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# ASX RELEASE

# Parndana Project Update

## HIGHLIGHTS

- **Soil sampling program completed**
- **Preliminary portable x-ray fluorescence (XRF) results received**
- **Coincident zinc and lead anomaly outlined**

Monax Mining Limited ("Monax") (ASX:MOX) is pleased to provide an exploration update for its 100 per cent owned Parndana Project in South Australia (Figure 1).

Monax recently completed a detailed soil sampling program on the Vinco prospect, located approximately 1km east of the Bonaventura prospect, which are both part of the Parndana Project, on South Australia's Kangaroo Island.

Previous exploration at the Vinco prospect, included detailed gravity and induced polarisation (IP) surveys. Monax drilled two diamond holes targeting the main gravity anomaly and a chargeable anomaly defined by the dipole-dipole IP survey.

Further refinement using a gradient array IP (GAIP) survey outlined a prominent NNW trending chargeable and resistive anomaly in an area not targeted by the diamond drilling.

Figure 2 shows the chargeability response from the GAIP survey and Figure 3 shows the resistivity anomaly outlined by the GAIP survey.

Figure 4 shows the combined lead and zinc soil results which show a strong correlation to the NNW trend of the GAIP anomalies.

"The new defined anomaly represents a genuine target for zinc and lead mineralisation similar to Bonaventura, and the next phase of drilling will target this feature," Monax Mining Managing Director, Mr Gary Ferris said.

"The correlation between the IP data and the soil results provides encouragement that this newly defined anomaly potentially represents a zone of mineralisation," he said.

Monax is planning a drilling program at its Parndana Project in the first half of 2015.

***Background***

Monax's Parndana Project is located at the flexure within the Cygnet Snelling Shear Zone (CS-ZS), a prominent east-west trending crustal scale structure. The CS-SZ is the interpreted southern margin of the Gawler Craton, and is marked by a clear zone of low magnetic intensity.

Mineralisation at Bonaventura comprises NNE trending zones of coarse sphalerite (zinc sulphide) and galena (lead sulphide) bearing quartz vein stockworks and disseminations within a silicified sandstone host rock. Exploration to date has focused around historical workings and near surface mineralisation.

Drilling by the former SA Department of Mines and Energy in 1990 reported several encouraging intersections of mineralisation in the Bonaventura area including:

- 16m (10-26) @ 2.69% Zn, 0.45% Pb & 1.7 g/t Ag including **5m** (16-21) @ **5.8% Zn** (Hole GRA 7).

(This information was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported. Note: all lengths are downhole lengths; true width unknown).

Exploration by ASX-listed Havilah Resources at Bonaventura in 2003 involved a shallow drilling program which produced further encouraging results including:

- 7m (14-21) @ 1.32% Zn, 3.16% Pb & 3.81 g/t Ag including 2m (16-18) @ 3.59% Zn, 9.46% Pb & 10 g/t Ag (Hole PRC01),
- 18m (30-48) @ 1.69% Zn & 1.81 g/t Ag including 6m (42-48) @ 3.48% Zn, 0.51% Pb & 1.4 g/t Ag (Hole PRC04), and
- **5m** (26-31) @ **26.9% Zn, 10% Pb** & 1.54 g/t Ag (Hole PRC31).

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Monax undertook drilling programs at Bonaventura in 2006 and 2008 aimed at understanding the structural setting to better target high-grade zones (see ASX Release 27 March 2014 for drill hole details). Significant intersections from the 2006 drilling program include:

- 6m (52-58) @ 1.96% Zn & 0.26% Pb including 2m (54-56) @ 3.65% Zn (Hole BVRC02),
- 4m (16-20) @ 2.06% Zn & 2.15% Pb (Hole BVRC03),
- 16m (34-50) @ 3.43% Zn & 0.66% Pb including **6m** (40-46) @ **6.3% Zn** (Hole BVRC03),
- 23m (62-85) @ 1.16% Zn (Hole BVRC08 – ended in mineralisation),
- 1m (56-57) @ 3.3% Zn & 4.58% Pb (Hole BVRC10),
- **4m** (91-95) @ **3.94% Zn** including **1m** (93-94) @ **7.1% Zn** (Hole BVRC10),
- 23m (98-121) @ 1.22% Zn (Hole BVRC10 – ended in mineralisation); and
- 1m (76-77) @ 2.31% Zn & 1.09% Pb (Hole BVRC11).

(This information was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported – see Monax ASX Release 24 July 2006 for details. Note: all lengths are downhole lengths; true width unknown).

Significant intersections from Monax's 2008 drilling program include:

- 29.9m (16.1-46) @ 1.79% Zn including **10m** (27-37) @ **3.22% Zn, 1.62% Pb** & 1.53 g/t Ag; and 3.9m (16.1-20) @ 2.13% Pb & 2.04 g/t Ag (Hole BVDD004)
- 10m (81-91) @ 2.13% Zn, 0.45% Pb & 0.83 g/t Ag including **6m** (85-91) @ **2.97% Zn**, 0.65% Pb & 1.08 g/t Ag (Hole BVDD007),
- 12m (94-106) @ 2.59% Zn including **5m** (97-102) @ **4.0% Zn** (Hole BVDD007), and
- 11m (58-69) @ 1.64% Zn & 1.2% Pb including **2m** (61-63) @ **6.96% Zn, 5.06% Pb & 2.5 g/t Ag** (Hole BVDD008).

(Note: all lengths are downhole lengths; true width unknown. Full results are presented in ASX Release 27 March 2014)).

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*The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr G M Ferris, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Ferris is employed full time by the Company as Managing Director 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 Ferris consents to the inclusion of the information in this report in the form and context in which it appears.*


**Figure 1. Monax tenement location plan including Kangaroo Island (Parndana Project).**

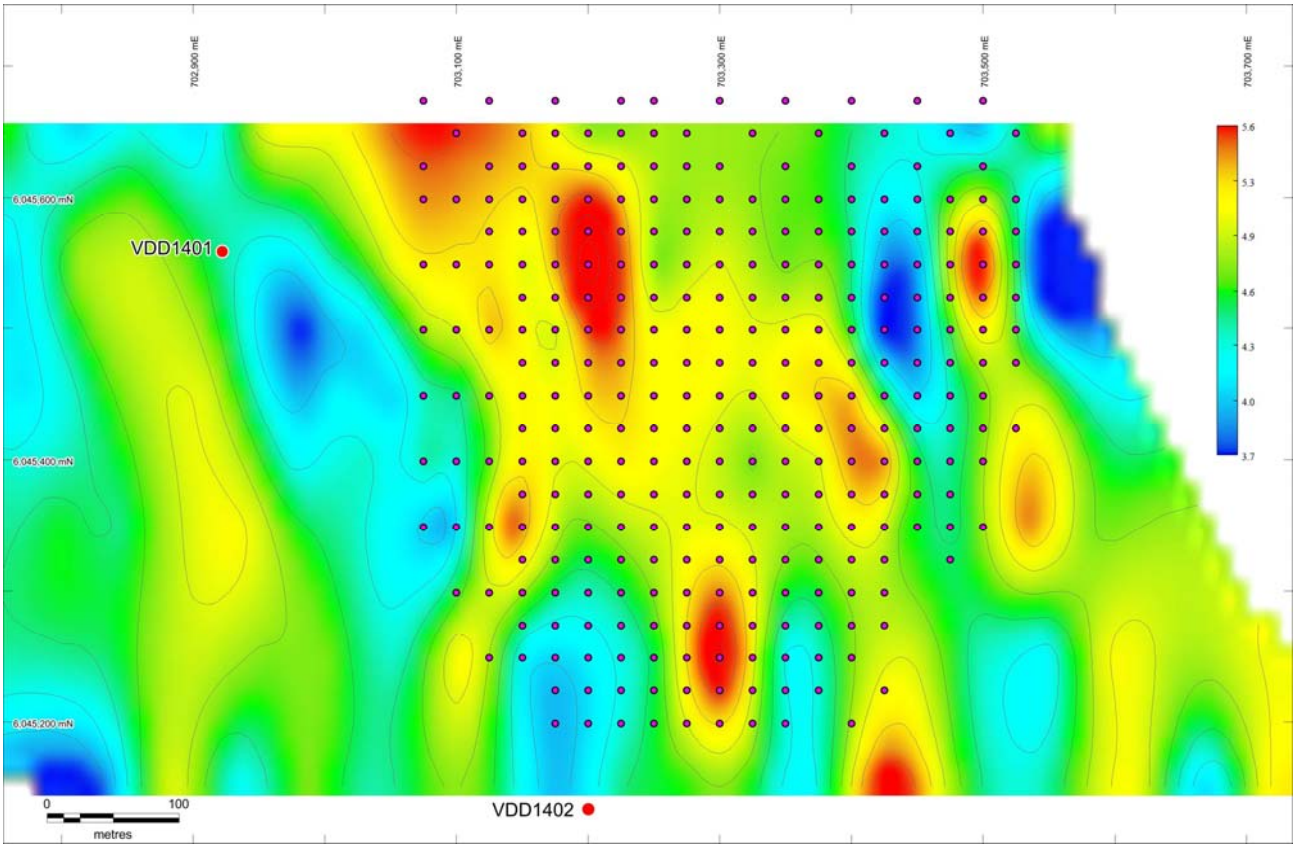


**Figure 2. Parndana Project – Gradient array IP survey chargeability results with soil sampling grid.**

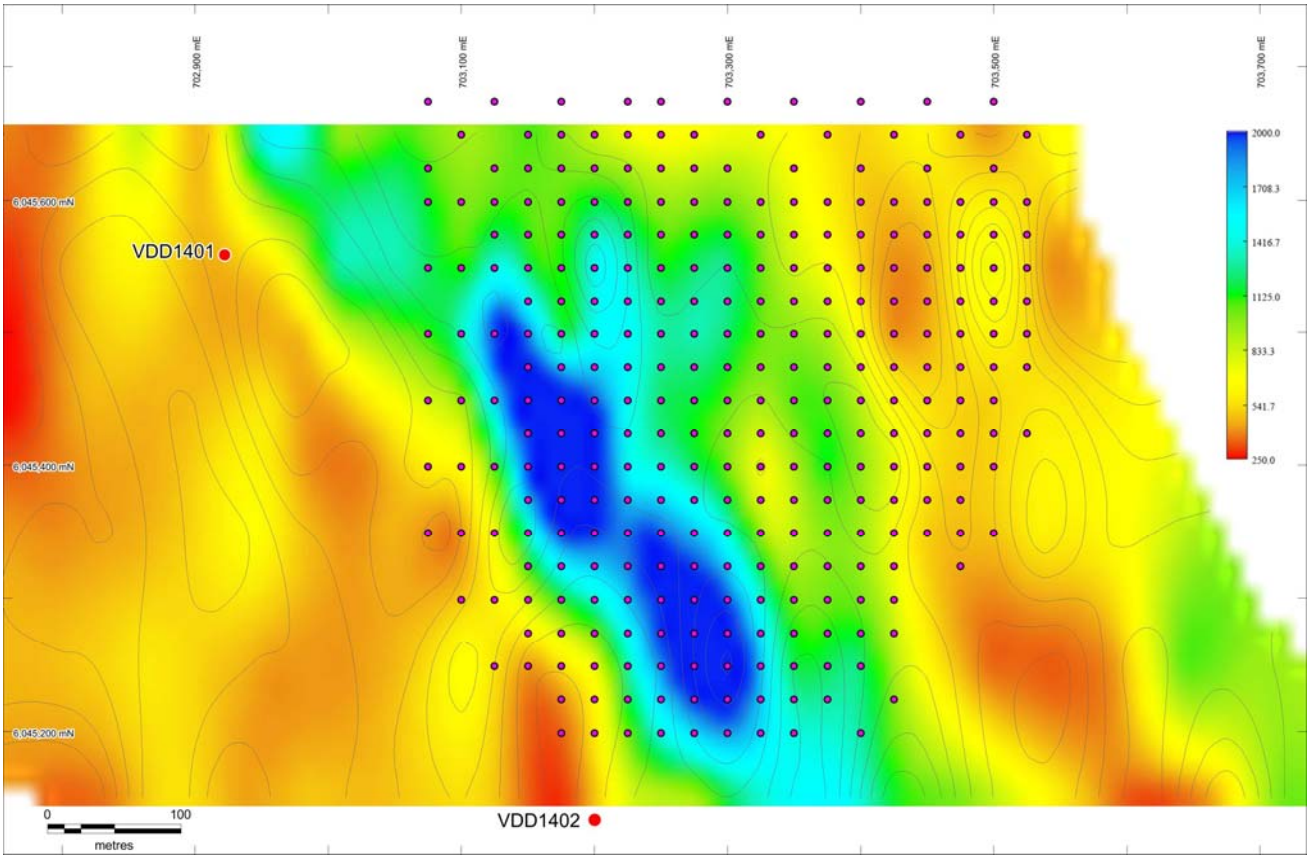


**Figure 3. Parndana Project – Gradient array IP survey resistivity results with soil sampling grid. Chargeability contours overlay.**

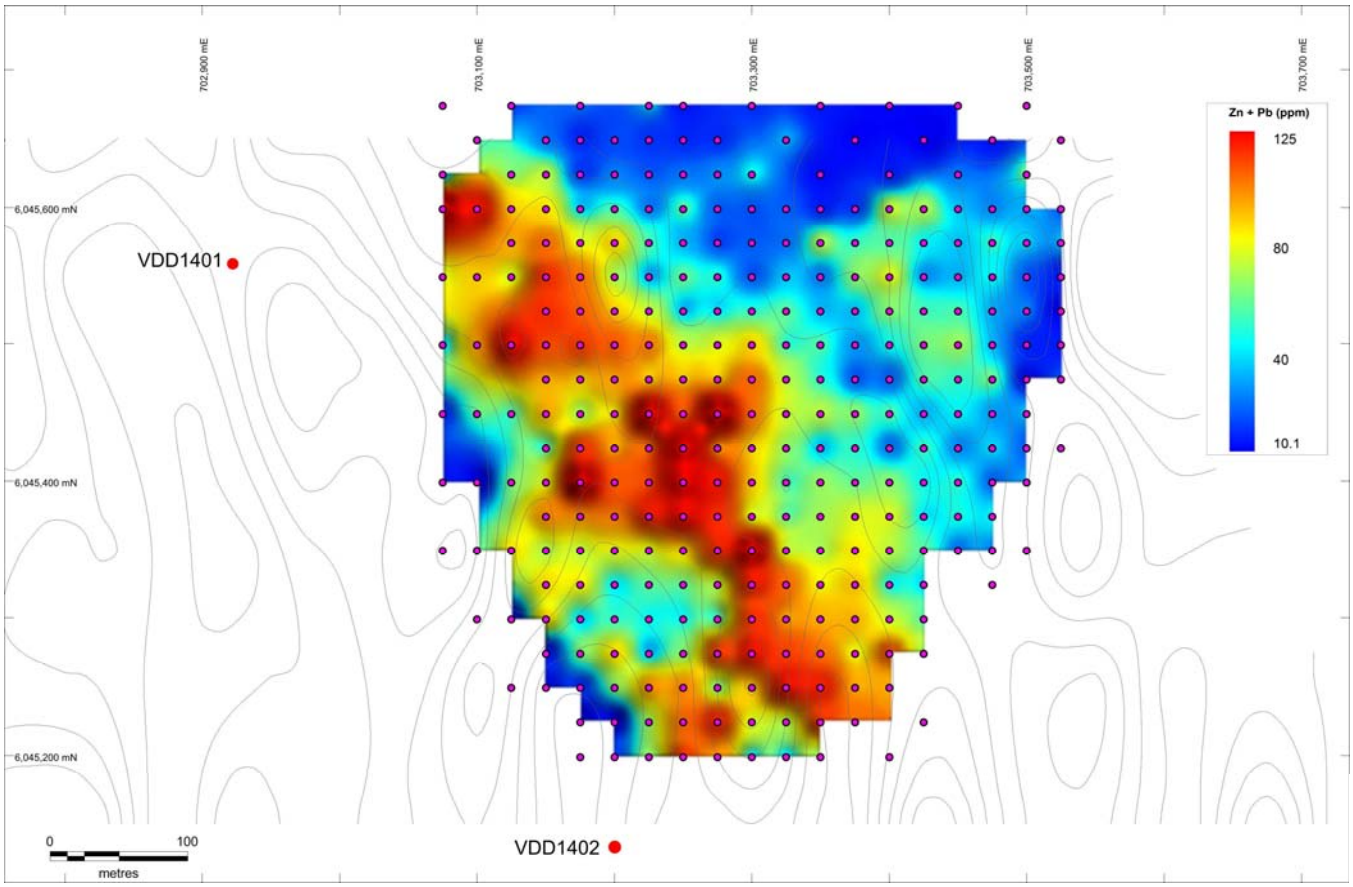


**Figure 4. Parndana Project – Combined lead and zinc soil sample results.**

# JORC Code, 2012 Edition – Table 1 report template

## Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

| 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.*<br>• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*<br>• *Aspects of the determination of mineralisation that are Material to the Public Report.*<br>• *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.* | • Soil samples comprised bulk samples collected at a nominal depth of 10-30cm depth on a 25m x 25m grid within the central area of interest grading to a 50m x 50m grid on the edge of the grid area.<br>• Bulk samples were sieved to remove the >3mm (coarse) fraction.<br>• The samples were collected dry and field sieved and approximately 300g was collected for analysis. A sub-sample was taken and hand crushed in a mortar and pestle to produce a fine powder which is then pressed into a disc suitable for the portable XRF machine. |
| *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).* | • Not Applicable, no drilling was undertaken as part of the soil sampling program. |
| *Drill sample recovery* | • *Method of recording and assessing core and chip sample recoveries and results assessed.*<br>• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*<br>• *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, no drilling was undertaken as part of the soil sampling program. |
| *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.*<br>• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* | • Not Applicable, no drilling was undertaken as part of the soil sampling program. |

| 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.*<br>• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*<br>• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*<br>• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*<br>• *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.*<br>• *Whether sample sizes are appropriate to the grain size of the material being sampled.* | • Not Applicable, no drilling was undertaken as part of the soil sampling program.<br>• Not Applicable, no drilling was undertaken as part of the soil sampling program.<br>• Sample size is considered appropriate to the grain size of the material sampled. |
| *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.*<br>• *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.*<br>• *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.* | • Soil samples were assayed using an Olympus X-5000 Portable XRF machine.<br>• Portable XRF allows for more accurate analysis of samples over longer beam times when sampling which allows for lower detection limits of elements and can detect lighter elements with more accuracy than handheld XRF.<br>• Standard samples were used for calibration. Monax also analysed 25 soil pulp samples (laboratory returns) from a previous soil sampling program from the nearby Bonaventura prospect through the portable XRF machine to provide an independent check on the results. |
| *Verification of sampling and assaying* | • *The verification of significant intersections by either independent or alternative company personnel.*<br>• *The use of twinned holes.*<br>• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*<br>• *Discuss any adjustment to assay data.* | • Not Applicable, no drilling was undertaken as part of the soil sampling program.<br>• No twinned holes.<br>• Field data was entered on to a paper template and transferred into an electronic copy back in the Office.<br>• No adjustment was made to the assay data. |
| *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.*<br>• *Specification of the grid system used.*<br>• *Quality and adequacy of topographic control.* | • Not Applicable for soil sampling program.<br>• Soil sample sites were located using MGA Zone 53 (GDA94).<br>• Location data for the soil sites was collected using a hand held GPS with +/- 5m accuracy. |
| *Data spacing* | • *Data spacing for reporting of Exploration Results.* | • Soil samples were collected mostly at 25m spacing with some |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *and distribution* | • *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.*<br>• *Whether sample compositing has been applied.* | collected at 50m spacing.<br>• Not applicable – data not used for resource estimation.<br>• No sample compositing was undertaken. |
| *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.*<br>• *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.* | • The sampling grid was predominantly 25m x25m which increased to 50m x 50m on the margins of the grid. In Monax's view the relatively detailed grid achieves and unbiased sampling program appropriate for the style of mineralisation.<br>• Not Applicable, no drilling was undertaken. |
| *Sample security* | • *The measures taken to ensure sample security.* | • Samples were collected and then taken back to the field camp each night. The samples were transported back to the Monax Office by the field contractors. Soil sampling program was undertaken by Euro Exploration who are experienced in this type of sampling program. |
| *Audits or reviews* | • *The results of any audits or reviews of sampling techniques and data.* | • No audits were undertaken. |

## 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.*<br>• *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.* | • The soil sampling program was undertaken on Exploration Licence 4581 which is owned 100% by Monax Mining Limited. The tenement is located on Freehold Land.<br>• The tenement is free of any known impediments. |
| *Exploration done by other parties* | • *Acknowledgment and appraisal of exploration by other parties.* | • Initial drilling in the Bonaventura area was undertaken by the South Australian Department of Mines and Energy in 1991. Havilah Resources undertook regional soil and stream geochemical surveys, followed by a drilling program in 2003. Several companies prior to 1990 undertook soil sampling programs in the region. No evidence of any mineral exploration at the soil sampling site has been reported. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Geology* | • *Deposit type, geological setting and style of mineralisation.* | • Sediment hosted silver-lead-zinc style mineralisation. |
| *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:*<br>o *easting and northing of the drill hole collar*<br>o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*<br>o *dip and azimuth of the hole*<br>o *down hole length and interception depth*<br>o *hole length.*<br>• *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 for soil sampling program.<br>. |
| *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.*<br>• *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.*<br>• *The assumptions used for any reporting of metal equivalent values should be clearly stated.* | • No averages or weighting have been used.<br>• No aggregate intercepts are reported.<br>• No metal equivalent values have been reported. |
| *Relationship between mineralisation widths and intercept lengths* | • *These relationships are particularly important in the reporting of Exploration Results.*<br>• *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*<br>• *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 for soil sampling program.<br>. |
| *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.* | • Map showing location of survey area included in this report. |
| *Balanced reporting* | • *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.* | • Only results relevant to the discussion on the style of mineralisation presented. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *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.* | • Data from previous exploration has been previously released.. |
| *Further work* | • *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*<br>• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.* | • Monax will review newly acquired data to assist in determining the next phase of exploration. |