

ASX ANNOUNCEMENT

15 December 2020

Diamond drill results at Big Rush confirms mineralisation continues at depth

HIGHLIGHTS:

- All diamond assays have been returned from Big Rush confirming gold mineralisation to a vertical depth of at least 200 metres.
- Results include:
 - o **3.05m @ 4.23 g/t Au** (BRRCD003) including 0.45m @ 21.47 g/t Au from 238 metres
 - o 5.15m @ 1.21 g/t Au (BRRCD002) from 230 metres
 - o 5.3m @ 1.27 g/t Au (BRRCD004) from 204 metres
- Diamond program follows previous shallower RC drilling program under Central, Southern and Northern pits that returned several high grade results including; 1m @ 81.68 g/t Au, 3m @ 21.73 g/t Au and 2m @ 17.16 g/t Au
- Work has now commenced on a JORC Resource estimate for Big Rush
- Aircore and RC drilling has commenced at Camel Creek to follow up on previous significant intersections

Great Northern Minerals Limited ("Great Northern Minerals" or the **"Company") (ASX: GNM)** has received all of the final assays (BRRCD001 to BRRCD004) from the diamond drilling programme at the Company's Big Rush Gold Project in Northern Queensland (Figure 1).

The total recent diamond drilling at Big Rush comprised 4 HQ diamond holes for 1039.8 metres spread over approximately 200 metres of strike underneath the previously mined Central open pit.

Managing Director Cameron McLean commented, "The diamond holes under Big Rush confirm and lend strength to our geological modelling, that the mineralisation extends in depth. At Big Rush we have already shown the strike over 2000m (Fig 1.) and all of this data is now being validated and compiled by CSA Global as we commence preliminary work on a JORC Resource for Big Rush. We have come a long way this year and the drilling programs completed have been comprehensive and the results are evidence that the Company is on track. Extensional and infill drilling has commenced at Camel Creek which will evolve to the maiden JORC 2012 resource estimate for Camel Creek..."

The individual detailed diamond results at Big Rush have highlighted an important laminated quartz vein which pinches and swells (boudinaged) and is the focus of the introduced gold at depth. The drilling has also allowed the commencement of a JORC 2012 resource estimate for Big Rush and final data compilation and validation has commenced for this work.





Figure 1: Location plan of the Big Rush Diamond Drilliing on Aerial Imagery



Figure 2: Big Rush Overview Long Section: Diamond Drillhole Locations

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BRCCD003: Ore Zone

Big Rush Gold Project

Great Northern has completed the initial diamond drilling program at Big Rush. A total of four angled HQ diamond holes were drilled totalling 1039.8 metres to test for extensions to the known mineralisation at Big Rush underneath the Central pit area. Holes were nominally spaced at 40-50 metres along strike and designed to intersect the interpreted gold zone at approximately 200 metres below natural surface. All final assasy results have been returned and compiled. See Table 1.

Table 1: Big Rush Central Pit Diamond Drilling Results: BRRCD001→BRRCD004

Hole	MGA_East	MGA_North	RL_(dtm)	Dip	Azimuth	Final Depth	From	То	Intersection
BRRCD001	264661	7851696	543	-55	308	258.5	229	230.2	1.2m @ 0.87 g/t Au
BRRCD002	264695	7851730	552	-55	306	263	230.25	235.4	5.15m @ 1.21 g/t Au
BRRCD002							240.1	243.35	3.25m @ 1.29 g/t Au
BRRCD002							256.75	258.25	1.5m @ 1.06 g/t Au
BRRCD003	264730	7851771	554	-55	307	259.9	236.95	240	3.05m @ 4.23 g/t Au
BRRCD003						including	238.6	239.05	0.45m @ 21.47 g/t Au
BRRCD003							246.9	248	1.1m @ 0.53 g/t Au
BRRCD004	264760	7851817	554	-55	307	258.4	203.97	209	5.03m @ 1.27 g/t Au
BRRCD004							231	232	1 m @ 0.48 g/t Au

The drilling was following up on the previously completed RC drill program at Big Rush which totaled 22 RC drillholes for 3634 metres targeting underneath the Central, Southern and Northern pit areas. A number of high grade gold results were returned including 1m @ 81.68 g/t Au, 3m @ 21.73 g/t Au

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and 2m @ 17.16 g/t Au, and this latest deep diamond drilling has now confirmed the mineralisation extends to at least 200 metres depth.

Hole	MGA_East	MGA_North	RL_(dtm)	Dip	Azimuth	Final Depth	From	То	Intersection	Area
BRRC1012	264554	7851951	597	-55	125	179	116	129	13m @ 0.93 g/t Au	Central Pit
BRRC1012						including	116	119	3m @ 2.33 g/t Au	
BRRC1012							139	146	7m @ 1.40 g/t Au	
BRRC1013	264529	7851920	594	-55	125	179	124	131	7m @ 1.05 g/t Au	Central Pit
BRRC1013							142	146	4m @ 20.73 g/t Au	
BRRC1013						including	144	145	1m @ 81.88 g/t Au	
BRRC1014	264514	7851838	587	-60	125	143	62	81	19m @ 5.11 g/t Au	Central Pit
BRRC1014						including	77	80	incl 3m @ 21.73 g/t Au	
BRRC1014							105	107	2m @ 1.00 g/t Au	
BRRC1014							113	115	2m @ 0.91 g/t Au	
BRRC1014							122	124	2m @ 0.74 g/t Au	
BRRC1015	264490	7851882	582	-60	125	179	132	164	32m @ 1.32 g/t Au	Central Pit
BRRC1017	264447	7851821	557	-65	125	185	142	161	19m @ 0.52 g/t Au	Central Pit
BRRC1018	264511	7851841	587	-70	125	160	91	121	30m @ 1.27 g/t Au	Central Pit
BRRC1019	264603	7851731	541	-60	305	180	114	140	26m @ 1.99 g/t Au	Central Pit
BRRC1019						including	119	121	2m @ 17.56 g/t Au	
BRRC1019							165	167	2m @ 1.74 g/t Au	

Table 2: Big Rush Central Pit Reverse Circulation One Metre Results: BRRC1012→BRRC1019



Figure 3: Big Rush Long Section Central Zone: Diamond Drillhole results

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Figure 4: Cross Section One: Big Rush Drilling



Figure 5:Location of the Company's gold projects in Northern QueenslandGreat Northern Minerals LimitedT: +618 6214 0148ABN 22 000 002 111Level 1, 33 Colin Streetwww.greatnorthernminerals.com.auWest Perth, WA 6005



This announcement has been authorised for release to the market by the Board of Great Northern Minerals Limited.

ENDS

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About Great Northern Minerals Limited

Great Northern Minerals Limited is an ASX-listed gold focused explorer. The Company's key North Queensland Gold Projects include the Golden Cup, Camel Creek and Big Rush Gold Mines in North Queensland. The historic mines ceased operation in the 1990's after production of over 150,000 oz at an average grade of 1.91g/t Au. Great Northern Minerals aims to extend known mineralisation and develop a new gold camp in North Queensland.

Competent Persons Statement

The information in this report that relates to Exploration Results is based on information compiled under the supervision of Simon Coxhell, the Technical Director of Great Northern Minerals Limited. Mr Coxhell is a member of the Australasian Institute of Mining and Metallurgy and has sufficient experience of relevance to the styles of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves." Mr Coxhell consents to the inclusion in this report of the matters based on his information in the form and context in which they appear.



Section 1 JORC Code, 2012 Edition - Sampling Techniques and Data

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 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.	 The holes were sampled by NQ Diamond Core drilling. Sampling was nominally at 1 m intervals however over narrow zones of mineralisation it was as short as 0.2 m. QAQC samples were inserted in the sample runs, comprising gold standards (CRM's or Certified Reference Materials) and commercially sourced blank material (barren basalt). Sampling practice is appropriate to the geology and mineralisation of the deposit and complies with industry best practice. Sample weights were variable, depending on the sample length collected, with a minimum of 1kg of material. The full sample was pulverised. Fire Assaying (gold only) was completed using a 50 g charge on the samples with all samples also individually analysed for a multielement suite, via ICP. Assaying was completed at Intertek Ltd's assay laboratory in Townsville.
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).	 Diamond coring was undertaken with a modern truck mounted rig and industry recognised quality contractor. Core (standard tube), was drilled at HQ3 size (61.1mm) from precollar depth (180 metres) The core was orientated using a Reflex Ez-Ori tool
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.	 Diamond core recovery was measured for each run and calculated as a percentage of the drilled interval. The core recovery was considered excellent at 98-100%. There has been no assessment of core sample recovery and gold grade relationship.
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.	 All core was geologically logged. Lithology, veining, alteration, mineralisation and weathering are recorded in the geology table of the drill hole database. Final and detailed geological logs were forwarded from the field following cutting and sampling. Geological logging of core is qualitative and descriptive in nature. Sample boundaries were determined by the geologists with a minimum width of 35cm and maximum of 1.3m.



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 subsampling 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. 	 Core was cut in half, one half retained as a reference and the other sent for assay. Sample size assessment was not conducted but used sampling size typical for similar style gold deposits.
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. 	 Preparation facility in Townsville Samples submitted for fire assay are weighed, dried, coarse crushed and pulverised in total to a nominal 85% passing 75 microns (method code SP3010) and a 50 g subsample is assayed for gold by fire assay with an AAS finish (method code FA50/AAS). Lower Detection limit 0.005 ppm The assaying work was Fire Assay (50g) which is industry standard assay technique for gold mineralisation. Multielement and gold analysis via FA50 and ICP (4A MS) was carried out on the samples also. Assaying and laboratory procedures used are NATA certified techniques for gold. Laboratory standards and industry satandards and blanks utilised.
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. 	 Intersection assays were documented by professional exploration geologists and verified No drill holes were twinned. All assay data were received in electronic format from Intertek, checked, verified and merged into GNMs database. Original laboratory data files in CSV and locked PDF formats are stored together with the merged data. There were no adjustments to the assay data.
Location of data points	 Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	 Coordinates located by hand held Garmin GPS. Co-ordinates are recorded in GDA94 zone 55. Control considered to be good.(+/- 2 metres)
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. 	 Drilling was on nominal 40-50 metre centres. A total of 4 HQ diamond holes drilled over a 200 metre strike length. •



Orientation of data in relation to geological structure	•	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	•	The attitude of the lithological units is predominantly believed to be NE striking and dipping at a moderate angle towards the southeast. Drilling was generally perpendicular to the considered lithology orientation with holes drilled at azimuths of approximately 310 degrees at dip angles between -50 to -60 degrees. Due to locally varying intersection angles between drillholes and lithological units all results will be defined as downhole widths. True widths of the mineralised zones are interpreted as approximately 60% of the down hole intervals No drilling orientation and sampling bias has been recognised at this time and it is not considered to have introduced a sampling bias.
Sample security	•	The measures taken to ensure sample security.	•	Samples taken by qualified staff and delivered to assay laboratory by company representatives.
Audits or reviews	•	The results of any audits or reviews of sampling techniques and data.	•	No audits or reviews completed.

Section 2 JORC Code, 2012 Edition - Reporting of Exploration Results

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. 	 Mining Leases MLs 10168, 10175 & 10192 are held by Alphadale Pty Ltd Great Northern Minerals Limited has purchased 100% of the Mining Leases listed above from Q-Generate Pty Ltd the owner of Golden Ant Mining Pty Ltd. The Mining Leases are granted.
Exploration dc other parties	 Acknowledgment and appraisal of exploration by other parties. 	 The Big Rush Gold Mine has been the subject of substantial previous exploration, resource definition drilling and mining operations. Gold mineralization in the Big Rush area was first recognized in 1987. Previous exploration and mining activities have been undertaken by Werrie Gold, Alphadale Pty Ltd, Lynch Mining Pty Ltd and Curtain Bros Pty Ltd. The project database contains 261 Reverse Circulation (RC) drill holes, 11 RC drill holes with diamond tails, 5 diamond holes and data from 195 blast holes and 179 trenches. The majority of exploration was completed between 1990 – 1997 just before and whilst mining was underway.
Geology	 Deposit type, geological setting and style of mineralisation. 	 The Big Rush Gold Mine is located in the Broken River Mineral Field. Quartz vein hosted gold mineralization within sedimentary rock units occurs within the project area and has been mined previously.
Drill hole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation 	 Refer to Table 1 of this ASX Announcement which provides easting and northing of the drill collars, dip, azimuth and end of hole depths.
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Criteria	JORC Code explanation	Commentary
	 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. 	
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. 	 The drill intercepts reported in Table 1 are on a length weighted basis. No high-grade cuts have been applied to the tabled intersections. No metal equivalents are used or presented.
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	 Drilling is generally perpendicular to the structure by angled RC at 50° to 65° into structures dipping between 30° and 60°. Some of the reported intersections are very close to true width. Due to locally varying intersection angles between drill holes and lithological units all results will be defined as downhole widths. True widths of the mineralised zones are interpreted as approximately 60% of the down hole intervals
Diagrams	 Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. 	 Maps and sections are presented in the announcement.
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. 	 The accompanying document is considered to represent a balanced report.
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. 	 The Big Rush Gold Mine has been the subject of substantial previous exploration, resource definition drilling and mining operations.
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. 	 Further work will include; Drill testing for extensions to the known mineralization. Metallurgical test work to determine the most appropriate process route for gold recovery. Complete an initial Scoping Study on the economics of developing a gold producing operation at Big Rush.