

Hawsons Drilling Program and Resource Update Completed

Key points

- The updated geological model resulted in a total Mineral Resource quantity of 4,415Mt, an increase over the previous Mineral Resource quantity by 491Mt (+12.5%).
- The prospectivity of the Fold Zone was confirmed as a shallow, higher-grade resource, still open to the south. This has the potential to act as an early feed source for the Project.
- Higher grade intersections from the Fold Zone included:
 - > RC Hole FO23014 : 25m at 15.6% DTR from 25m, 40m at 14.6% DTR from 75m
 - > RC Hole FO24006 : 20m at 11.7% DTR from 50m, 50m at 15.1% DTR from 85m
 - > RC Hole FO24008 : 10m at 12.3% DTR from 50m, 113m at 16.5% DTR from 80m
- Newly identified mineralisation was also identified within the upper zone from surface to approximately 150m depth.
- The recently completed two stage drilling program completed a total of 6,696m and successfully focused on identifying the edge of mineralisation along the northern and eastern margins.
- A larger mining lease application area MLA641 was granted in December 2023 to replace the previous MLA460.



Figure 1: Sampling from the final hole (RCFO24011) in the 2024-H1 program.

Hawsons Iron Ltd (**Hawsons** or the **Company**) advises that the drilling program in H1 2024 completed as a follow-up to the H1 2023 and H2 2023 programs has successfully further defined the extent, tonnage and grade of shallow magnetite mineralisation in the Fold Zone south of the existing mineral resource.

The 2023 and H1 2024 programs have confirmed the existence of additional magnetite resources at a depth of 30-150 metres with a grade of 9 per cent Davis Tube Recovery (DTR%) or higher. These resources will help to further improve the Hawsons Iron Project's cash flow during the first critical years of operation and also support the Project's current projected mine life.

Since the previous Mineral Resource update in September 2022 (*See ASX Announcement date 30* September 2022: Mineral Resource Update Completed), despite weather interruptions and assaying delays, 43 Reverse Circulation (RC) holes were drilled, together with one twin Diamond Drill core hole.



Figure 2: Location of drilling performed since the previous Mineral Resource update in Sept 2022.

CEO, Tom Revy, said: "The investigatory H1 2023 drilling, showed that further exploration activities should be focused on the Fold Zone in the south. The results of this follow-up drilling in H2 2023 and H1 2024 has proven the existence of shallow higher grade Mineral Resources. While the drill program has increased the previous Mineral Resources, the Company is planning to initiate a more extensive infill drill program to significantly increase Measured & Indicated Mineral Resources thereby extending the projected mine life.

The results of this work will help to provide greater certainty for investors and have the potential to positively impact both the NPV and IRR of the Project.

A more comprehensive Company update presentation is currently being prepared and will be issued in the coming weeks."



Mineral Resource Update

Res Class	Mt	DTR %	DTR Mt	Density t/m ³	Fe % Conc	SiO2 %	Al2O3 %	TiO2 %	P ppm	S ppm	LOI %
Measured	528	12.9	68	3.04	69.0	3.36	0.26	0.05	73	42	-2.81
Indicated	1,882	11.2	210	2.94	68.6	3.62	0.30	0.06	83	54	-2.60
Inferred	2,005	11.3	226	2.89	68.2	4.18	0.32	0.06	84	60	-2.67
Total	4,415	11.4	504	2.93	68.4	3.85	0.30	0.06	82	56	-2.66

Table 1: Mineral Resource Update at June 2024

Note: Tonnage calculations are at a DTR cut-off grade of 4%.

The Mineral Resource modelling and reporting conducted by Helman and Schofield Consultants (H&SC) from the data produced in the recent drilling programs has confirmed an increase in Mineral Resource and product tonnes (DTR Mt).

Recent mining studies being undertaken in parallel, have demonstrated that the marginal economic cut-off grade for the project is now 4% DTR.

The drilling program aimed at building on the exploration success from the Strategic Review's recommended three-stage resource analysis program - see ASX Announcements dated:

- <u>08 August 2023: Successful exploration program discovers mineable intersections of near-</u> surface magnetite mineralisation.
- <u>18 December 2023: Confirmation and definition drilling program update.</u>

The Hawsons Iron Project's current Exploration Target is 5–18 billion tonnes, which is in addition to its Measured, Indicated and Inferred JORC 2012 Mineral Resource estimate of 4.415 billion tonnes using a 4 per cent recovered magnetic fraction DTR cut-off constrained to a pit shell.

Cautionary Statement: The Exploration Target reported herein is not JORC compliant Mineral Resources. The potential quantity and grade of the Exploration Target is conceptual in nature. There has been insufficient exploration to determine a Mineral Resource and there is no certainty that further exploration work will result in the determination of a Mineral Resource.



Figure 3: Hawsons Iron Project and Tenement Map

Resource Statements

The data in this report that relates to Exploration Results and Exploration Targets 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 fulltime 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.

The data in this report that relates to Mineral Resource estimates for the Hawsons Magnetite Project is based on information evaluated by Mr Simon Tear who is a Member of The Australasian Institute of Mining and Metallurgy (MAusIMM) 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 Tear is a director of H & S Consultants Pty Ltd and he consents to the inclusion in the ASX release of the Mineral Resources in the form and context in which they appear.



Released by authority of the Board Hawsons Iron Limited 24 June 2024

For further information:

Tom Revy, CEO E: <u>tom.revy@hawsons.com.au</u> P: +61 411 475 376

Michael Harvey, CFO and Company Secretary E: <u>michael.harvey@hawsons.com.au</u> P: +61 07 3220 2022

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.

For more information: <u>https://hawsons.com.au</u> Follow Hawsons on X (Twitter): <u>https://www.twitter.com/HawsonsIron</u> Follow Hawsons on LinkedIn: <u>https://www.linkedin.com/company/hawsonsiron/</u> Follow Hawsons on Facebook: <u>https://www.facebook.com/HawsonsIron</u> For Hawsons' electronic media kit: <u>https://bit.ly/HIO-Media-Kit</u>

ENDS

Appendix 1: Exploration Drilling Update

This exploration update reports on exploration activities that have occurred since the last geology model was released on 22 September 2023. While the H1 2023 activities were reported in detail on 8 August 2023, short summaries of that report are contained herein for completeness.

The 2023-24 drilling program focused on two distinct zones: the NW of the resource around the periphery ("edge") of the proposed pitshell and the south-eastern Fold area.

The drilling program was exploratory in nature and aimed at targeting near-surface mineralization. Holes were drilled between 100m – 400m spacing and 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.

1. Location Information



Figure 1a: Hawsons Iron Project location plan.

Figure 1b: Hawsons Iron Project location plan showing tenure and proposed mine area.

The Hawsons magnetite project is about 60km south-west of Broken Hill in western NSW (see Figure 1a). 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, EL7504 and EL9620. At the end of 2023, Hawsons applied for, and was granted, a new mining lease application area MLA641.

2. Drilling and Sampling Conducted 2023-24

Drilling

The H1 2023 drilling program was conducted using a truck mounted Sandvik UDR 1200HC and was comprised of 22 Reverse Circulation holes for a total of 3,568.0m. This was reported in the exploration update of 8 August 2023. The H2 2023 and H1 2024 drilling program was comprised of 21 Reverse Circulation (RC) holes and 1 HQ3 fully-cored hole for a total of 3,127.8m). The H2 2023 portion of the program was comprised of 10 angled RC holes (total 1,281m) and 1 HQ3 vertical fully-cored hole (149.8m). The H1 2024 portion of the program consisted of the remaining 11 RC holes (total 1,697m).

All holes were drilled to test the upper zone from surface to ~150m for its ore potential. Drilling location data is shown in Table 1 and Figure 2.

RC holes for the H2 2023 - H1 2024 program were drilled by Watson Drilling with a truck-mounted McCulloch DR950 rig.

4.5" rods with stabiliser subs and 5-5/8" face bits were utilised in the drill string.

An Imex EL20 inclinometer was used to determine mast dip angle.

An in-drill-string Precision Mining and Drilling (PMD) Directa Gyroscope was used to monitor drillhole rod-string deviation. This gyroscope was found to be recording "Unsuccessful" against its results in most cases and this data was disregarded in favour of the Geolog downhole Reflex gyro results.

The subvertical (-85 degree dip at azimuth 040) HQ3 fully-cored hole was drilled by Watson Drilling with a BourneDrill TD1000 truck-mounted rig with 3¹/₂" rods and stabilisers and a PCD bit that generated core with a diameter of 61.1mm (2-3/8").

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 the azimuth alignment at the pegged drillhole collar location.

For the H1-2023 drillholes (MJ Drilling), the rig mast inclination was determined using a SOLA NAM 50 50cm inclinometer.

For the H2-2023 & H1-2024 drillholes (Watson Drilling), an Imex EL Series – EL20 inclinometer was used to determine the drill mast dip angle.

Table 1: Drillhole location data (datum = GDA2020, Zone 54H).

Date	Drill Order	Hole ID	East_GDA2020	North_GDA2020	RL_AHD	Azimuth Deg	Dip Deg	Prospect	EL	Date TD reached	Drilled to
H1-2023	1	RCCW23001	512555.26	6414141.88	195.38	040	-55	Core West	EL6979	29/03/2023	153.00
	2	RCCW23002	512624.50	6414292.82	194.57	040	-55	Core West	EL6979	31/03/2023	191.00
	3	RCCE23003	513286.67	6413489.94	190.39	040	-55	Core East	EL6979	4/04/2023	332.00
	4	RCCE23004	513391.60	6413533.99	189.43	040	-55	Core East	EL6979	5/04/2023	150.00
	5	RCCW23005	513112.36	6413423.00	191.47	040	-55	Core West	EL6979	6/04/2023	155.00
	6	RCCW23006	512703.11	6413564.81	195.02	040	-55	Core West	EL6979	7/04/2023	155.00
	7	RCCW23007	512867.58	6413777.34	194.45	040	-55	Core West	EL6979	8/04/2023	149.00
	8	RCCW23008	512405.76	6413980.56	199.96	040	-55	Core West	EL6979	12/04/2023	149.00
	9	RCCW23009	512126.49	6413826.79	198.71	040	-55	Core West	EL6979	13/04/2023	149.00
	10	RCCW23010	512017.54	6413673.99	196.85	040	-55	Core West	EL6979	14/04/2023	155.00
	11	RCF023011	514324.69	6412195.34	192.14	040	-55	Fold	EL6979	25/04/2023	155.00
	12	RCF023012	514566.24	6412298.05	193.52	040	-55	Fold	EL6979	26/04/2023	149.00
	13	RCF023013	514701.38	6411877.88	195.67	120	-55	Fold	EL6979	27/04/2023	155.00
	14	RCF023014	514327.98	6411765.64	202.71	115	-55	Fold	EL6979	28/04/2023	149.00
	15	RCF023015	514556.13	6412044.34	197.09	085	-55	Fold	EL6979	29/04/2023	155.00
	16	RCF023016	514426.86	6411472.41	202.60	120	-55	Fold	EL7208	30/04/2023	149.00
	17	RCF023017	514323.02	6411346.49	202.13	120	-50	Fold	EL7208	1/05/2023	161.00
	18	RCF023018	514608.81	6411490.03	198.03	120	-50	Fold	EL7208	2/05/2023	149.00
	19	RCF023019	513937.60	6411480.82	202.33	120	-55	Fold	EL7208	5/05/2023	149.00
	20	RCF023020	513873.70	6411415.16	201.81	130	-55	Fold	EL7208	5/05/2023	149.00
	21	RCF023021	513486.49	6411216.03	196.14	120	-50	Fold	EL7208	6/05/2023	149.00
	22	RCF023022	513832.37	6411136.37	197.72	120	-50	Fold	EL7208	7/05/2023	161.00
H2-2023	1	FCF023023	514153.84	6412246.11	188.89	040	-85	Fold	EL6979	3/11/2023	149.80
	2	RCF023024	514191.74	6412435.79	187.04	040	-55	Fold	EL6979	20/11/2023	151.00
	3	RCF023025	514462.40	6412150.34	194.78	040	-55	Fold	EL6979	4/12/2023	150.00
	4	RCF023026	514791.85	6412243.81	194.61	060	-55	Fold	EL6979	3/12/2023	151.00
	5	RCF023027	514787.57	6412018.71	194.11	100	-55	Fold	EL6979	8/12/2023	151.00
	6	RCF023028	514645.36	6411650.38	197.67	090	-55	Fold	EL6979	8/12/2023	151.00
	7	RCF023029	514806.52	6411700.46	194.25	090	-55	Fold	EL6979	10/12/2023	97.00
	8	RCF023030	514916.70	6412158.65	192.59	090	-55	Fold	EL6979	11/12/2023	31.00
	9	RCF023031	514771.19	6411531.05	193.60	130	-55	Fold	EL6979	12/12/2023	84.00
	10	RCF023032	514150.31	6412240.46	189.01	040	-85	Fold	EL6979	14/12/2023	163.00
	11	RCF023033	514200.95	6411576.92	204.22	130	-55	Fold	EL6979	15/12/2023	152.00
H1-2024	12	RCF024001	514233.31	6410895.96	194.95	070	-55	Fold	EL7208	7/02/2024	145.00
	13	RCF024002	514373.94	6411048.20	192.04	080	-55	Limb	EL7208	9/02/2024	151.00
	14	RCF024003	514244.84	6411162.38	197.68	120	-55	Fold	EL7208	9/02/2024	151.00
	15	RCF024004	514301.45	6410683.53	191.61	090	-55	Limb	EL7208	12/02/2024	151.00
	16	RCF024005	514247.61	6410456.48	187.39	090	-55	Limb	EL7208	14/02/2024	151.00
	17	RCF024006	513912.17	6410493.69	186.92	100	-55	Limb	EL7208	16/02/2024	151.00
	18	RCF024007	514463.85	6411395.49	200.98	130	-55	Fold	EL7208	17/02/2024	151.00
	19	RCF024008	513856.20	6410718.87	191.57	090	-55	Fold	EL7208	20/02/2024	193.00
	20	RCF024009	513391.59	6410763.35	191.91	100	-55	Limb	EL7208	21/02/2024	151.00
	21	RCFO24010	513853.52	6410916.57	194.35	090	-55	Fold	EL7208	22/02/2024	151.00
	22	RCF024011	513644.39	6411335.35	198.79	120	-55	Fold	EL7208	23/02/2024	151.00



Figure 2: Hawsons site location plan.

Sampling and Sample Recovery

The HQ3 core from drillhole FCFO23023 was transported to the Bureau Veritas Wingfield, Adelaide laboratory and cut into 1m long lengths. Then, each 1m length was cut in half lengthwise. These 1m half-core samples were processed and analysed individually and went through the same preparation and analysis process as the RC chip samples.

At the drill site, the RC chips were sampled using a Metzke Cyclone/Cone Splitter combination (3 chute – one permanently closed) in 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 as library samples in secure storage on-site.

As soon as each 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). Each sample weight was entered into an iPad-based digital logging system.

Sample bag tops were securely tied closed and placed in 30-sample-long rows. 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.

Subsamples were taken from each 5m composite sample for head sample assay and Davis Tube Recovery testing. The proprietary Hawsons sample preparation method that was used for DTR testing is available for review. The DTR recovered magnetic sample was subject to further XRF analysis.

QAQC field duplicate samples were collected from the secondary sample chute of the cone splitter at a rate of 1 x 5m composite samples per drillhole (~1 in every 30 x 5m composite samples) and were prepared using the same method as listed above for primary samples.

RC holes were drilled as perpendicular to bedding as possible to obtain as representative samples as possible. Although one hole was drilled at -50 degrees dip, -55 degrees mast dip angle was determined to be the limit for safe drilling operations.

Geophysical logging was completed for all 44 holes presented in this data set, including logs of natural gamma, magnetic susceptibility, density data, gyro downhole survey and acoustic scanner. During drilling operations, 1 x 6m length of 150mm PVC casing was inserted at the surface. All drillholes remained open to TD and no hole cave occurred. Apart from hole RCFO23033 where the 1.5m bottom hole assembly broke off after achieving TD, geophysical logging was successfully logged to TD in all holes. All geophysical data was provided at 10cm intervals.

Consistency of sampling method was maintained, and the sampling techniques used are considered appropriate for this deposit type with all sampling completed to industry standard practice.

Logging

Geological lithology logging of chips/core/rock hand samples is qualitative by nature. For the H2 2023 & H1 2024program, every drillhole was lithologically logged by a geologist and entered into an MS Excel-based logging spreadsheet template recording: Borehole ID, Depth From & To, Recovery, Moisture, Oxidation, Colour, Lithology, Lithology 2, Haematite_%, Magnetite_%, Gangue Composition, Fabric, Fabric Intensity, Bedding, Sorting, Vein_Type Vein_%, Sulphide_Type, Sulphide_%, Other_Descriptor_1, Other_Descriptor_2, Other_Descriptor_3, Comments. 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.

HQ3 core was pumped out of the core barrel into splits and onto a table for lithology logging. The core was marked-up, photographed, lithologically logged and geotechnically logged. This core was then broken carefully into ~1m lengths and these were placed into plastic fluted core trays for transfer to the core storage area in readiness for transporting to BV lab Adelaide.

Initial magnetic susceptibility measurements were recorded using a hand-held 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.

The same model hand-held magnetic susceptibility meter was used to log readings at 10cm intervals down the length of the HQ3 core from the FCFO23023 calibration hole.

Downhole geophysical logging included dual density, natural gamma, magnetic susceptibility, gyro downhole survey and acoustic televiewer. Data was recorded at 10cm intervals from the bottom depth reached by the logging tool in the hole to the surface.

Quality of Assay Data and Laboratory Tests

The H1 2023, H2 2023 and H1 2024 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/secondary sample and a 76% bulk reject sample. Each 1m primary sample and selected 1m secondary samples (used to form 5 metre duplicate composites) were sub-divided into ¼ portions at the BV laboratory using an 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.

The HQ3 DD core from the calibration hole was cut into 1m intervals. Each 1m interval was then cut longitudinally to produce 1/4 core samples for geochemical sampling.

Sample preparation for geochemical testing 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 RC sample for nominal 30 seconds (60 seconds for core) 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 (10 secs if core), 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 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.

The 2023-24 QAQC work included 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) & x21 OREAS701 CRM's (with multi-element/elemental-oxide comparison, x20 OREAS700 & x21 OREAS701 CRM's) & x21 OREAS701 CRM's (with multi-element/elemental-oxide comparison, x20 OREAS700 & x21 OREAS701 CRM's) & x21 OREAS701 CRM's (with multi-element/elemental-oxide comparison, x20 OREAS700 & x21 OREAS701 CRM's) & x21 OREAS701 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 drillhole, 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 H1 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) & 84 XRF CRM's (with multi-element/elemental-oxide comparison, x20 OREAS700 & x21 OREAS701 CRM's) & 84 XRF CRM's (with multi-element/elemental-oxide comparison, x20 OREAS700 & x21 OREAS701 CRM's) & 84 XRF CRM's (with multi-element/elemental-oxide comparison, 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 drillhole, 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 H2 2023 / H1 2024 work included 26 field duplicates for determining total precision at the rate of one duplicate per hole for DTR Mags%, Fe% and other assay data, 59 DTR Mags% certified reference materials (x25 OREAS 700, x14 OREAS 701, x10 IMS PBS-71 Head, and x10 IMS PBS-71 Assay CRM's) & 106 XRF CRM's (with multi-element/element/elemental-oxide comparison, x25 OREAS 700, x14 OREAS 701, x10 IMS PBS-71 Head, and x10 IMS PBS-71 Assay CRM's, x24 GIOP-96, & x23 GIOP-118) from five different CRM types inserted at the rate of approximately one per drillhole (IMS PBS-71 supplementing depleted OREAS 701 for high magnetite outcomes), and 23 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, x27),) pulp repeat samples (x27), sizing data test (x58), and cross-lab sizing test data (x20) 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). OREAS could no longer supply their 701 CRM when they ran out of it. Hawsons obtained IMS PBS-71 CRM from Independent Mineral Standards for QAQC analysis during the testing period.

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 as follows:

- 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 to be appropriate.

QAQC on Geophysical Log Data

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:

- Density Combination Probe
 - \circ $\,$ Calibrated in aluminium block and water prior to departure to Hawsons site.
 - $\circ~$ Run in test calibration hole at Geolog workshop prior to departure to Hawsons site.
- o Caliper
 - o Checked in test jig at Geolog workshop prior to departure to Hawsons site.
- o Gyro
 - o Utilises a digital surface-referenced MEMS-gyro system for accuracy of calibration; and
 - \circ Tested against driller's Axis rod-string gyro tool results with good correlation.
- o Magsus
 - \circ Calibrated in Robertson Geoscience calibration sleeve prior to departure to Hawsons site.
- On return to base from the Hawsons logging campaign, Geolog logs 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).
- o In the 2023-H2 program Hawsons drilled two calibration holes:
 - FCFO23023 was fully-cored from surface at -85° dip and 040 azimuth. The core was cut at 1m intervals and quarter core samples were taken and analysed. In addition to the standard laboratory analyses (Head grade XRF, DTR% and concentrate assay XRF), laboratory density analysis was performed on each 1m sample.
 - o RCFO23032 was RC drilled from surface at -55 dip and 040 azimuth. 1m samples were taken and composited into 5m intervals for analysis.
 - o These holes are now logged with all tools each time the logger comes to site:
 - \circ $\,$ before logging of newly drilled holes commences; and
 - $\circ~$ at other nominated times during the logging campaign.

Verification of Sample/Assay Data

For the 2023-24 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, logical calculation / sum checks and text value checks. Clean validated files once available were automatically uploaded to the database.

Audits/Reviews

- McMahon Resources completed reviews of the sampling and assaying for the 2023-H1, 2023-H2 and 2024-H1 drilling program data. Excerpts from this report are included in this document.
- Measured Group conducted an audit on the Hawsons geological database all items raised have been successfully addressed.
- Wes Nichols conducted an audit on the Bureau Veritas laboratory in November 2023.

Tenure Status

- In December 2023, Hawsons acquired a new tenement (EL9620) that adjoins the southern boundary of EL7208. The project area is entirely within Exploration Licences (ELs) 6979, 7208, 7504 & 9620. 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 new Mining Lease (MLA) was lodged with the NSW Trade & Investment Department in October 2013 and MLA621 was granted in December 2023. MLA621 (280.7 ha) covers a larger area than the previous MLA460 which was relinquished on the granting of the new MLA.

Other Exploration Activities

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 and aided the targeting of drillhole locations in the H2 2023 and H1 2024 program.

Additional, widely-spaced TSIM surveys were conducted within EL7504 in October-November 2023 as a preliminary investigation to determine if there is any potential for near-surface mineralisation across this tenement. These surveys are distant from, and north of, the main mine design pit area and the results from them are not considered to be consequential to resources within the Hawsons project area.

Ground-borne magnetic survey data performed in 2010 was reprocessed and modelled by Ultramag Geophysics using the latest algorithms/techniques to assist in updating and refining the Geology Model, especially in the Fold area at Hawsons.



Figure 3: EL 7504 TSIM VLF-EM survey lines (completed in October 2023) draped over tilt filtered RTP TMI airborne magnetics (Source: Minview - NSW Government Online Mapping Service).

3. Downhole DTR% Histograms.

Note: All holes were drilled at between -50 degree and -55 degree dip. These histograms represent the DTR% for 5m intervals along the drillhole length.

Holes Drilled 2023-H1 – DTR% Histograms







Holes Drilled 2023-H2





Holes Drilled 2024-H1





4. Images From Field Activities



Figure 4: Imex EL20 inclinometer use to determine mast dip angle.



Figure 5: Multi-wave Sensors DGPS APS used to peg drill rig azimuth alignment.



Figure 6: CorMaGeo RT-1 magnetic susceptibility meter.



- Figure 7: Rig and sampling setup at Drillhole RCFO24011. Samples are transported from the Metzke cone splitter to the weigh station via wheelbarrow.
- Samples laid out in 30m rows ready for hand-held magsus readings.
- IBCs at hand for dispatch of primary samples and storage of secondary samples.

Figure 9: Full suite of standard weights being used to calibrate the scale.



Figure 8: Wedderburn WS603 scale being calibrated to 10kg & 5kg standard weights.





Figure 10: Geologist logging & sampling RC chips into trays on the back of the utility vehicle. Square, yellow pails are filled with water for washing samples.





Figure 12: For sample shipment from site, the Chain of Custody process requires sample details to be placed on all sides, the top and inside the IBC.



Figure 11: Chips from 0-151m (TD) in drillhole RCFO24011.





Figure 13: Downhole geophysical logging calibration hole site.

- FCFO23023 (HQ3 fully-cored) in the foreground is drilled at -85° dip and 040 azimuth to a depth of 149.80m.
 RCFO23032 (Reverse Circulation) is drilled at -55° dip and 040 azimuth to a depth of 151.00m.
 The scarification on the photo's RHS and at the rear is from reheiting activities.
- rehabilitation activities.

Figure 14: Gyro geophysical logging in progress.

Appendix 2: Laboratory Activities (Bureau Veritas Adelaide)



Figure 15: Remainder of core from FCFO23023 calibration hole after 1 quarter Figure 16: Hawsons 1m RC chip samples awaiting Rotary Sample Division and compositing at BV.



Figure 17: Magnetite concentrate trapped in the Davis Tube between the plattens of 2 x 3,000 gauss magnets.



Figure 18: BV's AXIOS 2 DY602 automated XRF assay analyser with borate fusion discs in process.

Appendix 3: QAQC Activities

2023-H1 Cross-Lab Checks

For the H1-2023 cross-lab checks of CRMs, the Shewart charts show the BV lab to be generally in accord with DTR limits. Note that the BV samples were tested over roughly three months to June 30, while the ALS were tested over 14 days to July 14.

The ALS lab is in accord with CRM limits for the OREAS701 (higher DTR Mags ~20%), but not for the OREAS700 (lower DTR Mags, ~11%). The ALS low bias is reflected in the comparison scatter plot also. That is, low of BV outcomes, for lower DTR values in particular.

A further point of interest is that the first seven samples of the OREAS701 samples, though within CRM limits, still show a low bias compared with the CRM average and the BV data. These first seven samples were as supplied in 150g packets which are the same as the ones that were "batch" tested at BV. The latter twenty samples were all from a bulk jar sent to ALS directly by the CRM supplier. There may be some indication of differences in batch samples in these.





Figure 21: H1-2023 BV vs ALS bias and precision checks.



Figure 22: Typical graphical check on data used to determine data outliers (flagged for laboratory checks).

Table 2: QAQC & cross-lab checks conducted on samples from the H1-2023 program

Lab	QAQC Type	Description	Number
BV Adelaide	Duplicates	-	20
	Blanks	-	21
	Coarse Residue Repeats Cross Lab Checks - Coarse Residue Repeats		15
			15
Pulp Repeats		-	44
Sizing		-	106
		GIOP-96	23
		GIOP-118	20
	CRIVIS	OREAS 700	20
		OREAS 701	21
ALS Perth	CBM Cross Lab Chasks	OREAS 700	19
		OREAS 701	25
	Cross Lab Checks - Sizing	-	22

Table 3: QAQC & cross-lab checks conducted on samples from the H2-2023 and H1-2024 program

Lab	QAQC Type	Sample Reference	Number
BV Adelaid	Duplicates (5m composites)	-	26
	Blanks	-	23
	Coarse Residue Repeats	-	27
	Cross Lab Checks - Coarse Residue Repeats	-	27
	Pulp Repeats	-	27
	Sizing	-	58
		GIOP-96	24
		GIOP-118	23
	CPM/c	IMS PBS-71 Head	10
	CINVIS	IMS PBS-71 Assay	10
		OREAS 700	25
		OREAS 701	14
		IMS PBS-71 Head	10
ALC Dowth	CPM Cross Lab Chacks	IMS PBS-71 Assay	10
ALSFEIT		OREAS 700	20
		OREAS 701	10
	Cross Lab Checks - Sizing	-	20

Note: OREAS ran out of their 701 CRM and Hawsons' supply was depleted half-way through the drilling program. IMS PBS-71 CRMs were purchased and used in its place.

Table 4: Samples delivered to the laboratory (not including QAQC samples) for 2023-H1 program

Drillhole No	Sample Type	No. of Samples	Sample Description	Comments
RCCW23001	RC	31	1m sample intervals	
RCCW23002	RC	39	5m sample composited from 1m intervals	
RCCW23003	RC	67	5m sample composited from 1m intervals	
RCCW23004	RC	0	5m sample composited from 1m intervals	Barren hole.
RCCW23005	RC	31	5m sample composited from 1m intervals	
RCCW23006	RC	31	5m sample composited from 1m intervals	
RCCW23007	RC	30	5m sample composited from 1m intervals	
RCCW23008	RC	0	5m sample composited from 1m intervals	Barren hole.
RCCW23009	RC	30	5m sample composited from 1m intervals	
RCCW23010	RC	31	5m sample composited from 1m intervals	
RCFO23011	RC	31	5m sample composited from 1m intervals	
RCF023012	RC	30	5m sample composited from 1m intervals	
RCF023013	RC	31	5m sample composited from 1m intervals	
RCFO23014	RC	30	5m sample composited from 1m intervals	
RCFO23015	RC	31	5m sample composited from 1m intervals	
RCFO23016	RC	30	5m sample composited from 1m intervals	
RCFO23017	RC	33	5m sample composited from 1m intervals	
RCFO23018	RC	30	5m sample composited from 1m intervals	
RCFO23019	RC	30	5m sample composited from 1m intervals	
RCFO23020	RC	30	5m sample composited from 1m intervals	
RCF023021	RC	30	5m sample composited from 1m intervals	
	Total RC	595		

Drillhole No.	Sample Type	No. of Samples	Sample Description	Comments
FCFO23023	HQ3 core	150	1m sample intervals	
RCFO23024	RC	31	5m sample composited from 1m intervals	
RCFO23025	RC	30	5m sample composited from 1m intervals	
RCFO23026	RC	31	5m sample composited from 1m intervals	
RCFO23027	RC	31	5m sample composited from 1m intervals	
RCFO23028	RC	31	5m sample composited from 1m intervals	
RCFO23029	RC	14	5m sample composited from 1m intervals	
RCFO23030	RC	7	5m sample composited from 1m intervals	Hole terminated due collapse in loose material - fault?
RCFO23031	RC	17	5m sample composited from 1m intervals	Hole terminated due collapse in loose material - fault?
RCFO23032	RC	33	5m sample composited from 1m intervals	
RCFO23033	RC	31	5m sample composited from 1m intervals	
RCFO24001	RC	29	5m sample composited from 1m intervals	
RCFO24003	RC	31	5m sample composited from 1m intervals	
RCFO24004	RC	31	5m sample composited from 1m intervals	
RCFO24005	RC	31	5m sample composited from 1m intervals	
RCFO24006	RC	31	5m sample composited from 1m intervals	
RCFO24007	RC	31	5m sample composited from 1m intervals	
RCFO24008	RC	39	5m sample composited from 1m intervals	
RCFO24009	RC	31	5m sample composited from 1m intervals	
RCFO24010	RC	31	5m sample composited from 1m intervals	
RCFO24011	RC	31	5m sample composited from 1m intervals	
	Total HQ3	150		
	Total RC	572		

Table 5: Samples delivered to the laboratory (not including QAQC samples) for 2023-H2 & 2024-H1 program

Grand Total 722

Example Drill Sampling Recovery & Variation Charts



Figure 23: Sample mass variation.



Figure 24: Example sample mass variation in one drillhole.

Variability of 5% and 20% respectively were general indications of precise sampling for the above two charts,

The majority of averages for each hole were below a 20% coefficient of variation (save one at 23%). Thus, considering the reasonably minimal variations in comparison to more rigorous sampling practices as quoted by ISO Standard's (indicating a 20% coefficient of variation benchmark), the less precise RC sampling method as applied in the program faired well for sample representation.

General observations are that variation in masses reduced from the fifth hole drilled onwards, and that the first few metres of each hole were poorer in outcome due to loose soil/weathered material conditions at the top of the hole.

Field Duplicates



Figure 25: Precision/bias plot for field duplicates DTR%.



Figure 26: Precision/bias plot for field duplicates DTR%.

Mean bias and precision were within acceptable limits for the type of test comparison indicated.


Figure 27: Blank samples assay results.

Outcomes were within acceptable limits for the type of test comparison indicated, although those marked as for checks being undertaken are being queried.



Figure 28: Graph showing DTR% preparation and measurement precision.



Figure 29: Graph showing Head Fe% preparation and measurement precision.

Mean bias and precision were within acceptable limits for the type of test comparison indicated, though lower concentration samples included in testing create larger variation than typically sampled programs of higher concentration. Additionally, samples are indicated for checks that are currently being undertaken.



Figure 30: Graph of DTR% coarse residue repeat – cross-lab check.



Figure 31: Graph of Head Fe% coarse residue repeat – cross-lab check.

Mean bias and precision were within acceptable limits for the type of test comparison indicated, though lower concentration samples included in testing create larger variation than typically sampled programs of higher concentration.

Pulp Repeat



Figure 32: Graph showing total precision for pulp repeat DTR%.



Figure 33: Graph showing total precision for Head Fe% repeat.

Mean bias and precision were within acceptable limits for the type of test comparison indicated, though lower concentration samples included in testing create larger variation than typically sampled programs of higher concentration, Additionally, samples are indicated for checks that are currently being undertaken.

<u>Sizing</u>



Figure 34: Graph of sizing results (% passing) for 5m interval composites at -25µm.



Figure 35: Graph of sizing results (P80) for 5m interval composites at -25µm.

The aim of attaining a nominal P80 of approximately 25 micron for the sample of 80% was generally achieved, with an average P80 of 22.7% achieved. That is, a slightly finer size distribution than the P80 target (increased liberation / mass% passing) of 83.6% average.

Certified Reference Materials Example Control Charts



Figure 36: Control chart for GIOP-96 (assay Head Fe%).

Note that though the data shows a generally low bias of the certified value, cross lab checks indicate agreement within expected tolerances and with other moderate iron concentration CRM outcomes, indicating reasonable practice.



Note that though the data shows a generally low bias of the certified value, cross lab checks indicate agreement within expected tolerances and with other high iron concentration CRM outcomes, indicating reasonable practice.





Figure 39: CRM IMS PBS-71 Head Fe% control chart.

Aside from the exceptions noted individually in this section, testing of certified refence materials was generally close to the specified values and generally within the testing limits of 99% / 3 standard deviation upper and lower limits (USD & LSD), indicating reasonable practice. Additionally, samples are indicated for checks that are currently being undertaken.

Certified Reference Materials Examples – Cross Lab Checks



Figure 40: Graph of CRM results for Mags% cross-lab checks.



Figure 41: Graph of CRM results for Head Fe% cross-lab checks.



Figure 42: Graph of CRM results for Mags% cross-lab checks.



Figure 43: Graph of CRM results for Head Fe% cross-lab checks.

Aside from the exceptions noted individually above, testing of certified refence materials for both the testing lab and the check lab (Project Result and Cross-Lab Check respectively) was generally close to the specified values, and each other, and generally within the testing limits of 99% / 3 standard deviation upper and lower limits (USD & LSD), indicating reasonable practice. Additionally, samples are indicated for checks that are currently being undertaken.

Sizing – Cross Lab Checks



Figure 44: Graph of results for Sizing -25µm cross-lab checks.



Figure 45: Graph of results for P80 cross-lab checks.

The aim of attaining a nominal P80 of approximately 25 micron for the sample of 80% was generally achieved by both the BV and ALS laboratories. Statistics for the BV data are given previously. The ALS data showed an average P80 of 25.7% achieved. That is, a slightly coarser size distribution than the P80 target (decreased liberation / mass% passing) of 78.6% average. Similarity in cross lab checks for DTR and Fe% indicate acceptability of testing outcomes.



RESOURCE ESTIMATION | FEASIBILITY STUDIES | DUE DILIGENCE

RESOURCE SPECIALISTS TO THE MINERALS INDUSTRY

18th June 2024

Wes Nichols Hawsons Iron Ltd (by email)

Updated Mineral Resource Estimates for the Hawsons Magnetite Project, Western NSW

H&S Consultants Pty Ltd ("HSC") has completed updated Mineral Resource estimates ("MRE") for Hawsons Iron Ltd.'s ("HIO") Hawsons Magnetite Project in western New South Wales, where the target commodity is iron ore as magnetite (Figure 1). The new resource estimates are based on an additional 44 shallow drillholes (for 6,696m) drilled between 2023 and 2024, targeting near surface high grade mineralisation in the Fold area. The estimates have been reported according to the 2012 JORC Code and Guidelines and the author has the requisite experience to act as a Competent Person under the code. HSC has completed five previous resource estimates for the deposit in 2011, 2014, 2017 (for Carpentaria Exploration Pty Ltd ("CAP") and 2022 (x2) plus an update to the 2017 Mineral Resource in 2021. The latest MRE update was reported to the ASX in July 2022.



Figure 1 Location Map (supplied by CAP 2016)

H&S CONSULTANTS Pty. Ltd. ABN 72 155 972 080 6/3 Trelawney St, Eastwood, NSW 2122 P | +61 2 9858 3863 E | info@hsconsultants.net.au

www.hsconsultants.net.au

Level 4, 46 Edward St Brisbane, QLD 4000 P.O. Box 16116, City East, Brisbane, QLD 4002 P | +61 7 3012 9393

Geology & Mineralisation

The Hawsons prospect lies within folded Neoproterozoic sediments of the Nackara Arc of the Adelaide Fold Belt.

The Hawsons Prospect is pronounced in regional aeromagnetic data as a large, curvilinear, high amplitude magnetic anomaly interpreted to be a regional scale fold of magnetite-rich Braemar Ironstone (Figure 2). The yellow box outlines the Hawsons block model for Mineral Resources.



Figure 2 Airborne Magnetic Data and Target Areas

(Supplied by CAP 2016 Reduced to the Pole Magnetics depicting the magnetite sources)

The rocks exposed at Hawsons contain diamictitic siltstones (tillites), quartz sandstones, calcareous siltstones, dolomite and magnetic ironstone units of the Braemar Ironstone Facies (Figure 3). The ironstones are examples of glaciomarine Raptian-Sturtian sedimentary iron-formation type which has a world-wide occurrence in the Neoproterozoic (Klein & Beukes, 1993 and Lottermoser & Ashley, 2000).

Exposure at Hawsons is limited to a window of folded, upper greenschist metamorphosed Neoproterozoic strata located on the southeast limb of the Hawsons' aeromagnetic anomaly. An irregularly exposed sequence of steep, west-northwest to south dipping strata that kinks in strike about a fold structure in the northern part of the exposure window is present at the prospect. The exposed geology at the prospect is also distinctive in satellite imagery and aerial photography.

The red dashed line in Figure 3 represent the outline of the Hawsons block model.





Figure 3 Deposit Geology (Supplied by CAP 2011)

In detail, the conformable deposit stratigraphy comprises a footwall coarse sandstone overlain by a magnetite bearing siltstone, Unit 1, with relatively sporadic mineralisation a function of the sediment grain size and original porosity. Interbed Unit 1 consists of siltstone with low to moderate magnetite grades. This in turn is followed by a major magnetite-bearing interbedded siltstone and diamictite, Unit 2, with true thicknesses 200 to 300m. A second often distinct coarser grained interbed unit follows with thicknesses ranging from 20m to 80-100m. Unit 3 is the second major mineral bearing unit and comprises fine grained siltstone with disseminated magnetite. Overlying Unit 3 are two hanging wall unit siltstone units with variable low to moderate magnetite grade. The whole sediment package is approximately 700m thick (Figure 4). A schematic cross section for the Core West area is included as Figure 5.



Magnetite mineralisation consists of disseminated grains of euhedral magnetite sometimes with hematite overgrowths. Mineralisation is considered as primary and there is no evidence that the hematite overgrowths are a result of weathering.



Figure 4 Lithological Interpretation

(view : looking down & to grid NE; pale brown = FW unit, purple = Unit 1, brown = interbed 1, blue = Unit 2, green = Interbed unit, red = Unit 3, cyan = Upper HW unit 1, yellow = upper HW unit 2; brown planes = fault surfaces; black dash = line of section)



Figure 5 Core Mineralisation Schematic Cross Section



Drilling Information

Drilling was the main sampling technique, being predominantly reverse circulation ("RC") drilling with some diamond drilling ("DD") support. Table 1 details the drilling information by company and campaign.

Company	Year	Туре	No Holes	Metres	Comment
CAP	2010	DD	2	690.8	
		RC	44	13,600.8	
	2016	RC	26	7,314.2	
		Total	72	21,605.8	
HIO	2021-2022	DD	5	1,633.3	Met & Geotech
		RC_DD	38	16,072.0	inc Met holes
		RC	24	7,626.8	
	2023-2024	DD	1	149.8	
		RC	43	6,546.0	
		Total	111	32,027.9	
CRAE	1988	DD	1	100.0	
	1986	PERC	4	634.6	
		Total	5	734.6	
		Total	188	54,368.2	

CAP

The RC drilling for 2010 was carried out using a truck mounted Schramm and truck mounted KWL 1600H. Both rigs used 4.5" rods and 5.5" face bits. RC and DD drilling was carried out using a truck mounted UDR650 using NQ2 and standard HQ diameters. Core orientation used the Ace Core orientation tool. For the 2016 drilling (all RC drilling) truck-mounted Sandvik DE 840 (UDR1200), UDR1000 and Metzke rigs were used. All rigs used 4.5" rods with 5.5" face bits.

Drillhole collars and topographic control were located by a local surveyor using a Differential Global Positioning System ("DGPS") with accuracy to less than one metre. Coordinates were supplied in GDA 94 – MGA Zone 54. Location methods used to determine accuracy of drillhole collars are considered appropriate. HSC used a local grid conversion for the resource estimation work 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. 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 to significant distances but is associated with a 'run over' projection of the gyro data and therefore not necessarily accurate.



A range of appropriate truck mounted drillrigs for both RC and diamond drilling were employed. For the RC drilling all rigs used 4.5" rods and 5-5/8" face sampling bits. All the diamond drilling was triple tube HQ core size. A range of core orientation tools were used mainly for the geotechnical holes.

For the 2021-22 and 2023-4 exploration programs, drillhole collars were surveyed by a local accredited surveyor using an ALTUS APS-3 RTK (Real Time Kinematic) GPS units in differential mode, which provided an accuracy of 2 to 3 centimetres in horizontal and vertical measurements. 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. HSC continued to use the local grid conversion for the resource estimation.

Downhole surveys for the 2021-2 drillholes were measured using a gyroscope (no details available). The 2023-4 holes were measured using both Geolog's downhole Reflex gyro and an Axis Champ Navigator Gyroscope at 10m intervals down the length of the holes and to within 10m of final hole depth.

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.

Drilling was generally angled at -60° dip, and at right angles to geological strike to generally ensure sub-perpendicularity to the bedding, which is the primary control to the magnetite mineralisation. Different azimuths were used to reflect the changing strike of the beds associated with folding of the sediments and were designed to maintain the steep angle to the bedding.

Locally holes suffered significant deviation to the right (east) with depth. This affected the lower Unit 2 more than the upper Unit 3.

Drilling orientations are considered appropriate with no bias.

Sampling and Sub-sampling

CAP

The 2010 RC sampling was on 1m intervals into green plastic bags. Sample recoveries for the RC drilling were visually estimated by the geologist at the time of drilling and recorded. Because no numerical RC chip recovery data existed it is not possible to conclude if there was a relationship between sample recovery and mineral grade. The 2016 RC drilling recorded sample weights for 272 1m samples with recoveries of 80-90% for dry samples and 40 to 50% for wet samples. Plotting of the 2016 recoveries versus recovered magnetic fraction ("DTR") grade indicated no sampling bias. A very modest number of wet samples were recorded in the 2010 RC drilling and for the 2016 drilling, <5% of samples were logged as wet. Core recoveries were recorded by measuring the length of core recovered in each drill run divided by the drilled length of the individual core runs; average recovery was>97%. A handheld XRF orientation study by CAP for the 2010 RC drilling concluded that there was no sample bias with loss or gain of fine/coarse material with the RC drilling.

A study by Keith Hannan of Geochem Pacific Pty Ltd, an independent geochemist/consultant determined, "the magnetite recoveries for the composited intervals of individual samples are not systematically influenced (biased) by method of drilling and type of recovered sample".

Every RC and DD drillhole was logged by a geologist & entered into Excel spreadsheets, recording; Recovery, Moisture content, Magnetic susceptibility, Oxidation state, Colour, % of Magnetite, Gangue Min, Sulphide Min, Veins and Structure. Data was uploaded to a customised MSAccess database. Handheld magnetic susceptibility measurements and geological logging was



completed for every metre of every drillhole. Logging used a mixture of qualitative and quantitative codes.

The 2010 RC samples were composited in the field 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 5-7kg 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.

Core sampling was as sawn half core with the core 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 the remaining half core was retained for reference.

Sample preparation was completed at ALS Laboratories in Perth. Sample preparation consisted of drying, weighing and crushing of the samples to 90% passing 3.35mm. The sample was then pulverised to 80% passing 38 micron with three 150g pulp splits produced for analysis.

The 2010 work employed field duplicates (23x 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) at an insertion rate of 1 in 10, 111 laboratory duplicates and 39 blanks (river sand) at an insertion rate of 1 in 20, 58 2nd laboratory checks (Intertek Labs in Perth), pulp duplicates for XRF analysis and sample preparation checks. For the 2016 work the field pair results produced a slightly sub-optimal outcome but were still acceptable for the current resource classification and seemed to be less precise than the spear sampling method used in 2010. The lab duplicates (a second 150g split) produced good results indicating acceptable sample preparation procedures. The 2nd lab checks on 150g sub-samples produced results indistinguishable from the original lab results. Pulp duplicates demonstrated chemical homogeneity with the XRF analysis.

30 primary crush and sub-sample checks were completed by Aussam Geotechnical Services (Broken Hill) which concluded that no evidence of bias with the oversize mineralogy.

Blank samples comprising river sand produced results that indicated no contamination of the samples during the sample prep process.

An additional check on the 2010 field sub-sampling and compositing procedure for the RC drilling used a Jones 3 tier riffle splitter (1/8) and a free-standing 1:1 splitter to match the 1/16 rig splitter. A total of 30x 5m composite intervals were utilised. Noting that all samples were dry, slightly better results were achieved than the original field pair process. However under full field conditions it was thought that there was likely to be no difference between the riffle splitting and spear sub-sampling methods. Both are at risk to human errors, which perhaps can be better managed with the riffle splitting.

Two DD holes were used as twin holes to verify the results for two pairs of RC holes and the DTR performance. The results are reasonable but there is some potential ambiguity mainly due to a fundamental lack of assay data (mainly with the diamond drilling) and the separation distance of the relative mineral intercepts. It was concluded by Keith Hannan that "the 'twin hole' site data that, 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".



All sample methods and sample sizes are deemed appropriate.

HIO

The 2021/2022 RC samples were split using a 1/8th-7/8th riffle splitter placed under the rig cyclone. Samples were taken every metre and then composited in 5m intervals using the spear sampling method. Samples were then sent to a commercial laboratory, Bureau Veritas, in Adelaide.

DD core was cut perpendicular at start and end of sample interval and cut longitudinally to give quarter core for geochemical sampling.

The 2023-4 RC samples were sub-sampled using a Metzke Fixed Cyclone/Cone Splitter combination. Every metre was separated into a 12% primary, a 12% library/secondary sample and a 76% bulk reject sample. Primary and secondary samples were then sent to Bureau Veritas in Adelaide. Each 1m primary sample and selected 1m secondary samples (used to form 5 metre duplicate composites) were sub-divided into ¹/₄ portions at the BV laboratory using an rotary splitter, then composited into 5m samples for DTR & XRF analysis.

Sample preparation for both drilling programmes was as for CAP with drying, crushing and pulverising to give a 150g pulp sample, 20g feed for DTR and a 10g feed for head XRF assays.

QAQC consisted of both field and laboratory duplicates for DTR and XRF analyses (both DTR concentrate and head assays). No issues were reported. QAQC also included coarse reject samples again with no issues noted.

All sample methods and sample sizes are deemed appropriate.

Sample Analysis

CAP

An industry standard procedure for DTR measurement was used with a magnetic field strength of 3000 gauss was employed by ALS Laboratories in Perth. The 20g sample was passed through the Davis Tube with the resultant recovered magnetic fraction ie the concentrate, dried and weighed and reported as a percentage of the initial feed.

The head and concentrate sample analysis was by an XRF fusion method for the following attributes: Al₂O₃%, As%, Ba%, CaO%, Cl%, Co%, Cr%, Cu%, Fe%, K₂O%, MgO%, Mn% Na₂O%, Ni%, P%, Pb%, S %, SiO₂%, Sn%, Sr%, TiO₂%, V%, Zn%, Zr% & LOI.

The 2016 QAQC procedures comprised the use of three Certified Reference Materials ("CRMs") for DTR (head and high grades) and XRF analysis at a frequency of 1 per 15. The reported results for the standards met industry accepted criteria for accuracy, both for DTR and XRF analyses of the critical elements (Fe, Si, Al, and P). It is uncertain if CRMs were used for the 2010 drilling.

Keith Hannan reviewed the QAQC results for both the 2010 and 2016 drilling and expressed satisfaction with precision, accuracy and any lack of bias in the data, making it fit for purpose for resource estimation.

All assay methods are deemed appropriate.

HIO

Analysis for the 2021-2 and 2023-4 drilling was the same as for the CAP drilling. This included measuring the recovered magnetic fraction ("DTR") using a Davis Tube with XRF analysis of the



DTR concentrate and the original composited sample (head assays).

The 2021-2 and 2023-4 drilling used Certified Reference Materials, blank samples and second lab checks (ALS in Perth). No issues were noted with the QAQC data.

Geolog Pty Ltd logged each hole with three downhole logging tools:

- 1. Robertson Geoscience compensated dual density, natural gamma, caliper and temperature probe (Density Combination Probe);
- 2. Robertson Geoscience magnetic susceptibility probe (Magsus); and
- 3. Reflex Gyro downhole survey instrument (Gyro).

QAQC measures/checks applied to these probes included:

- 1. Calibrated in aluminium block and water prior to departure to Hawsons site.
- 2. Calibrated in Robertson Geoscience calibration sleeve prior to departure to Hawsons site.

The gyro utilises a digital surface-referenced MEMS-gyro system for accuracy of calibration.

On site calibration uses cored hole FCFO23023. This hole is now logged with all tools each time the logger comes to site, before logging of newly drilled holes commences, and at other nominated times during the logging campaign.

All assay methods are deemed appropriate.

Geological Interpretation

The broad geological interpretation of the Hawsons deposit is relatively straightforward and reasonably well constrained by drilling and the high amplitude airborne and ground magnetic anomalies. The mineralisation is stratabound as disseminated grains of magnetite associated with variable interstitial porosity of the clastic sediments with no obvious structural remobilisation or overprint. Mineralisation exhibits relatively poor downhole continuity with zones of variable magnetite grade (a function of the clastic grain size and composition) but in most instances the contacts between higher and lower grade mineralisation are gradational and precludes the use of hard boundaries as stratigraphic controls to mineral grade interpolation.

The downhole geophysical data, gamma and magnetic susceptibility, has been used in conjunction with DTR grades to produce a detailed geological interpretation and to the generation of a set of 3D wireframes representing variously mineralised units that provide a supportive role in the stratigraphic framework to the deposit. The consistency of the geophysical patterns for the sediments provides for a high level of confidence in the stratigraphic interpretation. The stratigraphic orientation controls the grade interpolation search ellipse rotations.

Two main cross faults, possibly a conjugate pair, have been interpreted and are believed to have caused small offsets or terminations in the mineral-bearing stratigraphy. The faults have been used to delineate three structural domains, Core West, Core East and Fold (Figure 6). The exact orientation of the faults is uncertain in places with the interpretation mainly based on magnetic anomaly discontinuities and limited drilling results.

(All subsequent diagrams are in the local orthogonal grid where relevant).





(blue = domain 1 Core West, green = domain 2 Core East, orange = domain 3 Fold, magenta =unclassified)

HSC used the geological logs of the drill holes and the multielement head grade analysis to create a wireframe surface representing the base of colluvium. HSC also used the geological logs of the drill holes and multielement assays to create wireframe surfaces representing the base of complete oxidation ("BOCO") and the top of fresh rock ("TOFR"). The recent HIO drilling has indicated that magnetite mineralisation can extend up into the oxide/transition zones as remnant mineralisation. As a result the BOCO and TOFR surfaces were not treated as hard boundaries in the grade interpolation.

Any additional faulting in the deposit is assumed to be insignificant relative to the resource estimation.

HSC is aware that alternative interpretations of the mineralised zones and faults are possible but consider the wireframes to adequately approximate the locations of the mineralised zones for the purposes of resource estimation. Alternative interpretations may have a limited impact on the resource estimates.

The new drilling data resulted in minor changes to the geological interpretation for the southern corner and eastern margin of the Fold area. A revised interpretation of the Fold stratigraphy was completed along with modifications to its western bounding faults. This resulted in an increase in the number of search domains to seven from a previous number of five.

The Mineral Resources have a strike length of around 3.3km in a south easterly direction (MGA94). The plan width of the resource varies from 700m to 1.9km with an average of around 1.1km (noting the relatively moderate dip angle of the beds). The upper limit of the mineralisation is exposed in the SE of the deposit with the fresh rock generally occurring between 25 and 80m below surface (average 65m) and the lower limit of the Mineral Resource extends to an approximate depth of 550m below surface (-360mRL).

The lower limit to the Mineral Resource is a direct function of the depth limitations to the drilling in conjunction with the search parameters. The mineralisation is open at depth and to the south beyond the Fold area (i.e. the South East Limb).



Database

An independently customised 2016 MSAccess database by GR-FX Pty Ltd was produced for CAP and subsequently supplied to HSC. Validation of CAP database was undertaken by Keith Hannan of Geochem Pacific Pty Ltd, an independent consultant. A substantial amount of additional validation was completed by HSC in 2017.

The HIO assay results are emailed by the laboratory to multiple company personnel where validation checks are completed, any errors are communicated back to the laboratory which fixes any issues and re-reports the assay results. The HIO database is an update of the GR-FX database and was compiled by independent database manager Chris McMahon of McMahon Resources. Previous HIO drilling was exported from the HIO database and merged into HSC's pre-existing 'resource database' (in MSAccess)

New drilling data for the 2023/4 drilling campaign was supplied by HIO to HSC as a series of CSV files and merged with the latter's pre-existing database. HSC completed some independent validation of the new data to ensure the drill hole database is internally consistent. Validation included checking that no assays or geological logs occur beyond the end of hole and that all drilled intervals have been geologically logged. The minimum and maximum values of assays and density measurements were checked to ensure values are within expected ranges (some density and magnetic susceptibility data was suspect). Further checks include testing for duplicate samples and overlapping sampling or logging intervals. It was noticed that some of the downhole geophysics calibrations for magnetic susceptibility and density looked at odds with the data from surrounding holes. Levelling by HSC was required to make the data fit for purpose.

HSC takes responsibility for the accuracy and reliability of the CAP data used in the MRE.

HIO takes responsibility for the accuracy and reliability of the HIO data used in the MRE.

Composite Data

The drilling sample data was composited to 5m intervals unconstrained by any wireframes. The composites were then domained using three structural wireframes ie Core West, Core East and Fold. and then sub-domained according to oxidation level ie cover, BOCO, TOFR and fresh rock.

Due to historic sampling issues (CAP), a substantial amount of the oxide zone material was not sampled along with peripheral low grade fresh and oxidised material marginal to the main mineral units. To compensate for this, most holes with missing data had been subject to downhole geophysics and it is possible to generate regression equations, using the Conditional Expectation technique, for DTR from either the downhole wireline magnetic susceptibility readings (at 1cm intervals) or the hand-held magnetic susceptibility readings (at 1m intervals). The regressions take into consideration the source company, the structural domain and the oxidation level. DTR results generated by regression also require the generation of concentrate values. To resolve this, the missing iron concentrate data was generated from a regression involving the DTR grade. The remaining missing concentrate attributes are generated from the iron concentrate values via simple linear regressions.

A total of 10,419 5m composites were generated from the drillhole database and estimated for DTR, and the DTR concentrate attributes of Fe, Al₂O₃, P, S, SiO₂ and Loss on Ignition ("LOI"). Head iron composites featured less data as a result of the past sampling regimes ie "missing data". Summary statistics for the composites are supplied in Table 2.



			Concentrate Grades						
	DTR %	Fe Head %	Fe %	Al ₂ O ₃ %	P %	S %	SiO ₂ %	LOI %	
Mean	9.956	16.270	68.411	0.306	0.010	0.005	3.580	-2.380	
Median	9.824	16.040	68.960	0.240	0.007	0.003	2.763	-2.822	
Std Dev	6.732	6.555	2.954	0.304	0.010	0.015	3.079	1.017	
CV	0.676	0.403	0.043	0.994	1.063	2.706	0.860	-0.427	
Minimum	0.001	0.18	36.90825	0.005	0.0005	0.0001	0.005	-4.188	
Maximum	52.6104	50	73.43	3.97	0.105	1.066	36.9965	5.7575	
Count	10419	8843	10419	10419	10419	10419	10419	10419	

Table 2: Summary Statistics for the Composite Data – All Domains

(Std Dev = standard deviation; CV = coefficient of variation (std dev / mean))

Figure 7 shows a plan view of the 5m composites for DTR. The black ellipses represent areas with the new 2023/4 drilling.



Figure 7 Plan View of DTR 5m Composites

Estimation Methodology

Ordinary Kriging ("OK") with multiple search domains was used to complete the grade interpolation using FSSI's GS3M modelling software. The geological interpretation and block model creation and validation was completed using the Surpac mining software. HSC considers OK to be an appropriate estimation technique for the type of mineralisation and extent of data available from



the Core and Fold prospects because all composite data have low coefficients of variation, generally <1, except for sulphur; overall sulphur had very low grades.

Two main cross faults have been interpreted to have caused small offsets in the mineral-bearing stratigraphy. These faults were treated as hard boundaries during estimation allowing for the creation of three structural domains so that data within a particular fault block was only used to estimate blocks in that fault block.

Grade interpolation was unconstrained, except by the search parameters and the variography, in acknowledgement of the gradational nature to changes in sediment composition, porosity and grain size of the host sediments and oxidation levels. Comparison of block grades with the interpretation of stratigraphic sub-units showed a good match with the block grades except in the basal stratigraphy where there was a notable lack of drilling control ie around mineralised Unit 1.

In prior estimates, the TOFR surface was found to coincide with a marked difference in density and DTR but the hardness of the boundary has softened with the recent drilling (with substantially more oxide/transition data), such that the surface was not treated as a hard boundary for density or DTR grade interpolation. The cover data was used in the grade interpolation to act as a buffer to the oxide/transition data. As a conservative measure no estimated grades were loaded into the cover zone in the block model.

No recovery of any by-products has been considered in the resource estimates as no products beyond iron are considered to exist in economic concentrations.

No top-cutting was applied as extreme values were not present and top-cutting was considered by HSC to be unnecessary.

No check estimate was carried out though the new estimates are in line with previous estimates. Hellman & Schofield, the predecessor to HSC, and HSC itself have completed six resource estimations between 2010 and 2022. There has been a sensible increase in size of the resource, a decrease in DTR grade and improvement in the resource classification based on the drilling completed and the cut off grades employed to report the MRE.

Block dimensions are 50m x 25m x 10m (Local E, N, RL respectively) with no sub-blocking (Table 3). The east dimension was chosen as it is around half to a third of the nominal drillhole spacing in the detailed drilled area of structural domain 1. The north dimension was chosen partly on the drillhole spacing but also taking into account the geometry of the mineralisation. The vertical dimension was chosen to reflect the sample spacing and possible mining bench heights and to allow for flexibility in potential mining scenarios.

hawsons_ok_working_new_10624.mdl								
Туре	Y	X	Z					
Minimum Coordinates	3662.5	19900	-360					
Maximum Coordinates	6487.5	24500	260					
User Block Size	25	50	10					
Min. Block Size	25	50	10					
Rotation	0	0	0					

 Table 3: Block Model Details (local grid)

All attributes were estimated as a combined dataset for each structural domain as each had the same number of composites for that domain and all values were inter-related. The exception was the iron



head grade which has fewer numbers due to a lack of sampling and relatable regression equations. Six search passes were employed with progressively larger radii and decreasing data point criteria (Table 4).

Axis	Pass 1	Pass 2	Pass 3	Pass 4	Pass 5	Pass 6
Along Strike	150m	300m	300m	400m	600m	600m
Down Dip	150m	300m	300m	400m	600m	600m
Across Strike	25m	50m	50m	75m	112.5m	112.5m
Data Requirements						
Min Data	12	12	6	6	6	3
Max Data	24	24	24	24	24	24
Octants	4	4	2	2	2	1

A total of twelve search domains were used representing the changes in dip and strike of the deposit (Table 5). There were three search domains for Core West, two for Core East and seven for the Fold area.

Domain	Dip	Strike
Core West 11	-45	095
Core West 12	-20	095
Core West 13	-5	095
Core East 14	-50	095
Core East 15	-50	122
Fold 25	-63	090
Fold 26	-60	110
Fold 27	-60	145
Fold 28	-65	0
Fold 29	-65	125
Fold 30	-60	165
Fold 31	-70	155

Table 5: Search Ellipse Dip and Stike Directions (local grid)

The maximum extrapolation distance for the Mineral Resources was in the order of 300m down dip and 400m along strike to the SW and 100m along strike to the NW; the latter due to a perceived fault termination. The rollover zone in the NW of the deposit was limited to 400m of extrapolation. The across strike and dip extent was 75m.

The new block model was reviewed visually by HSC and it was concluded that the block model fairly represents the grades observed in the drill holes. HSC also validated the block model using a variety of summary statistics and statistical plots. No issues were noted.

Density

Tonnages of the Mineral Resources are estimated on a dry weight basis. Moisture content was not determined.

The short-spaced density ("SSD") data from the downhole geophysics was used for the density of the Mineral Resources. Data consisted of 1cm data points averaged over 10cm intervals. The CAP SSD data was collected using a FDS50 down hole tool containing a 3500CO radioactive source. The



HIO SSD data was collected using a Robertson Geo Sidewall Density with BRD and Temperature, (Part No I002016) down hole tool containing an iOS Cs137 125 milli-curie radioactive source.

The density data was composited to 5m intervals prior to grade estimation, this resulted in 8,337 sample points (Figure 8).



Figure 8 Plan View of Density 5m Composites

The data was derived exclusively from the downhole geophysics with company correction factors applied. The CAP data had a correction factor of +5.2% applied to its drillholes based on comparative testwork completed on 194 10-15cm NQ core samples using the immersion-in-water technique weight in air/weight in air-weight in water method (Archimedes Principle). The HIO data, up to and including the 2022/3 drilling had a correction factor of +4.94% applied based on testwork completed on 166 10-15cm HQ core samples using the same immersion-in-water technique. Further testwork by HIO for the 2023/4 Fold drilling indicated that no correction factor was needed for this drilling campaign.

The siltstones have no vughs, and porosity is occluded, as observed from polished and thin section work. There is no characteristic alteration associated with the mineralisation.

Additional data processing for the Core West and Core East domains included levelling inconsistent data for four holes, which had a 15-30% overstatement of density in comparison with surrounding holes. Default average density values were generated for 5m downhole intervals down to 100m and these values were applied to holes where density data for those near surface zones were not



available. For the Fold domain, missing density data was generated from a set of regressions involving the iron head grade XRF assays.

The density at Hawsons was estimated using OK using a similar methodology to the DTR grade interpolation ie structural domains, same search ellipses and data point requirements.

Blocks with no grade from the density modelling were allocated default average values. These additions generally occurred on the periphery of the deposit for both fresh and oxidised material.

Cut Off Grade

The resources are reported at a cut-off of 4% DTR based on the outcome of a recently completed pit optimisation study by independent consultants AMDAD of Brisbane. All oxidation levels contained Mineral Resources except the cover sequence. A pit shell created by AMDAD was used to constrain the resource estimates; no other wireframe constraint was used. This pit had a base at -360mRL. The cut-off grade at which the resource is quoted reflects the intended bulk-mining approach.

Classification

The resource classification is based primarily on the pass number generated from the grade interpolation (Table 6).

Search Pass	Classification
1	Measured
2	Indicated
3	Inferred
4	Inferred
5	Exploration Potential
6	Exploration Potential

Table 6: Resource Classification

Thus the classification of the resource estimates is nominally based on the data point distribution which is a function of the drillhole spacing. The 100m spaced infill drilling in domain 1 has indicated much improved grade continuity with 60-70% of the variance between samples occurring within a 100-120m range. This forms the basis for the Measured Resources.

In order to remove a striping effect associated with the different drillhole line spacing, defined shapes have been used to categorise Measured and Indicated Resources for parts of Core West and Core East areas. A 2017 detailed sedimentological review using gamma and magnetic susceptibility downhole data had demonstrated strong stratigraphic continuity of the DTR grades within the sediment packages. This was updated in December 2022 and resulted in the additional local conversion of Inferred Resource to Indicated.

Other aspects have been considered qualitatively in the classification including, the style of mineralisation, the geological model including the chronostratigraphic study, sampling method and recovery, missing data and estimated grades, coherency of the downhole geophysics including density, the QAQC programme and results and comparison with previous resource estimates.

HSC believes the confidence in tonnage and grade estimates, the continuity of geology and grade, and the distribution of the data reflect Measured, Indicated and Inferred categorisation. The estimates appropriately reflect the Competent Person's view of the deposit. HSC has assessed the



reliability of the input data and takes responsibility for the accuracy and reliability of the CAP data used to estimate the Mineral Resources. HIO takes responsibility for the recent 2021-2024 drilling data used in the Mineral Resource estimation.

Mining, Metallurgical and Environmental Assumptions

The Mineral Resources were estimated on the assumption that the material is to be mined by open pit using a bulk mining method. The proposed mining method is a conventional truck and shovel operation with transport to a processing plant adjacent to the planned pit. Minimum mining dimensions are envisioned to be around $25m \times 10m \times 10m$ (strike, across strike, vertical respectively). The block size is significantly larger than the likely minimum mining dimensions. The resource estimation includes internal mining dilution but makes no allowance for external dilution and mining losses. Mine design and production is targeting a 68-71% iron product at nominal 12Mtpa.

The idioblastic nature of the magnetite lends itself to relatively easy liberation. The ROM material is considered relatively soft for a magnetite deposit with a bond work index much lower than typical Banded Iron Formation deposits. Liberation of the magnetite grains is a function of grinding to a fine size. Tests have been conducted that show grinding the material to -38 microns gives a P80 of 25 microns. XRF analysis from metallurgical testwork on the recovered magnetic fraction shows that a 68-71% iron product is feasible.

The deposit lies within flat, open country typical of Western NSW with predominantly scrub vegetation that allows for sheep grazing. There are large flat areas for waste and tailings disposal and only a small number of creeks with seasonal flows. The host sediments have low sulphur contents. Continuous data loggers have been installed on 9 water monitoring bores in the vicinity of the main pit design area to collect ground water data that will be used to update the current hydrogeology model covering the site. Additional 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. It is currently assumed that all process residue and waste rock disposal will take place on site in purpose built and licensed facilities. All waste rock and process residue disposal will be done in a responsible manner and in accordance with any mining license conditions.

Mineral Resources

The new Mineral Resource estimates are reported at a 4% DTR cut-off grade (Table 7), as advised by HIO, constrained by a pit shell supplied by HIO (the Revenue Factor 1 shell from pit optimisation ie the highest value, undiscounted). This pit shell went to a maximum depth of -360mRL, approximately 550m below surface. The pit optimisation considered all mineralisation, including material classified as exploration potential. The Mineral Resources include a modest amount of transition and oxide material, which is approximately 11% of the total Mineral Resources.

The differences in the new Mineral Resources with the December 2022 estimates are modest and well within the expectations associated with the new data and the estimation/reporting process.



Category	Mt	DTR %	DTR Concentrate Mt	Density t/m ³
Measured	528	12.9	68	3.04
Indicated	1,882	11.2	210	2.94
Inferred	2,005	11.3	226	2.89
Total	4,415	11.4	504	2.93

Table 7: 2024 Mineral Resources for the Hawsons Iron Deposit

	Concentrate Grades								
Category	Fe % Al ₂ O ₃ % P ppm S ppm SiO ₂ % L0								
Measured	69.0	0.26	73	42	3.36	-2.81			
Indicated	68.6	0.30	83	54	3.62	-2.60			
Inferred	68.2	0.32	84	60	4.18	-2.67			
Total	68.4	0.30	82	56	3.85	-2.66			

(minor rounding errors)

Figure 9 shows the global DTR block grade distribution for the top of fresh rock in plan view.



Figure 9 Global DTR Block Grade Distribution

(plan view; undefined = >0% < 4% DTR))

Figure 10 shows an oblique 3D view of the DTR block grades for the Mineral Resources for the fresh rock zone.





Figure 10 DTR Block Grade Distribution for Mineral Resources

(view looking down towards grid north east)

Comparison with the December 2022 MRE indicates a 12.5% increase in the size of the resource despite a 6% drop in density with an overall 5% increase in DTR concentrate tonnes. The increased resource was accompanied by a 6% decrease in the DTR grade but with a 0.3% increase in the iron concentrate grade to 68.4%. The amount of Measured Resource has increased by 34% with a 5.5% decrease in DTR grade resulting in a 26.6% increase in DTR tonnes. The increase in the global resource size is due to the new drilling with the addition of some new material from the periphery of the Fold prospect, which has lower DTR grades and density, a change in the cut-off grade from 6% DTR to 4% and the new pit shell design.

No statistical or geostatistical procedures were used to quantify the relative accuracy of the resource. The global MRE of the Hawsons deposit are moderately sensitive to higher cut-off grades but does not vary significantly at lower cut-offs (Figure 11).





Figure 11 Grade Tonnage Plot for DTR Grade

The relative accuracy and confidence level in the Mineral Resource estimates are considered to be in line with the generally accepted accuracy and confidence of the nominated Mineral Resource categories. This has been determined on a qualitative, rather than quantitative, basis, and is based on the Competent Person's experience with similar deposits and geology. The Mineral Resource estimates are considered to be accurate globally, but there is some uncertainty in the local estimates due to the current drillhole spacing, a lack of geological definition in certain places eg fault zones, and some ambiguity with the absence of assay data and the QAQC procedures and outcomes. No mining of the deposit has taken place, so no production data is available for comparison.

Exploration potential for the main Hawsons deposit is defined as an Exploration Target of 250 to 350Mt with a DTR grade range of 8.5 to 10% and concentrate grade ranges of 67.5-69.5% Fe, 0.2 to 0.4% Al₂O₃, 0.008 to 0.012% P, 0.005 to 0.007% S, 3.75 to 4.25% SiO₂ and -2.3 to -3% LOI. The Exploration Target is based on material within the supplied pit shell not included in the Mineral Resource. Approximately 80% of the Exploration Target is fresh rock with the majority of it coming from the periphery to the current MRE.

The potential quantity and grade of the Exploration Target is conceptual in nature and there has been insufficient exploration to define a Mineral Resource. It is uncertain if further exploration will result in the determination of a Mineral Resource.

Future Work

1. A full database audit is recommended, issues to be addressed include levelling of downhole wireline magnetic and density data, and suspect assay results for RDCW22032.



- 2. Several geotechnical core holes with potentially significant mineralisation remain unsampled. This oversight should be rectified. These holes could also be used for the density analysis testwork.
- 3. Further infill drilling is required to increase the confidence of the Mineral Resources with potential for additional material to be discovered along strike and down dip around the Fold hinge area and for the SE Limb area.

Simon Tear Director and Consulting Geologist H&S Consultants Pty Ltd



Appendix 1 Additional Information

Composite Data

Summary statistics for the new composite data by structural domain are included below. The listing does not include data generated by the regression equations or inserted default values.

			Concentrate Grades					
DOM1	DTR %	Fe Head %	Fe %	Al2O3 %	Р%	S %	SiO ₂ %	LOI %
Mean	11.55	16.89	69.16	0.28	0.009	0.005	3.04	-2.87
Median	11.94	16.72	69.56	0.21	0.006	0.003	2.57	-3.07
Std Dev	6.44	6.27	1.99	0.33	0.010	0.011	2.06	0.72
CV	0.56	0.37	0.03	1.17	1.151	2.218	0.68	-0.25
Minimum	0	0.18	56.52	0.005	0.0005	0.0005	0.005	-3.97
Maximum	52.6104	46.56	72.07	3.97	0.096	0.365	17.31	1.37
Count	4472	4472	3964	3964	3964	3964	3964	3521
				(Concentra	te Grades		
DOM2	DTR %	Fe Head %	Fe %	Al2O3 %	Р%	S %	SiO ₂ %	LOI %
Mean	10.496	15.673	68.897	0.286	0.008	0.004	3.420	-2.868
Median	10.862	15.500	69.449	0.216	0.005	0.002	2.680	-3.001
Std Dev	6.393	6.617	2.439	0.322	0.009	0.009	2.685	0.600
CV	0.609	0.422	0.035	1.125	1.255	1.923	0.785	-0.209
Minimum	0.001	0.59	53.34	0.024	0.0005	0.0005	0.46	-4.188
Maximum	32.3753	43.44	72.25	3.58	0.08	0.145	20.6	0.87
Count	1583	1583	1296	1296	1296	1296	1296	1174
				(Concentra	te Grades		
DOM3	DTR %	Fe Head %	Fe %	Al ₂ O ₃ %	Р%	S %	SiO ₂ %	LOI %
Mean	9.865	16.112	67.986	0.305	0.010	0.006	4.119	-2.530
Median	9.504	15.385	68.360	0.240	0.007	0.003	3.555	-2.800
Std Dev	6.650	6.427	2.359	0.243	0.013	0.026	2.613	0.912
CV	0.674	0.399	0.035	0.795	1.212	4.461	0.634	-0.360
Minimum	0.004	1.9	48.09	0.01	0.0005	0.0005	0.376	-5
Maximum	75.1731	47.08	73.43	3.14	0.105	1.066	24.32	0.91
Count	2658	2658	2180	2180	2180	2180	2180	1729

Summary Statistics for Composite DTR Data (pre-additions)

The figure below is a DTR cumulative frequency plot of the full composite dataset (including regression data) showing the variation between domain 1 and domains 2 and 3. Domain 1 is higher grade primarily due to the increased amounts of drilling into the higher grade Unit 3.





Cumulative Frequency Plots for DTR for the Structural Domains

The figure below shows a plan view of the search domains within the block model.



Search Domains for Hawsons


The following figures give an indication of global block grades, for all search pass categories, for different oxidation levels. No DTR mineralisation has be delineated for the cover sequence due to a considerable lack of data and uncertainty.



Global Block Grades for Different Oxidation Levels

The figure below shows an oblique view of the MRE classification within the supplied pit shell for the fresh rock material. A small amount of material, mostly Inferred, appears outside the pit but is not included in the Mineral Resources but represent areas likely to be captured by a new pit optimisation.





Classification for Mineral Resources inside Pit Shell

(red = Measured; green = Indicated; Blue = Inferred)

The table below contains data used for the grade tonnage plot. The yellow highlight is the current Mineral Resource.

DTR Cutoff %	Mt	DTR %	DTR Mt
0	4.886	10.54	515
1	4,794	10.73	514
2	4,693	10.93	513
3	4,560	11.17	509
4	4,415	11. 42	504
5	4,250	11.69	497
6	4,041	12.01	485
7	3,808	12.35	470
8	3,533	12.73	450
9	3,204	13.16	422
10	2,814	13.66	384
11	2,392	14.22	340
12	1,952	14.84	290
13	1,529	15.49	237
14	1,154	16.14	186
15	816	16.82	137

Grade Tonnage Data

The tables below show the breakdown of the MRE by structural domain and oxidation zone.



Domain Struct	Category	Mt	DTR %	DTR Mt	Density t/m ³
DOM1	Measured	320	13.6	43	3.07
	Indicated	848	11.6	99	2.96
	Inferred	687	11.4	78	2.91
Sub Total		1,856	11.9	220	2.96
DOM2	Measured	64	13.1	8	3.09
	Indicated	501	11.4	57	3.01
	Inferred	404	11.3	46	2.90
Sub Total		969	11.5	111	2.97
DOM3	Measured	144	11.4	16	2.96
	Indicated	532	10.2	54	2.84
	Inferred	913	11.1	102	2.88
Sub Total		1,590	10.9	173	2.87
Total		4,415	11.4	504	2.93

Mineral Resources by Structural Domain

		Concentrate Grades					
Domain Struct	Category	Fe %	Al2O3 %	P ppm	S ppm	SiO ₂ %	LOI %
DOM1	Measured	69.4	0.23	65	38	2.99	-2.97
	Indicated	69.2	0.27	73	48	3.05	-2.74
	Inferred	69.1	0.28	69	52	3.35	-2.96
Sub Total		69.2	0.27	70	48	3.15	-2.86
DOM2	Measured	69.4	0.24	59	33	2.93	-2.93
	Indicated	69.0	0.26	67	48	3.27	-2.79
	Inferred	68.8	0.29	74	61	3.54	-2.81
Sub Total		69.0	0.27	70	52	3.36	-2.81
DOM3	Measured	67.8	0.32	97	53	4.40	-2.40
	Indicated	67.2	0.37	114	71	4.87	-2.20
	Inferred	67.2	0.36	100	66	5.09	-2.39
Sub Total		67.2	0.36	104	66	4.95	-2.33
Total		68.4	0.30	82	56	3.85	-2.66

Mineral Resources by Oxidation

Oxidation	Category	Mt	DTR %	DTR Mt	Density t/m ³
BOCO	Measured	4	7.4	0	2.63
	Indicated	115	7.1	8	2.63
	Inferred	67	8.7	6	2.61
Sub Total		186	7.7	14	2.62
TOFR	Measured	27	8.6	2	2.83
	Indicated	285	8.4	24	2.80
	Inferred	106	9.2	10	2.70
Sub Total		418	8.6	36	2.78
Fresh	Measured	497	13.2	66	3.06
	Indicated	1,481	12.0	178	2.99
	Inferred	1,832	11.5	210	2.92
Sub Total		3,811	11.9	454	2.96
Total		4,415	11.4	504	2.93



		Concentrate Grades					
Oxidation	Category	Fe %	Al2O3 %	P ppm	S ppm	SiO ₂ %	LOI %
BOCO	Measured	67.1	0.38	174	56	3.96	-1.34
	Indicated	68.0	0.36	148	51	3.22	-1.60
	Inferred	67.8	0.34	126	72	3.78	-1.93
Sub Total		67.9	0.35	141	59	3.44	-1.71
TOFR	Measured	67.4	0.34	126	52	4.23	-1.82
	Indicated	68.3	0.31	114	48	3.27	-1.93
	Inferred	67.6	0.33	116	73	4.13	-2.05
Sub Total		68.1	0.32	115	55	3.55	-1.95
Fresh	Measured	69.1	0.25	69	41	3.31	-2.88
	Indicated	68.7	0.29	72	56	3.72	-2.81
	Inferred	68.2	0.32	81	59	4.20	-2.73
Sub Total		68.5	0.30	76	55	3.90	-2.78
Total		68.4	0.30	82	56	3.85	-2.66

The table below contains the December 2022 Mineral Resource estimates for comparison.

December 2022 Mineral Resources

Category	Mt	DTR %	DTR Concentrate Mt	Density t/m ³
Measured	394	13.7	54	3.09
Indicated	1,576	12.0	190	3.05
Inferred	1,954	12.1	237	3.16
Total	3,924	12.3	481	3.11

(minor rounding errors)

		DTR Concentrate Grade					
Category	Fe %	SiO ₂ %	Al2O3 %	Р%	S %	TiO ₂ %	LOI %
Measured	69.4	3.0	0.23	0.006	0.002	0.05	-3.0
Indicated	68.4	3.6	0.32	0.009	0.004	0.06	-2.7
Inferred	68.0	4.1	0.34	0.009	0.004	0.06	-2.8
Total	68.3	3.8	0.32	0.008	0.004	0.06	-2.8



JORC Code, 2012 Edition – Table 1 Hawsons Magnetite Project

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)(Work was completed by Carpentaria Exploration ("CAP") 2010-2018, Hawsons Iron ("HIO") 2019-2024)

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. 	 Sampling consisted of drillholes with a mixture of reverse circulation (RC) from surface, diamond tails to RC precollars (RC_DD) and diamond core from surface (DD). A total of 72 drillholes for 21,605.8m, were drilled by CAP in two main phases i.e. 2010 (RC & DD) and 2016 (RC). A total of 111 drillholes for 32,07.9m were drilled by HIO in three main phases i.e 2021-2022 (RC & RC_DD), 2023 (RC) and 2023-2024 (RC & DD). CRAE completed 5 drillholes for 734.6m (percussion and DD) in 1988/9 which were peripheral to the main body of mineralisation. RC drillholes were drilled to obtain 1m bulk samples with sample compositing a] in the field (various lengths under geological control) via spear sampling applied in order to obtain manageable sample sizes for laboratory sample preparation and assaying by CAP & HIO 2021-2 or b] by the laboratory in the lab (HIO 2023-4). For the 2010 RC drilling, sampling comprised 2m to 10m 3kg c om p os it e samples. The 2016 sampling comprised 5m composites generating 6kg of sample. All samples were pulverized to produce 150g aliquot for X-Ray Fluorescence (XRF) and Davis Tube Recovery (DTR) analysis. The 2021-2024 HIO drilling produced 5m composites. All samples were pulverized to produce 150g aliquot for X-Ray Fluorescence (XRF) and Davis Tube Recovery (DTR) analysis. Diamond core sampling involved sawing half core samples to produce an 8m composite sample (predominantly NQ core) for CAP and 5m composites for NQ/HQ3 core (HIO). Samples were pulverized to produce a 150g aliquot for XRF and DTR analysis. Geophysical logging was completed for a majority of holes and

Criteria	JORC Code explanation	Commentary
		 consisted of natural gamma, magnetic susceptibility, density and calliper readings. Mineralisation comprises bands of variable thickness of disseminated, idioblastic magnetite in low metamorphic grade fine grained siliciclastics and diamictites. Siliciclastic grain size and porosity tends to provide a strong control to mineralisation. Substantial regional deformation has occurred but locally the main mineral units are relatively straightforward moderately dipping units albeit with a 90° fold rotation in the middle of the deposit. Consistency of sampling method varied but the QAQC work indicated no bias with the sampling. The sampling techniques are considered appropriate for the deposit type with all sampling to industry standard practices.
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). 	 CAP The RC drilling for 2010 was carried out using a truck mounted Schramm and truck mounted KWL 1600H. Both rigs used 4.5" rods and 5.5" face bits. PD and DD drilling was carried out using a truck mounted UDR650 using NQ2 and standard HQ diameters. Core orientation used the Ace Core orientation tool. For the 2016 drilling (all RC drilling) truck-mounted Sandvik DE 840 (UDR1200), UDR1000 and Metzke rigs were used. All rigs used 4.5" rods with 5.5" face bits. HIO The RC drilling for 2021-2022 was carried out using the following truck mounted drill rigs:
		 Sandvik UDR 1200HC Sandvik UDR 1000 Both rigs used 4.5" rods and 5-5/8" face bits. The DD drilling was carried out using a range of truck-mounted drill rigs, including: Two x Sandvik UDR 1000 Sandvik UDR 1200 Bournedrill L1000THD Boart Longyear KWL 1600.

 All core drilled was HQ3 diameter. A range of core orientation tools were used on geotechnical core, they include: Reliex Act III Boart Longyear TruCore CAP The 2010 RC sampling was on 1m intervals into green plastic bags. Sample recoveries for Cover (see visually estimated by the geologist long and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. Because no numerical RC chip recovery data existed it was not passible to conclude if there was a relationship between sample recovery and mineral grade The 2016 RC ampling weed sample weights for 272 1m samples with recoveries of 80-80% for dry samples and 40 to 50% for ver samples. Plotting of recoveries versus DTR grade indicated no obvious sampling bias. Core recoveries nearchive the RC drilling. A very modest number of wet samples were recorded in the 2010 RC drilling. A very modest number of wet samples were logged as wet	•	 All core drilled was HQ3 diameter. A range of core orientation tools were used on geotechnical core, they include: Reflex Act III Boart Longyear TruCore Boart Longyear TruShot
 Drill sample 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 a relationship exists between sample recovery and grade and whether a relationship exists between sample recovery and grade and whether a relationship exists between sample recovery and grade and whether a relationship exists between sample recovery and grade and whether a relationship exists between sample recovery and grade and whether a relationship exists between sample recovery and grade and whether a relationship exists between sample recovery and grade and whether a relationship exists between sample recovery and grade and whether a relationship exists between sample recovery and mineral grade The 2016 RC drilling recorded qualitatively as high, medium and low. Because no numerical RC chip recovery date existed it was not possible to conclude if there was a relationship between sample recoveries of 80-090% for dy samples and 40 to 50% for wet sampling bias. Core recoveries were recorded by measuring the length of core recovered in each drill run divided by the 2010 RC drilling concluded that there was no sample bias with loss or gain of fine/coarse material with the RC drilling. dS% of samples were logged as wet. A study by Keith Hannan of Geochem Pacific Pty Ltd, an independent geochemic/consultant determined, "the magnetite recoveries for the composited intervals of individual samples are not systematically influenced (biased) by method of drilling and type of recovered sample". 	•	The 2023-4 drilling used a truck-mounted McCulloch DR950 rig with 4.5" rods with stabiliser subs and 5-5/8" face bits.
longth of core recovered in each drill run divided by the drilled longth	Drill sample recovery • Method of recording and assessing core and chip sample recoveries and results assessed. CA • 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. • • • •	AP The 2010 RC sampling was on 1m intervals into green plastic bags. Sample recoveries for RC were visually estimated by the geologist at the time of drilling and recorded qualitatively as high, medium and low. Because no numerical RC chip recovery data existed it was not possible to conclude if there was a relationship between sample recovery and mineral grade The 2016 RC drilling recorded sample weights for 272 1m samples with recoveries of 80-90% for dry samples and 40 to 50% for wet samples. Plotting of recoveries versus DTR grade indicated no obvious sampling bias. Core recoveries were recorded by measuring the length of core recovered in each drill run divided by the drilled length of the individual core runs; average recovery is >97%. A handheld XRF orientation study by CAP for the 2010 RC drilling concluded that there was no sample bias with loss or gain of fine/coarse material with the RC drilling. A very modest number of wet samples were recorded in the 2010 RC drilling and for the 2016 drilling, <5% of samples were logged as wet. A study by Keith Hannan of Geochem Pacific Pty Ltd, an independent geochemist/consultant determined, "the magnetite recoveries for the composited intervals of individual samples are not systematically influenced (biased) by method of drilling and type of recovered sample". O The 2021-2 RC drilling indicated no sampling bias of significance for DTR vs sample recovery Triple tube HQ core had core recoveries recorded by measuring the

Criteria	JORC Code explanation	Commentary
		 of the individual core runs. No numerical recovery percentage was supplied but visual indications were that recovery was very good. For the 2023-4 drilling RC recoveries were recorded by measuring the mass of the primary, library/duplicate and bulk reject samples of each 1m drilled. This data was then 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). An average qualitative value of 78% was achieved. No bias was noted in any of the HIO datasets Triple tube HQ core was used resulting in diamond core recoveries for the 2023-4 period being very good. Lower than normal core recoveries in both campaigns were recorded for top of hole cover and oxidised zones and the occasional but rare rubble/clay gouge fault material.
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. 	 Every RC, percussion and diamond drillhole was logged by a geologist & entered into Excel spreadsheets recording; Recovery, Moisture content, Magnetic susceptibility, Oxidation state, Colour, % of Magnetite, Gangue Min, Sulphide Min, Veins and Structure. Data was uploaded to a customised Access database. Handheld magnetic susceptibility measurements and geological logging was completed for every metre of every drillhole. Logging used a mixture of qualitative and quantitative codes. All RC samples 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. Processing of drillcore included core orientation, metre marking, magnetic susceptibility measurements (every 0.5m), core recoveries, rock quality designation (RQD). All drill core was photographed wet and dry after logging and before cutting. All relevant intersections were logged. Geological logging was of sufficient detail to assist in the creation of a geological model.
Sub-sampling techniques	 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. 	 CAP The 2010 RC samples were composited in the field 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

Criteria	JORC Code explanation	Commentary
and sample preparation	 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. 	 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. 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 retained for reference. Sample Preparation was completed at ALS Laboratories Perth Crush the sample to 100% below 3.35 mm. A 150 g sub-sample 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. 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-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) at an insertion rate of 1 in 0, 111 lab duplicates and 39 blanks (river sand) at an insertion rate of 1 in 20, 58 2nd lab checks (Intertek Labs in Perth), pulp duplicates for XRF analysis and sample preparation checks. For the 2016 work the field pair results produced a slightly sub-optimal outcome but were still acceptable for the current resource classification and seemed to be less precise than

Criteria	JORC Code explanation	Commentary
		 method used in 2010. The lab duplicates (a second 150g split) produced good results indicating acceptable sample preparation procedures. The 2nd lab checks on 150g sub-samples produced results indistinguishable from the original lab results. Pulp duplicates demonstrated chemical homogeneity with the XRF analysis. 30 primary crush and sub-sample checks were completed by Aussam Geotechnical Services (Broken Hill) which concluded that no evidence of bias with the oversize mineralogy. Blank samples comprising river sand produced results that indicated no contamination of the samples during the sample preparation process. An additional check on the field sub-sampling and compositing procedure used a Jones 3 tier riffle splitter (1/8) and a free-standing 1:1 splitter to match the 1/16 rig splitter. A total of 30 5m composite intervals were utilised. Noting that all samples were dry, slightly better results were achieved than the original 'field pair' process. However under full field conditions it was thought that there was likely to be no difference between the riffle splitting and spear sub-sampling methods. Both are at risk to human errors, which perhaps can be better managed with the riffle splitting.
		HIO
		• The 2021/2022 RC samples were split using a 1/8th-7/8th riffle splitter placed under the rig cyclone. Samples were taken every metre and then composited in 5m intervals using the spear sampling method. Samples were then sent to a commercial laboratory, Bureau Veritas in Adelaide.
		 DD core was cut perpendicular at start and end of sample interval and cut longitudinally in quarter for geochemical sampling. The 2023-4 RC samples were sub-sampled using a Metzke Fixed Cyclone/Cone Splitter combination. Every metre was separated into a 12% primary, a 12% library/secondary sample and a 76% bulk reject sample. Samples were sent to a commercial laboratory Bureau Veritas ("BV") in Adelaide for sample preparation and analysis. Each 1m primary sample and selected 1m secondary samples (used
		to form 5 metre duplicate composites) were sub-divided into 1/4

Criteria	JORC Code explanation	Commentary
		 portions at the BV laboratory using rotary splitetr, then composited into 5m samples for DTR & XRF preparation. The HQ3 DD core from the calibration hole was cut into 1m intervals. Each 1m interval was then cut longitudinally to produce ¼ core samples for geochemical sampling. Sample preparation was as for CAP with drying, crushing and pulverising to give a 150g pulp sample. 20g feed for DTR and 10g feed for head XRF assays. QAQC consisted of both field and laboratory duplicates for DTR and XRF analyses (both DTR concentrate and head assays). No issues were reported. QAQC also included coarse reject samples again with no issues noted. All sampling methods and samples sizes are deemed appropriate by HSC.
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. 	 CAP Davis Tube Recovery (DTR) Analysis Pulveriser bowl 150 ml Stroke Frequency - 60/minute Stroke length – 38mm Magnetic field strength – 3000 gauss Tube Angle – 45 degrees Tube Diameter – 40mm Water flow rate – 540-590 ml/min Washing time 20 minutes Collect the concentrate in small collector (magnetic fraction) and discard tails. Dry the DTR concentrate and report the weight of the concentrate as a percentage of measured feed and report – DTR Mass Recovery. X-Ray Fluorescence (XRF) Assaying Using the Head Sample, analyse by XRF fusion method for the following attributes: Al2O3%, As%, Ba%, CaO%, Cl%, Co%, Cr%, Cu%, Fe%, K2O%, MgO%, Mn% Na2O%, Ni%, P%, Pb%, S %, SiO2%, Sn%, Sr%, TiO2%, V%, Zn%, Zr% & LOI.

Criteria	JORC Code explanation	Commentary
		 Using the DTR concentrate sample analyse by XRF fusion method for the following grades: Al2O3%, As%, Ba%, CaO%, Cl%, Co%, Cr%, Cu%, Fe%, K2O%, MgO%, Mn% Na2O%, Ni%, P%, Pb%, S %, SiO2%, Sn%, Sr%, TiO2%, V%, Zn%, Zr% & LOI
		 JH8 and KT5 magnetic susceptibility meters were used to record magnetic susceptibility. A laboratory standard was used each day to calibrate each metre. A Niton XL3T Gold handheld XRF machine was used. A laboratory analysed sample was used to calibrate for Fe.
		• QAQC procedures consisted of the use of 3 certified reference materials for DTR (head and high grades) and XRF analysis at a frequency of 1 per 15 for the 2016 drilling. The reported results for the standards meet industry accepted criteria for accuracy, both for DTR magnetite recoveries and XRF analyses of the critical elements (Fe, Si, Al, and P).
		 It is uncertain if certified reference materials were used for the 2010 drilling. In CAP's documented drilling procedures it was indicated that a standard insertion rate of 1 in 30 should be used. In a QAQC review of procedures Keith Hannan noted that CAP utilises a 'monitor' standard consisting of crushed magnetite-rich rock derived from local outcrops but without commenting on any results.
		• Keith Hannan of Geochem Pacific Pty Ltd, an independent geochemist/consultant reviewed the QAQC results for both the 2010 and 2016 drilling and expressed satisfaction with precision, accuracy and any lack of bias in the data, making it fit for purpose for resource estimation.
		• The CAP SSD (density) data was collected using a FDS50 down hole tool containing a 3500CO radioactive source. No other information is available particularly for calibration.
		All assay methods are deemed appropriate by HSC.
		HIO
		• Analysis for the 2021-2 and 2023-4 drilling was the same as for the CAP drilling. This included recovered magnetic fraction using a Davis Tube with XRF analysis of the DTR concentrate and the original

Criteria	JORC Code explanation	Commentary
		 composited sample (head assays) The 2021-2 and 2023-4 drilling used Certified Reference Materials, blank samples and second lab checks (ALS in Perth). QAQC procedures consisted of the use of 3 certified reference materials for DTR (head and high grades) and XRF analysis at a frequency of 1 per 15. The reported results for the standards meet industry accepted criteria for accuracy, both for DTR magnetite recoveries and XRF analyses of the critical elements (Fe, Si, Al, and P).
		 <u>Geophysical Logging</u> (HIO) 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: Calibrated in aluminium block and water prior to departure to Hawsons site
		 Calibrated in Robertson Geoscience calibration sleeve prior to departure to Hawsons site.
		 The gyro utilises a digital surface-referenced MEMS-gyro system for accuracy of calibration and is tested against the driller's Axis rod-string gyro tool.
		• On site calibration uses cored hole FCFO23023. This hole is now logged with all tools each time the logger comes to site, before logging of newly drilled holes commences, and at other nominated times during the logging campaign.
		All assay methods are deemed appropriate by HSC.
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. 	 CAP Data was stored in a customised Access database. Database checks were completed by S. Tear of HSC on 5 randomly selected drillholes. Checks included comparing database values with original collar survey reports, downhole survey reports and assay

Criteria	JORC Code explanation	Commentary
Criteria JORC Code explanation • Discuss any adjustment to assay data.	 certificates. No issues were noted. Two DD holes were used as twin holes to verify the results for 2 pairs of RC holes and the DTR performance. The results are reasonable but there is some potential ambiguity mainly due to a fundamental lack of assay data (mainly with the diamond drilling) and the separation distance of the relative mineral intercepts. It was concluded by Keith Hannan that "the 'twin hole' site data that, 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". No details are available for any documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. CAP used a suite of documented procedures for the 2016 drilling-related activities drawn as a flowsheet. No adjustments were made to raw assay data except for the resource estimation where below detection results were recorded as half below detection value. Density data from the downhole geophysics was adjusted upwards by 5.2% based on check density measurements using drillcore and an immersion in water technique and the weight in air/weight in water (Archimedes) method. 	
		 Wes Nichols, Competent Person for the HIO Exploration Results, has visited the site several times in the 2021-4 time period. One diamond twin of an RC hole has been completed by HIO for the 2023-4 drilling. This diamond hole is used for the geophysical calibration and provided information on the density and the need for any corrections to the downhole geophysical data. A file based database system was used "DataStore" which utilised import and export tools that also validated and formatted the data. Data inputs for lithology, geochemistry and geophysics were utilised. Heading checks on each file were enacted via the software and once flagged corrections made in the input forms to ensure correct allocation of outcomes. Data was verified maximum / minimum value

Criteria	JORC Code explanation	Commentary
		 checks, sample advice to report reconciliation, dictionary checks and text value checks. Clean validated files once available were automatically uploaded to the database All assay data is validated through a proprietary MS Excel-based software (Lab-In for Geochem) program which has error-trapping and validation dictionary routines. Error reports are produced and provided back to the data provider for rectification and resubmission of corrected data.
Location of	 Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys) transhes, mine workings and other locations 	САР
υαια μοπτιδ	down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Drillhole collars were located by a local surveyor using a Differential GPS with accuracy to less than one metre
 Specification of the grid system used. Quality and adequacy of topographic control. 	 Coordinates were supplied in GDA 94 – MGA Zone 54. HSC 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 gyro data due to limitations with the gyro data as result of hole collapse and reluctance of the contractor to send the probe to the full hole depths. 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 to significant distances but is associated with a 'run over' projection of the gyro data
		 and therefore not necessarily accurate. Topographic control was collected using a high-resolution
		 Differential Global Positioning System by a local surveyor. Location methods used to determine accuracy of drillhole collars are considered appropriate.
		HIO
		• For the 2021-22 and 2023-4 exploration programs, drillhole collars
		were surveyed by a local accredited surveyor using ALTUS APS-3

Criteria	JORC Code explanation	Commentary
		 RTK (Real Time Kinematic) GPS units in differential mode, which provided an accuracy of 2 to 3 centimetres in horizontal and vertical measurements. Current GDA94 coordinates of an 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. Difficulty with getting the tool down the hole because of hole cave meant that some holes could not be logged along their entire length and where possible a multi shot downhole camera survey was utilized. Downhole surveys for the 2023-4 drilling were measured using both Geolog's downhole Reflex gyro and an Axis Champ Navigator Gyroscope at 10m intervals down the length of the holes and to within 10m of final hole depth. 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.
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. 	 CAP The deposit is drilled at a nominal spacing of 150m to 200m in section and plan extending to 400m on the periphery of the deposit. Downhole RC and DD sample spacing was 1m. The drill spacing was deemed adequate for the interpretation of geological and grade continuity noting the along strike stratigraphic homogeneity associated with the style of mineralisation. A majority of holes had downhole geophysics completed except where hole collapse prevented progress of the probe. Downhole sampling was at 1cm intervals which were averaged over 10cm intervals to aid modelling. The 2010 drill samples were composited in the field under geological control with an interval range of 2 to 10m with an average length of 8m. The 2016 RC drill samples were composited to 5m.

Criteria	JORC Code explanation	Commentary
		HIO
		 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 mineralization along strike. The data spacing is deemed appropriate for Mineral Resources and their classifications. The 2021-2 and 2023-4 RC and DD samples were composited into 5m intervals along the 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. 	 Drilling was generally angled at -60° dip, and at right angles to geological strike to ensure sub-perpendicularity to the bedding, which is the primary control to the magnetite mineralisation. Different azimuths were used to reflect the changing strike of the beds associated with folding of the sediments and were designed to maintain the steep angle to the bedding. Locally holes suffered significant deviation to the right (east) with depth. This affected the lower Unit 2 more than the upper Unit 3. Drilling orientations are considered appropriate with no bias. The drilling orientation made it very difficult to intersect the cross cutting fault structures as the drilling was often sub-parallel to these features. Therefore information on the nature and impact on metal grade of the structures, particularly with any potentially associated penetrative oxidation, is relatively unknown.
Sample security	The measures taken to ensure sample security.	 CAP All samples were stored on site under CAP personnel supervision until transporting to the CAP Broken Hill office. No details are available on the transportation of samples to the laboratory.
		 HIO All primary & secondary samples were bagged using industry standard calico sample bags and stored on site under the supervision of an HIO representative. Primary sample bags are pre-numbered to ensure that samples are not missed.

Criteria	JORC Code explanation	Commentary
		 Primary and secondary samples were separately packed 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. Photos were taken of each IBC at its send point before despatch The HIO assay results are emailed by the laboratory to multi company personnel where validation checks are completed, any errors are communicated back to the laboratory which fixes any issues and rereports the assay results.
Audits or	• The results of any audits or reviews of sampling techniques and data.	САР
reviews		• Sample procedures and results were systematically reviewed by CAP personnel.
		 The QAQC data was reviewed by CAP staff
		• The 2010 QAQC data was also reviewed by Keith Hannan of Geochem Pacific Pty Ltd, an independent Geochemist/consultant who concluded:
		• The duplication procedure for composite RC samples, by careful spearing, is demonstrably effective.
		 An absence of mismatches between duplicates and the consistency of analytical results for CAP blanks and the CAP certified standards indicate that sample handling procedures in the field for this complex program are well executed
		• Based on the laboratory chemical analyses and derived parameters such as magnetite content, the CAP monitor standard is chemically and mineralogically uniform and therefore 'fit-for-purpose'.
		• The high degree of correlation between the averaged field portable (FP) XRF readings for Fe on primary bags of RC spoil and the laboratory analyses of Fe on the much smaller composite samples derived thereof, indicates that downhole Fe distributions are successfully mapped by FP XRF and that the compositing procedure is effective.
		• Keith Hannan completed an exhaustive review of the sampling and assaying for the 2016 drilling which concluded "The investigation of multiple sources of QAQC data finds the magnetite recoveries and

Criteria	JORC Code explanation	Commentary
		chemical analyses obtained for the sample composites of the Hawsons Iron Project 2016 RC Infill Drilling Programme to be fit for the intended purpose of ore resource estimation and planning. Sampling and laboratory preparation and analytical errors are well within industry standard tolerances, and without demonstrable bias".
		HIO
		 An audit on sample tracking/arrival, sample preparation and analysis procedures was conducted by Wes Nichols on 01/12/2021 at the Bureau Veritas Laboratory at Wingfield in Adelaide. While the equipment and procedures were observed for XRF analysis during this audit visit, no samples were ready to be analysed via XRF at that date.
		 McMahon Resources completed reviews of the sampling and assaying for the 2023-4- drilling program data. No issues were noted

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 licence to operate in the area. 	 The Hawsons Magnetite project is located 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 HIO who currently manage the project. In December 2023, Hawsons acquired a new tenement (EL9620) that adjoins the southern boundary of EL7208. The project area is entirely within Exploration Licences (ELs) 6979, 7208, 7504 & 9620. 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 and MLA621 was granted in December 2023. MLA621 covers more area than the previous MLA460 which was relinquished on the granting of the new

Criteria	JORC Code explanation	Commentary
		MLA
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 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. CRAE completed in 1984, five holes within EL 6979 seeking gold mineralisation in a second-order linear magnetic low 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.
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 Iron Formation is the host stratigraphy and comprises a series of strike extensive magnetite-bearing siltstones generally with a moderate dip (circa -55°), primarily to the southwest. 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, 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 in 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

Criteria	JORC Code explanation	Commentary
		 of finer grained sediments with more consistent bed thicknesses, style and clast composition (Unit 3), as compared to the diamictite units. The transition from high (Unit 2) to lower (Unit 3) energy sediment deposition is marked by top of the Interbed Unit. 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 of the magnetite is believed due to one or more of a range of possible processes including in situ recrystallisation of primary detrital grains, chemical precipitation from seawater, or 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. The sediment composition and grain size appear to provide the main control on the mineralisation. There is no evidence for structural control in the form of veins or veinlets coupled with the lack of a strong structural fabric In the majority of the Core and Fold deposits the units strike south east and dip between 45 and 65° to the south west. The
Drill hole	A summary of all information material to the understanding of the	 synclinal fold structure resulting in a 90° strike rotation. Exploration results not being reported
Information	 exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	

Criteria	JORC Code explanation	Commentary
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. 	Exploration results not being reported
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 has tended to be at a steep angle to the dip angle of the sedimentary beds.
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. 	Exploration results not being reported
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. 	Exploration results not being reported
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 substantial amount of polished and thin section work has been completed on both RC chips and diamond core. This work has confirmed the nature and style of both the original sediment and the iron minerals including magnetite, hematite, chlorite and ferroan dolomite. Downhole geophysics comprises magnetic susceptibility, gamma and density and has been completed for a majority of the holes. This has resulted in the definition of a magnetic (and density- related) stratigraphy that is coincident with a chronostratigraphic interpretation. 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

Criteria	JORC Code explanation	Commentary
		 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 pit wall stability and to fill the gaps outlined in the GHD report. This report was completed in October 2022 TSIM VLF-EM ground-borne geophysical surveys have been conducted by HIO to help ascertain the north westerly and southeasterly extensions of newly discovered near-surface and exposed mineralisation in the Fold Zone and to assist with drillhole targeting.
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. 	 Infill drilling is planned to upgrade the current Mineral Resources to Measured and Indicated, upgrade a portion of the Exploration Target to Inferred.

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. 	 Independently customised 2016 MSAccess database by GR-FX Pty Ltd for CAP supplied to H&S Consultants (HSC). Validation of CAP database undertaken by Keith Hannan of Geochem Pacific Pty Ltd, an independent consultant. Additional validation completed by HSC in 2017. The new HIO database was compiled by independent database manager Chris McMahon of McMahon Resources. Assay results are reported to multi company personnel and passes through a series of validation checks involving those personnel. New drilling data is supplied by HIO to HSC as a series of CSV files which are then appended to the HSC 'resource database'. HSC completed some independent validation of the new data to

Criteria	JORC Code explanation	Commentary
		 ensure the drill hole database is internally consistent. Validation included checking that no assays, density measurements or geological logs occur beyond the end of hole and that all drilled intervals have been geologically logged. The minimum and maximum values of assays and density measurements were checked to ensure values are within expected ranges (some density and magnetic susceptibility data was suspect). Further checks include testing for duplicate samples and overlapping sampling or logging intervals. It was noticed that some of the downhole geophysics' calibrations for magnetic susceptibility and density looked at odds with the data from surrounding holes. Levelling by HSC was required to make the data fit for purpose, although the amount of downhole magnetic susceptibility data required to generate DTR values for grade interpolation has been significantly reduced since July 2022. HSC takes responsibility for the accuracy and reliability of the CAP data used in the Mineral Resource estimates. HIO takes responsibility for the accuracy and reliability of the HIO data used in the Mineral Resource estimates. HSC created a local E-W orthogonal grid for all interpretation and modelling work. There are accuracy issues with some of the data, mainly the downhole geophysics for magnetic susceptibility and density, which following appropriate processing have a very modest impact on the composite generate processing have a very modest impact on the composite generation for grade interpolation
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. 	 Regular site visits were completed by HIO's Competent Person for Exploration Results throughout the 2021-2024 exploration programs. Regular site visits were completed by CAP's Competent Person for Exploration Results for the period 2009 to 2017. A site visit was undertaken in 2012 by Simon Tear of HSC, Competent Person for the CAP Exploration Results and the reporting of the new Mineral Resources. The visit included geological logging of diamond drillhole DD10BRP023 covering over 500m of stratigraphy and an inspection of drill sites and outcropping mineralisation.

 The broad geological interpretation of the Hawsons deposit is
 relatively straightforward and reasonably well constrained by drilling and the high amplitude airborne and ground magnetic anomalies. The mineralisation is stratabound as disseminated grains of magnetite associated with variable interstitial porosity of the clastic sediments with no obvious structural remobilisation or overprint. Mineralisation exhibits relatively poor downhole continuity with zones of variable magnetite grade (a function of the clastic grain size and composition but in most instances the contacts between higher and lower grade mineralisation are gradational and precludes the use of hard boundaries as stratigraphic controls to mineral grade interpolation. The downhole geophysical data, gamma and magnetic susceptibility has been used in conjunction with DTR recovered magnetic fractior grades to produce a detailed geological interpretation and to the generation of a set of 3D wireframes representing variously mineralised units that provide the stratigraphic framework to the deposit. The consistency of the geophysical patterns for the sediments provides for a high level of confidence in the stratigraphic interpretation. The stratigraphic orientation controls the rotations or the grade interpolation search ellipses. Two main cross faults, possibly a conjugate pair, have beer interpreted and are believed to have caused small offsets in the mineral-bearing stratigraphy. The faults have been used to delineate three structural domains that act as hard boundaries for composite selection and grade interpolation. The exact orientation of the faults is unknown with the interpretation based on magnetic anomaly discontinuities. HSC used the geological logs of the drill holes and the multi element head assay data to create a wireframe surfaces representing the base of complete oxidation ("BOCO") and the top of fresh roce.

Criteria	JORC Code explanation	Commentary
		 ("TOFR"). The recent HIO drilling has indicated that magnetite mineralisation can extend up into the oxide/transition zones as remnant mineralisation. As a result the BOCO and TOFR surfaces were not treated as hard boundaries in the grade interpolation. Any additional faulting in the deposit is assumed to be insignificant relative to the resource estimation at this stage. HSC is aware that alternative interpretations of the mineralised zones and faults are possible but consider its approach to adequately approximate the locations of the mineralised zones. Alternative interpretations may have a limited impact on the resource estimates.
Dimensions	 The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource. 	 The Mineral Resources have a strike length of around 3.3km in a south easterly direction. The plan width of the resource varies from 700m to 1.9km with an average of around 1.1km (noting the relatively moderate dip angle of the beds). The upper limit of the mineralisation is exposed in the SE of the deposit with the fresh rock generally occurring between 25 and 80m below surface (average 65m) and the lower limit of the Mineral Resource extends to an approximate depth of 550m below surface (-360mRL). The lower limit to the Mineral Resource is a direct function of the depth limitations to the drilling in conjunction with the search parameters. The mineralisation is open at depth and to the south beyond the Fold area (i.e. the South Limb).
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 (eg sulphur for acid mine drainage characterisation). 	 Ordinary Kriging ("OK") with multiple search domains was used to complete the estimation using FSSI's GS3M modelling software. The geological interpretation and block model creation and validation was completed using the Surpac mining software. HSC considers OK to be an appropriate estimation technique for the type of mineralisation and extent of data available from the Core and Fold prospects. All data attributes have low coefficients of variation, generally <1. Two main cross faults have been interpreted to have caused small offsets in the mineral-bearing stratigraphy. These faults were treated as hard boundaries during estimation allowing for the creation of three structural domains so that data from within a particular fault block were only used to estimate blocks in that fault block.

JURC Code explanation	
 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. 	 Regression equations based on downhole surveyed magnetic susceptibility data were used to estimate missing DTR values for the different structural domains, company drilling campaigns and levels o oxidation. Regression equations based on the handheld magnetic susceptibility data was used to estimate the DTR values where wireline magnetic susceptibility data was not available. Missing Fe concentrate grades were calculated using regression equations based on the DTR grades for the structural domains, different companies and oxidation levels and the remaining concentrate elements were calculated using simple linear regressions based on the iror concentrate grade. The use of regression equations has been historically a small part of the Hawsons project and while not ideal the subsequent drilling has indicated no immediate issue with the use o generated estimated values for DTR and DTR concentrates in the Mineral Resources. A total of 10,419 5m composites, including residuals, were generated from the drillhole database with no wireframe constraints and modelled for DTR, and the DTR concentrate grades of Fe, Al₂O₃, P S, SiO₂, and LOI. Head Fe data had lower sample numbers but was still modelled together with the other data. Grade interpolation was unconstrained, except by the search parameters and the variography, in acknowledgement of the gradational nature to changes in sediment composition, porosity and grain size of the host sediments. Comparison of block grades with the block grades except in the basal stratigraphy where there was a notable lack of drilling control ie around mineralised Unit 1. In prior estimates, the TOFR surface was not treated as a hard boundary has softened with the new drilling (and substantially more oxide/transition data) such that the surface was not treated as a hard boundary for density or DTR grade interpolation.

Criteria	JORC Code explanation	Commentary
		 the cover zone in the block model. No recovery of any by-products has been considered in the resource estimates as no products beyond iron are considered to exist in economic concentrations. No top-cutting was applied as extreme values were not present and
		 top-cutting was considered by HSC to be unnecessary. No check estimate was carried out though the new estimates are in line with previous estimates. Hellman & Schofield, the predecessor to HSC, and HSC itself have completed six resource estimations between 2010 and 2022. There has been a sensible increase in size
		of the resource, a decrease in DTR grade and improvement in the resource classification based on the drilling completed and the cut off grades employed to report the MRE.
		 Block dimensions are 50m x 25m x 10m (Local E, N, RL respectively) with no sub-blocking. The east dimension was chosen as it is around half to a third of the nominal drillhole distances in the detailed drilled area of structural Domain 1. The north dimension was chosen partly on the drillhole spacing but also taking into account the geometry of
		the mineralisation with its moderately south-dipping stratigraphy. The vertical dimension was chosen to reflect the sample spacing and possible mining bench heights and to allow for flexibility in potential mining scenarios.
		 All grades were estimated as a combined dataset for each structural domain as each had the same number of composites, except for head Fe, for that domain and all values were inter-related. Six search passes were employed with progressively larger radii or decreasing data point criteria. The Pass 1 used radii of 150x150x25m. Passes 2
		and 3 used 300x300x50m, the fourth pass used 400x400x75m (along strike, down dip and across mineralisation respectively). The first and second passes required a maximum of 24 data and a minimum of 12 data points from 4 octants whereas the third and fourth passes
		sixth search pass (for exploration potential) used search dimensions of 600m by 600m by 112.5m with 6 and 3 minimum data respectively

Criteria	JORC Code explanation	Commentary
		 and 2 octants. The maximum extrapolation distance for the Mineral Resources was in the order of 300m down dip and 400m along strike to the SW and 100m along strike to the NW, the latter due to a perceived fault termination. The rollover zone in the NW of the deposit was limited to 400m of extrapolation. The across strike and dip extent was 75m. The new block model was reviewed visually by HSC and it was concluded that the block model fairly represents the grades observed in the drill holes. HSC also validated the block model using a variety of summary statistics and statistical plots. No issues were noted
Moisture	 Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content. 	 Tonnages of the Mineral Resources are estimated on a dry weight basis.
Cut-off parameters	 The basis of the adopted cut-off grade(s) or quality parameters applied. 	 The resources are reported at a cut-off of 4% DTR based on the outcome of a recently completed pit optimisation study by independent consultants AMDAD of Brisbane. All oxidation levels contained Mineral Resources except the Cover sequence. The cut-off grade at which the resource is quoted reflects the intended bulk-mining approach.
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. 	 The Mineral Resources were estimated on the assumption that the material is to be mined by open pit using a bulk mining method. Minimum mining dimensions are envisioned to be around 25m x 10m x 10m (strike, across strike, vertical respectively). The block size is significantly larger than the likely minimum mining dimensions. The resource estimation includes internal mining dilution, but no allowance for external dilution or mining losses. The proposed mining method is a conventional truck and shovel operation with transport to a processing plant adjacent to the planned pit. Mine design and production is targeting a 68-71% iron product at 12Mtpa.
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 	 The idioblastic nature of the magnetite lends itself to relatively easy liberation. The ROM material is considered relatively soft for a magnetite deposit with a bond work index much lower than typical Banded Iron

Criteria	JORC Code explanation	Commentary
	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.	 Formation deposits. Liberation of the magnetite grains is a function of grinding to fine size. Tests have been conducted that show grinding the ore to -38 microns gives a P80 of 25 microns. XRF analysis from metallurgical testwork on the recovered magnetic fraction shows that a 68-71% iron product is feasible.
Environmen- tal factors or assumptions	 Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made. 	 The deposit lies within flat, open country typical of Western NSW. Predominantly scrub vegetation that allows for sheep grazing. There are large flat areas for waste and tailings disposal. Small number of creeks with only seasonal flows. The host sediments have low sulphur contents. Continuous data loggers have been installed on 9 water monitoring bores in the vicinity of the main pit design area to collect ground water data that will be used to update the current hydrogeology model covering the site. Additional 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. It is currently assumed that all process residue and waste rock disposal will take place on site in purpose built and licensed facilities. All waste rock and process residue disposal will be done in a responsible manner and in accordance with any mining license conditions.
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. 	 The short-spaced density ("SSD") data from the downhole geophysics was used to estimate the density of the Mineral Resources. Data consisted of 1cm data points averaged to 10cm intervals. The CAP SSD data was collected using a FDS50 down hole tool containing a 3500CO radioactive source. The HIO SSD data was collected using a Robertson Geo Sidewall Density with BRD and Temperature, (Part No 1002016) down hole tool containing a iOS Cs137 125 milli-curie radioactive source. The CAP data had a correction factor of +5.2% applied based on comparative testwork completed on 194 10-15cm NQ core samples

Criteria	JORC Code explanation	Commentary
		 using an immersion-in-water technique i.e. weight in air / (weight in air - weight in water) – the Archimedes Principle. The HIO data had a correction factor of +4.94% applied based on testwork completed on 166 10-15cm HQ core samples using the same immersion-in-water technique. The 2023/4 core drilling produced results that required no correction factor to the downhole geophysical density data. No moisture determinations were made. The siltstones show no vughs, and porosity is occluded, as observed from polished and thin section work. There is no characteristic alteration associated with the mineralisation. The density data was composited to 5m intervals prior to modelling. This resulted in 8,338 data points. The data was derived exclusively from the downhole geophysics with the company correction factors applied. Processing of this data included levelling inconsistent data for 4 holes (15-30% overstatement of density in comparison with surrounding holes). Default average density values were generated for 5m downhole intervals down to 100m downhole. These values were applied to holes where density data for those near surface intervals were not available. Regression equations using the head iron assay were used to generate missing values in the Fold area The density at Hawsons was estimated using Ordinary Kriging using similar methodology to the DTR grade interpolation ie structural domains, same search ellipses and data point requirements. Blocks with no values from the density estimation were allocated average default values. These additions generally occurred on the periphery of the deposit.
Classification	 The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit. 	 The classification of the resource estimates is nominally based on the data point distribution which is a function of the drillhole spacing. A pit shell created by AMDAD was used to constrain the resource estimates; no other wireframe constraint was used. This pit had a base at -360mRL. The 100m spaced infill drilling in Domain 1 has indicated much

Criteria	JORC Code explanation	Commentary
		 improved grade continuity as demonstrated by the variogram maps; 60-70% of the variance between samples occurs within a 100-120m range. This forms the basis for the Measured Resources. Other aspects have been considered qualitatively in the classification including, the style of mineralisation, the geological model, sampling method and recovery, missing data and estimated grades, coherency of the downhole geophysics including density, the QAQC programme and results and comparison with previous resource estimates. The initial pass categories were reviewed and in five specific areas of Core West and Core East, Pass 1 blocks occurred in clusters, due to closer spaced drilling (circa 100m), that were delineated using Defined Shapes to retain the Pass 1 category as Measured Resource. Elsewhere more isolated Pass 1 blocks and Pass 2 blocks were classed as Indicated Resource (removal of the 'spotted dog' effect) and Passes 3 and 4 were classed as Inferred Resources. A 2017 detailed sedimentological review using gamma and magnetic susceptibility downhole data had demonstrated strong stratigraphic continuity of the DTR grades within the sediment packages. This was updated in December 2022 and resulted in the additional conversion of Inferred Resource to Indicated.
		 HSC believes the confidence in tornage and grade estimates, the continuity of geology and grade, and the distribution of the data reflect Measured, Indicated and Inferred categorisation. The estimates appropriately reflect the Competent Person's view of the deposit. HSC has assessed the reliability of the input data and takes responsibility for the accuracy and reliability of the CAP data used to estimate the Mineral Resources. HIO takes responsibility for the recent 2021/2022/2023 drilling data used to estimate the Mineral Resources.
Audits or reviews	• The results of any audits or reviews of Mineral Resource estimates.	• The estimation procedure was reviewed as part of an internal HSC peer review.
		 Mining Associates Limited ("MAL") completed a technical review in 2016 on the 2014 Indicated and Inferred Resources. MAL concluded that the model is a good global representation of the magnetite resource and considers Ordinary Kriging to be an appropriate estimating technique for the type of mineralisation with very low

Criteria	JORC Code explanation	Commentary
		 coefficients of variation. In a follow up report in 2020 MAL concluded that for the 2017 Mineral Resources: "Following [a] review of the geology, MRE and Reserve, MAL does not consider the current approach to the geology model and MRE suitable. A much higher level of detail needs to be incorporated into the Geological Model and MRE" and strongly proposed its own methodology of using implicit modelling "with much smaller blocks" incorporating upwards of 20+ stratigraphic boundaries, as being more suitable.
		• Behre Dolbear Australia ("BDA") completed a technical review for CAP in 2010 based on a GHD study. BDA considered that the broad geology and geological controls on mineralisation, the sampling methodology and the geological database were generally adequately defined for estimation of Inferred [2010] Resources
Discussion of relative accuracy/ confidence	 Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	 No statistical or geostatistical procedures were used to quantify the relative accuracy of the resource. The global Mineral Resource estimates of the Hawsons deposit are moderately sensitive to higher cut-off grades but does not vary significantly at lower cut-offs. The relative accuracy and confidence level in the Mineral Resource estimates are considered to be in line with the generally accepted accuracy and confidence of the nominated Mineral Resource categories. This has been determined on a qualitative, rather than quantitative, basis, and is based on the Competent Person's experience with similar deposits and geology The Mineral Resource estimates are considered to be accurate globally, but there is some uncertainty in the local estimates due to the current drillhole spacing, a lack of geological definition in certain places eg fault zones, and some ambiguity with the absence of assay data and the QAQC procedures and outcomes. No mining of the deposit has taken place, so no production data is available for comparison.