20 February, 2018

Highlands declares maiden Resource at Star Mountains

- Maiden JORC Mineral Resource declared at Olgal prospect
- 210 million tonnes at 0.4% Cu and 0.4 g/t Au for 840,000 tonnes of contained copper and 2.9 Moz contained gold
- Olgal resource area covers only a small part of total Star Mountains tenement package of 1049 sq kms
- Significant potential for additional discovery at other prospects within tenement area

Highlands Pacific (ASX:HIG) has declared a maiden Mineral Resource at its Star Mountains exploration project in Papua New Guinea, confirming the region as one of the most exciting and prospective exploration areas in PNG.

Using a 0.3% copper cut-off grade, the deposit is estimated to contain 210 million tonnes grading 0.4% copper, for 840,000 tonnes of contained copper and 2.9 Moz contained gold.

Table 1. Olgal Inferred Resource at various copper cut-off grades.

Cu cut-off grade	Mt	% Cu	g/t Au	Mt Cu	Moz Au
0.20	450	0.3	0.3	1.4	4.5
0.30	210	0.4	0.4	0.84	2.9
0.40	80	0.5	0.6	0.40	1.6

Highlands Pacific commissioned independent consulting geologists H&S Consultants Pty Ltd (HSC) to complete a resource estimate for the Olgal copper-gold deposit. The Olgal resource estimate is based on data and assays from 23 diamond core drill holes at the prospect for a total of 8,949 metres. Samples lengths were generally 2m with the shortest sample being 0.6m and the longest 3.2m; sampling was done on sawn half core. All drill core samples were assayed at either ALS or Intertek Townsville using a HF-HNO3-HClO4 acid digest with HCl leach and ICP-AES finish for base metals and gold assay by 50 gram fire assay. Geological boundaries were used to limit the resource to the rocks above the thrust and to separate the primary mineralisation from the copper-leached oxide zone. Surface dimensions of the mineralisation are roughly 0.9km by 0.6km and extend at depth to the Olgal-Futik thrust roughly 800m below the surface.

The holes were drilled since the mineralisation was discovered by Kennecott in 1972, with exploration efforts intensified over the past few years as Highlands Pacific and its former joint venture partner, Anglo American plc, conducted drilling campaigns at Olgal and other Star Mountains prospects.

All elements were estimated by ordinary kriging using samples composited to nominal 4.0m intervals, within the fault-bound primary and oxide domains. The primary and oxide domains were estimated separately for Cu, because copper is depleted in the oxide zone, but together for Au, Ag and Mo because these latter elements appear unaffected by oxidation.

The entire Mineral Resource is classified as Inferred, based on the Competent Person's experience with similar copper porphyry deposits elsewhere. Drill hole spacing is irregular, limited to accessible sites in the rugged terrain; nominal drill hole spacing is ~200m.

A nominal cut-off grade of 0.30% Cu was applied to define the Mineral Resources, which is based on a review of comparable copper porphyry deposits elsewhere.

At this early stage, a bulk mining operation seems likely for Olgal; it is unclear if this might be an open-pit or block cave mining operation. Olgal appears to be a fairly typical copper porphyry, and mineralogical studies indicate that copper occurs as of fine grained disseminated chalcopyrite with local minor bornite. Therefore, it is assumed that Olgal will be amenable to metallurgical treatment by conventional flotation.

Olgal is located in the Nong River lease (EL1312), which is one of seven held by Highlands in the Star Mountains project. The other leases include Tifalmin EL1392, Mt Scorpion EL1781, Benstead EL2001, Mt Abemh EL2467, Ilam River EL2478 and Lake Louise EL2517 and together the package covers approximately 1049 sq kms. The tenements are located only 20 kms north east of the giant Ok Tedi copper mine, within the New Guinean Orogenic Belt which hosts some of the world's largest copper porphyry and volcanogenic massive sulphide deposits including Grasberg, Frieda River, Porgera and Hidden Valley.

In addition to the 23 holes at Olgal, 27 other holes have been drilled at other prospects within the Star Mountains tenements and mineralisation has been identified at five other prospects.

Highlands CEO Craig Lennon said the declaration of an Inferred Mineral Resource at Olgal was a major advance for the Star Mountains project.

"This elevates the project to a new level and adds considerable value to the exploration package. Beyond Olgal there is clearly great prospectivity, with drilling in other locations within the Star Mountains tenements frequently identifying wide intercepts of high grade mineralisation.

"The exploration efforts that have been conducted to date have greatly enhanced our knowledge of the geology of the area, enabling us to target our efforts and improve the effectiveness of our exploration programs. All the evidence gathered to date continues to suggest that the Star Mountains may host a significant copper porphyry that may ultimately support a substantial mining project.

"Our plan is to introduce a new joint venture partner to work with us to build on this maiden Olgal Inferred Mineral Resource and continue to investigate other prospects.

"In the meantime, the declaration of this resource significantly increases Highland's total metal inventory, which includes the company's 20% interest in the giant Frieda River copper/gold project as well as its 8.56% interest in the producing Ramu nickel/cobalt mine, and gives our investors even greater leverage to rising metal prices," he said.

History

Kennecott drilled five holes in the Nong River lease in 1972 and identified mineralisation around the same period when they found Mt Fubilan (Ok Tedi). No further drilling was carried out in the area until 2009, when Highlands commenced a campaign initially focused on Olgal, where 14 holes were drilled, of which 12 encountered mineralisation.

In 2012, drilling moved from Olgal to nearby prospects including Futik, Pad48, Rattatat, Kum Kom and Tuk, with encouraging mineralisation was encountered in a number of holes. Highlands spent in excess of $25 million in this exploration campaign from 2009 to 2013.

In late 2014, Anglo American became a joint venture partner in the project, paying $10 million for its initial interest and spending in excess of $25 million during its time in the joint venture.

In 2015 a nine hole program was completed including six holes at Olgal and three at Kum Kom. Another campaign was conducted in 2016/17 which involved seven holes including four holes at Fune, two at Unfin and one at Olgal.

Anglo withdrew from the project early in 2018, with Highlands resuming 100% interest in the tenements, and enabling it to pursue earn-in arrangements with new parties.

Prospect Geology

Olgal is a copper-gold porphyry deposit hosted by a multi-stage porphyritic diorite that intrudes the Oligocene- early Miocene Darai Limestone. The contact between the diorite and limestone is typically marked by a breccia and small amounts of skarn have been observed in the Olgal area. Alteration (potassic and sericitic) and mineralisation (dominately disseminated chalcopyrite) is typical of other porphyry copper deposits in the area such as Ok Tedi and Frieda River.

Mineralisation is limited to the Olgal stock. There appears to be some degree of metal zoning in the deposit with a central zone that shows both higher grades of copper and gold. The deposit is cut off to the south and at depth by a regional thrust fault that trends roughly NW-SE. There is a minor zone of weathering near the surface where copper has been leached.

A total of 164 samples have been tested for Olgal to determine the bulk density. Dry bulk density was determined by a simple immersion method. The samples were unwaxed and selected from more competent core so the density estimate may be biased.

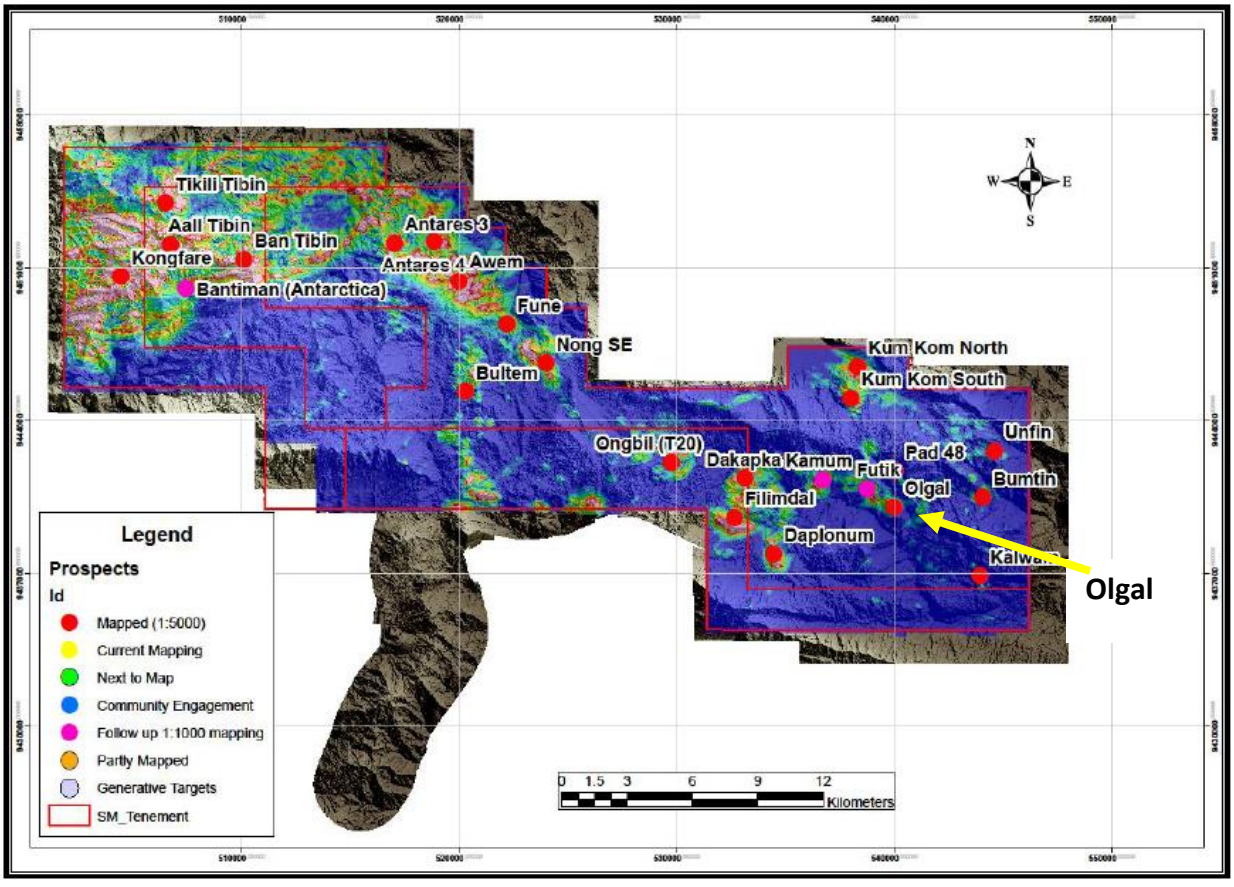
Drilling at the Star Mountains project has produced a number of exciting intercepts at various prospects over recent years including:

- 596m @ 0.61% Cu & 0.85g/t Au from 24 m down hole (Olgal Hole 14, 2012),
- 22m @ 1.42% Cu & 0.57 g/t Au from 146m down hole (Kum Kom Hole 1, 2013)
- 68m @ 0.97% Cu & 0.37 g/t Au from 280m down hole (Kum Kom Hole 1, 2013)
- 183 metres @ 0.53% Cu and 0.58 g/t Au from 168m downhole (Olgal Hole 19, 2016)
- 430 metres @ 0.39% Cu and 0.24 g/t Au from 168m downhole (Olgal Hole 20, 2016)
- 434.9 metres @ 0.52% copper and 0.72 g/t gold (Including 100 metres @ 0.82% copper and 1.39 g/t gold from 76m downhole) (Olgal Hole 17, 2016)

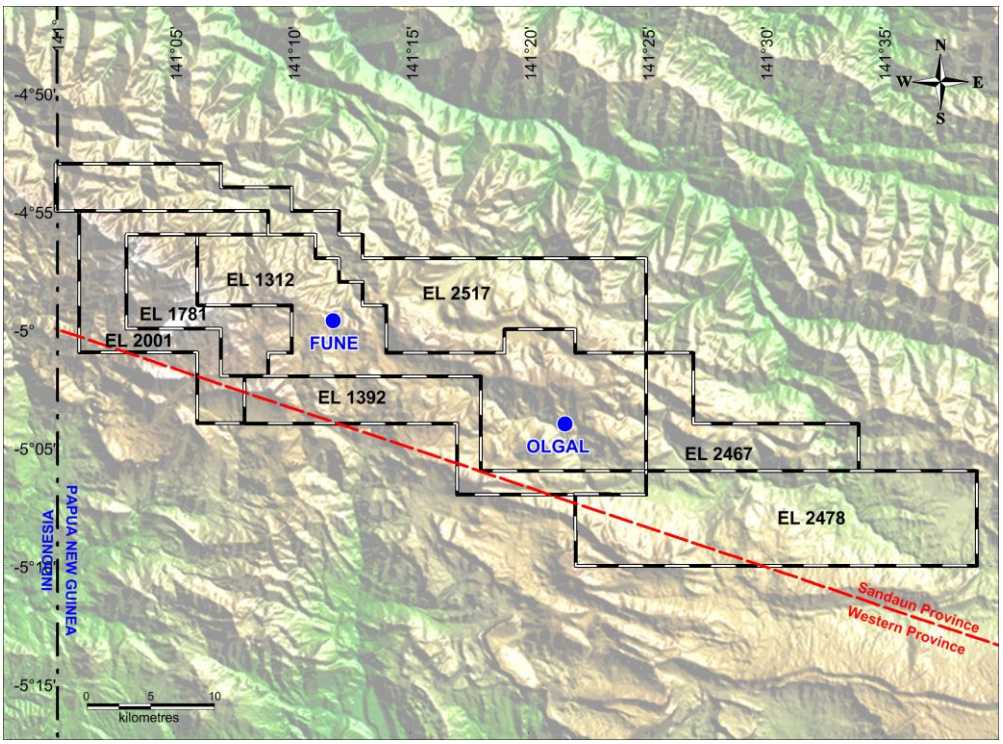
For full exploration results, see the following ASX announcements:

- 23 May 2012. Star Mountains Exploration Update
- 17 Jan 2013. New Discovery Star Mountains
- 8 Jan 2015. Star Mountains Joint Venture Agreements
- 29 September 2015. Star Mountains Drilling Results
- 11 November 2015. Star Mountains Drilling Results
- 25 February 2016. Star Mountains Drilling Results
- 8 June 2017. Star Mountains Update
- 28 August 2017. Star Mountains Drilling Results
- 13 September 2017. Star Mountains Drilling Results

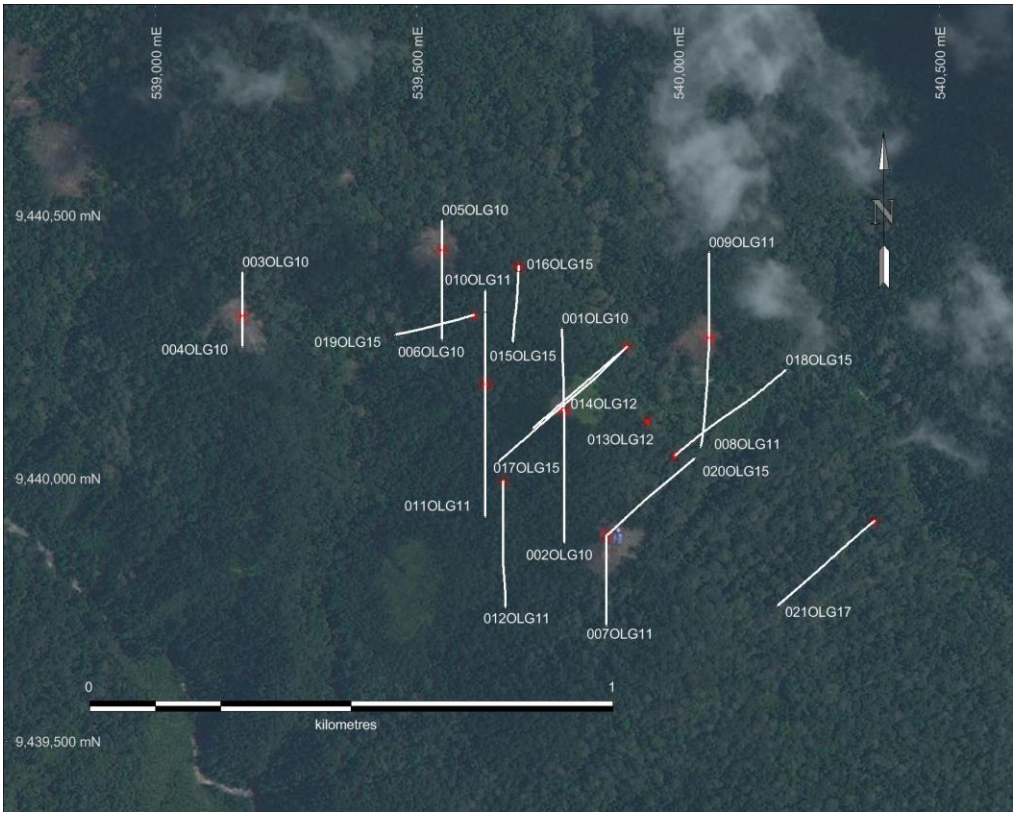
Highlands Pacific project locations in PNG



Star Mountains Tenements with prospects



Star Mountains Tenements



Olgal Prospect Drill Hole Plan

For further information, please contact:
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Competent Persons Statement:
The database information used for the Olgal resource estimate was compiled and verified as suitable for this estimate by Lawrence Queen. Details contained in this Report that pertain to the Olgal Resource Estimates are based upon, and fairly represent, information and supporting documentation compiled by Arnold van der Heyden. Mr. van der Heyden is a full-time employee of H&S Consultants Pty Ltd and a Member of The Australasian Institute of Mining and Metallurgy. Mr. Queen is a contractor for Highlands Pacific and a Member of The Australasian Institute of Mining and Metallurgy. Both Mr. Queen and Mr. van der Heyden have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are 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 Queen and Mr van der Heyden consent to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Drill Holes For the Olgal Inferred Mineral Resource

Hole Name	WGS84 Easting	WGS84 Northing	Collar RL from LiDAR	Hole start (down hole meters)	Hole end (down hole meters)	Dip	Azimuth (True north)	Prospect
001OLG10	539780	9440142	2201	0	302.9	-60	360	OLGAL
002OLG10	539780	9440136	2201	0	500.6	-60	180	OLGAL
003OLG10	539166	9440319	2193	0	162.9	-60	360	OLGAL
004OLG10	539165	9440315	2195	0	112.7	-60	180	OLGAL
005OLG10	539547	9440444	2224	0	110.7	-60	360	OLGAL
006OLG10	539547	9440440	2225	0	337.2	-60	180	OLGAL
007OLG11	539866	9439861	2224	0	341.7	-60	180	OLGAL
008OLG11	540058	9440273	2123	0	500.1	-60	180	OLGAL
009OLG11	540058	9440277	2123	0	321.6	-60	360	OLGAL
010OLG11	539630	9440189	2171	0	268.3	-60	360	OLGAL
010AOLG11	539630	9440189	2171	96	353.5	-60	360	OLGAL
011OLG11	539630	9440186	2171	0	502.9	-60	180	OLGAL
012OLG11	539664	9440003	2131	0	500.1	-60	180	OLGAL
013OLG12	539940	9440116	2111	0	82.5	-90	360	OLGAL
014OLG12	539780	9440136	2201	0	638.4	-90	360	OLGAL
015OLG15	539696	9440400	2210	0	466.9	-70	180	OLGAL
016OLG15	539696	9440405	2212	0	30.4	-70	180	OLGAL
017OLG15	539902	9440249	2116	0	487.8	-60	225	OLGAL
017OLG15_W1	539902	9440249	2116	478.4	782.2	-70	225	OLGAL
018OLG15	539995	9440043	2121	0	848.4	-70	45	OLGAL
019OLG15	539613	9440311	2196	0	630.7	-75	250	OLGAL
020OLG15	539864	9439855	2224	0	800	-75	45	OLGAL
021OLG17	540375	9439918	2068	0	441.2	-55	225	OLGAL

ASX Code: HIG
PoMSox Code: HIG
Shares on Issue: 950 million
Performance Rights: Nil

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About Highlands Pacific Limited
Highlands Pacific is a PNG incorporated and registered mining and exploration company listed on the ASX and POMSoX exchanges. Its major assets are interests in the producing Ramu nickel cobalt mine and the Frieda River copper gold project; with exploration in progress in the Star Mountains. Highlands also has exploration tenements at on Normanby Island (Sewa Bay).

Star Mountains Prospects
The Star Mountains exploration tenements are located approximately 20km north of the Ok Tedi mine, in the West Sepik Province, PNG. They lie within the highly prospective New Guinean Orogenic Belt, which hosts the Grasberg, Ok Tedi, Porgera and Hidden Valley mines, as well as the Frieda deposit.

Ramu Nickel Cobalt Mine
The producing Ramu nickel cobalt mine is located 75km west of the provincial capital of Madang, PNG. Highlands 8.56% interest in Ramu will increase to 11.3% at no cost to Highlands after repayment of its share of the project debt. Highlands also has an option to acquire an additional 9.25% interest in Ramu at fair market value, which could increase the company's interest in the mine to 20.55%, if the option is exercised.

Frieda River Copper/Gold Project
The Frieda River copper gold project is located 175kms north-west of the Porgera gold mine and 75km north-east of the Ok Tedi mine. Highlands has a 20% interest in the project and Frieda River Limited (a wholly owned subsidiary of PanAust Limited which in turn is a wholly owned subsidiary of Guangdong Rising Assets Management Co. Ltd.) has 80%.

JORC Code, 2012 Edition – Table 1 report template

Section 1 Sampling Techniques and Data

(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 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 1m 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.*	• Sampling reported for Olgal is for ½ PQ, HQ or NQ diameter diamond drill core • Holes were generally steeply dipping (>=60º) • Hole azimuths were generally planned to perpendicularly intercept any known or inferred structural trends. • Sampling was done on sawn half core. • Consistency of sampling method was maintained by reference to a written protocol • Sampling method is considered appropriate for both porphyry and skarn mineralization
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).*	• All holes drilled by Highlands Pacific are triple tube diamond core. Holes were collared in PQ and reduced to HQ and NQ as required. The core was un-oriented.
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.*	• Recoveries recorded on a drill run and sample length basis • There were some zones of poor recovery in near surface leached and oxidized zones and in intensely altered shear zones • Recovery is good. Most holes average better than 90% recovery in the mineralized zones. • No evidence of grade bias with recovery

Criteria	JORC Code explanation	Commentary
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 holes were geologically and geotechnically logged to a detail and standard appropriate for mineral resource estimation. • The logs are qualitative/semi-quantitative and record lithology, alteration, mineralogy, mineralization, weathering, strength, fracture numbers and orientation and other relevant features of the core. All the core is photographed before it is sampled • All core recovered is logged.
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.*	• Samples are taken by cutting the core in half using a diamond saw. • No non-core samples were taken. • Except at strong boundaries, are taken on a consistent 2m interval down hole. • Sampling protocol is documented with a flow sheet. • Half core samples bagged and dispatched to ALS or Intertek labs in Townsville for crushing, grinding and assay. • All sample methods and sample sizes are deemed to be appropriate and are similar to the sampling protocol used at Frieda River.
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.*	• All drill core samples were assayed using a HF-HNO3-HClO4 acid digest with HCl leach and ICP-AES finish. • Gold assay by 50 gram fire assay • Assay techniques are considered total and appropriate for the style of mineralisation. • No geophysical tools were used. • Assaying carried out by ALS Townsville or by Intertek Townsville, both accredited labs. • Extensive QAQC programme with standards, blanks, laboratory duplicates & secondary lab checks. Outcomes indicate acceptable precision and no obvious biases
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.*	• Significant intersections have been verified by the Competent Person and the Star Mountains Project geologists • There have been no twinned holes • Highlands Pacific has a series of written protocols relating to sampling, logging, data entry, data checking and data storage • There have been no adjustments to the assay data.

Criteria	JORC Code explanation	Commentary
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.*	• Drill hole collars are located by hand-held GPS. Elevations were extracted from a LiDAR DEM that Highlands had prepared over the prospect areas. Expected accuracy is +/- 5 m for northing and easting and +/- 5 m for elevation coordinates • Grid system used is WGS84 , Zone 54 • Topographic control is from a LiDAR survey flown over the area in 2010. A 2m grid was prepared from the LiDAR.
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 holes in the Olgal deposit are spaced on roughly 300 x 300m centers. Downhole sampling is generally 2m • The data spacing and distribution is considered sufficient to establish the degree of geological and grade continuity appropriate for Inferred Mineral Resources. • Compositing to nominal 4.0m intervals was applied for resource estimation.
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 deposits being investigated in the Star Mountains are Cu-Au porphyries. The mineralization appears to be stockworks with no dominant structural direction. • Drilling orientation is believed appropriate with no bias. Where structural control is suggested either by mapping or geophysical trends the drill hole are oriented to perpendicular to the structures.
Sample security	• *The measures taken to ensure sample security.*	• Chain of custody is managed by the Star Mountains Project JV. Samples are collected and stored on site by Star Mountains Project personnel. Half core samples are shipped directly to ALS or Intertek Townsville by freight courier. Tracking sheets have been set up to track the progress of sample batches.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits or reviews have been carried out at this stage.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also 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 results reported for Olgal occur in Exploration License EL 1312 that Highlands Pacific holds in the Star Mountains, Sanduan and Western Provinces, Papua New Guinea. The license was issued under the authority of the PNG Mining Act (1992) • The Star Mountains tenements are subject to the terms of a Joint Venture with Anglo American. The terms of the Joint Venture are detailed in an announcement released 11 February 2015 and available on the Highlands Pacific website.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Porphyry copper and gold mineralization was discovered in the area in late 1960s by Kennecott. In 1971 Kennecott drill five holes in the Futik and Olgal prospects. Between then and 2001 when Highlands acquired the ground a number of companies including BHP, CRA, Newcrest and OTML carried out mapping and sampling programs focused mainly on the previously identified prospects. The work by these companies is considered reliable and has been used to guide Highlands Pacific's work.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The mineralization so far identified at Olgal consists of Cu-Au porphyries and associated Cu-Au skarns .

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.*
		• Only Mineral Resources are being reported here. As no exploration results are being reported, this section is not considered applicable.

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*	• Only Mineral Resources are being reported here. As no exploration results are being reported, this section is not considered applicable.

Criteria	JORC Code explanation	Commentary
	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.*	
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').*	Only Mineral Resources are being reported here. As no exploration results are being reported, this section is not considered applicable.
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.*	• Only Mineral Resources are being reported here. As no exploration results are being reported, this section is not considered 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.*	• Only Mineral Resources are being reported here. As no exploration results are being reported, this section is not considered applicable.
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.*	Only Mineral Resources are being reported here. As no exploration results are being reported, this section is not considered applicable.
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.*	• Only Mineral Resources are being reported here. As no exploration results are being reported, this section is not considered applicable.

Section 3. Estimation and Reporting of Mineral Resources

Criteria	*Explanation*	*Deposit Specific Information*
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	All geological data for Mineral Resource estimation was provided as a Microsoft Access relational database. The Mineral Resources are based on 23 diamond hole (var diams) with geology and assays, totalling 8,949m with 4,246 assays. Some basic checks are performed by H&S Consulting (H&SC) prior to the resource estimate to ensure data consistency, including checks for from-to interval errors, missing or duplicate collar surveys, excessive down hole deviation, and extreme or unusual assay values. A few database issues were identified and resolved prior to estimation. Detailed independent database validation was not undertaken by H&SC. All data errors/issues were reported to Highlands Pacific personnel to be corrected or flagged in the primary database.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	No site visit was undertaken by the Competent Person responsible for the resource estimate. The reasons for this are the early stage of the project, the high cost of a site visit to such a remote location and the limited value of such a visit. A site visit was not considered essential for an Inferred Mineral Resource.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	There is a reasonable level of confidence in the broad framework of the geological interpretation based on the limited data available. The geological interpretation of the mineral deposit is based on the available geological logging and assays. A basal thrust has been identified in a number of holes, which separates the upper mineralised sequence from barren basement. A zone of oxidation has been identified on the basis of geological logging and depletion in sulphur and copper assays. The various intrusive phases and breccias have not been separated because of uncertainties in the relationships between these different lithologies. Alternative interpretations could have some effect on the Mineral Resource estimates, but estimates are believed to be well within the limits of variation commonly ascribed to Inferred Mineral Resources. Geology guides and controls the Mineral Resource estimates by limiting mineralisation to the sequence above the thrust, and by separating the primary mineralisation from the copper-depleted oxide zone.

		Apart from faulting and oxidation, there are currently no other obvious factors that affect the continuity of grade and geology. The continuity of grade is derived from variogram models based on the limited available data.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	The current Olgal Mineral Resource Estimate at a 0.3% Cu cut-off grade covers an approximate volume of: • 900m E-W • 600m N-S • 800m vertically, from ~20m below surface.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters, maximum distance of extrapolation from data points.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	All elements (Cu, Au, Ag, Mo) were estimated by ordinary kriging. This is considered appropriate because the coefficients of variation (CV = SD/mean) are generally low and the grades appear well structured spatially. No grade cutting was applied because the coefficients of variation are low, and no extreme values were identified. Samples were composited to nominal 4.0m intervals for estimation, within the fault-bound primary and oxide domains. The primary and oxide domains were estimated separately for Cu, but together for Au, Ag and Mo because these latter elements appear unaffected by oxidation. A three pass search strategy was used for estimation: 1. 120m isotropic search, 12-32 samples, minimum of 4 octants informed 2. 240m isotropic search, 12-32 samples, minimum of 4 octants informed 3. 240m isotropic search, 6-32 samples, minimum of 2 octants informed The maximum extrapolation distance is effectively 240m, the maximum search radius. The current Olgal estimate is very similar to a previous unreleased estimate completed in early 2017. It is assumed that Au will be recovered as a by-product; Ag and Mo grades seem too low to be economic. All elements have been estimated independently. No potentially deleterious elements were estimated as part of this exercise. An inspection of drill holes grades shows that As is low, averaging 5ppm for the deposit; there is significant S in the primary zone, averaging 2.4%, which could be acid-producing. Density was assigned to the model using the average of 115 drill hole samples from the primary domain (2.18 t/m^3); the oxide zone was assigned a nominal density of 2.00 t/m^3. The resource model block size is 50x50x20m. Drill hole spacing is irregular, limited to accessible sites in the rugged terrain; nominal drill hole spacing is ~200m. A block size one half to one quarter the hole spacing is considered appropriate for this type of deposit.

		The block size effectively is the selective mining unit (SMU). It is unclear if this deposit might become an open-pit or block cave mining operation; either way, a bulk mining operation seems likely and the current block size is considered appropriate for this. No assumptions were made regarding the correlation of variables during estimation as each element is estimated independently. Some elements show some correlation in the drill hole samples, and the similarity in variogram models effectively guarantees that this correlation is preserved in the estimates. The new model was validated in a number of ways – visual comparison of block and drill hole grades, statistical analysis, examination of grade-tonnage data, and comparison with the previous model. All the validation checks suggest that the grade estimates are reasonable when compared to the composite grades, allowing for data clustering.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	Tonnages are estimated on a dry weight basis. Moisture content has been determined for some of the density samples, by comparing sample weights before and after oven drying.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	A nominal cut-off grade of 0.30% Cu was applied to define the Mineral Resources. This was based on a review of comparable copper porphyry deposits elsewhere.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and. internal (or, if applicable, external) mining dilution. It may not always be possible to make assumptions regarding mining methods and parameters when estimating Mineral Resources. Where no assumptions have been made, this should be reported.*	It is unclear if this deposit might become an open-pit or block cave mining operation; either way, a bulk mining operation seems likely. Internal dilution is included in the resource estimates at the scale of the SMU. External dilution is not included in the mineral resource estimates.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It may not always be possible to make assumptions regarding metallurgical treatment processes and parameters when reporting Mineral Resources. Where no assumptions have been made, this should be reported.*	Olgal appears to be a fairly typical copper porphyry, possibly similar to the nearby Ok Tedi deposit. Mineralogical studies indicate that copper occurs as of fine grained (40-50 micron) disseminated chalcopyrite with local minor bornite. Chalcocite is also present in the supergene zone. Therefore, it is assumed that Olgal will be amenable to metallurgical treatment by conventional flotation.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation.*	No assumptions have been made regarding possible waste and process residue disposal options. The deposit is located in challenging terrain and could have acid mine drainage issues due to the sulphide content of the mineralisation. Nearby Ok Tedi might be a reasonable analogy in terms of the issues faced regarding waste and process residue disposal.

	While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.*	Dry bulk density was determined by a simple immersion method. Sample length is typically 10cm, but may be up to 20cm, and a total of 164 samples have been tested for Olgal. Density is influenced by rock type and alteration. Samples were weighed before and after drying for 5-6 hours in a wood-fire heated oil-drum oven, with limited temperature control, to determine dry weight and moisture content. The immersion method involved weighing the samples in air and then suspended in water. There is potential for water absorption during immersion, depending on the porosity of the rock, which could impact on results.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (i.e., relative confidence in tonnage/grade estimations, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	The entire Mineral Resource is classified as Inferred, based on the Competent Person's experience with similar copper porphyry deposits elsewhere. The maximum extrapolation distance of 240m is considered reasonable given the style of mineralisation, available data and known geological constraints. This scheme is considered to take appropriate account of all relevant factors, including the relative confidence in tonnage and grade estimates, confidence in the continuity of geology and metal values, and the quality, quantity and distribution of the data. The classification appropriately reflects the Competent Person's view of the deposit.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	This Mineral Resource estimates have been reviewed by Highland Pacific and H&SC personnel. No material issues were identified as a result of these reviews.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.*	The relative accuracy and confidence level in the Mineral Resource estimates are considered to be in line with the generally accepted accuracy and confidence of the nominated JORC Mineral Resource categories. This has been determined on a qualitative, rather than quantitative, basis, and is based on the estimator's experience with a number of similar deposits elsewhere. The main factor that affects the relative accuracy and confidence of the estimate is drill hole spacing, because there are few strong geological controls on the primary mineralisation. The estimates are local, in the sense that they are localised to model blocks of a size considered appropriate for local grade estimation. There are no tonnages relevant to

	• *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	technical and economic analysis because all Mineral Resources are classified as Inferred. No production data is available for this part of the deposit as it remains unmined.