PROJECT IRON BEAR

CYCLONE METALS LTD

## ASX Announcement

11th of April 2024

# Significant Mineral Resource Upgrade for Project Iron Bear

### HIGHLIGHTS

- **Indicated and Inferred Mineral Resource of 16.6 billion tonnes containing 29.3% total Fe and 18.2% magnetic Fe, cut-off grade 12.5% magnetic Fe.**
- **Indicated Mineral Resource of 2.15 billion tonnes containing 28.68% total Fe and 19% magnetic Fe.**
- **Upgraded mineral resource statement supported by geophysical analysis (including the development of an inversion model[1]), geophysical statistical analysis and pilot plant metallurgical test work.**
- **Ore body characteristics suggests that reasonable prospects exist for eventual economic extraction.**
  - **Low stripping ratio, with negligible overburden.**
  - **Location less than 25 km from existing open access railway.**
  - **Access to local low-cost renewable hydropower.**
- **Pilot plant metallurgical test work confirms that reasonable prospects exist for eventual economic extraction:**
  - **Production of a Direct Reduction grade concentrate grading 70.6% Fe and 1.2% $SiO_2$ with an overall magnetic Fe yield of 88.9%[2]**
  - **Production of a Blast Furnace grade concentrate grading 68.9% and 3.4% silica with a magnetic Fe yield of 95.5%**
  - **Very low deleterious elements (P, MnO etc)**
  - **Favourable grindability indices of BWi = 16.7 kWh/t and SMC = 11.7 kWh/t**

Cyclone Metals Limited (ASX: CLE) (**Cyclone** or **the Company**) is pleased to announce the release of an upgraded JORC compliant Mineral Resource Statement, for its 100% owned Iron Bear Iron Ore Project, located in the Labrador Trough region of Canada.

*1: Magnetic inversion model is a 3D volumetric model of the magnetic Fe in the ground derived from a high-definition aerial magnetic survey. This is the correlated with the drilling results and mapping to build a geophysical model which is then used to estimated magnetic Fe tonnages.*
*2: Fe yield includes RF concentrate scavenger recovery in the reverse flotation circuit*

## About The Iron Bear Project

The Iron Bear Project consists of ten licenses totalling 7,275 ha on 291 graticular Mineral Claims under the applicable Labrador and Newfoundland mining regulation, located near the Provincial border of Newfoundland and Labrador (NL) and Quebec (QC), approximately 30 km northwest of the town of Schefferville, QC and 1,200 km by air northeast of Montréal, QC.

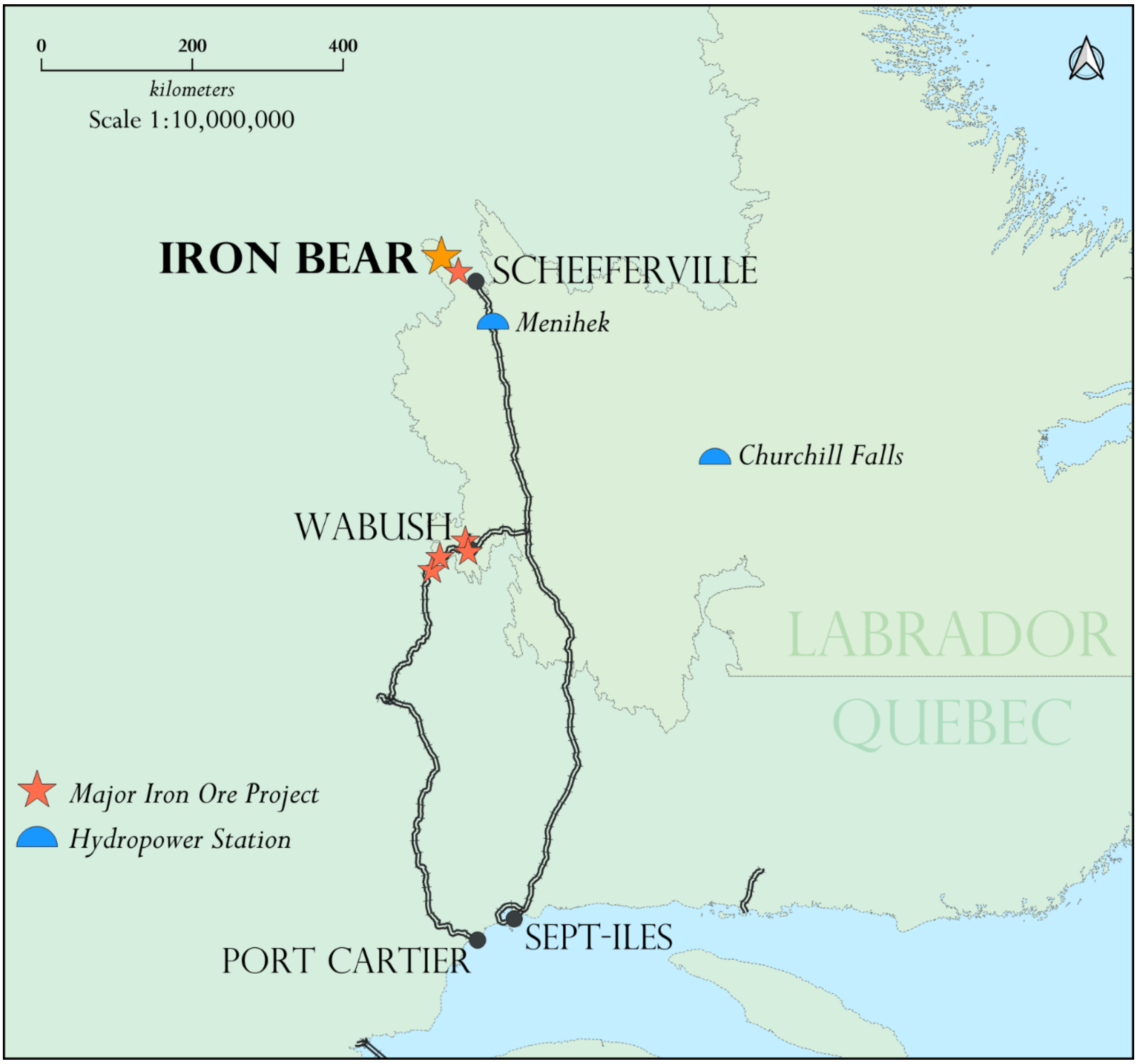


**Figure 1: Iron Bear - Regional Access and Infrastructure**

The mineralisation is typical of the Labrador Trough, being a magnetite/hematite taconite. The Labrador Trough is a 1,600 km long and 160 km Canadian Proterozoic volcanic and sedimentary basin that extends from Ungava Bay south-southeast through Quebec and Labrador. The Labrador Trough has supported iron ore mining operations since 1954.

## Project History

Previous explorers conducted mapping, geophysical surveys, and diamond drilling. In 2011 this comprised 43 drill holes for 5,662 m and in 2012, drilling of 72 drillholes for 22,359 m. This drilling was completed along grid lines 500 m to 600 m apart. The distance between holes varied, often less than 200 m apart. The drilling covered an approximate NW-SE strike length of 4 km by 2.5 km and tested mineralisation to a vertical depth of approximately 450m.

The results of this work were used to estimate a historic mineral resource of 7.2 billion tonnes of iron mineralised material at a total iron content ($Fe_{TOT}$) of 29.2% and magnetically separable iron content (MagFe) of 18.9% by mass, as determined by Davis Tube test work.

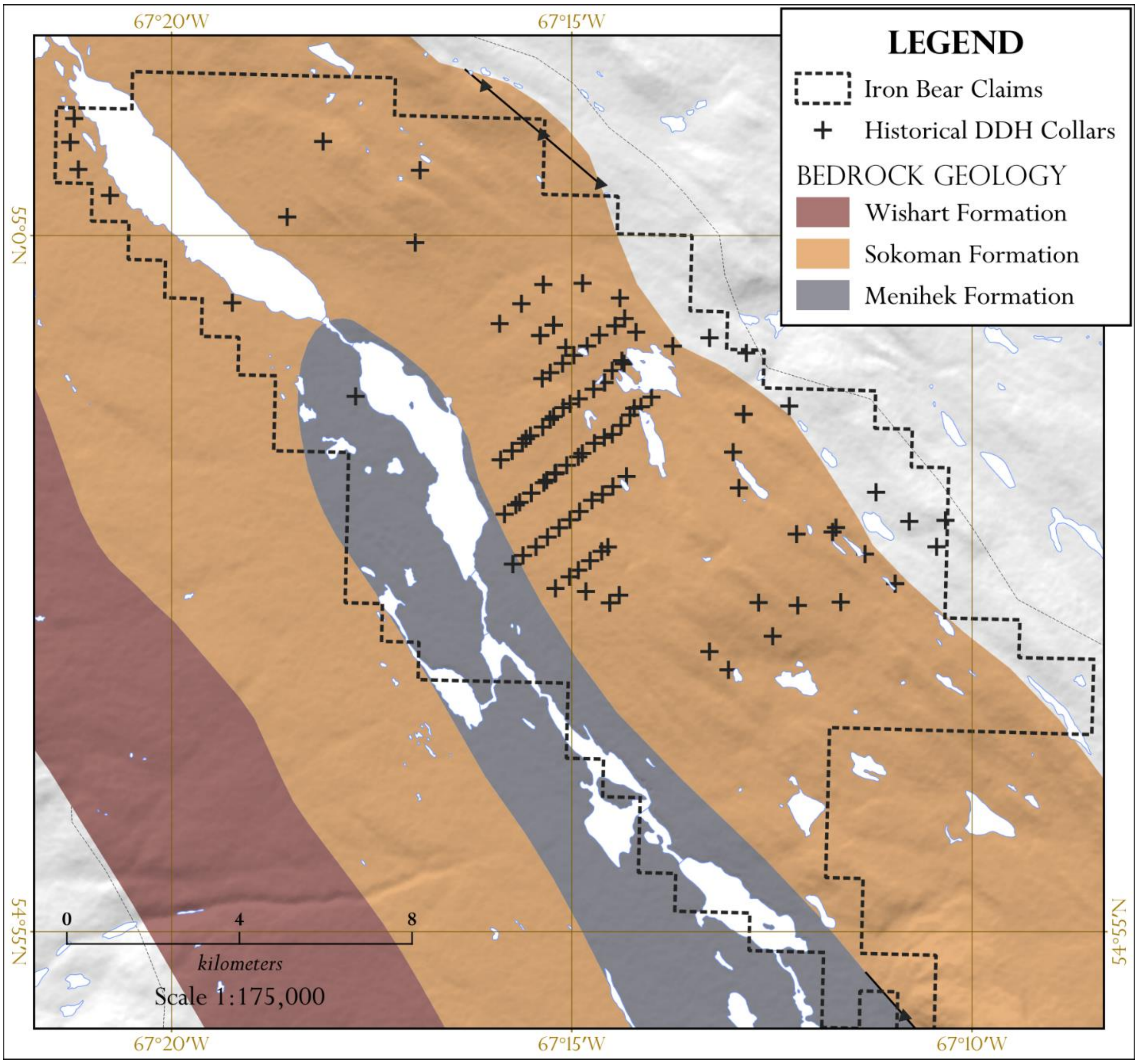


**Figure 2: Iron Bear - Regional Geology and Historic Drilling**

PROJECT IRON BEAR

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# Iron Bear Mineral Resource Estimate

Burnt Shirt Pty Ltd (Burnt Shirt) was requested by Cyclone Metals Limited (Cyclone, CLE) to update its 2023 Mineral Resource estimate (MRE)[1] on CLE's Iron Bear iron ore project (Iron Bear), or the Project), located in Newfoundland, Canada. Iron mineralisation mainly consists of magnetite ($Fe_3O_4$) and haematite ($Fe_2O_3$). The Mineral Resource estimate is based on data collected by CapEx Mining Ltd and modified by detailed compilation and interpretation of high-resolution geophysics and geology.

*This is the innovative factor that Cyclone has brought to this project – there was ample information within the database to estimate a Mineral Resource with confidence in geological and grade continuity, but the data had not been adequately compiled and analysed. Most importantly Cyclone commissioned the development of an inversion model which demonstrated an excellent correlation between the high-grade magnetic survey, the drilling results, down hole magnetic susceptibility data and provided reliable estimates of the mineral resource volumes. This aspect, coupled with the identification of real infrastructure solutions and outstanding metallurgical results satisfy the confidence required of an Indicated Mineral Resource within the provisions of the JORC Code.*

The mineralisation has been classified in accordance with the provisions of the Australian Joint Ore Reserves Committee (the "JORC Code", Appendix: Table 1). The mineralisation has been classified as Indicated and Inferred based on the geological continuity of the deposit, as demonstrated by drilling results and supported by detailed geophysical interpretation and mapping; and grade continuity of the deposit, as demonstrated by geostatistical analysis of drilling results[2].

Cyclone has undertaken pilot-plant scale metallurgical testing of drill core[3] and in the opinion of the Competent Person, the results of this work indicate reasonable prospects for eventual economic extraction. Cyclone advises that confidence in the classification of the mineralisation will increase with confirmatory drilling.

An Exploration Target[4] has been postulated, based on detailed geophysical interpretation and geological mapping and surface sampling in areas where there has not historically been any drilling.

Table 1: Iron Bear Mineral Resource Estimate at 12.5% magnetic Fe cut-off grade

| Category | Tonnes (Billion) | Total Fe% | Magnetic Fe% |
|---|---|---|---|
| Indicated | 2.15 | 28.68 | 18.97 |
| Inferred | 14.51 | 29.44 | 18.13 |
| **Total** | **16.66** | **29.34** | **18.24** |
| **Exploration Target** | | | |
| From | 16 | 24 | 16 |
| To | 21 | 33 | 22 |

*1 : Refer CLE Announcement, 20 June 2023*
*2 : Refer JORC Code, Clause 20*
*3 : Refer CLE Announcements, 14 December 2023 and 28 November 2023*
*4 : As defined by Clause 17 of the JORC Code*

The Competent Person for this Mineral Resource estimate is Mr Jeremy Peters BSc BEng FAusIMM CP (Min, Geo), a full-time employee of Burnt Shirt Pty Ltd., consulting to Cyclone. Mr Peters has more than five years' experience in the estimation and reporting of Mineral Resources for iron ore mineralisation in Australia and overseas.

Burnt Shirt has assisted CLE in its development of the Iron Bear Project and neither Burnt Shirt nor Mr Peters hold an interest in the Project or CLE. Mr Peters has assumed Competent Person responsibility due to his familiarity with the Project.

The Competent Person for this Exploration Target postulation is Mr Jeremy Peters BSc BEng FAusIMM CP (Min, Geo). Mr Peters cautions that the potential quantity and grade of the Exploration Target is conceptual in nature and that there has been insufficient exploration to result in the estimation of a Mineral Resource and that it is uncertain if further exploration will result in the estimation of a Mineral Resource. Cyclone is planning a drilling program for approval by the Newfoundland and Labrador Geological Survey. This program is designed to test the Exploration Target by reverse circulation drilling of magnetic lithology defined by the ResPot inversion model. Samples will be taken to verify grade and metallurgical characteristics.

## Introduction

CLE owns and operates the Iron Bear magnetite iron ore project, formerly known as the Block 103 Project. Since acquisition in April 2023[5], CLE has commissioned metallurgical testing of drill core obtained by previous operators in 2011 and 2012 drilling campaigns and stored on site. At the same time, information from these drilling campaigns has been used to support detailed reinterpretation of geophysical data and historical mapping using modern modelling techniques.

This data has been combined to support a new Mineral Resource estimate and postulate an Exploration Target.

Iron Bear is situated in the Churchill Province of the Proterozoic Labrador Trough, which extends for more than 1,100 km along the eastern margin of the Superior Craton from Ungava Bay to Lake Pletipi, Québec (Figure 2).

## Geology Summary

Iron Bear hosts Lake Superior-type banded iron formation comprising magnetite and haematite within chert, with variable amounts of silicate, carbonate and sulphide. Fresh, unaltered units are referred to as taconite and comprise bands of magnetite and/or hematite with grey chert or jasper.

The Mineral Resource estimate is classified as Inferred and Inferred, based on drillhole spacing, mapping and geophysical interpretation of the location of mineralisation. Confidence in the estimate is supported by geostatistical analysis of the drill data; continuity of mineralisation indicated by geophysics and mapping; and metallurgical results that demonstrate at a pilot scale that a superior marketable product is attainable. The quality of the concentrate and the presence of local and regional infrastructure and operating iron ore mines supports reasonable prospects for eventual economic extraction.

Iron Bear was the focus of a 2011 and 2012 drilling programme that identified mineralisation in what was named the Greenbush Zone. It is approximately 10 km long, striking northwest-southeast and 5 km wide and encompasses the Mineral Resource estimate (Figure 4 and Figure 5). Numerous thrust faults have stacked mineralised geological units to greater than 500 vertical metres.

The mineralogy and grade are uniform throughout the fault slices and the same overall group of sub-

*5: Refer CLE Announcement, 17 April 2023* members is repeated in whole or in part. The limits of the Greenbush Zone are open, and it is defined by a combination of mapping, geophysics, and drilling density in the Mineral Resource area.

## Geostatistical Analysis

CLE commissioned Haren Consulting ("**Haren**"), of Perth, to undertake a geostatistical analysis, interpretation and interpolation of the Iron Bear database, modified by the results of geophysical and geological investigations (refer *Geophysical Compilation*, below).

Directional variography analysis was undertaken on the drill database for both MAGFe and $FE_{Tot}$. Other variables were examined but are irrelevant in this context. Variograms were constructed to model downhole, strike, across strike and down plunge orientations of mineralisation (Table 2).

Table 2: Variogram Orientations

| Assay | Domain | Direction | | Nugget C0 | Structure 1 | | Structure 2 | | Structure 3 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | C1 | R1 | C2 | R2 | C3 | R3 |
| MAGNFE_SAT_PCT_D | 1 | 1 | 00-->140 | 0.073 | 0.337 | 200.0 | 0.346 | 650.0 | 0.244 | 1000.0 |
| | | 2 | -20-->050 | | | 50.0 | | 100.0 | | 300.0 |
| | | 3 | 70-->050 | | | 10.0 | | 25.0 | | 40.0 |
| FE_PCT | 1 | 1 | 00-->140 | 0.140 | 0.495 | 300.0 | 0.164 | 500.0 | 0.201 | 1500.0 |
| | | 2 | -20-->050 | | | 120.0 | | 200.0 | | 400.0 |
| | | 3 | 70-->050 | | | 8.0 | | 22.0 | | 50.0 |

*Source data ASX release dated 19/06/2023, Interpretation Haren, 2024*

The down dip (D2) orientation, which was the target of previous drilling and hence has the greatest drill density shows excellent continuity for both MAGFe (Figure 3) and $Fe_{Tot}$ (Figure 4) within the bounds of the Mineral Resource with maximum ranges implied by the variograms at 300m to 400m down dip.

The along strike variography for MAGFe shows confident structure out to 1,500m. The along strike variography for $Fe_{Tot}$ behaves in a similar manner.

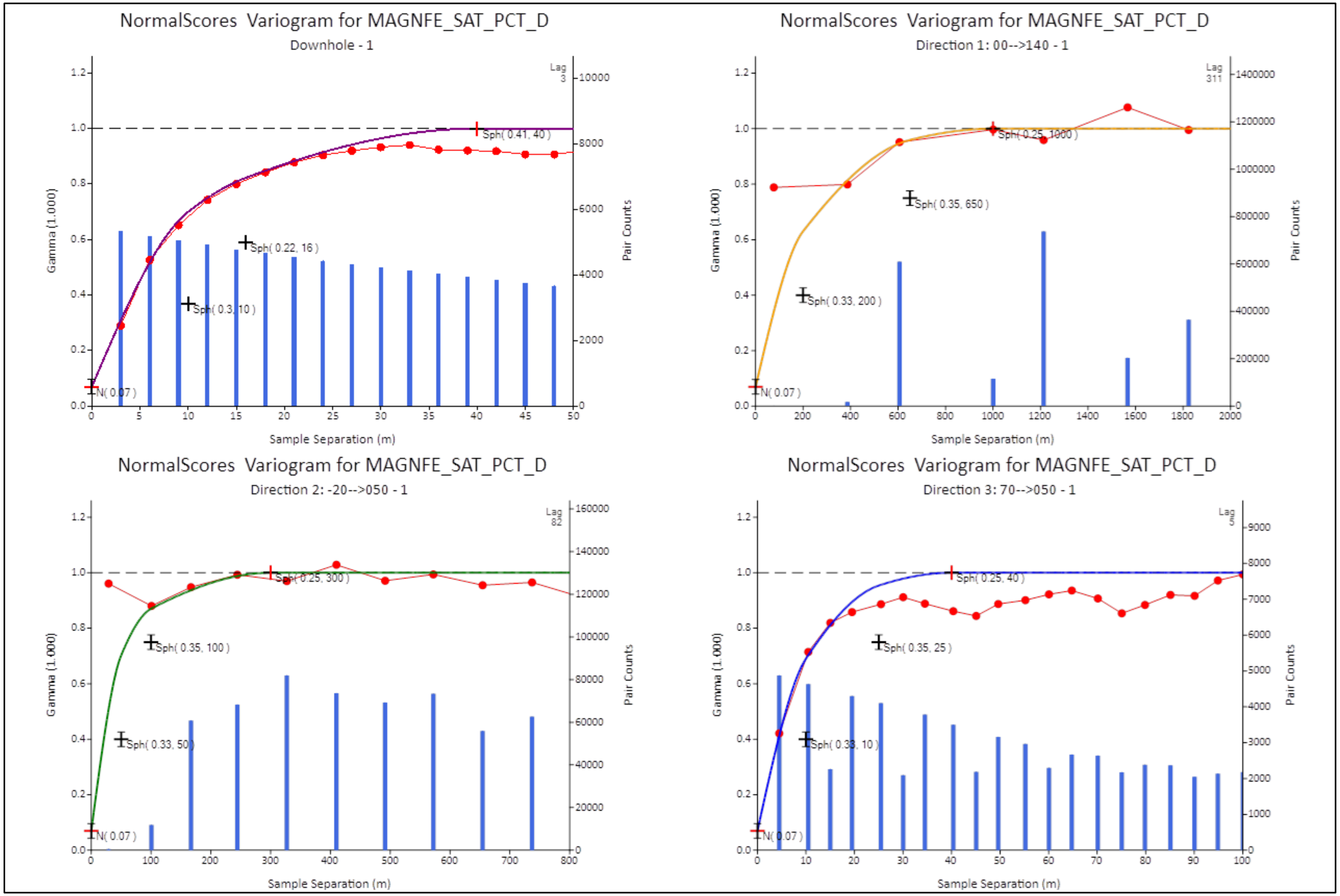


**Figure 3: Variograms for MagFe –** *Source data ASX release dated 19/06/2023, Interpretation Haren, 2024*

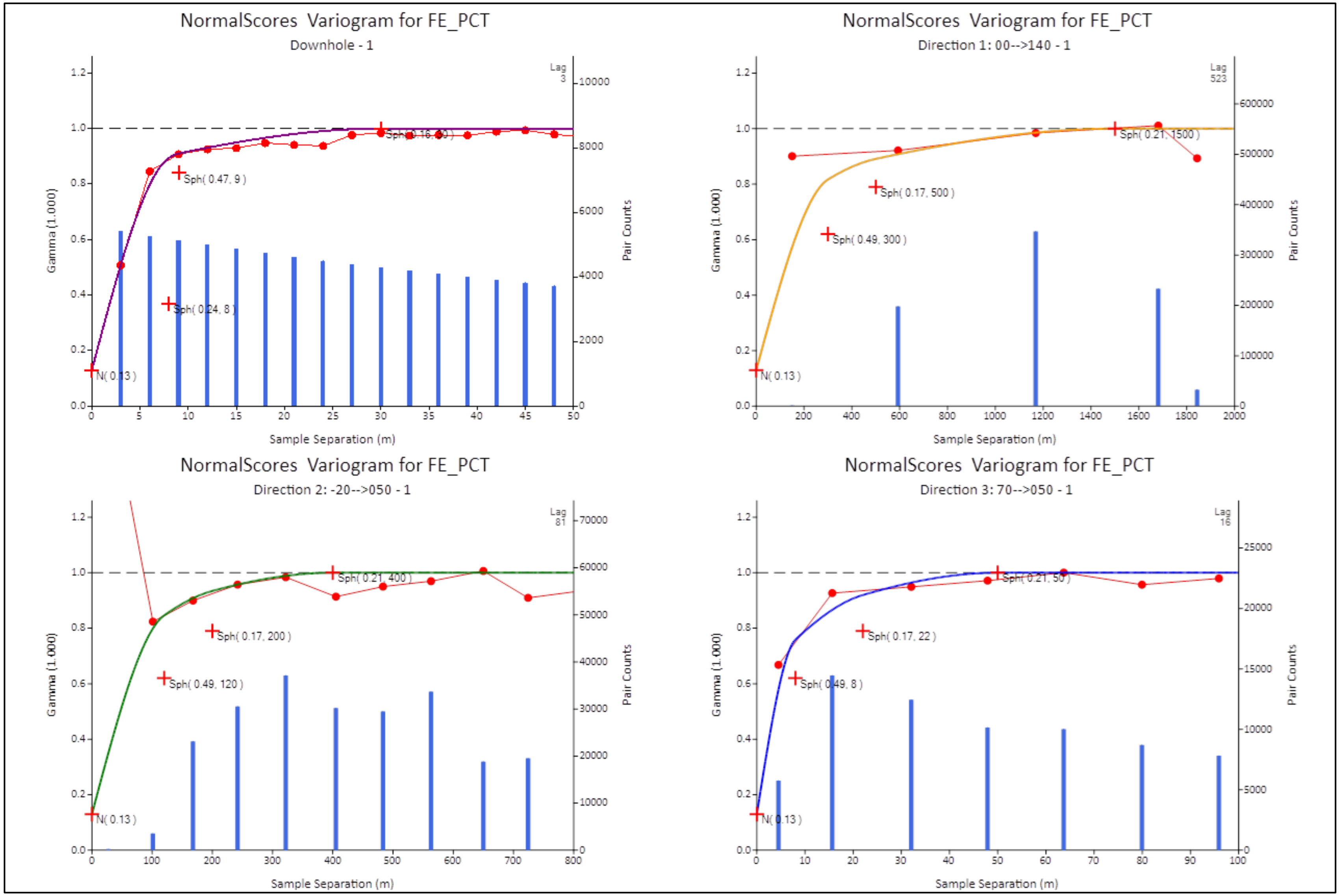


**Figure 4: Variograms for Fe Total** – *Source data ASX release dated 19/06/2023, Interpretation Haren, 2024*

## Geophysical Compilation

CLE commissioned Resource Potentials Pty Ltd, consulting geophysicists, of Perth (ResPot), to validate, compile and reinterpret the existing database of historic geological mapping and geophysics and more modern geophysical data, including detailed aerial magnetic surveys, down hole geophysics and gravity surveys.

Despite the large volume of valid data, this exercise had not been previously and comprehensively undertaken.

This exercise indicated that the geophysical and mapping data align consistently with the drilling data at the deposit scale. This allowed detailed reinterpretation of the location of and deportment of mineralisation within the Sokoman sequence (Figure 5 and Figure 3). Inversion models of the shapes of this mineralisation were than generated and verified against the mapped outcrop of mineralisation and the extensive historic drilling. These shapes were then used to constrain a mineralisation estimate (Figure 4).

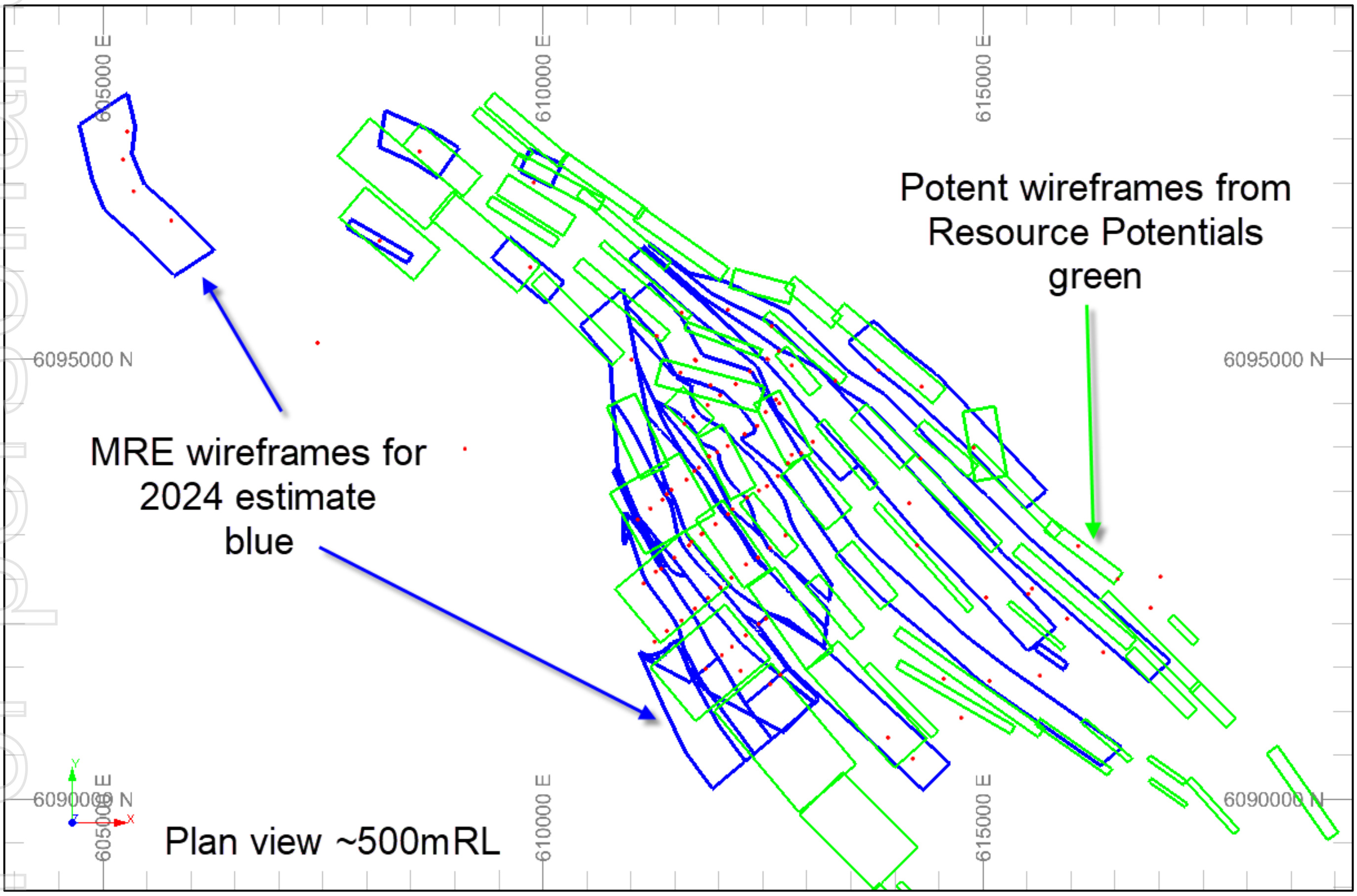


**Figure 5: -ResPot inversion model magnetic constraints against 2024 geological interpretation**
***Source data magnetic survey CAP-EX 2011***
*Red dots are drill collar locations*

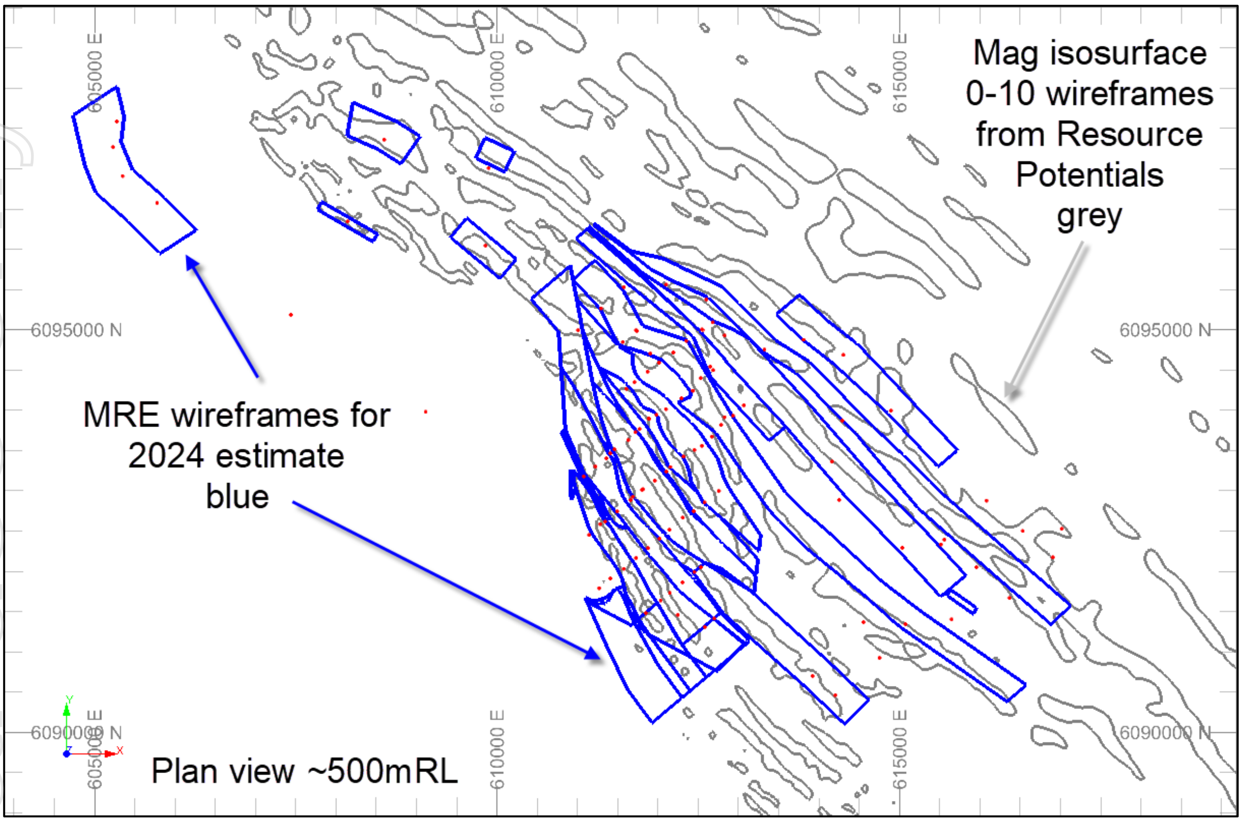


**Figure 6: ResPot magnetic isosurfaces used to inform 2024 mineralisation interpretation.**

*Red dots are drill collar locations*

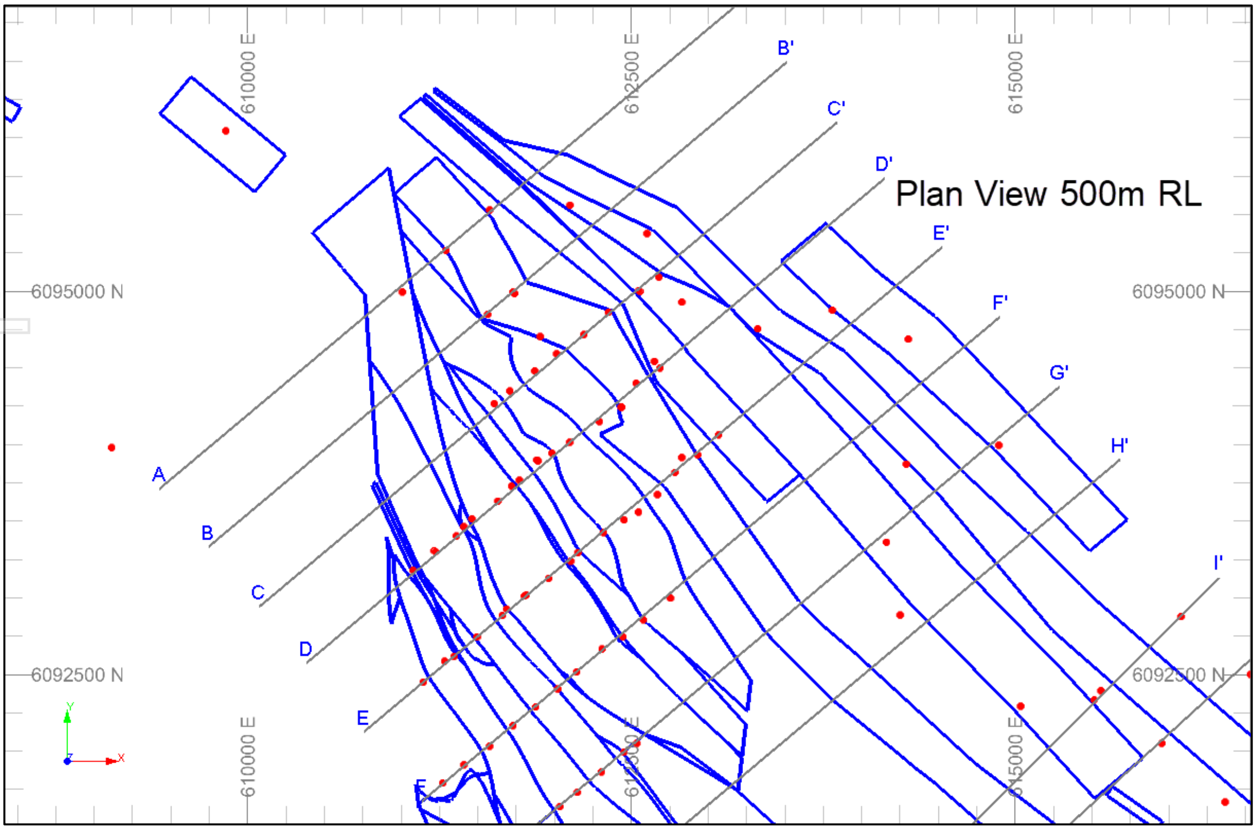


**Figure 7: Section lines used for interpretation –*Red dots are drill collar locations***

## Sectional Interpretation

Sectional interpretation was undertaken, modifying the 2013 Mineral Resource estimate wireframes to conform with the findings of the ResPot data compilation. The result was used to constrain a block model for grade interpolation (Figure 8, Figure 9 and Figure 10).

For comparison, $Fe_{Tot}$ for Section D – D′ is presented (Figure 10). For further comparison, Section D – D′ MagFe as interpolated in the 2013 Mineral Resource estimate is presented (Figure 11).

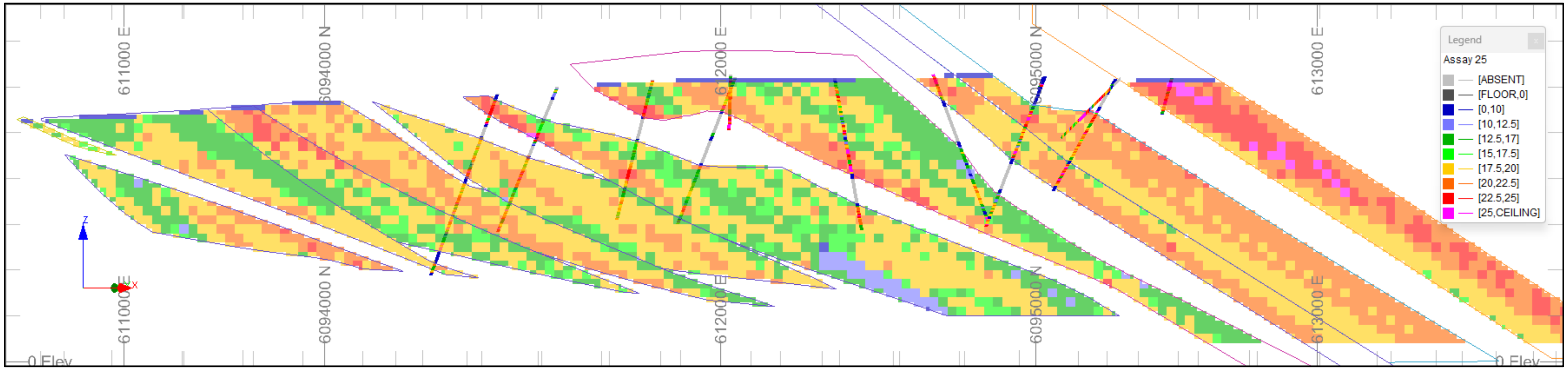


**Figure 8: Section C – C′ MagFe interpolation against drilling –** ***Source data magnetic survey CAP-EX 2011; interpretation Haren, 2024***

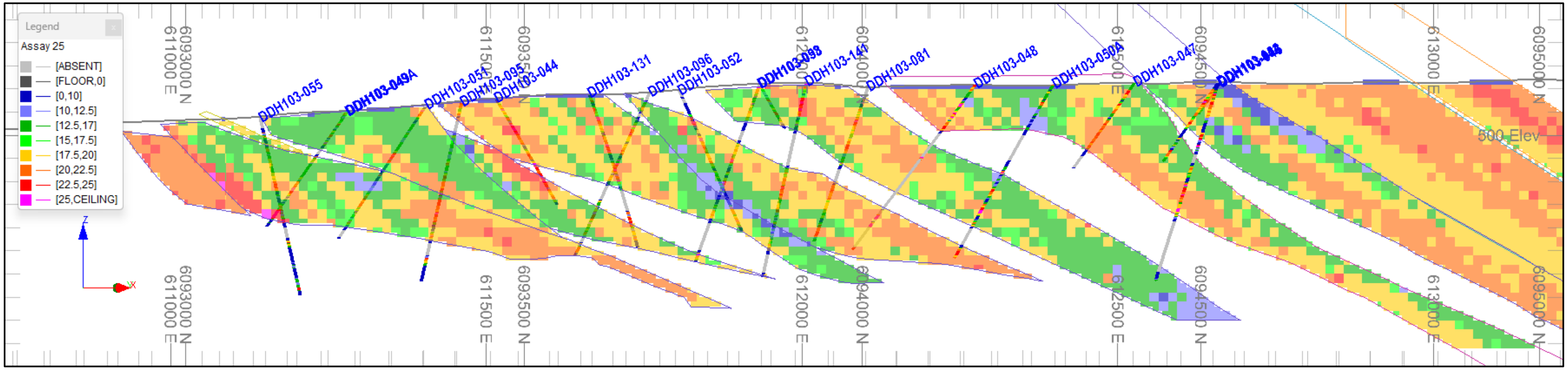


Figure 9: Section D – D' MagFe interpolation against drilling – *Source data magnetic survey CAP-EX 2011; interpretation Haren, 2024*

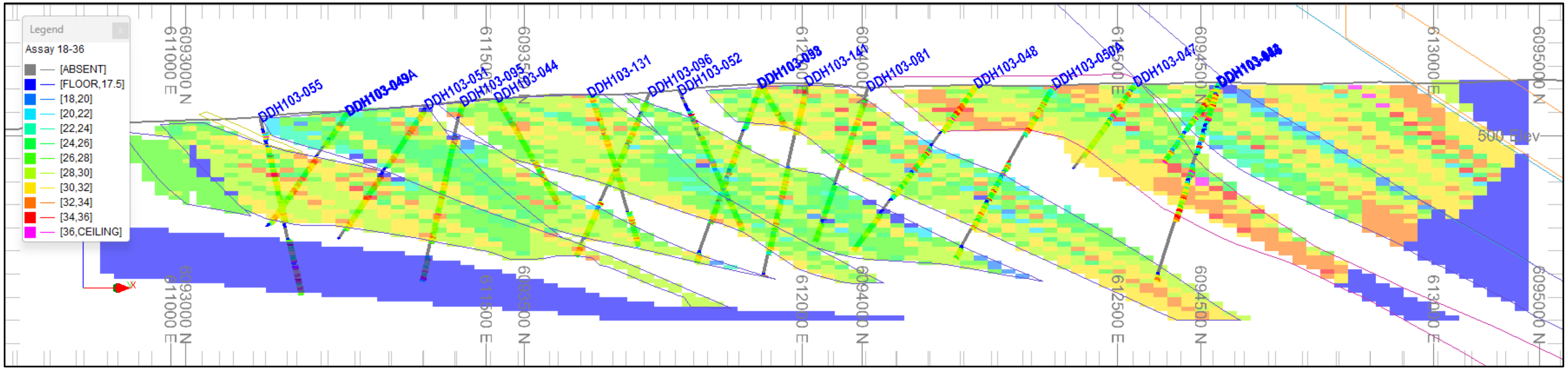


Figure 10: Section D – D' FeTot interpolation against drilling – *Source data magnetic survey CAP-EX 2011; interpretation Haren, 2024*

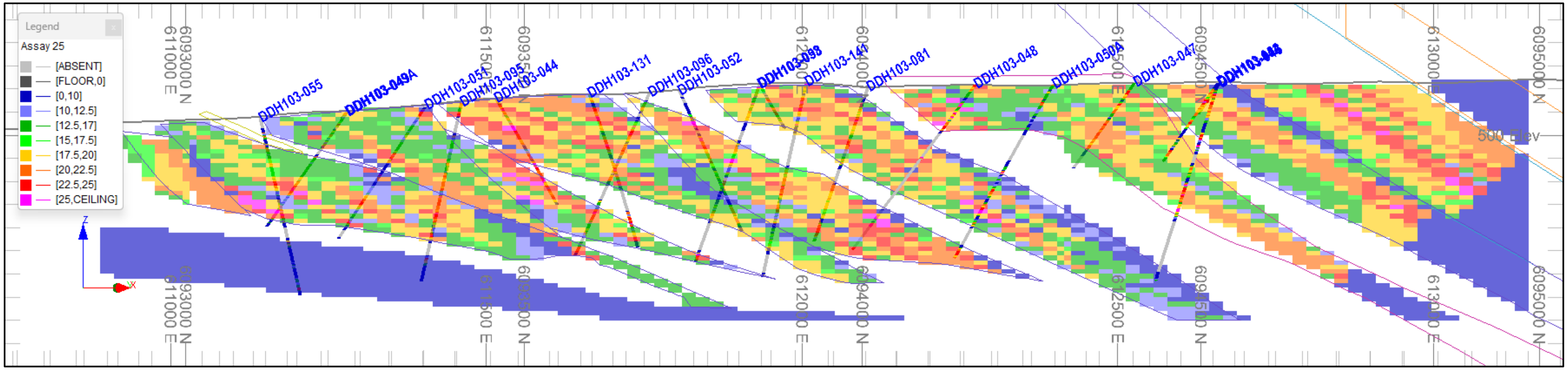


Figure 11: Section D – D' MagFe 2013 interpolation – *Source data magnetic survey CAP-EX 2011; interpretation Haren, 2024*

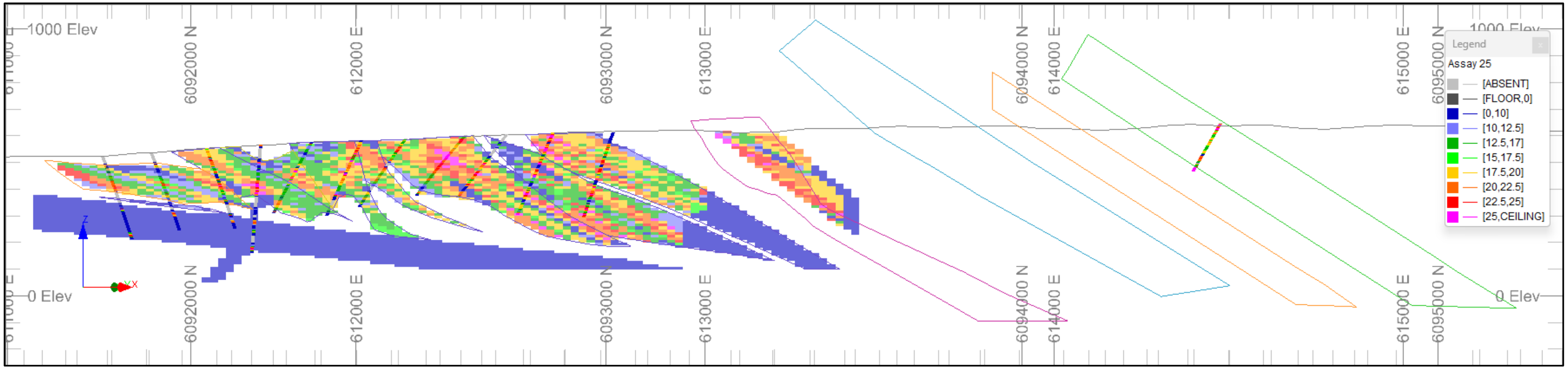


Figure 12: Section E – E' MagFe interpolation against drilling – *Source data magnetic survey CAP-EX 2011; interpretation Haren, 2024*

## Block Model and Interpolation

Blocks of $20m_x$ by $100m_y$ by $20m_z$ were constructed and oriented along the strike of the mineralisation using a dynamic rotation algorithm, governed by the geometry of the thrust faults identified in drilling and the ResPot compilation data.

Interpolation parameters were modified from those used in the 2013 Mineral Resource estimate to create a smoother result that honours the sample data, which was composited to 3m intervals. A search ellipse of $1{,}750m_x$ by $300m_y$ by $50m_z$ was imposed, based on the results of geostatistical analysis of the database. A minimum of five and maximum of twenty composites were included per drill hole.

The mineralisation has been stacked by folding and low angle thrust faulting into a series of inclined imbricate slices, which were used as hard boundaries for the interpolation.

$Fe_2O_3$, $Fe_3O_4$, haematite and magnetic iron oxide were populated by regression equations in the same manner as for the 2013 estimation[6], as was bulk density in mineralised sections:

$$\text{Bulk density} = (Fe_{TOT} \times 0.0279) + 2.5695$$

Bulk density was set as 1.9 t/m$^3$ for overburden and 2.9 t/m$^3$ for unmineralised material.

Overburden was flagged using the topography wireframe translated down five metres down at null grade and examination of subcelled cross sections indicates that this has negligible effect.

- 6 : (1) %hmFe = %$Fe_{Tot}$ - (Fe+++(computed from results of Satmagan assays) + Fe++(computed from FeO assays))
    - In practice, %OtherFe (equation 2) was computed as the first step in the calculation. %OtherFe is assumed to represent the Fe in sulphides, carbonates and/or silicates and is the iron represented by Fe++ from $FeO_{Tot}$ that is not in magnetite:
- (2) %OtherFe=Fe++ (from FeO assays) – magFe (from Satmagan assays) * 0.333
    - Subsequently, %hmFe (equation 3) is calculated based on the difference between total Fe and magFe and OtherFe:
- (3): %hmFe = %$Fe_{Tot}$ - (%magFe+%OtherFe)

## Drilling and Sampling

The 2011 diamond core drilling programme comprised 42 BTW (42.0 mm Ø) drill holes for 5,662.3 m The 2012 programme consisted of 72 drillholes for 22,359 m at mostly BTW and then NQ (47.6 mm Ø)

Core from both the helicopter-supported 2011 and 2012 diamond drilling campaigns was transported to and professionally logged in a purpose-built core yard in Schefferville, Quebec. Descriptive core logs were recorded reporting drillhole azimuth and dip, rock code, rock description, foliation/banding angle with respect to core axis, estimate of magnetite by unit and listing all core samples.

Sampling was undertaken according to geology, with mostly three-metre samples split coaxially using a core splitter.

The 2012 diamond drilling programme included borehole geophysics, DGPS surveying of drillhole collars and the re-logging of 2011 drillhole cores.

The primary magnetic iron analysis used was Davis Tube tests on 85% passing 200 # pulverised samples. Magnetic concentrates were then analysed for major elements by XRF. During the 2012 program, 28 field duplicates were collected and analysed using XRF and 27 had magFe determined using the proprietary Satmagan® system.

The 2011 and 2012 drilling programmes field QA/QC protocols included the insertion of blanks, standards, and duplicates to demonstrate sample representativity and identify any sampling bias. The 2011 core was split in the field with a mechanical splitter. For the 2012 programme, the core was sawn in half at a dedicated core yard with a diamond saw. Half core was submitted for assay, with some whole core being submitted for both assay, density determination and metallurgical testing.

The Competent Person has reviewed the results of this work and observes that an immaterial number of assays indicated error and for the most part, the results are indicated to be accurate and precise and the effects of sample error on the Mineral Resource estimate are negligible.

The Competent Person considers to be appropriate the measures taken to demonstrate that sample protocols were appropriate and unbiased

## Specific Gravity and Bulk Density

Selected representative samples of the deposit were sent to two laboratories for bulk density determination, both laboratories returning consistent data. Data for 315 samples was plotted against assayed total iron content and the resulting regression used to inform bulk density estimates for Mineral Resource estimation.

## Mineralisation Estimate

Mineralisation was constrained by a combination of wireframes used in the 2013 Mineral Resource estimate (Figure 13) and new wireframes developed from the ResPot data compilation (Figure 14). Estimation was undertaken using Ordinary Kriging on all elements using geostatistically derived search parameters and the resultant estimate visually checked against the drilling and wireframe constraints (Figure 15).

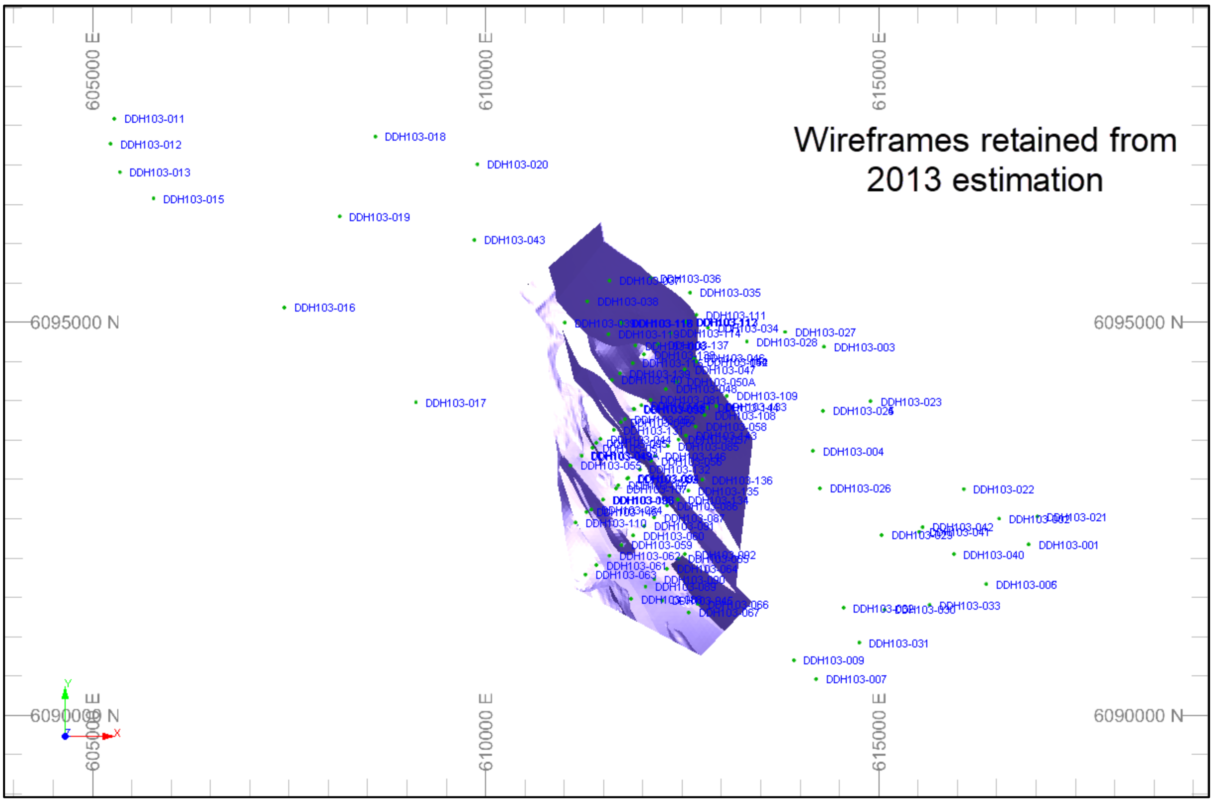


Figure 13: Retained 2013 Mineral Resource estimate wireframes – *Interpretation Haren, 2024*

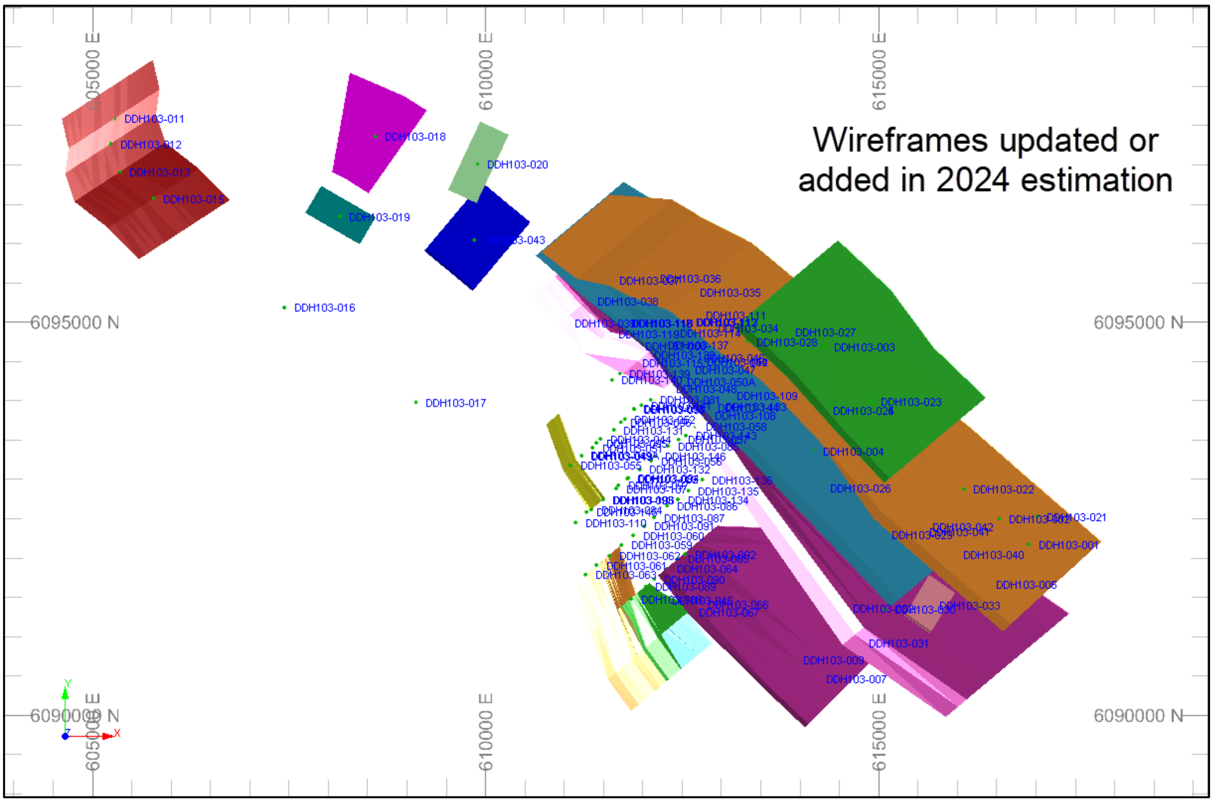


Figure 14: 2024 Mineral Resource estimate wireframes – *Interpretation: Haren, 2024*

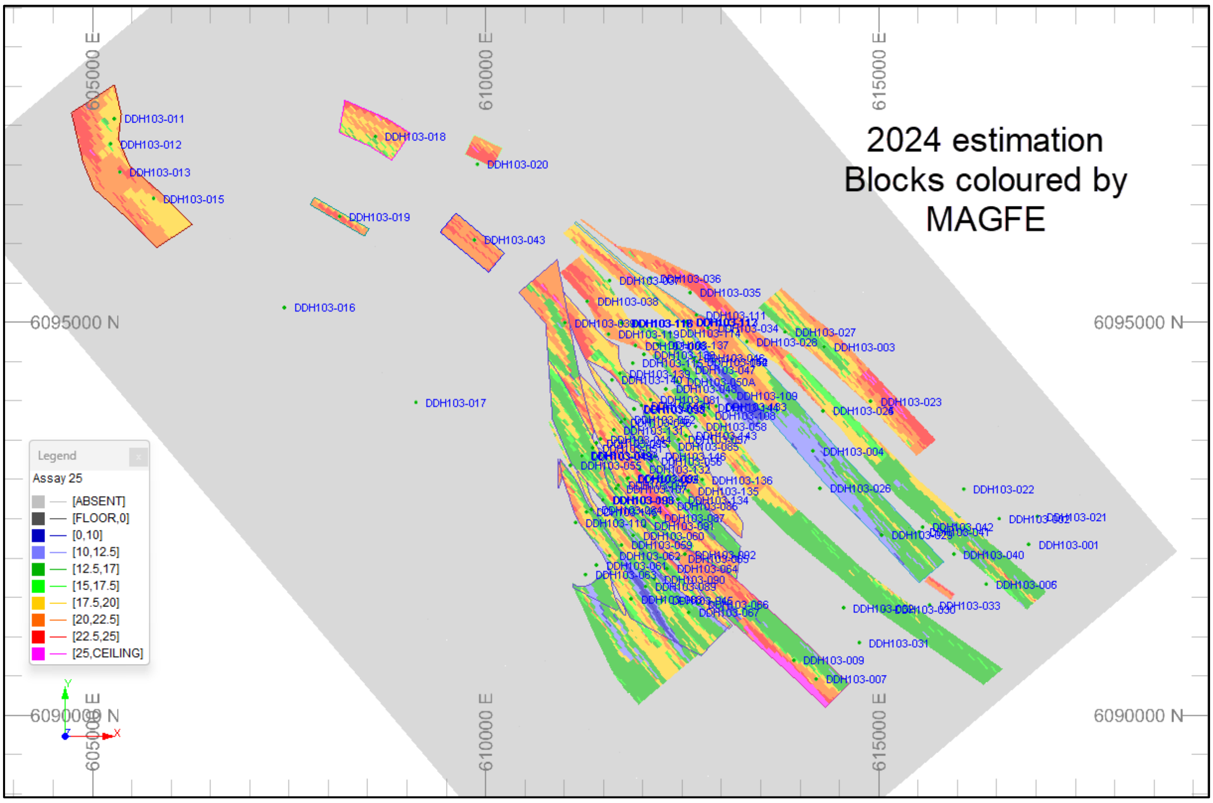


Figure 15: Mineral Resource estimate against drilling – *Interpretation: Haren, 2024*

## Mineral Resource Classification

The resultant mineralisation estimate has been classified in accordance with the provisions of the JORC Code. The 2013 PEA pit optimisation is observed to have broadly similar parameters to those currently being developed by Cyclone and this sequence of pit shells was used to assist classification of the Mineral Resource. The Competent Person considers that any variation in parameters will not make a material difference in the resultant pit shell at this scale and for this purpose.

Two pit shells were used for classification of the Mineral Resource, CapEx's "30-year" pit shell, which was used to support its PEA's; and CapEx's "ultimate" pit shell:

- The Indicated Mineral Resource is that part of the mineralisation that occurs above the 250mRL[7] floor (about 350m below surface) of a pit design undertaken by previous operators using similar design parameters to those prevalent today. This pit design contemplated provision of process plant feed for 30 years. There is a high degree of confidence in geological and grade continuity at the local and deposit scale within this boundary. Drill spacing for Indicated mineralisation is informed by the MagFe directional variography, being approximately 2/3 of the sill, which implies an along srike spacing of around 1,000m.

*7: mRL, metres Reduced Level – elevation with reference to a datum.*

- The Inferred Mineral Resource is that part of the mineralisation above 250mRL that occurs external to the 30-year pit shell and within an ultimate pit shell identified by previous optimisations. There is good confidence in the geological and grade continuity, with evidence to imply but not verify continuity. Drill spacing for Inferred mineralisation is informed by the MagFe directional variography, being less than the sill, which implies an along strike spacing of less than 1,500m.

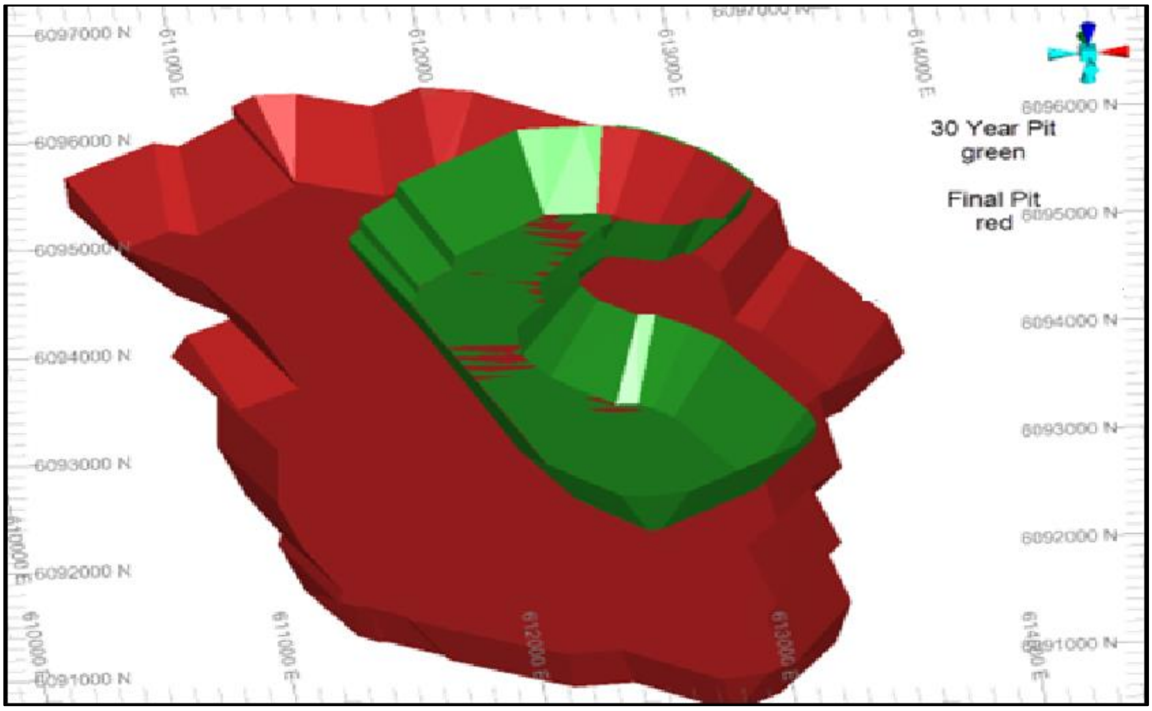


**Figure 16: Optimisation pit shells used for Mineral Resource classification – *Intrepretation: Haren, 2024***

## Exploration Target

The data compilation and subsequent modelling identified considerable mineralisation beyond the Mineral Resource for which there is some geological confidence in grade and geological continuity, but which has not been directly sampled. This was flagged as "Exploration Target" within the block model and comprises a volume of some 5.5Bm3.

The flagged blocks incorporate material within magnetic anomaly locations which marry closely with the reported Indicated Mineral Resource and shallower than 350mRL. Average grades from the reported Indicated Mineral Resource have been assumed for the Exploration Target and both grades and volumes have been varied within a plus-or-minus 15% range to generate a grade and tonnage range for the Exploration Target.

The Competent Person for this Exploration Target postulation is Mr Jeremy Peters BSc BEng FAusIMM CP (Min, Geo). Mr Peters cautions that the potential quantity and grade of the Exploration Target is conceptual in nature and that there has been insufficient exploration to result in the estimation of a Mineral Resource and that it is uncertain if further exploration will result in the estimation of a Mineral Resource.

Cyclone is planning a drilling program for approval by the Newfoundland and Labrador Geological Survey. This program is designed to test the Exploration Target by reverse circulation drilling of magnetic lithology defined by the ResPot inversion model. Samples will be taken to verify grade and metallurgical characteristics. The program is planned to be completed by June 2025 or earlier subject to approvals and funding.

## Mineral Resource Comparison

The Mineral Resource estimate is reported for all relevant assayed elements and the Competent Person notes that deleterious elements are relatively low when compared to other deposits in the Labrador Trough (Table 3).

No estimation had been performed for other elements for the Exploration Target, which is reported at a 10% MagFe cut-off. This cut-off appears to be a natural geological cut-off in the data and demonstrates low statistical sensitivity. Sums may vary slightly as a result of rounding.

**Table 3: Iron Bear 2024 Mineral Resource estimate reported at a 12.5% MagFe cut-off**

| Classification *12.5% MagFe cut-off* | Volume *(Bm3)* | Bulk Density *(ρ)* | Tonnes *(Bt)* | *% by mass* | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | MagFe | $Fe_{Tot}$ | Mn | $SiO_2$ | K2O | LOI | MgO | MnO | Na2O | P |
| **Indicated** | 0.64 | 3.37 | 2.15 | 18.97 | 28.68 | 0.53 | 46.12 | 0.06 | 6.94 | 2.49 | 0.69 | 0.03 | 0.03 |
| **Inferred** | 4.28 | 3.39 | 14.51 | 18.13 | 29.44 | 0.52 | 45.75 | 0.08 | 4.83 | 2.22 | 0.67 | 0.03 | 0.03 |
| **Total** | **4.92** | **3.39** | **16.66** | **18.24** | **29.34** | **0.52** | **45.8** | **0.08** | **5.1** | **2.26** | **0.67** | **0.03** | **0.03** |
| **Exploration Target** | From | | 16 | 16 | 29 | | | | | | | | |
| *(10% MagFe cut-off)* | To | | 21 | 22 | 30 | | | | | | | | |

## Grade Tonnage Curve

The tonne-grade curve for the Iron Bear Mineral Resource estimation is remarkably consistent, showing a gradational distribution of mineralisation, with a natural lower cut-off of around 10% MagFe.

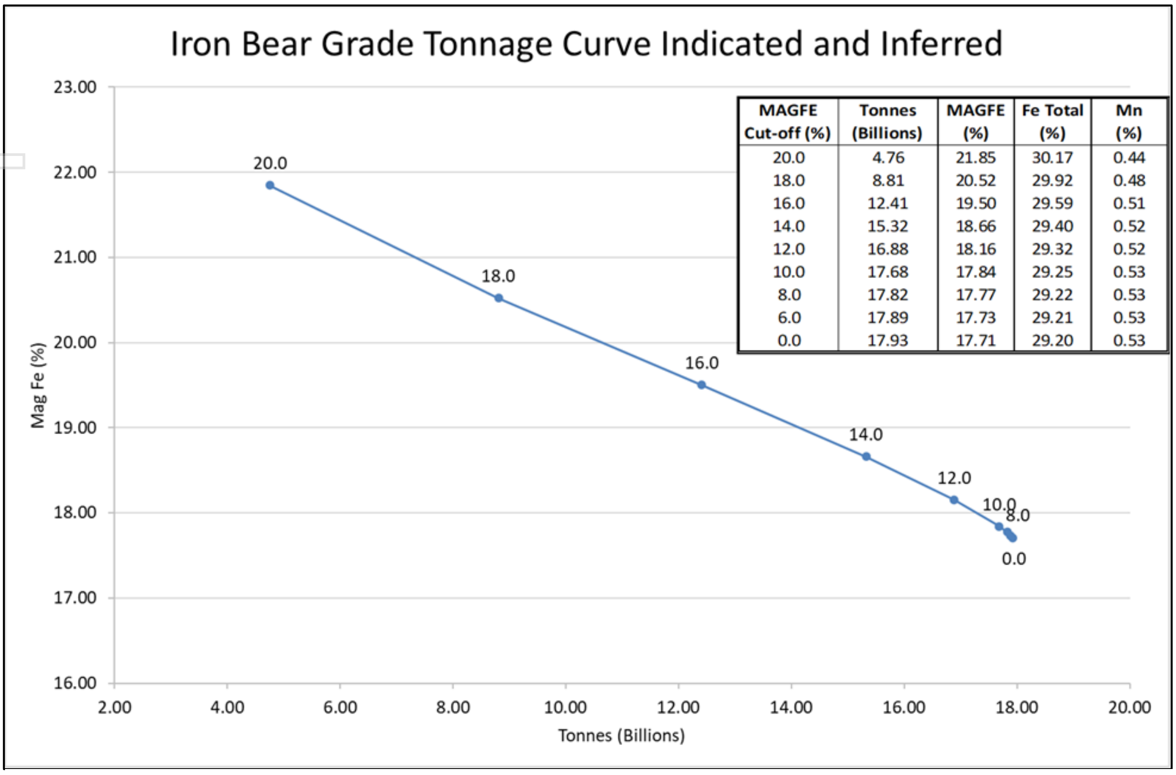




**Figure 17: Grade Tonnage Curve**

The Competent Person has compared the 2013 Mineral Resource estimate to the current results for both the common Mineral Resource area and extensions above 480m below surface (Table 4) and all blocks in the model (Table 5). The current Mineral Resource estimate has classified a significantly larger volume of material. This is the result of a comprehensive analysis of all of the available geological and geophysical data and developing a 3D volumetric magnetic inversion model based on the acquisition of high definition arial magnetic survey constrained by drilling results.

This has permitted mineralisation to be classified with some degree of confidence against historic drilling. This is supported by geostatistical analysis of the historic assay results, which has allowed projection of known mineralisation into those areas identified as being mineralised from high-resolution geophysics, resulting in postulation of an Exploration Target.

Table 4: Mineral Resource comparison, common area > 480m below surface, >12.5%MagFe

| Model | Tonnes (Bt) | MagFe | $Fe_{TOT}$ % By mass | MnO |
|---|---|---|---|---|
| **2013** | 7.24 | 18.92 | 29.18 | 0.47 |
| **2024** | 13.73 | 18.45 | 29.04 | 0.50 |
| **% Difference** | 90% | -2% | 0% | 7% |

Table 5: Mineral Resource comparison, all blocks, >12.5%MagFe

| Model | Tonnes (Bt) | Mag Fe | $Fe_{TOT}$ % By mass | MnO |
|---|---|---|---|---|
| **2013** | 7.24 | 18.92 | 29.18 | 0.47 |
| **2024** | 24.48 | 18.40 | 29.50 | 0.53 |
| **% Difference** | 238% | -3% | 1% | 15% |

## Pilot Scale Metallurgical Testing – Phase 1

Pilot Scale metallurgical test work was performed on 1.6t of core in H2, 2023 and Q1 2024. The pilot-scale tests were performed with small-scale industrial equipment to assist flowsheet development, followed by processing of 500kg of the core to direct reduction (DR) grade concentrate to verify the conceptual flowsheet.

**Figure 18: Dried DR concentrate (L) and RF concentrate (R) after batch reverse flotation**

Core was crushed to -3mm, and dry cobbing was tested at 12mm and 6mm sizing, though ultimately not included in the flowsheet. The -3mm material was ground to various sizes for primary wet magnetic separation, settling on 500 micron to reject 54% of mass via WLIMS. The remaining 46% mass was subjected to further grinding and WLIMS separation at various sizes, settling on $P_{80}$=32 micron to produce an iron ore concentrate suitable for blast furnace-(BF) route use at 68.9% Fe and 3.4% $SiO_2$ at a 25.46% mass recovery. BF concentrate was further subjected to reverse flotation at 400g starch/t concentrate and 150 g Tomamine/t concentrate, producing a Direct Reduction (DR) grade concentrate of 70.6% Fe, 1.2% $SiO_2$, at an overall 20.17% mass yield.

The DR concentrate grade of 1.2% silica is considered a very clean DR concentrate on the seaborne market. A third potentially saleable product was generated as the last reverse flotation froth stage of 67.0% Fe and 4.6% silica at an overall mass recovery of 2.6%.

Further work on a different 7t core sample is currently underway to produce DR concentrate for pellet plant thermal profile design and DR pellet production for customer samples.

**Figure 19: Bulk production of primary LIMS material (-500 micron) being observed at Corem**

**Table 6: Iron Bear pilot scale metallurgical performance**

| Item | Value |
|---|---|
| Overall Mass Recovery to BF Concentrate (%) | 25.46 |
| Overall Magnetite recovery to BF Concentrate (%) | 95.5 |
| BF Concentrate Iron Grade (%) | 68.9 |
| BF Concentrate Silica Grade (%) | 3.4 |
| BF Concentrate Liberation Size $_{P100}$ (mm) | 45 |
| Overall Mass Recovery to DR Concentrate (%) | 20.17 |
| Overall Magnetite recovery to DR Concentrate (%) | 79.7 |
| DR Concentrate Iron Grade (%) | 70.6 |
| DR Concentrate Silica Grade (%) | 1.2 |
| DR Concentrate Liberation Size $_{P100}$ (mm) | 45 |
| Overall Mass Recovery to RF Concentrate (%) | 2.64 |
| Overall Magnetite recovery to RF Concentrate (%) | 9.5 |
| RF Concentrate Iron Grade (%) | 67.0 |
| RF Concentrate Silica Grade (%) | 4.6 |
| RF Concentrate Liberation Size $_{P100}$ (mm) | 45 |
| **Ore Hardness** | |
| SMC (kWh/t) | 11.2 |
| BWi (kWh/t at $P_{80}$ 600µm) | 16.7 |

*Source: ASX announcement CLE Quarterly Activities Report dated 31 December - Analysis: Cyclone Metals, 2024*

**Table 7: Preliminary concentrate product specifications**

| Element | Fe | $SiO_2$ | $Al_2O_3$ | MgO | CaO | $Na_2O$ | $K_2O$ | $TiO_2$ | MnO | $P_2O_5$ | S |
|---|---|---|---|---|---|---|---|---|---|---|---|
| BF Concentrate | 68.9 | 3.4 | <0.1 | 0.2 | 0.1 | <0.1 | <0.01 | 0.01 | 0.08 | 0.01 | <0.015 |
| DR Concentrate | 70.6 | 1.2 | <0.1 | 0.1 | 0.1 | <0.1 | <0.01 | <0.01 | 0.06 | <0.01 | 0.005 |
| RF Concentrate | 67.0 | 4.6 | 0.12 | 0.36 | 0.33 | <0.1 | 0.02 | 0.02 | 0.15 | 0.01 | 0.009 |

*BF/DR Concentrate: CLE Quarterly Activities Report dated 31 December 2023*
*RF Concentrate: COREM, Quebec, 2024, refer attached Competent Person statement in table 1*

## Reasonable Prospects for Eventual Economic Extraction

The JORC Code definition of a Mineral Resource requires "reasonable prospects for eventual economic extraction". In June 2013, Cap-Ex published (*on the TSX*) a NI-43101 compliant PEA (Preliminary Economic Study[1]) which returned a positive result.

The PEA contemplated the construction of a magnetite concentrator and pelletising plant adjacent to the mine pit and then railing the product to port via the existing railway. In 2020 the PEA was updated by Hatch Ltd[2], consulting engineers of Canada, and delivered positive technical and economic outcomes.

Cyclone completed additional metallurgical test work leveraging a custom designed industrial pilot plant which indicates that the Iron Bear project can produce higher quality magnetite products at a higher yield than that contemplated by Cap-Ex and Hatch. This further reinforces the likelihood that there are reasonable prospects for economic exploitation of the Iron Bear mineral resource. In addition, Cyclone is actively investigating technical solutions to reduce the environmental footprint of the mining operations – and has specifically designed a 'dry tailings' mining operation which will mitigate any impact on the lacs and aquifers.

The key factors which are expected to underpin the economic viability of a potential mineral extraction are:

- Large and relatively homogeneous mineral resource amenable to open pit mining
- Low stripping ratio, with negligible overburden
- Location less than 25 km from existing open access heavy haul railway connected to an open access iron ore export port.
- Favourable grindability indices of BWi = 16.7 kWh/t and SMC = 11.7 kWh/t
- Access to low-cost regional hydropower
- Production of a Direct Reduction grade concentrate grading 70,6% Fe and 1,2% $SiO_2$ with an overall magnetic Fe yield of 89,2%[3]
- Production of a Blast Furnace grade concentrate grading 68,9% and 3,4% silica with a magnetic Fe yield of 95.5%
- Very low deleterious elements
- Dry tailings mining operation (no tailings dam)

Cyclone has utilised the optimised pit shells from the 2013 and 2020 PEA work to evaluate the 2024 Mineral Resource estimate for reasonable prospects for eventual economic extraction. The parameters applied to the earlier optimisations are broadly similar to those contemplated today and the Competent Person considers that the resultant pit shells are not materially different. Cyclone will be performing its own optimisations as part of its project development.

*1: Preliminary Economic Assessment dated June 2013 by BBA Inc. and Watts, Griffis & McOuats. The report is publicly available on the SEDAR web site: [https://www.sedarplus.ca/csa-party/records/document.html?id=fff2039a203d460f064ad00fb4519a452564922bc99267139733cf20c1c58b0](https://www.sedarplus.ca/csa-party/records/document.html?id=fff2039a203d460f064ad00fb4519a452564922bc99267139733cf20c1c58b0).*
*2: Refer SEDAR release M3 Metals Ltd, 24 January 2020*

## Next Steps

Cyclone has developed and communicated a clear strategy to achieve Decision to Mine (DTM) which is summarised below.

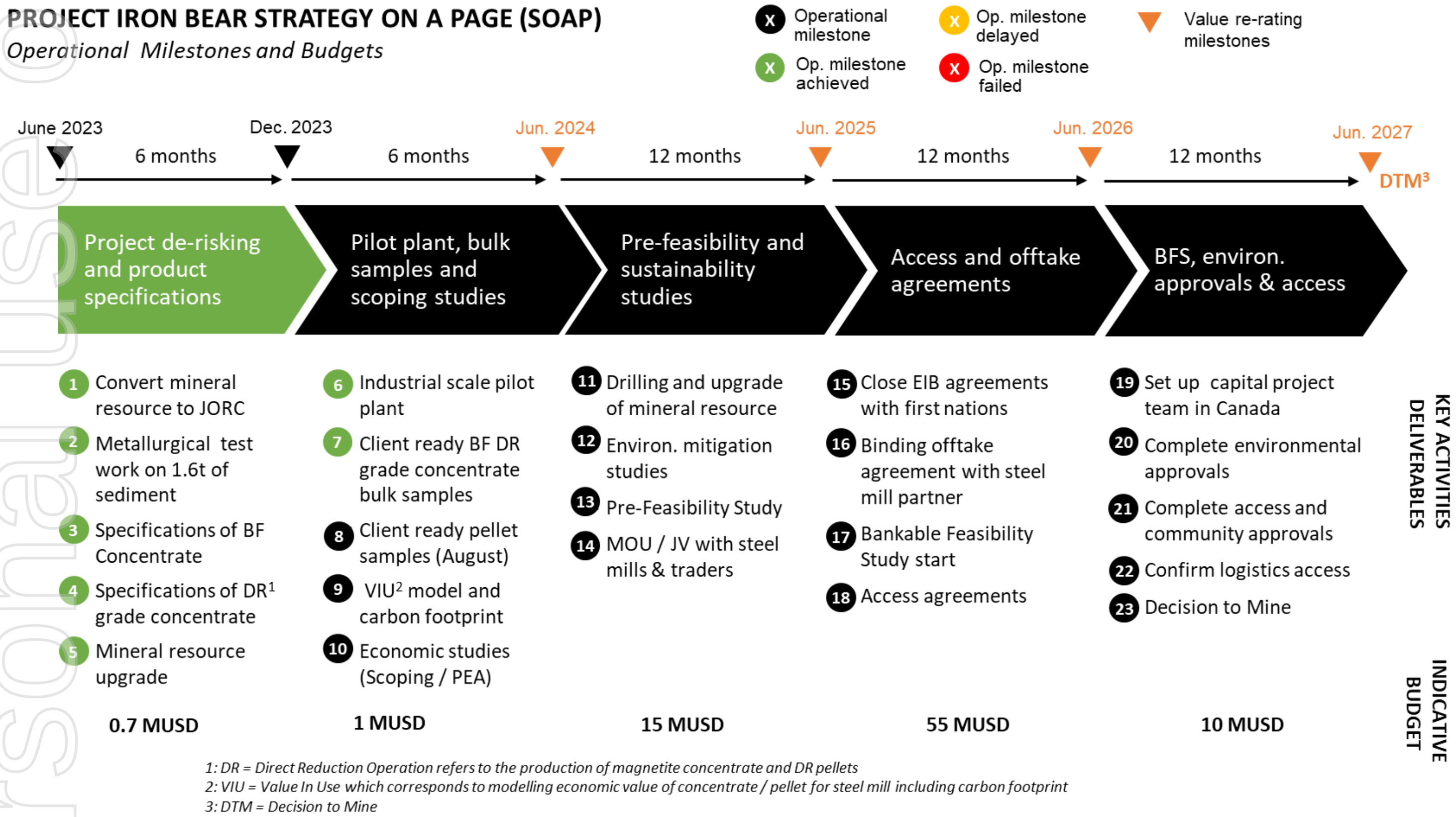


**Figure 20: Iron Bear Strategy on a Page (SOAP)**

Achieving this plan is contingent on a number of factors which are not controlled by Cyclone, including being granted approvals to operate, mining licenses, and securing funding. The execution of this plan carries material risks which should not be ignored by prospective investors. This plan has been delivered to date and provides a clear roadmap for Cyclone and all its associated stakeholders and therefore meets the requirements of the JORC Code.

***This announcement has been approved by the Company's board of directors***.

Paul Berend, CEO of Cyclone Metals, commented:

*"The updated geophysical model is supported by a magnetic inversion model[1] and massively improved our understanding of the Iron Bear ore body. This flowed into a major mineral resource upgrade which positions Iron Bear as a strategic undeveloped Tier 1 mineral asset. We now have over 2 billion tonnes of mineral resource at the indicated level which is more than sufficient to support our ongoing technical and economic studies which are proceeding as planned."*

## Compliance Statements

### *Forward-Looking Statements*

This document may include forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning the Company's planned exploration program and other statements that are not historical facts. When used in this document, the words such as "could," "plan," "expect," "intend," "may", "potential," "should,", "further" and similar expressions are forward-looking statements. Although the Company believes that its expectations reflected in these forward- looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that further exploration will result in additional Mineral Resources.

### *Competent Persons*

Exploration and technical information has been reviewed and compiled by Jeremy Peters FAusIMM CP (Mining, Geology), a Director of Burnt Shirt Pty Ltd, who has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration 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".

Metallurgy and processing information has been reviewed and compiled by Paul Vermeulen MAusIMM, MAIST, a Director of Vulcan Technologies Pty Ltd, who has sufficient experience which is relevant to the method of processing under consideration 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". Mr Vermeulen consents to the inclusion in the presentation of the matters based on his information in the form and context in which it appears.

The Competent Person for the 2024 Mineral Resource estimate is Mr Jeremy Peters FAusIMM CP (Geo, Min), a Director of Burnt Shirt Pty Ltd. The Mineral Resource estimate is stated in accordance with the provisions of the JORC Code (2012). Mr Peters has more than five years' experience in the estimation and reporting of Mineral Resources for iron mineralisation in Australia and overseas, to qualify as a

Competent Person as defined in the JORC Code. Mr Peters consents to the inclusion in the presentation of the matters based on his information in the form and context in which it appears.

The Competent Person for the 2024 Exploration Target estimate is Mr Jeremy Peters FAusIMM CP (Geo, Min), a Director of Burnt Shirt Pty Ltd. The Exploration Target is postulated in accordance with the provisions of the JORC Code (2012). Mr Peters has more than five years' experience in the postulation of Exploration Targets to qualify as a Competent Person as defined in the JORC Code. Mr Peters consents to the inclusion in the presentation of the matters based on his information in the form and context in which it appears.

# JORC CODE 2012 APPENDIX TABLE 1

## Section 1 Sampling techniques and data.

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

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| **Sampling techniques** | *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*<br>*Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*<br>*Aspects of the determination of mineralisation that are Material to the Public Report.*<br>*In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.* | For the 2011 drilling, sampling was done on a geological basis, with mostly 3 m samples split coaxially using a mechanical core splitter. Neither field standards or blanks were inserted into the sample stream, but core duplicates were collected.<br>Samples were marked in the core trays using aluminium tags etched with the sample numbers and stapled to the core tray at the end of each sample interval. Neither hand-held measurements of core magnetic susceptibility nor core photography were completed.<br>Core for the 2012 programme was taken to a dedicated core yard where it was similarly split, sampled and photographed. |
| **Drilling techniques** | *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).* | The 2011 diamond core drilling programme comprised 42 BTW (42.0 mm Ø) drill holes for 5,662.3 m<br>The 2012 programme consisted of 72 drillholes for 22,359 m at mostly BTW and then NQ (47.6 mm Ø) |
| **Drill sample recovery** | *Method of recording and assessing core and chip sample recoveries and results assessed.*<br>*Measures taken to maximise sample recovery and ensure representative nature of the samples.*<br>*Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.* | Drill sample recovery was recorded for all drillholes, measuring block to block core recovery against stated depth.<br>The Competent Person considers that due to the nature of the drilling and geology, sample bias is unlikely to result from poor recovery. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| **Logging** | *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*<br>*Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*<br>*The total length and percentage of the relevant intersections logged.* | All core was logged qualitatively and quantitatively for the 2012 downhole geophysics exercise.<br>For the 2011 drilling, logging recorded drillhole azimuth and dip, rock code, rock description, foliation/banding angle with respect to core axis and estimate of magnetite by unit.<br>The above was undertaken with the 2012 drilling in addition to geotechnical logging, core photography and downhole geophysics.<br>The Competent Person considers that the logging protocols are sufficient to support estimation of a Mineral Resource. |
| **Subsampling techniques and sample preparation** | *If core, whether cut or sawn and whether quarter, half or all core taken.*<br>*If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*<br>*For all sample types, the nature, quality and appropriateness of the sample preparation technique.*<br>*Quality control procedures adopted for all subsampling stages to maximise representivity of samples.*<br>*Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.*<br>*Whether sample sizes are appropriate to the grain size of the material being sampled.* | For the 2011 programme, core was split in the field with a mechanical splitter. For the 2012 programme, core was sawn in half at a dedicated core yard with a diamond saw. Half core was submitted for assay, with some whole core being submitted for both assay, density determination and metallurgical testing.<br>In all cases, appropriate blanks, standards, and duplicates were taken or added to demonstrate sample representativity and identify any sampling bias.<br>The Competent Person considers to be appropriate the measures taken to demonstrate that sample protocols were appropriate and unbiased. |
| **Quality of assay data and laboratory tests** | *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*<br>*For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.*<br>*Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.* | Samples were sent to one of three laboratories, with standards, blanks, duplicates, and cross-laboratory checks undertaken to an appropriate standard.<br>Geophysical tools were calibrated at site with the exception of density, where a relative measurement was made.<br>The Competent Person considers the measures taken to be appropriate to support estimation of a Mineral Resource. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| **Verification of sampling and assaying** | *The verification of significant intersections by either independent or alternative company personnel.*<br>*The use of twinned holes.*<br>*Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*<br>*Discuss any adjustment to assay data.* | Samples were verified with random duplicate samples taken by an independent Mineral Resource estimation consultant and cross-check laboratory assaying.<br>The Competent Person considers the measures taken to be appropriate to support estimation of a Mineral Resource |
| **Location of data points** | *Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*<br>*Specification of the grid system used.*<br>*Quality and adequacy of topographic control.* | The 2012 drilling campaign was surveyed by handheld GPS, with resurveying of collars being undertaken by professional surveyor in 2012.<br>The licences are defined by NAD27 UTM datum and various working grids are NAD83 or NAD84 datum and the relationship between NAD27 and the later systems is not completely defined for the region.<br>The Competent Person understands that there are no material errors in location. |
| **Data spacing and distribution** | *Data spacing for reporting of Exploration Results.*<br>*Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.*<br>*Whether sample compositing has been applied.* | Most cross sections contained at least three holes, and many had more than ten holes passing through the mineralised zones.<br>Sampling was undertaken on lithological boundaries, composited to 3m intervals in all cases. |
| **Orientation of data in relation to geological structure** | *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*<br>*If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.* | Drilling was oriented in the field to intersect mineralisation perpendicularly, according to field observations of its strike.<br>The Competent Person considers this to be appropriate and does not consider that this approach will introduce material bias. |
| **Sample security** | *The measures taken to ensure sample security.* | Samples were transported from the field to a secure yard in Schefferville where they variously processed and stored. All work was undertaken under a Supervising Geologist. |
| **Audits or reviews** | *The results of any audits or reviews of sampling techniques and data.* | The Cap-Ex drilling, sampling and assaying protocols were independently checked by the Mineral Resource estimation consultant in 2013. No material discrepancies or biases were identified. |

**Section 2: Reporting of Exploration Results**

*(Criteria listed in the preceding section also apply to this section)*

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| **Mineral tenement and land tenure status** | *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*<br>*The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.* | Iron Bear comprises ten graticular licenses totalling 7,275 ha under applicable Labrador and Newfoundland mining law.<br>Six of the ten licenses were staked by prior owner, Cap-Ex and the other four Licenses were acquired through purchase and sale agreements and remnant royalties remain. Four Aboriginal parties claim Native Title over various parts of Iron Bear. |
| **Exploration done by other parties** | *Acknowledgment and appraisal of exploration by other parties.* | Iron Bear was originally explored by IOCC and the Canadian Government. Most of the exploration was undertaken by Cap-Ex Iron Ore, of Vancouver, the predecessor company to M3 Metals Inc, vendor of the project. |
| **Geology** | *Deposit type, geological setting, and style of mineralisation.* | The deposit is a taconite banded ion formation of the Lake Superior type, partially metamorphosed to greenschist facies and subject to thrust faulting that has resulted in tectonic repetition and thickening of mineralisation. |
| **Drillhole information** | *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:*<br>• *easting and northing of the drillhole collar*<br>• *elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar*<br>• *dip and azimuth of the hole*<br>• *down hole length and interception depth*<br>• *hole length.*<br>*If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.* | Drilling information is not reported in this Release due to its volume and the fact that it has been comprehensively reported elsewhere (refer SEDAR, M3 Metals release 23 March 2013, CLE ASX Release 19 June 2023)<br>Mineralised intersections have not been reported in detail because the Competent Person advises that reporting of magnetite mineralisation at Iron Bear is complicated by the complex structural geology of the deposit and the nature of reporting mineralisation based on both grade and metallurgical recovery.<br>The Competent Person observes consistent broad intersections of recoverable magnetite, associated with haematite and is satisfied that the drilling information supports this interpretation. |
| **Data aggregation methods** | *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.*<br>*Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.*<br>*The assumptions used for any reporting of metal equivalent values should be clearly stated.* | Drillholes were sampled according to geology and the resultant information composited into 3m composites for modelling, inclusive of internal waste.<br>Magnetite grades were determined by Davis Tube or proprietary Satmagan analysis and compared to the results of downhole magnetic susceptibility measurements. This results in formation of a regression that estimated magnetite grade from total iron grade. The Mineral Resource estimate was based on assay results. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| **Relationship between mineralisation widths and intercept lengths** | *These relationships are particularly important in the reporting of Exploration Results.* *If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.* *If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (e.g. 'downhole length, true width not known').* | The structural geology of Iron Bear is complicated and there is observed to be considerable local variation in the orientation of drilling in relation to individual units. Drilling was undertaken as perpendicular as possible to the strike of the deposit, as measured at the location of each drill collar. |
| **Diagrams** | *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views.* | Diagrams are included at relevant sections in this Report. The Competent Person has taken and has attributed these diagrams from various material prepared by Haren, ResPot, Cyclone, Cap-Ex, WGM and M3 and has no reason to doubt their accuracy or veracity. |
| **Balanced reporting** | *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.* | Mineralisation has been reported at a variety of cut-off grades and appropriate statistics are reported for the relevant elements |
| **Other substantive exploration data** | *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.* | There have been various photogrammetric and geophysical surveys at Iron Bear at various times that have contributed to understanding of the geology of the deposit. These have been the subject of a recent intensive collation and interpretation campaign that has resulted in material improvements and extensions to the understanding of the continuity of both grade and geology. The Competent Person considers these to have been undertaken in an appropriate manner. |
| **Further work** | *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.* | Mineralisation is open along strike in both directions and at depth, albeit truncated by basement at around 480m beneath the surface topography. The Competent Person recommends that the Indicated Mineral Resource be used to underpin an economic Scoping Study (as defined by the JORC Code) of the mineralisation. |

**Section 3: Estimation and Reporting of Mineral Resources**

*(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)*

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| **Database integrity** | *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.*<br>*Data validation procedures used.* | The drilling database was independently reviewed and audited by the Mineral Resource consultant using appropriate data verification algorithms. |
| **Site visits** | *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*<br>*If no site visits have been undertaken indicate why this is the case.* | The Competent Person has twice visited the Iron Bear project and has personally collected samples and verified reports and observations on which this Mineral Resource estimate relies. The Competent Person has separately attended the St Johns offices of the Labrador Geological Survey and verified historic data. |
| **Geological interpretation** | *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*<br>*Nature of the data used and of any assumptions made.*<br>*The effect, if any, of alternative interpretations on Mineral Resource estimation.*<br>*The use of geology in guiding and controlling Mineral Resource estimation.*<br>*The factors affecting continuity both of grade and geology.* | The Competent Person observes that the geology is locally complicated but the overall taconite geology and distribution is well understood, at the scale of an Inferred and Indicated Mineral Resource applied to bulk mineralisation.<br>The continuity of the mineralisation is considered to be good, based on the drilling, geophysical interpretation, geostatistical analysis and geological mapping.<br>It is likely that further drilling will bring considerable detailed variation to sectional interpretation but is unlikely to change the overall understanding of the mineralisation. |
| **Dimensions** | *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.* | The Mineral Resource estimate for Iron Bear is defined along approximately 10,000 m of strike length and a range of 5,000 to 7,500 m of width for the central portion, to a depth pf 400m. |

| Criteria | JORC Code explanation | Commentary |
| --- | --- | --- |
| **Estimation and modelling techniques** | *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.*<br><br>*The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.*<br><br>*The assumptions made regarding recovery of by- products.*<br><br>*Estimation of deleterious elements or other non- grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).*<br><br>*In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.*<br><br>*Any assumptions behind modelling of selective mining units.*<br><br>*Any assumptions about correlation between variables.*<br><br>*Description of how the geological interpretation was used to control the resource estimates.*<br><br>*Discussion of basis for using or not using grade cutting or capping.*<br><br>*The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.* | The Mineral Resource estimate for Iron Bear was prepared based on drillhole data to the end of 2012.<br><br>The Mineral Resource is reported above 250 m elevation level (about 350 m from surface using block sizes of 20 mx x 100 my x 20mz and is based on results from 81 diamond drillholes totalling 23,735 m.<br><br>Holes from earlier drilling were excluded if they did not intersect the entire mineralised zone. The drillhole spacing along the strike is approximately 600 m and the hole spacing on the cross sections varied from 60 m to about 250 m and with vertical depths ranging from of 50 m to 400 m.<br><br>A modelling cut-off grade was applied at 10% magFe and used to create the constraining wireframes. Grade interpolation was based on equal length regular downhole composites of 3 m, generated from raw drillhole intervals. The original assay intervals were different lengths and required normalization to a consistent length.<br><br>The statistical distribution of the %TFe and<br><br>%magFe samples demonstrates good normal distributions and no grade capping was used in the Mineral Resource estimation. Bulk density was determined from pulps of 315 samples using a gas comparison pycnometer.<br><br>Experimental variograms were prepared using the composited assay dataset for magFe and TFe.<br><br>Variograms were constructed from the average strike (140°) and the general dip (-20°NE) and a search ellipsoid was designed incorporating an axis of anisotropy and applied parameters to interpolate grade.<br><br>An Ordinary Kriging algorithm was used to interpolate the blocks.<br><br>Dynamic rotation was applied, based on thrust geometry and geophysical interpretation. Search ellipses were derived from variography at 1,750mX by 300mY by 50mZ. For each interpolation, the number of 3m informing composites was set at:<br><br>Minimum = 5<br><br>Maximum = 20<br><br>Maximum per hole = 20<br><br>The Competent Person considers that this is appropriate at this level of confidence and in this style of mineralisation.<br><br>The geological interpretation was extended beyond the more densely drilled parts of the deposit in accordance with confidence in the data compilation. |

| Criteria | *JORC Code explanation* | Commentary |
|---|---|---|
| **Moisture** | *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.* | Tonnages are reported on a dry basis. |
| **Cut-off parameters** | *The basis of the adopted cut-off grade(s) or quality parameters applied.* | Cut-off grades were applied based on observation of nearby operations in similar geology and the presence of a natural magnetite cut-off in the taconite. |
| **Mining factors or assumptions** | *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous.*<br>*Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.* | No mining assumptions have been made other than that were it to be mined, Iron Bear would engage conventional cold-weather truck-and- shovel iron ore mining techniques, as practised over an extensive period elsewhere in the region. |
| **Metallurgical factors or assumptions** | *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous.*<br>*Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.* | Metallurgical assessments indicates that the magnetite at Iron Bear is readily separable using conventional wet magnetic separation techniques resulting in a 95.5% recovery to produce a 68.9% Fe concentrate at 3.4% $SiO_2$ content. The produced concentrate is amenable to further upgrade using reverse flotation methods to 70.6% Fe and 1.2% $SiO_2$ at an overall 88.9% magnetite recovery including a secondary 67.0% Fe, 4.6% $SiO_2$ product. Bond Work Index (BWi) is indicated at around 16.7 kWh/t. |
| **Environmental factors or assumptions** | *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.* | The M3 Metals PEA examined potential tailings disposal options and did not report any impediment to tailings disposal at a preliminary level. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| **Bulk density** | *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.*<br>*The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit*<br>*Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.* | Bulk density was estimated into the block model by using a regression based on total iron content. The regression was based on laboratory specific gravity measurements of core and estimated bulk densities determined by downhole geophysics. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| **Classification** | *The basis for the classification of the Mineral Resources into varying confidence categories.* *Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity, and distribution of the data).* *Whether the result appropriately reflects the Competent Person's view of the deposit.* | The Mineral Resource estimate is classified as Inferred and Indicated, based on the density of drill data and support from a comprehensive compilation and analysis of all available drilling, sampling, mapping and geophysical data, which shows continuity of mineralisation with unresolved localised variation. The Competent Person considers this classification to be appropriate in this situation. |
| **Audits or reviews** | *The results of any audits or reviews of Mineral Resource estimates.* | No audits or reviews have been undertaken of the current Mineral Resource estimate. It will be revised during Cyclone's proposed Scoping Study process. |
| **Discussion of relative accuracy/ confidence** | *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.* | The Competent Person considers the Mineral Resource estimate to be an adequate global estimation of the mineralisation, which shows good geological continuity between drill sections. The mineralisation has been projected beyond the more densely drilled sections, based on this geological and geostatistical continuity and the evidence of geophysics and geological mapping. Statistical analysis of the data supports this view . Locally, the deposit shows great variability as a result of the mineralisation being stacked by thrust faults. This will require resolution by further drilling but the Competent Person does not consider it to be material for a global estimate in an iron ore deposit. Further drilling and resolution of local geology is required to increase confidence to an Indicated categorisation or better. |

PROJECT IRON BEAR

CYCLONE METALS LTD

## Table of drillholes used in Mineral Resource Estimation

| Hole Id | Easting | Northing | Elv | Collar Azi | Collar Dip | Total Depth (m) | Start Date | End Date | Collar Location Survey | Collar Azimuth Survey | Downhole Attitude Survey |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DDH103-001 | 616905.23 | 6092173.58 | 709.17 | 230 | -65 | 84.42 | 1-Jul-11 | 3-Jul-11 | No | No | No |
| DDH103-002 | 616532.24 | 6092500.52 | 710.54 | 230 | -65 | 81.40 | 3-Jul-11 | 5-Jul-11 | No | No | No |
| DDH103-003 | 614303.32 | 6094687.23 | 647.42 | 230 | -60 | 209.40 | 5-Jul-11 | 12-Jul-11 | No | No | No |
| DDH103-004 | 614161.41 | 6093363.08 | 661.76 | 50 | -45 | 50.44 | 12-Jul-11 | 14-Jul-11 | Yes | No | No |
| DDH103-005 | 616367.29 | 6091668.42 | 679.67 | 50 | -45 | 50.40 | 22-Jul-11 | 23-Jul-11 | No | No | No |
| DDH103-006 | 616367.29 | 6091668.42 | 679.67 | 50 | -50 | 209.40 | 24-Jul-11 | 29-Jul-11 | No | No | No |
| DDH103-007 | 614203.33 | 6090462.39 | 594.15 | 230 | -50 | 164.94 | 2-Aug-11 | 6-Aug-11 | Yes | Yes | No |
| DDH103-008 | 611905.48 | 6094704.57 | 626.10 | 0 | -90 | 121.01 | 7-Aug-11 | 9-Aug-11 | Yes | Yes | No |
| DDH103-009 | 613919.82 | 6090700.29 | 627.60 | 230 | -50 | 157.89 | 10-Aug-11 | 13-Aug-11 | Yes | Yes | No |
| DDH103-011 | 605275.96 | 6097587.58 | 522.31 | 0 | -90 | 124.36 | 14-Aug-11 | 16-Aug-11 | No | No | No |
| DDH103-012 | 605231 | 6097269.50 | 528.36 | 0 | -90 | 120.70 | 12-Aug-11 | 14-Aug-11 | No | No | No |
| DDH103-013 | 605348.02 | 6096910.43 | 532.37 | 0 | -90 | 122.83 | | | No | No | No |
| DDH103-015 | 605777.03 | 6096575.37 | 527.83 | 0 | -90 | 142.34 | | | No | No | No |
| DDH103-016 | 607440.01 | 6095186.29 | 521.65 | 0 | -90 | 172.82 | | | No | No | No |
| DDH103-017 | 609113.9 | 6093980.33 | 520.96 | 0 | -90 | 196.60 | | | No | No | No |
| DDH103-018 | 608597.73 | 6097361.76 | 636.74 | 0 | -90 | 197.21 | | | No | No | No |
| DDH103-019 | 608143.85 | 6096345.52 | 547.32 | 0 | -90 | 106.07 | | | No | No | No |
| DDH103-020 | 609896.6 | 6097009.84 | 656.29 | 0 | -90 | 148.44 | | | No | No | No |
| DDH103-021 | 617015.2 | 6092528.64 | 716.49 | 230 | -45 | 99.70 | 1-Jul-11 | 3-Jul-11 | No | No | No |
| DDH103-022 | 616080.26 | 6092878.45 | 691.73 | 0 | -90 | 63.95 | 3-Jul-11 | 4-Jul-11 | No | No | No |
| DDH103-023 | 614893.31 | 6093995.29 | 671.92 | 230 | -65 | 173.17 | 4-Jul-11 | 10-Jul-11 | Yes | No | No |
| DDH103-024 | 614290.37 | 6093872.15 | 643.95 | 50 | -60 | 39.01 | 10-Jul-11 | 11-Jul-11 | No | No | No |
| DDH103-025 | 614290.37 | 6093872.15 | 643.95 | 50 | -45 | 121.20 | 11-Jul-11 | 15-Jul-11 | No | No | No |

| Hole Id | Easting | Northing | Elv | Collar Azi | Collar Dip | Total Depth (m) | Start Date | End Date | Collar Location Survey | Collar Azimuth Survey | Downhole Attitude Survey |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DDH103-026 | 614250.43 | 6092888.06 | 668.60 | 230 | -65 | 87.74 | 15-Jul-11 | 19-Jul-11 | No | No | No |
| DDH103-027 | 613808.34 | 6094876.16 | 620.61 | 50 | -70 | 167.00 | 20-Jul-11 | 24-Jul-11 | No | No | No |
| DDH103-028 | 613322.39 | 6094754.04 | 621.47 | 0 | -90 | 139.90 | 25-Jul-11 | 28-Jul-11 | No | No | No |
| DDH103-029 | 615035.39 | 6092293.18 | 687.09 | 50 | -65 | 191.11 | 28-Jul-11 | 31-Jul-11 | No | No | No |
| DDH103-030 | 615075.44 | 6091344.10 | 661.50 | 230 | -50 | 174.16 | 1-Aug-11 | 6-Aug-11 | Yes | No | No |
| DDH103-031 | 614751.49 | 6090924.98 | 639.45 | 50 | -70 | 73.46 | 7-Aug-11 | 9-Aug-11 | Yes | No | No |
| DDH103-032 | 614551.48 | 6091368.98 | 667.63 | 50 | -50 | 154.83 | 9-Aug-11 | 13-Aug-11 | Yes | No | No |
| DDH103-033 | 615647.37 | 6091403.24 | 659.22 | 0 | -90 | 70.00 | 13-Aug-11 | 14-Aug-11 | No | No | No |
| DDH103-034 | 612828.42 | 6094928.98 | 616.98 | 230 | -45 | 182.00 | 13-Aug-11 | 14-Aug-11 | No | No | No |
| DDH103-035 | 612601.41 | 6095375.98 | 619.99 | 230 | -75 | 87.50 | 23-Aug-11 |  | No | No | No |
| DDH103-036 | 612099.43 | 6095560.90 | 607.03 | 230 | -45 | 93.10 | 13-Jul-11 | 31-Jul-11 | No | No | No |
| DDH103-037 | 611576.5 | 6095529.83 | 599.13 | 0 | -90 | 69.70 | 6-Jul-11 | 14-Jul-11 | No | No | No |
| DDH103-038 | 611291.54 | 6095266.76 | 588.24 | 0 | -90 | 102.72 | 20-Jul-11 | 24-Jul-11 | No | No | No |
| DDH103-039 | 611007.59 | 6094994.70 | 576.28 | 0 | -90 | 194.20 | 16-Jul-11 | 20-Jul-11 | No | No | No |
| DDH103-040 | 615954.31 | 6092051.35 | 680.83 | 50 | -50 | 188.30 | 17-Aug-11 | 18-Aug-11 | No | No | No |
| DDH103-041 | 615514.34 | 6092334.29 | 685.17 | 0 | -90 | 41.80 | 11-Jul-11 |  | No | No | No |
| DDH103-042 | 615558.34 | 6092394.30 | 686.20 | 50 | -50 | 75.30 | 16-Jul-12 |  | No | No | No |
| DDH103-043 | 609857.66 | 6096045.68 | 591.88 | 0 | -90 | 178.92 |  |  | No | No | No |
| DDH103-044 | 611461.15 | 6093515.52 | 579.95 | 50 | -60 | 267.31 |  |  | Yes | Yes | No |
| DDH103-045 | 612246.71 | 6091459.46 | 583.86 | 0 | -90 | 165.51 | 16-Aug-11 | 17-Aug-11 | No | No | No |
| DDH103-046 | 612649.22 | 6094542.27 | 613.33 | 230 | -55 | 83.82 | 1-Aug-12 | 16-Oct-12 | Yes | No | No |
| DDH103-047 | 612530.40 | 6094399.49 | 614.49 | 230 | -55 | 239.88 | 5-May-12 |  | Yes | Yes | Yes |
| DDH103-048 | 612291.00 | 6094149.56 | 610.51 | 230 | -55 | 447.80 | 28-Aug-12 |  | Yes | Yes | Yes |
| DDH103-049 | 611223.41 | 6093300.67 | 551.74 | 230 | -55 | 330.71 | 3-Jul-12 | 12-Jul-12 | Yes | Yes | No |

| Hole Id | Easting | Northing | Elv | Collar Azi | Collar Dip | Total Depth (m) | Start Date | End Date | Collar Location Survey | Collar Azimuth Survey | Downhole Attitude Survey |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DDH103-049A | 611214.21 | 6093307.27 | 551.38 | 230 | -55 | 19.81 | 4-Jul-12 | 9-Jul-12 | No | No | No |
| DDH103-050 | 612434.52 | 6094244.23 | 610.48 | 230 | -60 | 435.60 | 29-Aug-12 | | Yes | Yes | Yes |
| DDH103-050A | 612434.46 | 6094244.03 | 610.56 | 230 | -60 | 32.92 | 5-Jul-12 | 6-Jul-12 | Yes | Yes | No |
| DDH103-051 | 611359.84 | 6093403.78 | 565.35 | 230 | -55 | 351.13 | 19-Jun-12 | | Yes | Yes | No |
| DDH103-052 | 611770.18 | 6093767.32 | 596.00 | 50 | -70 | 333.45 | 24-Aug-12 | 27-Aug-12 | Yes | Yes | No |
| DDH103-053 | 611883.22 | 6093899.27 | 610.70 | 50 | -60 | 171.30 | 13-Jul-11 | 20-Jul-11 | No | No | No |
| DDH103-054 | 612685.65 | 6094498.18 | 615.17 | 230 | -55 | 210.62 | 27-Jun-12 | | Yes | Yes | No |
| DDH103-055 | 611077.01 | 6093179.60 | 537.51 | 50 | -80 | 397.50 | 1-Aug-12 | | Yes | Yes | No |
| DDH103-056 | 612104.76 | 6093239.02 | 593.14 | 230 | -50 | 307.24 | 7-Jun-12 | | Yes | Yes | No |
| DDH103-057 | 612452.38 | 6093508.29 | 606.03 | 230 | -60 | 337.72 | 10-Jul-12 | 18-Jul-12 | Yes | Yes | Yes |
| DDH103-058 | 612669.23 | 6093673.38 | 609.79 | 230 | -70 | 286.21 | 3-May-11 | 6-May-11 | Yes | Yes | No |
| DDH103-059 | 611728.19 | 6092166.57 | 565.69 | 230 | -85 | 420.30 | 24-Sep-12 | | Yes | Yes | Yes |
| DDH103-060 | 611876.00 | 6092288.15 | 576.71 | 230 | -60 | 328.00 | 18-Jul-12 | | Yes | Yes | Yes |
| DDH103-061 | 611408.80 | 6091911.16 | 535.45 | 50 | -70 | 310.60 | 11-Jul-12 | 17-Nov-12 | Yes | Yes | Yes |
| DDH103-062 | 611576.01 | 6092032.18 | 553.62 | 50 | -69 | 320.65 | 16-May-12 | 19-May-12 | Yes | Yes | Yes |
| DDH103-063 | 611270.02 | 6091791.44 | 523.91 | 50 | -70 | 353.00 | 25-Jul-12 | | Yes | Yes | Yes |
| DDH103-064 | 612304.35 | 6091864.28 | 599.58 | 230 | -50 | 306.63 | 7-Aug-12 | | Yes | Yes | No |
| DDH103-065 | 612450.92 | 6091993.42 | 608.52 | 230 | -69 | 280.11 | 7-Aug-12 | | Yes | Yes | No |
| DDH103-066 | 612700.30 | 6091413.68 | 613.10 | 50 | -45 | 288.30 | 9-Aug-12 | 14-Nov-12 | Yes | Yes | No |
| DDH103-067 | 612581.81 | 6091308.92 | 603.03 | 230 | -70 | 274.00 | 14-Aug-12 | | Yes | Yes | No |
| DDH103-081 | 612098.19 | 6094015.13 | 604.45 | 230 | -70 | 354.48 | 4-May-12 | | Yes | Yes | Yes |
| DDH103-082 | 611802.84 | 6093011.92 | 576.33 | 230 | -70 | 78.64 | 24-May-12 | | Yes | Yes | No |
| DDH103-083 | 611802.65 | 6093011.85 | 576.24 | 230 | -70 | 203.80 | 15-Aug-12 | 22-Aug-12 | Yes | Yes | No |

| Hole Id | Easting | Northing | Elv | Collar Azi | Collar Dip | Total Depth (m) | Start Date | End Date | Collar Location Survey | Collar Azimuth Survey | Downhole Attitude Survey |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DDH103-084 | 611343.36 | 6092616.74 | 542.08 | 50 | -55 | 313.03 | 1-Oct-12 | 9-Oct-12 | Yes | Yes | Yes |
| DDH103-085 | 612317.67 | 6093425.67 | 605.40 | 230 | -60 | 356.31 | 26-Jul-12 | 30-Oct-12 | Yes | Yes | Yes |
| DDH103-086 | 612308.07 | 6092666.87 | 599.99 | 230 | -50 | 292.30 | 12-Jun-12 | | Yes | Yes | Yes |
| DDH103-087 | 612142.28 | 6092516.21 | 588.06 | 230 | -55 | 356.31 | 13-Aug-12 | | Yes | Yes | Yes |
| DDH103-088 | 611848.52 | 6091481.68 | 555.33 | 50 | -85 | 335.65 | | | Yes | Yes | Yes |
| DDH103-089 | 612032.99 | 6091638.47 | 573.86 | 230 | -70 | 352.96 | 12-Jul-12 | 1-Aug-12 | Yes | Yes | Yes |
| DDH103-090 | 612146.76 | 6091731.52 | 585.83 | 230 | -70 | 221.28 | 13-Jul-12 | 1-Aug-12 | Yes | Yes | Yes |
| DDH103-091 | 612019.22 | 6092406.01 | 581.77 | 230 | -70 | 320.70 | 7-Aug-12 | | Yes | Yes | Yes |
| DDH103-092 | 612534.29 | 6092050.81 | 615.77 | 50 | -55 | 204.20 | 24-Aug-12 | | Yes | Yes | No |
| DDH103-093 | 611491.95 | 6092744.08 | 557.37 | 230 | -59 | 274.10 | 10-Aug-12 | 15-Aug-12 | Yes | Yes | No |
| DDH103-094 | 611815.45 | 6093019.52 | 576.78 | 50 | -80 | 310.60 | 15-Aug-12 | 19-Aug-12 | Yes | Yes | No |
| DDH103-095 | 611407.67 | 6093464.63 | 571.56 | 230 | -80 | 397.80 | 19-Aug-12 | | Yes | Yes | No |
| DDH103-096 | 611719.07 | 6093728.41 | 592.62 | 230 | -65 | 395.90 | 4-Sep-12 | | Yes | Yes | No |
| DDH103-097 | 611687.22 | 6092927.27 | 575.60 | 50 | -77 | 417.30 | 17-Sep-12 | 30-Oct-12 | No | No | No |
| DDH103-098 | 611891.22 | 6093893.27 | 610.80 | 230 | -70 | 420.30 | 30-Sep-12 | | No | No | No |
| DDH103-106 | 611495.72 | 6092744.54 | 557.19 | 50 | -70 | 307.90 | 6-Aug-12 | 21-Aug-12 | Yes | Yes | Yes |
| DDH103-107 | 611658.27 | 6092884.71 | 569.99 | 230 | -70 | 322.20 | 14-Aug-12 | | Yes | Yes | Yes |
| DDH103-108 | 612783.57 | 6093818.16 | 615.47 | 230 | -50 | 240.80 | 16-Jul-12 | 18-Jul-12 | Yes | Yes | No |
| DDH103-109 | 613067.47 | 6094062.65 | 616.31 | 230 | -70 | 425.80 | 8-Aug-12 | 23-Sep-12 | Yes | Yes | No |
| DDH103-110 | 611144.95 | 6092451.71 | 530.25 | 50 | -80 | 299.50 | 20-Jun-12 | | Yes | Yes | Yes |
| DDH103-111 | 612678.79 | 6095091.83 | 616.99 | 230 | -58 | 337.11 | 2-Jul-12 | | Yes | Yes | No |
| DDH103-112 | 612548.22 | 6095004.28 | 624.05 | 230 | -68 | 31.50 | 26-Jul-12 | 28-Jul-12 | No | No | No |
| DDH103-113 | 612555.96 | 6094999.30 | 623.05 | 230 | -68 | 353.30 | 28-Jul-12 | 1-Aug-12 | Yes | Yes | No |
| DDH103-114 | 612350.57 | 6094861.89 | 627.71 | 50 | -70 | 341.10 | 28-Aug-12 | | Yes | Yes | No |

| Hole Id | Easting | Northing | Elv | Collar Azi | Collar Dip | Total Depth (m) | Start Date | End Date | Collar Location Survey | Collar Azimuth Survey | Downhole Attitude Survey |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DDH103-115 | 611870.20 | 6094480.18 | 615.80 | 230 | -70 | 317.60 | 8-Aug-12 | 14-Aug-12 | Yes | Yes | No |
| DDH103-116 | 611728.22 | 6094994.28 | 605.23 | 50 | -80 | 51.50 | 26-Aug-12 | 1-Sep-12 | No | No | No |
| DDH103-117 | 611728.22 | 6094994.28 | 605.23 | 50 | -45 | 60.70 | 7-Aug-12 | | No | No | No |
| DDH103-118 | 611738.53 | 6094985.40 | 606.47 | 230 | -60 | 335.90 | 11-Aug-12 | 18-Aug-12 | Yes | Yes | No |
| DDH103-119 | 611563.30 | 6094848.51 | 597.34 | 230 | -70 | 344.10 | 18-Aug-12 | | Yes | Yes | No |
| DDH103-131 | 611629.87 | 6093631.22 | 590.83 | 50 | -70 | 353.30 | 26-Sep-12 | | Yes | Yes | Yes |
| DDH103-132 | 611959.75 | 6093126.46 | 589.32 | 230 | -70 | 313.20 | 14-Aug-12 | | Yes | Yes | Yes |
| DDH103-133 | 612930.98 | 6093932.97 | 615.20 | 230 | -70 | 272.20 | 3-Jul-12 | 8-Jul-12 | Yes | Yes | No |
| DDH103-134 | 612443.98 | 6092746.56 | 605.00 | 230 | -50 | 324.61 | 3-Jul-12 | | Yes | Yes | No |
| DDH103-135 | 612577.49 | 6092856.41 | 611.80 | 230 | -65 | 337.41 | 3-Jul-12 | | Yes | Yes | No |
| DDH103-136 | 612754.33 | 6092998.05 | 617.80 | 230 | -70 | 343.81 | 24-Aug-12 | | Yes | Yes | No |
| DDH103-137 | 612190.32 | 6094717.93 | 619.58 | 50 | -76 | 338.02 | 25-Jul-12 | 28-Jul-12 | Yes | Yes | No |
| DDH103-138 | 612012.50 | 6094591.53 | 620.18 | 230 | -70 | 343.81 | 1-Aug-12 | 4-Aug-12 | Yes | Yes | No |
| DDH103-139 | 611707.40 | 6094349.52 | 599.67 | 230 | -70 | 342.29 | 8-Aug-12 | 15-Aug-12 | Yes | Yes | No |
| DDH103-140 | 611606.29 | 6094266.91 | 585.26 | 230 | -70 | 425.50 | 14-Aug-12 | | Yes | Yes | No |
| DDH103-141 | 611982.11 | 6093943.50 | 615.34 | 230 | -77 | 432.50 | 26-Aug-12 | | Yes | Yes | No |
| DDH103-142 | 612685.41 | 6094498.17 | 615.13 | 230 | -66 | 496.50 | 4-Aug-12 | | Yes | Yes | No |
| DDH103-143 | 612546.22 | 6093559.27 | 611.11 | 230 | -75 | 481.00 | 26-Aug-12 | | No | No | No |
| DDH103-144 | 612828.22 | 6093915.27 | 616.49 | 230 | -67 | 487.00 | 27-Sep-12 | | No | No | No |
| DDH103-145 | 611283.21 | 6092587.27 | 535.60 | 230 | -85 | 419.00 | 8-Oct-12 | | No | No | No |
| DDH103-146 | 612152.22 | 6093296.27 | 597.40 | 230 | -70 | 407.00 | 17-Oct-12 | | No | No | No |
| Total 72 drillholes | | | | | | 28021.38 | | | | | |