

**Drilling results & further significant gold and silver assays confirm potential for multiple mineralised systems returned from Vidalita and Alunita prospects in Chile**

## 2019 DRILL SUMMARY UPDATE

- Emu NL has, to date completed 37 holes for 5,824 metres of aircore drilling in 2019 (Table 1).
- Assay results for 20 drill holes have now been received.
- Assay results for 2 holes are detailed below.
- Assays for the remaining 17 holes are pending.
- Drilling continues.

EMU NL (ASX: EMU) is pleased to provide an update on drilling progress at the Vidalita and Alunita prospects in the Maricunga Belt, Chile.

### VIDALITA

#### *Hole 5300-12*

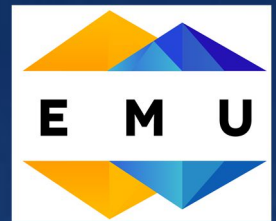
- Further significant mineralisation intersected at Vidalita including:
  - **16m at 2.0 g/t gold from 92m** including **4m at 4.1 g/t gold**.
- This intersection occurs within a larger interval of **52m at 0.8 g/t Au** from 52m.
- This hole is 25m east of the discovery hole (24m at 5.0 g/t gold and 28 g/t silver from 20m) and confirms further gold silver mineralisation close to surface (Figure 1).
- Silver assays pending.

#### *Hole 5400-4*

- **18m at 0.4 g/t gold from 92m** including **2m at 0.8 g/t gold** which ended in mineralisation.
- This hole is 100m north of the discovery hole (Figure 1 and 2).
- The composite assay of **2m at 0.8 g/t Au** is the last assay at the end of the hole which indicates potentially higher grades occurring at depth (Figure 2).
- Silver assays are still pending.

# EMU CONFIRMS POTENTIAL FOR MULTIPLE MINERALISED SYSTEMS AT VIDALITA & ALUNITA

10 April 2019



## *Vuggy Silica Mineralised Trend*

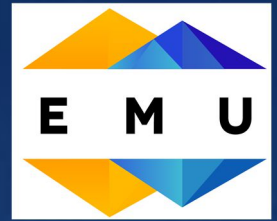
- Recent assay results indicate a gold-silver-rich structure along a prominent northwest trend (Figure 1).
- An interpreted northwest-oriented conceptual long section indicates thick zones of consistent vuggy silica, alunite and silica alteration with associated gold silver mineralisation with a shallow north plunge (Figure 2).
- Many holes ended in hard vuggy silica mineralisation at depth due to challenging drilling conditions for the aircore rig (Figure 2). Many areas remain untested at depth to the northwest and are high priority drill targets for a diamond rig.
- Multiple northwest-trending mineralised systems may occur to the north and at depth at Vidalita.
- Further high-grade mineralisation, similar to the grades intersected in the discovery hole, is likely to occur along recently identified northwest trend (Figure 2).
- Assays are awaited for at least eight holes that show areas of extensive vuggy silica and alunite alteration (Figure 2).

## ALUNITA

- High-grade silver assays and the first significant indication of associated gold received from the Alunita Prospect which is 1km north-northeast of Vidalita (Figure 1). Assays returned:
  - **20m at 0.1 g/t gold and 39.3 g/t (1.3 ounces) silver;**
  - **including 4m at 0.25 g/t gold and 92 g/t (3 ounces) silver** in 6500-3.
- This hole is located 70m down dip to the west of a 2018 EMU intersection of **15m at 114 g/t (3.6 ounces) silver** (no significant gold) from 44m in 6500-2 (Figure 3).
- The increase in gold at depth at Alunita is very significant and indicates excellent potential for the discovery of a new gold-silver deposit (Figure 3).
- Soil data suggests a separate sub-parallel system trending northwest that occurs over a strike length of at least 1km (Figure 1).
- Rock 'float' samples located 300m north of the Alunita drilling results assayed up to **14.5 g/t gold and 177 g/t silver**, which indicates further bonanza grades occur along strike to the northwest (Figure 1).
- Further drilling is planned to follow up these results at Alunita.

# EMU CONFIRMS POTENTIAL FOR MULTIPLE MINERALISED SYSTEMS AT VIDALITA & ALUNITA

10 April 2019



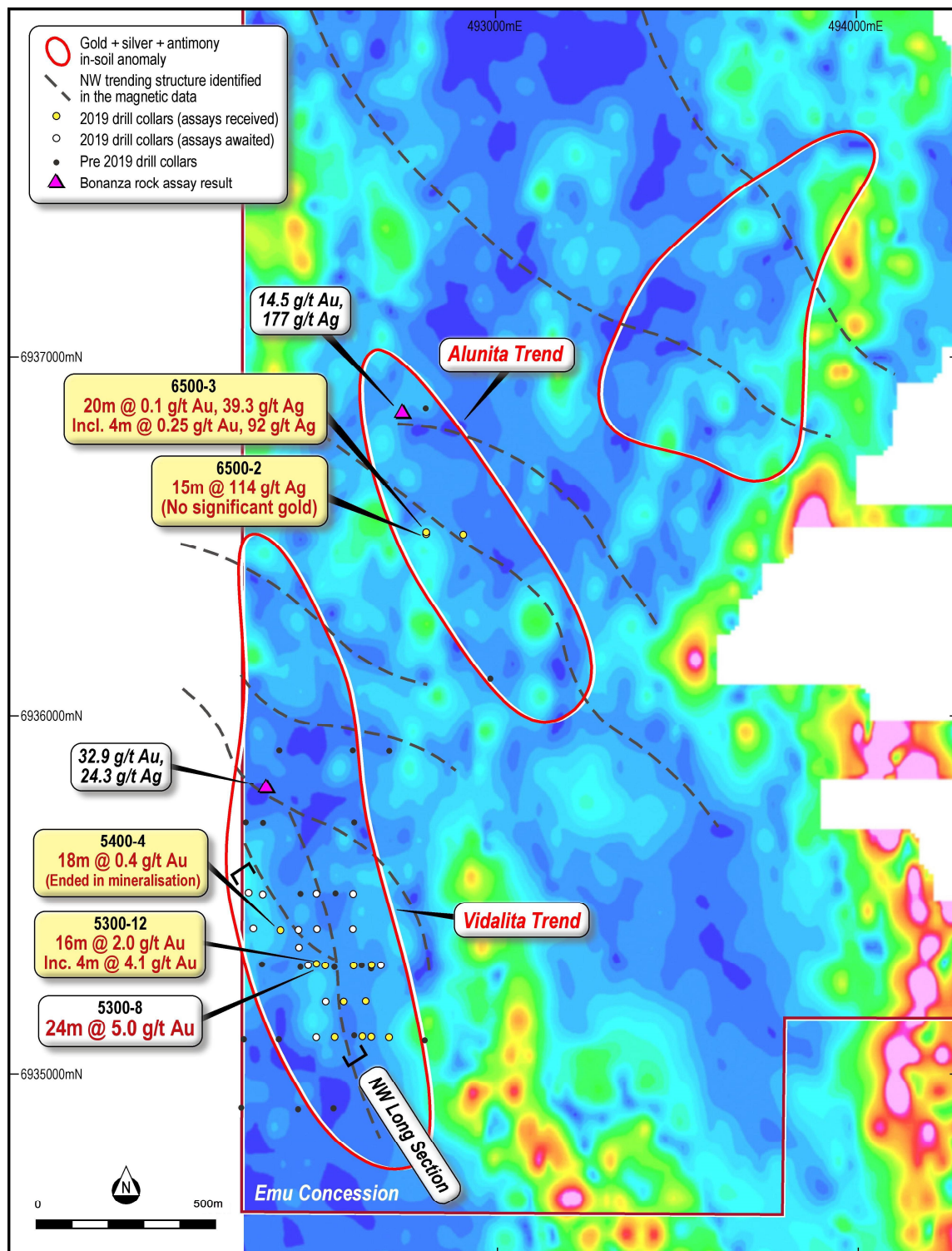
These results confirm at least two large epithermal high sulphidation systems; Vidalita and Alunita (Figure 1). Potential for several other systems occur to the north and northwest on EMU's concessions indicated by surface geochemistry data (Figure 1).

Aircore drilling continues to focus on the newly defined northwest trending gold-silver mineralisation at Vidalita and Alunita.

Further assays are awaited.

# EMU CONFIRMS POTENTIAL FOR MULTIPLE MINERALISED SYSTEMS AT VIDALITA & ALUNITA

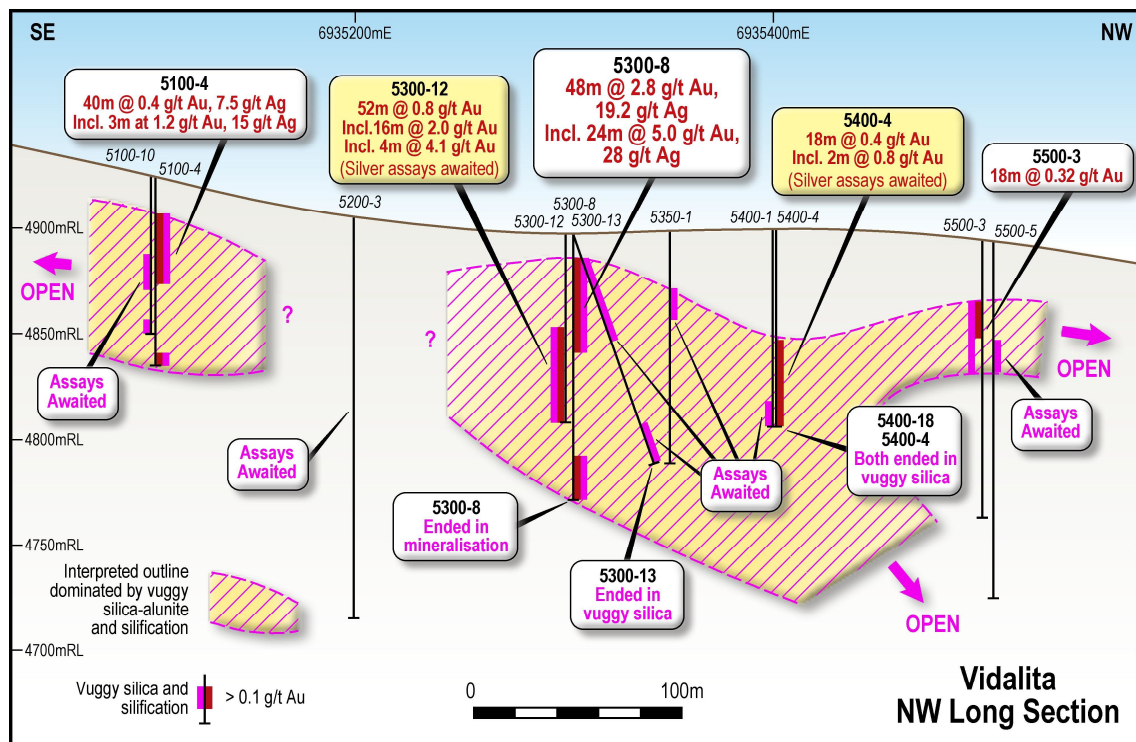
10 April 2019



**Figure 1:** Regional ground magnetic image of the area surrounding the Vidalita and Alunita prospects. Widespread north-northwest trends are defined by the soil geochemistry data. Multiple northwest structural trends have been interpreted from the magnetic data caused by magnetite destruction associated with epithermal style alteration and mineralisation.

# EMU CONFIRMS POTENTIAL FOR MULTIPLE MINERALISED SYSTEMS AT VIDALITA & ALUNITA

10 April 2019

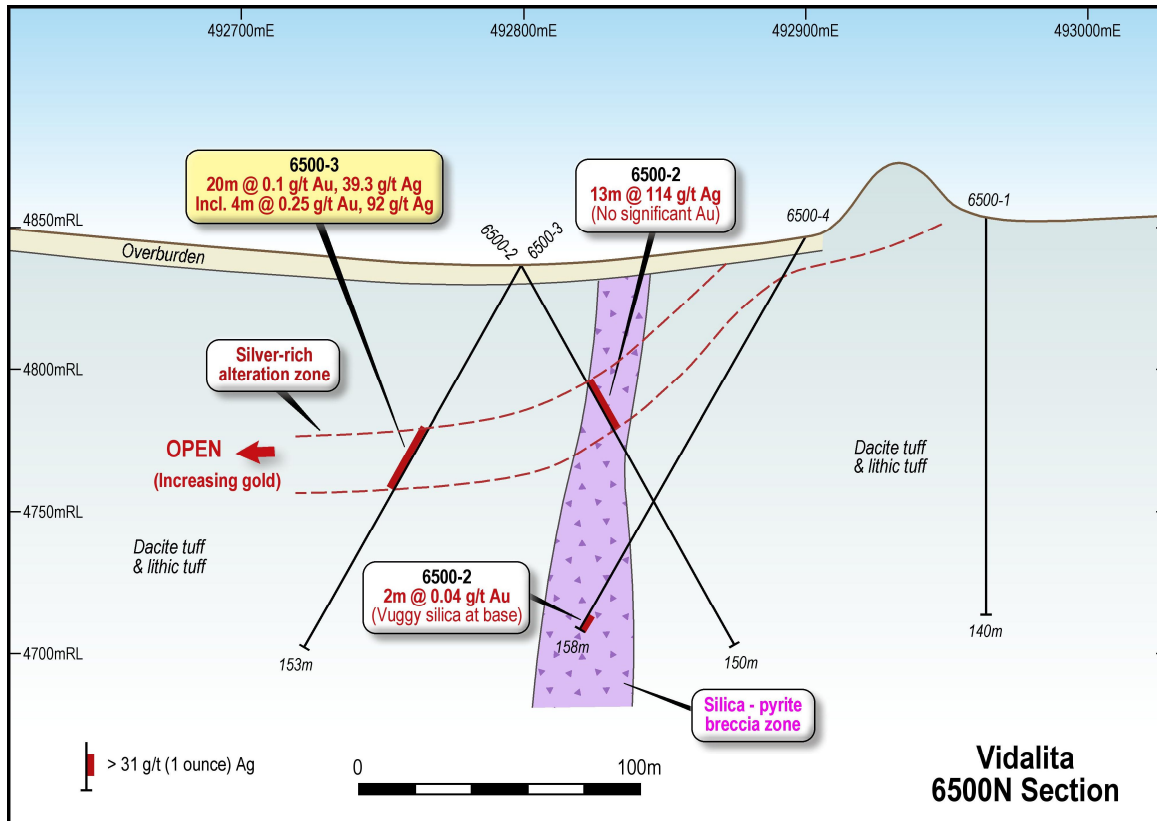
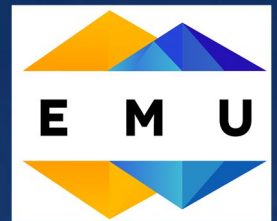


**Figure 2:** Conceptual northwest oriented long section at the Vidalita Prospect showing the extensive intersections of vuggy silica, alunite and silicification associated with gold-silver mineralisation.



# EMU CONFIRMS POTENTIAL FOR MULTIPLE MINERALISED SYSTEMS AT VIDALITA & ALUNITA

10 April 2019



**Figure 3:** Cross section at the Alunita Prospect located at 6936500 N.

# EMU CONFIRMS POTENTIAL FOR MULTIPLE MINERALISED SYSTEMS AT VIDALITA & ALUNITA

10 April 2019



**Table 1:** Aircore drill holes completed by EMU in 2019.

Hole No	Collar E	Collar N	Collar R.L.	Azimuth	Dip	Final Depth	Drill Start Date	Drill Finish Date
5100-6	492650	6935102	4924	270	-60	109.00	13/01/2019	16/01/2019
5100-7	492700	6935100	4924	270	-60	96.00	17/01/2019	19/01/2019
5300-6	492650	6935299	4897	270	-60	158.00	19/01/2019	23/01/2019
5300-7	492600	6935300	4897	270	-60	150.00	21/01/2019	23/01/2019
5300-8	492498	6935304	4896	270	-60	143.00	24/01/2019	1/02/2019
5300-9	492675	6935300	4903	270	-60	142.00	2/02/2019	2/02/2019
5500-4	492500	6935500	4900	270	-60	171.00	3/02/2019	5/02/2019
5100-8	492700	6935100	4900	90	-60	123.00	6/02/2019	6/02/2019
5100-9	492550	6935100	4900	270	-60	147.00	7/02/2019	8/02/2019
5200-1	492574	6935200	4905	270	-60	168.00	9/02/2019	9/02/2019
5200-2	492634	6935200	4905	270	-60	135.00	10/02/2019	10/02/2019
6500-3	492800	6936500	4905	270	-60	153.00	11/02/2019	12/02/2019
6500-4	492900	6936500	4905	270	-60	158.00	13/02/2019	13/02/2019
6800-1	492989	6936818	4872	240	-60	192.00	14/02/2019	15/02/2019
7300-1	493623	6937305	4801	270	-60	200.00	16/02/2019	17/02/2019
5300-10	492300	6935303	4903	90	-70	204.00	18/02/2019	19/02/2019
5500-5	492311	6935503	4897	90	-60	201.00	20/02/2019	20/02/2019
5500-6	492351	6935498	4895	270	-70	160.00	22/02/2019	23/02/2019
5500-7	492600	6935500	4870	270	-60	189.00	24/02/2019	25/02/2019
5100-10	492626	6935104	4924	270	-60	86.00	26/02/2019	26/02/2019
4900-4	492500	6934900	4920	90	-60	220.00	27/02/2019	28/02/2019
5200-3	492525	6935200	4905	270	-60	220.00	1/03/2019	2/03/2019
5400-1	492324	6935403	4855	90	-70	105.00	3/03/2019	4/03/2019
5400-2	492500	6935400	4900	270	-60	171.00	4/03/2019	5/03/2019
5400-3	492600	6935400	4895	270	-60	180.00	6/03/2019	6/03/2019
5100-11	492500	6935100	4924	90	-60	104.00	7/03/2019	9/03/2019
4900-5	492599	6934918	4937	90	-60	150.00	9/03/2019	12/03/2019
5300-11	492478	6935300	4896	270	-60	176.00	13/03/2019	15/03/2019
5300-12	492522	6935300	4896	270	-60	220.00	15/03/2019	16/03/2019
5400-4	492400	6935400	4900	270	-70	110.00	17/03/2019	17/03/2019
5400-5	492450	6935400	4900	270	-60	146.00	18/03/2019	19/03/2019
5350-1	492499	6935351	4721	90	-65	200.00	19/03/2019	30/03/2019
5350-2	492402	6935352	4800	90	-65	160.00	31/03/2019	31/03/2019
5300-13	492499	6935303	4800	295	57	138.00	1/04/2019	2/04/2019
5300-14	492456	6935295	4788	205	57	176.00	2/04/2019	3/04/2019
5300-15	492596	6935299	4855	175	57	140.00	4/04/2019	4/04/2019
5300-16	492594	6935300	4788	310	57	120.00	5/04/2019	6/04/2019

# EMU CONFIRMS POTENTIAL FOR MULTIPLE MINERALISED SYSTEMS AT VIDALITA & ALUNITA

10 April 2019



**Figure 4:** Location of the EMU NL project in the Maricunga Belt in relation to the Salares Norte deposit owned by Goldfields with a current SAMREC-compliant resource of 21.0Mt at 5.2 g/t Au and 72 g/t Ag for 3.5Moz Au and 48.6Moz Ag (indicated).

## About the Vidalita prospect, Maricunga Belt, Chile

The Vidalita prospect is located in the Maricunga gold belt in the Atacama Region in northern Chile hosting numerous world-class gold and silver projects. Emu's project in the Maricunga Belt covers an area of approximately 136 km<sup>2</sup> secured by mineral exploration and exploitation concessions that host alteration and mineralisation that appear geologically similar to other high sulphidation gold deposits of the Maricunga gold belt. The projects are accessed using established infrastructure of roads that link Copiapó (major mining town) with the Maricunga project (Kinross), Cerro Casale project (Barrick/Goldcorp) and the Caspiche project (Goldcorp). Refugio is located approximately 30 km to the northwest of Vidalita.

Emu holds an **Option** to acquire a 100% interest in certain of the Vidalita and Jotahues concession packages from two Chilean companies; Prospex SpA and BLC SpA.

The Prospex area covers six concessions at Vidalita and is subject to a 2% NSR on any production. The Option may be exercised in November 2019 on payment of US\$2M. If Emu defines: (i) 0.5Moz of gold in measured resources, a further 5M ordinary shares will be issued; and (ii) 1Moz of gold in measured resources, a further 5M ordinary shares will be issued.

The BLC SpA area comprises of three concessions (Jotahues and Vidalota A&B) and is subject to a 1% NSR. There is no Option payment to be made.

In addition, Emu has pegged a concession within its own right, Arroyo Ancho. Portions of this are subject to an area of influence inclusion into the Prospex Option.

Emu continues to look for new mineral exploration, development, and mining opportunities within Australia and overseas jurisdictions.



# EMU CONFIRMS POTENTIAL FOR MULTIPLE MINERALISED SYSTEMS AT VIDALITA & ALUNITA

10 April 2019



## Emu NL

ABN 50 127 291 927

### ASX Code: EMU

10 Walker Ave  
West Perth, WA 6005

T +61 8 9226 4266  
E [info@emunl.com.au](mailto:info@emunl.com.au)

PO Box 1112  
West Perth, WA 6872

### Directors:

**Peter Thomas**  
Non-Executive Chairman

**Terry Streeter**  
Non-Executive Director

**Gavin Rutherford**  
Non-Executive Director

### Investor enquiries:

Chairman  
T +61 8 9226 4266  
E [info@emunl.com.au](mailto:info@emunl.com.au)

## COMPETENT PERSON'S STATEMENT

Any details contained herein that pertain to exploration results, mineral resources or mineral reserves are based upon information compiled by Mr Francisco Montes, an experienced geologist working for Emu NL. There are no material changes to previously reported results. Mr Montes is a Member of the Australian Institute of Geoscientists 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 Montes consents to the inclusion herein of the matters based upon his information in the form and context in which it appears.

## FORWARD LOOKING STATEMENTS

As a result of a variety of risks, uncertainties and other factors, actual events and results may differ materially from any forward looking and other statements herein not purporting to be of historical fact. Any statements concerning mining reserves, resources and exploration results are forward looking in that they involve estimates based on assumptions. Forward looking statements are based on management's beliefs, opinions and estimates as of the respective dates they are made. The Company does not assume any obligation to update forward looking statements even where beliefs, opinions and estimates change or should do so given changed circumstances and developments.



## Appendix 1

### JORC Code, 2012 Edition – Table 1 report, EMU NL

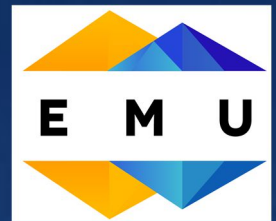
#### Vidalita Drilling

##### Section 1 Sampling Techniques and Data

Criteria	Commentary
<i>Sampling techniques</i>	<p>Air core (AC) samples – samples are collected from the rig cyclone in a bucket over each metre drilled. The larger intact core segments are recovered and stored in core trays for logging and geological reference. This material is not oriented.</p> <p>The sample is collected using a spear. This sample is usually between 1.0-1.5 kg representing ~ 15-20% of the mass of the 1M interval.</p> <p>All samples are prepared at Actlabs Copiapo (Activation Laboratories Limited) where they are dried, crushed to 2mm, split to an 800g sample and pulverised. Two splits of the pulverised sample are collected with a 200g split sent to Actlabs Coquimbo for analysis.</p>
<i>Drilling techniques</i>	Air core (AC) drilling using 75mm diameter bits.
<i>Drill sample recovery</i>	<p>Geological team makes a qualitative estimate (as good, moderate or poor) of sample recovery for each one metre down hole sample interval. Supervising geologist ensures that representative chip and AC samples are collected during drilling.</p> <p>Sampling is considered to be unbiased.</p>
<i>Logging</i>	<p>Alteration, mineralisation, rock type, and structure, where evident, are logged and recorded from the core drill samples.</p> <p>Pieces of core recovered by the AC system are stored in core trays for logging and geological reference.</p> <p>Total hole length is logged.</p>
<i>Sub-sampling techniques and sample preparation</i>	<p>AC samples (fines) from each one metre of drill hole is bagged up. The sample is usually around 1.0-1.5 kg.</p> <p>The 1m samples are prepared for analysis by standard laboratory procedures.</p> <p>Sub-sampling at the sample processing facility is done using splitters.</p> <p>The samples collected are representative of the in situ material.</p> <p>Sample sizes are appropriate to the grain size of the material being sampled.</p>

# EMU CONFIRMS POTENTIAL FOR MULTIPLE MINERALISED SYSTEMS AT VIDALITA & ALUNITA

10 April 2019



<i>Quality of assay data and laboratory tests</i>	<p>A 50g split from each one metre AC pulp is taken from four consecutive one metre samples, combined, re-pulverised to homogenise and a 30g split is taken for analysis.</p> <p>All samples are digested using method UT-1EMU 30g aqua regia digest and analysed using ICP-MS at Actlab's laboratory in Coquimbo. Select samples are re-analysed using the 1A2-30 30g fire assay technique with AAS finish.</p> <p>All drill samples results are reported.</p> <p>The aqua regia digest in this instance is considered appropriate given the stage of the program and the altered nature of the rocks.</p> <p>10% of drilling samples will be sent for check analysis to another laboratory.</p> <p>Laboratory standards, blanks and repeats are used to for QA/QC.</p>
<i>Verification of sampling and assaying</i>	<p>Highly anomalous four metre composites are identified and the one metre samples from which they were composited sent to an alternative laboratory for assaying.</p> <p>No twinned holes have been drilled.</p> <p>All geochemical and geological data is loaded into databases managed by independent third party entities for verification, storage and plotting. Assay data are not adjusted.</p>
<i>Location of data points</i>	<p>Drill hole collars are located using hand held GPS accurate to &lt; 5m in the first instance. Holes are subsequently surveyed in using DGPS accurate to &lt;0.02m.</p> <p>WGS 84 UTM zone 19J (south) grid system</p> <p>Topographic control is deemed adequate at this stage of the exploration program.</p>
<i>Data spacing and distribution</i>	<p>The drill holes are irregularly spaced (but generally &gt;100m) as they are testing geological, geophysical or geochemical targets.</p> <p>No mineral resources are being reported at this time.</p> <p>The AC samples are composited into four metre composites in the laboratory.</p>
<i>Orientation of data in relation to geological structure</i>	<p>Drill hole azimuth was planned on indications of outcrop and/or subcrop geology and lithological strike as indicated by a ground magnetic survey and geologic mapping.</p> <p>The controls on mineralisation are unknown at this time.</p>
<i>Sample security</i>	<p>Emu management supervises sample collection and delivery to the laboratory.</p>
<i>Audits or reviews</i>	<p>None undertaken.</p>

# EMU CONFIRMS POTENTIAL FOR MULTIPLE MINERALISED SYSTEMS AT VIDALITA & ALUNITA

10 April 2019



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

Criteria	Commentary
<i>Mineral tenement and land tenure status</i>	Emu has an option agreement dated 14 November 2016 with two Chilean companies, Prospex SpA and BLC SpA, to acquire 8 concessions at Vidalita and 3 concessions at Jotahues. This option maybe exercised any time up until November 2019 by granting Prospex and BLC a 1% NSR on production and allotting them up to 15 million Emu ordinary shares subject to certain vesting conditions (see ASX release 15 <sup>th</sup> November 2016). 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 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 taken an assignment of the rights and assumed the obligations of Prospex in relation to those 6 concessions. The option agreements are subject to a 5km AOI from the boundaries of the 11 concessions. Since entering into the option agreement with Prospex and BLC, additional concessions have been applied for and were reported in subsequent ASX releases.
<i>Exploration done by other parties</i>	Previous work was limited to rock sampling. There had been no drilling in the area prior to Emu's activities.
<i>Geology</i>	The prospect area is located within the early to late Miocene volcanics of the Maricunga Belt. The project is a green fields exploration project however the mineralisation style intersected in drilling is interpreted to be similar to known high sulphidation epithermal style ore deposits in the same geological setting. Rocks consist of volcanically derived lithologies, including tuffs, andesites, dacites, polymictic and monomictic breccias, and minor sedimentary facies associated with volcanic crater development. Major north-north-west trending faults may control the extent of mineralisation and provide the bounds to that mineralisation. Lesser cross-cutting faults, generally north-easterly, appear to affect mineralisation plunge and repetitions.
<i>Drill hole Information</i>	See ASX announcement on 8 March 2019. See Table 1 (page 7)
<i>Data aggregation methods</i>	Simple averages are calculated from mineralised zones. Gold zones above 0.2ppm are aggregated within the mineralised zones to calculate average gold intersections. Barren zones less than one sample interval may be included in a composite aggregation if occurring within the overall mineralised zone.

# EMU CONFIRMS POTENTIAL FOR MULTIPLE MINERALISED SYSTEMS AT VIDALITA & ALUNITA

10 April 2019



<i>Relationship between mineralisation widths and intercept lengths</i>	Project is at an early stage of exploration and any conclusions at this stage would be speculation. All widths quoted are down hole intersection widths.
<i>Diagrams</i>	Interpretive cross sections are included in the announcement. These are preliminary in nature and are subject to change.
<i>Balanced reporting</i>	Emu considers all pertinent information pertaining to this prospect is supplied in either this or previous announcements.
<i>Other substantive exploration data</i>	Surface rock and talus sampling was undertaken at opportune locations where outcrop allowed and appropriate. Summary maps were included in previous announcements.  Satellite imagery is used to identify significant areas of alteration to guide exploration.
<i>Further work</i>	Follow-up drilling, by infill and to extend into areas that are considered “open” to mineralisation, is being considered but not yet planned.