Successful exploration program discovers mineable intersections of near-surface magnetite mineralisation

Key points

- **Stage 2 resource analysis exploration drilling results have confirmed the presence of a prospective, near-surface zone hosting magnetite mineralisation at targeted grades**
- **The discovery supports a change in mining strategy to significantly shorten the Hawsons Iron Project's ramp-up to full production**
- **Further exploratory drilling is required to define the extent and tonnage of the near-surface mineralisation**
- **Work is underway to determine the scope and cost of this further drilling and to obtain regulatory approvals**
- **Sufficient working capital on hand to fund the estimated further exploratory drilling**
- **Encouraging preliminary results received from sampling and pilot test work programs to validate the redesigned mineral processing circuit**

Hawsons Iron Ltd (**Hawsons** or the **Company**) is pleased to announce that exploratory drilling during the first half of 2023 has identified a prospective, near-surface magnetite mineralisation at targeted grades with potential to extend significantly along strike to the south-west.

Executive Chair Mr Bryan Granzien said positive assay results from 10 of 12 Reverse Circulation (RC) holes drilled within an out-cropping area referred to as the Fold Zone to the south of the existing mineral resource warranted further exploration.

"Combined with further physical and geophysical mapping, these results provide a clear basis for additional drilling to define the extent, tonnage and grade of this near-surface mineralisation, for even stronger enhancement of the Hawsons Iron Project's economics," he said.

"This also means we have more work to do, such as mapping visible outcropping, ground-based geophysical surveys and surface trenching before undertaking the additional drilling."

The Company has sufficient working capital on hand to fund these activities – the cost of which would be dwarfed by the potential economic benefits for the project.

Purpose of exploration program

Mr Granzien said Hawsons, as a key action from the Strategic Review, was targeting access to an additional volume of shallower magnetite ore above a depth of 150 metres with a grade greater than 9 per cent Davis Tube Recovery (DTR) mass recovery to help accelerate the project's cash flow during the first few years of operation.

"The confirmed presence of mineable widths of targeted-grade mineralisation above the base of oxidation in the southern Fold Zone supports a change in mining strategy to greatly shorten the project's ramp-up period to full production," he said.

Activity on the Bankable Feasibility Study (BFS) was paused in October 2022 to preserve capital and instigate a Strategic Review. (*See ASX Announcement dated 1 February 2023: Hawsons endorses modified 11 Mtpa BFS and Strategic Review action plan*)

To further improve the project's economics and Net Present Value the Strategic Review recommended a three-pronged action plan comprising:

- Additional value engineering analysis to further reduce capital and operating costs;
- A three-stage resource analysis program targeting higher grade ore (> 9 per cent DTR) above a depth of 150 metres, to help accelerate start-up cash flow; and
- Fostering collaboration by industry, government and communities to support development of projects using shared resources and infrastructure in the Braemar mineral province.

Extensive engineering and strategic planning studies during the first phase of the BFS in 2022 concluded the vast bulk of the Hawsons magnetite deposit could be mined profitably.

However, most of the higher-grade tonnes within the currently defined mineral Resource start at a depth requiring a large tonnage of waste and low-grade mineralisation to be mined at considerable cumulative cost before the project can reach full production.

Conceptual modelling has shown that shortening the ramp-up period, combined with other strategies the Company is investigating on processing, concentrate transport and site services, has potential to deliver a much-improved project value. (*See ASX Announcement dated 13 June 2023: Strategic Review Update*)

Regarding the recommended value engineering analysis, Mr Granzien said Hawsons had begun to receive feedback from sampling and pilot test-work programs underway to validate Stantec's redesigned mineral processing circuit.

"We expect to be in a position to announce the results of this work within the next few weeks, but the preliminary findings have been particularly encouraging, including a potentially substantial reduction in comminution power consumption at no additional capital cost," he said.

The main objective of proving the new processing sequence recommended by the Stantec value-engineering analysis has been achieved, albeit with some changes to the comminution circuit configuration.

Exploration drilling delivers positive results

The 2023 exploration program was designed to assess shallower mineralisation, mainly above the base of oxidation, and involved 3,568 metres of RC drilling for 22 holes in two prospective zones shown on the accompanying map (Figure 1).

Guided by areas of outcrop mapping aligning with prior magnetic surveys, 12 holes drilled in the southern Fold Zone confirmed the occurrence of steeply dipping zones of greater than 9 per cent DTR magnetite mineralisation with mining intersections of 10-100 metres extending above the base of oxidation.

Drilled to an average vertical depth of 123 metres, these holes spanned approximately 1.5km along the strike of the outcrop zone over a width of about 270 metres. The accompanying downhole Fold Zone laboratory analysis graphics in (Figure 2) show DTR averages in 10 of the holes ranging from 10.2-16.9 per cent, with samples in several holes well above 20 per cent. Lower assay results from the remaining two holes reflected their location further down-dip from the outcrop area.

The 10 holes drilled in the north-western area closed off the main zone of mineralisation, confirming historic modelling of the deposit by determining boundaries to the north-west, and further de-risking decisions on the location of infrastructure within this area.

Mr Granzien reiterated that the program was designed to test the existence of near surface ore and was not intended to achieve a close enough sample spacing to allow resource estimation of the near-surface mineralisation.

"For this reason the mineral Resource estimate has not been updated from September 2022, although the results have been incorporated into our geological model," he said.

Next steps

Based on the general dip of the structures in the Fold Zone, Mr Granzien said the high-grade intercepts correlated with mapped outcrop, therefore supporting the possibility that they continued to surface or close to surface.

"This program has achieved our goal by defining prospective, shallow mineralisation in the Fold Zone with potential to extend significantly further along strike to the south-west, but we need to undertake further drilling to achieve a Resource level of confidence in line with the JORC Code 2012," he said.

The next steps to define the extent, tonnage and grade of shallow mineralisation in the Fold Zone and to the south-west include:

- Further delineation of near surface magnetite mineralisation using mapping of visible outcrop and detailed ground-based magnetic and other geophysical surveys to trace near surface zones where the structures do not outcrop;
- Surface trenching across outcrop and near surface zones to measure location, width and DTR grade at surface; and
- Drilling on lines to establish shape, extent and continuity of potentially mineable zones.

Mr Granzien said Hawsons now had significant evidence for planning a more targeted drilling campaign to upgrade Resource tonnes near surface in the Fold Zone and along strike to the south-west.

This evidence included:
- Mapping of outcropping, magnetite-bearing siltstones with high magnetic susceptibility measurements, including one outcrop sample which returned more than 21 per cent DTR;
- Sumps dug next to drill holes in the 2023 program which exposed iron bearing siltstones with high magnetic susceptibility just below surface;
- Correlation of mapped outcrops with drill intercepts of higher DTR material using dips measured in outcrop; and
- Outcrop and aeromagnetic anomalies extending along strike south-west of the Fold Zone for several kilometres beyond the currently modelled mineralisation.

Sampling during the 2023 exploration program

Figure 1: 2023 exploration program
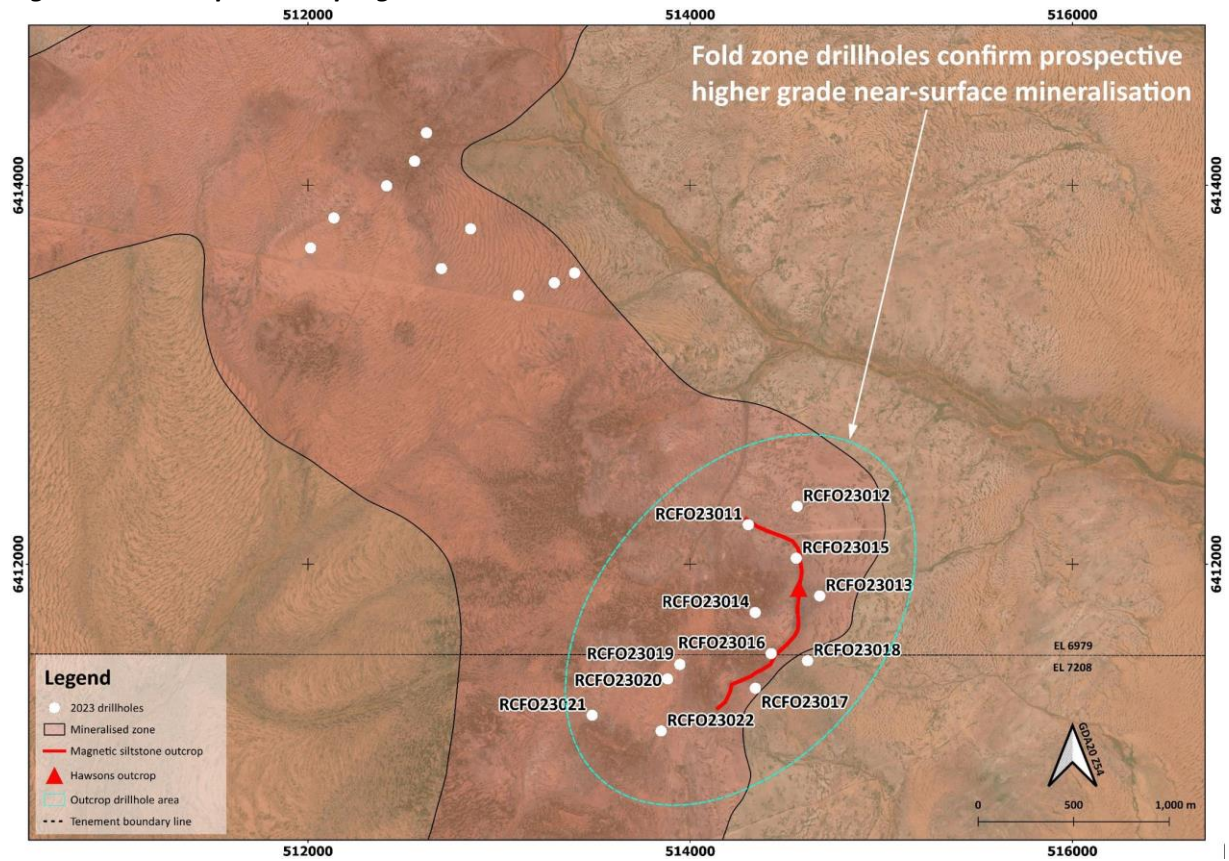
Figure 2: Downhole Fold Zone laboratory analysis results

As required, the full Hawsons Iron Exploration Results 2023 Program Report and related JORC Code, 2012 Edition Table 1 are attached.

Released by authority of the Board
Hawsons Iron Limited
8 August 2023
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About Hawsons Iron Ltd
Hawsons Iron Ltd (ASX: HIO) is an iron ore developer and producer listed on the Australian Securities Exchange. The company is focused on developing its flagship Hawsons Iron Project near Broken Hill into a premium provider of high-quality iron ore products for the global steel industry.

The Hawsons Iron Project is situated 60km southwest of Broken Hill, New South Wales, Australia in the emerging Braemar Iron Province. It is potentially capable of producing the world's highest-grade iron product (70% Fe), making it among the world's leading undeveloped high-quality iron ore concentrate and pellet feed projects.
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-ENDS-

Hawsons Iron Exploration Results 2023 Program

Report Date: 08/08/2023

This report outlines the sampling techniques used and data taken at Hawsons Magnetite Project in western New South Wales (NSW). It also covers the reporting of exploration results for the 2023 exploration drilling program.

1. *Location*

The Hawsons magnetite project is about 60km south-west of Broken Hill in western NSW (see Figure 1). The deposit is 30km from the Adelaide-Sydney railway line, the Barrier Highway, The Silver City Highway and a 220kV power supply line.

Terrain is generally flat and the red soil ground surface is covered in short shrubby vegetation (mainly sat bush & blue bush). It is approximately 1.5 hours drive to the site from Broken Hill. The project area lies within the Hawsons Exploration Licence areas EL6979, EL7208 and EL7504.
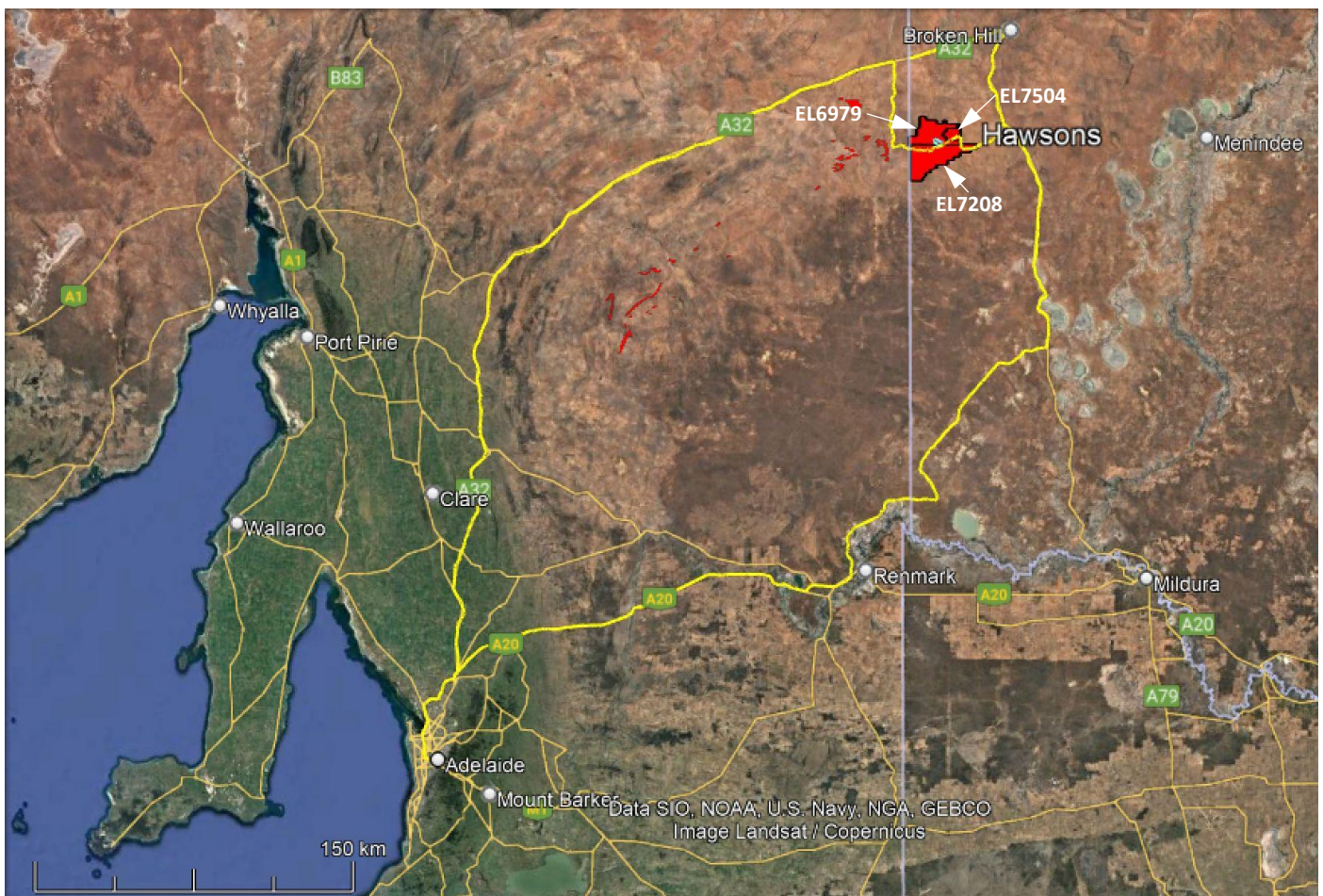
Figure 1: Hawsons magnetite project location and Exploration Licences.

Figures 2a-2c show the location of holes drilled in the 2023 exploration program. Table 1 in the Appendix provides information on collar, depth, orientation and other locational data. Table 2 shows the data that was available in the database as at 04/07/2023.
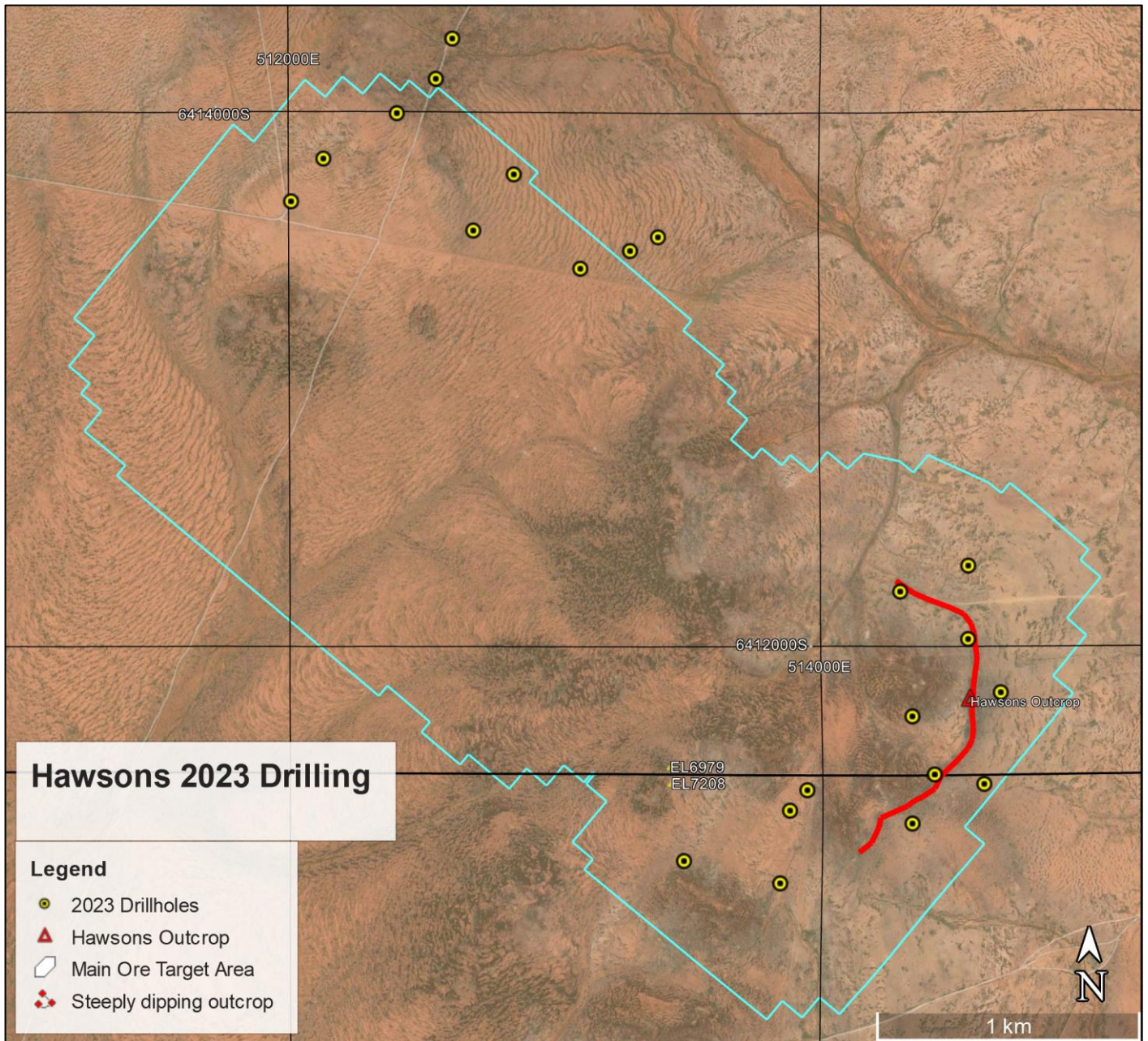
Figure 2a: 2023 exploration drillhole locations.
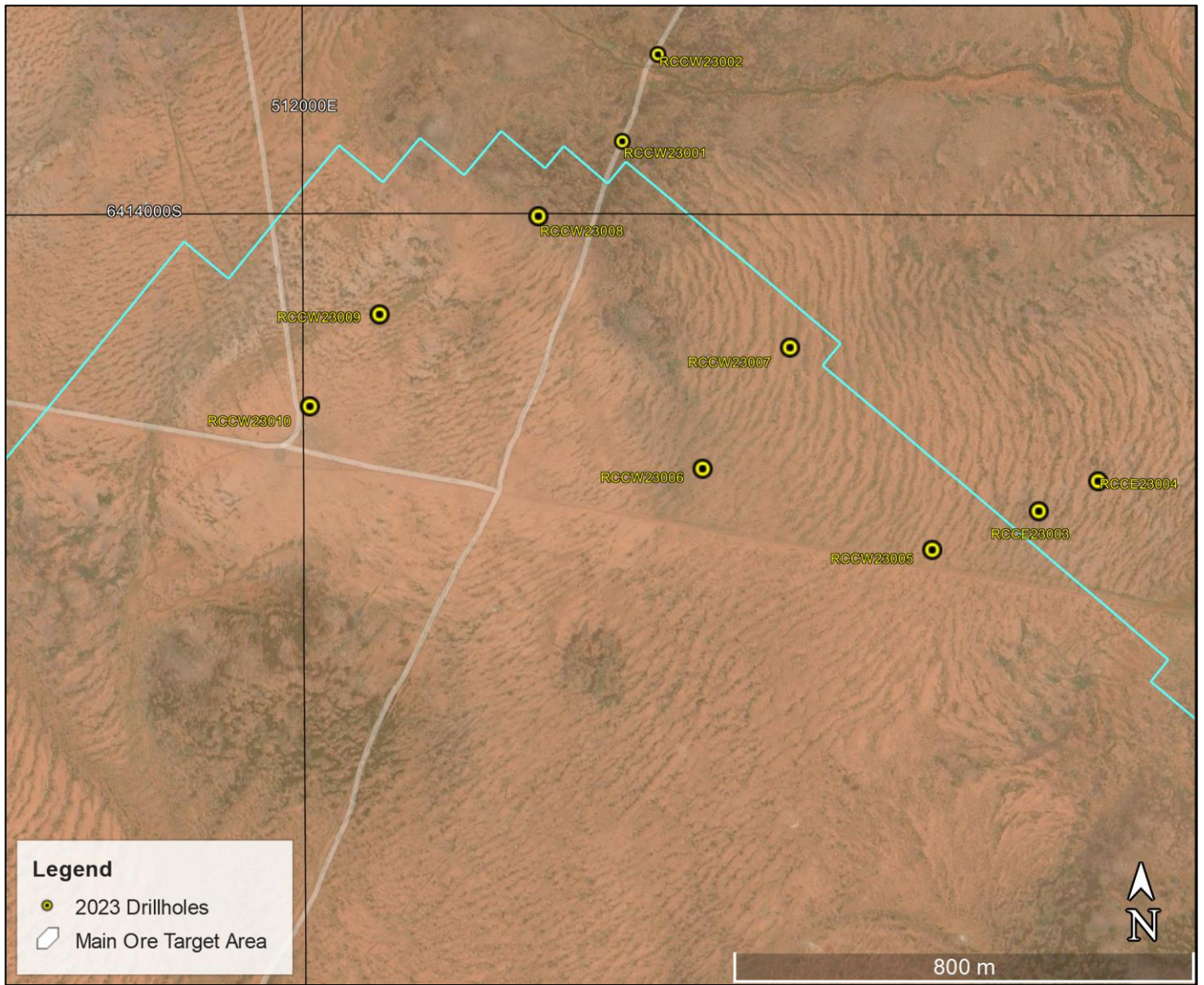
Figure 2b: 2023 exploration drillhole locations in the Core Area.
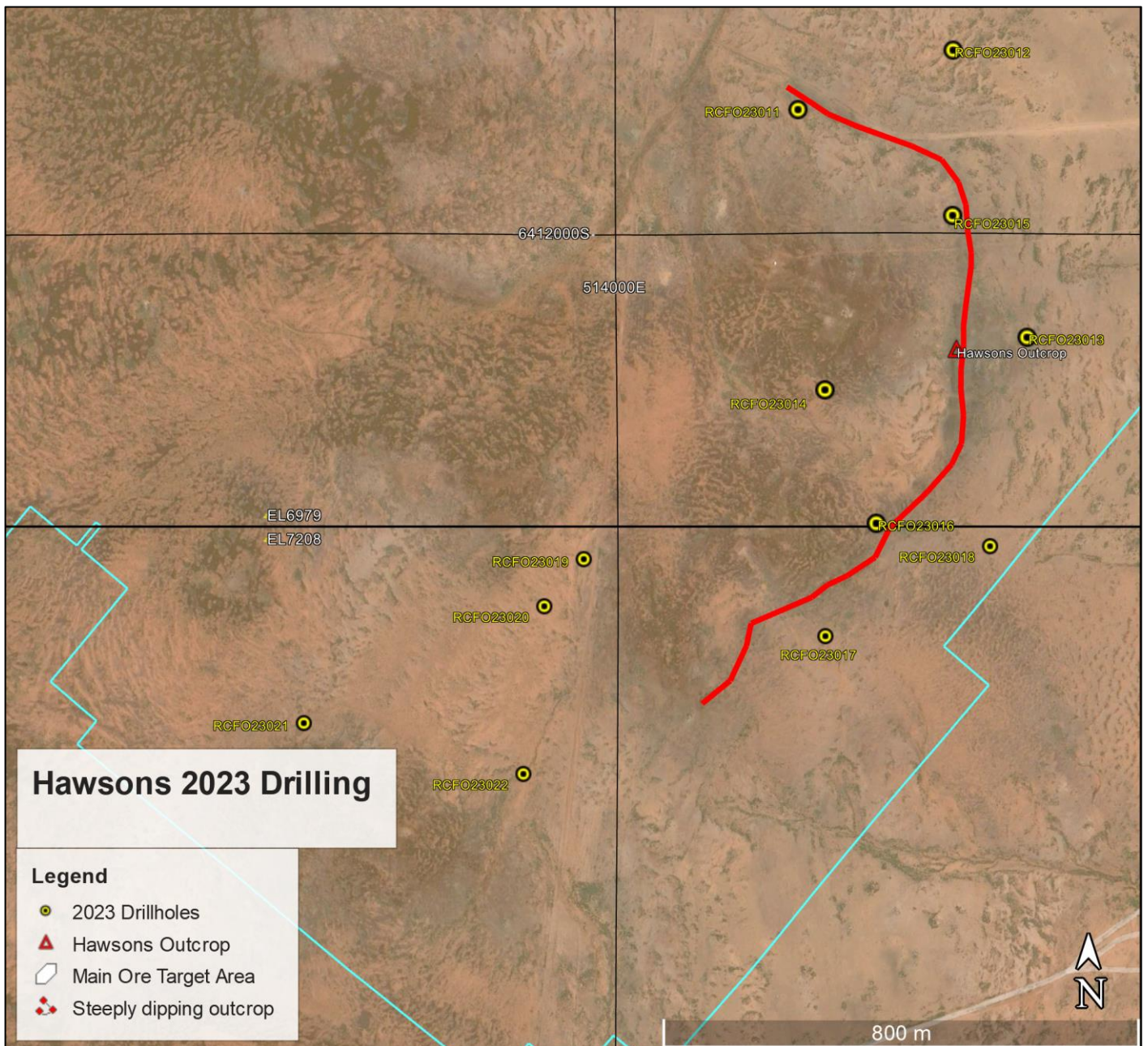
Figure 2c: 2023 exploration drillhole locations in the Fold Area.

2. *Brief Geology*

The Hawsons deposit lies in Neoproterozoic sedimentary basement rocks of the Adelaide Fold Belt. Specifically, it is within the Yudnamutana Sub-Group (750 -700) Ma at the base of the Umbertana Group and contains diamictite & calcareous siltstones (tillites), quartz sandstones, dolomite and magnetite & hematite rich units of the Braemar Ironstone Facies.

Mineralisation comprises bands of variable thickness of disseminated, idioblastic magnetite in low metamorphic grade fine grained siliciclastics and diamictites. Siliciclastic grain size tends to provide a strong control to mineralisation. Substantial regional deformation has occurred but, locally, the main mineral units are relatively straight forward moderately dipping units.
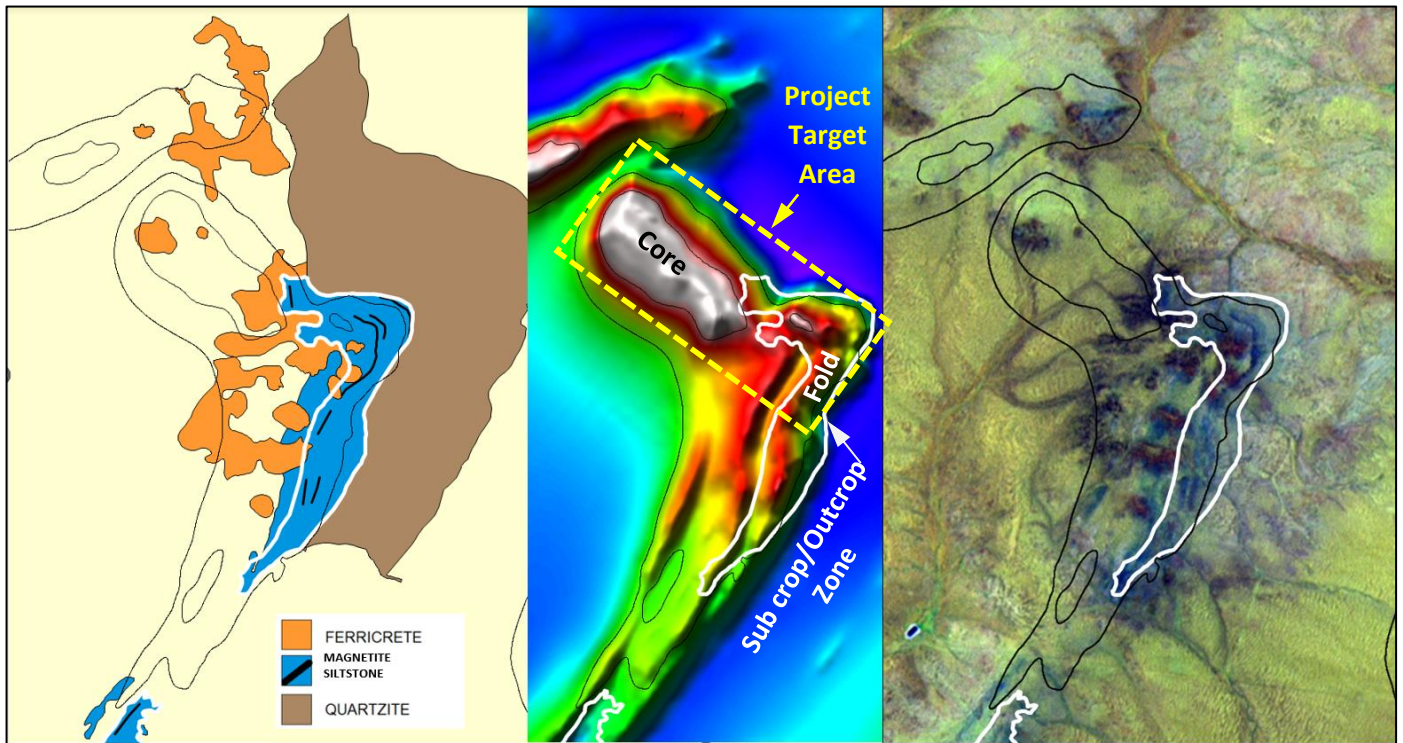
Figure 3: Surface geology, magnetic anomaly signature and Aster image (source: Donohue, 2012)

The Hawsons magnetic anomaly represents a SW plunging syncline and this anomaly defines the target mineralisation. Steeply-dipping magnetite siltstone outcrop is limited to the area bounded by the white polygon.   The yellow polygon outlines the target mineralised zone (Figure 3). The north-western portion of the project target area is under cover.

3. *Brief Historical Drilling Summary*

Carpentaria Resources (CAP) Drilling Summary

In 2009, CAP drilled three RC holes that were sampled to TD and analysed from base of oxidation. This drilling confirmed mineralisation in the Core area. Following the 2009 program, drilling consisted of a mixture of reverse circulation (RC) from surface, diamond tails to RC pre-collars (PD) and diamond from surface (DD). A total of 73 drillholes for 21,429.5m, were drilled by CAP in two main phases i.e., 2010 (RC & DD) and 2016 (RC). RC drillholes were drilled to obtain 1m bulk samples with sample compositing (various lengths under geological control) via spear sampling applied in order to obtain manageable sample sizes for laboratory sample prep and assaying. For the 2010 RC drilling, sampling comprised 2m to 10m 3kg composite samples. The 2016 sampling comprised 5m composites. Geophysical logging was completed for most holes and consisted of natural gamma, magnetic susceptibility, density and calliper readings. The sampling techniques are considered appropriate for the deposit type with all sampling to industry standard practices. No recoveries available for the RC drilling (a minimal number of wet samples) but very good recoveries were noted for the DD. Hole twinning suggested no grade issues with the RC drilling. Logging used a mixture of qualitative and quantitative codes.

All relevant intersections were logged with the geological logging of sufficient detail to allow the creation of a geological model. All RC sample metres were sub-sampled, sieved, washed and stored in a labelled plastic chip tray. All remaining drill core after sampling was stored in labelled plastic core trays and subsequently stored at the company's offices in Broken Hill.

The 2010 RC samples were composited using geological control via the spear sampling method of the 1m bulk sample bags. The spear method was concluded by CAP to be adequate based on the results of a handheld XRF orientation exercise. The compositing produced a 2m to 10m 3kg sample for laboratory analysis at ALS Labs in Perth. The 2016 RC samples were split using a riffle splitter (no details of type used) that produced a 1/16th split taken from the rig every metre and then composited to 5m intervals by splitting again using a 50/50 splitter to give a 6-7kg sample. DD core was cut into half core using a brick saw and diamond blade. The core was cut using the orientation line or perpendicular

to bedding. to produce an 8m composite sample (predominantly NQ core). Half core was sent to ALS Perth for analysis, whilst remaining half core was retained for reference.

Sample preparation by ALS Laboratories involved crushing, sub-sampling and pulverising to a 38 micron size using an industry standard procedure. The QAQC programme was variable sometimes not to industry standard; included field and lab duplicates. All sampling methods and samples sizes are deemed appropriate.

The recovered magnetic fraction analysis was measured by using the Davis Tube method with concentrate analysis by XRF. The QAQC programme was variable sometimes not to industry standard; included the use of Coarse blanks certified reference material and 2nd lab checks. All assay methods are deemed appropriate.

The 'twin hole' site data was limited but although there is demonstrable variation in average magnetite grades within several metres along-strike, there is no evidence of a consistent positive bias in the magnetite levels determined for RC samples

Drillhole collars were located by a local surveyor using a Differential GPS with accuracy to less than one metre. Coordinates were supplied in GDA 94 – MGA Zone 54. Down hole surveys for the 2010 drilling were initially recorded as single shot digital displays and were then recorded using a gyroscope due to the highly magnetic nature of the deposit. All the 2016 drillholes had downhole surveys measured using a gyroscope.

Hawsons 2021-22 Drilling Program

The 2021-22 exploration program was comprised of drilling 3 fully cored geotechnical holes (HQ3), 8 partially-cored geotechnical holes (RC top and HQ3 tail), 55 infill Resource upgrade holes (a mix of RC only and RC top with HQ3 diamond tail) and 2 large diameter holes (200mm diameter PCD). All holes were drilled to inform detailed mine design studies.

The geotechnical holes were drilled to determine pit wall (hanging wall, foot wall and end walls) stability and to investigate geological structures. The resource infill drillholes focussed on upgrading the Resource from Indicated status to Measured status, from Inferred status to Indicated status and to investigate geology.

QAQC for 2022 sampling was carried out as follows:

- Field precision duplicates defining total precision / primary sampling error outcomes showed relative precision and bias which were acceptable compared with the limits defined for Davis Tube Recovery Magnetics% (DTR Mags%) and Head Iron % (Head Fe%).
- Half-field pairs defining field halving precision / primary sampling error outcomes showed relative precision and bias which were acceptable compared with the limits defined for DTR Mags% and Head Fe%.
- The OREAS 700 & 701 Certified Reference Materials (CRM's) defining analytical precision / analytical error outcomes showed relative precision which was acceptable compared with the limits defined for DTR Mags%.
- The OREAS 700 & 701 Certified Reference Materials (CRM's) defining analytical precision / analytical error outcomes showed relative precision and bias which were acceptable compared with the limits defined for Head Fe%.
- The OREAS 700 & 701 Certified Reference Materials (CRM's) defining analytical precision / analytical error outcomes showed relative bias which was not acceptable compared with the limits defined for DTR Mags%. The absolute bias was calculated at -0.5% for the OREAS 700 CRM, with only two outcomes for the OREAS 701 CRM being attained, but showing a similar low bias (though still within CRM limits). That is, 0.5% lower DTR outcomes generally. The testing laboratory was made aware of this difficulty early in testing via data processing checks and maintained that the outcomes were due to the supplied OREAS 700 & 701 mass of 50 grams being lower than the DTR test mass requirement of 150 grams.
- Hawsons will investigate further including supplied sample mass requirements and effects for future programs.
- The OREAS 700, 701 & GIOP 96 CRM testing on of the Head Sample (ore) for elemental oxides and elements of SiO2, Al2O3, P, S, TiO2 and LOI (Loss on Ignition) either had precision and bias outcomes or control limits met jointly or in at least one instance.
- The GIOP 118 CRM testing of the Mags Sample (concentrate) for elemental oxides and elements of SiO2, Al2O3, P, S, TiO2 and LOI (Loss on Ignition) either had precision and bias outcomes or control limits met jointly or in at least one instance.
- Laboratory duplicates were tested for Head Iron (Fe%) for the measurement component (XRF measuring device) were from the same prepared sample and were found to be in accord with required analytical precision limits.
- Blanks were found to be in keeping with ranges observed in the 2016 program for DTR Mags% and Head Fe%.
- All sampling methods and samples sizes were deemed appropriate.

4. Hawsons Q1-Q2 2023 Exploration Program – Drilling, Logging & Sampling

The drilling program was completed in the first-half of 2023 and consisted of 22 RC holes to a shallow depth of approximately 150m. These holes were not planned at spacings to achieve an increase in Resource and were not drilled into the lower unoxidised mineralised zone. Rather, the purpose of this drilling program was to determine if shallow mineralised ore could exist in the upper oxidised zone and sub crop/outcrop zones in the north and southeast of the ore target area. This was based on the premise that shallow ore of a sufficient grade could make a significant commercial contribution to reducing the cost of accessing the higher-grade, but deeper, ore body. As such, there has been no material change to the Resource.

Drilling Technique

- For the 2023 program (all RC drilling), the drilling was carried out using a truck mounted Sandvik UDR 1200HC. An Axis Champ Navigator Gyroscope was used to monitor drillhole deviation.
- 6m x 4.5" rods with stabiliser subs and 5-5/8" face bits were utilised in the drill string.
- The azimuth was set via sighter pegs marked out at the nominated bearing via an Azimuth Pointing System. The drill rig was aligned to these pegs when it drove onto the drillhole site.
- A Multi-wave Sensors GPS Azimuth Pointing System was used to determine the location of the drillhole azimuth ground marker pegs. Three pegs were placed in the ground along the azimuth direction for the rig to drive in and align to: 1) a sighter peg at 15m away and two other pegs at the wheel base length. With the aid of a spotter, this allowed the drill rig to drive straight onto alignment at the drillhole location.
- The rig was jacked up and levelled using an inbuilt, bubble-levelling device on the rig.
- The rig mast inclination was determined using a SOLA NAM 50 50cm inclinometer.

Figure 6: Rig and mast alignment via a Multi-wave Sensors GPS Azimuth Pointing System and a SOLA inclinometer.

Data Logging

- Geological logging of chips/core/rock samples is qualitative by nature.
- For the 2023 program, every RC drillhole was lithologically logged by a geologist and entered into an excel based logging template recording: recovery, moisture, oxidation state, colour, magnetite %, hematite %, martite %, vein composition and %, gangue min, sulphide min. Data was validated against a company lithological dictionary using Lab-In, a proprietary data validation software system, and uploaded to a SharePoint cloud-based file storage facility.
- RC drill chips were wet sieved from each one-meter sample and geologically logged and codes digitally recorded onsite. Washed drill chips from one-meter intervals are stored in chip trays and photographic records are stored on a SharePoint cloud-based file storage facility.
- Handheld magnetic susceptibility was recorded using a CormaGeo RT-1 Magnetic Susceptibility Meter with inbuild data logger. Three measurements were recorded on each 1m RC bulk sample bag (top, middle & base), then averaged to give a single quantitative measurement.

Figure 7: CorMaGeo RT-1 magnetic susceptibility meter
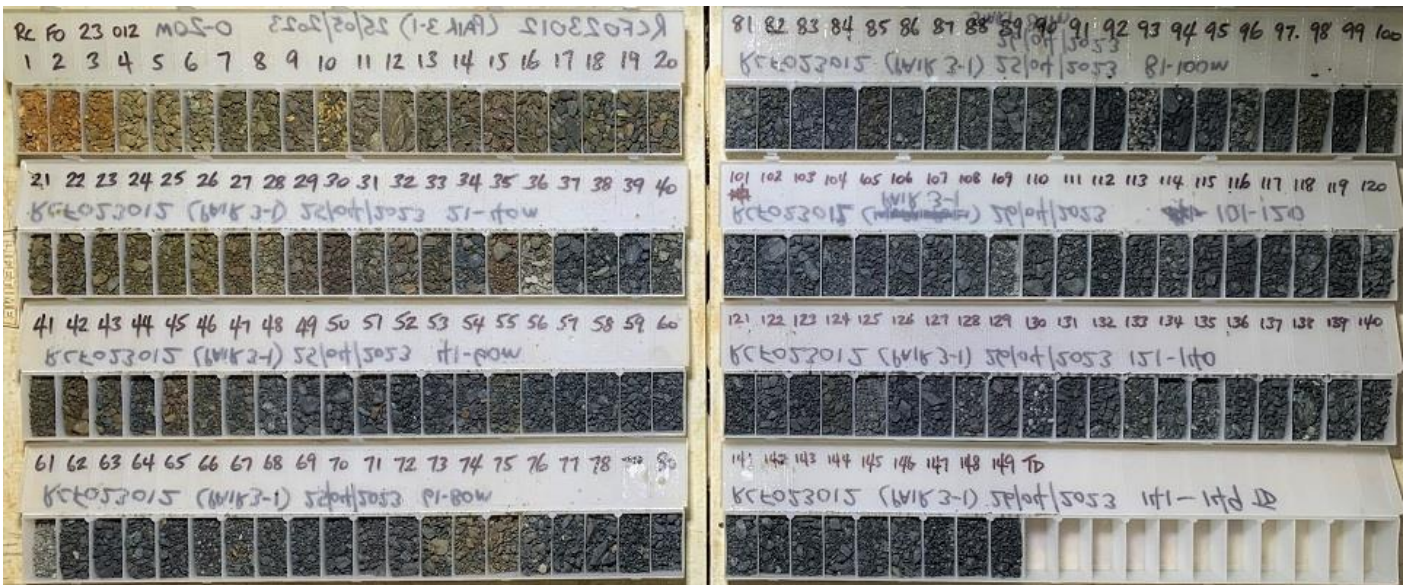
Figure 8: Photo of RC sample chips: Drillhole RCFO23012, 1-149m (TD).

Geophysical Logging

- Geolog Pty Ltd logged each hole with three downhole logging tools:
  - Robertson Geoscience compensated dual density, natural gamma, caliper and temperature probe (Density Combination Probe);
  - Robertson Geoscience magnetic susceptibility probe (Magsus); and
  - Reflex Gyro downhole survey instrument (Gyro).

- QAQC measures/checks applied to these probes included:
  - Density Combination Probe
    - Calibrated in aluminium block and water prior to departure to Hawsons site.
    - Run in test calibration hole at Geolog workshop prior to departure to Hawsons site.
  - Caliper
    - Checked in test jig at Geolog workshop prior to departure to Hawsons site.
  - Gyro
    - Utilises a digital surface-referenced MEMS-gyro system for accuracy calibration; and
    - Tested against driller's Axis rod-string gyro tool results.
  - Magsus
  - Calibrated in Robertson Geoscience calibration sleeve prior to departure to Hawsons site.
  - On return from the Hawsons logging campaign, Geolog logged a 160m deep test hole that is used by other geophysical logging contractors for calibration and obtained matching results (checked all logtypes/parameters, including depth).

Figure 5a: Gyro geophysical logging in progress at drillhole RCCE23005.

Figure 5b: Downhole wireline magnetic susceptibility logging through the drill string.

Field Sampling

From the 2021-22 drilling program Hawsons identified that there is potential for magnetite ore to exist in the upper oxidised zone within the main ore target areas. Consequently, starting with the 2021-22 program, sampling was performed from ground surface to TD. Sampling from surface in the 2023 exploration program is a continuum from the 2021-22 program and samples for assay analysis were taken via Reverse Circulation (RC) drilling from surface to total depth (TD).

During the first-half 2023 drilling program, 22 holes were drilled for 3,568m of RC chips. From both lithology logs and downhole geophysical logs, 2 of the drillholes were determined as being barren of magnetite ore. The samples for these holes were kept and stored, but were not assayed. Full assay data sets for the remaining 20 of the 2023 drillholes were received by 23rd June 2023. QAQC checking of these results followed before producing a validated database.

Site RC sampling, hand-held magnetic susceptibility logging and sample transport

The sampling processes that were followed are outlined as follows:
- Calico primary and secondary sample bag and large (600mm x 900mm) plastic bulk bottom chute bags were pre-labelled ahead of drilling.
- Corresponding sample tags were placed in each bag.
- The sample splitting technique for this program was changed from riffle splitting (as per past practice) to cone splitter sampling.
- The RC chips presented in a mostly-fine talcum powder consistency and the split from the cone splitter under the cyclone was used to obtain two 12% splits (~10-15kg each) for primary and secondary samples and a bulk bottom chute sample (~30-40kg). This was a much better practice for safe handleability while still providing representative samples.
- Prior to start of sampling at each site, the weighing frame rig (equipped with a Wedderburn WS603 digital hanging scale - 150kg capacity and accurate to 0.05kg) was calibrated with certified standard weights (2kg, 5kg, 10kg, 20kg).
- As soon as the 1m interval was drilled, the samples in the bags from the cone splitter were carried to the weighing rig and individually weighed. Each sample weight was entered into an iPad-based digital recording system.
- Sample bag tops were securely tied closed and placed in 30 x 1m samples per row.
- After the end of drilling, 3 readings (top, middle, base) were taken on each of the 1m bulk bottom chute samples using a CoRMaGeo RT-1 magnetic susceptibility meter.
- The 1m primary samples, together with the commensurate QAQC samples (as listed below) were loaded into a palletised IBC containers and the lid was screwed on in preparation for transport to the laboratory. Each IBC container was numbered and labelled on the outside with a list of its contents.
- Chain of Custody procedures were followed to ensure that the samples were accounted for on arrival at the laboratory.
- At the laboratory the 1m bulk samples were sub-sampled via rotary sample divider (RSD) and then combined into 5m composites of approximately 5kg for laboratory sample preparation and assaying.
- Along with primary samples, selected secondary samples were selected for QAQC duplicate analysis at the laboratory.

- Other QAQC checks included:
  ▪ sizing;
  ▪ washed sand blanks;
  ▪ duplicates;
  ▪ coarse residue repeats;
  ▪ pulp repeats;
  ▪ Certified Reference Material (CRM)
  - OREAS 700;
  - OREAS 701;
  - GIOP-118; and
  - GIOP-96.
- Selected samples were sent to ALS Perth laboratory for inter-laboratory result reproducibility checks.
- The residual secondary samples (~12-15kg) from the rig cone splitter that remained at site were loaded into IBCs and are being retained in storage.

Figure 6a: RC samples laid out in rows of 30 x 1m sample piles (1 pile = primary, secondary & bulk samples). Note the weighing rig in use near the end of the second row of samples. At right: Wedderburn digital scale used on weighing rig.

Figure 6b: Magnetic susceptibility measurements being taken on completion of sampling. Samples laid out in rows of 30 x 1m samples. At right: weighing rig being calibrated against the full suite of standard weights (37kg).

Site sub-sampling techniques and sample preparation
During setting of the drillhole collar, the top 6m of the hole were sampled with a shovel on 1m intervals.
The remainder of the 2023 RC samples were sub-sampled through a Metzke Cyclone/Cone Splitter combination (3 chute – one permanently closed). Samples were taken on 1m intervals and were separated into a 12% primary, a 12% library/duplicate sample and a 76% bulk bottom chute sample. All samples were weighed at the drill rig on a weighing rig with a Wedderburn WS603 digital hanging scale (150kg capacity and accurate to 0.05kg). Photographic and videographic records were taken of this process.

Laboratory sub-sampling techniques and sample preparation
Metallurgical sample preparation was completed at Bureau Veritas Laboratory in Wingfield, Adelaide SA. The following process was used:
- Crush the sample to 100% at -3.35 mm.
- A 150 g sub-sample was taken for pulverizing in a C125 ring pulveriser (record weight) – DTR SAMPLE.
- Initially pulverize the 150 g sample for nominal 30 seconds – the sample is unusually soft for a ferro-silicate rock.
- Wet screen the DTR sample at 38 micron pressure filter and dry, screen at 1 mm to de-clump and re-homogenize.
- Record the oversize weights – if less than approximately 20 g is oversize, stop the procedure – failure.
- If failure - select another 150 g DTR Sample and reduce the initial pulverization time by 5 secs, repeat until initial grind pass returns greater than approximately 20 g oversize. Once achieved retain the – 38 micron undersize.
- Regrind only the oversize for 4 seconds of every 5 g weight of oversize.
- Repeat the wet screening, drying, de-clumping & weighing stages until less than 5g above 38 micron remains.
- Ensure the remaining <5g oversize is returned back into the previously retained -38-micron product.
- Report the times and weights for each grind pass phase.
- Combine and homogenize all retained -38 micron aliquots and <5 g oversize –final pulverized product. Sub-sample the final pulverized product to give a 20 g feed sample for DTR work and a ~10 g sample for HEAD analysis via XRF fusion.

Sample security
- All samples were bagged using industry standard UV resistant thermoplastic Samplex bags and stored on site under the supervision of an HIO representative. Samples were combined into polyweave bags and were dispatched to the HIO yard in Broken Hill on a weekly basis and were accompanied by a manifest.
- The polyweave bags of samples were then loaded onto a hardwood pallet and pallet wrapped and secured to ensure no loose material could shift, these were then transported to the laboratory via a trusted freighting network company.
- Samples were transported in palletised IBC containers with lids screwed on with tek screws.
- Chain-of-custody documentation was utilised to track the transport of all samples to the BV Adelaide laboratory.

Figure 7: IBC containers at hole site (with top cut-off as lids) lined up ready to load samples (the lids are inside the containers and will be screwed on before transportation).

Quality of assay data and laboratory tests 2023

The 2023 work included 20 field duplicates for determining total precision at the rate of one duplicate per hole for DTR Mags%, Fe% and other assay data, 40 DTR Mags% certified reference materials (x20 OREAS700 & x21 OREAS701 CRM's) & 84 XRF CRM's (with multi element / elemental oxide comparison, x20 OREAS700 & x21 OREAS701 CRM's, x23 GIOP-96, & x20 GIOP-118) from four different CRM types inserted at the rate of one per hole each, and 21 blank samples (washed sand) for DTR Mags% and Fe% (Head Sample) at the rate of one per drillhole.

Additional check samples of cross-lab, coarse residue repeat samples (to ALS Perth, x43), coarse residue repeat samples (intra-lab, x44), pulp repeat samples (x44), sizing data test (x106), and cross-lab sizing test data (x22) were tested and evaluated.

The OREAS 700 & 701 Certified Reference Materials (CRM's) defining analytical precision / analytical error outcomes showed relative precision and bias which were acceptable compared with the limits defined for DTR Mags% and Head Fe%. These outcomes were further confirmed by cross-lab checks (DTR Mags% reported and verified, Fe% pending).

The additional check samples of cross-lab, coarse residue repeat samples, coarse residue repeat samples, and pulp repeat samples showed larger variations in precision and bias than generally encountered in testing programs. This was due to the significant number of low concentration samples tested for shallow depth holes, which gives increased relative outcomes compared with laboratory errors, and under which variability assessment was made. However, the field duplicates, despite still having a large proportion of low concentration samples (higher concentration zones were targeted more often for field duplicate outcomes, additional check samples having a random allocation via a stratified, random sampling method), still gave outcomes within acceptable variation.

The OREAS 700, OREAS701, GIOP-96 & GIOP-118 CRM testing on the Head Sample (ore) for elemental oxides and elements of SiO2, Al2O3, P, S, TiO2 and LOI (Loss on Ignition), had either precision outcomes or control limits met jointly or in at least one instance in most cases, though some areas for further investigation falling outside these criteria were noted following.
The BV laboratory was shown to have a general high variability (precision value), and / or small high bias on the four CRM outcomes, even when outcomes were within controlled limits, as most were indicated to be per prior comments. Investigation into these effects is ongoing, including cross lab checking that is pending. However, the impacts of these parameters on overall deposit evaluation was thought to be of no significance.

The BV laboratory was also shown to have a small bias on the high side for the elements of:
- P for the OREAS 700 and 701 samples (only CRM's with phosphorus testing),
- S for the OREAS 701 sample (CRM with the highest tested value of sulphur, but bias is caused by several outlying values),
- Al2O3 for the OREAS701 sample (CRM with the highest tested value of aluminium oxide) and
- SiO2 for the GIOP-118 sample (CRM with the lowest tested value of silicon oxide, but bias caused by just one outlying value).

Investigation into these effects is ongoing, including cross lab checking that is still pending. However, the impacts of these parameters on overall deposit evaluation had calculations performed to indicate likely effects and were reasoned to almost certainly to be of no significance (biases imparted were less than, or close to, CRM general testing limits).

Results for blanks were found to vary less than the ranges observed in the 2016 & 2021 programs for DTR Mags% and Head Fe% and, therefore, were deemed to be acceptable.

Pulverised sizing outcomes were close to the general aim of 80% passing 25 um and was confirmed by interlaboratory checking.

All sampling methods and sample sizings were deemed to be appropriate.

Verification of sampling and assaying

- Holes were not twinned in the Q1-Q2 2023 RC program.
- For the 2023 exploration programs, the "DataStore" database system was used that was processed via the associated "Lab-In" tool, which utilises import and export tools that also validate and format the data. Data inputs for lithology, geochemistry and geophysics were completed. Heading checks on each file were validated via the software and, once flagged, corrections were made in the input forms to ensure correct allocation of outcomes. Data was checked for maximum / minimum values, sample advice to report reconciliation, dictionary checks and text value checks. Clean validated files once available were automatically uploaded to the database.

Location of data points

- For the 2021-22 & 2023 exploration programs, drillhole collars were surveyed by a local accredited surveyor using ALTUS APS-3 RTK (Real Time Kinematic) GPS units in differential mode, which provided an accuracy of some 2 to 3 centimetres in horizontal and vertical measurements.
- Current GDA94 coordinates of existing permanent control point HK1 at the exploration site were utilised as a basis for the surveys.
- Coordinates were supplied in both GDA94 – MGA Zone 54 and GDA2020 – MGA Zone 54. HIO is now operating in GDA2020 – MGA Zone 54 and is using this as standard.
- Due to the highly magnetic nature of the mineralisation, down hole surveys for the 2021-22 drilling were measured using a gyroscope where possible.
- Due to hole conditions (wall cave) in 4 drillholes, a multi shot downhole camera survey was utilised because gyro surveys were not feasible.
- Difficulty with getting the tool down the hole because of hole cave meant that some holes could not be logged along their entire length.
- Downhole logging, including gyro surveys was not feasible in one drillhole due to poor ground conditions, handheld MagSus data was utilised as an alternative where downhole logs were not possible.
- A 3D check plot of five holes indicated minimal deviation for the common downhole lengths between the single shot and gyro data. Hole deviation appeared to increase at significant distances, but this is associated with a 'run over' projection of the gyro data.
- Topographic control was maintained using data control points set out by an accredited local surveyor. In 2021, a LiDAR survey was conducted to better constrain the local topography.
- Downhole surveys for the 2023 drill program were measured using both an Axis Champ Navigator Gyroscope at 10m intervals down the length of the holes and to within 10m of TD for all 22 holes.
- The DGPS location methods used to determine accuracy of drillhole collars are considered appropriate.

Data spacing and distribution

- The deposit is drilled at a nominal spacing of 200m in section and plan, and spacing extends to ~400m on the periphery of the drilled area within the proposed pitshell.
- The 2023 drilling program focused on two distinct zones: 1) the NW Core area of the resource around the periphery ("edge") of the proposed pitshell and 2) the outcrop/sub crop in the Fold area in the SE of the deposit. The drilling program was exploratory in nature and aimed at targeting near-surface mineralization. Holes were drilled between 100m – 400m spacing and also aimed at defining the edge of mineralisation where they were drilled at a closer spacing (approximately 200m centres at the closest).
- The location and spacing of these drillholes so that they met JORC Resource requirements was not taken into consideration for this program. The drilling was purely speculative to determine the existence of near-surface ore, especially within the oxidised zone.
- The 2023 RC samples were composited into 5m intervals along their entire hole length.

Orientation of data in relation to geological structure
- In all drilling programs to date, the drillhole trajectory was planned to have an azimuth as perpendicular to the strike of bedding and a dip as perpendicular as possible to the bedding dip. The nature of, and associated safety risk implication for, the drilling equipment precluded a starting dip angle of less than -50 degrees. -50 degrees was only achievable in certain conditions and most holes were drilled at -55 degrees from horizontal.
- The azimuth was set via sighter pegs marked out at the nominated bearing via an Azimuth Pointing System. The drill rig was aligned to these pegs when it drove onto the drillhole site.
- A Multi-wave Sensors GPS Azimuth Pointing System was used to determine the location of the drillhole azimuth ground marker pegs. Three pegs were placed in the ground along the azimuth direction for the rig to drive in and align to: 1) a sighter peg at 15m away and two other pegs at the wheel base length. With the aid of a spotter, this allowed the drill rig to drive straight onto alignment at the drillhole location.
- In the Core East and Core West portions of the deposit, angled drilling commenced at -55° dip and a hole azimuth of 040° True. This was targeted to intersect geological strike and bedding dip of the sediment-hosted ore body as close to perpendicular as possible.
- In the Fold portion of the deposit, the strike of the ore bedding is controlled by folding of the sedimentary sequence. The azimuth of drillholes was altered accordingly with the varying strike of the ore body and ranged from 085° - 130° True, again to intersect bedding as close to right angles as possible.
- Locally, holes suffered directional deviation to the east with depth. Deviation in inclination was also observed, typically causing shallowing of the drillhole and this increased with depth. The affect was more pronounced the lower part of Unit 2 more than in the upper part of Unit 3.
- Drilling orientations are considered appropriate and display no bias.
- The drilling dip and azimuths made it challenging to intersect the cross-cutting fault structures as the drilling was often sub-parallel to these features.
- An Excel spreadsheet containing identified fault intersections in a number of holes has been made available to the geotechnical engineers and hydrogeologist for further design work.

Audits or reviews

- Chris McMahon (McMahon Resources) completed a review of the sampling and assaying for the 2023 drilling program data. An excerpt from his report is included in Appendix 2.

5. *Reporting of Exploration Results*

Mineral tenement and land tenure status

- The project is wholly owned by Hawsons Iron Ltd (HIO). HIO currently manage the project.
- The project area is entirely within Exploration Licences (ELs) 6979, 7208 & 7504. Hawsons is the sole tenure holder of these ELs.
- Licence conditions for all ELs have been met and are in good standing.
- An application for a Mining Lease (ML) was lodged with the NSW Trade & Investment Department in October 2013 and HIO is not aware of any impediments to obtaining a mining lease. MLA460 remains in place.

Exploration done by other parties

- In 1960 Enterprise Exploration Company (the exploration arm of Consolidated Zinc) outlined a number of track-like exposures of Neoproterozoic magnetite ironstone (+/- hematite) which returned a maximum result of 6m at 49.1% Fe from a cross- strike channel sample. No drilling was undertaken by Enterprise.
- In 1986, CRAE completed five holes within EL 6979 seeking gold mineralisation in a second-order linear magnetic low. This was interpreted to be a concealed, faulted iron formation within the hinge of the curvilinear Hawsons aeromagnetic anomaly. CRAE's program failed to locate significant gold or base metal mineralisation, but the drilling intersected concealed broad magnetite ironstone units interbedded with diamictite adjacent to the then untested peak of the highest amplitude segment of the Hawsons aeromagnetic anomaly.
- Carpentaria Resources (CAP) completed drilling programs in 2009, 2010 and 2016.

Geology

- A brief geology description and plan of the surface geology (Figure 3) was given in the preamble to this document.
- The Hawsons Magnetite Project is situated within folded, upper greenschist facies Neoproterozoic rocks of the Adelaide Fold Belt. The Braemar Facies magnetite ironstone is the host stratigraphy and comprises a series of strike extensive magnetite-bearing siltstones generally with a moderate dip (circa -55o), primarily to the south west. The airborne magnetic data clearly indicates the magnetite siltstones as a series of parallel, high amplitude magnetic anomalies. Large areas of the Hawsons prospective stratigraphy are concealed by transported ferricrete and other younger cover. The base of oxidation due to weathering over the prospective horizons is estimated to average 80m from surface.
- The Hawsons project comprises a number of prospects including the Core West, Core East, Fold, T, Limb and Wonga deposits. Mineral Resources have been generated for the Core and Fold areas which are contiguous.
- The depositional environment for the Braemar Iron Formation is believed to be a subsiding basin, with initial rapid subsidence related to rifting possibly in a graben setting as indicated by the occurrence of diamictites in the lower part of the sequence (Unit 2). A possible sag phase of cyclical subsidence followed with deposition of finer grained sediments with more consistent, as compared to the diamictite units, bed thicknesses, style and clast composition (Unit 3). The top of the Interbed Unit marks the transition from high (Unit 2) to lower (Unit 3) energy sediment deposition
- The distribution of disseminated, inclusion-free magnetite in the Braemar Iron Formation at Hawsons is related to the composition and nature of the sedimentary beds. The idioblastic nature of the magnetite is believed to be due to one or more of a range of possible processes including in situ recrystallisation of primary detrital grains, chemical precipitation from seawater, permeation of iron-rich metamorphic fluids associated with regional greenschist metamorphism. Grain size generally ranges from 10 microns to 0.2mm, but tends to average around 40 microns. Sediment composition and grain size appear to be the main controlling factors of mineralisation. There is no evidence of structural control in the form of veins or veinlets coupled with the lack of a strong structural fabric.
- In the Core area and the western extremity of the Fold deposit, the units strike southeast and dip between 45° and 65° to the southwest. The eastern part of the Fold deposit comprises a relatively tight synclinal fold structure resulting in a 90° strike rotation causing the metasediments to strike south-southwest and dip between 60° - 75° to the west-northwest.
- A cross section through the Core area is shown in Figure 9.
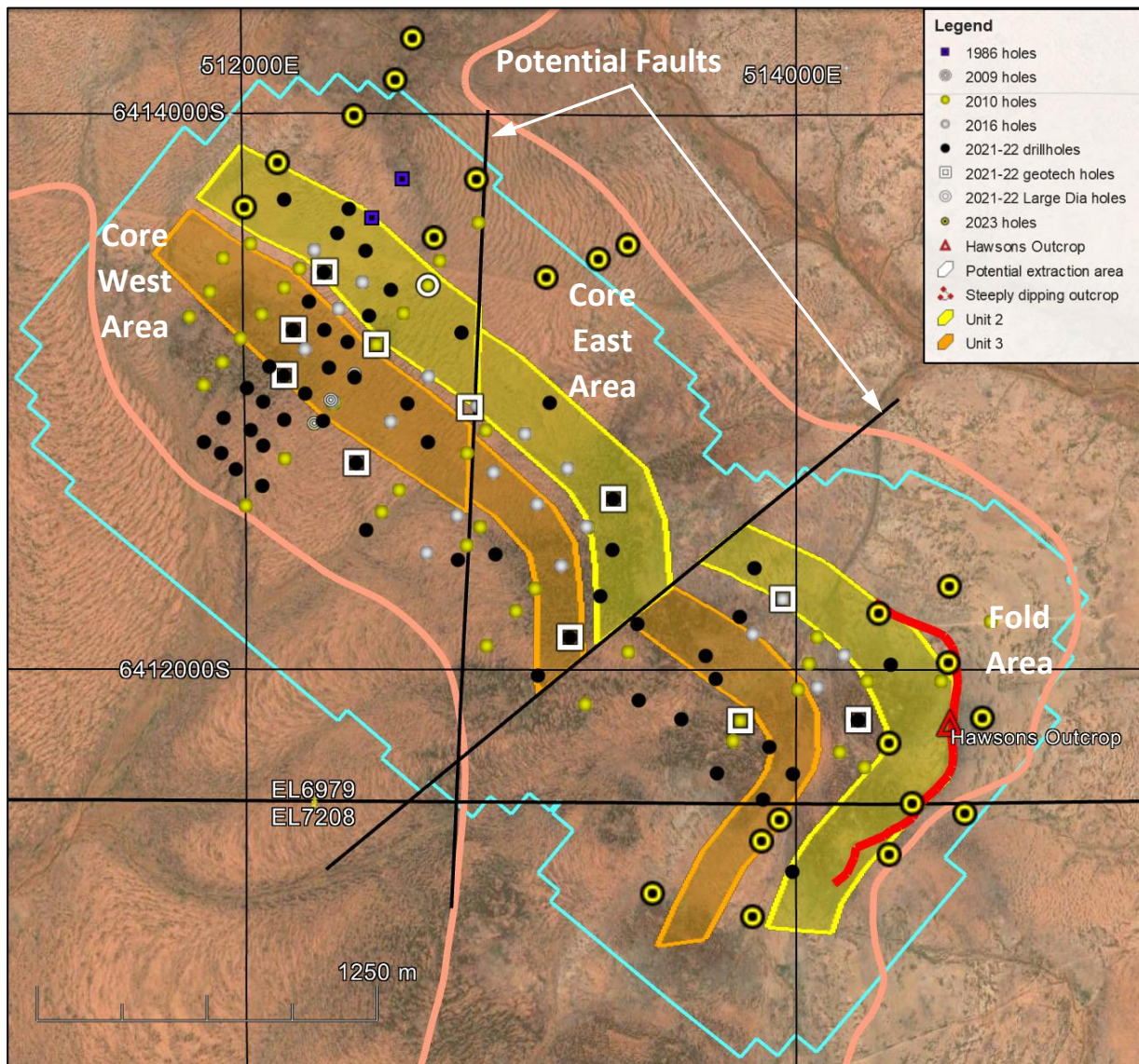
Figure 8: Drillhole location plan within the resource area showing potential modelled units of mineralization (yellow) and potential faulting. The pink zone indicates the extent of the interpreted magnetic anomaly (TMI RTP). Drillhole locations shown are historic holes up to 2021-22 and recent 2023 drillholes.
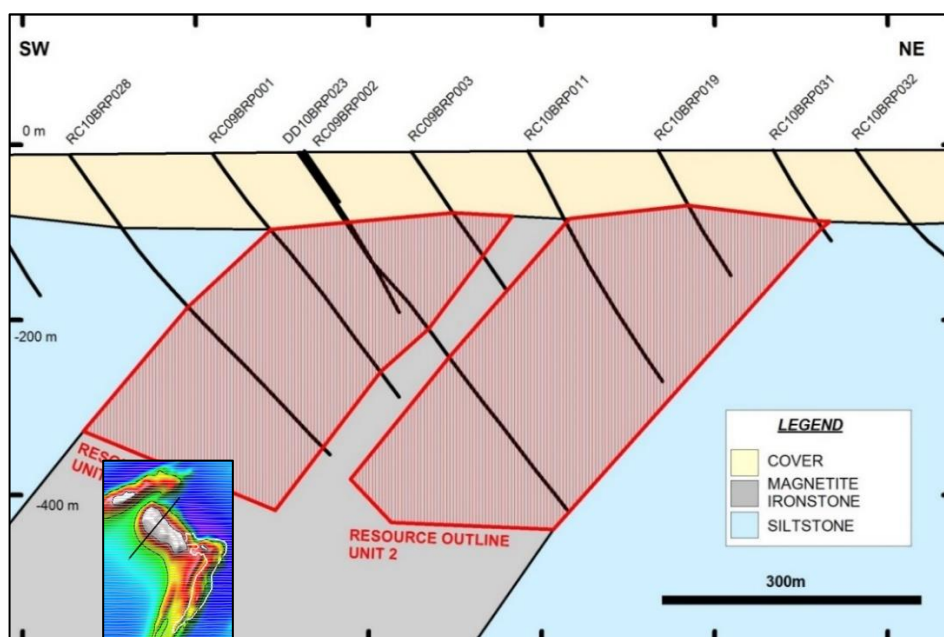
Figure 9: Generalised NE-SW cross-section through the Core West area showing the dipping sediments and core intersections from previous drilling (source: CAP, 2010).

Geophysics

Filtering is used in geophysics to enhance anomalous features at a given depth. Macquarie University Honours student, Ristch Camille reinterpreted Geoscience Australia's airborne magnetics data set by filtering the 1st vertical derivative (1VD) of the total magnetic intensity dataset (reduced to pole) with an additional tilt derivative filter. This enhanced the airborne magnetic image to show previously hidden high amplitude magnetic responses (see Figure 10).
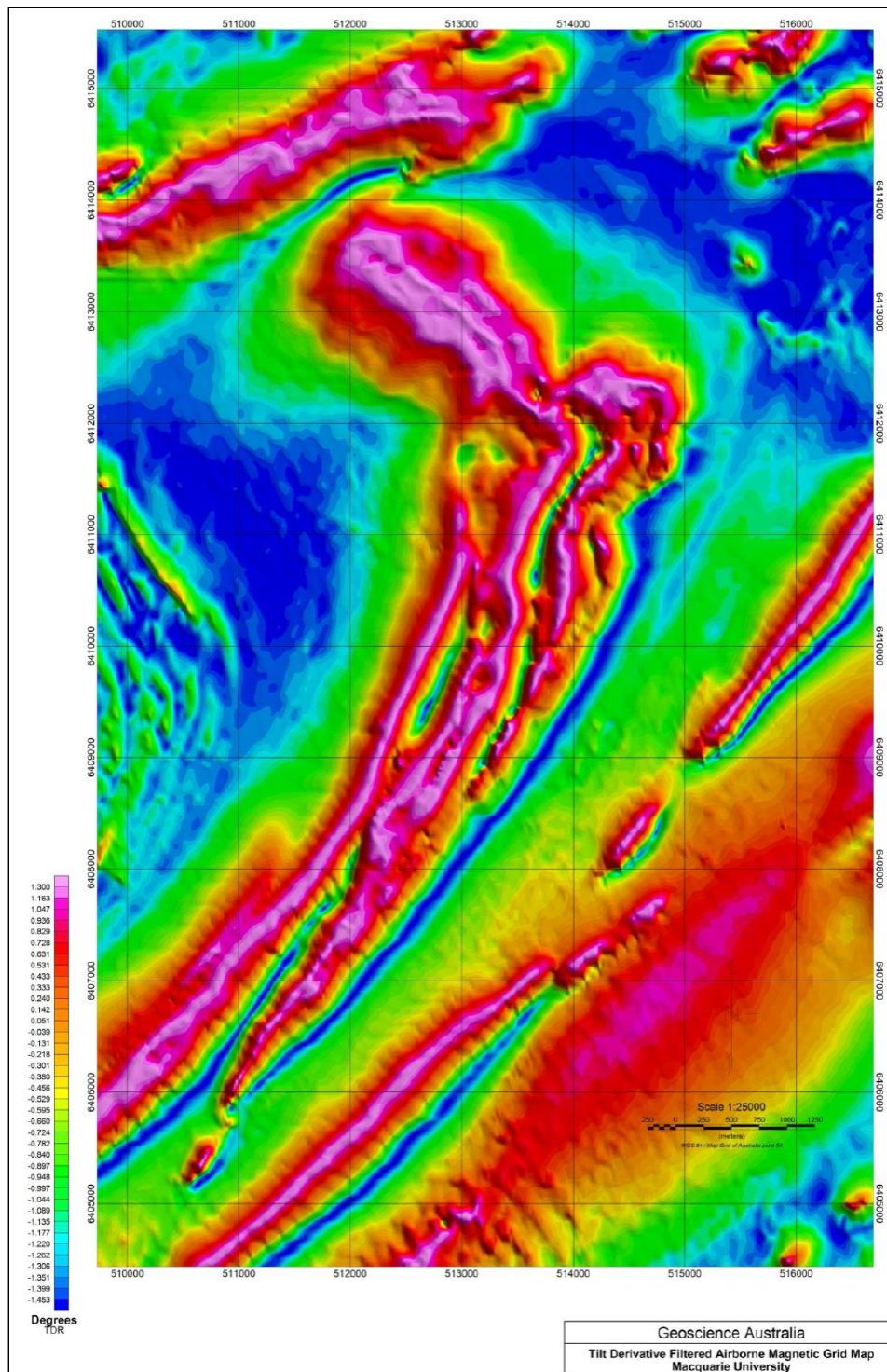
Figure 10: TMI RTP - Tilt Derivative Filtered Airborne Magnetic Image of the Hawsons Iron Deposit (after Camille R, 2012).

The image appears to be indicating the sinuous nature and distribution of where the higher magnetic susceptibility mineralization exists within the deposit. As well as in the Core areas of the deposit, it clearly shows that there is likely to be opportunity for target ore in the Fold and Limb areas.

Drill hole Information

- Drillhole location plans annotated with hole names are included as Figures 2a-2c in this document.
- Appropriate tabulations of drillhole information are available as Excel spreadsheets and examples are included at Appendix 2.
- Because of the potential for mineralisation in the upper oxidised zone, the entire hole length was considered to be the intercept interval.

Data aggregation methods

- All RC samples were collected on 1m intervals
- Each 1m interval was carefully speared and then aggregated into 5m intervals.
- ¼ core samples were aggregated into 5m intervals.
- 1cm downhole density logs were aggregated over the length of each sample that was used to determine a relationship with specific gravity. This was then extrapolated down the hole lengths to estimate gravity from geophysical logs.

Relationship between mineralisation widths and intercept lengths

- Drilling is conducted perpendicular to the dip of the mineralised sediments. This is done in an attempt to produce the most representative sample and most representative intercept length possible.
- In Core West and Core East, the drillholes predominantly dip at -55 degrees at azimuth 040, perpendicular to the SW steeply dipping nature of sedimentary beds. In Fold, drilling dips and azimuths vary according to the dip and strike of the folded strata.
- Mineralisation exists from the surface for the full length of drillholes and this constitutes the intercept lengths. See Appendix 1, Table 1 in this report.

Diagrams

- Appropriate plans and tabulations are included in with the text in this document and as tables in the Appendices.

Balanced reporting

- Comprehensive reporting is not practicable.
- Examples of data are included in the Appendices.

Other substantive exploration data

- A geotechnical report was furnished by Gutteridge Haskins and Davey (GHD) in 2019 titled "Carpentaria-Hawsons Iron Ore project 2017 Prefeasibility Study Geotechnical Assessment." This study was completed via a staged approach in order to progressively improve the level of Geotechnical understanding for the PFS and to identify gaps that needed to be addressed.
- In the 2021-2022 exploration program, Pells, Sullivan & Meynink (PSM) are undertaking the geotechnical design study for pitwall stability and to fill the gaps outlined in the GHD report. This report is not yet at hand.
- 11 cored holes were nominated by PSM to generate the data for geotechnical analysis that will feed into mine design. Of these holes, 3 were fully cored and the remainder were cored from depths nominated by PSM to total depth.
- A specialist PSM geotechnical geologist logged and sampled the core and the samples were transported to Trilab in Brisbane for testing.
- The majority of samples were analysed for Uniaxial Compressive Strength (UCS), Young's Modulus and Poisson's Ratio. Selected samples were submitted for shear box testing.
- A substantial amount of downhole geophysics data was generated throughout the 2021/2022 drilling program, comprising magnetic susceptibility, natural gamma, density and resistivity data. This has been utilised to define the magnetic (and density related) stratigraphy that is coincident with a chronostratigraphic interpretation. Sonic velocity and acoustic televiewer data was also collected to aid in structural interpretation necessary for pit wall

stability investigation. Further work to check the downhole geophysics to increase its accuracy in making predictions of DTR% from magnetic susceptibility logs and actual lab density from geophysical density.

- Analysis of geotechnical results/findings was reported in October 2022.
- An Ambient Noise Tomography (ANT) passive seismic survey was trialled but the results proved to be inconclusive and the trial was abandoned.
- TSIM VLF-EM ground-borne surveys were conducted in August-September 2022. The results from these surveys was used to help target the Q1-Q2 2023 drillhole locations. The results are outlined below.
- A surface soils mapping survey was conducted and this was used to target the Q1-Q2 drillhole locations.
- In June 2023, another 11km of TSIM surveys were conducted in the SE outcrop area and its extension along strike located subsurface anomalies. Preliminary results are outlined below.
- In association with the TSIM surveys, all outcrop encountered was mapped and the locations were recorded into a Garmin Rino hand-held GPS. Where dip and strike information could be determined at each location, it was recorded.

Soils Sampling Surveys

A detailed soil sampling campaign was conducted throughout February 2023 resulting in the collect of 1399 samples on a 100 x 100m grid. The samples were collected from 30cm below the surface, sieved to ~2mm with approximately 150g retained within zip lock plastic sample bags. Each sample was tested using the CorMaGeo RT-1 magnetic susceptibility meter. This data was gridded in ioGAS Geoscience Analytic System 8.0 using a maximum cell size of 40m and search radius of 5 cells and then colour shaded as shown in the legend in Figure 10. Together with the 08-09/2022 TSIM results, the apparent magnetic anomalies highlighted by this campaign were used as the basis for nominating the locations of the drillholes in the Q1-Q2 2023 drilling program.
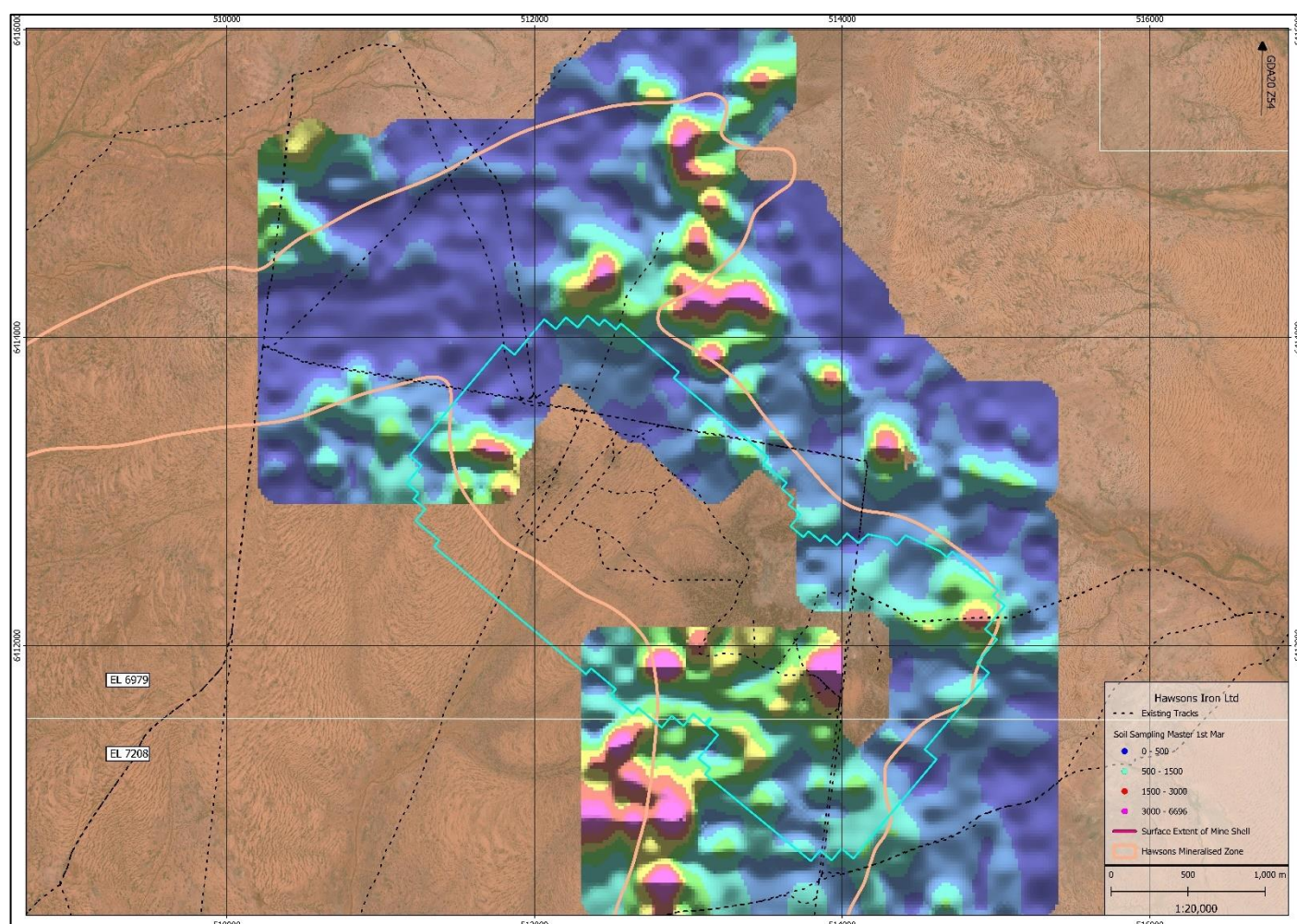
Figure 10: Hawsons deposit location plan with the colour shade plot of the gridded soils survey magnetic susceptibility results.

TSIM VLF-EM Ground-borne Geophysical Surveys

Two phases of TSIM surveys were conducted during the last half of 2022 and first half 2023. TSIM is a very low frequency (VLF) electromagnetic (EM) geophysical surveying technique that uses the transmissions from military

navigation stations. This is a near-surface technique that has the potential to map resistivity contrasts down to a depth of up to 50m in ideal conditions. Given that the target mineralisation (magnetite ore) should present a good resistivity contrast against its surrounding metasediments and that the depth to the target is ~30m, the TSIM proposes to be a reasonable option to find the target of interest within the outcrop/sub crop zones at the Hawsons deposit. The outputs from the machine are E-field and H-field data that are in-turn presented graphically as surface impedance and phase vs distance along the survey line.

August - September 2022 (20 line km)
The first phase of surveys targeted the areas:
1)   along the northern edge of the deposit that strikes in a NW-SE direction; and
2)   within the outcrop/sub crop zone around Hawsons outcrop in the SE.

The surface impedance data was gridded in Surfer 15 using the proprietary minimum curvature algorithm and the resulting surface impedance grid was colour shaded and contoured at 0.02 ohm intervals.
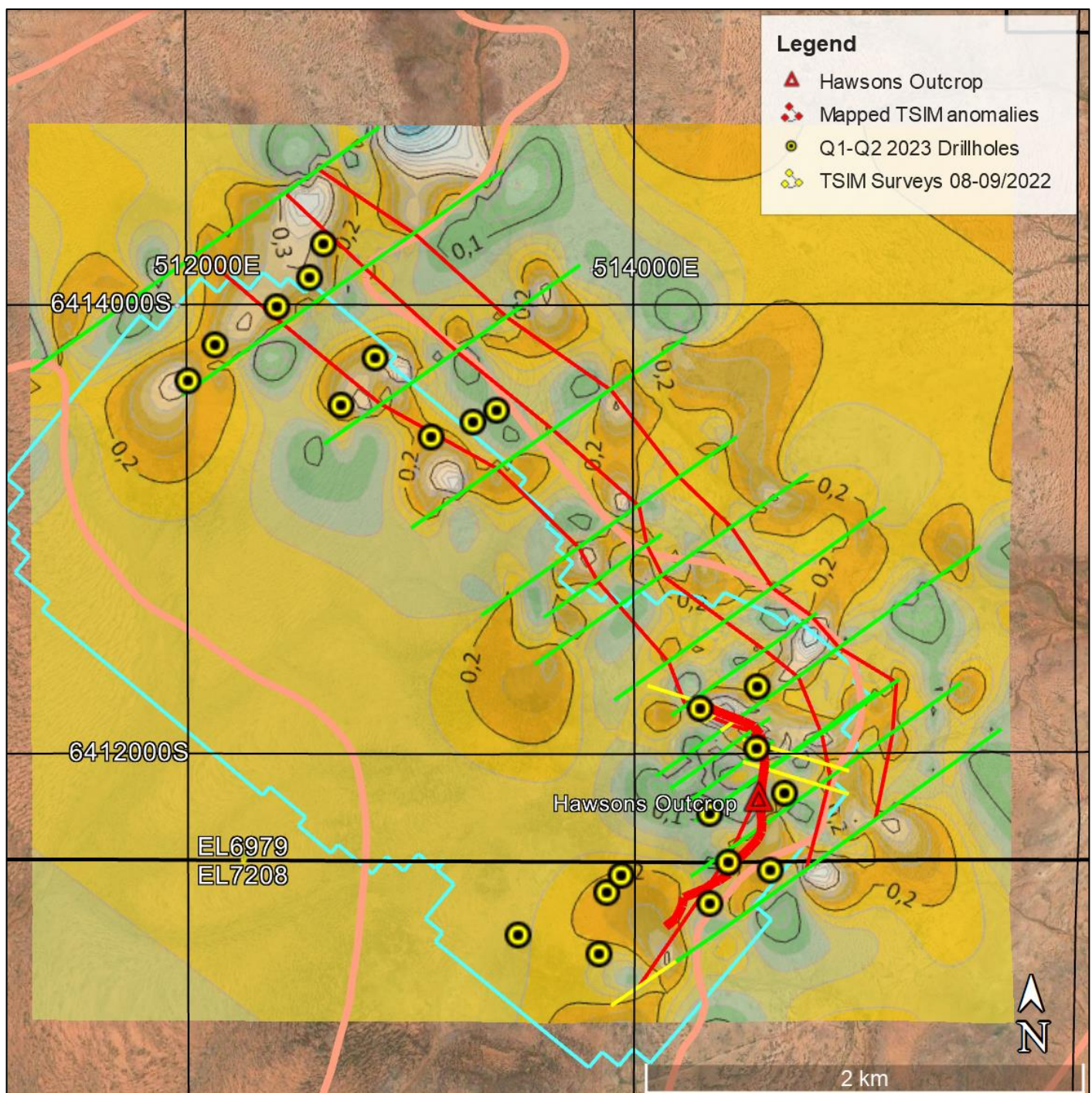
Figure 11: Image showing the location of the phase 1 TSIM Lines and the contoured grid of the surface impedance data. The 2023 drillhole locations are also shown. The red lines are joining points of matching anomalies between TSIM survey lines.

June 2023

A further set of TSIM surveys was conducted during June 2023. High soil moisture levels and water lying on the ground surface (from rain events) provided some challenges. However, initial results show some promise and further interpretation of the data is in progress.
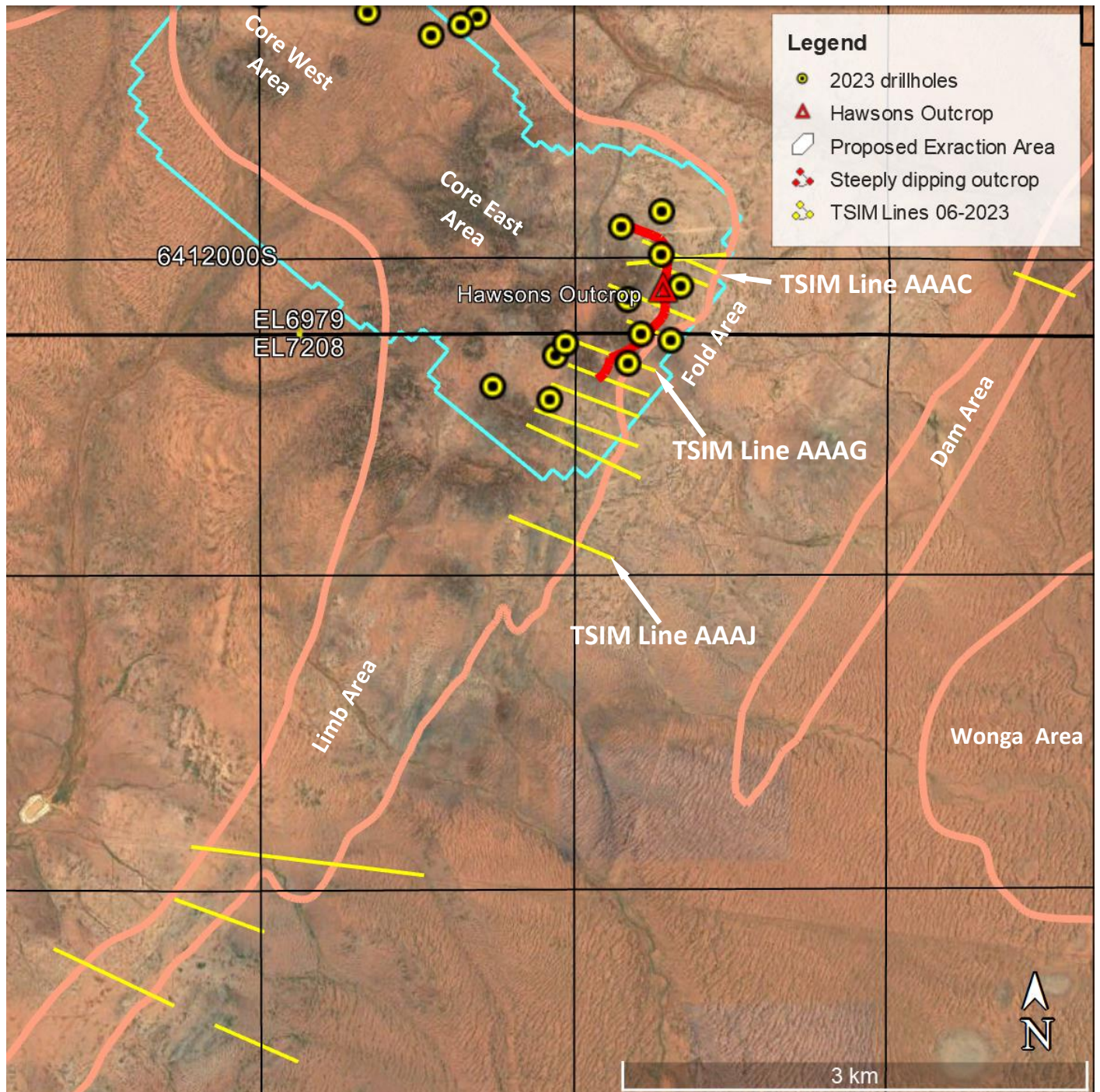
Figure 12: TSIM survey line locations June 2023.
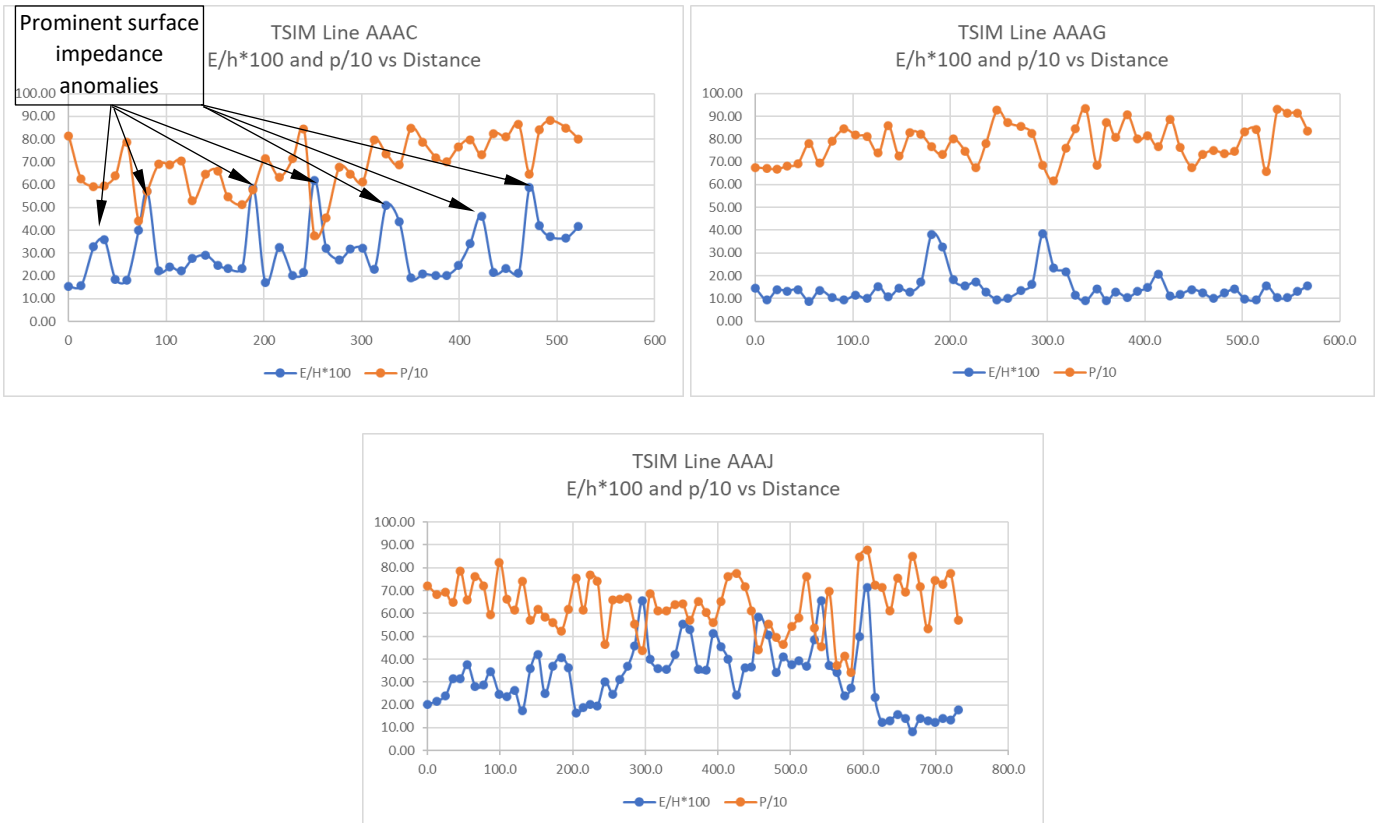
Figure 13: These example TSIM survey results (Lines AAAC, AAAG & AAAJ – see Figure 12 for location) display the potential existence of surface impedance anomalies in the near surface.

Outcrop Mapping

Prominent outcrop exists at the Hawsons deposit along the eastern flank of the Fold are and continues SW along strike into the Limb area. In addition to the outcrop mapping conducted by Brewster et al (2009), outcrop was mapped where it was intersected along the TSIM surveys. Along with the drilling results and geophysics results, this mapping indicates that the outcropping and near-surface material extends to the S-SW along strike in the Limb area for 4-5km.

Figure 14: Outcrop striking ESE changes strike to meet with Hawsons Outcrop (in the Fold area) visible in the upper right of the photo.

Figure 15: Hawsons Outcrop (looking north).

Figure 16: Outcrop looking south away from Hawsons Outcrop.

Figure 17: Very near-surface high magnetic susceptibility magnetitic siltstone sub crop was intersected while excavating the sump for drillhole RCFO23015.

Figure 18 shows the locations of outcrop that were mapped in Q1-Q2 2023.
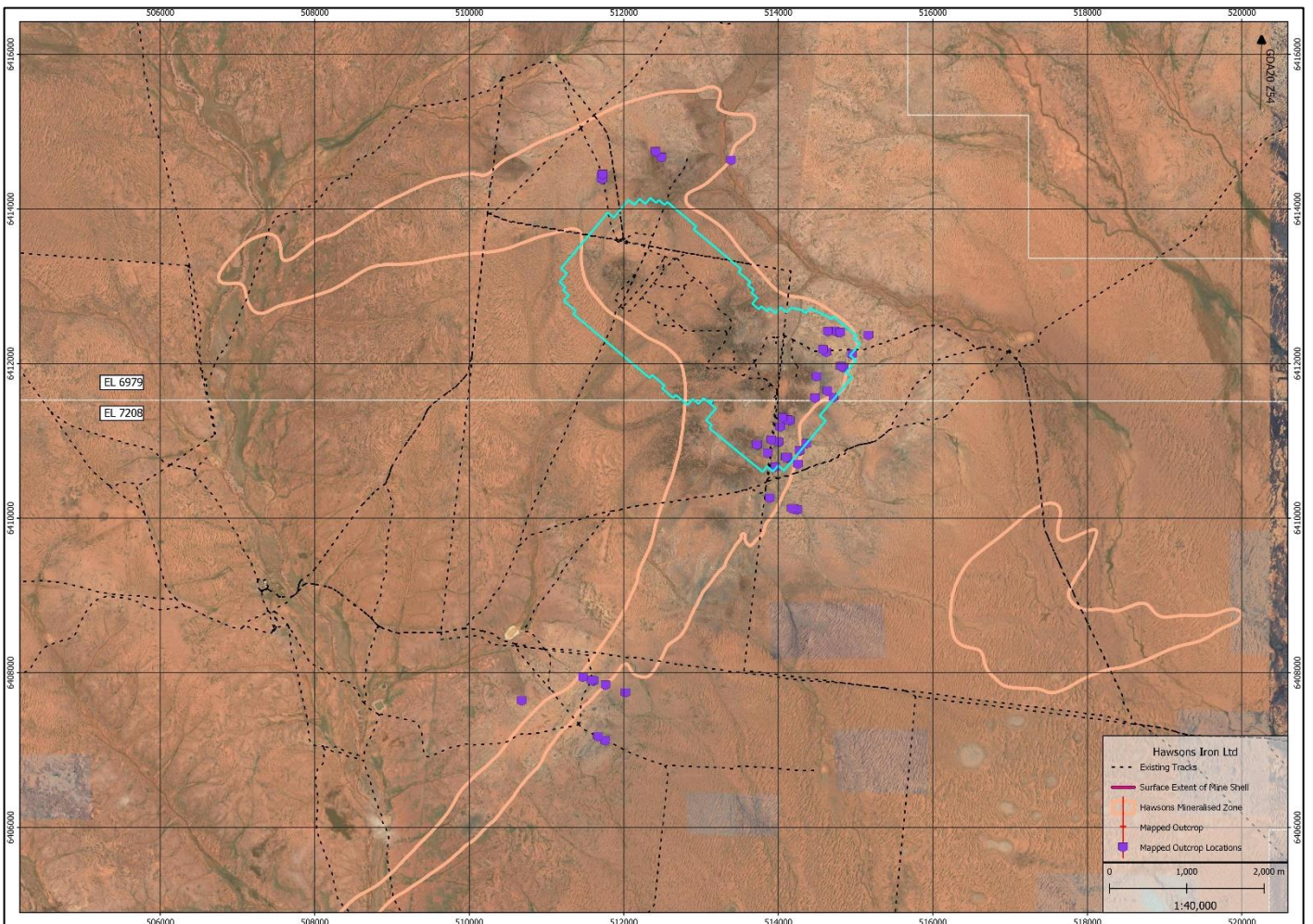
Figure 18: Magnetitic siltstone outcrop locations mapped during TSIM and Soils surveys Q1-Q2 2023.

6. Drilling Results

The following images represent a select of the boreholes as drilled with the laboratory DTR% results plotted at 5m intervals down the borehole length. The results indicate that there is opportunity for ore of a sufficient grade to meet economic mining requirements in the near surface (0m - ~150m). Further examples of results from geochemical testing of the samples from drilling are shown in the appendices.
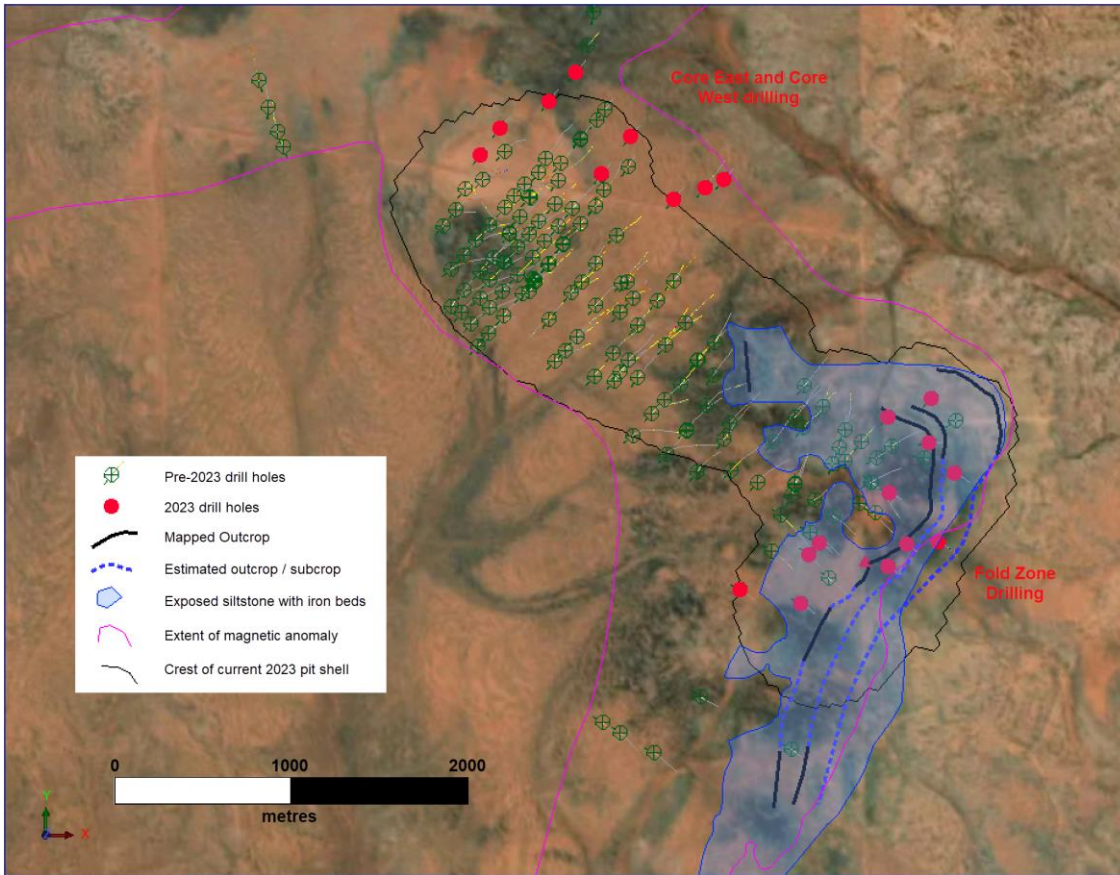
Figure 19: Location plan showing downhole traces of drillholes within the current database (Q1-Q2 2023 drillholes highlighted).
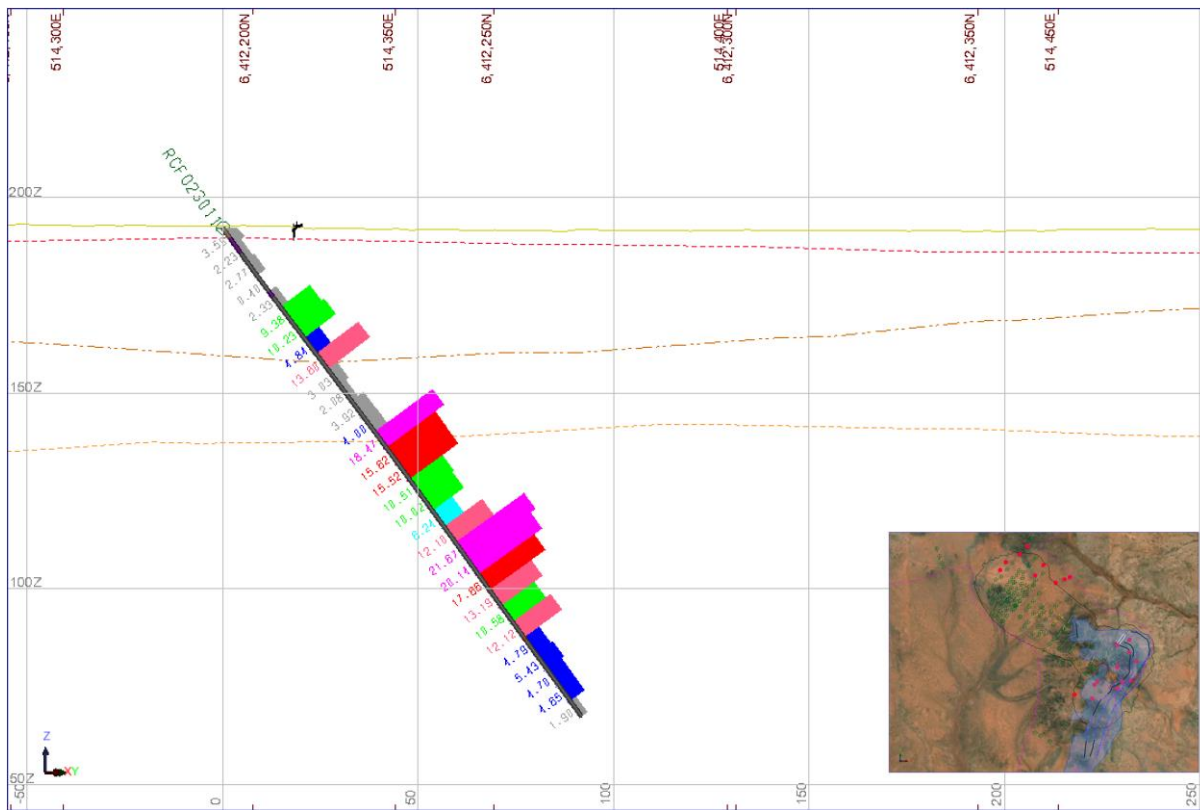
Figure 20: Drill Hole Section RCF023011 DTR%.
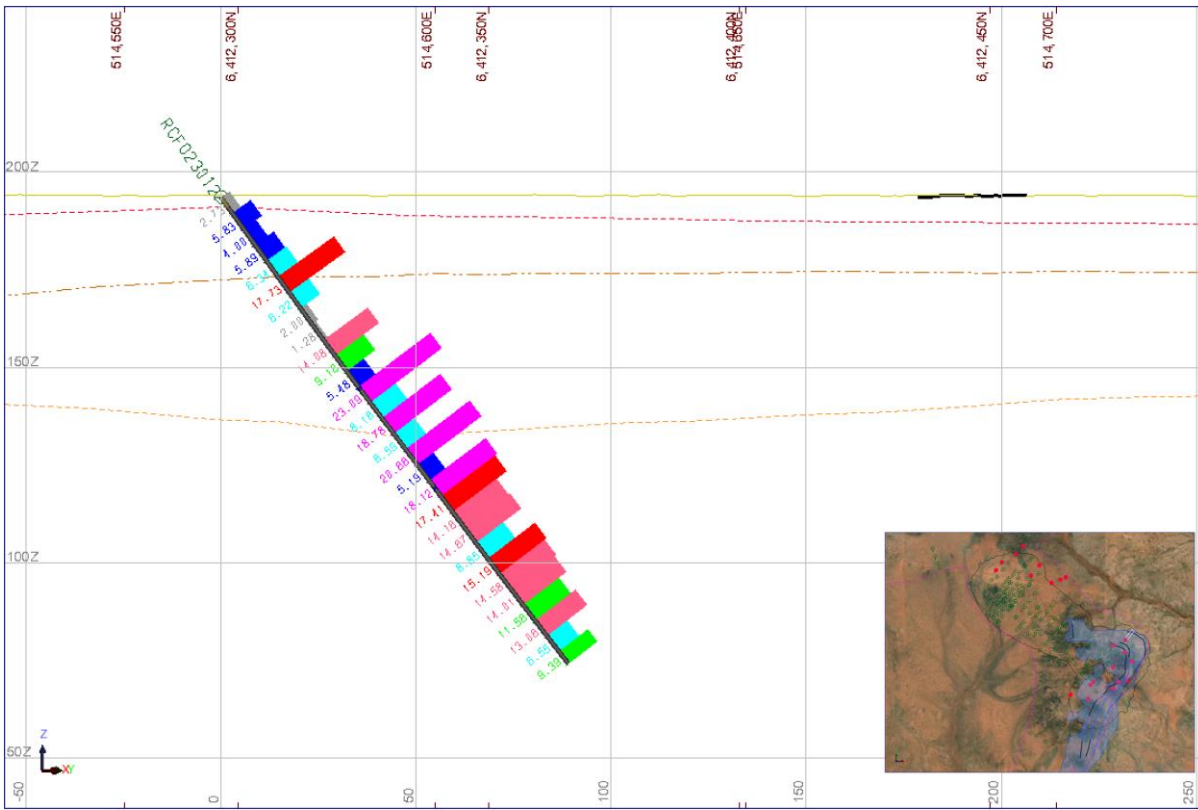
Figure 21: Drill Hole Section RCF023012 DTR%.
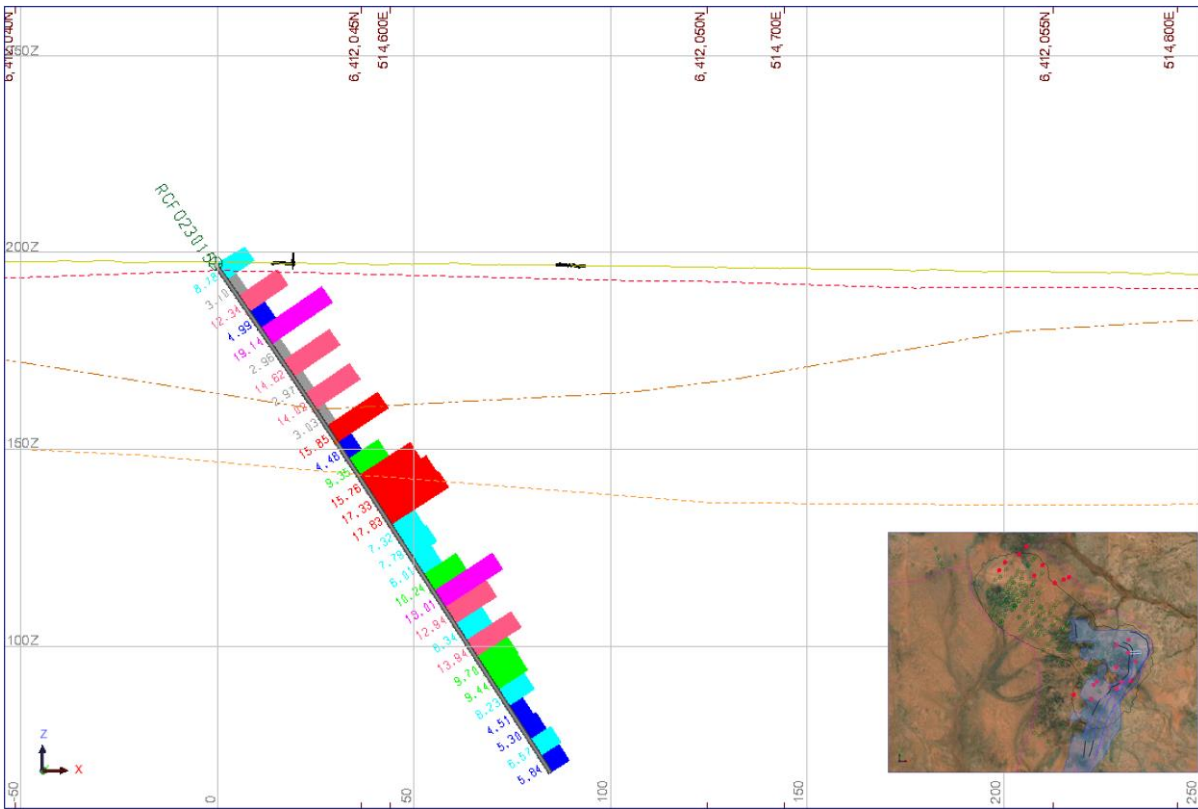
Figure 22: Drill Hole Section RCF023015 DTR%.
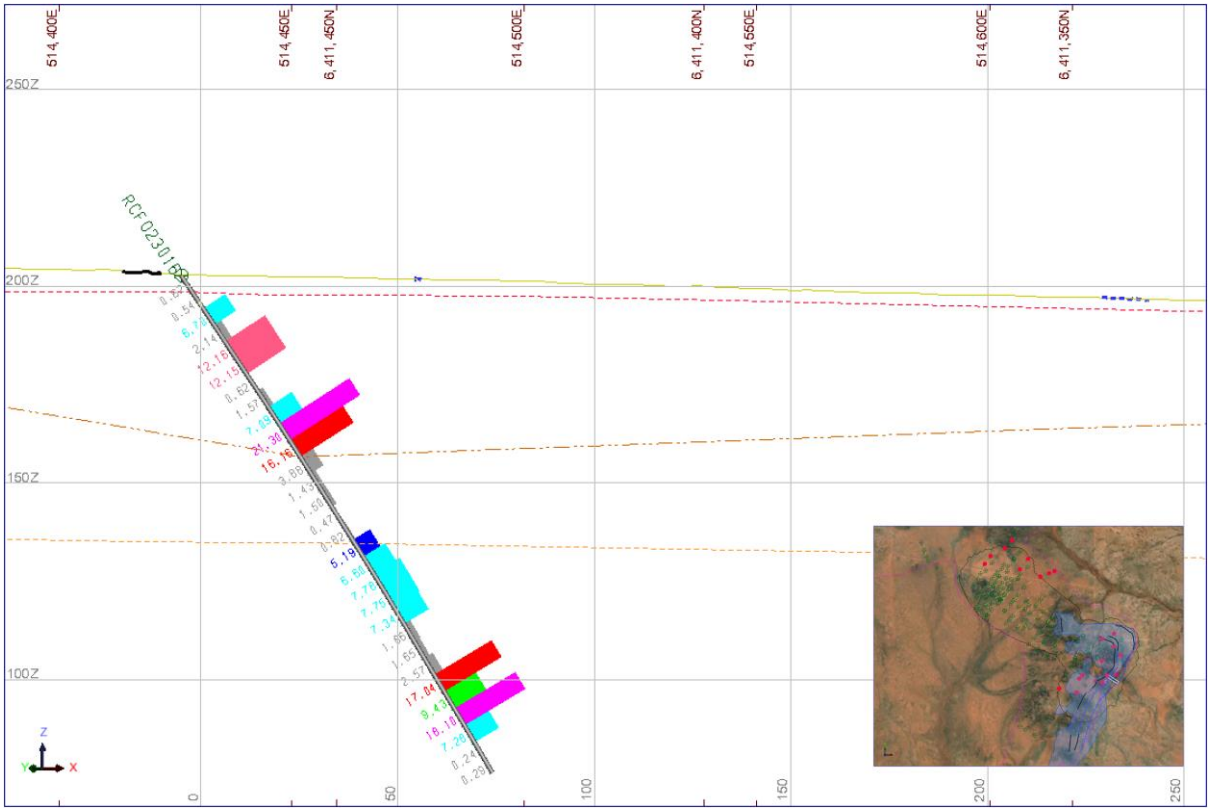
Figure 23: Drillhole Section RCF023016 DTR%.
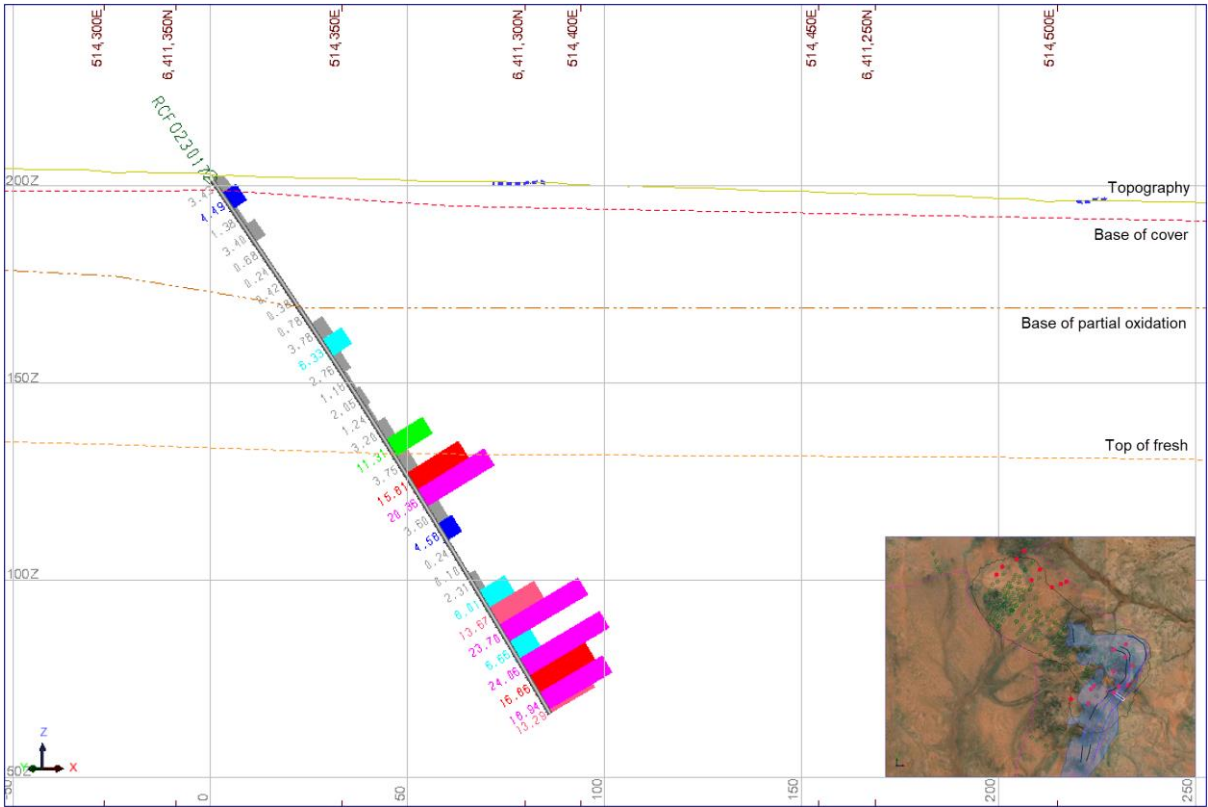
Figure 24: Drill Hole Section RCF023017 DTR%.
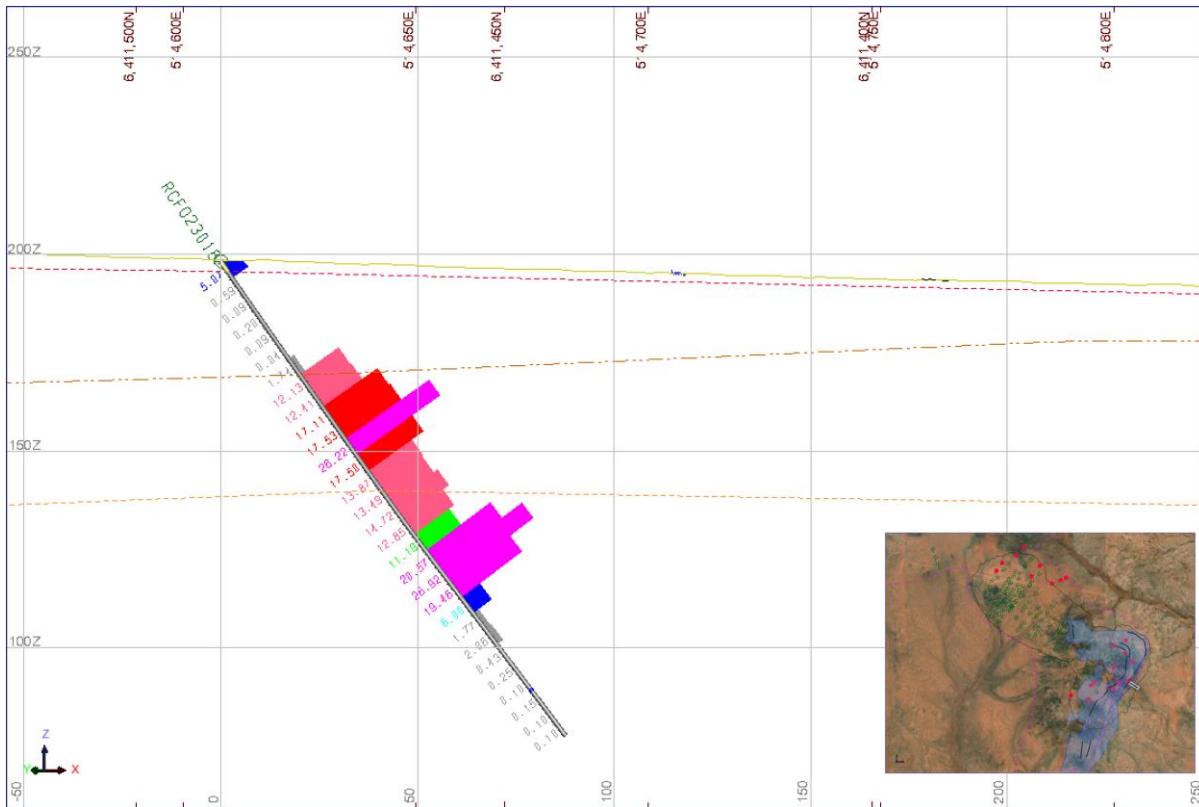
Figure 25: Drillhole Section RCF023018 DTR%.

7. *Further work*

Additional work that could provide further opportunity to define further mineralisation in the near-surface are:

Additional, more detailed TSIM & magnetics surveys in the Fold area are recommended.
Drilling of further shallow (~150m deep) drillholes is being considered to determine extents of the ore body outside of the current main drilling pattern.

Drilling in the 2022-23 period is being considered to determine extents of the ore body outside of the current main drilling pattern.
Geophysical surveys are being considered to help identify structural features and the lateral extents of the mineralized zone.
Sterilisation holes are being planned to positively identify that ore potential doesn't exist under planned infrastructure.
Test pits have been planned to determine the geomechanical properties of the surface material to determine what is required to support infrastructure.
PSM performed a preliminary desktop study on terrain assessment in December 2021 and then proposed a geotechnical test pitting program to cater for construction of civil infrastructure. Several of these test pits have been cleared for excavation works and sampling and this program is expected to proceed in the second half of 2022.

The data in this report that relates to Exploration Results for the Hawsons Magnetite Project is based on information evaluated by Mr. Wes Nichols who is a Member of the Australian Institute of Mining and Metallurgy and who has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the "JORC Code"). Mr. Nichols is a full-time employee of Hawsons Iron Ltd and he consents to the inclusion in the report of the Exploration Results in the form and context in which they appear.

Appendix 1

Tables of Data

Table 1: Holes drilled in 2023 drilling program

Hole ID	East_2020	North_2020	AHD	TD	Azi Deg True	Dip Deg	Prospect	EL	Interception Depth
RCCW23001	512555.26	6414141.88	195.38	153	040	-55	Core West	EL6979	Entire hole length
RCCW23002	512624.50	6414292.82	194.57	191	040	-55	Core West	EL6979	Entire hole length
RCCE23003	513286.67	6413489.94	190.39	332	040	-55	Core East	EL6979	Entire hole length
RCCE23004	513391.60	6413533.99	189.43	150	040	-55	Core East	EL6979	Entire hole length
RCCW23005	513112.36	6413423.00	191.47	155	040	-55	Core West	EL6979	Entire hole length
RCCW23006	512703.11	6413564.81	195.02	155	040	-55	Core West	EL6979	Entire hole length
RCCW23007	512867.58	6413777.34	194.45	149	040	-55	Core West	EL6979	Entire hole length
RCCW23008	512405.76	6413980.56	199.96	149	040	-55	Core West	EL6979	Entire hole length
RCCW23009	512126.49	6413826.79	198.71	149	040	-55	Core West	EL6979	Entire hole length
RCCW23010	512017.54	6413673.99	196.85	155	040	-55	Core West	EL6979	Entire hole length
RCFO23011	514324.69	6412195.34	192.14	155	040	-55	Fold	EL6979	Entire hole length
RCFO23012	514566.24	6412298.05	193.52	149	040	-50	Fold	EL6979	Entire hole length
RCFO23013	514701.38	6411877.88	195.67	155	120	-50	Fold	EL6979	Entire hole length
RCFO23014	514327.98	6411765.64	202.71	149	115	-55	Fold	EL6979	Entire hole length
RCFO23015	514556.13	6412044.34	197.09	155	085	-55	Fold	EL6979	Entire hole length
RCFO23016	514426.86	6411472.41	202.60	149	120	-55	Fold	EL7208	Entire hole length
RCFO23017	514323.02	6411346.49	202.13	161	120	-50	Fold	EL7208	Entire hole length
RCFO23018	514608.81	6411490.03	198.03	149	120	-50	Fold	EL7208	Entire hole length
RCFO23019	513937.60	6411480.82	202.33	149	120	-55	Fold	EL7208	Entire hole length
RCFO23020	513873.70	6411415.16	201.81	149	130	-55	Fold	EL7208	Entire hole length
RCFO23021	513486.49	6411216.03	196.14	149	120	-50	Fold	EL7208	Entire hole length
RCFO23022	513832.37	6411136.37	197.72	161	120	-50	Fold	EL7208	Entire hole length

Revised Hole Naming Convention Commencing 2021

Code Position	Code	Meaning
1st & 2nd characters (alpha)	RC	RC from surface to TD
	RD	RC top and Diamond Tail (HQ3)
3rd & 4th characters (alpha)	CW	Core West
	CE	Core East
	FO	Fold
5th & 6th characters (numeric)	21	Year drilled = 2021
	22	Year drilled = 2022
	23	Year drilled = 2023
7th, 8th & 9th characters (numeric)		Hole number in order of drilling

Table 2: Data summary for holes in the 2021-22 program

Hole ID	Depth	Lithology	Depth	Loaded on SP	Validated	Comments	HH MagSus	Depth	Processed	Loaded on SP	Validated	Comments	GN	Depth	Depth Δ	Loaded on SP	Validated	Comments	GY	Depth	Depth Δ	Loaded on SP	Validated	Comments	Geochem	Depth	Loaded on SP	Validated	Finalised	Comments
RCCW23001	153	Y	153	Y	Y		Y	153	Y	Y	Y		Y	153	0		Y	Log commences below 0m, logging commenced at top of wireline, not bottom of sonde.	Y	150	-3	Y	Y	Logged at 10m intervals, EOH not surveyed	Y	153	Y	Y	Y	
RCCW23002	191	Y	191	Y	Y		Y	191	Y	Y	Y		Y	181	-10	Y	Y	EOH blocked, unable to case to TD	Y	180	-11	Y	Y	EOH blocked, unable to case to TD	Y	191	Y	Y	Y	
RCCE23003	332	Y	332	Y	Y		Y	332	Y	Y	Y		Y	331.6	-0.4	Y	Y	Minor sediment infill at EOH	Y	330	-2	Y	Y	Logged at 10m intervals, EOH not surveyed	Y	332	Y	Y	Y	
RCCE23004	150	Y	150	Y	Y		Y	150	Y	Y	Y		Y	149.9	-0.1	Y	Y	Minor sediment infill at EOH	Y	150	0	Y	Y		N/A	150	N/A	N/A		Not analysed
RCCW23005	155	Y	155	Y	Y		Y	155	Y	Y	Y		Y	154.8	-0.2	Y	Y	Minor sediment infill at EOH	Y	155	0	Y	Y		Y	155	Y	Y	Y	Lab check - OREAS LOI pending
RCCW23006	155	Y	155	Y	Y		Y	155	Y	Y	Y		Y	155	0	Y	Y		Y	155	0	Y	Y		Y	155	Y	Y	Y	Lab check - OREAS LOI pending
RCCW23007	149	Y	149	Y	Y		Y	149	Y	Y	Y		Y	148.5	-0.5	Y	Y	Minor sediment infill at EOH	Y	149	0	Y	Y		Y	149	Y	Y	Y	Lab check - OREAS LOI pending
RCCW23008	149	Y	149	Y	Y		Y	149	Y	Y	Y		Y	148.5	-0.5	Y	Y	Minor sediment infill at EOH	Y	149	0	Y	Y		N/A	149	N/A	N/A		Not analysed
RCCW23009	149	Y	149	Y	Y		Y	149	Y	Y	Y		Y	149	0	Y	Y		Y	149	0	Y	Y		Y	149	Y	Y	Y	Lab check - OREAS LOI pending
RCCW23010	155	Y	155	Y	Y		Y	155	Y	Y	Y		Y	154.5	-0.5	Y	Y	Minor sediment infill at EOH	Y	150	-5	Y	Y	Logged at 10m intervals, EOH not surveyed	Y	155	Y	Y	Y	
RCFO23011	155	Y		Y	Y		Y	155	Y	Y	Y		Y	154.5	-0.5	Y	Y	Minor sediment infill at EOH	Y	150	-5	Y	Y	Logged at 10m intervals, EOH not surveyed	Y	155	Y	Y	Y	
RCFO23012	149	Y		Y	Y		Y	149	Y	Y	Y		Y	148.6	-0.4	Y	Y	Minor sediment infill at EOH	Y	148.5	-0.5	Y	Y		Y	149	Y	Y	Y	Lab check - OREAS LOI pending
RCFO23013	155	Y		Y	Y		Y	155	Y	Y	Y		Y	154.5	-0.5	Y	Y	Minor sediment infill at EOH	Y	155	0	Y	Y		Y	155	Y	Y	Y	Lab check - OREAS LOI pending
RCFO23014	149	Y		Y	Y		Y	149	Y	Y	Y		Y	149	0	Y	Y		Y	149	0	Y	Y		Y	149	Y	Y	Y	
RCFO23015	155	Y		Y	Y		Y	155	Y	Y	Y		Y	154	-1	Y	Y	Minor sediment infill at EOH	Y	154	-1	Y	Y	Minor sediment infill at EOH	Y	155	Y	Y	Y	
RCFO23016	149	Y		Y	Y		Y	149	Y	Y	Y		Y	148.9	-0.1	Y	Y	Minor sediment infill at EOH	Y	149	0	Y	Y		Y	149	Y	Y	Y	Lab check - OREAS LOI pending
RCFO23017	161	Y		Y	Y		Y	161	Y	Y	Y		Y	160.8	-0.2	Y	Y	Minor sediment infill at EOH	Y	161	0	Y	Y		Y	161	Y	Y	Y	Lab check - OREAS LOI pending
RCFO23018	149	Y		Y	Y		Y	149	Y	Y	Y		Y	148.8	-0.2	Y	Y	Minor sediment infill at EOH	Y	149	0	Y	Y		Y	149	Y	Y	Y	Lab check - OREAS LOI pending
RCFO23019	149	Y		Y	Y		Y	149	Y	Y	Y		Y	149	0	Y	Y		Y	149	0	Y	Y		Y	149	Y	Y	Y	
RCFO23020	149	Y		Y	Y		Y	149	Y	Y	Y		Y	148.7	-0.3	Y	Y	Minor sediment infill at EOH	Y	149	0	Y	Y		Y	149	Y	Y	Y	Lab check - OREAS LOI pending
RCFO23021	149	Y		Y	Y		Y	149	Y	Y	Y		Y	148.7	-0.3	Y	Y	Minor sediment infill at EOH	Y	149	0	Y	Y		Y	149	Y	Y	Y	
RCFO23022	161	Y		Y	Y		Y	161	Y	Y	Y		Y	160.9	-0.1	Y	Y		Y	161	0	Y	Y		Y	161	Y	Y	Y	
Total	3568	22	1738	22	22		22	3568	22	22			0	3552		0	0		0	3541		0	0		0	3568	0	0		

Table 3: Example Lithology Log Dump.

Drilling Method	::Borehole ID	Depth_From_m	Depth_To_m	Recovery	Recovery_Code	Sample_Moisture	Sample_Moisture_Code	Oxidation	Oxidation Code	Colour	Colour_Code	Lithology	Lithology_Code	Lithology_2	Lithology_2_Code	Hematite	Hematite_Code	Magnetite	Magnetite_Code
RC	RCCW23001	0	1	Undersize	U	Moist	M	Completely Oxidised	CO	Red	RD	Soil	t so	Ironstone	r fest	Hematite <5%	1		
		1	2	Undersize	U	Moist	M	Completely Oxidised	CO	Red	RD	Soil	t so	Ironstone	r fest	Hematite 5%-15%	2		
		2	3	Undersize	U	Moist	M	Completely Oxidised	CO	Red	RD	Soil	t so	Ironstone	r fest	Hematite 5%-15%	2		
		3	4	Undersize	U	Moist	M	Completely Oxidised	CO	Red	RD	Clay (undif)	t cy	Ironstone	r fest	Hematite 5%-15%	2		
		4	5	Undersize	U	Moist	M	Completely Oxidised	CO	Red	RD	Clay (undif)	t cy	Ironstone	r fest	Hematite <5%	1		
		5	6	Normal	A	Dry	D	Completely Oxidised	CO	Red	RD	Sand	t sand	Ironstone	r fest	Hematite <5%	1	Magnetite <5%	1
		6	7	Undersize	U	Moist	M	Completely Oxidised	CO	Brown	BR	Sand	t sand	Ironstone	r fest	Hematite <5%	1	Magnetite <5%	1
		7	8	Undersize	U	Dry	D	Completely Oxidised	CO	Red	RD	Sand	t sand			Hematite <5%	1	Magnetite <5%	1
		8	9	Undersize	U	Dry	D	Completely Oxidised	CO	Orange	OR	Sand	t sand			Hematite <5%	1	Magnetite <5%	1
		9	10	Undersize	U	Dry	D	Completely Oxidised	CO	Orange	OR	Siltstone	slt			Hematite <5%	1	Magnetite <5%	1
		10	11	Undersize	U	Dry	D	Completely Oxidised	CO	Red	RD	Sandstone - very fine (0.063-0.125mm)	ss vf			Hematite <5%	1	Magnetite <5%	1
		11	12	Undersize	U	Dry	D	Completely Oxidised	CO	Yellow	Y	Siltstone	slt			Hematite <5%	1		
		12	13	Undersize	U	Dry	D	Completely Oxidised	CO	Yellow	Y	Siltstone	slt			Hematite <5%	1		
		13	14	Undersize	U	Dry	D	Completely Oxidised	CO	Yellow	Y	Siltstone	slt			Hematite <5%	1		
		14	15	Undersize	U	Moist	M	Completely Oxidised	CO	Brown	BR	Claystone	cs						
		15	16	Undersize	U	Moist	M	Completely Oxidised	CO	Red	RD	Claystone	cs						
		16	17	Undersize	U	Moist	M	Completely Oxidised	CO	Red	RD	Claystone	cs						
		17	18	Undersize	U	Moist	M	Completely Oxidised	CO	Red	RD	Claystone	cs						
		18	19	Undersize	U	Moist	M	Completely Oxidised	CO	Red	RD	Claystone	cs						
		19	20	Undersize	U	Moist	M	Completely Oxidised	CO	Red	RD	Claystone	cs						
		20	21	Undersize	U	Moist	M	Completely Oxidised	CO	Red	RD	Claystone	cs						
		21	22	Undersize	U	Moist	M	Completely Oxidised	CO	Red	RD	Claystone	cs						
		22	23	Undersize	U	Moist	M	Completely Oxidised	CO	Red	RD	Claystone	cs			Hematite <5%	1		
		23	24	Undersize	U	Moist	M	Completely Oxidised	CO	Orange	OR	Claystone	cs			Hematite <5%	1		
		24	25	Undersize	U	Moist	M	Completely Oxidised	CO	Orange	OR	Claystone	cs						
		25	26	Undersize	U	Moist	M	Completely Oxidised	CO	Orange	OR	Claystone	cs						
		26	27	Normal	A	Moist	M	Completely Oxidised	CO	Orange	OR	Siltstone	slt						
		27	28	Undersize	U	Moist	M	Completely Oxidised	CO	Orange	OR	Siltstone	slt						
		28	29	Undersize	U	Moist	M	Completely Oxidised	CO	Red	RD	Siltstone	slt						
		29	30	Undersize	U	Moist	M	Completely Oxidised	CO	Pink	PN	Siltstone	slt						
		30	31	Normal	A	Moist	M	Completely Oxidised	CO	Pink	PN	Siltstone	slt						
		31	32	Normal	A	Moist	M	Completely Oxidised	CO	White	WH	Siltstone	slt						
		32	33	Normal	A	Moist	M	Completely Oxidised	CO	Pink	PN	Siltstone	slt						
		33	34	Undersize	U	Moist	M	Completely Oxidised	CO	Pink	PN	Siltstone	slt						
		34	35	Normal	A	Moist	M	Completely Oxidised	CO	Pink	PN	Siltstone	slt						
		35	36	Normal	A	Moist	M	Completely Oxidised	CO	White	WH	Siltstone	slt						
		36	37	Normal	A	Moist	M	Completely Oxidised	CO	Pink	PN	Siltstone	slt						
		37	38	Normal	A	Moist	M	Completely Oxidised	CO	Red	RD	Siltstone	slt						
		38	39	Normal	A	Moist	M	Completely Oxidised	CO	Orange	OR	Siltstone	slt						
		39	40	Normal	A	Moist	M	Completely Oxidised	CO	Orange	OR	Siltstone	slt						
		40	41	Undersize	U	Moist	M	Completely Oxidised	CO	Orange	OR	Siltstone	slt						
		41	42	Undersize	U	Moist	M	Completely Oxidised	CO	Orange	OR	Siltstone	slt						
		42	43	Normal	A	Moist	M	Completely Oxidised	CO	Yellow	Y	Siltstone	slt						
		43	44	Undersize	U	Moist	M	Completely Oxidised	CO	Yellow	Y	Siltstone	slt						
		44	45	Undersize	U	Moist	M	Completely Oxidised	CO	Yellow	Y	Siltstone	slt						
		45	46	Normal	A	Moist	M	Completely Oxidised	CO	Yellow	Y	Siltstone	slt						
		46	47	Normal	A	Moist	M	Completely Oxidised	CO	Yellow	Y	Siltstone	slt						
		47	48	Normal	A	Moist	M	Completely Oxidised	CO	Yellow	Y	Siltstone	slt						
		48	49	Normal	A	Moist	M	Completely Oxidised	CO	Yellow	Y	Siltstone	slt						
		49	50	Normal	A	Moist	M	Completely Oxidised	CO	Yellow	Y	Siltstone	slt						
		50	51	Normal	A	Moist	M	Completely Oxidised	CO	Orange	OR	Siltstone	slt						
		51	52	Normal	A	Moist	M	Completely Oxidised	CO	Orange	OR	Siltstone	slt						
		52	53	Normal	A	Moist	M	Completely Oxidised	CO	Orange	OR	Siltstone	slt						
		53	54	Normal	A	Moist	M	Completely Oxidised	CO	Orange	OR	Siltstone	slt						
		54	55	Normal	A	Moist	M	Completely Oxidised	CO	Orange	OR	Siltstone	slt						
		55	56	Normal	A	Moist	M	Completely Oxidised	CO	Orange	OR	Siltstone	slt						
		56	57	Normal	A	Moist	M	Completely Oxidised	CO	Orange	OR	Siltstone	slt						
		57	58	Normal	A	Moist	M	Completely Oxidised	CO	Orange	OR	Siltstone	slt						
		58	59	Normal	A	Moist	M	Completely Oxidised	CO	Orange	OR	Siltstone	slt						
		59	60	Undersize	U	Moist	M	Completely Oxidised	CO	Orange	OR	Siltstone	slt						
		60	61	Normal	A	Moist	M	Completely Oxidised	CO	Orange	OR	Siltstone	slt						
		61	62	Normal	A	Moist	M	Completely Oxidised	CO	Orange	OR	Siltstone	slt						
		62	63	Normal	A	Moist	M	Completely Oxidised	CO	Orange	OR	Siltstone	slt						
		63	64	Normal	A	Moist	M	Completely Oxidised	CO	Orange	OR	Siltstone	slt						
		64	65	Normal	A	Moist	M	Completely Oxidised	CO	Orange	OR	Siltstone	slt						
		65	66	Normal	A	Moist	M	Distinctly Oxidised	DO	Yellow	Y	Siltstone	slt						
		66	67	Normal	A	Moist	M	Distinctly Oxidised	DO	Yellow	Y	Siltstone	slt						
		67	68	Undersize	U	Moist	M	Distinctly Oxidised	DO	Yellow	Y	Siltstone	slt						
		68	69	Undersize	U	Moist	M	Distinctly Oxidised	DO	Yellow	Y	Siltstone	slt						
		69	70	Undersize	U	Moist	M	Distinctly Oxidised	DO	Yellow	Y	Siltstone	slt						
		70	71	Normal	A	Moist	M	Distinctly Oxidised	DO	Yellow	Y	Siltstone	slt						
		71	72	Normal	A	Moist	M	Distinctly Oxidised	DO	Yellow	Y	Siltstone	slt						
		72	73	Normal	A	Moist	M	Distinctly Oxidised	DO	Yellow	Y	Siltstone	slt						
		73	74	Normal	A	Moist	M	Distinctly Oxidised	DO	Yellow	Y	Siltstone	slt						
		74	75	Normal	A	Moist	M	Distinctly Oxidised	DO	Yellow	Y	Siltstone	slt						
		75	76	Normal	A	Moist	M	Distinctly Oxidised	DO	Yellow	Y	Siltstone	slt						
		76	77	Normal	A	Moist	M	Distinctly Oxidised	DO	Yellow	Y	Siltstone	slt						
		77	78	Normal	A	Moist	M	Distinctly Oxidised	DO	Yellow	Y	Siltstone	slt						
		78	79	Normal	A	Dry	D	Completely Oxidised	CO	Yellow	Y	Siltstone	slt						
		79	80	Normal	A	Dry	D	Distinctly Oxidised	DO	Green	GR	Siltstone	slt						
		80	81	Normal	A	Dry	D	Distinctly Oxidised	DO	Yellow	Y	Siltstone	slt						
		81	82	Normal	A	Dry	D	Distinctly Oxidised	DO	Yellow	Y	Siltstone	slt						
		82	83	Normal	A	Dry	D	Distinctly Oxidised	DO	Green	GR	Siltstone	slt						
		83	84	Normal	A	Dry	D	Distinctly Oxidised	DO	Green	GR	Siltstone	slt						
		84	85	Normal	A	Dry	D	Distinctly Oxidised	DO	Yellow	Y	Siltstone	slt						
		85	86	Normal	A	Dry	D	Slightly Oxidised	SO	Yellow	Y	Siltstone	slt						
		86	87	Normal	A	Dry	D	Slightly Oxidised	SO	Grey Green	GY/GR	Siltstone	slt	Sandstone - medium (0.25-0.5mm)	ss m				
		87	88	Normal	A	Dry	D	Slightly Oxidised	SO	Grey Green	GY/GR	Siltstone	slt	Sandstone - medium (0.25-0.5mm)	ss m				
		88	89	Normal	A	Dry	D	Fresh	FR	Grey Green	GY/GR	Siltstone	slt	Sandstone - medium (0.25-0.5mm)	ss m				
		89	90	Normal	A	Dry	D	Fresh	FR	Grey Green	GY/GR	Siltstone	slt	Sandstone - medium (0.25-0.5mm)	ss m				
		90	91	Normal	A	Dry	D	Fresh	FR	Grey Green	GY/GR	Siltstone	slt	Sandstone - medium (0.25-0.5mm)	ss m				
		91	92	Normal	A	Dry	D	Fresh	FR	Grey Green	GY/GR	Siltstone	slt	Sandstone - fine sand (0.125-0.25mm)	ss f				
		92	93	Normal	A	Dry	D	Fresh	FR	Grey Green	GY/GR	Siltstone	slt	Sandstone - fine sand (0.125-0.25mm)	ss f				
		93	94	Normal	A	Dry	D	Fresh	FR	Grey Green	GY/GR	Siltstone	slt	Sandstone - fine sand (0.125-0.25mm)	ss f				
		94	95	Normal	A	Dry	D	Fresh	FR	Grey Green	GY/GR	Siltstone	slt	Sandstone - fine sand (0.125-0.25mm)	ss f				
		95	96	Undersize	U	Dry	D	Fresh	FR	Grey Green	GY/GR	Siltstone	slt	Sandstone - fine sand (0.125-0.25mm)	ss f				
		96	97	Normal	A	Dry	D	Fresh	FR	Grey Green	GY/GR	Siltstone	slt	Sandstone - fine sand (0.125-0.25mm)	ss f				
		97	98	Normal	A	Dry	D	Fresh	FR	Grey Green	GY/GR	Siltstone	slt	Sandstone - fine sand (0.125-0.25mm)	ss f				
		98	99	Normal	A	Dry	D	Fresh	FR	Grey Green	GY/GR	Siltstone	slt	Sandstone - fine sand (0.125-0.25mm)	ss f				
		99	100	Normal	A	Dry	D	Fresh	FR	Grey Green	GY/GR	Siltstone	slt	Sandstone - very fine (0.063-0.125mm)	ss vf				
		100	101	Normal	A	Dry	D	Fresh	FR	Grey Green	GY/GR	Siltstone	slt	Sandstone - very fine (0.063-0.125mm)	ss vf				
		101	102	Normal	A	Dry	D	Fresh	FR	Grey Green	GY/GR	Siltstone	slt	Sandstone - very fine (0.063-0.125mm)	ss vf				
		102	103	Normal	A	Dry	D	Fresh	FR	Grey Green	GY/GR	Siltstone	slt	Sandstone - very fine (0.063-0.125mm)	ss vf				
		103	104	Normal	A	Dry	D	Slightly Oxidised	SO	Grey Green	GY/GR	Siltstone	slt	Sandstone - very fine (0.063-0.125mm)	ss vf				
		104	105	Normal	A	Dry	D	Slightly Oxidised	SO	Grey Green	GY/GR	Siltstone	slt	Sandstone - very fine (0.063-0.125mm)	ss vf				
		105	106	Normal	A	Moist	M	Completely Oxidised	CO	Yellow	Y	Siltstone	slt	Sandstone - very fine (0.063-0.125mm)	ss vf				
		106	107	Normal	A	Moist	M	Completely Oxidised	CO	Yellow	Y	Siltstone	slt	Sandstone - very fine (0.063-0.125mm)	ss vf				
		107	108	Undersize	U	Moist	M	Completely Oxidised	CO	Yellow	Y	Siltstone	slt	Sandstone - very fine (0.063-0.125mm)	ss vf				
		108	109	Normal	A	Moist	M	Completely Oxidised	CO	Yellow	Y	Siltstone	slt						
		109	110	Undersize	U	Moist	M	Completely Oxidised	CO	Yellow	Y	Siltstone	slt						
		110	111	Normal	A	Dry	D	Fresh	FR	Dark Grey	D-GY	Siltstone	slt					Magnetite 5%-15%	2
		111	112	Undersize	U	Dry	D	Fresh	FR	Dark Grey	D-GY	Siltstone	slt					Magnetite 5%-15%	2
		112	113	Normal	A	Dry	D	Fresh	FR	Dark Grey	D-GY	Siltstone	slt					Magnetite 5%-15%	2
		113	114	Normal	A	Dry	D	Fresh	FR	Dark Grey	D-GY	Siltstone	slt					Magnetite 5%-15%	2
		114	115	Normal	A	Dry	D	Fresh	FR	Dark Grey	D-GY	Siltstone	slt					Magnetite 5%-15%	2
		115	116	Normal	A	Dry	D	Fresh	FR	Dark Grey	D-GY	Siltstone	slt					Magnetite 5%-15%	2
		116	117	Normal	A	Dry	D	Fresh	FR	Dark Grey	D-GY	Siltstone	slt					Magnetite 5%-15%	2
		117	118	Undersize	U	Dry	D	Fresh	FR	Dark Grey	D-GY	Siltstone	slt					Magnetite 5%-15%	2
		118	119	Normal	A	Dry	D	Fresh	FR	Dark Grey	D-GY	Siltstone	slt					Magnetite 5%-15%	2
		119	120	Normal	A	Dry	D	Fresh	FR	Dark Grey	D-GY	Siltstone	slt					Magnetite 5%-15%	2
		120	121	Normal	A	Dry	D	Fresh	FR	Dark Grey	D-GY	Siltstone	slt					Magnetite 5%-15%	2
		121	122	Normal	A	Dry	D	Fresh	FR	Dark Grey	D-GY	Siltstone	slt					Magnetite 5%-15%	2
		122	123	Normal	A	Dry	D	Fresh	FR	Dark Grey	D-GY	Siltstone	slt					Magnetite 5%-15%	2
		123	124	Undersize	U	Dry	D	Fresh	FR	Dark Grey	D-GY	Siltstone	slt					Magnetite 5%-15%	2
		124	125	Normal	A	Dry	D	Fresh	FR	Dark Grey	D-GY	Siltstone	slt					Magnetite 5%-15%	2
		125	126	Normal	A	Dry	D	Fresh	FR	Dark Grey	D-GY	Siltstone	slt					Magnetite 15%-30%	3
		126	127	Normal	A	Dry	D	Fresh	FR	Dark Grey	D-GY	Siltstone	slt					Magnetite 15%-30%	3
		127	128	Undersize	U	Dry	D	Fresh	FR	Dark Grey	D-GY	Siltstone	slt					Magnetite 15%-30%	3
		128	129	Normal	A	Dry	D	Fresh	FR	Dark Grey	D-GY	Siltstone	slt					Magnetite 15%-30%	3
		129	130	Normal	A	Dry	D	Fresh	FR	Dark Grey	D-GY	Siltstone	slt					Magnetite 15%-30%	3
		130	131	Normal	A	Dry	D	Fresh	FR	Dark Grey	D-GY	Siltstone	slt					Magnetite 15%-30%	3
		131	132	Normal	A	Dry	D	Fresh	FR	Dark Grey	D-GY	Siltstone	slt					Magnetite 5%-15%	2
		132	133	Normal	A	Dry	D	Fresh	FR	Dark Grey	D-GY	Siltstone	slt					Magnetite 5%-15%	2
		133	134	Normal	A	Dry	D	Fresh	FR	Dark Grey	D-GY	Siltstone	slt					Magnetite 5%-15%	2
		134	135	Normal	A	Dry	D	Fresh	FR	Dark Grey	D-GY	Siltstone	slt					Magnetite 5%-15%	2
		135	136	Normal	A	Dry	D	Fresh	FR	Dark Grey	D-GY	Siltstone	slt					Magnetite 5%-15%	2
		136	137	Normal	A	Dry	D	Fresh	FR	Dark Grey	D-GY	Siltstone	slt					Magnetite 15%-30%	3
		137	138	Normal	A	Dry	D	Fresh	FR	Grey	GY	Siltstone	slt					Magnetite 5%-15%	2
		138	139	Normal	A	Dry	D	Fresh	FR	Light Grey	L-GY	Siltstone	slt					Magnetite 15%-30%	3
		139	140	Normal	A	Dry	D	Fresh	FR	Dark Grey	D-GY	Siltstone	slt					Magnetite 15%-30%	3
		140	141	Normal	A	Dry	D	Fresh	FR	Dark Grey	D-GY	Siltstone	slt					Magnetite 15%-30%	3
		141	142	Normal	A	Dry	D	Fresh	FR	Dark Grey	D-GY	Siltstone	slt					Magnetite 15%-30%	3
		142	143	Normal	A	Dry	D	Fresh	FR	Dark Grey	D-GY	Siltstone	slt					Magnetite 15%-30%	3
		143	144	Normal	A	Dry	D	Fresh	FR	Dark Grey	D-GY	Siltstone	slt					Magnetite 15%-30%	3
		144	145	Normal	A	Dry	D	Fresh	FR	Dark Grey	D-GY	Siltstone	slt					Magnetite 15%-30%	3
		145	146	Normal	A	Dry	D	Fresh	FR	Dark Grey	D-GY	Siltstone	slt					Magnetite 15%-30%	3
		146	147	Normal	A	Dry	D	Fresh	FR	Dark Grey	D-GY	Siltstone	slt					Magnetite 15%-30%	3
		147	148	Normal	A	Dry	D	Fresh	FR	Black	BK	Siltstone	slt					Magnetite 15%-30%	3
		148	149	Normal	A	Dry	D	Fresh	FR	Black	BK	Siltstone	slt					Magnetite 15%-30%	3
		149	150	Normal	A	Dry	D	Fresh	FR	Black	BK	Siltstone	slt					Magnetite 15%-30%	3
		150	151	Normal	A	Dry	D	Fresh	FR	Black	BK	Siltstone	slt					Magnetite 15%-30%	3
		151	152	Normal	A	Dry	D	Fresh	FR	Black	BK	Siltstone	slt					Magnetite 15%-30%	3
		152	153	Normal	A	Dry	D	Fresh	FR	Black	BK	Siltstone	slt					Magnetite 15%-30%	3

Table 4: Assay Data Examples

Screen capture of Lab-In data management software.

Example Assay Header

Hole No	Client	Project	Job Number	SAMPLES RECEIVED	INSTRUCTIONS RECEIVED	DATE REPORTED	Client Sample Number	Lab Sample Number	Batch Number	Sample Type	Depth From	Depth To	Thickness	Lab	Drill Diameter (mm)	Sample Receipt Weight	DTR Prep Head Weight_grams
RCCW23001	Hawsons Iron	Hawsons Iron	N9879	45020	45040	45072	40001-40005	40001-40005	HIO-001	RC	0	5	5	BV Adelaide	143	2409	150.92
RCCW23001	Hawsons Iron	Hawsons Iron	N9879	45020	45040	45072	40006-40010	40006-40010	HIO-001	RC	5	10	5	BV Adelaide	143	2759	150.62
RCCW23001	Hawsons Iron	Hawsons Iron	N9879	45020	45040	45072	40011-40015	40011-40015	HIO-001	SIZE	10	10	0	BV Adelaide	143	NR	NR
RCCW23001	Hawsons Iron	Hawsons Iron	N9879	45020	45040	45072	40011-40015	40011-40015	HIO-001	RC	10	15	5	BV Adelaide	143	1114	150.73
RCCW23001	Hawsons Iron	Hawsons Iron	N9879	45020	45040	45072	40016-40020	40016-40020	HIO-001	RC	15	20	5	BV Adelaide	143	2675	150.5
RCCW23001	Hawsons Iron	Hawsons Iron	N9879	45020	45040	45072	40021-40025	40021-40025	HIO-001	RC	20	25	5	BV Adelaide	143	1964	150.44
RCCW23001	Hawsons Iron	Hawsons Iron	N9879	45020	45040	45072	40026-40030	40026-40030	HIO-001	RC	25	30	5	BV Adelaide	143	3828	150.15
RCCW23001	Hawsons Iron	Hawsons Iron	N9879	45020	45040	45072	40031-40035	40031-40035	HIO-001	RC	30	35	5	BV Adelaide	143	3570	150.46
RCCW23001	Hawsons Iron	Hawsons Iron	N9879	45020	45040	45072	40036-40040	40036-40040	HIO-001	RC	35	40	5	BV Adelaide	143	3934	150.06
RCCW23001	Hawsons Iron	Hawsons Iron	N9879	45020	45040	45072	40041-40045	40041-40045	HIO-001	RC	40	45	5	BV Adelaide	143	2960	150.76
RCCW23001	Hawsons Iron	Hawsons Iron	N9879	45020	45040	45072	40046-40050	40046-40050	HIO-001	RC	45	50	5	BV Adelaide	143	3862	150.54
RCCW23001	Hawsons Iron	Hawsons Iron	N9879	45020	45040	45072	40051-40055	40051-40055	HIO-001	RC	50	55	5	BV Adelaide	143	3595	150.3

Example Assay Data (Part 1)

First Pulverise Time	First Oversize Weight	Second Pulverise Time	Second Oversize Weight	Third Pulverise Time	Third Oversize Weight	Fourth Pulverise Time	Fourth Oversize Weight	Fifth Pulverise Time	Fifth Oversize Weight	DTR Head_grams	DTR Mags_grams	DTR Non-Mags_grams	Mags%	Assay Head_Fe_%	Assay Head_SiO2_%	Assay Head_Al2O3_%	Assay Head_CaO_%
30	68.84	55	23.63	19	8.34	7	2.86	0	0	23.32	1.28	22.02	5.488850772	14.49	58.45	10.19	1.98
30	58.79	47	20.94	17	6.68	5	2.72	0	0	23.64	0.36	23.13	1.52284264	9.41	66.86	11.09	1.07
NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
30	46.44	37	15.5	12	4.69	0	0	0	0	22.18	0.36	21.79	1.623083859	9.29	70.78	8.51	0.34
30	19.42	16	6.24	5	2.28	0	0	0	0	21.76	0.02	20.96	0.091911765	6.9	59.39	17.98	1.07
30	30.84	25	8.57	7	2.57	0	0	0	0	22.59	0.04	23.1	0.1770695	6.64	63.29	16.49	0.41
30	39.32	31	12.55	10	3.85	0	0	0	0	21.49	0.02	20.89	0.093066543	12.28	50.72	19.14	0.53
30	33.9	27	11.2	9	3.18	0	0	0	0	23.43	0.05	23.44	0.213401622	5.38	60.56	20.47	0.25
30	32.62	26	8.8	7	2.43	0	0	0	0	22.71	0.07	22.6	0.308234258	6.11	59.1	20.01	0.57
30	28.31	23	8.84	7	3.46	0	0	0	0	22.53	0.02	21.94	0.088770528	7.19	59.5	15.58	0.57
30	29.06	23	8.22	7	2.75	0	0	0	0	21.16	0.09	20.71	0.425330813	6.35	60.79	15.71	0.18
30	31.48	25	9.25	7	1.98	0	0	0	0	22.66	0.06	22.46	0.26478376	5.87	62.05	14.89	0.44

Example Assay Data (Part 2)

Assay Head_MgO_%	Assay Head_MnO_%	Assay Head_P_%	Assay Head_S_%	Assay Head_K2O_%	Assay Head_Na2O_%	Assay Head_TiO2_%	Assay Head_Cu_%	Assay Head_Ni_%	Assay Head_Co_%	Assay Head_Cr_%	Assay Head_Pb_%	Assay Head_Zn_%	Assay Head_As_%	Assay Head_Sn_%	Assay Head_Sr_%	Assay Head_Zr_%	Assay Head_Ba_%
0.856	0.05	0.029	0.03	0.683	0.333	0.744	0.003	<0.001	0.004	0.016	<0.002	0.01	<0.001	<0.001	NR	NR	0.055
0.528	0.03	0.013	0.029	0.484	0.176	0.745	<0.001	<0.001	0.003	<0.001	<0.002	0.019	<0.001	<0.001	NR	NR	0.048
NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
0.539	0.06	0.008	0.015	0.324	0.128	1.222	0.002	<0.001	0.002	<0.001	<0.002	0.007	<0.001	<0.001	NR	NR	0.041
0.958	0.02	0.008	0.017	0.889	0.24	1.646	<0.001	<0.001	0.002	<0.001	<0.002	0.008	<0.001	<0.001	NR	NR	0.042
0.618	0.02	0.007	0.014	0.74	0.173	1.566	<0.001	<0.001	<0.001	0.008	<0.002	0.017	<0.001	<0.001	NR	NR	0.037
0.47	<0.01	0.018	0.022	0.328	0.137	1.491	0.002	<0.001	0.002	<0.001	<0.002	0.016	<0.001	<0.001	NR	NR	0.034
0.358	<0.01	0.014	0.014	0.208	0.107	1.706	<0.001	<0.001	0.002	0.013	<0.002	0.007	<0.001	<0.001	NR	NR	0.043
0.721	<0.01	0.019	0.012	0.394	0.123	1.553	0.002	<0.001	0.002	0.005	<0.002	0.008	<0.001	<0.001	NR	NR	0.036
3.117	0.02	0.038	0.005	2.127	0.146	1.638	0.004	<0.001	0.004	0.015	<0.002	0.017	<0.001	<0.001	NR	NR	0.052
3.557	0.03	0.029	0.002	3.143	0.181	1.594	0.003	<0.001	0.004	0.002	<0.002	0.017	<0.001	<0.001	NR	NR	0.064
3.612	0.03	0.039	0.003	3.232	0.18	1.516	0.003	<0.001	0.004	0.012	<0.002	0.016	<0.001	<0.001	NR	NR	0.064

Example Assay Data (Part 3)

Assay Head_V_%	Assay Head_Cl_%	Assay Head_LOI_%	Assay Mags_Fe_%	Assay Mags_SiO2_%	Assay Mags_Al2O3_%	Assay Mags_CaO_%	Assay Mags_MgO_%	Assay Mags_MnO_%	Assay Mags_P_%	Assay Mags_S_%	Assay Mags_K2O_%	Assay Mags_Na2O_%	Assay Mags_TiO2_%	Assay Mags_Cu_%	Assay Mags_Ni_%	Assay Mags_Co_%	Assay Mags_Cr_%
0.018	0.041	5.84	58.93	9.99	3.95	0.17	0.136	0.05	0.054	0.03	0.139	0.057	0.996	0.005	0.009	0.005	0.041
0.013	0.042	5.47	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS
NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
0.01	0.044	4.65	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS
0.012	0.073	7.89	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS
0.012	0.041	7.15	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS
0.022	0.04	9.55	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS
0.019	0.04	8.6	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS
0.013	0.042	8.73	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS
0.014	0.041	6.86	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS
0.015	0.038	5.57	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS
0.014	0.038	5.47	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS

Example Assay Data (Part 4)

Assay Mags_Pb_%	Assay Mags_Zn_%	Assay Mags_As_%	Assay Mags_Sn_%	Assay Mags_Sr_%	Assay Mags_Zr_%	Assay Mags_Ba_%	Assay Mags_V_%	Assay Mags_Cl_%	Assay Mags_LOI_%	Distribution_Fe	Distribution_SiO2	Distribution_Al2O3	Distribution_CaO	Distribution_MgO	Distribution_MnO	Distribution_P	Distribution_S
0.008	0.009	0.004	0.009	NR	NR	0.037	0.045	0.017	IS	22.32284168	0.938128643	2.127670319	0.471264965	0.872060403	5.488850772	10.22061868	5.488850772
IS	IS	IS	IS	NR	NR	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS
NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
IS	IS	IS	IS	NR	NR	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS
IS	IS	IS	IS	NR	NR	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS
IS	IS	IS	IS	NR	NR	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS
IS	IS	IS	IS	NR	NR	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS
IS	IS	IS	IS	NR	NR	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS
IS	IS	IS	IS	NR	NR	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS
IS	IS	IS	IS	NR	NR	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS
IS	IS	IS	IS	NR	NR	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS
IS	IS	IS	IS	NR	NR	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS

Example Assay Data (Part 5)

Distribution_K2O	Distribution_Na2O	Distribution_TiO2	Distribution_Cu	Distribution_Ni	Distribution_Co	Distribution_Cr	Distribution_Pb	Distribution_Zn	Distribution_As	Distribution_Sn	Distribution_Sr	Distribution_Zr	Distribution_Ba	Distribution_V	Distribution_Cl	-25um	P80
1.117057478	0.939533015	7.347977646	9.14808462	NR	6.861063465	14.0651801	NR	4.939965695	NR	NR	NR	NR	3.69249961	13.72212693	2.275864954	NR	NR
IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	NR	NR	IS	IS	NR	NR
NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	88.46	22.451
IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	NR	NR	IS	IS	NR	NR
IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	NR	NR	IS	IS	NR	NR
IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	NR	NR	IS	IS	NR	NR
IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	NR	NR	IS	IS	NR	NR
IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	NR	NR	IS	IS	NR	NR
IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	NR	NR	IS	IS	NR	NR
IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	NR	NR	IS	IS	NR	NR
IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	NR	NR	IS	IS	NR	NR
IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	NR	NR	IS	IS	NR	NR

Table 6: Example Geophysical Logs

Example Gyro Log (LAS)

WELL	DEPT.M	DIRE.DEG	TILT.DEG	NORT.M	EAST.M	AZIM.DEG	DRIF.M	TDEP.M
RCCE23003	0	40	37.19	0	0	0	0	0
RCCE23003	5	39.34	34.1	2.168	1.777	39.3	2.803	4.14
RCCE23003	10	39.19	34.33	4.353	3.559	39.3	5.623	8.269
RCCE23003	15	38.72	34.3	6.552	5.321	39.1	8.441	12.4
RCCE23003	20	38.4	34.66	8.78	7.088	38.9	11.284	16.513
RCCE23003	25	38.1	34.59	11.014	8.839	38.7	14.122	20.629
RCCE23003	30	37.75	34.61	13.26	10.578	38.6	16.962	24.744
RCCE23003	35	37.73	34.48	15.498	12.31	38.5	19.792	28.865
RCCE23003	40	37.71	34.43	17.735	14.039	38.4	22.619	32.99
RCCE23003	45	37.78	34.64	19.981	15.78	38.3	25.461	37.103
RCCE23003	50	37.35	35.05	22.264	17.522	38.2	28.332	41.197
RCCE23003	55	37.02	35.33	24.572	19.263	38.1	31.223	45.276
RCCE23003	60	37.32	35.43	26.877	21.02	38	34.121	49.35
RCCE23003	65	37.43	35.41	29.178	22.781	38	37.018	53.425
RCCE23003	70	37.67	35.2	31.459	24.543	38	39.9	57.511
RCCE23003	75	37.91	35.36	33.742	26.32	38	42.794	61.588
RCCE23003	80	37.56	35.8	36.061	28.103	37.9	45.718	65.644
RCCE23003	85	37.38	36.01	38.397	29.888	37.9	48.658	69.688
RCCE23003	90	37.29	36.14	40.743	31.675	37.9	51.607	73.726
RCCE23003	95	37.42	35.97	43.075	33.459	37.8	54.543	77.773
RCCE23003	100	37.24	35.98	45.414	35.237	37.8	57.481	81.819
RCCE23003	105	37.1	36.23	47.771	37.019	37.8	60.436	85.852
RCCE23003	110	37.41	36.17	50.115	38.812	37.8	63.386	89.888
RCCE23003	115	37.53	36.14	52.453	40.608	37.7	66.335	93.926
RCCE23003	120	37.44	36.15	54.795	42.401	37.7	69.285	97.964
RCCE23003	125	37.5	36.11	57.133	44.195	37.7	72.231	102.003
RCCE23003	130	37.43	36.2	59.478	45.99	37.7	75.184	106.038
RCCE23003	135	37.53	36.53	61.838	47.803	37.7	78.161	110.056
RCCE23003	140	37.15	36.65	64.217	49.606	37.7	81.145	114.067
RCCE23003	145	37.37	36.43	66.577	51.408	37.7	84.114	118.09
RCCE23003	150	37.37	36.23	68.925	53.201	37.7	87.069	122.123
RCCE23003	155	37.5	35.94	71.253	54.988	37.7	90.004	126.172
RCCE23003	160	37.64	35.67	73.562	56.768	37.7	92.92	130.233
RCCE23003	165	37.37	35.7	75.881	58.539	37.6	95.837	134.294
RCCE23003	170	37.38	35.77	78.203	60.314	37.6	98.76	138.351
RCCE23003	175	37.37	35.52	80.512	62.077	37.6	101.665	142.42
RCCE23003	180	37.33	35.32	82.811	63.83	37.6	104.555	146.5
RCCE23003	185	37.35	35.09	85.095	65.574	37.6	107.43	150.591
RCCE23003	190	37.57	34.89	87.362	67.318	37.6	110.29	154.692
RCCE23003	195	37.57	34.77	89.622	69.056	37.6	113.141	158.8
RCCE23003	200	37.62	34.65	91.874	70.791	37.6	115.984	162.913
RCCE23003	205	37.81	34.62	94.118	72.533	37.6	118.825	167.028
RCCE23003	210	37.59	34.56	96.366	74.263	37.6	121.661	171.145
RCCE23003	215	37.57	34.63	98.618	75.996	37.6	124.502	175.259
RCCE23003	220	36.88	34.84	100.903	77.71	37.6	127.359	179.363
RCCE23003	225	36.64	35.31	103.222	79.435	37.6	130.248	183.443
RCCE23003	230	36.14	35.97	105.593	81.167	37.5	133.184	187.49
RCCE23003	235	35.75	36.48	108.006	82.903	37.5	136.155	191.51
RCCE23003	240	35.49	37.09	110.461	84.654	37.5	139.169	195.499
RCCE23003	245	35.1	37.38	112.945	86.399	37.4	142.202	199.472
RCCE23003	250	35.19	37.34	115.423	88.147	37.4	145.232	203.447
RCCE23003	255	35.31	37.7	117.918	89.914	37.3	148.288	207.403
RCCE23003	260	34.82	38.03	120.447	91.673	37.3	151.365	211.342
RCCE23003	265	34.79	38.06	122.979	93.432	37.2	154.445	215.279
RCCE23003	270	34.53	38.15	125.523	95.183	37.2	157.53	219.211
RCCE23003	275	33.91	38.72	128.119	96.928	37.1	160.653	223.112
RCCE23003	280	33.98	38.73	130.713	98.676	37	163.777	227.012
RCCE23003	285	33.8	39.19	133.338	100.434	37	166.931	230.887
RCCE23003	290	33.54	39.86	136.009	102.204	36.9	170.13	234.725
RCCE23003	295	33.41	40.44	138.717	103.99	36.9	173.367	238.531
RCCE23003	300	32.98	40.98	141.467	105.775	36.8	176.639	242.306
RCCE23003	305	32.86	41.27	144.238	107.564	36.7	179.929	246.064
RCCE23003	310	32.46	41.33	147.024	109.337	36.6	183.222	249.818
RCCE23003	315	32.65	41.28	149.801	111.116	36.6	186.513	253.576
RCCE23003	320	32.45	41.51	152.597	112.894	36.5	189.819	257.32
RCCE23003	325	32.67	41.58	155.391	114.686	36.4	193.13	261.06
RCCE23003	330	32.27	41.45	158.189	116.453	36.4	196.431	264.808

Example GN Geophysical Log (LAS)

WELL.	DEPT[M]	MagS	SSD	LSD	GAM	CAL	BRD	CDL	Temp	MC2F	MC4F	DT	LON	SHN	SPR
RCCE23004	94.09	95.933	2.61	2.567	125	81.587	2.571	2.58267	24.097	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	94.19	96.067	2.563	2.607	116.667	81.594	2.574	2.58133	24.079	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	94.29	96.067	2.628	2.596	154.167	81.587	2.576	2.6	24.079	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	94.39	96	2.54	2.653	150	81.594	2.534	2.57567	24.079	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	94.49	95.9	2.606	2.614	145.238	81.535	2.607	2.609	24.079	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	94.59	95.933	2.595	2.526	83.929	81.587	2.581	2.56733	24.083	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	94.69	96.067	2.639	2.549	170.833	81.639	2.603	2.597	24.079	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	94.79	96	2.535	2.504	187.5	81.587	2.601	2.54667	24.067	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	94.89	96.1	2.583	2.71	129.167	81.639	2.544	2.61233	24.077	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	94.99	96	2.412	2.518	101.786	81.542	2.506	2.47867	24.079	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	95.09	96	2.456	2.439	125	81.587	2.411	2.43533	24.091	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	95.19	96.033	2.412	2.456	162.5	81.639	2.405	2.42433	24.079	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	95.29	96.233	2.398	2.41	115.476	81.691	2.412	2.40667	24.079	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	95.39	96.633	2.385	2.45	168.452	81.691	2.423	2.41933	24.083	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	95.49	96.033	2.369	2.433	166.667	81.639	2.351	2.38433	24.083	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	95.59	96.133	2.326	2.366	145.238	81.683	2.32	2.33733	24.083	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	95.69	96.033	2.378	2.39	158.333	81.683	2.28	2.34933	24.079	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	95.79	96	2.326	2.396	153.571	81.49	2.353	2.35833	24.083	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	95.89	96.067	2.236	2.356	148.81	81.49	2.285	2.29233	24.067	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	95.99	95.9	2.391	2.388	167.262	81.498	2.309	2.36267	24.079	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	96.09	95.933	2.408	2.478	120.833	81.49	2.299	2.395	24.079	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	96.19	95.933	2.413	2.539	120.833	81.49	2.373	2.44167	24.079	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	96.29	95.9	2.409	2.48	113.095	81.542	2.46	2.44967	24.083	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	96.39	95.9	2.425	2.506	104.762	81.49	2.424	2.45167	24.083	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	96.49	95.9	2.435	2.42	76.786	81.483	2.478	2.44433	24.079	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	96.59	96	2.42	2.5	144.048	81.49	2.476	2.46533	24.091	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	96.69	95.967	2.509	2.53	90.476	81.542	2.427	2.48867	24.083	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	96.79	95.967	2.467	2.489	106.548	81.49	2.466	2.474	24.097	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	96.89	96.033	2.469	2.541	92.857	81.542	2.45	2.48667	24.091	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	96.99	95.9	2.429	2.56	137.5	81.438	2.485	2.49133	24.075	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	97.09	95.9	2.451	2.546	83.333	81.542	2.503	2.5	24.091	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	97.19	95.867	2.47	2.499	87.5	81.49	2.506	2.49167	24.079	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	97.29	95.5	2.462	2.498	70.833	81.535	2.473	2.47767	24.079	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	97.39	95.9	2.5	2.545	61.31	81.49	2.47	2.505	24.079	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	97.49	96	2.477	2.442	82.738	81.483	2.433	2.45067	24.097	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	97.59	96	2.452	2.476	120.833	81.483	2.434	2.454	24.083	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	97.69	95.867	2.436	2.508	108.333	81.542	2.417	2.45367	24.093	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	97.79	95.933	2.51	2.474	96.429	81.483	2.495	2.493	24.083	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	97.89	95.6	2.41	2.509	92.262	81.49	2.456	2.45833	24.091	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	97.99	96.4	2.405	2.562	83.333	81.446	2.48	2.48233	24.079	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	98.09	95.933	2.485	2.497	101.786	81.483	2.448	2.47667	24.093	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	98.19	95.9	2.462	2.517	100.595	81.49	2.487	2.48867	24.091	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	98.29	95.867	2.444	2.563	66.667	81.49	2.526	2.511	24.083	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	98.39	95.933	2.557	2.679	127.381	81.535	2.522	2.586	24.083	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	98.49	95.9	2.465	2.535	86.31	81.446	2.468	2.48933	24.083	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	98.59	95.933	2.48	2.587	99.405	81.49	2.476	2.51433	24.083	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	98.69	95.933	2.535	2.515	120.833	81.542	2.517	2.52233	24.097	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	98.79	95.9	2.537	2.452	145.833	81.49	2.503	2.49733	24.083	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	98.89	96.033	2.535	2.505	120.833	81.542	2.511	2.517	24.091	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	98.99	95.967	2.501	2.565	94.643	81.498	2.483	2.51633	24.079	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	99.09	96	2.482	2.48	144.048	81.49	2.5	2.48733	24.079	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	99.19	95.967	2.581	2.51	117.857	81.49	2.487	2.526	24.091	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	99.29	95.9	2.522	2.564	154.167	81.542	2.464	2.51667	24.091	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	99.39	95.933	2.443	2.567	108.333	81.535	2.551	2.52033	24.097	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	99.49	95.9	2.541	2.505	125	81.431	2.498	2.51467	24.091	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	99.59	95.9	2.494	2.562	108.333	81.535	2.524	2.52667	24.097	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	99.69	95.933	2.532	2.557	122.024	81.49	2.544	2.54433	24.093	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	99.79	95.933	2.511	2.51	100	81.542	2.49	2.50367	24.093	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	99.89	95.933	2.507	2.505	120.238	81.49	2.525	2.51233	24.083	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25
RCCE23004	99.99	95.9	2.435	2.514	120.833	81.498	2.483	2.47733	24.097	-999.25	-999.25	-999.25	-999.25	-999.25	-999.25

Appendix 2

McMahon QAQC Report Extract

1 SUMMARY

1.1 Brief

This report details the QAQC (quality assurance, quality control) methods and outcomes employed by Hawson's Iron for their 2023 drilling program on laboratory and other test results.

Twenty holes were tested (twenty two holes drilled), each mostly to a depth of approximately 150 metres.

One metre samples were collected and combined into five metre composites for resource testing.

Approximately 700 samples were collected for laboratory testing, approximately 5% to 10% of which had various QAQC (Quality Assurance / Quality Control) checks initiated as evaluated in this report.

The laboratory utilised (lab) was Bureau Veritas (BV) Adelaide, with cross-check samples being performed at the ALS Perth lab.

> The investigation of multiple sources of QAQC was performed for sample recovery, magnetite recovery (DTR – Davis Tube Recovery - Magnetite% / DTR Mags%), chemical analyses (XRF on Head and Concentrate samples), and sizing analysis as was attained from laboratory testing for sample composites from RC (Reverse Circulation) drilling.
>
> **The outcomes were evaluated against industry practice and certification standards and the methods found to be generally in accord with accuracy measures (precision and bias), and with prior programs outcomes (2021 & 2016 programs), and thus suitable for use for the intended purpose of ore resource estimation and planning.**
>
> Sampling and laboratory preparation and analytical errors (precision) are generally within or close to industry standard specified tolerances, and without bias of significance. However, the shallow depth of drilling produced samples of low concentration (values) that, when compared with higher concentration outcomes, resulted in exacerbated errors for the relative value statistics utilised.
>
> Some test outcomes showed minor deviations outside specified limits, though were deemed to be of practically no significance. These are specified in the report, along with the size of deviations and are the subject of ongoing investigations.

Outlying values were identified and excluded if justifiable process faults were found, or included if not.

1.2 Key Findings

Key findings were as follows.

RC Sample Recovery Variations within Expectation – The mass of each 1 metre sample tested, was calculated as a percentage of the entire sample extracted from the RC drilling process, then compared for variation within the 5 metre section to be composited for testing. Statistics of percentage variation and coefficient of variation (standard deviation divided by mean of outcomes - a relative variation measurement; relative statistics also being used to evaluate analytical outcomes) were utilised. General expectation for good sampling of 5% within 5 metre variations, and 20% coefficient of variation on average were generally met.

Field Duplicates Adherence; DTR Mags% & Fe - The Field Duplicates, which represent the largest measurable errors comprising definition of overall sampling, preparation and measurement variation, were within expected statistical tolerance limits as defined by precision and bias for key analysis criteria of DTR Mags%, and Fe (iron in head sample). This is despite the drilling targeting shallow, low magnetite concentration zones, which exacerbates the relative precision and bias errors used for evaluation compared with a higher grade deposit.

Field Duplicates Sub Splits Relative Value Variations – Low Magnetite Concentrations; DTR Mags% & Fe – Testing of sub splits of the Field Duplicates, representing errors of sample preparation and measurement, were enacted via Cross-Lab Coarse Residue Repeat checks (ALS lab, Perth), Coarse Residue Repeats (within lab) and Pulp Sample Repeats. These sub split samples showed higher than expected variations, and at times higher than statistical tolerances, likely due to the low concentration of magnetite (and iron), the statistics used of relative precision exaggerating errors of low concentration. The Field Duplicates overall adherence gave confidence in outcomes, these having more samples of higher concentration of magnetite due to selective sampling than the other comparisons (which had random selection within set intervals, producing a lesser proportion of samples of low concentration material via a process called random, stratified sampling), though the Field Duplicates still had more low concentration outcomes than typical deposits and thus exacerbated relative errors as noted in the prior point.

Certified Reference Materials (CRM's); Adherence / Small High Biases / Ignition Loss Effects? - Certified Reference Materials (CRM's), representing measurement (analytical) errors, were found to either generally adhere to the nominal three standard deviation limits recommended by manufacturers, or the limits as set by industry for relative variations, with some exceptions noted below, for the key tests of DTR Mags%, elements / oxides of Fe, SiO2 (silicon dioxide), Al2O3 (aluminium oxide), P (phosphorus), TiO2 (titanium dioxide), and LOI (loss on ignition).

SiO2 for low concentrations, Al2O3 for high concentrations, and S and P for high concentrations were found to, at times, exceed CRM value upper limits, and be biased slightly high of expected average outcomes, as well as being outside of industry expected variations. The effects of these biases was examined and found to be generally minimal in significance in the opinion of McMahon Resources.

A general minimal to small bias was observed in all BV lab results compared with the CRM's specification values. The LOI (loss on ignition) were generally high and variable compared with CRM specifications and limits. High LOI in testing compared with certified samples could result in all other analysis being higher, as was observed. Investigations into this effect are ongoing.

Blanks – Blanks were tested for DTR Mags% and Fe% and found to be minimal in outcome as expected, and less than prior years testing.

Sizing – Sizing tests on pulverised samples were undertaken to ensure the aim of 80% passing 25 um (P80 of 25) was attained for analytical testing of DTR Mags% samples. The BV lab, and cross checked ALS lab, both had averages of greater than 80% passing at 25 um, and a corresponding P80 of less than 25um.

QA Sample Type	QA Parameter	Test Parameter	Type	Relative Precision Average%*						Acceptable Limits[3]	Number of Samples		
				2023			2021		2016		2023	2021	2016
				ISO Precision[0]	2 x APD[1]	2 x APD Adj[1]	2 x APD[1]	2 x APD Adj[1]	2 x APD[1]				
Field duplicates of 5 m RC composites	Total precision / primary sampling error		All Duplicates	19.0	41.5	21.7	31.3	26.7	24.1[4]	40	20	78	23
Field pairs of 5 m RC composites	Field halving precision / primary sampling error		All Duplicates	-	-	-	26.8	15.9	20.4	40	0	73	87
Cross-Lab Coarse Residue Repeat	Laboratory Preparation & Measurement Error - between laboratories	DTR Magnetics (DTR Mags)	All Repeats	30.2	88.7	25.7	-	-	-	15	43	-	-
Coarse Residue Repeat	Laboratory Preparation & Measurement Error - within laboratory		All Repeats	24.2	39	18.7	-	-	-	15	44	-	-
Pulp Repeat	Laboratory Measurement Error		All Repeats	24.9	39.9	20	-	-	-	7	44	-	-
Certified Reference Materials (CRM's)	Analytical precision / analytical error		All compared with OREAS 700 CRM[8]	4.4[9]	5.4	4.5	4.4	4.4[5]		Not calculated	20	99	10
			All compared with OREAS 701 CRM	3.2	3.7	3.3	0.7	0.7[5]		5	21	2	9

*Green shading denotes acceptable outcomes, orange shading denotes less acceptable outcomes.

[0]Statisitcs as provided by International Standard, ISO 3085, Part 8, 2019, "Iron ores — Experimental methods for checking the precision of sampling, sample preparation and measurement."

[1]APD - absolute pair difference; the absolute value of the difference between the primary and duplicate sample pair, divided by the mean of the sample pair and multiplied by two (2) to attain the relative precision value at 95% confidence. All samples tested are then averaged to give the relative precision average. The "Adj" version adjusts individual outcomes to the average precision outcome, rather than individual outcomes, McMahon Resources postulating the former will better represent actual variations.

[3]Limits are per prior Hawsons programs, save CRM precision which is based on the greater of the CRM certifiers supplied two standard deviation limits or 5%.
[4]Based on 2010 result of speared field duplicates (Hawson's Iron Project) applied to 2016 data by prior QAQC Reviewer.
[5]Mathematical adjustment with bias removed and two outlying values removed.
[9]One value was just above 2 standard deviation limits, however all outcomes (save outlier per prior note), are within tolerance of 3 standard deviation limits prescribed by CRM manufacturers.

TOTAL PRECISION - FIELD DUPLICATES, DTR Mags%

Relative Mean Bias = 0.7%

Relative Precision (2xSTD DEV) = 19%

Data — "1:1" line — Mean Bias ----- -Precision ----- +Precision
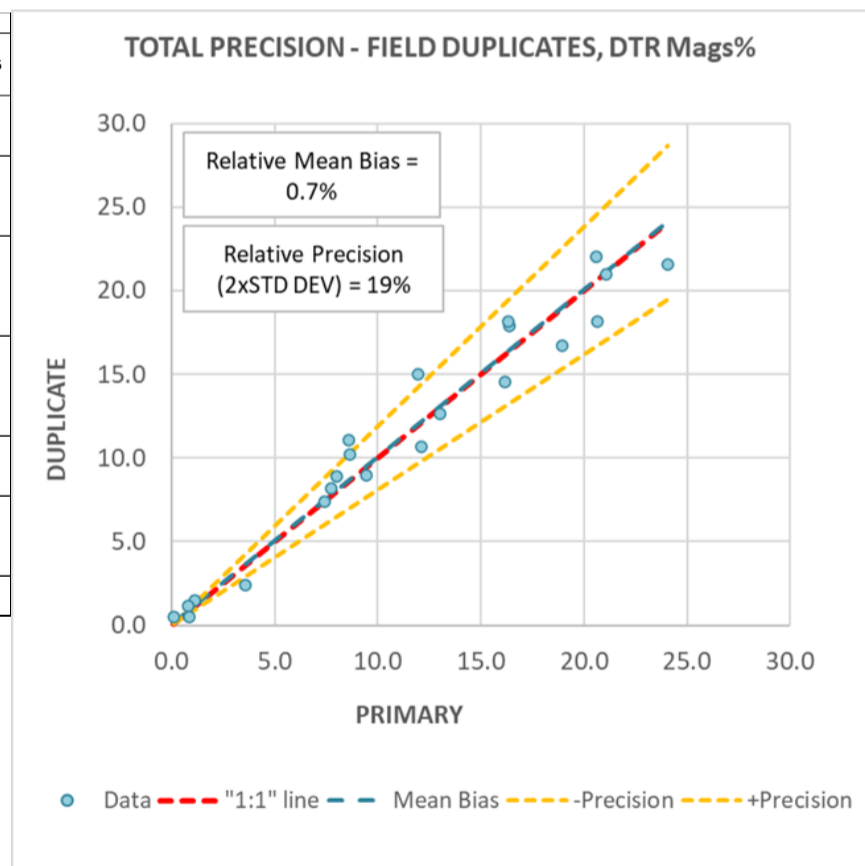
JORC Code, 2012 Edition – Table 1 Hawsons Magnetite Project

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.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (e.g., 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g., submarine nodules) may warrant disclosure of detailed information.*	o During the drilling program in Q1-Q2 2023, samples were taken from drillholes using the Reverse Circulation (RC) technique from surface to total depth (TD). o 22 holes were drilled for 3,568m of RC to test the upper zone from surface to ~150m for its ore potential. o The 2023 RC chips were sampled using a Metzke Cyclone/Cone Splitter combination (3 chute – one permanently closed) on 1m intervals into a split of 12% primary, a 12% library/duplicate sample and a 76% bulk bypass sample. The primary and secondary samples were collected into calico sample bags to give approximately 12-15kg per bag. The bulk bypass samples were collected into 900mm x 600mm plastic bags to give approximately 30-40kg per bag. The secondary samples are being kept in secure storage on-site. o As soon as the 1m interval was drilled, the samples in the bags from the cone splitter were carried to a weighing rig equipped with a Wedderburn WS603 digital hanging scale (150kg capacity and accurate to 0.05kg). o Each sample weight was entered into an iPad-based digital logging system. o Sample bag tops were securely tied closed and placed in 30-sample-long rows. o Together with QAQC samples, the 1m primary samples were sent to the Bureau Veritas (BV) laboratory in Wingfield, Adelaide and sub-sampled via rotary sub-division (RSD) into ¼ portions and then these 1m subsamples were combined into 5m composites. This was done to obtain manageable sample sizes for laboratory sample preparation and assaying. o Subsamples were taken from this 5m composite sample for head sample assay and Davis Tube Recovery testing. A copy of the proprietary Hawsons sample preparation method that was used for DTR testing is available for review. o The DTR recovered magnetic sample was subject to further XRF analysis.

Criteria	JORC Code explanation	Commentary
		o QAQC field duplicate samples were collected from the secondary sample chute of the cone splitter at a rate of 2 x 5m composite samples per drillhole (~1 in every 15 composite samples) and were prepared using the same method as listed above for primary samples. o Holes were drilled as perpendicular to bedding as possible to obtain as representative samples as possible. o Geophysical logging was completed for all 22 holes presented in this data set, including logs of natural gamma, magnetic susceptibility, density data and gyro downhole survey. o Geophysical data was initially logged through 50mm PVC casing to TD. However, the PVC casing was later pulled from the holes and each one was re-logged with magnetic susceptibility without casing. o Consistency of sampling method was maintained. o The sampling techniques used are considered appropriate for this deposit type with all sampling completed to industry standard practice.
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.).*	• For the 2023 program (all RC drilling), the drilling was carried out using a truck mounted Sandvik UDR 1200HC. An Axis Champ Navigator Gyroscope was used to monitor drillhole deviation. • 4.5" rods with stabiliser subs and 5-5/8" face bits were utilised in the drill string. • A Multi-wave Sensors GPS Azimuth Pointing System was used to determine the location of the drillhole azimuth ground marker pegs. Three pegs were placed in the ground along the azimuth direction for the rig to drive in and align to: 1) a sighter peg at 15m away and two other pegs at the wheelbase length. This allowed the drill rig to drive straight onto alignment at the drillhole location. • The rig was jacked up and levelled using an inbuilt, bubble-levelling device on the rig. • The rig mast inclination was determined using a SOLA NAM 50 50cm inclinometer.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *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.*	• Sample recoveries were recorded for the 2023 RC program returning an average recovery of 90.51%. • RC recoveries were recorded by measuring the mass of the primary, library/duplicate and bulk reject samples of each 1m drilled. This data was used to calculate a recovery percentage based on a theoretical mass calculated using downhole short-spaced density (SSD) data and the nominal drillhole diameter (143mm).

Criteria	JORC Code explanation	Commentary
		• Recovery data was also used for an investigation of RC recovery versus DTR grade, and this indicated that no inherent bias was evident. • Further, variations within proposed 5 metre primary composites were examined as a percentage of the entire RC sample recovered to ensure representative sample combination was attained.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* • *The total length and percentage of the relevant intersections logged.*	• Geological logging of chips/core/rock samples is qualitative by nature. • For the 2023 program, every RC drillhole was lithologically logged by a geologist and entered into an excel based logging template recording: recovery, moisture, oxidation state, colour, magnetite %, hematite %, martite %, vein composition and %, gangue min, sulphide min. Data was validated against a company lithological dictionary using Lab-In, a proprietary data validation software system. and uploaded to a SharePoint cloud-based file storage facility. • RC drill chips were wet sieved from each one-meter sample and geologically logged and codes digitally recorded onsite. Washed drill chips from one-meter intervals are stored in chip trays and photographic records are stored on a SharePoint cloud-based file storage facility. • Handheld magnetic susceptibility was recorded using a CormaGeo RT-1 Magnetic Susceptibility Meter with inbuild data logger. Three measurements were recorded on each RC sample bag (top, middle & base), then averaged to give a single 1m quantitative measurement.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• The 2010 RC samples were composited using geological control via the spear sampling method of the 1m bulk sample bags. The spear method was concluded by CAP to be adequate based on the results of a handheld XRF orientation exercise. The green plastic bags were speared from a range of angles to the bottom of the bag to ensure a representative sample was produced. The compositing provided a 2m to 10m 3kg sample for laboratory analysis at ALS Labs in Perth. • The 2016 RC samples were split using a riffle splitter (no details of type used) that produced a 1/16th split taken from the rig every metre and then composited to 5m intervals by splitting again using a 50/50 splitter to give a 6-7kg sample. • The 2010 work employed field duplicates (23 x 5m samples) using the spear sampling technique which on analysis produced acceptable results. • The 2016 work had a much more comprehensive QAQC programme which included 87 field pairs (not actual duplicates unfortunately) at an insertion rate of 1 in 10, 111 lab duplicates and 39 blanks (river sand) at an insertion rate of 1 in 20, 58 2nd lab checks (Intertek Labs in Perth),

Criteria	JORC Code explanation	Commentary
		pulp duplicates for XRF analysis and sample prep checks. • The 2021/2022 RC samples were split using a 1/8th-7/8th riffle splitter placed under the rig cyclone every metre and then composited in 5m intervals using the spear sampling method implemented in 2010. • The 2023 RC samples were sub-sampled using a Metzke Fixed Cyclone/Cone Splitter combination (3 chute – one permanently closed). Every metre was separated into a 12% primary, a 12% library/duplicate sample and a 76% bulk reject sample. Each 1m primary sample and 10 x 1m duplicate samples (to form x2, 5 metre duplicate composites) were sub-divided into ¼ portions using RSD, then composited into 5m samples for DTR & XRF preparation as stated below. All samples were weighed at the drill rig and photographic and videographic records were taken of this process. • HQ3 DD core for the 2021 and 2022 programs was cut perpendicular at start and end of sample interval and cut longitudinally in quarter for geochemical sampling. Where a hole is to be utilised for metallurgical work, it is drilled HQ diameter and then quartered, with a quarter core interval submitted for assay, and half core submitted for metallurgical work. • Metallurgical sample preparation was completed at Bureau Veritas Laboratory in Wingfield, Adelaide SA. The following process was used: • Crush the sample to 100% at -3.35 mm. • A 150 g sub-sample was taken for pulverizing in a C125 ring pulveriser (record weight) – DTR SAMPLE. • Initially pulverize the 150 g sample for nominal 30 seconds – the sample is unusually soft for a ferro-silicate rock. • Wet screen the DTR sample at 38-micron pressure filter and dry, screen at 1 mm to de-clump and re-homogenize. • Record the oversize weights – if less than approximately 20 g is oversize, stop the procedure – failure. • If failure - select another 150 g DTR Sample and reduce the initial pulverization time by 5 secs, repeat until initial grind pass returns greater than approximately 20 g oversize. Once achieved retain the – 38 micron undersize. • Regrind only the oversize for 4 seconds of every 5 g weight of oversize. • Repeat the wet screening, drying, de-clumping & weighing stages until less than 5g above 38 micron remains. • Ensure the remaining < 5 g oversize is returned back into the previously retained -38 micron product. • Report the times and weights for each grind pass phase. • Combine and homogenize all retained -38 micron aliquots and <5 g

Criteria	JORC Code explanation	Commentary
		oversize –final pulverized product. Sub-sample the final pulverized product to give a 20 g feed sample for DTR work and a ~10 g sample for HEAD analysis via XRF fusion.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (e.g., standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e., lack of bias) and precision have been established.*	• Results for previous drilling campaigns have been reported in previous • The 2023 work included 20 field duplicates for determining total precision at the rate of one duplicate per hole for DTR Mags%, Fe% and other assay data, 40 DTR Mags% certified reference materials (x20 OREAS700 & x21 OREAS701 CRM's) & 84 XRF CRM's (with multi element / elemental oxide comparison, x20 OREAS700 & x21 OREAS701 CRM's, x23 GIOP-96, & x20 GIOP-118) from four different CRM types inserted at the rate of one per hole each, and 21 blank samples (washed sand) for DTR Mags% and Fe% (Head Sample) at the rate of one per drillhole. • Additional check samples of cross-lab, coarse residue repeat samples (to ALS Perth, x43), coarse residue repeat samples (intra-lab, x44), pulp repeat samples (x44), sizing data test (x106), and cross-lab sizing test data (x22) were tested and evaluated. • The OREAS 700 & 701 Certified Reference Materials (CRM's) defining analytical precision / analytical error outcomes showed relative precision and bias which were acceptable compared with the limits defined for DTR Mags% and Head Fe%. These outcomes were further confirmed by cross-lab checks (DTR Mags% reported and verified, Fe% pending). • The additional check samples of cross-lab, coarse residue repeat samples, coarse residue repeat samples, and pulp repeat samples showed larger variations in precision and bias than generally encountered in testing programs. This was due to the significant number of low concentration samples tested for shallow depth holes, which gives increased relative outcomes compared with laboratory errors, and under which variability assessment was made. However, the field duplicates, despite still having a large proportion of low concentration samples (higher concentration zones were targeted more often for field duplicate outcomes, additional check samples having a random allocation via a stratified, random sampling method), still gave outcomes within acceptable variation. • The OREAS 700, OREAS701, GIOP-96 & GIOP-118 CRM testing on the Head Sample (ore) for elemental oxides and elements of SiO2, Al2O3, P, S, TiO2 and LOI (Loss on Ignition), had either precision outcomes or control limits met jointly or in at least one instance in most cases, though some areas for further investigation falling outside these criteria were noted following.

Criteria	JORC Code explanation	Commentary

		• The BV laboratory was shown to have a general high variability (precision value), and / or small high bias on the four CRM outcomes, even when outcomes were within controlled limits, as most were indicated to be per prior comments. Investigation into these effects is ongoing, including cross lab checking that is pending, however the impacts of this parameter on overall deposit evaluation was thought to almost certainly to be of no significance.
		• The BV laboratory was also shown to have a small, high bias for the elements of P for the OREAS 700 and 701 samples (only CRM's with phosphorus testing), S for the OREAS 701 sample (CRM with the highest tested value of sulphur, but bias caused by several outlying values), Al2O3 for the OREAS701 sample (CRM with the highest tested value of aluminium oxide) and in SiO2 for the GIOP-118 sample (CRM with the lowest tested value of silicon oxide, but bias caused by just one outlying value). Investigation into these effects is ongoing, including cross lab checking that is pending, however the impacts of these parameters on overall deposit evaluation had calculations performed to indicate likely effects and to were reasoned to almost certainly to be of no significance as biases imparted were less than or close to CRM general testing limits.
		• Blanks were found to be less than the ranges observed in the 2016 & 2021 programs for DTR Mags% and Head Fe%, and therefore acceptable.
		• Pulverised sizing outcomes were close to the general aim of 80% passing 25 um, and was confirmed by interlaboratory checking.
		• All sampling methods and samples sizes were deemed appropriate.
		
		Geophysical Logging
		• Geolog Pty Ltd logged each hole with three downhole logging tools:
		  o Robertson Geoscience compensated dual density, natural gamma, caliper and temperature probe (Density Combination Probe);
		  o Robertson Geoscience magnetic susceptibility probe (Magsus); and
		  o Reflex Gyro downhole survey instrument (Gyro).
		• QAQC measures/checks applied to these probes included:
		  o Density Combination Probe
		  o Calibrated in aluminium block and water prior to departure to Hawsons site.
		  o Run in test calibration hole at Geolog workshop prior to departure to Hawsons site.

Criteria	JORC Code explanation	Commentary
		○ Caliper ○ Checked in test jig at Geolog workshop prior to departure to Hawsons site. ○ Gyro ○ Utilises a digital surface-referenced MEMS-gyro system for accuracy calibration; and ○ Tested against driller's Axis rod-string gyro tool results. ○ Magsus ○ Calibrated in Robertson Geoscience calibration sleeve prior to departure to Hawsons site. ○ On return from the Hawsons logging campaign, Geolog logged a 160m deep test hole that is used by other geophysical logging contractors for calibration and obtained matching results (checked all logtypes/parameters, including depth).
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• For the 2023 exploration programs, the "DataStore" database system was used that was processed via the associated "Lab-In" tool, which utilises import and export tools that also validate and format the data. Data inputs for lithology, geochemistry and geophysics were completed. Heading checks on each file were validated via the software and, once flagged, corrections were made in the input forms to ensure correct allocation of outcomes. Data was checked for maximum / minimum values, sample advice to report reconciliation, dictionary checks and text value checks. Clean validated files once available were automatically uploaded to the database.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• For the 2010 and 2016 programs, drillhole collars were surveyed by a local accredited surveyor using a Differential GPS with accuracy to less than 1 metre. • Coordinates were supplied in GDA 94 – MGA Zone 54. H&SC used a local grid conversion which involved rotating the drilling data 320° in a clockwise direction to give an orthogonal E-W strike to the mineralisation. • Down hole surveys for the 2010 drilling were initially recorded as single shot digital displays and were then recorded using a gyroscope due to the highly magnetic nature of the deposit. All the 2016 drillholes had downhole surveys measured using a gyroscope. • It is noted that the downhole surveys in the database for the 2010 drilling consisted of 30 to 60m spaced single shot camera surveys and not the continuous gyro data. This was due to limitations with the gyro

Criteria	JORC Code explanation	Commentary
		data as result of hole collapse and reluctance of the contractor to send the probe to the full hole depths. • For the 2021-22 & 2023 exploration programs, drillhole collars were surveyed by a local accredited surveyor using ALTUS APS-3 RTK (Real Time Kinematic) GPS units in differential mode, which provided an accuracy of some 2 to 3 centimetres in horizontal and vertical measurements. • Current GDA94 coordinates of existing permanent control point HK1 at the exploration site were utilised as a basis for the surveys. • Coordinates were supplied in both GDA94 – MGA Zone 54 and GDA2020 – MGA Zone 54. HIO is now operating in GDA2020 – MGA Zone 54 and is using this as standard. • Due to the highly magnetic nature of the mineralisation, down hole surveys for the 2021-22 drilling were measured using a gyroscope where possible. • Due to hole conditions (wall cave) in 4 drillholes, a multi shot downhole camera survey was utilised because gyro surveys were not feasible. • Difficulty with getting the tool down the hole because of hole cave meant that some holes could not be logged along their entire length. • Downhole logging, including gyro surveys was not feasible in one drillhole due to poor ground conditions, handheld MagSus data was utilised as an alternative where downhole logs were not possible. • A 3D check plot of five holes indicated minimal deviation for the common downhole lengths between the single shot and gyro data. Hole deviation appeared to increase at significant distances, but this is associated with a 'run over' projection of the gyro data. • Topographic control was maintained using data control points set out by an accredited local surveyor. In 2021, a LiDAR survey was conducted to better constrain the local topography. • Downhole surveys for the 2023 drill program were measured using both an Axis Champ Navigator Gyroscope at 10m intervals down the length of the holes and to within 10m of TD for all 22 holes. • The DGPS location methods used to determine accuracy of drillhole collars are considered appropriate.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• The deposit is drilled at a nominal spacing of 200m in section and plan, and spacing extends to ~400m on the periphery of the drilled area within the proposed pitshell. • In 2021-22, closer-spaced drilling on approximately 100m centres was completed within the Core West area and the drill spacing was deemed adequate for the interpretation of geological and grade continuity for the stratigraphic homogeneity associated with the style of

Criteria	JORC Code explanation	Commentary
		mineralisation along strike. • The 2023 drilling program focused on two distinct zones: 1) the NW of the resource around the periphery ("edge") of the proposed pitshell and . The drilling program was exploratory in nature and aimed at targeting near-surface mineralization. Holes were drilled between 100m – 400m spacing and also aimed at defining the edge of mineralisation where they were drilled at a closer spacing (approximately 200m centres). • The location and spacing of these drillholes so that they met JORC Resource requirements was not taken into consideration for this program. The drilling was purely speculative to determine the existence of near-surface ore, especially within the oxidised zone. • The 2023 RC samples were composited into 5m intervals along their entire hole length.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• In all drilling programs to date, the drillhole trajectory was planned to have an azimuth as perpendicular to the strike of bedding and a dip as perpendicular as possible to the bedding dip. The nature of, and associated safety risk implication for, the drilling equipment precluded a starting dip angle of less than -50 degrees. -50 degrees was only achievable in certain conditions and most holes were drilled at -55 degrees from horizontal. • The azimuth was set via sighter pegs marked out at the nominated bearing via an Azimuth Pointing System. The drill rig was aligned to these pegs when it drove onto the drillhole site. • A Multi-wave Sensors GPS Azimuth Pointing System was used to determine the location of the drillhole azimuth ground marker pegs. Three pegs were placed in the ground along the azimuth direction for the rig to drive in and align to: 1) a sighter peg at 15m away and two other pegs at the wheelbase length. With the aid of a spotter, this allowed the drill rig to drive straight onto alignment at the drillhole location. • In the Core East and Core West portions of the deposit, angled drilling commenced at -55° dip and a hole azimuth of 040° True. This was targeted to intersect geological strike and bedding dip of the sediment-hosted ore body as close to perpendicular as possible. • In the Fold portion of the deposit, the strike of the ore bedding is controlled by folding of the sedimentary sequence. The azimuth of drillholes was altered accordingly with the varying strike of the ore body and ranged from 085° - 130° True, again to intersect bedding as close to right angles as possible.

Criteria	JORC Code explanation	Commentary
		• Locally, holes suffered directional deviation to the east with depth. Deviation in inclination was also observed, typically causing shallowing of the drillhole and this increased with depth. The affect was more pronounced the lower part of Unit 2 more than in the upper part of Unit 3. • Drilling orientations are considered appropriate and display no bias. • The drilling dip and azimuths made it challenging to intersect the cross-cutting fault structures as the drilling was often sub-parallel to these features. • An Excel spreadsheet containing identified fault intersections in several holes has been made available to the geotechnical engineers and hydrogeologist for further design work.
Sample security	• *The measures taken to ensure sample security.*	• All samples were bagged using industry standard calico sample bags and stored on site under the supervision of an HIO representative. Samples were combined into IBC containers, a lid was secured with tek screws and strapped to the container to ensure there was no loss of sample during transport. • Samples were dispatched on a regular basis via a trusted logistics company and were accompanied by a manifest. • Chain-of-custody documentation was utilised to track the transport and maintain security of all samples sent to the BV Adelaide Laboratory.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Chris McMahon (McMahon Resources) completed a review of the sampling and assaying for the 2023 drilling program data. An excerpt from his report is included in Appendix 2 in the Report on Exploration Results attached to this document.

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.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.*	• The Hawsons Magnetite project is in Western NSW, 60 km southwest of Broken Hill. The deposit is 30km from the Adelaide-Sydney railway line, a main highway, and a power supply. • The project is wholly owned by Hawsons Iron Ltd (HIO). HIO currently manage the project. • The project area is entirely within Exploration Licences (ELs) 6979, 7208 & 7504. Hawsons is the sole tenure holder of these ELs. • License conditions for all ELs have been met and are in good standing. • An application for a Mining Lease (ML) was lodged with the NSW Trade & Investment Department in October 2013 and HIO is not aware of any impediments to obtaining a mining lease. MLA460 remains in force.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• In 1960 Enterprise Exploration Company (the exploration arm of Consolidated Zinc) outlined several track-like exposures of Neoproterozoic magnetite ironstone (+/- hematite) which returned a maximum result of 6m at 49.1% Fe from a cross- strike channel sample. No drilling was undertaken by Enterprise. • In 1984, CRAE completed five holes within EL 6979 seeking gold mineralisation in a second-order linear magnetic low. This interpreted to be a concealed, faulted iron formation within the hinge of the curvilinear Hawsons' aeromagnetic anomaly. CRAE's program failed to locate significant gold or base metal mineralisation but the drilling intersected concealed broad magnetite ironstone units interbedded with diamictite adjacent to the then untested peak of the highest amplitude segment of the Hawsons aeromagnetic anomaly. • Carpentaria Resources (CAP) completed drilling programs in 2009, 2010 and 2016.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Hawsons Magnetite Project is situated within folded, upper greenschist facies Neoproterozoic rocks of the Adelaide Fold Belt. The Braemar Facies magnetite ironstone is the host stratigraphy and comprises a series of strike-extensive, magnetite-bearing siltstones generally with a moderate dip (circa -45°), primarily to the southwest, in the core area of the deposit and this is folded around to circa 55-75° down to the west-northwest in the Fold area. The airborne magnetic data clearly indicates the magnetite siltstones as a series of parallel, high amplitude magnetic anomalies. Large areas of the Hawsons deposit stratigraphy are concealed by transported ferricrete and other

Criteria	JORC Code explanation	Commentary
		younger cover. Due to weathering over the prospective horizons, the base of oxidation is estimated to average 50-80m from surface across most of the area, with some areas as shallow as 30m. • The Hawsons project comprises several prospects including the Core, Fold, T-Limb, South Limb and Wonga deposits. Mineral Resources have been generated for the Core and Fold areas which are contiguous. • The depositional environment for the Braemar Iron Formation is believed to be a subsiding basin, with initial rapid subsidence related to rifting possibly in a graben setting as indicated by the occurrence of diamictites in the lower part of the sequence (Unit 2). A possible sag phase of cyclical subsidence followed with deposition of finer grained sediments with more consistent, as compared to the diamictite units, bed thicknesses, style and clast composition (Unit 3). The top of the Interbed Unit marks the transition from high (Unit 2) to lower (Unit 3) energy sediment deposition. • The distribution of disseminated, inclusion-free magnetite in the Braemar Iron Formation at Hawsons is related to the composition and nature of the sedimentary beds. The idioblastic nature of the magnetite is believed to be due to one or more of a range of possible processes including in situ recrystallisation of primary detrital grains, chemical precipitation from seawater, permeation of iron-rich metamorphic fluids associated with regional greenschist metamorphism. Grain size generally ranges from 10microns to 0.2mm but tends to average around the 40microns. Sediment composition and grain size appear to be the main controlling factors of mineralisation. There is no evidence of structural control in the form of veins or veinlets coupled with the lack of a strong structural fabric. • In most of the Core and Fold deposits the units strike southeast and dip between 45° and 65° to the southwest. The eastern part of the Fold deposit comprises a relatively tight synclinal fold structure resulting in a 90° strike rotation.

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  o *easting and northing of the drill hole collar*
	  o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  o *dip and azimuth of the hole*
	  o *down hole length and interception depth*
		• Appropriate tabulations of drill results are available as Excel spreadsheets and examples are included in Appendix 1 in the Report on Exploration Results attached to this document.
		• Because the potential for mineralisation is in the upper oxidised zone, the entire hole length was the intercept interval.

Criteria	JORC Code explanation	Commentary
	o *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• All RC samples were collected on 1m intervals. • Each 1m interval was aggregated into 5m intervals after RSD sub-division at the BV laboratory in Adelaide. • 10cm downhole density logs were aggregated over the length of each sample that was used to determine recovery of each 1m interval downhole.
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 drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g., 'down hole length, true width not known').*	• Drilling is predominantly NE steeply dipping, perpendicular to the SW steeply dipping nature of sedimentary beds. Drilling is SE steeply dipping, perpendicular to the NW dipping nature of beds in the SE limb of the "Fold" zone. • Mineralisation exists from the surface for the full length of drillholes and this constituted the intercept lengths.
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 drill hole collar locations and appropriate sectional views.*	• Appropriate plans and tabulations are included as an attachment.
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.*	• Comprehensive reporting is not practicable. • Examples of data are included in the Appendices.
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.*	• A geotechnical report was furnished by Gutteridge Haskins and Davey (GHD) in 2019 titled "Carpentaria-Hawsons Iron Ore project 2017 Prefeasibility Study Geotechnical Assessment." This study was completed via a staged approach to progressively improve the level of Geotechnical understanding for the PFS and to identify gaps that needed to be addressed. • For the 2021-2022 exploration program, Pells, Sullivan & Meynink (PSM) completed a geotechnical design study for pitwall stability and to fill the gaps outlined in the GHD report. This report was completed in October 2022. o 11 cored holes were nominated by PSM to generate the data for

Criteria	JORC Code explanation	Commentary

		geotechnical analysis that will feed into mine design. Of these holes, 3 were fully cored and the remainder were cored from depths nominated by PSM to total depth.
		
		   o A specialist PSM geotechnical geologist logged and sampled the core, and the samples were transported to Trilab in Brisbane for testing.
		
		   o Most samples were analysed for Uniaxial Compressive Strength (UCS), Young's Modulus and Poisson's Ratio. Selected samples were submitted for shear box testing.
		
		• A substantial amount of downhole geophysics data was logged throughout the 2021/2022 drilling program, comprising magnetic susceptibility, natural gamma, density, and resistivity data. This has been utilised to define the magnetic (and density related) stratigraphy that is coincident with a chronostratigraphic interpretation. Sonic velocity and acoustic televiewer data was also collected to aid in structural interpretation necessary for pit wall stability investigation.
		
		   o Acoustic Televiewer (ATV) logs were run for holes where hole cave and other geological conditions did not compromise logging.
		
		• Analysis of geotechnical results/findings was completed, and a geotechnical report was furnished on 19th October 2022.
		
		• To understand the load-bearing properties of the ground PSM performed a preliminary desktop study on terrain assessment in December 2021 and then proposed a geotechnical test pitting program to cater for construction of civil infrastructure. Several of these test pits have been cleared for excavation works and sampling and this program is expected to proceed in the second half of 2022.
		
		• TSIM VLF-EM ground-borne geophysical surveys were conducted in August and September 2022 to help ascertain the northwesterly extension of newly discovered near-surface mineralisation in the Fold Zone.
		
		• Additional TSIM VLF-EM ground-borne geophysical surveys were conducted in June 2023 along the south-westerly extension of the outcrop zone to help find near-surface mineralisation in the Fold Zone.

Further work	• *The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Further drilling in 2023 will be considered if the results of geophysical surveys indicate economic quantities of resource in the near-surface extent of the Fold Zone. • Ground water data and the current hydrogeology model has been passed on to ATC Williams who are looking to see if they can locate potential water sources closer to site. • ATC Williams have also been engaged to develop a conceptual water

Criteria	JORC Code explanation	Commentary
		balance for the planned mining operation. • Water monitoring bores and pump testing bores are being planned to test the effect that mining will have on aquifers in the vicinity of the proposed mining area. • Sterilisation holes are being planned to positively identify that ore potential doesn't exist under planned infrastructure. • Test pits have been planned to determine the geomechanical properties of the surface material to assess what is required to support planned infrastructure. • Additional geophysical surveys (drone/ground-borne magnetic surveys and TSIM VLF-EM) are planned. • Additional field mapping in extension of outcrop areas is planned.

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.* • *Data validation procedures used.*	• The 22 drillholes in this exploration program were completed in order to determine the existence of shallow mineralisation that could potentially provide early cashflow in the proposed mining operation. The drillhole spacing and locations were not sufficient to make a material change to the existing Resource model. Consequently, a Resource model update is not being included in this ASX release.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• The Competent Person for Data was on site prior to the commencement of the drilling program during site preparation, at the commencement of the program and for drilling of holes RCFO23011-22 and performed the lithology logging for these holes. During this duration on-site, all data practices and activities were observed and were deemed to be appropriate.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• N/A

Criteria	JORC Code explanation	Commentary
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.	•N/A
Estimation and modelling techniques	• The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. • The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. • The assumptions made regarding recovery of by-products. • Estimation of deleterious elements or other non-grade variables of economic significance (e.g., sulphur for acid mine drainage characterisation). • In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. • Any assumptions behind modelling of selective mining units. • Any assumptions about correlation between variables. • Description of how the geological interpretation was used to control the resource estimates. • Discussion of basis for using or not using grade cutting or capping. • The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	•N/A
Moisture	• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	•N/A
Cut-off parameters	• The basis of the adopted cut-off grade(s) or quality parameters applied.	•N/A
Mining factors or assumptions	• Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	•N/A

Criteria	JORC Code explanation	Commentary
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	•N/A
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.*	•N/A
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	•N/A
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.*	•N/A
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	•N/A
Discussion of relative	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach*	•N/A

Criteria	JORC Code explanation	Commentary
accuracy/ confidence	*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.*	