

4 December 2018

Grants Iron Ore Basin Discovery Confirmed

HIGHLIGHTS

- A major new iron ore deposit confirmed by discovery of thick, continuous iron formation over an area of at least 3.5 km² in the western portion of the Grants Iron Ore Basin.
- Thickest drill intersection of 297 metres ended in mineralisation.
- Drilling to date has covered only ~25% of the interpreted Grants Iron Ore Basin.

Havilah Resources Limited (**Havilah**) is pleased to report that it has discovered a major new iron ore deposit in the Grants Iron Ore Basin. A recently completed 13 hole, 3,510 metre reverse circulation (**RC**) drilling program successfully intersected consistently thick iron formation in multiple drillholes over an area of at least 3.5 km² in the western part of the basin (**Figures 1 & 2**).



Figure 1: Overview map showing the recently completed RC drill holes in the Grants Iron Ore Basin on magnetic image showing the surface expression of the basin and the existing Grants Resource outline and drill holes.





Figure 2: Enlarged view of recently completed RC drill holes and drill intersections using handheld Niton XRF Fe results. Note: "NSI" means no significant intersection.

This drilling is part of a comprehensive program of work currently being performed and funded by SIMEC Mining (an affiliate of the GFG Alliance) as part of their due diligence investigation of the commercialisation potential of Havilah's Maldorky and Grants iron ore projects. SIMEC Mining has exclusivity over the Maldorky and Grants projects through the end of 2018 and discussions regarding an extension have commenced. The drilling program was planned and supervised by Havilah personnel.

The drilling was carried out by Ausdrill (ANW) using a large capacity RC drilling rig. Several holes were drilled to 316 metres depth (utilising the total of the available drilling rods) and still remained in the iron formation (see Figures 3 & 4 and intersections marked with a * in Table 1).





Figure 3: Drill cross section of Line 01 looking west showing the three RC holes ending in iron formation and Fe intersections calculated using handheld XRF results. Full width of iron ore basin at surface is interpreted to be ~900m.



Figure 4: Drill cross section of Line 02 looking west showing Fe intersections using handheld XRF results and interpreted shallower dip of iron sequence on southern side of basin. Note change in scale compared to section Line 01. Full width of iron ore basin at surface is interpreted to be ~1,700m.



Hole_ID	Section	From (m)	To (m)	Interval m @ % Fe XRF	Comments
GBRC001	Line 03	219	316	97m @ 23.8% *	Ended in Fe sequence
GBRC004	Line 01	19	316	297m @ 20.6% *	Ended in Fe sequence
GBRC005	Line 02	113	304	191m @ 20.7% *	Ended in Fe sequence
GBRC007	Line 02	31	284	253m @ 21.0%	
GBRC008	Line 02	128	316	188m @ 21.6% *	Centre of basin, ended in Fe sequence
GBRC009	Line 01	23	298	275m @ 21.2% *	Ended in Fe sequence
GBRC010	Line 01	37	292	255m @ 22.8% *	Ended in Fe sequence
GBRC012	Line 02	2	212	210m @ 21.6%	
GBRC013	Line 03	13	266	253m @ 21.9%	

Table 1: Drilling results of significance

To date only handheld Niton XRF iron (**Fe**) results are available, and they indicate consistent average grades ranging from 21 - 24% Fe between holes intersecting the iron sequence.

The handheld Niton XRF readings were collected by taking measurements through the heavy-duty plastic bags that hold the bulk samples for each metre. Comparisons between previous Maldorky Resource handheld XRF results and laboratory assay results and between current XRF results and laboratory certified standards directly and through the plastic has shown that the 200 µm thick plastic used in the bulk bags results in a 10% - 20% underestimation of iron results. No correction factors have been applied to the Niton XRF results reported here, although the above evidence indicates they are likely to be upgraded by the conventional laboratory XRF assays, which will be reported in due course.

Commenting on the drilling results, Havilah's Technical Director, Dr Chris Giles said: "The drilling program has confirmed the original exploration concept for the existence of a thick, relatively shallow, iron formation in the Grants Iron Ore Basin.

"We are grateful to SIMEC Mining for having the vision to fund the exploration drilling that has resulted in this major new iron ore discovery for South Australia.

"The beauty is that the deposit starts near surface, lies only 11 km from the Transcontinental Railway line and is just over a one hour drive from Broken Hill, which makes it uniquely favourable for development.

"At this stage we can only guess at the potential size of the deposit, but based on the thickness of the iron formation and its areal extent, it is apparent that there exists significant resource potential.

"Ironically, the iron-rich lateritised cap on the deposit was mined from the Grants quarries by BHP in the 1890's, as flux for the Broken Hill smelters but the primary iron deposit has lain essentially unrecognised until now.

"Havilah's recognition of the exploration potential and patience in accumulating all of the ground covering the Grants Iron Ore Basin over a period of several years, has finally been rewarded with these substantial interim drilling results," he said.

> For further information visit <u>www.havilah-resources.com.au</u> **Contact:** Mr Walter Richards, CEO, on (08) 8155-4500 or email: <u>info@havilah-resources.com.au</u>





Figure 5: Aerial view of drill site GBRC005, recently completed within the Grants Iron Ore Basin.

About SIMEC Mining (SIMEC: Shipping, Infrastructure, Mining, Energy, Commodities) and the GFG Alliance SIMEC Mining is a division of the SIMEC Group which is an international energy, infrastructure and natural resources business founded 50 years ago, which in 2016 had an annual turnover of almost US\$2.5 billion and net assets valued at US\$350 million. It is part of the Gupta Family Group (GFG Alliance), which has combined turnover of ~US\$15.0 billion and combined net assets of ~US\$3.0 billion. Its activities span renewable energy generation, mining, shipping and commodities trading through its key hubs in Europe, the Middle East, Asia and Australia.

SIMEC Mining owns and operates iron ore mines in the Middleback Ranges in South Australia, approximately 60 kilometres from the town of Whyalla. These operations incorporate the Iron Baron, Iron Knob and South Middleback Ranges mine sites. SIMEC Mining mines both hematite and magnetite iron ore which is respectively railed and piped to Whyalla. The majority of the magnetite is pelletised and is used within Liberty OneSteel's Whyalla Steelworks (an associated Company). The hematite and magnetite ore is loaded onto ships for transport to a primarily Asian customer base. Total reserves and resources are just under 0.5 billion tonnes.



Cautionary Statement

This announcement contains certain statements which may constitute "forward-looking statements". Such statements are only predictions and are subject to inherent risks and uncertainties which could cause actual values, performance or achievements to differ materially from those expressed, implied or projected in any forward looking statements. Investors are cautioned that forward-looking statements are not guarantees of future performance and investors are cautioned not to put undue reliance on forward-looking statements due to the inherent uncertainty therein.

Competent Persons Statement

The information in this announcement that relates to Mineral Resources is based on data and information compiled by geologist, Dr Chris Giles, a Competent Person who is a member of The Australian Institute of Geoscientists. Dr. Giles is Technical Director of the Company and is employed by the Company on a consulting contract. Dr. Giles has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activities being undertaken to qualify as a Competent Person as defined in the 2012 Edition of 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Dr. Giles consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.

Drilling Data

Hole_ID	GDA_E	GDA_N	RL	Azimuth	Dip	EOH_depth	Fe_XRF_intervals ¹
GBRC001	474000	6431500	146	360	-90	316	97 m @ 23.8% * from 219 m
GBRC002	474000	6431000	146	360	-90	280	NSI, did not reach iron formation
GBRC003	474000	6429000	146	360	-90	246.2	155 m @ 20.7% from 57 m
GBRC004	472000	6431300	146	360	-90	316	297 m @ 20.6% * from 19 m
GBRC005	473000	6431500	146	360	-90	304	191 m @ 20.7% from 11 3m
GBRC006	473000	6430920	146	360	-90	130	NSI - hole abandoned at 130 m, re drilled as GBRC008
GBRC007	473000	6430500	146	360	-90	316	253 m @ 21.0% from 31m
GBRC008	473008	6430921	146	360	-90	316	188 m @ 21.6% * from 128 m
GBRC009	472000	6431164	146	180	-60	316	275 m @ 21.2% from 23 m
GBRC010	472000	6431430	146	360	-60	292	255 m @ 22.8% from 37 m
GBRC011	472994	6431582	146	352	-60	118	37 m @ 20.8% from 31 m, north edge of basin
GBRC012	473000	6430357	146	180	-60	244	210 m @ 21.6% from 2 m

Notes: ¹Handheld Niton XRF, NSI = no significant intersection, * = ended in the iron bearing sequence.



APPENDIX 1: TABLE 1 OF THE 2012 EDITION OF THE JORC CODE

The table below is a description of the assessment and reporting criteria for the Grants Iron Ore Basin drilling program results, in accordance with Table 1 of The Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves

Criteria	Commentary
Sampling techniques	 RC drill chips and powder were collected directly via a cyclone and cone splitter to obtain a 3-4 kg sample for drill assay and a 15-30 kg bulk sample. Handheld XRF readings were collected from most bulk samples and are used to provide indicative iron results.
Drilling techniques	 Ausdrill (ANW) were contracted to drill the holes and supplied a large capacity RC rig (model DRA-RC600 with 316m of 4.5" drill rods. RC drilling was completed using a 5" hammer. On board air pack plus auxiliary compressor and booster were used as required.
Drill sample recovery	 Sample recoveries and dampness were recorded for all intervals. Sample recoveries were in general, excellent, with only a few small samples recorded near surface and only few wet samples were recorded.
Logging	 The drill samples were logged in detail by an experienced geologist directly into a tablet with logging software. Data was then uploaded into an Excel spreadsheet database. Logging is semi-quantitative and 100% of reported intersections have been logged. Logging is of a sufficiently high standard to support any subsequent interpretations, resource estimations and mining and metallurgical studies.
Sub-sampling techniques and sample preparation	 No sample preparation is undertaken for handheld XRF analysis as the bulk sample is mostly powdered by the percussion drilling method.
Quality of assay data and laboratory tests	 Handheld XRF readings were collected using a Niton XL3t 500 unit. 15 second XRF readings were collected by analysing through the lower and upper parts of the one metre plastic bagged bulk samples. The two readings for each metre interval were then averaged, resulting in a single analysis for each metre. Certified iron standards were analysed at the start of each session to check the accuracy of the XRF unit.
Verification of drilling sampling and assaying	 Certified iron standards were analysed at the start of each session to check the accuracy of the XRF unit. Ongoing assessment of handheld XRF results using laboratory certified iron standards and analysis of earlier Maldorky Iron Project handheld Niton XRF versus laboratory assay results has shown that analysing through the heavy-duty plastic bulk sample bags (200µm thickness) does have a reducing effect on handheld Niton XRF results. Multiple and ongoing tests has shown that there is a 10-20% difference between analysing a sample directly versus analysing the standard through a 200µm thickness plastic bulk sample bag. Therefore, the reported uncorrected Niton XRF results are regarded as being conservative, i.e. laboratory assay results are likely to return higher grades. All data entry is under control of an experienced geologist, who is responsible for data management, storage and security.
Location of drillholes	 Down hole surveys were conducted routinely every 30m, using a Reflex electronic survey camera, due to the magnetic nature of the sequence, only the dip was useable. Drillhole collars were located using a handheld GPS (±5m accuracy x:y:z) and are quoted in GDA94 datum coordinates.
Data spacing and distribution	 The objective of this RC drill program was to test the Grants Iron Ore Basin concept. Holes are widely spaced ranging up to 1km x 0.5km.
Orientation of data in relation to geological structure	 The drillhole azimuth and dip was chosen to intersect the interpreted shallow dipping iron formation as close as possible to right angles to maximize the value of the drilling data. Holes were drilled vertically and at -60 degrees to the north and south depending on their location, as shown on the attached plan and listed in the attached table of drill hole data.

Section 1 Sampling Techniques and Data



Criteria	Commentary
	• At this stage, no material sampling bias is known to have been introduced by the drilling direction.
Sample security	 Samples are analysed via Niton XRF at the drill rig directly after collection. There is limited to no opportunity for any interference with the samples which could affect the handheld XRF results.
Audits, reviews	 Ongoing internal auditing of sampling techniques and XRF analytical data has not revealed any material issues.

Section 2 Reporting of Exploration Results

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

Criteria	Commentary
Mineral tenement and land tenure status	• All drilling was undertaken on Havilah Resources 100% owned Exploration Licence EL 5393, "Mingary".
Exploration done by other parties	• There has been limited previous shallow, AC, RC and open hole percussion drilling carried out on the prospect by BHP, MIM and Havilah.
Geology	• Stratiform iron formation belonging to the Braemar Iron Formation of Adelaidean age. The sequence has been folded into a basin shape during deformation. The Adelaidean sequence is overlain by a cover sequence of 2 to 36m of Tertiary/Quaternary clays, grits and sand. The iron sequence is completely weathered to ~50-70m with the base of weathering at ~70-90m. The iron bearing sequence includes magnetite-hematite siltstones and magnetite-hematite ironstones. The iron bearing sequence is overlain by a quartz-biotite siltstone and underlain by tillites and quartzite. There is locally developed surficial lateritic iron enrichment where the iron sequence outcrops, which was the focus of mining in the late 1800s and early 1900s.
Drill hole Information	See separate table in this report.
Data aggregation methods	• Drill intersections are calculated using the length-weighted averages of individual samples. Minimum grade truncations are applied (15% Fe Niton XRF with up to 5m of internal dilution).
Relationship between mineralisation widths and intercept lengths	 Down-hole lengths are reported. Drillholes are generally oriented with the objective of intersecting mineralisation as close as possible to right angles, and therefore most down-hole intersections are in general, close to true width.
Diagrams	• Included figures show the location of the drillholes and a table of drillhole data is attached.
Balanced reporting	All results are reported.
Other substantive exploration data	Minimal substantive exploration data exists for this prospect.
Further work	 These holes were drilled to provide preliminary geological and assay data on the Grants Iron Ore Basin. Further drilling is planned, pending the receipt of laboratory assay results.