cover is very flat to gently undulating. Outcrop is rare due to the accumulations of windblown and alluvial sand at surface. Below this is a thin hard silcrete or lateritic claypan which overlies deep white and yellow sands. The Eneabba Plain consists of a series of shoreline, lagoon and dune deposits of early Pleistocene to possibly late Tertiary age, which locally have high concentrations of heavy minerals.

Preliminary exploration by Suvo consisted of mapping the extent of various sand lithologies, specifically silica sand and yellow construction sand. A total of 33 samples were taken by hand auger across different sand types. Results from previous exploration programs were included in the Replacement Prospectus released to the ASX on 25 June 2020, inclusive of JORC Table 1.

Silica sand was located at surface. Further work was required to test the depth extent and an air core drilling program was defined.

Air core Drilling Program

An air core drilling program was completed in late 2020 and early 2021 for the purpose of testing the depth extent of silica sands that were located at Nova from the prior surface auger sampling.

A total of 51 vertical drill holes were completed to around 20 metres depth for a total of 1,006 metres. Samples were taken from each one metre interval and the colour was logged. Samples were taken directly from a splitter attached to the cyclone and were around 3kg. The remaining sample was retained in a larger plastic bag and stored. The drill holes are represented in Figure 2.

The drilling intersected a mixture of aeolian, fluvial and marine sands. Samples were recovered dry, and no water was intersected in drilling. Usually at surface there is a thin veneer of silica sand below which there is a layer of red or yellow ferruginous sands. Below the ferruginous sands, in places a thin silcrete cap then gives way to cream or pink silica sands. At depth the silica rich sands were generally white. Most holes ended in white silica sands.

The ferruginous zones and underlying white sand zones are generally flat lying and extensive. The profile could represent ground water alteration with mobilisation of iron oxides into an upper oxide zone and a leaching breakdown and mobilisation of soluble elements from within the lower bleached white zones.

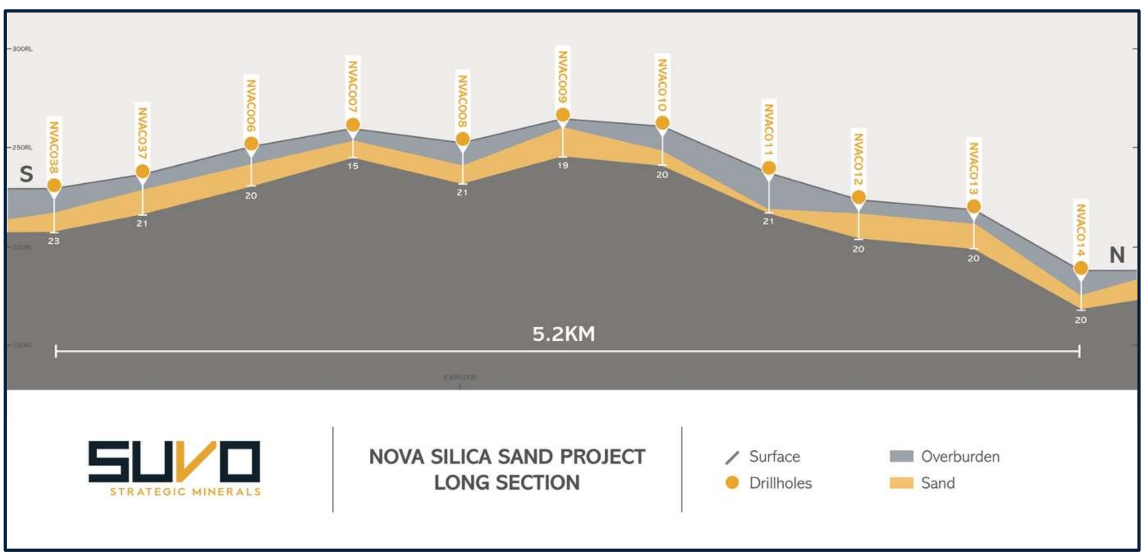

Figure 1 : Nova long section showing current drill holes

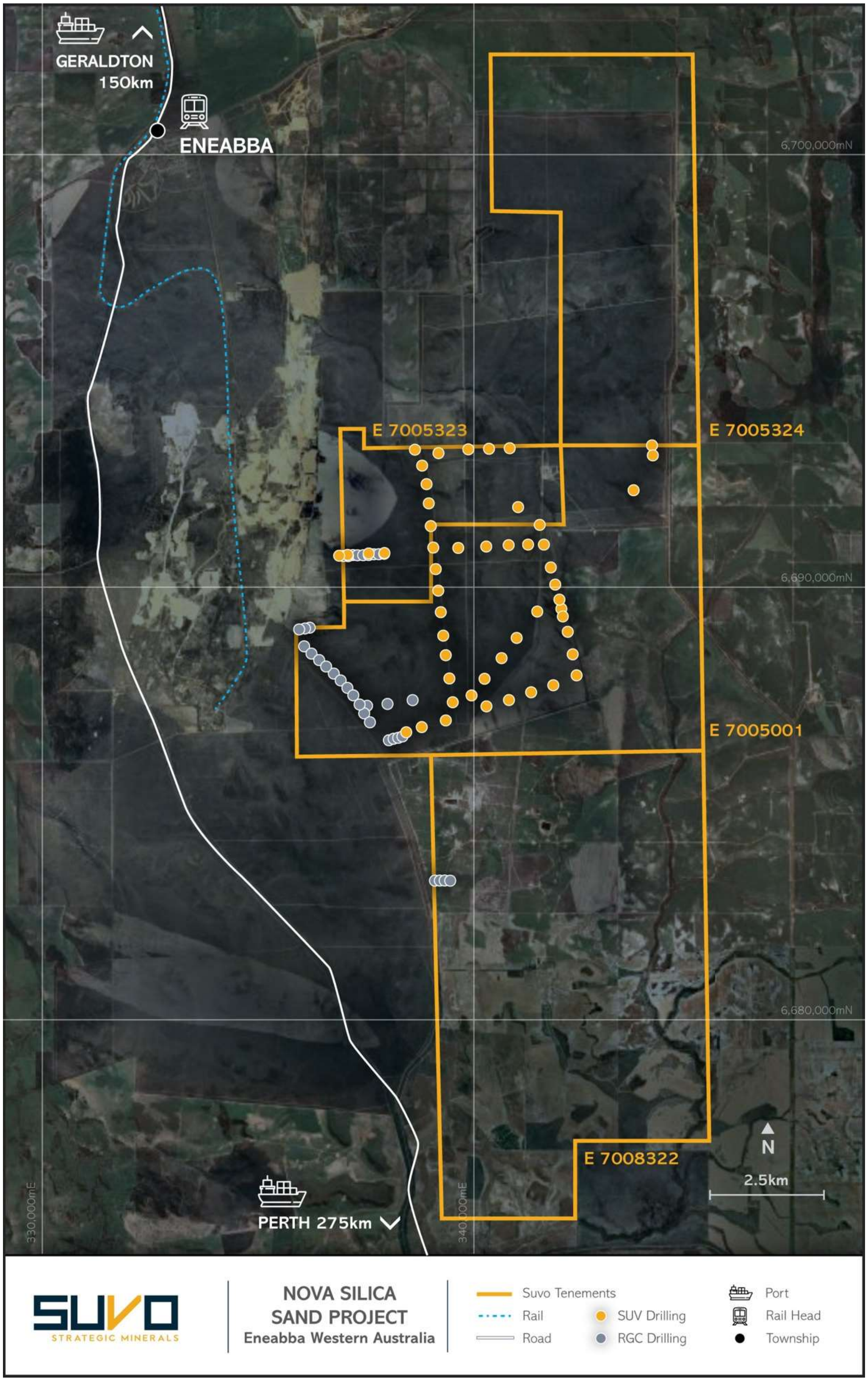

Figure 2 : Nova location map with existing and current drill holes

The release of this announcement has been approved by the the Board of Directors

<ENDS>

Contacts:

Robert Martin
Executive Chairman
E: robert.martin@suvo.com.au

Aaron Banks
Executive Director
E: aaron.banks@suvo.com.au

Company Profile

Suvo Strategic Minerals Limited is an Australian hydrous kaolin producer and exploration company listed on the Australian Securities Exchange (ASX:SUV). Suvo is focused on production at, and redevelopment of, their 100% owned Pittong hydrous kaolin operation located 40km west of Ballarat in Victoria. Suvo's exploration focus is on their 100% owned White Cloud Kaolin Project located adjacent to Gabbin in the Central Wheat Belt, and the 100% owned Nova Silica Sands Project located in the Gin Gin Scarp near Eneabba, both situated in Western Australia.

Pittong Operations

The 100% owned Pittong Operations, located in Victoria 40km west of Ballarat, is the sole wet kaolin mine and processing plant in Australia and has been in operation since 1972. Pittong comprises the Pittong, Trawalla and Lal Lal deposits located on approved Mining Licences MIN5408, MIN5365 and MIN5409 respectively.

At Pittong mining contractors deliver crude kaolin ore to stockpiles from the two currently operating mines, Pittong and Lal Lal. The plant takes its feedstock from the ROM and it is processed into four separate products for end users. These products are 10% moisture lump, high solids slurry, 1% moisture powder and 1% moisture pulverised powder. The solids slurry is used in paper and board manufacturing. The other products are used in paper, coatings, paint and specialist industries including rubber and pharmaceutical applications. Around 20-25kt per annum is supplied to various end users.

Current Reserves and Resources at Pittong are reported to PERC code and are in the process of being upgraded to JORC 2012 compliance.

The White Cloud Kaolin Project

The 100% owned White Cloud Project is located 215km northeast of Perth, Western Australia. The project area comprises four granted exploration licences (E70/5039, E70/5332, E70/5333, E70/5517) for 413km^2, centred around the town and rail siding of Gabbin.

The generally flat area is primarily cleared farming land devoid of native bushland and is currently used for broad-acre cereal cropping. A mining access agreement is in place over the current resource area with the landowner and occupier.

The main rock types at White Cloud are primarily Archaean granite, gneiss, and migmatite. These rocks are overlain and obscured by Tertiary sand and Quaternary sheetwash. The weathering profile is very deep and contains thick kaolin horizons capped by mottled clays or laterite zones. The current JORC 2012 Mineral Resources are 72.5Mt of bright white kaolinised granite with an ISO Brightness of 80.5%, <45μm yield of 41.2% results in 29.9Mt of contained kaolin.

Nova Silica Sands Project

The 100% owned Nova Silica Sands Project is located 300km north of Perth, Western Australia. The project comprises four granted exploration licences (E70/5001, E70/5322, E70/5323, E70/5324) for 169km^2.

The project is located on the Eneabba Plain whose sandy cover is very flat to gently undulating. Outcrop is rare due to the accumulations of windblown and alluvial sand at surface. Below this is a thin hard silcrete or lateritic claypan which overlies deep white and yellow sands.

Competent Persons Statements

The information in this report that relates to Mineral Resources is based on, and fairly reflects, information compiled by Mr Murray Lines who is the Overall Competent Person and who is a member of the Australian Institute of Mining and Metallurgy. Mr Lines 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 Competent Person as defined in the 2012 Edition of the "Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC Code). Mr Lines is a full-time employee of Stratum Resources and is a consultant to Suvo Strategic Minerals Limited and receives consultant fees in relation to his work on commercial terms. Mr Lines consents to the inclusion of the information in the release in the form and context in which it appears.

Forward looking statements

Information included in this release constitutes forward-looking statements. Often, but not always, forward looking statements can generally be identified by the use of forward looking words such as "may", "will", "expect", "intend", "plan", "estimate", "anticipate", "continue", and "guidance", or other similar words and may include, without limitation, statements regarding plans, strategies and objectives of management, anticipated production or construction commencement dates and expected costs or production outputs.

Forward looking statements inherently involve known and unknown risks, uncertainties and other factors that may cause the Company's actual results, performance and achievements to differ materially from any future results, performance or achievements. Relevant factors may include, but are not limited to, changes in commodity prices, foreign exchange fluctuations and general economic conditions, increased costs and demand for production inputs, the speculative nature of exploration and project development, including the risks of obtaining necessary licences and permits and diminishing quantities or grades of reserves, political and social risks, changes to the regulatory framework within which the Company operates or may in the future operate, environmental conditions including extreme weather conditions, recruitment and retention of personnel, industrial relations issues and litigation.

Forward looking statements are based on the Company and its management's good faith assumptions relating to the financial, market, regulatory and other relevant environments that will exist and affect the Company's business and operations in the future. The Company does not give any assurance that the assumptions on which forward looking statements are based will prove to be correct, or that the Company's business or operations will not be affected in any material manner by these or other factors not foreseen or foreseeable by the Company or management or beyond the Company's control.

Although the Company attempts and has attempted to identify factors that would cause actual actions, events or results to differ materially from those disclosed in forward looking statements, there may be other factors that could cause actual results, performance, achievements or events not to be as anticipated, estimated or intended, and many events are beyond the reasonable control of the Company. Accordingly, readers are cautioned not to place undue reliance on forward looking statements. Forward looking statements in these materials speak only at the date of issue. Subject to any continuing obligations under applicable law or any relevant stock exchange listing rules, in providing this information the Company does not undertake any obligation to publicly update or revise any of the forward-looking statements or to advise of any change in events, conditions or circumstances on which any such statement is based.

CSA Global
Mining Industry Consultants
an ERM Group company

MINERAL RESOURCE ESTIMATE

Nova Silica Sand Project

Report № R407.2021
7 October 2021

Prepared for

Client Name	Suvo Strategic Minerals
Project Name/Job Code	SUVMRE04
Contact Name	Jeremy Whybrow
Contact Title	General Manager Mining & Geology
Office Address	Level 9, 182 St Georges Terrace Perth WA 6000

Report issued by

CSA Global Office	**CSA Global Pty Ltd** Level 2, 3 Ord Street, West Perth, WA 6005 AUSTRALIA PO Box 141, West Perth, WA 6872 AUSTRALIA T +61 8 9355 1677 F +61 8 9355 1977 Email: csaaus@csaglobal.com Division: Resources

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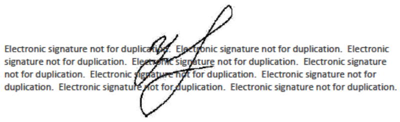
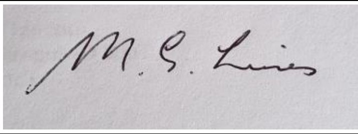
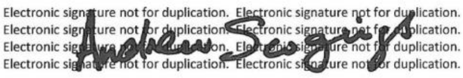
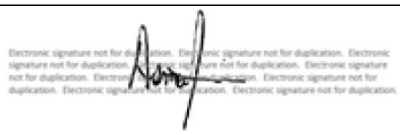
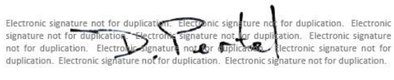
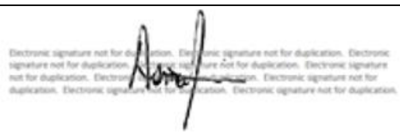
Coordinating Author	Serikjan Urbisinov BSc Geology, BSc Computer Science, MAIG	
Contributing Author	Murray Lines BSc (Geology), MAusIMM	
Contributing Author	Andrew Scogings PhD (Geology), MAIG, RP Geo (Industrial Minerals)	
Peer Reviewer (Report)	Aaron Meakin BSc (Geology) Hons, MAppFin, MAusIMM (CP Geo)	
Peer Reviewer (Block Model)	Dmitry Pertel MSc (Geology), MAIG, GAA	
Approved by CSA Global Representative	Aaron Meakin Manager – Resources	

Disclaimer

Purpose of this document

This Report was prepared exclusively for Suvo Strategic Minerals ("Client") by CSA Global Pty Ltd ("CSA Global"), an ERM Group company. The quality of information, conclusions, and estimates contained in this Report are consistent with the level of the work carried out by CSA Global to date on the assignment, in accordance with the assignment specification agreed between CSA Global and the Client.

Notice to third parties

CSA Global has prepared this Report jointly with regard to the particular needs and interests of our Client, and in accordance with their instructions. This Report is not designed for any other person's particular needs or interests. Third party needs and interests may be distinctly different to the Client's needs and interests, and the Report may not be sufficient nor fit or appropriate for the purpose of the third party.

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Results are estimates and subject to change

The interpretations and conclusions reached in this Report are based on current scientific understanding and the best evidence available to the authors at the time of writing. It is the nature of all scientific conclusions that they are founded on an assessment of probabilities and, however high these probabilities might be, they make no claim for absolute certainty.

The ability of any person to achieve forward-looking production and economic targets is dependent on numerous factors that are beyond CSA Global's control and that CSA Global cannot anticipate. These factors include, but are not limited to, site-specific mining and geological conditions, management and personnel capabilities, availability of funding to properly operate and capitalise the operation, variations in cost elements and market conditions, developing and operating the mine in an efficient manner, unforeseen changes in legislation and new industry developments. Any of these factors may substantially alter the performance of any mining operation.

Executive Summary

Suvo Strategic Minerals (Suvo) commissioned CSA Global Pty Ltd (CSA Global), an ERM Group company, to complete a geological interpretation, three-dimensional (3D) modelling and a Mineral Resource estimate (MRE) for the Nova silica sand deposit (the "Project"), located in Western Australia, Australia. The MRE has been reported in accordance with the JORC Code[1] and is therefore suitable for public reporting. The MRE is summarised in Table 1. The Mineral Resources have been reported in accordance with product specifications that have potential commercial interest.

Table 1: Nova Inferred MRE summary table

Size specification	Process	Tonnage (Mt)	Yield (%)	Product tonnes (Mt)	SiO_2 (%)	Al_2O_3 (%)	Fe_2O_3 (%)	TiO_2 (%)	CaO (%)	Na_2O (%)	K_2O (%)	LOI (%)
	Head grade (in situ)	288			89.53	6.69	0.61	0.45	0.01	0.03	0.16	2.34
Coarse Sand (-1.0 +0.6 mm)	Attrition		8.2	24	98.97	0.51	0.12	0.05	0.01	0.01	0.02	0.24
Glass Sand (-0.6 +0.15 mm)	Attrition => HLS floats => Non-magnetics		45.9	132	99.24	0.36	0.05	0.04	0.01	0.01	0.02	0.19
Silica Flour (-0.15 +0.075 mm)	Attrition		20.7	60	96.97	1.12	0.42	0.72	0.01	0.02	0.16	0.40

Notes:
- *Resources are reported in accordance with the JORC Code.*
- *Resources are constrained to the tenement boundaries.*
- *Resources are in million metric tonnes of final product. Differences may occur due to rounding.*
- *Product tonnes are calculated by multiplying in situ tonnes and product yield. More detailed information for Glass Sand product is provided in Table 38.*
- *In-situ density applied = 1.7 t/m^3.*

The following summary presents a fair and balanced representation of the information contained within the full MRE report:

- The 100% owned Nova Silica Sand Project is located approximately 300 km north of Perth, Western Australia. The Project comprises four granted exploration licences (E70/5001, E70/5322, E70/5323 and E70/5324) for 169 km^2. Access to the Project is via the Brand Highway approximately 15 km south of Eneabba. Numerous tracks servicing the Dampier-Bunbury Gas pipeline cross the tenure.
- The Project is underlain by mixed aeolian, fluvial and marine sands. There is typically an upper layer several metres thick comprising red or yellow ferruginous sands, which is occasionally overlain by a thin layer of silica sand at surface. Below the ferruginous sands are cream or pink sands which become white at depth. The sand layers are generally sub-horizontal.
- Quartz (also known as silica) is produced commercially from a wide variety of deposits, including unconsolidated sand, sandstone, quartzite, granite, aplite, and pegmatite. Silica sand and quartz are economical sources of SiO_2 used in glass and ceramics manufacture, for which key deleterious elements include iron and titanium. Silica sand is also used for foundry mould manufacture.
- Previous exploration for heavy minerals was completed in the 1990s by RGC Exploration Pty Ltd.
- Samples from the 2020–2021 program at Nova were obtained from aircore drilling.
- Three grades for sand were selected for potential commercial interest, based primarily on particle size (Table 2).

[1] Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. The JORC Code, 2012 Edition. Prepared by: The Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia (JORC).

- Physical and chemical analytical testwork determined head grade, percentage yield and grade after attritioning, density separation and magnetic separation for a range of particle sizes.
- The Mineral Resources were estimated within constraining wireframe solids using a combination of logged geological boundaries and analytical data such as chemical purity. The Mineral Resource is quoted from all classified blocks within these wireframe solids.
- Grade estimation was completed using Inverse Distance Weighting (IDW).
- The Mineral Resource was classified as Inferred, accounting for the level of geological understanding of the deposit, quality of samples, density data, drillhole spacing and sampling, analytical and metallurgical processes. Material classified as Inferred was considered sufficiently informed by geological and sampling data to imply geological, grade and quality continuity between data points.
- The Mineral Resource was classed as Inferred based on based upon assessment and understanding of the deposit style, geological and grade continuity, drillhole spacing, input data quality (including drill collar surveys and bulk density), interpolation parameters using IDW.
- The JORC Code Clause 49 requires that industrial minerals must be reported "in terms of the mineral or minerals on which the project is to be based and must include the specification of those minerals" and that "It may be necessary, prior to the reporting of a Mineral Resource or Ore Reserve, to take particular account of certain key characteristics or qualities such as likely product specifications, proximity to markets and general product marketability." The likelihood of eventual economic extraction was considered in terms of possible open pit mining, likely product specifications, possible product marketability and potentially favourable logistics and it is concluded that the Nova deposit is an industrial Mineral Resource in terms of Clause 49.

Table 2: Selected grades and their parameters

Characteristics	Parameters
Coarse Sand	-1.0 +0.6 mm
Glass Sand	-0.6 +0.15 mm
Silica Flour	-0.15 +0.075 mm

Contents

Figures

Tables

Appendices

1 Introduction

1.1 Specification Assignment

Suvo Strategic Minerals (Suvo) commissioned CSA Global Pty Ltd (CSA Global), an ERM Group company, to complete a geological interpretation, three-dimensional (3D) modelling, and a Mineral Resource estimate (MRE) according to the guidelines of the JORC Code for the Nova silica sand deposit (the "Project"), located in Western Australia.

The scope of work included the following:

1) Acquisition and desktop review of all available data and reports for the deposit.
2) A site visit and laboratory inspection were aimed at identifying material flaws and verifying data, as well as meeting with key field personnel and obtaining additional information and documentation. The Competent Person (CP), Mr Murray Lines, visited the site on numerous occasions during the recent exploration campaign.
3) In-office review of the additional essential information and documents obtained during the site visit.

The main objective of the work completed by CSA Global was to estimate silica sand Mineral Resources of the Nova deposit based on the analytical and geological data obtained from historical and recent drilling.

The following objectives were accomplished:

- Import and validation of the databases
- Classical statistical analysis of sampling data and selection of analytical and lithological parameters for interpretation of mineralisation domains
- Interpretation of the mineralisation, primarily based on lithology
- Wireframe modelling of the mineralised bodies and geological features
- Coding of sampling data using wireframes
- Classical statistical analysis, involving selection and application of top cut grade values for each domain
- Creation of composited intervals by length
- Creation of block models, their coding and preparation
- Grade interpolation using Inverse Distance Weighting (IDW)
- Mineral Resource classification in accordance with JORC Code requirements
- Preparation of a Mineral Resource report in accordance with JORC Code requirements.

1.2 JORC Code Compliance

The MRE for the Nova deposit is reported in accordance with the JORC Code[2].

1.3 Sources of Information and Reliance on Other Experts

CSA Global has completed the scope of work largely based on the information provided by Suvo. CSA Global has supplemented this information where necessary with other publicly available information.

CSA Global has made all reasonable endeavours to confirm the authenticity and completeness of the technical data on which this report is based; however, CSA Global cannot guarantee the authenticity or completeness of such third-party information.

[2] Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. The JORC Code, 2012 Edition. Prepared by: The Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia (JORC).

CSA Global is not responsible for any issues relating to the Project, such as economics, processing, environmental and legal status, property rights, estate liabilities, or any other law matters. These matters are not considered in the context of this report.

1.4 Prior Association and Independence

Neither CSA Global, nor the authors of this report who are the employers of CSA Global, have or have had previously, any material interest in the Nova deposit or the mineral properties in which Suvo has an interest. Relationships of CSA Global with Suvo are solely of professional association between client and independent consultants. CSA Global is an independent geological and mining consultancy. This report is prepared in return for professional fees based upon agreed commercial rates and the payment of these fees is not contingent on the results of this report. No member or employee of CSA Global is, or is intended to be, a director, officer, or other direct employee of Suvo.

Mr Murray Lines, who is a contributing author and the CP of this report, is a consultant to Suvo. Murray Lines, one of the authors of this report, does hold shares of Suvo, but the amount held is not a material interest.

1.5 Company and Authors Summary

1.5.1 CSA Global

This report has been prepared by CSA Global, an ERM Group company, that has been providing consulting services to the international mining industry for over 35 years. CSA Global is based in Perth, Western Australia, with offices in Brisbane, Vancouver, Toronto, Dublin, Horsham (UK), Johannesburg, and Jakarta. CSA Global provides multi-disciplinary services to clients including project generation, exploration, resource estimation, project evaluation, development studies, mining operations assistance, and corporate consulting such as valuations and independent technical reports. CSA Global has worked for major clients globally and many junior resource companies. CSA Global personnel have been involved in the preparation of independent reports for listed companies in most international mining jurisdictions.

1.5.2 Authors

The principal authors of this report are Murray Lines (Suvo Contractor), Serikjan Urbisinov (CSA Global Principal Resource Geologist), and Dr Andrew Scogings (CSA Global Geologist and Industrial Minerals Expert). Peer review of the block model was completed by Dmitry Pertel (CSA Global Principal Resource Geologist), and peer review of the report was completed by Aaron Meakin (CSA Global Manager – Resources).

1.6 Competent Persons Statements

The information in this report that relates to Exploration Results and Mineral Resources is based on, and fairly reflects, information compiled by Mr Murray Lines who is the Overall Competent Person and who is a member of the Australian Institute of Mining and Metallurgy. Mr Lines 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 Competent Person as defined in the 2012 Edition of the "Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC Code). Mr Lines is a full-time employee of Stratum Resources and is a consultant to Suvo Strategic Minerals Limited and receives consultant fees in relation to his work on commercial terms. Mr Lines consents to the inclusion of the information in the release in the form and context in which it appears.

The geological modelling included in the Mineral Resource report was prepared, and fairly reflects information compiled, by Mr Serik Urbisinov and Dr Andrew Scogings, each of whom have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (the JORC Code). Mr Urbisinov is a full-time employee of CSA Global and is a Member of the Australian Institute of Geoscientists. Dr Scogings is an employee of CSA Global, a Member of the Australian Institute of

Geoscientists, and is a Registered Professional Geoscientist (RP Geo. Industrial Minerals). Mr Urbisinov and Dr Scogings consent to the inclusion of information in the Mineral Resource report that is attributable to each of them, and to the inclusion of the information in the release in the form and context in which they appear.

2 Location and Exploration History

2.1 Location, Access and Infrastructure

The 100% owned Nova Silica Sand Project is located approximately 300 km north of Perth, Western Australia. The Project comprises four granted exploration licences (E70/5001, E70/5322, E70/5323, and E70/5324) for ~169 km^2 (Figure 1).

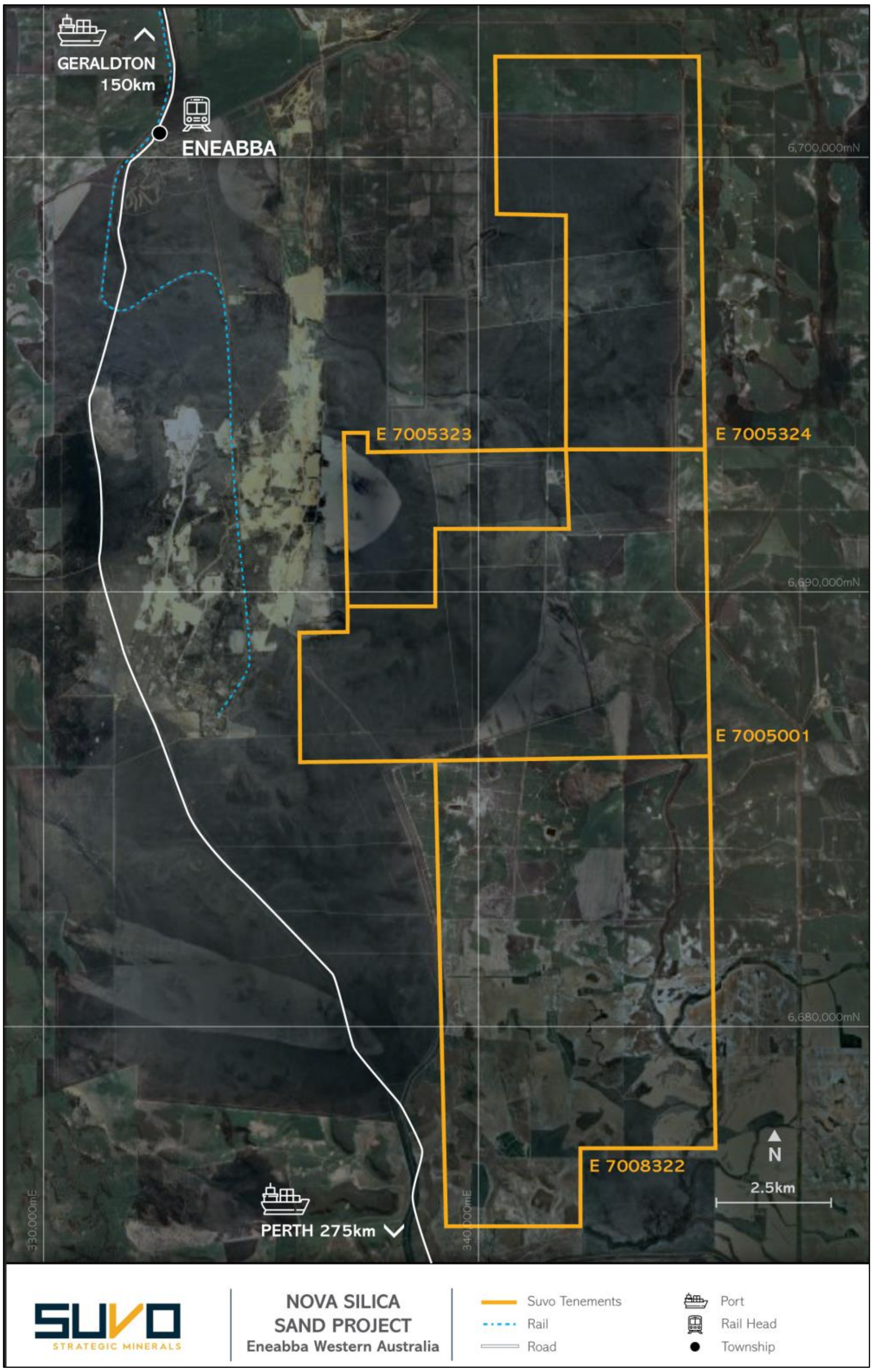


Figure 1: Location of the Nova Silica Sand Project tenements

Access to the Project is via the Brand Highway approximately 15 km south of Eneabba. Numerous tracks servicing the Dampier-Bunbury Gas pipeline cross the tenure.

2.2 Tenure

The Project comprises four granted exploration licences (E70/5001, E70/5322, E70/5323, and E70/5324) for ~169 km^2 (Figure 1). The tenement details are summarised in Table 3.

Table 3: Tenement details

Tenement ID	Holder	Grant date	Expiry date	Area (km^2)
E70/5001	Watershed Enterprise Solutions Pty Ltd	14 Jun 2018	13 Jun 2023	52.83
E70/5322	Watershed Enterprise Solutions Pty Ltd	1 Jul 2020	30 Jun 2025	65.35
E70/5323	Watershed Enterprise Solutions Pty Ltd	9 Sep 2020	8 Sep 2025	14.00
E70/5324	Watershed Enterprise Solutions Pty Ltd	6 Jun 2021	5 Apr 2026	35.70

2.3 Exploration by RGC

E70/765 was referred to as the Ocean Hill tenement by RGC Exploration Pty Ltd (RGC). The tenement was located adjacent to and east of the RGC Mineral Sands operations at Eneabba, 290 km north of Perth.

RGC E70/765 Annual Report February 1993 noted of the geology and previous exploration:

"The Gin Gin Scarp is a prominent topographical feature in the north Perth Basin interpreted to represent the landward limit of Quaternary marine transgressions. All the known major heavy mineral deposits in the north Perth Basin lie at the foot or seaward side of this structure including the Eneabba Mine.

The existence of mineralised wind blown deposits above and inland of the Gin Gin Scarp has been known since the mid 1970's. A large proportion of the former Jennings Eneabba Mine Production was obtained from wind blown deposits located north of the Eneabba town site and just inland from the Gin Gin Scarp.

Results from drilling conducted by Jennings in the mid to late 70's suggested that wind blown deposits may also exist south of the Eneabba town site. The most prospective ground being in the top half of the Ocean Hill tenement."

In the year to 30 March 1993, colour aerial photography was captured for the area, and areas of yellow sand were delineated. These areas were confirmed with a site visit.

Drilling was conducted on the areas of yellow sand with vertical aircore holes nominally spaced along the line at 120 m. The work encountered what appeared to be cream, grey and yellow sand on the western side of the current tenement from surface up to 50 m. Average drillhole depth was 27 m. Details of the collar positions, hole depths, logged sand colours and heavy mineral results are tabulated in Suvo's Prospectus (2020).

Holes were drilled with a Mantis 75 aircore drilling rig with samples taken at 2 m intervals, panned and logged on site. Samples with a visual heavy mineral estimate greater than 2% were submitted to RGCMS Narngulu Laboratory for analysis.

All samples were logged and had a background visual heavy mineral component; most of the more significant intercepts were analysed. Background values of heavy minerals were present with results from 0.1% to 8.3% heavy minerals.

Initial reconnaissance drilling was very limited due to access problems and only background, no significant heavy mineral mineralisation was found, thus the tenement was relinquished.

2.4 Exploration by Suvo

In 2019, preliminary exploration by Suvo consisted of mapping the extent of various sand lithologies, specifically silica sand and yellow construction sand. A total of 33 samples were taken by hand auger across different sand types. The auger samples were analysed by x-ray fluorescence (XRF) methods. The SiO_2 % results are shown in Figure 2.

Refer to Ultracharge (Suvo Prospectus) 2020 for additional publicly reported information.

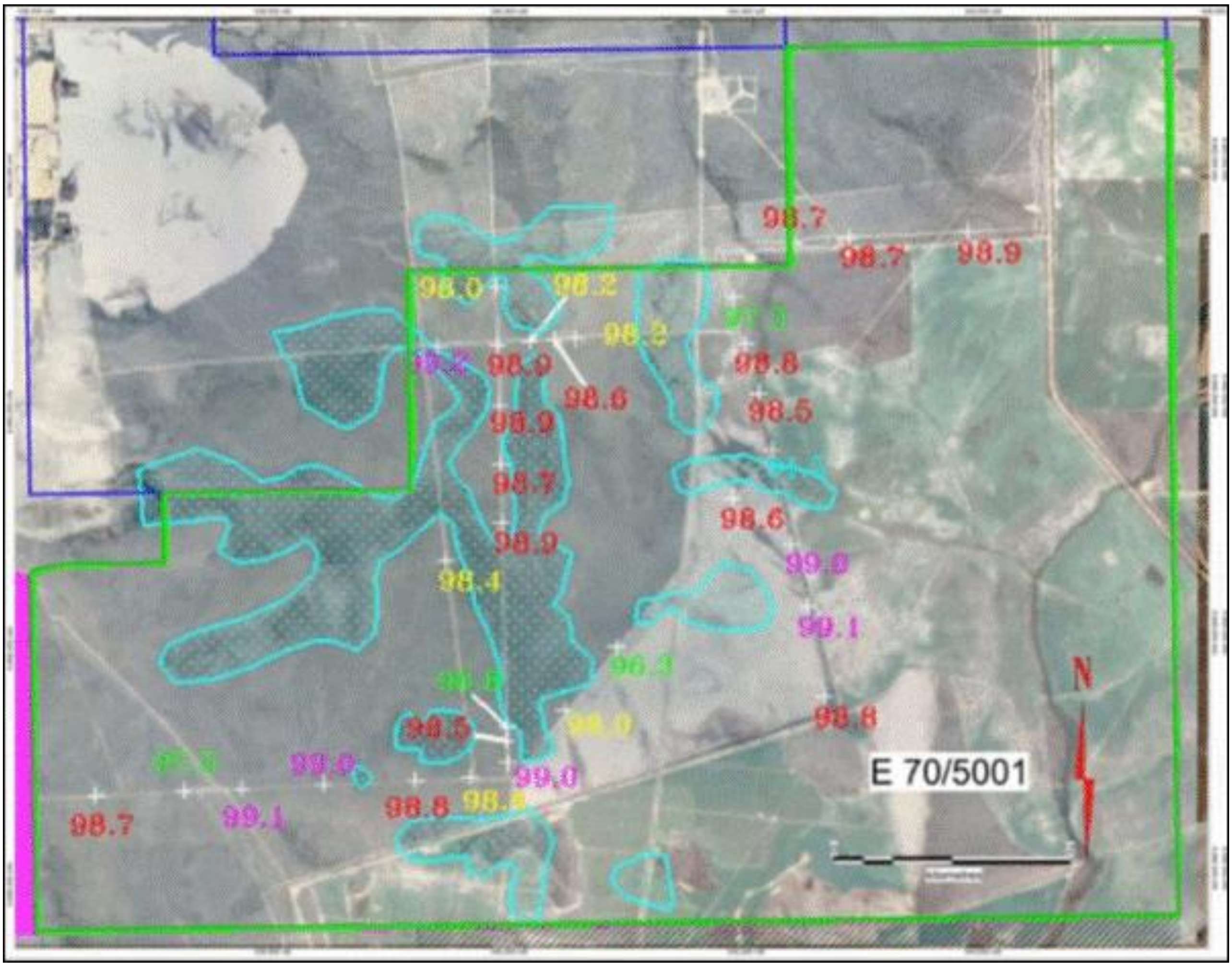


Figure 2: Auger hole positions and SiO_2 (%) results within E70/5001
Source: Suvo Prospectus (2020)

3 Mineralogy

3.1 Introduction

Silica sand deposits and their refined products consist essentially of the mineral quartz (commonly known in industrial minerals markets as “silica”). Silica sand deposits may contain various mineral impurities such as clay (e.g. kaolinite), feldspar, muscovite or heavy minerals such as ilmenite, magnetite or zircon. Mineral impurities contain potentially deleterious elements such as aluminium, potassium, iron or titanium which are undesirable for specialised markets like glass manufacture (Table 4).

Table 4: Approximate compositions and densities of minerals that may occur in a silica sand deposit

Mineral	SiO_2 (%)	Al_2O_3 (%)	K_2O (%)	MgO (%)	FeO (%)	TiO_2 (%)	ZrO_2 (%)	H_2O (%)	Density (g/cm^3)
Quartz	100.0								2.6
Kaolinite	46.5	39.5						14.0	2.6
Illite	54.0	17.0	7.3	3.1				12.0	2.7
K-feldspar	64.8	18.3	16.9						2.6
Muscovite	45.2	38.4	11.8					4.5	2.8
Ilmenite					47.4	52.6			4.7
Zircon	32.8						67.2		4.7

Source: webmineral.com; Industrial Minerals Handybook

Deleterious minerals may also contain silicon and it is therefore important to understand the deposit mineralogy and to be able to account for the measured silicon being hosted by quartz, not other minerals.

Understanding the sand mineralogy is important for interpreting metallurgy results and for designing appropriate processing methods. For example, iron may be present in iron-rich minerals such as magnetite or ilmenite which are likely to be easy to separate by gravity and/or magnetic methods. However, iron may also occur as “rusty” coatings on quartz grains; such iron may be difficult to remove and may need treatment by physical (attritioning) or chemical methods.

Suvo has therefore examined a selection of samples to validate the presence of quartz and to check for deleterious components, using optical microscopy and x-ray diffraction (XRD) methods.

3.2 Mineralogy of the Nova Deposit

Photographs of silica sand taken using a binocular microscope are shown from Figure 5 to Figure 11. The chip trays which show the intervals which were used for the microscope photos are shown in Figure 3 and Figure 4. XRD and XRF data are given for 22 feed samples in Table 5 and Table 6. XRD mineralogy results for the fine “slimes” fraction of the 22 initial samples are presented in Table 7.

The results are summarised below:

- The sand composite from NVAC004 (10–13 m) is distinctly yellow and has an opaque frosted appearance compared with translucent grains from the white sand of NVAC010 (13–17 m). This difference between the two samples is illustrated by the +1 mm fractions in Figure 6.
- Microscopic examination verified that deslimed sand (the purified +0.075 µm fractions) consists mainly of quartz grains (e.g. Figure 6 to Figure 8).
- Dark minerals (probably iron-rich minerals such as ilmenite) occur as discrete grains.
- Heavy liquid separation (which rejects “heavy” minerals such as ilmenite and zircon) and magnetic separation (which rejects magnetic particles such as ilmenite) results in visually cleaner sand (Figure 10 and Figure 11).

- XRD data for the feed samples (in situ sand) verified the presence of quartz (66–86%) with clay minerals such as illite, smectite and kaolinite comprising the reminder of the sample (11–28%). Minor amounts of mica and feldspar were detected.
- XRD results indicated that the minus 0.075 µm fractions, also known as "slimes", consist mainly of quartz and kaolinite.
- The above observations indicate that the Nova sand should be amenable to purification using sizing, density and magnetic methods.

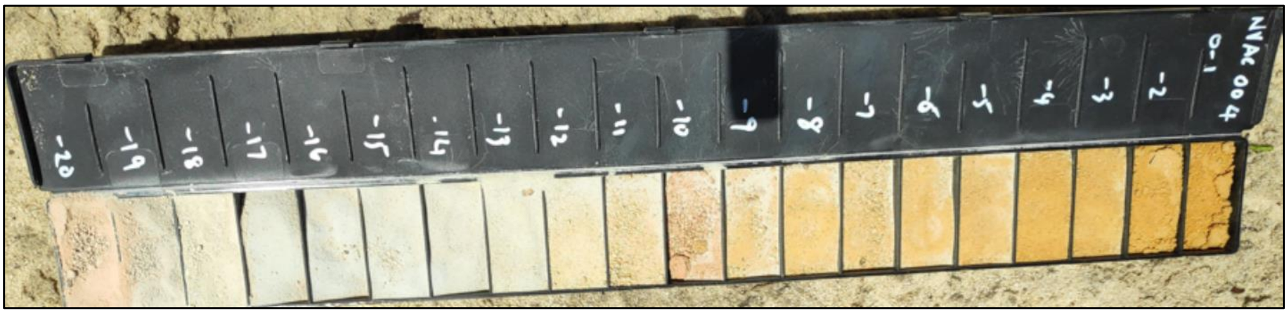


Figure 3: NVAC004 chip tray showing pale yellowish sand at 10–13 m used for microscope photos

Figure 4: NVAC010 chip tray showing white sand at 13–17 m used for microscope photos

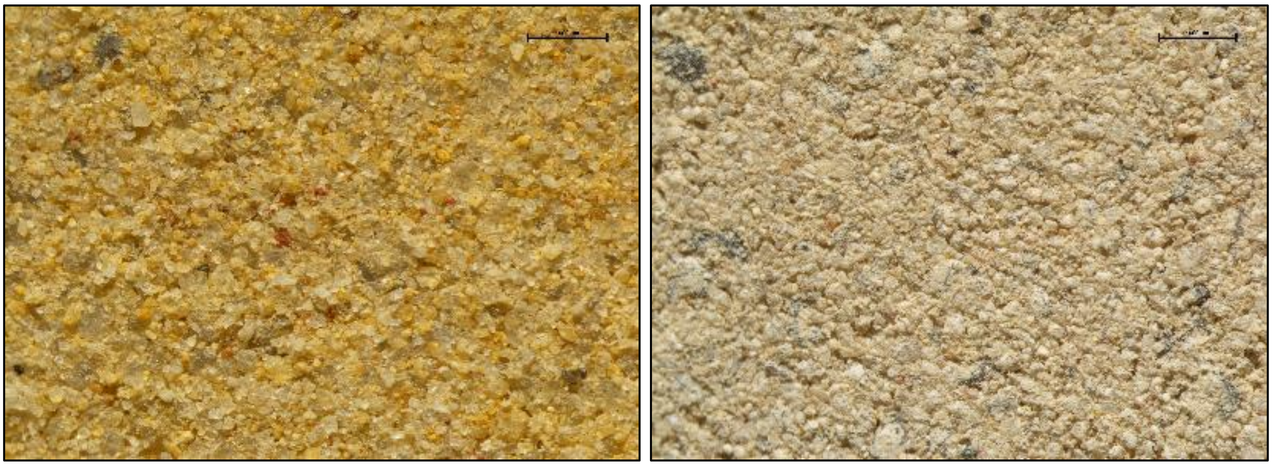


Figure 5: Head feed NVAC004-11-13 (left) and NVAC010-14-17 (right)
Scale bar in all photomicrographs = 1 mm.

Figure 6: Attritioned +1 mm NVAC004-11-13 (left) and NVAC010-14-17 (right)

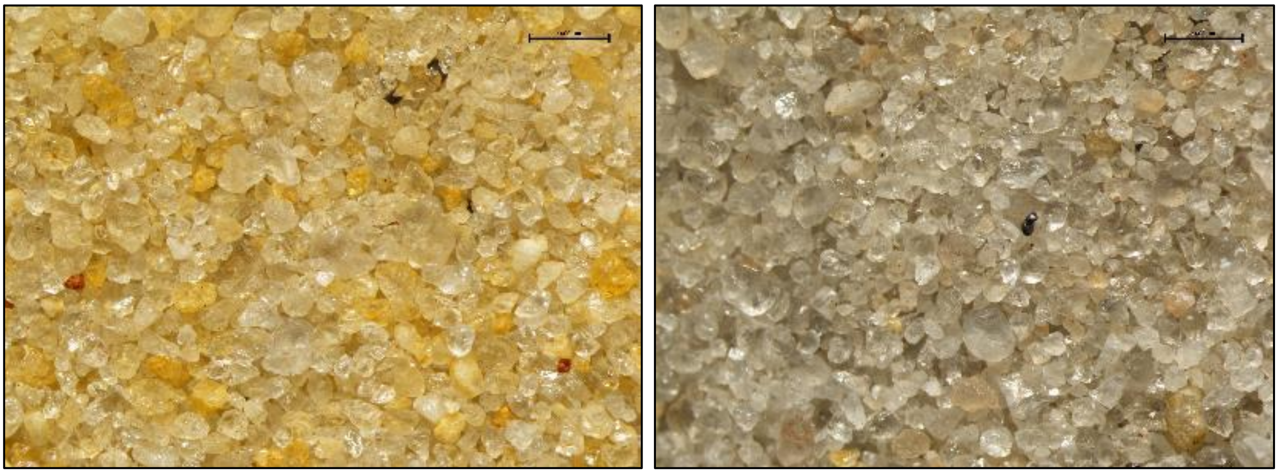


Figure 7: Attritioned -0.6+0.15 mm NVAC004-11-13 (left) and NVAC010-14-17 (right)

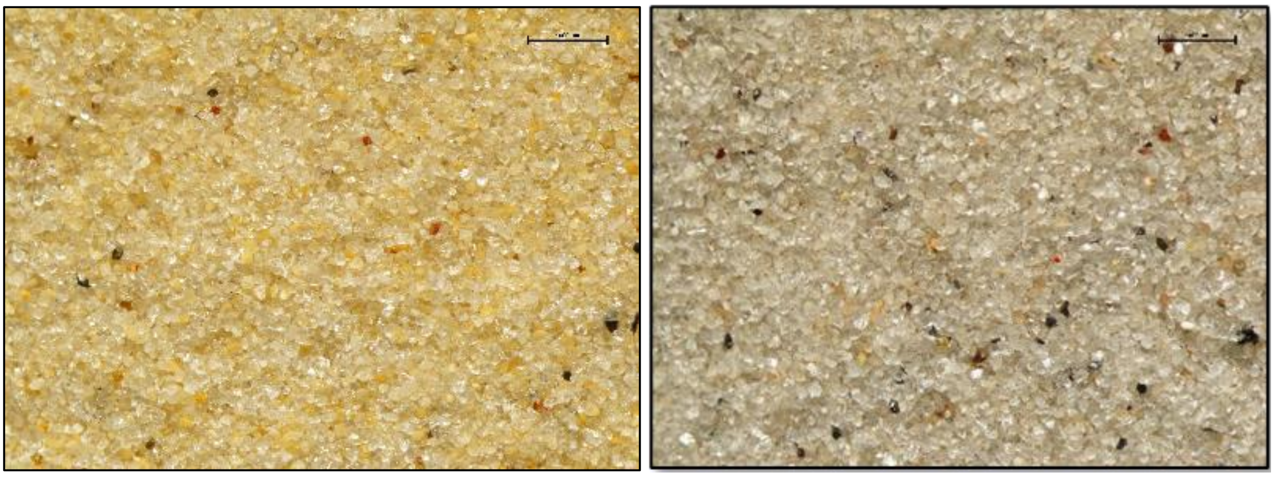


Figure 8: Attritioned -0.15+0.075 mm NVAC004-11-13 (left) and NVAC010-14-17 (right)

Figure 9: Attritioned -0.075 mm NVAC004-11-13 (left) and NVAC010-14-17 (right)

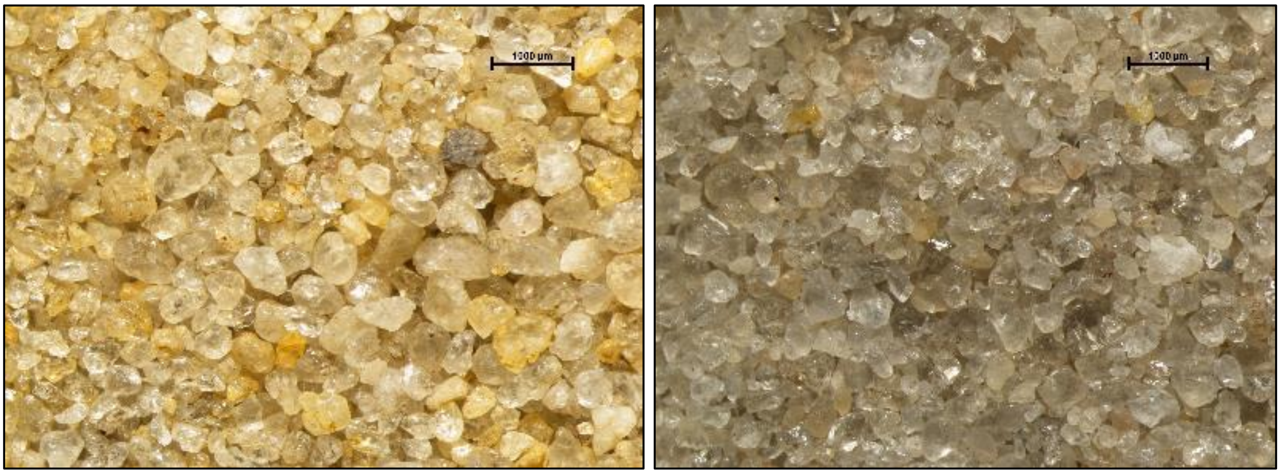


Figure 10: Attritioned HLS SG 2.96 Float -0.6+0.15 mm NVAC004-11-13 (left) and NVAC010-14-17 (right)

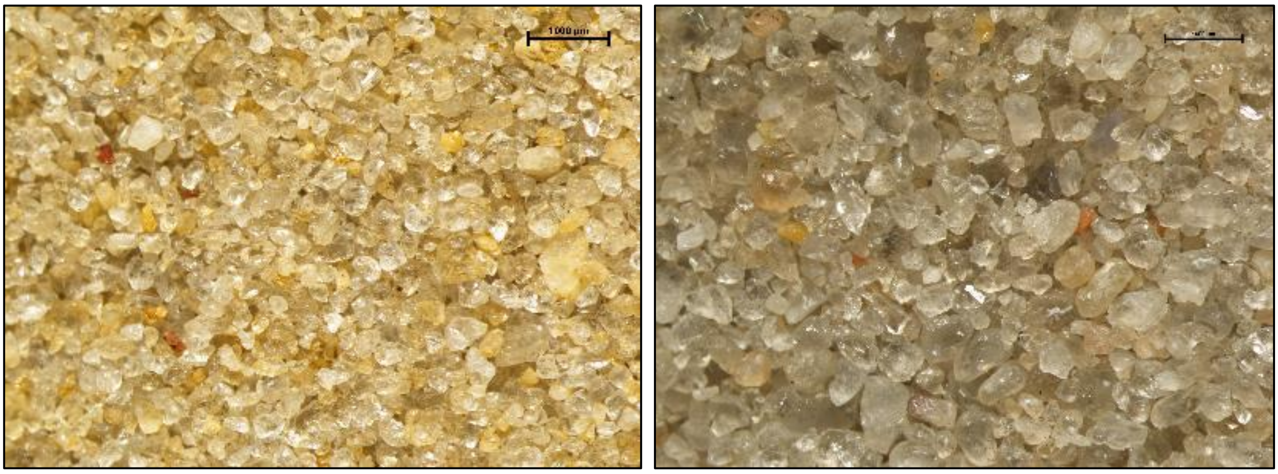


Figure 11: Attritioned HLS SG 2.96 Float Non-Mag -0.6+0.15 mm NVAC004-11-13 (left) and NVAC010-14-17 (right)

Table 5: Key XRF data for 22 feed samples from the initial metallurgy tests

Comp ID	SiO_2 (%)	Al_2O_3 (%)	Fe_2O_3 (%)	TiO_2 (%)	K_2O (%)	LOI (%)
NVAC011-16-18	86.8	8.4	0.86	0.54	0	3.2
NVAC011-19-21	93.1	4.4	0.36	0.34	0	1.7
NVAC012-12-14	92.8	4.6	0.34	0.33	0	1.8
NVAC012-15-17	93.5	4.1	0.38	0.27	0	1.6
NVAC012-18-20	93.3	4.1	0.38	0.42	0	1.6
NVAC013-12-14	86.7	8.4	0.64	0.76	0.1	3.1
NVAC013-15-17	89.2	6.8	0.61	0.52	0.1	2.6
NVAC013-18-20	90.7	5.7	0.89	0.32	0.1	2.2
NVAC014-15-17	90	6.6	0.32	0.39	0	2.5
NVAC014-18-20	91.7	5.3	0.33	0.45	0	2
NVAC015-10-11	83.1	9.6	2.89	0.5	0.1	3.8
NVAC015-12-14	84.9	9.7	1.25	0.47	0	3.7
NVAC017-12-14	90.1	6.4	0.33	0.57	0.1	2.4
NVAC017-15-17	89.7	6.5	0.35	0.67	0.1	2.5
NVAC017-18-20	94.8	3.3	0.21	0.25	0	1.3
NVAC036-11-14	89.8	6.9	0.39	0.46	0.1	2.5
NVAC036-15-17	90.5	6.2	0.39	0.47	0.1	2.2
NVAC036-18-20	92.6	4.5	0.54	0.46	0	1.7
NVAC036-6-7	89.6	6.7	0.66	0.43	0	2.5
NVAC036-8-10	85.7	9.7	0.79	0.52	0.1	3.5
NVAC046-15-17	88.2	6.7	0.37	0.09	2.9	1.4
NVAC046-18-20	89.3	6.1	0.32	0.11	2.8	1.1
Average	**89.8**	**6.4**	**0.6**	**0.4**	**0.3**	**2.3**
Range	**83.1–94.8**	**3.3–9.7**	**0.21–2.89**	**0.11–0.67**	**0–2.9**	**1.1–3.8**

Table 6: Semi quantitative XRD mineralogy for 22 feed samples from the initial metallurgy tests

Comp ID	Quartz (%)	Illite/smectite (%)	Kaolinite (%)	Muscovite (%)	Microcline (%)
NVAC011-16-18	81	9	9	1	1
NVAC011-19-21	75	13	8	1	4
NVAC012-12-14	74	14	11	1	1
NVAC012-15-17	77	14	8		1
NVAC012-18-20	78	12	8	1	1
NVAC013-12-14	78	11	9	1	1
NVAC013-15-17	72	14	13	1	
NVAC013-18-20	80	11	8	1	1
NVAC014-15-17	79	8	11	1	1
NVAC014-18-20	84	10	5		
NVAC015-10-11	81	8	10	1	
NVAC015-12-14	78	9	13		
NVAC017-12-14	79	11	9	1	
NVAC017-15-17	79	10	9	1	
NVAC017-18-20	77	15	6	1	
NVAC036-11-14	86	7	6	1	
NVAC036-15-17	84	9	5	1	1
NVAC036-18-20	82	12	6		
NVAC036-6-7	85	8	5	1	1

Comp ID	Quartz (%)	Illite/smectite (%)	Kaolinite (%)	Muscovite (%)	Microcline (%)
NVAC036-8-10	79	10	10	1	
NVAC046-15-17	70	12	4		14
NVAC046-18-20	66	15	4		14
Average	**78.4**	**11.0**	**8.0**	**1.0**	**3.4**
Range	**66–86**	**7–15**	**4–13**	**0–1**	**0–14**

Table 7: XRD data for 22 attritioned -0.075 mm samples

Sample ID	Quartz (%)	Kaolinite (%)	Muscovite (%)	Microcline (%)
T2911_NVAC011-16-18	34.6	53.9	11.5	0.0
T2911_NVAC011-19-21	42.9	56.0	1.1	0.0
T2911_NVAC012-12-14	38.5	59.2	2.3	0.0
T2911_NVAC012-15-17	55.6	42.6	1.8	0.0
T2911_NVAC012-18-20	49.1	49.1	1.8	0.0
T2911_NVAC013-12-14	38.0	58.5	3.5	0.0
T2911_NVAC013-15-17	35.8	60.6	3.7	0.0
T2911_NVAC013-18-20	39.3	58.8	1.9	0.0
T2911_NVAC014-15-17	38.1	60.7	1.2	0.0
T2911_NVAC014-18-20	50.5	47.3	2.3	0.0
T2911_NVAC015-10-11	19.6	74.2	6.2	0.0
T2911_NVAC015-12-14	13.5	86.5	0.0	0.0
T2911_NVAC017-12-14	33.0	63.6	3.4	0.0
T2911_NVAC017-15-17	28.5	67.7	3.9	0.0
T2911_NVAC017-18-20	41.3	57.4	1.3	0.0
T2911_NVAC036-6-7	65.7	34.2	0.0	0.0
T2911_NVAC036-8-10	34.6	61.3	4.1	0.0
T2911_NVAC036-11-14	47.6	50.0	2.4	0.0
T2911_NVAC036-15-17	53.6	44.6	1.8	0.0
T2911_NVAC036-18-20	69.7	30.1	0.2	0.0
T2911_NVAC046-15-17	37.2	19.4	0.2	43.2
T2911_NVAC046-18-20	42.4	17.4	1.3	38.9
Average	**41.6**	**52.3**	**2.1**	**3.9**
Range	**13–70**	**17–87**	**0–12**	**0–43**

Source: Perth Mineralogy, 26 April 2021

4 Sampling Techniques and Data

This section addresses the requirements for the JORC Code Table 1 Section 1. The information is summarised in Appendix A of this report.

4.1 Drilling Techniques and History

Aircore and auger drilling programs were conducted to investigate and quantify the amount and quality of the silica sand on the property.

The datasets were derived from a hand auger program and aircore drilling programs consisting of 38 shallow hand auger holes and 51 aircore drillholes for 1,006 m of drilling.

Samples are stored at a secure storage facility.

Auger samples (33) were taken from base of hole. The auger samples were used for visual assessment only and formed a basis for subsequent aircore drilling.

Aircore drill samples were collected at 1 m intervals. A sample of approximately 10 kg each was collected directly from the cyclone attached to the sample return hose. Subsamples of approximately 2 kg were collected using a plastic hand trowel after manual homogenisation and quartering. Sample quality and representivity was acceptable and no significant loss of sample through hole blowouts occurred. Drilling and sampling continued to rig refusal or maximum rig depth.

Historical RGC work conducted in the 1990s is reported in WAMEX Report a38058 and subsequently in Suvo's replacement prospectus released to the Australian Securities Exchange (ASX) on 5 August 2020.

Aircore drill samples were collected at 2 m intervals, panned and logged on site. Samples with a visual heavy mineral estimate greater than 2% were submitted to the RGCMS Narngulu laboratory for assay.

4.2 Sampling and Core Recovery Method

All Suvo aircore drillholes were completed by Outback Drilling Pty Ltd using a KL150 aircore rig using 83 mm aircore bits and 73 mm ARD drill rods.

RGC drilling was conducted with a Mantis 75 drill rig; the specifications of downhole equipment are unknown.

A qualitative assessment of sample recovery was made by the supervising geologist during drilling. Samples were geologically logged, and recovery was again assessed. Most samples were dry and recovery complete. Occasionally sample return required air adjustments during drilling to maximise recovery and reduce clay build-up between the sample face and the cyclone. To ensure sample quality and integrity was maintained, the drill string, cyclone and sample return hose was cleaned prior to commencing each drillhole and when necessary, during the drilling process.

There was no evidence of bias in the samples.

The RGC drill program report does not contain any recovery information, nor does it describe methods by which recovery could be maximised, the relationship between grade and recovery is unknown.

4.3 Geological Core Logging

Samples were geologically colour logged using Munsell colour charts for all intervals by an experienced geologist on-site at the time of drilling.

Logging was qualitative and focussed on grain size and colour.

Photographs were taken by Suvo of the chip trays during the aircore and auger programs (Figure 12).

RGC holes were geologically, and colour logged, with a visual estimate of heavy minerals. Logging is qualitative and occurred on 2 m composites.

Figure 12: Chip trays NVAC016, 012, 017, 037, 038, 044

4.4 Sample Preparation

Each 1 m interval was collected from the cyclone underflow in all drillholes. Subsamples were approximately 2 kg each. No composites were taken on site.

The individual 1 m subsamples were delivered to Nagrom Mineral Processing for further processing.

Field duplicates were taken each 20^{th} sample. A total of 46 duplicates were included in the samples sent to Nagrom.

Samples are deemed representative and the sample size appropriate.

The RGC drill program did not report sampling methods; 2 m sample composites were panned for visual estimation of heavy mineral concentrates. A 2 m composite is considered representative for this style of deposit.

4.5 Analytical Method

Metallurgical sighter testing comprised disaggregation and gentle attritioning of seven 1 m drill samples. The testwork involved separation of the sand and clay particles, wet screening of the slurry to -5 μm to separate the clay and the sand, dry the sand fraction and screen to determine particle size distribution (PSD), XRF and XRD analysis of the sand and clay fraction, and analysis of the results.

XRF chemical analysis was completed at the University of New South Wales. Reported constituents are Na_2O, MgO, Al_2O_3, SiO_2, P_2O_5, SO_3, K_2O, CaO, TiO_2, V_2O_5, Cr_2O_3, Mn_3O_4, Fe_2O_3, NiO, CuO, ZnO, SrO, ZrO_2, BaO, HfO_2, PbO, and LOI.

PSD was carried out by Alliance Geotechnical & Environmental.

AFS values were from data from CDEN Global.

Nagrom sighter testwork: 22 drill samples were composited, and PSD tests completed. The samples were attritioned in water and wet screened at +75 μm to remove the clay fraction from the sand fraction, and the fractions dried, weighed and a particle size distribution completed. The mass yield was calculated for each sieve fraction. The sand fraction was then subjected to heavy liquid separation and magnetic separation to produce a final silica product that was then analysed by XRF. XRF chemical analysis was completed at Nagrom. Reported constituents are Na_2O, MgO, Al_2O_3, SiO_2, P_2O_5, SO_3, K_2O, CaO, TiO_2, V_2O_5, Cr_2O_3, Mn_3O_4, Fe_2O_3, NiO, CuO, ZnO, SrO, ZrO_2, BaO, HfO_2, PbO, and LOI.

Nagrom final testwork: 177 drill samples were composited, and head sample chemistry determined by XRF. The samples were then attritioned in water and wet screened at 0.075 mm, 0.15 mm, 0.6 mm and 1.0 mm sieve sizes. This process removed the -0.075 mm (75 μm) clay (slimes) fraction from the sand fractions. The fractions were dried, weighed and chemical composition determined by XRF. The mass yields were calculated for each sieve fraction. The +0.15 -0.6 mm sand fraction was then subjected to heavy liquid separation and the "floats" then purified by magnetic separation to produce a final silica product. All floats and sinks from the heavy liquid separation process and the non-magnetic and magnetic fractions from the magnetic separation process were analysed by XRF. XRF chemical analysis was completed at Nagrom. Reported constituents are Na_2O, MgO, Al_2O_3, SiO_2, P_2O_5, SO_3, K_2O, CaO, TiO_2, V_2O_5, Cr_2O_3, Mn_3O_4, Fe_2O_3, NiO, CuO, ZnO, SrO, ZrO_2, BaO, HfO_2, PbO, and LOI.

Quality control tests: Three duplicate Nova drill samples were selected to provide a range of chemistry and PSDs. These were processed at Nagrom by attritioning and screening, and the chemistry and the results verify that the metallurgical separation process is reproducible.

One set of 33 samples was sent to an umpire laboratory (Intertek) to verify the performance of the primary laboratory (Nagrom) for both XRF and inductively coupled plasma (ICP) methods. It was concluded that the differences between original and umpire laboratories are immaterial for the current purpose of reporting an Inferred Mineral Resource.

Further umpire tests are recommended in any future programs and ICP should be considered as an alternative, especially when low-iron products are under consideration.

High-purity silica products are typically analysed by ICP methods due to the lower detection limit of ICP compared with XRF for key deleterious elements such as aluminium, iron and titanium which are of primary concern for the glass industry. However, ICP does not directly analyse for silicon, hence XRF was used for this initial phase of project investigation and metallurgical tests at Nagrom, to track SiO_2 contents between process steps. It was concluded that although the XRF Fe_2O_3 results appear to be slightly under-reported by about 7–8% on average compared with ICP, the XRF data should be suitable for reporting an Inferred Mineral Resource.

The CP considers that the sample preparation, sample testing and analytical techniques are appropriate for this type of deposit, at this stage of the exploration process.

The CP notes further that metallurgical (process) test methods can have a significant effect on the quality of concentrate produced at a laboratory scale, and that such tests should be tailored for specific geological and mineralogical conditions and desired product outcomes for specific markets.

Therefore, it is cautioned that laboratory process test results used to estimate Mineral Resources for industrial minerals such as silica sand may not reflect either the final process flowsheet adopted after completion of technical studies (e.g. prefeasibility studies or feasibility studies) or should a process plant be constructed.

RGC analytical data are recorded simply as a % heavy mineral and slimes visually, where visual heavy minerals were greater than 2% site laboratory analysis was completed and reported heavy minerals and slimes %. There was no reported verification of sampling, twinned holes, data entry procedures, electronic data or assay adjustment.

4.6 Verification of Sampling and Laboratory Assays

Dr Ron Goldbery BSc (Hons App Sc), Msc (App Sc), PhD, and Murray Lines BSc (Geol), consultants subcontracted to Suvo, helped select the samples and develop the testwork program.

Field data was collected in both field notebooks and log sheets, then manually entered in spreadsheets and validated in Micromine. No adjustments were made to assay data.

4.7 Location of Data Points

All drillholes were picked up using a mmGPS Rover to an accuracy of ±10 mm north and east, ±15 mm RL. Drillhole collars were recorded using the MGA94 Zone 50 grid.

The final three holes drilled, namely NVAC049, 050 and 051 were surveyed using handheld global positioning system (GPS) and adjusted vertically to fit the existing topographic map.

All holes were vertical and, with an average hole depth of only 20 m, downhole surveying was not considered necessary.

RGC drillholes are reported in local grid and were georeferenced in Mapinfo and Universal Transverse Mercator (UTM) coordinates attributed in GDA94 zone 50 with no topographic control.

4.8 Data Spacing and Distribution

The drilling was performed on tracks throughout the projects and collar density appropriate for the level of resource assessment. The holes were spaced at about 500 m along existing tracks.

4.9 Orientation in Relation to Geological Structure

All drillholes are assumed vertical, which means that the sampling is orthogonal to the horizontal to sub-horizontal sand horizons. Orientation-based sampling bias is not expected from vertical drillholes.

4.10 Sample and Data Security

Samples have been in the care of Suvo personnel during drilling, transport from the field and into Suvo's storage facility.

4.11 Audits and Reviews

The field program was managed and supervised by Suvo personnel in consultation with consultants and the CP. It is unknown if there was any review or audit of the RGC program.

4.12 Site Visit

The CP, Mr Murray Lines visited the site on numerous occasions during the recent exploration campaign.

The objectives of the visits were as follows:

- Inspect drilling sites and check drillhole collar locations
- Check selected drillhole collar locations
- Review the systems for collection of geological data on site (mapping, geological logging, maintaining of logs, etc.)
- Review the geological conditions and setting of the deposit
- Discuss quality control aspects with the geological staff
- Discuss data acquisition and storage aspects as well as review the drillhole database.

No flaws were identified according to the results of the completed inspections, and all the samples and geological data were assessed as consistent with the objectives of this MRE.

5 Quality Assurance and Quality Control

5.1 Introduction

The quality of any exploration data depends on the sample selection, sample preparation and analytical techniques adopted, as well as implementation of a quality assurance and quality control (QAQC) program. QAQC programs should be implemented at all exploration stages, including drilling, collection of all types of samples, sample preparation and analysis, determination of sample density, data digitisation, data storage and other associated aspects.

Quality assurance procedures are necessary to monitor contamination, precision, accuracy, and bias and typically involve using specially prepared quality control samples such as standards of known grade and duplicates to achieve this (Abzolov, 2008).

For the Nova Project, the following was completed in the 2020–2021 drilling program:

- Umpire laboratory tests
- Comparison of XRF and ICP results
- Duplicate metallurgy samples.

5.2 Umpire Laboratory Tests

External laboratory checks generally rely on pairs of pulverised exploration samples (also known as umpire samples) to define inter-laboratory precision and bias. One set of 33 samples was sent to an umpire laboratory (Intertek) to verify the performance of the primary laboratory (Nagrom) for both XRF and ICP methods (Table 8 and Table 9).

Table 8: XRF primary vs umpire laboratory – SiO_2 plus key deleterious elements (as oxides)

Comp ID	Size (mm)	SiO_2 (%)		Al_2O_3 (%)		Fe_2O_3 (%)		TiO_2 (%)	
		Primary	Umpire	Primary	Umpire	Primary	Umpire	Primary	Umpire
NVAC004-11-13	+0.6	99.50	99.46	0.21	0.22	0.09	0.09	0.10	0.10
NVAC004-11-13	+0.15	99.12	99.20	0.28	0.29	0.11	0.11	0.23	0.23
NVAC004-11-13	+0.075	98.44	96.76	0.37	0.34	0.19	0.20	0.58	0.58
NVAC005-13-15	+0.6	99.67	98.98	0.12	0.11	0.03	0.06	0.01	0.02
NVAC005-13-15	+0.15	99.56	98.86	0.16	0.16	0.06	0.07	0.10	0.11
NVAC005-13-15	+0.075	98.93	98.92	0.27	0.27	0.16	0.17	0.28	0.27
NVAC006-9-11	+0.6	99.46	99.35	0.29	0.30	0.03	0.04	0.03	0.04
NVAC006-9-11	+0.15	99.28	99.31	0.32	0.32	0.07	0.08	0.18	0.17
NVAC006-9-11	+0.075	98.07	97.65	0.51	0.51	0.28	0.28	0.77	0.73
NVAC006-12-15	+0.6	99.75	99.37	0.11	0.11	0.02	0.02	0.01	0.03
NVAC006-12-15	+0.15	99.56	98.58	0.14	0.14	0.06	0.07	0.12	0.14
NVAC006-12-15	+0.075	98.88	98.24	0.27	0.26	0.19	0.20	0.41	0.39
NVAC007-7-9	+0.6	99.69	99.69	0.14	0.12	0.02	0.02	0.02	0.02
NVAC007-7-9	+0.15	99.41	99.17	0.21	0.21	0.07	0.08	0.13	0.12
NVAC007-7-9	+0.075	98.25	97.50	0.60	0.59	0.24	0.22	0.58	0.56
NVAC007-13-15	+0.6	99.81	99.20	0.09	0.08	0.02	0.02	0.02	0.02
NVAC007-13-15	+0.15	99.52	99.20	0.14	0.15	0.06	0.06	0.13	0.13
NVAC007-13-15	+0.075	98.14	97.83	0.43	0.43	0.30	0.26	0.76	0.75
NVAC008-10-12	+0.6	99.67	99.62	0.15	0.15	0.04	0.06	0.02	0.02
NVAC008-10-12	+0.15	99.50	99.29	0.21	0.20	0.07	0.09	0.09	0.09
NVAC008-10-12	+0.075	98.72	97.80	0.47	0.45	0.22	0.21	0.32	0.32
NVAC009-17-19	+0.6	99.79	99.36	0.06	0.06	0.02	0.03	0.01	0.02
NVAC009-17-19	+0.15	99.67	99.11	0.11	0.10	0.05	0.04	0.05	0.06

Comp ID	Size (mm)	SiO_2 (%)		Al_2O_3 (%)		Fe_2O_3 (%)		TiO_2 (%)	
		Primary	Umpire	Primary	Umpire	Primary	Umpire	Primary	Umpire
NVAC009-17-19	+0.075	99.10	98.37	0.34	0.32	0.15	0.15	0.23	0.22
NVAC010-14-17	+0.6	99.69	99.08	0.14	0.13	0.02	0.02	0.02	0.02
NVAC010-14-17	+0.15	99.17	98.60	0.24	0.24	0.13	0.15	0.28	0.28
NVAC010-14-17	+0.075	96.90	96.62	0.57	0.56	0.59	0.60	1.40	1.37
NVAC032-1-2	+0.6	99.58	99.24	0.06	0.07	0.02	0.02	0.11	0.11
NVAC032-1-2	+0.15	99.56	99.03	0.11	0.11	0.04	0.03	0.13	0.15
NVAC032-1-2	+0.075	98.97	98.66	0.22	0.20	0.08	0.08	0.43	0.41
NVAC038-21-23	+0.6	99.65	99.72	0.06	0.06	0.03	0.03	0.02	0.02
NVAC038-21-23	+0.15	99.53	99.20	0.09	0.09	0.07	0.08	0.13	0.14
NVAC038-21-23	+0.075	98.45	97.93	0.23	0.21	0.31	0.29	0.67	0.63
Average		**99.18**	**98.75**	**0.23**	**0.23**	**0.12**	**0.12**	**0.25**	**0.25**

Table 9: ICP primary vs umpire laboratory – key deleterious elements

Sample ID	Size (mm)	Al (ppm)		Fe (ppm)		Ti (ppm)	
		Primary	Umpire	Primary	Umpire	Primary	Umpire
NVAC004-11-13	+0.6	1230	1188	930	648	640	597
NVAC004-11-13	+0.15	1390	1358	855	804	1230	1174
NVAC004-11-13	+0.075	1630	1606	1385	1315	2720	2615
NVAC005-13-15	+0.6	720	686	180	261	130	124
NVAC005-13-15	+0.15	750	752	425	452	560	557
NVAC005-13-15	+0.075	1320	1310	1185	1200	1580	1548
NVAC006-9-11	+0.6	1580	1586	210	265	230	230
NVAC006-9-11	+0.15	1590	1598	530	567	970	955
NVAC006-9-11	+0.075	2410	2332	2095	1893	4130	3842
NVAC006-12-15	+0.6	670	692	135	167	140	125
NVAC006-12-15	+0.15	710	702	490	500	760	735
NVAC006-12-15	+0.075	1240	1247	1480	1387	2320	2233
NVAC007-7-9	+0.6	740	723	155	165	140	128
NVAC007-7-9	+0.15	990	982	485	467	730	705
NVAC007-7-9	+0.075	2940	2878	1780	1639	3260	3117
NVAC007-13-15	+0.6	500	472	100	143	130	111
NVAC007-13-15	+0.15	670	713	405	459	700	729
NVAC007-13-15	+0.075	1970	2000	2270	2211	4310	4189
NVAC008-10-12	+0.6	920	825	325	340	160	138
NVAC008-10-12	+0.15	1130	1081	590	587	520	532
NVAC008-10-12	+0.075	2330	2414	1685	1677	1800	1834
NVAC009-17-19	+0.6	380	387	115	179	110	105
NVAC009-17-19	+0.15	550	579	320	362	330	325
NVAC009-17-19	+0.075	1700	1688	1205	1136	1270	1243
NVAC010-14-17	+0.6	770	789	165	184	150	142
NVAC010-14-17	+0.15	1170	1198	995	984	1610	1614
NVAC010-14-17	+0.075	2640	2668	4365	4173	7330	6512
NVAC032-1-2	+0.6	410	408	125	171	650	637
NVAC032-1-2	+0.15	620	615	225	273	760	767
NVAC032-1-2	+0.075	920	971	595	611	2160	2203
NVAC038-21-23	+0.6	390	415	160	218	120	117
NVAC038-21-23	+0.15	480	491	635	569	730	795
NVAC038-21-23	+0.075	990	974	2360	2192	3730	3567
Average		**1165**	**1161**	**878**	**855**	**1397**	**1341**

It is noted that:

- The primary laboratory XRF SiO_2 data is biased about 0.5% higher than the umpire laboratory (e.g. Figure 13).
- There is, however, close agreement between primary laboratory and umpire XRF for Al_2O_3, Fe_2O_3 (Figure 13) and TiO_2.
- Primary ICP and umpire ICP results for aluminium, iron and titanium are in close agreement (e.g. Figure 14).

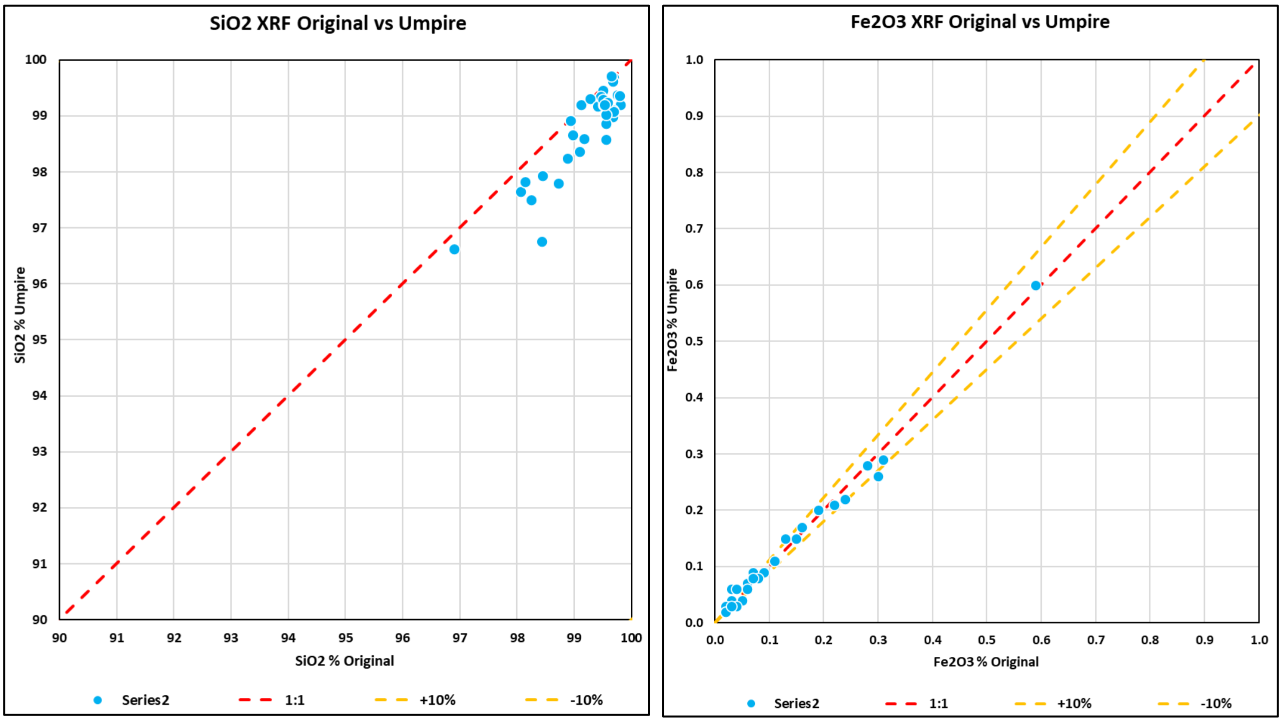


Figure 13: Scatterplot comparing original vs umpire SiO_2 (left) and Fe_2O_3 (right)

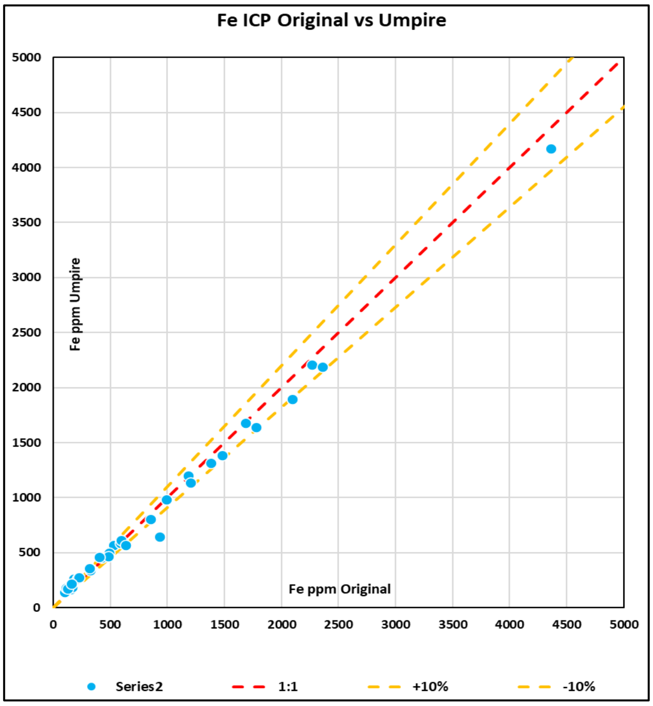


Figure 14: Scatterplot comparing original vs umpire Fe_2O_3 by ICP methods

It is concluded that the differences between original and umpire laboratories are immaterial.

Further umpire tests are recommended in any future programs and that ICP be considered as an alternative, especially when low-iron products are under consideration.

5.3 XRF vs ICP Methods

High-purity silica products are typically analysed by ICP methods due to the lower detection limit of ICP compared with XRF for key deleterious elements such as aluminium, iron and titanium which are of primary concern for the glass industry. However, ICP does not directly analyse for silicon, hence XRF was used for this initial phase of project investigation and metallurgical tests at Nagrom, to track silicon contents.

Thirty-two samples were analysed at Nagrom using a four-acid digestion ICP method to compare with XRF results (Table 10, Table 11, Table 12). A comparison of key deleterious elements aluminium and iron shows that:

- XRF Fe_2O_3 under-reports by an average of around 7–8% compared with ICP Fe_2O_3.
- XRF Al_2O_3 over-reports by an average of around 12–16% compared with ICP Al_2O_3.
- The difference in Fe_2O_3 and Al_2O_3 is more variable in coarser samples, which suggests some sort of nugget effect between sample splits.

It is concluded that although the XRF Fe_2O_3 results appear to be under-reported compared with ICP, the XRF data is reasonable for reporting an Inferred Mineral Resource (quality is implied, not verified).

Table 10: Nagrom ICP vs Nagrom XRF -1.0+0.6 mm attritioned

Sample ID	Al_2O_3		Al_2O_3		Fe_2O_3		Fe_2O_3	
	ICP	XRF	ICP-XRF	ICP-XRF	ICP	XRF	ICP-XRF	ICP-XRF
	%	%	Diff.	Diff. %	%	%	Diff.	Diff. %
NVAC004-11-13 +0.6mm	0.2324	0.213	0.0194	9.1%	0.1330	0.085	0.0480	56.4%
NVAC005-13-15 +0.6mm	0.1360	0.120	0.0160	13.4%	0.0257	0.025	0.0007	2.9%
NVAC006-9-11 +0.6mm	0.2985	0.294	0.0045	1.5%	0.0300	0.026	0.0040	15.5%
NVAC006-12-15 +0.6mm	0.1266	0.114	0.0126	11.0%	0.0193	0.020	<0.001	-3.5%
NVAC007-7-9 +0.6mm	0.1398	0.137	0.0028	2.1%	0.0222	0.022	0.0002	0.7%
NVAC007-13-15 +0.6mm	0.0945	0.089	0.0055	6.1%	0.0143	0.016	<0.001	-10.6%
NVAC008-10-12 +0.6mm	0.1738	0.146	0.0278	19.1%	0.0465	0.037	0.0095	25.6%
NVAC009-17-19 +0.6mm	0.0718	0.059	0.0128	21.7%	0.0164	0.017	<0.001	-3.3%
NVAC0010-14-17 +0.6mm	0.1455	0.136	0.0095	7.0%	0.0236	0.022	0.0016	7.2%
NVAC0032-1-2 +0.6mm	0.0775	0.061	0.0165	27.0%	0.0179	0.020	<0.001	-10.6%
NVAC0038-21-23 +0.6mm	0.0737	0.060	0.0137	22.8%	0.0229	0.025	<0.001	-8.5%
Average	**0.1427**	**0.130**	**0.0128**	**12.8%**	**0.0338**	**0.029**	**0.0052**	**6.5%**

Table 11: Nagrom ICP vs Nagrom XRF -0.6+0.15 mm attritioned

Sample ID	Al_2O_3		Al_2O_3		Fe_2O_3		Fe_2O_3	
	ICP	XRF	ICP-XRF	ICP-XRF	ICP	XRF	ICP-XRF	ICP-XRF
	%	%	Diff.	Diff. %	%	%	Diff.	Diff. %
NVAC004-11-13 +0.15mm	0.2626	0.281	<0.001	-6.5%	0.1222	0.111	0.0112	10.1%
NVAC005-13-15 +0.15mm	0.1417	0.157	<0.001	-9.7%	0.0608	0.058	0.0028	4.8%
NVAC006-9-11 +0.15mm	0.3004	0.317	<0.001	-5.2%	0.0758	0.073	0.0028	3.8%
NVAC006-12-15 +0.15mm	0.1342	0.142	<0.001	-5.5%	0.0701	0.062	0.0081	13.0%
NVAC007-7-9 +0.15mm	0.1871	0.208	<0.001	-10.1%	0.0693	0.065	0.0043	6.7%
NVAC007-13-15 +0.15mm	0.1266	0.142	<0.001	-10.8%	0.0579	0.060	<0.001	-3.5%
NVAC008-10-12 +0.15mm	0.2135	0.210	0.0035	1.7%	0.0844	0.073	0.0114	15.6%
NVAC009-17-19 +0.15mm	0.1039	0.105	<0.001	-1.0%	0.0458	0.053	<0.001	-13.7%

Sample ID	Al_2O_3		Al_2O_3		Fe_2O_3		Fe_2O_3	
	ICP	XRF	ICP-XRF	ICP-XRF	ICP	XRF	ICP-XRF	ICP-XRF
	%	%	Diff.	Diff. %	%	%	Diff.	Diff. %
NVAC0010-14-17 +0.15mm	0.2211	0.243	<0.001	-9.0%	0.1423	0.130	0.0123	9.4%
NVAC0032-1-2 +0.15mm	0.1171	0.109	0.0081	7.5%	0.0322	0.036	<0.001	-10.6%
NVAC0038-21-23 +0.15mm	0.0907	0.090	0.0007	0.8%	0.0908	0.069	0.0218	31.6%
Average	**0.3080**	**0.366**	**<0.001**	**-15.9%**	**0.1980**	**0.186**	**0.0120**	**6.5%**

Table 12: Nagrom ICP vs Nagrom XRF -0.15+0.075 mm attritioned

Sample ID	Al_2O_3		Al_2O_3		Fe_2O_3		Fe_2O_3	
	ICP	XRF	ICP-XRF	ICP-XRF	ICP	XRF	ICP-XRF	ICP-XRF
	%	%	Diff.	Diff. %	%	%	Diff.	Diff. %
NVAC005-13-15 +0.075mm	0.2494	0.274	<0.001	-9.0%	0.1694	0.157	0.0124	7.9%
NVAC006-9-11 +0.075mm	0.4554	0.507	<0.001	-10.2%	0.2995	0.275	0.0245	8.9%
NVAC006-12-15 +0.075mm	0.2343	0.272	<0.001	-13.9%	0.2116	0.193	0.0186	9.6%
NVAC007-7-9 +0.075mm	0.5555	0.601	<0.001	-7.6%	0.2545	0.235	0.0195	8.3%
NVAC007-13-15 +0.075mm	0.3722	0.433	<0.001	-14.0%	0.3245	0.303	0.0215	7.1%
NVAC008-10-12 +0.075mm	0.4402	0.468	<0.001	-5.9%	0.2409	0.220	0.0209	9.5%
NVAC009-17-19 +0.075mm	0.3212	0.337	<0.001	-4.7%	0.1723	0.153	0.0193	12.6%
NVAC0010-14-17 +0.075mm	0.4988	0.573	<0.001	-12.9%	0.6241	0.588	0.0361	6.1%
NVAC0032-1-2 +0.075mm	0.1738	0.222	<0.001	-21.7%	0.0851	0.082	0.0031	3.7%
NVAC0038-21-23 +0.075mm	0.1871	0.232	<0.001	-19.4%	0.3374	0.305	0.0324	10.6%
Average	**0.3488**	**0.392**	**<0.001**	**-11.9%**	**0.2719**	**0.251**	**0.0208**	**8.4%**

5.4 Duplicate Metallurgy Samples

Duplicates are samples collected, prepared and assayed in an identical manner to an original sample, to provide a measure of the total error of sampling. Three duplicate Nova drill samples were selected to provide a range of chemistry and PSDs. These were processed at Nagrom by attritioning and screening, and the chemistry and the results verify that the metallurgical separation process is reproducible.

Table 13: Original and duplicate attritioned and screened drill samples – key XRF chemistry, LOI and Yield

Particle size (mm)	SiO_2 (%)	Al_2O_3 (%)	Fe_2O_3 (%)	TiO_2 (%)	LOI @ 1,000°C (%)	Yield (%)
NVAC004-11-13 Original						
+1						8.0
+0.6	99.50	0.21	0.09	0.10	0.10	9.9
+0.15	99.12	0.28	0.11	0.23	0.13	57.9
+0.075	98.44	0.37	0.19	0.58	0.13	13.3
-0.075	77.37	13.18	2.84	0.89	5.17	10.1
NVAC004-11-13 Duplicate						
+1	99.24	0.27	0.16	0.10	0.15	10.8
+0.6	99.26	0.23	0.09	0.11	0.12	11.6
+0.15	99.09	0.28	0.11	0.25	0.14	56.0
+0.075	98.41	0.36	0.18	0.59	0.16	12.1
-0.075	76.03	13.78	2.91	0.91	5.69	9.5
NVAC018-14-17 Original						
+1						9.7
+0.6	99.65	0.18	0.02	0.03	0.10	14.3
+0.15	98.90	0.50	0.10	0.22	0.21	38.8
+0.075	95.87	1.81	0.43	0.97	0.70	12.0
-0.075	58.62	28.47	1.09	1.17	10.10	25.2

Particle size (mm)	SiO_2 (%)	Al_2O_3 (%)	Fe_2O_3 (%)	TiO_2 (%)	LOI @ 1,000°C (%)	Yield (%)
NVAC018-14-17 Duplicate						
+1	99.62	0.17	0.02	0.03	0.10	10.3
+0.6	99.44	0.18	0.02	0.03	0.10	12.5
+0.15	98.71	0.46	0.08	0.20	0.25	40.9
+0.075	95.13	2.00	0.48	1.08	0.78	11.4
-0.075	58.49	28.18	1.07	1.23	10.13	24.9
NVAC038-17-20 Original						
+1						2.1
+0.6	99.33	0.12	0.11	0.02	0.07	4.0
+0.15	99.64	0.11	0.05	0.04	0.04	51.8
+0.075	99.27	0.20	0.12	0.17	0.08	11.6
-0.075	79.27	13.98	0.98	0.46	4.98	30.6
NVAC038-17-20 Duplicate						
+1	98.78	0.13	0.68	0.02	0.16	1.8
+0.6	99.59	0.08	0.10	0.02	0.06	3.5
+0.15	99.54	0.09	0.04	0.04	0.05	52.1
+0.075	99.21	0.19	0.14	0.21	0.09	10.9
-0.075	79.05	14.07	0.97	0.51	5.05	31.7

5.5 Comments on Adequacy of QAQC and Analytical Methods

Examination of the quality control data indicates satisfactory performance of field sampling protocols and the primary analytical laboratories. As a result, the CP has concluded that the logged geology and sample analysis results are suitable for use in an MRE.

Based on the assessment of the data, the CP, Mr Murray Lines, considers the data acceptable for Mineral Resource estimation, with the laboratory results posing minimal risk to the reliability of the MRE.

6 Twin Holes

6.1 Introduction

Twinned holes are specifically referred to in JORC 2012 Table 1 for the verification of sampling and assaying and are traditionally drilled for verification of historical data or confirmation of drillhole data during geological due diligence studies (Abzolov, 2009). Twinned holes are typically drilled less than 5 m apart and are best compared according to geological units and individual or composite samples.

6.2 2021 Twin Holes

Historical holes were not specifically twinned during the recent drilling. However, new holes NVAC049, NVAC050 and NVAC051 were drilled within approximately 18–44 m of original holes C22H2, C22H5, and C22H9 (Figure 15 and Table 14).

The RGC holes are shown in an historical cross section and verify the presence of sand ranging in colour from yellow-white to grey, under a layer of orange, yellow and brown sand (Figure 16). This is interpreted to be comparable to the disposition of sands logged during recent Suvo drilling.

Although no direct correlation of geological logging can be made between historical and recent holes, the CP is of the opinion that the historical hole geology logs may be used to complement geology data from the 2020–2021 drilling.

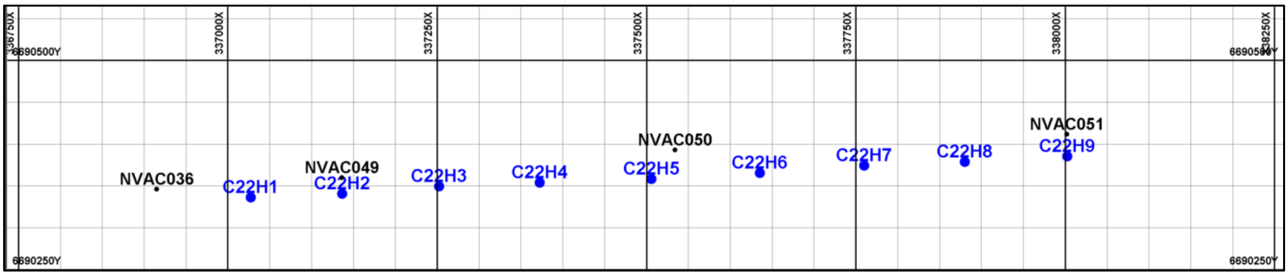


Figure 15: Map showing historical and recent holes drilled at approximately 6690350 to 6690410 m N
Blue = historical collars; black = 2020–2021 collars. Map grid 250 m x 250 m.

Table 14: Collar coordinates and final depths for historical and recent holes drilled nearby

Hole ID	Description	East (m)	North (m)	Distance apart (m)	RL (m)	Depth (m)
C22H2	Historical	337136.5	6690340.9		~190	21
NVAC049	Twin	337136.0	6690360.0	18	~192	30
C22H5	Historical	337505.9	6690358.7		~215	18
NVAC050	Twin	337534.0	6690393.0	44	~215	27
C22H9	Historical	338002.2	6690385.4		~239	21
NVAC051	Twin	338002.0	6690412.0	26	~239	30

Note: GDA 94 Zone 50. NVAC049, 050 and 051 surveyed using handheld GPS.

Table 15: Twin vs original logged intercepts

Collar	Description	From (m)	To (m)	Lithology	Width (m)
C22H2	Historical original	2	21	Yellow-white, grey sand	19
NVAC049	Twin	14	23	White sand	9
C22H5	Historical original	10	18	Yellow-white, grey sand	8
NVAC050	Twin	8	27	White sand	19
C22H9	Historical original	14	21	Grey sand	7
NVAC051	Twin	26	30	Cream sand	4

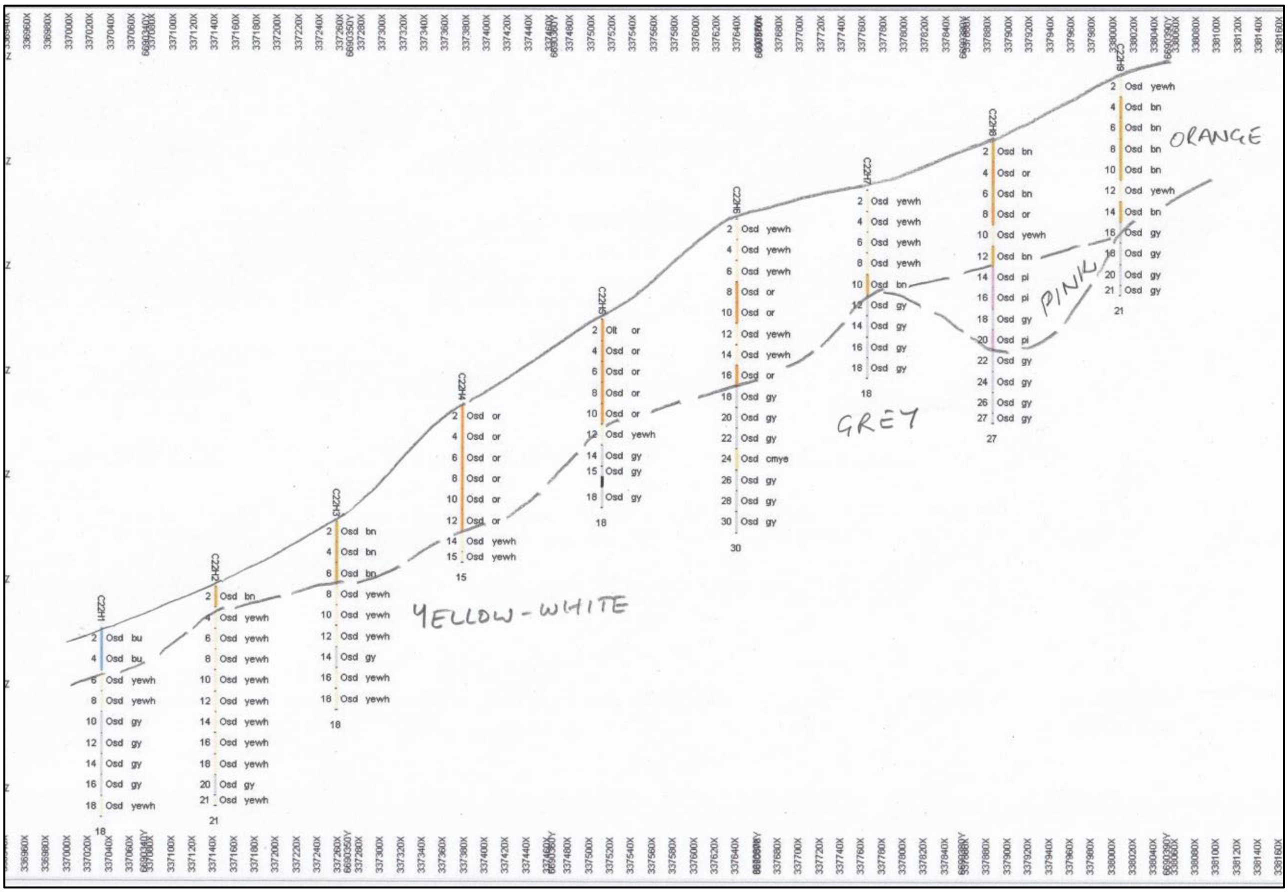


Figure 16: Cross section ~6690350N showing provisional interpretation of RGC holes based on sand colour

Yellow-white and grey sands are below the yellow, orange and brown sands. Section looking north. Vertical exaggeration ~10x.Vertical scale at 10 m intervals.

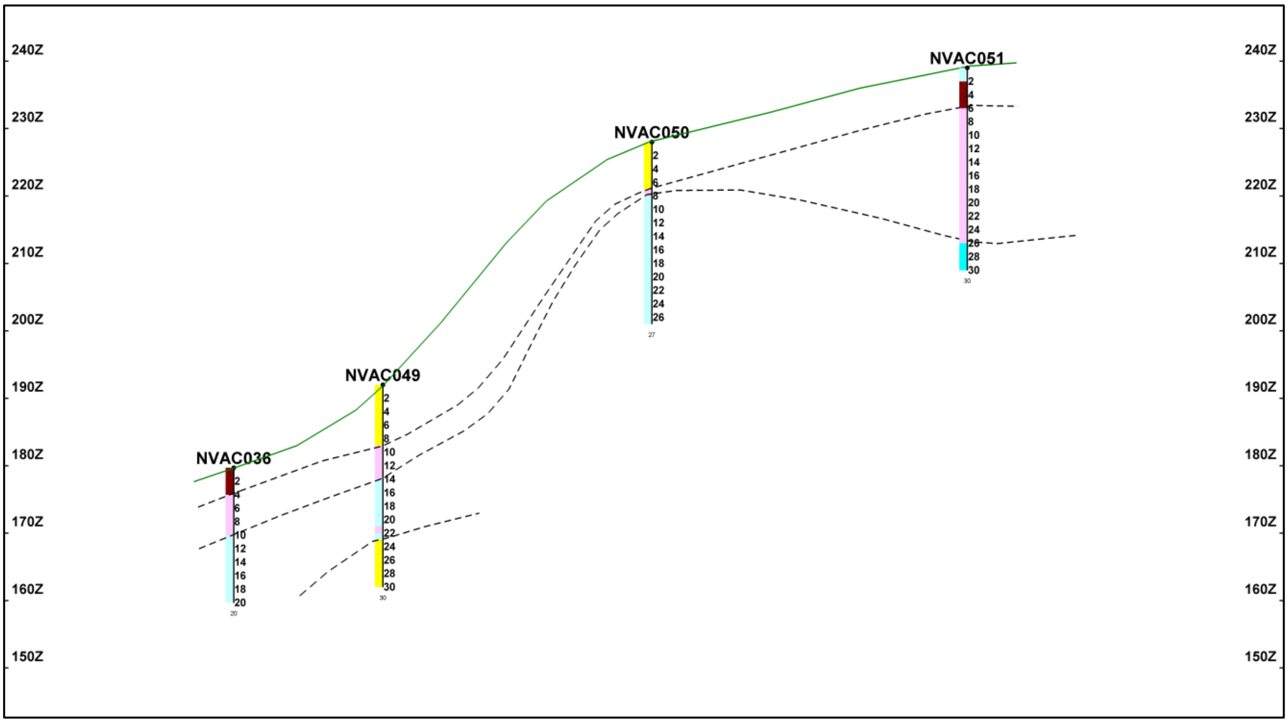


Figure 17: Cross section along ~6690350N showing geology interpretation of Suvo holes based on colour

Pale blue = cream and white sands; pink = pink sand. Section looking north. Vertical exaggeration = 10x. Vertical scale at 10 m intervals.

7 Geological Modelling

7.1 Software

Geological modelling was undertaken by CSA Global using Micromine 2018 software (version 18.0.1008.8 x64).

7.2 Data Import and Validation

The Nova database included the following:

- Drillhole collar coordinates file
- Analytical data file (assay intervals)
- Geology/lithology data file.

The database was provided by Suvo in Microsoft Excel format. Table 16 summarises the database.

Table 16: Summary table – database provided

Category	Historical drillholes	Recent drillholes	Total
Workings/drillholes	74	51	**125**
Metres driven/drilled	1,873	1,006	**2,879**
Lithology records	133	180	**313**
Assay intervals (Head assays)	-	200	**200**
Assay intervals (Head assays) (in metres)	-	562	**562**
Including:			
SiO_2	-	200	**200**
Al_2O_3	-	200	**200**
Fe_2O_3	-	200	**200**
TiO_2	-	200	**200**
CaO	-	200	**200**
Na_2O	-	200	**200**
K_2O	-	200	**200**
LOI	-	200	**200**

All drillhole analytical results from the recent exploration program completed by Suvo were used for interpretation and grade estimation of the lithological zones. Data were imported into a Micromine database for statistical analysis and grade interpolation. Lithological descriptions were entered into the database as an interval file with lithological codes assigned. The lithological codes assisted with domain interpretation and were compared visually with chip tray photographs supplied by Suvo.

The analytical databases were validated by specially designed processes in Micromine software.

The database was then checked using macros and processes designed to detect the following errors:

- Duplicate drillhole names
- One or more drillhole collar coordinates missing in the collar file
- FROM or TO missing or absent in the assay file
- FROM > TO in the assay file
- Sample intervals are not contiguous in the assay file (gaps exist between the assays)
- Sample intervals overlap in the assay file
- First sample is not equal to 0 m in the assay file
- First depth is not equal to 0 m in the survey file
- Several downhole survey records exist for the same depth

- Azimuth is not between 0 and 360° in the survey file
- Dip is not between 0 and 90° in the survey file
- Azimuth or dip is missing in survey file
- Total depth of the holes is less than the depth of the last sample.

The validation revealed no critical errors.

7.3 Geological Interpretation

Interpretation was carried out interactively for six vertical cross-sections through the weathering profile of the deposit for the white and cream sands combined as one unit, with the surfaces based on the geological boundaries defined by logged sand types and chemical analysis results from the drill data (Figure 18). No other sand types were considered for interpretation.

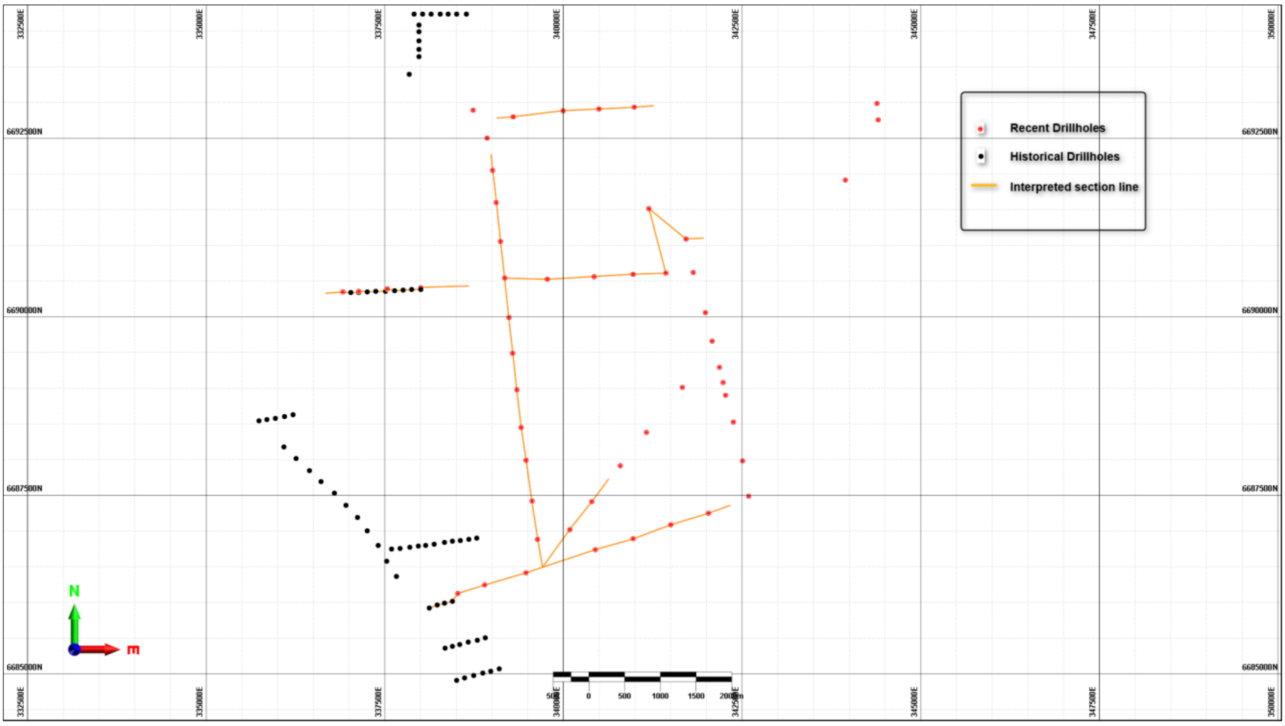


Figure 18: Exploration profiles in plan view (map grid 500 m x 500 m)

Interpretation was carried out by initially creating strings. Geological knowledge relating to weathering profile development formed the basis for interpretation. All strings were saved separately for each lithological domain.

The following approach was applied during interpretation:

- Each view was displayed on screen with a clipping window equal to half the distance from the adjacent plan sections.
- All interpreted strings were snapped to drillholes.
- The interpretation was extended perpendicular to the first and last interpreted section a distance equal to half the distance between the adjacent data points. Consideration was given to the general direction of the structure.
- If a lithological envelope did not extend to the adjacent section, it was pinched out to the next section and then terminated. The general shape of the envelope was maintained.

Figure 19 shows an interpretation of the white/cream sand lithological unit for the deposit using the lithological codes. Coloured hatches along the drillhole traces show the distribution of the various lithological units.

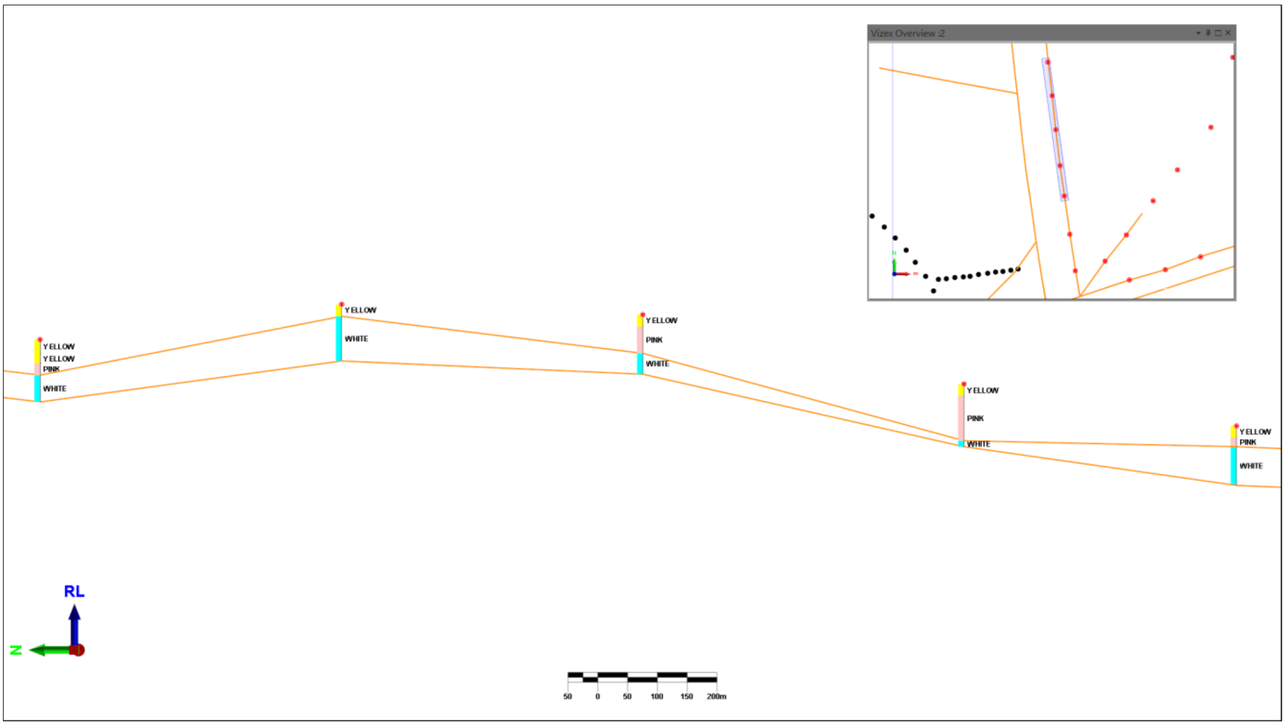


Figure 19: Example of geological interpretation of the white/cream sand domain

7.4 Topography

A topographic data was provided in the form of digital elevation model by Suvo and these data was imported into Micromine and converted into digital terrain model.

7.5 Wireframing

The interpretation strings were used to generate 3D models. A wireframe has a name that corresponds to its zone. One set of wireframes were created for the deposit: namely, white/cream sand domain. Examples of the wireframes constructed are shown in Figure 20 for modelled white/cream sand unit.

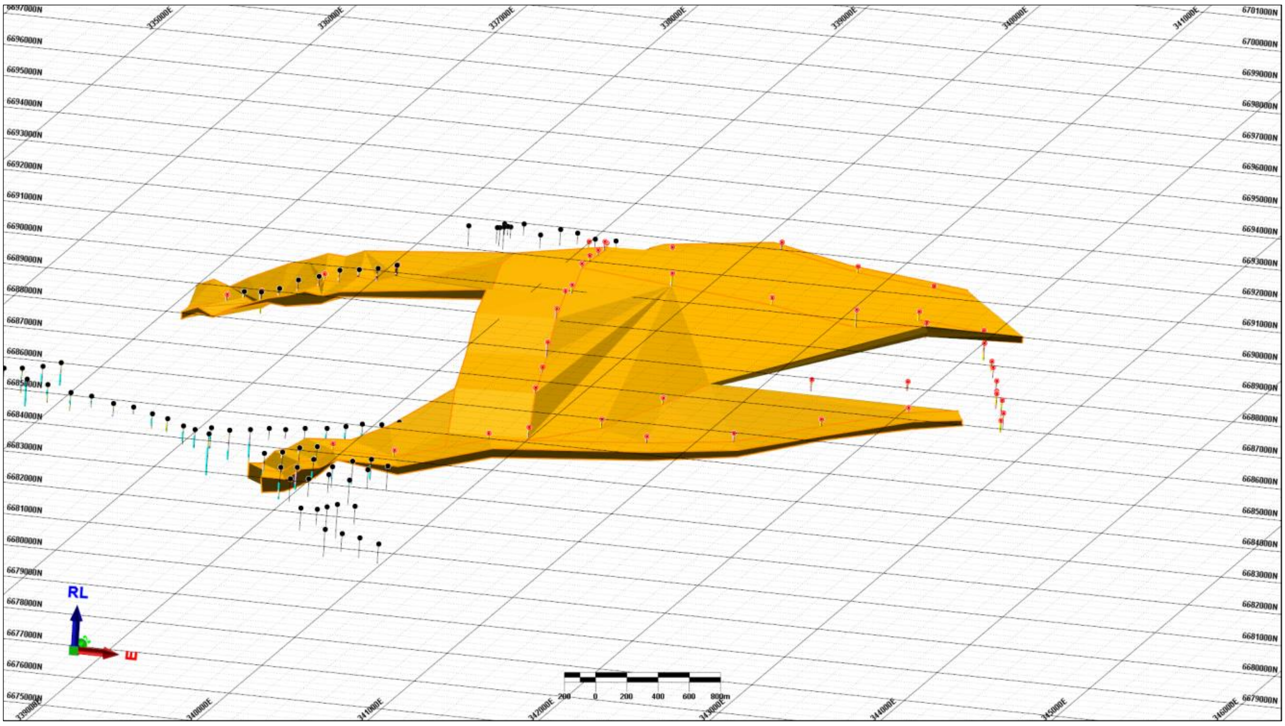


Figure 20: White/Cream sand wireframe, looking northeast

Working in a 3D environment ensured accurate modelling of the lithological units. Table 17 shows the volume of the wireframe models.

Table 17: Volume statistics for the wireframe models of the deposit

Domain	Volume (m^3)
White/Cream sand	182,883,939

8 Statistical and Geostatistical Analysis

8.1 Summary

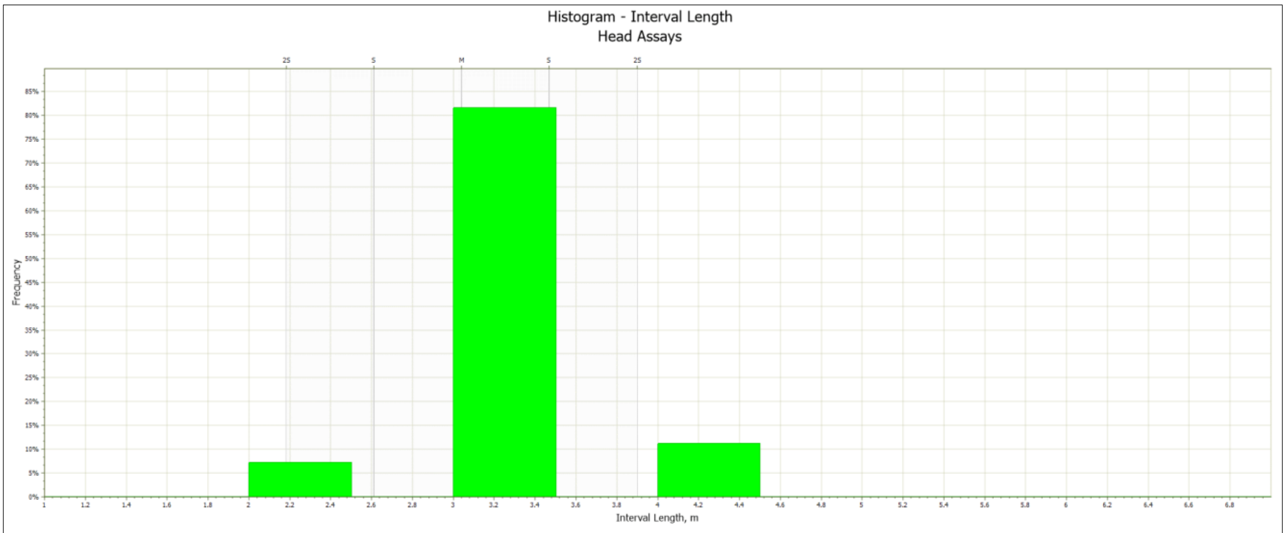
Before undertaking the block modelling, statistical assessment of the data was completed to understand how the grade estimates should be accomplished. Each of these variables was subject to classical exploratory data analysis in preparation for estimation.

Statistical analysis was carried out using Micromine software.

8.2 Data Coding and Selecting Composite Length

Drillhole interval compositing is a standard procedure which is used to set all sampling intervals to the same length ("volume support") so that all the samples will have the same weight during grade interpolation and geostatistical analysis. Usually, the composite interval length is selected to be close to the standard or mean sampling length [Reference: Mineral Resource and Ore Reserve Estimation, The AusIMM Guide to Good Practice, Monograph 23].

The most common sampling interval was analysed (Figure 21); 3 m was the most common sampling interval. The selected samples within each mineralised envelope were therefore composited over 3 m, starting at the drillhole collar and progressing downhole. Compositing was stopped and restarted at all boundaries between mineralised envelopes and waste material, as well between different oxidation zones. If a gap of less than 30 cm occurred between samples, it was included in the sample composite. If the gap was longer than 30 cm, the composite was stopped, and another composite was started from the next sample.



Minimum Value	2.00	Median	3.00
Maximum Value	4.00	Ln Mean	1.10
2nd Highest	4.00	Ln Std Deviation	0.15
3rd Highest	4.00	Geometric Mean	3.01
4th Highest	4.00	Geometric Std Dev	1.16
N	98	Sichel's Estimator	3.04
Mean	3.04	Sichel's V	0.02
Variance	0.18	Sichel's Gamma	1.01
Standard Deviation	0.43	Chi-Square	80.515
Coeff. of Variation	0.14	Degrees of Freedom	1

Figure 21: Histogram for interval length within white/cream sand

8.3 Statistical Analysis

Once the mineralisation had been interpreted and wireframed, classical statistical analysis was repeated, but only for the samples that were within the mineralised envelopes. This was carried out to meet the following objectives:

- To estimate the mixing effect of grade populations for each element within each zone
- To assess the potential for separation of grade populations if more than one population exists

- To define the top cut grades.

Samples were coded separately for each mineralisation zone. Visual validation was then performed to check sample coding.

Statistical parameters for all grades (weighted over the interval length) within the modelled domain are shown in Table 18.

Table 18: Statistical parameters of analytical results for white/cream sand grouped by PSD and test methods

Parameter	No. of samples	Minimum	Maximum	Mean	Variance	Standard deviation	Coefficient of variation	Median
Head Assays								
SiO_2 (%)	98	72.784	98.991	89.271	22.32	4.72	0.05	90.180
Al_2O_3 (%)	98	0.293	17.656	6.894	9.98	3.16	0.46	6.387
Fe_2O_3 (%)	98	0.151	1.878	0.610	0.15	0.39	0.64	0.453
TiO_2 (%)	98	0.118	1.327	0.457	0.04	0.20	0.44	0.426
CaO (%)	98	0.000	0.063	0.006	0.00	0.01	0.97	0.005
Na_2O (%)	98	0.000	0.113	0.026	0.00	0.02	0.86	0.019
K_2O (%)	98	0.004	1.906	0.138	0.09	0.30	2.14	0.048
LOI (%)	98	0.100	5.890	2.434	1.23	1.11	0.46	2.220
0.075–0.15 mm (Silica Flour) – Attrition								
Yield	97	4.65	87.51	21.01	547.43	23.40	1.11	11.65
SiO_2 (%)	98	89.858	99.394	96.980	4.93	2.22	0.02	97.366
Al_2O_3 (%)	98	0.134	4.786	1.149	1.19	1.09	0.95	0.605
Fe_2O_3 (%)	98	0.054	2.062	0.405	0.11	0.33	0.82	0.329
TiO_2 (%)	98	0.119	2.664	0.691	0.20	0.45	0.65	0.645
CaO (%)	98	0.003	0.051	0.008	0.00	0.01	0.67	0.007
Na_2O (%)	98	0.001	0.104	0.015	0.00	0.02	1.22	0.011
K_2O (%)	98	0.001	2.616	0.131	0.15	0.38	2.89	0.013
LOI (%)	98	0.030	1.870	0.434	0.13	0.36	0.83	0.275
0.15–0.60 mm (Glass Sand) – Attrition								
Yield	83	7.95	65.38	45.47	116.30	10.78	0.24	47.73
SiO_2 (%)	83	94.608	99.668	98.914	0.68	0.82	0.01	99.123
Al_2O_3 (%)	83	0.085	2.848	0.453	0.20	0.45	1.03	0.314
Fe_2O_3 (%)	83	0.040	0.929	0.128	0.02	0.12	1.01	0.088
TiO_2 (%)	83	0.041	1.006	0.170	0.02	0.14	0.81	0.144
CaO (%)	83	0.002	0.013	0.006	0.00	0.00	0.38	0.006
Na_2O (%)	83	0.001	0.026	0.008	0.00	0.01	0.70	0.008
K_2O (%)	83	0.001	0.253	0.023	0.00	0.05	2.03	0.007
LOI (%)	83	0.030	1.210	0.209	0.03	0.19	0.91	0.150
0.15–0.60 mm (Glass Sand) – HLS								
Yield	84	98.12	99.91	99.75	0.05	0.22	0.00	99.79
SiO_2 (%)	84	93.345	99.860	99.106	0.94	0.97	0.01	99.379
Al_2O_3 (%)	84	0.068	4.135	0.449	0.35	0.59	1.33	0.274
Fe_2O_3 (%)	84	0.012	0.636	0.079	0.01	0.12	1.48	0.035
TiO_2 (%)	84	0.012	0.515	0.046	0.00	0.06	1.27	0.033
CaO (%)	84	0.002	0.196	0.008	0.00	0.02	2.51	0.005
Na_2O (%)	84	0.001	0.032	0.007	0.00	0.01	0.72	0.006
K_2O (%)	84	0.001	0.243	0.023	0.00	0.04	1.97	0.007
LOI (%)	84	0.050	1.730	0.224	0.06	0.24	1.07	0.145

Parameter	No. of samples	Minimum	Maximum	Mean	Variance	Standard deviation	Coefficient of variation	Median
0.15–0.60 mm (Glass Sand) – non-magnetic								
Yield	83	94.84	99.98	99.38	0.79	0.89	0.01	99.62
SiO_2 (%)	83	96.390	99.912	99.261	0.32	0.57	0.01	99.398
Al_2O_3 (%)	83	0.060	2.338	0.358	0.13	0.36	1.02	0.254
Fe_2O_3 (%)	83	0.012	0.367	0.048	0.00	0.05	1.13	0.027
TiO_2 (%)	83	0.013	0.125	0.035	0.00	0.02	0.67	0.026
CaO (%)	83	0.002	0.013	0.005	0.00	0.00	0.38	0.005
Na_2O (%)	83	0.001	0.019	0.006	0.00	0.00	0.80	0.005
K_2O (%)	83	0.002	0.264	0.021	0.00	0.05	2.11	0.006
LOI (%)	83	0.020	0.910	0.182	0.02	0.14	0.79	0.150
0.60–1.00 mm (Coarse Sand) – attrition								
Yield	83	0.12	54.59	8.99	52.02	7.21	0.81	8.80
SiO_2 (%)	83	86.940	99.824	99.000	2.79	1.67	0.02	99.512
Al_2O_3 (%)	83	0.059	8.798	0.494	1.16	1.08	2.17	0.174
Fe_2O_3 (%)	83	0.015	0.892	0.108	0.03	0.17	1.52	0.031
TiO_2 (%)	83	0.011	0.464	0.045	0.00	0.06	1.34	0.025
CaO (%)	83	0.002	0.021	0.007	0.00	0.00	0.47	0.006
Na_2O (%)	83	0.001	0.031	0.010	0.00	0.01	0.75	0.008
K_2O (%)	83	0.001	0.324	0.016	0.00	0.04	2.62	0.005
LOI (%)	83	0.020	3.280	0.238	0.17	0.41	1.71	0.110

A review of grade outliers was undertaken to ensure that extreme grades are treated appropriately during grade interpolation. Element grade values for the mineralised domain were assessed using distribution coefficient of variation values, log-probability and histogram plots, to identify any extreme high-grade values. Data for elements for the mineralised domain showed pseudo-normal distributions with no significantly high-grade outliers. Consequently, no top cuts were applied to either variable.

Figure 22 and Figure 23 demonstrate the distribution of SiO_2 and Al_2O_3 within and outside of the white sand domain. It can be clearly seen that the distribution within the modelled domain has near normal distribution without obvious mixed populations for both elements that confirms that the interpretation of the white sand domain was completed correctly.

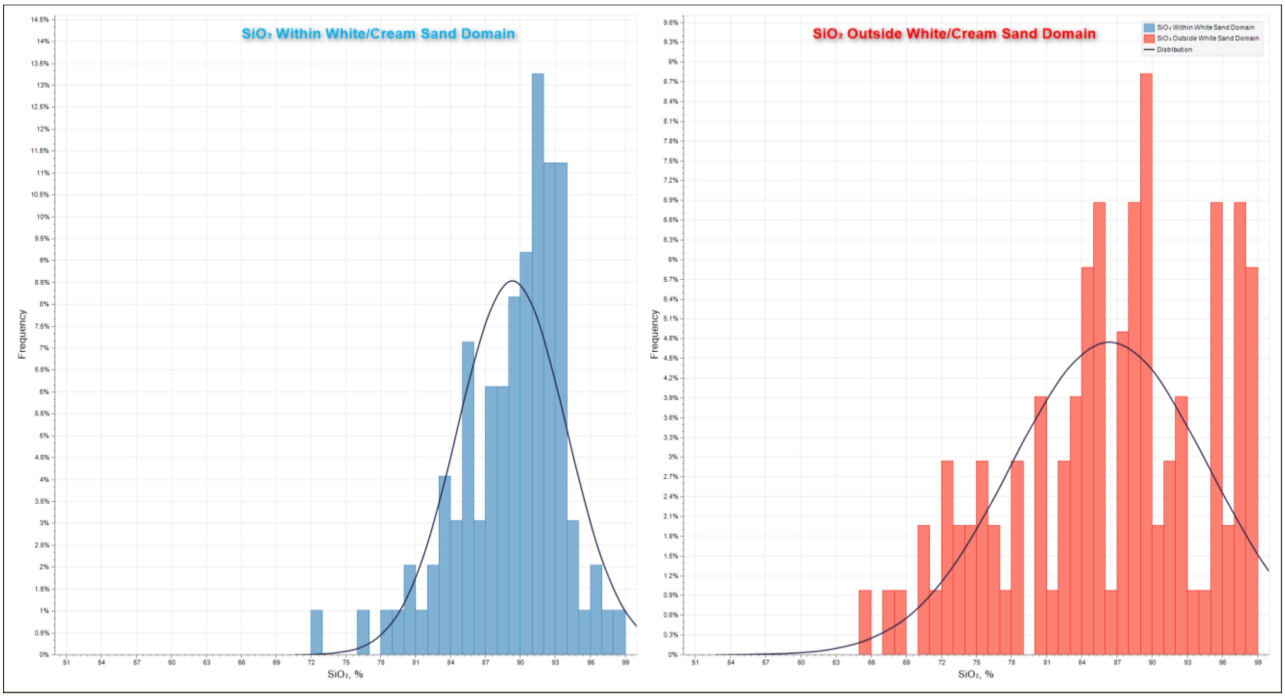


Figure 22: Histogram for SiO_2 distribution within and outside of white sand domain – Head assay intervals

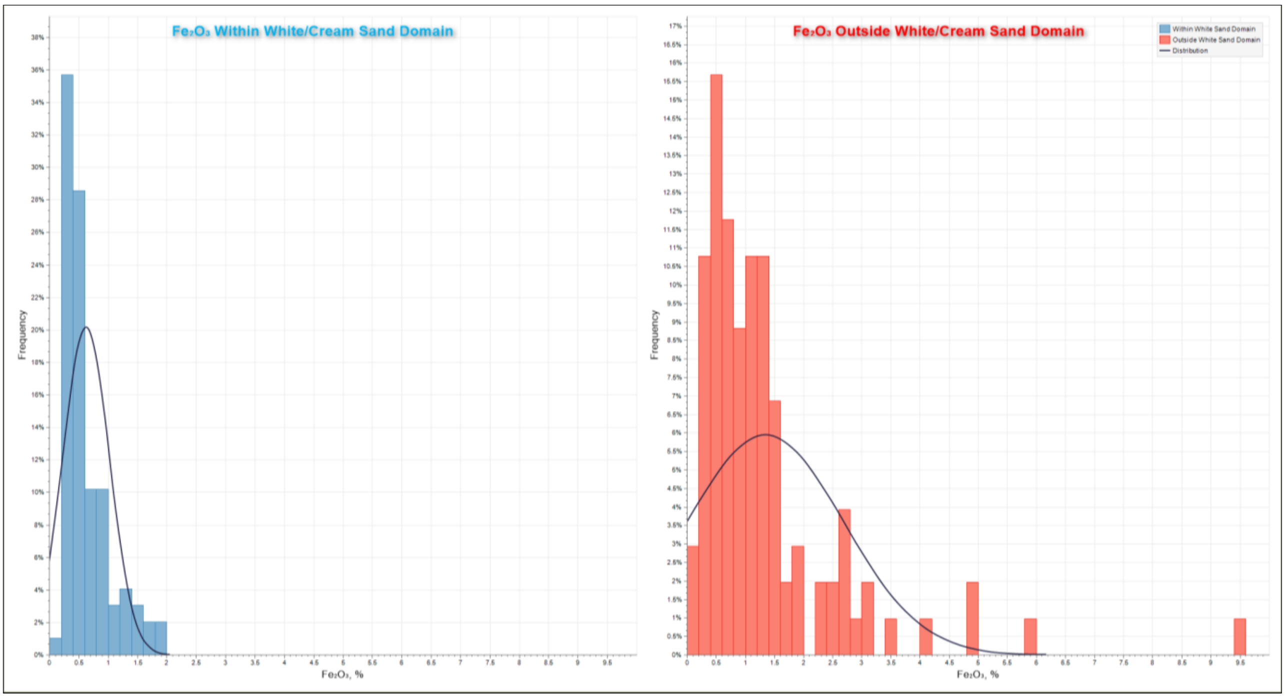


Figure 23: Histogram for Fe_2O_3 distribution within and outside of white sand domain – Head assay intervals

8.4 Geostatistical Analysis

No geostatistical analysis (variography) has been completed due to insufficient sample numbers.

9 Density

9.1 Introduction

Samples of feed material used in metallurgical tests were tested for bulk density at Nagrom using a method whereby sand is poured into a measuring cylinder. The volume of sand is measured immediately to obtain loose (uncompacted) volume and, after tapping the cylinder to fully compact the sand, the volume is measured to obtain compacted volume. The density is obtained by dividing mass by volume.

9.2 Results

9.2.1 Head Sample Density

Head sample loose dry bulk densities were determined to range between 1.1 t/m^3 and 1.4 t/m^3 for an average of 1.3 t/m^3. The compacted dry bulk density was determined to range between 1.5 t/m^3 and 1.8 t/m^3 for an average of 1.7 t/m^3. Refer to Table 19 for further details.

Table 19: Density – head samples

Sample	Net mass (kg)	Loose bulk density (kg/m^3)	Compacted bulk density (kg/m^3)
NVAC002-16-18	1.889	1,378.7	1,656.8
NVAC006-12-15	2.099	1,328.5	1,692.8
NVAC012-9-11	1.397	1,318.2	1,704.0
NVAC018-14-17	2.191	1,074.0	1,542.9
NVAC038-17-20	2.304	1,225.7	1,759.1
NVAC050-19-21	1.820	1,399.9	1,801.9
Average		**1,287.5**	**1,692.9**

9.2.2 Density of individual sieve fractions

Samples of three attritioned sieve fractions were tested for bulk density, illustrating that density decreases as the sieve size decreases (Table 20). As expected, on average the individual sieve fractions are less dense than the head samples, which is related to better packing of a range of particles and hence higher density of the head sample.

Table 20: Density – attritioned sieve fractions

Sample	Net mass (kg)	Loose bulk density (kg/m^3)	Compacted bulk density (kg/m^3)
NVAC004-11-13 Attritioned -0.6+0.15mm	0.218	1,398.1	1,627.7
NVAC010-14-17 Attritioned -0.6+0.15mm	0.140	1,428.7	1,628.0
Average		**1,413.4**	**1,627.9**
NVAC004-11-13 Attritioned -0.15+0.075mm	0.138	1,352.7	1,568.0
NVAC007-13-15 Attritioned -0.15+0.075mm	0.151	1,276.4	1,476.6
NVAC010-14-17 Attritioned -0.15+0.075mm	0.115	1,335.0	1,551.5
Average		**1,321.4**	**1,532.0**
NVAC004-11-13 Attritioned -0.075mm	0.176	1,013.8	1,116.5
NVAC007-13-15 Attritioned -0.075mm	0.319	849.3	1,137.5
NVAC010-14-17 Attritioned -0.075mm	0.445	747.9	1,059.5
Average		**870.3**	**1,104.5**

9.3 Conclusions

The CP, Mr Murray Lines, is of the opinion that the compacted density is representative of in-situ sand at the Nova Project and that an average in-situ dry bulk density of 1.7 t/m^3 is appropriate for estimating an Inferred Mineral Resource for the Nova silica sand deposit.

10 Metallurgy and Mineral Processing

10.1 Introduction

An initial set of six sighter samples was tested by Goldbery and Lines (2021) followed by a subset of 22 samples at Nagrom. Following these two sighter test programs, the sieve sizes were modified before proceeding with a final batch of 177 samples.

10.2 Initial Sighter Testwork

Sighter metallurgical testwork was initially done Dr. Ron Goldbery and Mr Murray Lines using 1 m samples of white sand (see Figure 24 for location of holes sampled and chip trays in Figure 25). A laboratory flowsheet was designed to allow for the separation of the drill cuttings into a "sand fraction" (+75 µm), averaging 73.7% and a "clay fraction" (-75 µm). Sample preparation included soaking, attritioning and screening. XRF and XRD analyses of the dried fraction provided chemical composition and mineralogy.

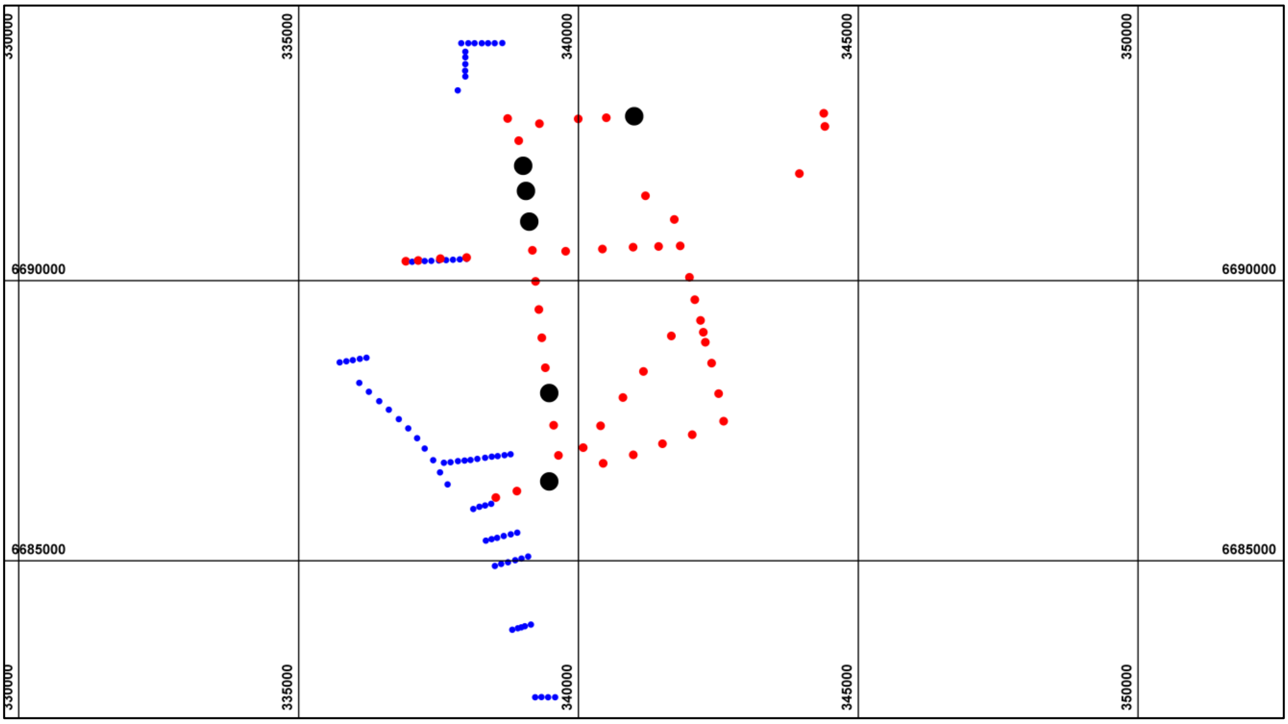


Figure 24: Location map of six holes sampled for the sighter testwork by Goldbery and Lines (2021)
Blue dots = historical collars; red dots = 2020–2021 collars; black dots = sighter samples.

Figure 25: Chip trays NVAC016, 012, 017, 037, 038, 044

Samples were prepared by taking a 600 g split of 2 kg samples, which were processed by gentle attrition to disaggregate. A wet screening process using a 75 µm screen produced two sized fractions: a sand (+75 µm sample) and a very fine sand/clay sample as the -75 µm fraction.

Silica content of the sand fraction ranged from 94.48% to 99.31% with an average of 97.0% (Table 21). The lower values of silica relate to manual rather than mechanical attrition resulting in some retention of clay on the quartz grains. Iron levels of the +75 µm fraction (sand) ranged from 0.05% to 0.20% with an average of 0.085%. Chrome levels were below detection levels; TiO_2 ranged from 0.34% to 0.92% with an average of 0.68%.

Table 21: Plus 0.075 mm sand fraction: SiO_2 plus key deleterious elements (as oxides) plus LOI

	Hole ID					
	NVAC006	**NVAC012**	**NVAC017**	**NVAC037**	**NVAC038**	**NVAC044**
Depths (m)	12–13	13–14	15–16	13–14	17–18	17–18
SiO_2 (%)	99.31	97.28	95.18	97.79	98.04	94.48
Al_2O_3 (%)	0.44	0.47	2	0.39	0.3	2.03
Fe_2O_3 (%)	0.05	0.13	0.13	0.1	0.03	0.2
TiO_2 (%)	0.16	0.23	0.29	0.16	0.06	0.28
Na_2O (%)	<0.01	<0.01	<0.01	<0.01	<0.01	0.03
K_2O (%)	<0.01	<0.01	0.01	<0.01	<0.01	1.12
CaO (%)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
LOI @ 1,000°C (%)	0.41	0.75	0.97	0.25	0.56	0.64

The -75 µm clay (slimes) fraction has higher Al_2O_3, Fe_2O_3 and LOI than the +75 µm sand, as expected for clay-rich material (Table 22).

Table 22: Minus 0.075 mm clay (slimes) fraction: SiO_2 plus key deleterious elements (as oxides)

	Hole ID					
	NVAC006	**NVAC012**	**NVAC017**	**NVAC037**	**NVAC038**	**NVAC044**
Depths (m)	12–13	13–14	15–16	13–14	17–18	17–18
SiO_2 (%)	68.97	65.83	56.47	64.43	77.34	58.21
Al_2O_3 (%)	20.32	22.71	29.43	24.09	14.6	25.59
Fe_2O_3 (%)	1.73	1.39	0.84	1.13	0.87	1.21
TiO_2 (%)	0.87	0.79	0.79	0.92	0.41	0.34
Na_2O (%)	0.02	0.02	0.02	0.02	0.01	0.14
K_2O (%)	0.05	0.08	0.19	0.14	0.21	5.49
CaO (%)	<0.01	0.01	0.01	<0.01	<0.01	<0.01
LOI @ 1,000°C (%)	7.58	8.65	11.78	9.31	5.83	8

Particle size analysis of the "sand" was carried out to determine suitability for use in the manufacture of glass. Results showed a yield of 78.14% within the glass window of preferred sizing -600µm+100µm.

PSD tests on one sample indicate an AFS number = 47 which should be suitable for foundry moulding sand applications (Table 23).

Table 23: Foundry size analysis

USA Sieve	Sieve size (microns)	AFS multiplier	Size distribution feed
3	6730	0	
4	4750	3	0
8	2360	4	1
16	1180	8	6
30	600	16	17
40	425	30	14
50	300	40	19
100	150	50	26
200	75	100	15
Pan		200	2
Total			**100**
AFS number			47

XRD mineralogy of the "sand" was almost exclusively quartz; the mineralogy of the "clay" comprised quartz, dickite (polymorph of kaolinite), traces of kaolinite and detrital microcline in one sample (Table 24).

Table 24: Qualitative XRD mineralogy of the -0.075 mm clay fractions

Hole ID	Mineral 1	Mineral 2	Mineral 3	Mineral 4
NVAC 06	Quartz	Dickite	Kaolinite (minor)	
NVAC 12	Quartz	Dickite		
NVAC 17	Quartz	Dickite	Kaolinite (minor)	
NVAC 37	Quartz	Dickite	Kaolinite	
NVAC 38	Quartz	Dickite	Kaolinite (minor)	
NVAC 44	Quartz	Dickite		Microcline (kspar)

The plus 75 µm sand samples, dried, ranged from 64% to 83% of the raw sample weight, with an average of 73.7% yield.

10.3 Nagrom Testwork – 22 Sample Sighter Tests

After the completion of the sighter metallurgical tests a preliminary run of 22 production composite samples were completed at Nagrom to replicate the bench-scale sighter testwork to ensure that the laboratory method could replicate the initial sighter results. The analysis of these samples confirmed that the method does replicate previous results.

The samples were composited, and a particle size distribution was completed. The samples were then wet screened at +75 µm to remove the clay fraction from the sand fraction, and the fractions dried, weighed and PSD completed. The PSD results demonstrate that the Nova sands are generally fine grained and that the bulk of the sand-sized material is in the range of ~0.15 mm to ~0.4 mm (Figure 26).

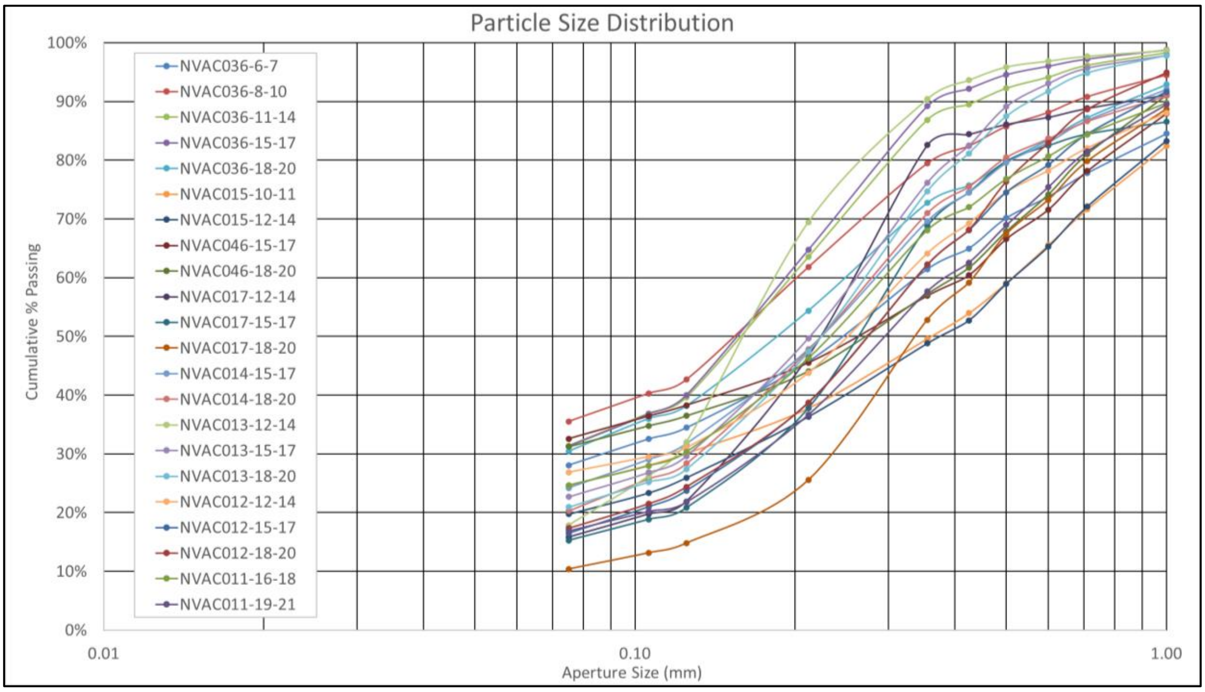


Figure 26: PSD for head samples from the Nagrom sighter test program

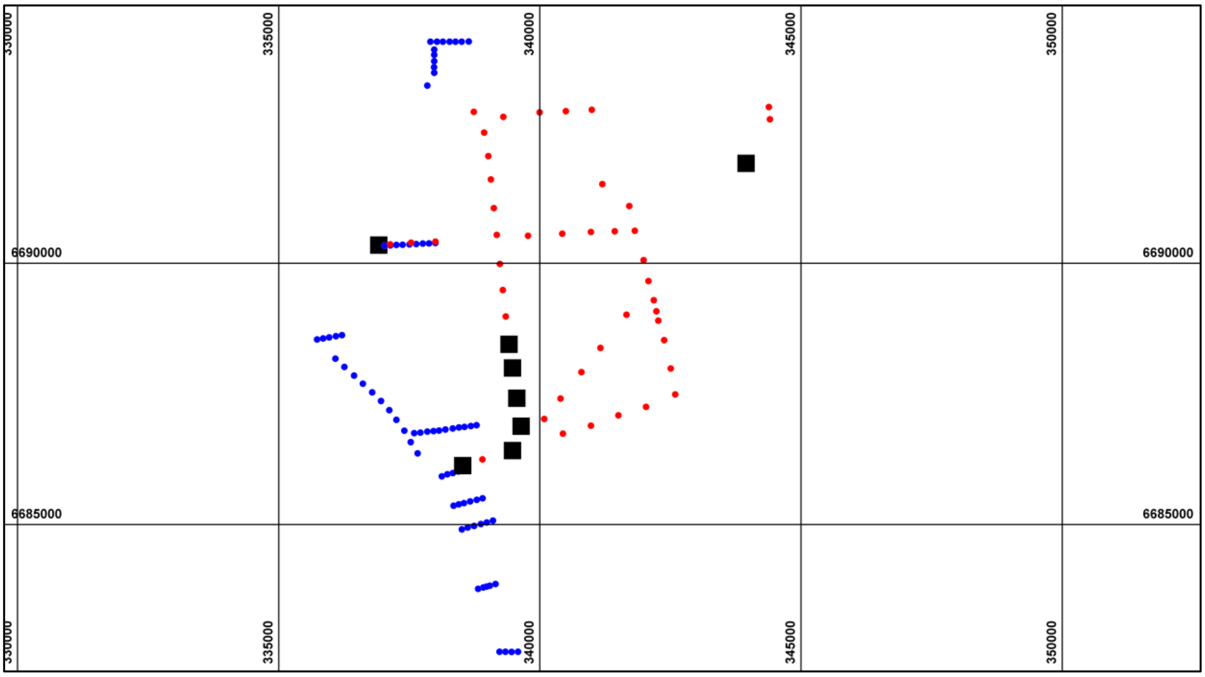


Figure 27: Location map of eight holes (2020–2021 series) sampled for the sighter testwork by Nagrom
Blue dots = historical collars; red dots = 2020–2021 collars; black squares = sighter samples.

The +75 µm sand fraction was then purified by heavy liquid separation and magnetic separation before the final non-magnetic product was analysed by XRF. Examples of the XRF analysis, LOI and Yield values for the +75 µm sand fraction are shown in Table 25.

Table 25: Nagrom sighter test results – examples of key XRF data for two composite samples (+75 µm)

	SiO_2 (%)	Al_2O_3 (%)	Fe_2O_3 (%)	TiO_2 (%)	K_2O (%)	LOI @ 1,000°C (%)	Yield (%)
NVAC017-18-20							
Head	94.85	3.27	0.21	0.25	0.02	1.3	
Attrition	98.88	0.44	0.09	0.19	0.01	0.2	87.5%
HLS floats	99.13	0.41	0.04	0.06	0.01	0.3	99.8%
Non-magnetic	99.13	0.39	0.03	0.05	0.01	0.3	99.8%
NVAC0046-15-17							
Head	88.21	6.71	0.37	0.09	2.91	1.4	
Attrition	97.54	1.18	0.08	0.06	0.87	0.1	66.7%
HLS floats	97.70	1.17	0.05	0.02	0.85	0.1	99.9%
Non-magnetic	97.63	1.18	0.03	0.02	0.87	0.1	99.7%

HLS = heavy liquid separation.

Nagrom production samples yielded 74.74% to the sand fraction while the previous sighter metallurgical tests yielded 73.7%; although not the same sample population as the sighter tests there was good correlation. The Nagrom production samples averaged 98.78% SiO_2 (96.56–99.61%) and the sighter metallurgical tests achieved 97.0% SiO_2 (94.48–99.31 SiO_2).

10.4 Nagrom Testwork – Final Program

The remaining 177 samples tested at Nagrom during 2021 followed the testwork program outlined below:

- RSD Blend and Split each Composite:
  - XRF analysis of feed sample.
- Conduct Loose and Compact Bulk Density:
  - Six sample allowance.
- Attritioning via Plastic Vessel at the following conditions:
  - Mix 50% w/w solids in Perth tap water and soak for 24 hours prior to attrition
  - 30 minutes residence time
  - D12 Joy Denver Unit (double propeller on mixing shaft) at 800 rpm
  - Wet Screen each Attritioned sample at 1.0 mm, 0.6 mm, 0.15 mm, and 0.075 mm.
- Dry at 110°C, Weigh and Riffle Split each +0.6 mm, -0.6+0.15 mm and -0.15+0.075mm fraction:
  - XRF analysis.
- Filter Press, Dry at 110°C, Weigh and Riffle Split each -0.075mm fraction:
  - XRF analysis of 0.6 mm, 0.15 mm and 0.075 mm fractions.
- Density (Heavy Liquid Separation) on each -0.6+0.15mm fraction at SG 2.96 to produce one Float and one Sink fraction.
- Dry and Riffle Split each HLS fraction:
  - XRF analysis of sinks and floats.
- Magnetic Separation via Rapid Disc to produce one Magnetic and one Non-Magnetic fraction.
- Riffle Split each Magnetic Separation fraction:
  - XRF analysis of magnetic and non-magnetic fractions.

All samples were prepared using Zirconia Bowl and analysed via XRF for SiO_2, Al_2O_3, Fe_2O_3, TiO_2, CaO, MgO, Na_2O, K_2O, P_2O_5, Mn_3O_4, Cr_2O_3, BaO, ZrO_2, ZnO, V_2O_5, SrO and LOI @ 1,000°C.

A subset of 32 samples was prepared using Zirconia Bowl and analysed via ICP to compare with the XRF data. The elements analysed by ICP were Al, As, B, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Dy, Er, Eu, Fe, Ga, Gd, Ge, Hf, Hg, Ho, In, K, La, Li, Lu, Mg, Mn, Mo, Na, Nb, Nd, Ni, P, Pb, Pr, Rb, S, Sb, Sc, Se, Si, Sm, Sn, Sr, Ta, Tb, Th, Ti, Tl, Tm, U, V, Yb, Y, Zn, Zr, plus LOI @ 1,000°C.

A further subset of 33 samples was analysed by an umpire laboratory using XRF and ICP methods.

10.4.1 Results

Examples of attritioning, density and magnetic separation results are given in Table 26 to Table 28.

Table 26: Nagrom attrition test results – examples of key XRF data plus LOI and Yield for four size fractions

Comp ID	Size (mm)	Mass (kg)	SiO_2 (%)	Al_2O_3 (%)	Fe_2O_3 (%)	TiO_2 (%)	K_2O (%)	LOI @ 1,000°C (%)	Yield (%)
NVAC004-11-13	+0.6-1.0	0.222	99.504	0.213	0.085	0.095	<0.001	0.10	9.85
	+0.15	1.307	99.123	0.281	0.111	0.231	<0.001	0.13	57.92
	+0.075	0.301	98.440	0.366	0.186	0.583	0.001	0.13	13.34
	-0.075	0.228	77.371	13.176	2.844	0.892	0.023	5.17	10.09
NVAC004-14-16	+0.6-1.0	0.036	99.619	0.136	0.042	0.085	<0.001	0.07	1.80
	+0.15	1.261	99.564	0.117	0.040	0.144	<0.001	0.04	62.65
	+0.075	0.455	99.377	0.134	0.057	0.239	<0.001	0.06	22.59
	-0.075	0.257	96.511	1.252	0.820	0.416	0.003	0.48	12.76
NVAC004-17-19	+0.6-1.0	0.105	99.701	0.095	0.029	0.052	<0.001	0.07	4.69
	+0.15	1.258	99.655	0.108	0.045	0.116	<0.001	0.06	56.27
	+0.075	0.435	99.353	0.143	0.106	0.281	<0.001	0.07	19.47
	-0.075	0.396	89.130	6.204	1.409	0.761	0.036	2.24	17.70
NVAC010-11-13	+0.6-1.0	0.131	98.391	0.913	0.255	0.046	0.006	0.36	7.67
	+0.15	0.528	97.782	1.063	0.316	0.293	0.006	0.40	30.82
	+0.075	0.196	95.652	1.734	0.696	1.050	0.012	0.65	11.45
	-0.075	0.525	57.330	27.466	3.459	1.181	0.094	9.96	30.62
NVAC010-14-17	+0.6-1.0	0.284	99.689	0.136	0.022	0.022	0.006	0.05	11.04
	+0.15	1.266	99.173	0.243	0.130	0.284	0.009	0.09	49.29
	+0.075	0.296	96.900	0.573	0.588	1.402	0.019	0.25	11.53
	-0.075	0.553	67.413	21.224	1.596	1.631	0.137	7.61	21.55
NVAC010-18-20	+0.6-1.0	0.089	99.621	0.136	0.034	0.025	0.008	0.10	5.91
	+0.15	0.727	99.098	0.308	0.073	0.137	0.017	0.15	48.44
	+0.075	0.234	96.602	0.802	0.468	1.235	0.044	0.36	15.58
	-0.075	0.357	60.204	26.704	1.391	1.529	0.300	9.48	23.77

Table 27: Nagrom density separation results – examples of key XRF data plus LOI and Yield (+0.15 mm)

Comp ID	Size (mm)	Mass (kg)	SiO_2 (%)	Al_2O_3 (%)	Fe_2O_3 (%)	TiO_2 (%)	K_2O (%)	LOI @ 1,000°C (%)	Yield (%)
NVAC004-11-13	+0.15	1.000	99.336	0.241	0.088	0.122	0.003	0.13	99.70%
NVAC004-14-16	+0.15	1.028	99.435	0.098	0.039	0.099	0.003	0.14	99.88%
NVAC004-17-19	+0.15	1.051	99.523	0.083	0.038	0.065	0.004	0.11	99.89%
NVAC010-11-13	+0.15	0.396	98.181	1.010	0.168	0.043	0.005	0.42	99.42%
NVAC010-14-17	+0.15	0.966	99.549	0.196	0.030	0.029	0.010	0.11	99.52%
NVAC010-18-20	+0.15	0.642	99.447	0.276	0.034	0.040	0.017	0.12	99.81%

Table 28: Nagrom magnetic separation results – examples of key XRF data plus LOI and Yield (+0.15 mm)

Comp ID	Size (mm)	Mass (kg)	SiO_2 (%)	Al_2O_3 (%)	Fe_2O_3 (%)	TiO_2 (%)	K_2O (%)	LOI @ 1,000°C (%)	Yield (%)
NVAC004-11-13	+0.15	0.537	99.315	0.228	0.086	0.125	0.004	0.15	99.85%
NVAC004-14-16	+0.15	0.516	99.538	0.098	0.039	0.104	0.002	0.08	99.85%
NVAC004-17-19	+0.15	0.560	99.485	0.090	0.033	0.068	0.003	0.11	99.79%
NVAC010-11-13	+0.15	0.349	98.717	0.607	0.069	0.035	0.005	0.31	98.70%
NVAC010-14-17	+0.15	0.510	99.351	0.193	0.024	0.030	0.009	0.20	99.75%
NVAC010-18-20	+0.15	0.525	99.498	0.269	0.023	0.032	0.013	0.11	99.75%

The testwork showed that:

- The -0.075 mm slimes (clay) fraction is generally high in aluminium, iron and titanium and has higher LOI that the sand fractions which verifies that removal of slimes is an important first step in purification of the sand.
- The highest yield of sand is in the +0.15 mm to -0.6 mm sand fraction.
- The sand is progressively purified through each step from attritioning, removal of slimes, removal of dense minerals and finally, removal of magnetic minerals.

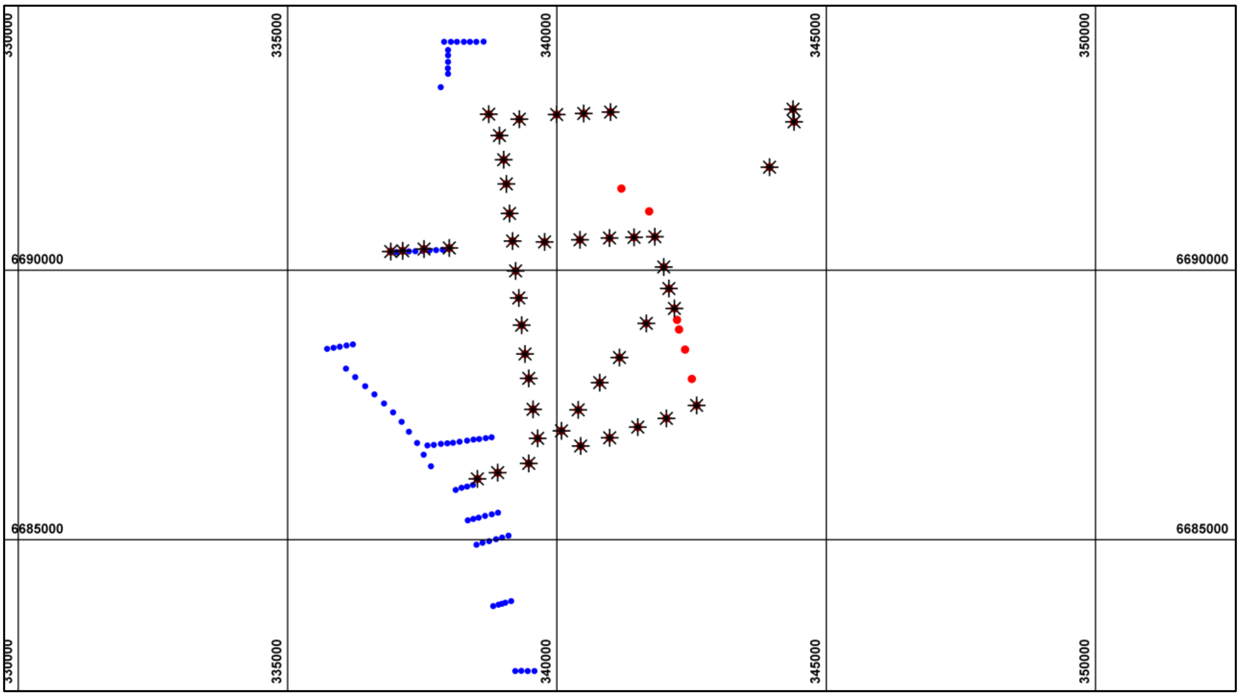


Figure 28: Location map of holes sampled for the main metallurgical testwork by Nagrom
Blue dots = historical collars; red dots = 2020–2021 collars; black stars = samples.

10.5 Conclusions

The CP notes that the metallurgical (process) test methods can have a significant effect on the quality of concentrate produced at a laboratory scale, and that such tests should be tailored for specific geological and mineralogical conditions and desired product outcomes for specific markets.

Therefore, it is cautioned that laboratory process test results used to estimate silica sand Mineral Resources may not reflect either the final process flowsheet adopted after completion of technical studies (e.g. prefeasibility studies or feasibility studies) or a final process plant design that may be constructed.

The CP concludes that the white sands at Nova can be purified by standard laboratory test methods such as attritioning, heavy liquid separation and magnetic separation and that the metallurgical testing of the Nova Project to date is appropriate for a preliminary evaluation of this style of mineralisation.

11 Block Modelling

11.1 Software

Block modelling was undertaken by CSA Global using Micromine 2018 (Version 18.0. 18.0.1008.8 x64) software.

11.2 Block Model Construction

An empty block model was created with dimensions sufficient to encompass the closed wireframe models for the mineralised envelopes that were modelled. Blocks that fell into the boundaries of the wireframes were then coded as white sand blocks.

Blocks were sub-celled at the margins of mineralisation domains and at the topographic surface during coding, to preserve volumetric resolution. The parent cell size was chosen based on the general morphology of the interpreted bodies and in order to avoid the generation of too large block models. The sub-celling size was chosen to maintain the resolution of the mineralised bodies. The sub-cells were optimised in the models where possible to form larger cells. The block model dimensions and parameters are shown in Table 29.

Table 29: Block model dimensions and parameters

Axis	Extent (m)		Block size (m)	Maximum sub-celling (m)
	Minimum	Maximum		
Easting	336,400	342,600	200	20
Northing	6,685,600	6,693,400	200	20
RL	114	279	3	0.3

Initial filling with parent cell size was followed by sub-celling where necessary. The sub-celling occurred near the boundaries of the modelled bodies or where models were truncated with the DTMs of the topographic surface and/or lithological boundaries. The parent cell size was chosen based on the general morphology of mineralised bodies and to avoid the generation of too large block models. The sub-celling size was chosen to maintain the resolution of the mineralised bodies. The sub-cells were optimised in the models where possible to form larger cells.

Coding of the block model was based on the separate wireframe models for deposit.

11.3 Interpolation Methodology

Yield, SiO_2, Al_2O_3, Fe_2O_3, TiO_2, CaO, Na_2O, K_2O, and LOI values for different PSD and test methods were interpolated into the empty block model using the IDW method.

For the purposes of domain coding, input data selection and estimation, each domain boundary was treated as a hard boundary.

The interpolation was performed using multiple passes, with expanding search radii until all cells were interpolated. The initial search radii were determined by the drillhole density used at the deposit is mostly 500 m x 500 m.

Due to the drilling grid at the deposit and to ensure that local grade distribution is preserved, the first run was set to be equal to the block size dimension. The second and the third interpolation runs used a multiplier to the search axes, which was started from two and incremented by one with requirement of minimum three samples and two drillholes. The search radii for the last three interpolation runs were set to five, 10 and 100 block sizes, respectively. For the last three runs, estimation parameters such as minimum number of informing samples, and restrictions on informing composites contributed from individual drillholes were relaxed and set to one minimum sample and one minimum drillhole. The search ellipse was relatively flat in the horizontal plane, so as to model the assumed high vertical variability of grades in the deposit's weathering profile.

Table 30: Interpolation parameters

Interpolation method	IDW		
Search radii	Equal to block size dimension (200 m x 200 m x 3 m)	2 or 3 block sizes in all directions	5, 10, 100 block sizes in all directions
Minimum number of samples	1	3	1
Maximum number of samples	16	16	16
Minimum number of drillholes	1	2	1

The blocks were interpolated using only composite intervals within the corresponding wireframe domains.

Search ellipses were divided into quadrants in the XY plane to minimise input sample clustering. The following constraints were applied on each quadrant for all profile zones: a maximum of four points was used within each quadrant. Thus, a maximum of 16 composite samples was available for interpolation. Target blocks were discretised into 5 x 5 x 5 points, with punctual estimation centred on each point. Then the grade estimation in the centre of the block consisted of the simple average value of the estimated points throughout the block volume.

11.4 Block Model Validation

Validation of the grade estimate was completed by:

- Visual checks on screen in sectional view to ensure that block model grades honour the general grade tenor of downhole composites.
- Generation of swath plots to compare input and output SiO_2 and Fe_2O_3 values in a semi-local sense, by easting, northing, and elevation (Figure 29 to Figure 34). The swath plots were constructed for the blocks and sample intervals that fall into the white sand domain.

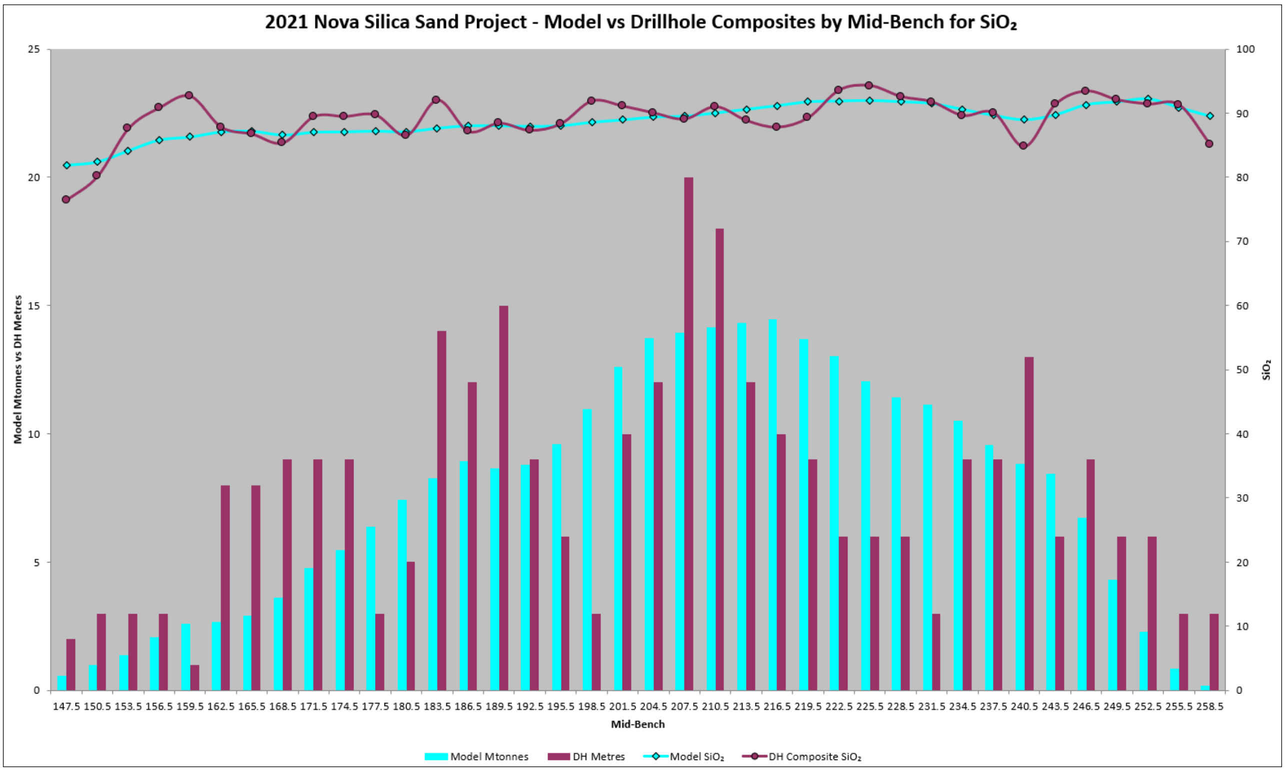


Figure 29: Swath plot by 3 m bench – SiO_2 (cyan = block results; burgundy = input data)

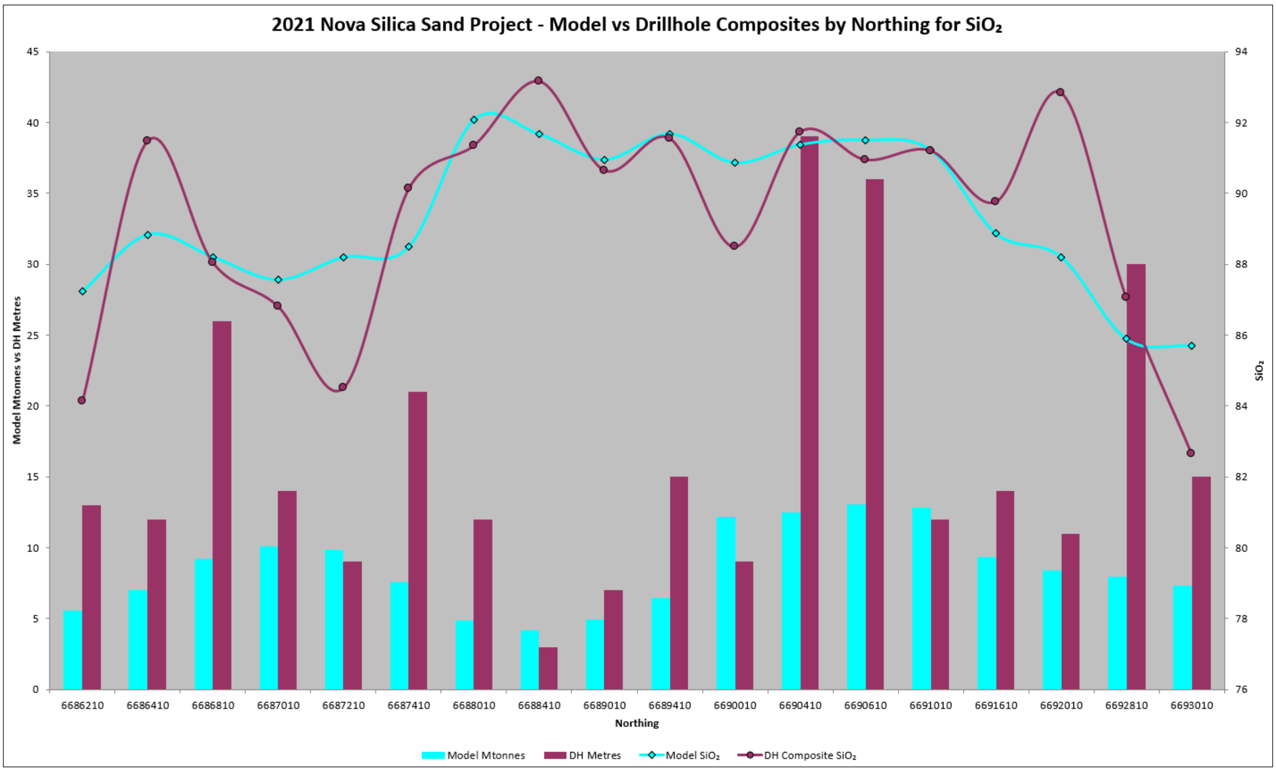


Figure 30: Swath plot by northing – SiO_2 (cyan = block results; burgundy = input data)

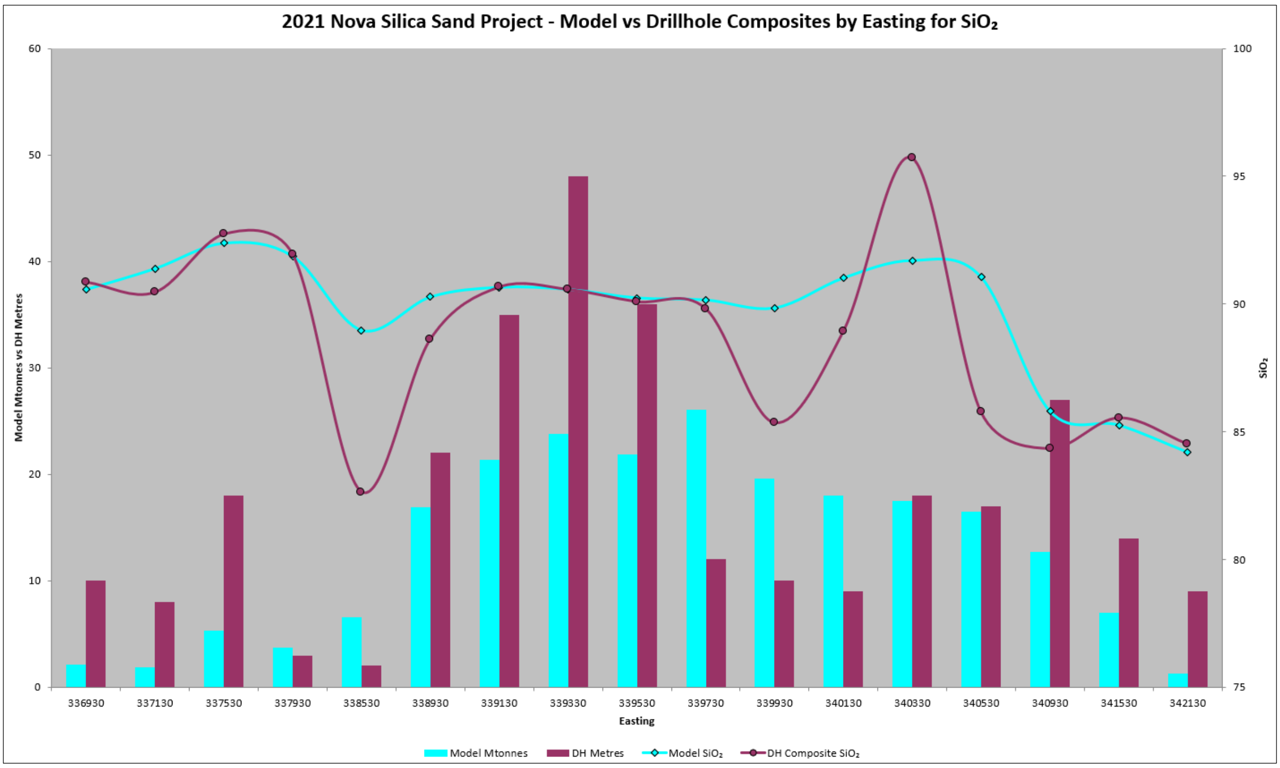


Figure 31: Swath plot by easting – SiO_2 (cyan = block results; burgundy = input data)

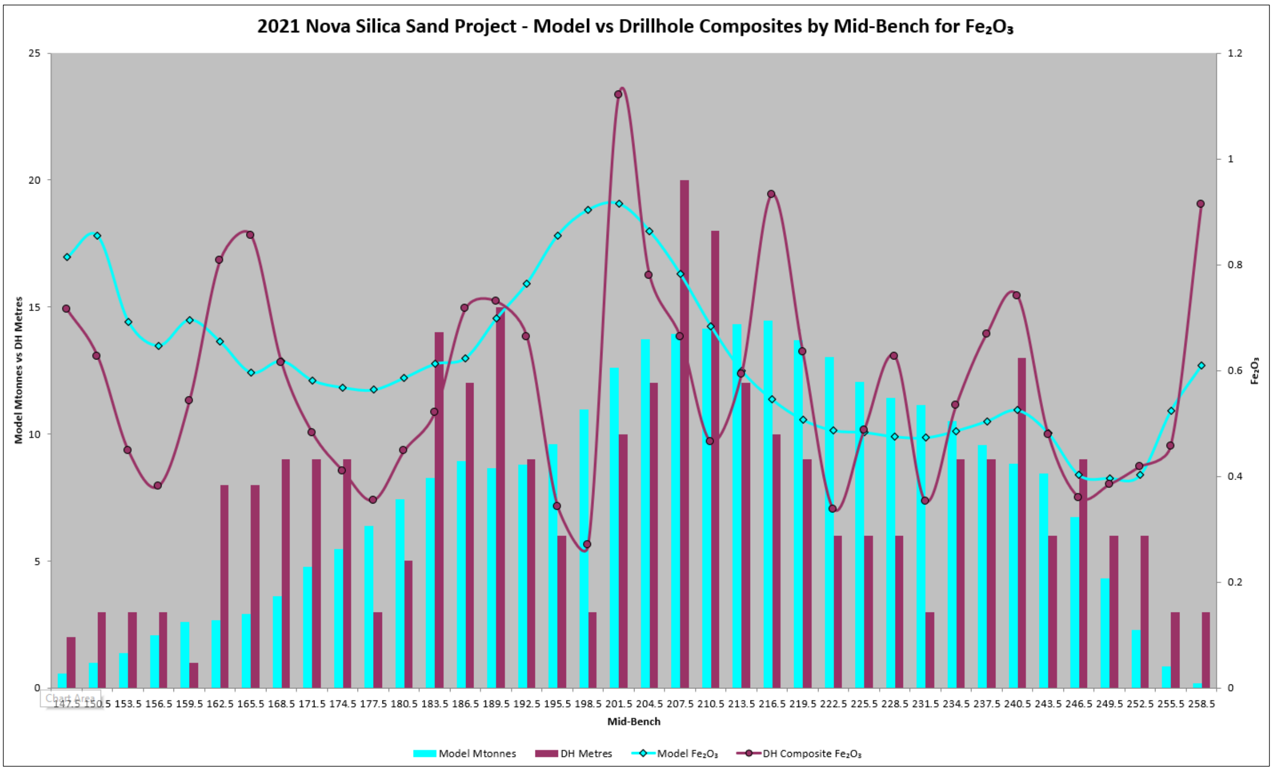


Figure 32: Swath plot by 3 m bench – Fe_2O_3 (cyan = block results; burgundy = input data)

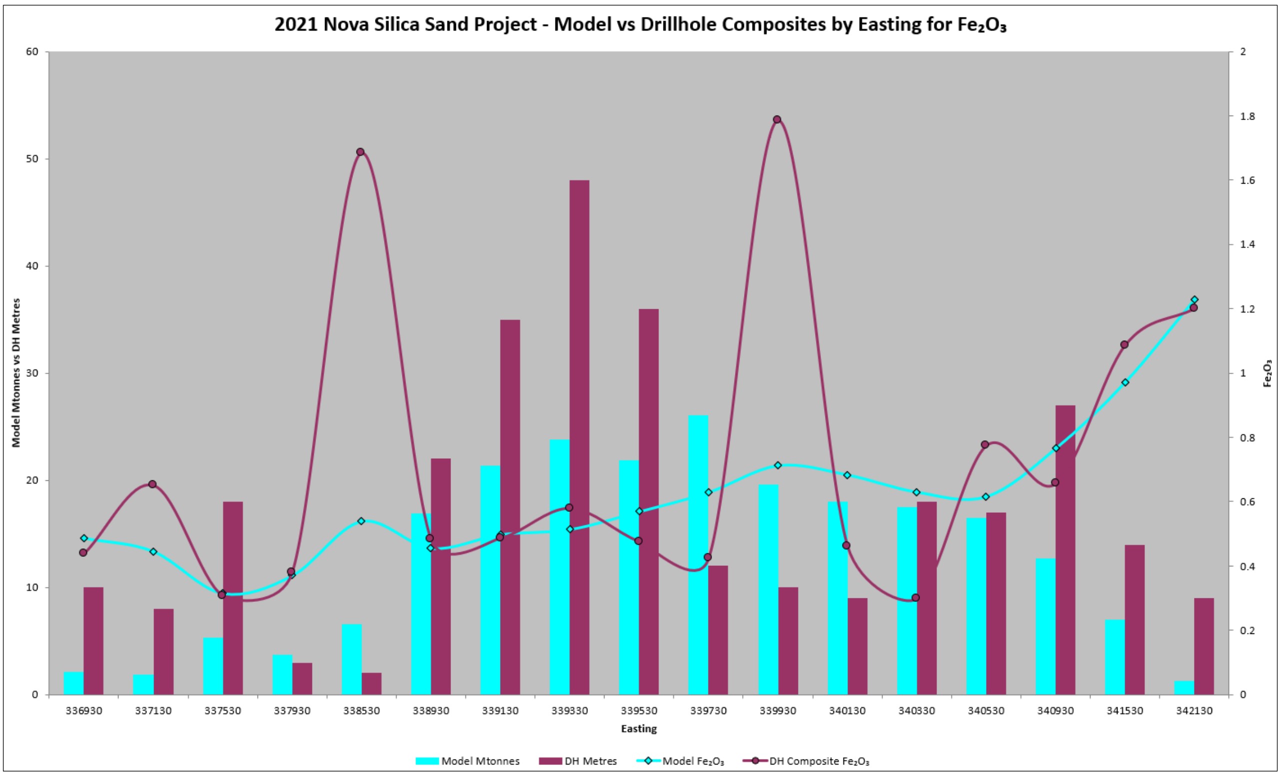


Figure 33: Swath plot by northing – Fe_2O_3 (cyan = block results; burgundy = input data)

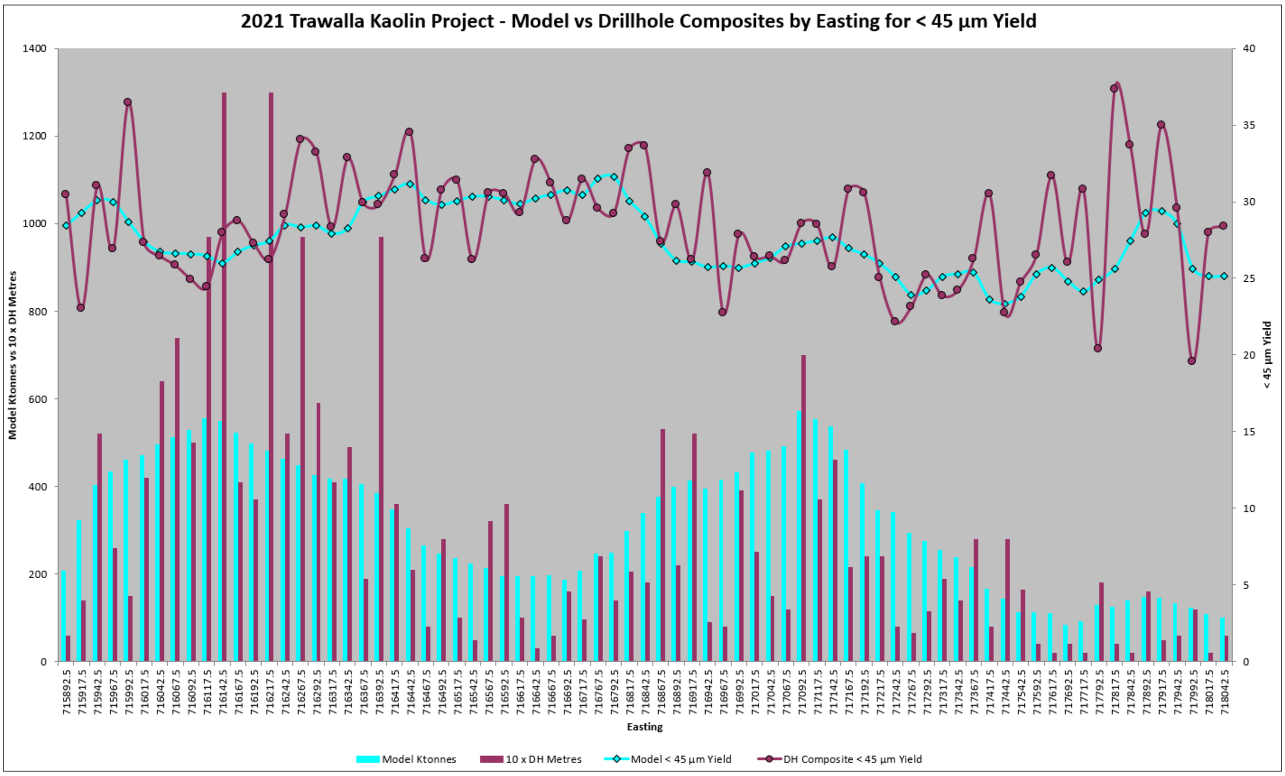


Figure 34: Swath plot by easting – Fe_2O_3 (cyan = block results; burgundy = input data)

Visual validation of block grades against input grades in each area confirmed that the block model reflects the grade tenor of the input composites. Example cross sections with SiO_2 and Fe_2O_3 values are shown in Figure 35 and Figure 36, respectively.

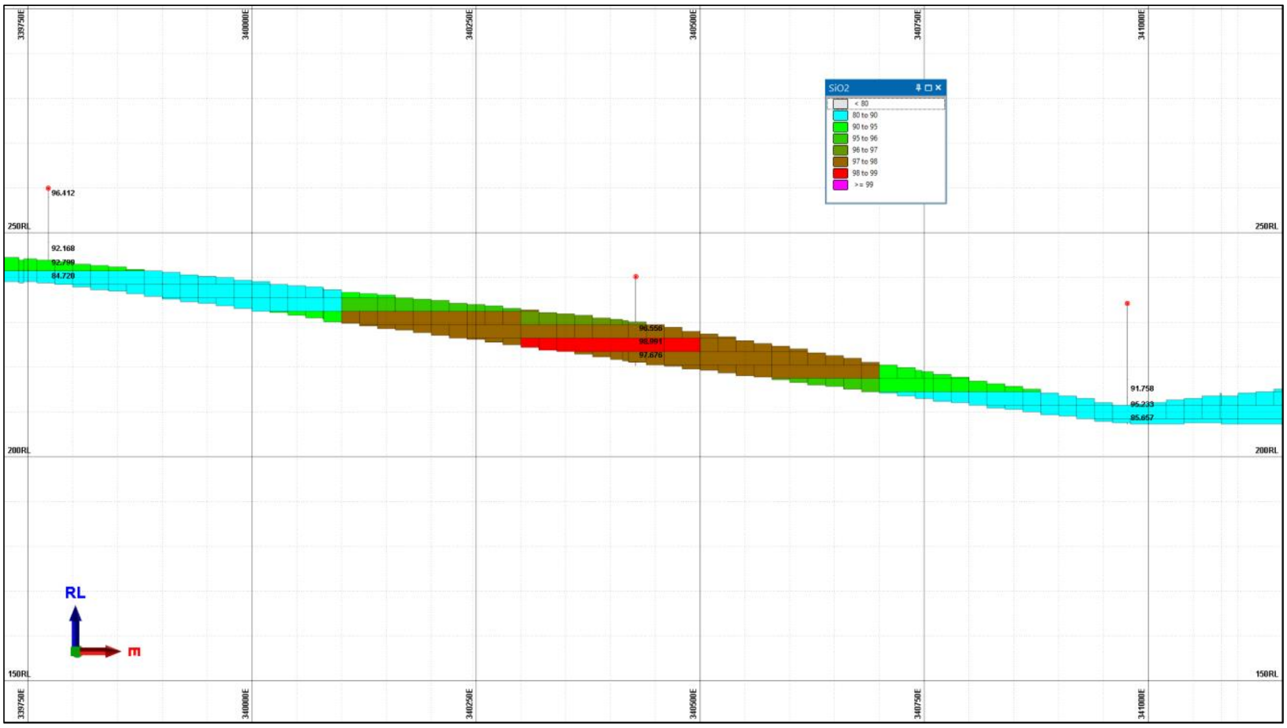


Figure 35: Visual validation of block model grades vs drillhole grades (SiO_2); vertical exaggeration 5

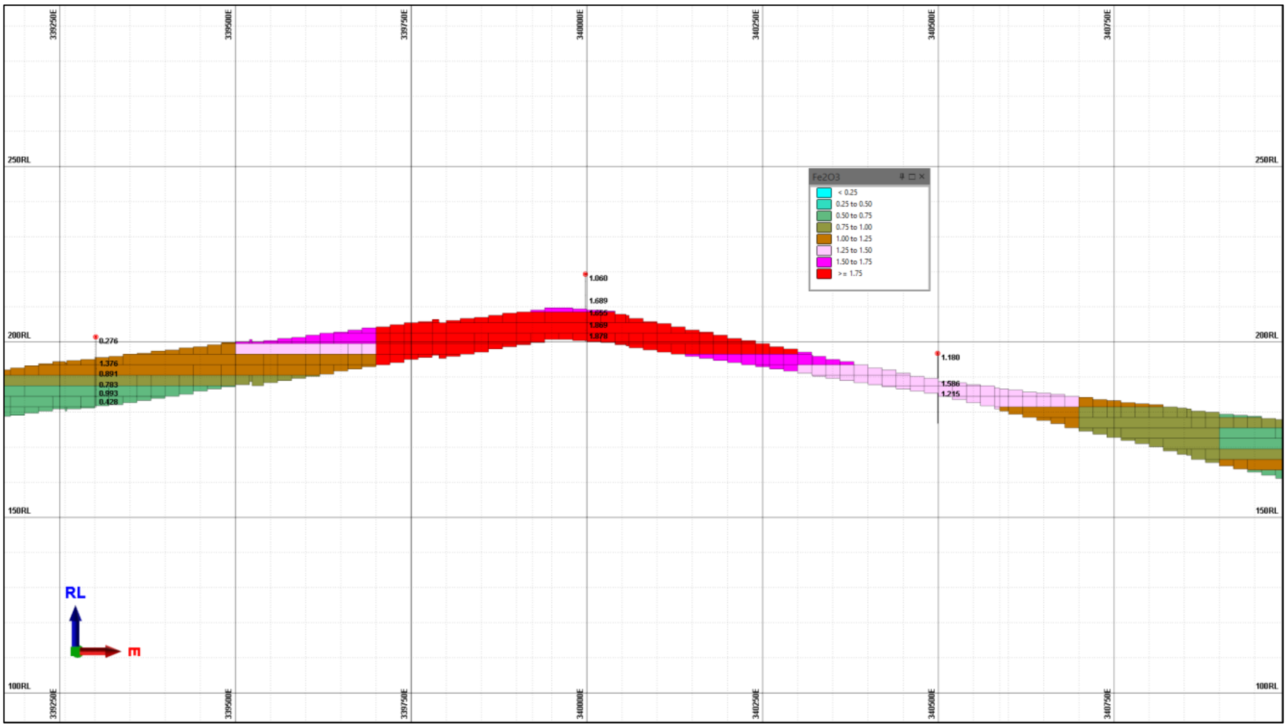


Figure 36: Visual validation of block model grades vs drillhole grades (Fe_2O_3); vertical exaggeration 5

Validation histograms and probability plots were generated for composites and block model grades. Grade distribution, populations and swath plots were reviewed and compared. They show that the distribution of block grades honours the distribution of input composite grades. There is a degree of smoothing evident, which is to be expected given the volume variance effect. Smoothing is particularly evident in areas of wide spaced drilling where the number of composites was relatively low. However, the general trend in the composites is reflected in the block model.

12 Mineral Resource Reporting

12.1 Reasonable Prospects Hurdle

Clause 20 of the JORC Code requires that all reports of Mineral Resources must have reasonable prospects for eventual economic extraction, regardless of the classification of the resource.

The overall CP, Murray Lines, deems that there are reasonable prospects for eventual economic extraction on the following basis:

- The geometry of the mineralisation is conducive to open pit mining, being close to the surface
- The Project is well situated for transport of product
- Meeting the requirements of Clause 49 of the JORC Code that are described below.

Clause 49 of the JORC Code requires that industrial minerals including silica sand that are produced and sold according to product specifications, must be reported "*in terms of the mineral or minerals on which the project is to be based and must include the specification of those minerals*".

12.2 JORC Code Clause 49

Mineral Resource tonnes, in-situ chemistry and mineralogy are key metrics for initially assessing silica sand projects; however, these projects also require attributes such as size distribution, chemical purity and particle shape to be evaluated to allow consideration of potential product specifications (e.g. Scogings, 2014). These specifications and ultimate markets are parameters that drive the value in silica sand projects.

Clause 49 of the JORC Code (2012) requires that industrial minerals such as silica sand that are produced and sold according to product specifications be reported "in terms of the mineral or minerals on which the project is to be based and must include the specification of those minerals".

Clause 49 also states that "It may be necessary, prior to the reporting of a Mineral Resource or Ore Reserve, to take particular account of certain key characteristics or qualities such as likely product specifications, proximity to markets and general product marketability".

Therefore, silica sand Mineral Resources must be reported at least in terms of product purity (e.g. chemistry including deleterious minerals/chemistry and size distribution, in addition to the basic in-situ tonnes and grade. Logistics and proximity to markets should also be considered.

Possible product specifications for the Nova silica sand deposit are supported by the results of process testwork program undertaken to date.

Likely product specifications for the Nova deposit are supported by the results of the sample testwork program undertaken at Nagrom.

Quartz (also known as silica) is produced commercially from a wide variety of deposits including unconsolidated sand, sandstone, quartzite, granite, aplite, and pegmatite. Silica sand and quartz are economical sources of SiO_2 used in glass and ceramics manufacture, for which key deleterious elements include iron and titanium. Silica sand is also used for foundry mould manufacture.

12.2.1 Glass and Ceramics Specifications

Though the production of glass requires a variety of different commodities, silica represents over 70% of its final weight. Its chemical purity is the primary determinant of colour, clarity and strength of the glass produced.

In the production of glass, there is both the need and requirement for silica to be chemically pure (composed of over 98% SiO_2), of the appropriate diameter (e.g. a grain size of between approximately 0.1 mm and 0.4 mm and with low iron content (less than approximately 0.04% Fe_2O_3). Refer to Table 31 to Table 33 for examples of chemical composition and size distribution for silica products for the glass and ceramics markets.

12.2.2 Foundry Sand Specifications

Silica sand is used in the production of sand moulds for casting of metals; this product is described generically as "foundry sand". Although other types of sand e.g. olivine, zircon, aluminosilicate or chromite sands can be used to make moulds, silica sand is used primarily because it is globally available and relatively inexpensive.

There are different size specifications depending on the foundry application and Suvo has identified opportunities for a range of sand sizes. Foundry sands are commonly bonded using bentonite clay and water, or resin, depending on the application. Milled coal is commonly added to create a reducing environment and to improve the casting finish by depositing a lustrous carbon layer at the sand/casting interface.

It is preferable to have rounded to sub-rounded silica grains with medium to high sphericity, as this improves flowability of the mould during formation and allows for higher permeability after the metal has been poured. More angular sands do not pack as well and require higher binder additions.

Most foundry sands fall into the range of ~0.1 mm to 0.5 mm and they are produced to meet specific size distributions which are commonly described by a number known as the "AFS number". The higher the AFS number, the finer the sand (see hypothetical AFS examples in Table 34).

Table 31: Silica sand chemical specifications for glass and ceramics markets

Market	SiO_2 (%)	Al_2O_3 (%)	Fe_2O_3 (%)
Flat glass	>99.5	<0.3	<0.04
Container flint glass	>98.5	<0.5	<0.035
Insulation fibre glass	>95.5	<2.2	<0.3
Porcelain	>97.5	<0.55	<0.2
Enamels	>97.5	<0.55	<0.02

Source: Modified from Sinton (2006)

Table 32: Silica sand and quartz chemical specifications by market

Specification	SiO_2 %	Other elements (%)	Other elements (ppm)
Clear glass-grade sand	>99.5	<0.5	<5,000
Semiconductor filler, LCD, and optical glass	>99.8	<0.2	<2,000
"Low Grade" HPQ	>99.95	<0.05	<500
"Medium Grade" HPQ	>99.99	<0.01	<100
"High Grade" HPQ	>99.997	<0.003	<30

Source: Modified from Richard Flook (Hughes, E., Industrial Minerals Magazine, December 2013)

Table 33: Physical size specifications for glass sand

Sieve size (mm)	Mesh size (openings per inch)	Flat glass (cumulative % retained)	Flint container glass (cumulative % retained)
1.18	14	0.0	0.0
0.85	18	<0.01	0.0
0.425	36	<0.1	<4
0.106	150	>92	>25
0.075	200	>99.5	>95

Source: Modified from Herron (2006)

Table 34: Examples of hypothetical sand particle size distribution and AFS numbers

Sieve size (mm)	"Coarse" sand (% retained)	"Medium" sand (% retained)	"Fine" sand (% retained)
0.85	35	5	
0.6	40	24	
0.425	20	40	
0.3	3	20	20
0.212	2	8	38
0.15		2	33
0.106		1	6
0.075			3
Total	**100**	**100**	**100**
AFS number	20	32	60

12.2.3 Proposed Nova Sand Specifications

Suvo has proposed Nova sand specifications for a range of glass, ceramic, coatings, foundry and other markets, based on the Nagrom test results (Table 35 to Table 37).

Table 35: Proposed chemical specifications for Nova 0.075 mm to 0.15 sand/silica flour

Market	SiO_2 % minimum	Al_2O_3 % maximum	Fe_2O_3 % maximum	Na_2O % maximum	K_2O % maximum	TiO_2 % maximum	CaO % maximum
O&G cementing	95	n/a	n/a	n/a	n/a	n/a	0.5
Ceramic frit/Glaze	98.5	0.4	0.1	0.1	0.1	0.1	n/a
Paint	97.5	n/a	0.1	n/a	n/a	0.1	n/a
Fibreglass	98.5	0.5	0.02	0.1	0.1	0.02	0.02
Sodium silicate	98.5	0.5	0.03	n/a	n/a	0.03	n/a

Source: Suvo

Table 36: Proposed chemical specifications for Nova 0.15 mm to 0.6 mm sand

Market	SiO_2 % minimum	Al_2O_3 % maximum	Fe_2O_3 % maximum
Flat glass	99.5	0.3	0.04
Container flint glass	98.5	0.5	0.035
Coloured container glass	98.5	1.6	0.3
Insulation fibre glass	95.5	2.2	0.3
Porcelain	97.5	0.55	0.2
Enamels	97.5	0.55	0.02
Epoxy flooring	98.5	0.5	0.4

Source: Suvo

Table 37: Proposed chemical specifications for Nova 0.6 mm to 1 mm sand

Market	AFS number	SiO_2 % minimum	Al_2O_3 % maximum	Fe_2O_3 % maximum
Large castings	45	98	0.8	0.5
Engineered machine parts	50	98	0.8	0.3
Smaller engine components	60	98	0.8	0.3
Fine finish parts	90	98	0.8	0.3
Epoxy flooring	40-60	98.5	0.5	0.4
Filter sand	2 grades	98	n/a	n/a
Fracking sand	100 mesh	97	n/a	n/a

Source: Suvo

12.3 Conclusions

CSA Global is of the opinion that available process testwork indicates that likely product qualities for glass and foundry sand would potentially meet market requirements. The requirements of Clause 49 of the JORC Code are therefore considered to have been met and support reporting the MRE. In addition, potentially favourable logistics and project location support the reasonable prospects test.

12.4 JORC Classification

The Mineral Resource has been classified in accordance with guidelines contained in the JORC Code. The classification applied reflects the author's view of the uncertainty that should be assigned to the Mineral Resources reported herein. Key criteria that have been considered when classifying the Mineral Resource are detailed in JORC Table 1.

This classification is based upon assessment and understanding of the deposit style, geological and grade continuity, drillhole spacing, input data quality (including drill collar surveys and bulk density), interpolation parameters using IDW.

The Mineral Resource has been classified as Inferred as it was considered sufficiently informed by geological and sampling data to imply but not verify geological and grade continuity between data points.

The MRE appropriately reflects the view of the CP, Murray Lines.

12.5 Mineral Resource Estimate

Mineral Resources for Nova (**Error! Reference source not found.**) were reported based on the product specifications that are described in Section 10.4.

Table 38: Nova Inferred MRE summary table

Size specification	Process	Tonnage (Mt)	Yield (%)	Product tonnes (Mt)	SiO_2 (%)	Al_2O_3 (%)	Fe_2O_3 (%)	TiO_2 (%)	CaO (%)	Na_2O (%)	K_2O (%)	LOI (%)
	Head grade (in situ)	288			89.53	6.69	0.61	0.45	0.01	0.03	0.16	2.34
Coarse Sand (-1.0 +0.6 mm)	Attrition		8.2	24	98.97	0.51	0.12	0.05	0.01	0.01	0.02	0.24
Glass Sand (-0.6 +0.15 mm)	Attrition		46.3	133	98.95	0.44	0.12	0.17	0.01	0.01	0.02	0.20
	HLS floats		*99.7	133	99.02	0.50	0.09	0.05	0.01	0.01	0.02	0.25
	Non-magnetics		*99.5	132	99.24	0.36	0.05	0.04	0.01	0.01	0.02	0.19
Silica Flour (-0.15 +0.075 mm)	Attrition		20.7	60	96.97	1.12	0.42	0.72	0.01	0.02	0.16	0.40

Notes:
- *Resources are reported in accordance with the JORC Code.*
- *Resources are constrained to the tenement boundaries.*
- *Resources are in million metric tonnes of final product. Differences may occur due to rounding.*
- *In situ density applied = 1.7 t/m^3.*
- **Yield after previous process step.*
- *Note that Glass Sand tonnes and grade are reported for each process step and are not accumulative.*

12.6 Audits and Reviews

Internal audits were completed by CSA Global which verified the technical inputs, methodology, parameters, and results of the estimate. No external audit of the MRE has been undertaken.

12.7 File Storage

All files associated with the work that forms the focus of this report have been saved on the CSA Global Perth server under the directory \Clients\Files\Suvo\SUVMRE04.

13 Conclusions and Recommendations

13.1 Conclusions

CSA Global makes the following conclusions following completion of the MRE:

- An analytical database was used in the process of modelling and MRE of the deposit, allowing estimation of yield, SiO_2, Al_2O_3, Fe_2O_3, TiO_2, CaO, Na_2O, K_2O, and LOI values for white/cream sand domain for different PSD and test methods.
- The deposit database was imported into the Micromine system environment and checked for errors. All logical errors were corrected, and the database was found valid for the purposes of modelling the deposit and grade-tonnage estimation.
- The white/cream sand domain was interpreted and modelled using geological logs and geological understanding of the deposit supported by analytical data.
- All model cells have been coded according to their occurrence in lithological domains.
- All sample analytical data were composited to 3 m to reflect the possible vertical variability of the deposit.
- The IDW method was used to interpolate values in the block model.
- Samples of feed material used in metallurgical tests were tested for bulk density at Nagrom using a method whereby sand is poured into a measuring cylinder. An average in-situ dry bulk density of 1.7 t/m^3 was used for estimation.
- The process testwork and results provided by the client are appropriate and are an industry standard for this style of mineralisation.

13.2 Recommendations

Several recommendations are made below to support the ongoing development and evaluation of the deposit.

Mineral Resources:

- Increase confidence in the geological model by infill drilling on the current lines and adding internal lines within the resource. Drill deeper than previously, as some holes stopped in white sand.
- Extend drilling to the north and south of the current Mineral Resource.
- Complete sampling and testing of the 2020 drillholes.
- Verify in-situ bulk density.

Metallurgy:

- Collect a bulk sample to commence metallurgical testing and to develop samples for customers.
- Investigate the heavy mineral deportment (e.g. zircon and ilmenite).

Scoping study:

- Scoping study to be commissioned on the Nova project.

Marketing and sales:

- Begin to develop customer relations.

Environmental and approvals:

- Continue studies.

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15 Abbreviations and Units of Measurement

°	degrees
°C	degrees Celsius
3D	three-dimensional
Al	aluminium
Al_2O_3	aluminium oxide
CaO	calcium oxide
cm	centimetres
CP	Competent Person
CSA Global	CSA Global Pty Ltd
Fe	iron
Fe_2O_3	iron(III) oxide (or ferric oxide)
g	grams
g/cm^3	grams per cubic centimetre
GPS	global positioning system
H_2O	water
ICP	inductively coupled plasma (spectroscopy)
IDW	inverse distance weighting
K_2O	potassium oxide
kg	kilograms
km	kilometres
kt	thousand tonnes (or kilo-tonnes)
LOI	loss on ignition
m	metre(s)
m^3	cubic metres
MgO	magnesium oxide
ml	millilitres
mm	millimetres
MRE	Mineral Resource estimate
Mt	million tonnes
Na_2O	sodium oxide
ppm	parts per million
PSD	particle size distribution
QAQC	quality assurance and quality control
RGC	RGC Exploration Pty Ltd
SiO_2	silicon dioxide (or silica)
Suvo	Suvo Strategic Minerals
t/m^3	tonnes per cubic metre
TiO_2	titanium dioxide
UTM	Universal Transverse Mercator
XRD	x-ray diffraction
XRF	x-ray fluorescence
ZrO^2	zirconium dioxide

Appendix A JORC Code, 2012 Edition – Table 1

Note: Section 1 and Section 2 of Table 1 were primarily completed by Suvo, and Section 3 was completed by CSA Global and Suvo.

Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	*Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* *Aspects of the determination of mineralisation that are Material to the Public Report.* *In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	Aircore and auger drilling programs were conducted to investigate and quantify the amount and quality of the silica sand on the property. The datasets were derived from a hand auger program and aircore drilling programs consisting of 38 shallow hand auger holes and 51 aircore drillholes for 1,006 m of drilling. Samples are stored at a secure storage facility. Auger samples (33) were taken from base of hole. The auger samples were used for visual assessment only and formed a basis for subsequent aircore drilling. Aircore drill samples were collected at 1 m intervals. A sample of approximately 10 kg was collected per metre directly from the cyclone attached to sample return hose. Subsamples of approximately 2 kg were taken using a plastic hand trowel after manual homogenisation and quartering. Sample quality and representivity was acceptable and no significant loss of sample through hole blowouts occurred. Drilling and sampling continued to rig refusal or maximum rig depth. Historical RGC Exploration Pty Ltd (RGC) work conducted in the 1990s is reported in WAMEX Report a38058 and subsequently in Suvo Strategic Minerals' (Suvo's) replacement prospectus released to the Australian Securities Exchange (ASX) on 5 August 2020. Air core drill samples were collected at 2 m intervals, panned and logged on site. Samples with a visual heavy mineral estimate greater than 2% were submitted to the RGCMS Narngulu laboratory for assay.
Drilling techniques	*Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).*	All Suvo aircore drillholes were completed by Outback Drilling Pty Ltd using a KL150 aircore rig using 83 mm air core bits and 73 mm ARD drill rods. RGC drilling was conducted with a Mantis 75 drill rig, the specifications of downhole equipment are unknown.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.* *Measures taken to maximise sample recovery and ensure representative nature of the samples.* *Relationship between sample recovery and grade/sample bias.*	A qualitative assessment of sample recovery was made by the supervising geologist during drilling completed by Suvo. Samples were geologically logged, and recovery was again assessed. Most samples were dry and recovery complete. Occasionally sample return required air adjustments during drilling to maximise recovery and reduce clay build-up between the sample face and the cyclone. To ensure sample quality and integrity was maintained, the drill string, cyclone and sample return hose was cleaned prior to commencing each drillhole and when necessary, during the drilling process. There was no evidence of bias in the samples. The RGC drill program report does not contain any recovery information, nor does it describe methods by which recovery could be maximised. The relationship between grade and recovery is unknown.

Criteria	JORC Code explanation	Commentary
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* *The total length and percentage of the relevant intersections logged.*	Samples were geologically colour logged by Suvo using Munsell colour charts for all intervals by an experienced geologist on-site at the time of drilling. Logging was qualitative and focussed on grain size and colour. Photographs were taken of the chip trays during the air core and auger programs. RGC holes were geologically, and colour logged, with a visual estimate of heavy minerals. Logging is qualitative and occurred on 2 m composite samples.
Subsampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.* *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* *For all sample types, the nature, quality, and appropriateness of the sample preparation technique* *Quality control procedures adopted for all subsampling stages to maximise representivity of samples.* *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.* *Whether sample sizes are appropriate to the grain size of the material being sampled.*	During the Suvo drilling, each 1 m interval was collected from the cyclone underflow in all drillholes. Subsamples were approximately 2 kg each. No composites were taken onsite. The individual 1 m subsamples were delivered to Nagrom Mineral Processing for further processing. Field duplicates were taken each 20^{th} sample. A total of 46 duplicates were included in the samples sent to Nagrom. Samples are deemed representative and the sample size appropriate. The RGC drill program did not report sampling methods. 2 m sample composites were panned for visual estimation of heavy mineral concentrates. A 2 m composite is considered representative for this style of deposit.
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.* *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.* *Nature of quality control procedures adopted and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	Metallurgical sighter testing comprised disaggregation and gentle attritioning of seven 1 m drill samples. The testwork included separation of the sand and clay particles using wet screening of the slurry to -75 µm to separate the clay and the sand, drying the sand fraction and screening to determine particle size distribution, and x-ray fluorescence (XRF) and x-ray diffraction (XRD) analysis of the sand and clay fraction. XRF chemical analysis was completed at the University of New South Wales reported are Na_2O, MgO, Al_2O_3, SiO_2, P_2O_5, SO_3, K_2O, CaO, TiO_2, V_2O_5, Cr_2O_3, Mn_3O_4, Fe_2O_3, NiO, CuO, ZnO, SrO, ZrO_2, BaO, HfO_2, PbO, and LOI. Particle size distribution (PSD) was carried out by Alliance Geotechnical & Environmental. AFS values were from data from CDEN Global. Nagrom sighter testwork included 22 composite drill samples which were subject to PSD tests. The samples were attritioned in water and wet screened at +75 µm to remove the clay fraction from the sand fraction, and the fractions dried, weighed and a PSD completed. The mass yield was calculated for each sieve fraction. The sand fraction was then subjected to heavy liquid separation and magnetic separation to produce a final silica product that was then analysed by XRF. XRF chemical analysis was completed at Nagrom. Reported constituents included Na_2O, MgO, Al_2O_3, SiO_2, P_2O_5, SO_3, K_2O, CaO, TiO_2, V_2O_5, Cr_2O_3, Mn_3O_4, Fe_2O_3, NiO, CuO, ZnO, SrO, ZrO_2, BaO, HfO_2, PbO, and LOI.

Criteria	JORC Code explanation	Commentary
		Nagrom final testwork: 177 drill samples were composited, and head sample chemistry determined by XRF. The samples were then attritioned in water and wet screened at 0.075 mm, 0.15 mm, 0.6 mm and 1.0 mm sieve sizes. This process removed the -0.075 mm (75 µm) clay (slimes) fraction from the sand fractions. The fractions were dried, weighed and chemical composition determined by XRF. The mass yields were calculated for each sieve fraction. The +0.15 -0.6 mm sand fraction was then subjected to heavy liquid separation and the "floats" then purified by magnetic separation to produce a final silica product. All floats and sinks from the heavy liquid separation process and the non-magnetic and magnetic fractions from the magnetic separation process were analysed by XRF. XRF chemical analysis was completed at Nagrom. Reported constituents included Na_2O, MgO, Al_2O_3, SiO_2, P_2O_5, SO_3, K_2O, CaO, TiO_2, V_2O_5, Cr_2O_3, Mn_3O_4, Fe_2O_3, NiO, CuO, ZnO, SrO, ZrO_2, BaO, HfO_2, PbO, and LOI. Quality control tests: Three duplicate Nova drill samples were selected to provide a range of chemistry and PSDs. These were processed at Nagrom by attritioning and screening, and the chemistry and the results verify that the metallurgical separation process is reproducible. One set of 33 samples was sent to an umpire laboratory (Intertek) to verify the performance of the primary laboratory (Nagrom) for both XRF and inductively coupled plasma (ICP) methods. It was concluded that the differences between original and umpire laboratories are immaterial for the current purpose of reporting an Inferred Mineral Resource. Further umpire tests are recommended in any future programs and that ICP be considered as an alternative especially when low-iron products are under consideration. High-purity silica products are typically analysed by ICP methods due to the lower detection limit of ICP compared with XRF for key deleterious elements such as aluminium, iron and titanium which are of primary concern for the glass industry. However, ICP does not directly analyse for silicon, hence XRF was used for this initial phase of project investigation and metallurgical tests at Nagrom, to track SiO_2 contents between process steps. It was concluded that although the XRF Fe_2O_3 results appear to be slightly under-reported by about 7–8% on average compared with ICP, the XRF data should be suitable for reporting an Inferred Mineral Resource. The Competent Person (CP) considers that the sample preparation, sample testing and analytical techniques are appropriate for this type of deposit, at this stage of the exploration process. The CP notes further that metallurgical (process) test methods can have a significant effect on the quality of concentrate produced at a laboratory scale, and that such tests should be tailored for specific geological and mineralogical conditions and desired product outcomes for specific markets. Therefore, it is cautioned that laboratory process test results used to estimate Mineral Resources for industrial minerals such as silica sand may not reflect either the final process flowsheet adopted after completion of technical studies (e.g. prefeasibility studies or feasibility studies) or should a process plant be constructed.

Criteria	JORC Code explanation	Commentary
		RGC analytical data are recorded simply as a % heavy mineral and slimes visually, where visual heavy minerals were greater than 2% site laboratory analysis was completed and reported heavy minerals and slimes%. There was no reported verification of sampling, twinned holes, data entry procedures, electronic data or assay adjustment.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.* *The use of twinned holes.* *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* *Discuss any adjustment to assay data.*	Dr Ron Goldbery BSc (Hons App Sc), Msc (App Sc), PhD, and Murray Lines BSc (Geol), consultants subcontracted to Suvo, helped select the samples and develop the testwork program. Field data was collected in both field notebooks and log sheets, and then manually entered in spreadsheets and validated in Micromine. No adjustments were made to assay data.
Location of data points	*Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* *Specification of the grid system used.* *Quality and adequacy of topographic control.*	All drillholes were picked up using a mmGPS Rover to an accuracy of ±10 mm north and east, ±15 mm RL. Drillhole collars were recorded using the MGA94 Zone 50 grid. The final three holes drilled, namely NVAC049, 050 and 051 were surveyed using handheld global positioning system (GPS) and adjusted vertically to fit the existing topographic map. All holes were vertical and, with an average hole depth of only 20 m. Downhole surveying was not considered necessary. RGC drillholes are reported in local grid and were georeferenced in Mapinfo and UTM coordinates attributed in GDA94 zone 50 with no topographic control.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.* *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.* *Sample compositing.*	The drilling was performed on tracks through the projects and collar density appropriate for the level resource assessment. The holes were spaced at about 500 m along existing tracks. The CP is of the opinion that the data spacing is sufficient for this stage of exploration and reporting an Inferred Mineral Resource.
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.* *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.*	All drillholes are assumed vertical, which means that the sampling is orthogonal to the horizontal to sub horizontal sand horizons. Orientation-based sampling bias is not expected from vertical drillholes.
Sample Security	*The measures taken to ensure sample security.*	Samples have been in the care of Suvo personnel during drilling, transport from the field and into the Suvo storage facility. Sample security for the RGC drill program is unknown but the drill program and laboratory were on adjacent leases.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	The field program was managed and supervised by Suvo personnel in consultation with consultants and the CP. It is unknown if there was any review or audit of the RGC program.

Section 2: Reporting of Exploration Results

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 security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	The Nova tenements are granted exploration licences. Tenement numbers are E70/5001, E70/5322, E70/5323 and E70/5324. They are located 15 km south of Eneabba in Western Australia. The tenements are held by Watershed Enterprise Solutions Pty Ltd. Watershed Enterprise Solutions Pty Ltd is a 100% subsidiary of Suvo. There are no known impediments to operate on the tenements.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	Previous exploration for heavy minerals was completed in the 1990s by RGC.
Geology	*Deposit type, geological setting and style of mineralisation.*	The Nova Project is an environment of mixed aeolian, fluvial and marine sands. Usually there is a layer of several metres comprising red or yellow ferruginous sands, sometimes with thin layer of silica sand overlying this at surface. Below the ferruginous sands, in places a thin hard cap then gives way to cream or pink sands, at depth the silica sands were generally white. The sand horizons are generally sub-horizontal.
Drillhole information	*A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:* • *easting and northing of the drillhole collar* • *elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar* • *dip and azimuth of the hole* • *downhole length and interception depth* • *hole length.* *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.*	The overburden of ferruginous sands is generally up to 4 m thick. Sometimes there is a thin hard layer, below which are light pink to cream sands, grading usually to white at depth. All holes were drilled vertically to an average depth of 20 m. Drillhole collar information has been publicly reported previously (Suvo 2020, 2021).
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 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.* *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	Not relevant. Exploration Results are not being reported. Mineral Resources are being disclosed (see Section 3).
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.* *If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.*	The silica sands are hosted within a horizontal near-surface weathering profile. It is an in-situ weathered product, and the weathering profile is zoned vertically. Drillholes are all vertical. Intercepted widths are approximately true widths.

Criteria	JORC Code explanation	Commentary
	If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (e.g. 'downhole length, true width not known').	
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 drillhole collar locations and appropriate sectional views.*	Drill collar maps and appropriate sections or 3D views are included in the main body of the Mineral Resource 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.*	All available Exploration Results were used in the Mineral Resource estimation. Exploration Results have been reported by Suvo (2020, 2021).
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.*	All material exploration data has been used in the estimation of the Mineral Resource.
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).* *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	Further aircore drilling is planned to laterally extend the Mineral Resource and also to infill between existing holes and increase confidence in geological, in situ grade and product quality continuity. This work is still in the planning stage.

Section 3: Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	*Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* *Data validation procedures used.*	Data used in the Mineral Resource estimate is sourced from Microsoft Excel files provided by Suvo. All data was validated in Micromine software. Suvo verified that all the available data was submitted. Validation of the data import include checks for overlapping intervals, missing survey data, missing and incorrectly recorded assay data, missing lithological data and missing collars. Manual checks were carried out by plotting and review of sections and plans.
Site visits	*Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*	The CP, Mr Murray Lines, visited the site on numerous occasions during the recent drilling campaign. No issues were reported or revealed during the visits.
	If no site visits have been undertaken indicate why this is the case.	Not applicable.
Geological interpretation	*Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* *Nature of the data used and of any assumptions made.* *The effect, if any, of alternative interpretations on Mineral Resource estimation.*	The geological interpretation of the silica sand deposit at Nova is well understood, and the logged lithologies are coherent and traceable over numerous drillholes and drill sections.

Criteria	JORC Code explanation	Commentary
	The use of geology in guiding and controlling Mineral Resource estimation. *The factors affecting continuity both of grade and geology.*	The grade and lithological interpretation form the basis for geological modelling. Lithological envelopes defining prospective white/cream sand zone within which the grade estimation has been completed. The lithological units are recognised based on mineralogy, chemistry, and colour. Resource estimation assumes that these units formed a series of conformable, sub-horizontal, pseudo-stratified, in-situ units.
Dimensions	*The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	The Mineral Resource extends for 6,800 m in the south to north direction and up to 4,600 m in the east to west direction and extends to 30 m below surface.
Estimation and modelling techniques	*The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* *The assumptions made regarding recovery of by-products.* *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).* *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* *Any assumptions behind modelling of selective mining units.* *Any assumptions about correlation between variables.* *Description of how the geological interpretation was used to control the resource estimates.* *Discussion of basis for using or not using grade cutting or capping.* *The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.*	The mineralisation interpretation was extended perpendicular to the corresponding first and last interpreted cross section to the distance equal to a half distance between the adjacent exploration lines. If a mineralised envelope did not extend to the adjacent drillhole section, it was pinched out to the next section and terminated. The general direction and dip of the envelopes was maintained. The size of the parent block used in creating the block model was selected based on the exploration grid (500 m x 500 m), the general morphology of mineralised bodies, and with due regard for the geology of the weathering profile and the high vertical grade variability and to avoid creating excessively large block models. The sub-block dimensions were chosen accordingly to maintain resolution of the mineralised bodies. The block model was constructed using a 200 m(E) x 200 m(N) x 3 m(RL) parent block size, with sub-celling to 20 m(E) x 20 m(N) x 0.3 m(RL) for domain volume resolution. Input data did not display significant outliers in their distributions and so no top cuts were applied. Grade estimation was by Inverse Distance Weighting (IDW) to the power of two, using Micromine 2018 software. The wireframe objects were used as hard boundaries for grade interpolation. The block model of the deposit with interpolated grades was validated both visually and by statistical/software methods.
Moisture	*Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	Tonnages have been estimated on a dry in-situ basis. No moisture values were reviewed.
Cut-off parameters	*The basis of the adopted cut-off grade(s) or quality parameters applied.*	Mineral Resources were reported in accordance with product specifications that have potential commercial interest

Criteria	JORC Code explanation	Commentary
Mining factors or assumptions	*Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	It is assumed that due to the very shallow/near-surface nature of the deposit, it will be mined by open pit methods.
Metallurgical factors or assumptions	*The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	Initial sighter tests on six samples of white sand were processed by soaking in water, attritioned and screened with the purpose of separating the samples into a “sand fraction” (+75 µm) and a “clay fraction” (-75 µm). XRF and XRD analyses of the dried fraction provided chemical composition and mineralogy. Silica content of the sand fraction ranged from 94.48% to 99.31% with an average of 97.0%. The lower values of silica relate to manual rather than mechanical attrition resulting in some retention of clay on the quartz grains. Iron levels of the +75 µm fraction (sand) ranged from 0.05% to 0.20% with an average of 0.085%. Chrome levels were below detection levels; TiO_2 ranged from 0.34% to 0.92% with an average of 0.68%. After the completion of the sighter metallurgical tests, a preliminary run of 22 production composite samples were completed at Nagrom to replicate the bench-scale sighter testwork to ensure that the laboratory method could replicate the initial sighter results. The samples were composited, and a PSD was completed. The samples were then wet screened at +75 mm to remove the clay fraction from the sand fraction, and the fractions dried, weighed and PSD completed. The PSD results demonstrate that the Nova sands are generally fine grained and that the bulk of the sand-sized material is in the range of ~0.15 mm to ~0.4 mm. The +75 µm sand fraction was then purified by heavy liquid separation and magnetic separation before the final non-magnetic product was analysed by XRF. Nagrom production samples yielded 74.74% to the sand fraction while the previous sighter metallurgical tests yielded 73.7%; although not the same sample population as the sighter tests there was good correlation. The Nagrom production samples averaged 98.78% SiO_2 (96.56–99.61%) and the sighter metallurgical tests achieved 97.0% SiO_2 (94.48–99.31 SiO_2).
Environmental factors or assumptions	*Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	It is assumed that no environmental factors exist that could prohibit any potential mining development. A small proportion of the tenure comprises an A class nature reserve, no exploration has been conducted in this area and in the future, it would be excluded from any development area. A mining operation is sited just to the west.

Criteria	JORC Code explanation	Commentary
Bulk density	*Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.* *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	Samples of feed material used in metallurgical tests were tested for bulk density at Nagrom using a method whereby sand is poured into a measuring cylinder. The volume of sand is measured immediately to obtain loose (uncompacted) volume and, after tapping the cylinder to fully compact the sand, the volume is measured to obtain compacted volume. The density is obtained by dividing mass by volume. Head sample loose dry bulk densities were determined to range between 1.1 t/m^3 and 1.4 t/m^3 for an average of 1.3 t/m^3. The compacted dry bulk density was determined to range between 1.5 t/m^3 and 1.8 t/m^3 for an average of 1.7 t/m^3. The CP, Mr Murray Lines, is of the opinion that the compacted density is representative of in situ sand at the Nova Project and that an average in-situ dry bulk density of 1.7 t/m^3 is appropriate for reporting an Inferred Mineral Resource.
Classification	*The basis for the classification of the Mineral Resources into varying confidence categories.* *Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity, and distribution of the data).* *Whether the result appropriately reflects the Competent Person's view of the deposit.*	This classification is based upon assessment and understanding of the deposit style, geological and grade continuity, drillhole spacing, input data quality (including drill collar surveys and bulk density), interpolation parameters using IDW and meeting the requirements of Clause 49 of the JORC Code. The Mineral Resource has been classified as Inferred as it was considered sufficiently informed by geological and sampling data to imply but not verify geological and grade continuity between data points. The Mineral Resource estimate appropriately reflects the view of the Competent Person.
Audits or reviews	*The results of any audits or reviews of Mineral Resource estimates.*	Internal audits were completed by CSA Global which verified the technical inputs, methodology, parameters and results of the estimate. No external audits have been undertaken.
Discussion of relative accuracy/ confidence	*Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	The Mineral Resource accuracy is communicated through the classification assigned to the deposit. The Mineral Resource estimate has been classified in accordance with the JORC Code (2012 Edition) using a qualitative approach. All factors that have been considered have been adequately communicated in Section 1 and Section 3 of this table. The Mineral Resource statement relates to a global estimate of in-situ tonnes and grade. No mining activity has been on the deposit.

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