

ASX ANNOUNCEMENT

23 December 2019

High grade drill intercepts of 5m @ 12.64g/t and 12m @ 1.11g/t Au returned from the Big Rush Project, North Queensland

Great Northern Minerals Limited ("Great Northern Minerals" or the **"Company"**) (**ASX: GNM**) is pleased to announce the receipt of assay results from the first two Reverse Circulation (RC) drill holes at the Company's Big Rush Gold Project in Northern Queensland (Figure 1).

Highlights:

- Drill intersections received from the Big Rush Project include:
 - o 5m @ 12.64 g/t Au from 92m (hole BRRC1004)
 - o **12m @ 1.11 g/t Au** from 76m (hole BRRC1005);
- Big Rush the largest of 3 former producing mines;
- 8 drill holes for 1,042 metres completed to validate historic drill results and depth; and
- Assay results from the remaining 6 RC drill holes are expected in early January 2020.

Big Rush

Assay results from the first 2 RC drill holes of an 8 hole drilling program at the Big Rush Project have now been received. All 8 holes were drilled beneath the Central Pit which was mined up until 1998. Hole BRRC1004 has returned a high grade intersection of 5m @ 12.64 g/t Au from 92 - 97 metres downhole (Table 1, Figures 2 & 3). Hole BRRC1005 has returned an intersection of 12m @ 1.11 g/t Au from 76 – 88m downhole (Figure 4). A total of 8 RC drill holes for 1,042 metres were completed at the project in early December and the assay results from the remaining 6 drill holes are expected to be available in early January 2020. The mineralised drill intercepts correspond to logged intervals of quartz veining and elevated amounts of visual arsenopyrite and pyrite. Gold assays were all by Fire Assay and multi-element assays, mainly for alteration studies, are awaited.

The aim of the drilling program was to validate previous drilling results from the project to enable a maiden JORC-compliant resource to be estimated. Future drill programs will also look to target the Northern Pit, Southern Pit and Sergei Pit areas which have not had any drilling completed since 1997.

Great Northern Minerals Managing Director, Cameron McLean commented on the announcement: "The Board and Management of Great Northern Minerals are excited by the preliminary assay results at Big Rush following the assays at Golden Cup. Big Rush is the largest producer of the three mines historically and an important part of our inventory. We look forward to the results of the remaining assays which we expect will demonstrate significant further increases in The Company's resource base."



10060mE 10040mE 10080mE 10100mE 10120mE 10140mE 480mRL BRIAS Orebody -460mRL BRRC1004 BRRCION PRRC1003 - Pit Outline 35m -440mRL 50m -420mRL 8m @ 1.99 g/t Au -400mRL 9m @ 2.12 g/t Au 9m @ 1.58 g/t Au -380mRL 5m @ 12.64 g/t Au 12m @ 4.41 g/t Au 102m 2m @ 1.86 g/t Au 18m @ 3.05 g/t Au -360mRL 1m @ 1.06 g/t Au 119m 141.2m -340mRL OPEN 144m Big Rush Mine Central Pit Drill Intersection 25m Section 11270N

Figure 1: Cross section 11270N (Local Grid) showing drill hole BRRC1004, Big Rush Project



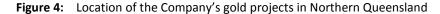
10025mE 10075mE 10100mE 10000mE 10050mE BR136 RRC1005 Surface BR35 Orebody 10m @ 12.16 g/t Au 3m @ 1.0 g/t Au Pit Outline 12m @ 14.75 g/t Au -450mRL 50m 12m @ 1.11 g/t Au -425mRL 32m @ 14.0 g/t Au 6m @ 0.98 g/t Au -400mRL 125m 1m @ 32.9 g/t Au **→** 146m -375mRL 18m @ 2.4 g/t Au -350mRL 195.4m Big Rush Mine Central Pit Drill Intersection -325mRL 25m Section 11310N OPEN

Figure 2: Cross section 11310N (Local Grid) showing drill hole BRRC1005, Big Rush Project



263000mE 264000mE 266000mE ML 10290 a 7853000mN 10km **FPM 27283** Northern Pit Leach Pad -7852000mN Central Pit Dam ML 10192 ML 10168 Other Southern Pit Companies Ground ML 10175 -7851000mN Sergei Pit O Drill hole 11 (No. prefixed BRRC10) 1000m EPM 27283 (Great Northern Minerals) 7850000mN

Figure 3: Location plan of the Big Rush Project showing recently completed drill holes and open pit mines



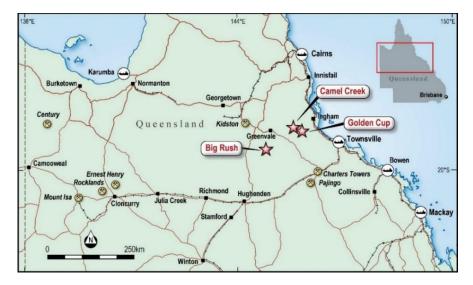




Table 1: Initial drill hole assay results, Big Rush Gold Project (> 1 g/t Au)

Hole ID	Easting	Northing	Dip	Azimuth	ЕОН	From	То	Width (m)	Grade (g/t Au)
BRRC1004	264581	7851752	-60	310	119	92	97	5	12.64
BRRC1004					including	95	96	1	52.21
BRRC1004						110	112	2	1.86
BRRC1004						118	119	1	1.06
BRRC1005	264505	7851839	-60	130	125	76	88	12	1.11
BRRC1006	264515	7851863	-55	130	125		Assays	Awaited	
BRRC1007	264525	7851879	-65	130	131		Assays	Awaited	
BRRC1008	264536	7851902	-60	130	143		Assays	Awaited	
BRRC1009	264555	7851912	-60	130	143		Assays	Awaited	
BRRC1010	264580	7851949	-55	130	125		Assays	Awaited	
BRRC1011	264608	7851978	-55	130	131		Assays	Awaited	

ENDS

For more information please contact:

Managing Director Investor Relations

Cameron McLean Peter Taylor, NWR Communications

info@greatnorthernminerals.com.au +61 412 036 231

About Great Northern Minerals Limited

Great Northern Minerals Limited is an ASX-listed gold focussed explorer. The Company's projects include the Golden Cup, Camel Creek and Big Rush Gold Mines in Queensland.

Competent Persons Statement

The information in this report that relates to Exploration Results is based on information compiled under the supervision of Andrew Jones, an employee of Great Northern Minerals Limited. Mr Jones 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 Jones 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. 	 Drilling reported is angled Reverse Circulation (RC) drilling. Sampling consists of one metre cone split samples. Sample weights were approximately 3kg of material. The full sample was pulverised. Fire Assaying was completed using a 50 g charge. Multi-element assaying was done using ICP following a four acid digest with mult-element assay results awaited. 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, facesampling bit or other type, whether core is oriented and if so, by what method, etc).	 All drilling at Big Rush was angled Reverse Circulation drilling using a face sampling hammer.
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. 	 Sample recoveries were assessed visually and appeared to be consistent throughout drill holes. All samples were dry. No measures needed to be taken. No sample bias believed to occur.
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. 	 Geological logging of colour, weathering, lithology, alteration and mineralisation has been undertaken. RC is considered both qualitative and quantitative in nature. The total length of the RC holes were logged.



Criteria	JORC Code explanation	Commentary
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. 	 Drilling was RC not core drilling. 1m samples were collected straight from the drill rig cyclone and splitter. Sampling is considered representative. Internal laboratory standards used. On site QAQC included inclusion of standards every 20 samples, duplicates every 20 samples as well as random blank samples. 3kg sample size considered appropriate for the grain size of the sedimentary rock units sampled.
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. 	 The assaying work was Fire Assay (50g) which is industry standard assay technique for gold mineralisation and ICP for multi-elements with a four acid digest. Both considered total techniques. Multi-element assays awaited. No instruments reported. Laboratory standards utilised. On site QAQC included inclusion of standards every 20 samples, duplicates every 20 samples as well as random blank samples.
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. 	 Historic drill holes within 10m also recorded gold mineralisation although thickness and grade varies yet this is believed to represent the changing nature of this style of mineralisation. Some of these holes twinned historic drill holes. Data was collected on paper and entered into an Excel Worksheet. No adjustments to assay results.
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.
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) 	 As this drilling program was a small drilling program there was considerable variation in the drill spacings. Only 8 holes drilled over a 250 m strike length. One metre samples were taken. Assay results reported are all 1 m samples.

Great Northern Minerals Limited ABN 22 000 002 111 www.greatnorthernminerals.com.au



Criteria	JORC Code explanation	Commentary
	and classifications applied.Whether sample compositing has been applied.	
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 southwest. Drilling was generally perpendicular to the considered lithology orientation with holes drilled at azimuths of 310 degrees or 130 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. 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 exercised an option agreement to purchase up to 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 by 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 RC and diamond drilling completed had an average depth of 63m and the deepest drill hole in the database is 240.50 metres deep. The majority of exploration was completed between 1990 – 1997 just before and whilst mining was underway. Three RC holes totalling 396m were drilled by Curtain Bros Pty Ltd in 2010 but that is the only



Criteria	JORC Code explanation	Commentary
	•	drilling recorded since mining activities stopped in 1998. Deeper drilling has largely been restricted to beneath the Central Pit with only limited drilling being completed beneath the Northern, Southern and Sergei Pits. Great Northern Minerals Ltd (previously Greenpower Energy Ltd purchased the project in August 2019.
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 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.	Refer to Table 1 of this ASX Announcement which provides easting and northing of the drill collars, dip, azimuth and end of hole depths.
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. Lengths of low-grade material (no more than 5m) have been incorporated where the adjacent higher grades are sufficient such that the weighted average remains above the 1 g/t Au lower cut-off grade. 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 cleastatement to this effect (eg 'down hole length true width not known'). 	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. The boundary of the structure of the stru



Criteria	JORC Code explanation	Commentary
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 (ag tasks for lateral extensions or double)	Further work will include;
	 (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of 	Drill testing for extensions to the known mineralization, mostly down dip.
	possible extensions, including the main geological interpretations and future drilling areas, provided this information is not	Additional metallurgical test work to determine the most appropriate process route for gold recovery.
	commercially sensitive.	Complete an initial Scoping Study on the economics of developing a gold producing operation at Big Rush.