



**Summary Qualified Person's Report for
Fortress Mengapur Sdn. Bhd.
Project Number DA207243
April 2023**

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Appendix A Snowden Report

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1 FINDINGS AND RECOMMENDATIONS

Snowden Optiro, at the request of Fortress Mengapur Sdn. Bhd. (Fortress), has updated the Mineral Resource estimate (MRE) for the Mengapur copper deposit, located in Pahang State, Malaysia.

Snowden Mining Industry Consultants (Snowden) previously undertook a MRE for Mengapur in October 2018 for the previous owners of the deposit, Monument Mining Ltd (Monument). In April 2021 Fortress acquired the Mengapur deposit and reported an updated MRE dated 26 October 2020 that included magnetite resources as well as the copper resources that were previously reported. In April 2022 the October 2020 MRE was reported unchanged.

The MRE update being reported builds on the previous estimates including drilling completed by Fortress since the acquisition and the work completed by Fortress geological staff in developing their understanding of the deposit geology. Magnetite resources were estimated and copper resources were estimated into the pyrrhotite-hosted and skarn-hosted mineralisation domains in line with the April 2022 estimate. Previous estimates identified issues with the confidence of the pre-Monument drilling, this data was only used to inform blocks of the skarn copper mineralisation not informed by Fortress or Monument data. Only Fortress and Monument data was used to inform the magnetite resources. Snowden Optiro considers this to be a prudent approach to manage risk with respect to the confidence of the historic data, allowing Snowden Optiro to report both Inferred and Indicated Resources.

Snowden Optiro has also reported the MRE within an optimised pit shell based on high level metallurgical assumptions provided by Fortress for processing of the copper mineralisation, no consideration was given to the magnetite resources or recovery of any additional elements such as gold and silver. Only mineralised material on the two mining leases was considered for the optimisation. Table 1.1 summarises the MRE with the copper mineralisation reported at a 0.3% Cu cut-off and the magnetite mineralisation at a cut-off of 25% Fe.

Table 1.1 Mengapur MRE as of 28 February 2023

Classification	Cut-off grade	Mineralisation	Gross Attributable to Licences						Nett Attributable to Fortress						Change from previous update	Remarks
			Tonnes	Grade Fe	Grade Cu	Grade Au	Grade Ag	Grade S	Tonnes	Grade Fe	Grade Cu	Grade Au	Grade Ag	Grade S	Tonnes	
			Mt	%	%	g/t	g/t	%	Mt	%	%	g/t	g/t	%	%	
Indicated	0.3 % Cu	Skarn Cu	20.3	20.76	0.41	0.12	7.26	4.6	20.3	20.76	0.41	0.12	7.26	4.6	No Indicated previously Reported	No Indicated previously Reported
		Pyrrhotite Cu	0.7	29.11	0.55	0.28	3.48	14.14	0.7	29.11	0.55	0.28	3.48	14.14		
		Sub Total	21	21.03	0.42	0.13	7.13	4.92	21	21.03	0.42	0.13	7.13	4.92		
	25% Fe	Skarn Magnetite	0.34	27.66	0.13	0.09	1.52	6.23	0.34	27.66	0.13	0.09	1.52	6.23		
		Breccia Magnetite	0.01	46.28	0.21	0.23	5.66	0.13	0.01	46.28	0.21	0.23	5.66	0.13		
		Sub Total	0.34	28.01	0.13	0.09	1.6	6.12	0.34	28.01	0.13	0.09	1.6	6.12		
Inferred	0.3 % Cu	Skarn Cu	7.93	22.39	0.41	0.13	8.42	4.62	7.93	22.39	0.41	0.13	8.42	4.62	-8%	Change in cut off from 0.5 Cu % to 0.3 Cu% and classification change
		Pyrrhotite Cu	6.96	29.26	0.6	0.27	3.56	13.75	6.96	29.26	0.6	0.27	3.56	13.75	13%	
		Sub Total	14.89	25.6	0.5	0.19	6.15	8.89	14.89	25.6	0.5	0.19	6.15	8.89	0%	
	25% Fe	Skarn Magnetite	1.38	27.8	0.13	0.12	1.35	5.89	1.38	27.8	0.13	0.12	1.35	5.89	-74%	Reported within optimised pit shell
		Breccia Magnetite	0.38	41.51	0.2	0.17	6.04	0.19	0.38	41.51	0.2	0.17	6.04	0.19	-93%	
		Sub Total	1.76	30.75	0.14	0.13	2.36	4.67	1.76	30.75	0.14	0.13	2.36	4.67	-84%	
Total	0.3 % Cu	Total Cu	35.89	22.93	0.45	0.16	6.72	6.56	35.89	22.93	0.45	0.16	6.72	6.56	143%	Change in cut off grade
	25% Fe	Total Magnetite	2.1	30.3	0.14	0.13	2.24	4.9	2.1	30.3	0.14	0.13	2.24	4.9	-80%	Reported within optimised pit shell

The Competent Person responsible for the preparation and reporting of the Mengapur Mineral Resource Estimate is Michael Andrew, who is an Executive Consultant with Snowden Optiro, mining industry consultants. Michael Andrew has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves”. Michael Andrew is a Fellow of the Australian Institute of Mining and Metallurgy (Membership No 111172).

The Competent Person and his firm's partners, directors, substantial shareholders and their associates confirm that they are independent of Fortress, Fortress's directors, Fortress's substantial shareholders, Fortress's advisers and their associates. The Competent Person and his firm's partners, directors, substantial shareholders and their associates does not hold any interest, direct or indirect, in Fortress, Fortress's subsidiaries or associated companies, and will not receive benefits (direct or indirect) other than remuneration paid to the Competent Person in connection with the qualified person's report. The remuneration paid to the Competent Person in connection with the qualified person's report is not dependent on the findings of the qualified person's report..

The reduction (80%) in reported magnetite mineralisation from the April 2022 MRE reflects the constraint of reporting within an optimised pit shell, as the bulk of the magnetite mineralisation lies below the optimised shell. The increase (143%) in reported copper mineralisation reflects the reporting of the mineralisation at a lower cut-off grade 0.3% Cu. At a 0.5% Cu cut-off, the copper mineralisation is reduced (61%) compared to the April 2022 MRE, reflecting the impact of reporting constrained by the pit shell.

Snowden Optiro makes the following recommendations for further work with respect to the Mengapur MRE:

- Undertake additional testwork to determine the metallurgical characteristics of the magnetite mineralisation so that it can be included in the understanding of the Mengapur potential.
- Undertake additional testwork to determine the metallurgical characteristics of the copper mineralisation in particular determine a grade recovery.
- Undertake additional testwork to understand the recovery of additional elements in the processing of Mengapur mineralised material, in particular gold and silver.
- Undertake drilling of the magnetic anomaly defined by a geophysics survey on the northern leases. The anomaly is likely defining additional magnetite mineralisation on the Mengapur lease. The scale of the anomaly appears to be similar to the areas of magnetite material currently defined in the updated MRE.
- Undertake additional density determinations to further characterise the mineralised and non-mineralised rock types at Mengapur.
- Implement formalised quality assurance/quality control (QAQC) reporting for the drill data being generated on site.

2 INTRODUCTION

The Mengapur deposit is located in Pahang State, Malaysia. The project lies approximately 13 km northwest of the town of Sri Jaya, which is on the Kuala Lumpur–Kuantan Road, and 145 km northeast of Kuala Lumpur, the capital of Malaysia. It is centred on Universal Transverse Mercator (UTM) coordinates 536,000 mE and 417,000 mN (Zone 48N).

Snowden Optiro, at the request of Fortress, has updated the MRE for the Mengapur deposit. In April 2021 Fortress acquired the Mengapur deposit and reported an updated MRE (October 2020) that included magnetite resources as well as the copper resources that were previously reported, this was reported unchanged as at February 2022. Prior to the acquisition by Fortress, the property was owned by Monument Mining Ltd (Monument). In 2018 Snowden Mining Industry Consultants (Snowden) prepared a NI43-101 report (Appendix A to this report) for Monument reporting the Mineral Resources for Mengapur. As part of the sale process Fortress commissioned an Independent Qualified Person Report (IPQR) (Appendix B to this report) by Valuation & Resource Management (VRM) which updated the MRE. The VRM MRE update included magnetite mineralization as well as the copper mineralization which Snowden had reported.

Both the Snowden and VRM reports provide detail on the history of the Mengapur deposit and the data and work undertaken up until the Fortress acquisition. It is recommended both reports be read to provide the background to the MRE update undertaken by Snowden Optiro. This report covers the work undertaken since the Fortress acquisition, that includes drilling and updating of the geological model by Fortress geological staff. A site visit was undertaken by Michael Andrew, an Executive Consultant with Snowden Optiro, in February 2023.

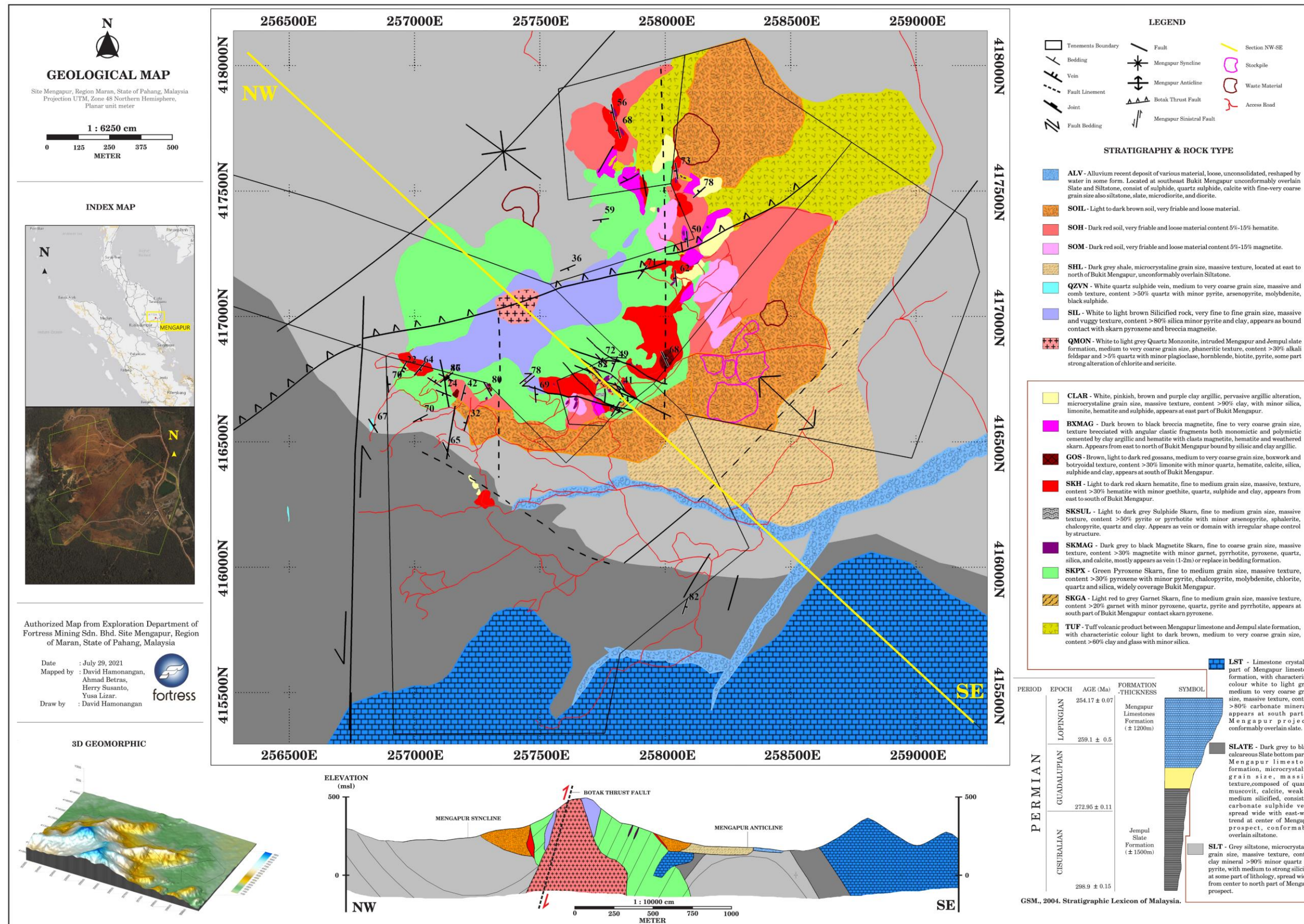
3 GEOLOGICAL MODEL

The geology of the Mengapur deposit has been described in detail in the Snowden and VRM reports. Figure 3.1 is a geology map of the Mengapur deposit developed by the site geology team. The development of the geological model at Mengapur has seen the addition of lenses of skarn magnetite, skarn pyrrhotite and skarn breccia units, in conjunction with the hornfels skarn which hosts the copper mineralisation.

Based on the mapped geology and drill data, the site geology team developed a three-dimensional (3D) geological model over the whole Mengapur deposit capturing the elements presented in the geology map. Figure 3.2 presents the geological elements that comprise the estimated domains in the MRE update. The pink wireframe is the skarn, the purple wireframe skarn magnetite, green wireframe skarn pyrrhotite and orange wireframe magnetite breccia. These wireframes are presented with a magnetic survey undertaken by Fortress over the Mengapur deposit in Figure 3.3 and Figure 3.4. The magnetic survey suggests potential for further magnetite and pyrrhotite style mineralisation to the north of the interpreted magnetite breccia.

The magnetite units were defined by elevated iron and corresponding elevated magnetic susceptibility readings together with the logged geology. The pyrrhotite units were defined by elevated iron, sulphur and copper and a low magnetic susceptibility with respect to the magnetite units and logged geology. The magnetite and pyrrhotite mineralisation are interpreted post-date the skarn mineralisation. The interpretation is also informed by geological mapping by the Fortress geology team. Earlier interpretations of the magnetite units (particularly the breccia) were less discreet; this iteration of the interpreted geology has them more constrained. These were the only units estimated as part of the MRE update, and this follows the VRM update approach. The 2018 Snowden MRE reported on the skarn mineralisation.

Figure 3.1 Mengapur geology map



Source: Fortress

Figure 3.2 Skarn (pink), skarn magnetite (purple), skarn pyrrhotite (green) and breccia magnetite (orange) wireframes

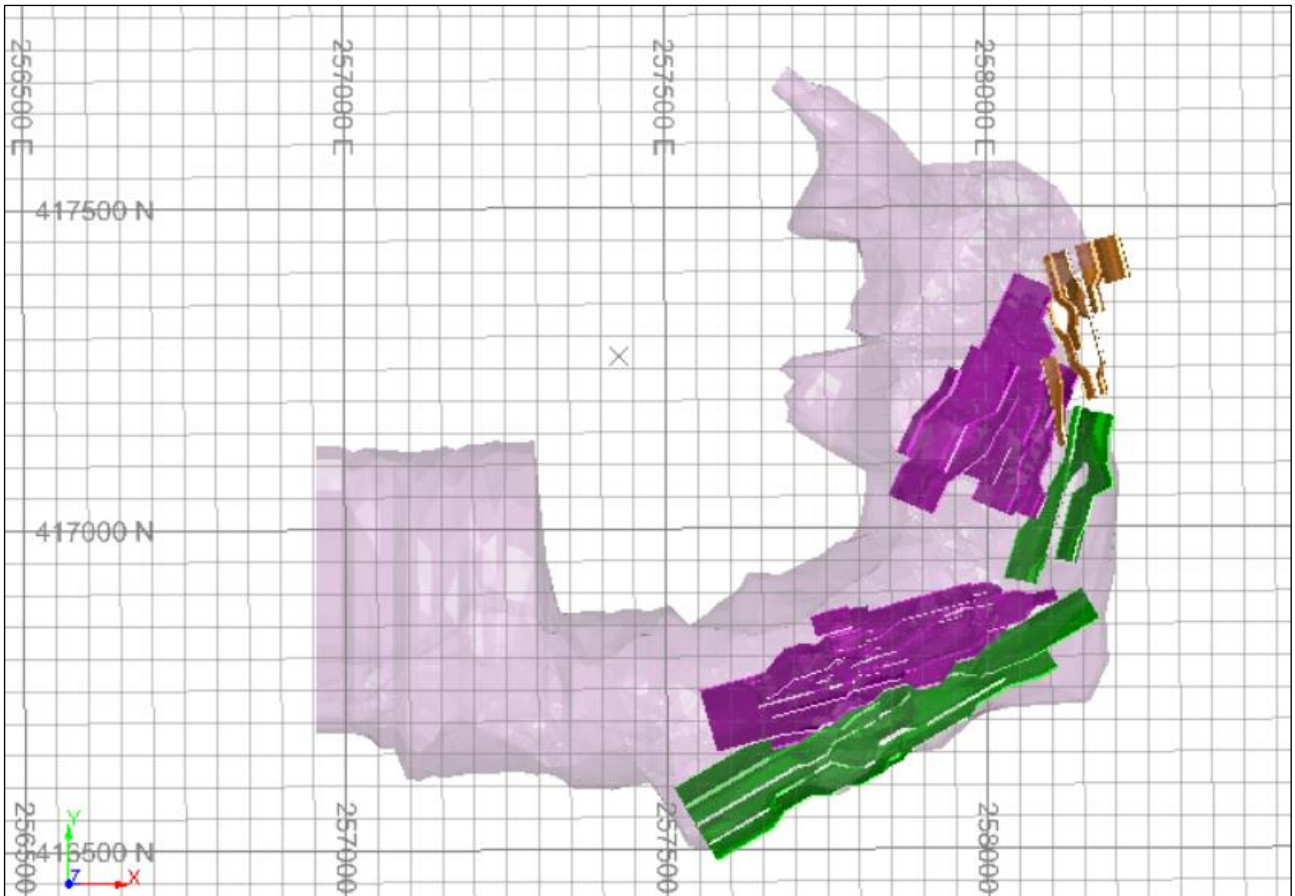


Figure 3.3 Skarn magnetite, skarn pyrrhotite, breccia magnetite wireframes and magnetic survey

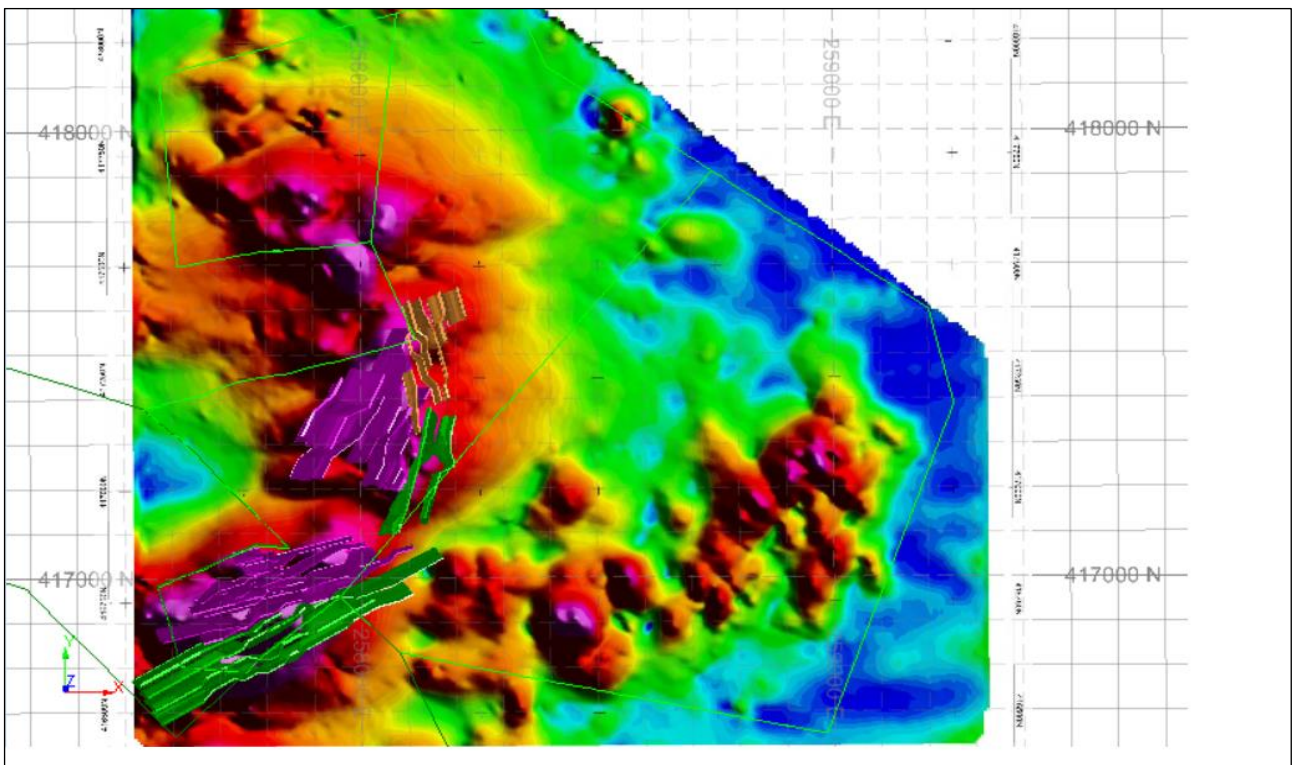
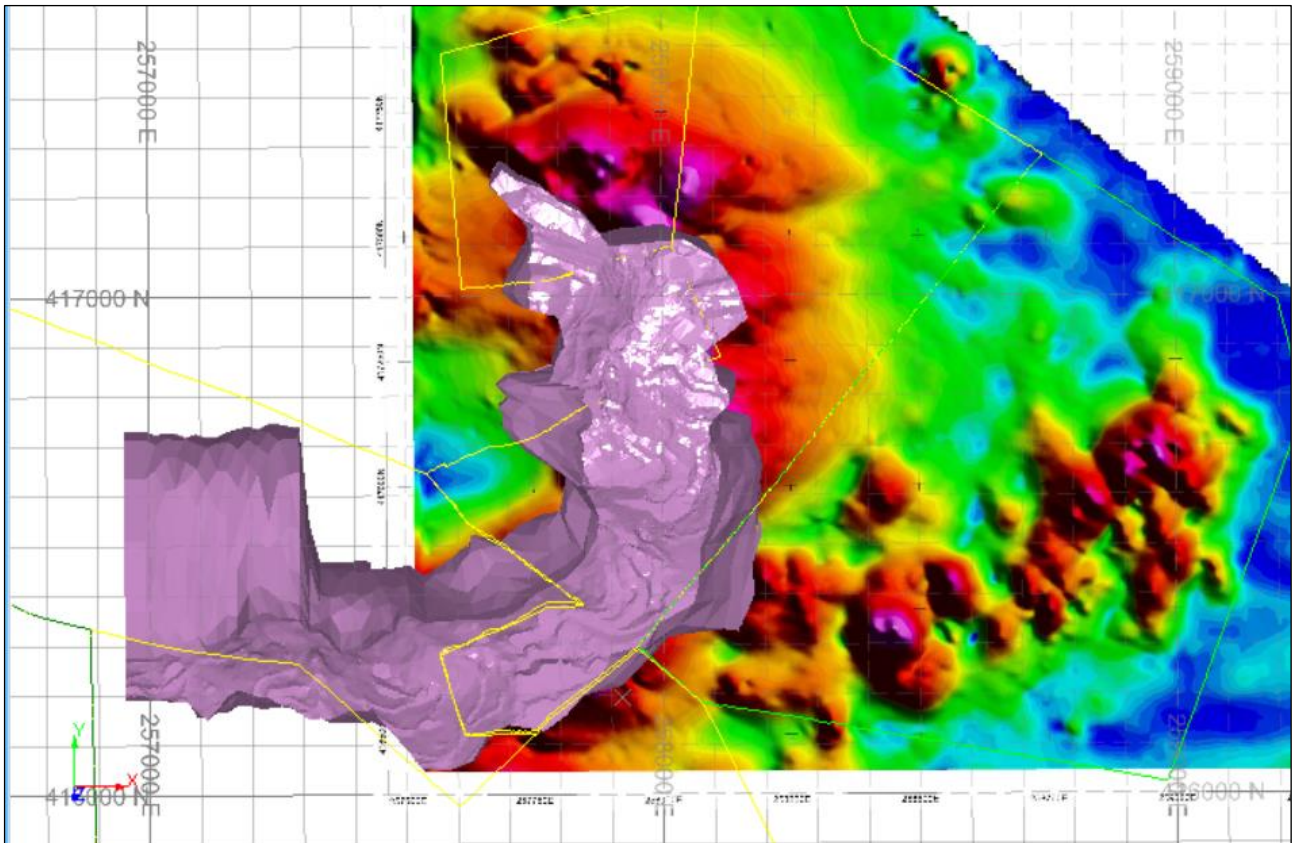


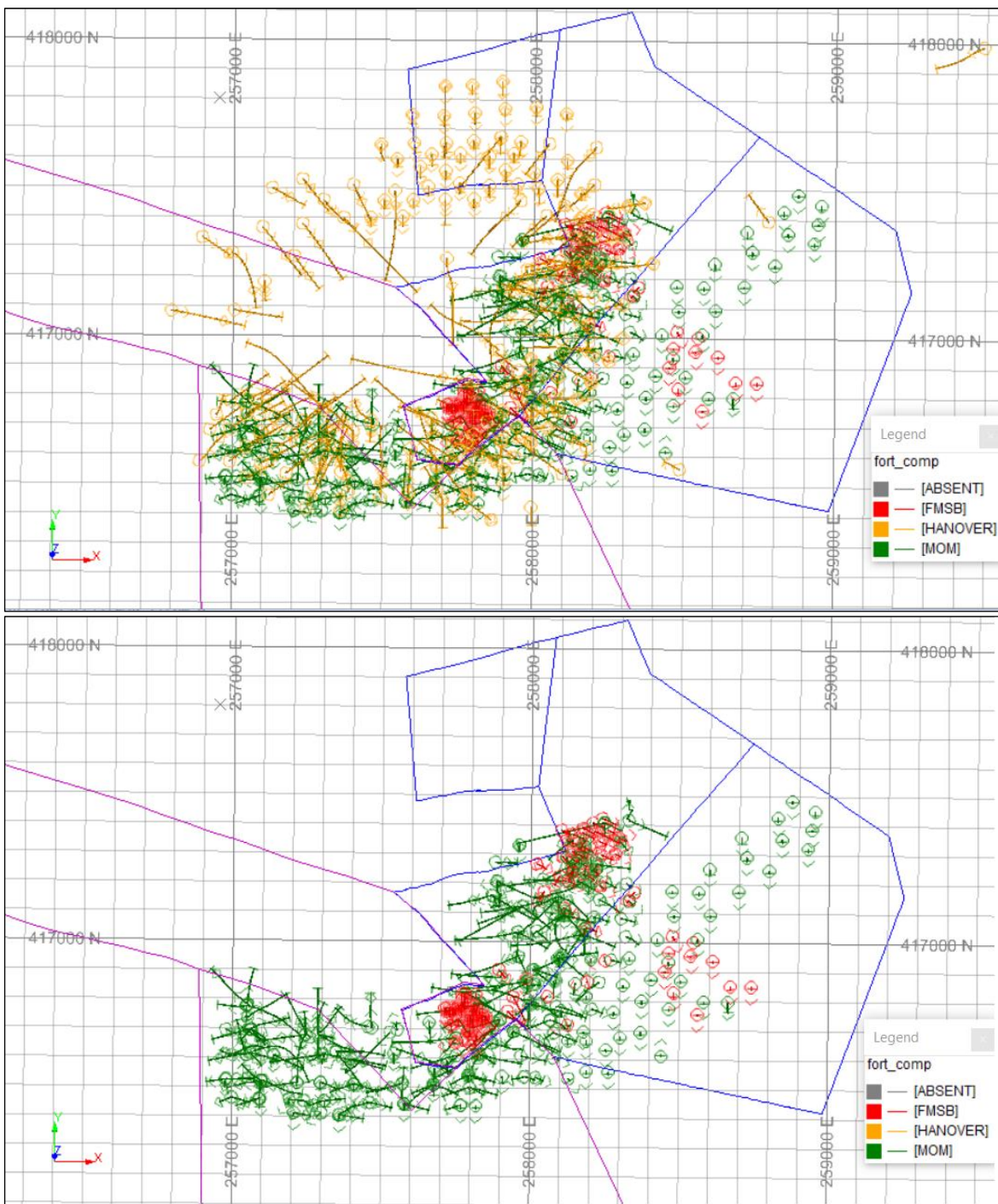
Figure 3.4 Skarn wireframe and magnetic survey



4 DATA

The Snowden and VRM reports describe in detail the historical data at Mengapur prior to the Fortress acquisition. After reviewing both these reports, the decision was made not to use the drill data generated in the 1980s (pre-Monument) to estimate the magnetite and pyrrhotite units. This data was only used to inform the skarn mineralisation that remained uninformed after being estimated with Fortress and Monument drill data. Figure 4.1 presents drillhole location plans of all drill data; as can be seen in the upper frame, there is a reasonable overlap of pre-Monument data with the Monument and Fortress drill data, except in the northern part of the deposit as illustrated in the lower frame which has the Monument and Fortress data only.

Figure 4.1 Upper image – drillhole location all drill data (upper), pre-Monument (orange), Monument (green) and Fortress (red); lower image – Monument and Fortress drilling



4.1 Fortress data

Fortress has drilled 18 core drillholes for 2,786 m and 88 reverse circulation (RC) drillholes for 7,999 m since the acquisition of the Mengapur deposit, based on the data supplied by Fortress for the MRE update. Samples are prepared and assayed onsite at Mengapur.

4.1.1 Sample collection

RC samples were passed from in-line cyclone connected to the sample hose, samples were collected in 1 m intervals into bulk plastic bags, and to produce smaller sample splits, the RC sample was split with a riffle splitter into four ports: 50%, 25% and two times 12.5% portions. Diamond core was cut in half and half core sampled. Diamond core sampling on HQ/NQ diamond drill core at mostly 1 m intervals. Closer spaced sampling around specific mineralised zones or structures. Diamond core was marked on the core by the geologist according to geological intervals. The core was cut in half by field technicians, with half being placed in a pre-numbered bag and the other half returned to the core tray. For duplicate samples the core to be submitted for analysis is quartered. The resource estimated use geochemical, metallurgical and magnetic susceptibility results with geological logging information from diamond drill core, RC chip samples and a small amount of grade control chip samples.

Core loss or low sample recovery was recorded in zones where there is localised faulting. Sample recovery was low for diamond drill and RC drill when intersecting brecciated zones. Recovery was estimated as a percentage and recorded on field sheets prior to entry into the database. Diamond core sample recovery was measured and calculated during logging using rock quality designation (RQD) logging procedures. Core loss or low sample recovery was recorded at zone where there is localised faulting. Sample recovery was low for diamond drill and RC drill when intersecting brecciated zone. Recovery was estimated as a percentage and recorded on field sheets prior to entry into the database. Diamond core sample recovery was measured and calculated during logging using RQD logging procedures. The RC sample recovery was measured to have an average recovery of 73.4%. RC chip recovery within fresh 84% and 62.7% for weathered rock. It is calculated using an average density of 3.2 g/cm³ of 6,892 samples. RC chip samples weight of less than 5 kg are marked as core loss to avoid bias. Average core recovery is 73% across all rock types and oxidation zone. The average recovery is low when drilling in weathered brecciated zones. The core recovery is found to be 98.34% for fresh rock and within oxide zone the recovery is 69%. Core recovery was measured directly. Most of the drilling was in the oxide and transitional zones, with the recovery being poor to good. Qualitative estimates of the rock chip recovery are mostly reasonable.

4.1.2 Sample analysis

Samples were analysed at the Fortress Mengapur site laboratory by x-ray fluorescence with an atomic absorption spectroscopy (AAS) finish for gold. Sample preparation methods involved:

- Drying of sample for less than 24 hours at generally <105°C
- Crushing with jaw crushers to >70% passing 2 mm
- Pulverising a 250 g to 2 kg (average 1 kg) riffle split subsample to greater than 85% passing 75 µm
- Multiple pulp samples are taken for assaying, metallurgical testwork and storage, as required.

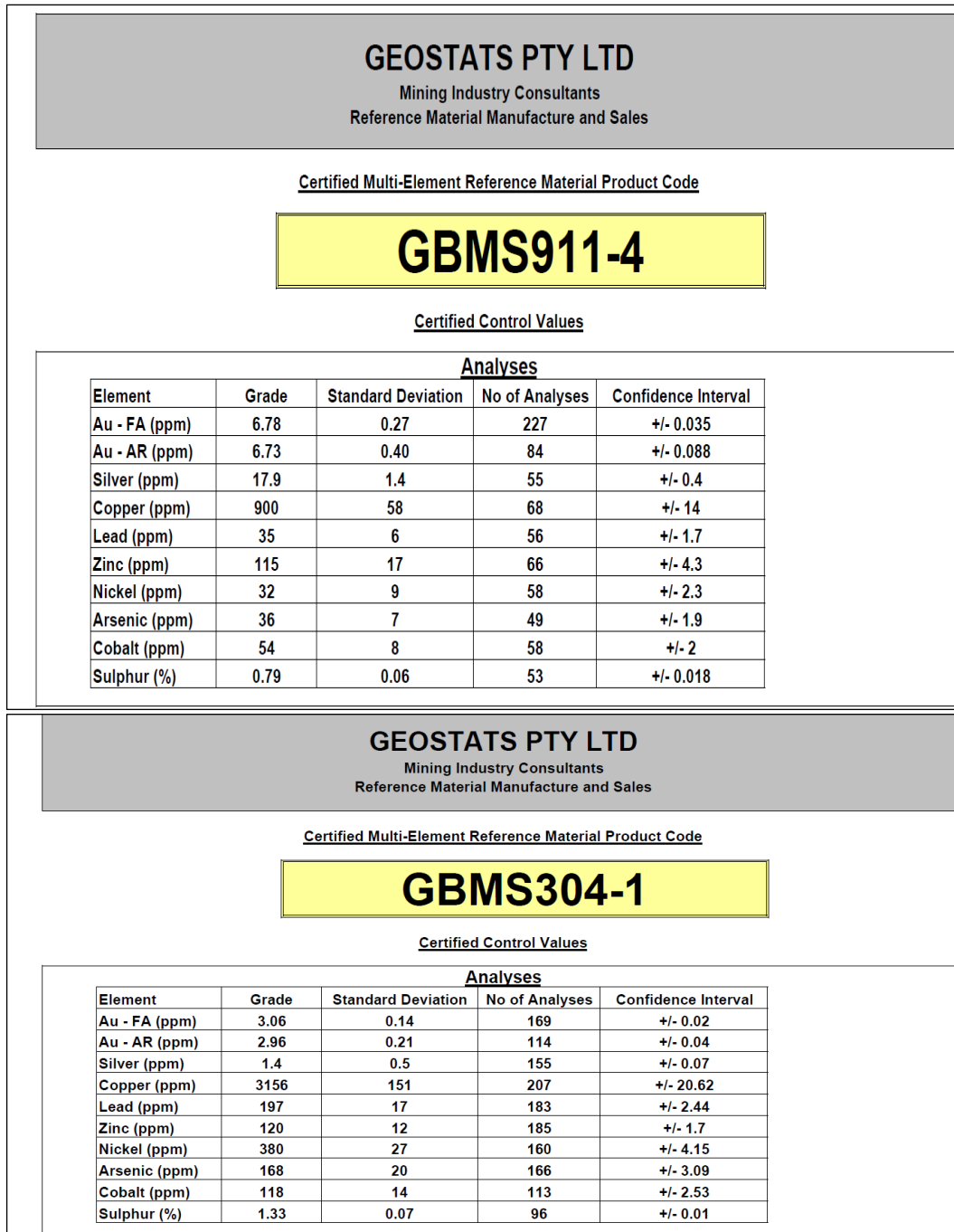
4.1.3 Quality assurance/quality control

Four RC field duplicates are inserted every 20 samples. In the case of drill core, the core is quartered, and quarter core is sampled as a duplicate for the primary half-core sample. Industry purchased standards are inserted at a rate of 4 per 20 samples.

Two Geostats iron standards and two copper standards are inserted per 20 samples.

Details of the certified reference materials (CRMs) or standards are presented in Figure 4.2. Standard control charts are presented for the five CRMs (two copper and three iron CRMs) in Figure 4.3. The results indicate that there have been issues at the Mengapur laboratory with respect to low level copper and high iron grades. The charts suggest that there were periods of poor accuracy with respect to the CRMs, indicating calibration issues of the equipment. Overall, there is a positive bias with respect to the copper and the iron does not display a consistent bias with the average assay values close to that of the CRM. Snowden Optiro recommends that Fortress reviews the performance of their onsite laboratory and resolve the issues with respect to accuracy of the assaying techniques. Given the Fortress assay data is approximately 17% of the data used for the update of the MRE (Fortress and Monument drilling), it is not considered that the accuracy issues will impact materially on the MRE update.

Figure 4.2 CRM details



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Certified Pulp Iron Ore Reference Material - GIOP-96

Certificate of Analysis

Analyte	Units	Average	Standard Deviation	Count	95% Confidence Interval
Fe	%	27.442	0.077	39	+/- 0.025
SiO2	%	54.38	0.58	49	+/- 0.17
Al2O3	%	0.723	0.02	48	+/- 0.006
TiO2	%	0.0289	0.006	47	+/- 0.0018
Mn	%	0.107	0.0041	50	+/- 0.0012
CaO	%	2.884	0.031	50	+/- 0.009
P	%	0.0507	0.0012	50	+/- 0.0004
S	%	0.94	0.042	49	+/- 0.012
MgO	%	2.819	0.025	48	+/- 0.007
K2O	%	0.051	0.0018	47	+/- 0.0005
Zn	%	0.0076	0.003	40	+/- 0.001
Pb	%	0.004			
Cu	%	0.0084			
Ba	%	0.0059			
V	%	0.0018			
Cr	%	0.0034			
Cl	%	0.0201	0.0032	43	+/- 0.001
As	%	0.0081			
Ni	%	0.0046			
Co	%	0.0032			
Sn	%	0.0027			
Sr	%	0.0072			
Zr	%	0.0027			
Na	%	0.038	0.0062	48	+/- 0.0018
LOI425	%	0.005	0.046	40	+/- 0.015
LOI850	%	-0.173	0.066	40	+/- 0.021
LOI	%	-0.454	0.047	48	+/- 0.014

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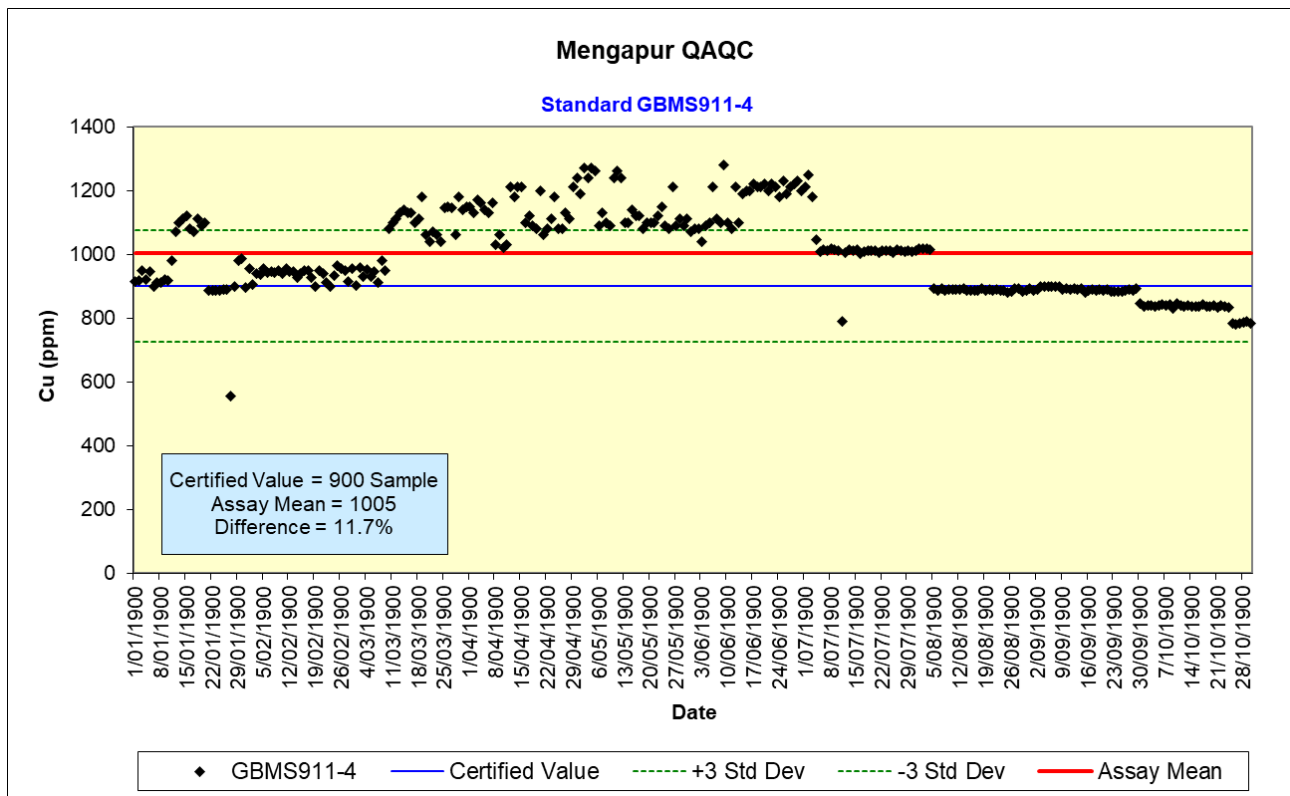
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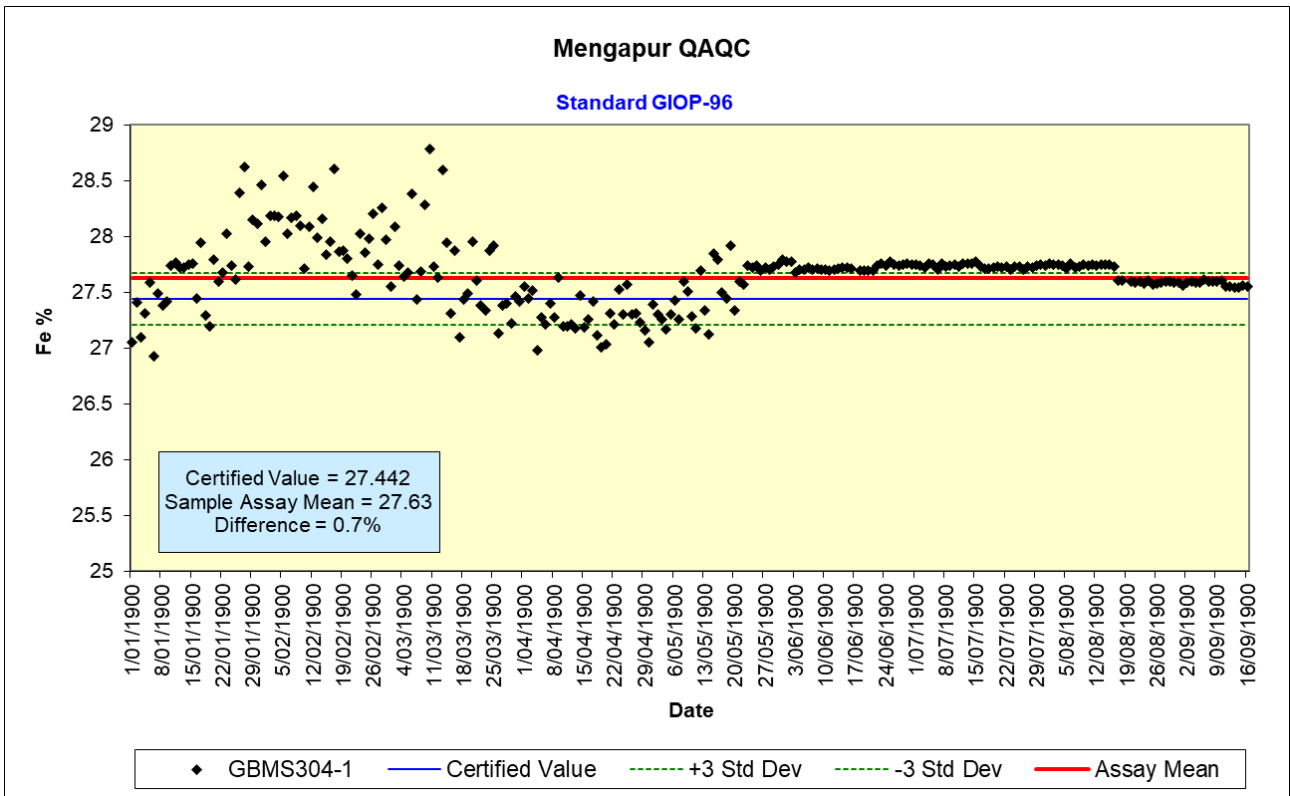
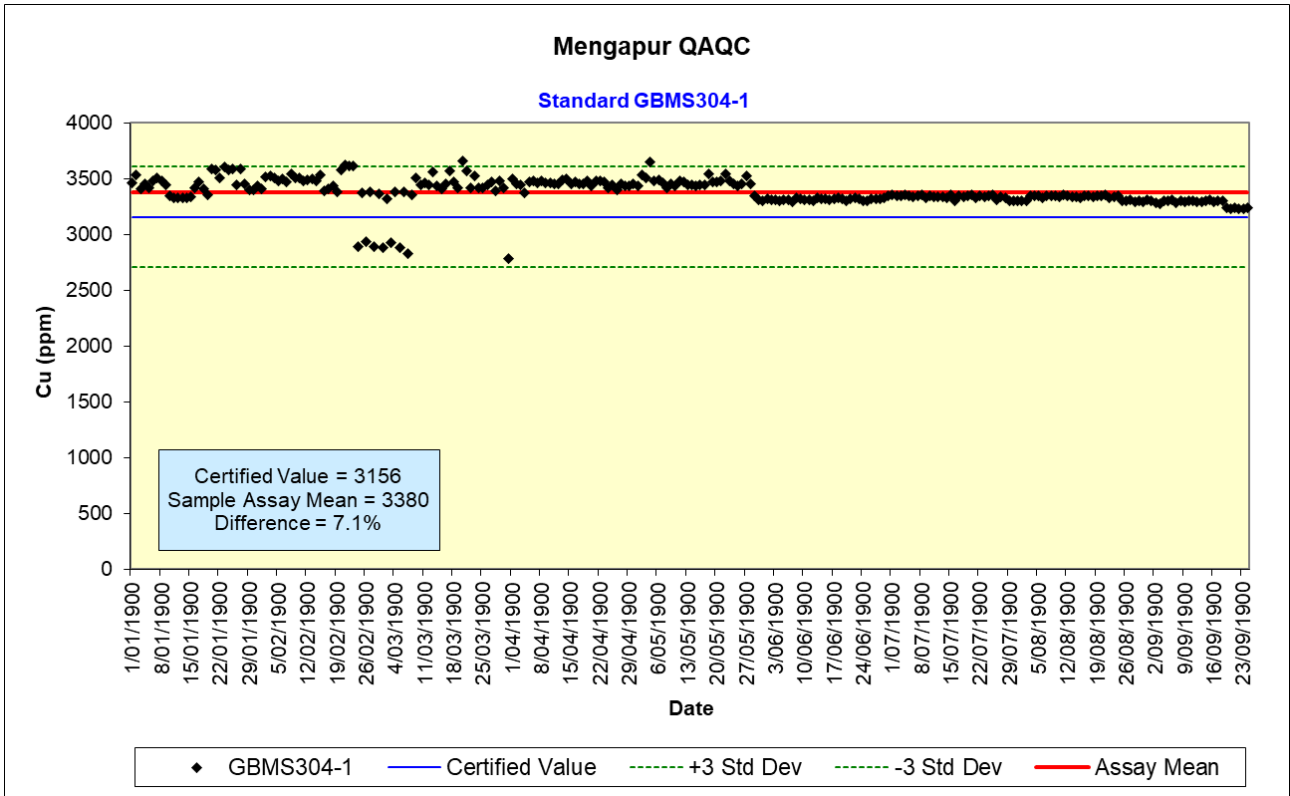
Analyte	Units	Average	Standard Deviation	Count	95% Confidence Interval
Fe	%	27.186	0.067	40	+/- 0.022
SiO2	%	55.26	0.5	50	+/- 0.14
Al2O3	%	0.722	0.019	48	+/- 0.006
TiO2	%	0.0278	0.0042	46	+/- 0.0013
Mn	%	0.0909	0.0013	47	+/- 0.0004
CaO	%	3.065	0.023	50	+/- 0.007
P	%	0.0474	0.0011	50	+/- 0.0003
S	%	0.768	0.026	47	+/- 0.008
MgO	%	2.368	0.018	49	+/- 0.005
K2O	%	0.0476	0.0042	50	+/- 0.0012
Zn	%	0.0072	0.003	40	+/- 0.001
Pb	%	0.0036			
Cu	%	0.0067	0.0034	31	+/- 0.0013
Ba	%	0.0041			
V	%	0.0018			
Cr	%	0.0022			
Cl	%	0.0155	0.003	42	+/- 0.001
As	%	0.008			
Ni	%	0.004			
Co	%	0.0034			
Sn	%	0.0022			
Sr	%	0.0075			
Zr	%	0.0028			
Na	%	0.0496	0.0073	50	+/- 0.0021
LOI425	%	-0.066	0.07	40	+/- 0.023
LOI850	%	-0.396	0.074	40	+/- 0.024
LOI	%	-0.705	0.043	50	+/- 0.012

Control Statistic Details

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Certified Pulp Iron Ore Reference Material - GIOP-135					
Certificate of Analysis					
Analyte	Units	Average	Standard Deviation	Count	95% Confidence Interval
Fe	%	53.505	0.08	50	+/- 0.023
Fe Calc	%	53.481	0.063	50	+/- 0.018
SiO2	%	9.833	0.054	49	+/- 0.016
Al2O3	%	7.322	0.052	50	+/- 0.015
TiO2	%	0.4731	0.0068	50	+/- 0.0019
Mn	%	0.0588	0.0017	50	+/- 0.0005
CaO	%	1.184	0.014	50	+/- 0.004
P	%	0.05917	0.00089	50	+/- 0.00026
S	%	0.0191	0.0012	50	+/- 0.0004
MgO	%	0.665	0.01	50	+/- 0.003
K2O	%	0.0825	0.0018	50	+/- 0.0005
Zn	%	0.00233	0.00048	30	+/- 0.00018
Pb	%	0.0023			
Cu	%	0.0013			
Ba	%	0.0088	0.0028	37	+/- 0.0009
V	%	0.00914	0.00098	44	+/- 0.0003
Cr	%	0.00614	0.0009	40	+/- 0.00029
Cl	%	0.0034	0.001	30	+/- 0.0004
As	%	0.001			
Ni	%	0.00248	0.00068	33	+/- 0.00025
Co	%	0.0017			
Sn	%	0.0018			
Sr	%	0.0058	0.0028	44	+/- 0.0008
Zr	%	0.0095	0.0013	30	+/- 0.0005
Na	%	0.2743	0.0075	49	+/- 0.0022
LOI425	%	3.332	0.058	50	+/- 0.017
LOI650	%	3.585	0.02	36	+/- 0.007
LOI1000	%	3.562	0.036	40	+/- 0.012

Figure 4.3 Standard control charts for copper and iron CRMs





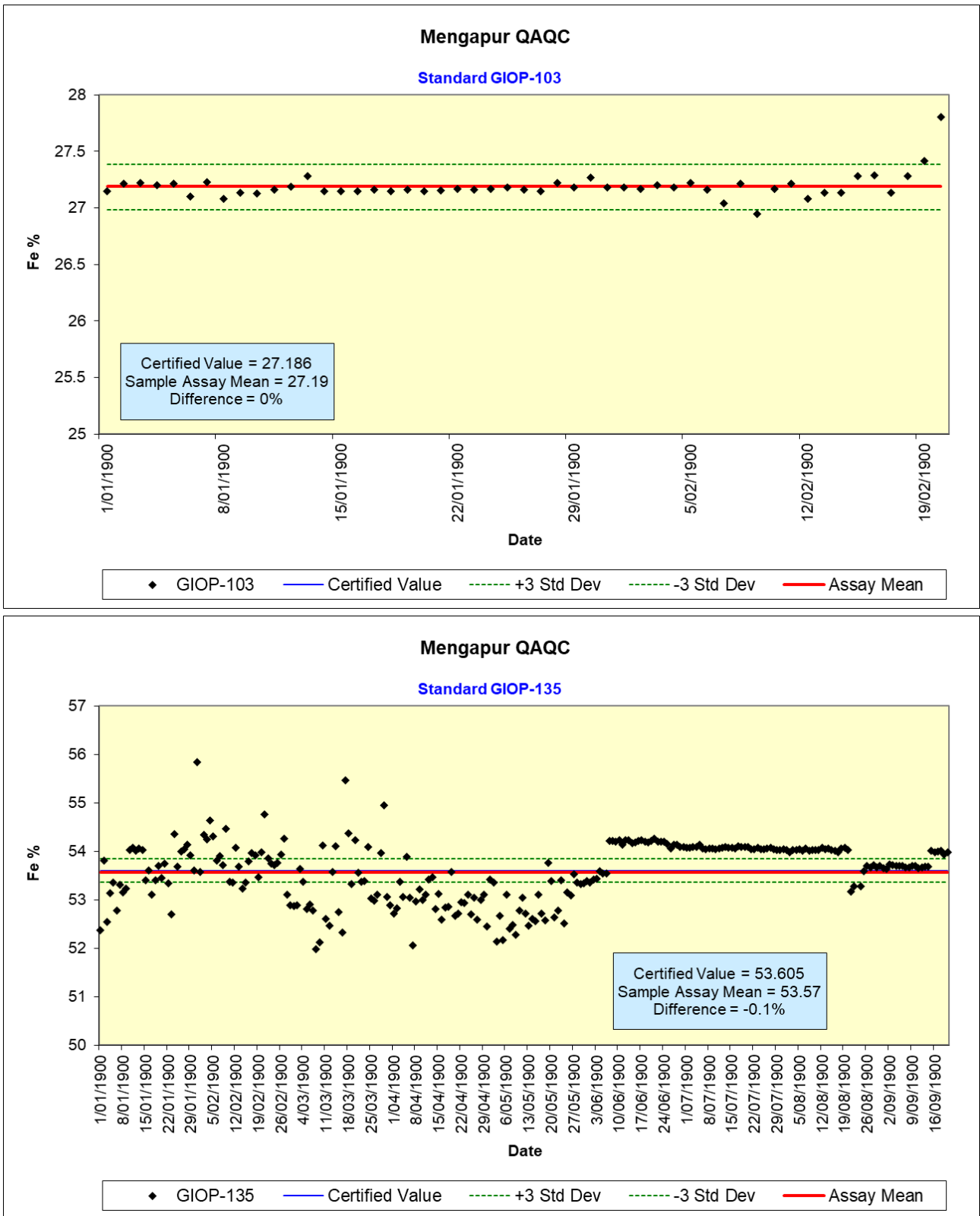
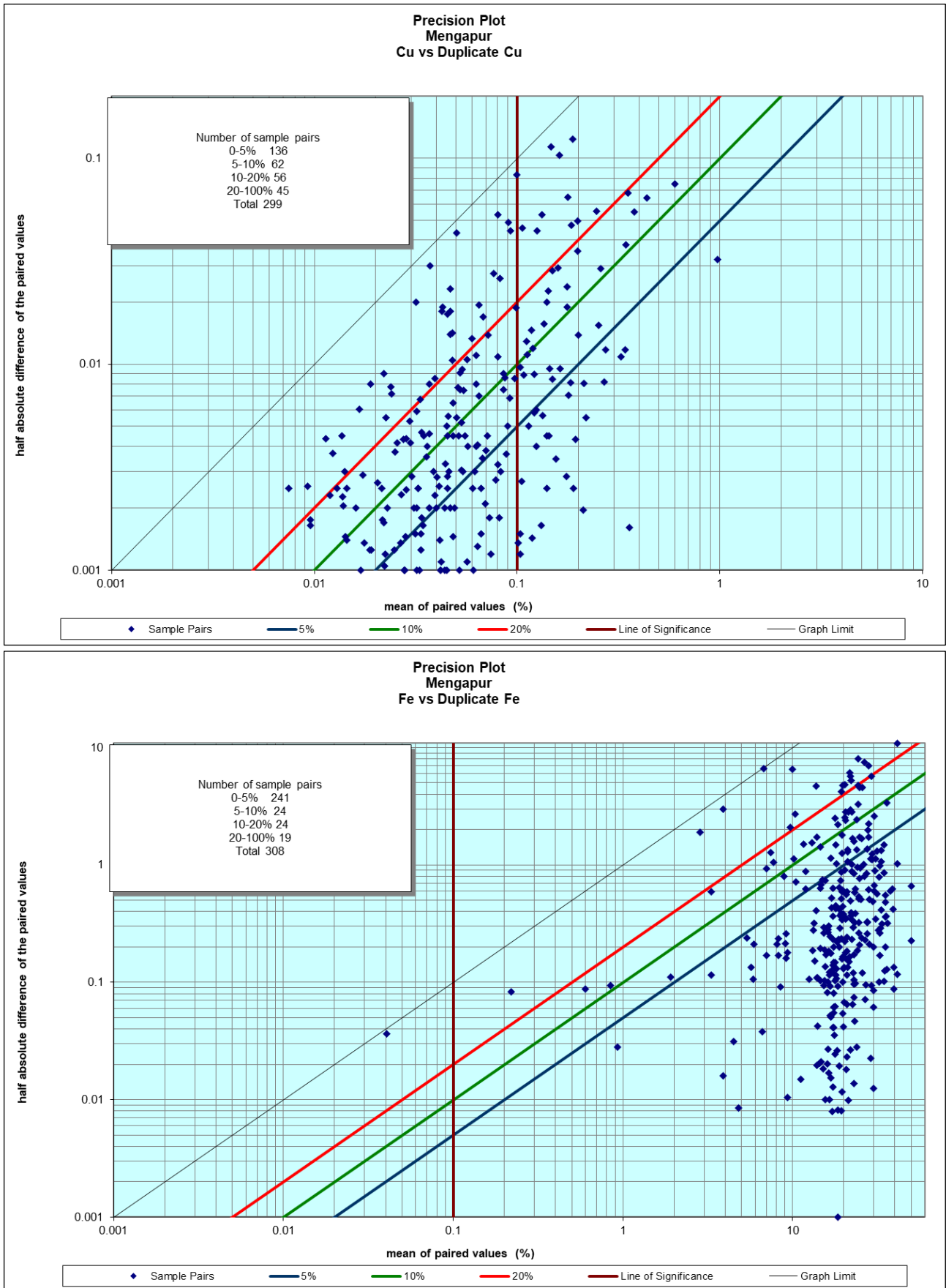


Figure 4.4 presents precision plots of the field duplicate data for both copper and iron. Both plots show acceptable precision for the field duplicates.

Figure 4.4 Precision plot of field duplicates copper and iron

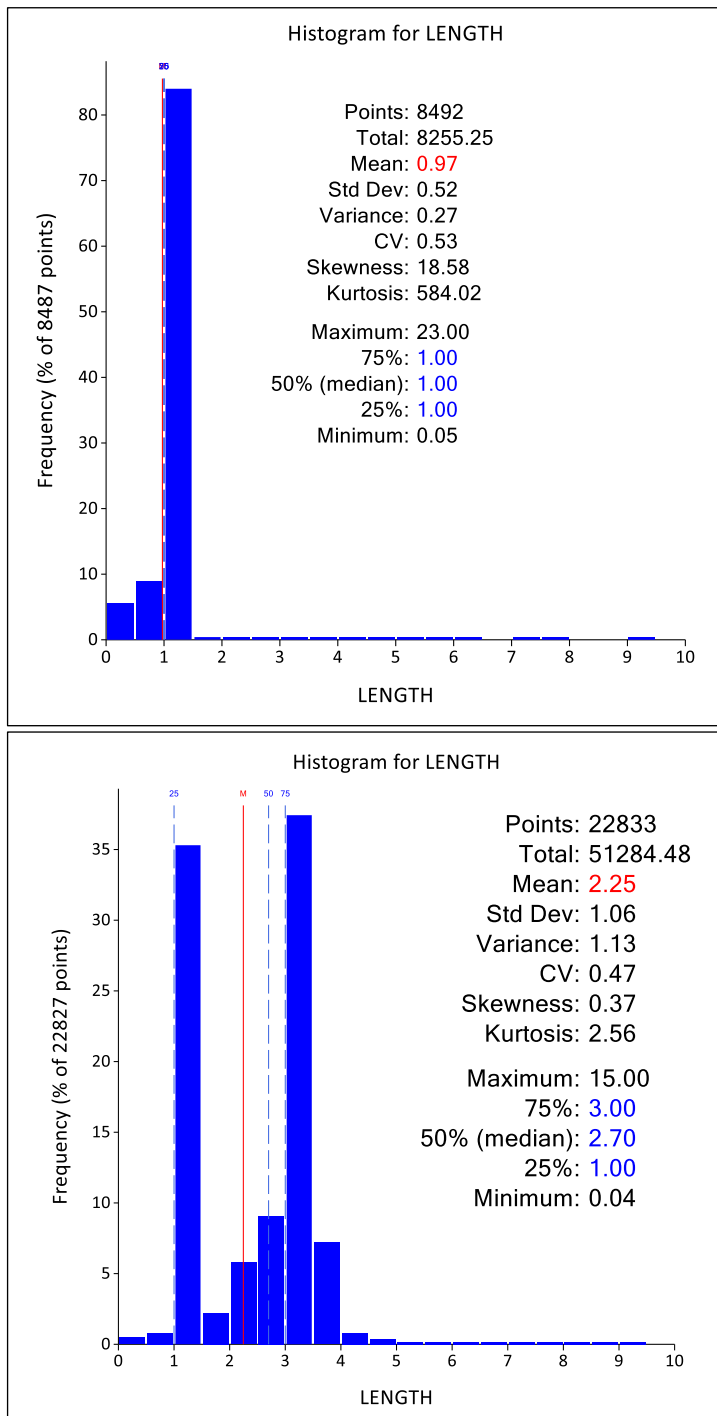


5 RESOURCE ESTIMATION

5.1 Data

Drill data generated by Fortress and Monument was used to estimate the magnetite and pyrrhotite domains. For the skarn mineralisation Fortress and Monument data was used initially, due to the lack of Fortress and Monument drilling in the north part of the deposit (Figure 4.1), pre-Monument drilling was used to inform areas of the MRE not estimated in the initial pass. Figure 5.1 presents histogram plots of sample length for both Fortress and Monument drilling, Fortress drilling has been sampled on predominantly 1 m intervals, while Monument has been sampled on 1 m and 3 m intervals predominantly.

Figure 5.1 Sample length – Fortress (upper) and Monument (lower) drilling



For the MRE update, it was decided to composite the data to 1 m, to preserve the resolution of the 1 m sample data with respect to the narrow magnetite and pyrrhotite domains. Summary statistics are presented by domain for the elements estimated in the MRE, copper, iron, gold, silver, arsenic and sulphur (Table 5.1).

Table 5.1 Summary statistics – Fortress and Monument data by domain

	Total	Skarn	Skarn magnetite	Skarn pyrrhotite	Magnetite breccia
Assay	Ag (ppm)	Ag (ppm)	Ag (ppm)	Ag (ppm)	Ag (ppm)
Samples	18,838.00	14,430.00	2,159.00	2,061.00	188.00
Minimum	0.01	0.01	0.01	0.09	0.28
Maximum	705.00	453.93	705.00	260.00	139.00
Mean	5.54	5.63	5.19	5.07	7.17
Standard deviation	13.08	10.78	19.75	18.12	12.30
CV	2.36	1.91	3.81	3.57	1.72
Assay	As (ppm)	As (ppm)	As (ppm)	As (ppm)	As (ppm)
Samples	24,161.00	17,684.00	3,846.00	2,384.00	247.00
Minimum	0.30	0.30	0.40	0.50	16.00
Maximum	125,000.00	99,110.00	70,000.00	125,000.00	6,829.00
Mean	1,379.80	1,692.70	509.80	546.60	569.80
Standard deviation	4,295.80	4,566.40	2,572.30	4,339.30	1,123.60
CV	3.10	2.70	5.00	7.90	2.00
Assay	Au (ppm)	Au (ppm)	Au (ppm)	Au (ppm)	Au (ppm)
Samples	22,125.00	15,450.00	3,527.00	2,743.00	405.00
Minimum	0.01	0.01	0.01	0.01	0.01
Maximum	7.85	6.30	4.55	7.85	6.96
Mean	0.14	0.11	0.12	0.30	0.31
Standard deviation	0.28	0.24	0.25	0.43	0.46
CV	2.00	2.10	2.01	1.43	1.48
Assay	Cu (%)	Cu (%)	Cu (%)	Cu (%)	Cu (%)
Samples	32,054.00	21,379.00	6,830.00	3,304.00	541.00
Minimum	0.01	0.01	0.01	0.01	0.01
Maximum	11.30	5.71	4.14	11.30	1.01
Mean	0.19	0.18	0.10	0.41	0.20
Standard deviation	0.29	0.23	0.15	0.57	0.15
CV	1.54	1.29	1.59	1.38	0.77
Assay	Fe (%)	Fe (%)	Fe (%)	Fe (%)	Fe (%)
Samples	32,299.00	21,526.00	6,961.00	3,270.00	542.00
Minimum	0.02	0.09	0.02	0.66	8.68
Maximum	70.20	62.42	56.62	53.40	70.20
Mean	20.16	17.59	23.53	26.34	41.77
Standard deviation	10.38	10.04	7.40	8.35	13.59
CV	0.51	0.57	0.31	0.32	0.33
Assay	S (%)	S (%)	S (%)	S (%)	S (%)
Samples	31,969.00	21,224.00	6,966.00	3,251.00	528.00
Minimum	0.01	0.01	0.01	0.01	0.01
Maximum	38.55	38.55	34.93	32.68	1.05
Mean	4.57	3.50	4.45	12.58	0.16
Standard deviation	5.26	4.08	4.57	6.64	0.12
CV	1.15	1.17	1.03	0.53	0.74

Where the CV (coefficient of variation) was elevated above 1, the data was reviewed for grade caps. For estimation of the skarn mineralisation, categorical indicator kriging was employed with a threshold of 0.15% Cu to domain the skarn above and below this threshold. The skarn magnetite and pyrrhotite units were also sub-domained to account for the change in orientation of the units. Table 5.2 summarises the grade caps applied by domain.

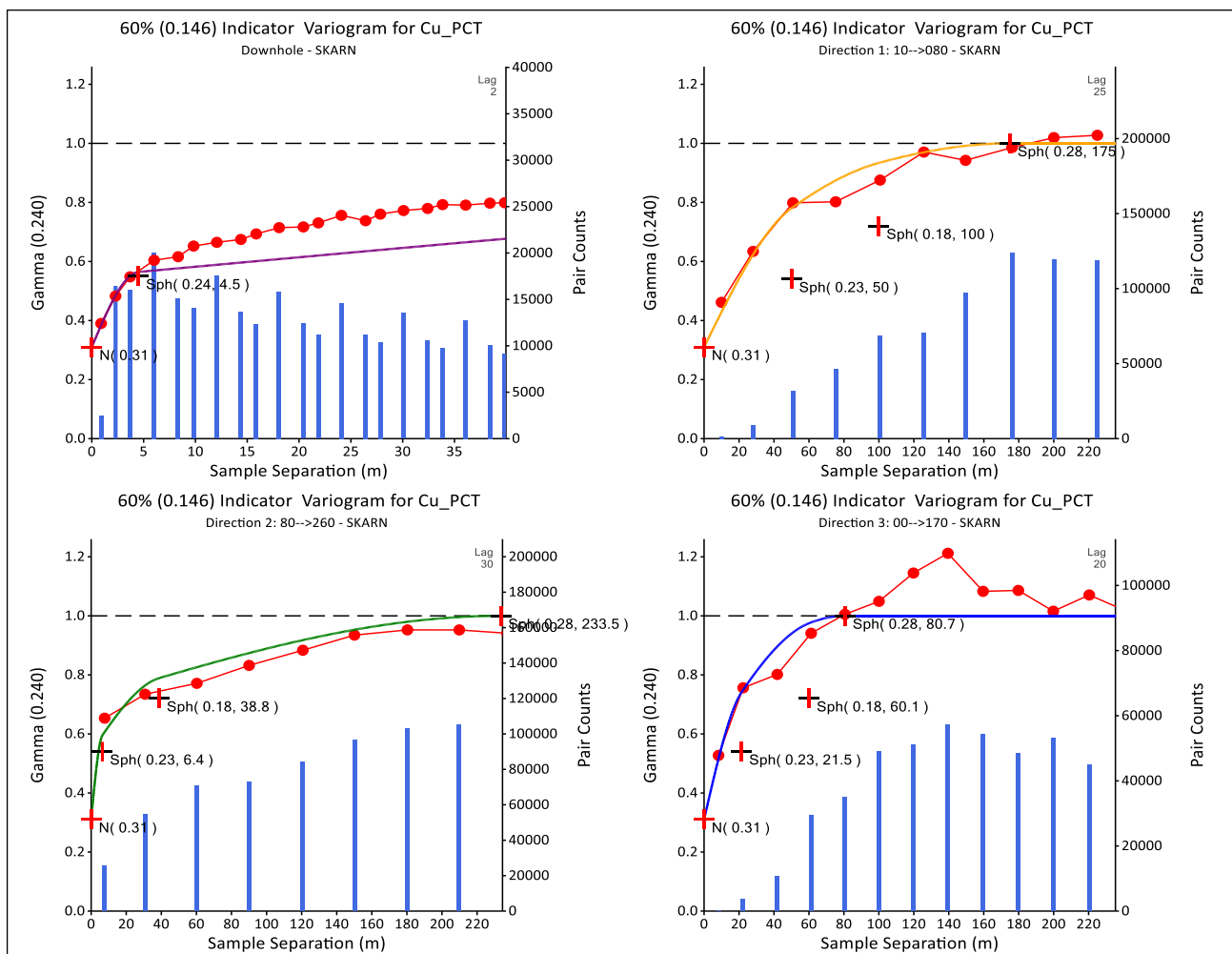
Table 5.2 Grade caps applied by domain

Domain	Ag (g/t)	Au (g/t)	As (g/t)	Cu (%)
Skarn low grade	40	1.1	20,000	0.5
Skarn high grade	90	1.9	50,000	2.0
Skarn magnetite north	50	8.0	19,000	0.6
Skarn magnetite south	8	3.5	4,000	0.5
Skarn pyrrhotite north	20	1.5	3,000	
Skarn pyrrhotite south	45	3.0	5,500	
Magnetite breccia	60	5.0	5,000	

5.2 Spatial analysis

Variography was undertaken for each element. For the skarn mineralisation, an indicator of 0.15% Cu was used to domain low-grade and high-grade mineralisation. The modelled variogram is presented in Figure 5.2. Data above the indicator was set to a value of 1 and 0 if below the threshold, it was then estimated into the skarn domain with resulting values between 0 and 1 reflecting the probability of being above the indicator. A value of 0.4 was selected to discriminate the two domains and the drill data was coded accordingly.

Figure 5.2 Skarn 0.15% Cu indicator variogram



Variography was undertaken on each estimated element in the high-grade domain and the resultant variograms were also used to estimate the low-grade domain. Variance was normalised to 1 and a spherical model used. The parameters for the variogram model are presented in Table 5.3, the “Vangle” fields describe the three rotations around the Z, X, Z axes. The “PAR1”, “PAR2”, “PAR3” fields are the ranges for each structure and the “PAR4” field is the variance for each structure. For the skarn magnetite and pyrrhotite units, the southern domains were modelled and the variograms were used for the northern domains as well, having been rotated appropriately.

Table 5.3 Skarn variography

	Copper	Gold	Arsenic	Sulphur	Iron	Silver
VANGLE1	170	170	180	170	170	180
VANGLE2	90	90	90	90	90	90
VANGLE3	170	-170	-170	-170	180	-40
NUGGET	0.31	0.2	0.16	0.3	0.2	0.3
ST1PAR1	50	12.9	11.8	97.3	35.6	9.3
ST1PAR2	6.4	47	17.8	62.9	12.7	10.9
ST1PAR3	21.5	22.2	11.4	54.4	20.9	15
ST1PAR4	0.23	0.36	0.08	0.4	0.52	0.2
ST2PAR1	100	147.5	87.4	230.9	92.7	45.6
ST2PAR2	38.8	230.5	77.7	168.4	195.2	42.1
ST2PAR3	60.1	66.9	13.7	160.7	87.9	15
ST2PAR4	0.18	0.44	0.31	0.3	0.28	0.32
ST3PAR1	175	-	160.3	-	-	190.2
ST3PAR2	233.5	-	218.9	-	-	128.1
ST3PAR3	80.7	-	82	-	-	20
ST3PAR4	0.28	-	0.45	-	-	0.18

Table 5.4 Breccia magnetite variography

	Copper	Gold	Arsenic	Sulphur	Iron	Silver
VANGLE1	70	70	70	-110	-110	70
VANGLE2	100	100	100	80	80	90
VANGLE3	0	0	-90	0	0	90
VAXIS1	3	3	3	3	3	3
VAXIS2	1	1	1	1	1	1
VAXIS3	3	3	3	3	3	3
NUGGET	0.32	0.16	0.4	0.3	0.5	0.5
ST1	1	1	1	1	1	1
ST1PAR1	62.7	56.1	23	30.1	63.2	12
ST1PAR2	12.9	29.4	62.3	25.1	25	27.5
ST1PAR3	10	20.2	20	10.1	10	15
ST1PAR4	0.68	0.84	0.6	0.7	0.5	0.5

Table 5.5 Skarn pyrrhotite south variography

Domain	South	South	South	South	South	South
Element	CU	AU	AS	S	FE	AG
VANGLE1	-20	-20	-20	-20	-20	-20
VANGLE2	80	80	80	80	80	80
VANGLE3	-90	-90	-90	-90	-90	-90
VAXIS1	3	3	3	3	3	3
VAXIS2	1	1	1	1	1	1
VAXIS3	3	3	3	3	3	3
NUGGET	0.3	0.38	0.3	0.35	0.3	0.23
ST1	1	1	1	1	1	1
ST1PAR1	8.2	10.5	8.2	8.9	11.7	9.7
ST1PAR2	19.9	19.9	19.9	26.4	19.9	133.8
ST1PAR3	20	20	20	20	20	20
ST1PAR4	0.45	0.45	0.45	0.32	0.45	0.28
ST2	1	1	1	1	1	1
ST2PAR1	33	48.3	33	42.2	127.1	85.7
ST2PAR2	59.8	48.1	59.8	92.6	52.1	160.1
ST2PAR3	20	20	20	20	20	20
ST2PAR4	0.25	0.17	0.25	0.16	0.25	0.49
ST3	-	-	-	1	-	-
ST3PAR1	-	-	-	133.3	-	-
ST3PAR2	-	-	-	103.9	-	-
ST3PAR3	-	-	-	20	-	-
ST3PAR4	-	-	-	0.17	-	-

Table 5.6 Skarn pyrrhotite north variography

Domain	North	North	North	North	North	North
Element	CU	AU	AS	S	FE	AG
VANGLE1	-60	-60	-60	-60	-60	-60
VANGLE2	80	80	80	80	80	80
VANGLE3	-90	-90	-90	-90	-90	-90
VAXIS1	3	3	3	3	3	3
VAXIS2	1	1	1	1	1	1
VAXIS3	3	3	3	3	3	3
NUGGET	0.3	0.38	0.3	0.35	0.3	0.23
ST1	1	1	1	1	1	1
ST1PAR1	8.2	10.5	8.2	8.9	11.7	9.7
ST1PAR2	19.9	19.9	19.9	26.4	19.9	133.8
ST1PAR3	20	20	20	20	20	20
ST1PAR4	0.45	0.45	0.45	0.32	0.45	0.28
ST2	1	1	1	1	1	1
ST2PAR1	33	48.3	33	42.2	127.1	85.7
ST2PAR2	59.8	48.1	59.8	92.6	52.1	160.1
ST2PAR3	20	20	20	20	20	20
ST2PAR4	0.25	0.17	0.25	0.16	0.25	0.49
ST3	-	-	-	1	-	-
ST3PAR1	-	-	-	133.3	-	-
ST3PAR2	-	-	-	103.9	-	-
ST3PAR3	-	-	-	20	-	-
ST3PAR4	-	-	-	0.17	-	-

Table 5.7 Skarn magnetite south variography

Domain	South	South	South	South	South	South
VREFNUM	CU	AU	AS	S	FE	AG
VANGLE1	-20	-30	-30	-20	160	-30
VANGLE2	80	80	80	80	100	80
VANGLE3	0	0	100	80	180	0
VAXIS1	3	3	3	3	3	3
VAXIS2	1	1	1	1	1	1
VAXIS3	3	3	3	3	3	3
NUGGET	0.4	0.3	0.2	0.4	0.4	0.3
ST1	1	1	1	1	1	1
ST1PAR1	43	113.5	31.3	11.3	40.6	113.5
ST1PAR2	35.8	110	93.6	18.3	8.3	110
ST1PAR3	18	20	5.2	6.9	10.8	20
ST1PAR4	0.5	0.7	0.58	0.29	0.49	0.7
ST2	1	-	1	1	1	-
ST2PAR1	105.7	-	116.7	58.9	67.3	-
ST2PAR2	70.1	-	115.6	66.3	81.3	-
ST2PAR3	26.1	-	20	20.1	20.3	-
ST2PAR4	0.1	-	0.22	0.31	0.11	-

Table 5.8 Skarn magnetite north variography

Domain	North	North	North	North	North	North
VREFNUM	CU	AU	AS	S	FE	AG
VANGLE1	-60	-60	-60	-60	-60	-60
VANGLE2	80	80	80	80	80	80
VANGLE3	-90	-90	-90	-90	-90	-90
VAXIS1	3	3	3	3	3	3
VAXIS2	1	1	1	1	1	1
VAXIS3	3	3	3	3	3	3
NUGGET	0.4	0.3	0.2	0.4	0.4	0.3
ST1	1	1	1	1	1	1
ST1PAR1	43	113.5	31.3	11.3	40.6	113.5
ST1PAR2	35.8	110	93.6	18.3	8.3	110
ST1PAR3	18	20	5.2	6.9	10.8	20
ST1PAR4	0.5	0.7	0.58	0.29	0.49	0.7
ST2	1	-	1	1	1	-
ST2PAR1	105.7	-	116.7	58.9	67.3	-
ST2PAR2	70.1	-	115.6	66.3	81.3	-
ST2PAR3	26.1	-	20	20.1	20.3	-
ST2PAR4	0.1	-	0.22	0.31	0.11	-

5.3 Model parameters

Kriging neighbourhood analysis was undertaken on the drill data and a block size of 20 m x 20 m x 10 m (x, y, z) was selected with sub-blocking down to 1.0 m x 1.0 m x 0.5 m to honour the wireframe volume. Parent cell estimation was undertaken, and the model extents are presented in Table 5.9.

Table 5.9 Model extents

	Easting	Northing	RL
Block size	20 m	20 m	10 m
Minimum extent	256,600	416,000	-600
Maximum extent	259,500	418,000	600
Number of blocks	145	100	120

Variography was undertaken on each element by domain, the search ellipse used was based on the copper variogram for the skarn domain and the iron variogram for the magnetite and pyrrhotite domains. A three-pass estimate was used the first pass was to the range of the variogram and a minimum of 12 samples and a maximum of 24 samples, the second pass was the same range but the minimum number of samples was reduced to six and the final pass was twice the range of the first pass with the same sample numbers the second pass. Discretisation was 6 x 6 x 3 (x, y, z).

As discussed previously for the skarn, an additional estimation pass was run using the pre-Monument data to inform blocks that were un-estimated when informed by only Monument and Fortress data. These blocks were flagged as Inferred by default. The same density values were used as for the Snowden and VRM estimates (Table 5.10).

Table 5.10 Bulk density summary

Lithology	Oxidation	Bulk density (t/m ³)
Adamellite	Oxide	1.85
	Trans	2.2
	Sulph	2.8
Gossan	Oxide	3.4
	Oxide	2.1
Limestone	Oxide	1.85
	Trans	2.4
	Sulph	2.75
Shale	Oxide	2.2
	Trans	2.65
	Sulph	2.75
Skarn	Trans	2.8
	Sulph	Bulk density = 0.023*Fe% + 3.004 3.5 as a default

Source: VRM, 2020

5.4 Resource reporting and classification

With respect to classification of the resource, only material informed on the first pass of the estimation run and by Fortress and Monument data was considered as Indicated Resources; all other estimated material was flagged as Inferred Resources. Classification reflects the drill spacing and confidence in the data; the classification reflects that the MRE is accurate at the global level. No material was classified as Measured at Mengapur.

Only mineralisation within the CASB and SDSB permit boundaries provided by Fortress are reported. Figure 5.3 is a plan view of the in-pit MRE coloured by the resource classification – Indicated (orange) and Inferred (green) – and the red trace is the optimised pit shell. Figure 5.4 is a cross section through the skarn mineralisation at 257230 mE coloured by copper grade, and Figure 5.5 is a 3D oblique view of the magnetite skarn and breccia mineralisation coloured by iron grade with only blocks within the optimised pit shell.

Figure 5.3 RL 200 MRE coloured by classification Indicated (orange) and Inferred (green) within optimised pit shell (red trace)

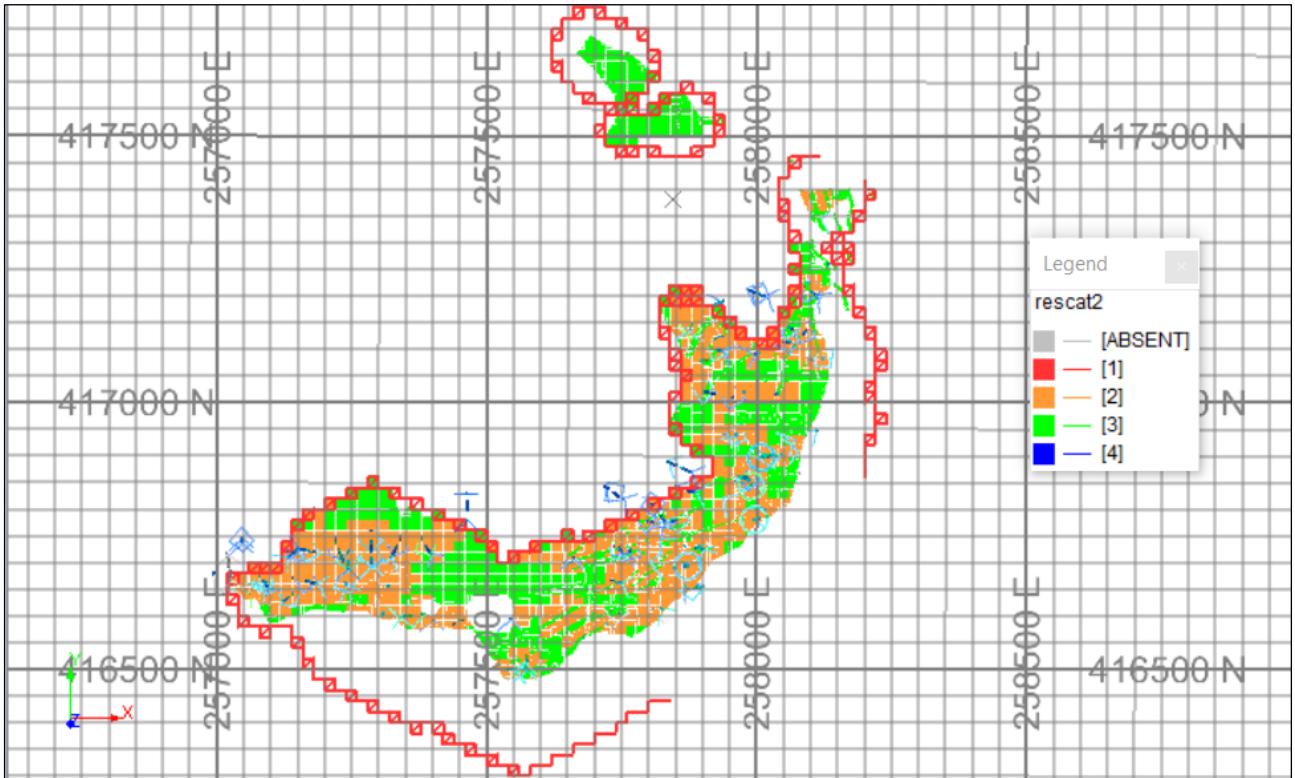


Figure 5.4 Cross section 257230 mE skarn mineralisation coloured by copper, optimised shell (red trace)

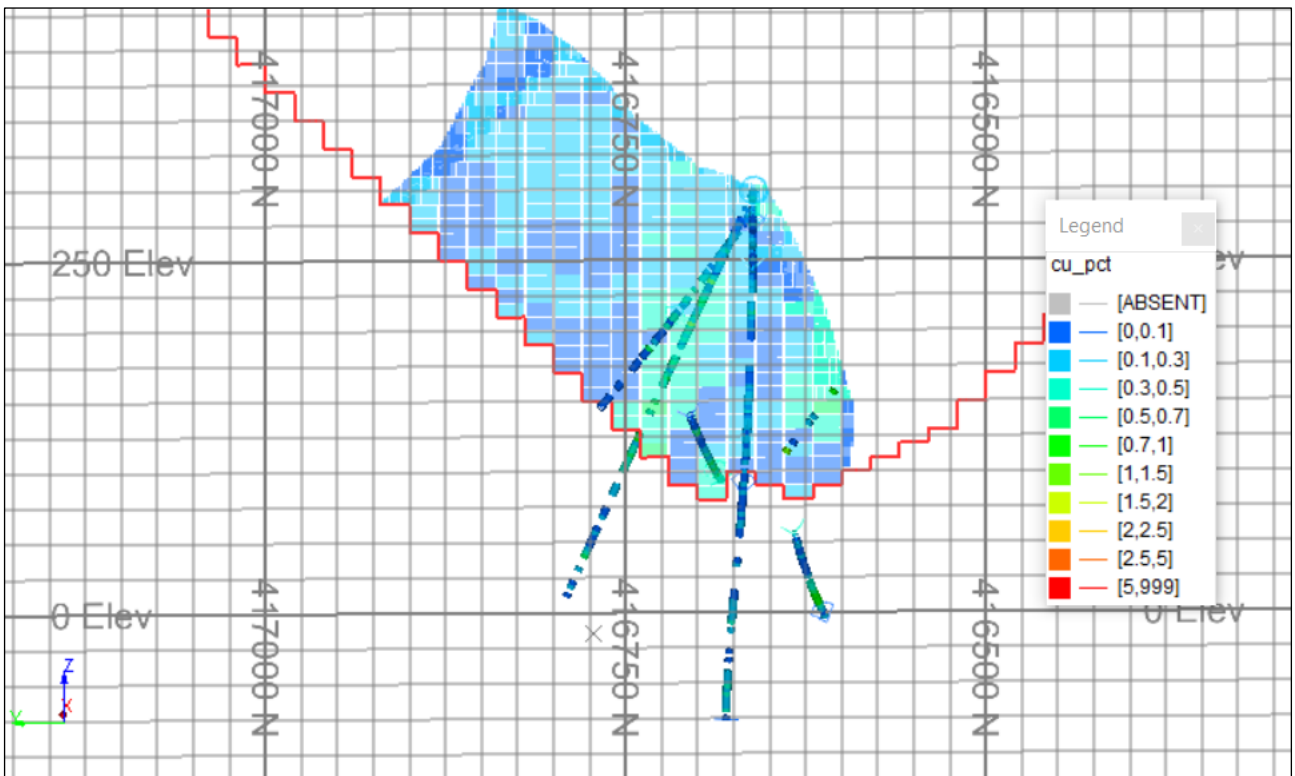


Figure 5.5 Oblique 3D view skarn and breccia magnetite coloured by iron, within optimised pit shell

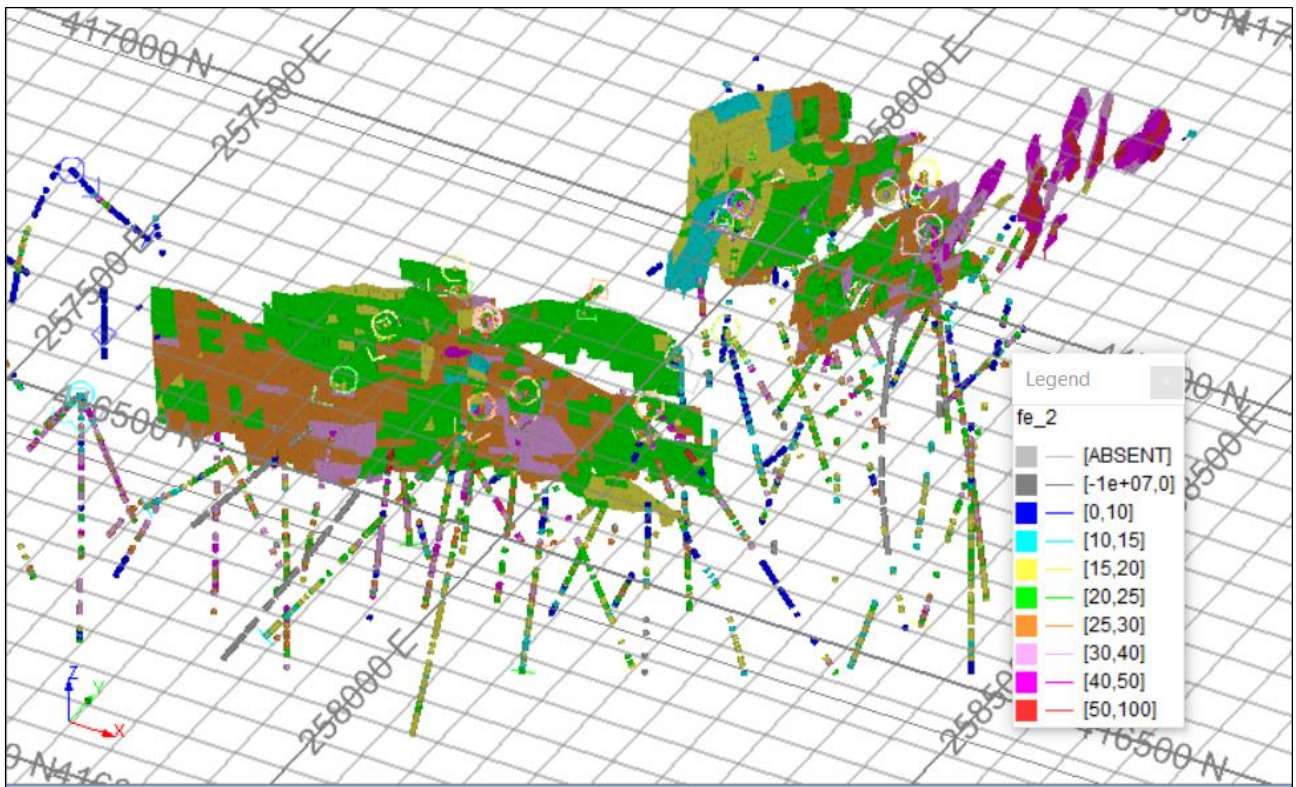
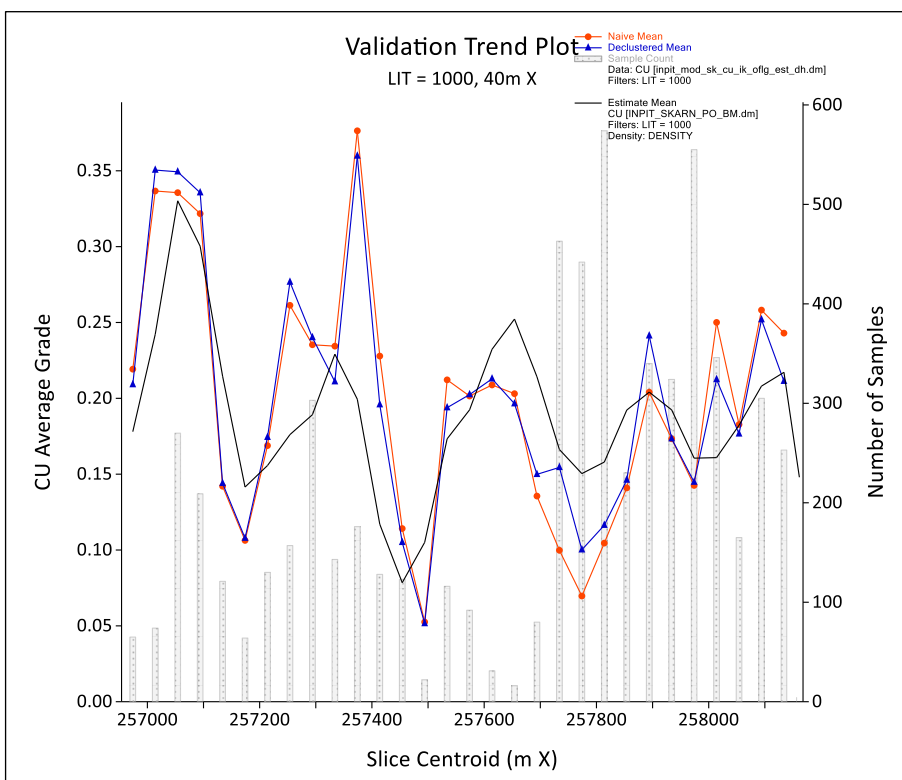


Figure 5.6 presents swath plots for copper of the in-pit skarn mineralisation, plotting the naïve drill data (orange trace), the declustered drill data (blue trace) and estimated copper grade (black trace) by easting, northing and RL. The swath plots show that the MRE reproduces the grade trends of the informing data. It was noted that when declustered (Figure 5.7) the average grade of the drill data increased, which indicated that the drilling orientation is not optimal at Mengapur. Typically, when data is declustered the average grade decreases.

Figure 5.6 In-pit skarn copper swath plots – easting, northing and RL



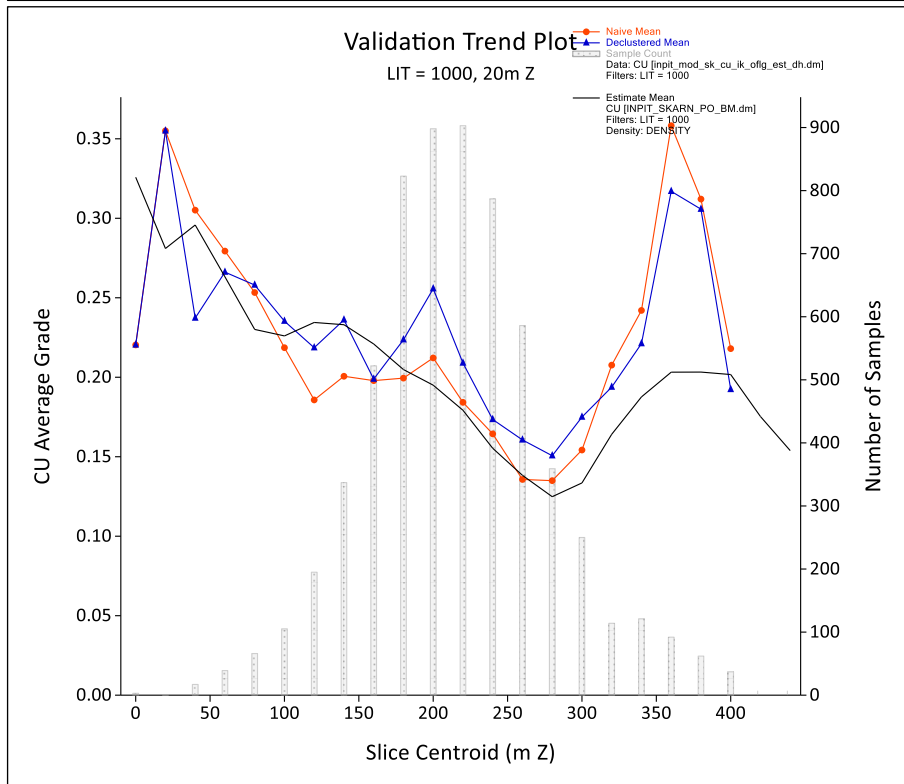
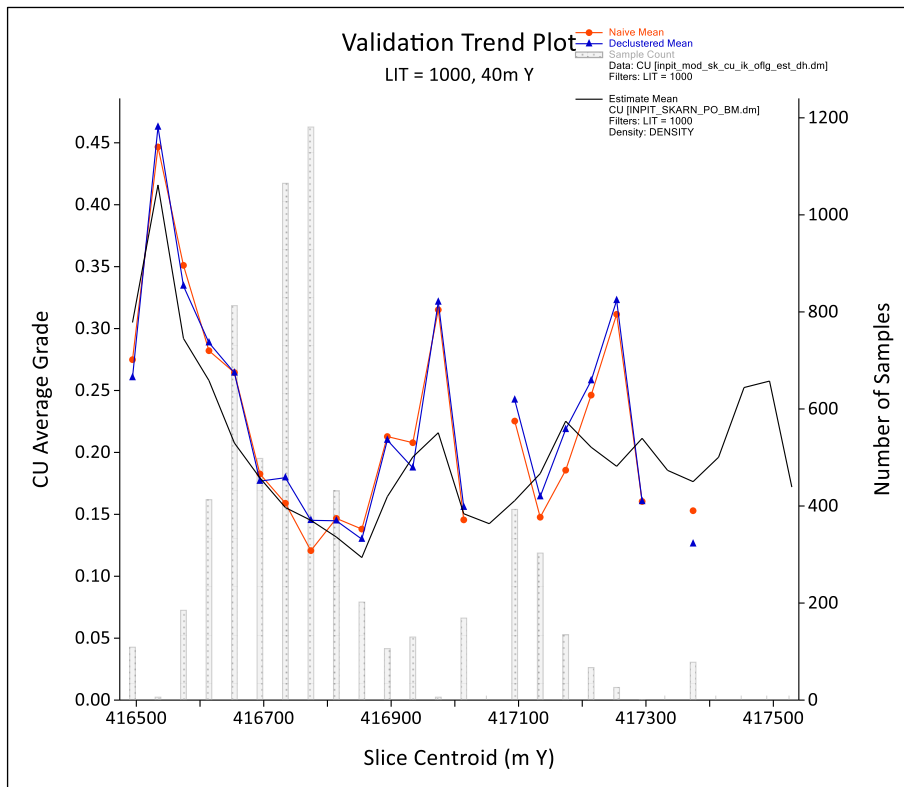
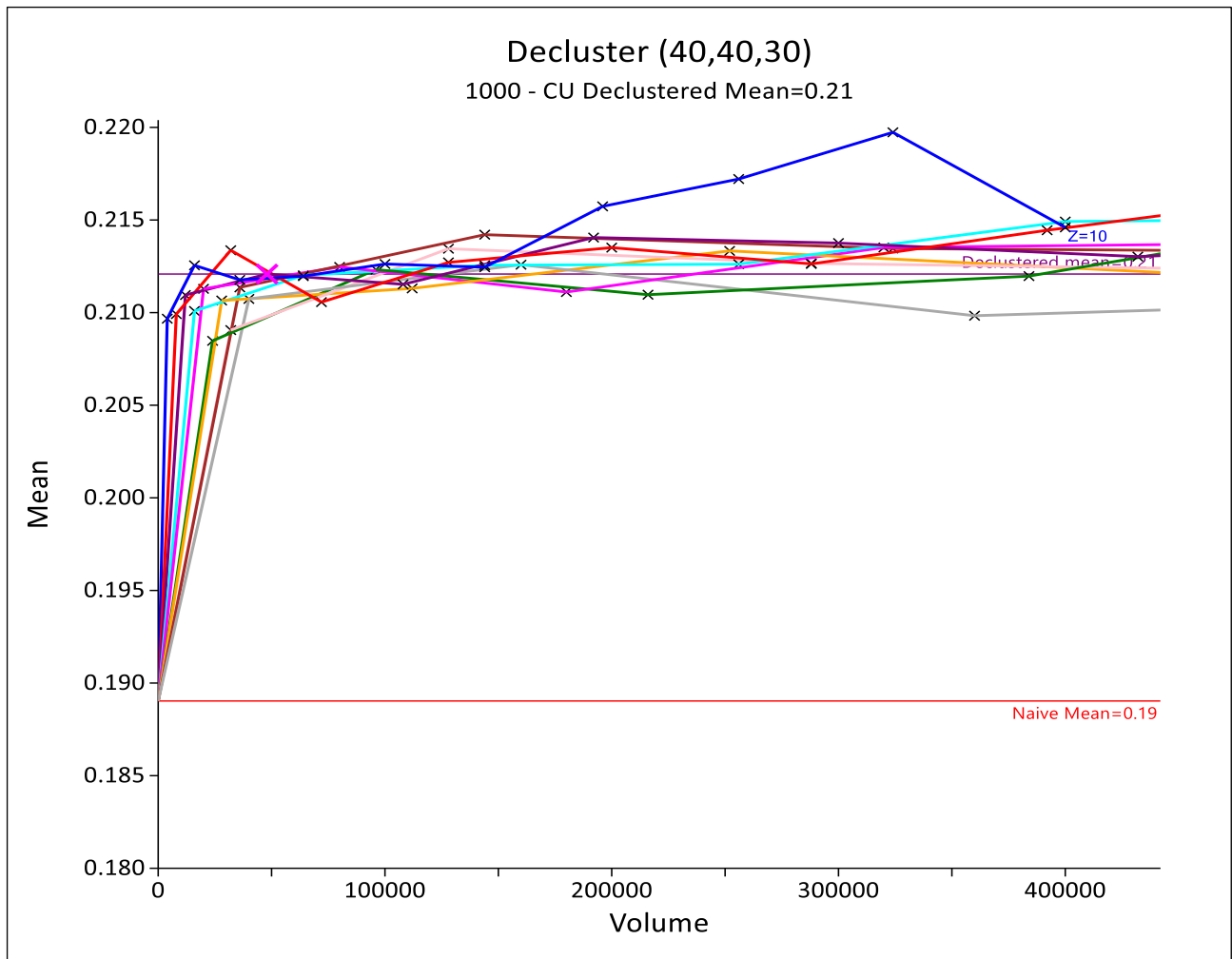


Figure 5.7 Declustered skarn copper data



The Mineral Resource (Table 5.11) is limited to within the CASB and SDSB mining lease boundaries and is also constrained within an optimised pit shell based on the recovery of copper only. No value was attributed to iron hosted by the magnetite units or the gold and silver or any other materials present on the mining leases. The parameters used in the pit optimisation were high-level assumptions provided by Fortress based on the limited metallurgical testwork to date.

The parameters used are presented below:

- Costs:
 - Mining cost – US\$1.15/t rock
 - Process cost US\$10.27/t ore
 - Selling cost – US\$23.82/t copper concentrate.
- Recoveries: Copper – 85%.
- Price:
 - US\$10,000/t copper
 - Copper payability – 83%.
- Slopes: 45°.
- Minimum grade – 0.3% Cu.

Table 5.11 Mengapur MRE as of 28 February 2023

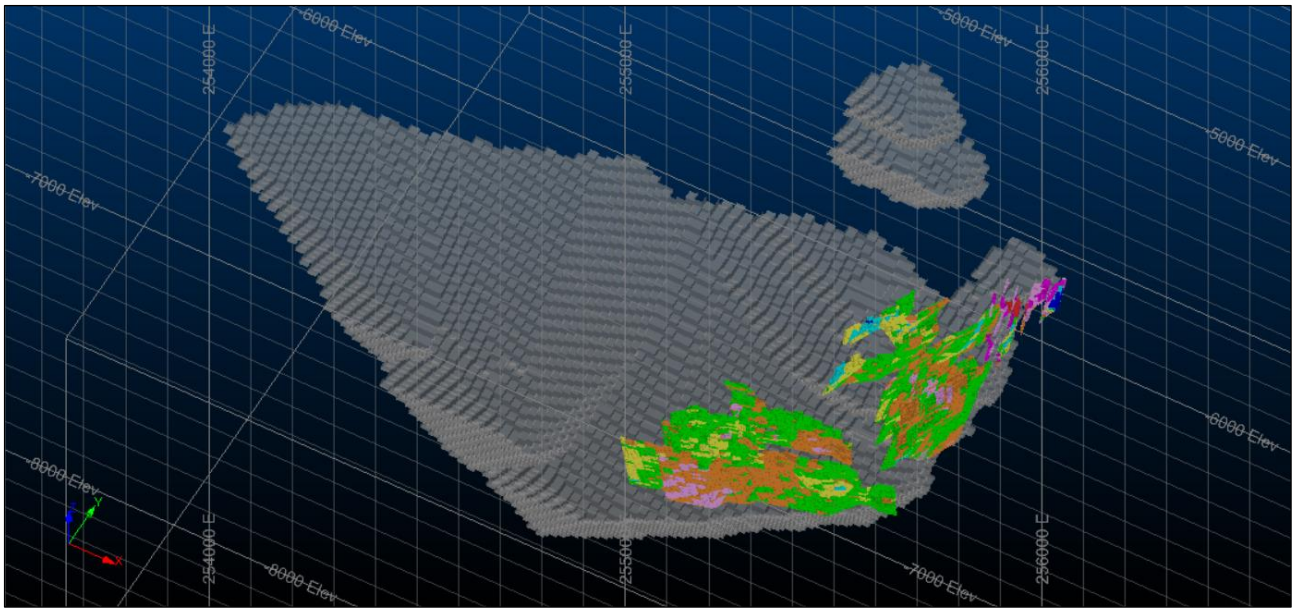
Classification	Cut-off grade	Mineralisation	Tonnes (Mt)	Grade Fe %	Grade Cu %	Grade Au g/t	Grade Ag g/t	Grade S %
Indicated	0.3% Cu	Skarn copper	20.3	20.76	0.41	0.12	7.26	4.6
		Pyrrhotite copper	0.7	29.11	0.55	0.28	3.48	14.14
		Subtotal	21	21.03	0.42	0.13	7.13	4.92
	25% Fe	Skarn magnetite	0.34	27.66	0.13	0.09	1.52	6.23
		Breccia magnetite	0.01	46.28	0.21	0.23	5.66	0.13
		Subtotal	0.34	28.01	0.13	0.09	1.6	6.12
Inferred	0.3% Cu	Skarn copper	7.93	22.39	0.41	0.13	8.42	4.62
		Pyrrhotite copper	6.96	29.26	0.6	0.27	3.56	13.75
		Subtotal	14.89	25.6	0.5	0.19	6.15	8.89
	25% Fe	Skarn magnetite	1.38	27.8	0.13	0.12	1.35	5.89
		Breccia magnetite	0.38	41.51	0.2	0.17	6.04	0.19
		Subtotal	1.76	30.75	0.14	0.13	2.36	4.67
Total	0.3% Cu	Total copper	35.89	22.93	0.45	0.16	6.72	6.56
	25% Fe	Total magnetite	2.1	30.3	0.14	0.13	2.24	4.9

Previously, the copper mineralisation has been reported at a cut-off grade of 0.5% Cu, which accounts for the increase in the copper resource. The reduction in the magnetite resource is a reflection of reporting the resource within the optimised pit shell based on the copper mineralisation. Table 5.12 presents the MRE at a range of copper cut-off grades for material within the optimised pit shell. The grades reported are in line with the previous estimates by Snowden and VRM at their respective copper cut-off grades. There is approximately 5 Mt of magnetite skarn and breccia material above a 25% Fe cut-off below the pit shell which has the potential to be brought into the MRE by further testwork to define metallurgical characteristics of the magnetite to include it in future pit optimisations to realise the full potential of Mengapur. This would also include the recovery of precious metals with the copper and magnetite processing for which there has been no allowance in the MRE update.

Table 5.12 Mengapur MRE at a range of copper cut-offs

Cut-off (Cu %)	Tonnes (Mt)	Fe %	Cu %	Au g/	Ag g/t	S %
0.2	68.09	22.16	0.35	0.13	5.75	5.84
0.3	35.89	22.93	0.45	0.16	6.72	6.56
0.4	18.13	25.13	0.56	0.19	6.88	8.29
0.5	9.10	27.08	0.67	0.23	6.39	10.24

Figure 5.8 Ex-pit magnetite breccia and skarn mineralisation



6 ABBREVIATIONS

Abbreviation	Description
°	degrees
°C	degrees Celsius
µm	micron(s)
3D	three-dimensional
AAS	atomic absorption spectroscopy
As	arsenic
Au	gold
CRM	certified reference material
Cu	copper
CV	coefficient of variation
Fe	iron
Fortress	Fortress Mining Sdn. Bhd.
g	grams
g/cm ³	grams per cubic centimetre
g/t	grams per tonne
IQPR	Independent Qualified Person Report
kg	kilograms
km	kilometres
m	metres
mm	millimetres
Monument	Monument Mining Ltd
MRE	Mineral Resource estimate
Mt	million tonnes
ppm	parts per million
RC	reverse circulation
RQD	rock quality designation
S	sulphur
Snowden	Snowden Mining Industry Consultants Pty Ltd
t	tonne(s)
t/m ³	tonnes per cubic metre
US\$	United States dollars
UTM	Universal Transverse Mercator
VRM	Valuation & Resource Management Pty Ltd



Appendix A

Snowden Report



Appendix B

VRM Report

