TECHNICAL REPORT PERTAINING TO THE:

# FORTUNA CONCESSIONS PROPERTY – PSAD56 ZONE 17S

IN THE PROVINCE OF AZUAY, ECUADOR

EFFECTIVE DATE OF THE TECHNICAL REPORT: AUGUST 31, 2018



PREPARED FOR: LUCKY MINERALS INC 202-905 WEST BROADWAY VANCOUVER, BC, CANADA V5Z 1K3



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#### DATE AND SIGNATURE PAGE

This technical report is dated August 31, 2018 and is signed by the author.

I, Alain Moreau, do hereby certify that:

1. I am a consultant geologist with office at 6661, Des Écores, Montreal, Quebec, H2G 2J8, Canada.

2. I graduated with a Master of Science Degree in Geology from École Polytechnique, Québec (Canada) in 1987.

3. I am a member of the Ordre des Géologues du Québec (No. 1298).

4. I have worked as a geologist for a total of 32 years since my graduation from University. I have worked in porphyry systems environments since 1987 for copper-gold exploration in South-America, Central America and Quebec with an expertise in the mapping of alteration signatures related to these systems. I work actively in the Ecuador porphyry belt since 2017.

5. I am responsible for the preparation of the technical report pertaining to the "Fortuna Concessions Property, PSAD56 Zone 17S in the Province of Azuay, Ecuador", and dated this August 31, 2018. To the best of my knowledge, information and belief, this technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

6. I have visited the Fortuna Concessions Property between the 19th July and the 22th July 2018

7. I have no interests in the Fortuna Concessions Property.

8. I am not independent of Lucky Minerals Inc.

9. I am independent of the property vendors and the property.

10. I have read NI 43-101 and Form 43-101F1 and that this report has been prepared in compliance with NI 43-101 instrument.

11. I am taking responsibility of all items of this report.

# To the Autorité des Marchés Financiers (AMF), Securities Regulatory Authority (British Columbia Securities Commission (BCSC)):

I, Alain Moreau, do hereby consent to the public filing of technical report entitled "Fortuna Concessions Property, PSAD56 Zone 17S in the Province of Azuay, Ecuador", and dated this August 31, 2018 (the "technical report") by Lucky Minerals Inc. (the "Company"), with the TSX Venture Exchange under its applicable policies and forms in connection with the Fortuna Concessions Property acquisition according to the mining property agreement signed on March 27, 2018 to be entered into the Company and I acknowledge that the technical report will become part of the Company record.

Dated this September 18, 2018

Alain Moreau, P. Geo. (OGQ 1298)

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Alain Moreau, P.Geo, on Fortuna 3 Concession







**Culebrillas Hill** 



F136 Sampling Site on Fortuna 3



East of Culebrillas Hill



Tullpas Lake

#### 1.0 SUMMARY

On August 31<sup>th</sup> 2018, the property is made up of one block (12 contiguous concessions), totalling 54,985 ha.

The concessions are located in the Azuay, Morona Santiago and Zamora Chinchipe Provinces in Ecuador, approximately 60 kilometres (km) south of Cuenca (Santa Ana de Los Cuatro Ríos de Cuenca), Azuay Province. The concessions are centered at 726600 Easting/9631500 Northing (PSAD 56, Zone 17S) or  $3^{\circ}19'28''S$  latitude and  $78^{\circ}57'35''W$  longitude and are located on geographical map-sheets CT – NVI – D2, 3783-I, CT – NVI – A3, 3884-III, CT-NVI – B4, 3784-II, and CT – NVI – C1, 3883-IV. Figure 1 "Regional Location Map" and Figure 2 "Property Location Map" show the actual property location. Table 2 shows concessions descriptions. The Property has not been legally surveyed

On August 31, 2018, the property is held 100% by Goldmindex S.A., an ecuadorian company that is subject to a transaction by Lucky Minerals Inc. Obligations that must be met to obtain 100% ownership of Goldmindex S.A. are:

Payments of due mineral property taxes of 2017 and 2018 and trust fees totalling US\$538,100 and the issuance of 16,000,000 shares of Lucky Minerals Inc.to Monterra S.A. (A Panama registered company) for the acquisition of all shares of Goldmindex S.A.

There are no surface rights nor any legal access issues that hamper exploration activities on property.

To the knowledge of the author, there are no environmental liabilities pertaining to the Fortuna Concessions Property.

To the knowledge of the author, there are no significant factors or risks that could affect access, title, or the right or ability to perform work on the property.

The Fortuna Concessions Property is centered at 726600 Easting/9631500 Northing (PSAD 56, Zone 17S) or 3°19'28''S latitude and 78°57'35''W longitude. It is located approximately 60 kilometers southeast of Cuenca.

Limited exploration has been conducted within the concessions. The first work on the ground appears to have been completed by Mammoth Energy Inc. in 1992. Between 1992 and 1997, a field camp was established at Laguna Tullpas (on Fortuna 3) and a field program was completed throughout the area of the Fortuna 2 and 3 concessions. In total, 16 stream samples were collected mainly on the Fortuna 2 concession (one sample was collected on the Fortuna 3 concession. Samples assayed up to 1,061 ppb Au (Zamora, 2008). In 1997 work ceased and the project was abandoned at the time (Smith, 2008).

Makromines S.A. acquired the Property in 2000 and completed a field program of prospecting and grab sampling. A total of 63 rock and soil samples were collected mainly on the Fortuna 3 and 4 concessions; sample assays returned up to 262 ppb Au (Zamora, 2008). A cluster of samples with 65-70 ppb Au is located in the central part of Fortuna 3 on the edge of the Laguna Tullpas caldera-like structure. The sample containing the highest gold content of 262 ppb Au, is located in the central part of the caldera-like structure in an area known as Cullebrillas. Additionally, 88 stream samples were collected by Alfredo Zamora throughout the Fortuna Concessions Property area with 62 samples falling on concessions Fortuna 2, 3, 5 and 6 (the timing of these is uncertain); samples assayed up to 10,506 ppb Au (Zamora, 2008).

The work performed by Mammoth Energy Inc. and Makromines S.A. identified six anomalous areas associated with interpreted *caldera-like* structures within the Fortuna 2 and 3 concessions. For example, in the area of the Laguna Tullpas feature, breccia's with stockwork veins and extensive mineralization and alteration were recognized (Smith, 2008).

Terrasources Minerals S.A. acquired the concessions in 2007 and completed a data compilation and reconnaissance and confirmatory field work in December. The field study included a foot expedition within the Property for the purposes of topography and geology inspection as well as a fixed wing airplane fly-over over the entire Property and surrounding areas. In early 2008, a satellite imagery study based upon available archived Landsat Enhanced Thematic Mapper (ETM+) data resulted in the identification of 12 exploration targets within the Fortuna Concessions Property, and an additional 30 targets were identified in the areas surrounding the concessions (Murphy, 2008). A subsequent field visit was undertaken in April to follow-up the satellite imagery targets. All the targets in the vicinity of the Fortuna Concessions Property were examined. Several highly prospective structures, similar to the Tullpas structure, were recognized on the Fortuna 1, Fortuna 4 and Fortuna 9 concessions (Smith, 2008). Additionally, detailed aerial reconnaissance and mapping was completed on the Fortuna 3 concession to gain a better understanding of the Tullpas structure, which led Smith (2008) to suggest that the Tullpas feature is connected to the Fortuna 1 feature. 418 rock grab (including 34 duplicates) and 155 HMC (including 13 duplicates) samples were collected throughout the Property.

The samples collected were not representative of the Property. In most cases, they were selected to test mineralization and to test previous identified outcrops to ensure previous assay results. The spacing of samples was not even over the Property. The area covered was limited to areas of reasonable access that were not covered with overburden.

The 2007 rock samples were dominated by pyroclastic material ranging from rhyolitic to andesitic composition, although several samples of basalt, muscovite schist and sediments were also collected for analysis; the majority of the rock grab samples were collected from the extensive bedrock outcrops along the road cuts within the Property boundary. No anomalous gold or other base metal or other values were returned from the 2007 rock samples.

The HMC samples were collected at points along drainages within and draining from the Property to delineate anomalous areas for further exploration. A total of 99 gold grains were recovered from 42 samples. The gold grains had an estimated total weight of 1,567 micrograms (" $\mu$ g"). The highest gold counts were recovered from samples within the Fortuna 10 concession. One sample returned the highest Au counts with 21 Au grains weighing an estimated 159.3 µg. An additional 5 samples located along the same drainage returned gold grain counts of 5, 1, 1, 2 and 11 grains, respectively.

Further highlight from the Fortuna 10 concession includes a sample which contained 6 gold grains weighing 45.79  $\mu$ g. Panned gold grains from the Rio Shincata placer workings area just south of the Fortuna 6 concession are interpreted to be sourced from the Property.

No field exploration was conducted in 2008 and early 2009 due to a moratorium on exploration enacted by the Ecuadorian government.

Then in August of 2009, Monterra S.A. collected four rock grab samples. In 2010, Monterra S.A. performed a geological mapping campaign, as well as rock grab and stream sediment sampling.

Several samples were taken along a major drainage SE of the Fortuna 10 concession to test potential bedrock sources within the Fortuna 10 concession. The highest gold counts recovered in this area was from a sample which contained three gold grains weighing 28.8  $\mu$ g.

On Fortuna 8 concession the highest gold grain counts were recovered from a sample which contained 5 grains weighing an estimated 99.75  $\mu$ g. The sample was collected from a stream near a kaolinite mine, located in the SW part of concession. Many other samples taken from Fortuna 8 and 10 concessions returned 1 and 2 gold grain counts.

One rock grab sample returned 96 ppb Au from the Fortuna 3 concession in a rusty gneissic boulder.

Monterra S.A. conducted some additional limited exploration within the Fortuna 3 concession in late 2009 and early 2010 whereby an additional 57 heavy mineral panned concentrate samples, 57 stream sediment samples, 40 petrography samples, and 111 rock grab and chip samples from within three targets areas. The HMC samples were taken from the same places as the stream samples. The field program was designed to visit anomalous areas identified from historic work to better plan ongoing field work. Mostly sericite- schist, quartz-feldspar porphyry and breccia was discovered/mapped in the area, although the area is densely covered by vegetation (Yuan, 2009; Vaca and Granda, 2010).

In December 2009 Smith collected 43 non-representative samples to test various geological structures within the Property. The samples returned gold values ranging between 0.001 ppm Au and 0.027 ppm Au.

57 HMC samples at the same sites as the 2010 stream sediment samples. The samples were hand processed/panned in the field. An internal report completed by Monterra S.A. discusses that 8 of the 57 HMC samples contained 'colors'/gold grains. Grains were identified visually and counted (See Plate 1). Up to 6 gold grain counts are reported in an HMC sample (Vaca and Granda, 2010). Stream sediment samples contained up to 0.155 g/t Au. In total 5 samples contain greater than 20 parts per billion ("ppb") Au (Vaca and Granda, 2010).

The rock grab samples collected in 2010 are from an area that historically had a stream sediment sample which contained 1898 ppb Au (Fortuna 6, Rios, 2010). The rock grab samples collected

in 2010 returned Au values ranging between <0.001 ppm Au and 0.044 ppm Au; two other rock samples returned more than 0.1 g/t Au.

5 new small breccia bodies were located. They all appear to have a structural control and the main alteration affecting the breccia and wall rock is phyllic (silica, sericite, pyrite +/- clay) with the presence of veinlets of quartz and vuggy quartz (Vaca, 2010).

In February 2010, a reconnaissance sampling campaign to identify further areas of exploration targets was performed. 26 samples from the area surrounding Culebrillas Hil. Some samples did contain millimetre (mm) sized veinlets of quartz and sulfides (Rios, 2010a). The samples returned Au results up to 35 ppb Au (taken from a zone that contained veinlets of quartz and sulfides).

A reconnaissance mapping campaign was undertaken in April 2010 at Culebrillas Hill to determine the relationship between the country and wall rock with respect to the hydrothermal breccia body and its alterations. Widespread silicification both in and around the breccia body was noted including an abundance of quartz stockwork veinlets in the surrounding country rock (Rios, 2010b).

In 2015, Murphy Geological Services completed a Landsat Interpretation of the area on behalf of Monterra S.A. In total, 42 target areas were identified which include the presence of major faults, major fault intersections, converging and branching faults, releasing bends, splays along major faults, domal/circular and linear resistant features and possible alteration anomalies.

In 2016, Monterra S.A. collected 9 grab samples. No anomalous values were returned.

Little to no exploration work had been previously documented within the Fortuna 11 and 12 concessions. Verbal reports of several small-scale placer operations were received from locals within the area with both timing and production are unknown. In the central area, just outside the Property concessions, there is abundant evidence of surficial and small-scale underground mining purportedly undertaken by the Inca's and Indigenous groups of the area.

The author did not verify the information and that the information is not necessarily indicative of any mineralization on the property.

The Andean Cordillera is composed of two parallel ranges: the western Cordillera Occidental and the eastern Cordillera Real. The two ranges are separated by the Inter-Andean Depression (Winkler *et al.*, 2005).

The Cordillera Occidental is composed of sub-greenschist, early to late Cretaceous, oceanic plateau basalts and ultramafics as well as late Cretaceous marine turbidites, early Eocene basaltic and andesitic oceanic island arc sequences. Along with overlying Eocene marine turbidite basin fill sequences and a late Eocene to Oligocene terrestrial sequence (Hughes and Pilatsig, 2002). Subsequently, the rocks of the Cordillera Occidental were intruded by late Eocene and younger l-type granitoids and covered by major mid-Eocene and younger sub-aerial calc-alkaline continental margin volcanics.

The Cordillera Real is a series of sublinear belts of Paleozoic to Mesozoic aged metamorphic rocks intruded by S- and I-type granitoids. The Cordillera Real is capped by Cenozoic to modern volcanics (Aguilera *et al.*, 2005).

The Inter Andean Depression is interpreted as a graben structure bounded by active normal faults and filled with volcanic and volcano- sedimentary deposits, discussed in more detail below. Northnortheast and north-trending faults of regional extent, which bound the Central Andean graben structure, are also evident throughout both the Cordillera Occidental and Real. The basement rock of the Inter Andean Depression is unknown, though gravity data suggests that it may be a continuation of the rocks of the Cordillera Occidental (Aguilera et al., 2005). The Property is in the southern pan of the central graben which is filled mainly with Tertiary to recent volcanic rocks (Figure 7).

Several mid- Miocene to Pliocene clastic sedimentary series and volcanic sequences exposed in the Inter Andean Depression are thought to closely reflect the younger tectonic history of the area (Hungerbuhler *et al.*, 2002). Specifically, the geology and stratigraphy of the Nabon basin applies to the Fortuna 8 to 10 concessions. The Nabon basin is characterized by syn-sedimentary tectonic deformation identified from progressive unconformities along the western edge of the basin as well as growth faults and folds. Maximum shortening occurred perpendicular to the longer basin axis in a WNW-ESE direction (Hungerbuhler *et al.*, 2002). The Nabon basin can be described in terms of two main Groups: the **Nabon Group** ("Gr.") and the **Saguro Gr.** and an overlying Formation ("Fm."), the *Tarqui Fm*.

Below is a summary from oldest to youngest of the stratigraphy within the Nabon Basin, adapted from Hungerbuhler *et al.*, 2002.

The **Saguro Gr.** consists of intermediate and acidic calc-alkaline sub aerial volcanics of the *Loma Blanca* and *Saraguro Formations*. The *Loma Blanca Fm.* is up to 2,000 m thick and is comprised of intermediate to felsic pyroclastics (ignimbrites, pumice crystal tuffs and volcanic breccia's), along with abundant dykes and sills, which are indicative of the proximity to the main eruptive centre. The 500 - 2,000 m thick *Saraguro Fm.* unconformably overlies a series of older formations and consists of intermediate to felsic pyroclastics (andesitic to dacitic tuffs are most prevalent in the lower section, whereas the upper portion contains mainly rhyolitic ignimbrites). Frequent intercalated fluvial and lacustrine sediments record periods of aquatic reworking between eruptive stages.

The sediment dominated **Nabon Group** is made up by four distinct formations. From oldest to youngest they are:

Iguincha Formation: made up of four members;

- Infiernillo: Mainly ash and pumice beds, deposition of this member commenced during an eruptive phase. Reworking of this unit by small rivers and gravity driven processes is evident.
- Namarin: Small alluvial fan systems prograding into the basin from the N and SE.
- El Salado: Partially interfingers the Namarin. Bed load to mixed load fluvial system with braided channels which flowed NE-SW.
- Dumapara: Pyroclastic flows and falls indicate a short lived syn-eruptive basin fill episode. These are overlain by sediments deposited from bed load dominated river systems which entered the basin from the NE and E. Letrero Formation: composed of clastic lake deposits that indicate a period of decreased tectonic and volcanic activity.

The *La Cruz Formation*: comprised of abundant detrital input from a meandering fluvial system, which drove the fill of the lake.

*Picota Formation:* a volcaniclastic mass – flow wedge during a further syn-eruptive stage.

The overlying *Tarqui Fm.* consists of intermediate to acidic pyroclastics. Exposed volcanic ashes of this formation typically alter to a dark red to purple kaolinite clays. The *Tarqui Fm.* 

unconformably overlies the **Saguro Group**. Lithologies of the *Tarqui Fm* include rhyolitic to andesitic volcanic breccia's, ash flow tuffs, pyroclastic flows, ignimbrites and airborne tuffs.

The Nabon basin formed and filled between 8.5 and 7.9 million years ago ("Ma"). Sedimentation occurred over a period of varying volcanic activity along the eastern and northern margin. The basin fill was then subsequently eroded and incised, and volcanic ash of the Tambo Veijo member sealed the resulting topography (Hungerbuhler *et al.*, 2002).

No mineralized zones have been identified on property.

Four types of mineral deposits can be considered for the exploration of the Fortuna Concessions Property. The first is Cu-Mo porphyry deposits as established by numerous Cu/Mo occurrences and the prospective modelling by the USGS (Cunningham et. al., 2008, see Figure 9 ("Regional Cu-Mo Prospectivity Map") for details). Porphyry copper deposits are copper orebodies that are formed from hydrothermal fluids that originate from a voluminous magma chamber several kilometers below the deposit itself. Predating or associated with those fluids are vertical dikes of porphyritic intrusive rocks from which this deposit type derives its name. In later stages, circulating meteoric fluids may interact with the magmatic fluids. Successive envelopes of hydrothermal alteration typically enclose a core of disseminated ore minerals in often stockwork forming hairline fractures and veins. Because of their large volume, porphyry orebodies can be economic from copper concentrations as low as 0.15% copper and can have economic amounts of by-products such as molybdenum, silver and gold. In some mines, those metals are the main product. Porphyry copper deposits are currently the largest source of copper ore. This deposit type is likely to be associated with the caldera-like structures, like those observed within the Fortuna 3 concession.

The second type to explore are High and Low sulphidation epithermal deposits. High sulphidation epithermal deposits occur as veins, vuggy breccias and sulphide replacements ranging from pods to massive lenses associated with high level hydrothermal systems marked by acid-leached, advanced argillic, and siliceous alteration. Metal associations in these deposits include variable amounts of precious- and base-metals and variable gangue minerals. The frequently irregular deposit shapes are determined by host rock permeability and the geometry of ore-controlling structures. Multiple, crosscutting composite veins are common. Low sulphidation epithermal deposits form from fluids which are typically a mixture of groundwater and fluid emanating from

molten rock at depths of around 5 to 10 kilometers below surface. These hot fluids are under very high pressures at those depths, and as they rise along faults to depths of about two km from the surface, they begin to boil. As the fluids boil, they cool rapidly, causing quartz to precipitate in the fault, forming the vein. Calcite, adularia, as well as any Au and Ag present in the fluid also precipitate in response to boiling.

Recent research indicates that these deposits form in subaerial volcanic complexes or composite island arc volcanoes above degassing magma chambers. The deposits commonly contain multiple stages of mineralization, presumably related to periodic tectonism with associated intrusive activity and magmatic hydrothermal fluid generation (Panteleyev, 1996). The ages of the deposits are commonly Tertiary to Quaternary, however some deposits have been dated as Mesozoic and rarely Paleozoic volcanic belts. The rare preservation of older deposits reflects rapid rates of erosion before burial of subaerial volcanoes in tectonically active arcs.

Rock types associated with such deposits are volcanic pyroclastic and flow rocks, commonly subaerial andesite to dacite and rhyodacite, and their subvolcanic intrusive equivalents. It is also thought that permeable sedimentary intervolcanic units can be sites of mineralization. The country rock surrounding the epithermal veins is commonly extensively altered to alunite and kaolinite (advanced argillic). There is a mid-zone of intermediate argillic alteration and sericitization and an outer zone of propylitic alteration, even though the vein walls may be sharply defined.

Volcanic-hosted, epithermal Au deposits in the Central Andean graben south of Cuenca have been known for some time. The most notable example is the Portovelo district, 50 km northwest of Loja, where mining has been underway since the 16th century. More than 4 million ounces of Au have been recovered to date with higher grades (more than 40 grams per tonne "g/t" Au) recovered from oxidized zones during the first 100 years of mining. More recent mining has been directed to pillars grading about 7 g/t Au (2009, IAMGOLD).

Such a deposit is likely to be found in the poorly exposed andesite-basalt flows at the bottom of the identified stratigraphy within western part of the Property; drusy and colloform textures were both noted in some of the veins cutting the flows. Such features have been recognized in Fortuna 3, 4 and 8 to 10 concessions.

The third type to explore for on the property is Skarn deposits that form during regional or contact metamorphism through a variety of metasomatic processes. Skarns are found in many forms, in various geological environments dominated by differing mineral assemblages. Skarn deposits can be hosted by any type of rock but are most commonly found associated with host rocks containing at least some limestone. The most common types of skarn deposits are defined by Au, Cu, Mo, lead-zinc ("Pb-Zn"), tungsten ("W"), tin ("Sn"), garnet and wollastonite.

The majority of gold skarn deposits are hosted by calcareous rocks. The rarer manganese type is hosted by dolomites or Mg-rich volcanics. Gold skarn deposits primarily form in orogenic belts at convergent plate margins and are often linked with syn- to late-arc intrusions which were emplaced into calcareous sequences in arc or back arc environments (Ray, 1998). As a result of poor correlation between Au and Cu in some Au skarns, the economic potential of a prospect can be overlooked if Cu-sulphide rich outcrops are preferentially sampled over those of other sulphide bearing or sulphide poor assemblages. The gold is often found in close association with bismuth ("Bi") or gold tellurides and is commonly found as small blebs (<40 microns) that form within or on sulphide grains (Ray, 1998).

Copper skarn deposits are most common where Andean type plutons intrude older continentalmargin carbonate sequences. Less commonly copper skarns can be found related to oceanic island arc plutonism. These oceanic island arcs copper skarns tend to be related to more mafic intrusions while those formed at continental margin environments are associated to more felsic intrusions (Ray, 1995). Most copper skarns are found to be Mesozoic, but may be of any age. Generally, copper skarns that are related to mineralized copper porphyry intrusions are larger, lower grade and emplaced at higher structural levels than those which are associated with barren rocks. Most copper skarns contain oxidized mineral assemblages and mineral zoning is common in the skarn envelope. Moderate to high sulphide content is found with copper skarns, where the inner garnet-pyroxene zone contains chalcopyrite  $\pm$  pyrite  $\pm$  magnetite, while mainly bornite  $\pm$ chalcopyrite  $\pm$  sphalerite  $\pm$  tennanite, make up the outer wollastonite zone.

Gold mineralization hosted by skarnified volcanic rocks is present in the eastern foothills of the Cordillera Real 50 km East of Loja. For example, the Nambija deposit is located upstream from historic alluvial workings. The mineralization is centered on ancient Inca workings which were rediscovered in 1931. Gold occurs in fault zones and quartz veins in garnet skarns derived from Triassic volcanic rocks which are contained in a roof pendant within a Jurassic granitic batholith.

Carbonate rich rocks have been recognized in the vicinity of Fortuna 10 concession.

Finally, Paleoplacer deposits are the fourth type of mineralization to be explored on property. Paleoplacer deposits form initially by ordinary sedimentary processes that concentrate heavy minerals, most commonly accomplished by moving water. Minerals which occur as placer deposits must first be freed from their source rock. They must have a high density, chemical resistance to weathering and mechanical durability. Examples of minerals with these properties are: Au, diamond, Cu, rutile and chromite (Evans, 1987). Placer deposits are typically low grade but can be easily exploited due to their host being loose material amenable to hydraulic mining methods. Paleoplacer deposits are typically lithified and buried beneath other strata. The Precambrian Witwatersrand Au deposit in West Africa is a prime example of a paleoplacer deposit. Post lithification the sedimentary strata of a paleoplacer fluvial system may undergo metamorphism which may act to further concentrate the minerals of interest. Presence of numerous placer mining activities around the Fortuna 11 and 12 concessions support this possibility.

The author did not verify the information and that the information is not necessarily indicative of any mineralization on the property.

Reconnaissance and detailed field work have been realized between April to July 2018 by Lucky Minerals Inc. The work consisted to perform structural modelling, alteration mapping using ASTER data and a rock saw sampling program in an area near the Culebrillas hill where numerous alteration anomalies were identified from satellite imagery and in the southwestern part of property (2 samples). Major NNE structures identified from the structural interpretation were confirmed by field observations. 153 rock samples have been taken in the property along major interpreted NNE structures with coinciding alteration anomalies. The area surveyed covers approximately 3 km by 1,5 km with a mean sampling density of 300m by 300m in an irregular grid that was dependent on the outcrop distribution in the area.

This area is surrounded by an extensive oxidation blanket (commonly referred to as a lithocap) composed of silica, iron oxides (hematite, limonite, goethite and jarosite) and argillic minerals with trace sulfides. An intrusive body of felsic composition exhibiting a strong pervasive phyllic alteration was identified with visual estimation of up to 5-10% pyrite.

No assay results were available on August 31<sup>st</sup> 2018.

The author is of the opinion that the sampling that occurred in property is insufficient to precise the potential of property; additional comprehensive sampling with a QC/QA protocol will be required.

Main results of this survey are:

- A) Access is difficult and requires mules and mountain trekking abilities.
- B) NNE trending structures inferred by the analysis of satellite imagery were confirmed in the field.
- C) Major oxidation blanket was identified in the area south of the Culebrillas hill and the presence of an intense phyllic alteration zone within the Culebrillas hill was also identified
- D) Sampling of 151 outcrops in the Culebrillas area and 2 outcrop samples in Fortuna 12 concession.

Figure 10 shows the "Property Structural Map of property". Figure 11, Figure 12 and Figure 13 show respectively the "Fortuna 3 Concession Alteration Anomalies Map", the "Property Sampling Sites Map" and the "Property Exploration Targets Map". Eleven (11) areas of interest with a prospective potential have been interpreted on the property; they result from a combined interpretation of all available data (see Figure 13 for details).

The author is of the opinion that all interpreted maps are insufficient to precise the potential of property; additional comprehensive structural, geophysical and geological surveys will be required.

Additional work is needed to explore carefully as the potential of the property is largely underexplored. Recommendations are:

- 1) Complete a Total Field Magnetics including radiometry (Mapping of the potassic alteration) with proper 3D inversion modelling on the property
- 2) Mapping and prospecting the eleven (11) exploration targets.
- 3) Saw sampling (outcrops) on the eleven (11) exploration targets.
- 4) Installation of a modern camp.

5) Road/trail upgrading for better access on property.

Since 1992, several exploration activities were conducted on the property with geological surveys, stream sediment, HMC and grab rock sampling.

Looking at the compilation map of historical exploration work, we can see that the geology, alteration patterns and structure of the area is still poorly understood despite the reconnaissance work undertaken in the 1990's up to 2016 by Mammoth Energy Inc, Makromines S.A., Terrasources Minerals S.A. and Monterra S.A. The presence of numerous mineralized outcrops surrounded by major geological features such as major regional structures (NNE structural lineaments) that are typical of major mineralized systems attest the geological potential of the property although there is no guarantee that economic mineralization could be found on property.

We suggest doing an airborne geophysical survey (Total Field Magnetics) including radiometry (Mapping of the potassic alteration) on the entire property with proper 3D inversion modelling, systematic mapping, prospecting and sampling of the eleven (11) exploration targets (See figure 13 for details) with stripping as necessary. We suggest thin section analysis of anomalous/altered rock samples to precise exploration targets and alteration signatures and intensities.

These surveys should increase geological knowledge on property but are not necessarily indicative of economic mineral deposits in property. The property is at an early stage of development without any significant mineralized zones.

There is no guarantee that an economic deposit could be discovered and be put into production in the Fortuna Concessions property.

To evaluate the property's full potential, assess the mineralization potential, a two-phase program is suggested, for a total of \$600,000. Phase 1 (\$150,000) will be consisting in surveying (alteration and geological mapping with rock saw sampling) the Culebrillas area in Fortuna 3 concession.

Advancing to phase II is contingent to positive results in phase 1. Phase II will consist in an airborne geophysical survey with preliminary sampling of anomalies is recommended. The budget for phase II would total approximately to 450,000\$ and will allow identification of promising exploration drill targets within this property. Finally, after each phase, an updated technical report

on the exploration work will be produced. The proposed budget to complete all phases is shown in Table 4 below.

#### TABLE 4PROPOSED BUDGET

#### PHASE I – PRELIMINARY EXPLORATION OF THE PROPERTY

#### A) Mapping and Prospecting

Team of 3 geologists with technical assistants for one month (all inclusive) \$100,000

#### B) Assays and associated costs

500	assays *	50\$/assay	/	\$25,000
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#### C) GIS Integration, Maps and Report filing of the property

Integration of additional geological data on the property into Arc/GIS. processing, map production and reporting (10 days * \$500/day)				
D) <u>Contingencies</u>	\$15, <b>000</b>			
TOTAL:	\$150,000			

#### **COST RESUME FOR PHASE I**

то	TAL PHASE 1:	<u>\$150,000</u>
D)	CONTINGENCIES	\$15,000
C)	GIS INTEGRATION, MAPS AND REPORT FILING	\$10,000
B)	ASSAYS AND ASSOCIATED COSTS	\$25,000
A)	MAPPING AND PROSPECTING	\$100,000

#### PHASE II - EXPLORATION FOLLOW-UP

#### E) Airborne Geophysics

TOTAL PHASE II:				
D) <u>Contingencies</u>	<u>\$15,000 </u>			
Integration of additional drilling data on the property into Arc/View. Processing, map production and reporting (20 days * \$500/day)	\$10,000			
C) GIS Integration, Maps and Report Filing of the property				
500 assays * 50\$/assay	\$25,000			
B) Assays and associated costs				
Team of three geologists with assistants (one month, all inclusive)	\$100,000			
A) Field Personnel for Sampling and Geology				
Magnetics airborne geophysics including radiometry (100m spacing) with inversion modelling (2000 km * \$150/km)				

#### **COST RESUME FOR PHASE II**

A)	AIRBORNE GEOPHYSICS	\$300,000
B)	FIELD PERSONNEL FOR SAMPLING AND GEOLOGY	\$100,000
C)	ASSAYS AND ASSOCIATED COSTS	\$25,000
D)	GIS INTEGRATION, MAPS AND REPORTING	\$10,000
E)	CONTINGENCIES	\$15,000

TOTAL PHASE II:		\$450,00	)0
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#### **GRAND TOTAL**

GRAND TO	TAL:	\$600,000
PHASE II	EXPLORATION FOLLOW-UP OF THE PROPERTY	\$450,000
PHASE I	PRELIMINARY EXPLORATION OF THE PROPERTY	\$150,000

#### 2.0 INTRODUCTION

#### 2.1 RECIPIENT

A technical report on the Fortuna Concessions Property has been prepared at the request of Lucky Minerals Inc.

This Report complies with the disclosure and reporting requirements set forth by the CSA in National Instrument 43-101, Companion Policy 43-101CP and Form 43-101F1. This Report is a technical summary of available geological, geophysical and geochemical information for the Property.

#### 2.2 TERMS OF REFERENCE

This report provides a summary of the scientific and technical information concerning the exploration activities, both historical and recent, carried out on the Fortuna Concessions. The Exchange requires a report in support of the property being acquired by Lucky Minerals Inn. This report reflects the work performed until the August 31, 2018.

#### 2.3 SOURCE OF DATA AND INFORMATION

This report is based on the documentation provided by EarthMetrix Inc. and by the company (former technical reports performed over the years). A complete and detailed list of the documentation used is given in Item 27.0, "References".

#### 2.4 SCOPE OF THE PERSONAL INSPECTION BY THE QUALIFIED PERSON

The author visited the property between July 19<sup>th</sup> and July 22<sup>th</sup>, 2018. Approximately 60 hours were required to complete the visit. The Fortuna Concessions Property was surveyed by foot during the visit. 51 samples from various parts of property were collected during the visit by the author. Rock samples descriptions are presented next page.

WGS 84 ZONE 17S						
UTME	UTMN	Sample #	Rock Type	Texture	Alteration Intensity	Mineralization
730913	9627455	F1	Oxidation Blanket	Brecciated	Weak Alteration	Trace Sulphides
730890	9627483	F2	Oxidation Blanket	Brecciated	Weak Alteration	Trace Sulphides
730904	9627552	F3	Oxidation Blanket	Brecciated	Weak Alteration	No Sulphides
730911	9627611	F4	Oxidation Blanket	Brecciated	Weak Alteration	No Sulphides
730885	9627680	F5	Oxidation Blanket		Weak Alteration	Trace Sulphides
730943	9627736	F6	Oxidation Blanket	Porphyritic	Weak Alteration	Trace Sulphides
730979	9627740	F7	Oxidation Blanket		Weak Alteration	Trace Sulphides
730969	9627784	F8	Oxidation Blanket	Porphyritic	Weak Alteration	No Sulphides
731007	9627778	F9	Oxidation Blanket	Porphyritic	Weak Alteration	No Sulphides
731008	9627779	F10	Granite		Moderate Alteration	0,50% Sulphides
731008	9627781	F11	Granite		Moderate Alteration	0,50% Sulphides
731061	9627852	F12	Granite		Moderate Alteration	0,50% Sulphides
731050	9627766	F13	Granite		Moderate Alteration	0,50% Sulphides
731068	9627753	F14	Granite	Porphyritic	Moderate Alteration	0,50% Sulphides
731089	9627785	F15	Granite	Porphyritic	Moderate Alteration	0,50% Sulphides
731145	9627758	F16	Granite	Porphyritic	Moderate Alteration	0,50% Sulphides
731167	9627732	F17	Oxidation Blanket		Weak Alteration	Trace Sulphides
731178	9627706	F18	Granite		Moderate Alteration	0,50% Sulphides
731176	9627677	F19	Oxidation Blanket		Weak Alteration	Trace Sulphides
731264	9627635	F20	Oxidation Blanket		Weak Alteration	No Sulphides

#### TABLE 1 ROCK SAMPLES DESCRIPTION, PROPERTY VISIT

WGS 84 ZONE 17S								
UTME	UTMN	Sample #	Rock Type	Texture	Alteration Intensity	Mineralization		
731265	9627635	F21	Oxidation Blanket		Weak Alteration	No Sulphides		
731385	9627654	F22	Granite	Silicification	Moderate Alteration	0,50% Sulphides		
731386	9627654	F23	Granite	Silicification	Moderate Alteration	0,50% Sulphides		
731424	9627625	F24	Granite		Weak Alteration	0,25% Sulphides		
731481	9627651	F25	Oxidation Blanket		Weak Alteration	Trace Sulphides		
731512	9627632	F26	Granite	Fractured	Weak Alteration	0,25% Sulphides		
731521	9627635	F27	Granite	Porphyritic	Moderate Alteration	0,50% Sulphides		
731529	9627630	F28	Granite	Fault Zone	Moderate Alteration	0,25% Sulphides		
731530	9627633	F29	Granite	Fault Zone	Moderate Alteration	0,25% Sulphides		
731525	9627633	F30	Granite	Fault Zone	Moderate Alteration	0,25% Sulphides		
731520	9627634	F31	Granite	Fault Zone	Moderate Alteration	0,25% Sulphides		
731520	9627637	F32	Diorite	Fault Zone	Moderate Alteration	Trace Sulphides		
731521	9627635	F33	Granite	Fault Zone	Weak Alteration	No Sulphides		
731596	9627652	F34	Granite	Porphyritic	Moderate Alteration	0,25% Sulphides		
731596	9627654	F35	Granite	Quartz Vein	Moderate Alteration	0,25% Sulphides		
731608	9627681	F36	Granite	Porphyritic	Moderate Alteration	0,25% Sulphides		
731611	9627691	F37	Oxidation Blanket		Weak Alteration	Trace Sulphides		
731620	9627697	F38	Granite		Weak Alteration	No Sulphides		
731653	9627720	F39	Granite	Porphyritic	Moderate Alteration	0,25% Sulphides		
731660	9627813	F40	Granite	Porphyritic	Moderate Alteration	0,50% Sulphides		

WGS 84 ZONE 17S									
UTME	UTMN	Sample #	Rock Type	Texture	Alteration Intensity	Mineralization			
731640	9627834	F41	Granite	Porphyritic	Moderate Alteration	0,50% Sulphides			
731623	9627822	F42	Granite	Quartz Vein	Moderate Alteration	0,50% Sulphides			
731625	9627893	F43	Granite	Porphyritic	Intense Alteration	1-2% Sulphides			
731635	9627916	F44	Granite	Porphyritic	Intense Alteration	1-2% Sulphides			
731650	9627912	F45	Granite	Porphyritic	Intense Alteration	5-10% Sulphides			
731651	9627912	F46	Granite	Porphyritic	Intense Alteration	5-10% Sulphides			
731664	9627916	F47	Granite	Porphyritic	Intense Alteration	5-10% Sulphides			
731664	9627927	F48	Granite	Porphyritic	Intense Alteration	5-10% Sulphides			
731665	9627927	F49	Granite	Porphyritic	Intense Alteration	5-10% Sulphides			
731665	9627928	F50	Granite	Porphyritic	Intense Alteration	5-10% Sulphides			
729401	9628110	F51	Volcanics	Fractured	Moderate Alteration	1-2% Sulphides			

Samples are saw rock samples, mineralized and non-mineralized rocks, taken in the property outcrop areas. All samples come from the Fortuna Concessions Property.

#### 2.5 UNITS USED IN THIS REPORT

Unless otherwise indicated, the units used in this report are in the metric system, amounts are in Canadian dollars, and coordinates are in the UTM system, NAD 83, Zone 17S; ppm and ppb refer respectively to parts per million and parts per billion.

# 3.0 RELIANCE ON OTHER EXPERTS

The author did not rely on any other expert in the production of this report. Alain Moreau, P. Geo., the author of the report, is fully responsible for all the sections of this technical report.

No warranty or guarantee, be it express or implied, is made by the QPs with respect to the completeness or accuracy of the legal aspects of this document. The QPs do not undertake or accept any responsibility or liability in any way whatsoever to any person or entity in respect of this part of this document, or any errors in or omissions from it, whether arising from negligence or any other basis in law whatsoever.

# 4.0 PROPERTY DESCRIPTION AND LOCATION

#### 4.1 AREA

On August 31<sup>th</sup> 2018, the property is made up of one block (12 contiguous concessions), totalling 54,985 ha.

#### 4.2 LOCATION

The concessions are located in the Azuay, Morona Santiago and Zamora Chinchipe Provinces in Ecuador, approximately 60 kilometres (km) south of Cuenca (Santa Ana de Los Cuatro Ríos de Cuenca), Azuay Province. The concessions are centered at 726600 Easting/9631500 Northing (PSAD 56, Zone 17S) or  $3^{\circ}19'28''S$  latitude and  $78^{\circ}57'35''W$  longitude and are located on geographical map-sheets CT – NVI – D2, 3783-I, CT – NVI – A3, 3884-III, CT-NVI – B4, 3784-II, and CT – NVI – C1, 3883-IV. Figure 1 "Regional Location Map" and Figure 2 "Property Location Map" show the actual property location. Table 2 shows concessions descriptions. The Property has not been legally surveyed

#### 4.3 TYPE OF MINERAL TENURE

Under the new Ecuadorian Mining Law (the "**New Mining Law**"), enacted in November 2009, concessions are granted for a term of 25 years. For concessions recorded prior to the new Mining Law that have been replaced, the term of the new concession is equal to the number of years remaining from the date the new concession was granted to the expiry of the old concession.

The New Mining Law prescribes the following terms for exploration and mining activities:

#### Exploration is to be conducted in 3 phases:

- 1. Initial Exploration 4 years, prior to proceeding to the advanced exploration phase, the New Mining Law requires a mandatory relinquishment of part of the total concession area.
- 2. Advanced Exploration 4 years

3. Economic Evaluation - 2 years with an option to extend for an additional 2 years

After a maximum of 12 years the concession has to enter into the exploitation phase. Before beginning the exploitation phase, the status of an existing granted mining concession under the large-scale mining regime must be replaced by either a Mining Exploitation Contract or a Mining Services Contract. In the case of medium scale mining regime, there is no need for a Mining Exploitation Contract or a Mining Services Contract. Under the small-scale mining regime exploration and exploitation activities can be developed simultaneously without the need to execute a Mining Exploitation Contract or a Mining Services Contract.

Exploitation – equal to the years remaining from the date the concession was granted. The concession can be renewed for successive 25-year periods provided that the concession holder gives notice and the Ecuadorian Mining Ministry approves such extension prior to the expiry date

To keep a concession in good standing an annual conservation payment to the Ecuadorian government along with the filing of an annual report is required. The conservation payment is based upon the current phase of mining. During the initial exploration phase it equals to 2.5% of a vital basic salary (in 2011 it totaled US\$6.06 per hectare per year), in the advanced exploration phase (next 4 years) it equals to 5% of a vital basic salary and 10% during the exploitation phase. The mineral concessions comprising the Fortuna Property are in good standing.

The concession owner is granted the universal and exclusive right to prospect, explore, exploit, beneficiate, smelt, refine and trade all the mineral substances which exist and can be obtained from within the limits of the concession. The concession may be transferred, subject to approval of the Ecuadorian Mining Ministry.

For more details, see https://www.mineria.gob.ec/wpcontent/uploads/downloads/2017/12/ULTIMA-REFORMA-2016-A-LA-LEY-DE-MINERIA.pdf

#### 4.4 NATURE AND EXTENT OF THE ISSUER'S TITLES

On August 31, 2018, the property is held 100% by Goldmindex S.A., an ecuadorian company that is subject to a transaction by Lucky Minerals Inc. Obligations that must be met to obtain 100% ownership of Goldmindex S.A. are:

Payments of due mineral property taxes of 2017 and 2018 and trust fees totalling US\$538,100 and the issuance of 16,000,000 shares of Lucky Minerals Inc.to Monterra S.A. (A Panama registered company) for the acquisition of all shares of Goldmindex S.A.

There are no surface rights nor any legal access issues that hamper exploration activities on property.

#### 4.5 **PROPERTY BOUNDARIES**

The property boundaries have not been surveyed. They are already precisely defined by map coordinates provided by the property owner (concessionaire). Concessions in Ecuador are referred to as map coordinates using the PSAD 1956 grid reference (UTM zone 17S for the Azuay province) and are granted by the Ministry of Mines.

#### 4.6 ROYALTIES AND TAXES

Ecuadorian New Mining Law sets out a minimum 3% net smelter royalty ("**NSR**") of all primary and secondary minerals and a maximum 8%.

Additional taxes include: 25% income tax, 12% tax on profits, 3% tax on labour profits and a 12% value added tax. The Property is considered a grass roots exploration property, in which the additional taxes would not come into effect until mining (exploitation) started. Upon termination of the "exploration phase" and prior to initiating the "exploitation phase" (which includes construction), Lucky Minerals, through its wholly owned subsidiary Goldmindex S.A. will need to negotiate an "exploitation contract" with the Ecuador government which finalizes a tax package if the decision is to go forward under the large-scale mining regime. A total of 60% of the NSR and 100% of the 12% profits taxes must be used on local productive and sustainable development projects. Nothing is established until a contract is signed and the government assumes the political and social license component of a mining project. The aforementioned New Mining Law states that this is the responsibility of the state for its community participation.

For more details, see https://www.mineria.gob.ec/wpcontent/uploads/downloads/2017/12/ULTIMA-REFORMA-2016-A-LA-LEY-DE-MINERIA.pdf

#### 4.7 Environmental Liabilities

To the knowledge of the author, there are no environmental liabilities pertaining to the Fortuna Concessions Property.

#### 4.8 ACCESS AND REQUIRED PERMITS

Access for exploration requires permission from surface landowners. Mining concession holders can negotiate with landowners in regards to the extensions of installations, materials and resources that are required for facilities for mining activities. If no agreement can be reached with the landowner, the Mining Control and Regulation Agency will impose any required easement. At this time, due to the unknown nature of future exploration work, agreements have not been sought with the surface landholders. The author believes that surface rights will be granted in a timely fashion once future work is approved.

Mining concession holders are required to complete an Environmental Impact Assessment ("**EIA**") prior to commencing exploration/mining activities. An EIA along with environmental management plans are required to outline procedures in order to prevent, mitigate, rehabilitate and compensate for environmental and social impacts that may result from the mining activities on the Property. The assessment and plans must be approved by the Ministry of Environment, which handles the environmental approval system for new mining projects.

Additionally, in order to carry out mining activities, including prospecting, exploration, exploitation, beneficiation, smelting, refining and trading, it is necessary to obtain reports issued by various governmental entities, namely:

- ✓ <u>The Ministry of Environment</u>: through the environmental license.
- <u>The Water Secretariat SENAGUA</u>: regarding the potential impact to water and the priority use of it.
- ✓ For more details, see http://www.ambiente.gob.ec/wpcontent/uploads/downloads/2012/07/Ley-de-Gestio%C2%81n-Ambiental.pdf

An affidavit made by the Mining Concessionaire before a notary in which it expresses knowledge that the mining activities do not affect: roads, public infrastructure, authorized ports, sea beaches and sea beds; telecommunications networks; military installations; oil infrastructure; aeronautical facilities; electrical networks or infrastructure; or archaeological vestiges or natural and cultural heritage.

On the 31 August 2018, no permits were applied for.

#### 4.9 SIGNIFICANT FACTORS AND RISKS

To the knowledge of the author, there are no significant factors or risks that could affect access, title, or the right or ability to perform work on the property.

Concession Name	Concession Number	Hectares	Date recorded	Owner
Fortuna 1	90000341	4980	12/30/2016	Goldmindex S.A.
Fortuna 2	90000342	4000	12/30/2016	Goldmindex S.A.
Fortuna 3	90000332	4799	12/30/2016	Goldmindex S.A.
Fortuna 4	50000587	4950	12/28/2016	Goldmindex S.A.
Fortuna 5	50000588	4875	12/28/2016	Goldmindex S.A.
Fortuna 6	50000589	4950	12/28/2016	Goldmindex S.A.
Fortuna 7	90000333	4500	12/30/2016	Goldmindex S.A.
Fortuna 8	10000320	4250	12/30/2016	Goldmindex S.A.
Fortuna 9	10000321	4983	12/30/2016	Goldmindex S.A.
Fortuna 10	10000322	4502	12/30/2016	Goldmindex S.A.
Fortuna 11	50000606	4049	12/28/2016	Goldmindex S.A.
Fortuna 12	50000607	4147	12/28/2016	Goldmindex S.A.
Total		54,985		

 TABLE 2
 FORTUNA CONCESSIONS PROPERTY DESCRIPTION AND STATUS







Fortuna Project, Nabon Area, Ecuador **Property Location** 1:5,000,000 200 km PSAD56 Zone 17S APEX Geoscience Ltd. Edmonton, AB April, 2017





Alain Moreau, P.Geo., EarthMetrix Technologies Inc., 6661, Des Écores, Montréal, Québec H2G 2J8 514 924-6840



#### Figure 3 Property Concessions Map

# 5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES INFRASTRUCTURE AND PHYSIOGRAPHY

The Fortuna Concessions Property is centered at 726600 Easting/9631500 Northing (PSAD 56, Zone 17S) or 3°19'28''S latitude and 78°57'35''W longitude. It is located approximately 60 kilometers southeast of Cuenca.

#### 5.1 TOPOGRAPHY, ELEVATION, VEGETATION AND DRAINAGE

Geographically Ecuador is divided into three physiographic settings: Coastal, Andean, and the Amazon/Oriente Basin. The Andean Mountain Chain, which extends through central Ecuador, is comprised of two parallel mountain ranges: The Western Cordillera Occidental and the Eastern Cordillera Real. The two ranges are separated by the 35 to 50 km wide Inter Andean Depression. The Property is located in the Inter Andean Depression near the western foothills of the Cordillera Real. Topography and vegetation are typical of the Andean highlands or "altiplano". The topography in the Property area ranges from greater than (">") 3,600 m above sea level (asl) in the area of the peak of Culebrillas (on Fortuna 3 block, see Figure 4 for details), to less than ("<") 1,600 m asl in the south of the Property (on Fortuna 6).

The northwest portion of the Property is dominated by open rolling grass lands and farm land with a few pine plantations throughout, and thick vegetation along the steep valleys near major drainages. Rare stands of eucalyptus occur throughout the Property, which will allow for easier access to most potential drill sites. The southwest portion of the Property is dominated by steep mountains with a large drop in altitude towards the south.

Bedrock exposure is most prevalent along road cuts and hill crests, as well as proximal to the abundant drainages in the area. Overall bedrock exposure is good to excellent with only a few areas completely masked by developed soil horizons and vegetation. The majority of the bedrock has been altered and/or weathered to clays, though original lithologies and textures can still be widely recognized.

#### 5.2 ACCESSIBILITY

The closest major city to the Property is Cuenca, which is the capital city of the Azuay Province. Cuenca is serviced daily by several direct flights from Quito, the country's capital city and main international hub of Ecuador. Access to the Property from Cuenca is via the Pan American highway, which runs NE-SW through the Property. Access to the remainder of the Property is provided by several secondary all–weather roads as well as abundant four-wheel drive accessible tracks and by foot/horse. Overall access to the Property is good, though access is limited during the wetter months of the year (October through May). The operating season is year-round. Access to the property is illustrated in Figure 4, "Property Logistics Map".

#### 5.3 INFRASTRUCTURE

The major city of Cuenca with more than 1 million inhabitants (60 km to the northwest of the Property) contains all of the services and suppliers required for exploration and mining work in the area. Additionally, the abundant smaller towns and parishes that lie directly within the Property boundary are excellent sources for basic supplies, local labour and especially for local knowledge of the area. Accommodation can be found in the towns of Nabon, Charqui, and La Playa, with Nabon being the largest town in the vicinity.

#### 5.4 CLIMATE

Average annual rainfall is approximately 1,200 mm, with the drier months being June through September. Temperatures range from 6 to 20 degrees Celsius ("°C") with an annual average of 15°C. Drainages in the Property area, along with man-made aqueducts and canals provide good sources of water.

Water sources for exploration are available on the majority of the Property due to the numerous streams and creeks as well as abundant rainfall. Other man-made utilities such as power needed for exploration is currently sparse in the region.

These are normal conditions for south-central Ecuador and do not hamper either exploration or mining work.




#### 6.0 HISTORY

#### 6.1 OWNERSHIP

The Orotierra 1 and 2 concessions were originally granted to Mr. Leonard Anibal Nunez Rodas by the National Mining Bureau, through the Regional Mining Bureau of Azuay, on November 9, 2006. The concessions were duly registered in the Property Register of the Gualaquiza Canton on November 10, 2006. The Orotierra 3 to 6 concessions (inclusive) were originally granted to Mr. Leonard Anibal Nunez Rodas by the National Mining Bureau, through the Regional Mining Bureau of Azuay, on November 16, 2006. The concessions were duly registered in the Property Register of the Yacuambi Canton on November 16, 2006. The concessions were duly registered in the Property Register of the Yacuambi Canton on November 16, 2006. The ANDI 1 to 6 concessions were originally granted to Mr. Leonard Anibal Nunez Rodas by the National Mining Bureau, through the Regional Mining Bureau of Azuay, on December 13, 2006. The concessions were duly registered in the Nabon Property Register on January 9, 2007.

The Orotierra 1 to 6 concessions were transferred to Dr. Santiago Jose Yepez by Mr. Leonard Anibal Nunez Rodas on August 3, 2007 for a sum of US\$340,000. Subsequently, a promissory agreement was signed on August 6<sup>th</sup> of that year between Dr. Yepez and Mr. Camilleri, whereby the promise to irrevocably assign and transfer the Orotierra 1 to 6 concessions to Mr. Camilleri or to a person or entity that he should designate within 5 days of such a request, was agreed upon. The subsequent transfer of concessions from Dr. Yepez to Terrasources Minerals S.A. occurred on September 4, 2007.

The ANDI 1 to 6 concessions were transferred from Mr. Leonard Anibal Nunez Rodas to Nabonminas S.A. on July 2, 2007 for a sum of US\$160,000.

Monterra S.A. acquired the Orotierra 1 to 6 concessions in 2007 and Nabonminas S.A. (owner of the ANDI 1 to 6 concessions) in 2008.

The Orotierra and ANDI concessions were relinquished in 2016 (due to lack of payment of mineral property taxes) and the Fortuna Concessions 1 to 12 were applied for and granted in December 2016 to Goldmindex S.A.

Fortuna 1 to 6 concessions correspond to former Orotierra 1 to 6 concessions while Fortuna 8 to 10 correspond, approximately, respectively to former ANDI 4 to 6 concessions.

Monterra S.A. was registered as a corporation in Panama on September 19, 2007. Terrasources Minerals S.A. is incorporated in the Republic of Ecuador and is owned by Monterra S.A. Goldmindex S.A. is incorporated in the Republic of Ecuador and is owned by Monterra S.A. Nabominas S.A. is incorporated in the Republic of Ecuador and is owned by Monterra S.A.

#### 6.2 WORK DONE BY MINING COMPANIES

Limited exploration has been conducted within the concessions. The first work on the ground appears to have been completed by Mammoth Energy Inc. in 1992. Between 1992 and 1997, a field camp was established at Laguna Tullpas (on Fortuna 3) and a field program was completed throughout the area of the Fortuna 2 and 3 concessions. In total, 16 stream samples were collected mainly on the Fortuna 2 concession (one sample was collected on the Fortuna 3 concession. Samples assayed up to 1,061 ppb Au (Zamora, 2008). In 1997 work ceased and the project was abandoned at the time (Smith, 2008).

Makromines S.A. acquired the Property in 2000 and completed a field program of prospecting and grab sampling. A total of 63 rock and soil samples were collected mainly on the Fortuna 3 and 4 concessions; sample assays returned up to 262 ppb Au (Zamora, 2008). A cluster of samples with 65-70 ppb Au is located in the central part of Fortuna 3 on the edge of the Laguna Tullpas caldera-like structure. The sample containing the highest gold content of 262 ppb Au, is located in the central part of the caldera-like structure in an area known as Cullebrillas. Additionally, 88 stream samples were collected by Alfredo Zamora throughout the Fortuna Concessions Property area with 62 samples falling on concessions Fortuna 2, 3, 5 and 6 (the timing of these is uncertain); samples assayed up to 10,506 ppb Au (Zamora, 2008).

The work performed by Mammoth Energy Inc. and Makromines S.A. identified six anomalous areas associated with interpreted *caldera-like* structures within the Fortuna 2 and 3 concessions. For example, in the area of the Laguna Tullpas feature, breccia's with stockwork veins and extensive mineralization and alteration were recognized (Smith, 2008).

Terrasources Minerals S.A. acquired the concessions in 2007 and completed a data compilation and reconnaissance and confirmatory field work in December. The field study included a foot expedition within the Property for the purposes of topography and geology inspection as well as a fixed wing airplane fly-over over the entire Property and surrounding areas. In early 2008, a satellite imagery study based upon available archived Landsat Enhanced Thematic Mapper (ETM+) data resulted in the identification of 12 exploration targets within the Fortuna Concessions Property, and an additional 30 targets were identified in the areas surrounding the concessions (Murphy, 2008). A subsequent field visit was undertaken in April to follow-up the satellite imagery targets. All the targets in the vicinity of the Fortuna Concessions were examined. Several highly prospective structures, similar to the Tullpas structure, were recognized on the Fortuna 1, Fortuna 4 and Fortuna 9 concessions (Smith, 2008). Additionally, detailed aerial reconnaissance and mapping was completed on the Fortuna 3 concession to gain a better understanding of the Tullpas structure, which led Smith (2008) to suggest that the Tullpas feature is connected to the Fortuna 1 feature. 418 rock grab (including 34 duplicates) and 155 HMC (including 13 duplicates) samples were collected throughout the Property.

The samples collected were not representative of the Property. In most cases, they were selected to test mineralization and to test previous identified outcrops to ensure previous assay results. The spacing of samples was not even over the Property. The area covered was limited to areas of reasonable access that were not covered with overburden.

The 2007 rock samples were dominated by pyroclastic material ranging from rhyolitic to andesitic composition, although several samples of basalt, muscovite schist and sediments were also collected for analysis; the majority of the rock grab samples were collected from the extensive bedrock outcrops along the road cuts within the Property boundary. No anomalous gold or other base metal or other values were returned from the 2007 rock samples.

The HMC samples were collected at points along drainages within and draining from the Property to delineate anomalous areas for further exploration. A total of 99 gold grains were recovered from 42 samples. The gold grains had an estimated total weight of 1,567 micrograms (" $\mu$ g"). The highest gold counts were recovered from samples within the Fortuna 10 concession. One sample returned the highest Au counts with 21 Au grains weighing an estimated 159.3 µg. An additional 5 samples located along the same drainage returned gold grain counts of 5, 1, 1, 2 and 11 grains, respectively.

Further highlight from the Fortuna 10 concession includes a sample which contained 6 gold grains weighing 45.79  $\mu$ g. Panned gold grains from the Rio Shincata placer workings area just south of the Fortuna 6 concession are interpreted to be sourced from the Property.

No field exploration was conducted in 2008 and early 2009 due to a moratorium on exploration enacted by the Ecuadorian government.

Then in August of 2009, Monterra S.A. collected four rock grab samples. In 2010, Monterra S.A. performed a geological mapping campaign, as well as rock grab and stream sediment sampling.

Several samples were taken along a major drainage SE of the Fortuna 10 concession to test potential bedrock sources within the Fortuna 10 concession. The highest gold counts recovered in this area was from a sample which contained three gold grains weighing 28.8  $\mu$ g.

On Fortuna 8 concession the highest gold grain counts were recovered from a sample which contained 5 grains weighing an estimated 99.75  $\mu$ g. The sample was collected from a stream near a kaolinite mine, located in the SW part of concession. Many other samples taken from Fortuna 8 and 10 concessions returned 1 and 2 gold grain counts.

One rock grab sample returned 96 ppb Au from the Fortuna 3 concession in a rusty gneissic boulder.

Monterra S.A. conducted some additional limited exploration within the Fortuna 3 concession in late 2009 and early 2010 whereby an additional 57 heavy mineral panned concentrate samples, 57 stream sediment samples, 40 petrography samples, and 111 rock grab and chip samples from within three targets areas. The HMC samples were taken from the same places as the stream samples. The field program was designed to visit anomalous areas identified from historic work to better plan ongoing field work. Mostly sericite- schist, quartz-feldspar porphyry and breccia was discovered/mapped in the area, although the area is densely covered by vegetation (Yuan, 2009; Vaca and Granda, 2010).

In December 2009 Smith collected 43 non-representative samples to test various geological structures within the Property. The samples returned gold values ranging between 0.001 ppm Au and 0.027 ppm Au.

57 HMC samples at the same sites as the 2010 stream sediment samples. The samples were hand processed/panned in the field. An internal report completed by Monterra S.A. discusses that 8 of the 57 HMC samples contained 'colors'/gold grains. Grains were identified visually and counted (See Plate 1). Up to 6 gold grain counts are reported in an HMC sample (Vaca and Granda, 2010). Stream sediment samples contained up to 0.155 g/t Au. In total 5 samples contain greater than 20 parts per billion ("ppb") Au (Vaca and Granda, 2010).

The rock grab samples collected in 2010 are from an area that historically had a stream sediment sample which contained 1898 ppb Au (Fortuna 6, Rios, 2010). The rock grab samples collected in 2010 returned Au values ranging between <0.001 ppm Au and 0.044 ppm Au; two other rock samples returned more than 0.1 g/t Au.

5 new small breccia bodies were located. They all appear to have a structural control and the main alteration affecting the breccia and wall rock is phyllic (silica, sericite, pyrite +/- clay) with the presence of veinlets of quartz and vuggy quartz (Vaca, 2010).

In February 2010, a reconnaissance sampling campaign to identify further areas of exploration targets was performed. 26 samples from the area surrounding Culebrillas hill. Some samples did contain millimetre (mm) sized veinlets of quartz and sulfides (Rios, 2010a). The samples returned Au results up to 35 ppb Au (taken from a zone that contained veinlets of quartz and sulfides).



#### Plate 1 Gold Grains in HMC Sample 249504

A reconnaissance mapping campaign was undertaken in April 2010 at Culebrillas Hill to determine the relationship between the country and wall rock with respect to the hydrothermal breccia body and its alterations. Widespread silicification both in and around the breccia body was noted including an abundance of quartz stockwork veinlets in the surrounding country rock (Rios, 2010b).

In 2015, Murphy Geological Services completed a Landsat Interpretation of the area on behalf of Monterra S.A. In total, 42 target areas were identified which include the presence of major faults, major fault intersections, converging and branching faults, releasing bends, splays along major faults, domal/circular and linear resistant features and possible alteration anomalies.

In 2016, Monterra S.A. collected 9 grab samples. No anomalous values were returned.

Historical sampling is summarized in Figure 5 ("Property Historic Rock Samples Map (Gold Anomalies)") and Figure 6 ("Property Historic Stream Sediment Samples Map (Gold Anomalies)")



#### Figure 5 Property Historic Rock Samples Map (Gold Anomalies)



## Figure 6 Property Historic Stream Sediment Samples Map (Gold Anomalies)

Little to no exploration work had been previously documented within the Fortuna 11 and 12 concessions. Verbal reports of several small-scale placer operations were received from locals within the area with both timing and production are unknown. In the central area, just outside the Property concessions, there is abundant evidence of surficial and small-scale underground mining purportedly undertaken by the Inca's and Indigenous groups of the area.

The author did not verify the information and that the information is not necessarily indicative of any mineralization on the property.

Summary of historic work by companies is presented in Table 3 ("History").

Year	Company	Exploration	Results
1992 to 1997	Mammoth Energy Inc.	Stream sediment sampling	Up to 1,061 ppb Au
2000	Makromines S.A.	Soil, stream and rock sampling	Up to 10,506 ppb Au in a stream sediment sample
2007 and 2008	Terrasources Minerals S.A.	Heavy Minerals Concentrate (HMC) and rock sampling and a basic Landsat-ETM+ interpretation survey	Up to 21 gold grains in an HMC sample
2009	Monterra S.A.	Stream, HMC and rock sampling. Geological mapping of Fortuna 3, Fortuna 8 and Fortuna 10 concession	Up to 96 ppb Au in a grab rock sample
2010	Monterra S.A.	Stream, HMC and rock sampling	Up to 1,898 ppb Au in a stream sediment sample
2015	Monterra S.A.	Landsat Interpretation	Identification of 42 target areas
2016	Monterra S.A	Rock sampling	No anomalies reported

TABLE 3HISTORY

# 6.3 WORK DONE BY THE GOVERNMENT

Finally, in 2016, the Instituto Nacional de Investigación Geológico Minero Metalúrgico ("INIGEMM") conducted regional exploration throughout the area and collected 16 rock grab samples and 39 stream sediment samples. The purpose of the work was to document Mineral Occurrences and get information from mineralized outcrops, alluvial deposits, geological and structural features related to mineralization. Two rock grab samples and one stream sediment sample are anomalous with respect to gold (0.237 ppm; 0.768 ppm and 0.318 ppm Au) respectively, and 3 other stream sediment samples are possibly anomalous (up to 0.097 ppm Au)

Inigemm concluded that portions of the Property are very prospective due to the existence of altered schist and tertiary granodioritic intrusions that are mineralizing the adjacent shales (E. M. Vaca Vega, 2016).

#### 6.4 MINERAL RESOURCES AND MINERAL PRODUCTION FROM THE PROPERTY

Mineral resources have never been estimated, and no production has ever occurred on the Fortuna Concessions Property.

#### 7.0 GEOLOGICAL SETTING AND MINERALIZATION

#### 7.1 REGIONAL GEOLOGY

The Andean Cordillera is composed of two parallel ranges: the western Cordillera Occidental and the eastern Cordillera Real. The two ranges are separated by the Inter-Andean Depression (Winkler *et al.*, 2005).

The Cordillera Occidental is composed of sub-greenschist, early to late Cretaceous, oceanic plateau basalts and ultramafics as well as late Cretaceous marine turbidites, early Eocene basaltic and andesitic oceanic island arc sequences. Along with overlying Eocene marine turbidite basin fill sequences and a late Eocene to Oligocene terrestrial sequence (Hughes and Pilatsig, 2002). Subsequently, the rocks of the Cordillera Occidental were intruded by late Eocene and younger I-type granitoids and covered by major mid-Eocene and younger sub-aerial calc-alkaline continental margin volcanics.

The Cordillera Real is a series of sublinear belts of Paleozoic to Mesozoic aged metamorphic rocks intruded by S- and I-type granitoids. The Cordillera Real is capped by Cenozoic to modern volcanics (Aguilera *et al.*, 2005).

The Inter Andean Depression is interpreted as a graben structure bounded by active normal faults and filled with volcanic and volcano- sedimentary deposits, discussed in more detail below. North-northeast and north-trending faults of regional extent, which bound the Central Andean graben structure, are also evident throughout both the Cordillera Occidental and Real. The basement rock of the Inter Andean Depression is unknown, though gravity data suggests that it may be a continuation of the rocks of the Cordillera Occidental (Aguilera et al., 2005). The Property is in the

southern pan of the central graben which is filled mainly with Tertiary to recent volcanic rocks (see Figure 7, "Regional Geological Map").

Several mid- Miocene to Pliocene clastic sedimentary series and volcanic sequences exposed in the Inter Andean Depression are thought to closely reflect the younger tectonic history of the area (Hungerbuhler *et al.*, 2002). Specifically, the geology and stratigraphy of the Nabon basin applies to the Fortuna 8 to 10 concessions. The Nabon basin is characterized by syn-sedimentary tectonic deformation identified from progressive unconformities along the western edge of the basin as well as growth faults and folds. Maximum shortening occurred perpendicular to the longer basin axis in a WNW-ESE direction (Hungerbuhler *et al.*, 2002). The Nabon basin can be described in terms of two main Groups: the **Nabon Group** ("Gr.") and the **Saguro Gr.** and an overlying Formation ("Fm."), the *Tarqui Fm*.

Below is a summary from oldest to youngest of the stratigraphy within the Nabon Basin, adapted from Hungerbuhler *et al.*, 2002.

The **Saguro Gr.** consists of intermediate and acidic calc-alkaline sub aerial volcanics of the *Loma Blanca* and *Saraguro Formations*. The *Loma Blanca Fm.* is up to 2,000 m thick and is comprised of intermediate to felsic pyroclastics (ignimbrites, pumice crystal tuffs and volcanic breccia's), along with abundant dykes and sills, which are indicative of the proximity to the main eruptive centre. The 500 - 2,000 m thick *Saraguro Fm.* unconformably overlies a series of older formations and consists of intermediate to felsic pyroclastics (andesitic to dacitic tuffs are most prevalent in the lower section, whereas the upper portion contains mainly rhyolitic ignimbrites). Frequent intercalated fluvial and lacustrine sediments record periods of aquatic reworking between eruptive stages.

The sediment dominated **Nabon Group** is made up by four distinct formations. From oldest to youngest they are:

Iguincha Formation: made up of four members;

- Infiernillo: Mainly ash and pumice beds, deposition of this member commenced during an eruptive phase. Reworking of this unit by small rivers and gravity driven processes is evident.
- Namarin: Small alluvial fan systems prograding into the basin from the N and SE.

- El Salado: Partially interfingers the Namarin. Bed load to mixed load fluvial system with braided channels which flowed NE-SW.
- Dumapara: Pyroclastic flows and falls indicate a short lived syn-eruptive basin fill episode. These are overlain by sediments deposited from bed load dominated river systems which entered the basin from the NE and E. Letrero Formation: composed of clastic lake deposits that indicate a period of decreased tectonic and volcanic activity.

The *La Cruz Formation*: comprised of abundant detrital input from a meandering fluvial system, which drove the fill of the lake.

Picota Formation: a volcaniclastic mass – flow wedge during a further syn-eruptive stage.

The overlying *Tarqui Fm.* consists of intermediate to acidic pyroclastics. Exposed volcanic ashes of this formation typically alter to a dark red to purple kaolinite clays. The *Tarqui Fm.* unconformably overlies the **Saguro Group**. Lithologies of the *Tarqui Fm* include rhyolitic to andesitic volcanic breccia's, ash flow tuffs, pyroclastic flows, ignimbrites and airborne tuffs.

The Nabon basin formed and filled between 8.5 and 7.9 million years ago ("Ma"). Sedimentation occurred over a period of varying volcanic activity along the eastern and northern margin. The basin fill was then subsequently eroded and incised, and volcanic ash of the Tambo Veijo member sealed the resulting topography (Hungerbuhler *et al.*, 2002).

# 7.2 **PROPERTY GEOLOGY**

No detailed mapping has been completed within the concessions however the Tertiary volcanic and sedimentary packages can be interpreted to continue along strike onto the concessions. Observations made during previous exploration programs by Mammoth Energy Inc., Makromines S.A., Terrasources Minerals S.A. and Monterra S.A. indicate that outcrops within the concessions include metamorphic gneiss and schist as well as granite/porphyry, metavolcanic breccia and breccia intrusions (Smith, 2008).

Alteration in the form of argillization, silicification and sericitization was observed. The concessions extend south-eastward and, in that direction, overlie fault bounded Triassic and Paleozoic sequences comprised mainly of 2 units: Tres Lagunas Granite and Chiguinda Unit. The Tres Lagunas Granite is in fault contact with the Tertiary units discussed above. The Tres Lagunas granite is an S-Type granite and in many cases contains garnet. It is of Triassic age and is in

tectonic contact with the Paleozoic rocks of the Chiguinda Unit to the east. The Paleozoic Chiguinda Unit consists of low grade metamorphic rocks composed of cream-colored, sometimes whitish, quartzites interspersed with black phyllites. Additionally, quartz-feldspar porphyries are found associated with the large regional structures (mainly associated with faults and stockwork). The rocks are highly silicified, which at times totally obliterates the characteristics of the porphyry.

The minerals observed in these fault planes are pyrite, chalcopyrite, patinas of malachite and locally molybdenite. Outcrops of amphibolite are located in various areas of the concessions. Small moraine deposits, characteristic of glacial cirques, complete the lithological picture in the project area (Zamora, 2008). Previous explorers (i.e. Mammoth Energy Inc., Makromines S.A. and Monterra S.A.) located a caldera-like feature on the Fortuna 3 concession (surrounding Lake Tullpas). The area of the lake and the surrounding hill was found to contain volcanic breccias and stockwork veins with extensive mineralization and alteration. It was suggested that the caldera is possibly part of a larger complex (Smith, 2008).

The Property spans the contact between Paleozoic and Mesozoic basement in the east and the Tertiary volcanics in the west. The Fortuna Concessions Property partly lie within the Tertiary volcanics and sedimentary sequences. The concessions extend to the east over the fault bounded Triassic and Paleozoic sequences.

The geology of the Fortuna 8 to 10 concessions was mapped in 2007 by Terrasources and the following geological description is the result of this mapping program. The volcanic sequence described below overlies a unit of schistose conglomerates and sandstones with a lesser component of mylonitic granite (Unit 1). This older substrate is exposed in the southeast part of the mapping area (Fortuna 10 concession).

The stratigraphically lowest facies recognized within the mapping area is a unit of andesitic to basaltic extrusive and explosive deposits (Unit 2). The facies morphology varies significantly, but has been grouped into: i) pillowed flows, ii) thin sheet-like stacked flows, iii) massive flows, iv) agglomerates (monolithic pyroclastic to autoclastic deposits), small syn-explosive volcanic domes or subvolcanic/hypabyssal sills, and Vi) autoclastic peperitic textured (clay matrix with quenched puzzle-piece juvenile fragments) deposits. The first and last of these are suggestive of a subaqueous depositional environment however, given the characteristics of the overlying deposits it was likely a shallow-water to sub- aerial environment. The rheological differences between the

flow-dominated andesite/basalt facies and the overlying volcaniclastic dacites has led to stronger fracturing in the more competent flows.

A switch in eruptive style from extrusive, flow dominated to explosive, Plinean- style, volcaniclastic dominated resulted in the deposition of a thin local unit of block, ash and surge deposits (Unit 4) followed by a thick sequence of andesitic to dacitic ignimbrites and dacitic crystal-lithic tuffs. The aerially restricted block, ash and surge deposits locally directly overlie the basalts. The block and ash deposits are typically poorly consolidated, well bedded, white-beige in colour and composed of an ash rich, crystal poor matrix with near monolithic, granule to boulder sized, sub-rounded dacitic clasts. The less common surge deposits are spatially, and likely paragenetically, associated with the block and ash deposits. They are chalky white in colour, fine grained and typically exhibit planar and cross bedding. A surge deposit appears to be the primary lithology at the La Playa kaolin mining operation.

The thick sequence of dacitic to andesitic ignimbrites (Unit 3) and crystal-lithic tuffs (Unit 4) were deposited syn- and post- Unit 4. The ignimbrites stratigraphically underlie and are slightly more andesitic than the overlying dacitic crystal-lithic tuffs. The ignimbrites have been seen overlying Unit 2 in more than one location. Locally, there is a transitional section of stratigraphy (Unit 5) that contains a mixture of basaltic volcanics (flows?), and esite-dacite ignimbrites and dacitic crystallithic tuffs. The ignimbrites are typically less altered than the overlying crystal-lithic tuffs. They exhibit various degrees of welding and compaction and commonly have a glassy or "clinkery" morphology. The overlying tuffs have varying clast and crystal percentages and compositions, but plagioclase-quartz-biotite. Alteration are almost always is often completely texturally/mineralogically destructive. It is possible that some areas mapped as dacite tuffs are actually ignimbrites – i.e. the alteration is so severe in places that welding or compaction textures that may have been present have since been destroyed.

This stage of explosive felsic volcanism was followed by a period of quiescence during which rather extensive fluvial deposits (Unit 7 & 8) were laid down in a northeast-southwest trending channel. These deposits show a very clear facies variation along strike with the channel. Fluvial deposits in the southwest are dominated by mature conglomerates and sandstones with lesser (floodplain?) siltstones and claystones (Unit 7). In contrast, fluvial deposits in the northeast consist of lightly reworked (immature) fluvial to epiclastic rocks (Unit 8). In some cases. weakly fluvially reworked volcanic rocks (epiclastics) can be difficult to distinguish from the (primary) pyroclastic

facies. Examples of detrital muscovite and clasts derived from the (muscovitic) schists to the south and east are common. It is possible that this unit includes some purely volcaniclastic (autoclastic/epiclastic) deposits.

Alteration within the mapping area is divided into three varieties:

Argillic alteration: which manifests itself as very strong kaolin alteration of feldspar minerals. It is typically accompanied by fine hematite disseminations or deep red centimeter (cm)-scale fracturecontrolled (vein?) areas. The argillic alteration is near-pervasive within the dacite tuffs, although much of the outcrop on the northwest part of the mapping area is only weakly altered. At an outcrop scale, alteration is usually pervasive and evenly distributed, but a number of examples of "greisen" stockworking, sometimes including quartz veins, were noted. There are also a number of examples of so-called "green alteration". Most examples occur in the lower areas of stratigraphy and are interpreted as argillic alteration overprinting more andesitic or basaltic units. This is supported by the fact that this alteration is typically stratabound and in areas of stratigraphy where andesite-basalt is expected to occur. The green colour is likely the result of mixed clays-chlorite-epidote +/- zoisite.

An unidentified light green coloured form of alteration: noted in the cores of some of the kaolin alteration domes and in a few other areas. The material is harder than the kaolin altered dacite, but is far softer than quartz. It likely consists of some epidote group mineral; and

Quartz veining: with weak stockworking and associated weak silicification. Individual quartz veins are typically <5 cm. This style of alteration is almost exclusive to the andesite-basalt flows, which are more competent and thus more amenable to brittle fracturing, helping to concentrate hydrothermal fluids. This is in contrast to the less competent and more permeable dacite tuffs at the top of the volcanic pile.

The area of the concessions has the potential for epithermal gold ("Au") – copper ("Cu") – molybdenum ("Mo") mineralization of classical Andean form. Tuff volcanoes developed over igneous intrusives develop brecciation along lines of structural weakness. Within the features developed within the Property there is the potential for disseminated ore bodies in porphyries; Breccia-hosted deposits in the associated volcanic breccia's; and, Vein and disseminated deposits in granitic and schist / gneiss bedrock. Areas of quartz lag were observed on surface

within Fortuna 1 and Fortuna 10. All these styles have been demonstrated in the Tulpas feature and are inferred in the Fortuna 1 and 4 concessions and further demonstrated at Cerro Colorado. As a result of the historic work, evidence of Au, silver ("Ag"), Cu and Mo mineralization exists within the Property (Smith, 2009).

Limited undulatory to botryoidal quartz veining within the lower basalt was also identified, though no associated sulphide mineralization was observed.

Several operating kaolin mines were identified within the previous ANDI concessions (including Fortuna 8 to 10 concessions). Kaolin is an industrial mineral derived from the advanced argillic alteration of feldspar rich volcanics in an epithermal environment. It is used for porcelain, inks and filler in plastics. The presence of extensive kaolinite clays within the property indicates the likelihood of an acid sulphate epithermal environment which is typically a good source for Au and other base and precious metals.

No detailed geological mapping was performed on concessions 11 and 12. Property geology is displayed on Figure 8 ("Property Geological Map").

# Figure 7 Regional Geological Map







#### 7.3 MINERALIZED ZONES

No significant mineralized zones have been identified on property.

## 8.0 **DEPOSIT TYPES**

Four types of mineral deposits can be considered for the exploration of the Fortuna Concessions Property. The first is Cu-Mo porphyry deposits as established by numerous Cu/Mo occurrences and the prospective modelling by the USGS (Cunningham et. al., 2008, see Figure 9 ("Regional Cu-Mo Prospectivity Map") for details). Porphyry copper deposits are copper orebodies that are formed from hydrothermal fluids that originate from a voluminous magma chamber several kilometers below the deposit itself. Predating or associated with those fluids are vertical dikes of porphyritic intrusive rocks from which this deposit type derives its name. In later stages, circulating meteoric fluids may interact with the magmatic fluids. Successive envelopes of hydrothermal alteration typically enclose a core of disseminated ore minerals in often stockwork forming hairline fractures and veins. Because of their large volume, porphyry orebodies can be economic from copper concentrations as low as 0.15% copper and can have economic amounts of by-products such as molybdenum, silver and gold. In some mines, those metals are the main product. Porphyry copper deposits are currently the largest source of copper ore. This deposit type is likely to be associated with the caldera-like structures, like those observed within the Fortuna 3 concession.

The second type to explore are High and Low sulphidation epithermal deposits. High sulphidation epithermal deposits occur as veins, vuggy breccias and sulphide replacements ranging from pods to massive lenses associated with high level hydrothermal systems marked by acid-leached, advanced argillic, and siliceous alteration. Metal associations in these deposits include variable amounts of precious- and base-metals and variable gangue minerals. The frequently irregular deposit shapes are determined by host rock permeability and the geometry of ore-controlling structures. Multiple, crosscutting composite veins are common. Low sulphidation epithermal deposits form from fluids which are typically a mixture of groundwater and fluid emanating from molten rock at depths of around 5 to 10 kilometers below surface. These hot fluids are under very high pressures at those depths, and as they rise along faults to depths of about two km from the surface, they begin to boil. As the fluids boil, they cool rapidly, causing quartz to precipitate in the

fault, forming the vein. Calcite, adularia, as well as any Au and Ag present in the fluid also precipitate in response to boiling.

Recent research indicates that these deposits form in subaerial volcanic complexes or composite island arc volcanoes above degassing magma chambers. The deposits commonly contain multiple stages of mineralization, presumably related to periodic tectonism with associated intrusive activity and magmatic hydrothermal fluid generation (Panteleyev, 1996). The ages of the deposits are commonly Tertiary to Quaternary, however some deposits have been dated as Mesozoic and rarely Paleozoic volcanic belts. The rare preservation of older deposits reflects rapid rates of erosion before burial of subaerial volcanoes in tectonically active arcs.

Rock types associated with such deposits are volcanic pyroclastic and flow rocks, commonly subaerial andesite to dacite and rhyodacite, and their subvolcanic intrusive equivalents. It is also thought that permeable sedimentary intervolcanic units can be sites of mineralization. The country rock surrounding the epithermal veins is commonly extensively altered to alunite and kaolinite (advanced argillic). There is a mid-zone of intermediate argillic alteration and sericitization and an outer zone of propylitic alteration, even though the vein walls may be sharply defined.

Volcanic-hosted, epithermal Au deposits in the Central Andean graben south of Cuenca have been known for some time. The most notable example is the Portovelo district, 50 km northwest of Loja, where mining has been underway since the 16th century. More than 4 million ounces of Au have been recovered to date with higher grades (more than 40 grams per tonne "g/t" Au) recovered from oxidized zones during the first 100 years of mining. More recent mining has been directed to pillars grading about 7 g/t Au (2009, IAMGOLD).

Such a deposit is likely to be found in the poorly exposed andesite-basalt flows at the bottom of the identified stratigraphy within western part of the Property; drusy and colloform textures were both noted in some of the veins cutting the flows. Such features have been recognized in Fortuna 3, 4 and 8 to 10 concessions.

The third type to explore for on the property is Skarn deposits that form during regional or contact metamorphism through a variety of metasomatic processes. Skarns are found in many forms, in various geological environments dominated by differing mineral assemblages. Skarn deposits can be hosted by any type of rock but are most commonly found associated with host rocks containing

at least some limestone. The most common types of skarn deposits are defined by Au, Cu, Mo, lead-zinc ("Pb-Zn"), tungsten ("W"), tin ("Sn"), garnet and wollastonite.

The majority of gold skarn deposits are hosted by calcareous rocks. The rarer manganese type is hosted by dolomites or Mg-rich volcanics. Gold skarn deposits primarily form in orogenic belts at convergent plate margins and are often linked with syn- to late-arc intrusions which were emplaced into calcareous sequences in arc or back arc environments (Ray, 1998). As a result of poor correlation between Au and Cu in some Au skarns, the economic potential of a prospect can be overlooked if Cu-sulphide rich outcrops are preferentially sampled over those of other sulphide bearing or sulphide poor assemblages. The gold is often found in close association with bismuth ("Bi") or gold tellurides and is commonly found as small blebs (<40 microns) that form within or on sulphide grains (Ray, 1998).

Copper skarn deposits are most common where Andean type plutons intrude older continentalmargin carbonate sequences. Less commonly copper skarns can be found related to oceanic island arc plutonism. These oceanic island arcs copper skarns tend to be related to more mafic intrusions while those formed at continental margin environments are associated to more felsic intrusions (Ray, 1995). Most copper skarns are found to be Mesozoic, but may be of any age. Generally, copper skarns that are related to mineralized copper porphyry intrusions are larger, lower grade and emplaced at higher structural levels than those which are associated with barren rocks. Most copper skarns contain oxidized mineral assemblages and mineral zoning is common in the skarn envelope. Moderate to high sulphide content is found with copper skarns, where the inner garnet-pyroxene zone contains chalcopyrite  $\pm$  pyrite  $\pm$  magnetite, while mainly bornite  $\pm$ chalcopyrite  $\pm$  sphalerite  $\pm$  tennanite, make up the outer wollastonite zone.

Gold mineralization hosted by skarnified volcanic rocks is present in the eastern foothills of the Cordillera Real 50 km East of Loja. For example, the Nambija deposit is located upstream from historic alluvial workings. The mineralization is centered on ancient Inca workings which were rediscovered in 1931. Gold occurs in fault zones and quartz veins in garnet skarns derived from Triassic volcanic rocks which are contained in a roof pendant within a Jurassic granitic batholith. Carbonate rich rocks have been recognized in the vicinity of Fortuna 10 concession.

Finally, Paleoplacer deposits are the fourth type of mineralization to be explored on property. Paleoplacer deposits form initially by ordinary sedimentary processes that concentrate heavy minerals, most commonly accomplished by moving water. Minerals which occur as placer deposits must first be freed from their source rock. They must have a high density, chemical resistance to weathering and mechanical durability. Examples of minerals with these properties are: Au, diamond, Cu, rutile and chromite (Evans, 1987). Placer deposits are typically low grade but can be easily exploited due to their host being loose material amenable to hydraulic mining methods. Paleoplacer deposits are typically lithified and buried beneath other strata. The Precambrian Witwatersrand Au deposit in West Africa is a prime example of a paleoplacer deposit. Post lithification the sedimentary strata of a paleoplacer fluvial system may undergo metamorphism which may act to further concentrate the minerals of interest. Presence of numerous placer mining activities around the Fortuna 11 and 12 concessions support this possibility.

The author did not verify the information and that the information is not necessarily indicative of any mineralization on the property.



# Figure 9 Regional Cu-Mo Prospectivity Map

(Reference: Cunningham et. al., 2008)

#### 9.0 **EXPLORATION**

Reconnaissance and detailed field work have been realized between April to July 2018 by Lucky Minerals Inc. The work consisted to perform structural modelling, alteration mapping using ASTER data and a rock saw sampling program in an area near the Culebrillas hill where numerous alteration anomalies were identified from satellite imagery and in the southwestern part of property (2 samples). Major NNE structures identified from the structural interpretation were confirmed by field observations. 153 rock samples have been taken in the property along major interpreted NNE structures with coinciding alteration anomalies. The area surveyed covers approximately 3 km by 1,5 km with a mean sampling density of 300m by 300m in an irregular grid that was dependent on the outcrop distribution in the area.

This area is surrounded by an extensive oxidation blanket (commonly referred to as a lithocap) composed of silica, iron oxides (hematite, limonite, goethite and jarosite) and argillic minerals with trace sulfides. An intrusive body of felsic composition exhibiting a strong pervasive phyllic alteration was identified with visual estimation of up to 5-10% pyrite.

No assay results were available on August 31<sup>st</sup> 2018.

The author is of the opinion that the sampling that occurred in property is insufficient to precise the potential of property; additional comprehensive sampling with a QC/QA protocol will be required.

Main results of this survey are:

- A) Access is difficult and requires mules and mountain trekking abilities.
- B) NNE trending structures inferred by the analysis of satellite imagery were confirmed in the field.
- C) Major oxidation blanket was identified in the area south of the Culebrillas hill and the presence of an intense phyllic alteration zone within the Culebrillas hill was also identified
- D) Sampling of 151 outcrops in the Culebrillas area and 2 outcrop samples in Fortuna 12 concession.

Figure 10 shows "Property Structural Map of property". Figure 11, Figure 12 and Figure 13 show respectively the "Fortuna 3 Concession Alteration Anomalies Map", the "Property Sampling Sites Map" and the "Property Exploration Targets Map". Eleven (11) areas of interest with a prospective potential have been interpreted on the property; they result from a combined interpretation of all available data (see Figure 13 for details).

The author is of the opinion that all interpreted maps are insufficient to precise the potential of property; additional comprehensive structural, geophysical and geological surveys will be required.

Additional work is needed to explore carefully as the potential of the property is largely underexplored. Recommendations are:

- 1) Complete a Total Field Magnetics including radiometry (Mapping of the potassic alteration) with proper 3D inversion modelling on the property
- 2) Mapping and prospecting the eleven (11) exploration targets.
- 3) Saw sampling (outcrops) on the eleven (11) exploration targets.
- 4) Installation of a modern camp.
- 5) Road/trail upgrading for better access on property.







## Figure 11 Fortuna 3 Concession Alteration Anomalies Map







#### Figure 13 Property Exploration Targets Map

#### 10.0 DRILLING

The property has never been drilled.

## 11.0 SAMPLE PREPARATION, ANALYSES AND SECURITY

All the 153 samples were taken by the author and Gabriel Arseneau, P.Geo (OGQ #1624) and were transported to the city of Cuenca to the preparation laboratory (LAC y Associados) that is associated with MS Analytical based in Vancouver.

The author is of the opinion that future assays will be based on sample preparation and analytical protocols that meet standard industry practice using a laboratory independent of the issuer. Such a laboratory will be an established laboratory with modern and state of the art equipment and staffed with highly qualified personnel.

Samples will be crushed at 85% < 75 um with a 30 g sample retained for assay. Au will be assayed by Fire Assay with Atomic Absorption finish. All other elements will be assayed by ICP-MS following a 4-acid digestion.

MS Analytical meets a global quality management system with all requirements of International Standards ISO/IEC 17025:2005 and ISO 9001:2015.

The 153 samples were not assayed on August 31<sup>st</sup> 2018.

## 11.1 QUALITY CONTROL AND QUALITY ASSURANCE

No quality control and quality assurance for the assays have been implemented at this stage.

## 12.0 DATA VERIFICATION

The author was able to verify part of the historical work realized on property. During the site visit, trails, basic camp and artisanal work (western part of the Fortuna 3 concession) were observed, attesting the exploration work done in the past. The author took 51 rock samples (using a saw) from 44 different locations on property (see table 1 for rock descriptions details). These samples aren't necessarily representative or indicative of mineralization in property. The author currently

has no reason to suspect that the historical work (surveys) reported on the property was in fact not done.

The author has carefully reviewed historical work documented in past reports. The author was unable to verify the information contained in the reports.

The author is of the opinion that historical work is more or less adequate to describe the potential of the property as many geochemistry techniques with different procedures have been undertaken with samples assayed with different laboratories with deficient QA/QC protocols; numerous nugget effects (very high anomalous values) reported in the results were not properly interpreted.

#### 13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

Mineral processing and metallurgical testing have never been performed on the Fortuna Concessions Property.

#### 14.0 MINERAL RESOURCE ESTIMATES

Mineral resources have never been estimated on the Fortuna Concessions Property.

# 15.0 TO 22.0 DO NOT APPLY TO THE FORTUNA CONCESSIONS PROPERTY PROJECT

The property is still at an early stage of exploration, in this case items 15 to 22 do not apply to the Fortuna Concessions Property.

## 23.0 ADJACENT PROPERTIES

Several mineral properties in varying degrees of development lie in the vicinity of the concessions (see Figure 14 "Properties surrounding Fortuna Concessions Property Map"). The most notable of these are discussed below. The information below was derived largely from company press releases and publicly available assessment and technical reports. This information is presented by the author in order to provide context for the deposit types discussed above, and is not necessarily indicative of the mineralization within the Property and was unable to verify the information on adjacent properties.

Three mineral exploration properties lie along the Collay-Shincata mineralized belt, which is located to the northeast, east and south of the Property. The San Bartolome Property, owned by EcuaGold, to the northeast is the largest historical silver producer in Ecuador. Mineralization within the San Bartolome concessions is of the low sulphidation epithermal Ag, Pb, Zn vein system type. Between 1991 and 1994 a total of 85,000 tonnes of ore were mined from the San Bartolome Property.

Channel Resources' El Mozo Property lies directly to the southwest of the Property. High sulphidation epithermal gold mineralization is exhibited within the El Mozo Property. The El Mozo mineralization appears to be controlled by high angle north and east trending faults, specifically gold mineralization occurs in vuggy silica and grey silica – pyrite altered zones.

The Asaray project, also owned by EcuaGold, lies to the northeast. It is the most undeveloped of the three mineral properties which lie along the Collay – Shincata belt in the vicinity of the Property. Mineralization within the Asaray project show high sulphidation epithermal Au-Ag characteristics.

Two mineral properties owned by Nortec Resources lie to the west of the Property along the Ganarin Mineralized belt. The properties are named the Condorcocha and the Ganarin. Both are still at the prospect stage, though encouraging results from trenching have been obtained from the Ganarin Property (104 m at 0.628 g/t Au and 1.33 g/t Ag, as well as 3 m at 3.12 g/t Au and 50.60 g/t Ag from separate trenches; Nortec, 2009). The Condorcocha and the Ganarin mineral properties exhibit mineralization typical of low sulphidation epithermal character.

IAMGold's Quimsacocha Property lies to the northwest of the Property. The Quimsacocha Property is in the pre-feasibility stage. Mineralization is structurally controlled in a silicified zone surrounded by weaker altered rock. The Quimsacocha mineralization displays high sulphidation epithermal gold, copper and silver characteristics.

To the northwest of the Property lies the Chaucha Property, owned by Copper Mesa Mining Corporation. The Chaucha Property is believed to be a Cu, Mo, Ag, Au porphyry lying within the Cordillera Occidental. The geology of the Chaucha Property is dominated by tonalite and quartz porphyry intrusions, with mineralization occurring in quartz veins, quartz stockworks and disseminated, all of which are related to phyllic – potassic hydrothermal alteration. A separate

copper porphyry type deposit, owned by Corriente Resources lies to the northeast of the Property. Four spatially distinct Cu-(Au) porphyry deposits are located within the Corriente concessions.

Fortescue Mining Group Ltd. Holds a large piece of land contiguous to the Fortuna 11 and 12 concessions (see Figure 14 for details).

Several other mineral properties exist within close proximity to the Property, though little or no information could be located by the author at this time (see Figure 14 for details).



#### Figure 14Properties Surrounding Fortuna Concessions

#### 24.0 OTHER RELEVANT DATA AND INFORMATION

A series of trail exist on property and allow access to southernmost concessions.

#### 25.0 INTERPRETATION AND CONCLUSION

Since 1992, several exploration activities were conducted on the property with geological surveys, stream sediment, HMC and grab rock sampling.

Looking at the compilation map of historical exploration work, we can see that the geology, alteration patterns and structure of the area is still poorly understood despite the reconnaissance work undertaken in the 1990's up to 2016 by Mammoth Energy Inc, Makromines S.A., Terrasources Minerals S.A. and Monterra S.A. The presence of numerous mineralized outcrops surrounded by major geological features such as major regional structures (NNE structural lineaments) that are typical of major mineralized systems attest the geological potential of the property although there is no guarantee that economic mineralization could be found on property.

We suggest doing an airborne geophysical survey (Total Field Magnetics) including radiometry (Mapping of the potassic alteration) on the entire property with proper 3D inversion modelling, systematic mapping, prospecting and sampling of the eleven (11) exploration targets (See figure 13 for details) with stripping as necessary. We suggest thin section analysis of anomalous/altered rock samples to precise exploration targets and alteration signatures and intensities.

These surveys should increase geological knowledge on property but are not necessarily indicative of economic mineral deposits in property. The property is at an early stage of development without any significant mineralized zones.

There is no guarantee that an economic deposit could be discovered and be put into production in the Fortuna Concessions property.
#### 26.0 RECOMMENDATIONS

To evaluate the property's full potential, assess the mineralization potential, a two-phase program is suggested, for a total of \$600,000. Phase 1 (\$150,000) will be consisting in surveying (alteration and geological mapping with rock saw sampling) the Culebrillas area in Fortuna 3 concession.

Advancing to phase II is contingent to positive results in phase 1. Phase II will consist in an airborne geophysical survey with preliminary sampling of anomalies is recommended. The budget for phase II would total approximately to 450,000\$ and will allow identification of promising exploration drill targets within this property. Finally, after each phase, an updated technical report on the exploration work will be produced. The proposed budget to complete all phases is shown in Table 4 below.

#### TABLE 4PROPOSED BUDGET

#### PHASE I – PRELIMINARY EXPLORATION OF THE PROPERTY

#### A) Mapping and Prospecting

Team of 3 geologists with technical assistants for one month (all inclusive)	\$100,000
B) Assays and associated costs	
500 assays * 50\$/assay	\$25,000
C) GIS Integration, Maps and Report filing of the property	
Integration of additional geological data on the property into Arc/GIS. processing, map production and reporting (20 days * \$500/day)	\$10,000
D) <u>Contingencies</u>	<u>\$</u> 15, <b>000</b>
TOTAL:	\$150,000

#### **COST RESUME FOR PHASE I**

TOTAL PHASE 1:\$150,0		
D)	CONTINGENCIES	\$15,000
C)	GIS INTEGRATION, MAPS AND REPORT FILING	\$10,000
B)	ASSAYS AND ASSOCIATED COSTS	<u>\$25,000</u>
A)	MAPPING AND PROSPECTING	\$100,000

#### PHASE II - EXPLORATION FOLLOW-UP

#### A) Airborne Geophysics

Magnetics airborne geophysics including radiometry (100m spacing) with inversion modelling (2000 km * \$150/km)	_\$300,000
B) Field Personnel for Sampling and Geology	
Team of three geologists with assistants (one month, all inclusive)	\$100,000
C) Assays and associated costs	
500 assays * 50\$/assay	\$25,000
D) GIS Integration, Maps and Report Filing of the property	
Integration of additional drilling data on the property into Arc/View. Processing, map production and reporting (20 days * \$500/day)	<u>\$10,000</u>
E) <u>Contingencies</u>	<u>\$15,000</u>
TOTAL PHASE II:	_\$450,000

#### **COST RESUME FOR PHASE II**

A)	AIRBORNE GEOPHYSICS	\$300,000
B)	FIELD PERSONNEL FOR SAMPLING AND GEOLOGY	\$100,000
C)	ASSAYS AND ASSOCIATED COSTS	\$25,000
D)	GIS INTEGRATION, MAPS AND REPORTING	\$10,000
E)	CONTINGENCIES	\$15,000

TOTAL PHASE II:		\$450,0	00
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#### **GRAND TOTAL**

GRAND TO	TAL:	\$600,000
PHASE II	EXPLORATION FOLLOW-UP OF THE PROPERTY	\$450,000
PHASE I	PRELIMINARY EXPLORATION OF THE PROPERTY	<u>\$150,000</u>

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# **SCHEDULE 1**

Certification

### CERTIFICATION

This technical report is dated August 31, 2018 and is signed by the author.

I, Alain Moreau, do hereby certify that:

1. I am a consultant geologist with office at 6661, Des Écores, Montreal, Quebec, H2G 2J8, Canada.

2. I graduated with a Master of Science Degree in Geology from École Polytechnique, Québec (Canada) in 1987.

3. I am a member of the Ordre des Géologues du Québec (No. 1298).

4. I have worked as a geologist for a total of 32 years since my graduation from University. I have worked in the porphyry systems environment since 1987 for copper-gold exploration in South-America, Central America and Quebec. I work actively in the Ecuador porphyry belt since 2017.

5. I am responsible for the preparation of the technical report pertaining to the "Fortuna Concessions Property, PSAD56 Zone 17S in the Province of Azuay, Ecuador", and dated this August 31, 2018. I have read NI 43-101 and Form 43-101FI. To the best of my knowledge, information and belief, this technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

6. I have visited the Fortuna Concessions Property between the 19<sup>th</sup> July and the 22<sup>th</sup> July 2018

- 7. I have no interests in the Fortuna Concessions Property.
- 8. I am not independent of Lucky Minerals Inc.
- 9. I am independent of the property vendors and the property.

10. I am taking responsibility of all items of this report.

## To the Autorité des Marchés Financiers (AMF), Securities Regulatory Authority (British Columbia Securities Commission (BCSC)):

I, Alain Moreau, do hereby consent to the public filing of technical report entitled "Fortuna Concessions Property, PSAD56 Zone 17S in the Province of Azuay, Ecuador", and dated this August 31, 2018 (the "technical report") by Lucky Minerals Inc. (the "Company"), with the TSX Venture Exchange under its applicable policies and forms in connection with the Fortuna Concessions Property acquisition according to the mining property agreement signed on March 27, 2018 to be entered into the Company and I acknowledge that the technical report will become part of the Company record.

Dated this September 18, 2018

Alain Moreau

