

#### **ASX Announcement**

# HATCHES CREEK PROJECT UPDATE

### **Highlights**

- 3,150 m Reverse Circulation (RC) drilling program is to commence in mid July with approvals for up to 4,730 m
- Follow up Mineral Resource drilling to be undertaken at Pioneer, Treasure and Hit or Miss
- Five additional prospects to be tested with reconnaissance drilling
- Combined Exploration Target defined for Pioneer, Treasure and Hit or Miss prospects
- Previous work identified an Inferred Resource of 225,000 tonnes at 0.58% WO<sub>3</sub> within historical mine dumps
- Discussions commenced with logistics and infrastructure providers with regards to development options
- Extensive metallurgical testwork already completed as part of dumps project indicating simple process for recovery of WO<sub>3</sub>, Cu and Au. The recovery of Au and Cu by products have potential to add significant revenue to the project

GWR Group Limited (ASX: GWR) ("GWR" or "the Company") is pleased to provide an update for the Hatches Creek Tungsten Project in the Northern Territory.

Following a highly successful drilling program completed in November, 2016, which confirmed multiple high-grade tungsten prospects, the Company is planning the next campaign of RC drilling, to commence in July, 2017.

The program will have two parallel aims. Firstly, step out drilling will be undertaken along strike of mineralised zones at Treasure, Hit or Miss and Pioneer. The aim of this drilling is to enable sufficient drilling density to provide a maiden Mineral Resource estimate.

At **Treasure**, the program will be following up on broad zones of tungsten and copper mineralisation including 53 m at 0.26% WO<sub>3</sub> and 0.13% Cu, from 63 m in HCRC014 and 44 m at 0.21% WO<sub>3</sub> and 0.12% Cu, from 55 m in HCRC013.

The program at **Hit or Miss** will follow up the fifteen, high-grade mineralised WO<sub>3</sub> and Cu structures identified and on wide zones such as 36 m at 0.18% WO<sub>3</sub> and 0.24% Cu in HCRC011 from 52m and narrow high grade intersections including 2 m at 3.05% WO<sub>3</sub> from 3 m in HCRC010. It will also target mineralised structures not previously tested but known from historical mapping and aerial photography

At **Pioneer**, the drilling in November 2016 intersected multiple stacked zones of mineralisation that correspond with historical mining zones. Several of the holes intersected at least three stacked mineralised zones. Better results included 2 m at 1.60% WO<sub>3</sub>, 0.96 g/t Au and 0.36%

Cu from 43 m in HCRC004, also in HCRC004, 1 m @ 1.96% WO<sub>3</sub>, 1.58g/t Au and 0.28% Cu, from 80 m and 3 m at 0.63% WO<sub>3</sub> from 81 m in HCRC002.

In the second focus for the program, reconnaissance drilling will be undertaken on five new prospect areas within the Hatches Creek project area. These prospects, known as Green Diamond, Black Diamond, Bonanza, Silver Granite and Kangaroo, are all sites of historical mining and prospecting activity.

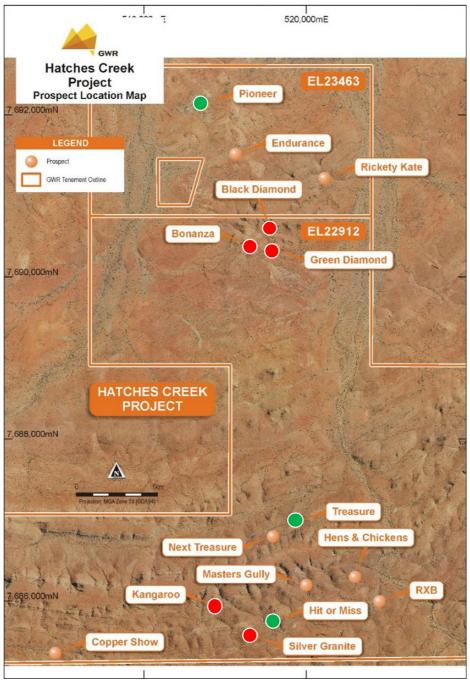


Figure 1: Prospect map showing resource drilling areas (red) and reconnaissance prospects (green)

#### **Exploration Target**

Based on the results of the RC drilling program completed in November 2016 and including the details of the underground workings and high quality photogrammetry, the Company has developed an Exploration Target for Pioneer, Hit or Miss and Treasure.

**Table 1: Hatches Creek Exploration Target (Pioneer, Treasure, Hit or Miss)** 

Deposit	Ton	nes	WO:	3 (%)	Cu	(%)	Au	(g/t)		g Equiv (%)
	Low	High	Low	High	Low	High	Low	High	Low	High
Pioneer	525,000	1,050,000	0.35	0.90	0.15	0.20	0.40	0.80	0.46	1.10
Treasure North	262,500	525,000	0.30	0.50	0.00	0.00	0	0	0.30	0.50
Treasure South	900,000	1,800,000	0.20	0.40	0.10	0.15	0	0	0.23	0.44
Hit or Miss	1,500,000	2,250,000	0.20	0.40	0.15	0.25	0	0	0.24	0.47
Total	3,200,000	5,600,000	0.25	0.50	١	Not dete	ermine	d	0.30	0.60

The Exploration Target for Hatches Creek, describing the potential quantity and grade is conceptual in nature. There has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

The Exploration Target has only been calculated for areas that have been the subject of previous RC drilling as described in an ASX release dated 14<sup>th</sup> March, 2017 titled "Exceptional Results from Maiden RC Drilling Program at Hatches Creek". High quality surface and underground mapping of historical mine workings and aerial photography has also been used to support the calculation. RC drilling is planned to test the validity of the Exploration Target and this work will be commenced during July, 2017.

# Favourable metallurgy indicates potential low cost development

The Company has previously completed metallurgical test work on the mineralised dump samples at Hatches Creek based on the potential to treat the dumps as a standalone project. An Inferred Resource estimate (JORC Code 2012) of 225,000 tonnes at 0.58% WO<sub>3</sub> has been defined, refer to Arunta Resources Limited ASX release 23<sup>rd</sup> September 2014 (upper cut of 1.5% WO<sub>3</sub> applied), with metallurgical studies showing that pre-concentration using x-ray ore sorting technology can remove up to 25% of the feed material as waste whilst maintaining 97% WO<sub>3</sub> yield. Pre-concentration using X-ray ore sorting will result in a low-cost development option by reducing the size of processing plant footprint and associated operating costs.

Simple gravity and flotation test work on samples downstream of the ore sorter has achieved as high as 66% WO<sub>3</sub>, with 18% Cu, 13% Mo and 5 g/t Au in the concentrates adding significant value as by-products. The crushing and ore sorting path for treatment has the

potential to result in a low-cost development option. Samples will be collected during the upcoming RC program for further metallurgical testwork to assess the potential of the crushing/ore sorting methodology across multiple prospects.

#### **Logistics and Infrastructure**

Based on the excellent initial round of drilling results and the high recoveries achieved in the initial metallurgical program (refer to ASX announcement 19<sup>th</sup> January 2015 and March 2015 Quarterly Report and June 2015 Quarterly Report), the Company has commenced discussions with various logistics and infrastructure providers for the potential transport of ore and/or concentrate from Hatches Creek. Hatches Creek is located 165 km south east of Tennant Creek, opening up the potential for the utilisation of rail transport to Darwin or Adelaide. Discussions with these providers will continue in Q3 2017.

#### **Commentary**

GWR's Chief Executive Officer, Craig Ferrier, said "We see significant potential for Hatches Creek as a reborn tungsten field. With over 50 years of mining history, there is plenty of evidence that we are looking in the right places.

"We intend to accelerate the drilling and exploration program at Hatches Creek over the coming six months. With a recent lift in the tungsten price and leverage from valuable by-products we see considerable potential to increase shareholder value through focused exploration work."

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## Competent Persons Statement

The information in this report which relates to Exploration Targets, Exploration Results and Mineral Resources or Ore Reserves is based on information compiled by Mr Allen Maynard, who is a Member of the Australian Institute of Geosciences ("AIG"), a Corporate Member of the Australasian Institute of Mining & Metallurgy ("AusIMM") and independent consultant to the Company. Mr Maynard is the Director and principal geologist of Al Maynard & Associates Pty Ltd and has over 35 continuous years of exploration and mining experience in a variety of mineral deposit styles. Mr Maynard has sufficient experience which is relevant to the style 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, Exploration Targets, Mineral Resources and Ore Reserves" (JORC Code). Mr Maynard consents to inclusion in the report of the matters based on this information in the form and context in which it appears.



# Appendix 1 JORC 2012 Table 1

JORC 2012 TABLE 1

Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary	
Sampling techniques	Nature and quality of sampling (e.g. 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.	The Pioneer, Copper Show, Hit or Miss and Treasure prospect areas at the Hatches Creek project were sampled using Reverse Circulation ("RC") drilling. A total of 18 holes for an aggregate of 1739m was completed.	
		The drill holes were located to intersect the mineralisation at representative points to help with the overall understanding of the geology and distribution of the mineralisation.	
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used	All the sample recoveries were visually estimated and logged as they were collected and a the samples were consistently logged as approximately $100\%$ .	
		All the drill samples as well as QAQC samples including duplicates and Certified Standards were submitted to an independent, ISO certified laboratory for chemical analysis.	
		No measurement tools or systems were used that required calibration.	

Criteria	JORC Code explanation	Commentary		
	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 (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information	Samples were collected at 1m intervals using cyclone and passed through a cone splitter.  Duplicate (A and B sample) sub samples were collected of approximately 2 to 4kg in prenumbered and barcoded calico sample bags and the residue stored in a plastic bag. The A calico bag sample was submitted to Nagrom Laboratories in Perth where the following was carried out;  • Dried and pulverized  • W03, Sn, Fe203, Mn0, Si02, Al203, Ti02, Ca0, Mg0, As, P, S, Mo, Cu, Bi and Sb were all analysed using the Nagrom XRF008 technique with a lower detection limit of 0.001%  • At the Pioneer prospect Au was also analysed by fire assay with a lower detection limit of 0.01 ppm		
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. 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).	A total of 18 RC holes for an aggregate of 1739m was completed at depths ranging from 29 to 150m, averaging 97m. All of the drilling was undertaken using a 146mm face sampling RC hammer		
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed	The sample recovery was visually assessed and recorded on drill logs and is considered to be acceptable.		
Logging	Measures taken to maximise sample recovery and ensure representative nature of the samples	The samples were visually checked for recovery, moisture and contamination. A cyclone and cone splitter were utilised to provide a representative sample and were regularly cleaned. The drilling contractor blew out the hole at the beginning of each rod to remove any water.		
	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.	The ground conditions were good and the drilling returned consistent sized dry samples and the possibility of sample bias through selective recoveries is considered negligible.		
	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.	All samples were geologically logged with lithology and mineralisation recorded. This logging was of sufficient detail to support the findings of this report and, after further drilling is completed, included in later Mineral Resource estimation.		
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	The drill sample logging was qualitative.		
	The total length and percentage of the relevant intersections logged	All the drill samples 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.	This section is not applicable as there were no core samples collected.		
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	The RC drilling chip samples were collected using a cyclone and then duplicate sub samples of 2kg to 4kg in size collected using a cone splitter attached to the cyclone. All samples were dry.		
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Samples were submitted to Nagrom Laboratories in Perth where the following sample preparation procedures were carried out;  • The sample was dried and crushed to -6.3mm using a jaw crusher  • Samples in excess of 2kg are riffle split  • The crushed sample is pulverized to 95% passing 75 micron  These sample preparation procedures followed by the laboratory meet industry standards and are appropriate for the sample type and mineralisation being analysed.		
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Certified Standards and duplicate samples were routinely inserted into the sample sequences submitted for chemical analysis according to GWR Group Limited ("GWR") QAQC procedures. Results from the QAQC were found to be acceptable. Nagrom Laboratories also carried out internal QAQC as per their operating procedures		
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/secondhalf sampling.	Field duplicates of the drilling samples were routinely collected and these were all found to agree within acceptable limits with the original samples.		
	Whether sample sizes are appropriate to the grain size of the material being sampled.	The sample size is considered appropriate to the grain size of the material being sampled.		
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory	XRF has proven to be a very accurate analytical technique for a wide range of base metals, trace elements and major constituents found in rocks and mineral materials. Glass fusion XRF is utilised for assaying, since it provides good accuracy and precision; it is suitable for analysis from very low levels up to very high levels.		
	procedures used and whether the technique is considered partial or total.	ICP and Fire Assay techniques are also considered appropriate and industry standard for the elements analysed using this technique and the detection limits as stated.		
		The assaying techniques used are total analyses.		
	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.	Since this equipment was not used, this section is not applicable.		

Criteria	JORC Code explanation	Commentary
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	Certified Standards and duplicate samples were routinely inserted into the sample sequences submitted for chemical analysis according to GWR Group Limited ("GWR") QAQC procedures. Results from the QAQC indicate that the assays met acceptable levels of accuracy without significant bias. Nagrom Laboratories also carried out internal QAQC as per their operating procedures.  No blanks were used for QAQC checking. The risk of contamination during sample preparation was considered minimal because of the mineralogy of the samples being tested.  At this early stage of the exploration program no external laboratory checks have been undertaken.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Brian Varndell of Al Maynard and Associates, who are consultants to GWR, has checked and verified the data pertaining to the significant intercepts against original field logs, laboratory certificates and by checking cross sections.
	The use of twinned holes.	At this early stage of the exploration program no twin holes have been drilled.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	All field data is recorded on log sheets as per GWR operating procedures. Drill data is entered into a digital database and is also stored in hard copy in Perth office. The digital data was checked against the field logs by the geologist after the data entry was completed and also checked visually on cross sections.
	Discuss any adjustment to assay data.	No adjustments to the assay data were made.
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.	The RC drill hole collar northings and eastings were surveyed using a hand held GPS while the RLs were determined from contours generated by high quality photogrammetry.  A down hole survey measurement was taken at the bottom of each hole.
	Specification of the grid system used.	The grid system is MGA GDA94 Zone 53.
	Quality and adequacy of topographic control.	High resolution aerial photogrammetry was collected using an unmanned aerial vehicle (UAV) survey undertaken in August 2015 with an accuracy of +-40mm in all 3 dimensions.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	The drilling is of a first pass nature to test the overall geology and indicative style and extent of the mineralisation only.

Criteria	JORC Code explanation	Commentary
	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.	No resource estimation was undertaken using the drilling data so this section is not applicable
	Whether sample compositing has been applied.	Only 1m RC drill samples were collected and no sample compositing was undertaken.
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.	The drilling was designed to intersect mineralisation approximately perpendicular to the mineralisation and not biased towards any special grade areas. However since the orientation of the mineralisation has not been determined accurately at this early stage, the intersection widths may be appreciably longer than the true width of the mineralisation intersected and some mineralised structures intersected at sub-optimal angles.
	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.	Since the drilling to date has been exploratory and not at a sufficient density to properly determine the orientation and grade of the mineralisation, it cannot be determined at this early stage if the orientation of the drilling has introduced a sampling bias. But the knowledge of the mineralisation gained so far from surface mapping and drilling indicates that the drilling has been properly oriented to test the mineralisation without undue bias.
Sample security	The measures taken to ensure sample security.	Samples were collected in calico sample bags, then placed in a polyweave bag and the bag sealed with a cable tie. The individual bags were then placed in a Bulka Bag and this bag was sealed with rope. The bulka bags were transported by trucking contractors to Nagrom Laboratories in Perth.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Since the exploration program is only at an early stage there have been no audits or reviews of the sampling techniques. It is believed by GWR that the sampling procedures and techniques followed meet current international standards of quality.  Independent geological consultants, Al Maynard & Associates, have audited all the drilling data collected to date.

Section 2: REPORTING OF EXPLORATION RESULTS

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status		The Hatches Creek project is located in the Northern Territory of Australia upon EL22912 and EL23463 covering a total area of approximately 31.8 km2
	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 registered holder of the tenements is NT Tungsten Pty Ltd, which is a $100\%$ owned subsidiary of GWR Group Limited.
		The tenements are located upon Aboriginal Freehold Land, which is owned by the Anurrete Aboriginal Trust and administered by the Central Land Council (CLC), with whom a Deed of Exploration has been executed
		NT Tungsten holds a $100\%$ interest in the tenements and a $1.5\%$ net smelter royalty is payable to Davenport Resources Limited.
	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 tenements are in good standing.
Exploration done by other parties		Previous mining activities up to 1960 are well documented and are summarised in Bulletin No 6 "The Geology and Mineral Resources of the Hatches Creek Wolfram Field, Northern Territory", G. R Ryan 1961.
	Acknowledgment and appraisal of exploration by other parties.	Between 2008 and 2015 the ground was held by numerous companies associated with Davenport Resources Limited and Arunta Resources Limited. Their activities focused on sampling and mapping of the historical mine workings.
Geology	Deposit type, geological setting and style of mineralisation.	Tungsten mineralisation at Hatches Creek is associated with quartz veins in shear zones within a variety of Proterozoic host rocks forming part of the Davenport Province. Wolframite and Scheelite are the dominant tungsten minerals present
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.	All relevant data for GWR's RC drilling is summarised in ASX announcement titled "Exceptional Results From Maiden RC Drilling Program at Hatches Creek" dated 14th march 2017 and in particular Tables 1 and 2 in the body of the report and all assay data in Appendix 2

Criteria	JORC Code explanation	Commentary
Data aggregation methods		Significant Intercept Significant WO3 intersections are reported for all intervals greater than 1m at 0.1% WO3 or greater than 2m at 0.1% WO3and up to 2m of internal waste.
	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	Significant Cu intersections are reported for all intervals greater than 1m at 0.5% Cu.
		Significant Au intercepts are reported for all intervals greater than 1m at 0.5g/t Au.
		All composited intercept assays were weighted by sample length. No upper cut-off grades were applied.
		Mineralised Zone At the Hit or Miss and Treasure prospects mineralised zones have been reported which encompass the significant intercepts within defined structures that do contain multiple mineralised structures and these with the internal waste intervals are shown on the accompanying Figures 8 and 10 of the 14th March 2017 ASX announcement.
	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.	All the drill samples are collected over consistent 1 m intervals and composited assays weighted by sample lengths.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	A WO3 metal equivalent ( "WO3Equv" )has been reported in Table 1 of the body of this report the following has been used in this calculation Commodity Prices  As below and based upon approximate prices in \$US on $12^{th}$ June 2016 and assume a $100\%$ recovery  Au price \$US 1,270 per ounce or \$US40.8 per gram  Cu price \$US 5,780 per tonne  W price \$US 220 per MTU  WO3 Equivalent  The WO3 equivalent grade is calculated using the formula below;  WO3Equv = ((W*220)+((Cu/100)*5,780)+(Au*40.80))/220  Where:  W = WO3 grade in %  Cu = Cu grade in %  Au = Au grade in g/t

Criteria	JORC Code explanation	Commentary	
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 (e.g. 'down hole length, true width not known').	Based upon historical mine reports and surface observations; the geometry of the mineralisation is reasonably well understood. In most cases the drilling is close to perpendicular to the strike and as the mineralisation is steeply dipping, true widths of the mineralisation are considered to be greater than 60% of the intercept width. Plans and cross sections are provided in the body of the report that show the relationship between the drill holes and he mineralisation.	
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.	Refer to diagrams provided in the body of the ASX announcement dated $14^{\mbox{\tiny th}}$ March $2017$	
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 drilling results are provided in Appendix 2 of the ASX announcement dated $14^{\rm th}\text{March}$ 2017 .	
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	The area was the subject of detailed study by the Bureau of Mineral Resources and this was published in Bulletin No 6 (1961). The geology of all the areas drilled are described in detail in this report.	
	treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	GWR has undertaken significant metallurgical test work on representative mineralised samples with the results of these tests reported in previous ASX announcements.	
Further work	The nature and scale of planned further work (e.g. 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 RC drilling and possibly diamond drilling is planned to follow up on the results described in this report and also to evaluate the remaining prospect areas not tested in the current program.	