**8 May 2018**

# EXTENSIVE BASE METAL SOIL GEOCHEMICAL ANOMALIES DEFINED AT GOODSPRINGS PROJECT, NEVADA USA.

## Highlights

- **7.64% Cobalt(Co) returned from sample collected at the Whale Mine during the due diligence**
- **Stream sediment sampling totalling 902 samples defines 2 main Co targets**
- **Soil sampling defines 2 strong coincident sub-parallel Cu-Zn-Pb anomalies at the Whale Mine over a 4km strike**
- **Photogeological interpretation across the claim block to define structural controls and generate targets is close to completion**
- **Stage 2 soils/stream sediment sampling scheduled for the June Quarter**
- **Ground consolidation in advance negotiations**

Tyranna Resources Limited (ASX: TYX) ('Tyranna' or 'the Company'), previously announced that it had entered into a binding option agreement to acquire private company, US Cobalt Pty Ltd (US Cobalt), the owner of Goodsprings Cobalt and Base Metals Project, located in the State of Nevada, USA. The US Cobalt acquisition is part of Tyranna's minerals exploration diversification strategy aimed at capitalising on the battery minerals revolution which has seen the rapid rise in the LME price of Cobalt (from US$23,000/ton in March 2016 to US$91,000/ton.

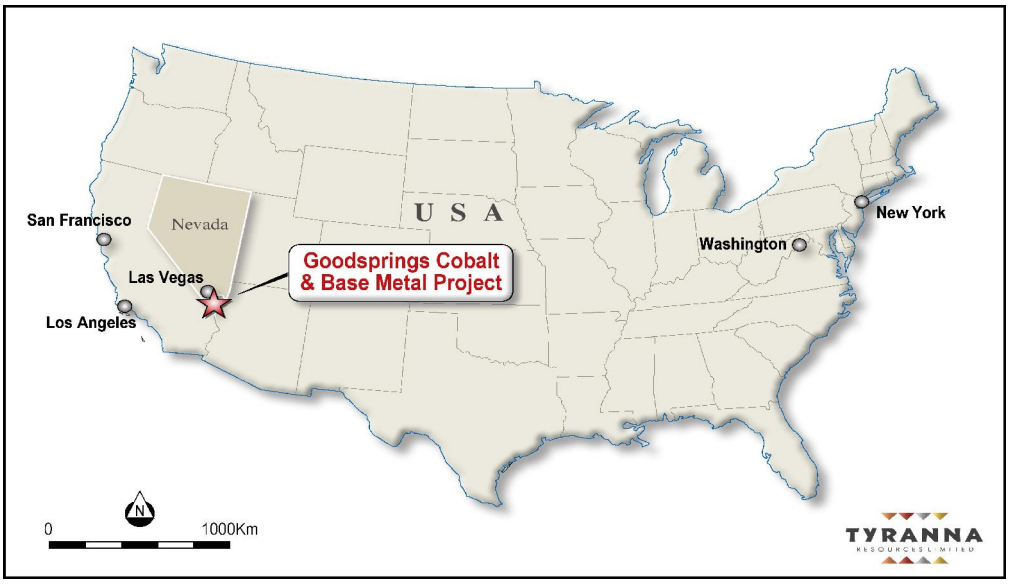


**Figure 1. Goodsprings Cobalt & Base Metals Project Location Map**

Tyranna has received highly encouraging XRF results for the initial stream sediment sampling and follow up soil sampling programmes at Goodsprings. The initial stream sediment programme highlighted 2 main Co anomalous zones at the Whale Mine and the Rose Mine. It is coincident with Cu, Pb and Zn at the Whale Mine and Cu and Pb to the south of the Rose Mine (Figures 2 to 5).

During due diligence at the Whale Mine a grab sample of dump material returned 7.64% Co. Other samples taken at the same time at the Whale Mine returned up to 22.5% Cu, 1.37% Pb and >30% Zn reflecting the polymetallic nature of the mineralisation.

Soil sampling was completed across the anomalous zones defined by the stream sediment sampling at both the Whale and Rose Mines (Figures 6 to 8). Sampling was completed using a handheld XRF analyser on a 100m N-S x 20m E-W grid.

At the Whale Mine the sampling has defined sub-parallel, NE trending, Cu-Pb-Zn anomalism over a strike length of 4km. The eastern most of the anomalies remains open to the NE. Recent alluvium covers a large portion of the area to the south of the anomaly. Previous reconnaissance geological mapping has identified the presence mineralisation hosted within NE trending structural features and westerly dipping beds.

Soil sampling to the south of the Rose Mine has identified a north trending Pb anomaly with partially coincident Cu and Zn values.

The soil sampling programme did not return any Co values (utilising the hand held XRF analyser) above limit of detection (LOD). This is interpreted to result from either the masking effect of the other elements or higher mobility of the Co within the soils versus the presence of Co mineralised rock fragments in the alluvial traps sampled by the stream sediment survey.

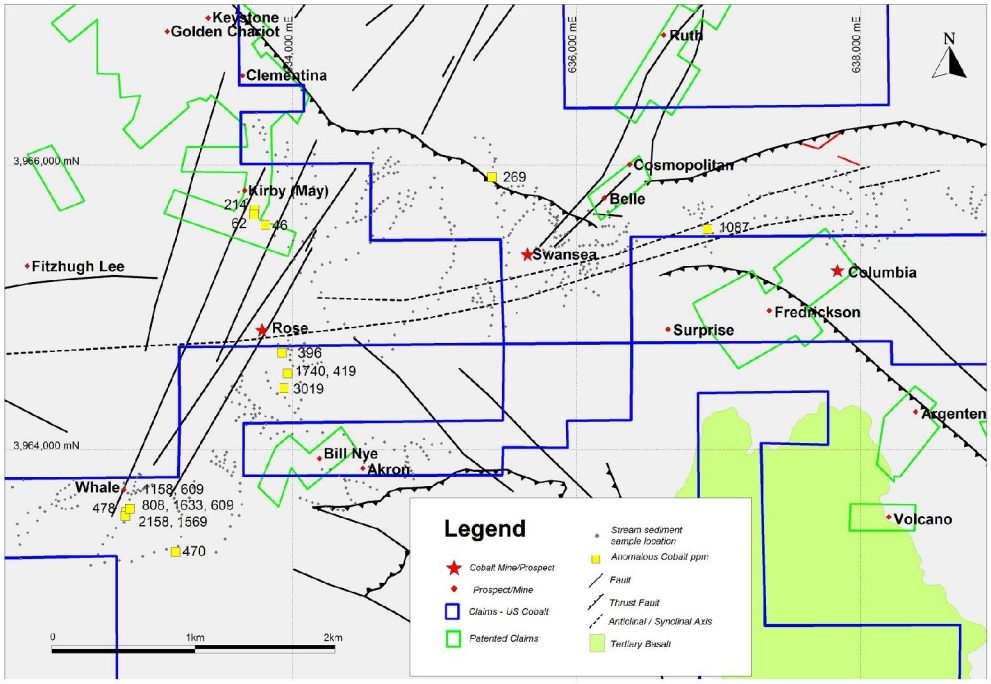


**Figure 2. Goodsprings Stream Sediment Cobalt (Co) XRF Results**

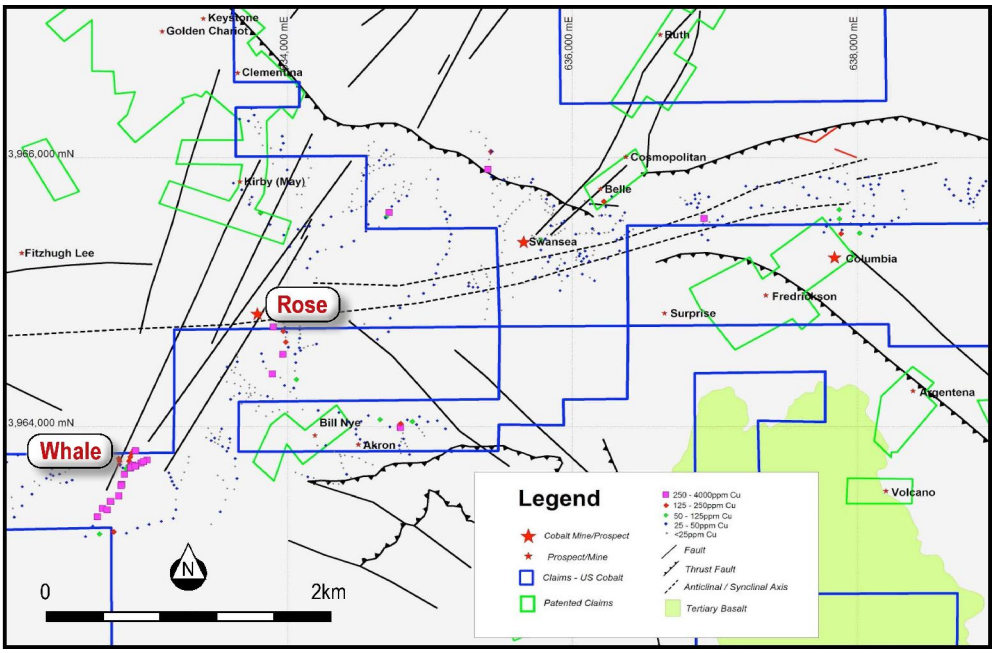


**Figure 3. Goodsprings Stream Sediment Copper (Cu) XRF Results**

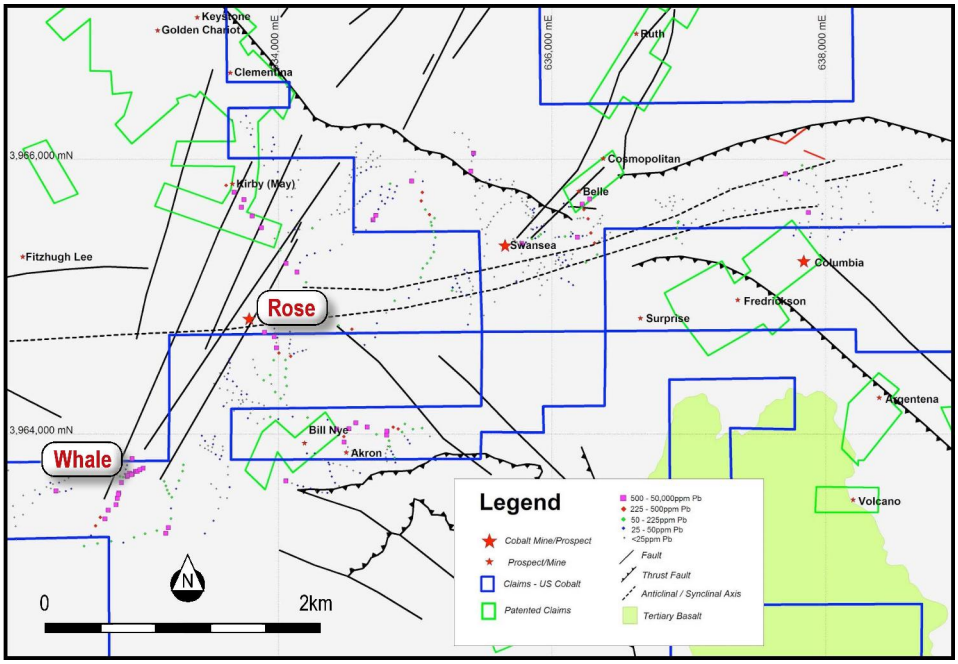


**Figure 4. Goodsprings Stream Sediment Lead (Pb) XRF Results**

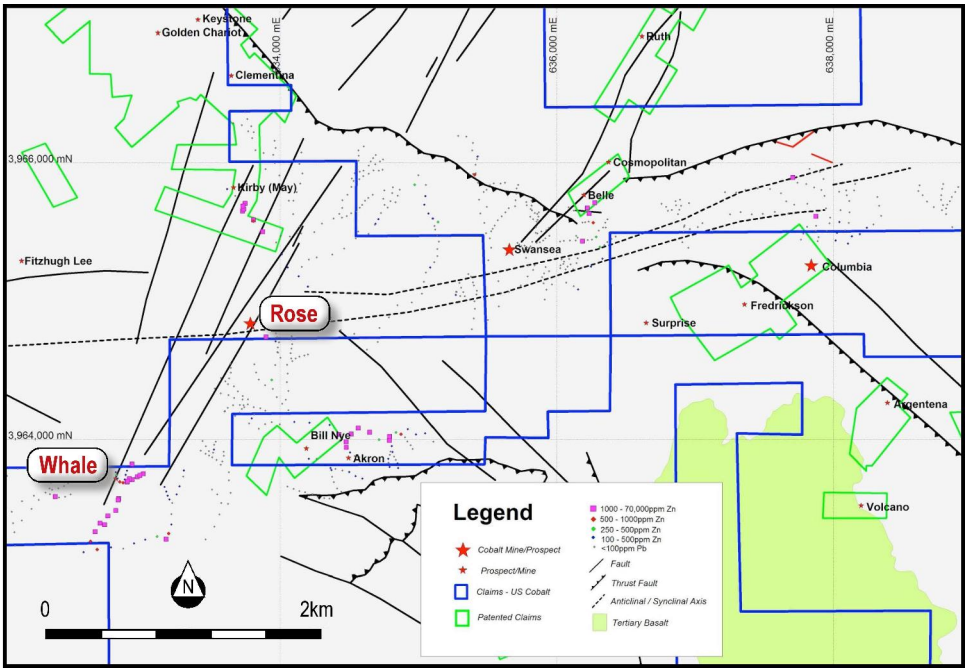


**Figure 5. Goodsprings Stream Sediment Zinc (Zn) XRF Results**

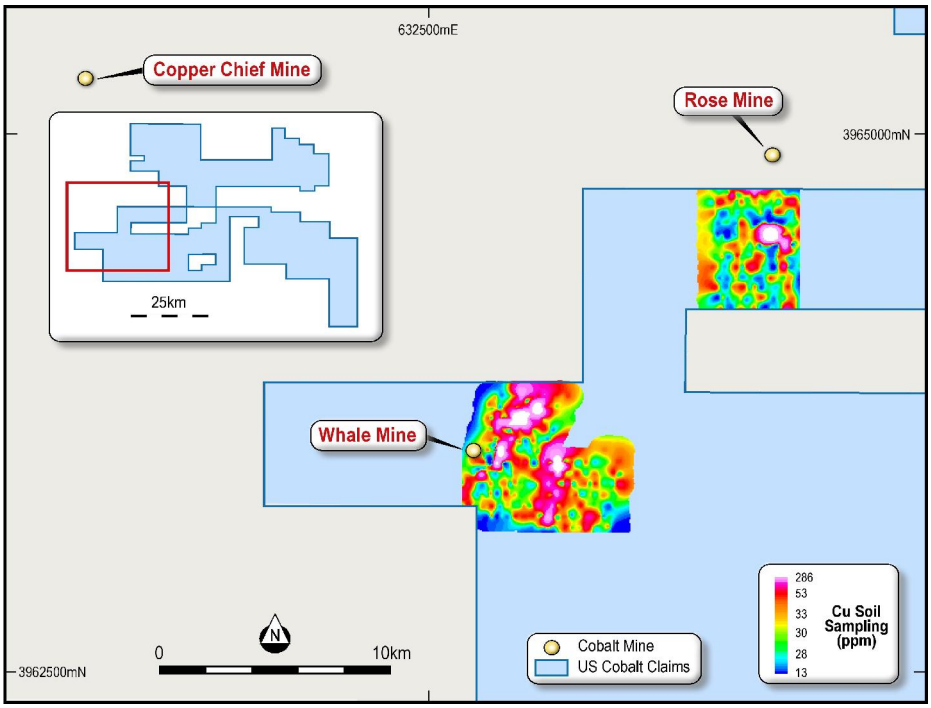


**Figure 6. Goodsprings Project Copper ( Cu ) XRF Soils Results**

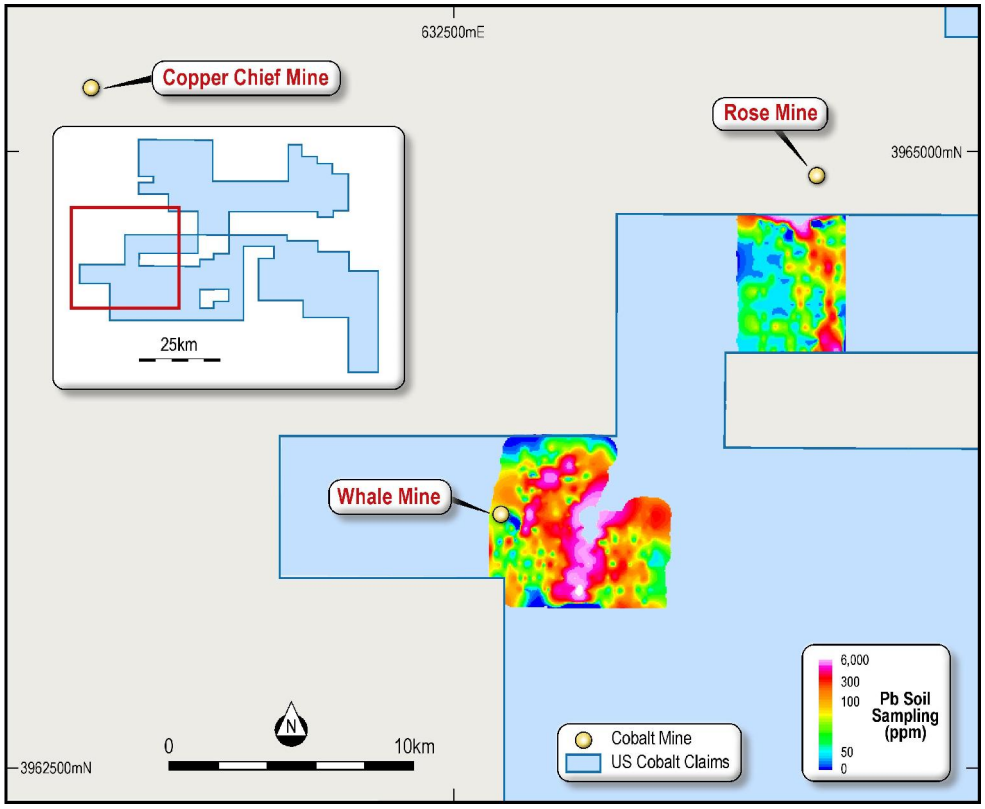


**Figure 7. Goodsprings Project Lead ( Pb ) XRF Soils Results**

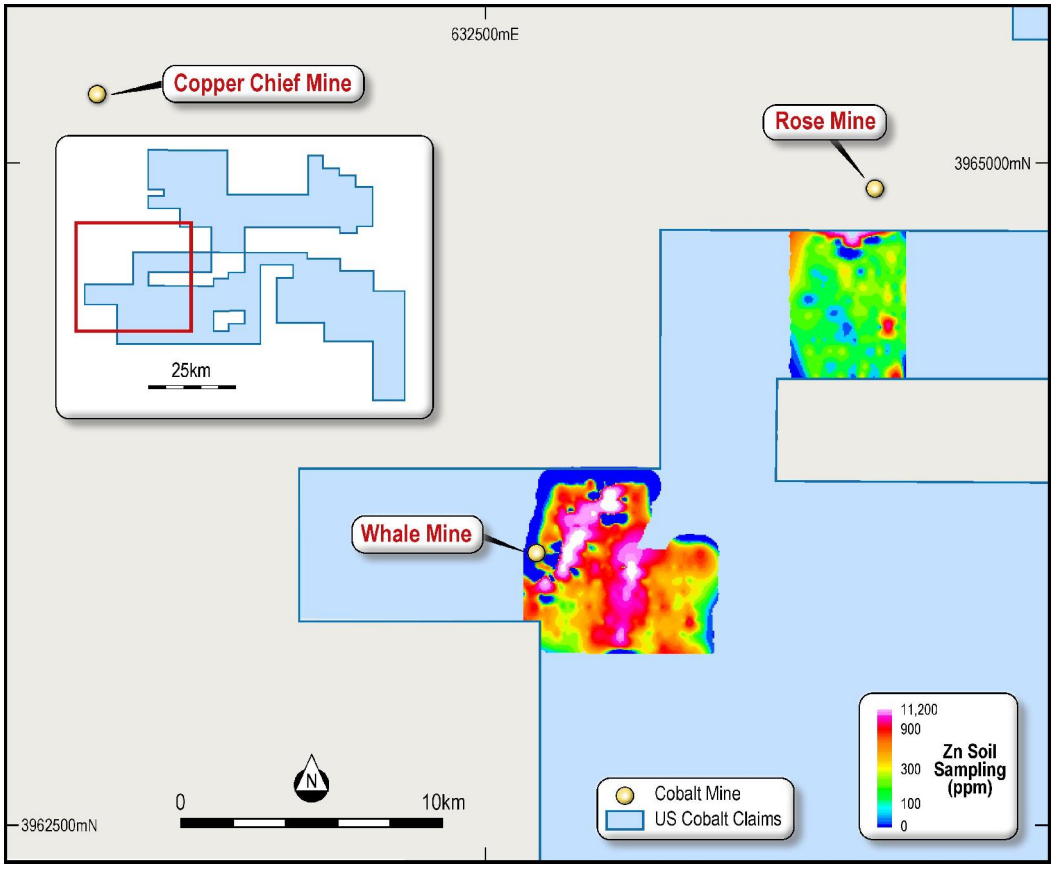


**Figure 8. Goodsprings Project Zinc ( Zn ) XRF Soils Results**

Tyranna have commissioned Dr Richard Russell to complete a photogeological structural interpretation on the Goodsprings claim block. This will identify structural controls on the mineralisation and identify target areas for follow up.

Further stream sediment is planned to further test the western portion of the claim block. Soil sampling will be completed to follow the eastern most of the multi element anomalous zones to the north.

Negotiations are underway with the owner of the patented mining claims and are expected to be completed in the next quarter.

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**About Tyranna**

Tyranna Resources is an ASX listed diversified minerals exploration Company with a significant portfolio of assets at various stages of development including the Jumbuck Gold Project in the Northern Gawler Block of South Australia. Jumbuck is a highly prospective and underexplored area, similar in style to the Albany/Fraser belt adjacent to the Yilgarn Craton in Western Australia which is host to the large 6.3M Au oz Tropicana gold deposit. Tyranna controls over 9,762 $km^2$ of ground in this area, which also hosts the Challenger gold mine (owned by WPG Resources Ltd).

In December 2017, Tyranna announced the acquisition of a near term production Eureka Gold Mine and it is also currently in the process of acquiring the Goodsprings Cobalt and Base Metals Project, located in the State of Nevada, USA.

Tyranna holds strategic interests in Kairos Minerals (31.3m shares), Orinoco Gold (19.1m shares) and 29% JV interest in the Wilcherry Project Joint Venture with the Weednanna Gold Project as the main asset.

**Competent person statement:** The information in this announcement that relates to Exploration Results is based on information compiled by Nicholas Revell, who is a Member of The Australian Institute of GeoScience and who has more than five years' experience in the field of activity being reported on. Mr. Revell is the Technical Director of the Company. Mr. Revell has sufficient experience which 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 in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr. Revell consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

**JORC Code, 2012 Edition – Table 1**

**Section 1: Sampling Techniques and Data – Goodsprings Project**

| Criteria | JORC Code Explanation | Commentary |
|---|---|---|
| Sampling Techniques | • Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole 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 tool 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 (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed Information. | Stream Sampling was carried out on sediment collected at a depth of 10-20cm from dry stream beds. Samples were sieved with a US Size 8 mesh and the <2.36mm fraction was collected for assay. The fine fraction was analysed with a portable XRF analyser.<br>Soil samples were taken by scraping the surface cover and direct soil read analysed with a portable XRF analyser. |
| Drilling Techniques | • 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.). | No drilling conducted. |

| Criteria | JORC Code Explanation | Commentary |
|---|---|---|
| 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 | No drilling conducted. |
| 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.<br>• The total length and percentage of the relevant intersections logged | Brief descriptions of mineralisation and location were recorded. |
| 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. | Stream samples were sieved with a US 8 (2.36mm) size mesh.<br>Soil samples were taken directly on location after scraping off the surface cover. |

| Criteria | JORC Code Explanation | Commentary |
|---|---|---|
| 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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established | Assays were carried out with a portable XRF analyser, a Bruker S1 Titan.<br>Calibration was done by Geotech Environmental Equipment Inc. Reading times were approximately 60 seconds. |
| 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 | Previous studies of the comparison between the pXRF and the ICP assays indicate that the pXRF can be used to delineate mineralisation in the field. |
| Location of data points | • Accuracy and quality of surveys used to locate drillholes (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 | Location of samples was recorded by hand held GPS. |

| Criteria | JORC Code Explanation | Commentary |
|---|---|---|
| Data Spacing and distribution | • Data spacing for reporting of Exploration Results.<br>• 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. | Stream samples were taken along the natural drainage. Soil samples were taken on a 50m X 20m grid. |
| 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. | Stream and soil samples were not oriented along any known geological orientation. |
| Sample Security | • The measures taken to ensure sample security | Company personnel collected the samples and then transported them to the assay laboratory at Reno, Nevada. |
| Audits or reviews | • The results of any audits or reviews of sampling techniques and data | The Competent Person and other company personnel have reviewed the data contained the data |

**Section 2: Reporting of Exploration Results**

(Criteria listed in section 1 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 | US Cobalts projects are located on unpatented Federal mining claims in the USA. The Competent Person has accessed the USA Federal government websites to confirm that all of the mining claims are held by the party indicated in the agreement.<br>US Cobalt will obtain local, state and/or federal permits to operate in their project areas as required. |

| Criteria | JORC Code Explanation | Commentary |
|---|---|---|
| Exploration done by other parties | • Acknowledgment and appraisal of exploration by other parties. | Limited information is available on the exploration and development of the Goodsprings Project. There are numerous small, historic mines in the region. The US Bureau of Mines and the US Geological Survey have published reports, circulars and bulletins over the years and these provide the bulk of the information.<br><br>'Reconnaissance of Mining Districts in Clark County, Nevada', USBM Information Circular 6964, 1937.<br><br>'Geologic Controls on Lead-Zinc Mineralisation in Goodsprings (Yellowpine) District, Nevada', USGC Bulletin 1010, 1954.<br><br>'Geology and Ore Deposits of the Goodsprings Quadrangle, Nevada', US Department of the Interior, Professional Paper 162, 1931. |
| Geology | • Deposit type, geological setting and style of mineralisation | Mineralisation within the Goodsprings Project appears to be closely associated with limestones, while also appearing to have strong structural controls. A spatial relationship between intrusive granite-porphyries and mineralisation is apparent. But the importance of this association is not yet known. |
| Drillhole Information | • A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:<br>-Easting and northing of the drillhole collar<br>-Elevation or RL (Reduced Level elevation above sea level in metres) of the drillhole collar<br>-Dip and azimuth of the hole<br>-Downhole length and interception depth<br>hole length. | No drilling was carried out. |

| Criteria | JORC Code Explanation | Commentary |
|---|---|---|
| Data aggregation methods | • 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.<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 | The assay results are based on spot pXRF analysis. No data aggregation methods, weighting of results or top cuts have been applied. |
| 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 drillhole angle is known, its nature should be reported.<br>• If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known'). | These are point assays of stream sediment and soil samples. There is no known relationship between assay results and mineralisation widths. |
| 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 drillhole collar locations and appropriate sectional views | These are contained in the announcement. |
| 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 | All results have been reported, unmodified. |

| 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. | This is an early stage exploration project so there is no other substantive exploration data available. |
| Further Work | • The nature and scale of planned further work (e.g. 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. | US Cobalt plans to conduct exploration including geochemical and geophysical surveys. If warranted drilling will focus on targets generated from the initial exploration phase. |