High-grade Gold intersected at Tennant Creek

Highlights

- RC drilling at the Mauretania discovery has intersected thick, high-grade gold, silver and copper with elevated bismuth and cobalt.
- **Drill hole MTRC023** intersected three distinct zones of mineralisation:
    - **26m at 8.9g/t gold, 85g/t silver, 0.49% copper and 0.13% bismuth** from 53m including a higher grade zone of **8m at 23g/t gold, 219g/t silver, 0.72% copper and 0.26% bismuth**
    - 12m at 2.1g/t gold, 11.8g/t silver, 0.24% copper from 97m including 3m at 6.6g/t gold, 11.9g/t silver, 0.28% copper and 414ppm cobalt
    - 10m at 7.6g/t gold, 2.4g/t silver, 0.19% copper and 0.14% bismuth from 171m including 5m at 13.4g/t gold, 2.8g/t silver, 0.22% copper and 0.21% bismuth
- **Drill hole MTRC027** intersected 12m at 10.4g/t gold and 0.27% bismuth from 48m including **6m at 18.9g/t gold and 0.46% bismuth.**
- **Drill hole MTRC025** intersected 19m at 1.85g/t gold, 28.7g/t silver, 1.25% copper and 734ppm cobalt from 101m including **9m at 2.6g/t gold, 22.8g/t silver, 2.3% copper and 0.12% cobalt.**
- A single RC pre-development hole drilled at West Gibbet intersected **7m at 7g/t gold** from 66m including 1m at 16.6g/t gold and 2m at 12.4g/t gold.
- Metallurgical test work to be completed on samples from both holes in support of the small and medium mine strategy.
- Drilling of new high-value copper, gold and cobalt targets within the Northern Corridor at Tennant Creek to begin next quarter following interpretation of recently completed airborne geophysical survey.

Emmerson's Managing Director; Mr Rob Bills commented: *"The success of this first round of drilling at Mauretania has confirmed the potential for high grades and expanding both the shallow and deeper mineralisation. Our aim is to include the project in our small to medium mines portfolio in support of the recent strategic alliance with Territory Resources. This portfolio of small mines can be monetised via processing at the refurbished Warrego Mill on a profit share basis and provide funding to continue our exploration program targeting larger mines at Tennant Creek and in NSW.*

"Encouragingly, much of the higher grade material at Mauretania is within the upper 100m and thus amenable to possible open pit mining. Further, the highly encouraging grades for both gold and copper once again highlight the potential for this style of hematite hosted mineralisation – a style that has been largely overlooked by previous explorers in Tennant Creek. Emmerson has now made four such discoveries, all with exceptional metal grades of either gold, copper, bismuth, silver and more recently, at Jasper Hills and at depth at Mauretania, high-grade cobalt.

"Emmerson's exploration programs are designed to discover more of these high-value deposits and we await with anticipation, the results of the now completed airborne EM geophysical survey over the Northern Corridor at Tennant Creek. This survey is aimed at detecting the signatures of these systems through either directly detecting copper sulphides or the associated clay alteration at the base of oxidation. Thus our next drill program will be particularly exciting as it will be focussed on new hematite hosted, high grade, multi-metal (gold, copper, cobalt, bismuth, silver) targets generated from this geophysical survey."

Mauretania

Emmerson is pleased to announce highly encouraging, drill results from Mauretania which provide additional geological and grade related information aimed at adding this project to our small to medium-sized mine portfolio (Figure 1). This portfolio is now the subject of detailed studies by Emmerson's Tennant Creek strategic alliance partner, Territory Resources. This study includes the mining-related parameters of metallurgy, extraction and dilution, before negotiation of a "profit share" style agreement between both parties.

The twofold aim of the drilling at Mauretania was to provide a more refined structural understanding and test for extensions to the mineralisation. Pleasingly both were successfully achieved as now the continuity of the ironstone has been demonstrated, plus a new zone consisting of: **10m at 7.6g/t gold, 2.4g/t silver, 0.19% copper and 0.14% bismuth** has been discovered in the footwall of the hematite ironstone.

Drill hole MTRC023, a vertical hole through the alteration and ironstone provides an insight into the metal and alteration zonation plus highlights mineralisation both on the footwall and hangingwall of the ironstone – excitingly opening up the untested potential for additional mineralisation at depth (Figure 2).

Whilst the highest gold grades occur above the base of oxidation, this new deeper gold, copper and bismuth mineralisation indicates further drilling will be required before mining studies are finalised. The intersection of 9m at 2.56g/t gold, 22.8g/t silver, 2.3% copper and 0.12% cobalt (drill hole MTRC025) highlight the likely true width of the mineralisation and potential for copper and cobalt credits.

This latest drilling together with the geochemical footprint, now suggests great potential for down dip and strike extensions to the mineralisation (Figure 3). Metallurgical test work will be completed on samples from the recent drill program in support of future development.

West Gibbet

West Gibbet is an undercover target that is associated with a discrete magnetic anomaly coincident with an underlying, magnetite ironstone. It occurs along a highly mineralised, east-west trending structural corridor referred to as the "wine line". This corridor hosts the Chariot,

Malbec and TC8 mines – with all associated gold and copper mineralisation hosted in magnetite and/or transitional magnetite-hematite ironstone.

Previous drill results at West Gibbet intersected extremely high grades of 9m at 95.5g/t gold within the oxide zone, some 74m from surface (ASX: 26/05/2008). This recent hole drilled (WGRC052) was aimed at confirming the tenor of the historical drill hole and to provide a bulk metallurgical sample, ahead of converting this target to a small mine.

Drill hole WGRC052 intersected lower tenor mineralisation of 7m at 7g/t gold from 66m compared to Emmerson's previous drilling, indicating the mineralisation was likely associated with coarse gold. However, it did confirm the continuity and potential for a shallow underground mine. Interestingly the nearby Analytic target contains a historic intercept of 24m at 6.3g/t gold from 246m (including 3m at 48.3g/t gold) (ASX:15/12/2008) – suggesting the possibility for deeper, high-grade gold at West Gibbet beneath the existing ironstone (Figure 4). As similar to Edna Beryl, this potential is likely best realised once the underground development is established.

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About Emmerson Resources, Tennant Creek and New South Wales

Emmerson recently commenced exploration on new gold-copper projects in NSW, identified (with our strategic alliance partner Kenex Limited) from the application of 2D and 3D predictive targeting models – aimed at increasing the probability of discovery. The highly prospective Macquarie Arc in NSW hosts >80Mozs gold and >13Mt copper with these resources heavily weighted to areas of outcrop or limited cover. Emmerson's five exploration projects contain many attributes of the known deposits within the Macquarie Arc but remain under explored due to historical impediments, including an overlying cover (plus farmlands) and a lack of exploration focus. Kadungle is a JV with Aurelia Metals covering 43km^2 adjacent to Emmerson's Fifield project.

In addition, Emmerson is exploring the Tennant Creek Mineral Field (TCMF), one of Australia's highest-grade gold and copper fields producing over 5.5 Mozs of gold and 470,000 tonnes of copper from deposits including Warrego, White Devil, Orlando, Gecko, Chariot and Golden Forty. These high-grade deposits are highly valuable exploration targets, and to date, discoveries include high-grade gold at Edna Beryl and Mauretania, plus copper-gold at Goanna and Monitor. These are the first discoveries in the TCMF for over a decade.

Emmerson has now received the proceeds of the third gold pour from the high-grade Edna Beryl gold mine in December 2017. This mine is being operated under a Tribute Agreement with a specialist small miner, the Edna Beryl Mining Company

Emmerson recently announced a strategic alliance with Territory Resources to build a central processing hub in Tennant Creek to support the milling and processing from Emmerson's small gold mines and other third party feed. This alliance is intended to extend to an earn-in and JV with Territory Resources over Emmerson's southern tenements.

Emmerson is led by a board and management group of experienced Australian mining executives including former MIM and WMC mining executive Andrew McIlwain as non-executive chairman, and former senior BHP Billiton and WMC executive Rob Bills as Managing Director and CEO.

Competency Statement

The information in this report which relates to Tennant Creek Exploration Results is based on information compiled by Mr Steve Russell BSc, Applied Geology (Hons), MAIG, MSEG. Mr Russell is a Member of the Australian Institute of Geoscientists and has sufficient experience which is relevant to the style of mineralisation and types of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 edition and the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Russell is a full-time employee of the Company and consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

Forward-Looking Statements

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

Table 1: West Gibbet and Mauretania significant drill hole intersections.

Hole ID	East (MGA94_53)	North (MGA94_53)	RL AHD	Dip (deg)	AZI mag (deg)	From (m)	To (m)	Width (m)	Au (g/t)	Ag (g/t)	Bi (ppm)	Cu (%)	Co (ppm)	Fe (%)	Pb (ppm)	Zn (ppm)	Sb (ppm)	Se (ppm)
WGRC052 (West Gibbet)	409614.02	7826841.06	348.3	-90	0.00	44	46	2	3.13	0.55	1198	0.01	20.5	18.8	28.0	17.5	4.35	23.3
						55	56	1	2.68	0.26	130	0.02	17.2	21.5	20.7	30.0	10.2	1.00
						66	73	7	7.01	2.64	516	0.01	12.7	22.8	74.3	15.6	15.5	21.5
					Incl.	**68**	**69**	**1**	**16.6**	**4.45**	**462**	**0.01**	**12.3**	**25.2**	**102**	**11.0**	**23.9**	**20.5**
					Incl.	**70**	**72**	**2**	**12.4**	**4.19**	**0.13%**	**0.01**	**7.80**	**19.6**	**89.0**	**10.5**	**6.73**	**46.8**
						84	87	3*	1.10	0.10	164	0.05	50.1	6.53	7.30	136	0.27	2.20
MTRC023 (Mauretania)	430730.80	7833052.00	329.7	-90	0.00	**53**	**79**	**26**	**8.93**	**85.1**	**0.13%**	**0.49**	**223**	**24.3**	**0.13%**	**410**	**11.4**	**3.55**
					Incl.	**59**	**67**	**8**	**22.7**	**219**	**0.26%**	**0.72**	**341**	**23.4**	**0.19%**	**513**	**11.8**	**5.29**
					Incl.	**59**	**64**	**5**	**31.6**	**166**	**0.31%**	**0.67**	**263**	**24.5**	**0.22%**	**447**	**11.8**	**6.96**
						95	96	1	1.91	10.4	69.9	0.20	252	13.9	0.38%	557	6.80	1.90
						97	**109**	**12**	**2.09**	**11.8**	**90.9**	**0.24**	**251**	**22.4**	**0.51%**	**542**	**5.64**	**3.94**
					Incl.	104	107	3	6.58	11.9	166	0.28	414	25.5	0.39%	0.10%	5.89	5.50
						171	**181**	**10**	**7.58**	**2.38**	**0.14%**	**0.19**	**69.8**	**29.1**	**13.9**	**107**	**2.37**	**30.0**
					Incl.	**172**	**177**	**5**	**13.4**	**2.85**	**0.21%**	**0.22**	**69.8**	**30.6**	**12.1**	**89.4**	**2.58**	**27.1**
MTRC025 (Mauretania)	430706.69	7833029.32	329.7	-70	45.6	101	120	19	1.85	28.7	63.2	1.25	734	17.0	0.22%	0.16%	6.88	2.35
					Incl.	**111**	**120**	**9**	**2.56**	**22.8**	**40.1**	**2.30**	**0.12%**	**11.7**	**929**	**0.30%**	**7.68**	**2.59**
MTRC027 (Mauretania)	430709.00	7833042.00	329.5	-70	45.6	**48**	**60**	**12***	**10.4**	**1.33**	**0.27%**	**0.06**	**17.6**	**25.4**	**166**	**64.8**	**8.02**	**0.50**
					Incl.	**51**	**57**	**6***	**18.9**	**0.66**	**0.46%**	**0.04**	**14.5**	**26.9**	**199**	**64.0**	**7.32**	**0.13**
MTRC024 (Mauretania)	430722.75	7833042.90	329.7	-70	45.6	NSI												
MTRC026 (Mauretania)	430726.00	7833034.00	329.5	-70	45.6	NSI												

Note:

(1) All samples are 1-metre riffle split Reverse Circulation samples.
(2) * denotes a 3-metre composite Reverse Circulation sample.
(3) Gold analysis method by 25g Aqua Regia with ICP-OES finish.
(4) Where gold analysis is greater than 1 g/t Au, repeat assay is by 50g Fire Assay.
(5) Multi element analysis method by 4 acid digest & ICP-OES, ICP-MS finish.
(6) Intersections are reported as downhole lengths and not true v
(7) Minimum cut-off of 0.50 g/t Au. No maximum cut-off.
(8) Minimum cut-off of 1% Cu. No maximum cut-off.
(9) Maximum of 2m internal dilution.

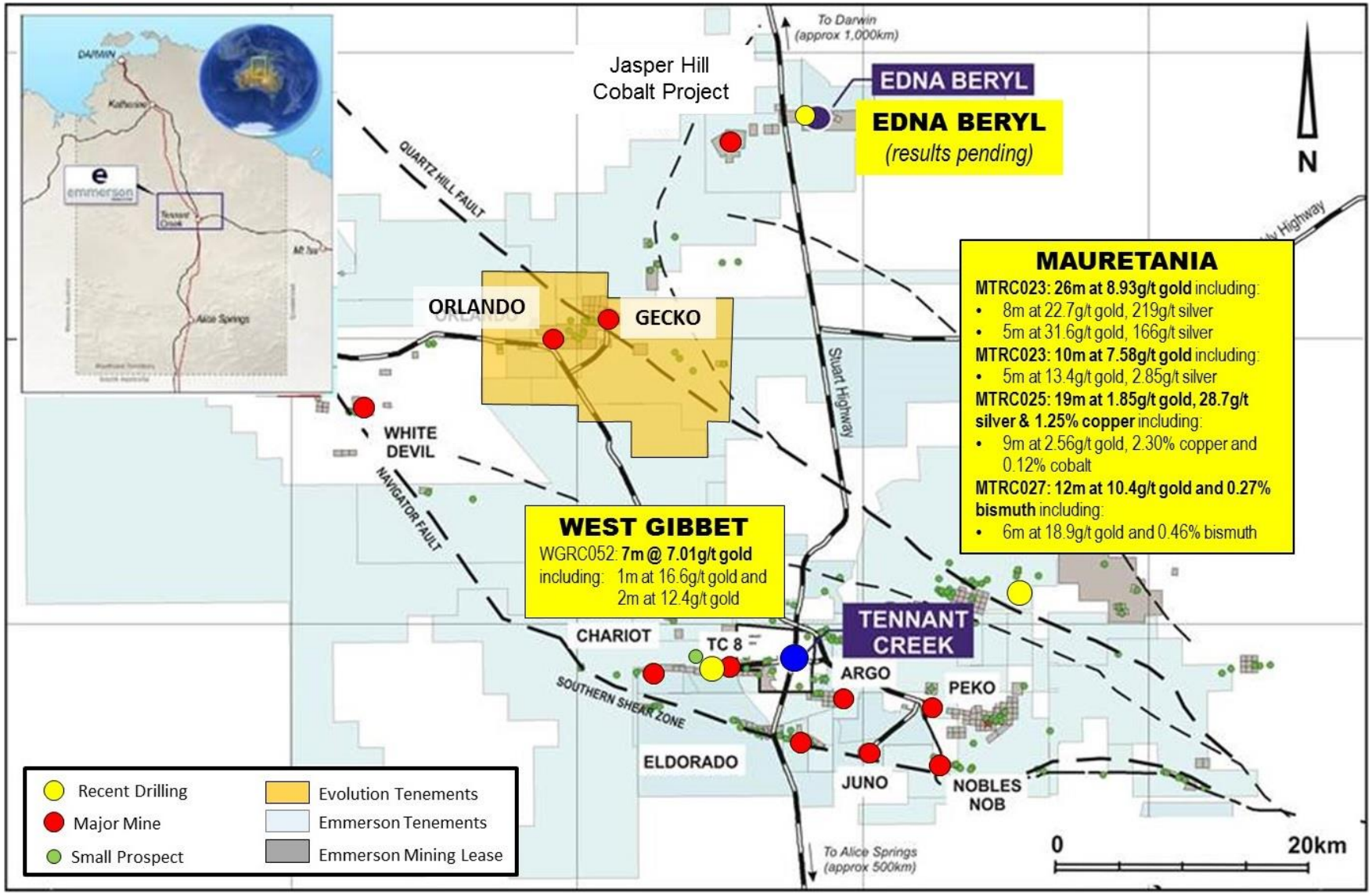

Figure 1: Location of Emmerson's tenement package (light blue) and recently completed drill program targets (yellow dots).

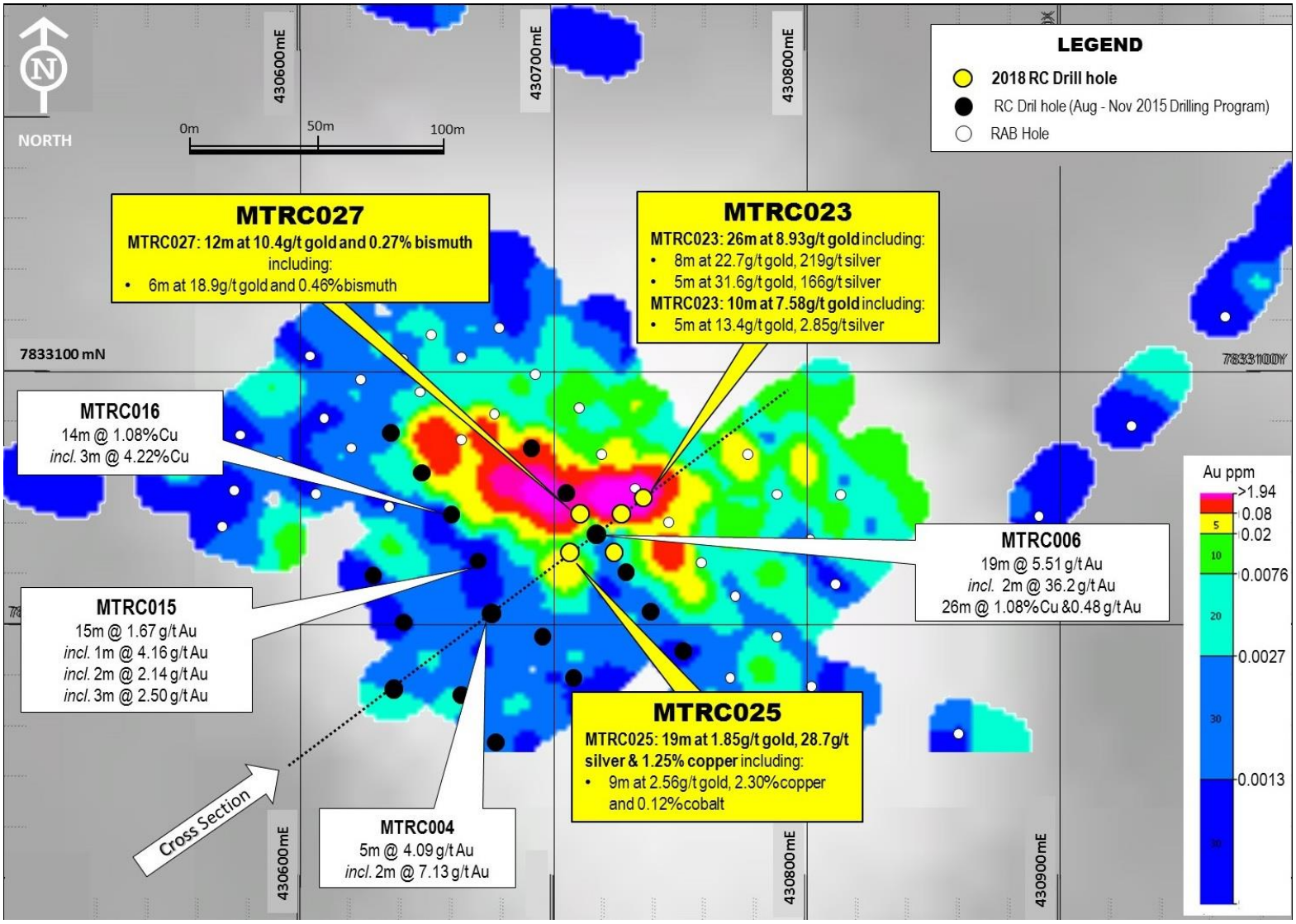

Figure 2: Location of previous drilling (black & white dots) plus recent RC collars (yellow call out boxes) on a background of gold geochemistry in ppm (colours), magnetics (grey-scale).

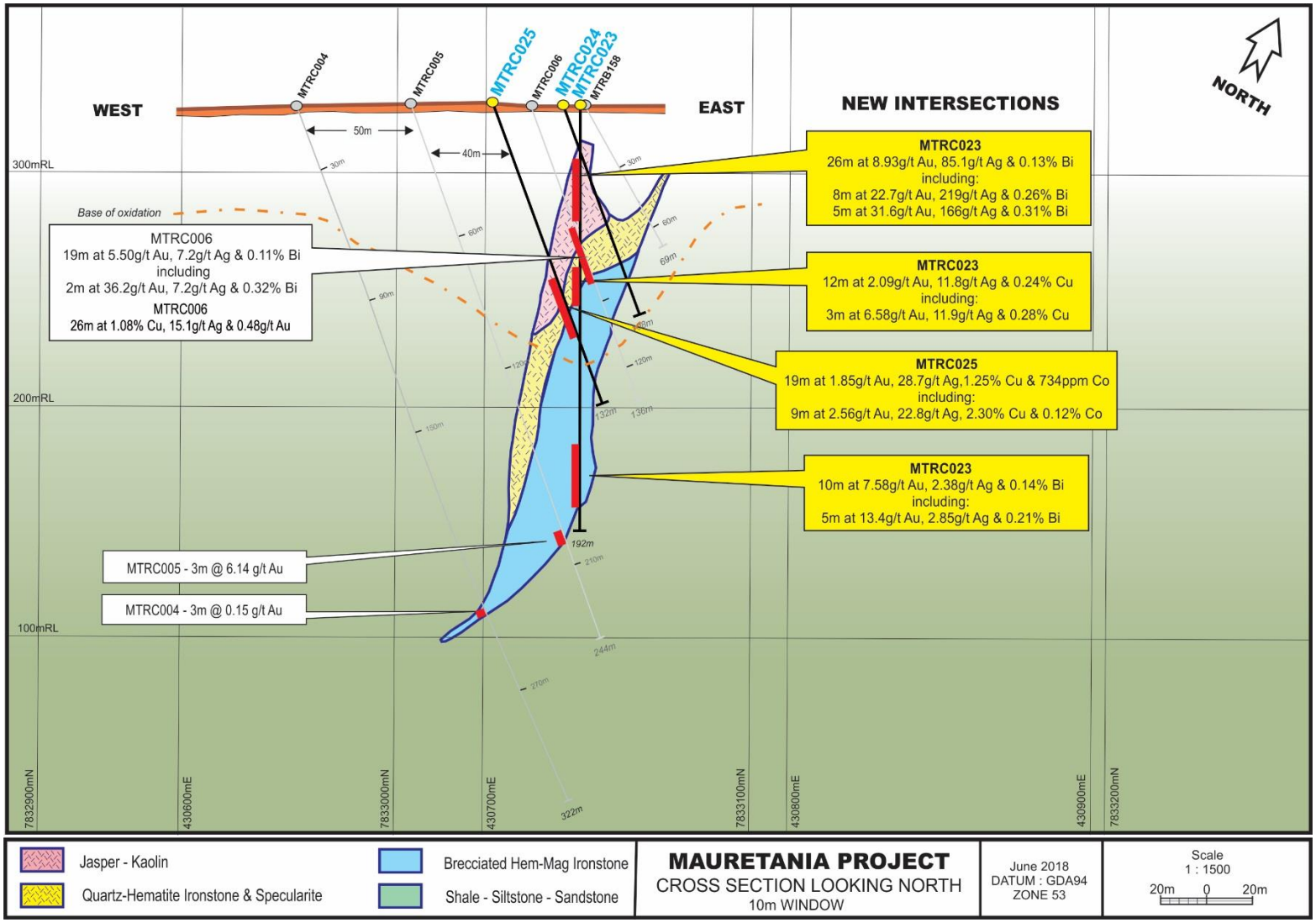

Figure 3: Mauretania schematic cross section – note white call out boxes are assay results from the 2015 drilling program and yellow call out boxes are assay results from the recent 2018 drilling program.

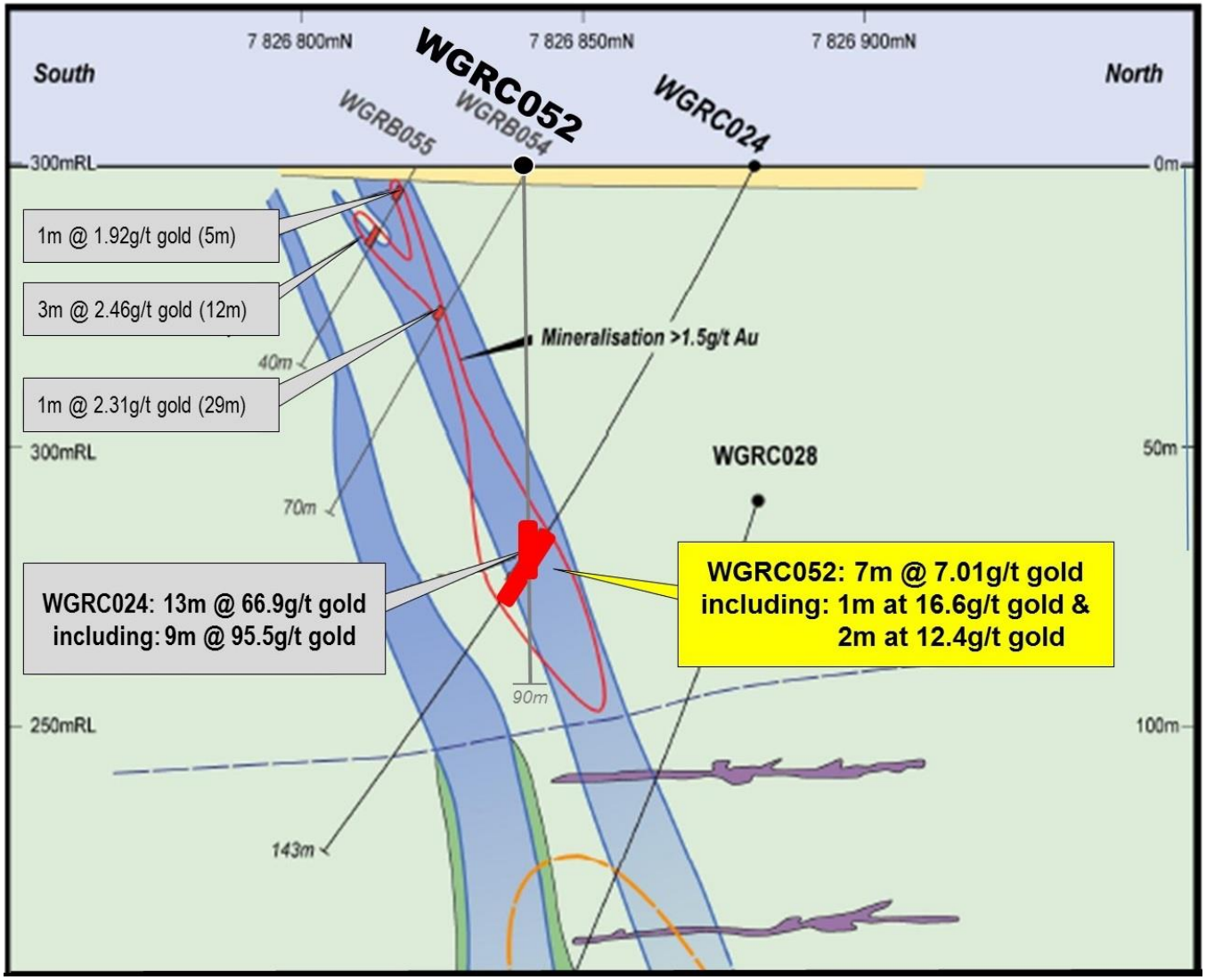

Figure 4: West Gibbet schematic cross section – grey call out boxes are assay results from previous drilling programs and yellow call out boxes are assay results from the recent 2018 drilling program.

The exploration results contained within the above company release are in accordance with the guidelines of *The Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves* (JORC Code, 2012 Edition–Table 1).

Section 1.1 Sampling Techniques and Data – MAURETANIA PROJECT AREA – RC DRILLING
(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• 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 downhole 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.	• The *Mauretania* holes were sampled using Reverse Circulation drilling techniques (RC). Five holes (MTRC023-MTRC027) were drilled for a total of 660m and are reported in this current release. • Holes were angled to optimally test the interpreted shear zones/geophysical model). Four drill holes have been drilled at an angle of 70 degrees. • One drill hole MTRC023 was drilled as a vertical hole to test vertical continuity of ironstone body and to allow collection of a 100kg bulk metallurgical sample. • RC chips are riffle split on site to obtain 3m composite samples from which 2.5 – 3.0kg was pulverised (at Genalysis in Alice Springs) to produce a 25g charge for analysis by Aqua Regia digestion / ICP-MS/OES (Au, Ag, Bi, Cu, Fe, Pb, Zn, Mo, Co, Se, Sb). • Selected 1m samples were individually assayed. • Individual 1m samples are pulverised to produce a 25g charge for analysis by four acid digest with an ICP/OES (Cu, Fe, Pb, Zn) ICP/MS (Ag, Bi, Mo, Se, Sb, Co) & Fire Assay/AAS (Au) finish. • RC samples were collected via a fixed cone splitter that is mounted to the drill rig under a 1200cfm cyclone. • The fixed cone splitter has three sample chutes for comparative sampling, 2 chutes are synchronised for comparative samples and 1 Chute is independently set for the geologists field samples.
Drilling techniques	• 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).	• RC drilling accounts for 100% of the current reported drilling at *Mauretania Exploration Target* and comprises, 3m riffle split, composite RC samples and selected 1m riffle split RC intervals. • RC drilling utilizes a 4.5 inch, face sampling bit. • Drill hole depths range from 108m to 192m. • RC recoveries are logged and recorded in the database. • Overall RC recoveries are >90% for the Mauretania Project, and there are no significant sample recovery problems.
Drill sample recovery	• Method of recording and assessing core and chip sample recoveries and results assessed. • Measures taken to maximise sample recovery and ensure representative nature of the samples. • Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	• RC samples are visually checked for recovery, moisture and contamination. • Any issues or concerns are discussed at the time with the drilling contractor and also recorded in our database. • Recoveries are considered good for the reported RC drilling. • The cyclone and splitter are routinely cleaned with more attention spent during the drilling of damp or wet samples.

Criteria	JORC Code explanation	Commentary
		• It was rare to experience more than 2 sequential "wet samples" during this program. • Emmerson do not consider that there is evidence for sample bias that may have occurred due to preferential loss/gain of fine/coarse 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.	• Standard operating procedures are employed by Emmerson for logging RC samples. • All RC samples are lithologically logged in one metre intervals. • Drill hole logging data is directly entered into field tough book computers via Logchief software. Look up codes and real time validations reduce the risk of data entry mistakes. • Field computer data (the drill log) are uploaded to Emmerson's relational database whereby the data undergoes a further set of validations checks prior to final upload. • Standardised codes are used for lithology, oxidation, alteration, veining and presence of sulphide minerals. • Structural logging of the RC drill samples was not possible. • Magnetic susceptibility data for all individual 1m RC samples are collected as per ERM procedure. • All RC chips are stored in trays in 1m intervals. • Representative RC chips and diamond core is available to all geologists (a physical reference set) to ensure consistency of logging.
Sub-sampling techniques and sample preparation	• If core, whether cut or sawn and whether quarter, half or all core taken. • If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. • For all sample types, the nature, quality and appropriateness of the sample preparation technique. • Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. • Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. • Whether sample sizes are appropriate to the grain size of the material being sampled.	• Standard sampling operating procedures have used by ERM at Mauretania Project area drilling for RC samples. • The sample preparation of RC samples for follows industry best practice in sample preparation involving oven drying, coarse crushing of the sample down to ~10mm followed by pulverisation of the entire sample (total prep) using LM5 grinding mills to a grind size of 85% passing 75 micron. • Pulverised material not required by the laboratory (pulps) including duplicate samples are returned to ERM, logged into a database and stored undercover at the Tennant Creek office. • Coarse rejects are disposed of by the Laboratory. • RC samples were collected on the rig using cone (from the drill rig) and then riffle split by the field assistants if dry to obtain a 3 kg sample. • If samples are wet, they are left to dry before being riffle split.
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 (eg standards, blanks, duplicates, external laboratory	• Field QC procedures involve the use of certified reference material (CRM's) as assay standards, and ERM include blanks, duplicates. • QAQC protocols consist of the insertion of blanks at a rate of one in every 40 samples, insertion of standards (CRM's) at a rate of approximately one in every 20 samples and duplicate field sample analysis of at a rate of approximately one in every 20 samples.

Criteria	JORC Code explanation	Commentary
	checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	• A selection of CRM's is available to the geologists and insertion points are predetermined prior to drilling. • The geologist has the ability to override this predetermined insertion based on visual and geological characteristics of the current drill hole. • Insertion of assay blanks is increased when visual mineralisation is encountered and consists of insertion above and below the mineralised zone. • Samples typically weigh less than 3kg to ensure total preparation at the pulverisation stage. • RC field duplicates are collected on the 3m composites samples, using a riffle splitter. • Individual 1m RC sample duplicates are also collected using the same technique. • Laboratory checks include CRM's and/or in-house controls, blanks, splits, and replicates that are analysed with each batch of samples submitted. These QC results are reported along with sample values in the final analytical report. Barren quartz washes are also routinely used in zones of mineralisation. • QAQC data is uploaded with the sample values into ERM's database through an external database administrator (contractor). • A QAQC database is created as a separate table in the database and includes all field and internal laboratory QC samples. • QC data is reported through a series of control charts for analysis and interpretation by the Exploration Manager or his/her delegate. • The sample sizes are considered to be appropriate to correctly represent the mineralisation at *the Mauretania Exploration Target* based on the style of mineralisation (iron oxide copper gold), the thickness and mineral consistency of the intersection(s). • Emmerson's sampling methodology (SOP) is available at any time for peer review.
Verification of sampling and assaying	• The verification of significant intersections by either independent or alternative company personnel. • The use of twinned holes. • Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. • Discuss any adjustment to assay data.	• The Exploration Manager of ERM has visually verified significant intersections in RC samples. • The geochemical data is managed by ERM using and external database administrator and secured through a relational database (Datashed). • Laboratory data is been received in digital format and uploaded directly to the database. • Original data sheets and files are been retained and are used to validate the contents of the database against the original logging. • No twin drill holes have been completed at the *Mauretania Exploration Target*.
Location of data points	• Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. • Specification of the grid system used. • Quality and adequacy of topographic control.	• RC Drill hole collars were surveyed (set out and pick up) using a differential GPS and by a suitably qualified company employee. • Collar survey accuracy is +/- 30 mm for easting, northing and elevation coordinates. • Co-ordinate system GDA_94, Zone 53. • Topographic measurements are collected from the

Criteria	JORC Code explanation	Commentary
		final survey drill hole pick up. • Downhole survey measurements were collected at a minimum of every 30m using an CORE EX ® electronic single shot camera for RC. • This survey camera equipment is quoted by the manufacturer to have an accuracy of o Azimuth 0-360º ± 0.5º o Dip ± 90º ± 0.2º • If the measurement is considered to be affected by magnetic material (ironstone) then an average from the last non affected and the next non affected measurement is used. • There were no down hole survey issues during this drill program.
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.	• Drill density within the *Mauretania Exploration Target* area is 50m x 50m. On the discovery line containing MTRC004,005,006,023-025 spacing is 10m x 10m. • RAB drill hole density is 20m x 20m. • There is insufficient drill / assay data to establish the geological and grade continuity at this stage of drilling. • No Mineral Resource Estimation can be applied to these Exploration Results.
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.	• Exploration drilling is perpendicular to the interpreted strike of the Mauretania target. • No orientation based sampling bias has been identified in the data at this point. • Results at this stage suggest that the geological and geophysical targets being tested have been drilled in the correct orientation. •
Sample security	• The measures taken to ensure sample security.	• Samples are selected, bagged and labelled by site geologist. • They are placed in sealed polyweave bags and then larger bulka bags for transport to the assay laboratory. • The assay laboratory confirms that all samples have been received and that no damage has occurred during transport. • Tracking is available through the internet and designed by the Laboratory for ERM to track the progress of batches of samples. • Sample receipt is logged into ERM's sample ledger. • While samples are being processed in the Lab they are considered to be secure.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• An internal review of the sampling techniques, QAQC protocols and data collection was conducted by Emmerson in November 2013. • Optiro (2013) also reviewed the standard operating procedures for RC and diamond core sampling used and discussion with the site geologist confirmed that these were understood and being followed.

Section 1.2 Reporting of Exploration Results - MAURETANIA PROJECT AREA – RC DRILLING

(Criteria listed in the proceeding section may 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 Mauretania Exploration Target* is located within Exploration Licence 28761. • *The Mauretania target* is located on Tennant Station Perpetual Pastoral Lease. • Exploration Licence 28761 is 100% held by Emmerson Resources Limited. • Land Access is secured through Emmerson's Indigenous Land Use Agreement (ILUA) with the CLC which is in good standing. • Land Access is secured through Emmerson's Land Access Agreement signed by the owners of the Tennant Creek station. • Heritage surveying (assisted by the Central Land Council) was conducted prior to any exploration being conducted within the *Mauretania Project Area*. • Sacred Site Certificate Numbers 2015-40a, 2015-40b and 2015-40c subsequently issued post field inspection allowing field exploration and drilling to commence. • Two exclusion zones were identified during the field inspections however do not impact on the current exploration drilling. • Emmerson do not believe that the two identified exclusion zones will impact of future exploration of the *Mauretania Project Area.* • The tenement is in good standing and no known impediments exist.
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	• Emmerson Resources commenced exploration at the *Mauretania Exploration Target* in 2015. RAB drilling (158 holes for 6,956 metres), 22 RC holes for 3,843 metres (MTRC001-MTRC022) and 2 diamond (HQ) drill hole tails for 393.1 metres. • Minor regional mapping and rock chipping was undertaken by previous explorers. The majority of this work was completed in the 1970's by Australian Development Pty Ltd and in the 1980's by Normandy Tennant Creek • Adelaide Petroleum NL (Sabminco NL JV) drilled 11 RC holes at the Black Cat Prospect (1988) however did not discover significant results and no further work was done. • Matana Minerals NL also mapped the general area in 1989.
Geology	• Deposit type, geological setting and style of mineralisation.	• The reader is referred to AusIMM Monograph 14 (Geology of the Mineral Deposits of Australia and Papua New Guinea), Volume 1, pp. 829-861, to gain an introduction to the regional geology and styles of gold-copper mineralisation of the area. • In 1995 the Northern Territory Geological Survey released a geological map and explanatory notes for the Tennant Creek 1:100,000 sheet, which covers the area of the license.

Criteria	JORC Code explanation	Commentary
		• The rocks of the Warramunga Formation host most of the ore bodies in the region and underlie the Exploration License. • Mineralisation is considered to be Proterozoic Iron Oxide Copper Gold (IOCG) mineralisation of similar style and nature to other mineralisation / deposits in the Tennant Creek Mineral Field.
Drillhole information	• A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes: o easting and northing of the drillhole collar o elevation or RL of the drillhole collar o dip and azimuth of the hole o downhole length and interception depth o hole length.	• A list of the drillholes and the drillhole collar locations and elevation, the total depth, drill type and dip and azimuth and assay results are included as a Table in the body of the text.
Data aggregation methods	• 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. • 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. •	• Mineralized intersections are reported as down hole intervals and not weighted averages. • Please refer to the table of significant results in the body of the text for detail on cut off grades and mineralised widths. • These results are exploration results only and no allowance is made for recovery losses that may occur should mining eventually result, nor metallurgical flow sheet considerations. • Cut-off grades have been used for reporting of exploration drill results and are defined below the Table of Significant results.
Relationship between mineralization widths and intercept lengths	• These relationships are particularly important in the reporting of Exploration Results. • If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported. • If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (eg 'downhole length, true width not known').	• Mineralisation identified at the *Mauretania Exploration Target* is contained within hematite-magnetite-quartz jasper ironstone which grades with depth to a hematite-magnetite ironstone (see cross – section in the text). • The ironstone dips 75 degrees to the southwest and strikes NNW-SSE. Magnetic modelling suggests the ironstone has a strike length of 120m and the modelled body plunges to the northwest.
Diagrams	• Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views.	• Refer to Figures in body of text.
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.	• All results are 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.	• Geophysical magnetic susceptibility logging is completed at 1m intervals on site (RC drilling). • Three component magnetic probing of has been completed. • A regional RAB program was completed in 2015 and included some areas within the Mauretania Exploration Target.

Criteria	JORC Code explanation	Commentary
Further work	• The nature and scale of planned further work (eg 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.	• Step out drilling North and South of MTRC023, MTRC25 and MTRC027 looking for lateral extensions to mineralisation reported. • Collection of a 100kg composited bulk metallurgical sample from drill hole MTRC023.

The exploration results contained within the above company release are in accordance with the guidelines of *The Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves* (JORC Code, 2012 Edition – Table 1).

***SECTION 1.1 SAMPLING TECHNIQUES AND DATA* – WEST GIBBET EXPLORATION TARGET**

(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *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 downhole 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.*	• The *West Gibbet exploration* hole (WGRC052) was sampled using Reverse Circulation drilling techniques (RC). • WGRC052 was drilled to a final depth of 90m and is reported in this current release. • WGRC052 was drilled as a vertical hole to test vertical grade and geological continuity of the known ironstone body and to allow collection of a 100kg bulk metallurgical sample. • RC chips are riffle split on site to obtain homogeneous 1m samples for assay. • 1m samples are pulverised to produce a 25g charge for analysis by four acid digest with an ICP/OES (Cu, Fe, Pb, Zn) ICP/MS (Ag, Bi, Mo, Se, Sb, Co) & Fire Assay/AAS (Au) finish. • RC samples were collected via a fixed cone splitter that is mounted to the drill rig under a 1200cfm cyclone. • The fixed cone splitter has three sample chutes for comparative sampling, 2 chutes are synchronised for comparative samples and 1 Chute is independently set for the geologist's field samples.
Drilling techniques	• *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).*	• RC drilling accounts for 100% of the current reported drilling at *West Gibbet Exploration Target*. • RC drilling utilizes a 4.5 inch, face sampling bit. • RC recoveries are logged and recorded in the database.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• Overall RC recoveries are >90% for the West Gibbet target, and there are no significant sample recovery problems. • All WGRC052 samples were dry. • No voids were experienced during RAB drilling. • Emmerson do not consider that there is evidence for sample bias that may have occurred due to preferential loss/gain of fine/coarse material during

Criteria	JORC Code explanation	Commentary
		the West Gibbet drill program.
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.*	• WGRC052 was logged by Emmerson's Exploration Manger on site. • Logged data was then uploaded to Emmerson's relational database – Datashed. • WGRC052 logging intervals are 1m increments and the entire hole was logged. • All RC chips are stored in chip trays in 1m intervals. • Logging is considered to be qualitative in nature.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Standard sampling operating procedures have been used by ERM. • The sample preparation of RC samples for follows industry best practice in sample preparation involving oven drying, coarse crushing of the sample down to ~10mm followed by pulverisation of the entire sample (total prep) using LM5 grinding mills to a grind size of 85% passing 75 micron. • Pulverised material not required by the laboratory (pulps) including duplicate samples are returned to ERM, logged into a database and stored undercover at the Tennant Creek office. • Coarse rejects are disposed of by the Laboratory. • RC samples were collected on the rig using cone (from the drill rig) and then riffle split by the field assistants if dry to obtain a 3kg sample. • All samples were dry.
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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• Field QC procedures are routinely undertaken by Emmerson and involve the use of representative certified reference materials (CRM's) as assay standards, and include blanks and duplicates. • QAQC protocols consisted of the insertion of blanks at a rate of approximately one in every 40 samples, insertion of standards at a rate of approximately one in every 20 samples and duplicate field sample analysis of at a rate of approximately one in every 20 samples. • The geologist on the rig is responsible for maintaining the field QC. • Insertion of assay blanks was increased when visual mineralisation was encountered and consists of insertion above and below the mineralised zone. • Internal Laboratory checks were also included as in-house controls, blanks, splits, and replicates that are analysed with each batch of samples submitted. These QC results are reported along with sample values in the final analytical report. • Intertek Genalysis conducted the analytical analysis. Sample preparation occurred in Alice Springs, Northern Territory and analyses were read in Perth, Western Australia. • Review of QC results were conducted through a series of control charts and are considered satisfactory to good. • The sample sizes are considered to be appropriate

Criteria	JORC Code explanation	Commentary
		to correctly represent the style of mineralisation - Iron oxide copper gold.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• No twin drill holes have been completed.

Location of data points	• *Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*
	• *Specification of the grid system used.*
	• *Quality and adequacy of topographic control.*
		• WGRC052 was surveyed (set out and pick up) using a differential GPS and by a suitably qualified company employee.
		• Collar survey accuracy is +/- 30 mm for easting, northing and elevation coordinates.
		• Co-ordinate system GDA_94, Zone 53.
		• Topographic measurements are collected from the final survey drill hole pick up.
		• Downhole survey measurements were collected at a minimum of every 30m using an CORE EX ® electronic single shot camera for RC.
		• This survey camera equipment is quoted by the manufacturer to have an accuracy of
		  ○ Azimuth 0-360º ± 0.5º
		  ○ Dip ± 90º ± 0.2º
		• If the measurement is considered to be affected by magnetic material (ironstone) then an average from the last non-affected and the next non-affected measurement is used.
		• There were no down hole survey issues during this drill program.

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.*	• Drill density within the West Gibbet Exploration Target area is 40m x 40m. • There is insufficient drill / assay data to establish the geological and grade continuity at this stage of drilling. • Sample compositing has been used by previous explorers. • No Mineral Resource Estimation can be applied to these Exploration Results.
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.*	• WGRC052 was drilled vertically into the known ironstone body. • Previous company drilling has been drilled perpendicular to the known strike of the West Gibbet Ironstone body. • No orientation based sampling bias has been identified in the data at this point. • Results at this stage suggest that the geological and geophysical targets being tested have been drilled in the correct orientation.
Sample security	• *The measures taken to ensure sample security.*	• Samples were collected, bagged and labelled by site geologists. • They are placed in sealed bags for transport to the assay laboratory.

Criteria	JORC Code explanation	Commentary
		• The assay laboratory confirms that all samples have been received and that no damage has occurred during transport. • While samples are being processed in the Lab they are considered to be secure.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Emmerson geologists have reviewed previous drilling campaigns and are happy that data is in good condition and data is to industry best standards.

SECTION 1.2 REPORTING OF EXPLORATION RESULTS – WEST GIBBET EXPLORATION TARGET

(Criteria listed in the proceeding section may 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 West Gibbet Exploration Target is entirely located within Mining Lease Central 18 (MLC018) and on Tennant Station Perpetual Pastoral Lease 1142. • MLC018 is 100% held by Emmerson Resources Limited and is in good standing with no known impediments existing. • Land Access to the area is secured through a current Indigenous Land Use Agreement between Emmerson Resources and the CLC, representing Traditional Owners. • Land Access to the area is also secured through a current Land Access Agreement with Tennant Creek Station. • No exclusion zones are identified within MLC018.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• The West Gibbet Target has been campaign drilled since the early 1970s. • Original work targeted the deep ironstone centred on the large magnetic and gravity anomalies (peak values 0.7 mgal and 550nT) • Modelling of historic drilling defines an east west striking magnetite rich ironstone pod, approximately 125m long, 100m wide, up to 50m thick with a depth to top of 150m. The ironstone body has a shallow 200 north dip and a shallow 200 east plunge. • High grade Au intersections were recorded in chlorite-magnetite alteration on the footwall of the ironstone body (e.g. 3m @ 35.9 g/t Au from 241m in WGBDD001). • Follow up drilling encountered sporadic mineralisation, typically 1 to 2 g/t Au over several metres, in both the hanging wall and footwall alteration zones. • Giants Reef completed a detailed (80m x 40m) gravity survey in 2005 which revealed a large gravity anomaly to the west of the deep magnetic ironstone • Gravity anomaly was thought to represent an untested hematite dominant ironstone up dip from the historic deep ironstone target

Criteria	JORC Code explanation	Commentary
		• Giants Reef RAB drilling intersected mineralised ironstone (max 1m @ 5.3ppm Au) 15-30m below surface. • Emmerson completed a small RC drill program in 2008 (ASX:26/05/2008).
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Mineralisation within the area consists of hematite-magnetite-quartz ironstone within sediments of the Warramunga Formation. • Target style for Emmerson is non-magnetic ironstone related iron oxide copper gold. • Mineralisation is Proterozoic Iron Oxide Copper Gold (IOCG) mineralisation of similar style and nature to other mineralisation / deposits in the Tennant Creek Mineral Field
Drillhole information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:* o *easting and northing of the drillhole collar* o *elevation or RL of the drillhole collar* o *dip and azimuth of the hole* o *downhole length and interception depth* o *hole length.*	• Assay results from WGRC052 plus collar location, elevation, total depth, drill type and dip and azimuth is included as a table in the body of the announcement text.
Data aggregation methods	• *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.* • *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.*	• Mineralised intersections are reported as down hole single metre drill intervals and not weighted averages. • These results are exploration results only and no allowance is made for recovery losses that may occur should mining eventually result, nor metallurgical flow sheet considerations. • Cut-off grades have been used for reporting of exploration drill results and are defined below the Table of Significant results.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.* • *If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (eg 'downhole length, true width not known').*	• Mineralisation identified at the *West Gibbet Exploration Target* is contained within hematite-magnetite-quartz ironstone which grades with depth to a magnetite-quartz ironstone (see cross – section in the text). • The ironstone dips 85 degrees to the south and strikes east-west. • WGRC052 was drilled as a vertical hole. • Caution must be exercised when interpreting the assay results from WGRC052 as the drill hole represents a vertical intersection and not the typical angled drill hole intersection. • All results reported in the text and figures are down-hole lengths and may not represent true widths.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views.*	• Refer to Figures in body of text.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable,*	• Not relevant for the data reported.

Criteria	JORC Code explanation	Commentary
	representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	
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.*	• No deleterious or contaminated substances have been identified during Emmerson's the desktop review.
Further work	• *The nature and scale of planned further work (eg 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.*	• Additional drilling is being considered to better define the West Gibbet Exploration Target as a potential small mine proposition. • Collection of a 100kg composited bulk metallurgical sample from drill hole WGRC052.