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**ASX Release** 

# HIGH GRADE OPEN-PIT GOLD CONFIRMED AT EMPIRE'S PENNY'S FIND GOLD MINE

Further in-pit high grade gold has been confirmed by gold miner, Empire Resources Ltd ('Empire', ASX code: ERL, the "Company") following the latest round of grade control drilling undertaken at its Penny's Find gold mine, 50km northeast of Kalgoorlie, WA.

This round of Reverse Circulation drilling was designed to provide grade control information from 60m depth to the planned 85m bottom of the Penny's Find open-pit.

Mining is currently at 55m depth with Empire already well advanced in its feasibility studies to take the mine underground.

In the latest drill program, a total of 15 holes for 486 metres was completed on a 10m X 10m pattern at -60 degrees along the length of the gold ore zone.

As anticipated, the grade control drilling returned numerous high grade gold intersections from the lower part of the planned open pit. Better results include:

- > 7m @ 6.22g/t Au from 30m depth in hole PGC147
- > 7m @ 12.14g/t Au from 30m depth in hole PGC148
- > 4m @ 7.90g/t Au from 24m depth in hole PGC154
- > 6m @ 9.60g/t Au from 16m depth in hole PGC157
- > 7m @ 12.50g/t Au from 20m depth in hole PGC158
- > 6m @ 8.78g/t Au from 24m depth in hole PGC159
- > 9m @ 20.60g/t Au from 12m depth in hole PGC160

Results from all holes returning >1.30g/t Au\* over 2m are presented in Table 2. True widths are 85% of down hole intersections.

<sup>\* 1.30</sup>g/t Au is the lower cut-off for run of mine ore transported to a toll treatment plant.

#### **Empire's Managing Director, Mr David Sargeant:**

"As expected, the open-pit mining operation is now accessing the higher grade part of the ore body. We are looking forward in the next couple of months to solid gold production through the Lakewood toll treatment facility at Kalgoorlie.

"These results also bode well for the completion of our underground feasibility study as they indicate grades in the fresh part of the ore body are robust at depth".

Empire holds a 60% direct interest in the Penny's Find gold project with the remaining 40% interest held by unlisted Brimstone Resources Ltd.

#### DAVID SARGEANT MANAGING DIRECTOR December 2017

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The information in this report that relates to Exploration Results has been compiled by Mr David Ross B.Sc(Hons), M.Sc, who is an employee of the Company. He is a member of the Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. He has sufficient experience which is relevant to the style of mineralization and type of deposit under consideration and to the activity to 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". David Ross consents to the inclusion in the public release of the matters based on his information in the form and context in which it appears.

TABLE 2: PENNY'S FIND GRADE CONTROL RC DRILLING RESULTS

HOLE ID	NORTH	EAST	RL	AZ	DIP	ЕОН	FROM	то	LENGTH	GRADE
	GDA9	4 z51				(m)	(m)	(m)	(m)	(g/t Au)
PGC146	6621814.52	391968.59	280	240	-60	42	27	35	8	5.18
						incls	29	30	1	21.40
PGC147	6621823.18	391963.59	280	240	-60	42	30	37	7	6.22
						incls	34	35	1	20.60
PGC148	6621830.84	391956.86	280	240	-60	42	30	37	7	12.14
						incls	33	35	2	31.05
PGC150	6621778.54	391966.27	280	240	-60	21	6	9	3	3.97
PGC151	6621783.54	391974.93	280	240	-60	30	16	18	2	9.21
PGC152	6621787.20	391961.27	280	240	-60	21	9	11	2	5.38
PGC153	6621788.54	391983.59	280	240	-60	42	26	29	3	5.54
PGC154	6621797.20	391978.59	280	240	-60	42	24	28	4	7.90
						incls	26	27	1	20.50
PGC155	6621809.52	391959.93	280	240	-60	30	20	24	4	6.78
						incls	22	24	2	12.70
PGC156	6621804.52	391951.27	280	240	-60	24	13	17	4	7.64
						incls	15	16	1	15.30
PGC157	6621813.18	391946.27	280	240	-60	24	16	22	6	9.60
						incls	17	18	1	40.50
PGC158	6621818.18	391954.93	280	240	-60	30	20	27	7	12.50
						incls	25	27	2	36.50
PGC159	6621826.84	391949.93	280	240	-60	30	24	30	6	8.78
						incls	26	28	2	22.25
PGC160	6621821.84	391941.27	280	240	-60	24	12	21	9	20.60
						incls	12	13	1	30.30
						incls	17	19	2	62.35
As	says by 40gm f	ire assav/AAS	Low	er cut-	off is 1	.3a/t Au	. no high	cut has	been applie	ed.

Assays by 40gm fire assay/AAS. Lower cut-off is 1.3g/t Au, no high cut has been applied.

Maximum internal dilution is 2m @ <1.3g/t Au.

<sup>1.30</sup>g/t Au is the lower cut-off for run of mine ore transported to a toll treatment plant.

### **JORC 2012 COMPLIANCE TABLE**

## 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.	A total of 15 Reverse Circulation drill holes were completed on a nominal 10m by 10m spacing across the deposit to a maximum drill depth of 42 metres.
	<ul> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> </ul>	Whole one metre samples were split using a rig mounted splitter to produce a nominal 2 - 3kg sample for delivery to a laboratory.
	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.	Reverse circulation drilling was used to obtain 1 m samples from which a nominal 2 - 3 kg was pulverised to produce a 40 g charge for fire assay.
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.).	Reverse circulation drilling using face sampling hammer.
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	RC sample recoveries remained consistent throughout the program.     The cyclone and splitter were routinely inspected and cleaned during the drilling ensuring no excessive material build-up. Care was taken to ensure the split samples were of a consistent volume.
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	The RC chip samples were not logged.

Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>No core drilled.</li> <li>1 metre RC samples were collected and split off at the drill rig using a stationary splitter. All samples were dry in nature.</li> <li>The sample preparation of the RC sample follows industry best practice in sample preparation involving weighing, oven drying, pulverising of the entire sample (total prep) to a grind size of 85% passing 75 micron.</li> <li>QAQC procedures involved the use of certified standards and blanks.</li> <li>A field duplicate sample was taken roughly every 10 sample.</li> <li>The sample sizes are considered appropriate to the deposit type.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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</li> </ul>	<ul> <li>The analytical technique used was a 40gm fire assay/AAS finish. This achieves total extraction of the gold from the sample.</li> <li>No geophysical tools were used to determine any element concentrations.</li> <li>Certified standards and blanks were inserted roughly every 10 samples. Assays returned acceptable levels of accuracy.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>Significant intersections are checked by the mine geologist.</li> <li>No twinned holes were drilled.</li> <li>No adjustments were made to any assay data used in this report.</li> </ul>
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Hole collar coordinates have been picked up using a RTK GPS with all co-ordinates and RL data considered reliable.</li> <li>The grid system used for the location of all drill holes is MGA_GDA94, Zone 51.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Drill spacing was 10m by 10m.</li> <li>Not applicable</li> <li>No compositing has been applied to the sample results.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul> <li>All holes were drilled at -60 degrees, roughly perpendicular to the mineralization.</li> <li>Given the nature of the mineralizing system, no orientation based sampling bias has been identified in the data at this point.</li> </ul>
Sample security	The measures taken to ensure sample security.	Samples were delivered direct to the laboratory by an Empire Resources Limited employee.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No review has been carried out to date.

**Section 2: Reporting of Exploration Results** 

Criteria	JORC Code Explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>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.</li> <li>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.</li> </ul>	<ul> <li>Penny's Find is located wholly within Mining Lease M27/156 of which Empire Resources Limited has a 60% interest.</li> <li>Native title does not affect the tenement.</li> <li>The tenement is subject to one third party royalty.</li> <li>The tenement is a granted Mining Lease, is in good standing and no known impediments exist.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Previous exploration has been conducted at Penny's Find by Croesus Mining, Defiance Mining and Brimstone Resources Ltd. They each carried out small drilling programs which intersected gold mineralization.</li> <li>A Mineral Resource estimate by JV partners Brimstone Resources was released to the ASX in February 2015.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	Gold mineralization at Penny's Find is hosted by quartz veins in a shear zone at the contact between mafic volcanics and sediments.
Drill hole Information	<ul> <li>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:</li> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> <li>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.</li> </ul>	See Table 2 in the text.
Data aggregation methods	<ul> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>All reported intersections are arithmetic averages.</li> <li>No top cuts have been applied.</li> <li>A 1.3g/t Au lower cut-off has been applied with a maximum of 2m @&lt; 1.3g/t Au internal dilution.</li> <li>High grade gold intervals internal to broader zones of gold mineralization are reported as included intervals in Table 2.</li> <li>No metal equivalent values have been reported.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	<ul> <li>True widths are 85% of drill widths.</li> <li>The zone of gold mineralization at Penny's Find dips at approximately 55-60° to the northeast.</li> </ul>

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.	Not applicable
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 >2m @1.3g/tAu 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.	Grade control drilling confirms geological model derived from surface resource drilling.
Further work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	• Not applicable