ASX Release
4 August 2023

Metallurgical testing opens the door to simplify the Hualilan flowsheet, lower capex, and significantly de-risk the project

Highlights

- **Recently completed metallurgical testwork re-examining cyanide leaching technology on Hualilan Mineralisation has indicated high gold and silver recoveries.**
- **Historical testwork had indicated poor recoveries (<40%) for gold and silver and high cyanide consumption.**
- **Recent Bottle Roll testwork assessing a Carbon-in-Pulp ("CIP") or Carbon-in-Leach ("CIL") processing route, has resulted in 89% recovery for gold; primary grind size was 100 µm (P_{80}) and sodium cyanide consumption was 0.7 kg/t.**
- **Testwork has been conducted at SGS Lakefield laboratory in Canada, with confirmatory testing completed, and additional optimization testing underway, at Base Met Lab in Kamloops, Canada.**
- **A potential conventional CIP/CIL processing route offers several advantages including: lower capital cost than with a flotation alternative; simplification of the flow sheet and operability; lower process OPEX; lower transport costs for gold and silver doré compared to concentrate; and higher payabilities of precious metals.**
- **Additionally, Column Leach testwork aimed at examining a supplementary heap leach processing route for low-grade mineralisation is underway, with early results identifying an economically viable process route to recovering gold and silver from this material which would have previously been considered waste.**
- **The results suggest significant upside for the project and a more comprehensive evaluation of these processing alternatives must be performed. Consequently, the decision has been made to delay the release of the Scoping Study in order to properly consider the CIP/CIL processing route option.**
- **A Second, larger stage of Column Leach testwork has commenced this week, whereby 13 samples of varying grades and material types will be leached for 90 days, to give more detailed insight into grade/recovery relationships and the impact of lithology on recovery. Considering the lead time for final results, the upside presented by potentially attaching a low-grade heap leach option to either a CIL/CIP or Flotation primary process route will instead be evaluated during the Pre-Feasibility Study, rather than further delay the Scoping Study.**

Commenting on the results, CEL Managing Director, Mr Kris Knauer, said

"Hualilan has the ability to continually surprise on the upside. A program of metallurgical testwork conducted, really, for completeness, has the potential to change the way Hualilan is developed.

Initial trade-off work indicates that the outcome between developing Hualilan via flotation compared to CIL needs to be properly evaluated in the Scoping Study. CIL offers several advantages including; production and sale of s gold and silver doré, lower up-front capital, higher payabilities and simplification of the flow sheet and logistics.

Additionally, the ability to use CIL offers a number of benefits such a likely perceived lower overall project risk profile and a broadening of the potential investor/finance base for the Company."

Challenger Gold (**ASX: CEL**) ("**CEL**" the "**Company**") is pleased to provide an update on its Scoping Study at the flagship 2.8 million ounce[1] Hualilan Gold project in San Juan, Argentina. The Scoping Study is focused on the high-grade core of mineralisation at Hualilan comprising 8.5 Mt at 5.4 g/t AuEq (4.8 g/t gold, 14.2 g/t silver, 1.6% zinc, 0.14% lead) at a 2.3 g/t AuEq cut-off.

In the past weeks the Company received results from testwork that was conducted by SGS Lakefield, which is regarded as one of the world's leading metallurgical laboratories. The results demonstrate excellent recoveries of gold and silver using traditional sodium cyanide leaching. This testwork was conducted using a master composite, designed to be representative of the in-pit component of the Hualilan Mineral Resource Estimate ("**MRE**"). Testwork was immediately initiated at a second leading laboratory, Base Met Lab in Kamloops, Canada, to independently verify these results, with this confirmatory testwork also achieving recoveries of 89% for gold and 71% for silver. The Base Met Lab testwork was conducted using a second master composite, derived from a different series of Hualilan drill holes, and also designed to be representative of the in-pit component of the Hualilan MRE.

Sodium Cyanide Leach Testing

As part of the Scoping Study an initial series of sodium cyanide leach testwork was undertaken at the SGS laboratories in Lakefield Canada to rule out process routes, other than gravity and flotation, as viable options for the Hualilan Gold Project. This testwork was conducted on a composite designed to be representative of the in-pit component of the MRE, ROM-1 with a grade of 1.3 g/t gold and 8.4 g/t silver. The testwork demonstrated recoveries of 89.3% for gold and 46.1% for silver at a coarse grind of 100 µm (P_{80}) and a relatively low cyanide consumption of 0.7 kg/t (Table 1).

The Company subsequently repeated, and expanded, the sodium cyanide leach testwork panel at a second laboratory (Base Met Lab), also located in Canada, on a second composite sample (ROM-2). The second composite was produced by combining 148 metres of quarter core from several drillholes which were selected to represent an expected typical composite from the open pit component of the MRE. This sample has an average core sample assay grade of 1.06 g/t gold and 6.60 g/t silver. This testwork produced similar results producing recoveries of 88.6% for gold and 70.7% for silver at a 75 µm (P_{80}) primary grind and sodium cyanide consumption of 1.4 kg/t (results: Table 1).

Test	Sample	Grind Size (P_{80})	Laboratory	NACN Consumed	Lime Consumed	24hr Leach Extraction	72hr Leach Extraction
CN-8	ROM 1	50 µm	SGS	1.04 kg/t	0.8 kg/t	81.3% (Au)	84.1% (Au)
						42.3% (Ag)	47.9% (Ag)
CN-6	ROM 1	100 µm	SGS	0.72 kg/t	0.6 kg/t	89.3% (Au)	85.1% (Au)
						46.1% (Ag)	52.7% (Ag)
CN4	ROM 2	45 µm	Base Met Lab	1.7 kg/t	0.8 kg/t	81.5% (Au)	71.1% (Ag)
						86.6% (Au)	74.2% (Ag)
CN1	ROM 2	75 µm	Base Met Lab	1.4 kg/t	0.9 kg/t	88.6% (Au)	88.3% (Au)
						70.7% (Ag)	71.9% (Ag)
CN2	ROM 2	150 µm	Base Met Lab	1.0 kg/t	0.7 kg/t	83.0% (Au)	84.1% (Au)
						66.2% (Ag)	67.6% (Ag)
CN3	ROM 2	3.3 mm (6 mesh)	Base Met Lab	0.3 kg/t	0.8 kg/t	47.6% (Au)	49.7% (Au)
						35.2% (Ag)	40.4% (Ag)
CN5	ROM 2	6.3 mm (1/4 inch)	Base Met Lab	0.3 kg/t	0.4 kg/t	38.2% (Au)	42.7% (Au)
						33.5% (Ag)	37.8% (Ag)

Table 1 - Bottle Roll Cyanide leach test of whole Composites

Leach testing after Gravity Recovery

Additionally, the company undertook bottle roll tests after gravity recovery of gold and silver on samples ROM 1 and ROM-2 (Table 2). Results for gravity recovery from the SGS testwork are not yet available so an assumed gravity recovery of 36%, which is based on the average gravity recovery in the skarn mineralisation and Gravity Recoverable Gold ("**GRG**") testing, has been used as a proxy to calculate potential recoveries from combined gravity followed by CIL. The combined gravity and cyanide leach results indicate similar ultimate recoveries of gold and silver.

Column Leach Testing

Typically, Column leach tests are conducted over a 90-day period using a representative composite sample of mineralised material to approximate conditions on a Heap Leach pad and are an industry accepted standard used to estimate expected gold and silver recoveries via heap leaching. Heap leaching is well understood in Argentina with two nearby operating mines, Barrick Gold's Veladero (~ 400,000 Oz pa) and Fortuna Silver's Lindero (110,000 Oz pa), both being Heap Leach operations.

Tests CN3 and CN5 (Table 1) undertaken at Base Met Lab were bottle roll tests (over 72 hours) on samples at a very coarse grind of 3.3 mm (~1/8 inch) and 6.3 mm (~1/4 inch) as a preliminary check as to the potential viability of a heap leach as an option to treat the lower grade material. The Company

considered that the recoveries of 40%-50% for gold and silver provided justification to proceed to column tests using the ROM-2.

Test	Sample/Lab	Grind Size (P_{80})	NACN Consumed	Lime Consumed	Gravity Extraction	Tails Leach Extraction[1]	Total Extraction[2]
CN-5	ROM 1 SGS	100 µm	0.55 kg/t	0.58 kg/t	36.0%[3] (est)	82%[1] (Au)	88.5 (Au)
					no assay (Ag)	56.8%[1] (Ag)	not calc
CN-7	ROM 1 SGS	50 µm	1.00 kg/t	0.74 kg/t	36.0%[3] (est)	65%[1] (Au)	77.6% (Au)
					no assay (Ag)	37.4%[1] (Ag)	not calc
GR-CN-8	ROM 2 Base Met Lab	75µm	1.35 kg/t	1.3 kg/t	23.8% (Au)	79.2%[1] (Au)	84.8% (Au)
					no assay (Ag)	No assay (Ag)	72% (Ag)

Table 2 - Bottle Roll Cyanide leach test of Composites after gravity recovery

Early results of the first column test, which is now nearing completion, exceeded expectations and demonstrated recoveries which surpassed those of bottle roll tests CN-3 and CN-5. Accordingly, a second column test was initiated to demonstrate the results of the first column test were reproducible and not a result one-off variability. This second Column Test is at day 33 of 90 days and is currently tracking to duplicate the performance of the first Column Test.

While the initial Column test results are encouraging, a more comprehensive program of Column testwork needs to be completed before definitive conclusions on the possible viability of heap leach as a processing route for Hualilan can be drawn. This program of 13 Column tests includes: ~0.2 g/t Au, ~0.4 g/t Au, ~0.6 g/t Au, ~0.8 g/t Au and ~1.0 g/t Au for Sediment-hosted and Intrusion-hosted mineralisation, which makes up the majority of the potential low grade feed material by mass; and, ~0.2 g/t Au, ~0.4 g/t Au and ~1.0 g/t Au for the Skarn-hosted mineralisation. Results for this program are expected to be available around the end of October 2023.

[1] Recovery expressed at total recovery of the Au and Ag in the gravity tails
[2] Metal recoveries are subject to final assays and metal balances at conclusion of the tests.
[3] 36% based on fixed extraction pending confirmation of actual gravity recovery in test from SGS

Ends

This ASX release was approved by the Managing Director.

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Previous announcements referred to in this release include:

21 July 2020 - Further outstanding metallurgical results from the Hualilan Gold Project
22 Feb 2021 - Gold recoveries of 91-94% from Phase 1 metallurgical testing at Challenger's Hualilan Gold Project
17 May 2021 - CEL Delivers Exceptional Metallurgical Test Work Results from the Hualilan Gold Project
3 May 2022 - Outstanding results from metallurgical testing significantly upgrade CEL's Hualilan Gold Project

COMPETENT PERSON STATEMENT – EXPLORATION RESULTS AND MINERAL RESOURCES

The information that relates to sampling techniques and data, exploration results, geological interpretation and Mineral Resource Estimate has been compiled Dr Stuart Munroe , BSc (Hons), PhD (Structural Geology), GDip (AppFin&Inv) who is a full-time employee of the Company. Dr Munroe is a Member of the AusIMM. Dr Munroe has over 20 years' experience in the mining and metals industry and qualifies as a Competent Person as defined in the JORC Code (2012).

Dr Munroe has sufficient experience of relevance to the styles of mineralisation and the types of deposits under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results and Mineral Resources. Dr Munroe consents to the inclusion in this report of the matters based on information in the form and context in which it appears. The Australian Securities Exchange has not reviewed and does not accept responsibility for the accuracy or adequacy of this release.

The Mineral Resource Estimate for the Hualilan Gold Project was first announced to the ASX on 1 June 2022 and updated 29 March 2023. The Mineral Resource Estimate for the El Guayabo Project was first announced to the ASX on 14 June 2023. The Company confirms it is not aware of any information or assumptions that materially impacts the information included in the announcements and that the material assumptions and technical parameters underpinning the Mineral Resource Estimates continue to apply and have not materially changed.

About Challenger Gold

Challenger Gold Limited's (ASX: CEL) aspiration is to become a globally significant gold producer. The Company is developing two complementary gold/copper projects in South America with am MRE of **2.8 million ounces of gold equivalent** recently announced for the Hualilan Gold Project in San Juan, Argentina in 2022.

The Company strategy is for the 100% owned Hualilan Gold Project to provide a high-grade low capex operation in the near term while it prepares for larger bulk gold operation at El Guaybo in Ecuador.

1. **Hualilan Gold Project**, located in San Juan Province Argentina, is a near term development opportunity. It has extensive drilling with over 150 historical and almost 900 CEL drill-holes. The Company has released an Interim JORC 2012 Compliant resource of **2.8 Moz AuEq** which remains open in most directions. This resource contains a high-grade core **9.9 Mt at 5.0 g/t AuEq for 1.6 Moz** AuEq and **29.1Mt at 2.2 g/t AuEq for 2.4 Moz AuEq** within the larger MRE of **60.6 Mt at 1.4 g/t AuEq for 2.8** Moz AuEq. The resource was based on 216,000 metres of CEL's 264,000 metre drill program. In the past 3 years CEL has completed more than 220,000 metres of drilling. Results have included **6.1m @ 34.6 g/t Au, 21.9 g/t Ag, 2.9% Zn**, **67.7m @ 7.3 g/t Au, 5.7 g/t Ag, 0.6% Zn, and 63.3m @ 8.5 g/t Au, 7.6 g/t Ag, 2.8% Zn**. This drilling intersected high-grade gold over 3.5 kilometres of strike and extended the known mineralisation along strike and at depth in multiple locations. Recent drilling has demonstrated this high-grade skarn mineralisation is underlain by a significant intrusion-hosted gold system with intercepts including **209.0m at 1.0 g/t Au, 1.4 g/t Ag, 0.1% Zn** and **110.5m at 2.5 g/t Au, 7.4 g/t Au, 0.90% Zn** in intrusives. CEL's current program which is fully funded will include a Scoping Study, Pre-Feasibility Study, and regional exploration along the previously unexplored 30 kilometres of prospective stratigraphy.

2. **El Guayabo Gold/Copper Project** covers 35 sq kms in southern Ecuador and is located 5 kilometres along strike from the 17-million ounce Cangrejos Gold Project[1]. Prior to CEL the project was last drilled by Newmont Mining in 1995 and 1997 targeting gold in hydrothermal breccias. Historical drilling demonstrated potential to host significant gold and associated copper and silver mineralisation. Historical drilling has returned a number of intersections including 156m @ 2.6 g/t Au, 9.7 g/t Ag, 0.2% Cu and 112m @ 0.6 % Cu, 0.7 g/t Au, 14.7 g/t Ag which have never been followed up. CEL's maiden drilling program confirmed the discovery of a major Au-Cu-Ag-Mo gold system spanning several zones of significant scale. The Company has drilled fourteen regionally significant Au-soil anomalies with over 500 metres of mineralisation intersected at seven of these thirteen anomalies, confirming the potential for a major bulk gold system at El Guayabo. The Company has reported a **maiden 4.5 Moz gold equivalent MRE**. This MRE is based on 34 drill holes, for 22,572 metres, from the Company's Phase 1 and 2 diamond core drill program at its 100% owned El Guayabo concession. The drilling has focussed on 2 of the 7 anomalies that have returned plus 500 metre drill intercepts and mineralisation remains open in all directions.

[1] Source : Lumina Gold (TSX : LUM) July 2020 43-101 Technical Report

Domain	Category	Mt	Au g/t	Ag g/t	Zn %	Pb %	AuEq g/t	AuEq (Mozs)
US$1800 optimised shell > 0.30 ppm AuEq	Indicated	45.5	1.0	5.1	0.4	0.06	1.3	1.9
	Inferred	9.6	1.1	7.3	0.4	0.06	1.2	0.4
Below US$1800 shell >1.0ppm AuEq	Inferred	5.5	2.1	10.7	1.0	0.06	2.6	0.5
	Total	***60.6***	***1.1***	***6.0***	***0.4***	***0.06***	***1.4***	***2.8***

Note: Some rounding errors may be present

Table 1 Upgraded Hualilan MRE, March 2023

Table 1 Comparison 2022 MRE with Upgraded MRE (reported at a 1.0 g/t Cut-off)

[1] Gold Equivalent (AuEq) values - Requirements under the JORC Code

- Assumed commodity prices for the calculation of AuEq is Au US$1900 Oz, Ag US$24 Oz, Zn US$4,000/t, Pb US$2000/t
- Metallurgical recoveries are estimated to be Au (95%), Ag (91%), Zn (67%) Pb (58%) across all ore types (see ***JORC Table 1 Section 3 Metallurgical assumptions)*** based on metallurgical test work.
- The formula used: AuEq (g/t) = Au (g/t) + [Ag (g/t) x 0.012106] + [Zn (%) x 0.46204] + [Pb (%) x 0.19961]
- *CEL confirms that it is the Company's opinion that all the elements included in the metal equivalents calculation have a reasonable potential to be recovered and sold.*

Domain	Category	Mt	Au (g/t)	Ag (g/t)	Cu (%)	Mo (ppm)	AuEq (g/t)	AuEq (Mozs)
US$1800 optimised shell > 0.3 g/t AuEq	Inferred	212.2	0.36	2.8	0.07	6.5	0.50	3.4
Below US$1800 shell >0.4 g/t AuEq	Inferred	56.5	0.46	1.8	0.07	7.5	0.59	1.1
Total	***Inferred***	***268.7***	***0.38***	***2.6***	***0.07***	***7.2***	***0.52***	***4.5***

Note: Some rounding errors may be present

Table 2 El Guayabo Interim MRE

[1] Gold Equivalent (AuEq) values - Requirements under the JORC Code

- Assumed commodity prices for the calculation of AuEq is Au US$1800 Oz, Ag US$22 Oz, Cu US$9,000/t, Mo US$44,080/t
- Metallurgical recoveries are estimated to be Au (85%), Ag (60%), Cu (85%) Mo (50%) across all ore types (see ***JORC Table 1 Section 3 Metallurgical assumptions)*** based on metallurgical test work.
- The formula used: AuEq (g/t) = Au (g/t) + [Ag (g/t) x 0.012222] + [Cu (%) x 1.555] + [Mo (%) x 4.480026]
- *CEL confirms that it is the Company's opinion that all the elements included in the metal equivalents calculation have a reasonable potential to be recovered and sold.*

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 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.*	Stream sediment samples with a weight of 1 – 2 kg from each site were collected from the surface of recently active drainage channels. The samples were collected dry and sieved to -0.85mm, + 0.075 mm (coarse sand to sand fraction). The coarse and fine fraction of the sample were discarded at the sample site. Soil Samples with a weight of 1 – 1.5 kg from each site were collected from the base of a small pit of depth 0.1 to 0.3 metres. The sample from the base of the pit is dry and sieved to -0.85mm, + 0.075 mm (coarse sand to sand fraction). The coarse and fine fraction of the sample were discarded at the sample site. Stream sediment and soil samples were transported to San Juan for preparation. Samples were dried and a 250g split was pulverised to 85% passing 75 microns. Pulps were analysed following qua regia digestion with ICP-MS finish, including trace detection limit method for Au (25g charge) plus 50 additional elements. Rock chip samples with a weight of 2-3 kilograms are collected from representative exposure. Samples are dried and prepared at the laboratory Samples were crushed to approximately 85% passing 2mm. A 500g or a 1 kg sub-sample was taken and pulverized to 85% passing 75µm. A 50g charge was analysed for Au by fire assay with AA determination. Where the fire assay grade is > 10 g/t gold, a 50g charge was analysed for Au by Fire assay with gravimetric determination. In addition, a 10g charge was analysed for 48 elements by 4-acid digest and ICP-MS determination. For Ag > 100 g/t, Zn, Pb and Cu > 10,000 ppm and S > 10%, overlimit analysis was done by the same method using a different calibration. Unused pulps are returned from the laboratory to the Project and stored in a secure location, so they are available for any further analyses.
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).*	No drilling is being reported
Drill sample recovery	- *Method of recording and assessing core and chip sample recoveries and results assessed.*	No drilling is being reported

Criteria	JORC Code explanation	Commentary
	- *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.*	
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.*	Rock chip samples are logged for lithology, weathering, alteration, mineralisation and measurements are made of any relevant structures in the vicinity of the sample. Stream sediment samples are not 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.*	Included with the 186 stream sediment samples for which final results have been received are 5 field duplicate samples. Duplicate samples are taken using the same method at the same location as the original sample. The duplicate results are well within expected results indicating strong representivity. Duplicate samples were not taken for the rock chip samples collected
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*	The laboratory procedures are consistent with international best practice and are suitable for samples collected. The MSA Laboratories preparation laboratory was last visited in September 2022. The ALS Laboratories preparation facility in Mendoza has not yet been inspected by CEL representatives. In addition to external QAQC, the laboratories present internal laboratory standards for each job to gauge precision and accuracy of assays reported. Included in the rock chip and soil samples for which final results have been received are duplicate samples, CRM (standard) pulp samples and blanks. 6 different CRM samples were used. All

Criteria	JORC Code explanation	Commentary
	derivation etc. - *Nature of quality control procedures adopted (eg standards blanks duplicates external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	reported analyses of the CRMs are within acceptable error. The blank samples are from a gravel source near Iglesiana and a quarry near San Juan. All blank samples returned results that suggest low levels of contamination during preparation. Standards and blanks were not submitted with the stream sediment 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 entry procedures data verification data storage (physical and electronic) protocols.* - *Discuss any adjustment to assay data.*	Final sample assay analyses are received by digital file in PDF and CSV format. There is no adjustment made to any of the assay values received. The original files are backed-up and the data copied into a cloud-based drill hole database, stored offsite from the project. The data is remotely accessible for geological modelling and exploration planning. Assay results summarised in the context of this report have been rounded appropriately to 2 significant figures. No assay data have been otherwise adjusted.
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.*	The East and West location of stream sediment, soil and rock chip samples are surveyed with handheld GPS which is generally precise to +/- 10-15 metres. The locations have been surveyed in WGS84 UTM zone 19s. The samples are then draped on detailed topographic models which are precise to 2m elevation.
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.*	No regular data spacing 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.*	Rock chip and stream sediment samples have not been taken relative to the orientation of the geology.
Sample security	- *The measures taken to ensure sample security.*	Samples were under constant supervision by site security, senior technical personnel and courier contractors prior to delivery to the preparation laboratories in San Juan and Mendoza.

Criteria	JORC Code explanation	Commentary
Audits or reviews	- *The results of any audits or reviews of sampling techniques and data.*	There has not yet been any independent reviews of the sampling techniques and data.

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 Hualilan and El Peñon projects comprises fifteen Minas (equivalent of mining leases) and five Demasias (mining lease extensions) held under an farmin agreement with Golden Mining SRL (Cerro Sur) and CIA GPL SRL (Cerro Norte). Fourteen additional Minas and eight exploration licences (Cateos) have been transferred to CEL under a separate farmin agreement. Six Cateos and eight requested mining leases are directly held. This covers all of the currently defined mineralization and surrounding prospective ground. There are no royalties held over the tenements. *Granted mining leases (Minas Otorgadas) at the Hualilan Project*

Name	Number	Current Owner	Status	Grant Date	Area (ha)
Cerro Sur					
Divisadero	5448-M-1960	Golden Mining S.R.L.	Granted	30/04/2015	6
Flor de Hualilan	5448-M-1960	Golden Mining S.R.L.	Granted	30/04/2015	6
Pereyra y Aciar	5448-M-1960	Golden Mining S.R.L.	Granted	30/04/2015	6
Bicolor	5448-M-1960	Golden Mining S.R.L.	Granted	30/04/2015	6
Sentazon	5448-M-1960	Golden Mining S.R.L.	Granted	30/04/2015	6
Muchilera	5448-M-1960	Golden Mining S.R.L.	Granted	30/04/2015	6
Magnata	5448-M-1960	Golden Mining S.R.L.	Granted	30/04/2015	6
Pizarro	5448-M-1960	Golden Mining S.R.L.	Granted	30/04/2015	6
Cerro Norte					
La Toro	5448-M-1960	CIA GPL S.R.L.	Granted	30/04/2015	6
La Puntilla	5448-M-1960	CIA GPL S.R.L.	Granted	30/04/2015	6
Pique de Ortega	5448-M-1960	CIA GPL S.R.L.	Granted	30/04/2015	6
Descrubidora	5448-M-1960	CIA GPL S.R.L.	Granted	30/04/2015	6
Pardo	5448-M-1960	CIA GPL S.R.L.	Granted	30/04/2015	6

Sanchez	5448-M-1960	CIA GPL S.R.L.	Granted	30/04/2015	6
Andacollo	5448-M-1960	CIA GPL S.R.L.	Granted	30/04/2015	6

Mining Lease extensions (Demasias) at the Hualilan Project

Name	Number	Current Owner	Status	Grant date	Area (ha)
Cerro Sur					
North of "Pizarro" Mine	195-152-C-1981	Golden Mining S.R.L.	Granted	29/12/1981	2.42
Cerro Norte					
South of "Andacollo" Mine	545.208-B-94	CIA GPL S.R.L.	Pending Reconsideration	14/02/1994	1.83
South of "Sanchez" Mine	545.209-B-94	CIA GPL S.R.L.	Registered	14/02/1994	3.50
South of "La Toro" Mine	195-152-C-1981	CIA GPL S.R.L.	Granted	29/12/1981	2.42
South of "Pizarro" Mine	545.207-B-94	Golden Mining S.R.L.	Registered	14/02/1994	2.09

Requested Mining Leases (Minas Solicitados)

Name	Number	Status	Area (ha)
Elena	1124.328-G-2021	Registered	2,799.24
Juan Cruz	1124.329-G-2021	Granted	933.69
Paula (over "Lo Que Vendra")	1124.454-G-2021	Application	1,460.06
Argelia	1124.486-G-2021	Registered	3,660.50
Ana Maria (over Ak2)	1124.287-G-2021	Registered	5,572.80
Erica (Over "El Peñón")	1124.541-G-2021	Application	6.00
Silvia Beatriz (over “AK3”)	1124.572-G-2021	Application	2,290.75
Soldado Poltronieri (over 1124188-20, 545867-R-94 and 545880-O-94)	1124.108-2022	Application	777.56

Mining Lease Farmin Agreements

Name	Number	Transfrred to CEL	Status	Area (ha)
Marta Alicia	2260-S-58	In Process	Granted	23.54
Marta	339.154-R-92	In Process	Granted	478.50
Solitario 1-5	545.604-C-94	In Process	Application	685.00
Solitario 1-4	545.605-C-94	In Process	Registered	310.83

Criteria	JORC Code explanation	Commentary

Solitario 1-1	545.608-C-94	In Process	Application	TBA
Solitario 6-1	545.788-C-94	In Process	Application	TBA
AGU 3	11240114-2014	No	Granted	1,500.00
AGU 5	1124.0343-2014	No	Granted	1,443.58
AGU 6	1124.0623-2017	No	Granted	1,500.00
AGU 7	1124.0622-S-17	No	Granted	1,500.00
Guillermina	1124.045-S-2019	No	Granted	2,921.05
El Petiso	1124.2478-71	No	Granted	18.00
Ayen	1124.495-I-20	No	Granted	2059.6

Exploration Licence (Cateo) Farmin Agreements

Name	Number	Transfrred to CEL	Status	Area (ha)
-	295.122-R-1989	In process	Registered	1,882.56
-	338.441-R-1993	In process	Granted	2,800.00
-	545.880-O-1994	In process	Registered	149.99
-	414.998-2005	No	Registered	977.5
-	1124.011-I-07	No	Granted	2552
-	1124.012-I-07	No	Registered	6677
-	1124.013-I-07	No	Granted	5818
-	1124.074-I-07	No	Granted	4484.5

Exploration Licence (Cateo) Held (Direct Award)

Name	Number	Transfrred to CEL	Status	Area (ha)
-	1124-248G-20	Yes	Current	933.20
-	1124-188-G-20 (2 zones)	Yes	Current	327.16
-	1124.313-2021	Yes	Current	986.41
-	1124.564-G-2021	Yes	Current	1,521.12
-	1124.632-G-2022	Yes	Current	4,287.38

There are no known impediments to obtaining the exploration licenses or operating the Project.

Exploration done by other parties	- *Acknowledgment and appraisal of exploration by other parties.*	At Hualilan, previous explorers have collected rock chip samples from underground (235 samples known) but few samples taken regionally. The location and geological observations of these rock chip samples has not been recorded and these data have not been relied upon. At Hualilan and nearby, 321 known stream sediment samples have been taken by previous explorers. The precision of the location of these samples and the sample collection procedures have not been recorded. These results of these surveys will be used to guide reconnaissance surveying.

Criteria	JORC Code explanation	Commentary
		At El Peñon, 148 stream sediment samples were collected by Centenera Mining Corporation (2004). A further 85 stream sediment samples were taken in a follow-up regional survey by Committee Bay Resources (2005). The location and final assay data is known only for the 2004 survey. The data from the 2005 survey is not known. The results of these surveys and some satellite data interpretation are recorded in summary reports. Little is known about the sample and assay techniques used. These earlier exploration results are used as a guide only for the current exploration program.
Geology	- *Deposit type geological setting and style of mineralisation.*	Mineralisation at Hualilan occurs in all rock types where it preferentially replaces limestone, shale and sandstone and occurs in fault zones and in fracture networks within dacitic intrusions. The mineralisation is Zn-(Pb-Cu-Ag) distal skarn (or manto-style skarn) overprinted with vein-hosted mesothermal to epithermal Au-Ag mineralisation. It has been divided into three phases – prograde skarn, retrograde skarn and a later quartz-rich mineralisation consistent with the evolution of a large hydrothermal system. Precise mineral paragenesis and hydrothermal evolution is the subject of on-going work which is being used for exploration and detailed geometallurgical test work. Gold occurs in native form as inclusions with sulphide (predominantly pyrite) and in pyroxene. The mineralisation commonly contains pyrite, chalcopyrite sphalerite and galena with rare arsenopyrite, pyrrhotite and magnetite. Mineralisation is either parallel to bedding in bedding-parallel faults, in veins or breccia matrix within fractured dacitic intrusions, at lithology contacts or in east-west striking steeply dipping siliceous faults that cross the bedding at a high angle. The faults have thicknesses of 1–4 metres and contain abundant sulphides. The intersection between the bedding-parallel mineralisation and east-striking cross veins seems to be important in localising the mineralisation. Complete oxidation of the surface rock due to weathering is thin. A partial oxidation / fracture oxidation layer near surface is 1 to 40m thick and has been modelled from drill hole intersections. El Peñon hosts a similar sedimentary sequence to Hualilan, repeated by a series of north-south striking detachment faults that have inverted the sedimentary sequence. No dacite intrusions have been mapped at El Peñon. Previous explorers were working with a sedimentary replacement Au-Ag mineralisation model. More detailed results received by CEL to data suggest the area may represent the upper levels of a porphyry Cu-Mo system with peripheral Au-Ag-Bi-Pb-Zn.
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:*	No drill hole data is being reported

Criteria	JORC Code explanation	Commentary
	- *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.*	
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.*	No weighting, top cuts or aggregate has been applied to the reported data. The following metals and metal prices have been used to report gold grade equivalent (AuEq): Au US$ 1900 / oz Ag US$24 /oz, Zn US$ 4,000 /t and Pb US 2,000/t. Average metallurgical recoveries for Au, Ag, Zn and Pb have been estimated from the results of Hualilan metallurgical test work completed by SGS Metallurgical Operations in Lakefield, Ontario using a combination of gravity and flotation combined metallurgical samples as detailed in the Criteria below. For the AuEq calculation average metallurgical recovery is estimated as 94.9% for gold, 90.9% for silver, 67.0% for Zn and 57.8% for Pb. Accordingly, the formula used for Au Equivalent is: AuEq (g/t) = Au (g/t) + [Ag (g/t) x (24/1900) x (0.909/0.949)] + [Zn (%) x (40.00*31.1/1900) x (0.670/0.949)] + (Pb (%) x 20.00*31.1/1900) x (0.578/.9490}.
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*	No width or intercept lengths have been reported.

Criteria	JORC Code explanation	Commentary
	clear statement to this effect (eg 'down hole length true width not known').	
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.*	Representative maps and sections are provided in the body of reports released to the ASX.
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 available final data have been reported where possible and plans of all drilling with results.
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.*	Ground magnetic studies over the El Peñon and Lo Que Vendra concessions are being done on east-west line traverses with a line spacing of 100 metres by an independent contractor using 3 GEM 19 Overhauser mobile magnetometers and one GEM 19 Overhauser base station magnetometer. Line survey is by handheld Garmin GPS . Daily data is received for review. In total 880 line kilometres of ground magnetic data is expected to be collected, covering 8,140 hectares. The existing magnetic survey was completed in the same way as above but on a 40 metre line spacing. Interpretation of rock chip sampling at Hualilan is supported by the geological model generated for that deposit.
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.*	CEL Plans to undertake the following over the next 12 months • Ground magnetic surveys at El Peñon and Lo Que Vendra. • Grid soil sampling at El Peñon and Hualilan • Geological mapping using high resolution satellite data and geophysics. • Field mapping program targeting extensions of known mineralisation at Hualilan. • Drill testing