PepinNini Minerals limited
ABN 55 101 714 989

ASX ANNOUNCEMENT

18 July 2014

Phase 2 Exploration Results, Santa Ines Project Argentina

- **Phase- 2 of systematic exploration program complete**
- **Soil Sampling extends Copper & gold anomalism at El Obsequio prospect**
- **Weak chargeable response at El Obsequio**

PepinNini Minerals ("PepinNini" or 'the Company") is pleased to announce details of Phase 2 exploration field activities completed within its Santa Ines Project, Argentina. The work was undertaken by geological consultants CSA Global and involved geological mapping, soil sampling (field portable XRF) and an eleven line-kilometer Induced Polarisation (IP) survey to investigate the potential for porphyry copper-gold mineralisation within prospects defined during previous field work (*PepinNini ASX release 28th February, 2014*).

Soil samples were collected on a 200 x 200 meter grid overlying prospective geological domains but where outcrop was concealed by younger cover. Concentrations of Copper (Cu) and Molybdenum (Mo) were investigated using a field portable XRF and the accuracy of analyses was quantified by comparison with field duplicates submitted for ICP analyses.

Copper and gold results highlight coincident anomalism in the vicinity of El Obsequio prospect, with maximum value of 228ppm Cu and 13.7 ppb Au present in soil samples. This expands on positive results from stage 1 field activities, from which PepinNini reported maximum concentrations of 3.25% Cu, 0.8g/t Au, 91.1 ppm Mo 12.5 g/t silver, in rock chip samples. No interesting geochemical distributions were identified from soil geochemical sampling over the La Recompensa prospect, although a single sample contained 39.1ppb Au.

Four lines of pole-dipole IP were read over two targets defined within El Obsequio and La Recompensa following positive interpretation of ground magnetic data within these areas. The chargeability values ranged from 2 to 6mV/V across the entire survey and the resistivity values were high. The results detect weak responses within El Obsequio possibly sourced by narrow chargeable bodies (veins). The IP survey did not identify any significant chargeability anomalism at La Recompensa.

PepinNini will utilise the current winter months and exploration off-season to assess the merit of a drill campaign to test anomalous base metal geochemistry and IP anomalies at El Obsequio. The Company will also be assessing its current exploration portfolio in the region for additional porphyry copper opportunities.

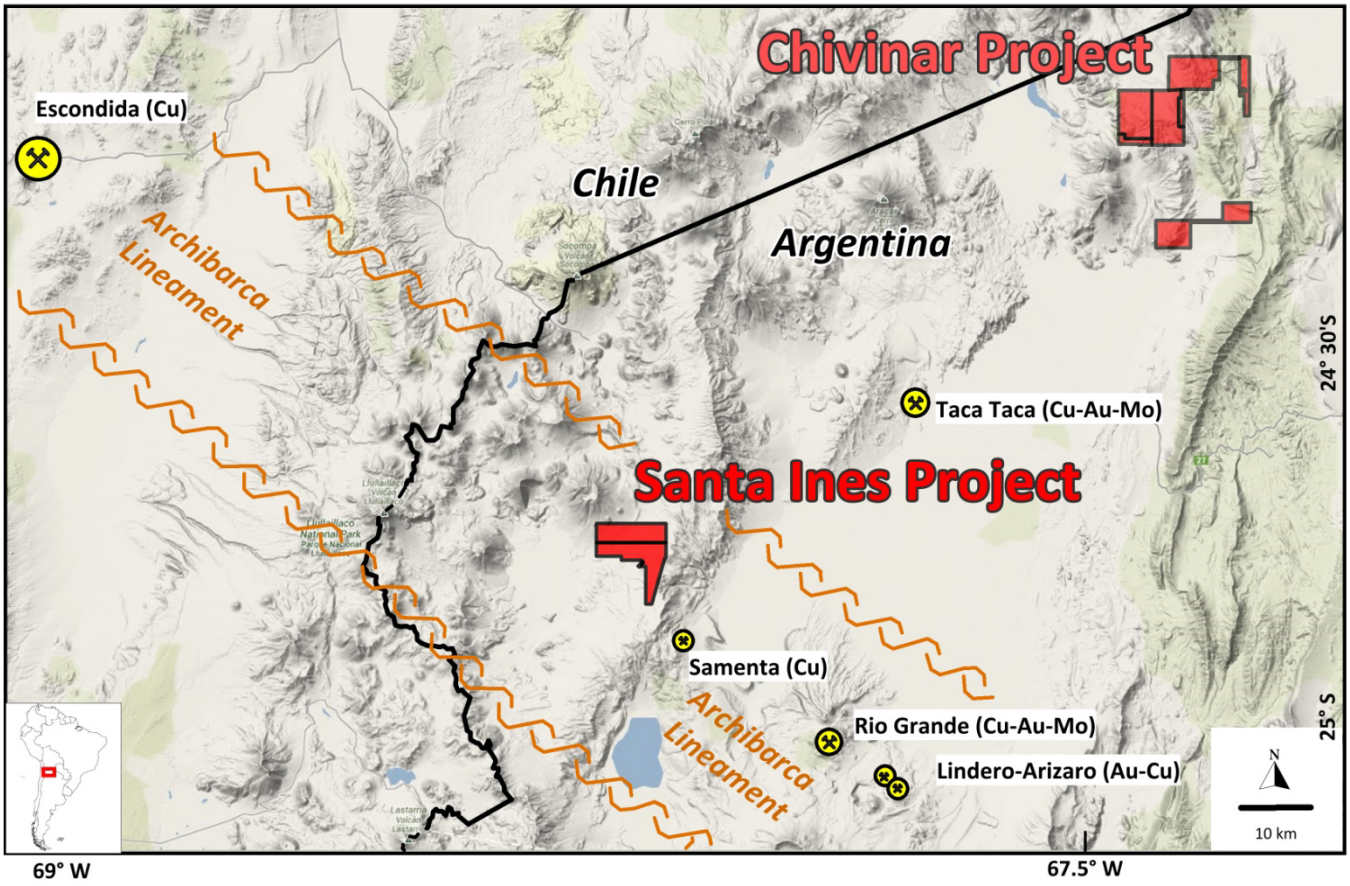

Figure 1 – Location of PepnNini's Santa Ines and Chivinar Projects

Project Potential

The Santa Ines Project is located within a crustal scale mega–lineament (the Archibarca lineament zone) which trends to the northwest and contains the giant Escondida Copper-Gold Project located 80km to the northwest in Chile. These crustal structures are widely recognised as being fundamental in the control and distribution of porphyry-epithermal deposits, particularly where they are intersected by northeast-trending structures, such as those seen at Santa Ines.

PepinNini is exploring the project area for a large copper-gold-molybdenum porphyry system that may also have iron-copper-gold (IOCG) characteristics. Epithermal style quartz veins were also identified, though non-mineralised in the sparse outcrop exposed.

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Colin Brodie who is a member of the Australasian Institute of Mining and Metallurgy. Mr Brodie is an associate senior geological consultant to CSA Global and has a minimum of five years relevant experience in the style of mineralisation and type of deposit under consideration and qualifies as a Competent Person as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Brodie consents to the inclusion of the information in this report in the form and context in which it appears.

For further information please contact:

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Note: Additional information on PepinNini Minerals Limited can be found on the website: www.pepinnini.com.au

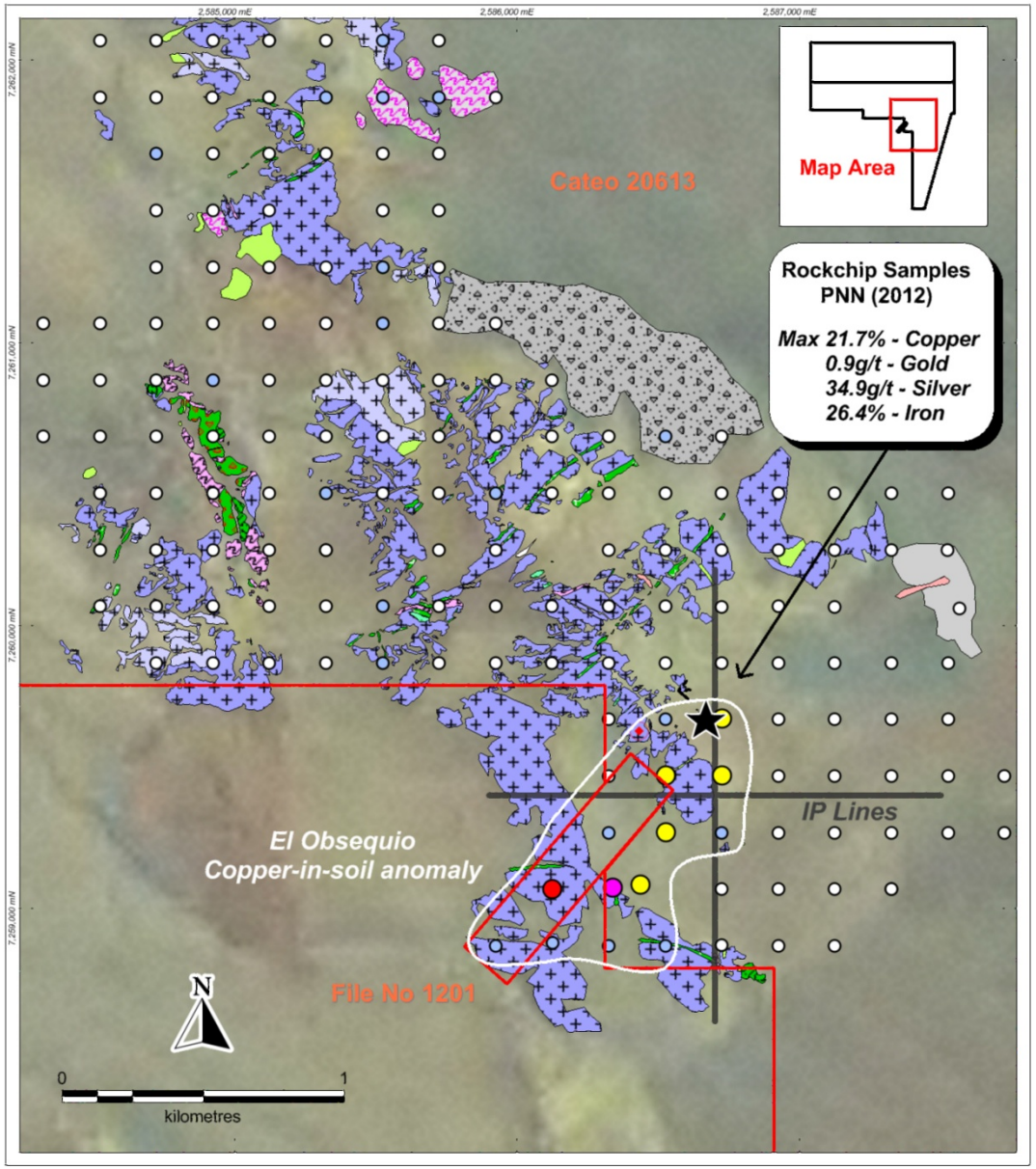
Table A – Notable Soil Sample Results

Sample	East	North	Cu (ppm)	Au (ppb)	Mo (ppm)	Pb (ppm)	Zn (ppm)	Ag (g/t)
526	2586434	7259087	100.6	13.6	1	39	106	0.1
538	2586338	7259078	228.5	13.7	1.7	31	94	0.2
539	2586124	7259073	130.5	2	1.1	16	142	*<dl*
554	2586524	7259474	99.9	0.9	0.9	15	71	*<dl*
726	2584924	7262475	55	15.1	1.1	53	109	0.5
733	2585324	7262275	109.2	*<dl*	1.6	21	74	*<dl*
756	2581723	7261875	82.7	39.1	0.8	18	114	*<dl*

NB. East / North co-ordinates = Argentina Gauss-Kruger Zone 2

Analysis by ACME ANALYTICAL LABORATORIES LTD, all analyses by Aqua Regia digestion with an ICP finish, except Au, which was done by 30g charge fire assay and ICP finish. Soil samples were collected in the field by CSA Global. Surface debris was removed to a depth of a few centimetres, and then a small pit dug to take an effectively "C" horizon sample. A <1mm fraction was sieved and collected in paper soil sampling envelopes, total sample weights were about 100-150g. Samples sites were navigated to and recorded by hand held GPS. A further 262 samples contained lower Cu and Au values.

<dl = below detection limit



El Obsequio Prospect, Santa Ines Project
Phase 2 Soil Sampling

Stratigraphic Legend

Post - Santa Ines Volcanic Complex deposits

- Mine dump material
- Unconsolidated, mainly volcanogenic deposits (block and ash deposts, bedded sediments)
- Monzonite/trachyte dykes - porphyritic
- Basalt - lava to hypabyssal intrusions
- Fault zone, probably also with movement syn-Santa Ines Volcanic Complex deposition

Santa Ines Volcanic Complex (Eocene?)

- Rhyolite - dykes and lavas (some may be younger than Santa Ines Volcanic Complex)
- Dacite - dykes and high level plugs
- Andesite - intrusions, mainly dykes
- Andesite lava, massive porphyritic or flow-banded
- Andesite volcanic breccias (polymict)
- Mafic Breccia - grade from shear zones to fluidized breccias (age? post-granite, pre-andesite)

Llullaillaco Plutonic Complex (Permo-Triassic)

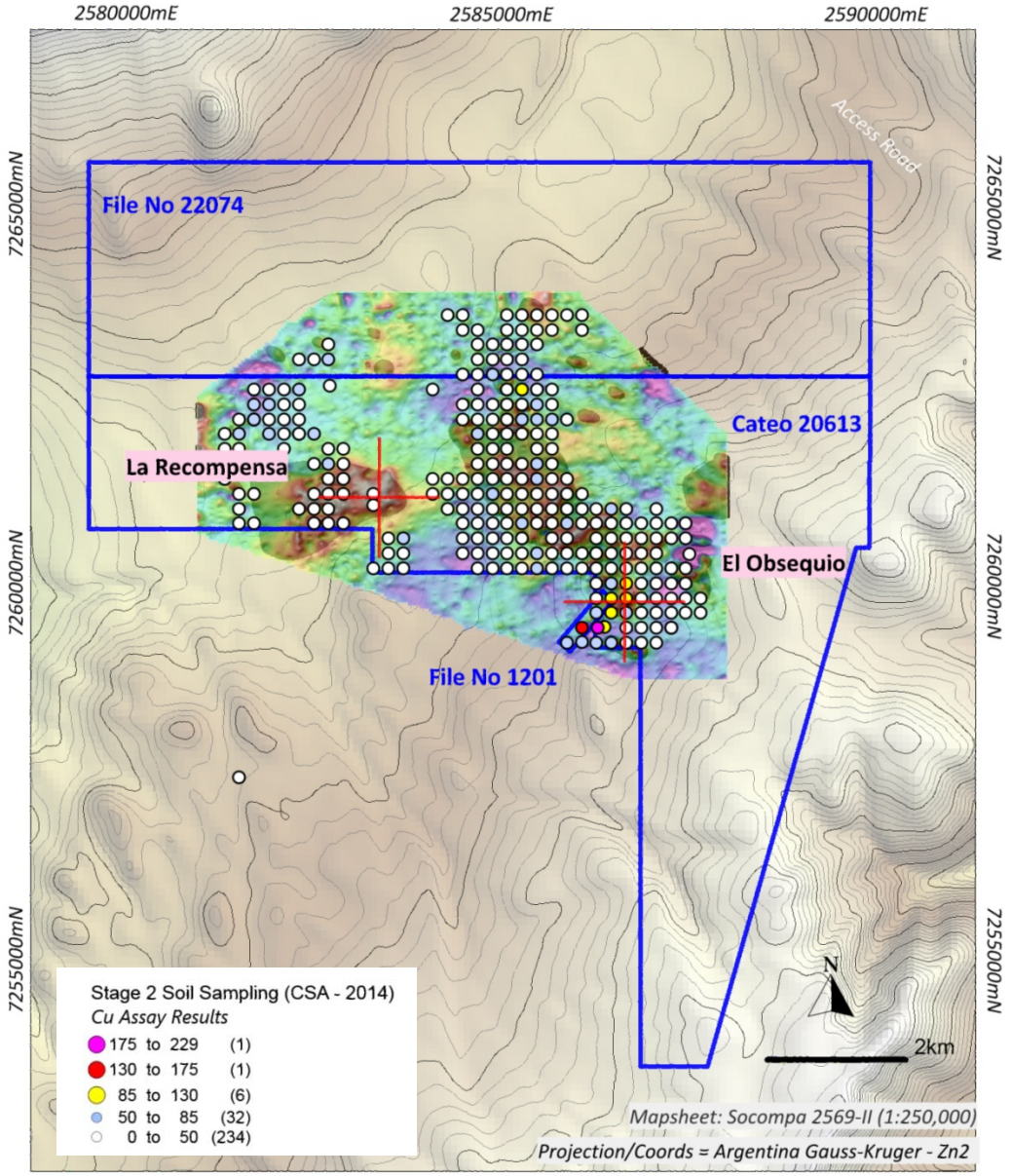
- Leucogranite
- Granite
- Foliated granite

Stage 2 Soil Sampling (CSA - 2014)
Cu Assay Results

- 175 to 229 (1)
- 130 to 175 (1)
- 85 to 130 (6)
- 50 to 85 (32)
- 0 to 50 (234)

Tenure Boundary

Mapsheet: Sacompa 2569-II (1:250,000)
Coords: Argentina Gauss-Kruger - Zone 2
Projection: Argentina Gauss-Kruger - Zone 2



Santa Ines Project
Phase 2 Soil Sampling and Induced Polarisation (IP)
Location Plan

Tenure Boundaries

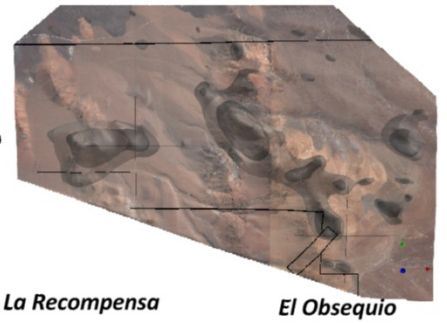
100m topographic contour
20m topographic contour
[Background = Digital Elevation Model]

Ground Magnetic Target
Shadow = surface expression of 3D magnetic model
[Image = Ground Magnetics RTP (Reduced to Pole)]

Induced Polarisation (IP) lines
[2750m E-W and N-S profiles across Magnetic Targets]

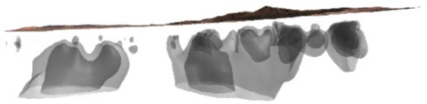
3D Magnetic Model

Looking Down



La Recompensa *El Obsequio*

Looking North



JORC Code, 2012 Edition – Table 1 Santa Ines Project, Salta Province, Argentina

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• Information contained in this announcement is based on recent soil sampling conducted by CSA Global on behalf of PepinNini Minerals. • Surface debris was removed to a depth of a few centimetres, and then a small pit dug to take an effectively "C" horizon sample. A <1mm fraction was sieved and collected in paper soil sampling envelopes, total sample weights were about 100-150g. • On-site analyses were undertaken using a portable NitonThermo XL3t XRF to allow real-time adjustment of the soil sampling survey. The instrument was calibrated every 50th spot analyses using a known standard. 269 representative soil samples were submitted to ACME Analytical Laboratories in Vancouver for Aqua Regia Digest ICP-MS and Fire Assay methods • Sample standards, blank samples and field duplicates were routinely analysed to ensure representivity and repeatability of results.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• No drilling undertaken due to early stage of exploration.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• Not applicable as no drilling has been completed.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*	• Not applicable as no drilling has been completed.

Criteria	JORC Code explanation	Commentary
	• *The total length and percentage of the relevant intersections logged.*	
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Soil samples were dried to 60°C and 100g samples sieved to -180 µm (80 mesh). • A batch of 14 rock chip samples weighing up to approximately 1kg were collected to validate rock chip sampling from phase 1 field mapping (December 2013). Samples were crushed to a nominal 80% passing 2mm and a 200 to 250g flit was pulverised to a nominal 85% passing 75 microns. A 30 g sub-sample from the pulp was fire assayed for Au and a 0.25 g sub-sample was subjected to Four Acid Digest and ICP-MS analysis. A standard sample was inserted into the sequence in the form of a pulp.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• Gold was determined by lead-collection fire assay (total analysis) and the remaining multi-element suite was analysed using a multi-acid digestion, which will be total for the base metals but near-total for those elements found in refractory minerals. The digestion and analytical methods used are considered appropriate for oxidised Cu-Au mineralization. • The samples were analysed with a total of 26 internal multi-element certified reference materials, blanks and quartz washes and a single external standard reference material. The results have been compared to certificates and acceptable levels of accuracy have been obtained. The data indicate acceptable reproducibility but are insufficient to quantify precision.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• No drilling was undertaken. • Data entry for this early stage exploration program was through the use of data capture directly into GIS software on a handheld Trimble Nomad. Merging of field and assay data was done in an Excel spreadsheet. • The data has not been adjusted.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Argentina Gauss Kruger Zone 2 - Campo Inchauspe datum. • Sample locations were collected using handheld GPS.

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Sampling was not designed to constrain resources.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• Soil sampling was complete on a 200 x 200 meter grid for areas where outcrop was absent • Induced Polarisation studies were undertaken by Compania Geofisica Argentina. The survey involved two sets of north-south and east-west orientated lines, parallel to the Gauss-Kruger geographic grid, sited over magnetic anomalies defined by the December 2013 campaign. Each of the 4 lines was about 2.8 km long. Dipole spacing was 200m.
Sample security	• *The measures taken to ensure sample security.*	• Samples were delivered to the AcmeLabs preparation facility in Mendoza, Argentina by the contractors engaged to carry out the field program.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• None undertaken at this early stage.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• Mina Santa Ines (File 1201), Mina Santa Ines VIII (22074) and Cateo 20613 (Santa Ines) held 100% by PepinNini SA, a wholly owned subsidiary of PepinNini Minerals Ltd. Ownership has not been independently verified by the Competent Person. • Surface rights for the tenements are held by Salta Province (i.e. crown land). • An approved environmental impact report (approval resolution Nº 006/14) is in place to allow exploration activities to take place.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Historical artisanal mining has taken place but there are no records of production or previous exploration on the tenements.

Criteria	JORC Code explanation	Commentary
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Cu-Au-Mo mineralisation of either porphyry-Cu or iron oxide copper gold (IOCG) style in a Cainozoic Andean magmatic arc setting.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* o *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* o *dip and azimuth of the hole* o *down hole length and interception depth* o *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	• Not applicable as no drilling was undertaken.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Not applicable as no weighted averages, aggregates or metal equivalents have been used at this early stage of exploration.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• Not applicable as no drilling has been undertaken nor has systematic channel sampling of surface workings been carried out.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Geological and magnetics map with significant soil sample results provided.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades*	• Cu grades vary from a low of 13.4 ppm to a high of 228 ppm. • Au grades vary from below detection to a high of 39.1 ppb.

Criteria	JORC Code explanation	Commentary
	and/or widths should be practiced to avoid misleading reporting of Exploration Results.	• Ag grades vary from below detection to a high of 0.5 ppm. • Mo grades vary from a low of 0.2 ppm to a high of 1.9 ppm.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• Extension of previous geological mapping to zones of outcrop in the west reveal a large, magnetic, coarse-grained granitoid intrusion intruded by a paired north- to northeast-striking andesite and porphyritic granite dykes. Hydrothermal alteration related to mineralisation is generally weak or absent.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Interrogate primary datasets collected by CSA global to assess the merit of a follow up diamond program to test geochemical and chargeable anomalies within Santa Ines.