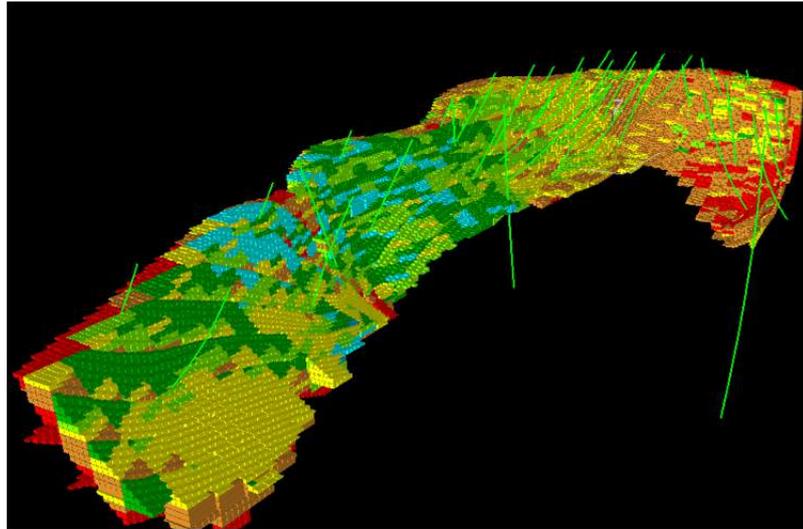


Olary Iron Project Mineral Resource Estimate, South Australia NI 43-101

Report prepared under the guidelines of National Instrument 43-101 and accompanying documents 43-101.F1 and 43-101.CP



Prepared by



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Olary Iron Project Mineral Resource Estimate, South Australia NI 43-101

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Important Notice

This report was prepared as a National Instrument 43-101 Technical Report for Yukuang Australia (WA) Resources Pty Ltd (Yukuang) by SRK Consulting (Australasia) Pty Ltd (SRK). The quality of information, conclusions, and estimates contained herein is consistent with the level of effort involved in SRK's services, based on: i) information available at the time of preparation, ii) data supplied by outside sources, and iii) the assumptions, conditions, and qualifications set forth in this report. This report is intended for use by Yukuang subject to the terms and conditions of its contract with SRK and relevant securities legislation. The contract permits Yukuang to file this report as a Technical Report with Canadian securities regulatory authorities pursuant to National Instrument 43-101, Standards of Disclosure for Mineral Projects. Except for the purposes legislated under provincial securities law, any other uses of this report by any third party is at that party's sole risk. The responsibility for this disclosure remains with Yukuang. The user of this document should ensure that this is the most recent Technical Report for the property as it is not valid if a new Technical Report has been issued.

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1 Summary

The Olary Iron Project is an early stage iron exploration project. This technical report has been prepared for Yukuang Australia (WA) Resources Pty Ltd (Yukuang), a mineral exploration company with corporate headquarters in Zhengzhou, Henan Province of Peoples' Republic of China. Yukuang is earning the iron ore rights of the Project through a farm-in agreement with an ASX listed company, Avocet Resources Limited (Avocet). U3O8 Limited changed its name to Avocet on 25 May 2012.

This technical report documents the basis of the mineral resource statement for the Olary Iron Project prepared by SRK. It was prepared following the guidelines of the Canadian Securities Administrators' National Instrument (NI) 43-101 and Form 43-101F1. SRK understands this technical report will be used by Yukuang to support an application for listing on an international stock exchange.

Property Description and Location

The Project is located approximately 70 km south west of Broken Hill in South Australia. The Barrier Highway and the parallel Indian Pacific Railway are 40 km to the west of the Project. The Mineral Exploration Licence (EL No 4664) was originally granted to Avocet Resources Limited (Avocet), then U3O8 Limited by the Department of Manufacturing, Innovation, Trade, Resources and Energy of the Government of South Australia on 8 February 2011. This Licence is valid for 2 years until 7 February 2013. The Licence covers an area of 280 km² and the listed target exploration commodity is uranium. The Project is considered by Avocet to be prospective for uranium, copper and iron ore mineralisation.

Accessibility, Climate, Local Resources, Infrastructure and Physiography

The closest commercial airfield to the Olary Iron deposit is at Broken Hill. Broken Hill has a population of about 21,000 and is the closest major regional centre where main supplies are sourced. EL4664 can be accessed by approximately 55 km of sealed bitumen road from Broken Hill to Mutooroo, followed by approximately 40 km of unsealed road.

The climate of the Olary Iron Project area is warm and dry and is considered to be a desert climate. Summer temperatures are warm to hot and winter is cool to cold. The Olary Iron Project has a similar climate to Broken Hill, which has average maximum temperatures ranging from low 30's in summer, to cool minimum average winter temperatures of 5.4°C.

The Olary deposit is approximately 35 km from the major rail line linking Broken Hill to Port Pirie and Adelaide. The closest port facility is Port Pirie which has Capesize ship capacity and is 260 km from the Olary deposit. The 220 kilo Volt (kV) High Voltage transmission line that supplies electricity to Broken Hill is approximately 50 km east of the Olary Iron Project.

History

The drilling history at the project is relatively simple, consisting of two drilling programmes. The first drilling programme was late 2010 by Avocet Resources who completed 6 Reverse Circulation (RC) holes for a total of 689 m. The second drilling programme was by Yukuang, commencing in 2011 totalling 55 drillholes and is the basis for this Mineral Resource Estimate.

Geological Setting and Mineralisation

The iron ore mineralisation is hosted by the Neoproterozoic Braemar ironstone facies of the Olary Block. The Braemar ironstone facies consists of laminated and diamictic ironstones interbedded with calcareous or dolomitic siltstone. Petrographical study shows that these rocks have metamorphosed up to amphibolite facies, but subsequently retrogressed pervasively to greenschist facies. The entire succession is further cut by centimetre-scale olivine phyric basaltic to doleritic dykes in places.

With the exception of a few exposures cropped out in the North Zone, the mineralisation is covered by Quaternary sediments. The geometry of the modelled mineralisation is controlled by an asymmetric east-northeast trending synform and north–east trending open folds to a lesser extent. The mineralisation is cut by a sub-vertical east–west trending fault zone that subdivides the mineralisation into the North and South Zones.

Deposit Types

The iron ore deposit at Olary is an example of Neoproterozoic ironstones that are related to glaciation and formed during the “Snowball Earth” period, when there was a global-scale glaciation even at low latitudes. The Braemar facies ironstone is envisaged to have accumulated in a marine basin along the border of a continental glaciated highland and a low-lying weathered landmass. The interlayering relationship between dolostones, manganiferous siltstones, ironstones and diamictites are related to a transgressive event during a postglacial period.

Exploration

The geology of the Project area is described in the 1:25,000 scale Olary (SI 54-2) geological map and the 1:10,000 Oakvale geological map, prepared by Department of Primary Industries and Resources of South Australia. The area is also covered by the regional aeromagnetic survey, which was flown by the Targeted Exploration Initiative, South Australia (TEISA) in 1999-2000 at 200 m spacing. In the regional aeromagnetic data, the Braemar facies ironstones show up as pronounced, curvilinear, high magnetic anomalies. The mostly covered Braemar facies ironstones appear to have been folded and extend discontinuously for at least 180 km.

In late 2010, Avocet completed 6 RC holes for a total of 689 m to test the geophysical anomalies, interpreted to represent the Braemar facies ironstones. In July 2011, a ground magnetic survey was completed over the area of interest by Yukuang. The survey was performed using a WCZ-1 Proton Magnetometer. Line and survey station spacing was 100 m and 20 m respectively. The survey was conducted between 467300E – 470400 E and 6399700N – 6403200N, measuring 11.2 km².

Drilling

- The Olary Iron deposit drilling included in the Mineral Resource estimate consists of 55 drillholes which were drilled, under contract by Yukuang, using Diamond and Reverse Circulation (RC) drilling methods.
- The gyroscopic logging method for downhole surveys was used for 41 drillholes and the downhole camera method was used for the remaining 14 drillholes, where the gyroscope could not re-enter the drillhole.
- All drillholes were picked up using a Differential Global Positioning System (DGPS).
- Rock quality is good with dominantly competent rocks. Core recoveries were very good, averaging 99% core recovery, below the top several metres of poorly consolidated material.

- SRK's observation of the RC sampling operation showed very little wastage via dust, minimum loss at the cyclone and consistent sample mass. In SRK's opinion there is a high sample recovery during the RC operation.
- Areas classified as Indicated Mineral Resources were dominantly drilled on a section spacing of 200 m although the classification also depended on other variables such as geological interpretation and distance from drillholes.
- Areas classified as Inferred were dominantly drilled on 400 m drillhole sections although the section spacing decreased to 200 m in the hinge section of the syncline where the geology was more complex.

Sample Preparation, Analyses and Security

- Sample crushing was undertaken by ALS in Adelaide and sample pulverising and assay analysis were undertaken in Perth.
- The majority of drillholes were oriented.
- Drillhole logs were generated for Lithology, Structure and Geotechnics.
- The median core and RC sample interval was 3.0 m, representing 41% and 71% of samples respectively.
- Samples were assayed for total analysis and by DTR using XRF.
- Samples were assayed for 25 elements and compounds.
- A total of 266 samples were laboratory measured for bulk density from 4 drillholes.
- 75% of drillholes were downhole surveyed for bulk density and a regression was determined by comparing with the laboratory bulk densities.

Data Verifications

- SRK was introduced to the Olary Project early in the initial drilling phase and has regularly conducted site inspections.
- Procedures and processes implemented and reviewed on site included drilling, planning, sampling, logging, geophysical downhole surveys, database and geological interpretation.
- SRK observed careful and accurate drilling and handling of core.
- RC drilling techniques were observed by SRK to produce consistent volume samples with minor loss of sample to dust and spillage. SRK observed a high standard of RC sampling resulting in a high sample recovery.
- SRK has been in regular contact with ALS and reviewed their sample preparation and analytical procedures for total concentration, DTR and bulk density.

Mineral Processing and Metallurgical Testing

Two metallurgical studies have been completed on the Olary Iron Project as follows:

- 1). Yukuang Centre's Alliance Mines Magnetite Recovery Tests (Simulus, 2012) conducted in Perth. Core samples from three drillholes were composited into 4 metallurgical samples for testwork with the following results:
 - Testwork on Dense Media Separation (DMS) concluded that the product iron grade was quite low and was likely to be part of processing flowsheet and would require further downstream beneficiation.

- DTR tests, conducted on material ground and screened to 100% passing 150 microns, demonstrated that separation of the iron minerals from the gangue occurred however, product Fe grades were lower than expected.
 - Further optimisation testwork on Composite 2 demonstrated that the 38 micron grind size produced the most acceptable concentrate grade of 64.83% Fe. These testwork results were the basis on which a grind size of 38 micron was used for Mineral Resource estimate DTRs.
- 2). Process Mineralogy and Mineral Separation Test Research on Olary Iron Ore (Zhengzhou Institute, 2012), conducted in China. Representative Fe mineralised samples from the six drillholes were selected for metallurgical testwork with the following results:
- For magnetite mineralisation the recommended process is Low Intensity Magnetic Separation (LIMS) and magnetic screening. Combined concentrate grade was 63.75% Fe, yield was 41.1% and total iron recovery was 83.3%.
 - For hematite mineral separation, a recommended two stage grinding and four stage magnetic separation to produce a combined LIMS concentrate and moderate magnetic separated concentrate. Combined concentrate grade was 61.33% Fe, yield was 38.75% and total iron recovery was 73.29%.
 - No economic analysis was undertaken to determine the economic feasibility to recover the hematite. SRK is of the opinion that the hematite mineralisation within the weathered zone does not meet the criteria of a Mineral Resource as it is not economically extractable.

Mineral Resource Estimates

The Mineral Resource Statement presented herein represents the first mineral resource evaluation prepared for the Olary Iron Project in accordance with the Canadian Securities Administrators' National Instrument 43-101.

The mineral resource model prepared by SRK considers 55 core and reverse circulation boreholes drilled by Yukuang during the period of July 2011 to August 2012. The resource estimation work was completed by Danny Kentwell, FAusIMM, an appropriate "independent qualified person" as this term is defined in National Instrument 43-101.

The Olary Iron Resource has been estimated on a global basis and has been classified as Indicated and Inferred under the JORC Code as appropriate to reflect the global confidence in the overall resource at the stated cut-off. The confidence in the local block by block values remains low due to the wide drill spacing, relatively small block size and absence of coherent experimental variograms. The estimate is appropriate for use with bulk mining studies. Bulk mining refers to methods where all material above the Resource cut-off is targeted to be mined. Bulk mining methods are the typical mining methods for magnetite Iron. The estimate is not appropriate for selective mining studies at higher cut-offs.

Oxide material is not considered economically recoverable and is not included in the Resource tables. Transition material that does not have associated concentrate sampling is not included in the Resource tables even if the head grades are available.

Combined cut-offs of 10% DTR and 20% Total Fe have been used for the Resource tabulation. This cut-off excludes approximately 10% of the total Resource tonnage at zero cut-off. Areas that fall below the combined cut-off are largely contiguous groups of blocks and are appropriate to exclude in a bulk mining context.

Table 1-1: Mineral Resource Statement, Olary Iron Project, Olary, South Australia, SRK Consulting (Australasia) Pty Ltd, 20 August 2013

Head Grades									
Category	Tonnage (Mt)	Fe %	SiO ₂ %	Al ₂ O ₃ %	LOI %	S %	P %	DTR %	Density
Indicated	214	26.3	40.8	6.9	3.9	0.029	0.24	26.4	3.12
Inferred	296	26.4	41.3	6.9	3.7	0.027	0.25	27.3	3.10

Category	Concentrate Tonnage (Mt)	Concentrate Grades					
		Fe %	SiO ₂ %	Al ₂ O ₃ %	LOI %	S %	P %
Indicated	57	69.6	2.9	0.3	-3.1	0.008	0.01
Inferred	81	69.8	2.6	0.2	-3.1	0.009	0.008

Cut-off of 20% Fe and 10% Mass recovery (DTR)

Grind size 38 micron

Responsibility for the entire Mineral Resource Estimate: Information that relates to all Sections, except Section 14 of this report, and overall responsibility of this report compilation and review was by Mr Paul Hunter BSc, MSc, MAusIMM(CP). Mr Danny Kentwell, MSc, FAusIMM was responsible for Section 14 of this report. Mr Hunter and Mr Kentwell who are full time employees of SRK Consulting Australasia Limited, and who 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 a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (The JORC Code). Mr Hunter and Mr Kentwell consent to the inclusion in the release of the statement of this undertaking the resource estimation process in the form and context in which it appears.

Adjacent Properties

SRK is unaware of any further information, regarding adjacent properties, relevant to the Olary Project.

Other Relevant Data and Information

SRK is not aware of any other relevant data available about the Olary Iron Project.

Interpretation and Conclusions

SRK considers that the drilling methods and procedures used at the Olary Iron are consistent with generally accepted industry best practices and are therefore appropriate.

In the opinion of SRK, the sampling preparation, security and analytical procedures used by Yukuang are consistent with generally accepted industry best practices and are therefore appropriate.

The Olary Iron deposit Resource estimate classifications could be improved by tighter geological modelling in the areas where the banding of Iron grades demonstrates high downhole variability within the current modelled domains. To enable a coherent volume model based on tighter geological definition additional infill drilling along strike is required to confidently align the correct units with each other along strike. The aim of the infill drilling would be to enable explicit domain definition for the high grade iron population, averaging around 40% Fe, as seen in the histogram of the current fresh domains.

Infill drilling and tighter domaining should enable coherent variograms to be modelled for each variable which will in turn improve the confidence in the estimate on a block by block scale as well as on the whole.

Recommendations

This technical report is the first Mineral Resource estimate for the Olary Iron deposit and therefore it is normal process to progressively build on this position of existing knowledge. SRK recommends that Yukuang complete a Preliminary Economic Assessment which will allow the Olary Iron Project to qualify as an "Advanced Exploration Property" as defined by NI 43-101. Yukuang plans to commission a PEA in 2013. The preliminary budget for the PEA is US\$270,000 and includes:

- Geological Studies
- Environmental and Social Impact Baseline Studies
- Geotechnical Studies
- Tailings Studies
- Mine Engineering Scoping Study Design
- Equipment Selection Optimisation Port/Rail
- Access & Capacity Opex & Capex
- Project Economics Project Management
- Preparation of PEA technical report.

Other recommendations from SRK, regarding further data collection and interpretation, are:

- Continue the drillhole database validation process established by SRK to ensure data is routinely validated on site.
- Review drilling methods and procedures to determine whether drillhole direction can more consistently attain less deviation.
- Further metallurgical testwork to select optimum grind size and therefore yield and iron grade achieved in concentrate.
- Economic assessment of considered process options.
- Infill drilling to 50 x 50 m, for at least part of the deposit, which may allow the mineral resource to be classified as Measured.
- Targeting of the centre of the basin with one or two holes to establish if the formation does in fact flatten in the centre is currently predicted.
- Target a number of holes to cross the interpreted north–south dividing fault.
- Orient some holes east–west, perpendicular to the formation, around the eastern nose of the northern area fold.
- Consider establishing regression equations for the concentrate and mass recovery grades for the fresh material to reduce the number of samples that require full concentrate assaying.
- Consistently analyse all of the transition material for mass recovery and concentrate grade as the mass recoveries in this material are more variable than in the fresh.
- Consider additional holes specifically targeting the transition material for each domain as the transition domain are under-sampled using the current hole geometry due to their relatively small vertical extent.
- Review overall exploration potential of the EL4664 to enable strategic planning of future exploration programmes.

2 Introduction

The Olary Iron Project is an early stage iron exploration project, located in Australia. It is located 70 km southwest of Broken Hill in South Australia. This technical report has been prepared for Yukuang Australia (WA) Resources Pty Ltd (Yukuang), a mineral exploration company with corporate headquarters in Zhengzhou, Henan Province of Peoples' Republic of China. Yukuang is earning the iron ore rights of the Project through a farm-in agreement with an ASX listed company, Avocet Resources Limited (Avocet). U3O8 Limited changed its name to Avocet on 25 May 2012.

This Report incorporates data from the drill programmes, commissioned by Yukuang in 2011 and 2012. In addition, this report also relies on ground magnetic survey data collected by Avocet in 2011 and other publicly available information.

In October 2011, Yukuang commissioned SRK Consulting (Australasia) Pty Ltd (SRK) to visit the property, review the Olary Iron Exploration Plan and provide sampling support. In May, 2012, Yukuang commissioned SRK to prepare a geological and mineral resource model for the Olary Iron Project. The services were rendered for 13 months between October 2011 and November 2012, leading to the preparation of the mineral resource statement reported herein.

This technical report documents the basis of the mineral resource statement for the Olary Iron Project prepared by SRK. It was prepared following the guidelines of the Canadian Securities Administrators' National Instrument (NI) 43-101 and Form 43-101F1. The mineral resource statement reported herein was prepared in conformity with the Canadian Institute of Mining, Metallurgy and Petroleum's (CIM) "Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines."

SRK understands this technical report will be used by Yukuang to support an application for listing on an international stock exchange.

Some of the listing requirements include:

- A minimum of 50% ownership of an "Advanced Exploration Property" that contains demonstrated economically interesting mineralisation in three dimensions with reasonable continuity
- Minimum recommended expenditures of 750,000 dollars
- A working capital of at least two million dollars
- Net tangible assets with a minimum value of three million dollars
- Up-to-date technical report prepared by an independent qualified person
- Minimum of one million free trading public shares held by a minimum of 300 shareholders and a combined minimum value of four million dollars.

This technical report summarises the technical information available on the Olary Iron Mineral Resource Estimate and demonstrates that the Olary Iron Project will qualify as an "Advanced Exploration Property" as defined by the NI 43-101, following completion of a Preliminary Economic Assessment (PEA).

2.1 Scope of Work

The scope of work, as defined in a letter of engagement executed in May 2012 between Yukuang and SRK includes the construction of a mineral resource model for the iron mineralisation delineated by drilling on the Olary Iron Project and the preparation of an independent technical report in compliance with NI 43-101 and Form 43-101F1 guidelines.

This work involved the assessment of the following aspects of this project:

- Topography, landscape, access
- Regional and local geology
- Exploration history
- Audit of exploration work carried out on the project
- Geological modelling
- Mineral resource estimation and validation
- Preparation of a mineral resource statement
- Recommendations for additional work.

2.2 Work Programme

The mineral resource statement reported herein is a collaborative effort between Yukuang and SRK personnel. The exploration database was compiled and maintained by Yukuang and audited by SRK. The assay database was compiled and validated by SRK. The geological model and outlines for the iron mineralisation were constructed by SRK, in conjunction with Yukuang, using a three-dimensional geological interpretation. In the opinion of SRK, the geological model is a reasonable representation of the distribution of the targeted mineralisation at the current level of sampling. The geostatistical analysis, variography and grade models were completed by SRK during the months of August and September 2012. The mineral resource statement reported herein was presented to Yukuang in a memorandum report on 10 October 2012.

The mineral resource statement reported herein was prepared in conformity with generally accepted CIM “*Exploration Best Practices*” and “*Estimation of Mineral Resource and Mineral Reserves Best Practices*” guidelines. This technical report was prepared following the guidelines of the Canadian Securities Administrators NI 43-101 and Form 43-101F1.

The technical report was assembled in Newcastle, Australia during the months of September and November 2012.

2.3 Basis of Technical Report

This report is based on information collected by SRK during 3 site visits performed on 24-25 October 2011, 8-9 December 2011 and 18-19 May 2012 and on additional information provided by Yukuang throughout the course of SRK’s investigations. Other information was obtained from the public domain. SRK has no reason to doubt the reliability of the information provided by Yukuang. This technical report is based on the following sources of information:

- Discussions with Yukuang personnel
- Inspection of the Olary Project area, including outcrop, drilling and sampling techniques, drill chips and drill core
- Review of exploration data collected by Yukuang
- Additional information from public domain sources.

2.4 Qualifications of SRK and SRK Team

The SRK Group comprises over 1,000 professionals, offering expertise in a wide range of resource engineering disciplines. The SRK Group's independence is ensured by the fact that it holds no equity in any project and that its ownership rests solely with its staff. This fact permits SRK to provide its clients with conflict-free and objective recommendations on crucial judgment issues. SRK has a demonstrated track record in undertaking independent assessments of Mineral Resources and Mineral Reserves, project evaluations and audits, technical reports and independent feasibility evaluations to bankable standards on behalf of exploration and mining companies and financial institutions worldwide. The SRK Group has also worked with a large number of major international mining companies and their projects, providing mining industry consultancy service inputs.

Part of the resource evaluation and compilation of this technical report was completed by Mr Paul Hunter, SRK Principal Geologist (MAusIMM(CP), membership number 109883). The geological interpretation was completed by Dr Gavin Chan (MAusIMM, membership number 300908) under the supervision of Mr Hunter. The resource estimation was completed by Mr Danny Kentwell, SRK Principal Geologist (FAusIMM, membership number 203401). By virtue of their education, membership to a recognised professional association and relevant work experience, Mr Hunter and Mr Kentwell are independent Qualified Persons as this term is defined by NI 43-101.

Mr Robin Simpson, (MAIG, membership number 3156), a Principal Geologist with SRK, reviewed drafts of this technical report prior to their delivery to Yukuang as per SRK internal quality management procedures. Mr Simpson did not visit the project.

2.4.1 Qualified Persons Certificates

The information in this report that relates to the Olary Iron Project Mineral Resource Estimate is based on information compiled by;

- Mr Paul Hunter, Geologist, Principal Consultant, SRK Consulting (Australasia) Pty Ltd (MAusIMM(CP), Membership number 109883)
- Mr Danny Kentwell, Geostatistician, Principal Consultant, SRK Consulting (Australasia) Pty Ltd (FAusIMM, membership number 203401).

The certificates of the Qualified Persons are included at the end of the Report.

2.5 Site Visits

In accordance with NI 43-101 guidelines, Mr Paul Hunter, M.Sc., MAusIMM (CP) and Mr Gavin Chan, PhD, GDip(AppFin), MAusIMM, who are full time employees of SRK, conducted 3 site visits to the Olary project site on 24-25 October 2011, 8-9 December 2011 and 18-19 May 2012, accompanied by Mr Pengxiang Xu of Yukuang.

The purpose of the site visits was to review the digitalisation of the exploration database and validation procedures, review exploration procedures and drilling practices, define geological modelling procedures, examine drill core, interview project personnel and to collect all relevant information for the preparation of a revised mineral resource model and the compilation of a technical report. During the visit, particular attention was given to the treatment of historical drilling data. The site visit also aimed at investigating the geological and structural controls on the distribution of the iron mineralisation in order to aid the construction of three dimensional iron mineralisation domains.

SRK was given full access to relevant data and conducted interviews of Yukuang personnel to obtain information on the past exploration work, in order to understand procedures used to collect, record, store and analyse historical and current exploration data.

2.6 Acknowledgement

SRK would like to acknowledge the support and collaboration provided by Yukuang personnel for this assignment. Their collaboration was greatly appreciated and instrumental to the success of this project.

2.7 Declaration

SRK's opinion contained herein and effective 20 August 2013, is based on information collected by SRK throughout the course of SRK's investigations, which in turn reflect various technical and economic conditions at the time of writing. Given the nature of the mining business, these conditions can change significantly over relatively short periods of time. Consequently, actual results may be significantly more or less favourable.

This report may include technical information that requires subsequent calculations to derive sub-totals, totals and weighted averages. Such calculations inherently involve a degree of rounding and consequently introduce a margin of error. Where these occur, SRK does not consider them to be material.

SRK is not an insider, associate or an affiliate of Yukuang, and neither SRK nor any affiliate has acted as advisor to Yukuang its subsidiaries or its affiliates in connection with this project. The results of the Mineral Resource Estimates by SRK are not dependent on any prior agreements concerning the conclusions to be reached, nor are there any undisclosed understandings concerning any future business dealings.

3 Reliance on Other Experts

Exploration has been completed by Yukuang. SRK was consulted by Yukuang from the beginning of the drilling programme to:

- Review the exploration plan
- Provide drilling and drillhole sampling guidelines and protocols
- Sample security advice.

SRK worked together with Yukuang throughout the drilling programme to ensure that appropriate standards occurred to meet the requirements of NI 43-101.

The Zhenzhou Institute of Multipurpose Utilisation of Mineral Resources was relied upon to provide metallurgical testwork results and opinions regarding analysis of magnetite and hematite recovery and Iron (Fe) grade obtained from composite samples.

SRK has not performed an independent verification of land title and tenure as summarised in Section 4 of this report and has instead relied upon information supplied by Yukuang. SRK did not verify the legality of any underlying agreement(s) that may exist concerning the permits or other agreement(s) between third parties, but have relied on information supplied by Yukuang.

SRK was informed by Yukuang that there are no known litigations potentially affecting the Olary Iron Project.

4 Property Description and Location

4.1 Mineral Tenure

The Olary Creek Project (the “Project”) is located approximately 70 km south of Broken Hill in South Australia. The Barrier Highway and the parallel Indian Pacific Railway are 40 km to the west of the Project. The Olary Iron Project Mineral Resource Estimate stated in this report pertains to the area in the north-east of EL4664, as shown in Figure 4-1.

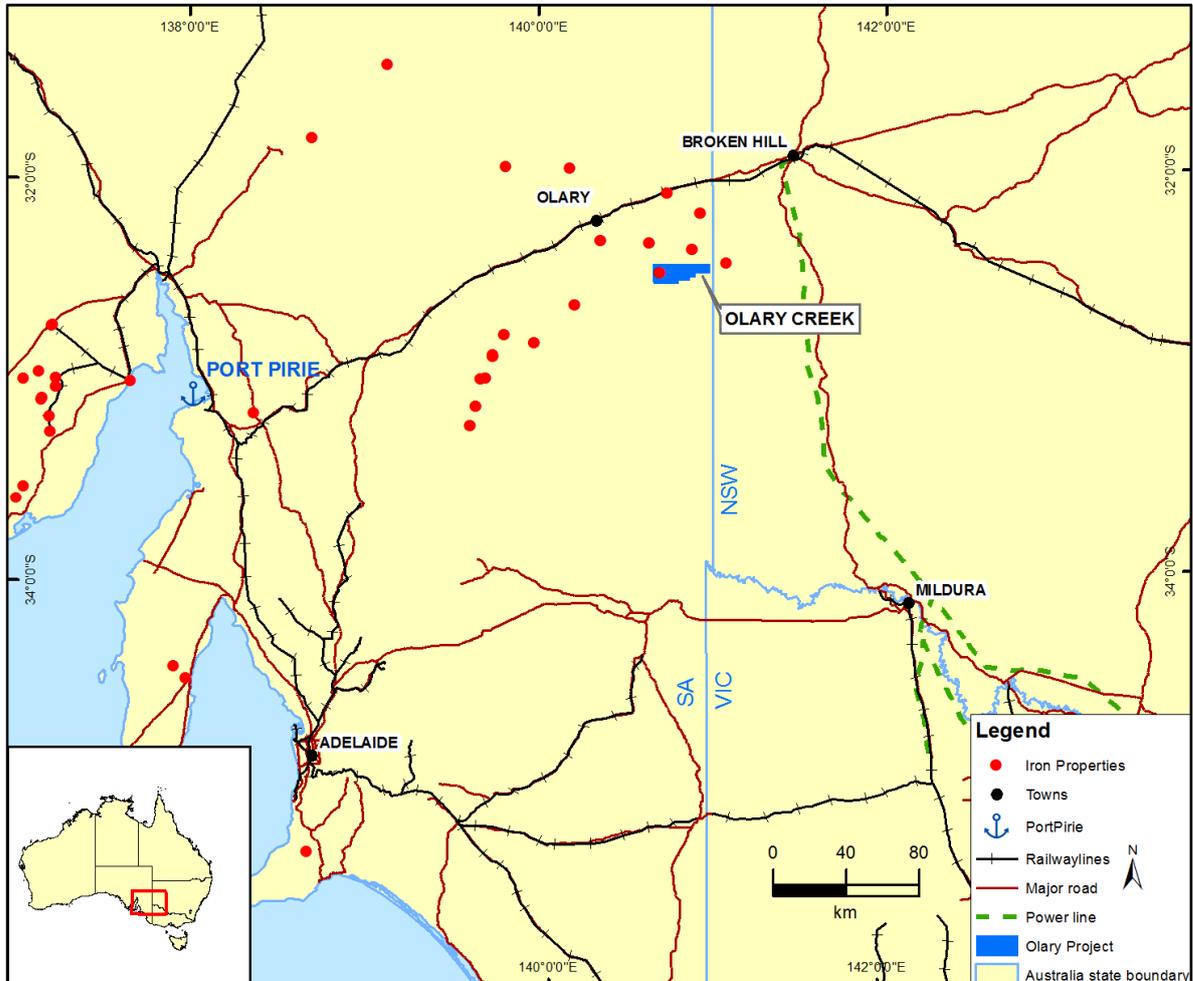


Figure 4-1: Location Map of the Olary Creek Project

Source: SRK, October 2012

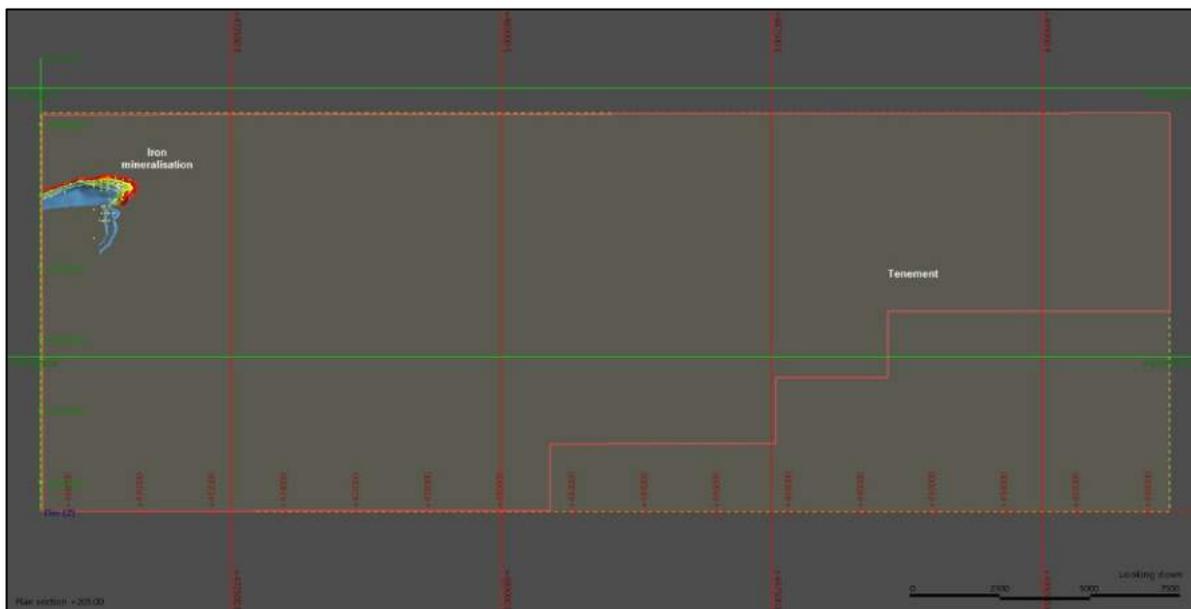
The Mineral Exploration Licence 4664 (EL4664, Table 4-1) was originally granted to Avocet Resources Limited (Avocet), then U3O8 Limited by the Department of Manufacturing, Innovation, Trade, Resources and Energy of the Government of South Australia on 8 February 2011. This Licence is valid for 2 years until 7 February 2013. The Licence covers an area of 280 km² and the listed target exploration commodity is uranium (Table 4-2). The Project is considered by Avocet to be prospective for uranium, copper and iron ore mineralisation. The Mineral Resource Statement within this report pertains to EL4664 and the location currently defined Olary Iron mineralisation is shown in Figure 4-2.

Table 4-1: EL4664 Mineral Tenure coordinates

Beacon	Longitude	Latitude	Beacon	Longitude	Latitude
1	140° 39' 00"	32° 30' 00"	6	140° 52' 00"	32° 34' 00"
2	140° 59' 00"	32° 30' 00"	7	140° 52' 00"	32° 35' 00"
3	140° 59' 00"	32° 33' 00"	8	140° 48' 00"	32° 35' 00"
4	140° 54' 00"	32° 33' 00"	9	140° 48' 00"	32° 36' 00"
5	140° 54' 00"	32° 34' 00"	10	140° 39' 00"	32° 36' 00"

Table 4-2: Mineral Tenure information

Tenement No	EL4664
Tenement Type	Mineral Exploration
Grant Date	08/02/2011
Expiry Date	07/02/2013
Area	280 km ²

**Figure 4-2: Mineral Tenure map of EL4664 showing location currently defined Olary iron mineralisation**

Source: SRK, October 2012

4.2 Underlying Agreements

In February 2010, Avocet has signed a Heads of Agreement (HoA) with Yukuang Australia (WA) Resources Pty Ltd to farm out the iron ore rights of the Olary Creek Project.

The terms of HoA are as follows.

- Yukuang to incur expenditure of \$5 million over a period not exceeding four years to earn a 75% interest of the iron ore on the tenement.
- Avocet to be paid \$100,000 on acceptance offer.
- Avocet to receive an annual payment of \$50,000 in each subsequent year until farm-in is complete.
- Avocet will be free carried to completion of a bankable feasibility study and decision to mine.

- Should Avocet elect not to contribute to mine development, its interest can be converted to a free on board royalty and/or reserve tonne royalty.
- Avocet retains the rights to other commodities on the tenement, including uranium and copper.

By September 2012, Yukuang has incurred expenditure of over \$5 million and has earned 75% ownership of the iron ore right of the Project.

4.3 Permits and Authorisation

4.3.1 South Australia Mining Act 1971

The Mining Act 1971 regulates all activities associated with mining in South Australia. The Act is administered by the Land Access Branch of the Department for Manufacturing, Innovation, Trade, Resources and Energy (DMITRE).

Exploration Lease

The details of exploration lease currently held by Avocet and its underlying agreement with Yukuang has been detailed in Section 4.1.

Mineral Claim

A Mineral Claim (MC) provides an exclusive right to prospect for minerals within the claim area for 12 months and to apply for a mining lease or retention lease over all of, or a portion of, the claim. Pegging an MC is the first step required in pegging a mining licence application in South Australia.

Pursuant to section 75 of the Mining Act, mineral claims and leases for extractive minerals can only be obtained by the freehold owner of the land, unless written consent from the freehold owner of land is obtained prior to any other party pegging a claim for extractive minerals. An exploration lease holder has the first right to minerals within their tenure.

A mineral claim cannot exceed 250 ha in area without prior approval from the Minister. Its length must not exceed five times its width and the maximum length of any side cannot exceed 2 km. A mineral claim must be pegged in a rectangular shape. If a claim is pegged out in an irregular shape, a letter which outlines the basis for an irregularly shaped claim is required to be submitted with the application.

A mineral claim lapses if an application for mining or retention is not made within 12 months of the registration date. If a claim lapses, the area cannot be re-pegged by the same person (or company) within two years without authority of the Minister or Warden's Court.

Mining Lease

If an MC is found to have an economic deposit of minerals, a Mining Lease (ML) must be obtained before mineral production can commence. The mining operator has 12 months from the date of registration of the MC to lodge their application for a ML with the Mining Registrar.

An ML gives the exclusive right to conduct mining operations and sell the minerals specified in conditions attached to the lease.

The maximum term for which a lease may be granted is 21 years; however it may be renewed if conditions of the lease have been complied with.

Retention Lease

A retention lease may be granted when, for economic or other prescribed reasons, it is not possible to work a deposit immediately. The applicant must provide sufficient justification for the grant of a retention lease over all or part of the claim area.

The maximum term for which a retention lease may be granted is five years; however, it may be renewed if conditions of the lease have been complied with.

Miscellaneous Purpose Licences

A Miscellaneous Purposes Licence (MPL) may be granted for any purpose directly relating to the conduct of mining operations.

MPLs may be used for ancillary purposes such as:

- For the carrying on of any business that may conduce to the effective conduct of mining operations or provide amenities for persons engaged in the conduct of mining operations
- For establishing and operating plant for the treatment of ore recovered in the course of mining operations
- For drainage from a mine
- For the disposal of overburden or any waste produced by mining operations
- Any other purpose ancillary to the conduct of mining operations.

A PEPR must accompany any MPL application. The maximum term for which an MPL may be granted is 21 years; however it may be renewed if conditions of the licence have been complied with.

4.3.2 Development (South Australia) Act 1993

The Development Act (SA) 1993 provides for planning and regulates development in the State, to regulate the use and management of land and buildings, and the design and construction of buildings; to make provision for the maintenance and conservation of land and buildings where appropriate; and for other purposes.

The Development Plan anticipates and encourages significant growth and sustainable development in the mining industry, particularly in the remote far north regions of the state.

4.3.3 Native Title (South Australia) Act 1994

The project area is subject to native title claims by Native Title claimants. Yukuang will need to enter into native title agreement with Native Title claimants prior to developing the Olary Iron project beyond the exploration phase. Work Area Clearances (WAC) have been undertaken within Exploration Licence EL4664.

4.3.4 Environment Protection Act 1993

All environmental legislation and liabilities can be referred to in Section 4.4.

4.3.5 Other Relevant State Legislation

There are a number of other South Australian Acts and policies that are, or may be, relevant to the infrastructure developments Yukuang may undertake in conjunction with the project.

These include:

- Radiation and Protection Control Act
- Aboriginal Heritage Act 1988
- Heritage Places Act 1993
- Mines and Works Inspection Act 1920
- Occupational Health and Safety and Welfare Act 1986

- Pastoral Land Management and Conservation Act 1989
- Country Fires Act 1989
- Explosives Act 1936
- Environment Protection (Air Quality) Policy 1994
- Public Environment and Health Act 1987
- Environmental Protection
- (Industrial Noise) Policy 1994.

4.4 Environmental Considerations

The conduct of exploration activities on EL4664 has been in accordance with the Department of Manufacturing, Innovation, Trade, Resources and Energy (DMITRE) environmental guidelines and approvals.

As part of the Mining Act, Yukuang were required to have an approved programme for environmental protection and rehabilitation (PEPR), prior to commencement of any exploration. The PEPR identifies all environmental, social and economic impacts that may result from the proposed exploration activities and how each of the identified impacts will be managed and avoided.

Consideration of the environment and minimising environmental impact has been a priority for Yukuang and any of their contractors while conducting exploration activities such as drilling.

4.5 Mining Rights in EL4664

Yukuang has the right to explore for Iron Ore within EL4664; however, a Mining Lease needs to be applied for before any Iron Ore mining can occur. Yukuang, in agreement with Avocet, has earned a 75% interest of the iron ore within EL4664. An EL is the principal title issued for exploration in South Australia and authorises Yukuang, subject to the Mining Act, Regulations and conditions of EL4664, to explore for iron ore.

There is a two-stage authorisation process for mining in South Australia. A Mining Lease must be applied for and must be supported by a 'Mineral Lease Proposal'. There is a detailed flowchart of the mining proposal approval processes provided by the DMITRE, which shows responsibilities of the applicant and of the Primary Industries and Regions of South Australia (PIRSA).

5 Accessibility, Climate, Local Resources, Infrastructure and Physiography

5.1 Accessibility

The Olary Iron Project is located approximately 70 km south-west of Broken Hill and 40 km southeast of Olary in South Australia (SA), within Exploration License (EL) 4664. The western boundary of EL4664 is 1.5 km from the border between SA and New South Wales (NSW). The closest commercial airfield is at Broken Hill. Broken Hill has a population of about 21,000 and is the closest major regional centre where main supplies are sourced. EL4664 can be accessed by approximately 55 km of sealed bitumen road from Broken Hill to Mutooroo, followed by approximately 40 km of unsealed road.

5.2 Local Resources and Infrastructure

Yukuang tenement EL4664 is located SE of Broken Hill, which is a major mining centre. Adelaide, which is the capital of SA, is approximately 440 km by road from EL4664.

The Olary deposit is approximately 35 km from the major rail line linking Broken Hill to Port Pirie and Adelaide.

The closest port facility is Port Pirie which has Capesize ship capacity and is 260 km from the Olary deposit. There are also port facilities further away at Adelaide. The SA Government (REISC, 2012) has proposed port facilities for the Yorke Peninsula, Port Bonython and Eyre Peninsula.

The 220 kilo Volt (kV) High Voltage transmission line that supplies electricity to Broken Hill is approximately 50 km east of the Olary Iron Project.

The Cooper Basin to Adelaide gas pipeline is approximately 140 km from the Olary Iron deposit.

5.3 Climate

The climate of the Olary Iron Project area is warm and dry and is considered to be a desert climate under the Koppen climate classification (Koppen, 2007). Summer temperatures are warm to hot and winter is cool to cold. The closest major regional centre to the Olary Iron deposit is Broken Hill, which has average maximum temperatures ranging from low 30s in summer, to cool minimum average winter temperatures of 5.4°C (Weatherzone, 2012). Long term monthly average monthly temperatures and rainfall, for Broken Hill, are displayed in Figure 5-1.

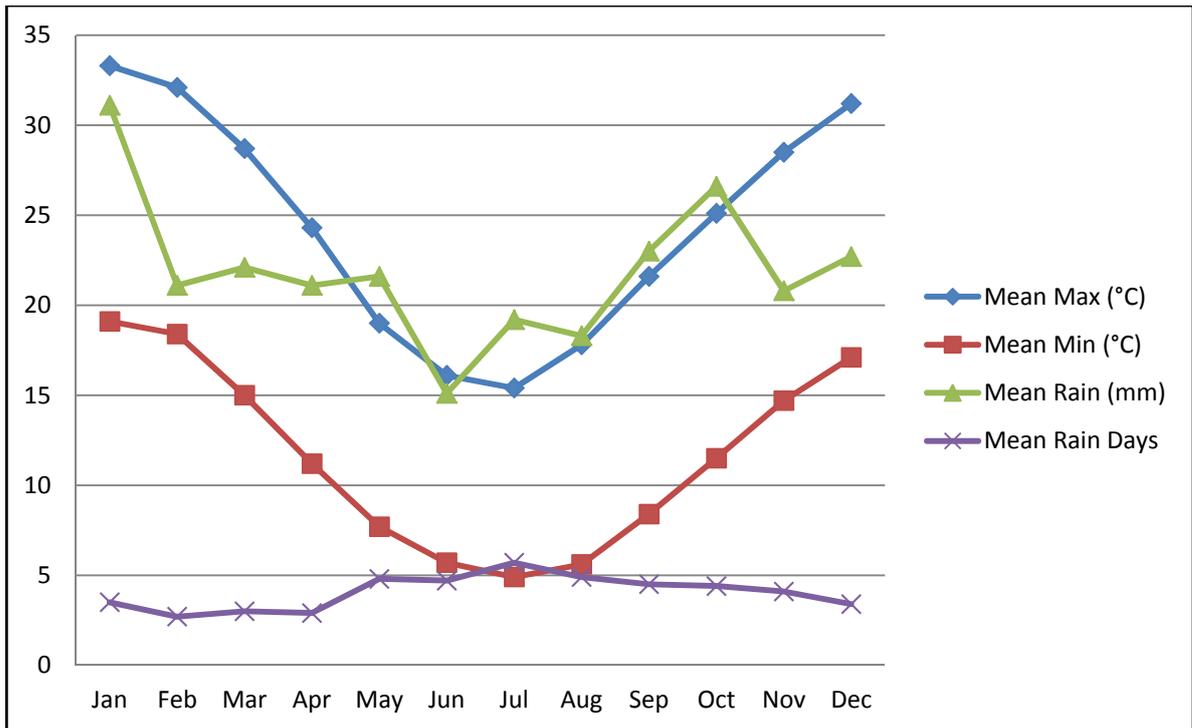


Figure 5-1: Broken Hill long term average temperature and rainfall

Source: Weatherzone, 2012

5.4 Physiography

EL4664 and is a part of the South Olary Plains region where the landscape is low relief open shrub land (Forward, 1996) as is displayed in Figure 5-2. The physiography of the Olary area is a low hill belt of crystalline and sedimentary rocks (Pain et al, 2011). Vegetation consists of low open shrub land with the dominant species being Grey, Black and Pearl Bluebush, Bladder Saltbush, Turpentine, Wards Weed, Rough Spear-grass, Spear-grass and Pin-bush Wattle (Forward, 1996). The Olary region is leased for pastoralism and is used for grazing and farming activities.



Figure 5-2: Typical landscape of the Olary Iron Project area

6 History

6.1 Previous government geological surveys

The geology of the Project area is described in the 1:25,000 scale Olary (SI 54-2) geological map and the 1:10,000 Oakvale geological map. The area is also covered by the regional aeromagnetic survey, which was flown by the Targeted Exploration Initiative, South Australia (TEISA) in 1999-2000 at 200 m spacing. In the regional aeromagnetic data, the Braemar facies ironstones show up as pronounced, curvilinear, high magnetic anomalies. The mostly covered Braemar facies ironstones appear to have been folded and extend discontinuously for at least 180 km (Figure 6-1).

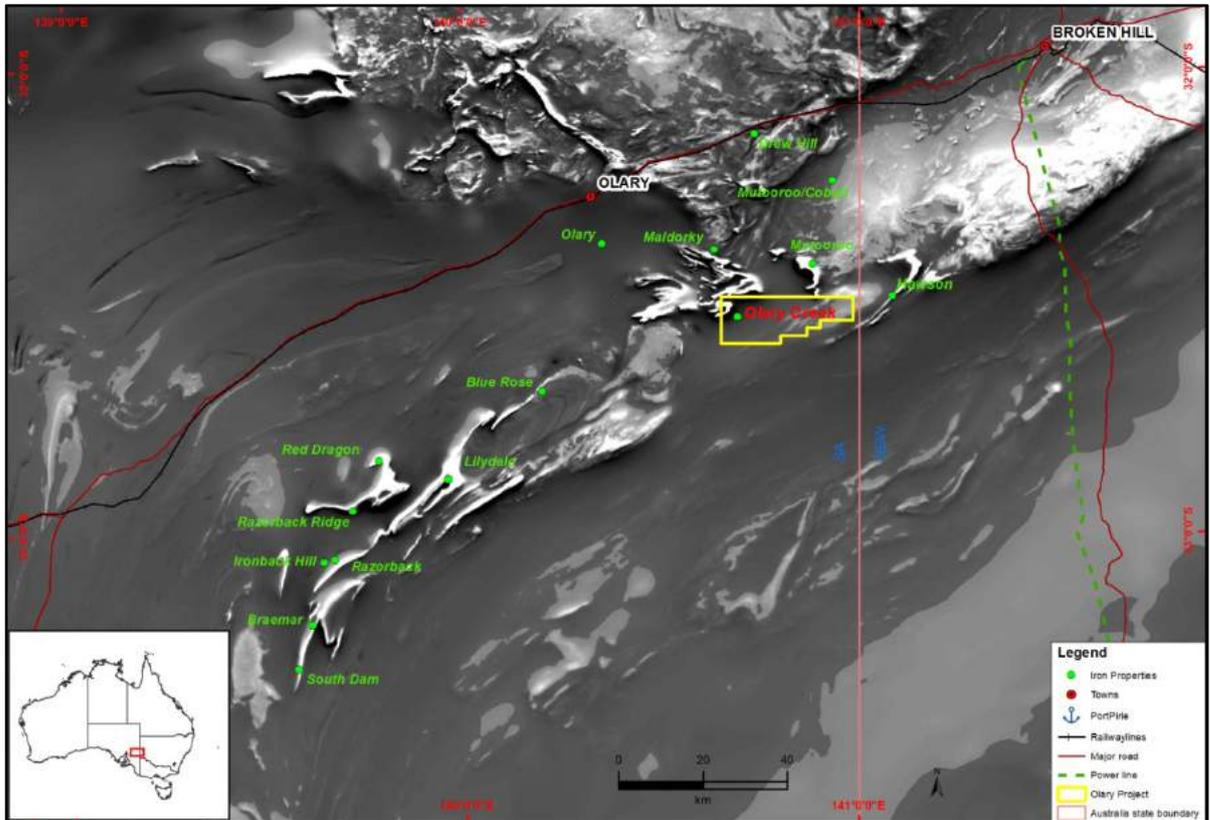


Figure 6-1: Regional magnetic survey highlights the presence of the Braemar facies ironstones

Source: SRK, October 2012

6.2 Drilling by Avocet Resources

In late 2010, Avocet Resources completed 6 Reverse Circulation (RC) holes for a total of 689 m (Table 6-1, Figure 6-2). These holes were variably spaced with the aim of testing the aeromagnetic anomalies identified on the regional magnetic survey map (Figure 6-1), as well as a weakly magnetic signature, regarded to be prospective of iron ore accumulation in a paleochannel.

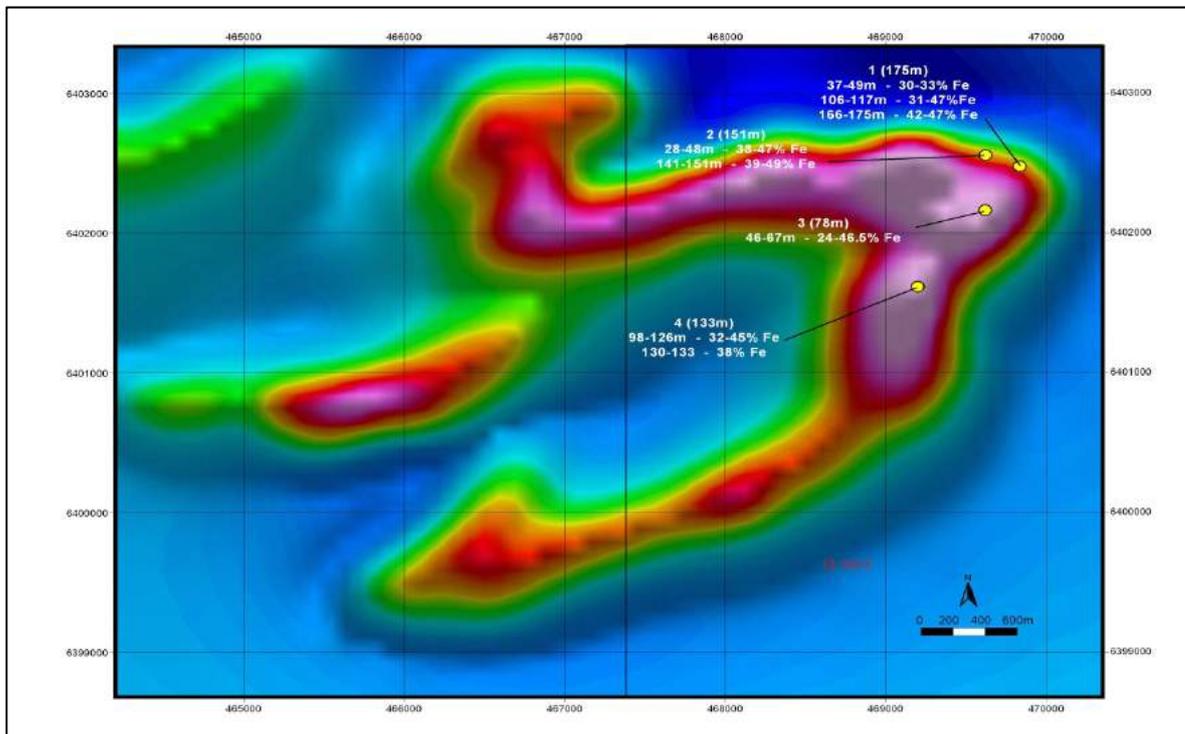


Figure 6-2: Location of the holes, targeting geophysical anomalies by Avocet in 2010

Source: Avocet Resources website, accessed October 2012

Table 6-1: Drillhole location completed by Avocet Resources in 2010

Hole ID	EOH	Northing	Easting	Dip	Azimuth
OCKRC01	175	6402413	469728	-70	225
OCKRC02	151	6402490	469523	-70	180
OCKRC03	79	6402113	469521	-70	45
OCKRC04	133	6401588	469119	-70	90
OCKRC05	94	6402120	469541	-70	45

Composite samples of up to 4 m were analysed at ALS Perth using XRF. Samples with a minimum head grade of 10% Fe were submitted to Davis Tube Recovery (DTR) analysis. The selection of samples for DTR analysis was also aided by magnetic susceptibility measurement which helped estimate the magnetic iron oxide content. Table 6-2 shows the DTR results.

Table 6-2: Assay results

Hole ID	From (m)	To (m)	Interval (m)	Average Head Fe%	DTR Analysis (%)					
					Fe% Concentrate	Mass Recovery%	SiO ₂	Al ₂ O ₃	P	S
OCKRC01	59	70	11	27.1	70.4	33.6	1.87	0.12	0.003	0.002
	86	90	4	14.7	68.1	16.4	4.76	0.27	0.006	0.003
	94	175	81	29	70.3	32.8	2.32	0.15	0.004	0.002
	incl 158	175	17	39.7	71.4	46.8	1.03	0.06	0.004	0.002
OCKRC02	0	87	87	28	No DTR test undertaken					
	incl 28	48	20	42.9	No DTR test undertaken					
	87	90	3	20.1	69.9	20.9	2.33	0.15	0.005	0.002
	114	151	37	37	24.5	28.6	2.72	0.18	0.005	0.003
OCKRC03	24	28	4	36.2	69.4	37.7	1.16	0.15	0.007	0.002
	53	64	11	41	70.3	42.9	1.13	0.1	0.003	0.001
OCKRC04	2	12	10	12.5	69	11.4	3.16	0.43	0.005	0.008
	15	40	25	19.5	68.5	22	4.07	0.44	0.009	0.002
	69	84	15	26.1	69	27.3	2.75	0.41	0.008	0.007
	98	126	28	36	69.5	40.8	3.05	0.32	0.018	0.01
	130	133	3	38.6	69.1	51	3.35	0.44	0.035	0.006
OCKRC05	60	64	4	42.7	69.5	31.1	0.87	0.11	0.013	0.001

6.3 Previous geophysical survey

A ground magnetic survey was completed over the area of interest in July 2011 by Yukuang (Figure 6-3). The survey was performed using a WCZ-1 Proton Magnetometer. Line and survey station spacing was 100 m and 20 m respectively. The survey was conducted between 467300E – 470400E and 6399700N – 6403200N, measuring 11.2 km².

The magnetic survey showed that there are at least three major magnetic layers, which together form an asymmetric east–northeast trending synform, that are further deformed by north–northeast trending open folds and a major east-west trending fault. The magnetic intensity of these layers vary along strike with distinctive positive anomalies occurring around the hinge zone and the eastern limb of the synform. The magnetic layers extend from the western margin of the tenement boundary, through the hinge zone and southward for an aggregate length of at least 5,000 m. The result of the magnetic survey formed the basis of the design of the following drill programmes by Yukuang.

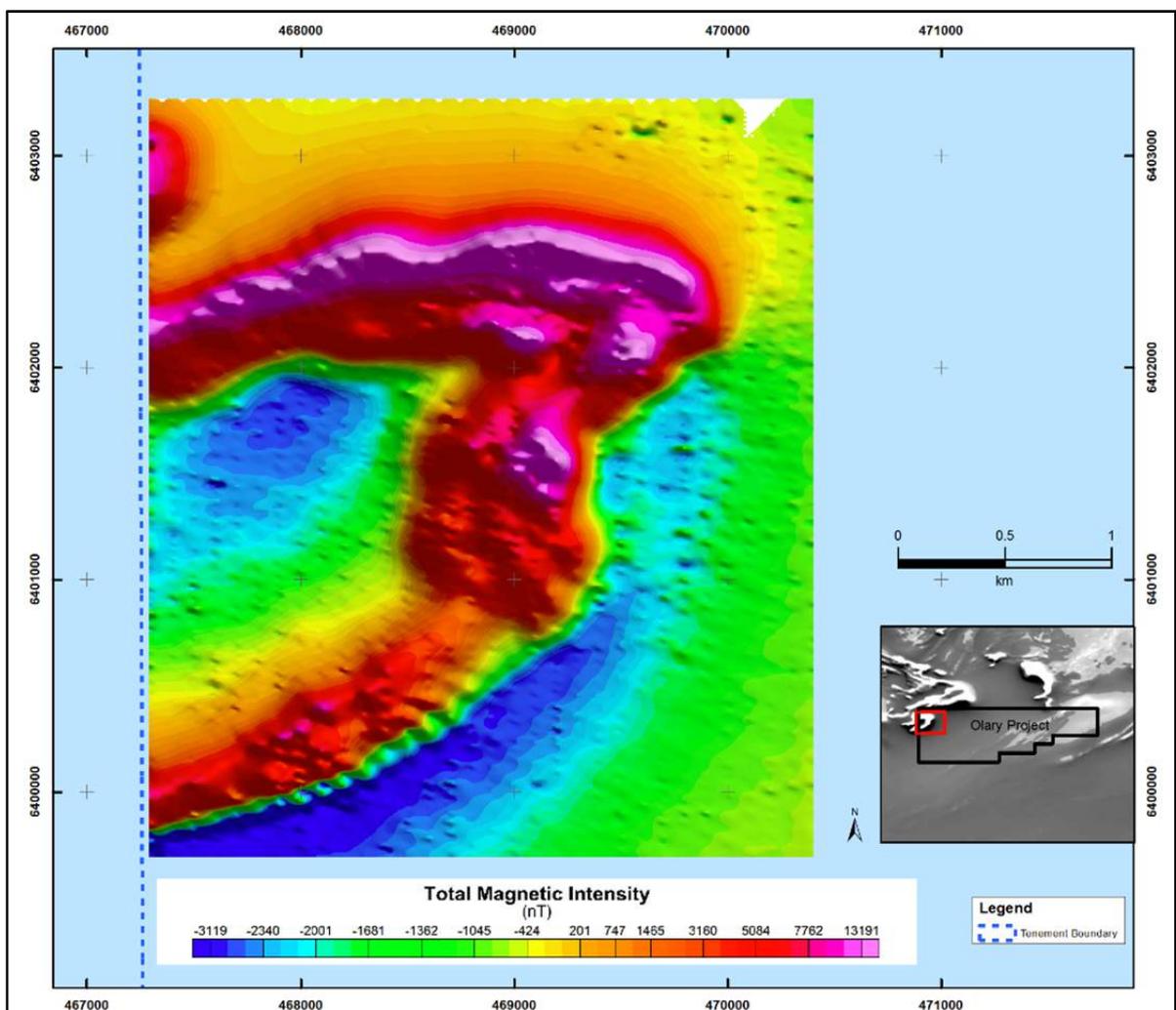


Figure 6-3: Ground magnetic survey highlights undertaken by Yukuang in 2011

7 Geological Setting and Mineralisation

7.1 Regional Geology

The Olary Project is located within the Adelaide Rift Complex that extends from the northernmost parts of the Flinders Ranges in the north to Kangaroo Island in the south. The sediments in the Complex overlie the Palaeoproterozoic to Mesoproterozoic metamorphic basement rocks and were deposited between Neoproterozoic and Cambrian times (Preiss et al., 1993).

This sedimentary succession preserves evidence for two major glaciations during the Neoproterozoic: the Sturtian and Marinoan glaciations (Preiss et al., 1993). The Sturtian glaciation is manifested in the Umberatana Group that consists of diamictite, siltstone, orthoquartzite and dolomitic and ferruginous units in places, and extends from the central Flinders Ranges to the Yunta-Olary region in eastern South Australia (Preiss et al., 1993).

In the Yunta–Olary region, the ferruginous units are known as the Braemar ironstone facies. The iron ore units form four to six lenticular units and grade into the host diamictites and siltstones with decreasing iron contents and also contain dolostone and quartzite beds (Lottermoser and Ashley, 2000). These ironstone units crop out in places, such as at Razorback Ridge, south of Yunta, and form prominent features on aeromagnetic images.

The Adelaide Rift Complex has experienced at least five phases of deformation (Paul et al., 2000). In the Mesoproterozoic Olarian Orogeny (D1-D3), a strong east to northeast trending structural pattern was developed. The deformation associated with the Delamerian Orogeny has been recorded in the Neoproterozoic sequences which include early north-south trending upright folds (F4) and an associated axial planar schistosity formed during D4. This was followed by the formation of the southwest–northeast trending F5 folds during D5 (Foden et al., 2006).



Figure 7-1: Regional Geology setting

Source: SRK, October 2012

7.2 Property Geology

The oldest rocks in the Project are a sequence of rhyolitic and andesitic volcanics which is overlain disconformably by tuffaceous and arkosic sandstones, siltstones and conglomerates of the Burra Group. These rocks form a northeast trending ridge, known as the Mutooroo Ridge in the eastern part of the Project area, and are characterised by steep foliation and tight folds.

The Braemar facies rocks are present in the western part of the Project area. Ground magnetic survey showed that the ferruginous units form a northeast- trending asymmetric synform.

Intrusive rocks observed in the project area include tholeiitic basaltic and doleritic dykes which might be part of the regional Neoproterozoic Gairdner Dyke Swarm.

The entire sequence is further capped by calcrete, clay and sand. A paleochannel, possibly prospective for roll-front type uranium mineralisation, is interpreted to cross cut the western part of the tenement. The dimension of the paleo-channel system is interpreted to be few kilometres wide and diminishes when it moves north (U3O8, 2012).

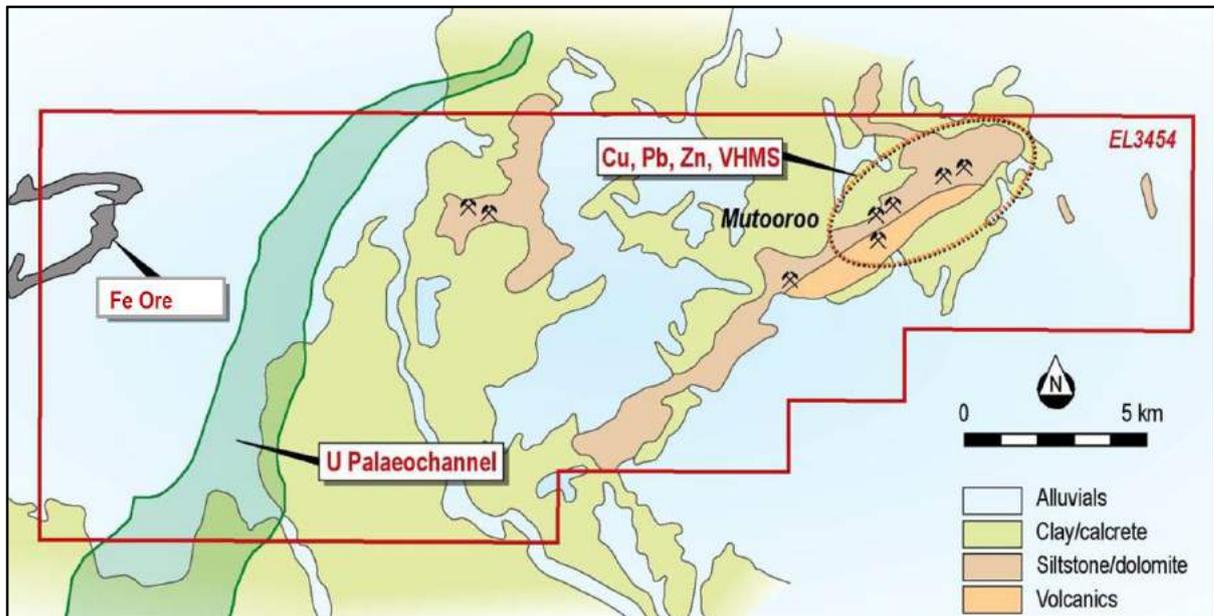


Figure 7-2: Local Geology setting

Source: After U3O8, 2012

7.2.1 Stratigraphy

The geometry of the Braemar ironstone facies is strongly controlled by an asymmetric east-northeast trending synform and by northeast trending open folds to a lesser extent. The northern limb of the synform dips moderately to steeply to the south, whereas the eastern limb dips moderately to the west. Given the abrupt change of the stratigraphy and a sharp change of the ground magnetic survey signal, an east-west trending subvertical fault is interpreted to subdivide the mineralisation into the north and South Zones.

With the exception of a few exposures cropped out along the northern limb of the asymmetric synform in the North Zone, the mineralisation is covered by Quaternary sediments, 3 to 50 m thick. Typical rock types can be largely divided into three groups: Fe-oxide metasiltstone, metasiltstone and basaltic to doleritic rock (Figure 6-7).

Figure 7-3 shows a total magnetic intensity (TMI) image of the Olary Project area, showing the key magnetic units, interpreted fault, drillhole collars and locations of cross sections. Figure 7-4, Figure 7-5 and Figure 7-6 show cross sections through the deposit.

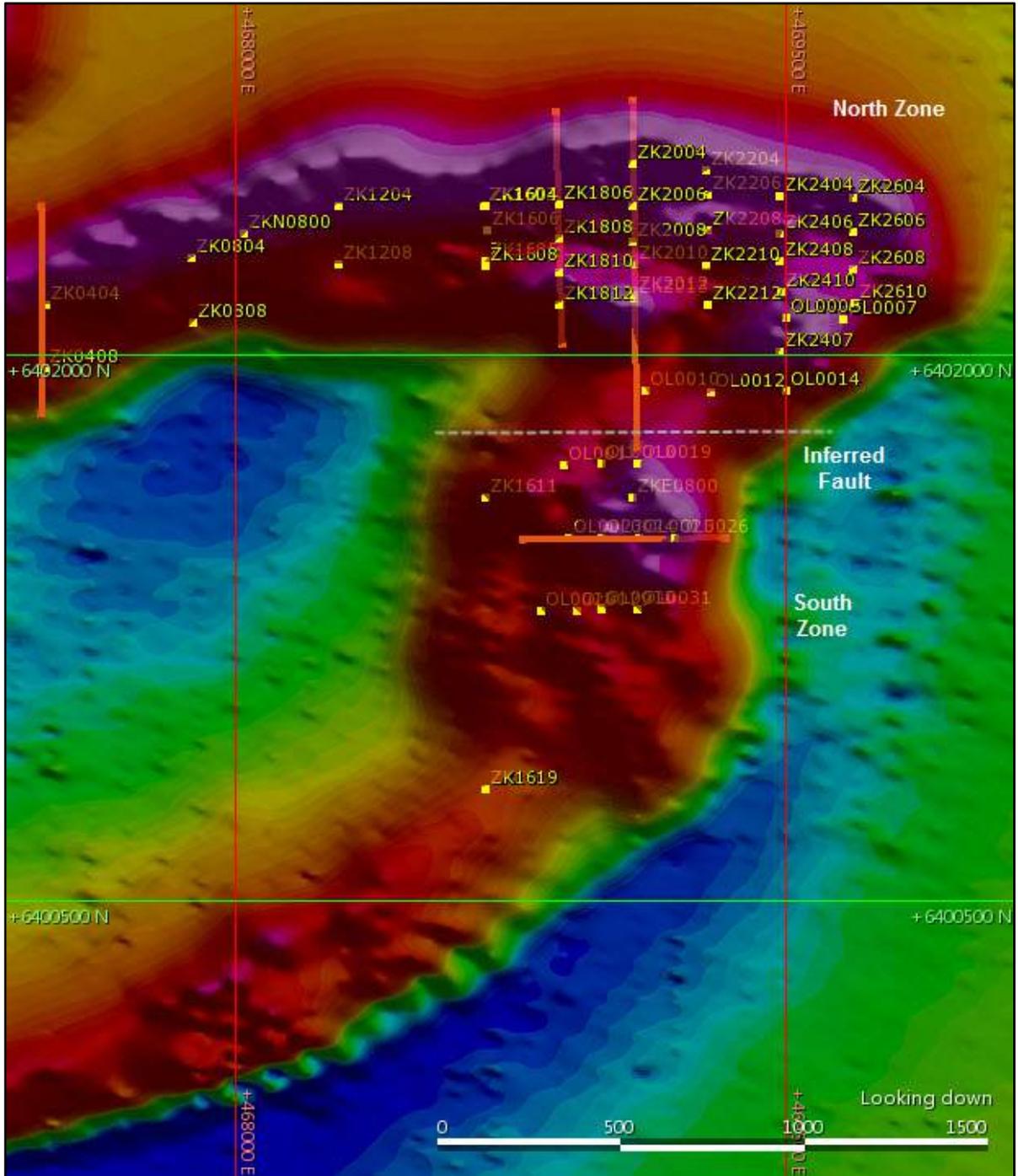


Figure 7-3: Total magnetic intensity (TMI) image of the Olary deposit, showing drillhole collars, interpreted fault and location of cross sections

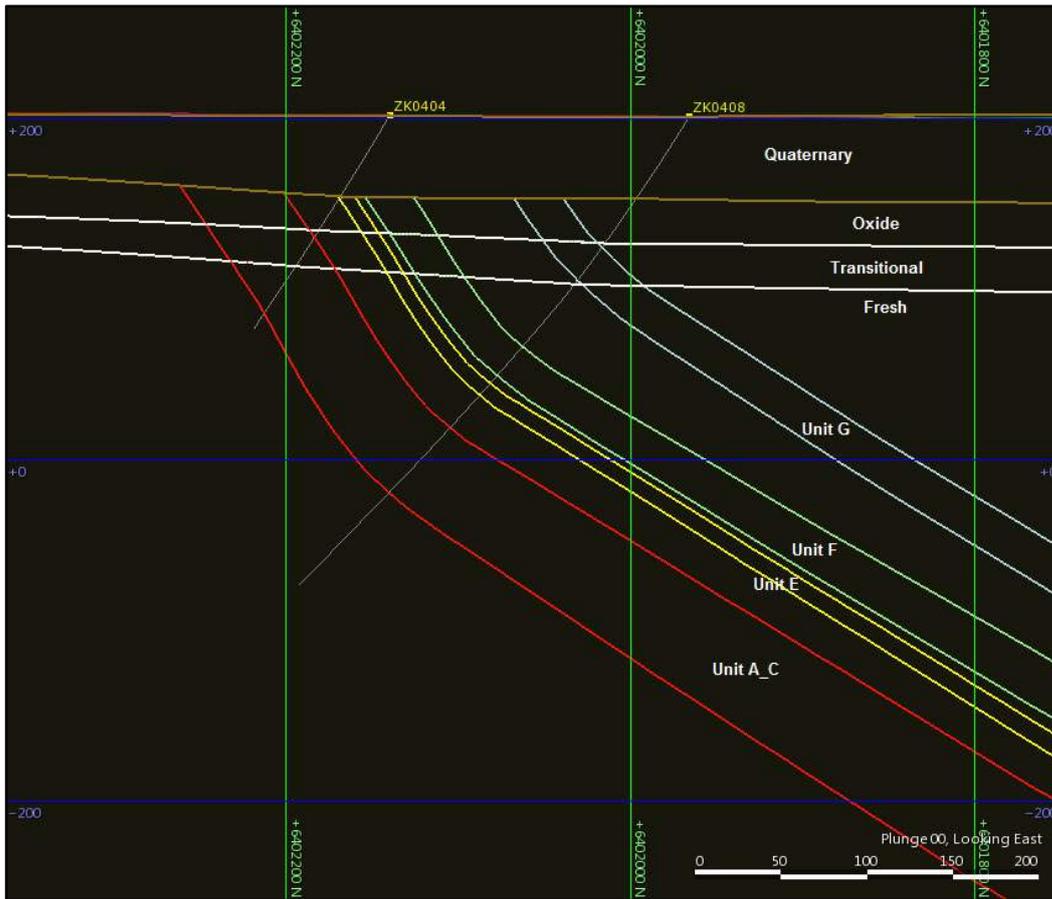


Figure 7-4: Cross section at exploration Line 4 of the North Zone

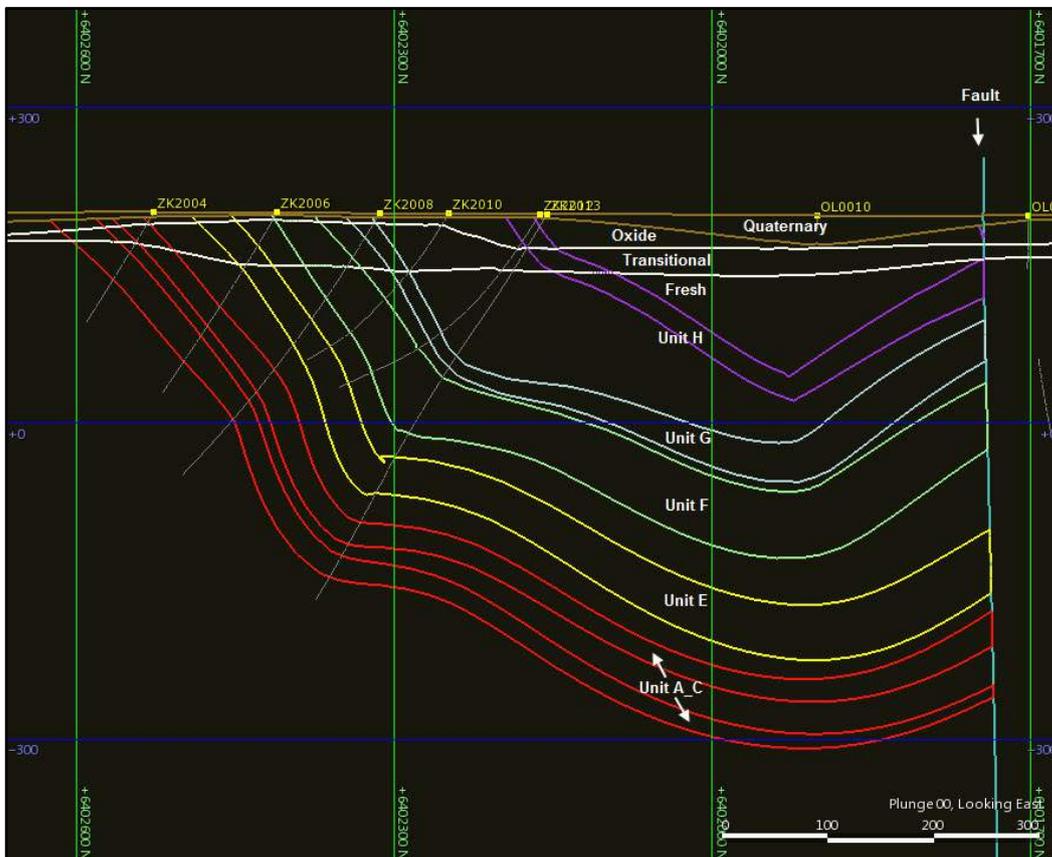


Figure 7-5: Cross section at Line 20 of the North Zone

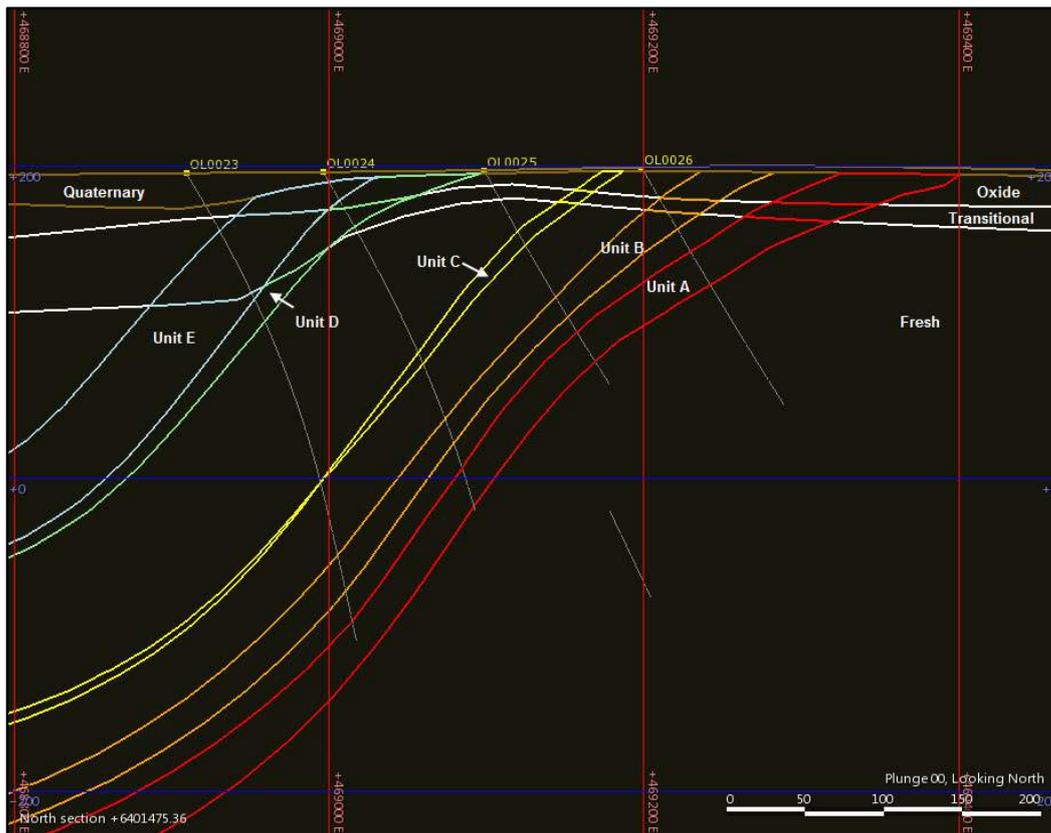


Figure 7-6: Cross section at 6401475N, showing the ore units in the South Zone

Fe-oxide metasilstone

The ore units are represented by Fe-oxide metasilstones, which are laminated with a granoblastic texture. The granoblastic texture is interpreted to be a result of pervasive recrystallisation of clay-poor ferruginous sedimentary protoliths (Crawford, 2012). The Fe-oxides are mostly subhedral and fine-grained (<0.1 mm). Deeper samples in the fresh zone are entirely magnetite, with no alteration or insignificant amounts of hematite alteration. Fe-oxides in the shallower samples from the oxide or transition zones contain both magnetite and hematite that together present as peak metamorphic phases. Coarser magnetite grains in these shallower zones have preserved fresh cores, but the rims are mostly replaced by maghemite. This is further overprinted by silvery hematite along fractures. Occasionally, the samples are transected by goethite veinlets.

The thickness of the ore units ranges from 10 to 60 m. In the North Zone, the ore units extend from the tenement boundary in the west through the hinge zone of the synform to the major east–west trending fault for an aggregated length of approximately 3,000 m. In the South Zone, drilling to date shows that the ore units extent for at least 800 m, but ground magnetics survey and stratigraphy hole drilling indicate that the ore units might extend for another 2,000 m.

Metasilstone

The ore units are interbedded with metasilstone and quartz-biotite-carbonate±muscovite±chlorite schist. These rocks are derived from less ferruginous, muddy and carbonate-bearing fine-grained sediments. The dominant mineral assemblage is quartz and biotite, with recrystallised, very fine-grained anhedral carbonate varying from a very minor phase to a volumetrically significant phase, making up to 10-15 modal%. Occasional angular to sub-angular quartzose or carbonate clasts are preserved in some samples.

These clasts probably represent dropstones, indicative of a glacial origin of the protolith (Lottmøster & Ashley, 2000). The thickness of the metasiltstone/schist ranges from 20 to 60 m.

The contact between Fe-rich beds and metasediments/schists is commonly gradational with magnetite decreasing and abundances of quartz and silicates increasing. Sedimentary structures commonly present include microfaulting and micro- to meso-scale folding of laminae, probably a result of soft-deformation.

Basaltic to doleritic rock

The entire sequence is cut by basaltic to doleritic rocks with 10-15modal% of former olivine phenocrysts (Crawford, 2012). In drill core, it is clearly shown that the olivine-phyric dykes cut the metamorphic banding, suggesting a post-metamorphic timing for this basaltic magmatism. The rocks also show quenched groundmass texture, indicative of marginal facies of shallowly emplaced basaltic dykes, with local brecciation and melt crack-fill textures. The thickness of the doleritic dykes ranges from few centimetres to up to a metre.



Figure 7-7: Typical rock types at the Olary deposit*

* 69.2 m: a recrystallised, fine-grained, foliated Fe-rich metasilstone; 108.3m: a thoroughly recrystallised, weakly foliated quartz-biotite-carbonate schist with sparse magnetite (2-4 modal%); 119.2 m: a finely laminated granoblastic metasilstone with up to 50-55 modal% Fe; 121.9 m: an intrusive contact between an olivine-phyric quenched basaltic dyke margin and a finely banded granoblastic metasilstone; 155.5 m: ?diamictic fine-grained weakly foliated quartz-chlorite schist; 167.9 m: a massive granoblastic metasilstone with relatively coarse with khaki biotite porphyroblasts; 182.2 m: a weakly banded metasilstone in which bands reflect relative abundance of biotite.

7.3 Weathering

Weathering typically extends to approximately 60 to 80 m depth from surface significantly modifying the ore mineralogy. The weathering profile thickness through the deposit appears to become deeper towards the core of the synform.

Three distinct domains have been mapped across the deposit reflecting degrees of weathering: Oxide, Transitional and Fresh. The contact between each zone is gradational.

7.4 Metamorphism

The entire package of rocks has undergone regional metamorphism and deformation. The metamorphic mineral assemblage suggests greenschist facies conditions. However, petrographic study found that chlorite-biotite-carbonate-muscovite aggregates replace possible cordierite porphyroblasts in some of the samples, indicating that the rock reached a peak amphibolite facies metamorphism, but subsequently underwent pervasive retrogression to greenschist facies assemblages.

8 Deposit Types

The iron ore deposit at Olary is an example of Neoproterozoic ironstones that are related to glaciation and formed during the “Snowball Earth” period (Hoffman et al., 1998), when there was a global-scale glaciation even at low latitudes. The Braemar facies ironstone is envisaged to have accumulated in a marine basin along the border of a continental glaciated highland and a low-lying weathered landmass. The interlayering relationships between dolostones, manganese siltstones, ironstones and diamictites are related to a transgressive event during a postglacial period (Lottermoser & Ashley, 2000).

Hydrothermal exhalations added significant amounts of Fe and other metals to Neoproterozoic seawater. When the climate changed from deep refrigeration to slightly warmer temperatures, melting of floating ice led to an influx of clastic detritus and deposition of glaciomarine sediments. Oxygenation of the ferriferous seawaters led to the precipitation of dissolved Fe as laminated ironstones and as matrix of diamictic ironstones (Lottermoser & Ashley, 2000).

8.1 Regional Deposits

The major deposits of potential economic importance in the region include Royal Resources’ Razorback Iron Project, Minotaur Exploration’s Muster Dam Deposit and Carpentaria’s Hawsons Project. None of these projects are currently producing saleable iron ore concentrate (Figure 8-1).

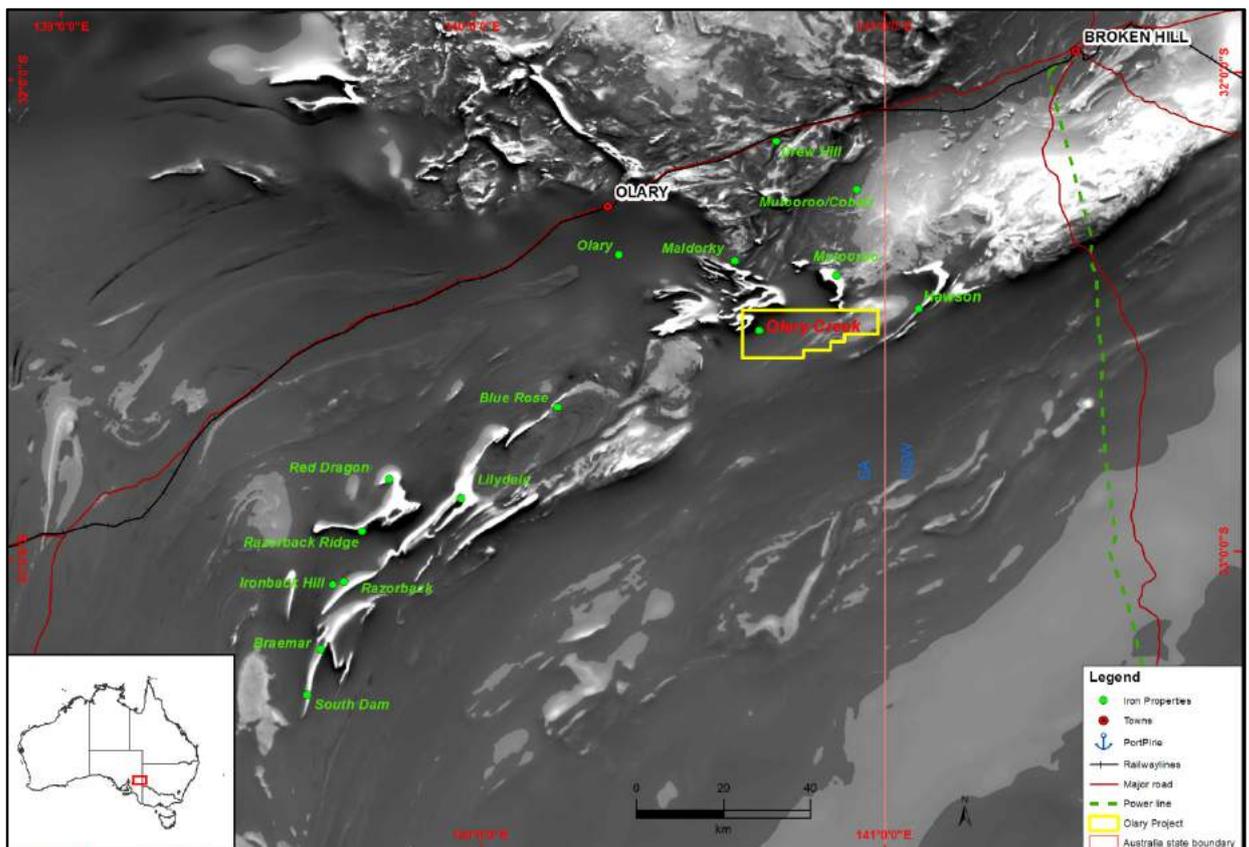


Figure 8-1: Braemar facies ironstone projects in the region

Source: SRK, October 2012

9 Exploration

With the exception of ground magnetic survey undertaken at the site in 2011, all exploration activities have been through drilling methods. The previous exploration phases are described in Section 6. Drilling programmes undertaken are described in Section 10.

10 Drilling

10.1 Drilling Methods

The Olary Iron deposit drilling included in the Mineral Resource estimate consists of 55 drillholes which were drilled, under contract by Yukuang, using Diamond and Reverse Circulation (RC) drilling methods. The majority, 76%, of drilled metres was by the diamond drilling method and the remaining 24% was by RC. All drilling used in the Olary Iron Mineral Resource estimate has been recently completed and therefore has had modern Quality Assurance and Quality Control programmes utilised. The drilling was completed in two programmes: from July 2011 to January 2012, and May to August 2012. A total of 16,281 m was drilled as tabulated by drillhole method in Table 10-1.

Table 10-1: Drillhole method, quantity and depth

Drilling method		Number of drillholes	Total depth (m)
Diamond		28	7,713
Reverse Circulation (RC)		10	2,246
RC/Diamond Tail	RC	17	1,707
	Diamond Tail		4,615
Total		55	16,281

Diamond drilling used HQ size core for the top 10 to 50 m, followed by NQ for the remainder of the drillhole. RC drilling utilised a 140 mm diameter drill bit.

10.2 Collar Surveys

All drillholes were picked up using a Differential Global Positioning System (DGPS). Collar surveys are displayed in Table 10-2.

Table 10-2: Collar co-ordinates for Olary Iron Project

Hole ID	Easting	Northing	RL	EOH	RC_End	Drill type	Dip	Azimuth	Completion Date
OL0005	469498.71	6402104.26	197.3	302.4	-	DD	-60	90	2011
OL0014	469500.86	6401900.81	196.6	200.0	-	DD	-60	90	2011
OL0017	468897.28	6401698.98	195.3	393.4	-	DD	-60	90	2011
OL0018	468997.75	6401700.06	195.9	267.4	-	DD	-60	90	2011
OL0019	469097.32	6401701.12	197.3	174.4	-	DD	-60	90	2011
OL0025	469098.33	6401499.70	197.41	159.0	-	DD	-60	90	2011
OL0026	469198.49	6401499.77	199.00	177.0	-	DD	-60	90	2011
OL0030	468999.01	6401300.08	196.1	275.5	-	DD	-60	90	2011
OL0031	469096.79	6401300.63	196.3	206.5	-	DD	-60	90	2011
ZK1204	468280.69	6402410.04	201.3	153.4	-	DD	-60	360	2011
ZK1208	468283.50	6402250.49	199.2	351.4	-	DD	-60	360	2011
ZK1603	468679.74	6402409.64	202.0	309.5	-	DD	-90	180	2011
ZK1604	468681.73	6402410.32	202.38	189.5	-	DD	-60	360	2011
ZK1605	468680.64	6402260.21	200.68	489.5	-	DD	-90	180	2011
ZK1608	468683.51	6402245.28	200.77	351.5	-	DD	-60	360	2011
ZK1611	468681.19	6401607.49	193.7	702.5	-	DD	-90	360	2011
ZK1619	468680.91	6400808.20	190.5	453.3	-	DD	-80	180	2011

Hole ID	Easting	Northing	RL	EOH	RC_End	Drill type	Dip	Azimuth	Completion Date
ZK2006	469083.64	6402410.37	200.03	201.4	-	DD	-60	360	2011
ZK2008	469084.14	6402313.85	199.23	312.0	-	DD	-60	360	2011
ZK2404	469483.37	6402434.78	199.58	165.2	-	DD	-60	360	2011
ZK2406	469484.55	6402332.63	198.92	245.8	-	DD	-60	360	2011
ZK2407	469484.49	6402009.30	197.01	296.0	-	DD	-60	120	2011
ZKE0800	469080.47	6401610.84	197.0	454.0	-	DD	-60	120	2011
ZKN0800	468024.72	6402332.99	201.7	222.4	-	DD	-70	360	2011
OL0007	469658.48	6402097.79	196.8	229.0	164.0	RC/DD	-60	90	2012
OL0010	469117.97	6401901.11	197.3	505.0	223.0	RC/DD	-60	90	2012
OL0012	469297.58	6401898.27	197.9	498.7	300.0	RC/DD	-60	90	2012
OL0023	468909.01	6401498.92	195.6	348.7	238.0	RC/DD	-60	145	2012
OL0024	468996.05	6401499.32	196.2	240.0	-	RC	-60	90	2012
OL0028	468834.12	6401299.54	194.8	489.1	222.0	RC/DD	-60	90	2012
OL0029	468929.24	6401296.34	195.6	492.0	300.0	RC	-60	90	2012
ZK0404	467484.61	6402139.84	202.4	148.0	148.0	RC	-60	360	2012
ZK0408	467482.26	6401965.65	201.6	357.5	136.0	RC/DD	-60	360	2012
ZK0804	467883.49	6402265.42	202.5	148.0	-	RC	-60	360	2012
ZK0808	467885.12	6402088.66	201.0	366.6	270.0	RC/DD	-60	360	2012
ZK1606	468686.31	6402340.99	200.6	238.0	238.0	RC	-60	360	2012
ZK1806	468881.95	6402416.03	202.0	174.9	-	DD	-60	360	2012
ZK1808	468881.85	6402319.05	200.8	253.0	-	DD	-60	360	2012
ZK1810	468883.72	6402229.06	200.2	327.8	238.0	RC/DD	-60	360	2012
ZK1812	468884.51	6402139.41	199.3	412.0	178.0	RC/DD	-60	360	2012
ZK2004	469082.75	6402526.43	200.7	123.5	-	DD	-60	360	2012
ZK2010	469086.09	6402248.38	199.1	334.0	202.0	RC/DD	-60	360	2012
ZK2012	469085.81	6402162.91	198.6	256.0	244.0	RC/DD	-60	360	2012
ZK2013	469085.23	6402156.01	198.5	427.0	300.0	RC/DD	-60	360	2012
ZK2204	469284.07	6402506.79	198.7	94.0	-	RC	-60	360	2012
ZK2206	469285.52	6402439.05	198.5	172.0	-	RC	-60	360	2012
ZK2208	469285.23	6402344.17	198.7	220.0	-	RC	-60	360	2012
ZK2210	469284.98	6402244.07	202.0	334.0	178.0	RC/DD	-60	360	2012
ZK2212	469285.89	6402139.33	204.0	420.0	250.0	RC/DD	-60	360	2012
ZK2408	469484.41	6402257.24	198.9	300.0	-	RC	-60	360	2012
ZK2410	469485.72	6402173.46	197.6	406.0	299.0	RC/DD	-60	360	2012
ZK2604	469684.01	6402433.54	198.0	108.8	-	DD	-60	360	2012
ZK2606	469682.99	6402336.95	198.1	194.0	-	RC	-60	360	2012
ZK2608	469684.62	6402238.41	197.4	264.8	237.0	RC/DD	-60	360	2012
ZK2610	469685.62	6402143.41	196.8	346.0	250.0	RC/DD	-60	360	2012

10.3 Downhole Surveys

The gyroscopic logging method for downhole surveys was used for 41 drillholes and the downhole camera method was used for the remaining 14 drillholes, where the gyroscope could not re-enter the drillhole. The downhole camera surveys were taken at different intervals of 50 m, 100 m or end-of-hole. The presence of magnetite in the rock can deflect the magnetic bearings of the downhole camera and therefore, 5 drillholes utilised the planned bearing instead of the camera bearing. The remaining 9 holes used the downhole camera bearings where it was considered that the influence of magnetite would not be significant.

Downhole surveys for gyro, density, magnetic susceptibility and hole diameter were completed by GAA Wireline. Readings were taken every 1 cm, which were then composited to 3 m intervals.

SRK considered that it was important to gyroscope as many drillholes as possible due to the effects of magnetite and the quite large drillhole deviations observed in some drillholes in the southern limb of the syncline (Figure 10-1). A majority, 75%, of drillholes have been accurately surveyed using a gyroscope. The traces of the remaining 14 drillholes, which have been camera surveyed, have been compared with those using the gyroscope and SRK considers that the potential error in location of drillholes is not significant.

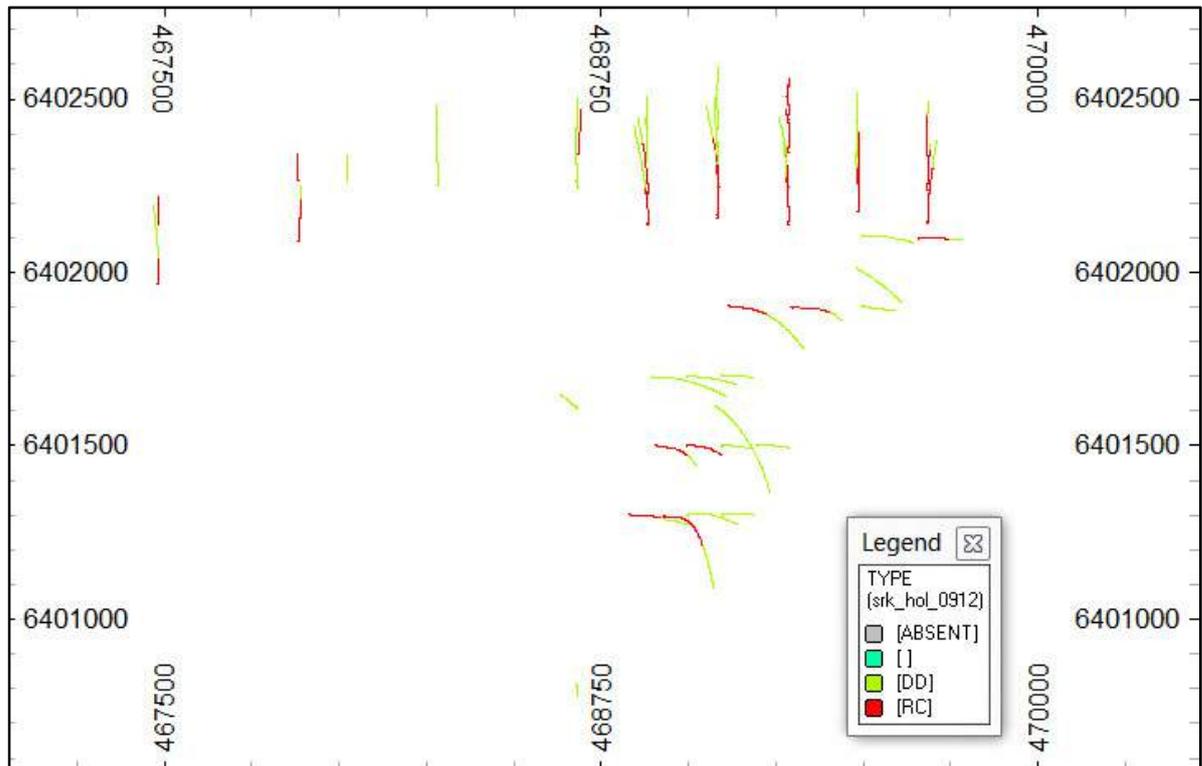


Figure 10-1: Drillhole plan of the Olary Iron Project

10.4 Recoveries and Rock Quality

For up to 6 m from the surface, core was not recovered due to the difficulty of establishing collar casing in poorly consolidated soil and rock. The top 6 m were not used in the Mineral Resource Estimate as this was within the oxide zone, and could not be recovered. Apart from the first few metres of poorly consolidated material, core recoveries were very good, averaging 99%.

To measure RC recoveries, 5807 RC samples were weighed including 96% of the RC drillholes. RC sample masses from fresh and transitional material – the zones within the Olary Iron Mineral Resource estimate – are combined and plotted in Figure 10-2 as a histogram. The histogram demonstrates close to a normal distribution and sample mass variation is expected due to the variance of density. The average of all the RC samples was 38.0 kg. SRK’s observation of the RC sampling operation showed very little wastage via dust, minimum loss at the cyclone and consistent sample mass. SRK’s opinion was a high sample recovery during the RC operation. The majority of the RC samples were dry.

Recovery logs for diamond and RC drilling indicate appropriate recovery for resource estimation purposes.

Rock quality is good with dominantly competent rocks. Rock Quality Determinations (RQDs) were collected routinely for all diamond drillholes. The average RQD was 76 for the 1,602 measurements taken. Yukuang has recorded some zones of very broken ground; however, these are uncommon in unweathered material.

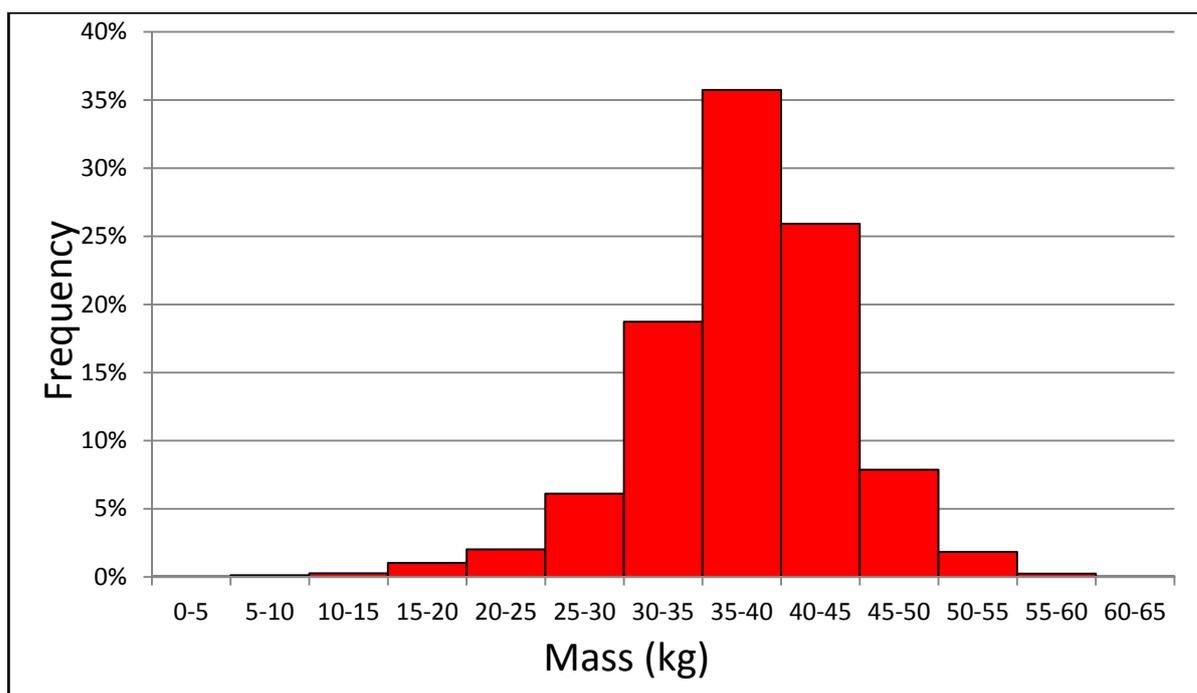


Figure 10-2: Reverse circulation sample mass histogram for Fresh and Transitional samples

10.5 Trenching

No trenching samples were taken within EL4664.

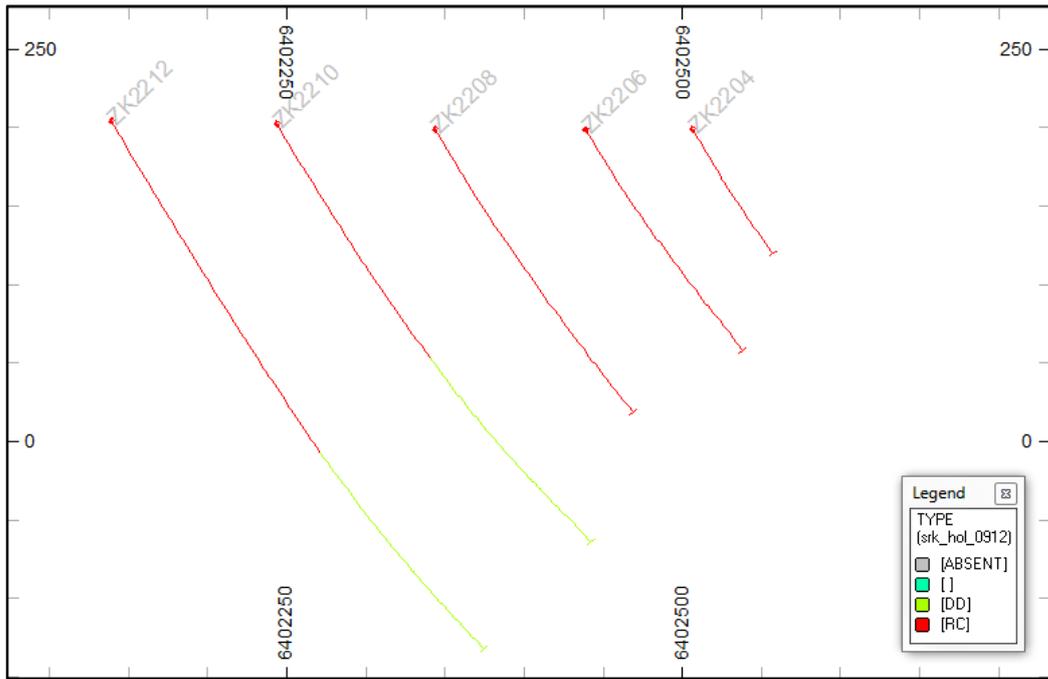


Figure 10-4: Typical cross section drillhole pattern and type for Indicated Mineral Resources

10.8 SRK Comments

A long section of the drillhole pattern for the North limb of the syncline is shown in Figure 10-5. The drilling pattern shows the three spaced sections on the western end of the pattern. SRK notes that the deposit is open to the west, although this is constrained by the EL4664 boundary, and to the south, corresponding to the extensions of the northern and southern limbs of the syncline.

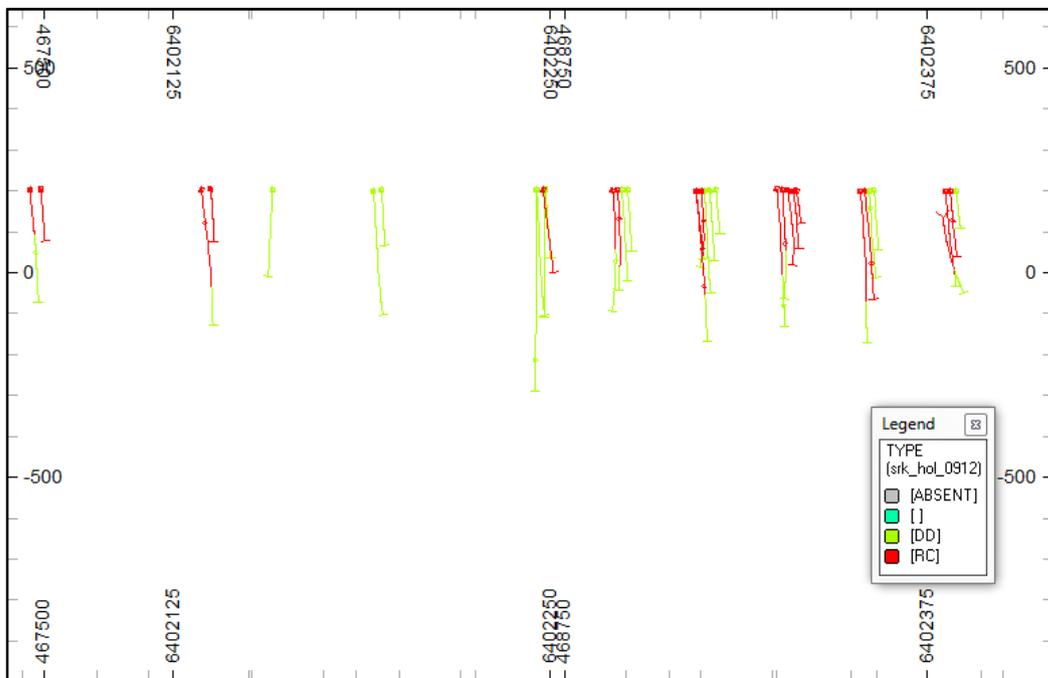


Figure 10-5: Long section displaying drillhole pattern and type through the North Limb of the syncline (looking North)

SRK considers that the drilling methods and procedures used at the Olary Iron are consistent with generally accepted industry best practices and are therefore appropriate.

11 Sample Preparation, Analyses, and Security

Yukuang drilling and assaying procedures are described by SRK (2011). The main features of the Olary sampling are:

- Samples collected by Diamond and RC drilling methods.
- Logging completed by qualified Yukuang geologists, in consultation with SRK geologists.
- Sampling undertaken by Yukuang staff and contractors.
- All sample preparation and assay analysis was completed by ALS Adelaide and Perth.
- Sample crushing was undertaken by ALS in Adelaide and sample pulverising and assay analysis was undertaken in Perth.
- The majority of drillholes were oriented.

11.1 Trench Sampling

No trenching samples were taken within EL4664.

11.2 Core Drilling Logging and Sampling

Core drilling, logging and sampling at Olary proceeded as follows:

- For the 28 diamond only drillholes, an average of 5.7 m of the poorly consolidated surface material was drilled using a RC pre-collar tailed with HQ diamond core. An average of 40 m and a maximum of 73.5 m, of HQ core were drilled before the hole was then cased and completed using NQ diamond core.
- Lithological logging included rock type, mineralogy, alteration, texture, grain size and contact type.
- Geotechnical logging included core orientation, alpha angle, beta angle, core loss, weathering, strength, RQD, defects, planarity, roughness and contact infill.
- All core was photographed.
- Sample intervals were marked up by Yukuang geologists on site. Half core of mineralised intervals was cut by diamond saw and sampled for assay. Core in trays was then transported to Adelaide where it was cut and sampled by ALS staff.
- Sample intervals were marked up within each lithology.
- The median core interval was 3.0 m, representing 41% of core samples, which was the way the sampling programme was designed. Core intervals ranged from 0.5 to 3.35 m. A histogram of core sample lengths is displayed in Figure 11-1.
- Drillholes were downhole surveyed using either a gyroscope or downhole camera. The gyroscope recorded on 1 cm readings while shots were taken on 50 m, 100 m or end-of-hole with the downhole camera.
- Core recovery was high, averaging 99%.
- Bulk density measurements were taken using the water immersion method by comparing wet and dry weights.

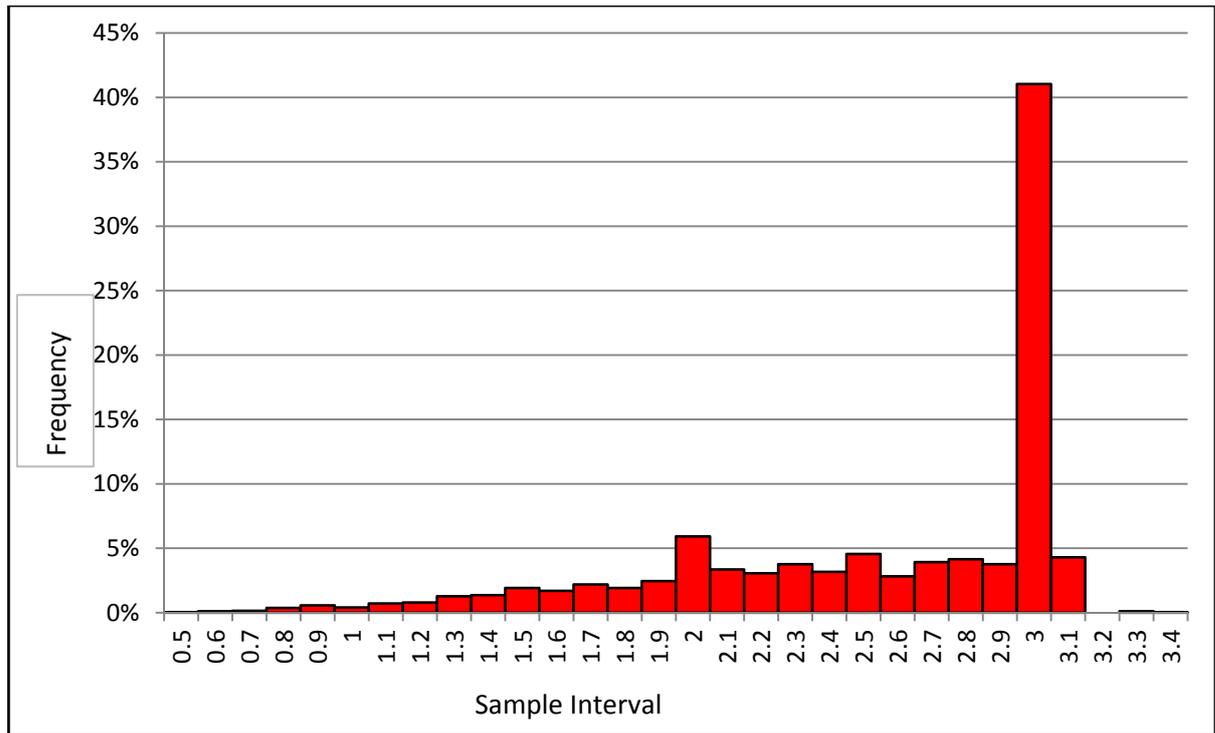


Figure 11-1: Sample interval histogram for diamond drilling

11.3 Reverse Circulation Drillhole Sampling

RC drilling, logging and sampling at Olary proceeded as follows:

- There were 27 drillholes that were either all RC (10) or the RC pre-collar (17) to a diamond tail.
- Samples were collected on 1 m intervals using a large plastic bag and a 3 to 4 kg calico bag for each sample.
- Lithological logging included rock type, grainsize, colour, texture, mineralogy, weathering and moisture.
- Each metre also had a small sample washed and collected in a Chip tray for permanent reference.
- Yukuang geologists then chose sample composite intervals within individual geological units and composited samples to 3 m where possible; however, samples of 1 m and 2 m were also collected for assay within appropriate geological units. The distribution of RC sample composite intervals is graphically illustrated in Figure 11-2, and shows 71% of sample intervals were 3 m.

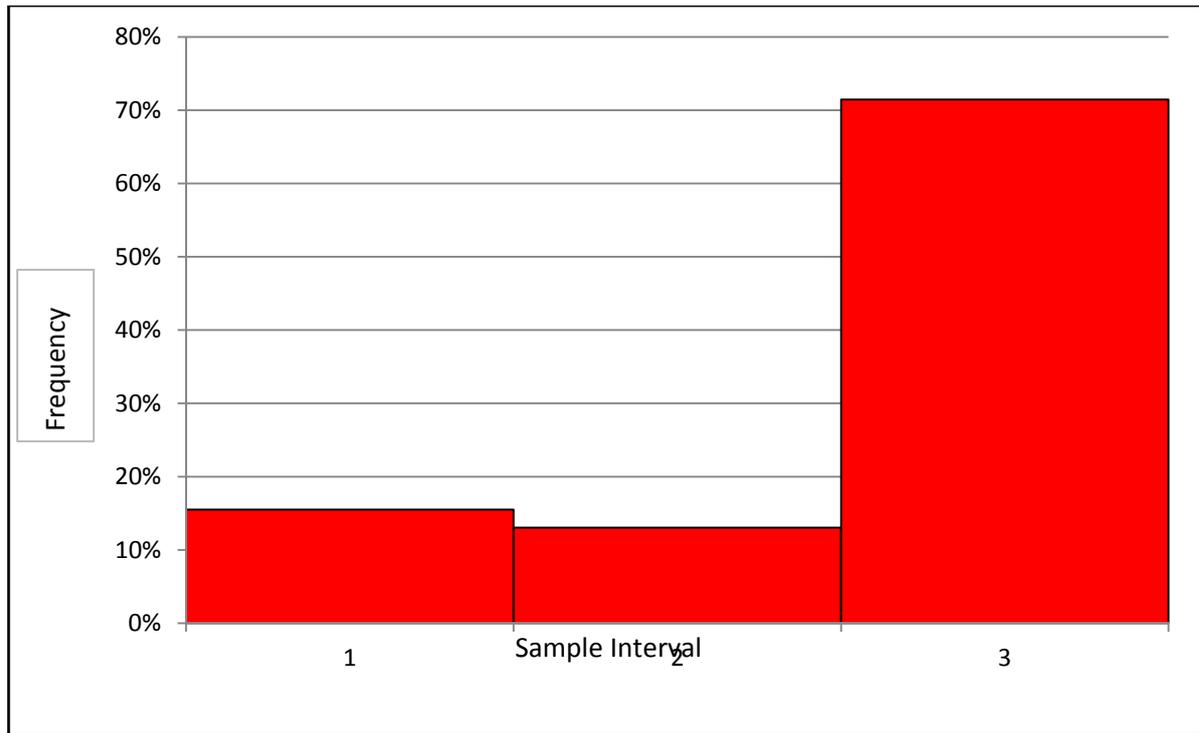


Figure 11-2: Reverse circulation drilling sample interval histogram

11.4 Sample Preparation and Analysis Procedures

ALS Limited (ALS) commercial laboratory procedures for core and RC samples are described by ALS (2011).

The sample preparation procedure by ALS Adelaide laboratory was:

- 1). Initial jaw crush to less than 3.35 mm.
- 2). Split to approximately 2 kg using Jones Riffle Splitter if required.
- 3). Homogenise via mat roll and then selectively sub sample to produce a 150 gram (g) sample and retain bulk residue in calico bag.
- 4). 4,150 gram despatched to Perth.

The Sample wet preparation procedure in Perth laboratory was:

- 1). Pulverise the 150 g sample for 40 seconds in a ring mill pulveriser (150 ml bowl).
- 2). Wet screen the sample at 38 micron and record oversize weights.
- 3). If less than 5 g of oversize is produced then a 150 g sample must be re-split and pulverised for a shorter time.
- 4). Dry and regrind the oversize for 4 seconds for every 5 g of sample oversize.
- 5). Repeat the screening, until less than 5 g is above 38 micron.
- 6). Filter press total sample, dry and homogenise.
- 7). Using a 3 decimal place balance, sample the pulverised product to give a 20 g sample for DTR test work.
- 8). The remaining pulverised material used for head grade assay.

Sample Preparation for Davis Tube Recovery included:

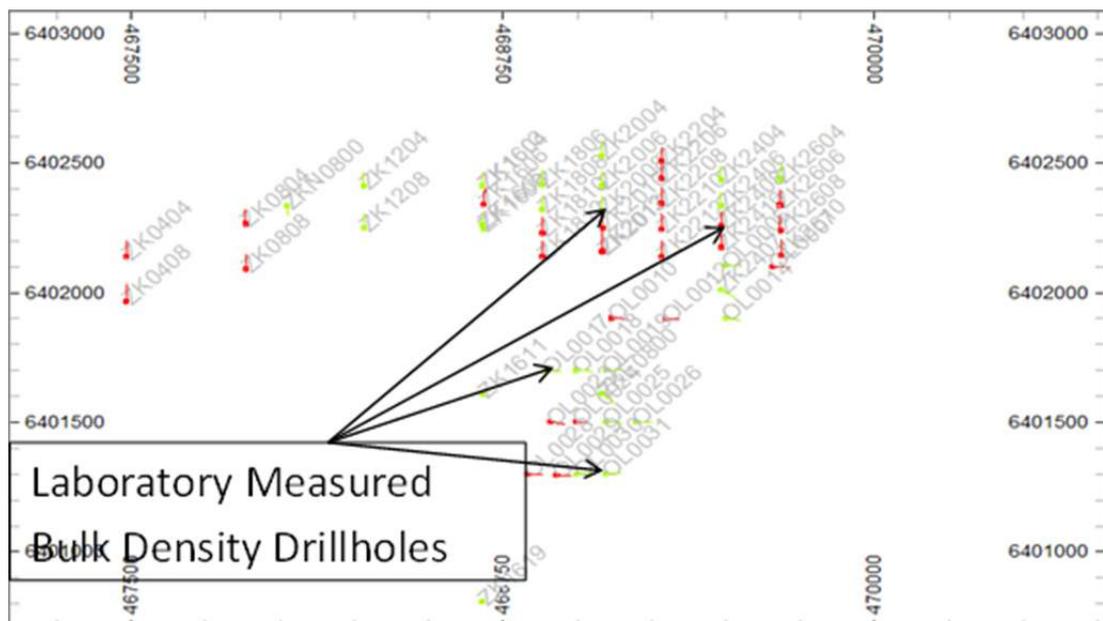
- 1). Stroke Frequency - 60 per minute
- 2). Stroke Length - 38 mm
- 3). Magnetic Field Strength - 3000 gauss
- 4). Tube Angle - 45°
- 5). Tube Diameter - 38 mm
- 6). Washing Time - 20 minutes or until clear
- 7). The concentrate sample is collected in a small container after washing is complete. The concentrate is then vacuum filtered, washed, dried and weighed. All wash times are recorded and reported.

Sample Analysis methods by ALS Perth included:

- 1). Analytical method X-Ray Fluorescence Spectroscopy (XRF) using ME-XRF21h for head grades and ME-XRF21c for concentrate grades. The same method is used for each type of sample, where a calcined or ignited sample (0.9 g) is added to 9.0 g of Lithium Borate Flux (50% – 50% $\text{Li}_2\text{B}_4\text{O}_7$ – LiBO_2), mixed well and fused in an auto fluxer between 1050–1100°C. A molten glass disc is prepared from the resulting melt. This disc is then analysed by X-ray fluorescence spectrometry.
- 2). Sample analysed for 25 elements or compounds: Al_2O_3 , As, Ba, CaO, Cl, Co, Cr_2O_3 , Cu, Fe, K_2O , MgO, Mn, Na_2O , Ni, P, Pb, S, SiO_2 , Sn, Sr, TiO_2 , V, Zn, Zr and LOI.

11.5 Specific Gravity Data

The Water Displacement Method, as described by Lipton (2001), was used to measure 266 laboratory bulk densities by ALS in Adelaide. Four drillholes shown in Figure 11-3, which were spaced approximately equally across the deposit to gain a representative sample across the Olary deposit, were used to measure bulk densities. Oxide and transition material were appropriately prepared by wrapping in plastic to ensure samples did not absorb water.



Geophysical downhole densities were available for the majority of the holes. These were calibrated with the bulk densities measured by ALS and a linear regression was calculated. For the fresh material the laboratory densities, the short range probe geophysical density and the long range probe geophysical densities were all within 4% of each other on average. The short range geophysical density was estimated on a block by block basis and used for the final reporting.

Where geophysical densities were not available the density values for the composites were supplemented via a regression against the head Fe.

11.6 Quality Assurance and Quality Control Programmes

SRK has undertaken an analysis of the QA/QC data provided by Yukuang, which includes:

- Certified Reference Materials (CRM) and standards used by Yukuang and ALS
- Blanks
- Field duplicates, only applied to RC samples
- Lab duplicates.

Certified Reference Materials

CRMs are used to measure the accuracy of the analytical procedure. Three commercially available laboratory standards (GIOP-63, GIOP-102 & GIOP-108) with variable Fe contents were used on a rotation basis for the QA/QC programmes. These standards were inserted into the sample stream at a rate of 1 in every 40 samples.

The reference values are provided by Geostats Pty Ltd, which included the mean and standard deviation. The mean of the CRM is the Expected Value; the expected value plus 2 standard deviations is Upper Limit; and the expected value minus 2 standard deviations is Lower Limit.

GIOP-63

Table 11-1 and Table 11-2 show the expected values and statistical summary of CRM GIOP-63. Figure 11-4 to Figure 11-12 show the performance of the variables of interest. The majority of the 33 samples plot within the expected value ranges. It appears that there is a high bias of MgO values in the early stage of the assay programme, but such bias does not coincide with other variables of concern. There is also a significant spike in LOI. Overall, the other results are largely within the control limits.

Table 11-1: Expected values and range of CRM GIOP-63

GIOP-63	SiO ₂	Al ₂ O ₃	Fe	MgO	P	S	CaO	TiO ₂	LOI
Expected Value	10.89	5.137	52.46	0.149	0.0469	0.0505	0.106	0.2928	6.887
Lower Limit	10.63	4.995	52.04	0.117	0.0445	0.0451	0.0886	0.2778	6.747
Upper Limit	11.15	5.279	52.88	0.181	0.0493	0.0559	0.1234	0.3078	7.027
SD	0.13	0.071	0.21	0.016	0.0012	0.0027	0.0087	0.0075	0.07

Table 11-2: Statistical Summary of CRM GIOP-63

GIOP-63	SiO ₂	Al ₂ O ₃	Fe	MgO	P	S	CaO	TiO ₂	LOI
No of samples	33	33	33	33	33	33	33	33	33
Mean	10.91	5.06	52.37	0.21	0.045	0.052	0.10	0.29	6.93
Maximum	11.35	5.21	52.75	0.31	0.048	0.064	0.15	0.34	8.05
Minimum	10.45	4.94	51.78	0.14	0.043	0.047	0.09	0.27	6.71
Variance	0.04	0.00	0.04	0.00	0.000	0.000	0.00	0.00	0.04
SD	0.19	0.06	0.19	0.05	0.001	0.003	0.01	0.01	0.21
2SD	0.38	0.12	0.38	0.11	0.002	0.007	0.03	0.02	0.41
Mean - Expected Value	0.02	-0.07	-0.09	0.06	-0.001	0.001	-0.01	-0.01	0.05

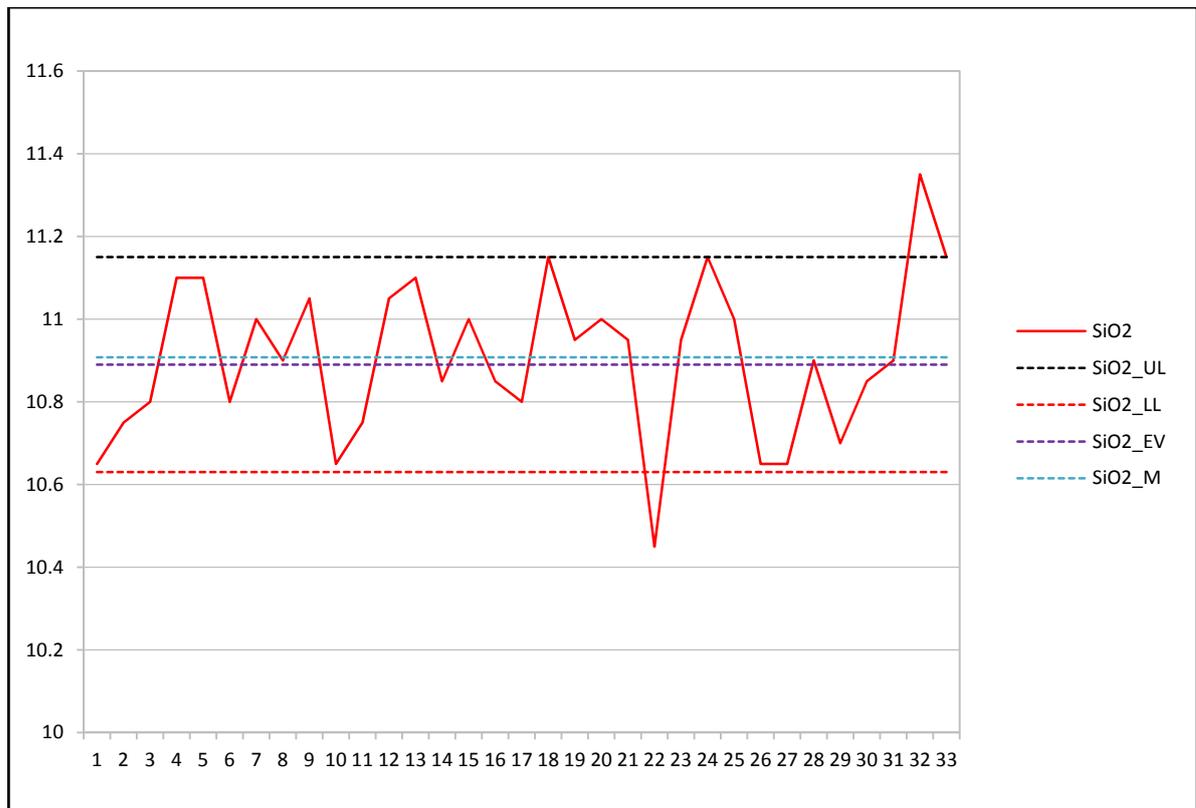


Figure 11-4: Control plot for GIOP-63 – SiO₂ (in chronological order)

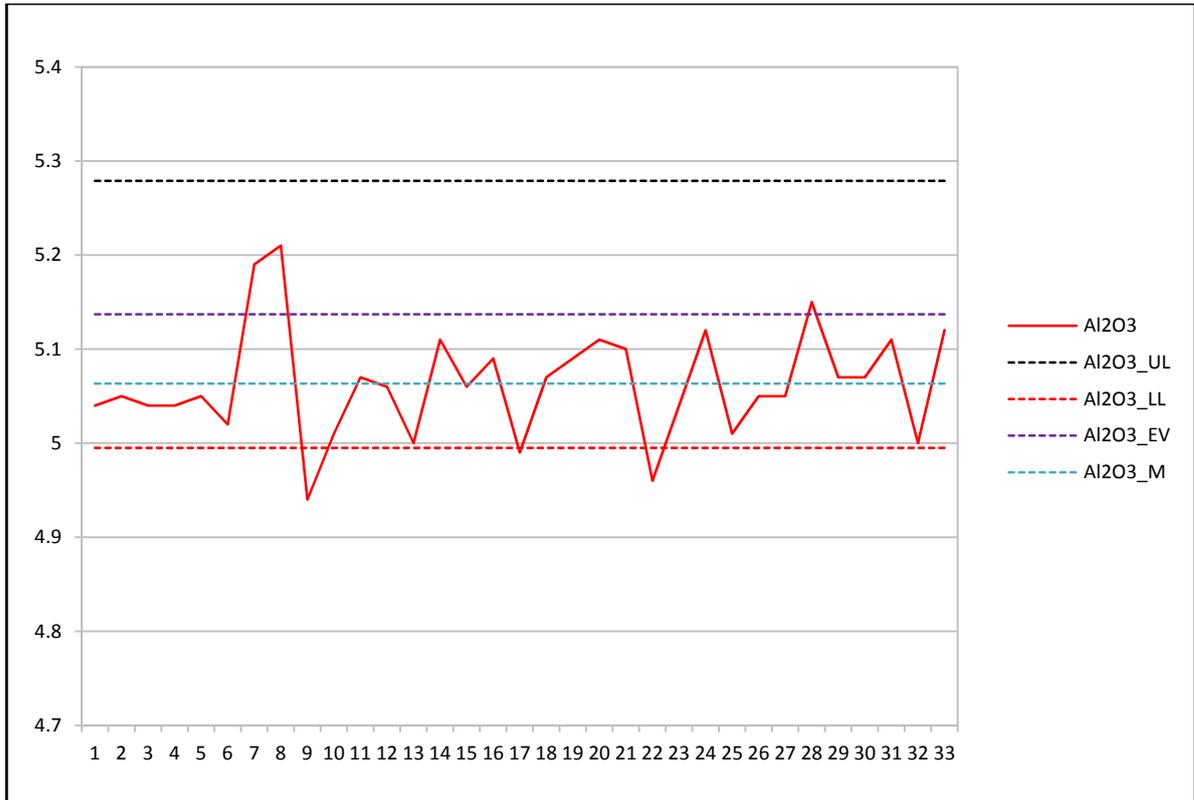


Figure 11-5: Control plot for GIOP-63 – Al₂O₃ (in chronological order)

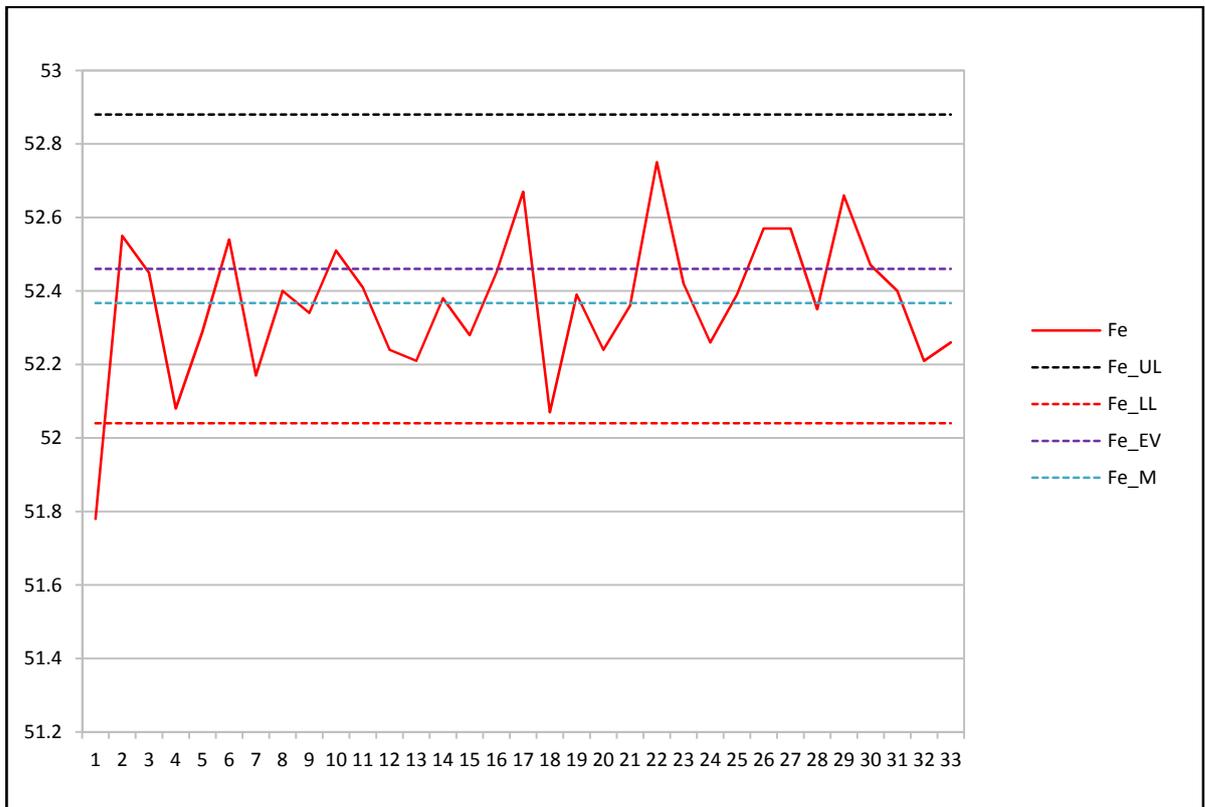


Figure 11-6: Control plot for GIOP-63 – Fe (in chronological order)

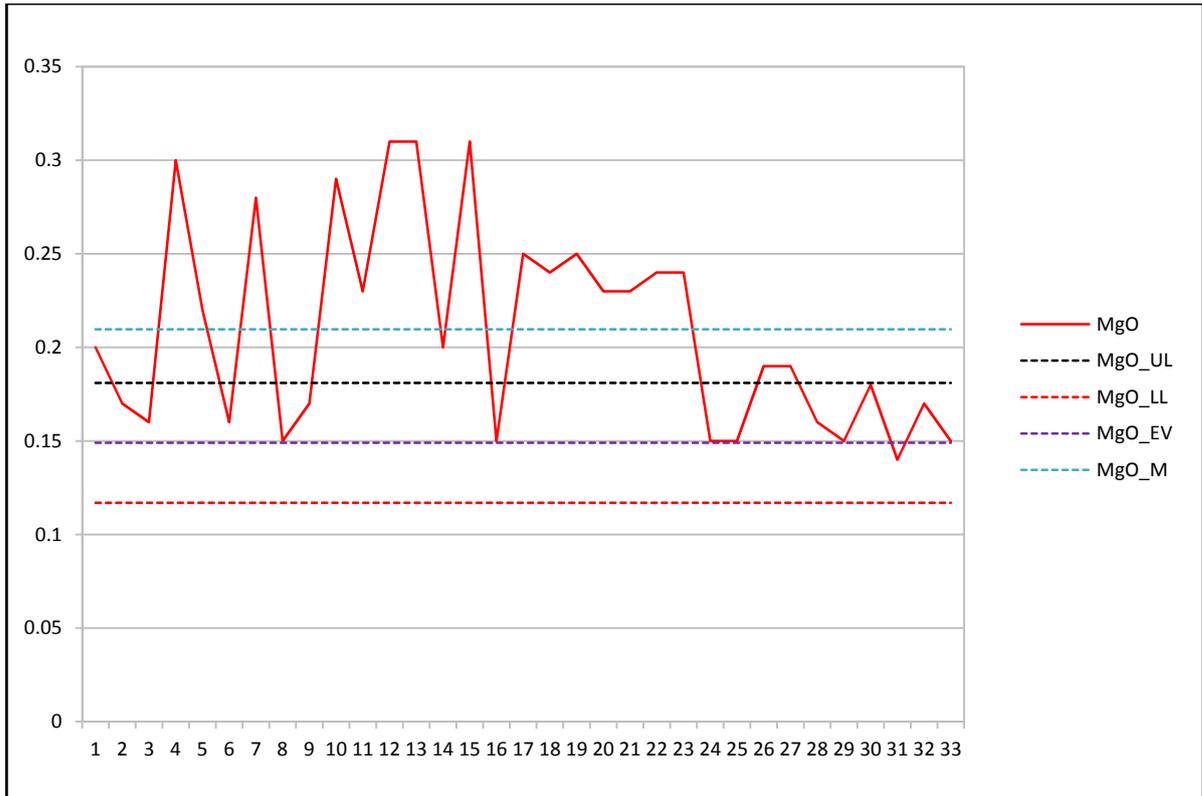


Figure 11-7: Control plot for GIOP-63 – MgO (in chronological order)

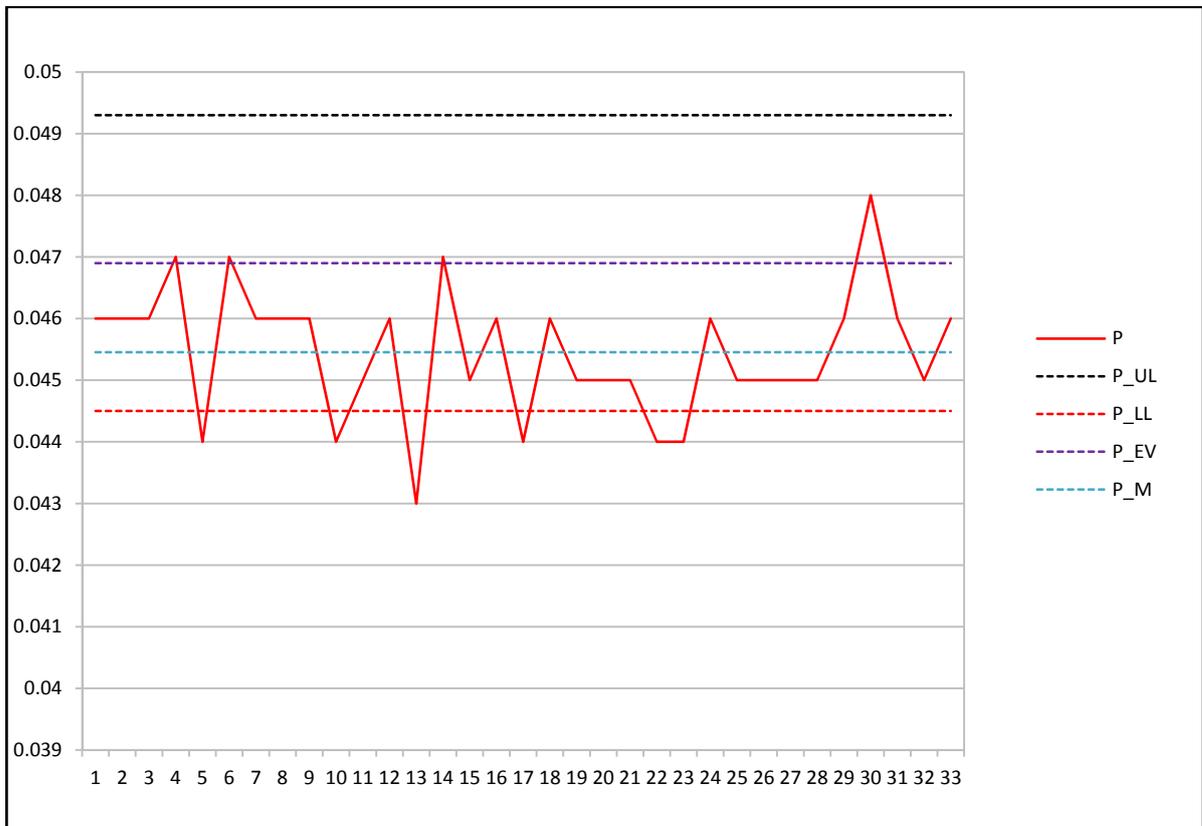


Figure 11-8: Control plot for GIOP-63 – P (in chronological order)

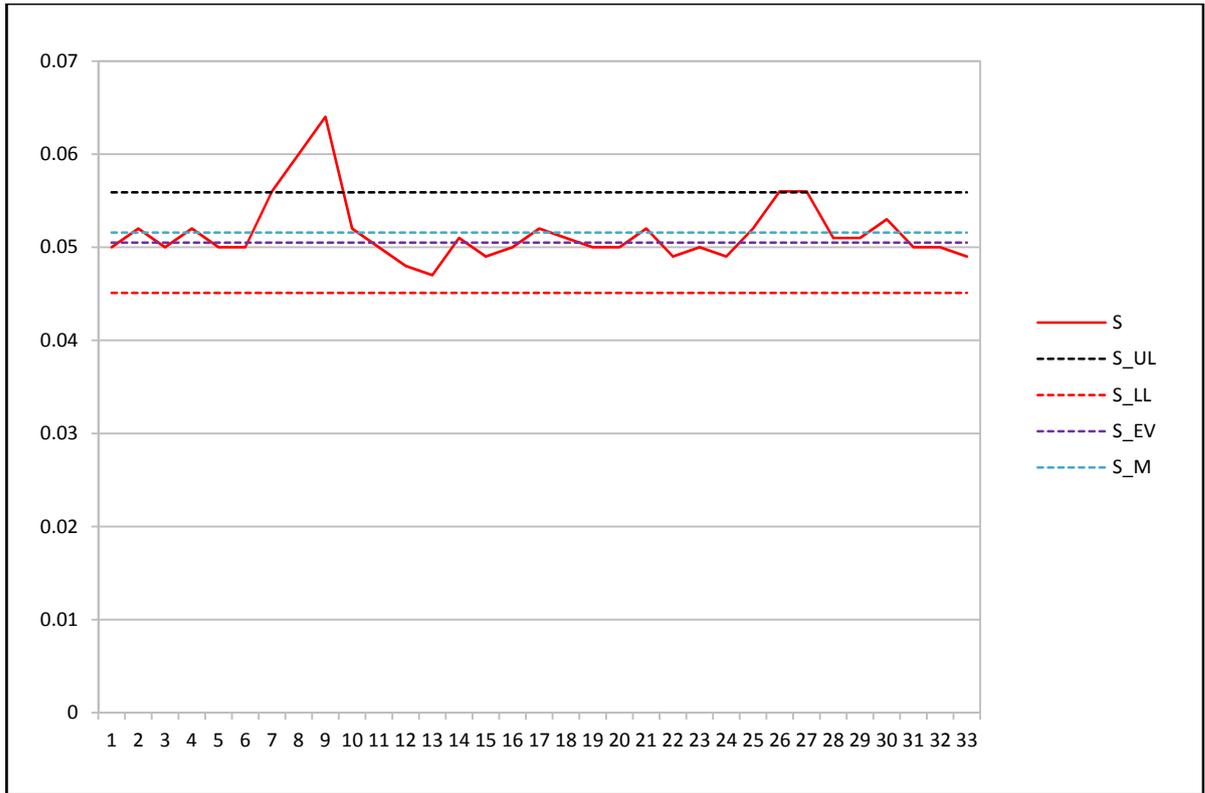


Figure 11-9: Control plot for GIOP-63 – S (in chronological order)

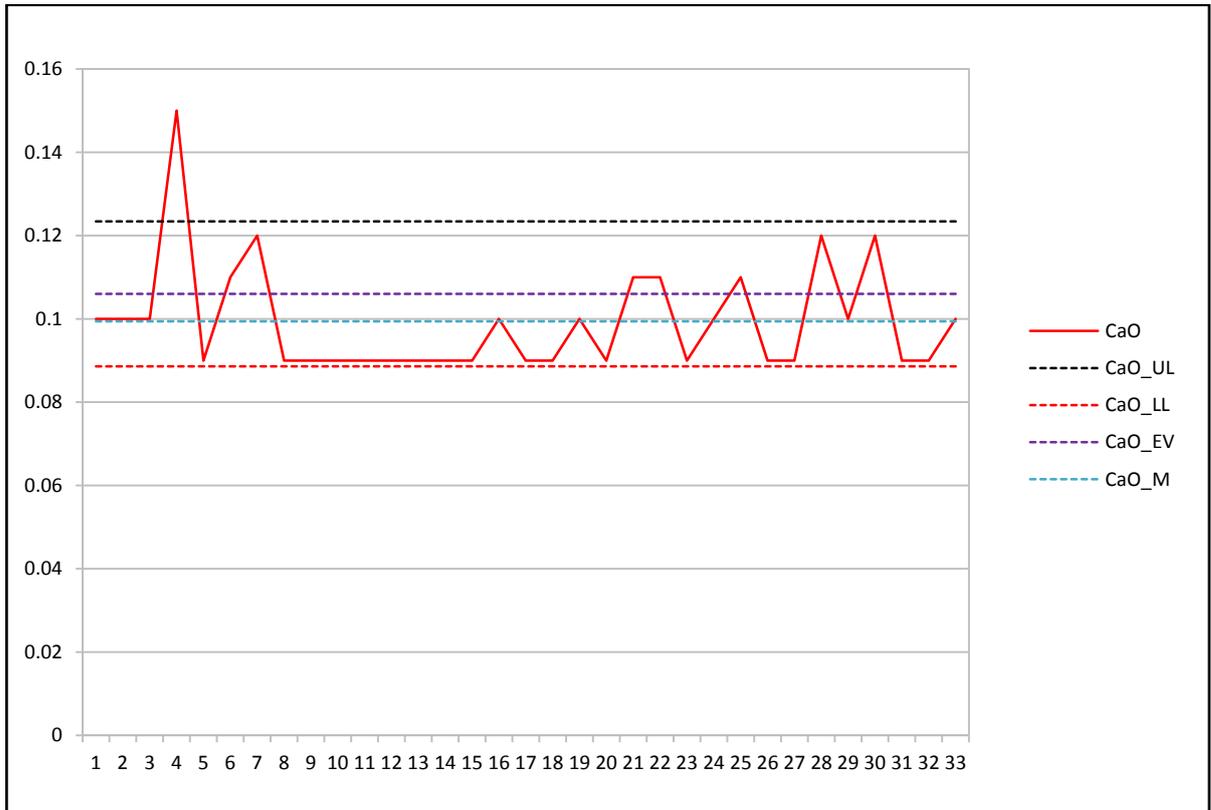


Figure 11-10: Control plot for GIOP-63 – CaO (in chronological order)

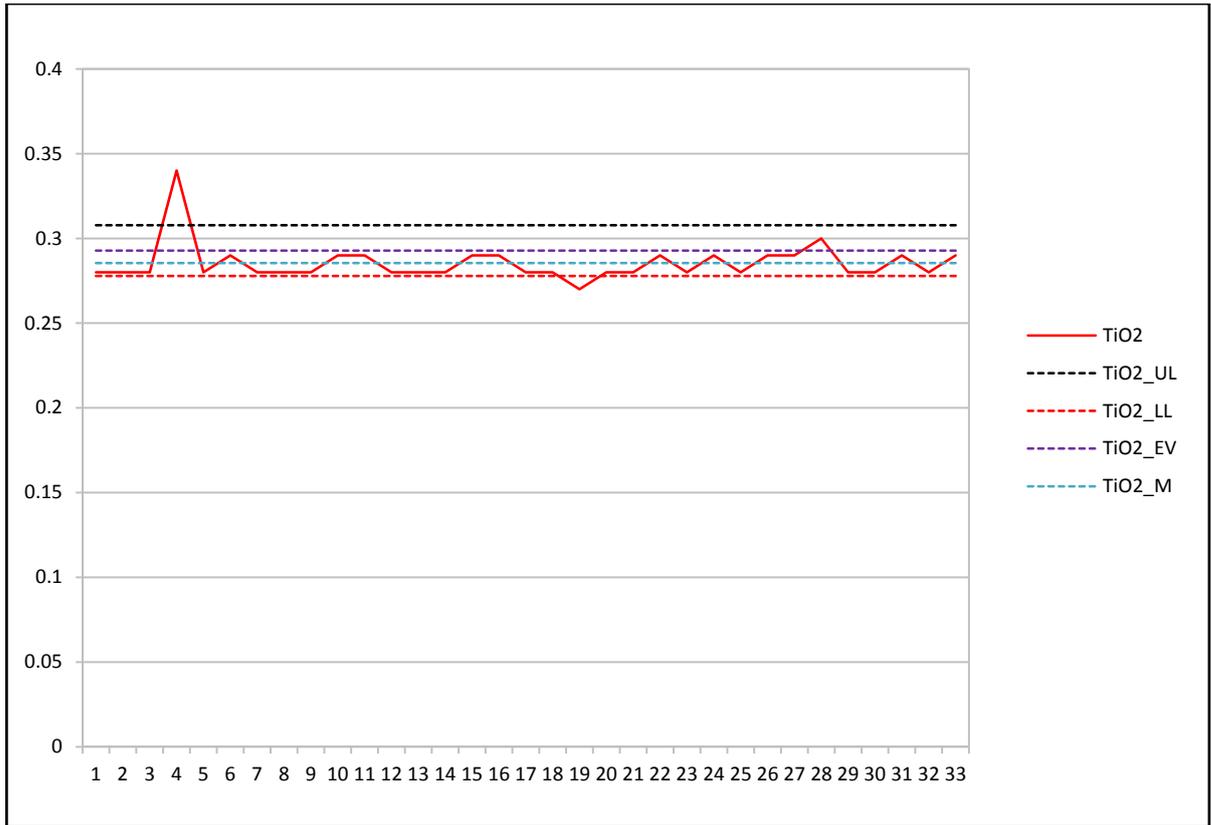


Figure 11-11: Control plot for GIOP-63 – TiO₂ (in chronological order)

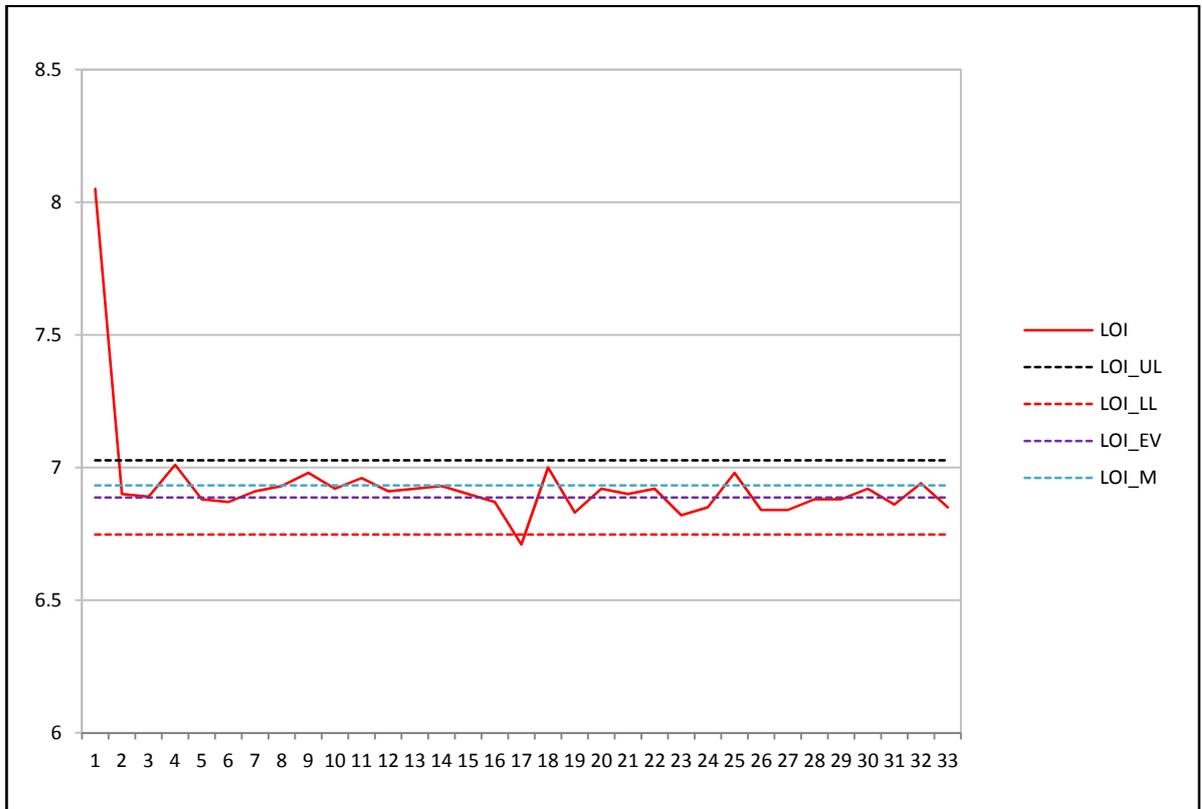


Figure 11-12: Control plot for GIOP-63 – LOI (in chronological order)

GIOP-102

Table 11-3 and Table 11-4 show the expected values and statistical summary of CRM GIOP-102. Figure 11-13 to Figure 11-21 show the performance of the variables of interest. There are a few spikes, in particular in the early stage of the assay programme, but generally the data are mostly within the control limits.

Table 11-3: Expected values and range of CRM GIOP-102

GIOP-102	SiO ₂	Al ₂ O ₃	Fe	MgO	P	S	CaO	TiO ₂	LOI
Expected Value	53.35	2.051	25.604	3.668	0.0758	1.297	3.748	0.0832	-0.194
Lower Limit	52.83	1.949	25.424	3.612	0.0732	1.145	3.676	0.069	-0.314
Upper Limit	53.87	2.153	25.784	3.724	0.0784	1.449	3.82	0.0974	-0.074
SD	0.26	0.051	0.09	0.028	0.0013	0.076	0.036	0.0071	0.06

Table 11-4: Statistical Summary of CRM GIOP-102

GIOP-102	SiO ₂	Al ₂ O ₃	Fe	MgO	P	S	CaO	TiO ₂	LOI
No of samples	32	32	32	32	32	32	32	32	32
Mean	53.41	2.06	25.40	3.63	0.075	1.374	3.75	0.08	-0.11
Maximum	54.80	2.15	25.93	3.74	0.078	1.430	3.85	0.09	-0.03
Minimum	51.70	2.00	24.34	3.47	0.070	1.290	3.63	0.07	-0.23
Variance	0.32	0.00	0.11	0.00	0.000	0.001	0.00	0.00	0.00
SD	0.57	0.03	0.33	0.05	0.002	0.034	0.05	0.00	0.04
2SD	1.13	0.07	0.66	0.11	0.003	0.067	0.10	0.01	0.08
Mean - Expected Value	0.06	0.01	-0.20	-0.04	0.00	0.08	0.00	0.00	0.08

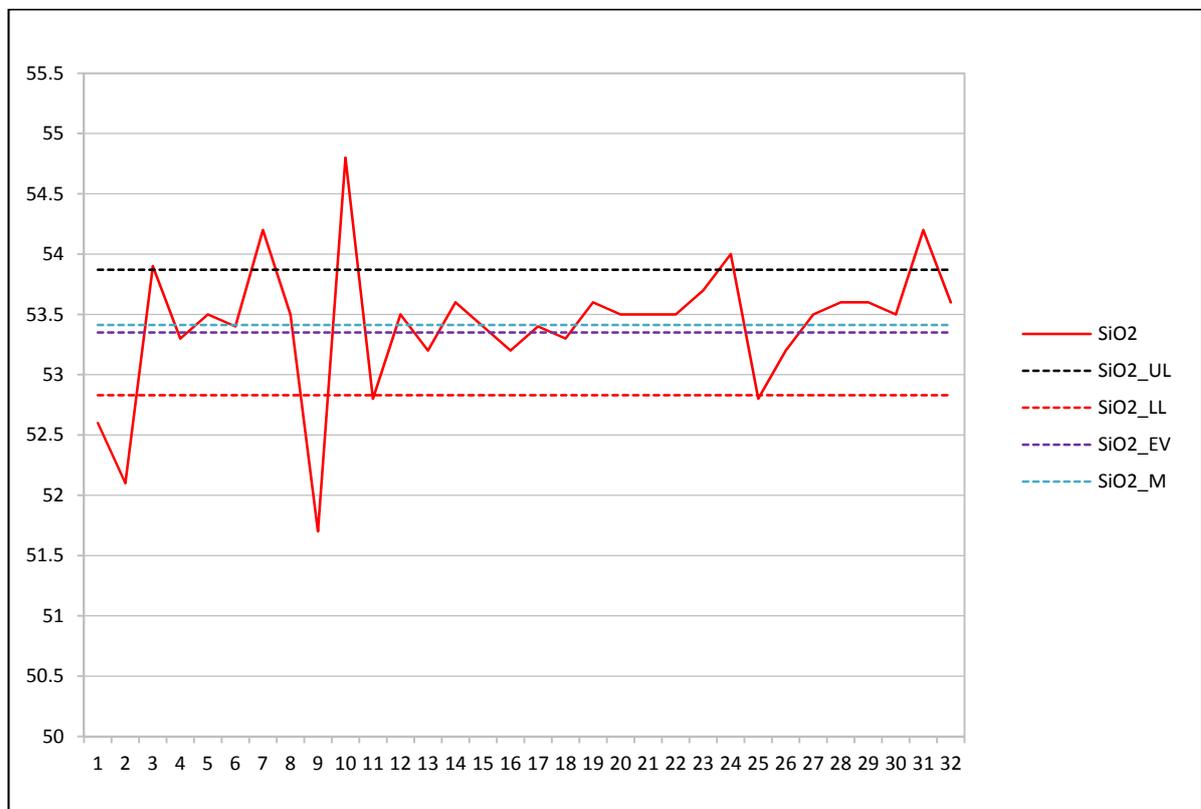


Figure 11-13: Control plot for GIOP-102 – SiO₂ (in chronological order)

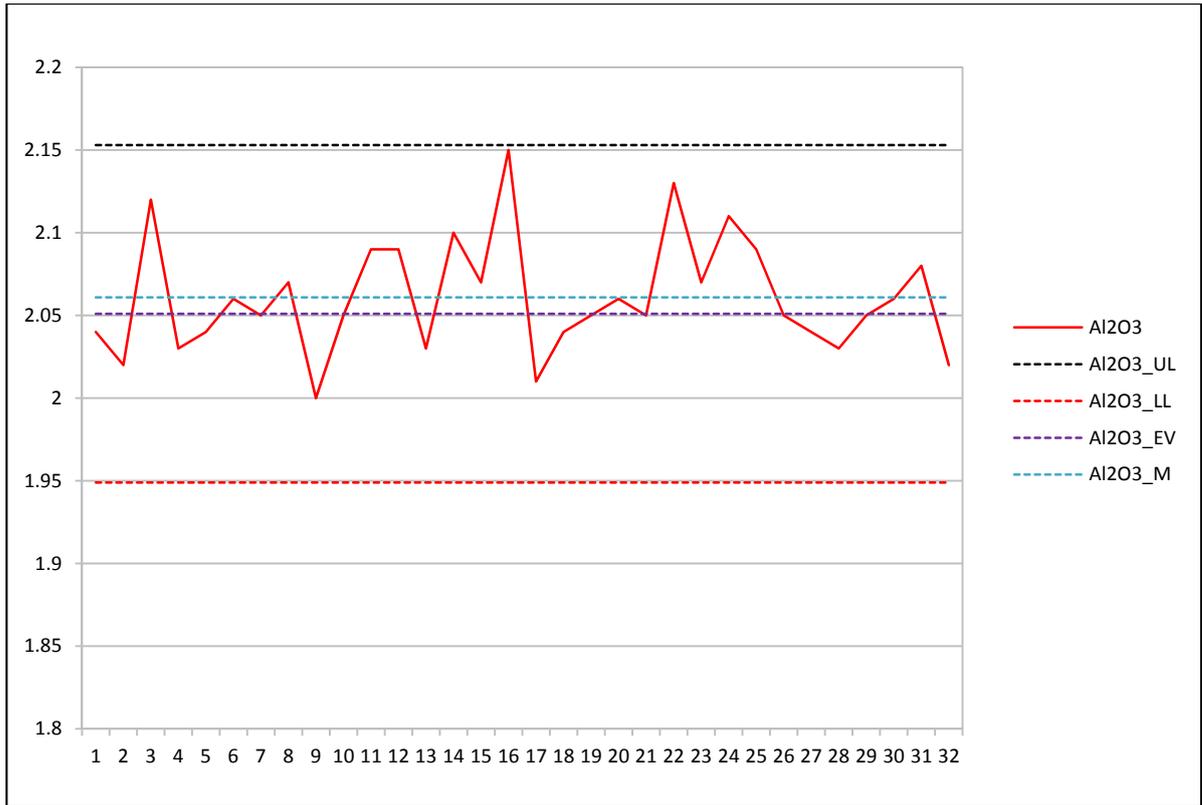


Figure 11-14: Control plot for GIOP-102 – Al₂O₃ (in chronological order)

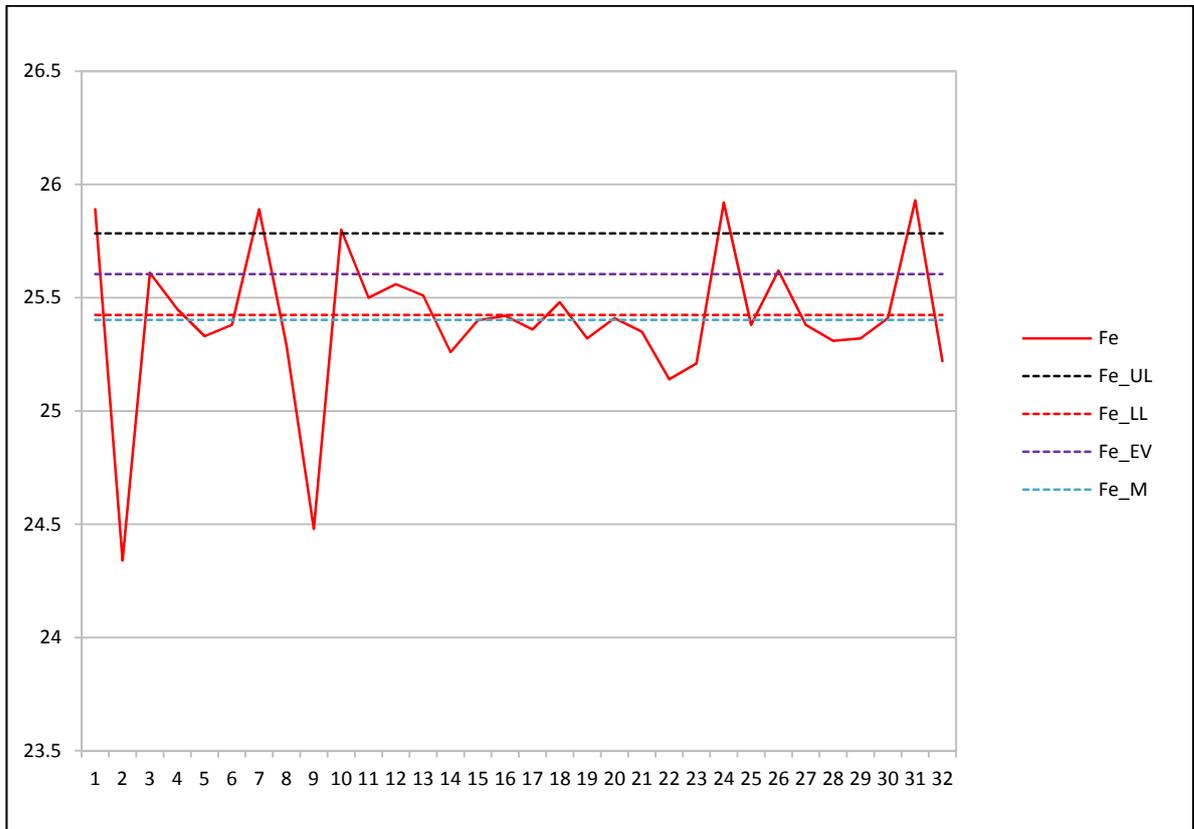


Figure 11-15: Control plot for GIOP-102 – Fe (in chronological order)

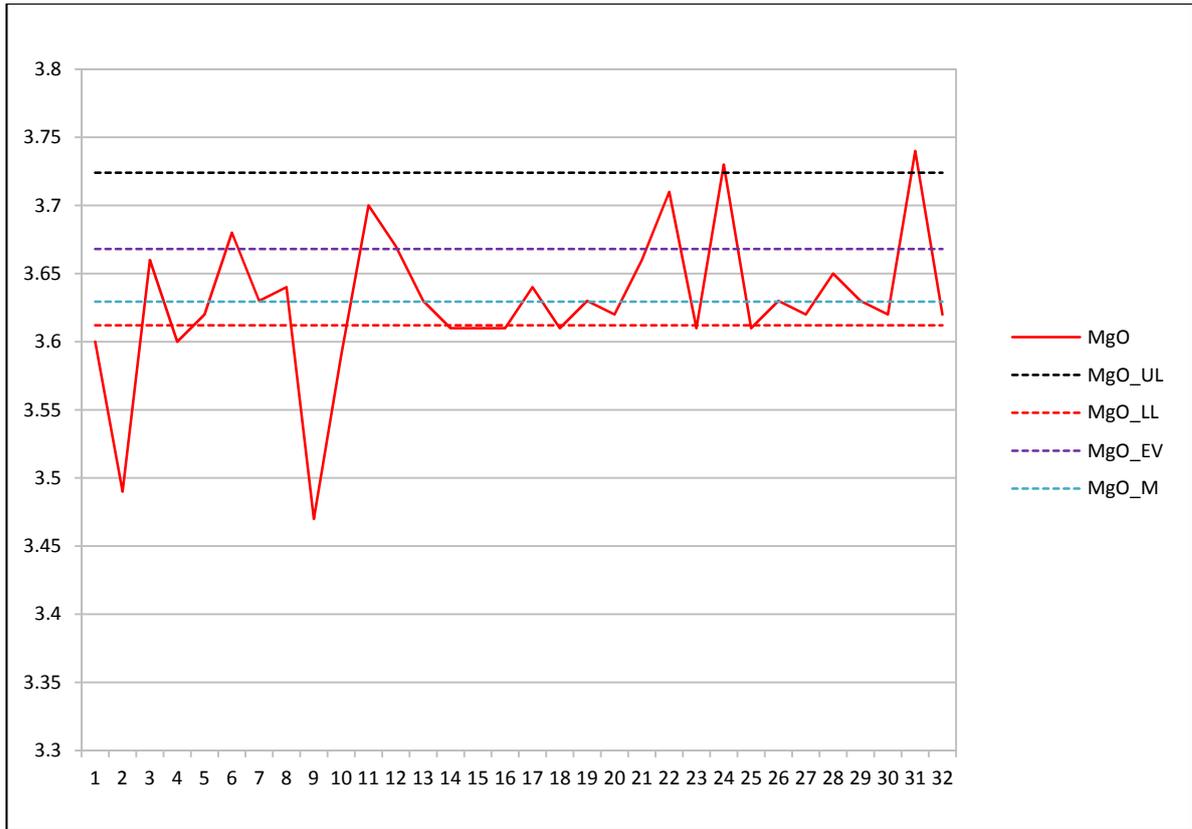


Figure 11-16: Control plot for GIOP-102 – MgO (in chronological order)

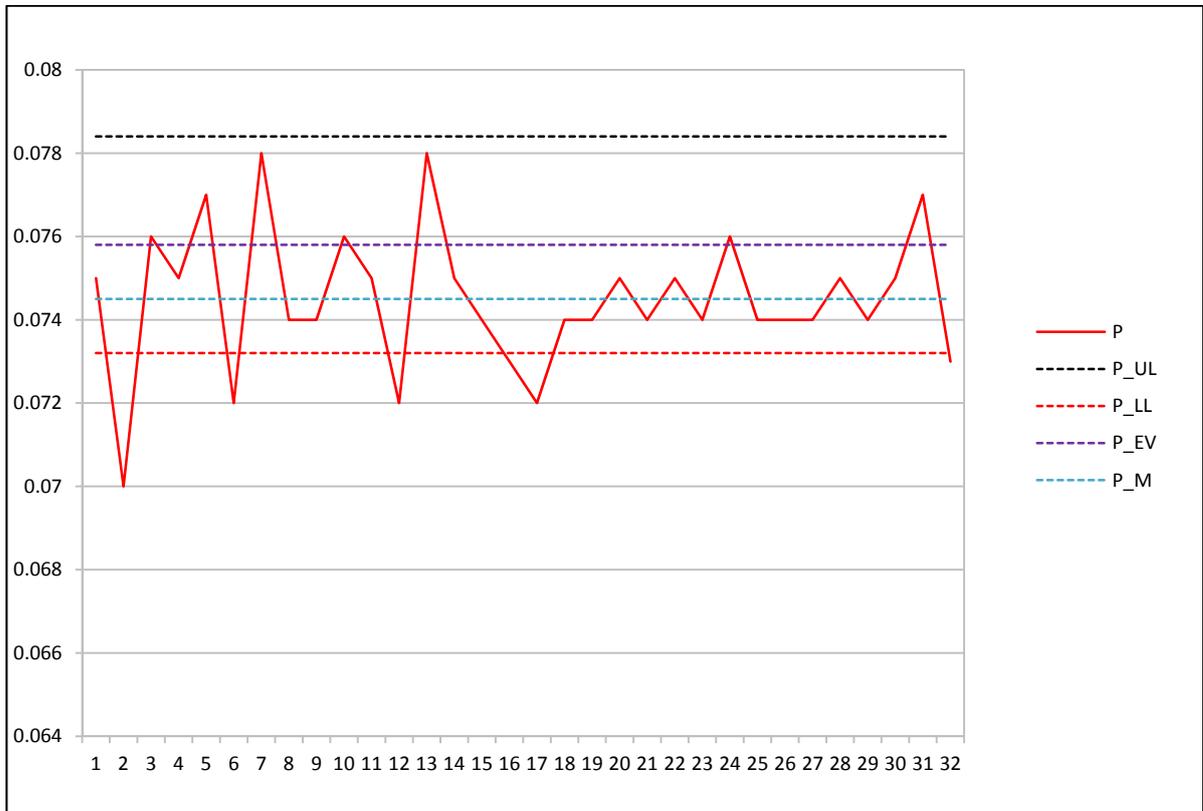


Figure 11-17: Control plot for GIOP-102 – P (in chronological order)

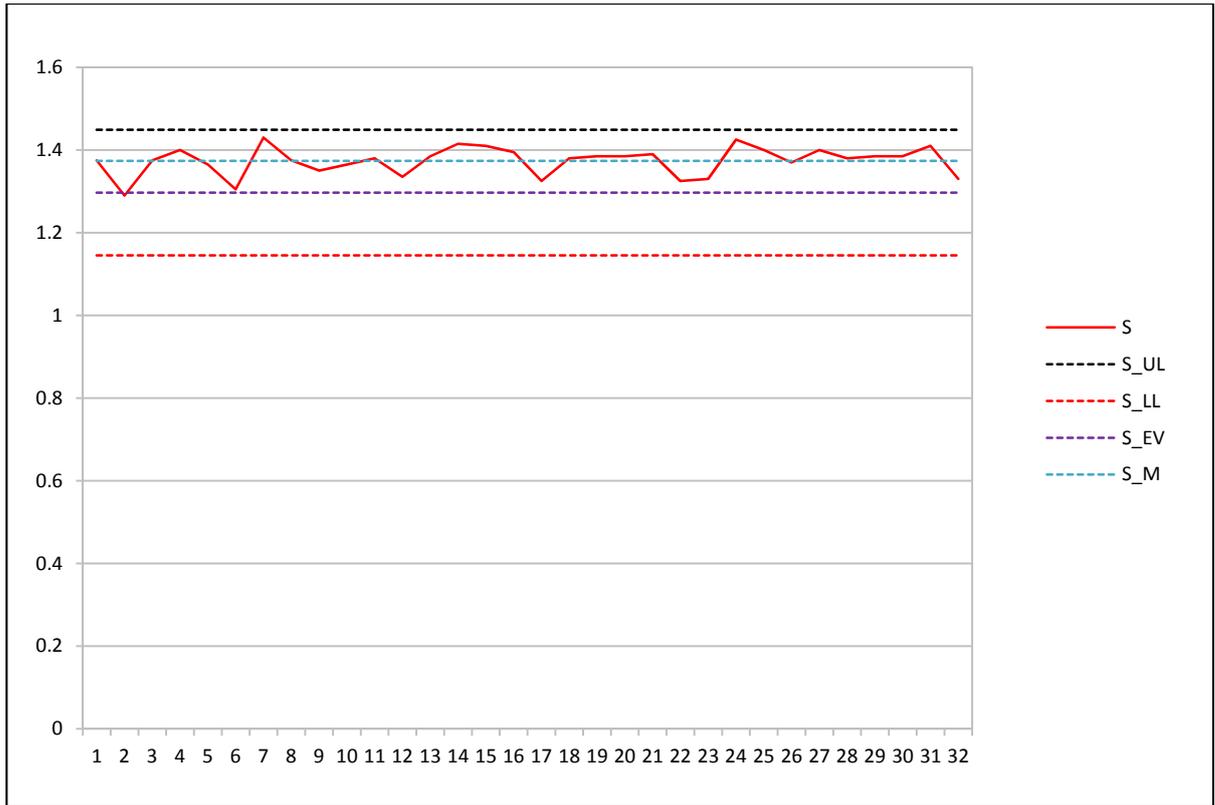


Figure 11-18: Control plot for GIOP-102 – S (in chronological order)

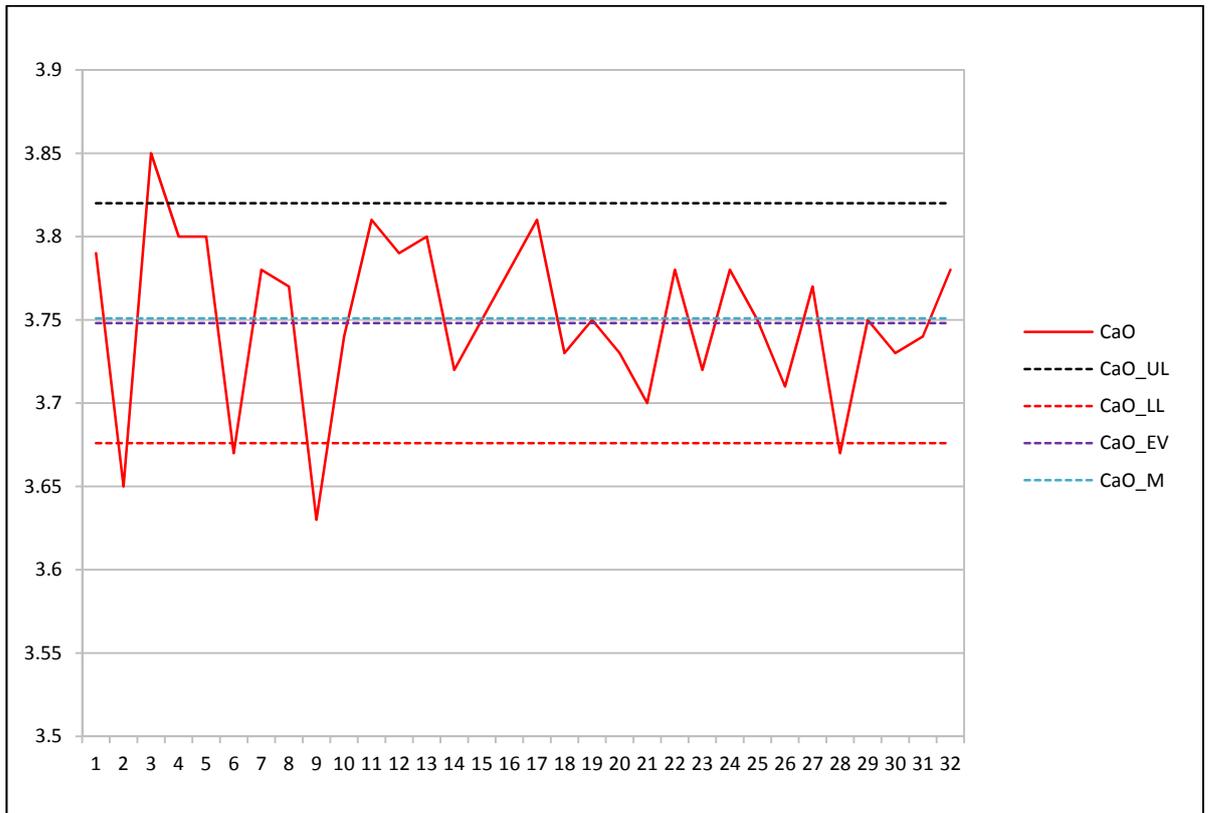


Figure 11-19: Control plot for GIOP-102 – CaO (in chronological order)

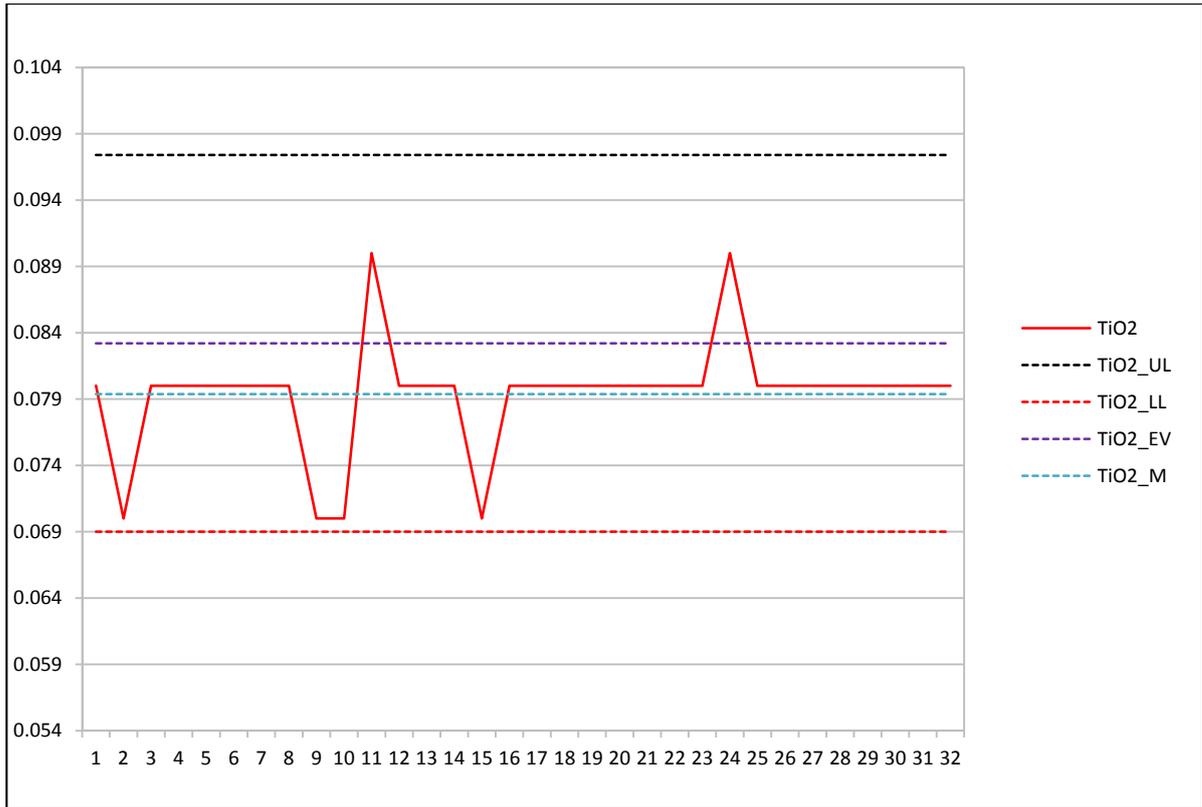


Figure 11-20: Control plot for GIOP-102 – TiO₂ (in chronological order)

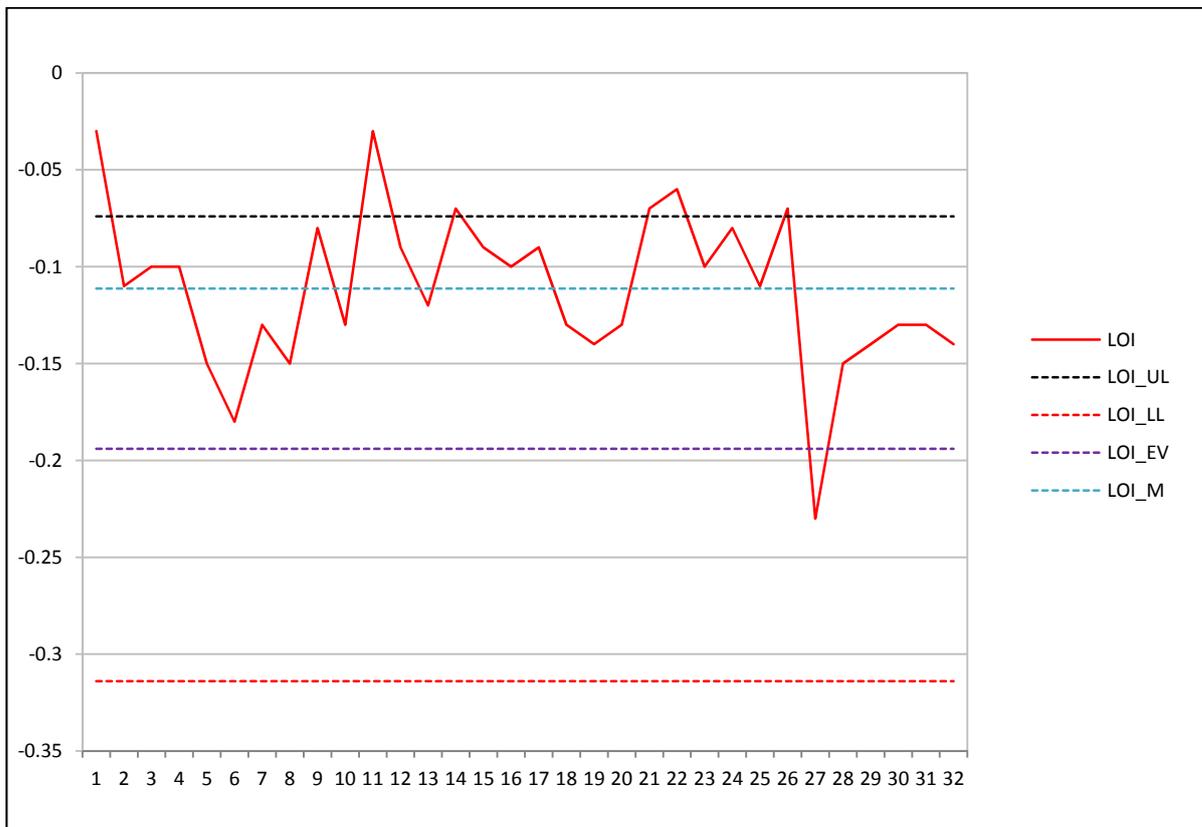


Figure 11-21: Control plot for GIOP-102 – LOI (in chronological order)

GIOP-108

Table 11-5 and Table 11-6 show the expected values and statistical summary of CRM GIOP-108. Figure 11-22 to Figure 11-29 show the performance of the variables of interest. The majority of the 32 GIOP-108 CRM results are shown to be within two standard deviations of the expected values, providing a robust correlation with the expected grade. There are a few outliers, and there is a small but consistent low bias for Fe and P, but overall. The amount of deviation is minimal and SRK does not consider it to be significant.

Table 11-5: Expected values and range of CRM GIOP-108

GIOP-108	SiO ₂	Al ₂ O ₃	Fe	MgO	P	S	CaO	TiO ₂	LOI
Expected Value	46.93	0.1985	34.73	1.889	0.0617	0.1366	2.244	0.0347	-1.22
Lower Limit	46.55	0.1795	34.43	1.857	0.0589	0.126	2.198		-1.33
Upper Limit	47.31	0.2175	35.03	1.921	0.0645	0.1472	2.29		-1.11
SD	0.19	0.0095	0.15	0.016	0.0014	0.0053	0.023		0.055

Table 11-6: Statistical Summary of CRM GIOP-108

GIOP-108	SiO ₂	Al ₂ O ₃	Fe	MgO	P	S	CaO	TiO ₂	LOI
No of samples	32	32	32	32	32	32	32	17	32
Mean	46.86	0.21	34.52	1.89	0.060	0.140	2.22	0.01	-1.13
Maximum	47.40	0.23	35.06	2.00	0.065	0.148	2.32	0.02	1.63
Minimum	45.60	0.17	33.56	1.84	0.058	0.130	2.18	0.01	-1.34
Variance	0.13	0.00	0.07	0.00	0.000	0.000	0.00	0.00	0.25
SD	0.36	0.01	0.26	0.04	0.001	0.004	0.03	0.00	0.50
2SD	0.71	0.03	0.52	0.07	0.003	0.008	0.05	0.00	1.00
Mean - Expected Value	35.97	-4.93	-17.94	1.74	0.014	0.089	2.11	-0.28	-8.02

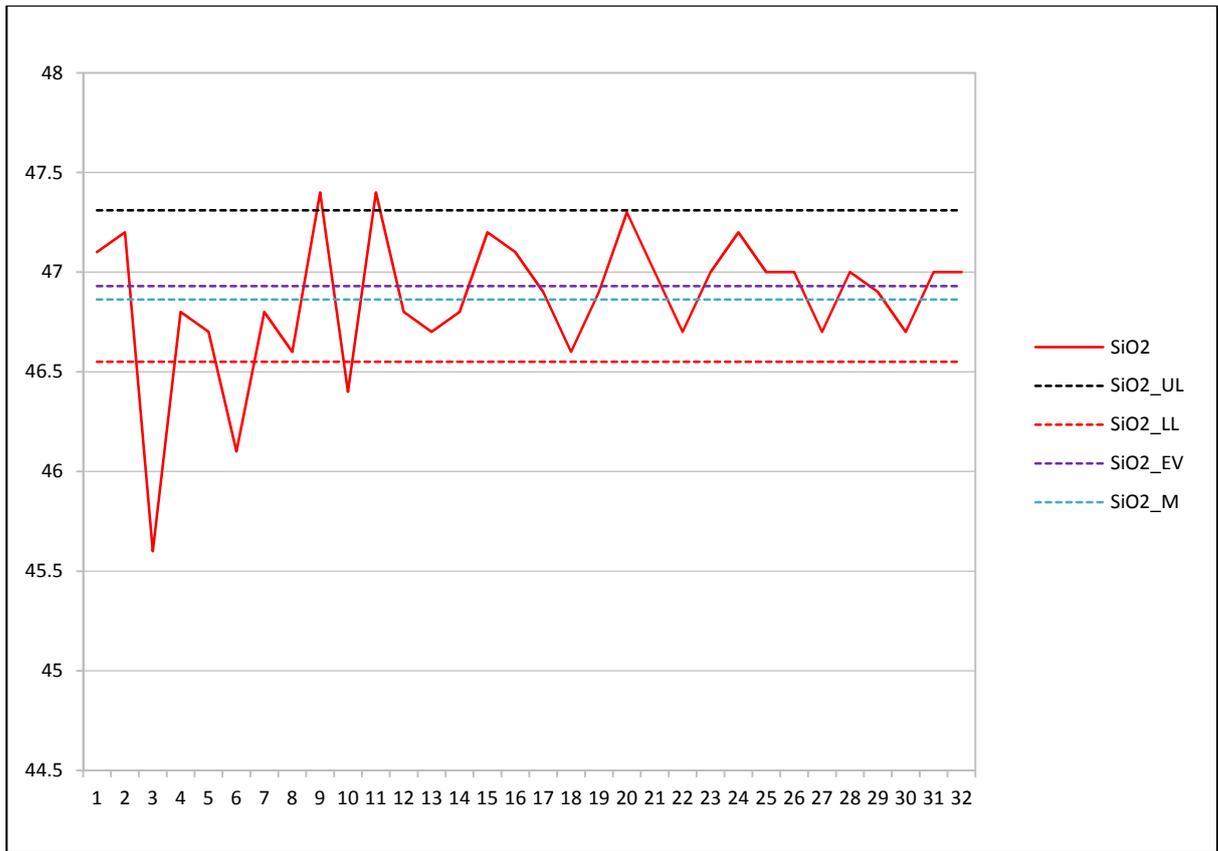


Figure 11-22: Control plot for GIOP-108 – SiO₂ (in chronological order)

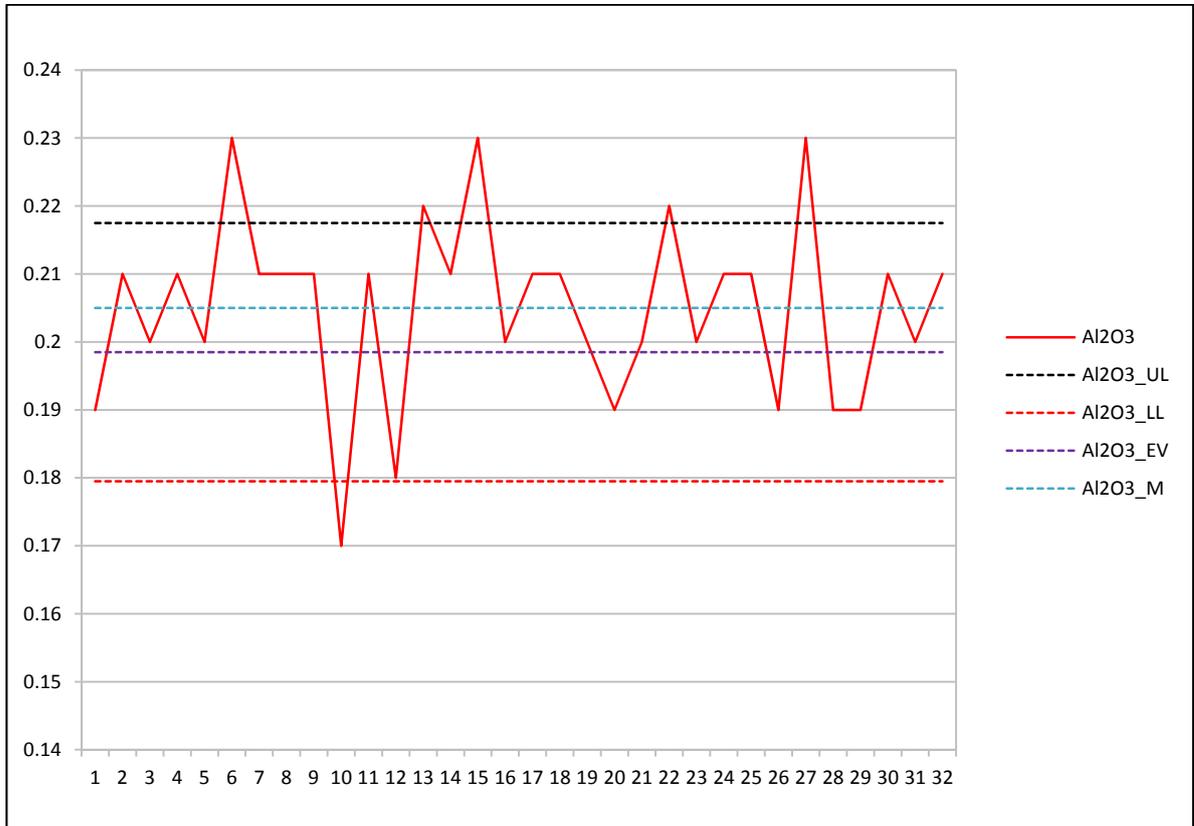


Figure 11-23: Control plot for GIOP-108 – Al₂O₃ (in chronological order)

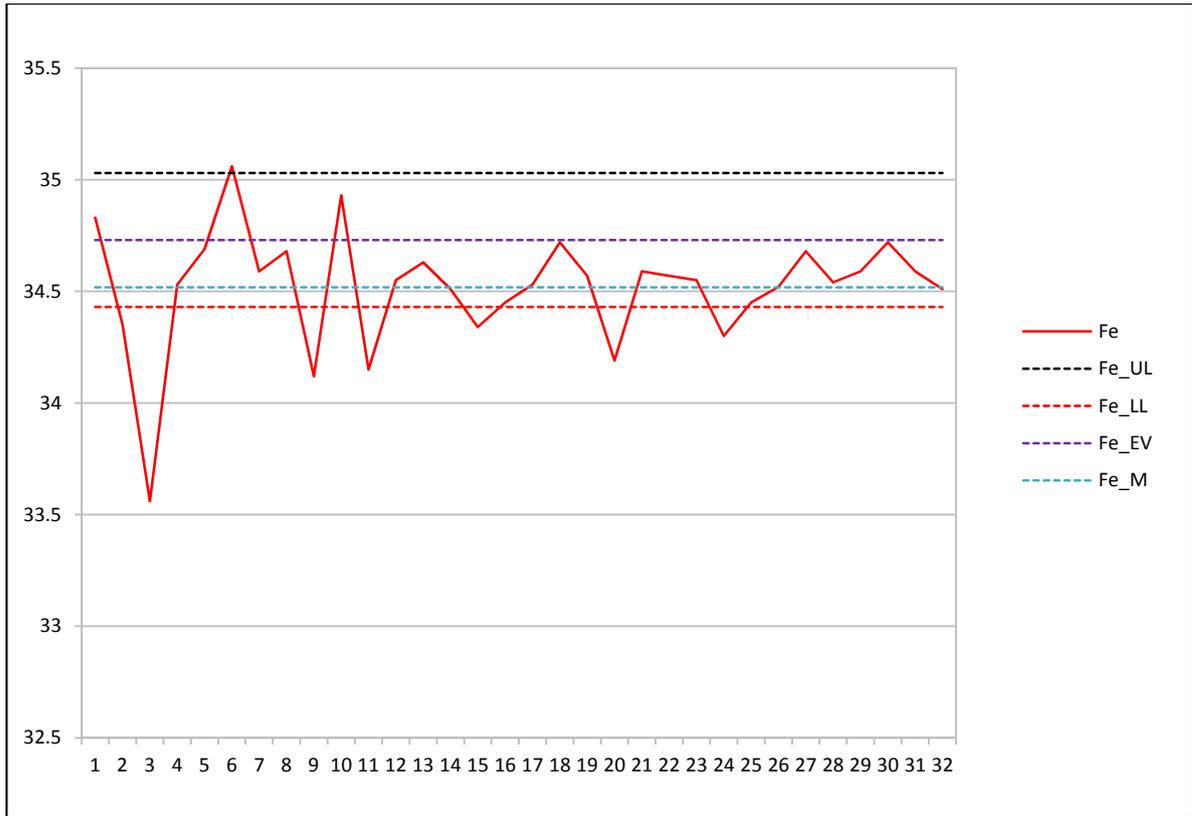


Figure 11-24: Control plot for GIOP-108 – Fe (in chronological order)

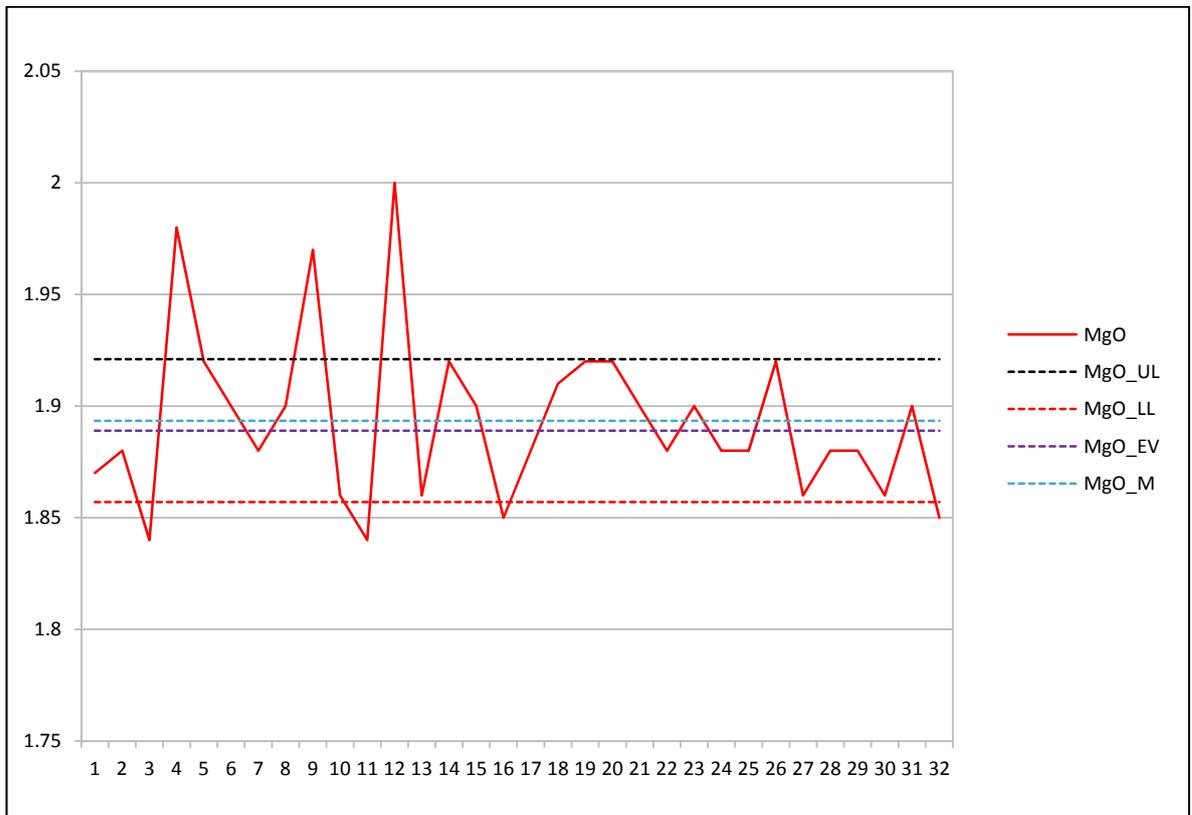


Figure 11-25: Control plot for GIOP-108 – MgO (in chronological order)

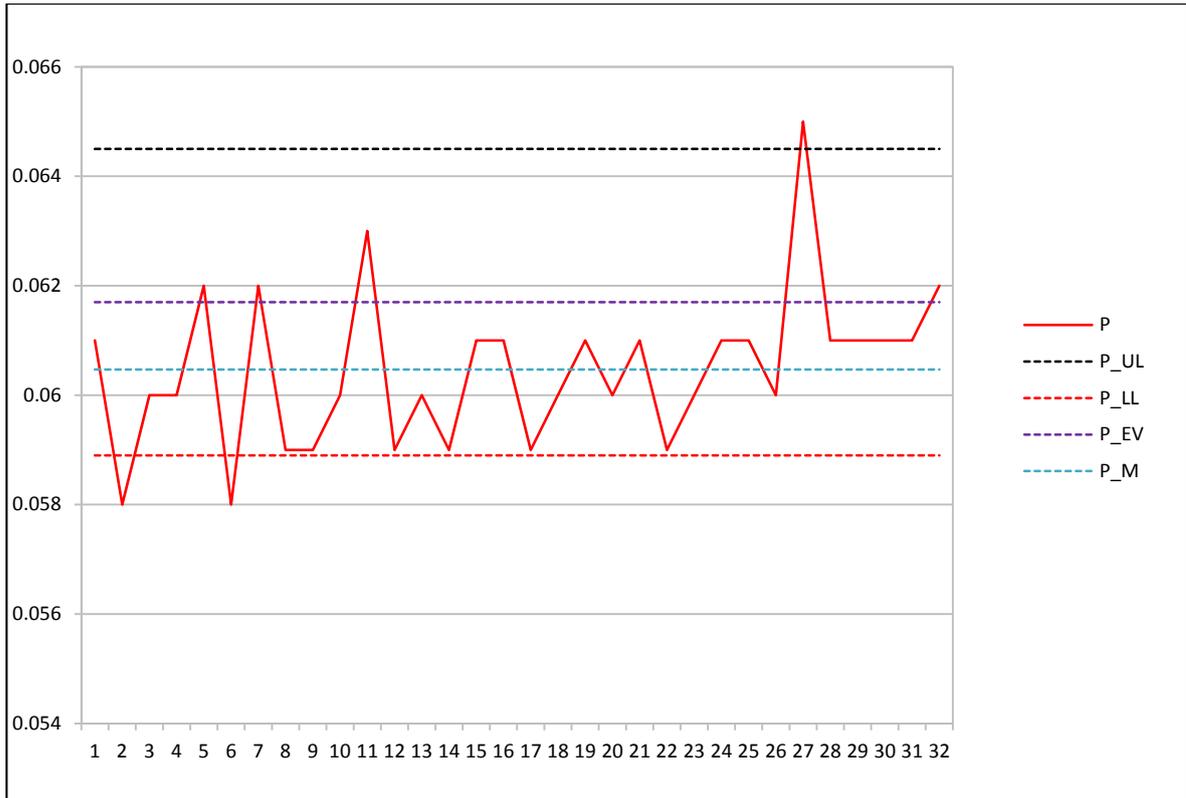


Figure 11-26: Control plot for GIOP-108 – P (in chronological order)

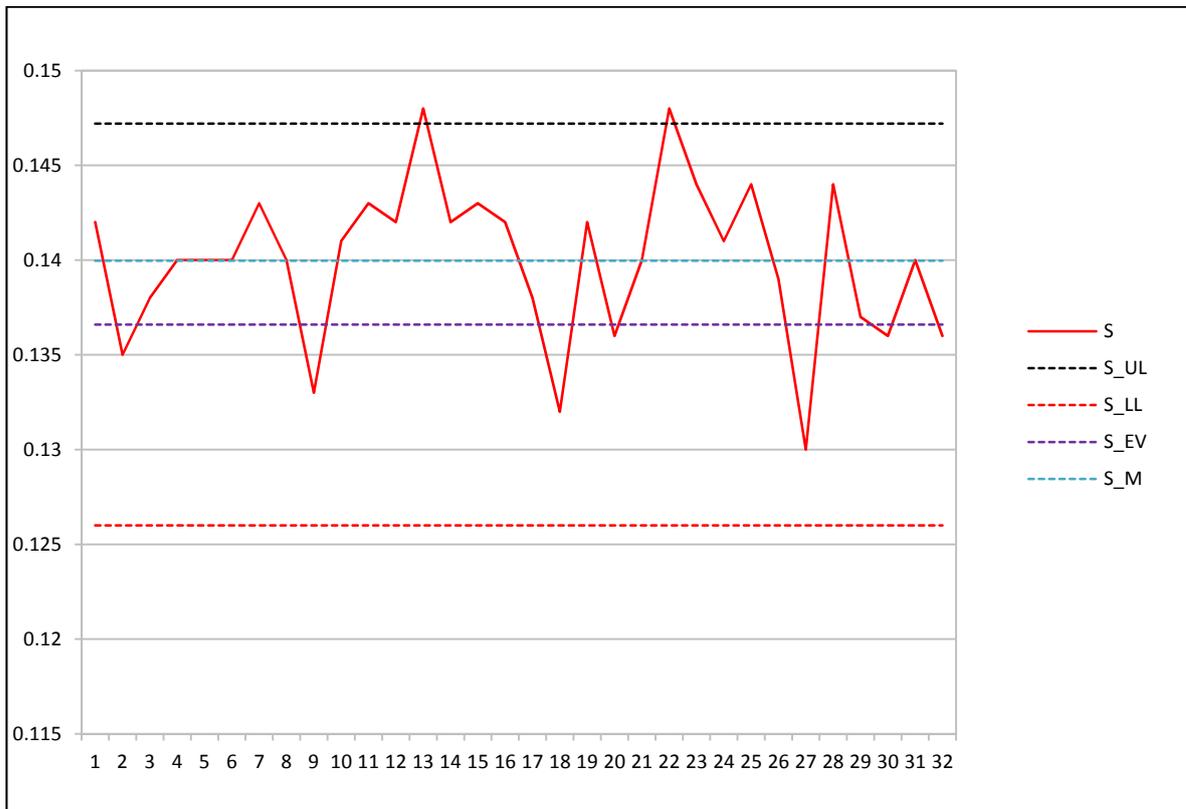


Figure 11-27: Control plot for GIOP-108 – S (in chronological order)

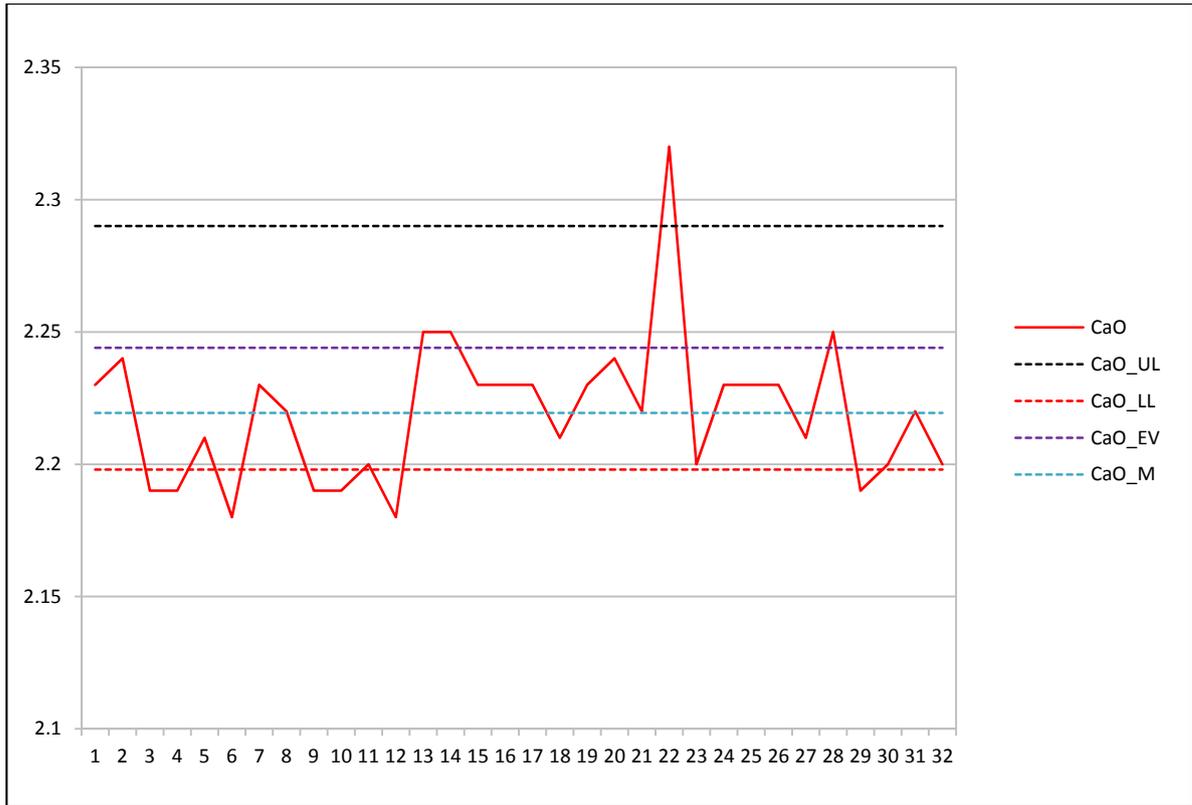


Figure 11-28: Control plot for GIOP-108 – CaO (in chronological order)

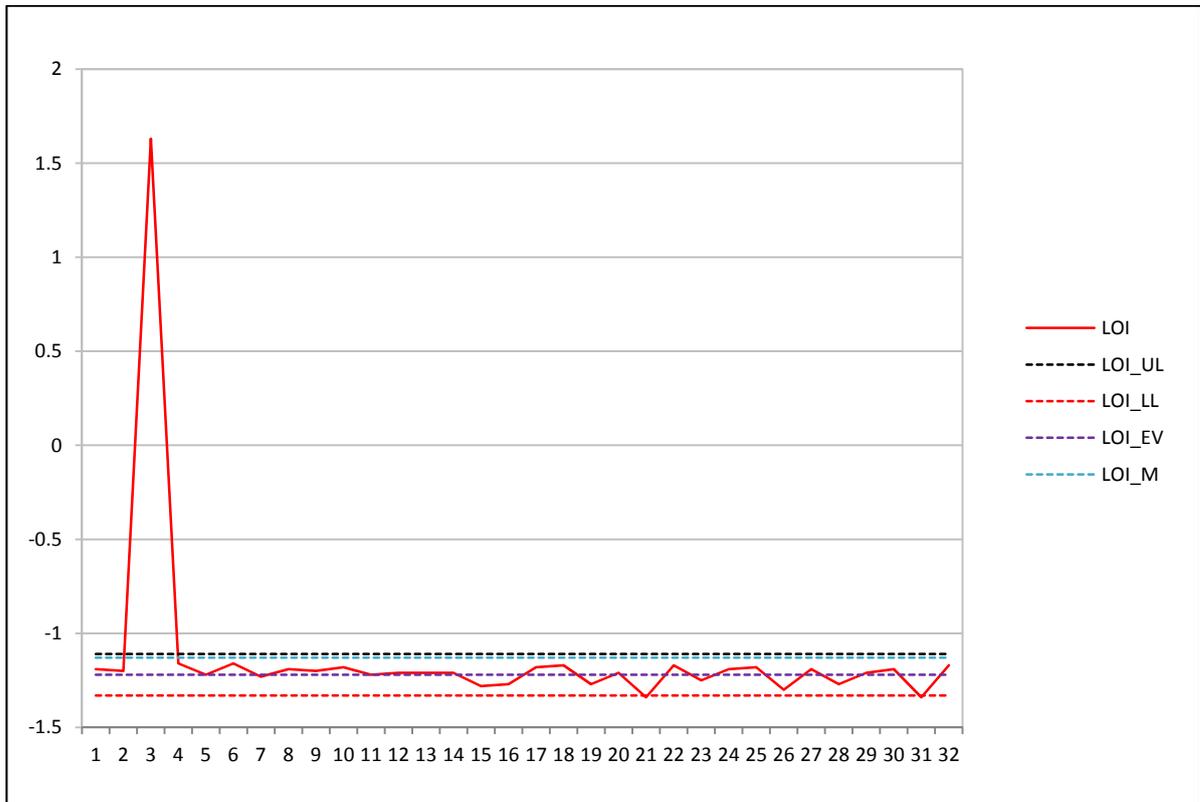


Figure 11-29: Control plot for GIOP-108 – LOI (in chronological order)

ALS STD DTR 1

An in-house standard prepared (STDDTR) by ALS was used to monitor the accuracy of the DTR programme. One standard was inserted in each sample batch. Of the 52 samples analysed, only two samples are beyond 2 standard deviations of the mean of the samples $33.8 \pm 2.04\%$ Mass Recovery (Figure 11-30). However, it appears that there is a subtle positive drift of the mass recovery data. Overall, SRK is of the opinion the quality of the DTR data is within the control limits.

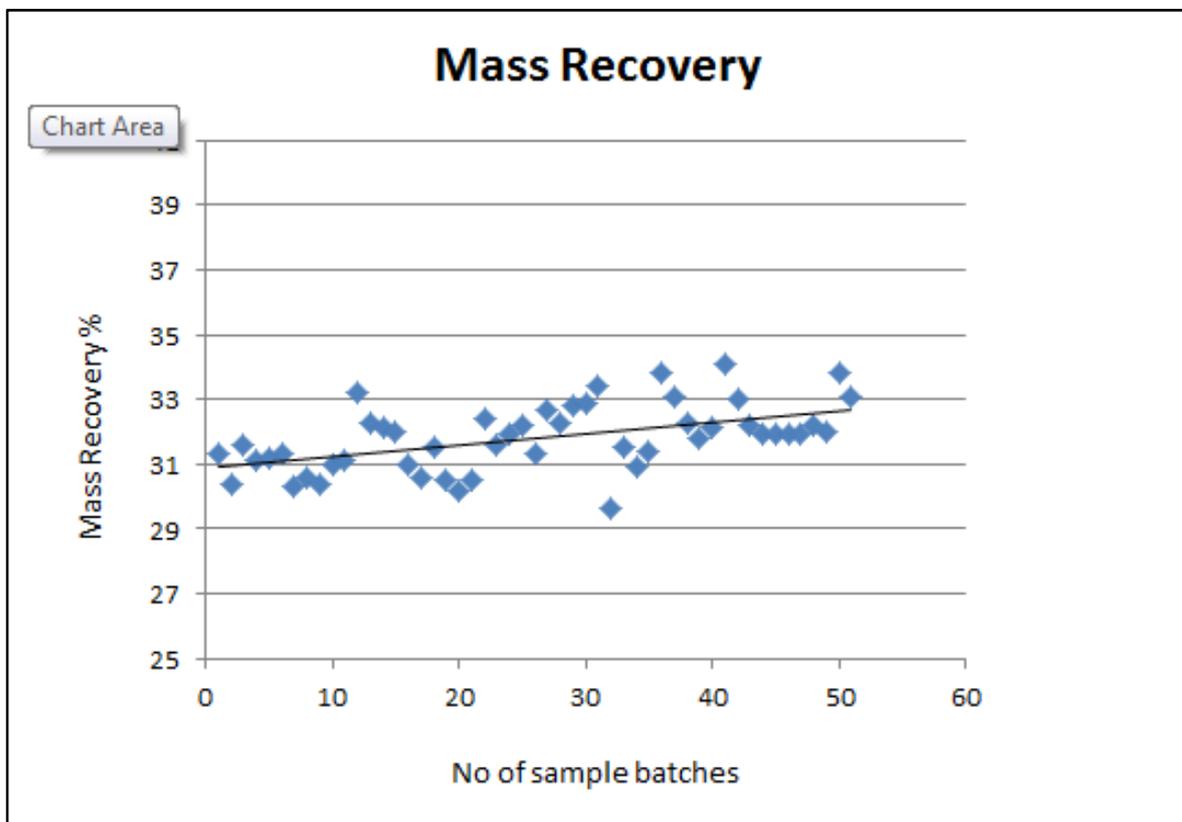


Figure 11-30: ALS in-house DTR standard, Mass Recovery

Blanks

Figure 11-31 shows the Fe results of the field blanks inserted into the sample stream. The field blank was purchased from Geostat Pty Ltd in Perth and was described as “blank milled siliceous material (pale reddish colour)”. Blanks were inserted into the sample stream at 1 every 40 samples frequency. Of the 96 samples analysed, only three samples are beyond two standard deviations of the mean of the samples $4.02 \pm 0.17\%$ Fe (Figure 11-32). These three blank samples were inserted in the same sample batch, however, as this deviation is not reflected in the CRMs for the same batch. Therefore SRK considers the deviation is probably a result of contaminated blank material, rather than bias or sample contamination in general.

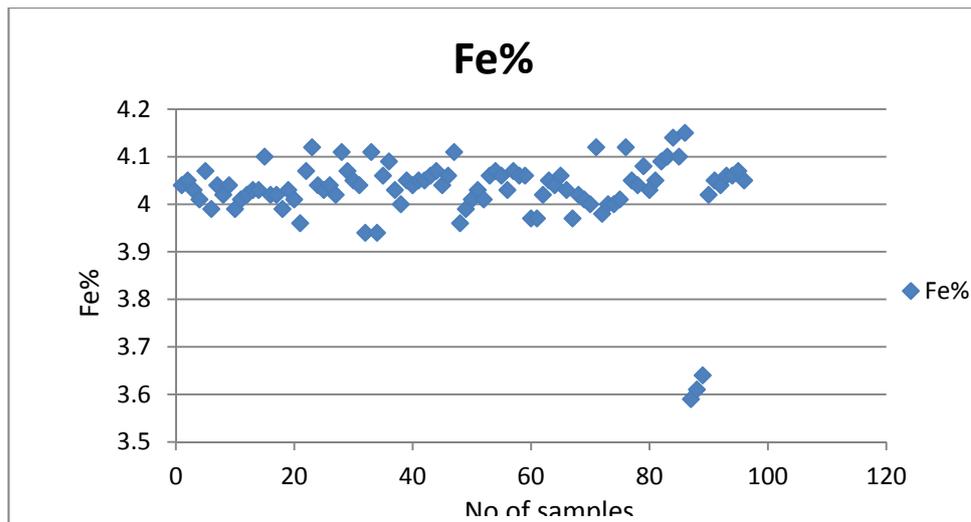


Figure 11-31: Field blanks -% Fe total assays

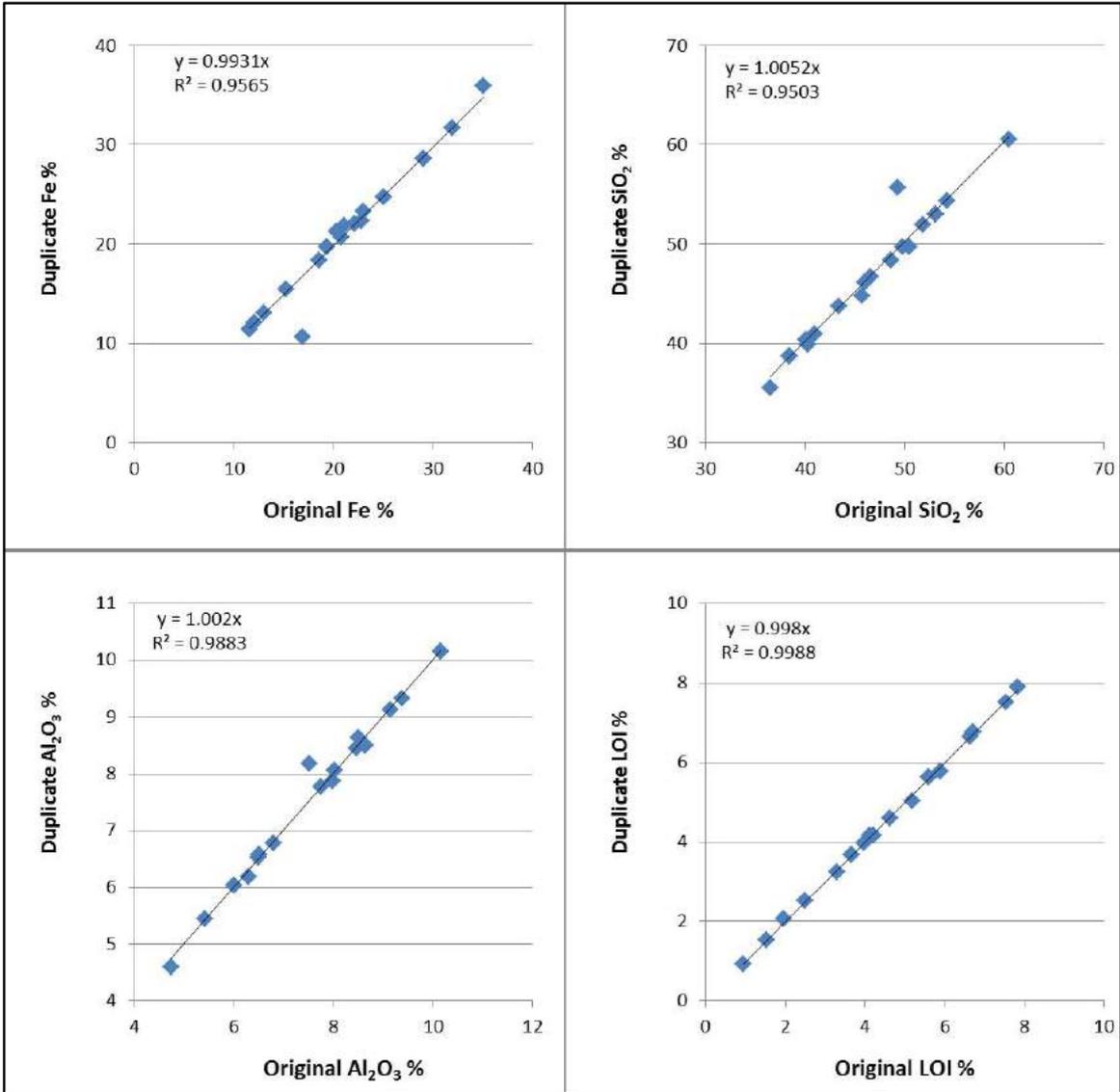
Field Duplicates

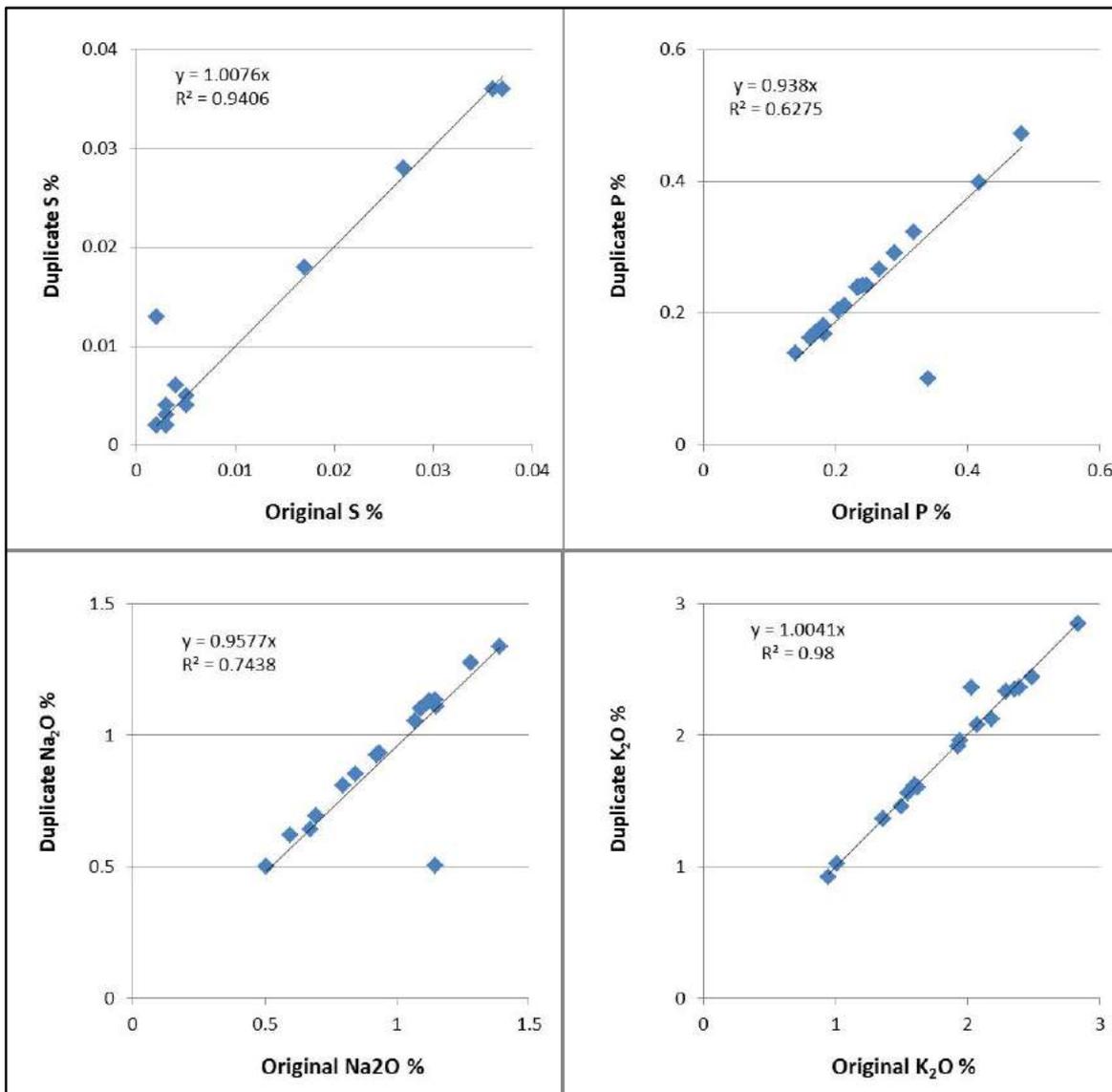
SRK is of the opinion that sampling quarter core will not produce an accurate duplicate sample for diamond core samples. Therefore, only field duplicates were inserted into the RC samples to monitor samples batches for potential sample mix-ups and data variability as a function of both laboratory error and sample homogeneity.

Table 11-7 and Figure 11-32 show the results of the re-assayed duplicates for the Olary data. In total, 21 duplicate samples have been submitted for analysis, this being approximately 2% of the RC samples submitted for assaying. With the exception of a few outliers, the duplicate samples show a strong correlation to the original sample, with a correlation coefficient of 0.94 to 1.00, and thus SRK is confident in the repeatability of the sample preparation and analysis of these samples.

Table 11-7: Summary statistics for original and field duplicate data

Variable	Count	Minimum	Maximum	Mean	SD	Variance	Variat. Coef.	Skewness	Kurtosis
SiO2_Original	21	36.5	60.5	46.81	6.09	37.11	0.13	0.16	2.42
SiO2_Duplicate	21	35.5	60.5	47.04	6.42	41.15	0.14	0.11	2.24
Al2O3_Original	21	4.74	10.15	7.57	1.49	2.22	0.2	0.02	2.07
Al2O3_Duplicate	21	4.6	10.15	7.59	1.49	2.23	0.2	-0.07	2.15
Fe_Original	21	11.57	35.03	21.07	6.43	41.38	0.31	0.33	2.47
Fe_Duplicate	21	10.67	35.94	20.85	6.77	45.86	0.32	0.27	2.5
MgO_Original	21	1.99	4.76	3.65	0.66	0.44	0.18	-0.6	3.58
MgO_Duplicate	21	1.99	4.74	3.69	0.7	0.49	0.19	-0.55	3.27
P_Original	21	0.14	0.48	0.25	0.08	0.01	0.32	1.2	4.26
P_Duplicate	21	0.1	0.47	0.24	0.08	0.01	0.34	0.97	4.22
S_Original	21	0	0.04	0.01	0.01	0	1.3	1.47	3.41
S_Duplicate	21	0	0.04	0.01	0.01	0	1.22	1.34	3.11
CaO_Original	21	1.48	5.44	3.27	0.96	0.93	0.29	0.29	2.62
CaO_Duplicate	21	1.44	5.46	3.34	1.02	1.05	0.31	0.17	2.32
TiO2_Original	21	0.29	0.7	0.54	0.1	0.01	0.19	-0.4	2.87
TiO2_Duplicate	21	0.29	0.7	0.55	0.1	0.01	0.19	-0.44	2.99
LOI_Original	21	0.94	7.83	4.37	1.9	3.62	0.44	0.05	2.16
LOI_Duplicate	21	0.93	7.9	4.36	1.89	3.59	0.43	0.09	2.21





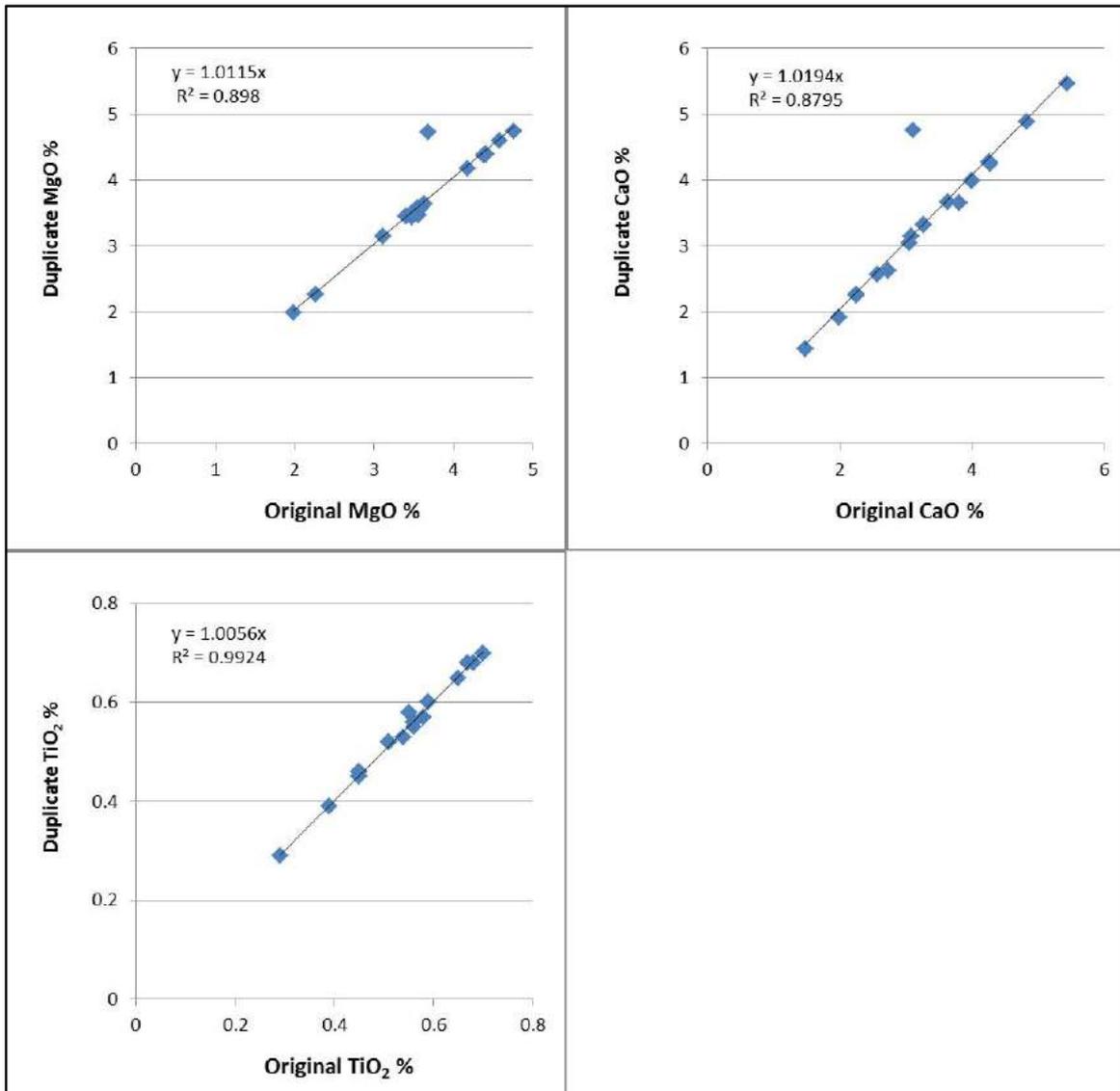


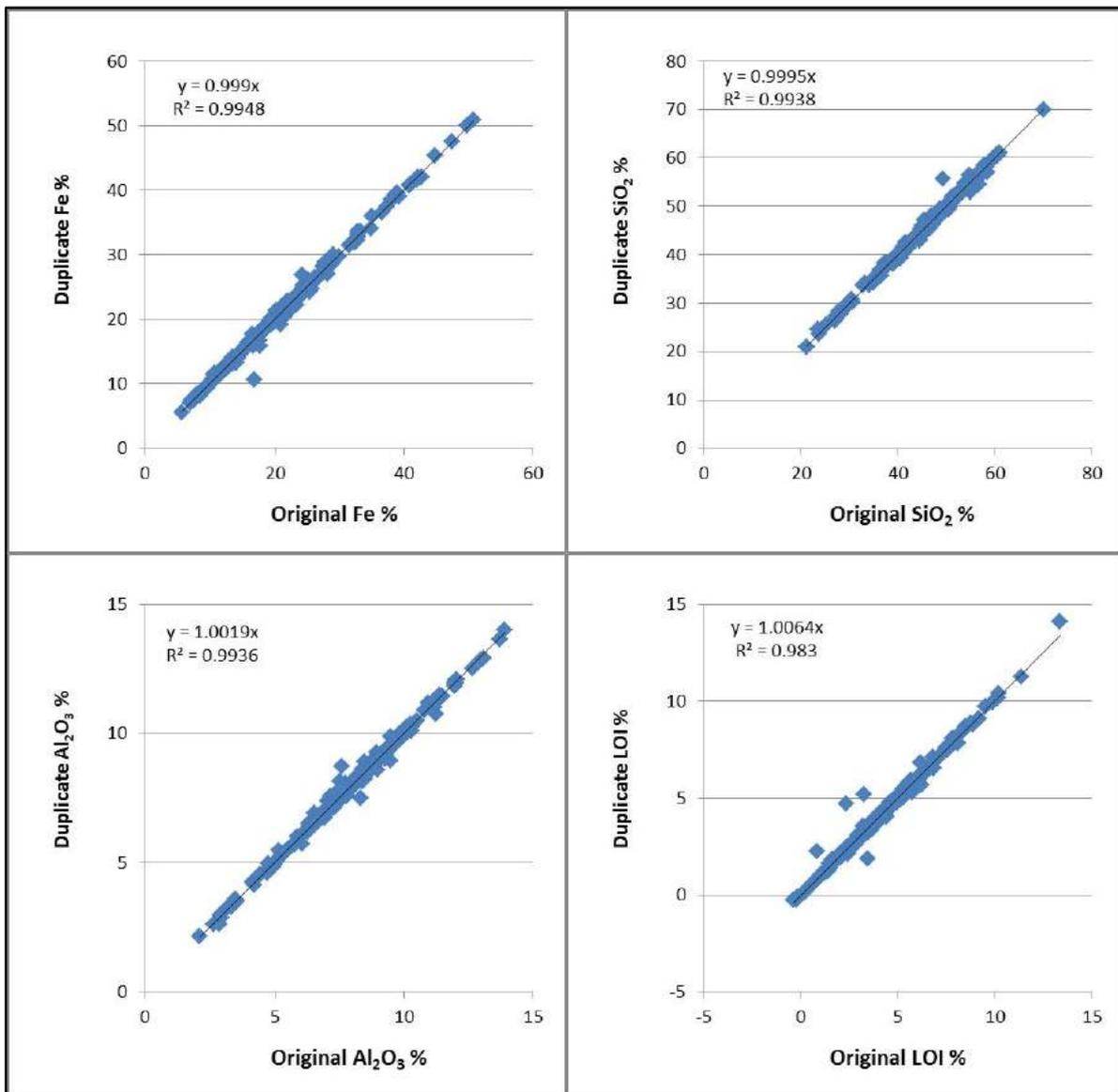
Figure 11-32: Scatter plots of field duplicate vs original samples

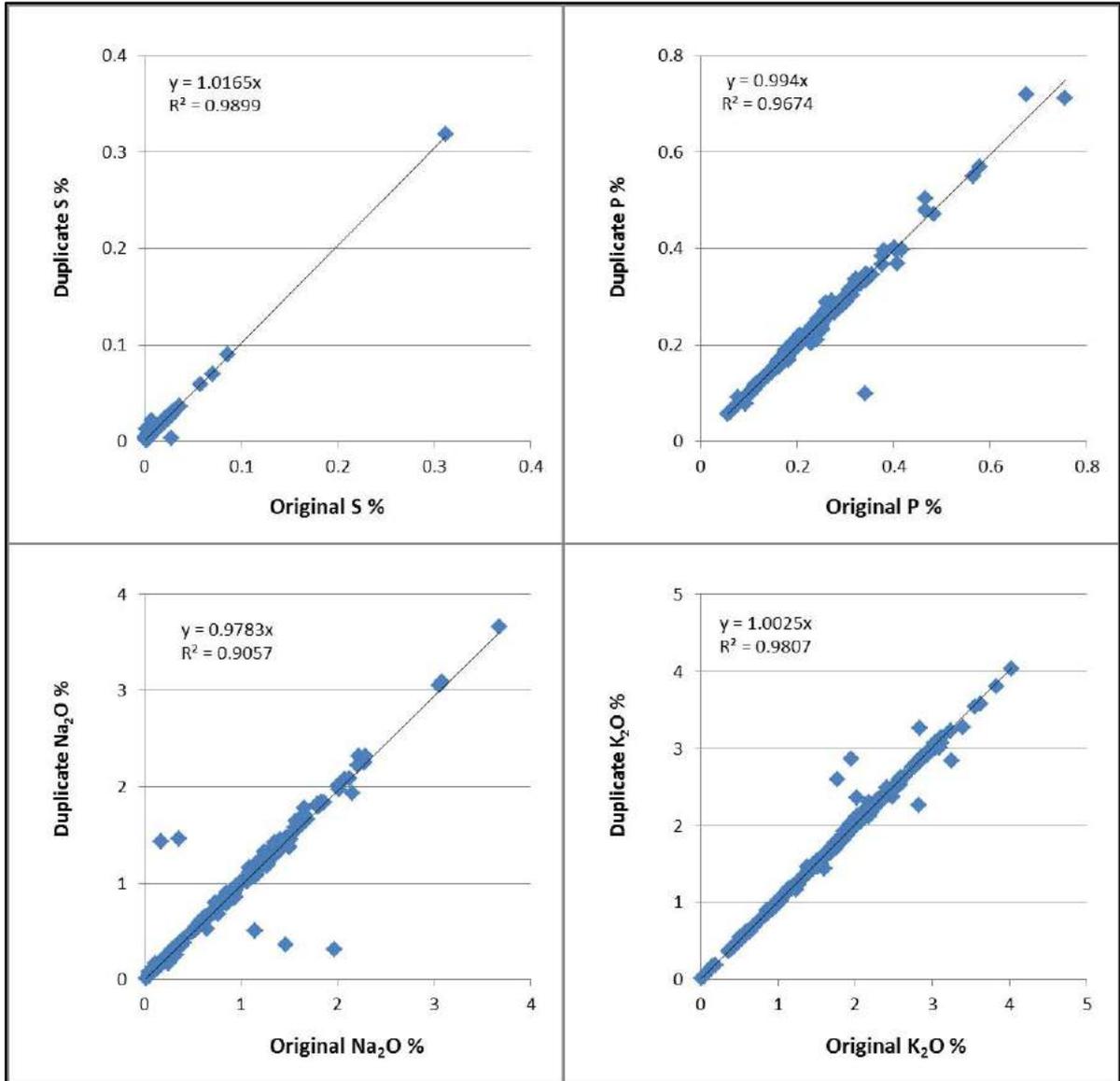
Laboratory Duplicates

Table 11-8 and Figure 11-33 show the results of the re-assayed duplicates for the Olary data. In total, 21 duplicate samples have been submitted for analysis, this being approximately 7% of the RC and diamond samples submitted for assaying. The duplicate samples show a strong correlation to the original sample, with a correlation coefficient of 0.97 to 1.00, and thus SRK is confident in the repeatability of the sample preparation and analysis of these samples.

Table 11-8: Summary statistics for original and lab duplicate data

Variable	Count	Minimum	Maximum	Mean	Std. Dev.	Variance	Variat. Coef.	Skewness	Kurtosis
SiO2_Original	224	21.1	70.1	45.95	8.73	76.21	0.19	-0.54	3.06
SiO2_Duplicate	224	20.9	70	45.91	8.72	76	0.19	-0.53	3.05
Al2O3_Original	224	2.11	13.9	8.11	2.23	4.96	0.27	-0.15	3.21
Al2O3_Duplicate	224	2.16	14	8.13	2.22	4.92	0.27	-0.18	3.24
Fe_Original	224	5.66	50.78	21.37	9.06	82.12	0.42	0.77	3.59
Fe_Duplicate	224	5.54	50.91	21.36	9.07	82.28	0.42	0.78	3.59
MgO_Original	224	0.13	10.35	3.52	1.34	1.79	0.38	-0.03	6.29
MgO_Duplicate	224	0.18	10.55	3.53	1.34	1.8	0.38	0.04	6.48
P_Original	224	0.06	0.75	0.22	0.1	0.01	0.46	1.92	9.58
P_Duplicate	224	0.06	0.72	0.22	0.1	0.01	0.45	1.89	9.3
S_Original	220	0	0.48	0.03	0.07	0.01	2.31	4.05	20.45
S_Duplicate	219	0	0.56	0.03	0.08	0.01	2.33	4.35	24.06
CaO_Original	224	0.05	9.64	3.31	1.61	2.59	0.49	0.26	3.97
CaO_Duplicate	224	0.07	10	3.32	1.63	2.66	0.49	0.35	4.14
TiO2_Original	224	0.12	0.96	0.56	0.15	0.02	0.27	-0.38	3.79
TiO2_Duplicate	224	0.12	0.96	0.56	0.15	0.02	0.26	-0.38	3.83
LOI_Original	224	-0.38	13.31	4.31	2.2	4.84	0.51	0.67	4.2
LOI_Duplicate	224	-0.26	14.13	4.34	2.22	4.95	0.51	0.75	4.54





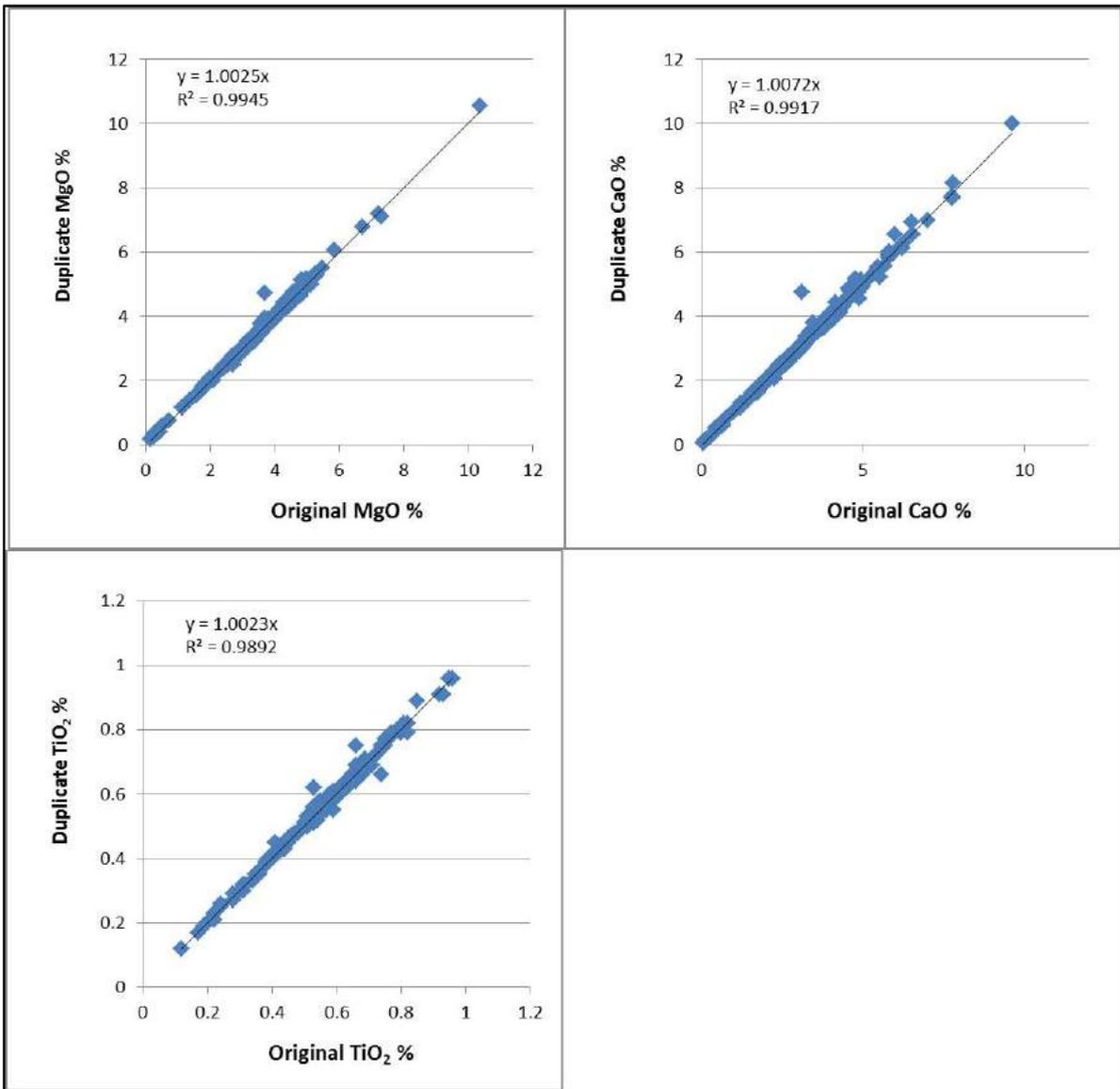


Figure 11-33: Scatter plots of laboratory duplicate vs original samples

11.7 Inter-laboratory check

A total of 74 pulp samples have been submitted to Ultra Trace Laboratory in Perth for inter-laboratory check, this being approximately 2% of the samples submitted to ALS for assaying (Table 11-9). The re-assayed samples show a strong correlation to the original sample, with a correlation coefficient of 0.98 to 1.00 in all variables of concern (Figure 11-34, Figure 11-35 and Figure 11-36), and thus SRK is confident in the repeatability of the sample preparation and analysis of these samples at ALS.

Table 11-9: Summary statistics of the inter-laboratory check samples

Variable	Count	Minimum	Maximum	Mean	Std. Dev.	Variance	Variat. Coef.	Skewness	Kurtosis
Fe	74	8.72	50.45	29.32	11.54	133.21	0.39	0.08	1.76
SiO ₂	74	21.79	60.47	39.51	10.4	108.18	0.26	-0.06	1.73
Al ₂ O ₃	74	2.37	12.04	6.64	2.34	5.49	0.35	-0.11	1.92
LOI	74	-0.78	17.58	3.29	2.66	7.07	0.81	2.49	13.67
S	74	0	0.39	0.03	0.05	0	1.9	4.97	32.98
P	74	0.02	0.47	0.23	0.09	0.01	0.41	0.25	2.83
K ₂ O	74	0.03	3.31	1.36	0.83	0.69	0.61	0.28	1.92
Na ₂ O	74	0.02	1.93	0.84	0.51	0.26	0.61	-0.11	2.05
MgO	74	0.11	8.01	2.69	1.44	2.09	0.54	0.43	4.06
CaO	74	0.05	11.54	2.58	1.86	3.48	0.72	1.76	9.3
TiO ₂	74	0.15	0.71	0.45	0.16	0.03	0.37	-0.2	1.69

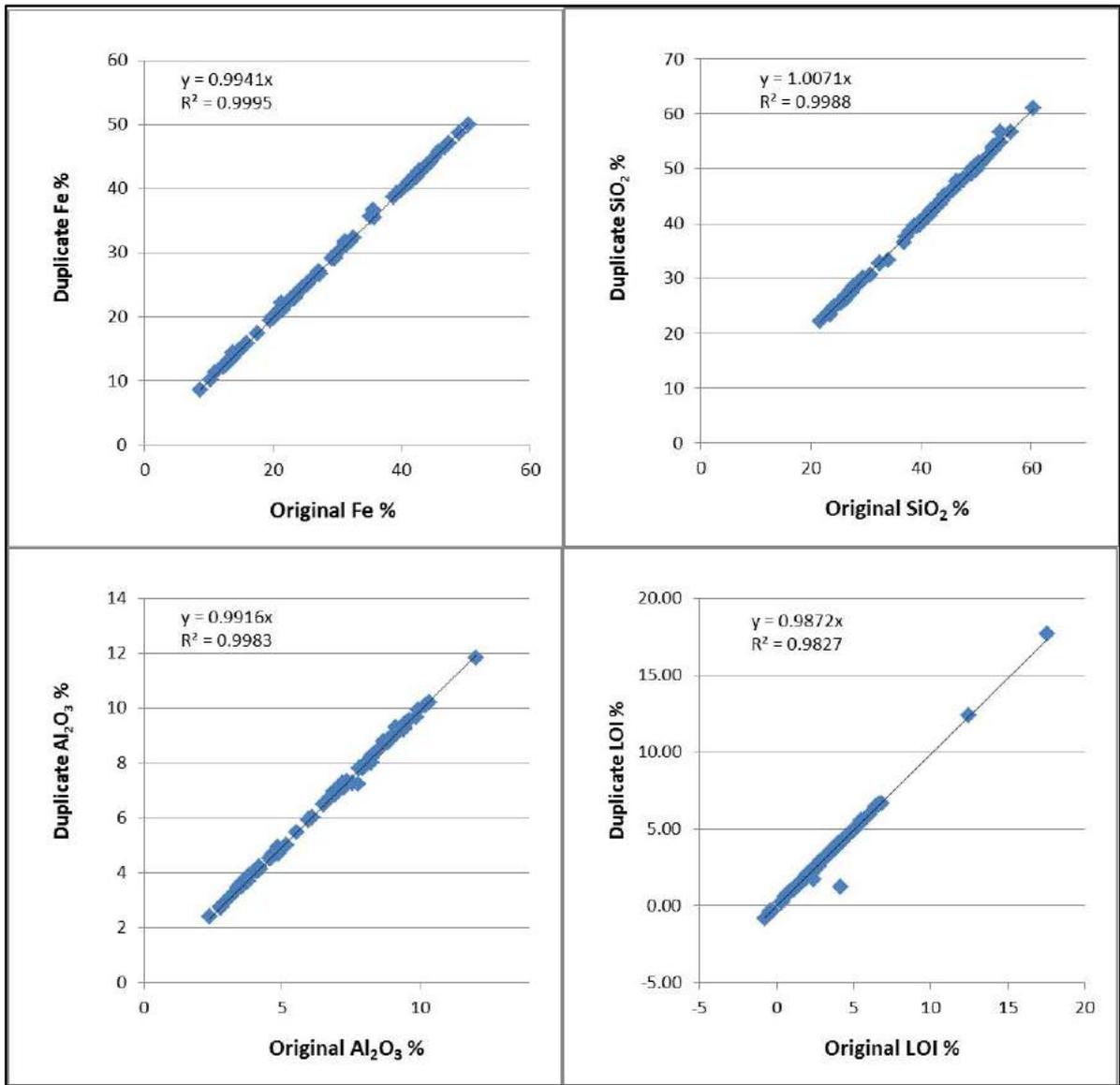


Figure 11-34: ALS vs Ultra Trace Fe, SiO₂, Al₂O₃ and LOI assay

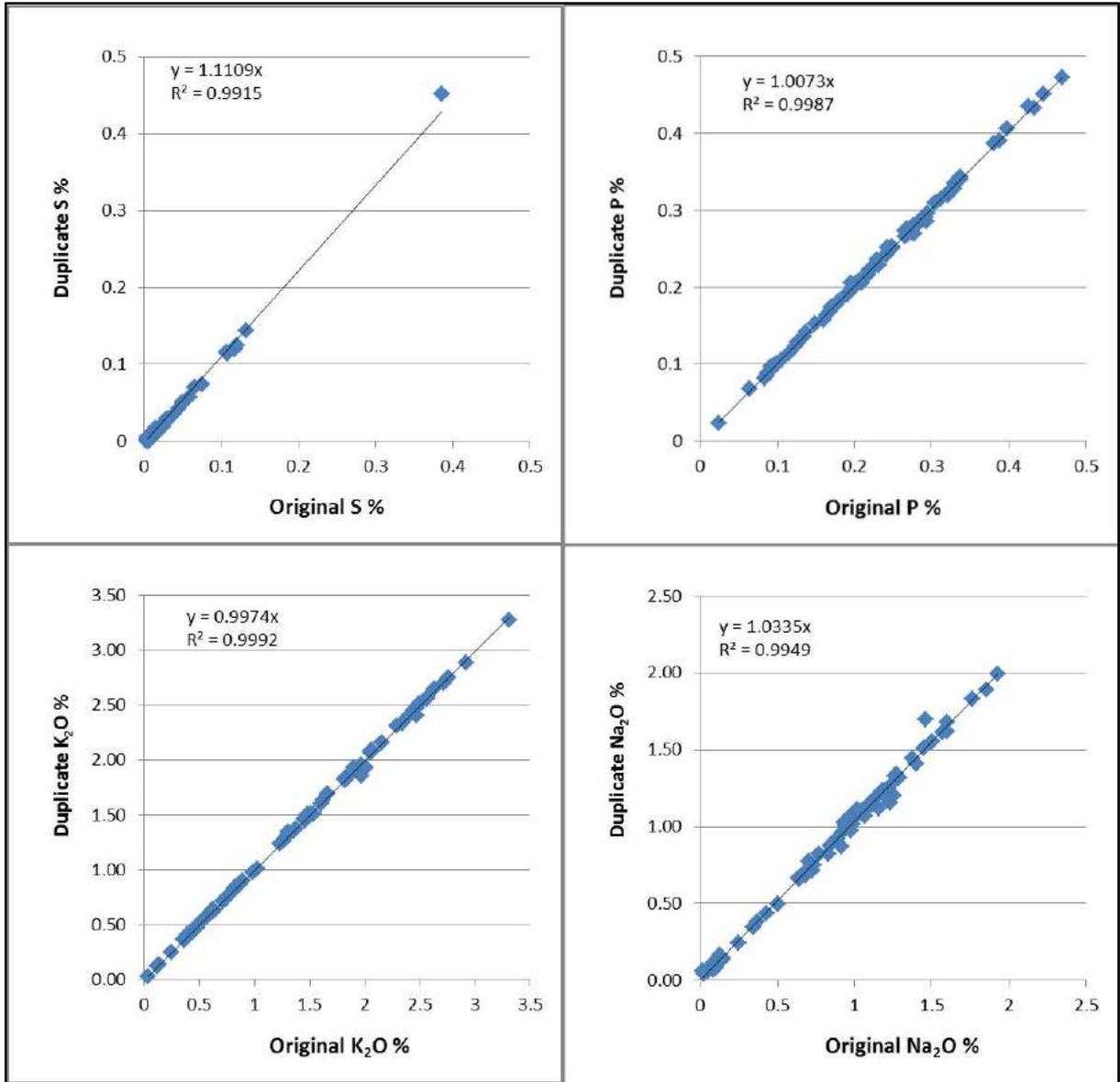


Figure 11-35: ALS vs Ultra Trace S, P, K₂O and Na₂O assay

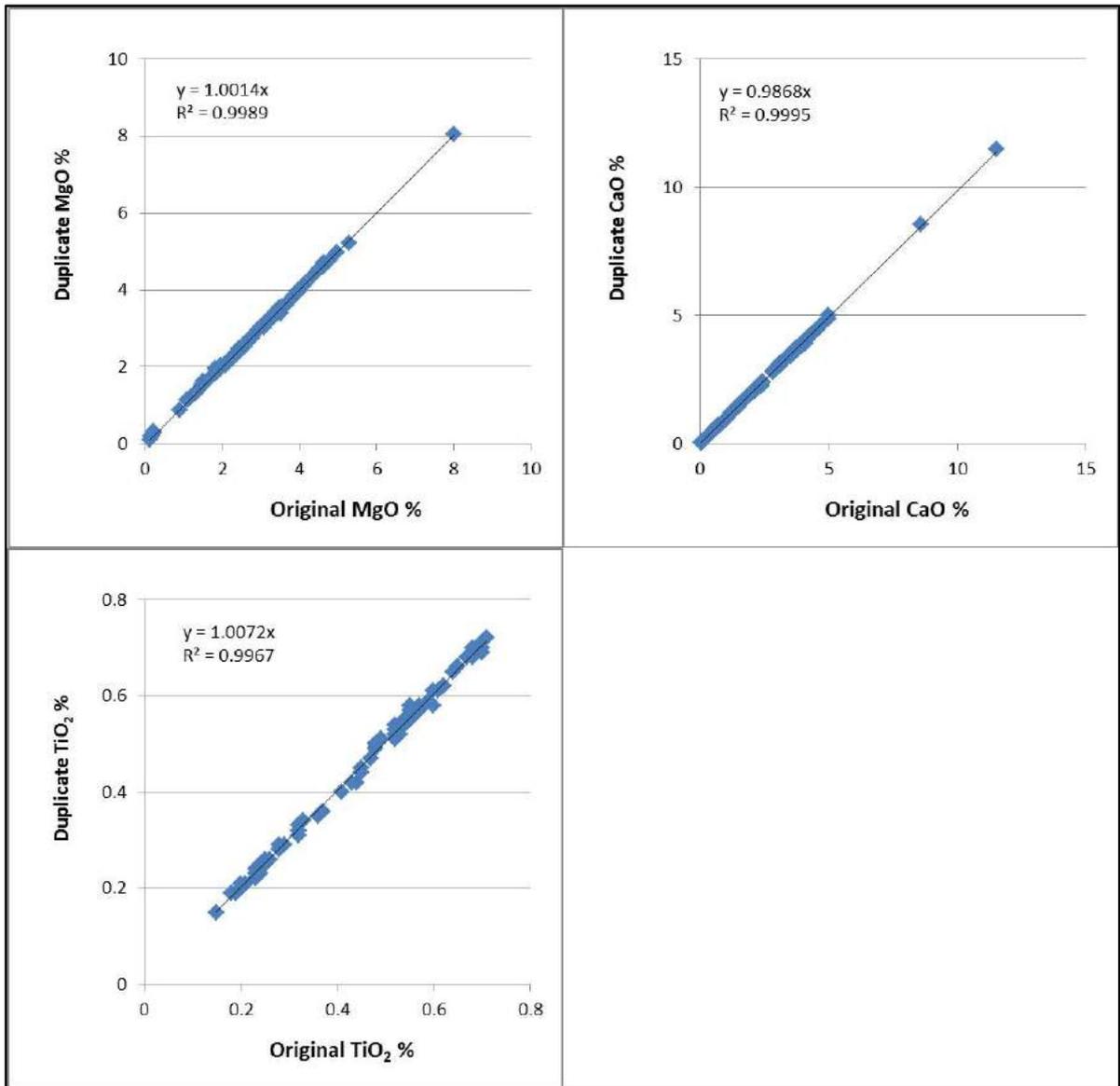


Figure 11-36: ALS vs Ultra Trace MgO, CaO and TiO₂ assay

11.8 SRK Comments

Core is stored in Adelaide in a secure ALS compound. In the opinion of SRK, the sampling preparation, security and analytical procedures used by Yukuang are consistent with generally accepted industry best practices and are therefore appropriate.

12 Data Verification

12.1 Verifications by Yukuang

All drilling data used in the Mineral Resource estimation were collected in 2011 and 2012, which has allowed Yukuang to apply modern drilling, logging and sampling methods to derive a high standard of data. Yukuang verification processes for drilling include:

- Yukuang consulted the services of SRK to allow the alignment of their Chinese standards with the drilling and sampling practices required to meet the standards required in NI43-101.
- Yukuang provided a team of at least 5 experienced geologists on-site to personally oversee the operations and ensure procedures and standards were upheld. In consultation with SRK, they reviewed their procedures and sought to make improvements where warranted.
- A comprehensive QAQC programme has been undertaken by Yukuang throughout the drilling and sampling process, to ensure a high level of confidence in the data used in the Mineral Resource Estimate. The QAQC programme has demonstrated a commitment to generating high data quality that meets industry best standards.
- Sample security has been a high priority for Yukuang and has been demonstrated by their sample despatch processes and storage of core in a secure location.
- Yukuang used DGPS to accurately define the location of drillholes and topographic surface.
- Yukuang invested a considerable amount of effort and resources by monitoring and closely managing the capture of downhole survey measurements. Drillholes often could not be entered by wireline tool and needed to be cleaned out by the drill rig first. The presence of magnetite, combined with the deviation of some holes, required the use of the downhole wireline gyroscope to provide confidence in the location of drillholes.
- Yukuang thoroughly reviewed their logging practices and procedures for diamond drilling and RC methods to ensure there was accuracy and consistency between geologists.

12.2 Verifications by SRK

12.2.1 Site Visit

SRK was introduced to the Olary Project early in the initial drilling phase and has regularly conducted site inspections. Procedures and processes were implemented and reviewed while on site which included: drilling, planning, sampling, logging, geophysical downhole surveys, database and geological interpretation. The following verification and audit processes included:

- As part of the data verification process, SRK conducted three site visits to the Olary Project at different stages in the drilling phase. SRK reviewed on-site exploration practices and has been in consultation with Yukuang from early stages of the drilling programme.
- Diamond and RC drilling operations have been observed and reviewed by SRK while on site.
- SRK observed careful and accurate drilling and handling of core.
- RC drilling techniques were observed by SRK to produce consistent volume samples with minor loss of sample to dust and spillage. SRK observed a high standard of RC sampling resulting in a high sample recovery.
- SRK reviewed core logging procedures for lithological, structural and geotechnical logs.

12.2.2 Verifications of Analytical Quality Control Data

The quality control that Yukuang has put in place has been discussed in the previous section. A summary of the quality control data is given in Table 12-1. It is SRK's opinion that the procedures adopted have led to a reliable database and SRK is confident that the quality of the data is sufficient for use in a Mineral Resource estimation in conformity with the CIM "*Estimation of Mineral Resource and Mineral Reserve Best Practices*" guidelines.

Table 12-1: Summary of analytical Quality Control data produced by Yukuang on the Olary Iron Project

Sampling programme	2012
Sample Count - Diamond Core	3609
Sample Count - RC	1246
Sample Count - Total	4855
Field Blanks	96
<i>QC Samples</i>	
GIOP-63	33
GIOP-102	32
GIOP-108	32
ALS STD DTR - samples only	51
Field Duplicates - RC sample only	21
Laboratory Duplicates	246
Total QC samples	511
Check Assay to Umpire Laboratory	74

12.2.3 Independent Verification Sampling

SRK has not undertaken any independent verification sampling.

13 Mineral Processing and Metallurgical Testing

Two metallurgical studies have been completed on the Olary Iron Project as follows:

1). Yukuang Magnetite Recovery Tests (Simulus, 2012). The report was written by Mr Bret Mueller, who is the Managing Director of Simulus Engineers. This initial study was completed at Simulus Laboratories in Perth and comprised of the following two stages:

- **Stage 1** – The testwork consisted of the following:
 - Bench scale beneficiation tests
 - Ball mill tests
 - Davis Tube Recovery (DTR) tests

Core samples, which were designed to be representative of the various types of magnetite mineralisation within the Olary deposit, from the following three drillholes were submitted for testwork:

- ZK1604
- ZK2406
- OL0025

Four composite samples were then generated from the three drillholes. The testwork involved measuring different recoveries by varying the grind particle size to 38, 45, 75, 106 and 150 microns.

Testwork on Dense Media Separation (DMS) concluded that the product iron grade was quite low and was likely to be part of processing flowsheet and would require further downstream beneficiation.

DTR tests that were conducted on material ground and screened to 100% passing 150 microns, demonstrated that separation of the iron minerals from the gangue occurred, however, product Fe grades were lower than expected.

- **Stage 2** – Consisted of further testwork on Composite 2 to optimise magnetite recovery using the DTR method for a range of operating conditions.

The results for the recoveries of Fe are shown in Table 13-1 and demonstrated that the 38 micron grind size produced the most acceptable concentrate grade of 64.83%Fe. These testwork results were the basis on which a grind size of 38 micron was used for Mineral Resource estimate DTRs. DTR product assay results for Fe, Si, Al and P are displayed in Table 13-2. The Composite 2 concentrate is relatively high quality and contains quite low quantities of deleterious elements of Al and P, compared to some West Australian Iron Ore mines.

Table 13-1: Metallurgical testwork DTR results from Composite 2*

Sample	Grind size (microns)	Yield to magnetics (% w/w)	Fe (% w/w) feed	Fe (% w/w) product	Fe (% w/w) tailings	Fe recovery (% w/w)
5	150	65.22	35.94	53.40	5.78	96.90
1	106	63.23	34.66	50.85	5.23	92.76
2	75	60.85	41.59	57.76	5.54	84.51
3	45	54.37	34.01	59.84	6.61	95.66
4	38	40.39	30.47	66.10	5.59	87.63
10	150	66.50	35.72	52.83	6.65	98.36
6	106	63.75	38.71	51.82	6.19	85.33
7	75	59.70	34.41	56.47	7.16	97.98
8	45	51.94	32.84	62.83	6.30	99.38
9	38	38.16	27.71	62.61	5.84	86.23
15	150	64.82	39.83	55.93	5.93	91.02
11	106	67.77	37.34	52.30	6.94	94.93
12	75	63.46	36.38	56.65	6.18	98.82
13	45	53.27	36.86	60.89	6.63	88
14	38	40.00	28.22	65.78	6.70	93.24

*Source: Simulus, 2012

Table 13-2: DTR product assay grades for Fe, Si, Al and P from Composite 2*

Sample	Grind size (microns)	Fe (% w/w)	Si (% w/w)	Al (% w/w)	P (ppm)
Typical			<5.0%	<1-3%	200
5	150	53.40	10.37	0.57	474
1	106	50.85	12.51	0.43	406
2	75	57.76	8.09	0.33	293
3	45	59.84	6.78	0.32	307
4	38	66.10	3.29	0.08	120
10	150	52.83	10.88	0.52	452
6	106	51.82	11.72	0.51	413
7	75	56.47	8.61	0.49	375
8	45	62.83	4.90	0.33	292
9	38	62.61	5.80	0.07	97
15	150	55.93	8.53	0.65	451
11	106	52.30	11.44	0.50	392
12	75	56.65	8.51	0.43	337
13	45	60.89	6.19	0.36	331

*Source: Simulus, 2012

2). Process Mineralogy and Mineral Separation Test Research on Olary Iron Ore (Zhengzhou Institute, 2012). The testwork focused on the separation of Fe from magnetite and hematite samples.

Representative Fe mineralised samples from the following drillholes were selected for metallurgical testwork:

- Hematite from drillholes; ZK1604, ZK2407, ZK2008, ZK2404. Total hematite sample mass of 55.57 kg.
- Magnetite from drillholes; ZK2404, ZKE0800, ZK2006. Total magnetite sample mass of 280.96 kg.

The Hematite mineralisation occurs in the weathered zone and is classified as Oxide material in this report. Results for the magnetite mineral separation were as follows:

- Recommended process is Low Intensity Magnetic Separation (LIMS) and magnetic screening. Magnetic screened middles recommended to be re-grinded and re-elected and combined with initial concentrate. Two tailings products are treated with LIMS.
- Combined concentrate grade was 63.75% Fe, yield was 41.1% and total iron recovery was 83.3%.

Results for the hematite mineral separation were as follows:

- Recommended two stage grinding and four stage magnetic separation to produce a combined LIMS concentrate and moderate magnetic separated concentrate.
- Combined concentrate grade was 61.33% Fe, yield was 38.75% and total iron recovery was 73.29%.
- Key factors in hematite separation efficiency were grinding fineness and magnetic intensity.

SRK notes that there was no economic analysis for feasibility of producing hematite concentrate. SRK is of the opinion that the hematite mineralisation within the weathered zone does not meet CIM's Definition Standards – For Mineral Resources and Mineral Reserves (CIM, 2005) of a Mineral Resource. CIM's definition of a Mineral Resource is as follows:

“A Mineral Resource is an inventory of mineralisation that under realistically assumed and justifiable technical and economic conditions might become economically extractable.”

SRK's opinion is that the oxide hematite mineralisation is not a Mineral Resource as it does not meet justifiable economic conditions to become economically extractable.

14 Mineral Resource Estimates

14.1 Introduction

The Mineral Resource Statement presented herein represents the first mineral resource evaluation prepared for the Olary Iron Project in accordance with the Canadian Securities Administrators' National Instrument 43-101.

The mineral resource model prepared by SRK considers 55 core and RC boreholes drilled by Yukuang during the period of July 2011 to August 2012. The resource estimation work was completed by Danny Kentwell, FAusIMM an appropriate "independent qualified person" as this term is defined in National Instrument 43-101. The effective date of the resource statement is 2 November 2012.

This section describes the resource estimation methodology and summarises the key assumptions considered by SRK. In the opinion of SRK, the resource evaluation reported herein is a reasonable representation of the global magnetite Iron mineral resources found in the Olary Iron Project at the current level of sampling. The mineral resources have been estimated in conformity with generally accepted CIM "*Estimation of Mineral Resource and Mineral Reserves Best Practices*" guidelines and are reported in accordance with the Canadian Securities Administrators' National Instrument 43-101. Mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the mineral resource will be converted into mineral reserve.

The database used to estimate the Olary Iron Project mineral resources was audited by SRK. SRK is of the opinion that the current drilling information is sufficiently reliable to interpret with confidence the boundaries for Magnetite Iron mineralisation and that the assay data are sufficiently reliable to support mineral resource estimation.

Leapfrog software was used to construct the geological solids. Datamine Studio Version 3 was used to construct the geological solids, prepare assay data for geostatistical analysis and construct the block model. Isatis was used for geostatistical analysis and variography, estimate metal grades and tabulate overall mineral resources.

14.2 Resource Estimation Procedures

The resource evaluation methodology involved the following procedures:

- Database compilation and verification
- Construction of wireframe models for the boundaries of the Olary deposit mineralisation
- Definition of resource domains
- Data conditioning (compositing and capping) for geostatistical analysis and variography
- Transfer of local domain orientations from wireframe models to blocks (to enable local estimation using neighbourhood orientations that vary according to the orientation of the domain near the block)
- Block modelling and grade interpolation
- Resource classification and validation
- Assessment of "reasonable prospects for economic extraction" and selection of appropriate cut-off grades
- Preparation of the Mineral Resource Statement.

14.3 Resource Database

A total of 55 holes were completed by Yukuang in two drilling programmes (July 2011–January 2012 and May–August 2012). Diamond and Reverse Circulation (RC) drilling techniques were employed, resulting in 11,666 m diamond core and 4,615 m RC samples.

Yukuang followed QA/QC and sampling protocols prepared by SRK during the course of the drilling programme. SRK consultants visited the site in November 2011, January 2012 and May 2012 and confirmed that the proposed QA/QC programme was implemented properly. All samples were prepared at ALS Adelaide facility and assayed subsequently at ALS Perth laboratory.

At the end of the drilling and assay programme, SRK was provided a database, including lithological logs, downhole surveys (density, magnetic susceptibility), assay (head and concentrate composition, Davis Tube Recovery (DTR)'s mass recovery), bulk density of four selected holes and drill core and rock chip cuttings pictures.

SRK's analysis of the assays and QAQC samples showed no material issues with the sampling and assaying.

14.4 Geological Solid Modelling

The iron ore mineralisation is hosted by the Neoproterozoic Braemar ironstone facies of the Olary Block. The Braemar ironstone facies consists of laminated and diamictic ironstones interbedded with calcareous or dolomitic siltstone. Petrographical study shows that these rocks have metamorphosed up to amphibolite facies, but subsequently retrogressed pervasively to greenschist facies. The entire succession is further cut by centimetre-scale olivine phyric basaltic to doleritic dykes in places.

With the exception of a few exposures outcropping in the North Zone, the mineralisation is covered by shallow (3–5 m thick) Quaternary sediments. The geometry of the modelled mineralisation is controlled by an asymmetric east-northeast trending synform and north-east trending open folds to a lesser extent. The mineralisation is cut by an inferred sub-vertical east-west trending fault zone that subdivides the mineralisation into the North and South Zones. The fault is inferred from a sharp change of ground magnetic signals and the abrupt displacement of the stratigraphy

Leapfrog™, a three-dimensional (3D) software package was used to model the mineralisation. On the basis of the lithological logs, downhole magnetic susceptibility measurements and assay results, contacts of each ore unit were interpreted on drill sections spaced either 200 m or 400 m apart. Interpretation was also assisted by the structural logging data. Six sub-parallel mineralisation domains (A_C, D, E, F, G & H) were modelled in the North Zone, whereas five similar domains (A, B, C, D & E) were modelled in the South Zone.

The contacts between the mineralised unit and metasilstone were selected at $Fe \geq 20\%$, where consistency existed on and between sections. The contact between the basaltic to doleritic dykes with the country rocks was not modelled as the thickness of these dykes is merely between few centimetres to up to a metre. Once the contact points between ore-waste were interpreted, the mineralised units were modelled using the "vein modelling" function in Leapfrog™. Overall, 6 sub-parallel mineralisation domains (A_C, D, E, F, G, H) were modelled in the North Zone, whereas five similar domains (A, B, C, D & E) were modelled in the South Zone.

In the North Zone, the mineralisation extends from the tenement boundary in the west through the hinge zone of the synform to the inferred major east-west trending fault for an aggregated length of approximately 3,000 m. In the South Zone, drilling to date shows that the mineralisation extends for at least 800 m, but ground magnetics surveys and stratigraphic hole drilling indicate that

mineralisation might extend for another 2,000 m. The thicknesses of the mineralisation domains range from 10 to 60 m.

The mineralisation domains were further subdivided into fresh, transitional and oxide, according to their degrees of weathering. The thickness of the oxide zone ranges from 60 to 80 m. Oxidation Boundaries were based on logging by Yukuang geologists, who determined oxidation boundaries. The drillhole logged point oxidation data was selected using “new interval selection” function in Leapfrog. Each oxidation domain was then created using the “vein modelling” function. The Quaternary deposit unit was modelled by a similar method.

A topographical surface was generated by SRK using collar data as well as spot height measurements.

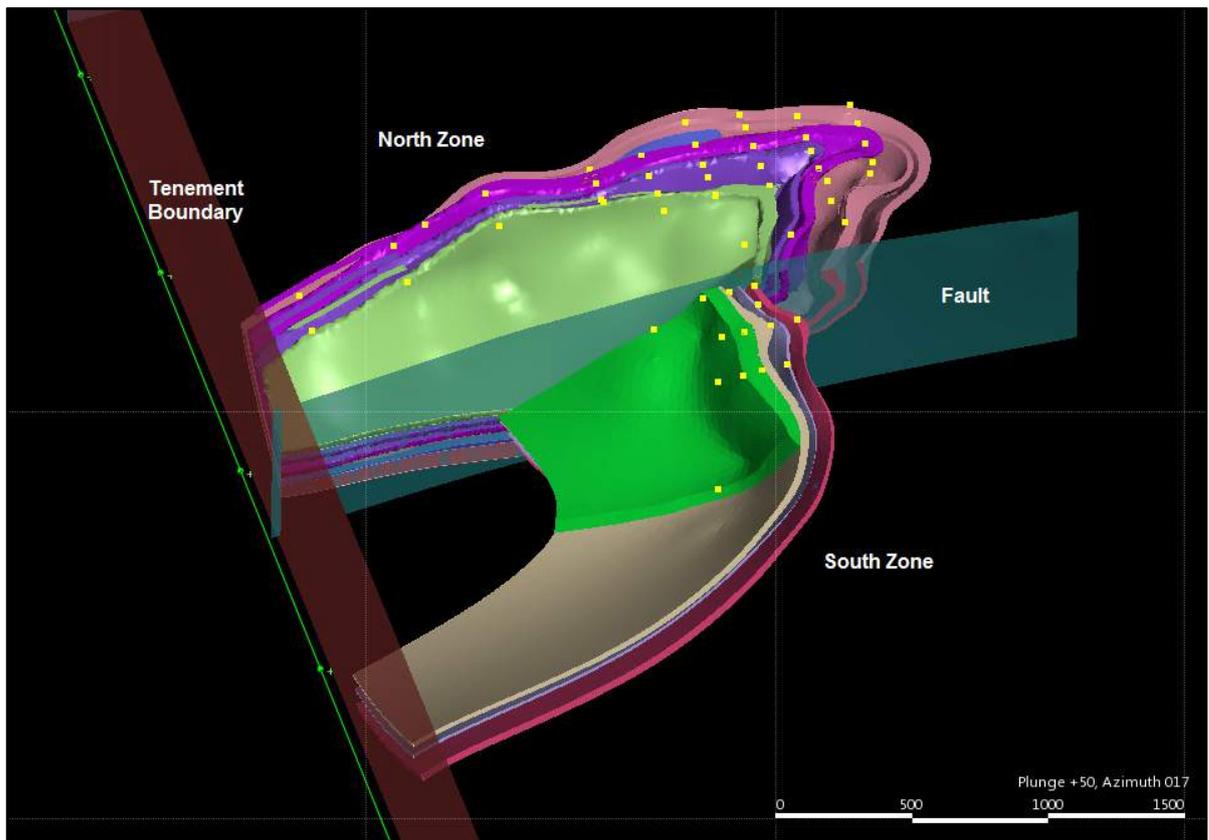


Figure 14-1: 3D Leapfrog models of the Olary Iron Ore deposit– oblique view looking NNE

In addition, eight geometric zones were defined which approximate areas of geometric continuity of the modelled units and boundaries to volumes of different densities of drilling. These zones are independent of the mineralised domains and split the mineralised domains for reporting purposes. For example, Figure 14-2 shows Zone 2 overlaying north domains A to E.

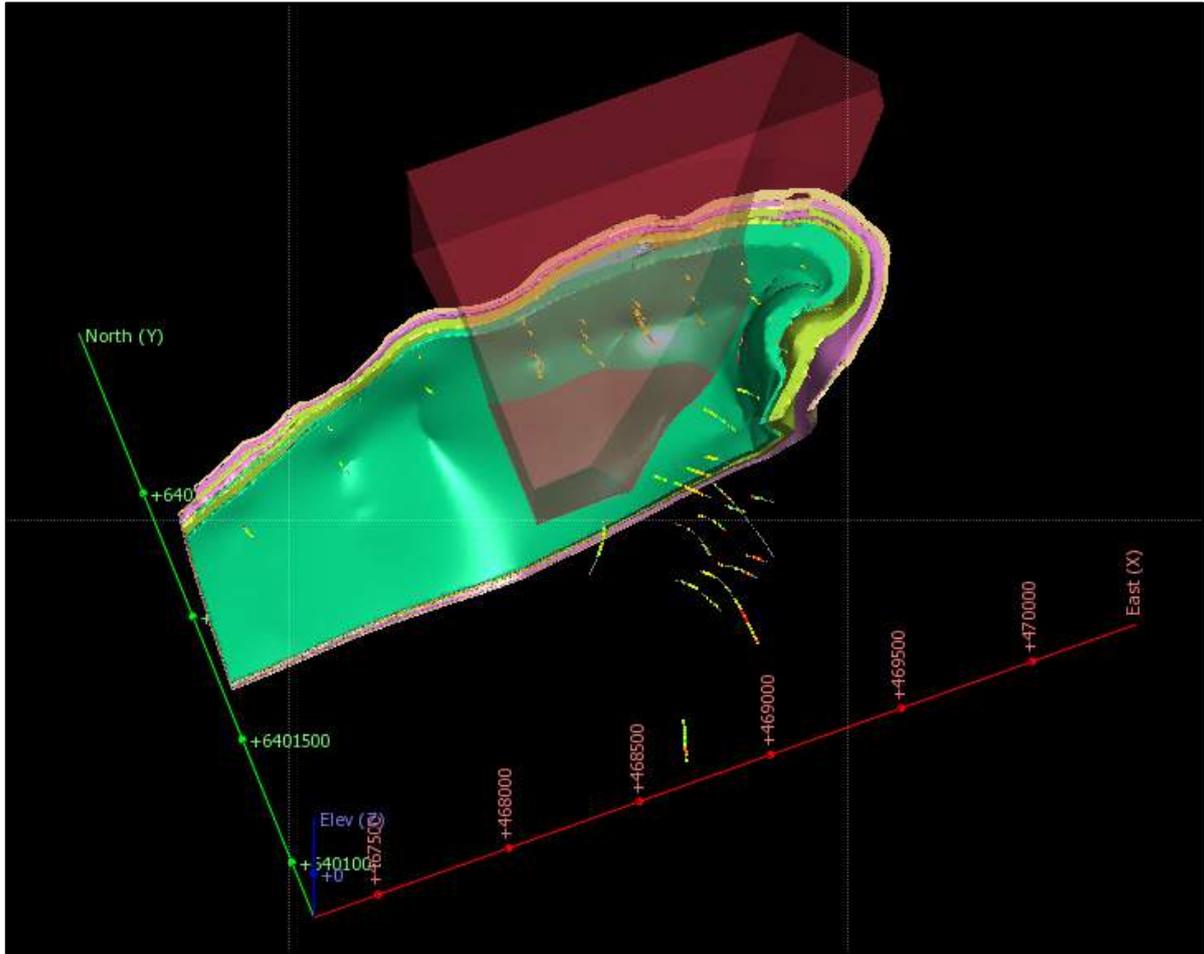


Figure 14-2: Zone example – Zone 2 in red– oblique view looking NE

14.5 Preliminary Statistical Analysis and Domaining

Initial statistical examination of the geological units (Table 14-1) and weathering domains (Table 14-3, Table 14-4 and Table 14-5) showed significant enough differences in the averages of critical variables (Mass Recovery (DTR), Total Fe and Total Silica) to require separate estimation of the individual units and weathering states. This was backed up by examination of the downhole assays values of these variables on a section by section basis.

Table 14-1: Total assay mean grades by domain for the fresh domains

Domain	nfa	nfd	nfe	nff	nfg	nfh	sfa	sfb	sfc	sfd	sfe
Count	759	64	293	271	62	11	216	90	36	25	56
T_AL2O3%	6.78	8.32	7.71	7.06	7.1	7.11	5.71	7.16	7.58	6.94	7.58
T_CaO%	4.05	4.08	3.6	3.11	2.92	2.71	2.94	3.6	3.12	2.75	3
T_Fe%	27.1	21.82	24.45	22.59	21.46	21.26	30.65	24.96	23.67	25.9	17.86
T_LOI%	4.46	5.21	4.08	3.69	3.17	2.79	3	4.32	3.18	2.49	3.19
T_MgO%	3.52	3.8	3.61	3.58	3.59	3.58	2.95	3.66	3.64	3.32	3.7
T_P%	0.24	0.2	0.23	0.23	0.25	0.25	0.27	0.24	0.22	0.25	0.26
T_S%	0.03	0	0.01	0.01	0	0	0.06	0.04	0.03	0.01	0.01
T_SiO2%	38.52	42.91	41.61	46.36	48.27	48.97	38.3	41.68	44.41	43.13	52.48
T_TiO2%	0.46	0.57	0.53	0.51	0.55	0.58	0.39	0.5	0.52	0.48	0.57
MASSREC	28.57	15.36	22.66	20.63	17.39	17.74	36.56	24.54	26.01	30.08	19.48

Table 14-2: Total assay mean grades by weathering for domain North A

Domain	nfa	nta	noa
Count	759	53	19
T_AL2O3%	6.78	8.48	9.3
T_CaO%	4.05	1.71	0.69
T_Fe%	27.1	25.13	29.19
T_LOI%	4.46	3.57	3.81
T_MgO%	3.52	2.16	0.67
T_P%	0.24	0.22	0.23
T_S%	0.03	0.01	0.02
T_SiO2%	38.52	44.05	40.84
T_TiO2%	0.46	0.56	0.52
MASSREC	28.57	17.91	NA
Massrec count	756	26	0

Table 14-3: Total assay mean grades by weathering for domain North E

Domain	nfe	nte	noe
Count	268	74	48
T_AL2O3%	7.71	8.21	9.65
T_CaO%	3.6	2.49	0.7
T_Fe%	24.45	24.26	25.97
T_LOI%	4.08	3.53	3.45
T_MgO%	3.61	3.01	1.3
T_P%	0.23	0.24	0.15
T_S%	0.01	0.01	0.03
T_SiO2%	41.61	43.59	44.39
T_TiO2%	0.53	0.56	0.59
MASSREC	22.66	17.41	14.77
Massrec count		44	6

Table 14-4: Total assay mean grades by weathering for domain North F

Domain	nff	ntf	nof
Count	271	75	99
T_AL2O3%	7.06	7.68	9.33
T_CaO%	3.11	2.04	0.46
T_Fe%	22.59	21.71	25.01
T_LOI%	3.69	3.34	3.72
T_MgO%	3.58	2.86	0.68
T_P%	0.23	0.24	0.12
T_S%	0.01	0.01	0.06
T_SiO2%	46.36	48.99	47.3
T_TiO2%	0.51	0.52	0.61
MASSREC	20.63	15.61	49.18
Massrec count	267	20	2

Many of the units showed twin populations of total Fe with a smaller higher grade population group. This often occurred at the on the hanging wall or footwall of the individual units, particularly in unit A (example shown in Figure 14-3), but was not consistent enough or thick enough to justify further sub domaining of the geological units. Infill drilling may assist in defining this high grade Fe as a distinct unit. This high grade Fe population is associated with a high mass recovery population (Figure 14-4).

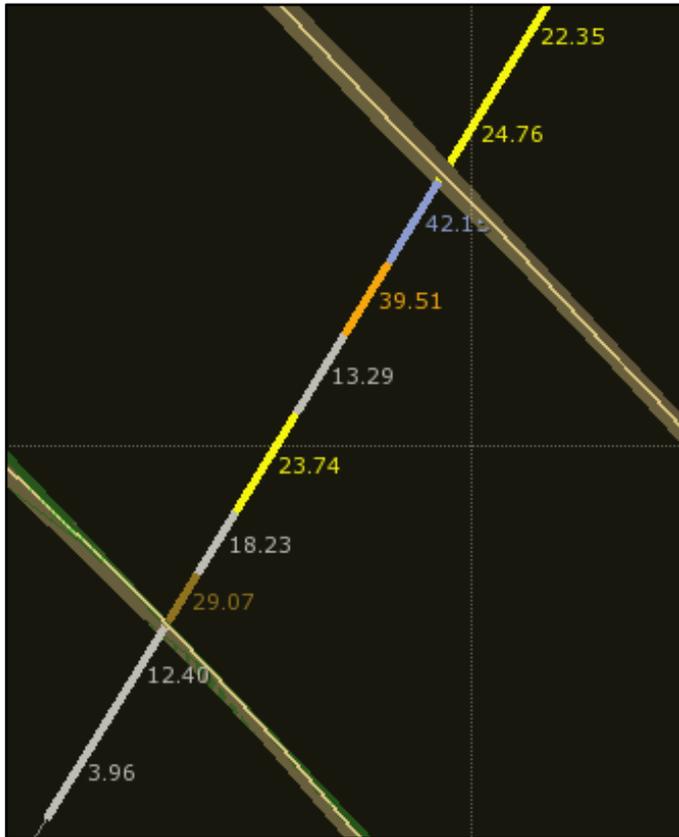


Figure 14-3: Section view - high Fe grade on the hanging wall of domain A, hole ZK2004

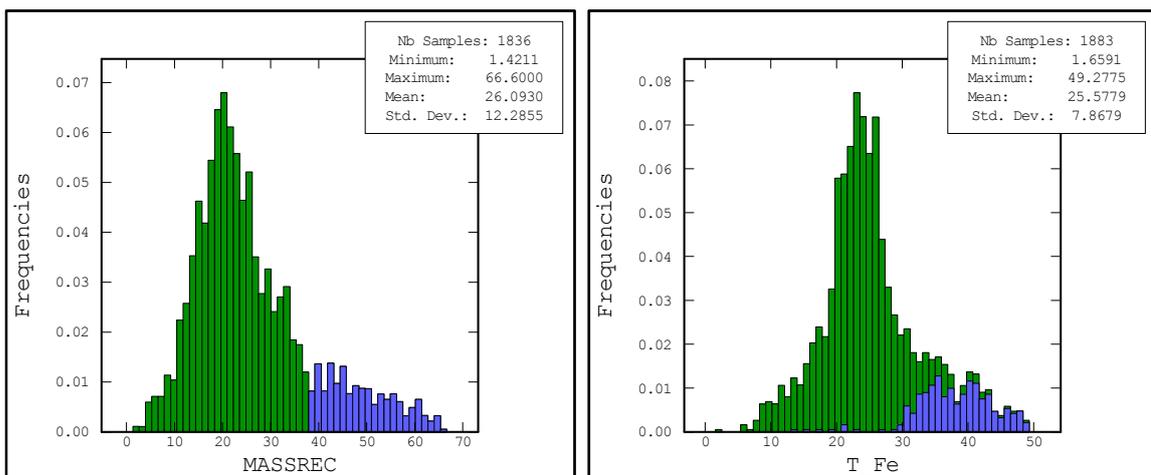


Figure 14-4: Total Fe and mass recovery histograms for the fresh domains

14.6 Data Flagging and Compositing

14.6.1 Data Flagging

Data flagging is the process of assigning a domain code to the data based on the position of the data in the desurveyed drillhole file, relative to a wireframe interpretation.

Separate codes were assigned for the weathering or oxidation status, mineralised domain, North/South Zone and geometric zone. A summary of the codes is presented in Table 14-5.

Table 14-5: Flagging of Mineralised and Weathering Domains

Mineralised Domain	Zone	Fresh	Transition	Oxide
AC	North	111	112	113
D	North	121	122	123
E	North	131	132	133
F	North	141	142	143
G	North	151	152	153
H	North	161	162	163
A	South	211	212	213
B	South	221	222	223
C	South	231	232	233
D	South	241	242	243
E	South	251	252	253

A unique DOMAIN code was then calculated by summing the three codes. An example of the South Zone, Mineralised Domain E, Fresh material would have the following codes:

- South Zone = 200
- Mineralised Domain E = 50
- Fresh Material = 1.

The DOMAIN code is therefore $200 + 50 + 1 = 251$.

The logic of the sample coding process is as follows:

- 1). Select data within interpreted wireframe.
- 2). Code selected data as required.
- 3). Join selected data to the complete drillhole database using fields BHID and FROM.
- 4). Repeat for all wireframes.
- 5). A total of 33 domains were then created.

Due to the folded nature of the syncline and the interpreted fault zone, separate zones were created to establish similar geometrical shapes for kriging. A total of eight geometrical zones (GZONE'S), displayed in Figure 14-5 and Figure 14-6, were created of which five were in the North Zone and three were in the South Zone.

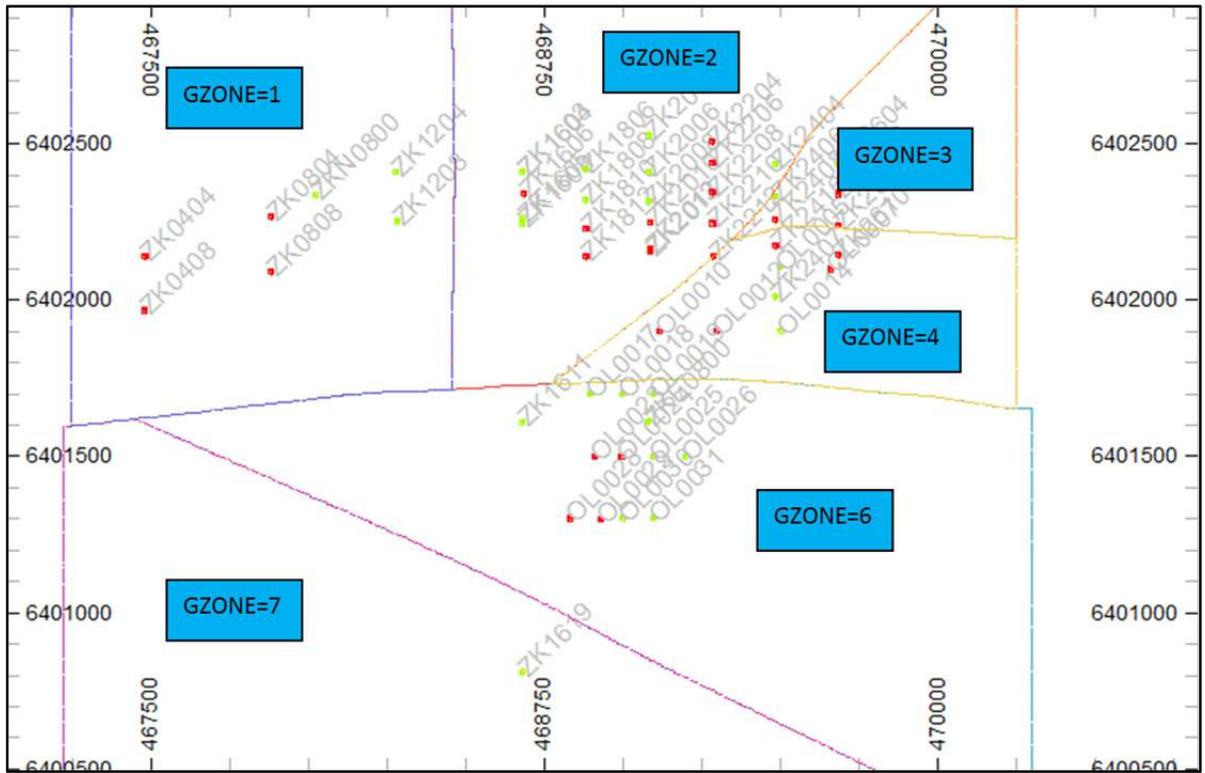


Figure 14-5: Surface plan view showing geometric zones

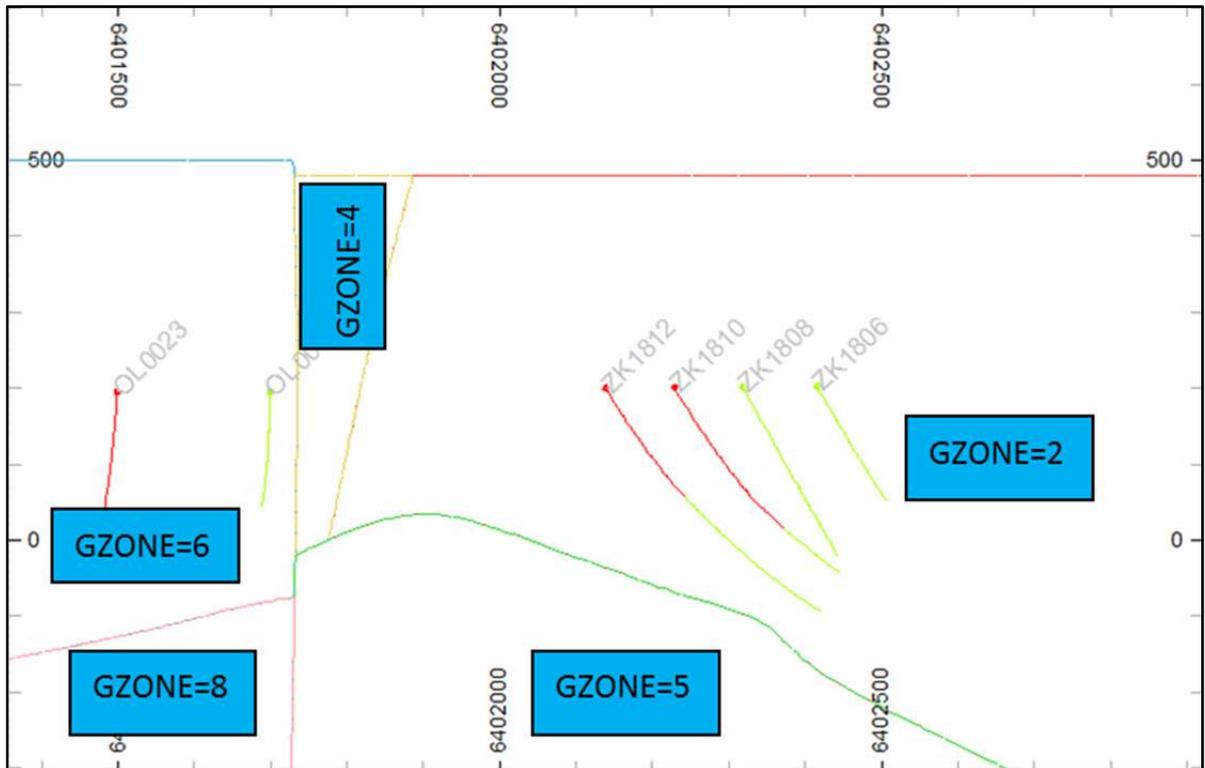


Figure 14-6: Section 468880E showing geometric zones (looking West)

During the transition to and from different software packages alternative alphanumeric codes were used to enable more efficient processing in the respective packages. The equivalent alphanumeric codes are shown in Table 14-6.

Table 14-6: Numeric and alpha domain codes

Mineralised Domain	Zone	Fresh	Transition	Oxide	Fresh	Transition	Oxide
AC	North	111	112	113	nfa	nta	noa
D	North	121	122	123	nfd	ntd	nod
E	North	131	132	133	nfe	nte	noe
F	North	141	142	143	nff	ntf	nof
G	North	151	152	153	nfe	nte	noe
H	North	161	162	163	nfh	nth	noh
A	South	211	212	213	sfa	sta	soa
B	South	221	222	223	sfb	stb	sob
C	South	231	232	233	sfc	stc	soc
D	South	241	242	243	sfd	std	sod
E	South	251	252	253	sfe	ste	soe

14.6.2 Data Compositing

All head assays, concentrate assays, mass recoveries and densities were composited to 3 m intervals within the geological units. Where residual intervals less than 3 m resulted, the lengths were adjusted so that all material in that drill segment was composited, i.e. actual composite lengths were adjusted to slightly more or slightly less than 3 m to accommodate the residual. Using this method of compositing ensures that all sample assay data is utilised. Minimum composite length is 2.0 m, maximum composite length is 4.3 m with an average composite length of 3.0 m. A histogram of drillhole sample composite lengths is displayed in Figure 14-7 and illustrates a close to normal distribution, where 98% of the composite lengths are within 10% of the 3.0 m composite length.

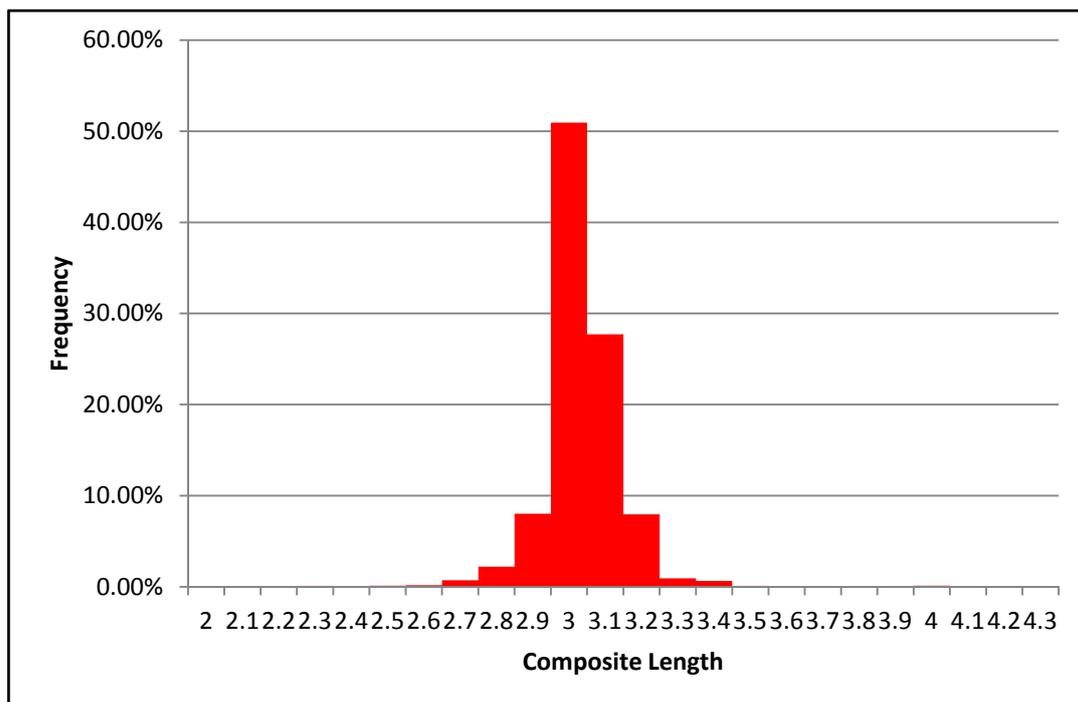


Figure 14-7: Drillhole sample composite length histogram

14.7 Statistical Analysis and Variography

14.7.1 Evaluation of Outliers

All variables with the exception of total sulphur (T_S) displayed approximately Gaussian-shaped histograms and no top cutting was considered necessary. The comparison of the block averages against the composite averages per domain show that there has not been any overestimation of sulphur or any other variable.

14.7.2 Variography

Variographic modelling was attempted on several of the major head assay and concentrate assays on several different splits and combinations of geology, geometry and weathering however no clear structure was obvious in any of the experimental variograms. SRK considers that this is due to the wide spaced drilling (200 x 100 m or wider) and the high downhole variability associated with the banded formation (for example see Figure 14-8).



Figure 14-8: Section view - Downhole T_Fe values for domain nfa (between the yellow lines) hole ZK2212

SRK therefore chose to model a single variogram and use that for estimation of all variables for all geological units. This variogram model was based on the nugget value observed from the downhole variogram of the T_Fe in the fresh component of the major northern unit (domain code = nfa). The ranges were also based on the poorly structured experimental variography for the same domain.

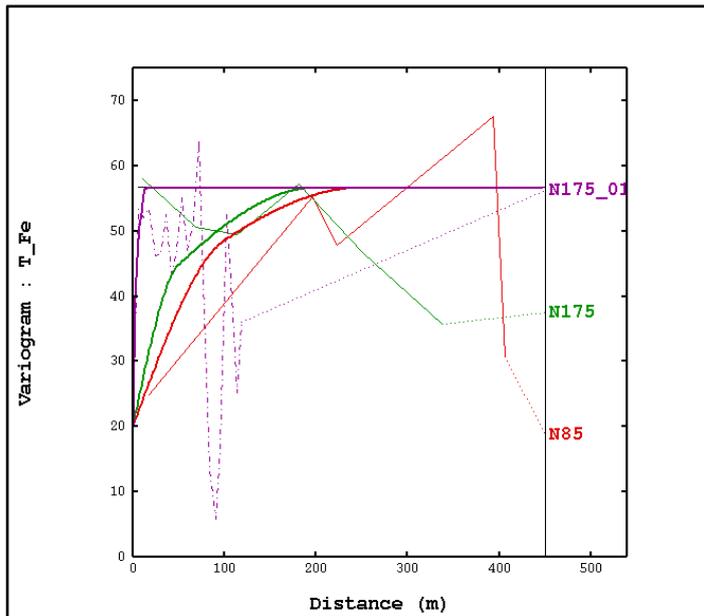


Figure 14-9: Anisotropic directional variogram – experimental (thin lines) and model (thick lines)

Variogram ranges are around 200 m simply because that is the lower limit of the drill spacing in the strike direction (red lines). Some definition is shown in the down dip direction (green lines) as there is closer spaced data in this direction but ranges are still around 200 m.

Drilling spacing is inadequate for variogram definition in the strike direction. Infill drilling is highly recommended.

14.8 Block Model and Grade Estimation

Each of the 11 mineralised domains was estimated separately for fresh, transition and oxide making 33 potential estimation runs. A number of oxide and transition domains did not contain any samples so the total number of estimation runs was 27. There are 12 fresh domains, 9 transition domains.

Within each domain, eleven head grades and eleven concentrate grades were estimated together with density and mass recovery (DTR).

14.8.1 Block size

The block model was estimated using a 50 x 50 x 10 m block to attempt to provide a level of selectivity close to what might be used during mining and to accommodate the folded geometry of the formation. Given the drill spacing and the difficulty identifying structure in the experimental variograms, estimation at this block size results in low to very low local confidence in the local block by block estimates in most areas. Confidence in the global domain by domain grade and tonnage curves is higher but still reliant on the assumed variogram model.

SRK tested the north fresh A unit (nfa) domain to assess the impact of the small block size on the T_Fe grade and tonnage curves. This domain is the largest and best informed domain. The test was done by comparing the actual kriged block estimate curves with theoretical curves generated via a change of support calculation based on the variogram and the sample distribution. No significant differences in T_Fe grade with higher cut-off was seen. There was some difference in the tonnages around the 22% T_Fe cut-off but these were less than 10%. The 50 x 50 x 10 m block estimate is therefore considered adequate for global assessment of the economic potential of the deposit. The block estimate at this size with the current level of drilling is not suitable for selective block by

block mine planning as the confidence in the individual block by block estimates is low to very low. However, it is assumed that the deposit will be bulk mined and that selective mining will not be used.

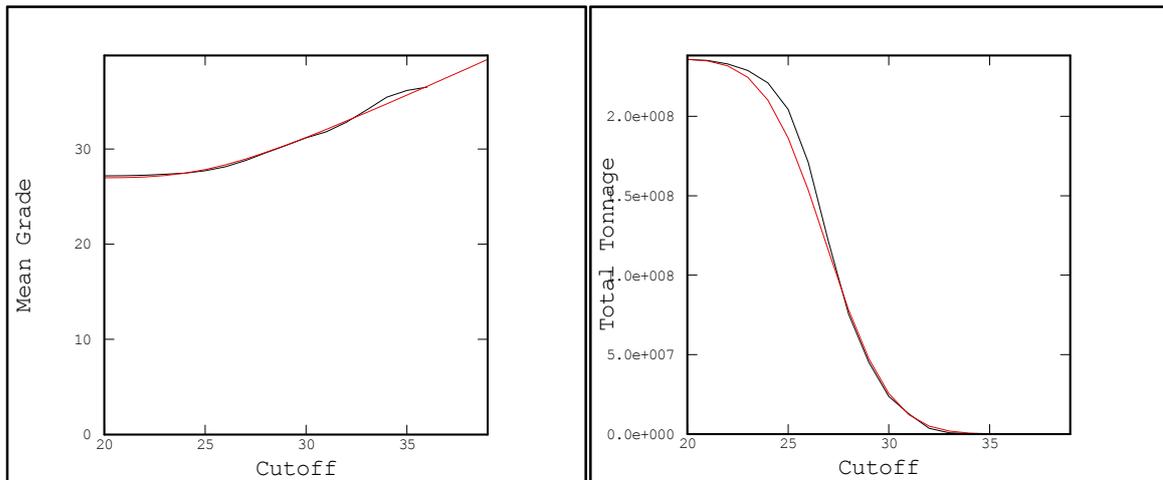


Figure 14-10: Actual (black) and theoretical (red) grade and tonnage curves for T_Fe in the nfa domain

A block discretisation of 10 by 10 by 3 was used for ordinary kriging estimation.

14.8.2 Unfolding

Due to the complex shape of the banded units some sort of geometric subdivision or unfolding technique is required to estimate the resource blocks appropriately. SRK chose to use a technique referred to by the software provider (Geovariances – Isatis software) as Local Geostatistics. This requires the local dip and strike of the geology at every block to be available. The variogram and search orientation at each block are then adjusted locally so that the estimation geometry corresponds to the local orientation of the geological wireframes.

The triangle dips and strikes were taken from the individual triangles of the wireframes used to construct the geological domains and migrated onto the block model. Any uninformed blocks were filled using a nearest neighbour search.

Ordinary kriging with a local block by block set of orientations is then performed.

14.8.3 Search Parameters

As the modelled wireframes are much larger than the drilled area the extent of interpolation and extrapolation of blocks from drilling was controlled by the search neighbourhood parameters and by restricting the final reported blocks to a set of eight geometric zones which applied depth and area limits to the extrapolation.

A single search neighbourhood was used for all variables and all domains but was oriented with local strike and dip parameters on a block by block basis. The search was designed so that sufficient samples from the individual domains were selected given the narrow widths of some of the domains, the changing geometries and variable drill spacing. Minimisation of negative kriging weights was also considered but was generally not an issue due to short variogram ranges relative to the drill spacing. Parameters are shown in Table 14-7. Further restrictions on the extrapolation were imposed by limiting the reported blocks to specific zones.

Table 14-7: Search parameters

Ellipsoid	
Major axis radius	600 m
Semi-major axis radius	240 m
Minor axis radius	100 m
Minimum number of samples	2
Number of horizontal angular sectors	8
Optimum number of samples per sector	12
(Implied maximum number of samples)	96
Maximum number of consecutive empty sectors	Not set
Maximum distance without any sample	210 m
Optimum number of samples per hole	2
Maximum number of samples per hole	4

14.8.4 Concentrates

Missing values

Mass recovery (DTR) and DTR concentrate assays were available for 1,832 of the 1,883 composites (97%) in the fresh mineralised domains. For the fresh material composites only, where DTR values were not available the DTR and DTR grades were supplemented via a set of regression equations against the head Fe. Missing DTR values in the transition were not supplemented as there was insufficient transition DTR data to form any meaningful regressions. The regressions used are as follows;

$$\begin{aligned} \text{Mass Recovery} &= 0.0125 * (T_Fe)^2 + 0.6604 * T_Fe \\ R_Fe &= 0.00008 * (T_Fe)^3 + 0.0103 * (T_Fe)^2 + 0.4397 * T_Fe + 63.894 \\ R_SiO2 &= -0.0001 * (T_Fe)^3 + 0.0126 * (T_Fe)^2 - 0.5199 * T_Fe + 9.540 \\ R_K2O &= -0.0013 * T_Fe + 0.064 \\ R_Al2O3 &= 0.0002 * (T_Fe)^2 - 0.0173 * T_Fe + 0.5436 \\ R_CaO &= 0.11 \\ R_LOI &= -3.07 \\ R_MgO &= 0.085 \\ R_NaO2 &= 0.040 \\ R_TiO2 &= 0.056 \\ R_P &= 0.007 \\ R_S &= 0.007. \end{aligned}$$

Weighting

In order to correctly estimate the concentrate values the associated mass recoveries need to be taken into account so as to ensure equal weighting of the concentrate values. The concentrate assays were first multiplied by the mass recovery. The weighted concentrate assays were estimated into blocks and then divided by the mass recovery block estimate to return the concentrate block estimate.

This approach is validated by the block and composite concentrate value comparisons which are in close agreement.

14.8.5 Density

Geophysical densities were available for many of the holes. These were calibrated with some 266 lab densities. For the fresh material the lab densities, the short range probe geophysical density (SSD) and the long range probe geophysical densities (LSD) were all within 4% of each other on average. The short range geophysical density was estimated on a block by block basis and used for the final reporting.

Geophysical densities were available for 1,069 of the 1,883 composites (57%) in the fresh mineralised domains. Geophysical densities were available for 154 of the 298 composites (52%) in the transition mineralised domains. Where geophysical densities were not available the density values for the composites were supplemented via a regression against the head Fe (T_Fe). The same regression was used for fresh and transition domains. A number of outlying composites were removed from the data used for the regression as shown in red in Figure 14-11. The regression equation used is:

$$\text{SSD} = 0.020943 * \text{T_Fe} + 2.565$$

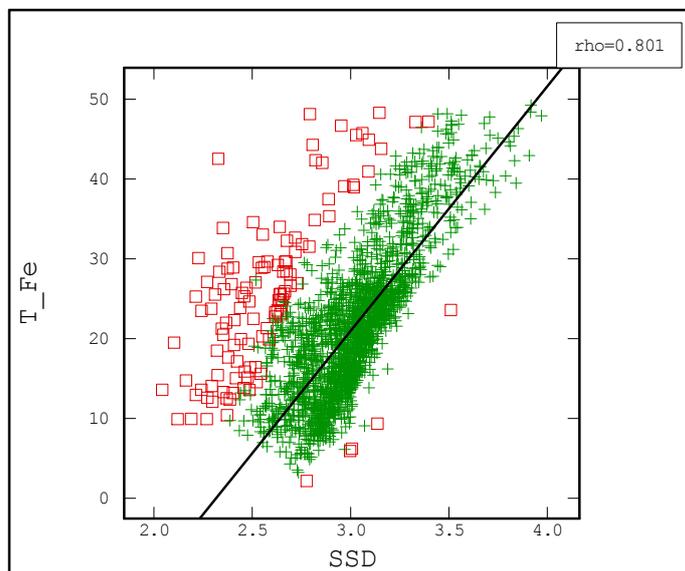


Figure 14-11: Geophysical SSD regression line and scatterplot with total Fe

14.9 Model Validation and Sensitivity

Comparison of means of each estimation domain showed that there were no biases present as the majority of critical variable means (Mass recovery, Total Fe, Total SiO₂, Concentrate Fe and Concentrate SiO₂) for all domains were within 10% of the composite means.

Visual inspection of the block model and drillholes showed reasonable agreement given the smoothing expected in the block estimation and the small block size.

As the modelled wireframes are much larger than the drilled area the extent of interpolation and extrapolation of blocks from drilling was examined visually for each domain. Extrapolation was controlled by the search neighbourhood parameters and by restricting the final reported blocks to a set of eight geometric zones which applied depth and area limits to the extrapolation. The extents of extrapolation of the individual domains are shown in Figure 14-12 to Figure 14-22.

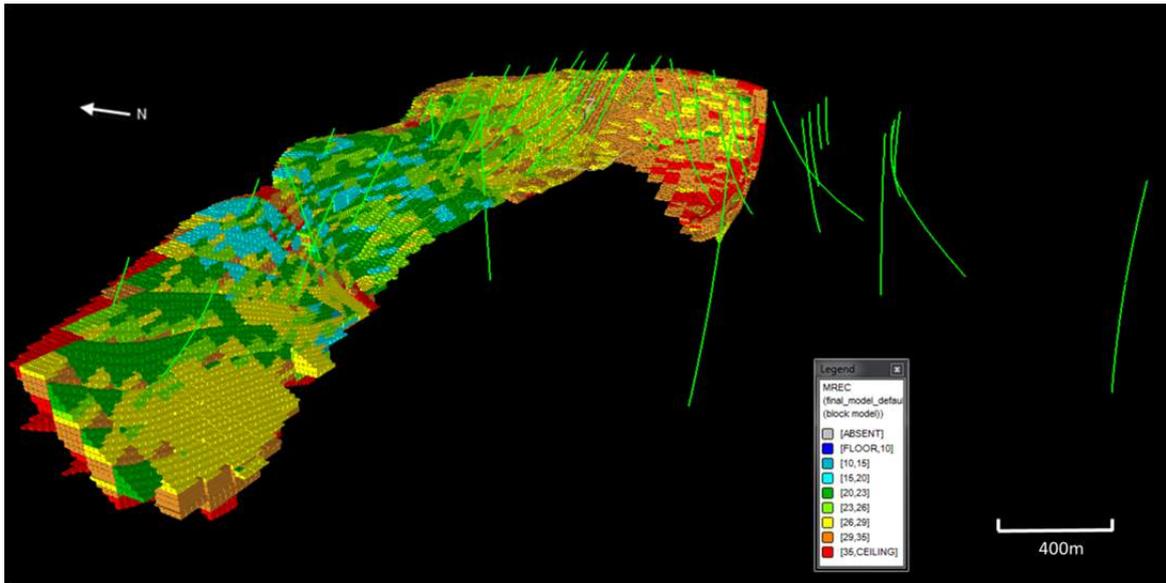


Figure 14-12: Estimated blocks for domain North Fresh A – mass recovery legend – oblique view looking NE

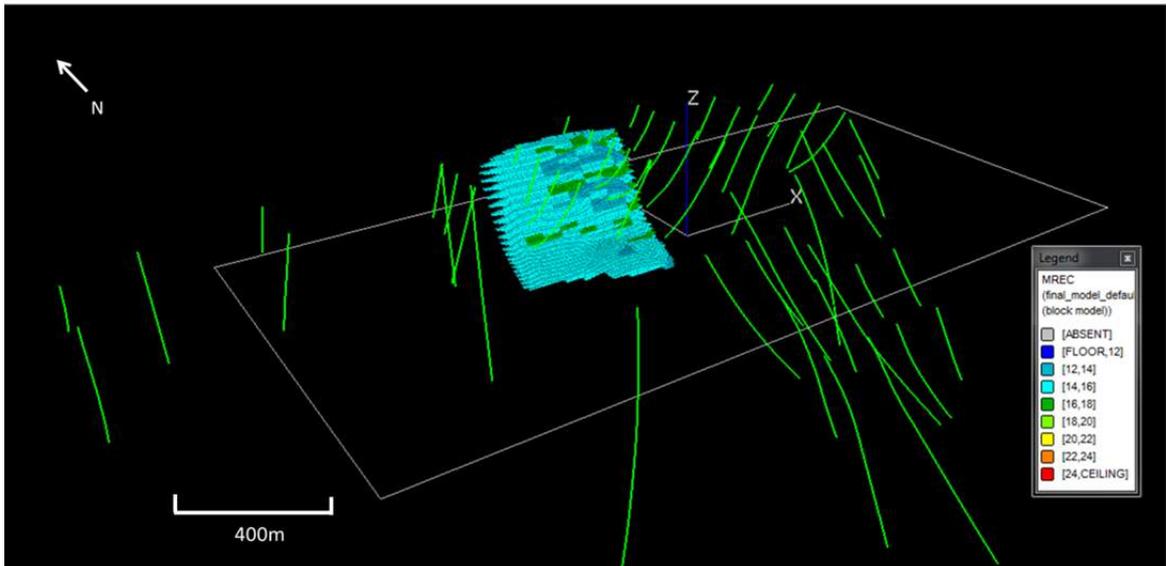


Figure 14-13: Estimated blocks for domain North Fresh D – mass recovery legend – oblique view looking NNE

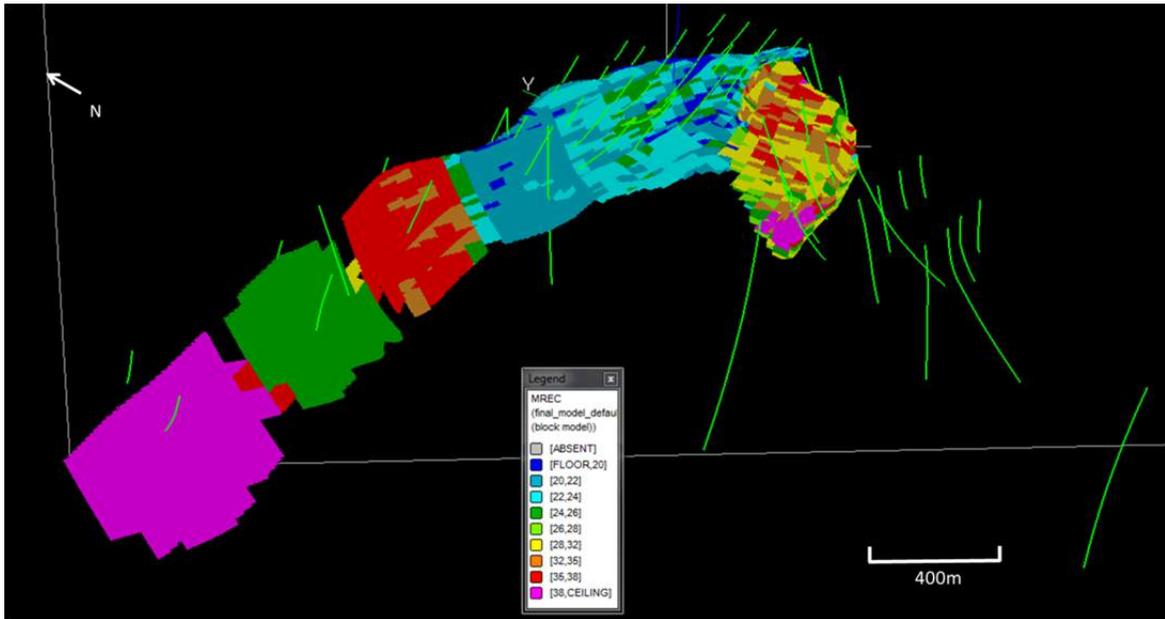


Figure 14-14: Estimated blocks for domain North Fresh E – mass recovery legend – oblique view looking NE

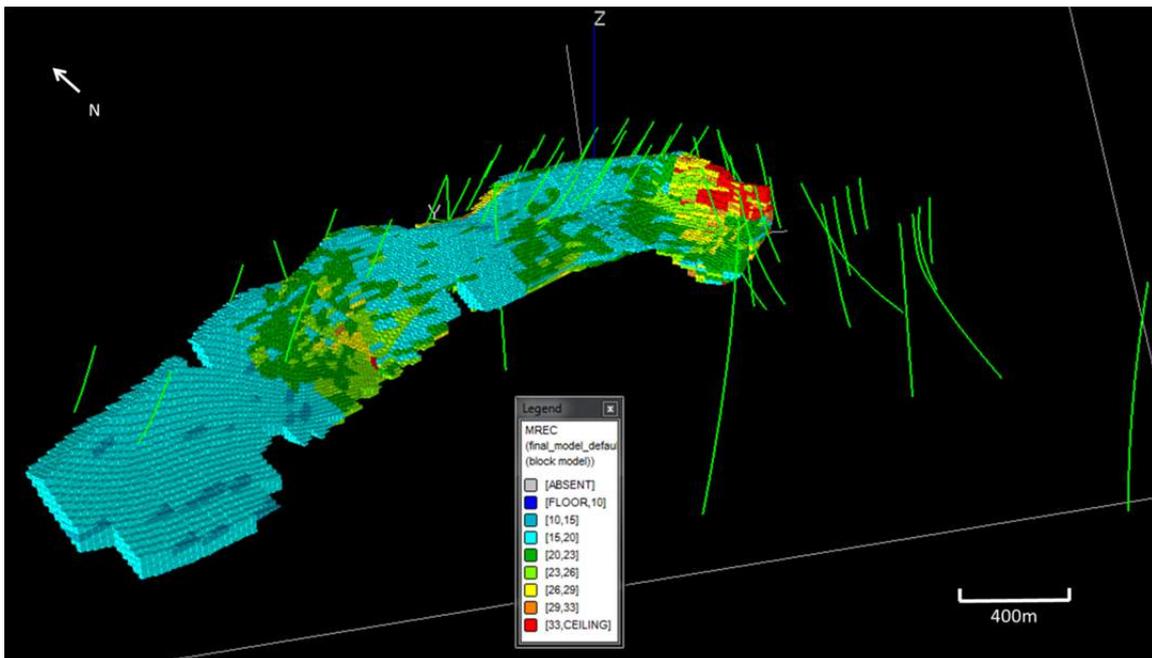


Figure 14-15: Estimated blocks for domain North Fresh F – mass recovery legend – oblique view looking NE

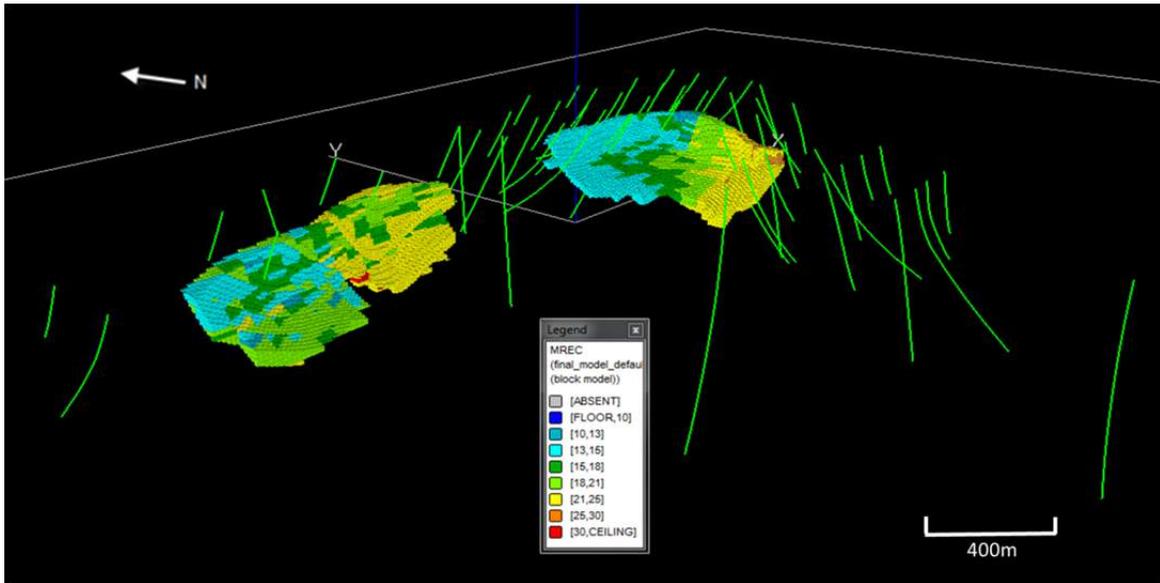


Figure 14-16: Estimated blocks for domain North Fresh G – mass recovery legend – oblique view looking NE

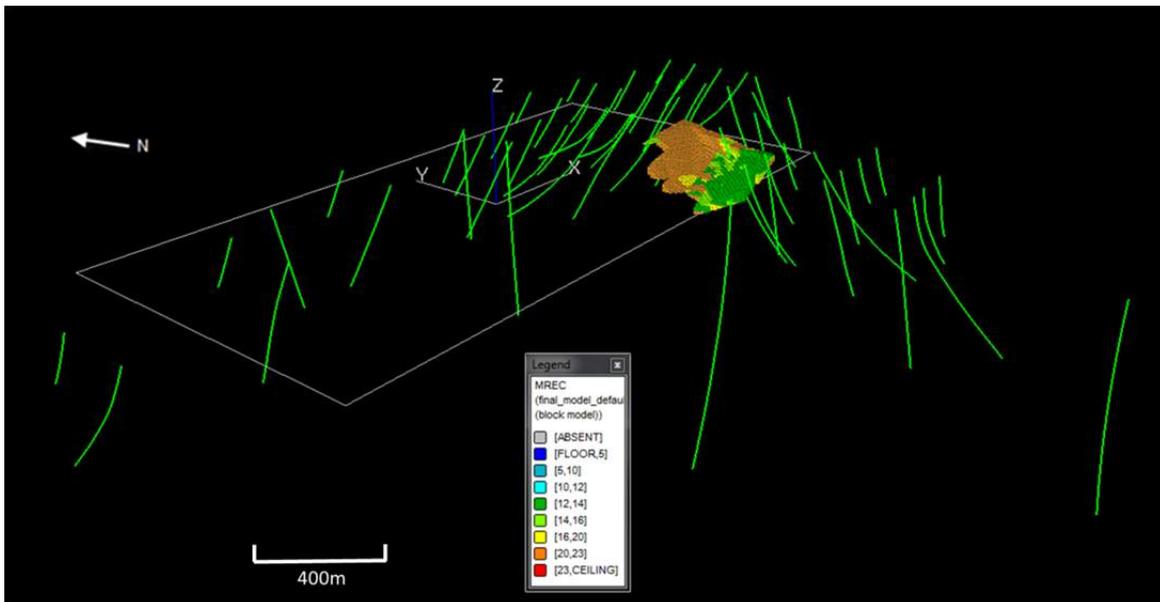


Figure 14-17: Estimated blocks for domain North Fresh H – mass recovery legend – oblique view looking NE

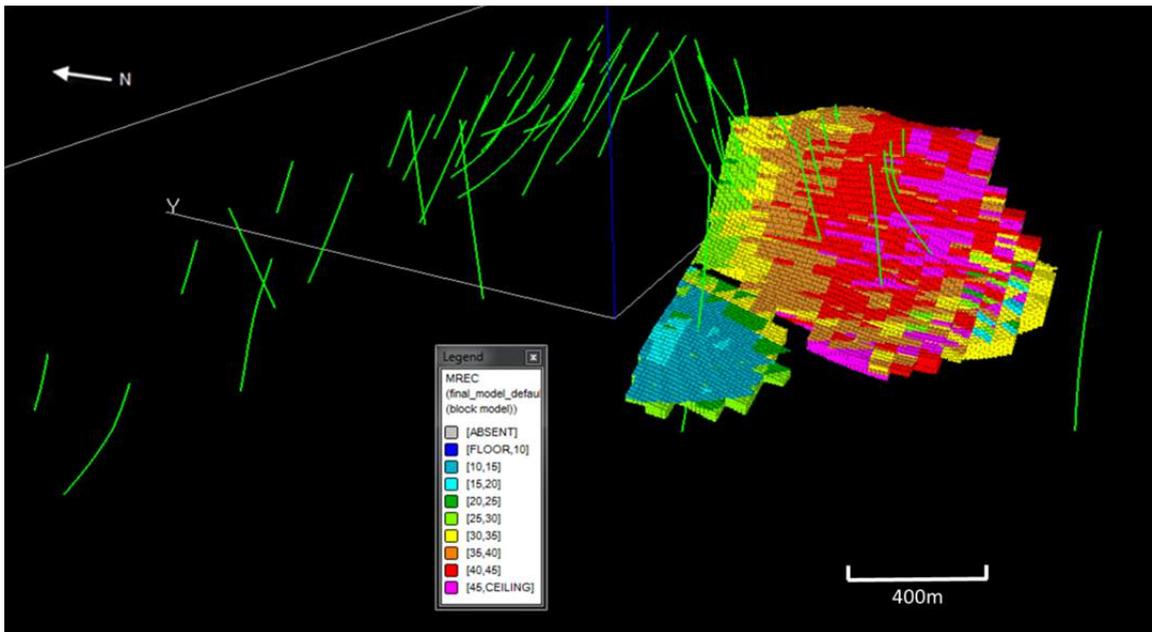


Figure 14-18: Estimated blocks for domain South Fresh A – mass recovery legend – oblique view looking NE

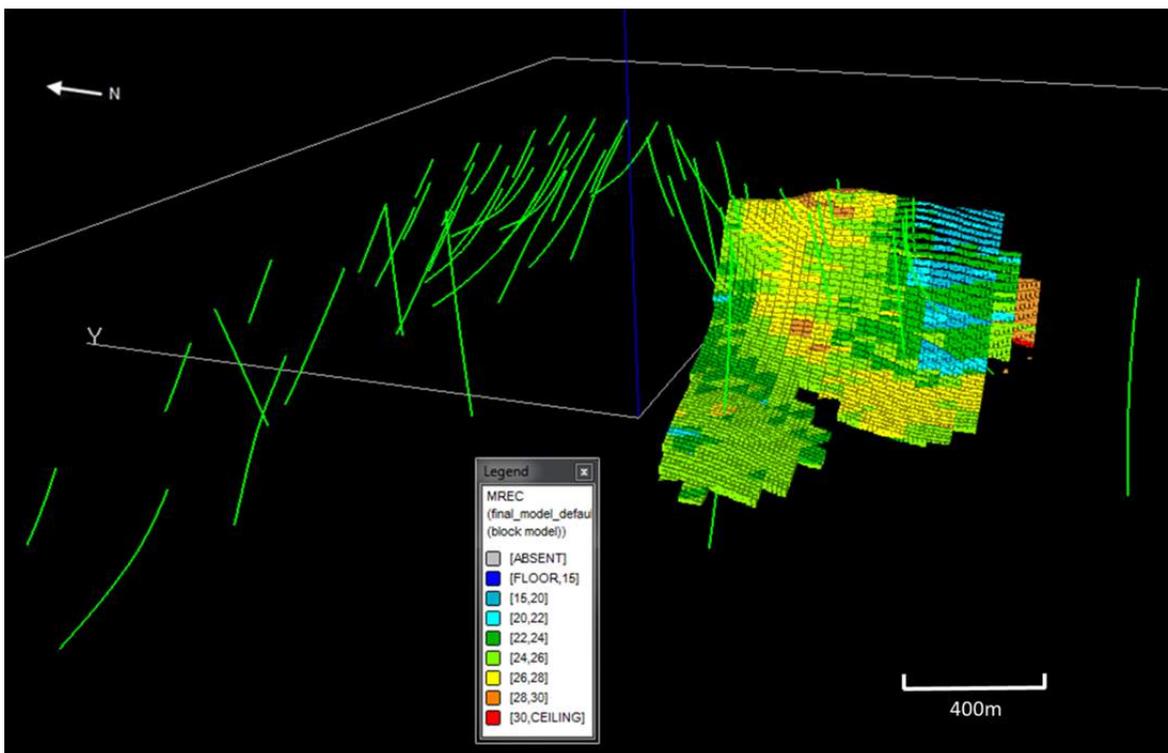


Figure 14-19: Estimated blocks for domain South Fresh B – mass recovery legend – oblique view looking NE

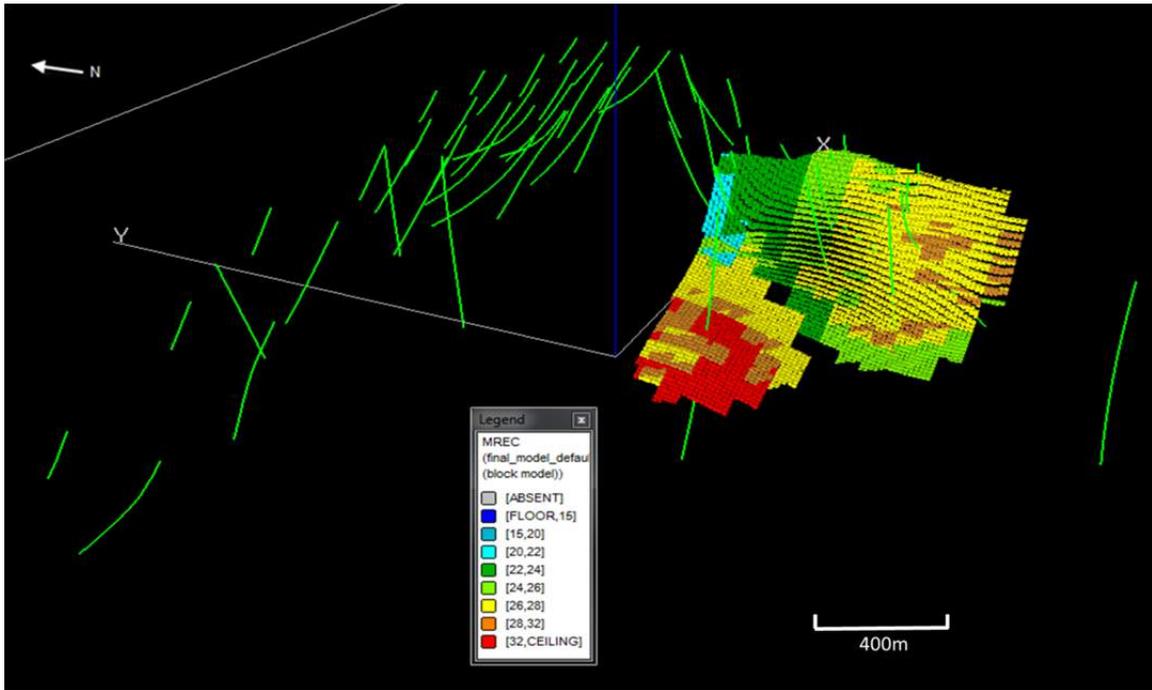


Figure 14-20: Estimated blocks for domain South Fresh C – mass recovery legend – oblique view looking NE

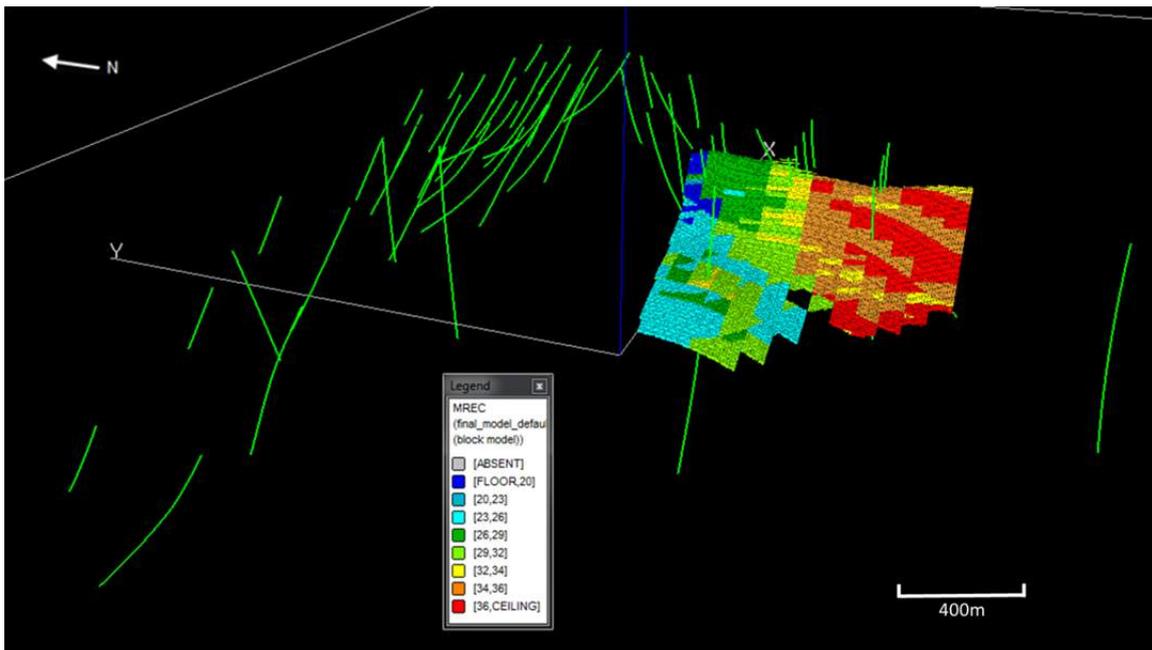


Figure 14-21: Estimated blocks for domain South Fresh D – mass recovery legend – oblique view looking NE

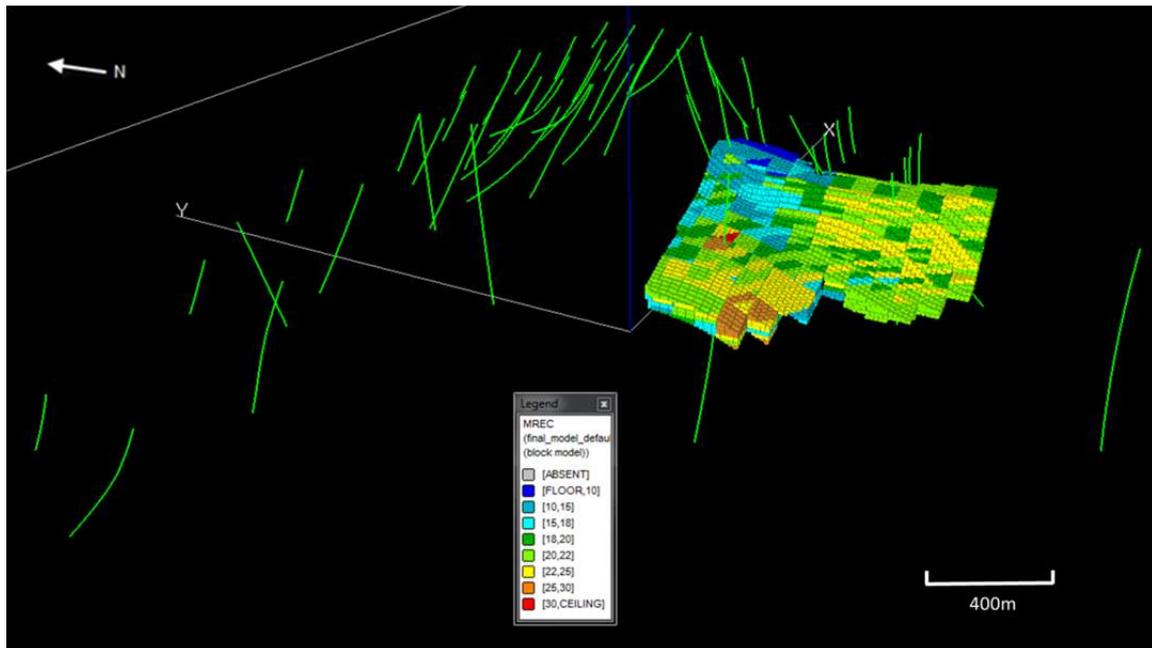


Figure 14-22: Estimated blocks for domain South Fresh E – mass recovery legend – oblique view looking NE

14.10 Mineral Resource Classification

Block model quantities and grade estimates for the Olary Iron Project were classified according to the JORC Code Standards for Mineral Resources and Ore Reserves (2004) by Danny Kentwell, (FAusIMM, membership number 203401) an appropriate independent qualified person for the purpose of National Instrument 43-101.

Mineral resource classification is typically a subjective concept; industry best practices suggest that resource classification should consider the confidence in the geological continuity of the mineralised structures, the quality and quantity of exploration data supporting the estimates and the geostatistical confidence in the tonnage and grade estimates. Appropriate classification criteria should aim at integrating these concepts to delineate regular areas at similar resource classification.

SRK is satisfied that the geological modelling honours the current geological information and knowledge. The location of the samples and the assay data are sufficiently reliable to support resource evaluation. The sampling information was acquired primarily by diamond drilling on sections spaced between 200 and 400 m along strike and between 100 and 200 m across strike.

Confidence in the quality of data is high. SRK has been involved in the drilling and sampling protocols from the start of the campaign. The duplicates and standards have returned within expected confidence limits. In the areas where the formation is reasonably linear there is a high confidence in the geological continuity of most units, and these units can be traced from hole to hole over distances of up to 400 m. In folded areas and around the interpreted fault there is low confidence in the geological continuity. There is very low confidence in the composite scale grade continuity as reflected in the inability to model any reliable variograms. This is also related to the high downhole variability on a metre by metre scale due to the banded nature of the formation.

Most fresh material that is covered by drillholes spaced 200 m along strike and 100 m across strike is classified as globally Indicated.

An extract from the 2004 JORC Code is given below with regard to the nature of an Indicated Resource.

An 'Indicated Mineral Resource' is that part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drillholes. The locations are too widely or inappropriately spaced to confirm geological and/or grade continuity but are spaced closely enough for continuity to be assumed. (JORC 2004)

Areas of fresh material covered by drillholes spaced at 200 m by 100 m, but downgraded to Inferred include:

- Domain North fresh G and Domain North fresh H – these are poorly informed, in the nose of the fold, and are often defined only by projection from transition samples.
- Material at depth in Zone 8 – the 200 m x 100 m drilling coverage becomes patchy at depth, and there is a change in the orientation of the modelled geological units.

Blocks that are further than approximately 250 m from any holes have not been included in the Mineral Resource estimation.

All transition material is classified as Inferred due to limited sampling in many of the transition domains, where low magnetic susceptibility readings implied low and uneconomic mass recoveries.

Oxide material is not classified as it is not considered economic due to very low magnetite content in general.

Local block by block grade confidence in the Indicated material is relatively poor. The Indicated classification is based on the likelihood that bulk mining will take place and entire units will be mined.

The block classifications on a domain by domain basis are shown in Figure 14-23 to Figure 14-33.

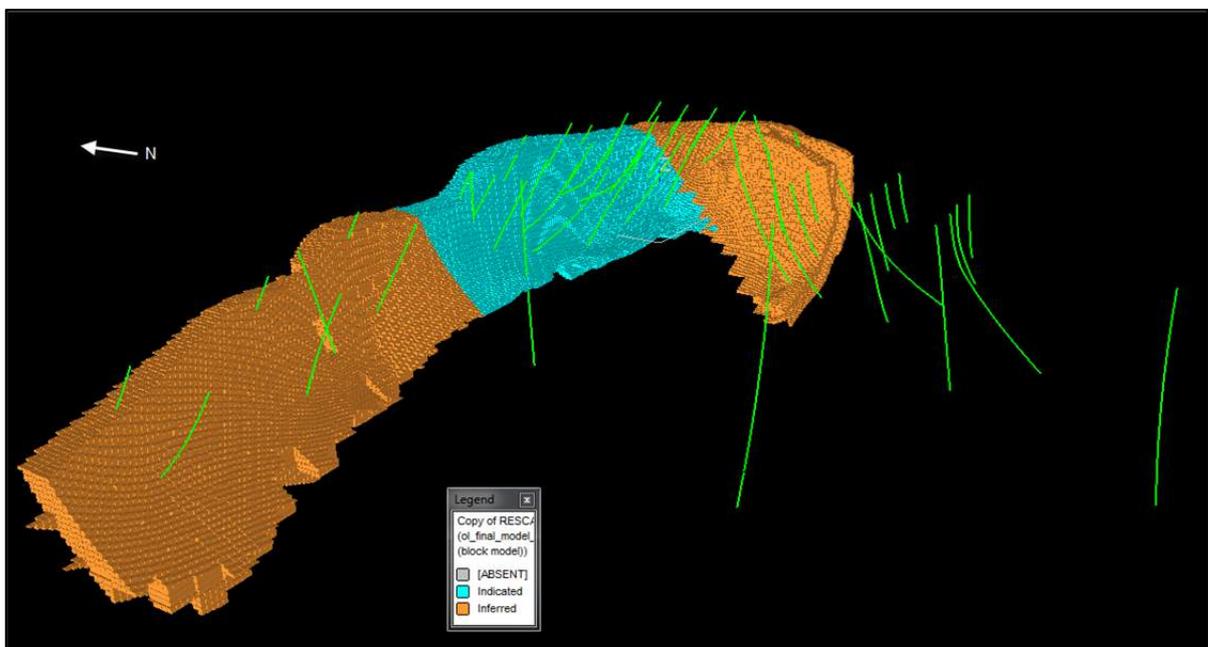


Figure 14-23: Classifications for domain North Fresh A – oblique view looking NE

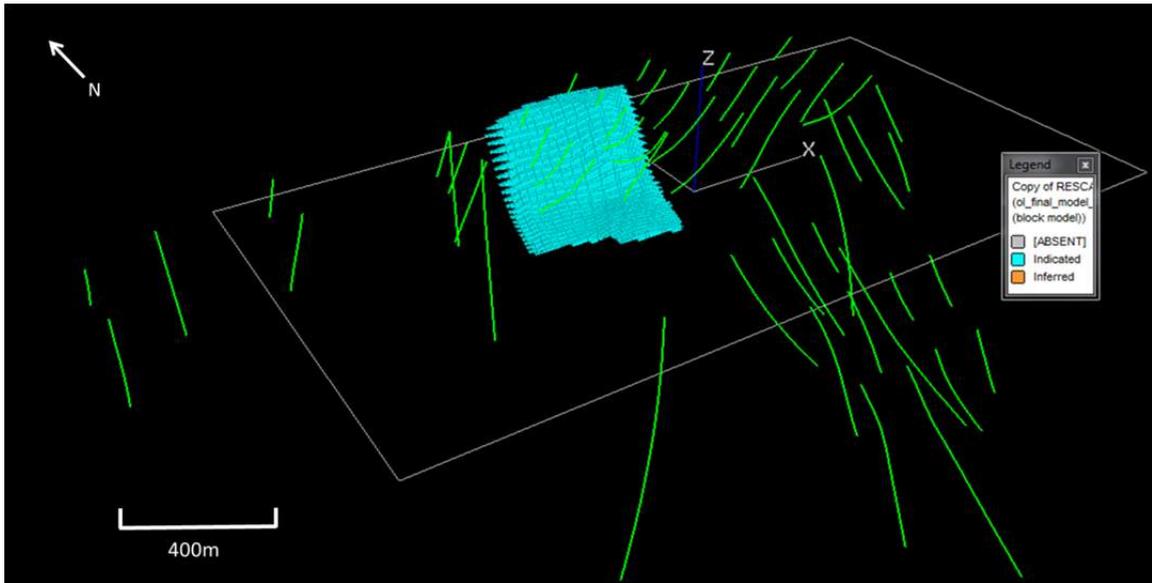


Figure 14-24: Classifications for domain North Fresh D – oblique view looking NNE

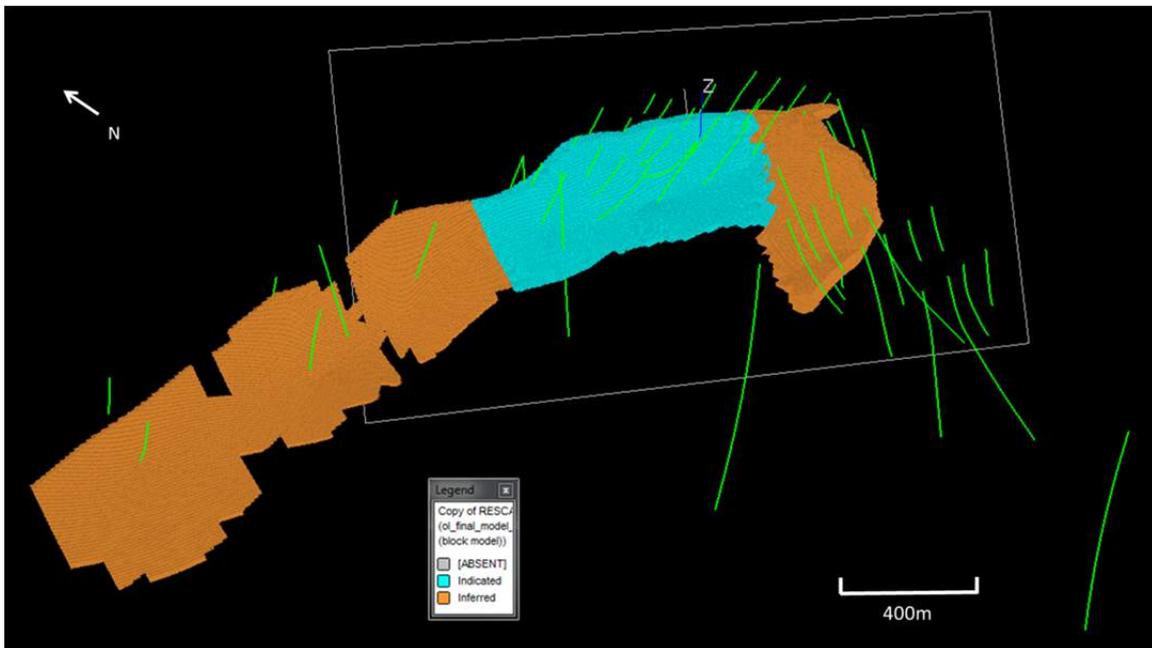


Figure 14-25: Classifications for domain North Fresh E – oblique view looking NE

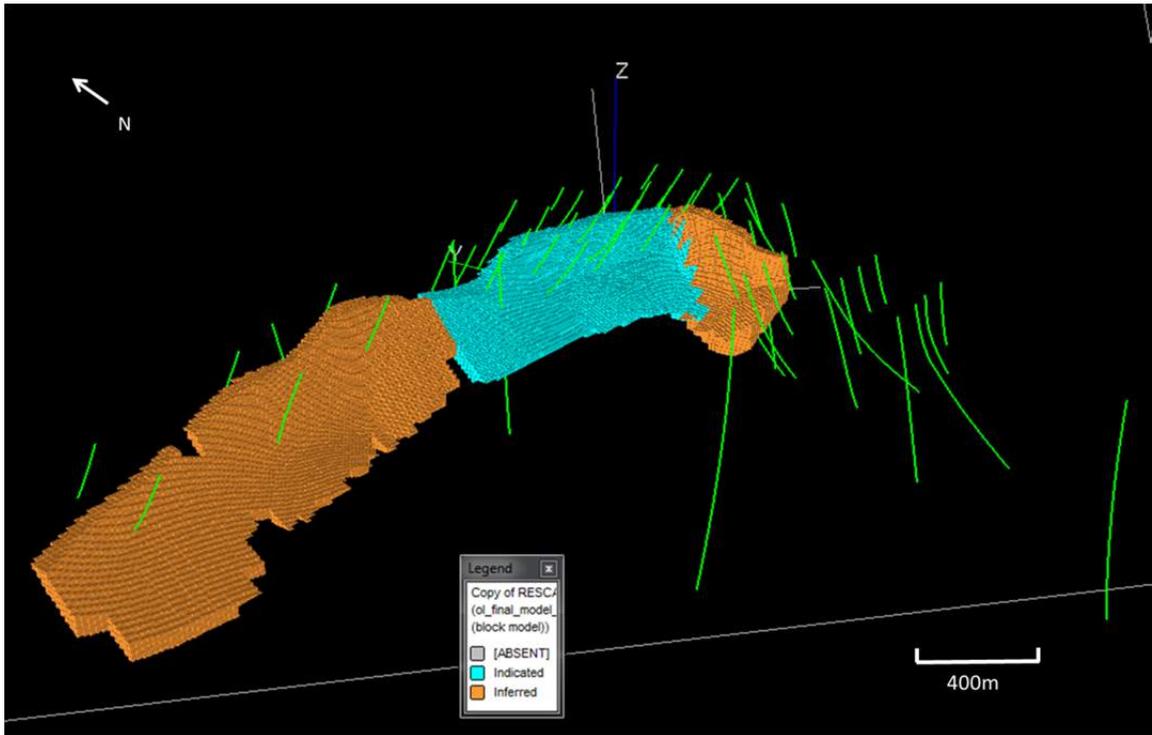


Figure 14-26: Classifications for domain North Fresh F – oblique view looking NE

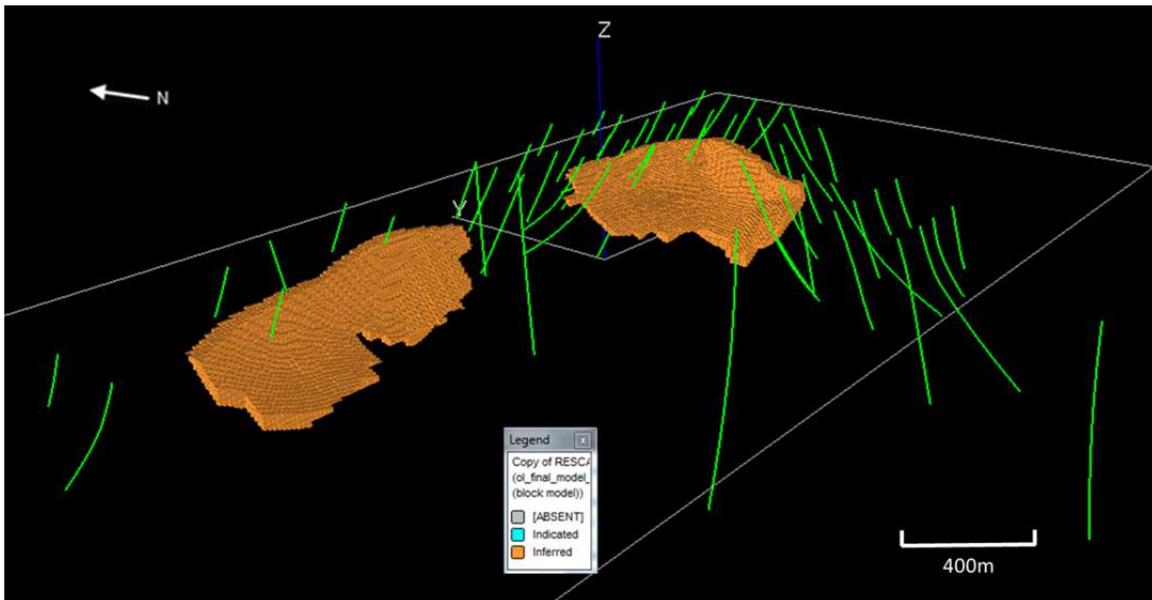


Figure 14-27: Classifications for domain North Fresh G – oblique view looking NE

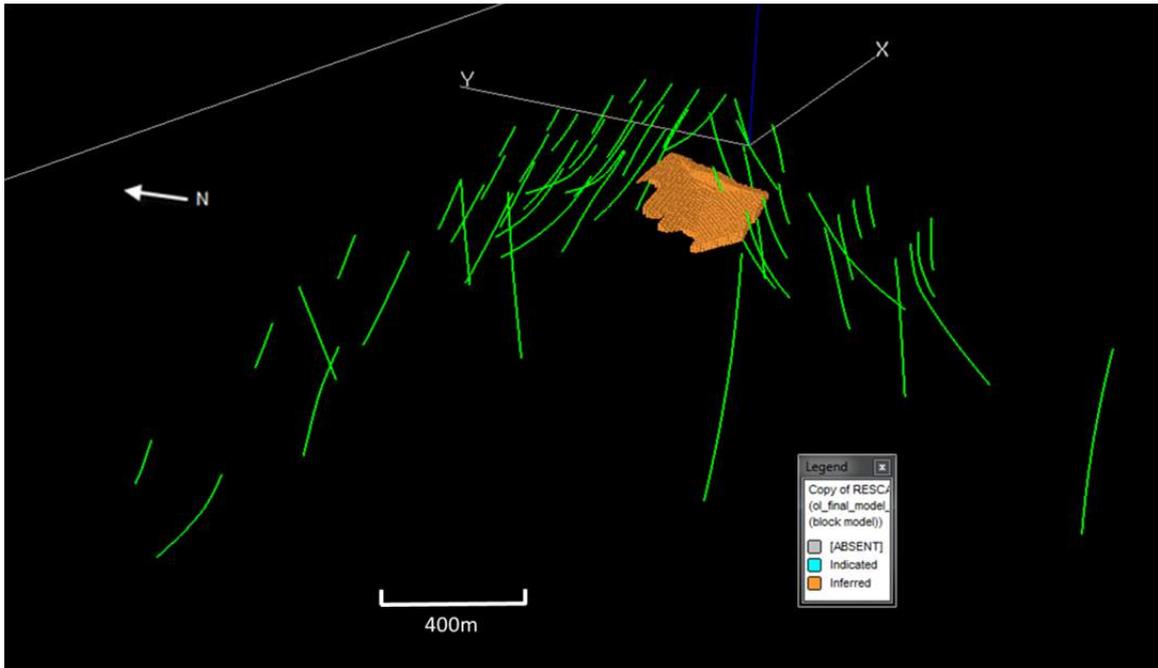


Figure 14-28: Classifications for domain North Fresh H – oblique view looking NE

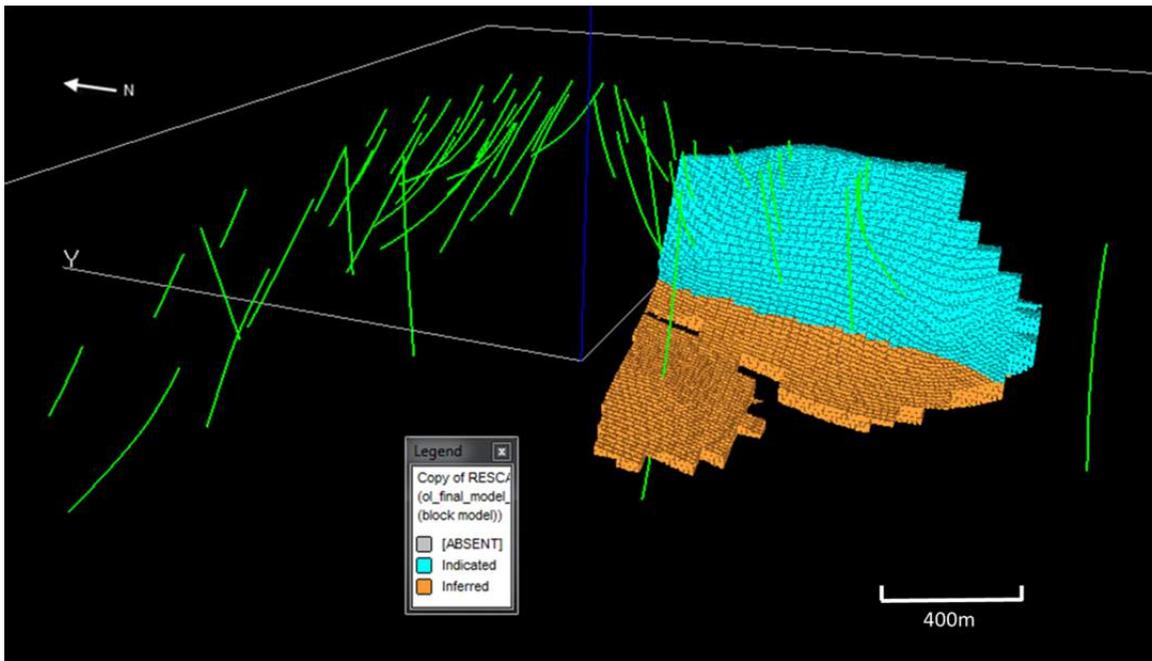


Figure 14-29: Classifications for domain South Fresh A – oblique view looking NE

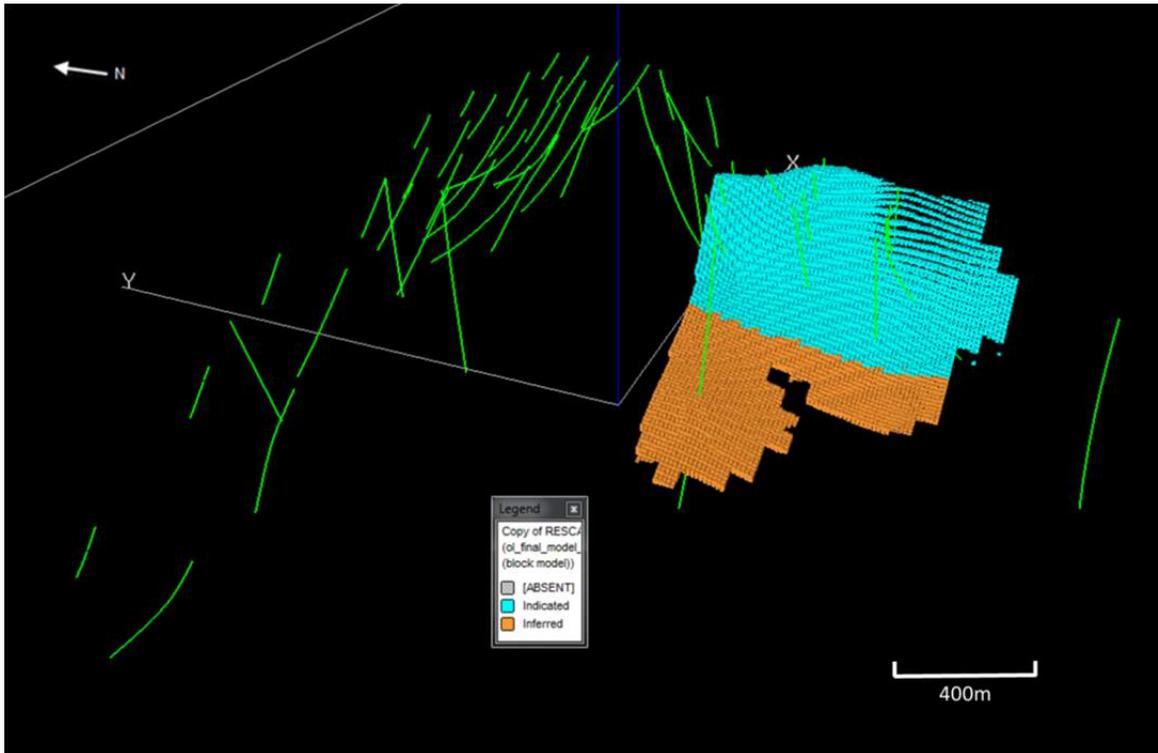


Figure 14-30: Classifications for domain South Fresh B – oblique view looking NE

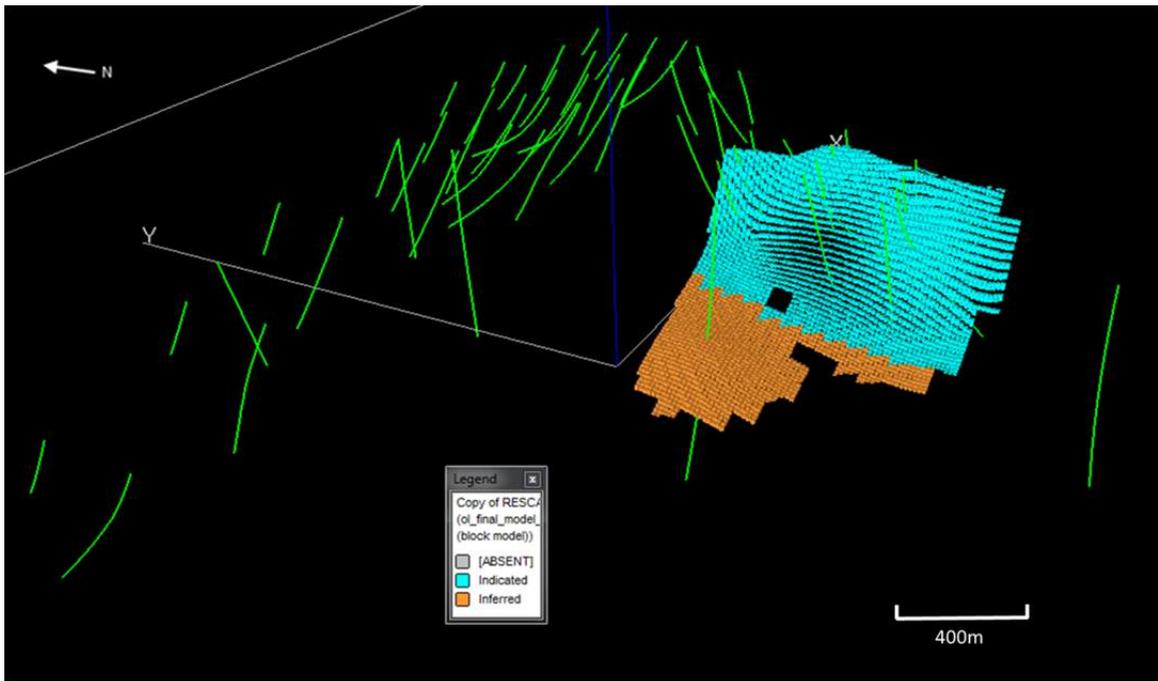


Figure 14-31: Classifications for domain South Fresh C – oblique view looking NE

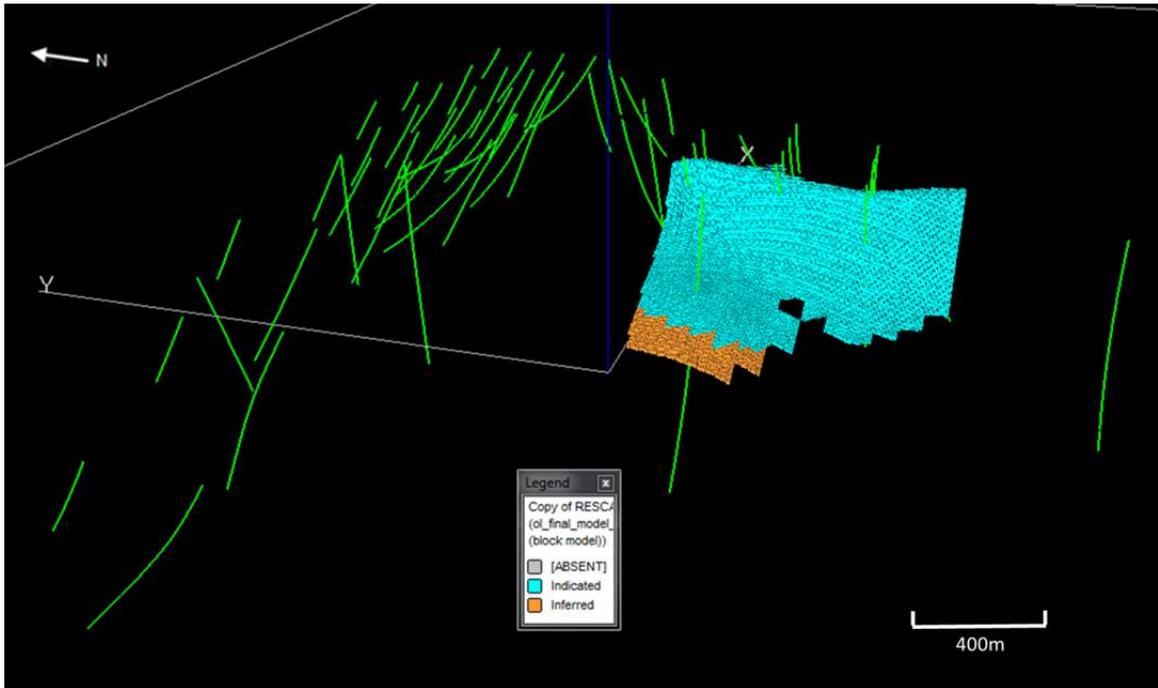


Figure 14-32: Classifications for domain South Fresh D – oblique view looking NE

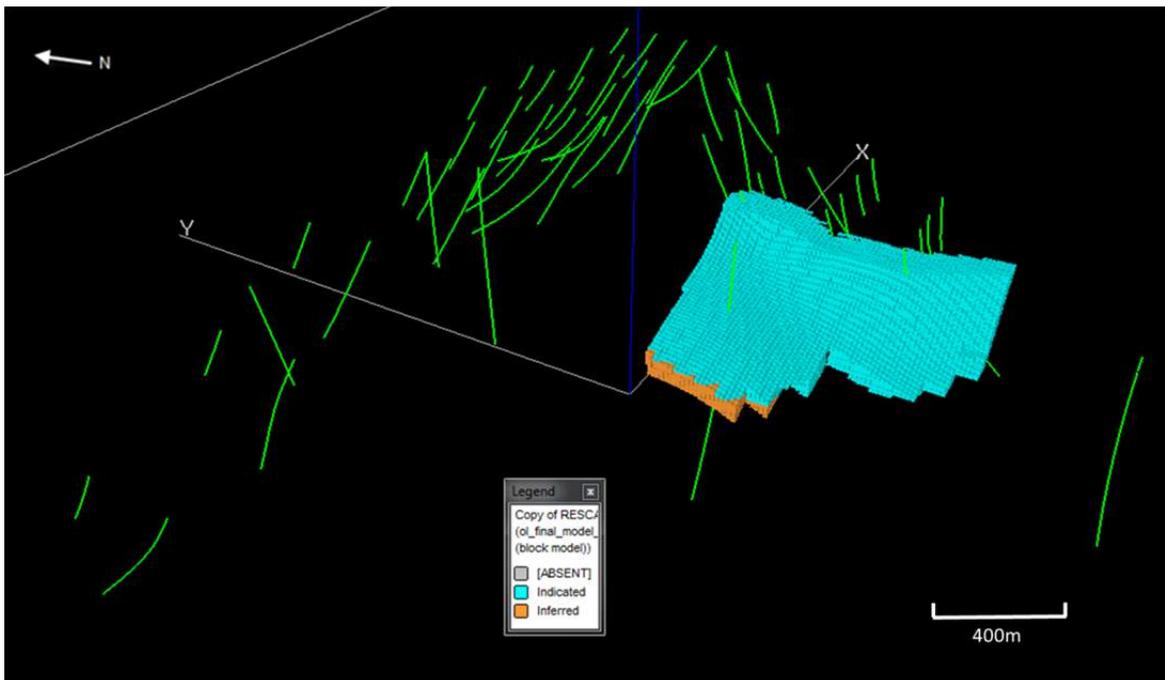


Figure 14-33: Classifications for domain South Fresh E – oblique view looking NE

14.11 Mineral Resource Statement

The 2004 Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the “JORC Code”) defines a mineral resource as:

“A concentration or occurrence of material of intrinsic economic interest in or on the Earth’s crust in such form, quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories.

Portions of a deposit that do not have reasonable prospects for eventual economic extraction must not be included in a Mineral Resource...”

The “reasonable prospects for eventual economic extraction” requirement generally implies that the quantity and grade estimates meet certain economic thresholds and that the mineral resources are reported at an appropriate cut-off grade taking into account extraction scenarios and processing recoveries. In order to meet this requirement, SRK considers that major portions of the Olary Iron Project are amenable to open pit extraction.

The resource is considered to have “reasonable prospects for eventual economic extraction” by open pit mining methods due to the following;

- Approximately 90% of the mineralised domains are above reporting cut-off of >20% Total Fe and > 10% DTR
- The concentrate grades are consistent with a saleable magnetite iron concentrate product
- The average mass recovery above cut-off of 27% is within the range of the resource mass recoveries for similar Australian magnetite projects with existing feasibility studies (Crosslands Jack Hills Expansion Project [25% mass recovery] (Murchison 2011); Grange Resources Southdown project [34% mass recovery] (Grange 2012).
- Overburden (including oxide material) depths vary between 5 m and 80 m from surface
- The continuity of grade above cut-off is high
- Combined horizontal thickness of above cut-off mineralised domains varies between 200 m and 350 m including internal waste.
- The folded geometry of above cut-off mineralised domains is favourable to minimising stripping ratio compared to a linear sub vertical deposit.
- The strike and dip extents are not closed and there is potential for strike and dip extensions of the mineralisation.
- There are indications that the formation may be basin-like and extrapolation of the current geological model suggests that the formation flattens at depth.

14.11.1 Reporting cut-offs

Oxide material is not considered economically recoverable and is not included in the Resource tables. Transition material that does not have associated concentrate sampling is not included in the Resource tables even if the head grades are available.

Combined cut-offs of 10% DTR and 20% Total Fe have been used for the Resource tabulation. This cut-off excludes approximately 10% of the total Resource tonnage at zero cut-off. Areas that fall below the combined cut-off are largely contiguous groups of blocks and are appropriate to exclude in a bulk mining context. The Resource tonnages, density, head grades, mass recovery (DTR) and concentrate grades are shown in Table 14-8.

Table 14-8: Mineral Resource Statement, Olary Iron Project, Olary, South Australia, SRK Consulting (Australasia) Pty Ltd, effective date 20 August 2013

Resource Category	Tonnage (Mt)	Density	Head Grades											
			Fe %	SiO ₂ %	Al ₂ O ₃ %	LOI %	S %	P %	K ₂ O %	Na ₂ O %	MgO %	CaO %	TiO ₂ %	DTR %
Indicated	214	3.12	26.3	40.8	6.9	3.9	0.029	0.24	1.54	1.05	3.41	3.44	0.48	26.4
Inferred	296	3.10	26.4	41.3	6.9	3.7	0.027	0.25	1.55	1.04	3.23	3.24	0.48	27.3

Resource Category	Concentrate Tonnage (Mt)	Concentrate Grades										
		Fe %	SiO ₂ %	Al ₂ O ₃ %	LOI %	S %	P %	K ₂ O %	Na ₂ O %	MgO %	CaO %	TiO ₂ %
Indicated	57	69.6	2.9	0.3	-3.1	0.008	0.010	0.03	0.04	0.09	0.11	0.06
Inferred	81	69.8	2.6	0.2	-3.1	0.009	0.008	0.02	0.03	0.08	0.10	0.05

Cut-off of 20% Fe and 10% Mass recovery (DTR). Grind size 38 micron

Responsibility for the entire Mineral Resource Estimate: Information that relates all Sections, except Section 14 of this report, and overall responsibility of this report compilation and review was by Mr Paul Hunter, BSc, MSc, MAusIMM(CP). Mr Danny Kentwell, MSc, FAusIMM, was responsible for Section 14 of this report. Mr Hunter and Mr Kentwell who are full time employees of SRK Consulting Australasia Limited, and who 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 a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (The JORC Code). Mr Hunter and Mr Kentwell consent to the inclusion in the release of the statement of this undertaking the resource estimation process in the form and context in which it appears.

Table 14-9: Resource by weathering state and classification

Oxidation	Classification	Tonnes	Density	DTR	T_Fe
		Mt	t/m ³	%	%
Transitional	Inferred	28	3.03	17.19	23.85
Transitional	Indicated	-	-	-	-
Fresh	Inferred	267	3.10	28.32	26.72
Fresh	Indicated	214	3.12	26.43	26.32

Table 14-10: Resource by zone and classification

ZONE	Resource Category	Tonnes	Density	MREC	T_Fe
		Mt	t/m ³	%	%
1	Inferred	99	3.10	27.53	28.45
1	Indicated	-	-	-	-
2	Inferred	19	3.03	16.36	24.08
2	Indicated	146	3.09	23.68	25.18
3	Inferred	26	3.06	23.52	24.32
3	Indicated	-	-	-	-
4	Inferred	111	3.08	28.33	25.21
4	Indicated	-	-	-	-
6	Indicated	68	3.18	32.32	28.76
6	Inferred	3	3.02	20.18	23.71
8	Inferred	39	3.19	31.79	27.62
8	Indicated	-	-	-	-

Table 14-11: Resource by domain and classification

Alpha Domain Name	DOMAIN	Resource Category	Tonnes	Density	MREC	T_Fe
			Mt	t/m ³	%	%
Nfa	111	Indicated	67	3.12	27.90	26.68
Nfa	111	Inferred	125	3.14	29.86	28.21
Nta	112	Indicated	-	-	-	-
Nta	112	Inferred	6	3.02	18.39	23.89
Nfd	121	Indicated	10	3.07	15.12	21.75
Nfd	121	Indicated	-	-	-	-
Nfe	131	Indicated	31	3.10	21.15	24.79
Nfe	131	Inferred	42	3.07	29.45	26.20
Nte	132	Indicated	-	-	-	-
Nte	132	Inferred	8	3.04	16.66	23.86
Nff	141	Indicated	39	3.03	20.63	23.82
Nff	141	Inferred	34	3.02	24.69	23.69
Ntf	142	Indicated	-	-	-	-
Ntf	142	Inferred	8	3.05	16.18	23.78
Nfg	151	Indicated	-	-	-	-

Alpha Domain Name	DOMAIN	Resource Category	Tonnes	Density	MREC	T_Fe
			Mt	t/m ³	%	%
Nfg	151	Inferred	23	2.95	18.87	23.05
Ntg	152	Indicated	-	-	-	-
Ntg	152	Inferred	1	3.08	13.76	24.23
Nfh	161	Indicated	-	-	-	-
Nfh	161	Inferred	4	3.03	20.29	23.34
Nth	162	Indicated	-	-	-	-
Nth	162	Inferred	1	2.94	17.23	24.06
Sfa	211	Indicated	33	3.31	39.50	33.62
Sfa	211	Inferred	23	3.22	35.83	29.86
Sfb	221	Indicated	12	3.11	24.84	25.53
Sfb	221	Inferred	11	3.14	24.91	24.53
Stb	222	Indicated	-	-	-	-
Stb	222	Inferred	<0.5	3.22	23.27	31.19
Sfc	231	Indicated	6	3.09	25.89	24.38
Sfc	231	Inferred	4	3.18	30.01	25.47
Stc	232	Indicated	-	-	-	-
Stc	232	Inferred	<0.5	3.06	19.65	24.76
Sfd	241	Indicated	6	3.12	32.33	26.52
Sfd	241	Inferred	1	3.11	27.20	22.50
Std	242	Indicated	-	-	-	-
Std	242	Inferred	1	3.06	35.32	23.76
Sfe	251	Indicated	11	2.98	21.92	21.08
Sfe	251	Inferred	1	2.99	24.88	21.58
Ste	252	Indicated	-	-	-	-
Ste	252	Inferred	2	2.95	12.45	21.84

14.12 Cut-off Sensitivity Analysis

The grade and tonnage curves from the actual block by block Resource estimate are shown in Figure 14-34.

Given the nominal cut-off of 20% T_{Fe} used for geological modelling the mineral resources of the Olary Iron project are relatively insensitive to the selection of the reporting cut-off grade from 0% up to approximately 20% T_{Fe}. The Resource is sensitive to the selection of the reporting cut-off grades above 20% T_{Fe}.

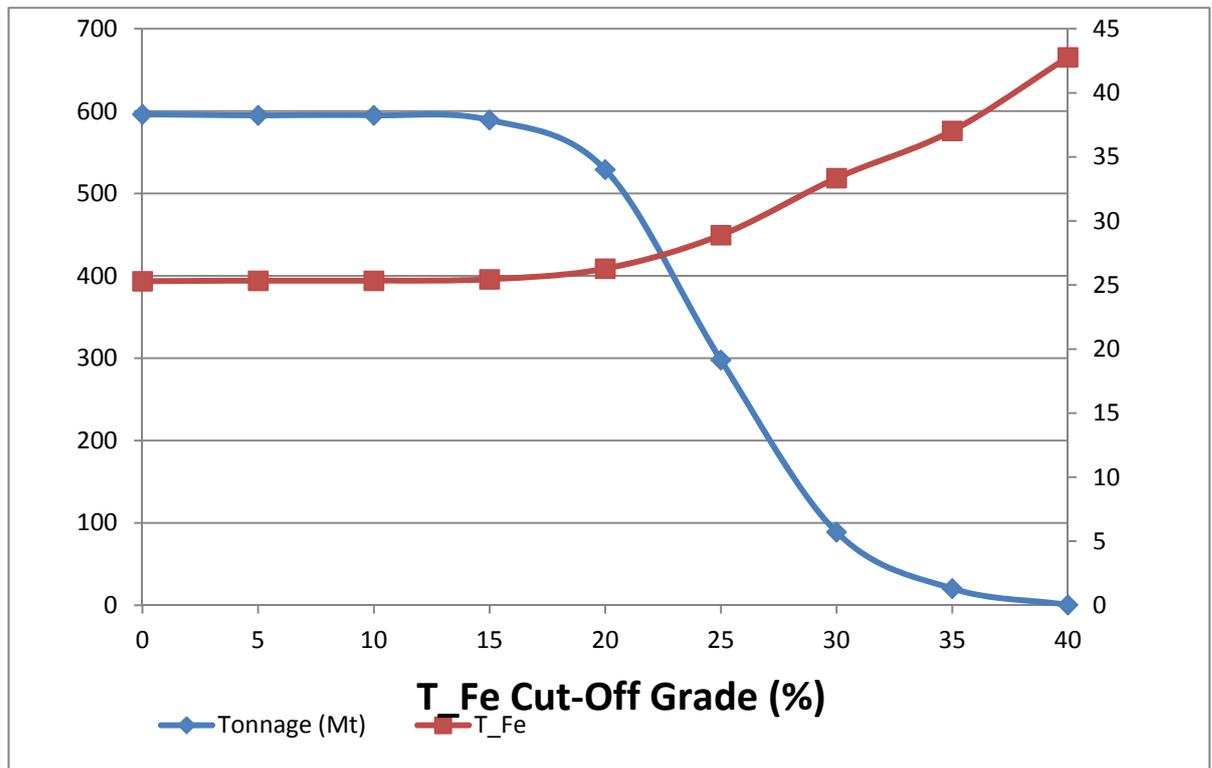


Figure 14-34: Tonnage and grade with cut-off, entire Resource

To examine any sensitivity related to the assumed variogram model, the global model quantities and grade estimates derived from change of support modelling (from sample size to block size) via Gaussian anamorphosis are examined graphically at different cut-off grades for different variogram models. This methodology uses the variogram model for T_{Fe} in conjunction with the histogram of the T_{Fe} composites to reconstruct the expected block histogram at a specified block size. The block distribution can then be accumulated at different cut-offs to yield theoretical tonnages and grades above cut-off at the specified block size. The variogram model is critical to this procedure.

Due to the uncertainty of the variogram model for the current level of drilling two alternative variogram models were also tested with the change of support modelling to evaluate the sensitivity of the resource to the uncertainty of the variogram model. One alternative model shows the impact of reduced continuity T_{Fe} grades via an increase in the nugget and a reduction in the ranges of the variogram model. The second alternative shows the impact of increased T_{Fe} grade continuity via a decrease in the nugget and increasing the ranges of the variogram model. The three variogram models are shown in Figure 14-35 and Figure 14-36.

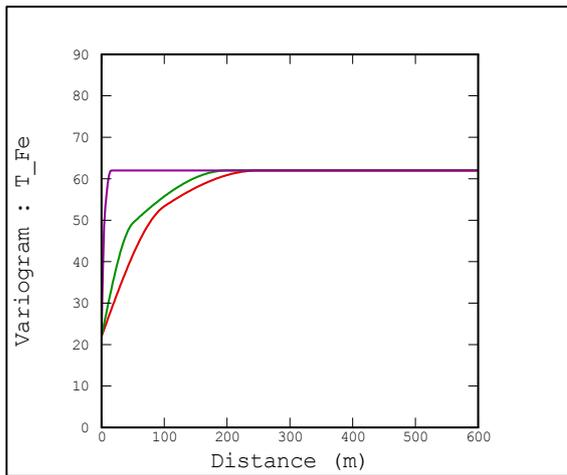


Figure 14-35: Variogram model used for estimation

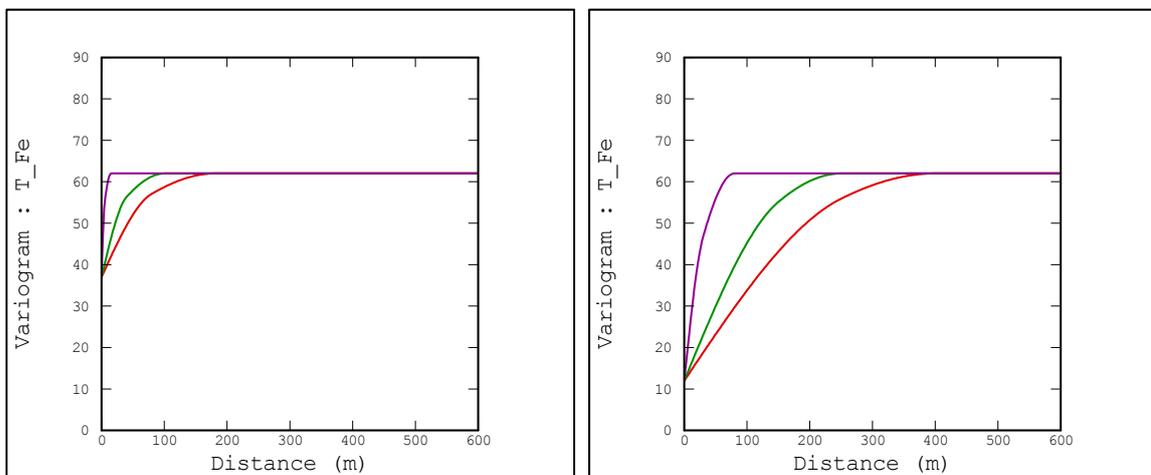


Figure 14-36: Reduced continuity and increased continuity variogram models

The resulting grade and tonnage curves for a block size of 50 m x 50 m x 10 m are shown in Figure 14-37 and Figure 14-38. These indicate that at a T_{Fe} cut-off of 20% the resource T_{Fe} grade is insensitive to the assumed variogram model. The tonnages show some sensitivity to the increased continuity model in the order of 15% less tonnage at a 20% T_{Fe} cut-off compared to the model used for estimation. A difference of this magnitude is considered to be within the range of expectation of a Resource that contains approximately half of the tonnage classified as Inferred.

For all variogram models the resource tonnage is highly sensitive to T_{Fe} cut-off grades above 22% (Figure 14-38).

The tonnage and metal at zero cut-off for this exercise have been set to the tonnage and metal at zero cut-off from the actual block by block resource estimate.

The reader is cautioned that the figures presented in this table should not be misconstrued with a Mineral Resource Statement. The figures are only presented to show the sensitivity of the block model estimates to the selection of cut-off grade and variogram model.

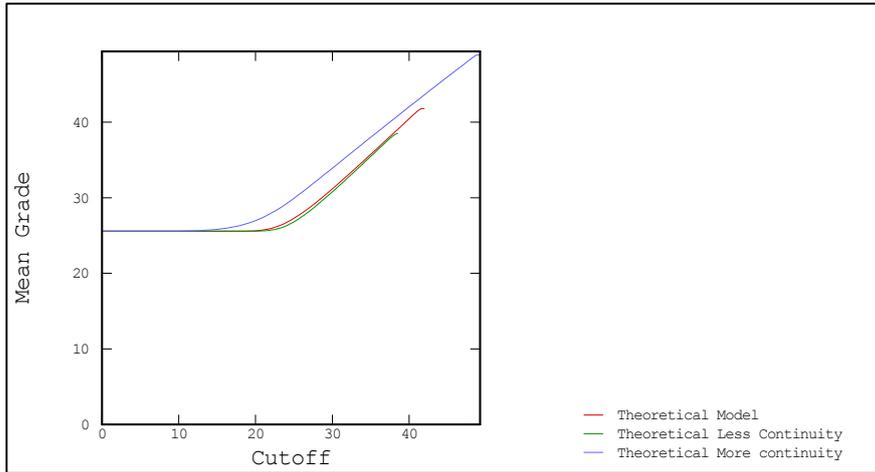


Figure 14-37: Grade curves for theoretical block distributions of the fresh domains

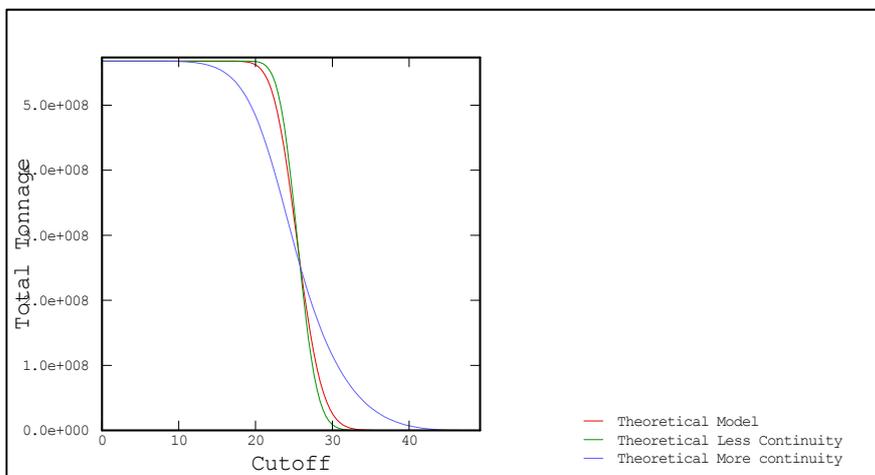


Figure 14-38: Tonnage curves for theoretical block distributions of the fresh domains

14.13 Previous Mineral Resource Estimates

There have been no previous Mineral Resource Estimates for the Olary Iron Project.

15 Adjacent Properties

SRK is not aware of any further information, regarding adjacent properties, relevant to the Olary Project.

16 Other Relevant Data and Information

SRK is not aware of any other relevant data available about the Olary Iron Project.

17 Interpretation and Conclusions

SRK considers that the drilling methods and procedures used at the Olary Iron are consistent with generally accepted industry best practices and are therefore appropriate.

In the opinion of SRK, the sampling preparation, security and analytical procedures used by Yukuang are consistent with generally accepted industry best practices and are therefore appropriate.

The Olary Iron Resource has been estimated on a global basis and has been classified as Indicated and Inferred as appropriate to reflect the global confidence in the overall resource at the stated cut-off. The confidence in the local block by block values remains low due to the wide drill spacing, relatively small block size and absence of coherent experimental variograms. The estimate is appropriate for use with bulk mining studies. Bulk mining refers to methods where all material above the Resource cut-off is targeted to be mined. Bulk mining methods are the normal mining methods for magnetite Iron. The estimate is not appropriate for selective mining studies at higher cut-offs.

The Olary Iron deposit Resource estimate classifications could be improved by tighter geological modelling in the areas where the banding of Iron grades demonstrates high downhole variability within the current modelled domains. To enable a coherent volume model based on tighter geological definition additional infill drilling along strike is required to confidently align the correct units with each other along strike. The aim of the infill drilling would be to enable explicit domain definition for the high grade iron population, averaging around 40% Fe, as seen in the histogram of the current fresh domains.

Infill drilling and tighter domaining should enable coherent variograms to be modelled for each variable which will in turn improve the confidence in the estimate on a block by block scale as well as on the whole.

18 Recommendations

This technical report is the first Mineral Resource estimate for the Olary Iron deposit and therefore it is normal process to progressively build on this position of existing knowledge. SRK recommends that Yukuang complete a Preliminary Economic Assessment which will allow the Olary Iron Project to qualify as an "Advanced Exploration Property" as defined by NI 43-101. Yukuang plans to commission a PEA in 2013.

The preliminary budget for the PEA is CN\$270,000 and includes:

- Geological Studies
- Environmental and Social Impact Baseline Studies
- Geotechnical Studies
- Tailings Studies
- Mine Engineering Scoping Study Design,
- Equipment Selection Optimisation Port/Rail
- Access & Capacity Opex & Capex
- Project Economics Project Management
- Preparation of PEA technical report.

SRK's further recommendations regarding further data collection and interpretation are:

- Continue the drillhole database validation process established by SRK to ensure data is routinely validated on-site
- Review drilling methods and procedures to determine whether drillhole direction can more consistently attain less deviation
- Further metallurgical testwork to select optimum grind size and therefore yield and iron grade achieved in concentrate
- Economic assessment of considered process options
- Infill drilling to 50 m x 50 m, for at least part of the deposit, which may allow the mineral resource to be classified as Measured
- Targeting of the centre of the basin with one or two holes to establish if the formation does in fact flatten in the centre as currently predicted
- Target a number of hole to cross the interpreted north south dividing fault
- Orient some holes east west, perpendicular to the formation, around the eastern nose of the northern area fold
- Consider establishing regression equations for the concentrate and mass recovery grades for the fresh material to reduce the number of samples that require full concentrate assaying
- Consistently analyse all of the transition material for mass recovery and concentrate grade as the mass recoveries in this material are more variable than in the fresh
- Consider additional holes specifically targeting the transition material for each domain as the transition domains are under- sampled using the current hole geometry due to their relatively small vertical extent
- Review overall exploration potential of the EL4664 to enable strategic planning of future exploration programmes.

19 References

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Certificate of Qualified Person

- a) I, Paul Francis Hunter am a Principal Consultant with SRK Consulting (Australasia) Pty Ltd with a business address at 1/1 Balbu Close, Beresfield NSW 2322, Australia.
- b) This certificate applies to the technical report entitled Olary Iron Project Mineral Resource Estimate, South Australia NI 43-101, dated 20 August 2013 (the "Technical Report").
- c) I am a graduate of Monash University, (BSc, 1993) and James Cook University, (MSc, 1997). I am a member in good standing of The Australasian Institute of Mining and Metallurgy (Chartered Professional, membership number 109883). My relevant experience is more than 20 years in the resources sector with an emphasis on mine geology, exploration and project evaluation within Australia as well as internationally. My experience includes geology and resource evaluation on several large projects including West Angelas Iron Ore deposit, Kanowna Belle Gold Mine, Mt Leyshon Gold and the Savage River Iron Ore deposit in Australia. My particular fields of expertise include resource evaluation, project development, underground and open cut mine geology. I have worked across several commodities including gold, copper, iron, nickel, aluminium, coal, bismuth, lead, zinc, silver and molybdenum. I am a "Qualified Person" for purposes of National Instrument 43-101 (the "Instrument").
- d) My most recent personal inspection of the Olary Iron Project was 19 May 2012 for two days.
- e) I am responsible for Sections s 1 to 13, as well as overall compilation of the Technical Report.
- f) I am independent of Yukuang Australia (WA) Resources Pty Ltd as defined by Section 1.5 of the Instrument.
- g) I have no prior involvement with the Property that is the subject of the Technical Report.
- h) I have read the Instrument, and the Technical Report has been prepared in compliance with the Instrument.
- i) At the effective date of the technical report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

- "Original document dated, signed and sealed by Paul Francis Hunter, MSc, MAusIMM(CP)"
- Paul Francis Hunter, MSc, MAusIMM(CP)
- Principal Consultant
- SRK Consulting (Australasia) Pty Ltd

Certificate of Qualified Person

- a) I, Daniel Jasper Kentwell, am a Principal Consultant with SRK Consulting (Australasia) Pty Ltd with a business address at Level 8, 35 Queen Street, Melbourne VIC 3000, Australia.
- b) This certificate applies to the technical report entitled Olary Iron Project Mineral Resource Estimate, South Australia NI 43-101, dated 20 August 2013 (the "Technical Report").
- c) I am a graduate of the Queensland University of Technology (BAppSc, 1988) and Edith Cowan University (MSc, 1997). I am a Fellow in good standing of The Australasian Institute of Mining and Metallurgy (membership number, 203401). My relevant experience is 15 years of mine planning and resource estimation for multiple commodities for SRK Consulting. I am a "Qualified Person" for purposes of National Instrument 43-101 (the "Instrument").
- d) I have not visited the project site.
- e) I am responsible for Section 14 (Mineral Resource Estimates) of the Technical Report.
- f) I am independent of Yukuang Australia (WA) Resources Pty Ltd as defined by Section 1.5 of the Instrument.
- g) I have no prior involvement with the Property that is the subject of the Technical Report.
- h) I have read the Instrument, and Item 14 of the Technical Report that I am responsible for, has been prepared in compliance with the Instrument.
- i) At the effective date of the technical report, to the best of my knowledge, information and belief, Item 14 of the Technical Report that I am responsible for contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

- "Original document dated, signed and sealed by Daniel Jasper Kentwell, MSc, FAusIMM"
- Daniel Jasper Kentwell, MSc, FAusIMM
- Principal Consultant
- SRK Consulting (Australasia) Pty Ltd