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**Directors / Secretary**

Melanie Leydin  
Chair & Company Secretary

Todd Williams  
Managing Director

Alastair Morrison  
Non-Executive Director

**Issued Capital**

91.8M fully paid ordinary shares

## Sierra Morena – Southern Project Area Soil Targets

19 August 2019

### Highlights

New soil data for the Southern Project area at Sierra Morena have defined **four priority gold and silver targets** associated with epithermal alteration in the prospective Jurassic Chon Aike volcanic rocks. The work enhances the potential for additional concealed veins in new areas with no prior exploration.

### Southern Project Area

- **Berlen:** Large 400m by 450m anomaly with up to 2.87ppm silver, and the highest single gold value for the survey of 68.6ppb.
- **Londres:** Single line anomaly with high silver (up to 8.96ppm) over 5 sample sites spaced 250m apart. Up to 20.8ppb gold.
- **Eastern Vein Southern Extension:** up to 1.22ppm silver and 5.6ppb gold extending the target by 200m. Gold and silver values increasing to the southeast.
- **Fenix:** Discrete silver (up to 3.91ppm) and gold anomaly in an area of gravel cover. Located 240m southwest of single point anomaly of 51ppb gold.

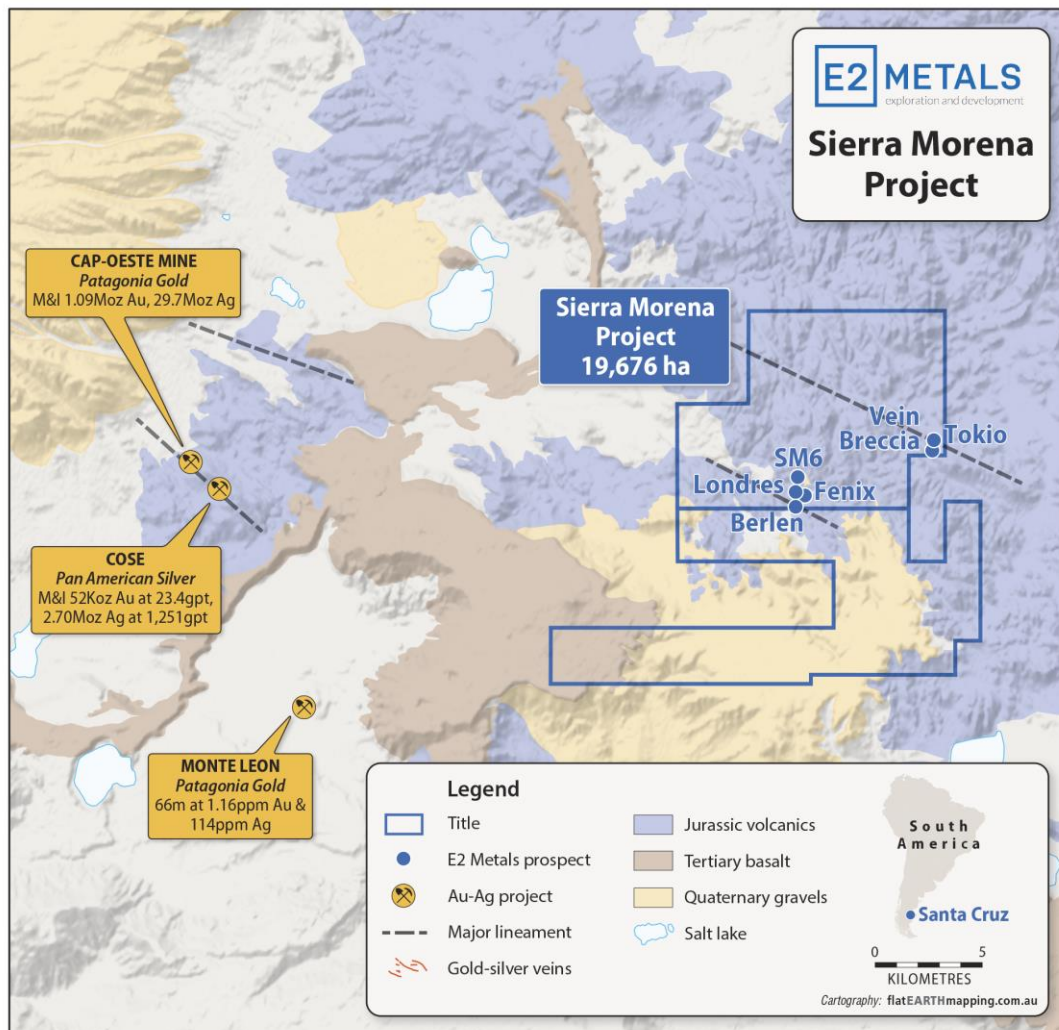
### Review of historical soil data

In addition, a review of historical LAG data for the Project has identified an additional priority gold and silver anomaly (up to 40.9ppb and 0.591ppm respectively) at the **Tokio** prospect located 600m north of known gold and silver mineralised veins.

All five prospects will be ground truthed in the upcoming field season in parallel with work programs at the Conserrat Project.

## Overview

E2 Metals (**E2 or the Company**) is pleased to provide the results for the coarse fraction surface soil (**LAG**) geochemical survey completed at the Sierra Morena Project (see *E2 Metals ASX announcement 20 May 2019*). The Project is located in the Santa Cruz province of southern Argentina and is prospective for low sulphidation epithermal gold and silver vein deposits like the nearby Cap-Oeste and COSE mines (Figure 1) centred 30km to the west. Total endowment for the district is 1.14 million ounces gold and 32.5 million ounces silver<sup>1</sup>. This includes the Cap-Oeste heap leach mine that is currently on care and maintenance and the new underground development at COSE where high grade ore will be transported 180km to Pan American Silver's Manantial Espejo processing plant.

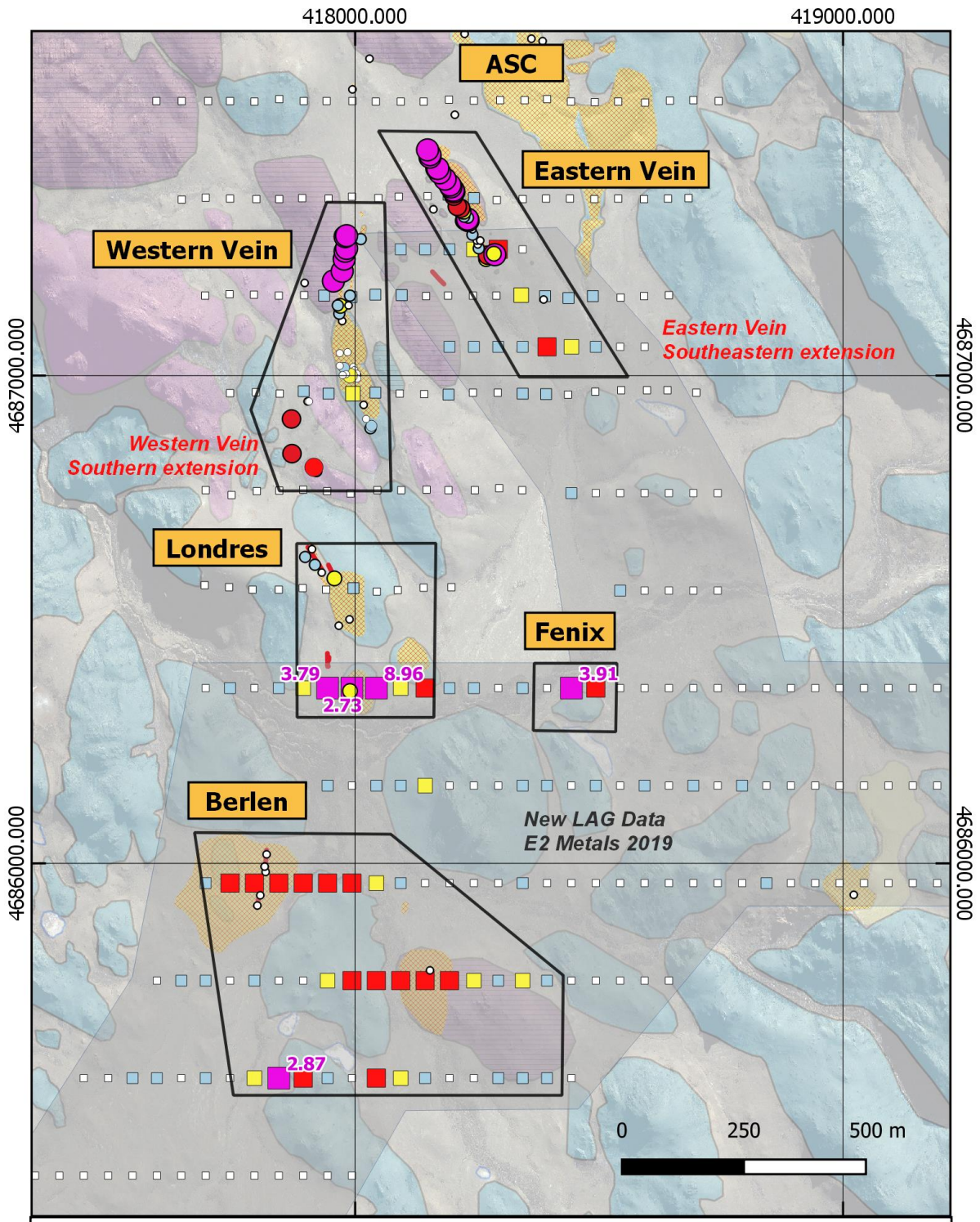


**Figure 1:** Sierra Morena and nearby gold-silver projects

The LAG survey was completed following the recent drill and reconnaissance mapping program, with aim to:

- Define possible extensions to the gold and silver mineralised SM6 – Western and Eastern Vein prospects where outcrop disappears under shallow cover
- Evaluate the potential of the Southern Project Area where prospective Chon Aike volcanic rocks occur with widespread epithermal alteration and sporadic vein outcrops.

<sup>1</sup> Cap-Oeste resource estimate sourced from the Patagonia Gold website - <http://www.patagoniagold.com/projects/el-tranquilo/>  
COSE resource estimated sourced from the Pan American Silver SEDAR filing from August 9, 2017

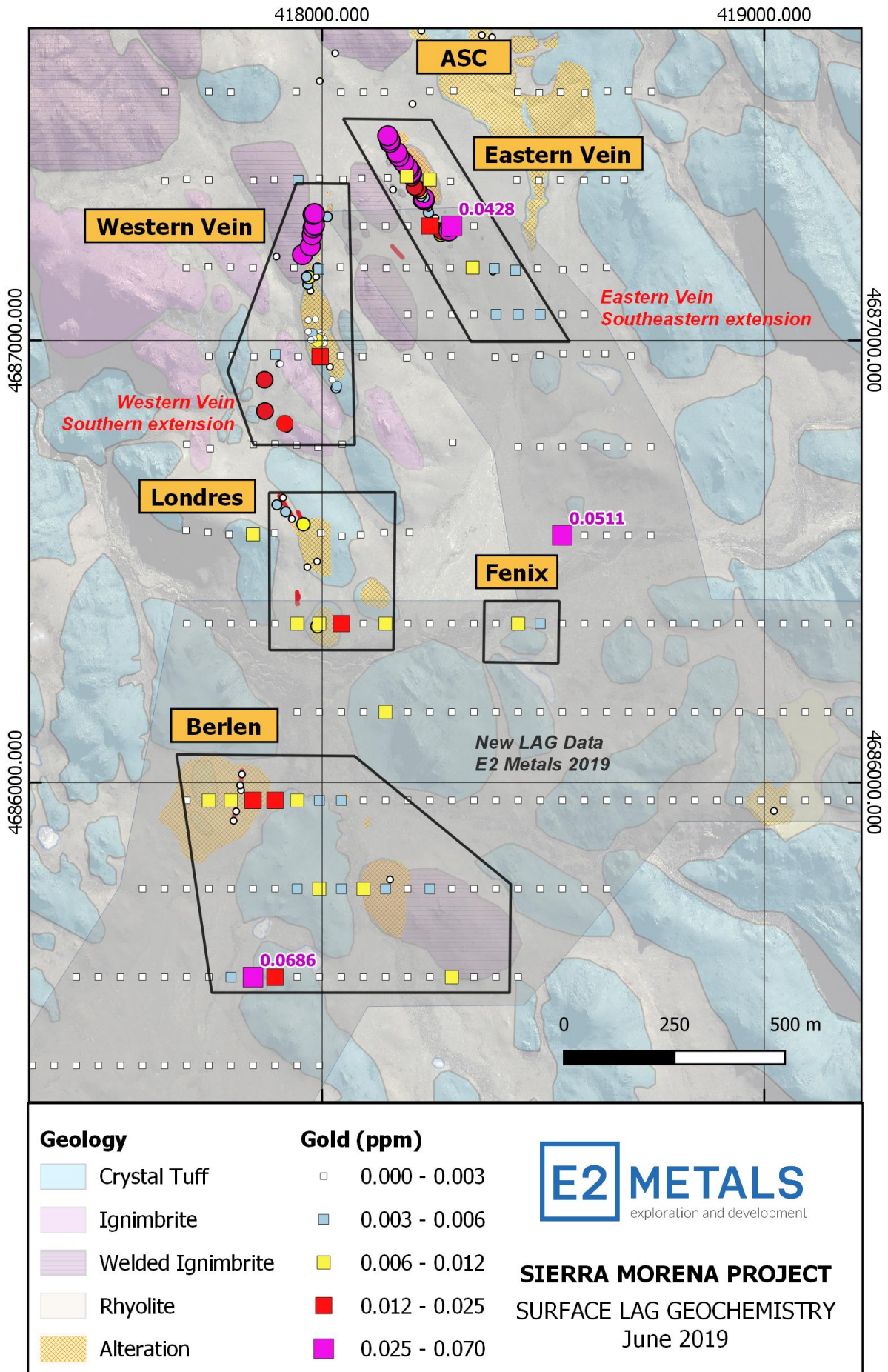


Geology		LAG Silver (ppm)	
	Crystal Tuff		0.01 - 0.10
	Ignimbrite		0.10 - 0.50
	Welded Ignimbrite		0.50 - 1.00
	Rhyolite		1.00 - 2.50
	Alteration		2.50 - 10.0

**E2 METALS**  
exploration and development

**SIERRA MORENA PROJECT**  
SURFACE LAG GEOCHEMISTRY  
June 2019

**Figure 2: Southern Project Area silver geochemistry**



**Figure 3:** Southern Project Area gold geochemistry

A total of 226 primary samples were collected on a 200m by 50m grid starting at the southern terminus of the SM6 – Western and Eastern Vein prospects and extending south for 1600m into the Southern Project Area (Figures 2-3). The survey was designed on east-west orientated lines to target an approximately 1 square kilometre area of Chon Aike volcanic rocks.

Historical exploration in the Southern Project Area was limited to reconnaissance rock chip sampling by De Grey Mining (ASX: DEG) that was completed in 2011 and confirmed the veins to be anomalous in silver and gold with maximum values of 51.7ppm and 0.13gpt respectively. This was followed by a Gradient Array Induced Polarisation (GAIP) survey by Circum Pacific Pty Ltd in 2018 that was conducted as part of a broader regional survey and highlighted several zones of high chargeability that are interpreted to be the subsurface footprint of veins observed at surface<sup>2</sup>.

## Discussion

Results for the Southern Project Area soil survey significantly enhance the potential for blind gold and silver mineralisation at four prospects. Key findings include:

1. **Largest (scale and tenor) gold and silver soil targets defined to date;** absolute values for the Southern Project Area are an order of magnitude greater than historical anomalies for the SM6 prospect. Maximum silver values for Londres are 8.96ppm compared to 0.947ppm for SM6. The Berlen anomaly has dimensions of 400m by 450m, which is considered large for the target type.
2. **Extensions to the SM6 Prospect - Eastern and Western Veins** have been defined at both prospects, effectively doubling the target strike of both targets. Gold and silver values are increasing to the south where vein outcrop decreases.
3. **Anomalies are silver rich;** At the nearby COSE and Cap-Oeste deposits high-grade gold-silver mineralisation is overlain by a broad diffuse vein system characterised by strong silver anomalism, with silver to gold ratios<sup>3</sup> similar to those encountered by E2 in the recent SM6 drill program. The Company interprets this to be an indication that surface exposure is high in the epithermal system and that silver anomalism in soils is a useful vector to concealed COSE-style high grade veins.

## Review of Historical LAG Data

In parallel to the interpretation of the new soil data within the Southern Project Area, the Company has reviewed historical LAG data for the Vein Breccia area (*see De Grey Mining ASX announcement 31 January 2012*) where previous work (Figures 4-5) has identified epithermal alteration and gold-silver mineralised veins associated with a northwest structure that has been traced over 2km.

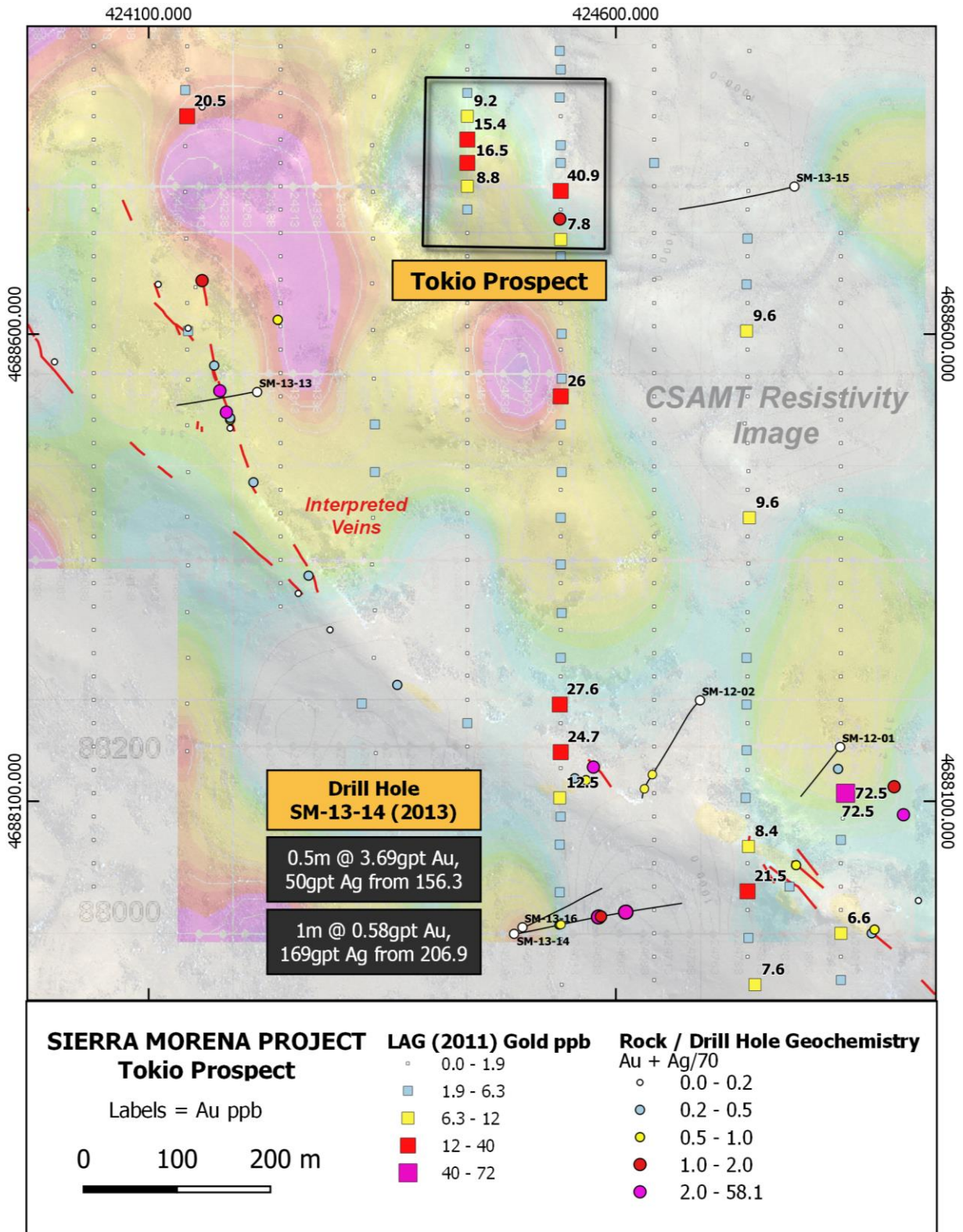
This review has identified a gold-silver anomaly (up to 40.9ppb Au and 0.591ppm Ag) at the Tokio prospect located some 600m north of the Vein Breccia prospect where historical drilling returned a narrow mineralised intercept of 0.5m at 3.69gpt gold & 50gpt silver from 156.3m<sup>4</sup>. Despite this no follow up work was completed at Tokio and the anomaly remains untested.

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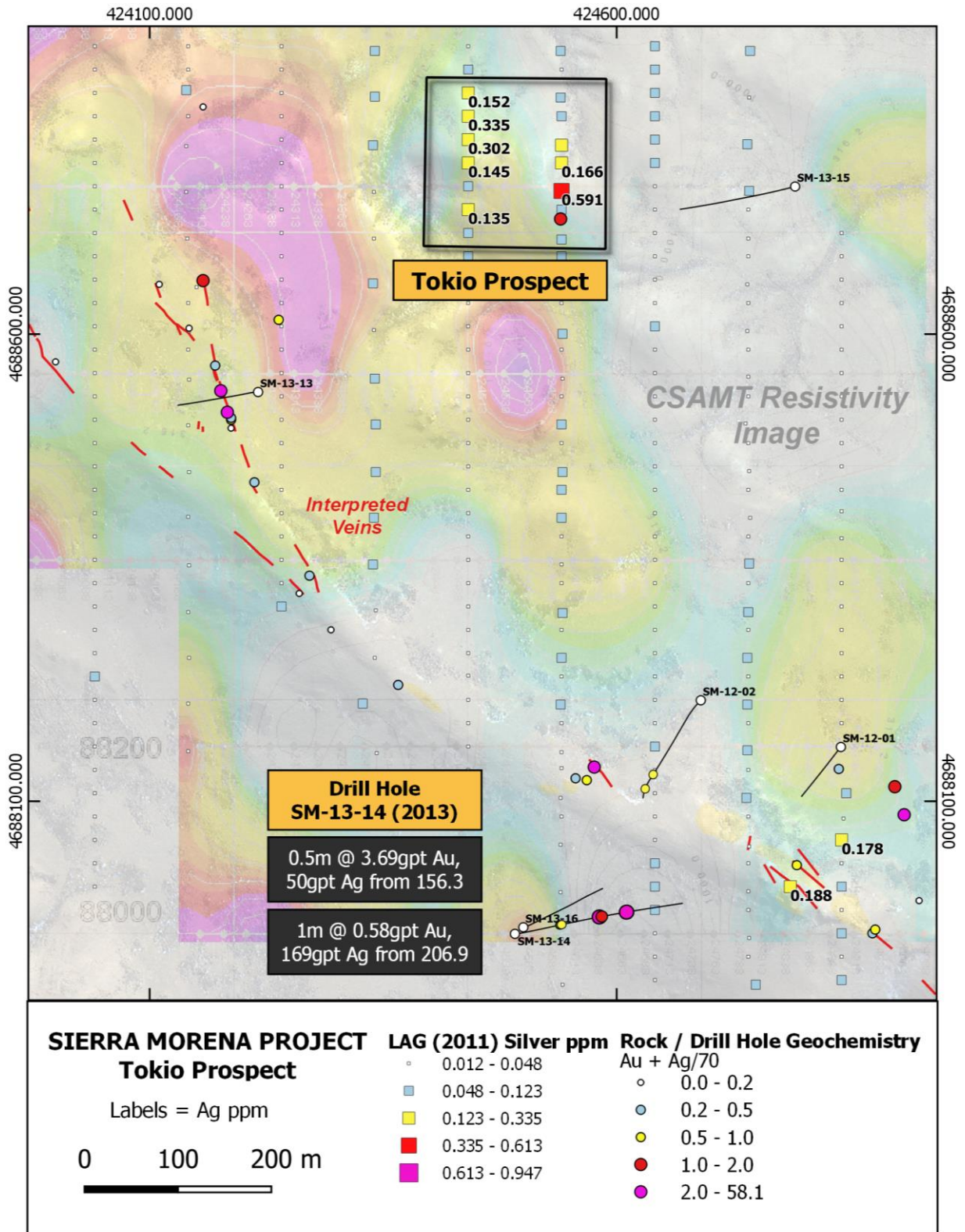
<sup>2</sup> E2 Metals ASX Announcement 20 May 2019 – Sierra Morena Drill Results

<sup>3</sup> Chlumsky et al (2012) NI 43-101 Technical Report, Preliminary Economic Assessment, Cap Oeste Suroeste COSE Project

<sup>4</sup> De Grey Mining ASX announcement 4 July 2014 – Spectacular base metal indicators at VBZ



**Figure 4:** Tokio Prospect gold geochemistry plotted on CSAMT resistivity image



**Figure 5:** Tokio Prospect gold geochemistry plotted on CSAMT resistivity image

## Next Steps

In relation to E2's plans for Sierra Morena, Managing Director Todd Williams states: *We are encouraged that the recent work in the Southern Project Area has defined the most compelling gold and silver soil targets in the Sierra Morena project to date. These results are supported by the prospective geology and the historical GAIP data that have shown chargeabilities to be increasing south into the Londres and Berlen prospects, indicating the potential for a large blind vein system. The recent drill and soil programs have made significant contributions to our understanding of where we are in the epithermal system, with strong silver anomalism in both the shallow drilling at SM6 and recent soil grid suggesting that we are high in the system when compared to nearby deposits such as Cap-Oeste and COSE. This gives us confidence in the potential for these soil anomalies to host blind high-grade mineralisation at depth. All anomalies will be ground truthed during the next field season in parallel with our work programs at the Conserrat Project.*

For enquiries please contact:

**Todd Williams**

Managing Director

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### Competent Person's Statement

Information in this report that relates to Exploration results and targets is based on, and fairly reflects, information compiled by E2 Metals Limited and Mr Mark Gordon, a Competent Person who is a Member of the Australian Institute of Geoscientists and Australian Institute of Mining and Metallurgy. Mr. Gordon is a consultant to E2 Metals Limited. Mr. Gordon has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined by the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr. Gordon consents to the inclusion of the data in the form and context in which it appears.



## Table 1: JORC Code Reporting Criteria

### Section 1 Sampling Techniques and Data

Criteria	JORC Code Explanation	Commentary
<b>Sampling Techniques</b>	<ul style="list-style-type: none"> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialized 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.</li> <li>Include reference to measures taken to ensure sample representativity and the appropriate calibration of any measurement tools or systems used.</li> </ul>	<p><b>Sierra Morena, Southern Project Area, Soil Survey (April 2019)</b></p> <ul style="list-style-type: none"> <li>Coarse fraction soil samples (LAG) were collected on a 50 x 200m grid over Jurassic volcanics of the Chon Aike formation, including ignimbrites and crystal tuffs.</li> <li>LAG samples at each grid point consist of approximately 2-5kg of 2-5mm field sieved surface rock chips. The purpose of this field sample is to avoid any windblown surface material interference.</li> </ul>
<b>Drilling Techniques</b>	<ul style="list-style-type: none"> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. 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).</li> </ul>	NA
<b>Drill Sample Recovery</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	NA
<b>Logging</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	NA
	<ul style="list-style-type: none"> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> </ul>	NA
	<ul style="list-style-type: none"> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	NA
<b>Sub-Sampling</b>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> </ul>	NA

Criteria	JORC Code Explanation	Commentary
<b>Techniques and Sample Preparation</b>	<ul style="list-style-type: none"> <li>• If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>• For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>• Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>• 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.</li> <li>• Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	NA
<b>Quality of Assay Data and Laboratory Tests</b>	<ul style="list-style-type: none"> <li>• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>• 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.</li> <li>• Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<p><b>Sierra Morena, Southern Project Area, Soil Survey (April 2019)</b></p> <ul style="list-style-type: none"> <li>• 235 samples were submitted to ALS laboratories Mendoza, Argentina. This includes 226 primary samples, 2 field duplicates, 4 CRM/standards OREAS 600B (Au x=0.2ppm, sd=0.008ppm) and 3 blanks OREAS 23b (Au&lt;3ppb)</li> <li>• Samples were dried, crushed to 70% -2mm, 1kg riffle spilt off and pulverised in a LM2 to 85% -75um. The Au and multi-element chemical analysis was completed by ALS's AuME-ST43 technique which consists of aqua regia digestions of a 25g sample with an ICP-OES/MS finish. This large ICP-OES/MS analysis is capable of not only producing multi-element results but also useful Au analysis.</li> <li>• The 4 CRMs Au results all passed and were between 0.219 and 0.201ppm. Two of the pulp blanks passed with 0.0022ppm, 0.0018ppm, but the third failed with 0.0365ppm Au in batch ME19128637. The failed blank was the last sample in the batch and no obvious sample was responsible for the analytical carry-over contamination. The pulp blank Ag values were acceptable. No indication of laboratory batch effects were identified.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>• The verification of significant intersections by either independent or alternative company personnel.</li> <li>• The use of twinned holes.</li> <li>• Documentation of primary data, data entry procedures, data</li> </ul>	NA

Criteria	JORC Code Explanation	Commentary
	verification, data storage (physical and electronic) protocols. <ul style="list-style-type: none"> <li>• Discuss any adjustment to assay data.</li> </ul>	
<b>Location of Data Points</b>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Specification of the grid system used.</li> <li>• Quality and adequacy of topographic control.</li> </ul>	<b>Sierra Morena, Southern Project Area, Soil Survey (April 2019)</b> <ul style="list-style-type: none"> <li>• Soil points are located using handheld GPS to <math>\pm 5\text{m}</math>.</li> <li>• All coordinates are based on UTM Zone 19S using a WGS84 datum.</li> <li>• Topographic control to date has used GPS data, which is adequate considering the small relief (&lt;50m) in the area.</li> </ul>
<b>Data Spacing and Distribution</b>	<ul style="list-style-type: none"> <li>• Data spacing for reporting of Exploration Results.</li> <li>• 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.</li> <li>• Whether sample compositing has been applied.</li> </ul>	NA
<b>Orientation of Data in Relation to Geological Structure</b>	<ul style="list-style-type: none"> <li>• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>• If the relationship between the drilling orientation and the orientation of key mineralized structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<b>Sierra Morena, Southern Project Area, Soil Survey (April 2019)</b> <ul style="list-style-type: none"> <li>• The 50 x 200m soil grid is considered appropriate for identifying alteration and metal dispersion halos around mineralized Low-Sulphidation (LS) Epithermal veins</li> </ul>
<b>Sample Security</b>	<ul style="list-style-type: none"> <li>• The measures taken to ensure sample security.</li> </ul>	<b>Sierra Morena, Southern Project Area, Soil Survey (April 2019)</b> <ul style="list-style-type: none"> <li>• Chain of custody was managed by E2 Metals. Samples were placed into taped polyethylene bags with sample numbers that provided no specific information on the location of the samples.</li> <li>• Samples were transported from site to the preparation laboratory in Mendoza</li> </ul>
<b>Audits or Reviews</b>	<ul style="list-style-type: none"> <li>• The results of any audits or reviews of sampling techniques and data.</li> </ul>	<b>Sierra Morena, Southern Project Area, Soil Survey (April 2019)</b> <ul style="list-style-type: none"> <li>• An independent audit of the sample technique was conducted by Phillip J. Allen of Allen Geochemical Services. All samples passed QAQC checks.</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code Explanation	Commentary
<b>Mineral Tenement and Land Tenure Status</b>	<ul style="list-style-type: none"> <li>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.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.</li> </ul>	<p>The Sierra Morena project titles are owned 100% by Minera Los Domos S.A., a private company incorporated in Argentina. E2 Metals Limited through its Australian holding company Los Domos Pty Ltd owns 80% of Minera Los Domos.</p> <p><b>Sierra Morena Project titles</b></p> <ul style="list-style-type: none"> <li>430.269/MS/14</li> <li>430.270/MS/14</li> </ul>
<b>Exploration Done by Other Parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<p><b>Sierra Morena, Southern Project Area historical exploration</b></p> <ul style="list-style-type: none"> <li>During the period 2011 to 2012 De Grey Mining (ASX: DEG) collect 15 outcrop rock and float samples within the Southern Project Area. Maximum values were 51.7ppm silver and 0.13gpt gold.</li> <li>During 2018 Circum Pacific Pty Ltd conducted a Gradient Array Induced Polarisation Survey (GAIP) that defined chargeabilities highs associated with known vein and alteration outcrop in the Southern Project Area (see <i>E2 Metals ASX announcement 20 May 2019</i>).</li> </ul> <p><b>Sierra Morena, Vein Breccia historical Exploration</b></p> <ul style="list-style-type: none"> <li>During late 2011 De Grey Mining (ASX: DEG) collect 860 coarse fraction soil (LAG) samples on a 100m x 25m sample grid covering the Vein Breccia prospect (see De Grey Mining ASX Announcement 31 January 2012).</li> <li>During Q2 2012 De Grey Mining complete a drill program</li> </ul>

Criteria	JORC Code Explanation	Commentary
		<p>at Vein Breccia comprising two holes 366m (see De Grey ASX announcement 25 July 2012)</p> <ul style="list-style-type: none"> <li>• During Q2 2013 De Grey Mining completed a drill program at Vein Breccia comprising four holes for 1,043m (see De Grey ASX announcement 4 July 2013).</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>• Deposit type, geological setting and style of mineralisation.</li> </ul>	<p><b>Santa Cruz Geology and Deposit Model</b></p> <p>The Sierra Morena project is located towards the central western margin of the extensive ~60,000km. sq Deseado Massif geological province that stretches across southern Argentina into the Chilean southern Andes. This massif is made up of Jurassic volcanic and volcanoclastic rocks of the Chon Aike formation.</p> <p>Important precious metal deposits have been discovered in the province during the past 20 years. Gold and silver mineralisation is associated with Low Sulphidation (LS) Epithermal veins in northwesterly structures that were active at the time of mineralisation.</p>
<b>Drill Hole Information</b>	<ul style="list-style-type: none"> <li>• 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: <ul style="list-style-type: none"> <li>○ Easting and northing of the drill hole collar</li> <li>○ Elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>○ Dip and azimuth of the hole</li> <li>○ Down hole length and interception depth</li> <li>○ Hole length</li> </ul> </li> </ul> <p>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.</p>	NA

Criteria	JORC Code Explanation	Commentary
<b>Data Aggregation Methods</b>	<ul style="list-style-type: none"> <li>• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>• 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.</li> <li>• The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	NA
<b>Relationship Between Mineralisation Widths and intercept lengths.</b>	<ul style="list-style-type: none"> <li>• These relationships are particularly important in the reporting of Exploration Results.</li> <li>• If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>• 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”).</li> </ul>	NA
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>• 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.</li> </ul>	Classified maps and plots of gold and silver are provided
<b>Balanced Reporting</b>	<ul style="list-style-type: none"> <li>• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	NA
<b>Other Substantive Exploration Data</b>	<ul style="list-style-type: none"> <li>• 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.</li> </ul>	NA
<b>Further Work</b>	<ul style="list-style-type: none"> <li>• The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>• Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	Plans for future work are provided