

## **ASX** Release

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GTE is an experienced exploration company focussed on the discovery of high value base metal, nickel and gold deposits.

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### Board of Directors

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Craig Mathieson – Non-Executive

Terry Grammer – Non-Executive

Justin Barton – Company Secretary

# **Chisel Exploration Update**

- RC drilling confirms favourable geological setting for Besshi style VHMS mineralisation at Chisel
- Four potential VHMS horizons identified in downhole geochemistry
- Positive results from the drilling allows the company to proceed with ground EM surveys over the target area.

Great Western Exploration Limited would like to announce that the recent drilling completed at the Company's Chisel prospect has demonstrated favourable geological conditions for the formation of VHMS style base metal massive sulphide mineralisation.

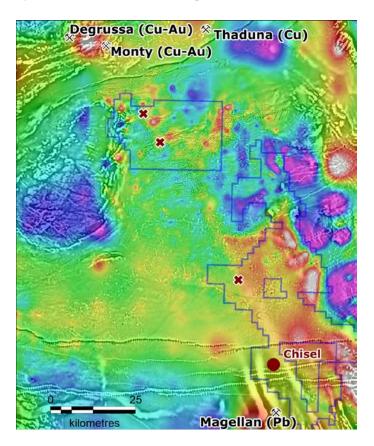


Figure 1: Location of Chisel prospect

Three RC holes, for a total of 591m, were completed, spaced 50m apart, for 100m coverage across stratigraphy, where RGC reported an intersection of 2m @ 3.2% copper, 8 g/t silver, 0.296 g/t gold and 0.12% zinc from a single diamond hole (DDH7) drilled in 1994 (fig 1). The purpose of the drilling was to determine the nature of this base metal anomalism and the geological setting in which it occurs.

All three drill holes intersected wides zones (>50m) of strongly altered medium and fine grained basaltic (mafic) volcanic sequences. The mafic volcanic sequence is overlain by a flat lying 100m thick black shale unit and a possible discordant minor dolomite unit along the base of the shale. The alteration is predominantly carbonate – pyrite with localised concentrations of pyrite up to 5%. The mutli-element geochemistry identified four horizons where there is a geochemical signature for VHMS style mineralisation at around the 50m, 100m, 140m and 190m depths.

The main interest in the historical drill hole was the juxtaposition of base metal mineralisation and "peperite" which is a diagnostic feature of Degrussa and Monty style massive copper mineralisation. As there were no massive sulphides logged in the original drill hole the company was not expecting to intersect a sulphide horizon and instead the holes were drilled to determine whether the conditions exist for VHMS mineralisation similar to what has been observed at Degrussa and Monty.

The Degrussa deposit has been classified as a Besshi style VHMS deposit where mafic volcanic rocks have erupted onto or intruded into unconsolidated saturated sedimentary sequences and it's the interaction of the hot rocks with the sediments that forms peperites. These hot rocks also heat up the water which starts circulating through the ground dissolving metal from the mafic rocks and then migrating upwards along faults until there is favourable conditions for the metal to precipitate out forming massive sulphide bodies. It has been proposed that the primary mineralisation at Degrussa was formed during the intrusion of the mafic rocks after the formation of the host sedimentary sequence.

Furthermore the stratigraphic relationship of the Degrussa host rocks between what is "Yerrida" and what is "Bryah" is not clear due to the host rocks being an age more closely aligned with Yerrida stratigraphy and the mafic volcanic rocks do not reconcile well with the regional stratigraphy and could be either Narracoota (Bryah) or Killara (Yerrida).

This would indicate the broader region, whether its Bryah or Yerrida are prospective for VHMS with the emphasis being on local stratigraphic relationships rather than being confined to these divisions.

The drilling at Chisel has identified a similar geological setting to Degrussa, where mafic volcanics have erupted and/or intruded into a sedimentary sequence forming peperite. The mafic volcanic exhibit "spilitic" alteration with locally intense carbonate and pyrite alteration is indicative of a large hydrothermal system. This is also observed at Degrussa where the mafic volcanics are similarly altered and with strong carbonate alteration peripheral to the main lodes. Furthermore the path finder elements associated with the alteration at Chisel exhibit a VHMS signature.

Four potential VHMS horizons have been identified using path finder geochemistry where there has been a combination is barium, silver, cobalt, copper, manganese, iron, molybdenite and zinc enrichment.

The overlying black shale unit is the first primary target as the underlying hydrothermal fluids can make their way up through faults and either form replacement lodes along the

carbonate rich layers or vent onto the seafloor forming VHMS. At approximately 40m to 50m depth there are centimetre scale massive pyrite layers with elevated silver, cobalt and copper that may be indicative of venting occurring at this level. Approximately 6km to the south at the same level an historical drill hole intersected 2m @ 85 g/t silver from 44m at the bottom of the hole demonstrating the prospectivity of this level.

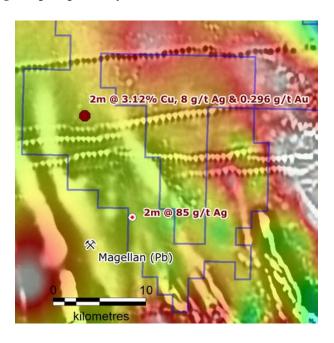


Figure 2: Location of anomalous historical drill intersections

A second potential horizon is seen occurring at the base of the black shale where there is intense carbonate altered mafic volcanics coincident with elevated manganese, silver, barium, zinc, cobalt, iron and molybdenite. Elsewhere in the region it has been noted that peperites have formed along this contact.

At approximately 140m depth there is a horizon with elevated barium, iron, manganese, cobalt and zinc that is co-incident with the same level as the historical intersection. The historical hole intersected a 6m zone of shale from 140m which exhibit the peperite textures and the base metal mineralisation along with elevated barium, silver, gold and zinc. This shale unit was not apparent in the drilling but may have been intersected in the closest hole (CHC002) where it would have been less than 1 metre thick. This unit probably thickens to the southeast and pinched out to the northwest where the drilling was carried out.

Another potential horizon was detected in the geochemistry at approximately 190m depth where there was change in mafic volcanic to a much finer unit.

The prospect is located approximately 1km west of the Perseverance fault which is orientated northwest and is one of the first order controls that would have facilitated the formation of the Yerrida Proterozoic basin and can be traced along strike to the Monty deposit. In addition approximately 3.5km to the southwest there is a structurally complex area where northeast trending faults are interpreted to intersect the Perseverance fault which would be a prime location for the development of VHMS, either as sea floor venting and/or near surface replacement along the dolomitic layers of the shale sequence (Fig 3).

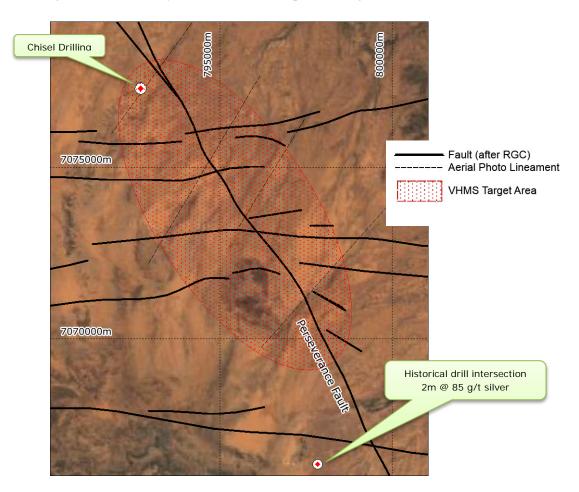


Figure 3: Target Area for VHMS mineralisation at Chisel.

These positive results allows the company to now proceed with ground EM covering a block 1km wide and 5km long to the southeast to target the area adjacent to the Perseverance fault.

### J A Luckett

### **Managing Director**

#### **Competent Person Statement**

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Jordan Luckett who is a member of the Australian Institute of Mining and Metallurgy. Mr Luckett is an employee of Great Western Exploration Limited and 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 Luckett consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.