

# News Release

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## Hubbay Announces Initial Mineral Resource Estimate at Copper World

- Indicated mineral resources of 272 million tonnes at 0.36% copper and inferred mineral resources of 142 million tonnes at 0.36% copper
- Includes near surface, higher grade indicated mineral resources of 96 million tonnes at 0.57% copper and inferred mineral resources of 31 million tonnes at 0.71% copper, with the potential to be mined earlier in the mine life
- Resource estimate includes recent additional drilling at Copper World which has continued to define shallow high-grade mineralization and continuity between Peach-Elgin and North-South Limb, as well as between Bolsa and Rosemont
- Resources comprise both oxide and sulphide mineralogy and are potentially amenable to heap leach and flotation processing methods, respectively
- Preliminary economic assessment is progressing well and is on track for the first half of 2022

**Toronto, Ontario, December 15, 2021 – Hubbay Minerals Inc. (“Hubbay” or the “company”) (TSX, NYSE: HBM)** today announced a National Instrument 43-101 (“NI 43-101”) initial mineral resource estimate for the recently discovered Copper World deposits located near the company’s Rosemont copper project in Arizona. The 100% owned Copper World project is located in close proximity to the 100% owned Rosemont deposit, with mineralization closer to surface than Rosemont. The Copper World project consists of seven deposits extending over seven kilometres, including Bolsa, Broad Top Butte, Copper World, Peach, Elgin, South Limb and North Limb.

“The initial resource for our Copper World project is larger and at a higher level of geological confidence than we expected at this stage due to the exploration team’s success in discovering several quality deposits through an extensive drill program this year,” said Peter Kukielski, President and Chief Executive Officer. “The indicated and inferred resources at Copper World include a significant higher-grade component located near surface, which has the potential to form part of an attractive, low-cost copper operation located predominantly on private land. The metallurgical testing and mineralogical studies on Copper World are well-advanced and we look forward to releasing a preliminary economic assessment in the first half of 2022.”

“We are very encouraged by the initial resource estimate for Copper World, where we have seven meaningful deposits with relatively low strip ratios, and the project has the potential to be an exciting operation for our Arizona business,” said Andre Lauzon, incoming Senior Vice President and Chief Operating Officer. “If Copper World is developed, it will support America’s efforts to reduce greenhouse gas emissions by producing the copper needed for renewable energy and electric vehicles, in a sustainable and socially responsible manner. In addition, it would generate many direct and indirect jobs in the region. There remains the potential for further copper discoveries in the area and we look forward to continuing the exploration and permitting process in 2022.”

## Extensive Drill Program Results in Large Resource Estimate

In October 2020, Hudbay began condemnation and exploration drilling over the company’s patented private land claims at Copper World and, following encouraging early results, Hudbay expanded the exploration drill program. The initial drill results were announced in March 2021, including four deposits with the potential to be a viable open pit operation. Since then, Hudbay’s exploration program at Copper World has continued to define and extend seven mineral deposits hosting both oxide and sulphide copper mineralization at shallow depths over a seven-kilometre strike area. The deposits are located northwest of and in continuity with the Rosemont deposit and are predominantly located on Hudbay’s wholly owned private land mining claims (please refer to the plan view in Figure 1). The mineralization consists of both skarn and porphyry copper sulphides with a significant oxidized component along a regional fault along the west side of the Rosemont, Bolsa and Broad Top Butte deposits known as the Backbone Fault (please refer to Figure 2).

Based on the assay results compiled and validated as of October 13, 2021, the initial mineral resource estimate for the Copper World deposits is summarized in Table 1 below. The mineral resources are shown with reference to the potential processing methodology for the sulphide and oxide mineralogy present.

**Table 1: Copper World Project Global Mineral Resource Estimates as at December 1, 2021**

Potential Processing Method	Category	Metric Tonnes	CuT (%)	CuSS (%)	Mo (g/t)	Ag (g/t)
Flotation	Indicated	180,000,000	0.37	0.07	136	2.7
	Inferred	91,000,000	0.36	0.05	129	3.8
Leach	Indicated	92,000,000	0.34	0.27	74	3.4
	Inferred	51,000,000	0.35	0.27	61	2.5
<b>Total</b>	<b>Indicated</b>	<b>272,000,000</b>	<b>0.36</b>	<b>0.13</b>	<b>115</b>	<b>2.9</b>
	<b>Inferred</b>	<b>142,000,000</b>	<b>0.36</b>	<b>0.13</b>	<b>105</b>	<b>3.3</b>

Notes:

<sup>1</sup> CIM definitions were followed for the estimation of mineral resources. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

<sup>2</sup> Mineral resources are reported within an economic envelope defined by a pit shell optimization algorithm and assuming a selective mining unit of 50x50x50 feet. This pit shell is defined by a revenue factor of 1.0 assuming operating costs adjusted and updated from the 2017 Rosemont Feasibility Study.

<sup>3</sup> Long-term metal prices of US\$3.45 per pound copper, US\$20.00 per ounce silver and US\$11.00 per pound molybdenum were used for the estimation of the mineral resources.

<sup>4</sup> Metal recovery estimates assume that this mineralization would be processed at a combination of facilities, including copper and molybdenum flotation and heap and/or run-of-mine leach pads followed by solvent extraction and electrowinning.

<sup>5</sup> CuT represents total copper grade.

<sup>6</sup> CuSS represents the copper grade in oxides.

<sup>7</sup> Specific gravity measurements were estimated from core box weights validated by industry standard laboratory measurements.

## High Grade and Located Close to Surface

The Copper World deposits contain higher grade mineralization that often starts at or very near surface. This is specifically observed at the Peach-Elgin, Broad Top Butte and Bolsa deposits where significant higher-grade tonnage has the potential to be mined with minimum waste stripping during the initial years of mining (please refer to Figure 3). This higher grade, near surface portion of the Copper World global mineral resource estimate is shown in Table 2 below.

**Table 2: Copper World Project High Grade Mineral Resource Estimates as at December 1, 2021**

Potential Processing Method	Category	Metric Tonnes	CuT (%)	CuSS (%)	Mo (g/t)	Ag (g/t)
Flotation	Indicated	48,000,000	0.68	0.14	125	4.0
	Inferred	13,000,000	0.78	0.18	136	3.6
Leach	Indicated	48,000,000	0.46	0.37	68	4.2
	Inferred	18,000,000	0.66	0.49	50	3.7
<b>Total</b>	<b>Indicated</b>	<b>96,000,000</b>	<b>0.57</b>	<b>0.26</b>	<b>97</b>	<b>4.1</b>
	<b>Inferred</b>	<b>31,000,000</b>	<b>0.71</b>	<b>0.36</b>	<b>86</b>	<b>3.7</b>

Notes:

<sup>1</sup> Mineral resource estimates in this Table 2 are defined by a revenue factor of 0.36. A lower revenue factor typically indicates the optimal mining sequence and highlights mineralization that has the potential to be mined earlier in the mine life in order to maximize the value of the operation.

2. The higher grade mineral resources shown in Table 2 above are included in the global mineral resource estimate presented in Table 1.

### Additional Successful Drilling Results

The resource estimate for Copper World includes drilling completed since the last exploration update on September 22, 2021. The recent drilling activities have focused on filling the drilling gap between the Bolsa and Rosemont deposits and have been successful in continuing to delineate higher grade mineralization. The drilling gap has now been reduced to 300 feet from 1,500 feet, and the drilling has extended the Bolsa deposit to the south. Four drill rigs continue to turn at site to conduct infill drilling and to support future economic studies, as discussed below.

### Synergies Between Copper World and Rosemont

Approximately 33 million tonnes of inferred mineral resources at the Bolsa deposit were considered to be waste in the resource pit shell used for the NI 43-101 Technical Report Feasibility Study for Rosemont dated March 30, 2017 (“2017 Feasibility Study”). For that study, these tonnes were accounted for as pre-stripping since there were no mineralized intersections available at the time (please refer to Figure 2 for a visual of the proximity of the Bolsa deposit to the Rosemont deposit). Any ability to convert Bolsa mineral resources to reserves would be expected to result in less waste being mined at Rosemont, thereby reducing costs and energy consumption per tonne of ore mined. It is expected that additional synergies will be identified as Hudbay continues to close the drilling gap between Bolsa and Rosemont.

The Rosemont deposit also contains oxide mineralization that was previously classified as waste, which may be able to be processed with the oxide mineralization at Copper World, further reducing costs and energy consumption per tonne of ore mined at Rosemont.

### Next Steps

#### *Preliminary Economic Assessment on Track for the First Half of 2022*

The technical studies for Copper World are well-advanced and the results will be incorporated into a Preliminary Economic Assessment (“PEA”) contemplating the development of the Copper World deposits in conjunction with the Rosemont deposit. The company expects to publish the PEA results in a NI 43-101 Technical Report in the first half of 2022. The PEA is also expected to reflect preliminary expectations of potential synergies between Copper World and Rosemont.

The Rosemont deposit is one of the world’s best undeveloped copper projects with proven and probable mineral reserves of 537 million tonnes at 0.45% copper and additional measured and indicated mineral resources, exclusive of reserves, of 536 million tonnes at 0.29% copper. Hudbay is also completing a review of the Rosemont resource model in the 2017 Feasibility Study based on the recent knowledge gained from the shallow drilling conducted at Copper World and notably at Bolsa, as described above. The objective is to investigate opportunities to reduce some of the grade smoothing inherent in the resource modeling methodology used in 2017 for Rosemont.

*Private Land Operation Permitting Underway*

Hudbay holds approximately 4,500 acres of private land and patented mining claims to support an operation entirely on private land. In October, Hudbay received approval from the Arizona State Mine Inspector for its Mined Land Reclamation Plan (“MLRP”) for Copper World after applying for the MLRP in June 2021. The MLRP approval includes the requirement for reclamation cost bonding prior to initiating work on the company’s private lands and represents the first step in the state-level permitting process for a private land operation.

The aquifer protection permit and air quality permit are the key state-level permits required for a private land operation, which, along with other minor permits, are expected to be advanced in 2022 pending positive economic studies for Copper World. Hudbay has previously received the aquifer protection and air quality permits for Rosemont and these permits have been successfully upheld through litigation.

*Continued Exploration Success and 2022 Plans for Further Drilling and Economic Studies*

There remain opportunities for extension of the mineralization discovered at the Copper World and Bolsa deposits. The objectives of the current drilling program, which will continue in 2022, is to convert a large portion of the inferred mineral resources to the indicated category, convert some of the indicated mineral resources to the measured category, to test the potential connections between Broad Top Butte and Bolsa and between Bolsa and Rosemont, to test for extensions of the Copper World deposit, and to test for other discrete mineralized bodies in between the known deposits. Hudbay is also planning to advance a pre-feasibility study in 2022 after the completion of the PEA. Activities to support the PEA will include additional technical studies and drilling at Copper World.

In 2021, geophysical surveys have also identified several new targets north and south of Copper World, one of which is highlighted in Figure 4. A large portion of Hudbay’s property in this prolific region has yet to be explored and provides the potential for further discoveries.

**Resource Estimation Methodology**

A total of 310 holes drilled by Hudbay and previous owners of the project area have intersected copper mineralization and were used to define the Copper World deposits. The methodology followed to estimate mineral resources at the Copper World deposits is identical to the approach used for several years at Hudbay’s Constancia and Pampacancha mines in Peru where the mineral resource and reserve estimates have shown positive reconciliation results with mill credited production (please refer to the NI 43-101 Technical Report for Constancia dated March 29, 2021 for more details).

This methodology is slightly different from the one used for the Rosemont deposit in the 2017 Feasibility Study and has also been adapted to reflect the recent knowledge gained from the shallow and closely-spaced drilling conducted by Hudbay in 2020 and 2021 at the Copper World deposits. The distribution of the copper mineralization is not bounded by each stratigraphic unit but, rather, delimited by four structural domains with the porphyry intrusives and the regional backbone and low-angle faults being the key controlling structural features.

Resource classification adopted at Copper World follows the same classification criteria found to be a reliable measure of quarterly and annual performance in tonnes and grade prediction at Hudbay's operating mines and compares well with the classification used at Rosemont in the past. Blocks initially classified as measured were downgraded to indicated in order to account for the impact of historical drilling in the Peach-Elgin and Broad Top Butte areas, for which no quality assurance / quality control results and core are available for validation.

The Copper World mineral resource estimates were estimated assuming a selective mining unit of 50 feet by 50 feet by 50 feet and within economic pit shells defined by a Lerch Grossman algorithm. This mineral resource estimate does not account for marginal amounts of historical small-scale operations in the area that occurred between 1870 and 1970 and is estimated to have extracted approximately 200,000 tonnes, which is within rounding approximations of the current resource estimates.

### **Qualified Person and NI 43-101**

Because of the early stage of their development, Hudbay does not consider the Copper World deposits to be material mineral properties for purposes of NI 43-101.

The scientific and technical information contained in or incorporated by reference into this news release has been prepared under the supervision of Olivier Tavchandjian, P. Geo., Hudbay's Vice President, Exploration and Geology. Mr. Tavchandjian is a "Qualified Person" for purposes of NI 43-101.

Mr. Tavchandjian has verified the exploration data disclosed in this news release, including sampling, analytical, and test data underlying the information or opinions expressed herein. The data verification and quality assurance / quality control ("QA/QC") measures that were used as part of the Copper World drill program conducted by Hudbay since 2020 are summarized below:

- Recent exploration core drilling done by Hudbay at the Copper World deposits was a combination of NQ and PQ size. Drill core was removed from the core tube by drilling contractors and placed in labelled core boxes. Core was logged by geologist, photographed, measured for conductivity, and tagged with sample tags. Core was cut in half and placed in labeled sample bags with the sample tags and transported via commercial carrier for preparation and analysis to the facilities of three selected independent commercial analytical laboratories: Skyline Assayers & Laboratories in Tucson (AZ), SGS Canada in Burnaby (BC) and ALS USA Inc in Tucson (AZ). The remaining second half of the core was securely stored as a secondary backup sample for eventual verification purposes and further analysis if required.
- Samples were prepared and assayed following industry standard analytical protocols at each laboratory. To keep consistency among the different Laboratories, the sample preparation and analytical protocols were equivalent to those carried out by Bureau Veritas Mineral Laboratories in Reno (NV) and Vancouver (BC) as part of previous Hudbay's 2014 and 2020 drilling campaigns. Analyses were carried using a combination of ICP-MS and ICP-ES, following multi acid digestion to achieve near total dissolution (Methods TE-5, GE\_ICM40Q12 and ME-MS61 at each Lab respectively). Gold was analyzed by fire assay with AAS finish (Methods FA-1, GE\_FAA30V5 and Au-AA23 respectively). Samples with concentration of Cu>8000 ppm and Mo>1000 ppm, were reanalyzed multi acid (Methods CuT & SEA/Mo, GO\_ICP42Q100 ICP-ES and MW-OG62) for ore grade base-metal sulfide and precious-metal ores. Cu Sequential Analysis (sulfuric acid leach followed by sodium cyanide leach) were analyzed by methods Cu-SEQ, GC\_ASQ01D50/GC\_ASQ02D100 and Cu-AA05/17h at Skyline, SGS and ALS respectively. QA/QC included the insertion of 5% of samples as blanks, 5% as standards (from 4 certified reference materials) and 5% as pulp duplicates. Failure rates were nominal in all cases and no significant QA/QC issue was identified.

- The validity of using historical drilling for which core and or QAQC results are not available anymore was confirmed by conducting global comparison of grade interpolation using this data versus the recent drilling done by Hudbay.

Hudbay is not aware of any drilling, sampling, recovery, or other factors that could materially affect the accuracy or reliability of the mineral resource estimates disclosed in this news release.

### **Forward-Looking Information**

This news release contains forward-looking information within the meaning of applicable Canadian and United States securities legislation. Forward-looking information includes, but is not limited to, Hudbay's expectations regarding the future potential of the Copper World deposits and the Rosemont project, its plans for additional drilling and other exploration work on the Copper World deposits, its expectations regarding the PEA for Copper World and the potential to advance a pre-feasibility study in 2022, the anticipated state-level permitting process for Copper World and potential synergies between Copper World and Rosemont. Forward-looking information is not, and cannot be, a guarantee of future results or events. Forward-looking information is based on, among other things, opinions, assumptions, estimates and analyses that, while considered reasonable by the company at the date the forward-looking information is provided, inherently are subject to significant risks, uncertainties, contingencies and other factors that may cause actual results and events to be materially different from those expressed or implied by the forward-looking information.

The material factors or assumptions that Hudbay identified and were applied by the company in drawing conclusions or making forecasts or projections set out in the forward-looking information include, but are not limited to, the company's ability to continue to operate safely and at full capacity during the COVID-19 pandemic; no disruptions to supply chains, contractor availability or technical services due to COVID-19 related challenges and no unanticipated litigation or legal challenges related to Copper World or Rosemont.

The risks, uncertainties, contingencies and other factors that may cause actual results to differ materially from those expressed or implied by the forward-looking information may include, but are not limited to, risks associated with the COVID-19 pandemic and its effect on Hudbay's operations, financial condition, projects and prospects, the possibility of a global recession arising from the COVID-19 pandemic and attempts to control it, risks generally associated with the mining industry, such as economic factors (including future commodity prices, currency fluctuations, energy prices and general cost escalation), risks associated with the Copper World permitting process, risks associated with the ongoing Rosemont litigation and the potential for new legal challenges or litigation to arise as well as the risks discussed under the heading "Risk Factors" in Hudbay's most recent Annual Information Form.

Should one or more risk, uncertainty, contingency or other factor materialize or should any factor or assumption prove incorrect, actual results could vary materially from those expressed or implied in the forward-looking information. Accordingly, you should not place undue reliance on forward-looking information. Hudbay does not assume any obligation to update or revise any forward-looking information after the date of this news release or to explain any material difference between subsequent actual events and any forward-looking information, except as required by applicable law.

### **About Hudbay**

Hudbay (TSX, NYSE: HBM) is a diversified mining company primarily producing copper concentrate (containing copper, gold and silver), zinc metal and silver/gold doré. Directly and through its subsidiaries, Hudbay owns three polymetallic mines, four ore concentrators and a zinc production facility in northern Manitoba and Saskatchewan

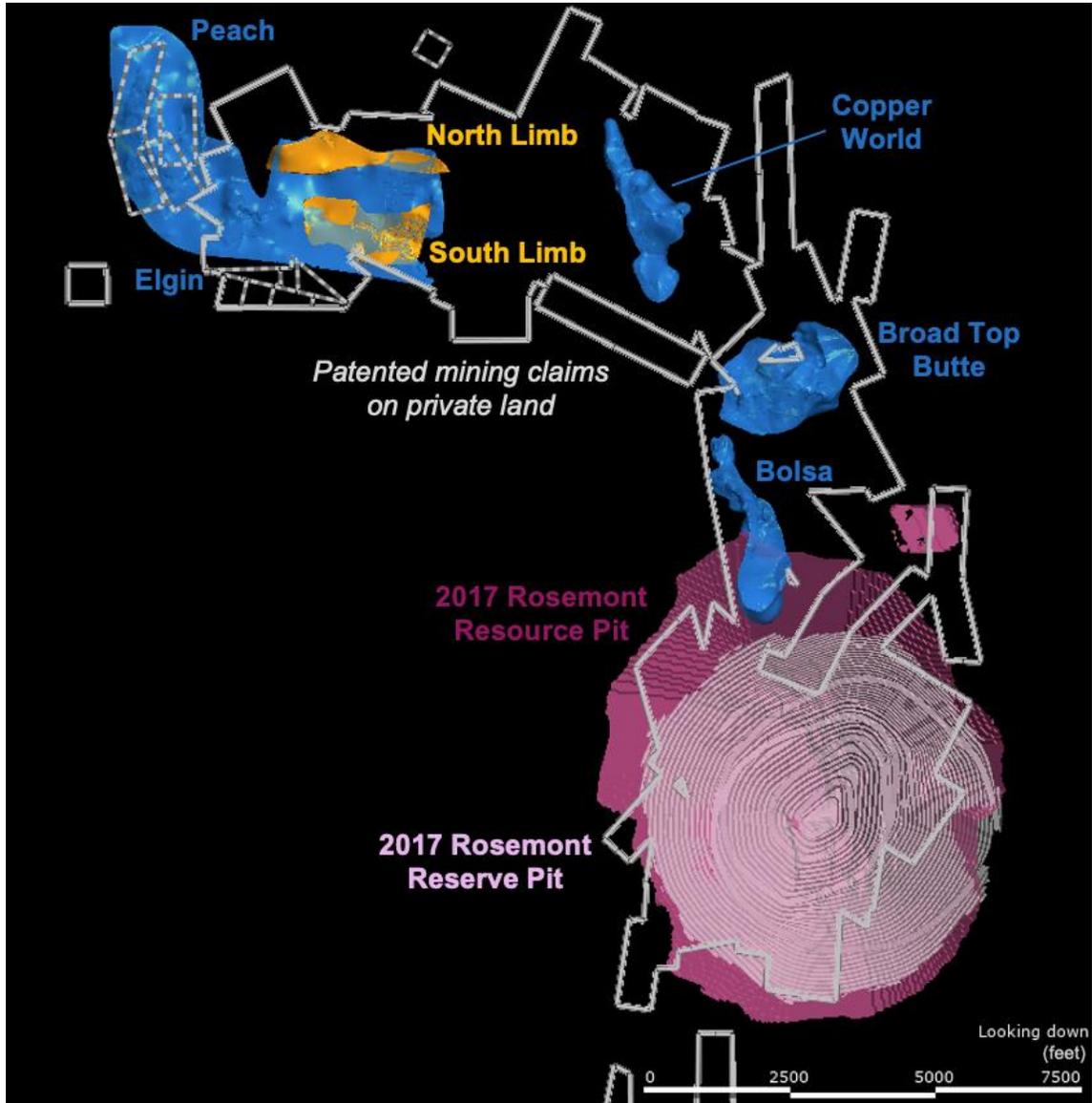
(Canada) and Cusco (Peru), and copper projects in Arizona and Nevada (United States). The company's growth strategy is focused on the exploration, development, operation and optimization of properties it already controls, as well as other mineral assets it may acquire that fit its strategic criteria. Hudbay's vision is to be a responsible, top-tier operator of long-life, low-cost mines in the Americas. Hudbay's mission is to create sustainable value through the acquisition, development and operation of high-quality, long-life deposits with exploration potential in jurisdictions that support responsible mining, and to see the regions and communities in which the company operates benefit from its presence. The company is governed by the Canada Business Corporations Act and its shares are listed under the symbol "HBM" on the Toronto Stock Exchange, New York Stock Exchange and Bolsa de Valores de Lima. Further information about Hudbay can be found on [www.hudbay.com](http://www.hudbay.com).

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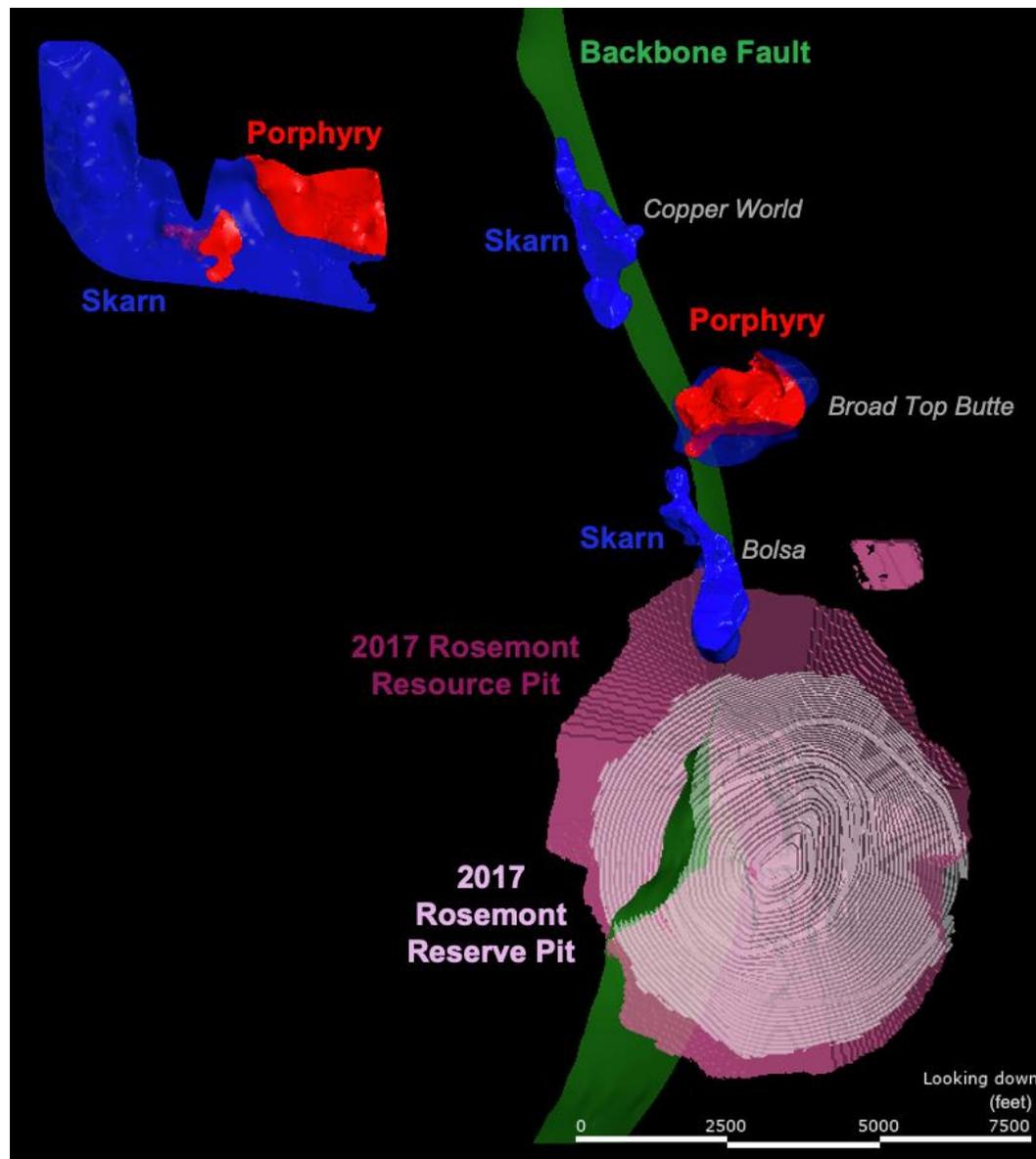
**Figure 1: Plan View of the Copper World Project**

*The Copper World project consists of seven mineral deposits hosting both oxides and sulphide copper mineralization at shallow depths over a seven-kilometre strike area, with a majority of the deposits located on private mining claims adjacent to Rosemont.*



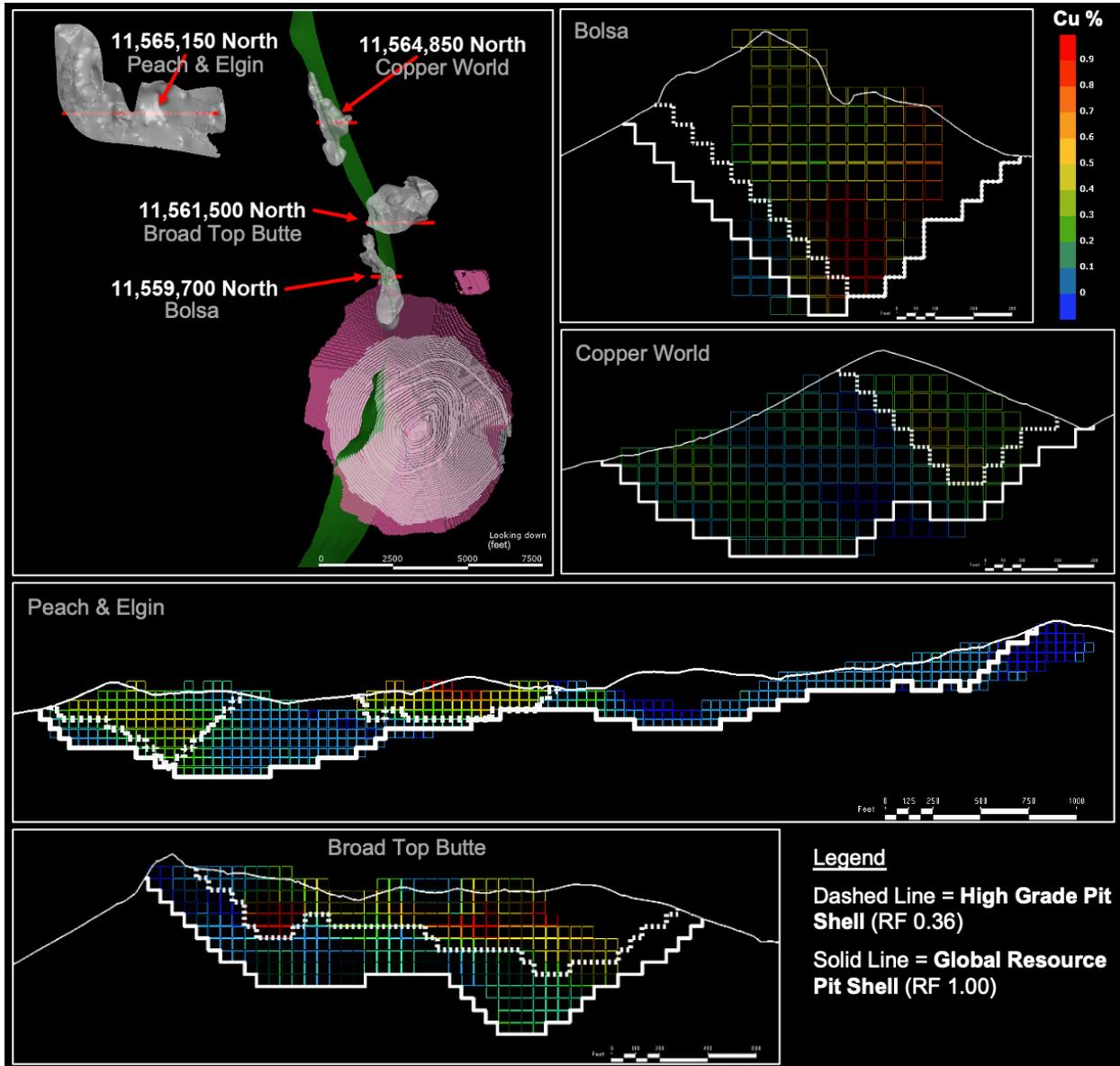
**Figure 2: Location of Deposits in Proximity to the Backbone Fault**

Significant oxide mineralization located along a regional fault that runs near the west side of the Rosemont, Bolsa and Broad Top Butte deposits known as the Backbone Fault.



**Figure 3: Higher Grade Portion Expected to be Mined Earlier**

Longitudinal section showing Bolsa, Copper World, Peach-Elgin and Broad Top Butte pit shells with higher grade mineralization located closer to surface and expected to be mined earlier in the mine life.



**Figure 4: Several Geophysical Exploration Targets Identified in the Region**

The region remains prospective with several geophysical targets identified north and south of the Copper World deposits, including an untested geophysical anomaly located near Broad Top Butte.

