

## **QUARTERLY REPORT MARCH 2017**

#### **HIGHLIGHTS**:

- Option Agreement to acquire Vidalita and Jotahues gold projects in Chile became unconditional; Option Fee shares issued.
- Results from geochemical programs undertaken by Emu have confirmed the prospectivity of the projects which were acquired.
- Core recovered from Emu's maiden drilling program is indicative of the upper or peripheral parts of a high sulphidation epithermal system.
- Assays from initial diamond drilling program expected during May.

Australian explorer, Emu NL (ASX: EMU), provides the following update in relation to its activities during the March quarter of 2017, including at the Company's Vidalita gold project in northern Chile.

Since completing its due diligence investigation on the Vidalita and Jotahues projects in northern Chile (effective 11<sup>th</sup> December 2016), the Company has undertaken an active exploration program which enabled some drilling to be conducted during the current field season in the high Andes. Prior to the shareholders' meeting (held 8<sup>th</sup> February 2017) to approve the Chilean acquisition transaction, the subject of the Option Agreement, these activities were limited to geological mapping, surface sampling and ground geophysics (induced polarization). Post the shareholders' meeting, the Company sought and obtained regulatory approval for drilling which subsequently commenced 22<sup>nd</sup> March 2017.

#### **SURFACE SAMPLING**

#### **VIDALITA**

Previous prospecting and rock sampling by Prospex/BLC (see project summary below) during 2015/16 had defined an area on the western side of the Vidalita project characterised by elevated levels of gold, silver, arsenic, antimony, lead and mercury, being a typical geochemical assemblage of high sulphidation epithermal gold/silver mineralised systems (**HSE**). It was primarily on the basis of this information, the geological setting and the prospectivity of the Maricunga Belt that the Company entered into the Option Agreement with Prospex/BLC. Emu has no knowledge, due search and enquiry having been made, of the project having been drilled by prior explorers.

In December 2016 and January 2017, the Company completed two programs of soil geochemistry within the Vidalita concessions. These programs defined an area of approximately 3 x 2km showing the same elements in highly anomalous proportions in the soils, thus confirming the earlier results (Figure 1 shows the gold results).

The Company has collected further rock samples confirming previous results and showing additional evidence of mineralisation, thus generating more drill targets. Typically these rock samples consist of banded chalcedonic silica, silica and volcanic breccias containing sulphides (or ex sulphides) and minerals such as alunite (a typical alteration mineral associated with HSE). In April, to follow up anomalous silver, mercury and base metal rock samples, two additional soil lines (on the same 400 x 50m regional grid) were added in the northern part of Vidalita. During this work, rock samples were collected from line 6,938,900N showing evidence of epithermal style



mineralisation similar to those in the ASX Release dated 11<sup>th</sup> April 2017. This occurrence and the associated geochemistry has enlarged the prospective zone to the north-south length of the Vidalita property, an area of approximately 4 x 2km. Results are pending for these additional surface samples.

Mapping at Vidalita is heavily reliant on interpreting the colluvial material as outcrop is sparse and it is on that basis that the knowledge of the underlying geology has been established.

Based on these surface sampling results, the Company applied for regulatory drilling approval.

#### **JOTAHUES**

During March and April 2017, scree slope soil sampling was undertaken to collect additional material for geochemistry to follow up previous rock sample results which returned mercury and gold values. Results are pending.

#### INDUCED POLARISATION SURVEY

As previously reported (ASX Release 2<sup>nd</sup> February 2017), seven lines of pole-dipole induced polarisation were completed at Vidalita. A significant feature of interest is a large, low resistivity feature lying directly below the surficial geochemical anomaly.

#### **GROUND MAGNETICS**

126 line km of ground magnetic data were collected at Vidalita.

#### **DIAMOND DRILLING - VIDALITA**

Notwithstanding the tight time constraints, the Company elected to apply to drill some holes during the current field season. Prior to mobilising the camp and drilling equipment, regulatory approval had to be obtained to clear the access tracks, which was the limiting factor to commencing drilling. Being at high altitude, the Company had to make provision for inclement weather and medical events (altitude sickness) so the camp had to be of high standard.

The choice of drill targets posed a significant decision making process as the prospective area is very large, measuring approximately 4 x 2km, and particularly as the surface geochemistry may, at the end of the day, not be directly connected to or be immediately above the mineral deposit.

The plan was to try and drill a traverse across one of the many gold and silver soil/rock targets and to push the holes down to 300 to 400m to test for any high grade core to the system. Once these holes were completed, Emu then planned to drill a selection of the other targets be they soil/rock or induced polarisation targets.

Three diamond drill holes (total meterage of 442.5m) were completed at Vidalita. The locations of the holes are tabulated below.

| Hole ID | Easting | Northing  | Azimuth | Dip    | RL     | Effective vertical depth | Total<br>Depth |
|---------|---------|-----------|---------|--------|--------|--------------------------|----------------|
| 17DV1   | 492,600 | 6,935,900 | 270 deg | 65 deg | 4,886m | ~95m                     | 105.5m         |
| 17DV2   | 492,800 | 6,936,850 | 270 deg | 60 deg | 4,866m | ~167m                    | 193.35m        |
| 17DV3   | 492,500 | 6,935,900 | 270 deg | 60 deg | 4,884m | ~124m                    | 143.65m        |



Due to drilling difficulties experienced by the contractor as a result of swelling clays caused by the intense argillic (clay) alteration, the number of holes completed was less than planned and the holes did not reach their designed target depth.

Holes 17DV1 & 3 were targeted at a combined soil and rock geochemistry target. These holes intersected a sequence of dacitic volcanics +/- breccias, argillically (illilte/smectite clay) altered and containing disseminated and vein mineralisation (pyrite).

Hole 17DV2 intersected a similar sequence of mineralised (pyrite) dacitic volcanics to 90m. From there to the end of hole, it passed through a polymictic breccia (interpreted to be a diatreme) also intensely argillically altered. From ~170m to the end of hole, the breccia is flooded with iron oxides. This hole was intended to test both surface geochemistry and the resistivity target but was stopped ~80m short of the resistivity target. Diatremes (polymictic breccias) are a characteristic of mineralised HSE systems and, although the diatremes themselves may not be mineralised, there is a common association with HSE mineral deposits.

The main conclusions drawn by the Company from the information to hand are that the rocks intersected are part of the upper or peripheral parts of the style of mineralisation being sought (HSE). Significant additional drilling will be required and is justified to explore the property.

The last of the core was delivered to the laboratory on 20<sup>th</sup> April 2017. Depending on the laboratory's workload, results should be available by early May.

#### **CORPORATE**

As provided for in the Option Agreement with Propsex SpA and BLC SpA, 2.5 million ordinary shares were issued to Prospex on 23<sup>rd</sup> February 2017 following shareholder approvals received on 8 February (whereupon the agreement became unconditional). No further securities have been issued pursuant to The Option Agreement. Refer to 'ASX Waiver' section below for further details.

As announced on 17<sup>th</sup> March, the Company completed a placement to sophisticated investors raising approximately \$1.1 million to fund the reported drilling.

The Company raised a further \$1.5 million from the exercise of all of its 10 cent listed options, which expired 30 March 2017. The exercise of up to 4 million of these options was underwritten by Insync Equity Services Pty Ltd and Hartleys Limited, which exercised the shortfall of 223,381 options.

On 30<sup>th</sup> January 2017, the Company announced a change in Company Secretary with the appointment of Mr Damien Kelly.

#### ASX WAIVER – APPROVAL TO ISSUE SHARES

On 8 February 2017, the Company received shareholder approvals for the issue of up to 15 million shares (**Consideration Shares**; 2,500,000 of which were issued shortly after the approvals) in respect of the Option Agreement (for the option to purchase the Vidalita and Jotahues projects – **Projects**) with Prospex SpA and BLC SpA.

The following information is provided in accordance with a waiver granted by ASX permitting the Company to issue the balance of the Consideration Shares (12,500,000) more than 3 months after the date of the approvals:

- a) 2,500,000 Consideration Shares were issued during the reporting period;
- b) 12,500,000 of the Consideration Shares remain, conditionally, to be issued; and



- c) the conditions to and instalments in which the remainder of the Consideration Shares may be issued are:
  - i) 2,500,000 (approved for issue no later than 31 March 2019) if the Company elects to continue exploring the Projects and subject to it meeting its expenditure commitment in relation to the Projects (minimum of US\$1 million by 10 December 2018) and;
  - ii) 5,000,000 (approved for issue no later than 31 December 2020) if the Company exercises the option and defines a 500,000 ounce measured resource of gold on the Projects; and
  - iii) 5,000,000 (approved for issue no later than 31 December 2020) if the Company exercises the option and defines a 1,000,000 ounce measured resource of gold on the Projects.

#### **NEW PROJECTS**

Consistent with previous statements by the Company, Emu did and continues to look for new mineral exploration, development and mining opportunities within Australia and at various overseas jurisdictions.

For more information on the Company see the website www.emunl.com.au

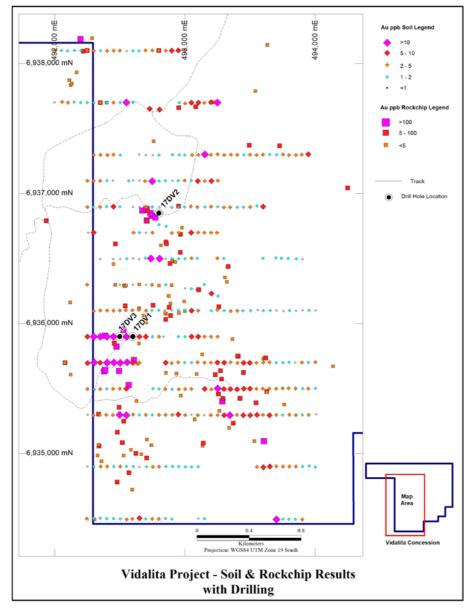
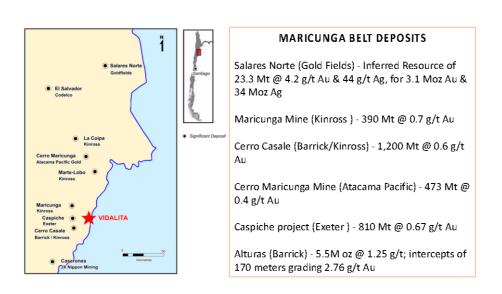


FIGURE 1



### **ABOUT THE CHILE GOLD PROJECTS**

The Vidalita and Jotahues gold projects are located in the highly mineralised Oligocene/Miocene Maricunga gold belt in northern Chile, approximately 200 km east from the city of Copiapó in the Atacama Region of Chile. The two projects cover an area of approximately 2,800 hectares of mineral exploration concessions and host alteration and mineralization that appear geologically similar to other high sulphidation oxide gold deposits of the Maricunga gold belt. The projects are accessed using a network of roads that link Copiapó with the Refugio project (Kinross), Cerro Casale project (Barrick/Kinross) and the Caspiche project (Exeter). Refugio is located 30 km to the northwest of Vidalita. Apart from the current programme, due enquiry having been made, the Company is unaware of the project having been drilled before the interest in the projects was acquired.





Emu has an option (**Emu's Option Agreement**) with Prospex SpA and BLC SpA, Chilean subsidiaries of Altius Minerals Corporation of Canada, to acquire 8 concessions at Vidalita and 3 concessions at Jotahues. The option under Emu's Option Agreement may be exercised any time up until 11<sup>th</sup> November 2019 by granting Prospex and BLC a 1% NSR on production and, subject to Emu expending US\$1 million in pursuing its rights under the Emu Option Agreement by 10<sup>th</sup> December 2018 and electing to continue with the project, allotting them 2.5 million Emu ordinary shares. In addition, if the option is exercised and subject to certain measured mineral resource hurdles being met (see ASX release 15<sup>th</sup> November 2016), up to a further 10 million shares will be issued. Prospex SpA in turn has an option under an agreement (the **Prospex's Option Agreement**) to acquire 6 of the 8 Vidalita concessions from local Chilean parties. Under the terms of that agreement, Prospex has the right to exercise that option by 11<sup>th</sup> November 2019 by paying US\$2 million and granting the Chilean parties a 1% NSR over those 6 concessions. Under Emu's Option Agreement, Emu has assumed the rights and obligations of Prospex under Prospex's Option Agreement.



#### Emu NL

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## Issued Capital: Quoted:

Shares

65,910,387 fully paid shares

#### **Contributing Shares**

36,580,667 paid to \$0.03; \$0.03 to pay, no call before 31/12/2018

#### **Unlisted Options**

3,750,000 options, exercise price \$0.10, date 20/12/18 300,000 options, exercise price \$0.25, date 20/12/18

#### Directors:

**Peter Thomas** 

Chairman

**Greg Steemson** 

Managing Director

Gavin Rutherford Non-

**Executive Director** 

#### COMPETENT PERSON'S STATEMENT

The details contained in this report that pertain to exploration results, mineral resources and mineral reserves are based upon information compiled by Mr. Greg Steemson, Managing Director of Emu NL. Mr. Steemson is a Fellow of the Australasian Institute of Mining and Metallurgy (FAusIMM) and has sufficient experience in the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC Code). Mr. Steemson consents to the inclusion in the report of the matters based upon his information in the form and context in which it appears.

#### FORWARD LOOKING STATEMENT

This report contains forward looking statements concerning the projects owned by Emu NL. Statements concerning mining reserves, resources and exploration results may also be deemed to be forward looking statements in that they involve estimates based on specific assumptions. Forward-looking statements are not statements of historical fact and actual events and results may differ materially from those described in the forward looking statements as a result of a variety of risks, uncertainties and other factors. Forward looking statements are based on management's beliefs, opinions and estimates as of the dates the forward looking statements are made and no obligation is assumed to update forward looking statements if these beliefs, opinions and estimates should change or to reflect other future developments.

## JORC Code, 2012 Edition – Table 1 report, EMU NL Quarterly Report – March 2017

# Section 1 Sampling Techniques and Data (Criteria in this section apply to all succeeding sections.)

| Criteria                 | Explanation   | Commentary  |
|--------------------------|---|---|
| Sampling<br>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.  | The diamond core samples were analysed for gold using 50g fire assay (ALS method Au-ICP22) and for multi-elements by 50g aqua regia digest ICP multi element analysis for 44 elements (ALS method Au-ME-ST44 ICP-MS). |
|                          | 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  | Soil samples are analysed using 50g aqua regia digest ICP multi element analysis for 44 elements (ALS method Au-ME-ST44 ICP-MS).  |
|                          | 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. | Rock samples are analysed using 30g fire assay and 4 acid digest ICP multi element analysis for 48 elements (ALS method ME-MS61m).  |
| Drilling<br>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 with HQ diamond drilling.   |
| Drill sample<br>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   | Core is placed in core trays. Core recovery and RQD measurements are made as soon as possible after drilling due to the altered nature of the core rendering the core unstable  |

|   | samples.   | once out of the hole.  |
|---|--|--|
|   | 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. | All of the core is being geologically logged.  |
| Sub-sampling<br>techniques and<br>sample<br>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.   | Most of the core is altered to clay and breaks easily. Where possible the core was cut. Otherwise it was broken with a chisel.   |
|   | For all sample types, the nature, quality and appropriateness of the sample preparation technique.   | The core was crushed, split and a 250g sub sample was pulverised.  |
|   | Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.  | Labortory QA/QC samples used.  |
|   | 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.  | Sample size considered appropriate.  |
| Quality of<br>assay data and<br>laboratory tests        | The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.   | The fire assay will report total gold content. The aqua regia digest in this instance is considered appropriate given the stage of the program and the altered nature of |
|   | For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis   | the rocks.   |

|  | 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. | Laboratory standards and checks only.                                  |
|--|---|--|
| Verification of sampling and assaying                            | The verification of significant intersections by either independent or alternative company personnel.   | No results reported at this time.  No twinned holes.                   |
|  | 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.  | Data loaded into databases for checking and further use.               |
| 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.   | Holes located using hand held GPS accurate to < 5m.                    |
|  | Specification of the grid system used.  Quality and adequacy of topographic control.  | UTM grid system  |
| Data spacing<br>and<br>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.  | The holes are not being used in any resource calculation at this time. |
|  | Whether sample compositing has been applied.  | No compositing.  |
| Orientation of<br>data in relation<br>to geological<br>structure | Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.  | The controls on mineralisation are unknown at this time.               |

|                    | 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. |   |
|--------------------|--|---|
| Sample<br>security | The measures taken to ensure sample security.  | Management was present during the drilling. Core is stored in a secure location in Copiapo. |
| Audits or reviews  | The results of any audits or reviews of sampling techniques and data.  | None undertaken.  |

 $Section\ 2\ Reporting\ of\ Exploration\ Results\\ (Criteria\ listed\ in\ the\ preceding\ section\ also\ apply\ to\ this\ section.)$ 

| Criteria                                | 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. | Emu has an option agreement with Prospex SpA and BLC SpA, Chilean subsidiaries of Altius Minerals Corporation of Canada, to acquire 8 concessions at Vidalita and 3 concessions at Jotahues. This option maybe exercised any time up until 11 <sup>th</sup> November 2019 by granting Prospex and BLC a 1% NSR on production and allotting them up to 12.5 million Emu ordinary shares as to 2.5 million upon meeting an expenditure commitment of US\$1 million on or before 10 <sup>th</sup> December 2018 and electing to continue with the project, and, subject to certain vesting conditions (see ASX release 15 <sup>th</sup> November 2016), the remainder in 2 installments of 5 million each. Prospex SpA in turn has an option to acquire 6 of the 8 Vidalita concessions from local Chilean parties. Under the terms of that agreement, Prospex has the right to exercise that option by 11 <sup>th</sup> November 2019 by paying US\$2 million and granting the Chilean |

|                                   |  | parties a 1% NSR over those 6 concessions. Under the Emu option agreement, Emu has assumed the rights and obligations of Prospex in relation to those 6 concessions.   |
|-----------------------------------|--|--|
| Exploration done by other parties | Acknowledgment and appraisal of exploration by other parties.  |  |
| Geology                           | Deposit type, geological setting and style of mineralisation.  | The project is a green fields exploration project and while the source of the surface evidence of mineralisation can only be speculation at this stage, it is likely to be similar to known epithermal style ore deposits in the same geological setting.  |
| Drill hole<br>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 holes, down hole length and interception depths 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. | 17DV1 location 6,935,900N, 492,600E. Azimuth 270 degrees UTM Inclination 65 degrees. RL is 4,886m.  17DV2 location 6,935,900N, 492,500E. Azimuth 270 degrees UTM Inclination 60 degrees. RL is 4,866m.  17DV3 location 6,935,900N, 492,500E. Azimuth 270 degrees UTM Inclination 60 degrees. RL is 4,884m. |
| Data<br>aggregation<br>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.   | No results reported at this time.  |

|  | 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.                                   |  |
|--|---|--|
| Relationship<br>between<br>mineralisation<br>widths and<br>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   | Project is at an early stage of exploration and any conclusions at this stage would be speculation.  |
| Diagrams   | lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').  Appropriate maps and sections (with scales)  | Not yet applicable – assays yet to   |
|  | 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.  | be received.   |
| Balanced<br>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.   | Not yet applicable – assays yet to be received.  |
| Other<br>substantive<br>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 magnetics using GSM-19<br>GPS enabled magnetometer<br>sampling at 1Hz.<br>Contractor Quantec. |

| Further work | The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).  | Field work complete this field season. |
|--------------|---|--|
|              | Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. |  |