

OM HOLDINGS LIMITED

(ARBN 081 028 337)

(Malaysian Registration No. 202002000012 (995782-P))

Incorporated in Bermuda



No. of Pages Lodged: 16

26 October 2022

ASX Market Announcements

ASX Limited

4th Floor

20 Bridge Street

SYDNEY NSW 2000

Dear Sir/Madam

SEPTEMBER 2022 QUARTERLY PRODUCTION AND MARKET UPDATE

The Board of OM Holdings Limited (“OMH” or the “Company”) is pleased to provide the following update.

HIGHLIGHTS

OPERATING PERFORMANCE

SMELTING: OM Materials (Sarawak) Sdn Bhd (75% owned smelter in Samalaju, East Malaysia)

- Production output for the quarter ended 30 September 2022 was 37,094 tonnes of ferrosilicon (“FeSi”), 54,011 tonnes of manganese alloys (included silicomanganese (“SiMn”), high carbon ferromanganese (“HCFeMn”) and low carbon silicomanganese (“LCSiMn”)) and 25,159 tonnes of manganese sinter ore
- A total of 36,607 tonnes of FeSi and 54,048 tonnes of manganese alloys were sold during the quarter ended 30 September 2022
- Scheduled major maintenance has been completed on two out of 16 furnaces, while a further 4 furnaces are currently undergoing significant planned maintenance
- Two furnaces converted from FeSi to Mn Alloys passed performance testing in August 2022
- Loan repayment of US\$6.5 million was made to project finance lenders during the quarter ended 30 September 2022

MARKETING, TRADING AND MARKET UPDATE

- 294,223 tonnes of ores and alloys were transacted in the period from 1 July 2022 to 30 September 2022 as compared to 422,380 tonnes from 1 April 2022 to 30 June 2022, which represented a quarter-on-quarter decrease of 30.3%, caused by the cessation in Mn ore shipments from the Australian subsidiary
- World crude steel production during July and August 2022 was 306.5 million tonnes, which represented a 4.9% decrease as compared to the same period in 2021, mainly due to the continued slowdown in Chinese and European steel production

Singapore Office:

10 Eunos Road 8, #09-03A

Singapore Post Centre, Singapore 408600

Tel: 65-6346 5515 Fax: 65-6342 2242

Email address: om@ommaterials.com

Website: www.omholdingsltd.com

Malaysia

Malaysian Registered Office:
Unit 30-01, Level 30, Tower A
Vertical Business Suite Avenue 3
Bangsar South, No.8, Jalan Kerinchi
59200 Kuala Lumpur

1



OPERATING PERFORMANCE (CONT'D)

- Price of 44% Mn ore closed at US\$4.41/dmtu CIF China at the end of September 2022, a decrease of 39.3% from US\$7.27/dmtu CIF China at the end of June 2022
- FeSi price decreased from US\$1,925 to US\$1,620 per metric tonne CIF Japan and SiMn price decreased from US\$1,225 to US\$1,040 per metric tonne CIF Japan during the quarter ended 30 September 2022

CORPORATE

- As at 17 October 2022, a total of 110,595,986 shares were listed on Bursa Malaysia and 628,027,351 shares were listed on the Australian Securities Exchange



SMELTING

OM MATERIALS (SARAWAK) SDN BHD (“OM Sarawak”)

OM Sarawak owns a Ferroalloy Smelting Plant in the Samalaju Industrial Park in Sarawak, Malaysia (the “Plant”). The Plant consists of 8 main workshops with a total of 16 units of 25.5 MVA furnaces, of which 6 units are allocated for the production of FeSi, 8 units for manganese alloys and 2 units for silicon metal (which are currently undergoing conversion works). The Plant will have a design capacity to produce approximately 120,000 to 126,000 tonnes of FeSi, 333,000 to 400,000 tonnes of manganese alloys and 21,000 to 24,500 tonnes of silicon metal per annum upon completion of the conversion works. The Plant also consists of a sinter plant that has a design capacity to produce 250,000 tonnes of sinter ore per annum.

Commercial operation

As at 30 September 2022, 10 out of 16 furnaces were in operation with 6 furnaces producing FeSi and 4 furnaces producing manganese alloys. The remaining 6 furnaces included 2 furnaces which are undergoing conversion to produce silicon metal (“FeSi – Silicon Metal Conversion Project”) and 4 furnaces presently undergoing major maintenance.

	Sep 2022 Quarter	Jun 2022 Quarter	YTD 2022
Tonnes			
Production			
Ferrosilicon	37,094	35,004	106,023
Manganese Alloys	54,011	60,767	175,318
Manganese Sinter Ore (<i>commissioning phase</i>)	25,159	30,446	81,252
Sales			
Ferrosilicon	36,607	37,779	105,104
Manganese Alloys	54,048	52,172	163,852

For the quarter ended 30 September 2022, production volumes for FeSi increased by 6.0% with no annual maintenance scheduled resulting in a higher operating rate as compared to the previous quarter. Production volumes for manganese alloys decreased by 11.1% with 4 manganese alloy furnaces shut down in batches for major maintenance works.

For the quarter ended 30 September 2022, sales volumes for FeSi decreased by 3.1%. Despite higher production in 3Q 2022 vs 2Q 2022, sales for FeSi dropped mainly due to shipments in March 2022 that were delayed and carried over into 2Q 2022 which resulted in the higher 2Q 2022 sales volume. Meanwhile manganese alloy sales increased by 3.6% as compared to the previous quarter ended 30 June 2022.

Major scheduled maintenance on two out of 16 furnaces was completed which commenced in 2Q 2022 and included passing performance testing. Four furnaces are currently undergoing major maintenance works to be completed in phases between October to November 2022. Based on the maintenance schedule, two additional manganese alloy furnaces will commence major maintenance works in Q4 2022.

The two furnaces converted from FeSi to manganese alloys were successfully converted after passing performance testing in August 2022. For the FeSi - Silicon Metal Conversion Project, civil modification works will be completed in October 2022. Equipment installation works are currently ongoing and are targeted to be completed in December 2022.

Loan repayment of US\$6.5 million was made to project finance lenders during the quarter ended 30 September 2022.



Share Purchase Agreement

Further to the ASX announcements dated [5 May 2022](#), [31 May 2022](#), [14 June 2022](#) and [15 September 2022](#), OMH's wholly owned subsidiary, OM Materials (S) Pte Ltd ("OMS") has entered into a conditional share purchase agreement ("SPA") with Samalaju Industries Sdn Bhd ("SISB") for SISB to sell all its shares held (25% interest) in OM Materials (Sarawak) Sdn Bhd ("OM Sarawak") and OM Materials (Samalaju) Sdn Bhd ("OM Samalaju"), (collectively the "Targets") ("Sale Shares") for total cash consideration of USD 120 million less the aggregate amount of shareholders' loans ("Purchase Consideration"). Following the sale and purchase of the Sale Shares, OMS which currently holds 75% of the equity interest in the Targets will increase its equity interest in the Targets to 100%.

Subject to the terms and conditions as set out in the SPA, OMS has agreed to purchase and SISB has agreed to sell:

- (a) 165,594,162 ordinary shares representing 25% of the issued and paid up ordinary share capital of OM Sarawak and 43,690,300 irredeemable convertible preference shares in OM Sarawak, representing 25% of the issued and paid up preference share capital of OM Sarawak; and
- (b) 32,077,500 ordinary shares in OM Samalaju, representing 25% of the issued and paid up share capital of OM Samalaju.

(collectively, the "Transaction")

The Transaction includes the full and final settlement and full discharge of all shareholders' loans (including interests payable) between SISB and the Targets as of the closing date ("Shareholders' Loans").

The salient terms of the SPA were disclosed in the Company's ASX announcement dated 14 June 2022. On 19 July 2022, ASX Limited granted the Company a waiver from ASX Listing Rule 10.1 to the extent necessary to permit the Transaction to proceed without the Company being required to obtain the approval of its shareholders, subject to the condition that the material terms of the Transaction and of the waiver granted by ASX are announced to the market to ASX's satisfaction ("ASX Condition").

The ASX Condition has been satisfied as disclosed in the Company's ASX announcement dated 15 September 2022. Accordingly, OMH has announced that all the conditions precedent under the SPA have been satisfied as of 15 September 2022. With the satisfaction of the conditions precedent, the Transaction is expected to complete on 13 December 2022 ("Closing Date") (being the date which is 60 business days following the satisfaction of the conditions precedent) unless SISB and OMS otherwise agree in writing. The Company will update the market once the Closing Date has occurred.

OMH intends to fund the Purchase Consideration through a combination of existing cash reserves, future operating cash flows, and/or borrowings in the second half of 2022.



EXPLORATION AND MINING
OM (MANGANESE) LTD (“OMM”)

Production at the 100% owned Bootu Creek Manganese mine (the “Mine”) ceased as planned during the quarter ended 31 December 2021. Processing of the final ore occurred in January 2022 with no further sales during the quarter ended 30 September 2022 as summarised below:

	Unit	Sep 2022 Quarter	Jun 2022 Quarter	YTD 2022
Mining				
Total Material Mined	bcms	-	-	-
Ore Mined – tonnes	dt	-	-	-
Ore Mined – Mn grade	%	-	-	-
Production				
Lumps – tonnes	dt	-	-	12,463
Lumps – Mn grade	%	-	-	29.27
Fines/SPP/UFP – tonnes	dt	-	-	5,608
Fines/SPP/UFP – Mn grade	%	-	-	27.39
Total Production – tonnes	dt	-	-	18,071
Total Production – Mn grade	%	-	-	28.69
Sales				
Lumps – tonnes	dt	-	59,056	117,056
Lumps – Mn grade	%	-	26.47	27.86
Fines/SPP – tonnes	dt	-	-	27,296
Fines/SPP – Mn grade	%	-	-	33.20
Total Sales – tonnes	dt	-	59,056	144,352
Total Sales – Mn grade	%	-	26.47	28.87

Processing

The Mine was placed under care and maintenance mode since the end of January 2022. Measures have already been implemented and will continue to be undertaken during the period of care and maintenance with appropriate environmental management strategies and activities planned to manage environmental requirements.

The UFP rectification plan is ongoing to resolve poor screening efficiency, tails pumping issues and increase the water supply to the UFP.

Environmental Programs

During the quarter ended 30 September 2022, rehabilitation progressed at the Mine. Eleven targets to remediate the Masai, Yaka, Chugga and Shekuma Waste Rock Dumps (“WRDs”) have been achieved, including waste profiling, topsoil cart and spread, drainage controls, and cross-ripping earthworks. These WRDs have been prepared and the supplementary aerial seeding project is scheduled to commence in November 2022.

Remedial works to address extensive erosion wash-out of the Xhosa, Chugga East, Gogo, Shekuma and Central WRDs have also been completed.



Rehabilitation of exploration drill collars are nearing completion, and additional site clean-up earthworks are in progress and are expected to be completed by the end of October 2022.

The Mine Weed Management program is currently ongoing and will be assessed by the Northern Territory Government Weed Management Branch during their site visit to the Mine in November 2022.

MARKETING AND TRADING UPDATE

During the quarter ended 30 September 2022, a total of 294,223 tonnes of ores and alloys were transacted, which represented a 30.3% quarter-on-quarter decrease compared to the previous quarter ended 30 June 2022. The decrease was mainly due to the cessation of manganese ore shipments from the OMM operation.

According to the International Manganese Institute (IMnI), world crude steel production during July and August 2022 was 306.5 million tonnes, which represented a decrease of 4.9% as compared to the same corresponding period in 2021, mainly due to the continued slowdown in Chinese and European steel production.

Fastmarkets MB reported that the price of 44% Mn ore closed at US\$4.41/dmtu CIF China at the end of September 2022, a decrease of 39.3% from US\$7.27/dmtu CIF China at the end of June 2022. The reduction in price during the quarter was due to a more orderly supply of high grade manganese ore to the market, thus closing the price gap between high grade and low grade ore.

During the quarter ended 30 September 2022, FeSi price decreased from US\$1,925 to US\$1,620 per metric tonne CIF Japan, and SiMn price decreased from US\$1,225 to US\$1,040 per metric tonne CIF Japan. The price decreases during the quarter were mainly driven by the continued suppressed demand from steel mills amid higher energy costs amidst the weakening global steel market.

There has been a significant decline in freight rates in the current quarter ended 30 September 2022, with Fastmarkets MB reporting an implied freight rate of US\$0.97/dmtu from South Africa to China for 37% manganese ore, compared to US\$1.51/dmtu at the end of June 2022.

OM Holdings Limited

CORPORATE

1. Tshipi é Ntle Manganese Mining (Pty) Ltd (“Tshipi”)

OMH has an effective 13% interest in Tshipi through its 26% strategic partnership with Ntsimbintle Holdings Proprietary Limited.

OMH (26%) and Ntsimbintle Holdings Proprietary Limited (74%) are shareholders in Ntsimbintle Mining Proprietary Limited (“NMPL”). NMPL holds a 50.1% interest in Tshipi, an independently operated and managed black-empowered manganese mining company that operates the Tshipi Borwa Manganese Mine located in the world class Kalahari Manganese field in South Africa. The Tshipi Borwa Manganese Mine currently has a production capacity of 3.3 to 3.6 million tonnes per annum.

Tshipi Borwa Manganese Mine

Tshipi exports (100%) for the quarter ended 30 September 2022 totaled 925,001 tonnes, which represented an increase of 18.5% from the previous quarter ended 30 June 2022.



2. Update on Bryah Farm-In and Joint Venture Agreement

As previously announced, OMM has executed a binding Farm-In and Joint Venture Agreement for the Bryah Basin Manganese Project with Bryah Resources Limited (ASX Code: BYH).

OMM currently holds a 51% interest and is the Manager of the Bryah Basin Manganese Joint Venture (“BBMJV”). BYH is continuing to fund its 49% joint venture interest.

OMM has been progressively funding its joint venture interest including subsequent phases of exploration including Gradient Array IP (“GAIP”) geophysics, Reverse Circulation (“RC”) and diamond drilling programs, metallurgical test work, and Mineral Resource estimates over the Horseshoe South, Horseshoe Extended, Brumby Creek East, Brumby Creek West, Area 74, Black Hill and Redrum prospect areas.

BYH released its maiden BBMJV Inferred and Indicated JORC 2012 compliant Mineral Resource estimate of 1.84 million tonnes at 21.0% Mn¹. This comprised an Indicated Mineral Resource of 1.08 million tonnes at 21.7% Mn and an Inferred Mineral Resource of 0.75 million tonnes at 19.9% Mn.

During the quarter ended 30 September 2022, assay results were received for the 2,498m March 2022 RC drill program testing geophysical targets at Brumby Creek and Redrum prospects which returned several significant intersections listed in the appended ASX announcements^{2,3}. Assay results for the 1,458m June 2022 RC drill program testing selected geophysical targets at the Black Hill, Black Beauty, Brumby Creek and Horseshoe South prospects are currently pending.

Additional Gradient Array Induced Polarisation (“GAIP”) surveys are planned to start in the early part of the quarter ending 31 December 2022 (“Q4 2022”) to evaluate new manganese targets defined by recent geological mapping. Follow up RC drilling is planned for the later part of Q4 2022 once the additional GAIP and Heritage Clearance surveys have been completed.

¹ Refer Bryah Resources Limited (ASX: BYH) ASX announcement dated 3 March 2022 “Maiden Bryah Basin Manganese Mineral Resource”

² Refer Bryah Resources Limited (ASX: BYH) ASX announcement dated 1 August 2022 “New Manganese mineralisation identified at Redrum Prospect”

³ Refer Bryah Resources Limited (ASX: BYH) ASX announcement dated 31 August 2022 “Continued Manganese drilling Success at Redrum and Brumby West”

3. 701 Mile Manganese Project with Great Sandy Pty Ltd (“701 Mile Manganese Project”)

As previously announced, OMM executed a Farm-in and Exploration Joint Venture Agreement (the “701 Mile JV Agreement”) with Great Sandy Pty Ltd for the 701 Mile Manganese Project, located approximately 90km southeast of Newman on E52/3587.

Ethnographic and Archaeological surveys covering the area of the proposed RC drill program were completed in the quarter ended 31 December 2021. The area was cleared of any significant Aboriginal sites. A Land Access Agreement with the pastoral lease owner was executed in March 2022.

The initial wide spaced drill program of 56 RC holes (1,393m) was completed in June 2022. Assay results have outlined a wide area of mineralisation with manganese grades typically associated with other manganese shale deposits in the East Pilbara. Drill collar locations and assay intersections (>8% Mn) are listed in Appendixes 1 and 2, and the JORC tables in Appendix 3.

The A\$0.25 million “Due Diligence” phase of the 701 Mile JV Agreement has now been completed. An Option Fee of A\$50,000 is required to be paid by OMM to advance to Stage 1 exploration with an expenditure requirement of A\$1.25 million required within the next 3 years



to earn a 51% interest in the 701 Mile Manganese Joint Venture. Further expenditure of A\$1.00 million over the following 2 years will be required to increase OMM's interest in the 701 Mile Manganese Joint Venture to 80%.

The initial Stage 1 RC drill program is proposed to infill and extend the mineralised areas of interest. Requests for further Heritage Clearance and an application for a Plan of Works ("PoW") to extend the project area has been submitted.

4. Weelaranna Project Area

E52/3892 is a 100% OMM owned Exploration Licence (recently trimmed to 30 blocks) located to the west of the 701 Mile Manganese Project area.

Geological mapping has commenced and a 90 square kilometre high resolution image and Lidar aerial survey was completed in May 2022.

A Programme of Works application for a proposed initial RC drill program and a request for Heritage Clearance of the associated drill area and access track have been submitted to the relevant authorities.

Competent Person Statement – Exploration Results and Exploration Target

The information in this announcement that relates to Exploration Results is based on information compiled by Mr Craig Reddell, who is a Member of the Australian Institute of Geoscientist. Craig Reddell is an employee of OM (Manganese) Ltd. Craig Reddell has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which is undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Craig Reddell consents to the inclusion in this announcement of the matters based on information in the form and context in which it appears.

CAPITAL STRUCTURE

There was no movement in the share capital structure of the Company during the quarter ended 30 September 2022. As at 30 September 2022, the Company had 738,623,337 ordinary shares on issue.

As at 17 October 2022, a total of 110,595,986 shares were listed on Bursa Malaysia and 628,027,351 shares were listed on the Australian Securities Exchange.

Yours faithfully

OM HOLDINGS LIMITED

Heng Siow Kwee/Julie Wolseley

Joint Company Secretary

Further enquiries please contact:

Ms Jenny Voon | Ms Ng Ruiqi

T: +65 6346 5515

E: investor.relations@ommaterials.com

This ASX announcement was authorised for release by the Board of OM Holdings Limited.

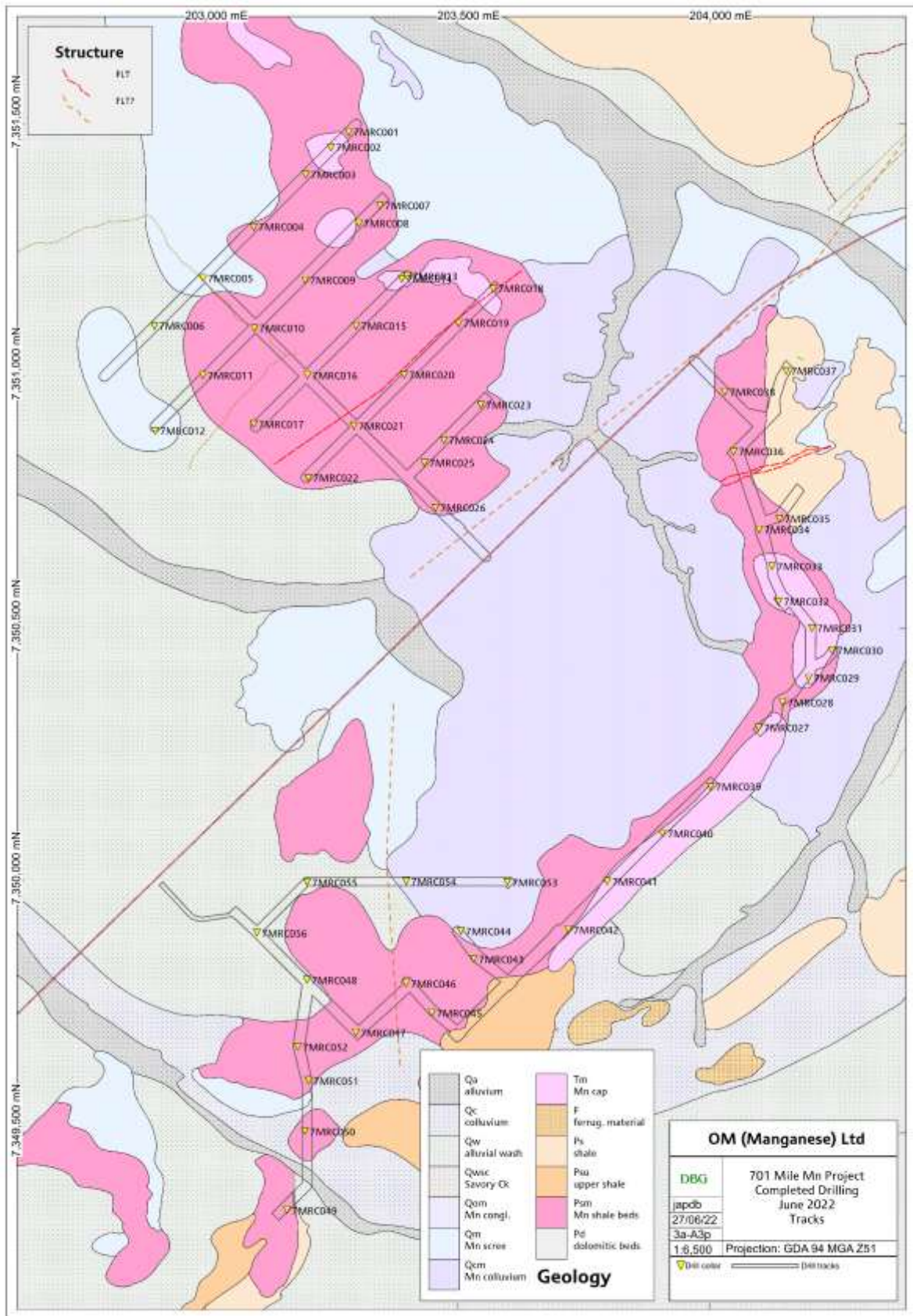
Appendix 1: 701 Mile Prospect – Drill Collar Details and Location

Table 1. Reverse Circulation Drill Collar Details – June 2022

Hole ID	Depth m	MGA94		RL	Dip	Azi	Prospect
		East	North				701 Mile
7MRC001	21	203286	7351484	593	-90	0	West
7MRC002	30	203248	7351449	596	-90	0	West
7MRC003	33	203196	7351396	591	-90	0	West
7MRC004	24	203093	7351299	589	-90	0	West
7MRC005	21	202992	7351193	587	-90	0	West
7MRC006	15	202897	7351094	588	-90	0	West
7MRC007	24	203344	7351337	596	-90	0	West
7MRC008	33	203301	7351302	597	-90	0	West
7MRC009	30	203194	7351191	591	-90	0	West
7MRC010	30	203098	7351097	590	-90	0	West
7MRC011	12	202995	7351001	590	-90	0	West
7MRC012	12	202903	7350894	588	-90	0	West
7MRC013	5	203397	7351201	596	-90	0	West
7MRC014	36	203388	7351193	595	-90	0	West
7MRC015	39	203298	7351100	594	-90	0	West
7MRC016	33	203200	7351001	593	-90	0	West
7MRC017	30	203097	7350901	589	-90	0	West
7MRC018	48	203572	7351174	601	-90	0	West
7MRC019	39	203500	7351098	598	-90	0	West
7MRC020	30	203394	7351003	595	-90	0	West
7MRC021	30	203295	7350900	592	-90	0	West
7MRC022	18	203202	7350800	591	-90	0	West
7MRC023	15	203545	7350944	592	-90	0	West
7MRC024	21	203472	7350879	593	-90	0	West
7MRC025	20	203429	7350827	594	-90	0	West
7MRC026	25	203458	7350741	593	-90	0	West
7MRC027	24	204096	7350303	603	-90	0	East
7MRC028	24	204156	7350363	605	-90	0	East
7MRC029	24	204194	7350403	606	-90	0	East
7MRC030	24	204222	7350447	607	-90	0	East
7MRC031	27	204199	7350501	606	-90	0	East
7MRC032	24	204154	7350552	606	-90	0	East
7MRC033	21	204123	7350622	602	-90	0	East
7MRC034	21	204095	7350694	598	-90	0	East
7MRC035	15	204135	7350722	596	-90	0	East
7MRC036	21	204048	7350849	596	-90	0	East
7MRC037	20	204149	7351009	597	-90	0	East
7MRC038	24	204025	7350965	594	-90	0	East
7MRC039	21	204004	7350185	603	-90	0	East
7MRC040	21	203906	7350094	600	-90	0	East
7MRC041	18	203797	7349998	605	-90	0	East
7MRC042	24	203709	7349892	606	-90	0	East
7MRC043	27	203532	7349845	602	-90	0	East
7MRC044	30	203504	7349899	598	-90	0	East
7MRC045	30	203448	7349736	602	-90	0	East
7MRC046	30	203397	7349796	599	-90	0	East
7MRC047	30	203297	7349696	600	-90	0	East
7MRC048	27	203199	7349800	599	-90	0	East
7MRC049	21	203147	7349349	597	-90	0	East
7MRC050	30	203196	7349502	595	-90	0	East
7MRC051	24	203204	7349602	597	-90	0	East
7MRC052	27	203189	7349661	598	-90	0	East
7MRC053	21	203599	7349996	595	-90	0	East
7MRC054	21	203399	7349998	594	-90	0	East
7MRC055	30	203201	7349996	596	-90	0	East
7MRC056	18	203101	7349897	597	-90	0	East

For personal use only

Figure 1. 701 Mile Drill Collar Location Plan



For personal use only

Appendix 2: 701 Mile Prospect – RC Drill Intersections

Table 1. RC Drill intercepts from 2022 RC program.

Hole ID	From (m)	To (m)	Interval	Mn %	Fe %	Comment
7MRC001	2	20	18	10.06	11.10	
7MRC002	3	20	17	8.87	13.72	
7MRC002	27	30	3	15.51	13.97	eoh
7MRC003	0	1	1	11.77	13.43	cap
7MRC003	19	32	13	9.31	11.04	
7MRC003	19	22	3	12.48	10.84	includes
7MRC007	1	20	19	10.15	12.34	
7MRC007	1	4	3	12.70	8.30	includes
7MRC008	15	27	12	9.39	12.27	
7MRC008	21	23	2	12.86	11.70	includes
7MRC014	0	28	28	9.86	11.97	
7MRC018	19	22	3	9.84	12.70	
7MRC019	1	4	3	9.11	10.60	
7MRC028	1	4	3	13.69	12.95	
7MRC029	1	4	3	11.80	12.59	
7MRC030	3	5	2	10.84	13.63	
7MRC031	2	8	6	13.85	12.12	
7MRC032	2	6	4	12.10	13.12	
7MRC033	0	3	3	11.24	12.09	
7MRC034	1	5	4	9.16	14.99	
7MRC036	0	5	5	11.44	14.51	
7MRC038	0	3	3	9.09	13.64	
7MRC039	0	2	2	10.26	14.70	
7MRC043	5	9	4	8.59	13.45	
7MRC044	0	1	1	11.33	14.34	cap
7MRC044	8	14	6	8.96	14.03	
7MRC045	5	8	3	10.15	12.76	
7MRC047	4	8	4	8.10	10.69	
7MRC050	0	3	3	9.78	11.84	
7MRC051	3	5	2	9.25	10.95	
7MRC051	8	14	6	8.93	14.33	
7MRC055	12	14	2	10.77	15.44	
7MRC055	23	26	3	8.32	13.37	

Calculated using >8%Mn cutoff and minimum 2m width (excluding surface cap).

eoh = end of hole

cap = surface outcrop

Appendix 3: 701 Mile Prospect

JORC Code, 2012 Edition – Table 1 Exploration Results Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> Nature and quality of sampling (eg 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 (eg '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 (eg submarine nodules) may warrant disclosure of detailed information. 	<ul style="list-style-type: none"> For this drill program OM Manganese Ltd (OMM) utilized vertical Reverse Circulation (RC) drill holes. RC drilling was to generally accepted industry standards producing 1m samples of approximately 3kg weight which were collected beneath a rotary cone splitter mounted under the cyclone. The splitter reject samples were laid out into 10 x 1m sample rows. The holes were sampled as 1m samples from the splitter and placed into pre-numbered calico bags with draw string tied up and then placed onto the respective reject sample for later collection and dispatch. The full length of each hole was drilled and sampled, but only selected samples (based on visual logging) were collected and submitted to a contract commercial laboratory for sorting, drying, crushing, splitting, and pulverising. A prepared sample was then fused in a lithium borate flux with lithium nitrate additive. The resultant glass bead is analysed via X-Ray Fluorescence (XRF) tailored to suite specific ore types. The analysis suite included Loss on Ignition (LOI/1100).
Drilling techniques	<ul style="list-style-type: none"> Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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). 	<ul style="list-style-type: none"> OMM's RC holes were drilled with a contract RC drilling rig.
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	<ul style="list-style-type: none"> The RC samples were not weighed or measured for recovery on the rig but will be completed on a campaign basis later as required. To ensure maximum sample recovery, and the representativity of the samples, an experienced OMM geologist was onsite during the drilling to monitor the sampling process. Any issues were immediately rectified. OM (Manganese) Ltd is satisfied that the holes have taken sufficiently representative sample of the 1m sample intervals, with minimized loss of fines occurred in the RC drilling resulting in minimal sample bias. No twin RC drill holes have been completed to assess sample bias. At this stage no investigation has been made into whether there is a

personal use only

Criteria	JORC Code explanation	Commentary
		relationship between sample recovery and grade.
Logging	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • All the 1m RC samples were sieved and collected into 20m chip trays for geological logging of colour, weathering, lithology, and mineralisation for potential Mineral Resource estimation and mining studies. • RC logging is both qualitative and quantitative in nature. • The total length of the holes was logged. Where no sample was returned due to cavities/voids it was recorded as such.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> • If core, whether cut or sawn and whether quarter, half or all core taken. • If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. • For all sample types, the nature, quality and appropriateness of the sample preparation technique. • Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. • Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. • Whether sample sizes are appropriate to the grain size of the material being sampled. 	<ul style="list-style-type: none"> • All samples were collected by the RC drill rig into a cyclone and the passed through the cone splitter. • The samples were generally dry, and attempts were made to ensure the collected samples were dry. Moisture was logged in a qualitative way where observed. • The cyclone and cone splitter were cleaned with compressed air at the end of every 6m RC drill rod. • The sample sizes were appropriate to correctly represent the insitu mineralisation based on the style of mineralisation, the thickness and consistency of intersections, the sampling methodology, and percent value assay ranges for the primary elements. • Quality Control procedures included collection of field duplicate samples taken on the cyclone at an average of 1 per 30 samples. • Sample preparation at the laboratory consisted of samples being weighed and dried at 105°C, crushed to -6+3mm using a jaw crusher, ripple splitting of sample if >2.5kg, pulverising by LM5 or disc pulveriser to 80% passing -75 microns.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> • 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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	<ul style="list-style-type: none"> • XRF is suitable for the total analysis of a range of geological ores and is appropriate for the analysis of manganese and its associated host and impurities. • Laboratory duplicates, repeats, and certified samples containing a range of manganese values were inserted at a pre-determined level specified by the laboratory. • The combined laboratory QAQC insertion rate for duplicates, repeats and certified samples was 1 per 6 samples. • The nature of the quality controls adopted are considered sufficient to provide acceptable levels of accuracy and precision.

Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> Significant intersections have been verified by alternative company personnel. The use of twinned holes is not considered necessary at this stage of exploration. The Competent Person has visited the site and supervised the drilling and sampling processes in the field. All primary data related to logging and sampling was uploaded to an Access database which is managed by the OMM Exploration Manager. No adjustments or calibrations have been made to any assay data, apart from resetting of below detection values to zero.
Location of data points	<ul style="list-style-type: none"> Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> All collars have been surveyed by an independent Survey Contractor using differential GPS for accurate collar location and RL. The digital collar data has been uploaded into the company Access database. No downhole surveys have been completed as all holes are shallow and nominally vertical. The grid system for the 701 Mile prospect is MGA_GDA94 Zone 51. Topographic control is from digital elevation derived from a drone survey.
Data spacing and distribution	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> This initial reconnaissance drill program was loosely based on a 200m x 100m collar spacing. The current data spacing is not sufficient to establish the degree of geological and grade continuity appropriate for an Inferred Mineral Resource estimation. No sample compositing has been applied.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The current drill spacing is not sufficient to determine if unbiased sampling of possible structures has been achieved. Follow up infill drilling and mapping will be required to determine if mineralised structures are considered to have introduced a sampling bias. No drill orientation or sampling bias has been recognized at this stage.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> The calico samples collected for assay were placed in poly-weave sacks, and then into bulka-bags by company staff, before being transported to the Perth based laboratory by commercial freight. Sample security was not considered a significant risk.

Criteria	JORC Code explanation	Commentary
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> The company has not performed an audit of sampling technique or data.

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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The 701 Mile manganese project is located on a single exploration licence E52/3587 The exploration licence is held by Great Sandy Pty Ltd with whom OM (Manganese) Ltd has an Earn-in Agreement. Great Sandy Pty Ltd has issued a Letter of Authority to OMM to manage exploration and development of the tenement. The tenement is held in good standing at the time of this report.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Earlier exploration of adjacent manganese detrital by Shaw River Resources is acknowledged.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> The style of deposit is a supergene enriched manganese shale. It is similar in style to other shale hosted manganese deposits in the Pilbara region such as Butcherbird (owned E25) and Oakover manganese hub (owned by Firebird Metals).
Drill hole Information	<ul style="list-style-type: none"> A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The 701 Mile drill program was designed as a reconnaissance exercise to test a largely undrilled manganese shale outcrop and beneath adjacent manganese scree. The drilling has outlined areas of low-medium grade supergene manganese mineralisation associated with and adjacent to manganese caps. The drilling has also outlined areas of low-grade manganese shales that have not been supergene enriched and do not require further exploration. A summary of information related to the 56 RC drill holes is attached as Table 1 to this announcement.

Criteria	JORC Code explanation	Commentary
Data aggregation methods	<ul style="list-style-type: none"> <i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</i> <i>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.</i> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<ul style="list-style-type: none"> No high-grade cuts have been applied to the exploration results. No metal equivalent value are used.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <i>These relationships are particularly important in the reporting of Exploration Results.</i> <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</i> 	<ul style="list-style-type: none"> Quoted intersections were calculated using minimum cutoff grade of 8%Mn and a minimum width of 2m. The drill holes are vertical, and the shale bedding is near horizontal. Down hole lengths are assumed to be close to true width.
Diagrams	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> See attached figures within this announcement.
Balanced reporting	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> Refer to Appendix 2 of this announcement.
Other substantive exploration data	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> No other exploration data available.
Further work	<ul style="list-style-type: none"> <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	<ul style="list-style-type: none"> Extension and infill drilling of areas of interest have not yet been planned.