

Clark (EL10/2018) Annual Report on Exploration 2019

(to September 20th 2019)



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Summary

Clark EL10/2018 is prospective for Cambrian Volcanic Hosted Massive Sulphide (VHMS, Zn-Pb-Cu-Ag-Au) deposits and hybrids including Henty Gold style. Two large targeted VHMS end members being Rosebery (51.5Mt @ 12.1% Zn, 3.9% Pb, 0.50% Cu, 130g/t Ag, 1.9g/t Au) and Mount Lyell (311Mt @ 0.97% Cu and 0.5g/t Au). Potential also exists for magnetite-Cu-Au mineralisation similar to that located on nearby Mt Darwin and at the Garfield Prospect.

The VHMS potential of the Clark Grid is demonstrated by anomalous base metals and alteration vectors in soils, silica – pyrite alteration with rock chips to 15g/t Au and an favourable magnetic basalt / andesite association, with the potential host horizon striking south into the north east corner of the adjacent EL31/2014.

An EDGI Grant was successfully sought in 2018 upon the basis of various demonstrated prospective features in the anomalous Au rock chip vicinity. The grant was not utilised, in part due to discouraging Au results from limited focused soil and rock chip sampling that aimed to further verify the anomaly during the tenure year to 20/09/2019. A key outcome from fire assay Au and portable Niton XRF analysis of soil and rock in the area was confirmation of a Zn-Cu+/-Pb+/-Au anomalous zone possibly representing an exhalative or immediate sub seafloor replacement.

GIS planning and interpretation continued utilising a variety of datasets to identify salient features for ground follow up, evolve the geological model and improve targeting of mineralisation.

A renewed effort to seek a Joint Venture partner is planned for the start of the 2020 tenure year. Previous efforts in 2018 involved approaching numerous (~8) potential financiers to market the Pillinger EL31/2014 and adjacent EL10/2018 area as a highly VHMS prospective bundle. Efforts were unsuccessful at the time, with most apparently focused upon brownfields exploration plays.

Numerous mapping and geochemical sampling options exist to further characterise. This includes man portable drilling options. However, an idea program resulting from significant financial input from JV search, would target VHMS and hybrids, as well as IOCG via a program including ground IP, EM and drilling, as well as an airborne MobileMT (or VTEM) survey extending to include the adjacent EL31/2014.

Introduction

This first annual report on Clark EL10/2018 details work undertaken to 20th September 2019. The Clark and Pillinger (EL31/2014; adjacent to the south) exploration licences are held by R Reid (50%) and B Koster (50%).

This year's work investigated the potential of a likely VHMS host horizon and basalt package identified on the Clark Valley Grid. A 15.5 g/t Au in rock chip sample from this horizon was further followed up.

The Clark tenement is little explored with no drilling and minimal geological mapping having been undertaken. Stream sediment sampling is relatively extensive within Clark, but rock chip sampling is limited. Soil sampling incompletely covers much of the tenement with a focused 100m spaced Clark grid in the southeast. Favourably a 1995 aeromagnetics survey and regional aeromagnetics and

radiometrics surveys cover the tenement. Intensive gridding surveys (geological mapping, soil sampling, Induced Polarisation and ground magnetics) and WTRMP (Western Tasmanian Regional Minerals Program) airborne electromagnetics also extend across the tenement.

Access

Clark EL10/2018 covering 13km² lies approximately 30km south of Queenstown, west coast Tasmania (Figure 1). The principal access to the tenements north is via the 4WD track along South Mount Darwin Plateau, which further utilises a walking track to the Clark River grid.

Geology

The area is little mapped with what's known coming from MRT 250,000 scale mapping, possibly in part derived from EZ company work. The structurally complex geology of EL10/2018 and adjacent EL31/2014 comprises three principal rock types; the Middle Cambrian-aged Mount Read Volcanics (MRV), the Late Cambrian-aged Owen Group siliciclastics and uppermost Cambro-Ordovician Gordon Group (including limestone; Figure 2 & 3). The Mount Read Volcanics are largely mapped as Yolande River Sequence (YRS; Western Volcano-Sedimentary Sequence), which in a local regional context inter fingers with the Central Volcanic Complex (CVC) at or near it's top, beneath Tyndall Group (TG) quartz-feldspar phyric volcanoclastics (mapped on the eastern flank of Mt Sorell). A narrow band of CVC is aligned NW through the eastern portion of the tenement. The CVC/YRS - TG boundary represents a Volcanic Hosted Massive Sulphide (VHMS; Zn-Pb-Cu-Ag-Au) prospective stratigraphic position.

Cambrian granite outcrops on the South Darwin Plateau, proximal to the north east of Clark (EL10/2018) is associated with magnetite – Cu +/- Au mineralisation.

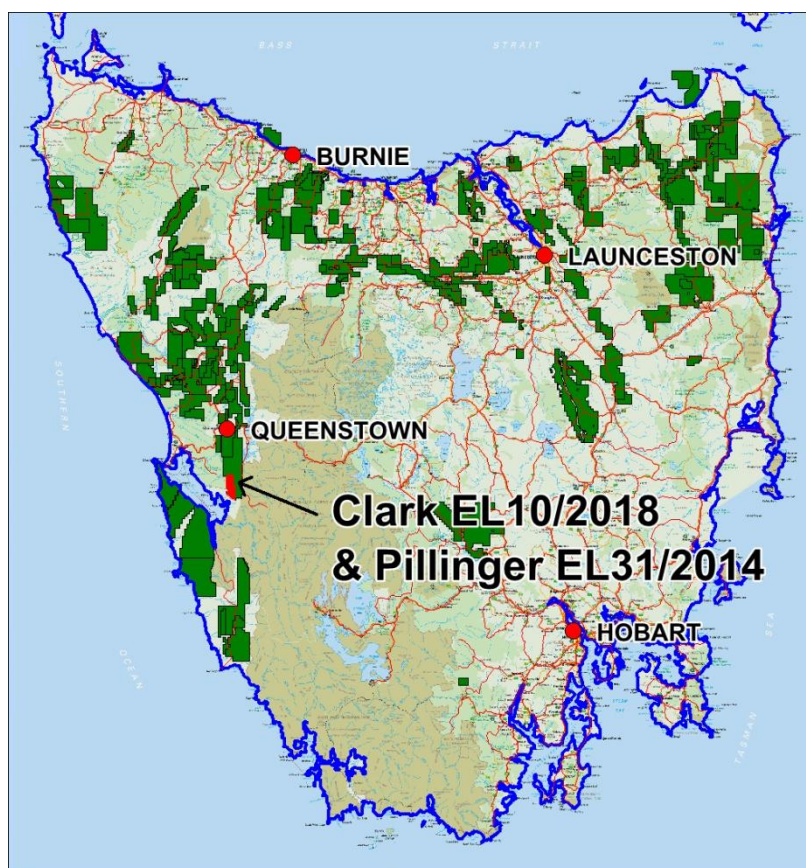


Figure 1: Location of EL10/2018.

Previous Work and Exploration History

A summary of exploration history over the Clark Valley tenement area follows. Recognition and significant advances in VHMS potential are highlighted in more recent interpretation provided in Reid (2012, 14 & 15).

Early History

The Jukes Darwin Mining Field, lying largely adjacent and to the east of the Clark Valley is reported in GSB16 (Hills, 1914). This report mostly describes Cu, Au and magnetite mineralisation.

Old mining leases 3334 93M, 3335 93M, 4831 93M, 4778 93M and 5221 93M are noted in MRT records; being located on the eastern margin of the tenement.

The Mt Lyell Mining & Railway Company (1970's)

Howland-Rose (1978; TCR 84_2239) provides a summary of gradient array IP and ground magnetic surveys over the Clark Valley area. Phase 1 data reported ends at 00N, whereas Howland-Rose (1979; TCR 84_2242) reports data extending a further 600m south to line 6S, ending immediately within the north eastern 1km² block of the adjacent Pillinger EL31/2014. A less powerful 3kw generator was used for the follow up survey, but was considered adequate. Thus, anomaly discrimination in the furthest south zone may not be quite as precise as the original survey (Howland-Rose, 1979).

Chargeability ranged from 10 to 70 millivolts/volt. Resistivities range from 1500 to 20000 ohm-metres. Grid line spacing was wide at 200 to 400m.

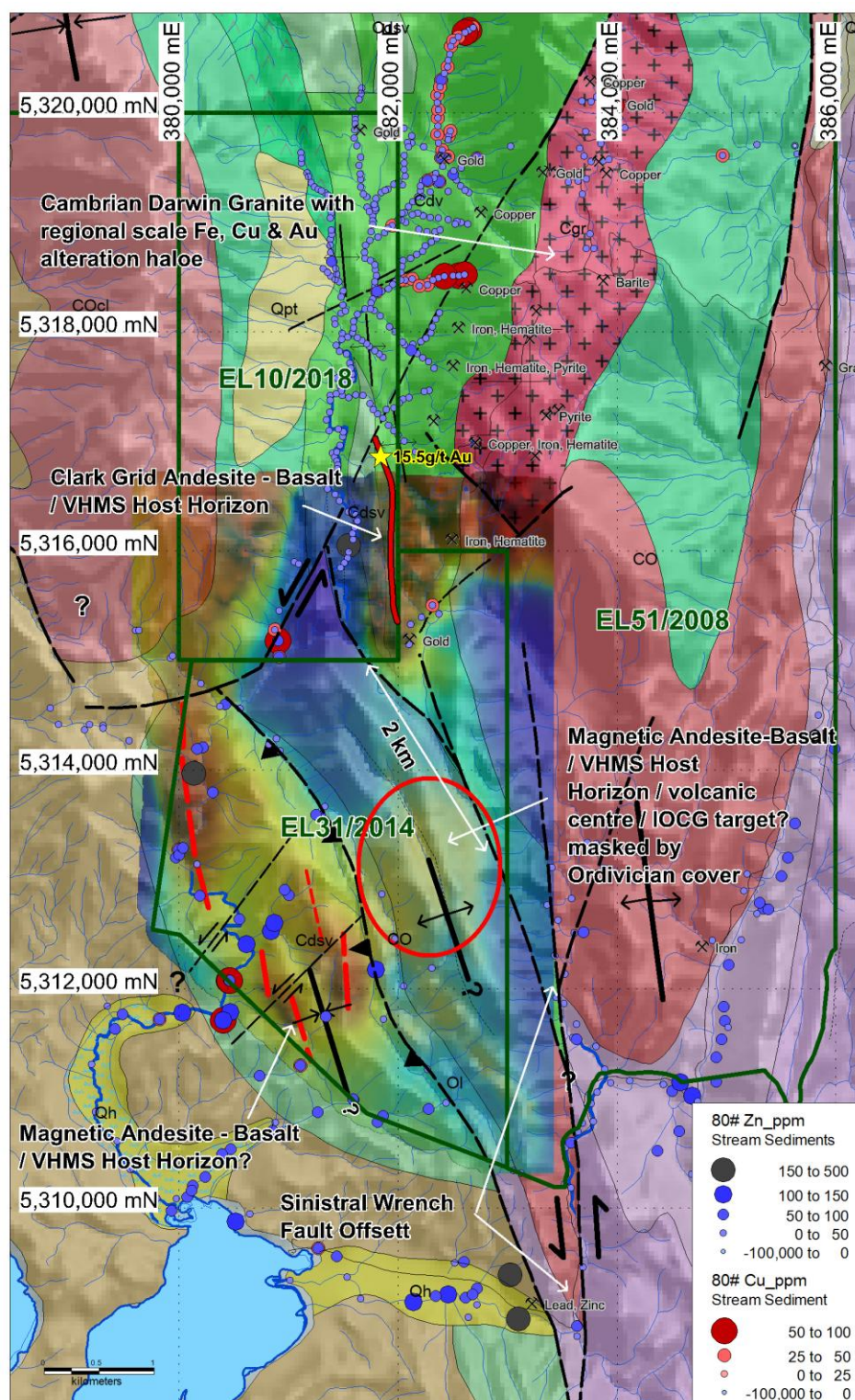


Figure 2: Regional geology of the Clark Valley and Pillinger areas, showing interpreted Geology/Structure, inferred basalt / VHMS host horizon (Red dash lines), known prospects, Shree Mineral's 15.5g/t Au in rock chip site and known prospects over clipped 1995 aeromagnetics grid transparency and MRT 250k digital geology (See Figure 3 for legend).

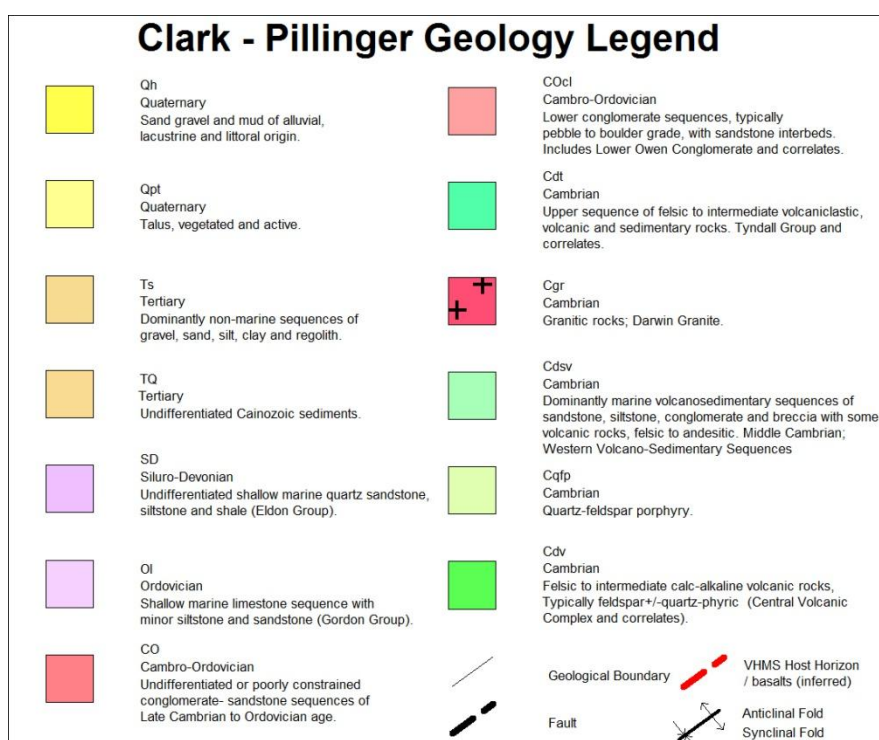


Figure 3: MRT 250k digital geology legend for the Clark Valley and Pillinger areas.

BHP (1990-1)

A comprehensive previous exploration data review is provided in Cameron and Read (1991; TCR91-3252). Among this is the location of two 1957 Turan helicopter EM anomalies, coincident with the Owen / MRV contact on South Darwin. BHP undertook a ground electromagnetic UTEM survey in 1990 over the upper Clark Valley, but didn't extend south into the Clark Grid (EL10/2018), finishing well outside Pillinger EL31/2014 on 17600N, approximately 1km north of Shree Mineral's gold in rock chip anomaly.

RGC Exploration Pty. Ltd. (1992-3)

Undertook extensive geological mapping, rock chip and soil sampling identifying anomalous base metals in soils (to 880ppm Zn) on what is now filled by soil sampling on the Clark Grid.

Aberfoyle (1995)

Aberfoyle conducted a helicopter aeromagnetic survey of the Clarke Valley and Mt Darwin in 1995. The survey defined a magnetic zone within the Central Volcanic Complex, which subsequently has been shown to correspond with basalts and anomalous base metal in soils on the Clark Grid. The helimag data was not processed beyond an initial assessment and is not reported upon by McNeill (1996) in his relinquishment report.

WTRMP (2002)

The 2002 WTRMP airborne electromagnetic and magnetic survey covers to the southern boundary of EL10/2018 and the top NE 1km² block of the adjacent EL31/2014. The WTRMP also undertook a

separate widespread aeromagnetics and radiometrics over the west coast, including the Clark Valley area.

Zinico Resources – Zelos Resources - Gujarat NRE Resources (2004 –7)

Zelos cut but did not sample the Clark Grid (21 lines of 500m length and 100m spacing), which planned to assess RGC's anomalous base metals in soils, extending north of Pillinger EL31/2014.

Three discrete EM responses were identified by Hungerford (in Vanzino 2007) from WTRMP electromagnetics, within both the YRS and the CVC. 'Ground truthing' by way of reconnaissance stream sediment sampling and minor rock sampling was undertaken in drainages in the vicinity of each of these anomalies and returned poor results. Best gold reported was 20ppb, with copper to 60ppm, Pb 105ppm and Zn 145ppm.

For ground follow up, Hungerford considered that TEM (Time Domain Electromagnetic) and IP (Induced Polarisation) surveys would both locate conductive black shales, with the IP being of greater benefit overall. Although, TEM might be easier to undertake and would provide more accurate estimates of conductors properties. Hungerford's images clearly show that BHP's UTEM survey stopped well north of Pillinger EL31/2014 and the Clark Grid.

Shree Minerals Ltd. 2011-15

In 2012, the Clark Grid immediately north of Pillinger EL31/2014 was soil sampled, ground magnetic surveyed and mapped confirming a coherent zone of anomalous base metals in soils and identifying positive vectors to VHMS mineralisation. A 0.6g/t Au in composite rock chip sample was re-sampled in 2015, returning 15.5g/t Au. This sample is coincident an ~150m plus zone of silica-sericite-pyrite alteration and remains to be further followed up. Potential to find a Rosebery or Que-Hellyer like VHMS within the grid area was considered high (Reid, 2015). The inferred VHMS exhalative horizon trends into the north of Pillinger (EL31/2014).

Reid and Koster (2016 to date)

Concurrent EL10/2018 and EL31/2014 exploration identified unexplained magnetic anomalies of possibly similar affinity to the Clark inferred VHMS host horizon basalt, within the adjacent to south Pillinger EL31/2014 (Figure 2). Three principal targets were identified as the south western magnetic anomalies, NE block and a buried VHMS conceptual target located in the centre of the tenement. A regional interpretation evolved suggesting that the host horizon from the Clark Grid, striking into the north east of Pillinger, maybe fault offset to the south into the centre of EL31/2014, where it's marked by elevated magnetics, possibly reflecting a source beneath the Owen Group (Figures 4 & 5).

Sampling in Pillinger's NE Block comprised 28 rock chips, 2 -80# stream sediment samples and 7 panned concentrates. Peak results were 1210ppm Zn and 0.05g/t Au in rock chip, as well as 0.475g/t Au in -80# draining off the southern end of the Clark Grid.

A key outcome was the location and sampling of an extensive silicification zone (resistive?) at an interpreted structural intersection, in the vicinity of a significant apparently structure controlled EM conductor/anomaly. Rock chip analysis for gold by fire assay returned low level Au to 0.02ppm. Gold of irregular proximal to source form was found in the silica zones drainage, with up to 11 colours returned per panned concentrate sample. Potential for Henty style Au, including remobilised Devonian gold exists in this area.

Rock chips bearing low level gold (to 0.014g/t Au) were derived from a zone of lithic volcanoclastics, representing the strike extent of the Clark inferred VHMS horizon on the Clark Grid. Highly anomalous gold (0.475g/t Au) was returned from a -80# stream sediment sample draining this area.

Work Conducted

Work conducted during the year to 20/09/2019 included a field visit undertaking soil sampling covering the Au in rock chip anomaly on the Clark Grid, in conjunction with reconnaissance into the southwest of the adjacent EL31/2014. GIS-based planning and interpretation utilised a variety of datasets to identify salient features for ground follow up, evolve the geological model and improve targeting of mineralisation.

Minor Joint Venture search efforts were unsuccessfully undertaken, via approaches to private equity groups. Further marketing is planned for the coming tenure year, hopefully with improved market conditions. An equity model is another approach to be tried given poor outcomes of JV partner search.

An EDGI (Exploration Drilling Grant Incentive) grant application was successfully sought in 2018 for government co funding on a drill hole targeting anomalous Au in rock chip and other salient features (see Appendix). The grant was not claimed as further investigation of the site, including soil and rock chip sampling did not strongly verify previous work, and consequently didn't warrant a drill hole at this stage. Although potential to target the anomalous Au in rock chip via a man portable drill rig test remains and was further investigated.

Soil Sampling

Soil sampling entailed collection of 15 C-horizon soil samples on two informal E-W GPS located lines. One passed directly over the Au in rock chip anomaly, with the other a further ~100m south, infilling at 50m between 100m spaced grid lines (Figure 4). C-Horizon soil samples were typically collected from 30 to 100cm depth at ~5 to 10m spacing.

Samples were sent to ALS, Burnie for sample preparation with Au analysis via fire assay. Data are presented in EL102018_201903_02_SG_1.xls, digitally appended. Three to five portable Niton XRF analysis were collected for each of the soil and rock chip samples; listed in EL102018_201903_03_SG_XRF.xls appended. Portable XRF analysis despite elevated lower detection limits, were judged to be within the approximate range of previous multi element ICP-MS soil analyses for many important elements. XRF analyses from more reliable elements (Fe, Cu, Pb, Zn) were averaged for display and analysis purposes. Ba was possibly spuriously elevated on both lines, apparently at significantly higher level than previous proximal soil sampling, which yields clear base metal parallel trends.

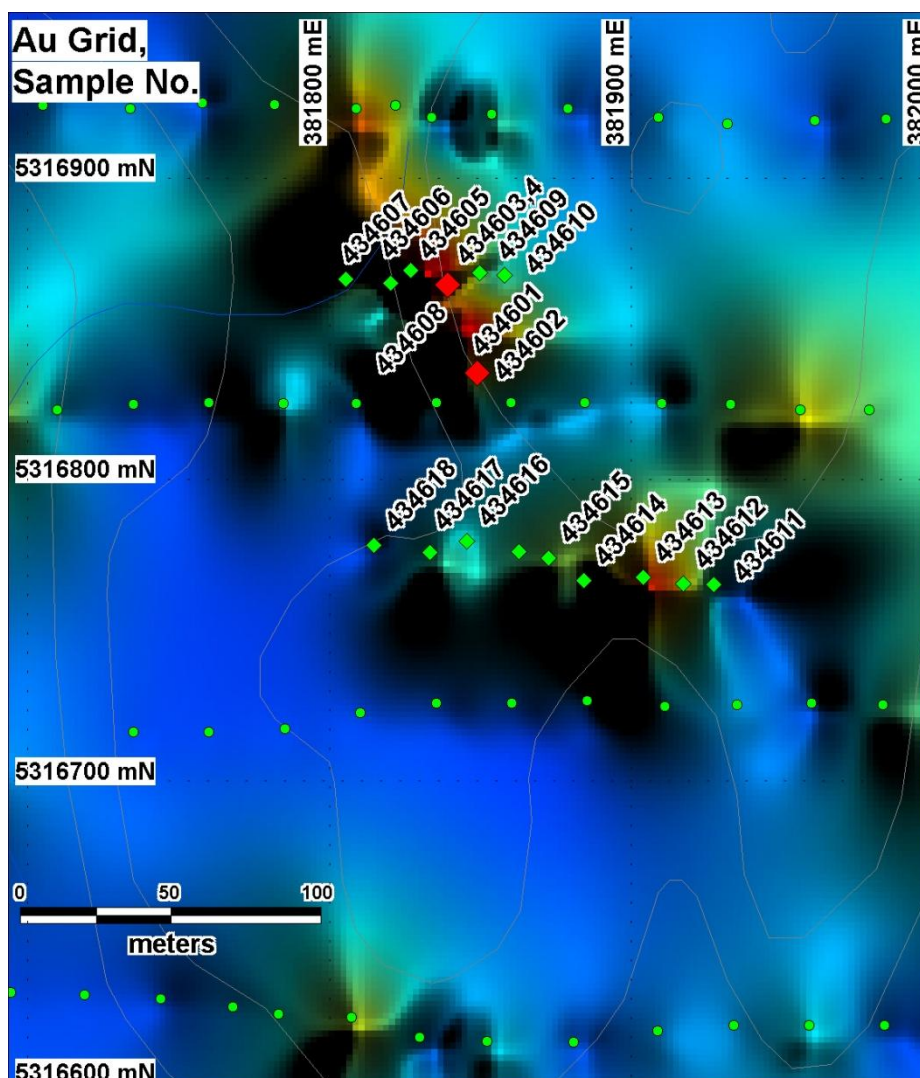


Figure 4: Soil (green) and rock chip (red) sample locations; with a crude 98% clipped grid illustrating Au distribution in the northern Clark Grid area. (NB: Au soil max 0.02ppm).

A number of compelling VHMS-like features defining a target zone in the northern Clark Grid are summarised in Figures 5 to 7. Two base metal anomalous zones are evident from historic soil sampling on the southern most infill line (Figure 6). This is further defined by recent sampling; the westernmost being most base metal anomalous, extending across 3 soil samples totalling >35m approximate width on line. Portable XRF analysis highlights from this zone are 860ppm Zn and 116ppm Cu in sample 434612 and 598ppm Zn and 179ppm Pb in 434614. This line appeared to largely sample basalt (supported by XRF Ti/Zr 20 to 40 & locally elevated Cr), with a chloritic sample near western most, representing the western zone, returning 134ppm Cu in 434616 and 247ppm Pb in 434617. Ti/Zr indicated andesitic to basalt volcanic were sampled on the southernmost line.

The two base metal zones lie flanking a high Ti/Zr / mafic zone to the east and west (Figures 5 & 6). Fe in soil is strongly coincident with high Ti/Zr, as well as with the easternmost slightly more Cu rich basemetal horizon. A weak localised WTRMP cx980, cx7k, cp880 and cp34k conductive EM anomaly is also coincident with high Fe, defining a surface anomalous zone that could extend 50 to 100m+ (Figure 5). Further soil sample infill is warranted to the south along ~5316670mN.

The base metal horizon in the Au in rock chip vicinity returned portable XRF soil analysis for S to 3175ppm (434605), Pb to 190ppm and elevated Ba of >1000ppm.

Rock Chip Sampling

Rock chip samples (No. 2) were collected from the Au in rock chip area, attempting to identify more specific sample character or stronger mineralisation and alteration. Sample 434603 from the vicinity of the 15g/t Au sample disappointingly returned a low 0.006ppm Au.

NITON XRF analysis collected for select rock samples are listed in EL102018_201909_03_SG_XRF.xls.

Portable XRF rock chip analysis (data appended) from immediately south of the Au in rock chip anomaly included 507ppm Zn, 122ppm Cu, Fe 10.5% (434602) and Ba 3279ppm (434603). Ba is significantly elevated in both soil and rock chip samples (434602&3) consistent with / possibly indicative of a peripheral alteration.

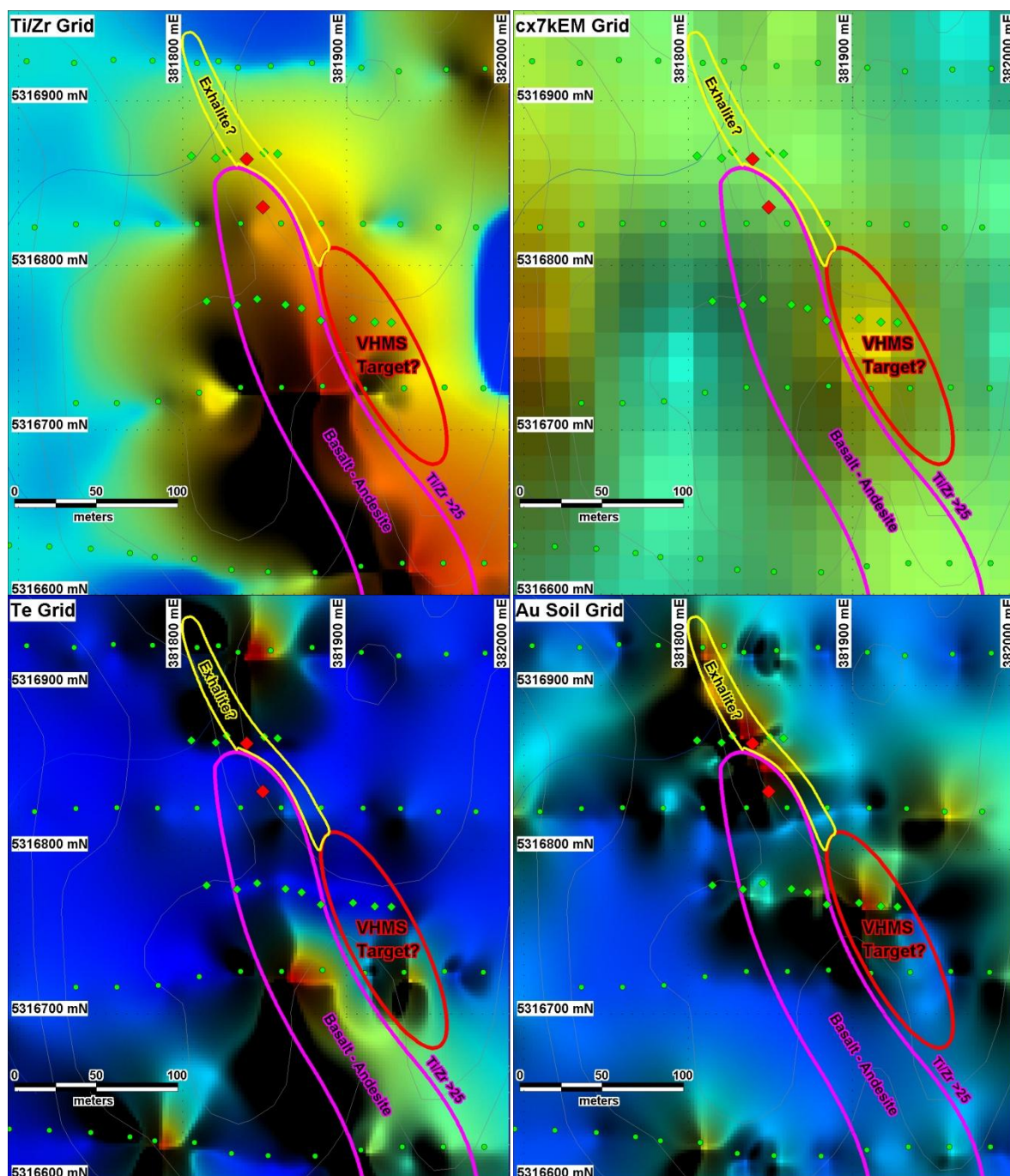


Figure 5: Northern Clark Grid diagrams illustrating recent sampling and various salient features; Ti/Zr soil grid illustrating mafic volcanic distribution relative to a relative conductor (all frequencies) and soil sample points over Te and Au soil grids (NB: soil max Te 0.23ppm & Au 0.02ppm)

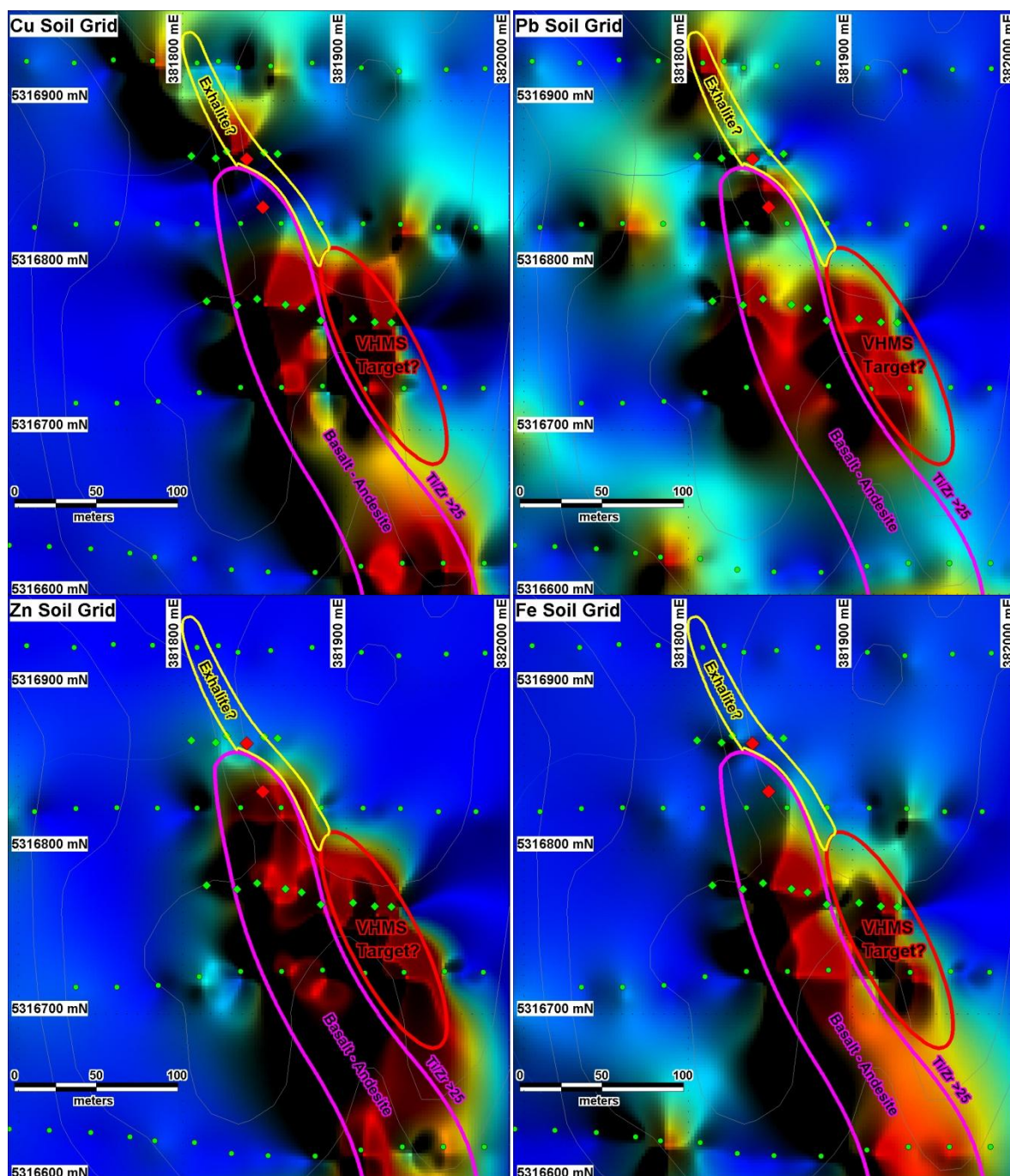


Figure 6: Northern Clark Grid diagrams illustrating recent sample points, soil grids for Cu, Pb, Zn & Fe and various salient features (NB: XRF soil max 116ppm Cu, 185ppm Pb, 835ppm Zn & 17% Fe).

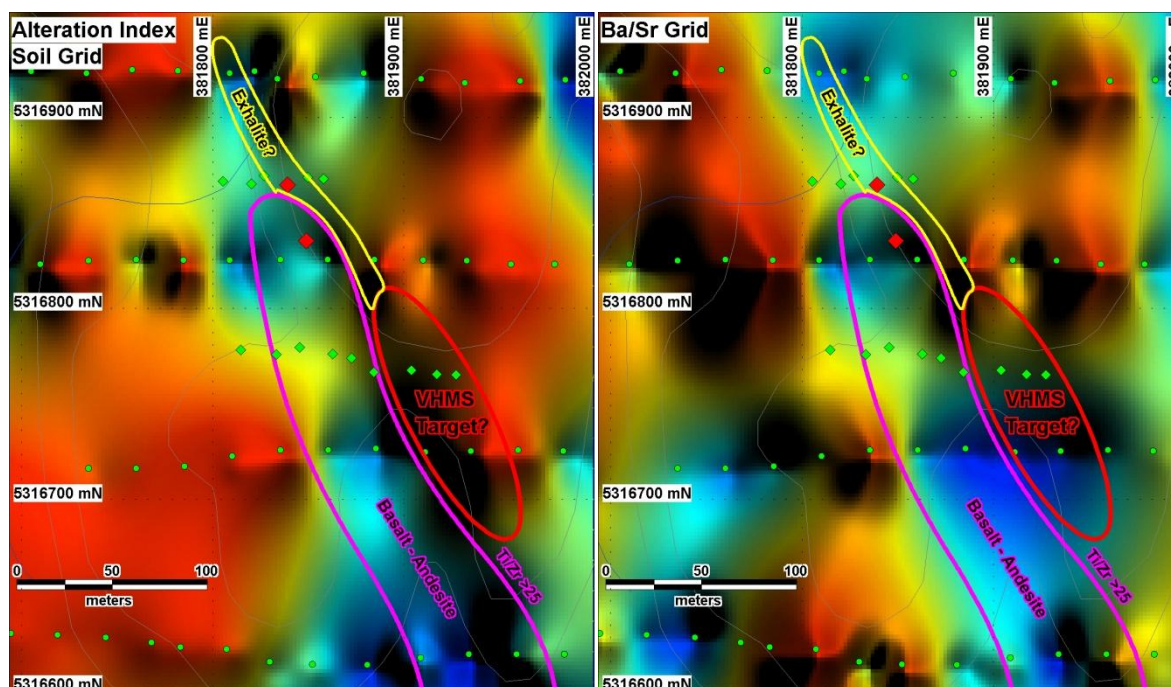


Figure 7: Northern Clark Grid diagrams illustrating recent sampling and various salient features; Soil grids for Alteration Index and Ba/Sr (potentially hangingwall VHMS).

Environment

All works were undertaken within the guidelines of the Exploration Code of Practice. All equipment and associated items were clean before coming on site. Soil auger holes were back filled on completion. Accommodation was off site with daily walking access from the South Darwin Plateau. Rubbish was removed on a daily basis.

Expenditure

Expense Type	Cost
1. Geoscience	
Geology	\$9,243
Geochemistry	\$6,845
Geophysics	
Remote Sensing	
2. Drilling & Gridding	
Gridding	
Drilling	
3. Land Access	
4. Rehabilitation	
5. Feasibility Studies	
6. Other	\$469
7. Administration	\$190
8. Total Exploration Costs	\$16,747

Proposed Exploration

Proposed exploration on EL10/2018 aims to discover high value Cambrian Volcanic Hosted Massive Sulphide (VHMS, Zn-Pb-Cu-Ag-Au) deposits and hybrids. Two large targeted VHMS end members are Rosebery (51.5Mt @ 12.1% Zn, 3.9% Pb, 0.50% Cu, 130g/t Ag, 1.9g/t Au; in ground value ~\$31,000M) and Mount Lyell (311Mt @ 0.97% Cu and 0.5g/t Au; in ground value ~\$21,000M). Potential also exists for Henty Gold-style (5.7Mt @ 8.4g/t Au; in ground value ~\$1,900M).

The exploration work program on EL10/2018 is in part tied to the adjacent EL31/2014. Further significant financial input is to be sought for extensive exploration concurrently on both tenements, although it's unclear what JV potential exists in the current economic climate.

Planned field work on EL10/2018 aims to assess the area via continued geological mapping, accompanied by rock chip and stream sediment sampling as well as informally GPS located soil sampling is planned to better understand the geology and consequently VHMS targeting.

Soil sampling to infill the likely extension of the Clark Grid inferred exhalative horizon in the south east is warranted to follow up 0.475g/t Au in 80# stream sediment sampling coincident with the projection of the Clark Valley Inferred VHMS host horizon into the adjacent Pillinger tenements NE. This includes soil sampling covering shale coincident IP chargeability anomalies.

In summary:-

- Geological mapping EL wide, but focused in the southern Clark grid area.
- Soil augering and possibly trenching around anomalous areas previously identified on the Clark grid.
- JV partner search for VHMS targeting program including ground IP, EM and drilling and / or airborne VTEM or MobileMT survey extending across the adjacent EL31/2014.

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Appendix

Appendix 1: List of Appended Digital Files

Exploration Work Type	Filename	File format
Report	EL102018_201909_01_Report.pdf	<i>pdf</i>
Surface sampling		
	EL102018_201909_02_SG_1.xls	<i>xls</i>
	EL102018_201909_03_SG_PortableXRF.xls	<i>xls</i>
	EL102018_201909_04_TV19055044.pdf	<i>pdf</i>
	EL102019_201909_05_Lookups.txt	<i>txt</i>
File Verification Listing (<i>this file</i>)	EL102018_201909_06_FileListing.xls	<i>xls</i>

Appendix 2: EDGI Grant Clark (EL10/2018) Proposal Addendum – 2018

By Robert Reid (BSc Hons, MSc Econ Geol, MAIG), 21/9/2018

Exploration Model and Geological Context

The Clark Valley (including EL's 10/2018 and 31/2014) is little mapped with what's known coming from MRT 250,000 scale mapping, possibly in part derived from EZ company work; MRVP 1:25k mapping reached the northern end of the Clark Valley. The structurally complex geology comprises three principal rock types; the Middle Cambrian-aged Mount Read Volcanics (MRV), the Late Cambrian-aged Owen Group siliciclastics and uppermost Cambro-Ordovician Gordon Group (including limestone; Figure 1 & 2).

The Mount Read Volcanics are largely mapped as Yolande River Sequence (YRS; Western Volcano-Sedimentary Sequence), which in a local regional context inter fingers with the Central Volcanic Complex (CVC) at or near its top, beneath Tyndall Group (TG) quartz-feldspar phyric volcanoclastics (mapped on the eastern flank of Mt Sorell). A narrow band of CVC is aligned NW through the eastern portion of the tenement. The CVC/YRS - TG boundary represents a Volcanic Hosted Massive Sulphide (VHMS; Zn-Pb-Cu-Ag-Au) prospective stratigraphic position. The apparently greater accumulation of more siliceous and pelitic volcano-sedimentary rocks of the YRS within Pillinger relative to that in the Clark Valley to the north may indicate thicker accumulation in a Cambrian graben to the south west or folded repetition. The sequence has previously been considered to dip steeply west along the identified "host horizon", but mapped lithology and alteration distribution inferred from soil geochemistry suggest the stratigraphy is more folded than previously appreciated.

Jukes Breccia forming an erosional surface above the Cambrian Volcanics and at the base of the Owen Conglomerate, exists in the area.

Cambrian granite outcrops on the South Darwin Plateau, proximal to the east of the Clark Valley (EL10/2018) is associated with magnetite – Cu +/- Au mineralisation.

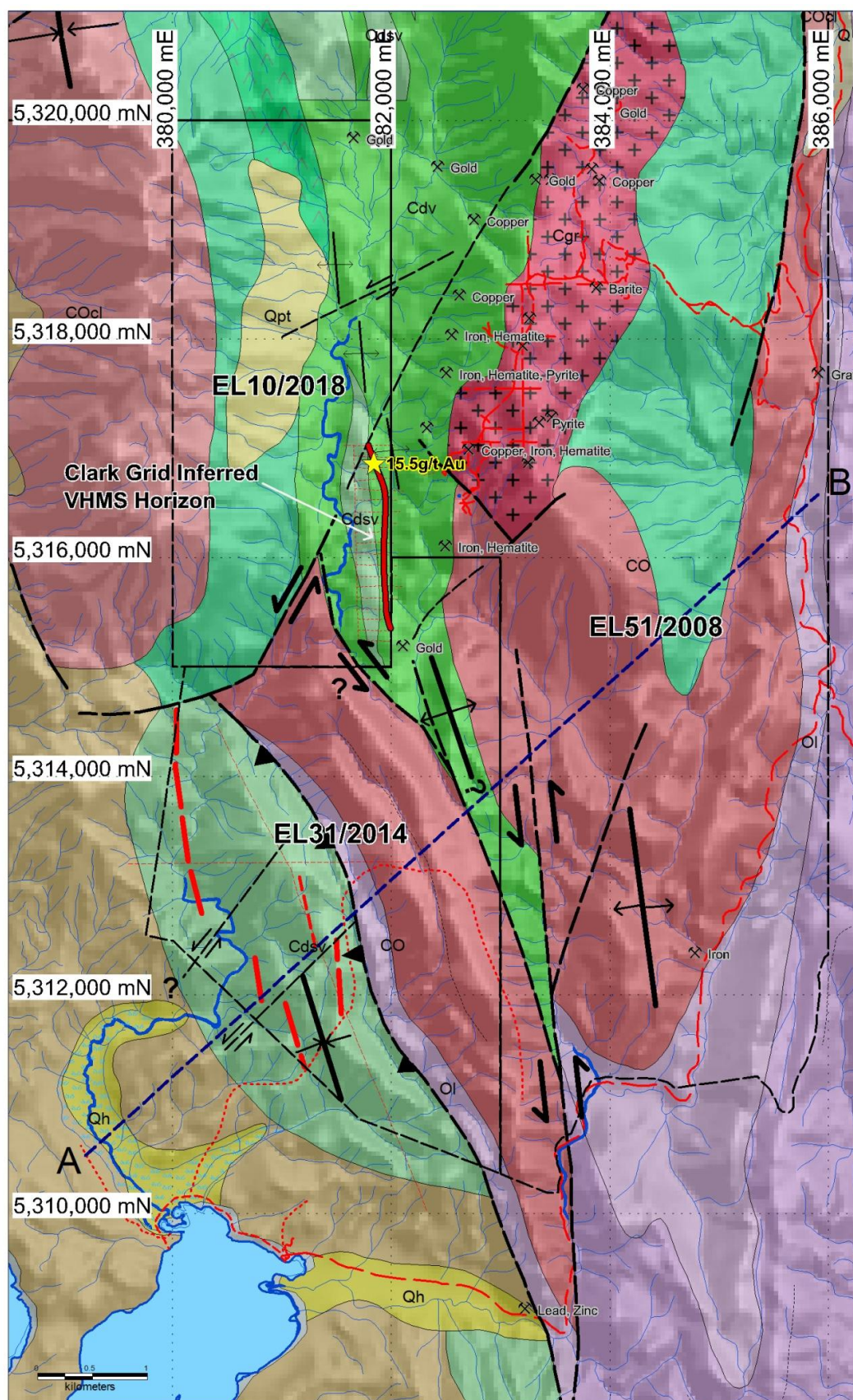


Figure 1: Regional geology of the Clark Valley and Pillinger areas, showing Mineral Resources Tasmania (MRT) 250k digital geology (see legend in Figure 3), known prospects and Shree Mineral's 15.5g/t Au in rock chip site.

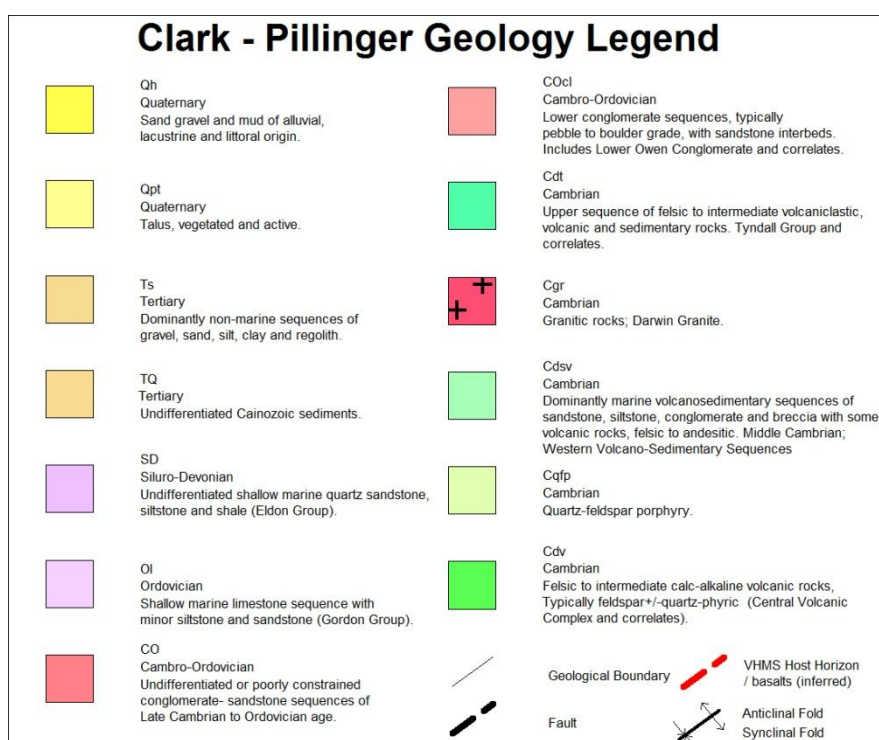


Figure 2: MRT 250k digital geology legend for the Clark Valley and Pillinger areas.

EL10/2018 is prospective for high value Cambrian Volcanic Hosted Massive Sulphide (VHMS, Zn-Pb-Cu-Ag-Au) deposits and hybrids. Two large targeted VHMS end members are Rosebery (51.5Mt @ 12.1% Zn, 3.9% Pb, 0.50% Cu, 130g/t Ag, 1.9g/t Au) and Mount Lyell (311Mt @ 0.97% Cu and 0.5g/t Au). Potential also exists for Henty Gold-style (5.7Mt @ 8.4g/t Au). The following adapted from the authors report Reid (2015) details specific VHMS – related mineralization features in the vicinity of the targeted 15.5 g/t Au anomaly. Further Clark Grid – wide compelling vectors to VHMS are described in Reid (2015).

Geological Observations 2015

The 0.6g/t Au (Sample87707) in rock chip vicinity was re-sampled as a composite, returning 15.5g/t Au in 2015. Notably, two strongly altered float boulders (Sample No.'s 47705 & 6 and Photo 1) were located near the 15.5g/t Au rock chip. These rocks contain moderate intensity pervasive silica, bearing irregular iron oxide halo's to relict stringer pyrite veining in a weakly foliated sericitic matrix. The protolith appears to be felsic volcanic. Similar less intensely altered felsic volcanics were located along strike to the SSE for ~150m along SSE strike toward the vicinity of an anomalous basemetal zone bearing Zn to 0.15% in rock chip and soil samples.

Notably the creek draining west from the stringer pyrite altered zone contains moderate iron oxidation as moderate to strongly oxidised recemented creek bed covered in more recent quartz vein fragment rich alluvium including common iron oxidised felsic volcanic fragments. Much of the iron oxide is likely derived from increased pyrite alteration in the vicinity. Two other nearby creeks, including that immediately east of the anomalous (0.15%) Zn in rock

chip sites, bear minor gossanous oxidised fragments, which possibly originated as eroded gossan from nearby. Many creeks in the area bear common quartz vein fragments and black shale distribution is also traceable from alluvium.



Photo 1: Sample 47706; FeO haloes on irregular stringer pyrite veining.

Black shale was found coincident with the targeted chargeability anomaly. This unit tapers / thins considerably at its south extent (6500N; Figure 3). An intermediate volcanic component was noted within black shale on 6600N, suggesting that the andesitic volcanic inferred host horizon conformably overlies the shale, being syn to post shale deposition. Suspected shale rip up clasts in hangingwall lithic volcanics support a local unconformity at or above the black shale horizon. The volcanic texture is similar to mapped pumiceous lithic felsic volcanics, but microscopic examination supports a shale rip up clast origin, with cleavage shown in one example. Chargeability is diminished locally along strike at the shale horizon, which possibly reflects where the black shale is eroded on an unconformity (eg. 6300 to 6600N). The thicker and less altered black shale in the vicinity of 7000N displays no obvious cross structure and may have been a relative palaeo topographic high during the Cambrian.

In the ~7200N vicinity pumiceous felsic volcanics are located hangingwall and to a lesser extent footwall to the black shale. The hangingwall northwest of the black shale in particular is a massive un-foliated, silicified pale green feldspar phyric pumiceous felsic volcanic. Silicification is matrix pervasive, but also replaces green sericitic relict fiamme. On 6900N, a green sericitic lithic felsic volcanic (Sample 47726) is weakly chlorite spotted and veined, and bears oxidised lithics suggesting rip up derivation from a palaeo oxidation surface; VHMS exhalative? A potential analogy of the pumiceous unit to similar rocks hangingwall to the Rosebery VHMS exists.

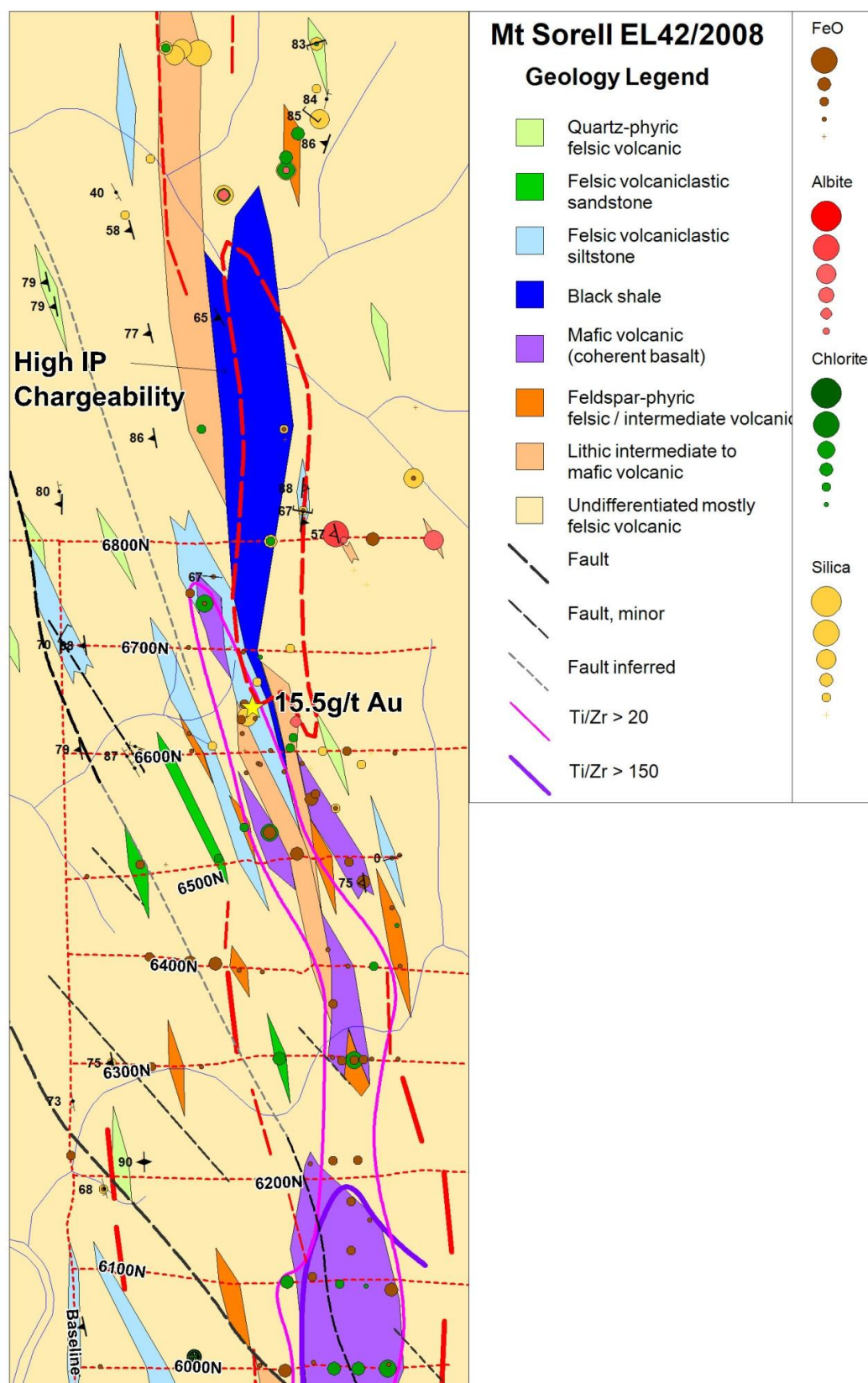


Figure 3: Geology of the northern half of the Clark River Grid, showing chargeability anomalies (red) and thematic mapped alteration distribution.

Alteration

There appears to be a change in most abundant alteration styles in the vicinity of the Au in rock chip anomaly. Pervasive silica and albite alteration is most focused in the footwall, extending north of the Au rock chip anomaly (Figure 3). Whilst minor pervasive silica is noted further south in the CZA (Central Zinc Anomaly) area, although the footwall is little mapped here. Conversely, iron oxides are mostly evident south of the Au rock chip anomaly and within the inferred host horizon or associated with faulting. Chlorite alteration is relatively ubiquitous in the footwall and along the inferred host horizon.

Strong pink albite and weak to moderate chlorite alteration (47721) is evident in the footwall to the black shale horizon. The strong pervasive albite possibly represents a peripheral to VHMS zone, with Na increasing to the hangingwall and laterally away from hydrothermal focus in the footwall. Alternatively considering the 235ppm high Cu in soils in the north of the chargeability anomaly, a Magnetite-Cu Darwin Granite related origin is another possible origin for Albite here.

Structure

A key advance in structural understanding of the area is the identification of evidence for possible Cambrian faulting of inferred SW-NE orientation and sinistral offset, which may relate to the informally recognized Clark Fault (Zone). This predates the dominant NNW to NW aligned Devonian foliation and likely the NW to NNW orientated brittle structures of inferred dextral offset identified by Reid (2014).

Earlier WSW and WNW orientated cleavage is disrupted and overprinted by the dominant NNW to NW aligned foliation at several localities in the northern footwall, east of the large chargeability anomaly (Figure 3). The WSW and WNW orientated cleavage / cross fractures are variable developed, occurring as 10cm spaced fractures at wp173 and as a strong 1 to 3cm spaced fracture set at wp171. Notably, foliation appears less pronounced in highly altered footwall rocks in this area. A footwall example is at wp166 (7100N), where moderate pervasive silica, albite and chlorite alteration overprints a volcanic displaying no foliation. This possibly resulted from pre-deformation induration imparted by the alteration. Elsewhere on the Clark Grid, basalt is similarly little foliated in most cases. At one location (wp163) in the hangingwall (7100N) discontinuous silicification as foliation disrupted bands suggests pre to syn deformation timing of this alteration. The earlier cleavage may reflect reactivated Cambrian rift faulting, active during and post VHMS formation with closer spaced cleavage possibly reflecting proximity to these faults, which could have focused basalt and VHMS fluids.

A bend in the apparent distribution of soil geochemistry and the intermediate to mafic volcanics between 6300 and 6600N, where SW-NE aligned lineaments in the gridded chargeability cross, supports a sinistral fault offset (<100m) in this area (Figure 5). The chargeability lineament orientation is also parallel to a weakly defined ground magnetic lineament identified further south.

Geochemistry

Peak analyses from forty two rock chip samples were 15.5g/t Au, 7.7ppm Ag, 151ppm Cu, 321ppm Pb and 1180ppm Zn. Aside from the highly anomalous Au rock chip, the range of basemetal analysis values returned was of similar tenor to those collected during previous

campaigns. However, the resulting geochemical distributions have better focused VHMS exploration.

The stand out 15.5g/t Au composite rock chip was returned from sample 47704, which re-sampled a 0.6g/t Au anomaly (Sample No. 87707). This sample also returned high Ag (7.7ppm) and elevated results for Cu, Ba, Bi, Cd, Fe, Mo, Pb, Sb, S, Tl and Zn when compared to rock chips from the Clark area. Notably anomalous 38ppm Bi and 45ppm Mo point to a hydrothermal / magmatic source. Samples from the near proximity all bear elevated Ba (1500 to 2360ppm) and Tl (0.93 to 1.22ppm), supporting potential proximity to VHMS exhalite. However, Au in other nearby samples was low at <0.03ppm. Two strongly altered float boulders disappointingly returned Au below detection but contained 2.1ppm Ag.

Anomalous Zn (to 0.16%) in rock chip defines a linear zone extending SE of the 15g/t Au (Figure 4). This area is clearly basemetal (Zn, Pb and Ag) anomalous, with Pb more concentrated near the gold anomaly. This area is clearly more Ag anomalous than the rest of the grid. Ag peaks at the gold anomaly (7.7g/t Ag) with elevated values (>0.25ppm) roughly delineating the approximate host horizon, as well as footwall including the black shale. Au and Ag is anomalous in soils along a NNW strike through this area, coincident with the inferred host horizon, but with elevated Au in soils also extending into the footwall.

High Ni and Cr in soils immediately south of the area, indicates a peripheral to basalt location. The basalt is flanked by elevated Tl; a good VHMS indicator. Strong albite alteration in rock chip coincides with anomalous Na in soils. This alteration is interpreted as peripheral to VHMS with a potential feeder zone marked by low Na adjacent and coincident with anomalous Zn in soil and rock chip extending into the inferred footwall.

A key element indicator for proximity to VHMS is considered to be Tl (Large et. al., 2001 & Gemmell and Fulton, 1998). This and elements As, Sb and Mo form a coincident elevated zone in the vicinity of the 15.5g/t Au in rock chip (Figure 4). Elsewhere, the high Ti/Zr zone bears strong Sb adjacent to but not coincident with a Tl anomaly. Mo appears to be a good indicator for strong mineralisation, being most elevated in pyrite and iron oxide mineralised and pervasive silica altered samples. Elevated Mo was located at the Au in rock chip anomaly as well as immediately south in the footwall to elevated Zn.

Ba notably ranged up to 0.55% (Sample No. 47740). This sample came from a lithic volcanoclastic coincident with a weak chargeability anomaly on 6200N in the hangingwall west of the high Ti/Zr in soils. Extensive but weak pervasive silicification and weak to moderate intensity quartz veining with local oxidised veinlets was apparent. Sample 47740 also returned weakly anomalous Pb at 76ppm.

Elevated Ag at the base of Black Shale, north of the Au RC anomaly, may indicate that VHMS formation extended through the quiescent time of shale formation.

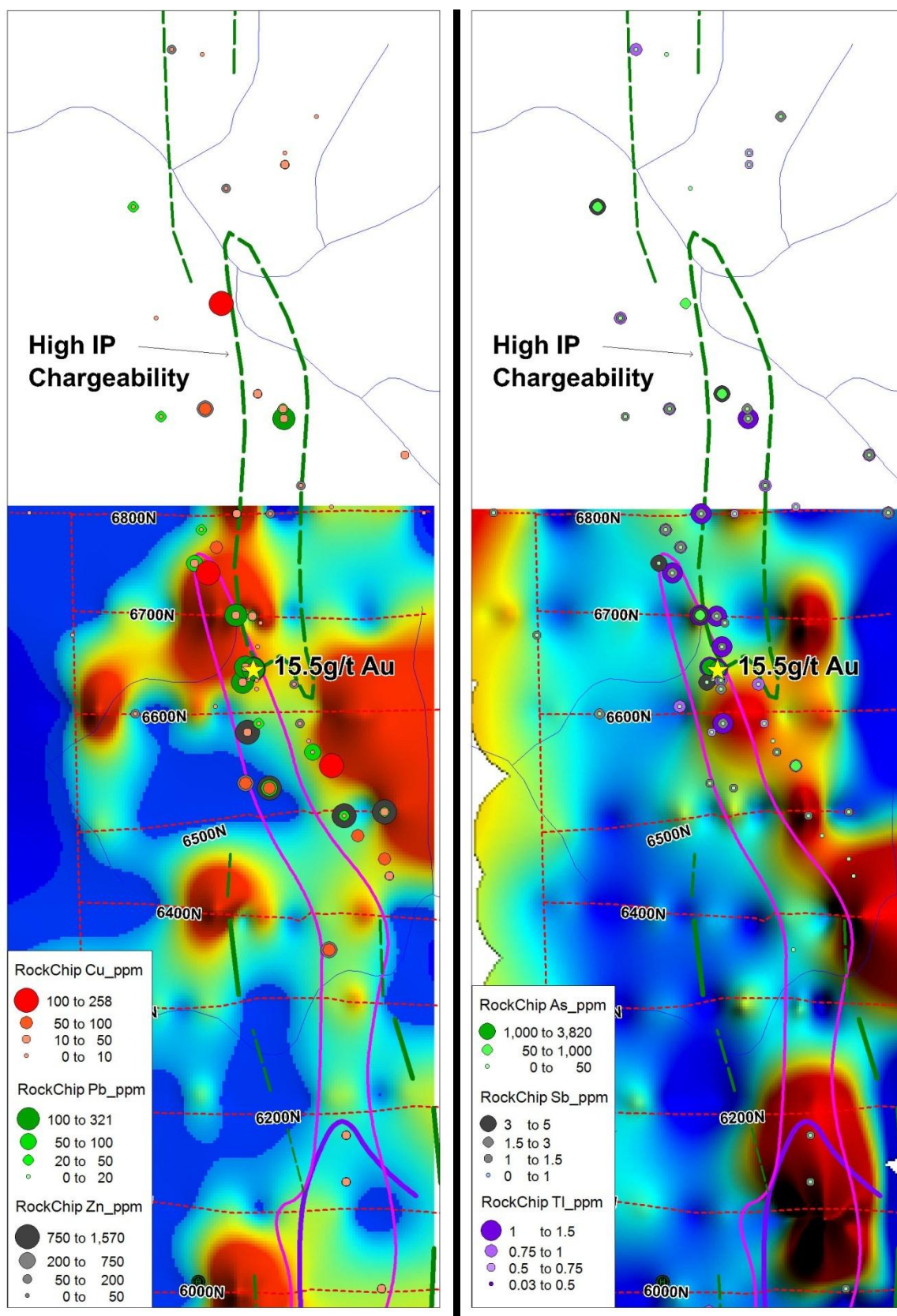


Figure 4: Rock Chip sampling results; Left is Cu, Pb & Zn with IP chargeability (green) and 15.5g/t Au in rock chip over Au in soils grid and Right is VHMS pathfinders As, Sb & TI with IP chargeability (green), Ti/Zr >20 (purple) over TI in soils grid.

Discussion

Investigation of IP grids derived from Howland-Rose (1978), shows that black shales commonly correspond with chargeability highs and low resistivity (Figure 5). Basalt and intermediate volcanic distribution also generally corresponds to lower resistivity, but mostly not with elevated chargeability. An exception and potential VHMS target is a chargeability high within intermediate volcanic, extending between 5700 & 5800N. Further, chargeability highs in the immediate hangingwall differ being associated with moderate / elevated resistivity. Elevated resistivity forming a zone in the footwall between 6300 and 6700N likely reflects silica alteration, further enhancing VHMS prospectivity.

The chargeability anomaly and black shale are not un-expectantly coincident with significant WTRMP airborne EM cx980k and cx7k EM anomalies (Figures 6 & 7). Comparatively, BHP's 1990 UTEM survey (Cameron and Read, 1991), ending 1km north of the 6600N gold in rock chip anomaly, found that black shales produced low to moderate amplitude early time responses and some shales produced no response. The cx7k channel best defines the northern Clark Grid mapped shale distribution, whilst stronger cx980k responses are evident at this shale units mapped extents. Curiously the later airborne EM high is not well reflected by low resistivity.

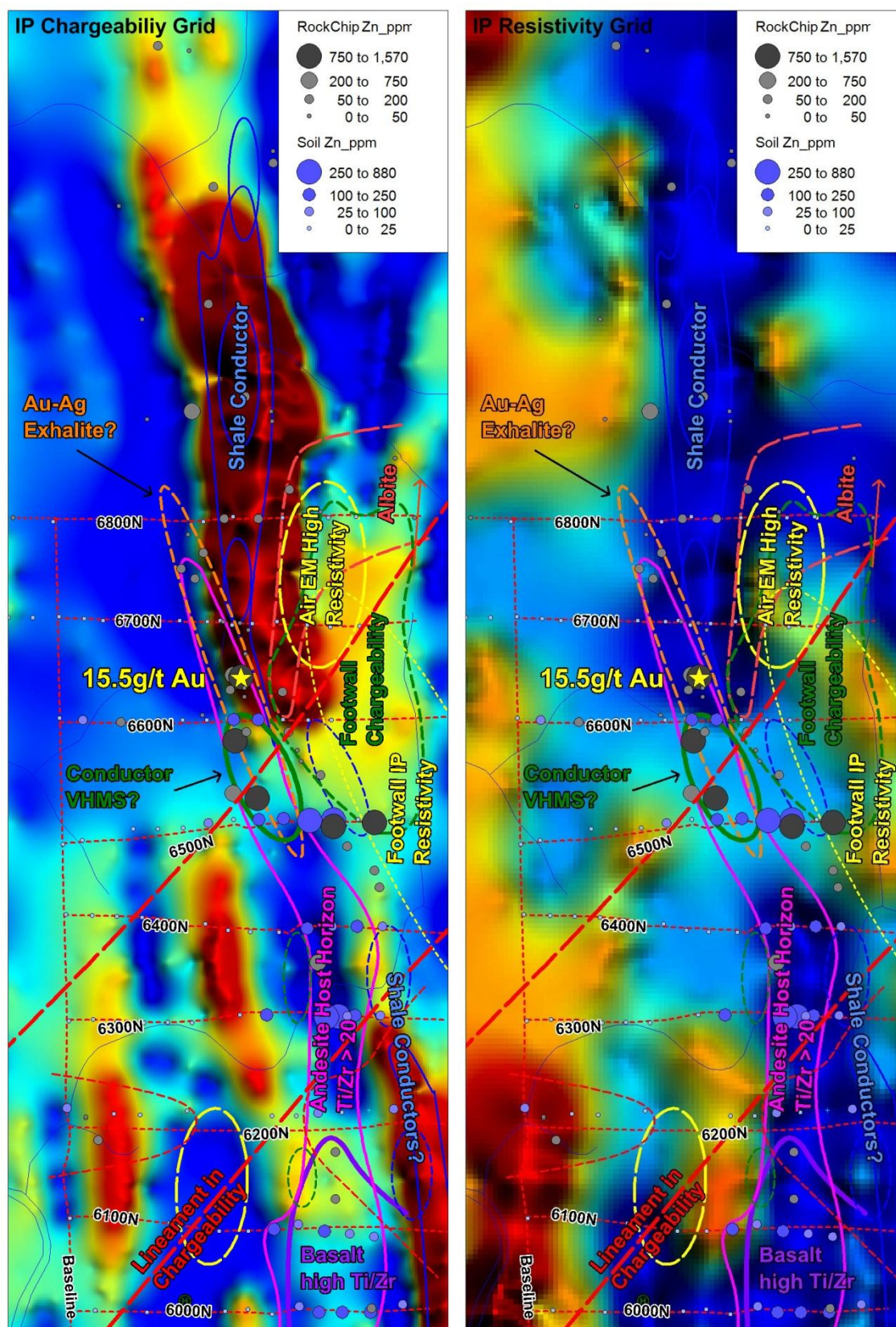


Figure 5: VHMS prospectivity map for the northern half of the Clark River Grid showing rock chip and soil Zn over gradient array IP Chargeability (left) and IP Resistivity (right).

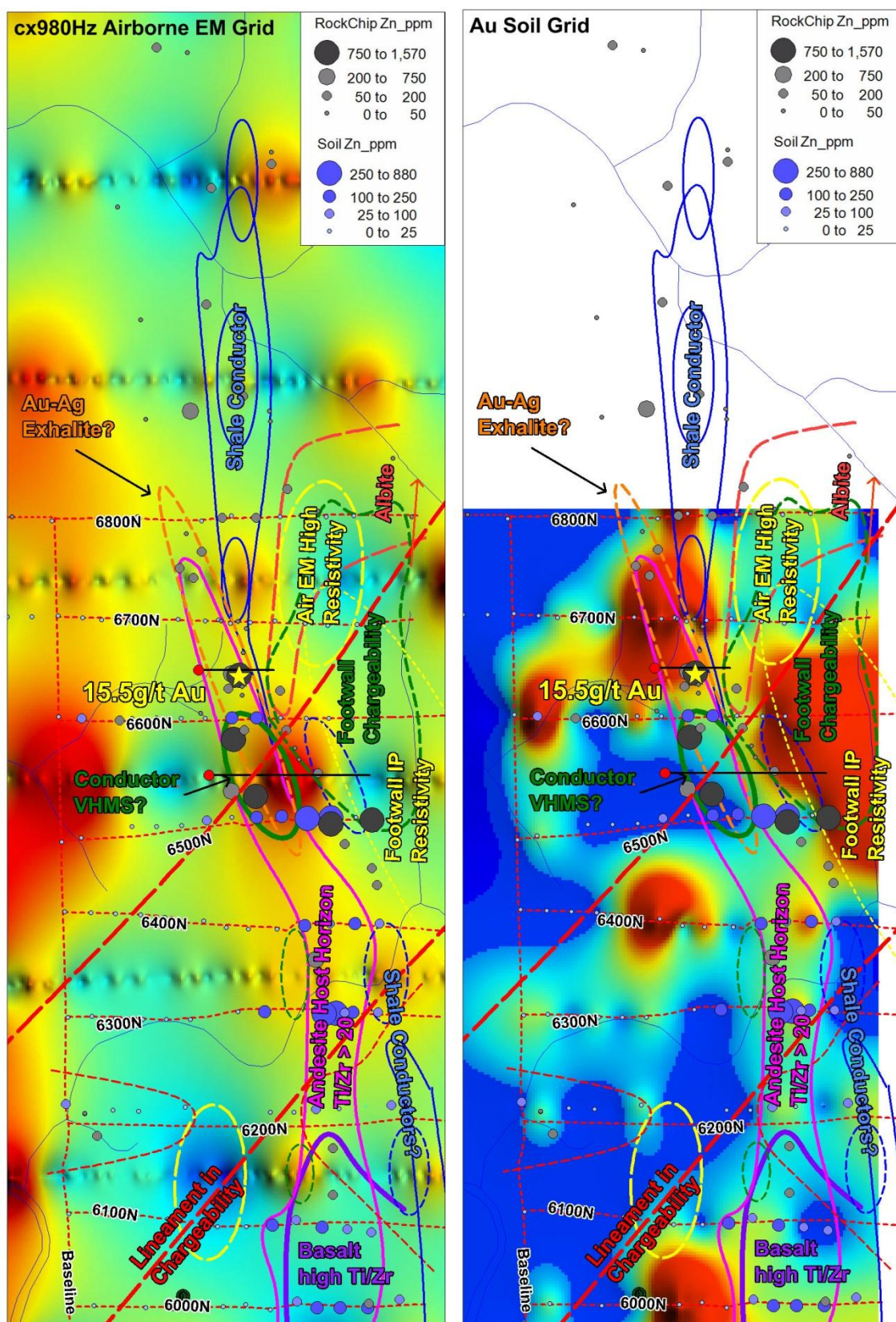


Figure 6: VHMS prospectivity map for the northern half of the Clark River Grid showing Zn in rock chip and soil thematic and potential drill holes over WTRMP cx980Hz Airborne EM grid (left) and Au in soils grid (right).

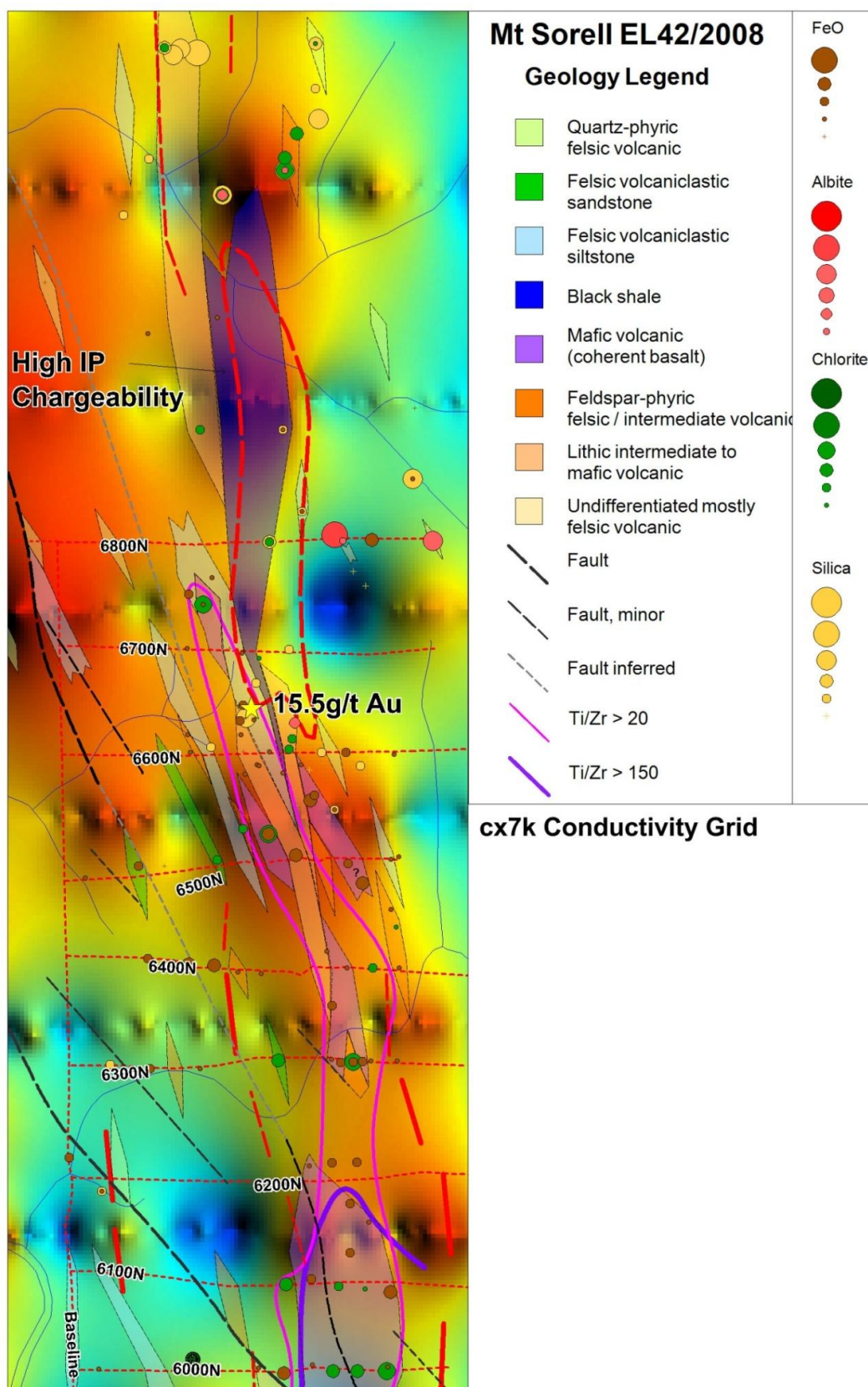


Figure 7: Alteration distribution and Interpreted Geology transparency over cx7k WTRMP airborne EM Conductivity Grid.

The black shale thins considerably at the chargeability anomalies southern end, whilst chargeability remains high (Figure 7 & 5). This suggests that some component of the chargeability footwall to the Au in rock chip anomaly maybe mineralisation related. Immediately south of the chargeability high and 6600N Au in rock chip anomaly is a relatively strong EM anomaly reflected in all channels (particularly cp34k, cx7k & cx980; Figures 6 & 7). This is a VHMS target! Further supporting a VHMS focus in this area is a broad elevated chargeability zone coincident with Au and Zn in soils within the footwall to the EM anomaly and 15.5g/t Au rock chip. This feature is not evident footwall to other chargeability anomalies in the area. A significant resistivity high zone coincident with strong albite – silica alteration footwall to the Au in rock chip anomaly also supports potential VHMS fluid focus in this area (Figure 5).

The Au rock chip anomaly apparently occurs near the intersection of the inferred Holy Host horizon with an inferred SW trending fault (reflected in regional aeromagnetism), informally recognised by previous explorers as the “Clark Fault”. A Henty-Au style hybrid model may apply to this environment.

Proposed Drilling Program

Exploration concurrently on EL’s 10/2018 and 31/2014 will target the inferred Clark Grid VHMS host horizon and hypothesized southern fault offset extensions into EL31/2014.

Drilling planned to test the 15.5g/t Au in rock chip anomaly and associated VHMS-like features in the north of the CG. This is subject to anomaly confirmation via soil and trench sampling. One ~100m drill hole is planned. The first will dip at -45 facilitating maximum sampling of stratigraphy. A break after drilling is planned prior to demobe to await analysis return, which will determine if a second steeper (~-70) hole from the same pad is warranted to further upgrade the prospect.

Hole ID	East MGA94 Zone 55	North MGA94 Zone 55	RL m	Azimuth	Dip	EOH
PDDH01	381,820	5,316,870	340	90	-45	100

Reid and Koster plan to self fund initial drill testing to improve equity and project value for JV partner search and negotiations. Given successful surface and drill testing of the 15.5g/t Au in rock chip anomaly on the Clark Grid, further financial input will be sought for extensive exploration concurrently on tenements EL10/2018 and EL31/2014, as outlined below. The tenement holders believe JV potential exists in the current economic climate.

Exploration work is likely to include:-

Phase 1 – Target upgrade / generation and JV search; Clark Grid (2018/19)

- Soil augering infill at 50m spacing between existing Clark grids locally; including at least 2 by 200m (6550 & 6650N) lines testing the inferred host horizon package.
- Extend soil sampling further east along existing grids extending into EL31/2014.
- Soil augering high Au rock chip target at close spacing (~5 to 10m).
- Soil auger infill on Au anomalous inferred exhalative horizon (in part test 0.475g/t Au in -80# draining southern CG).
- Hand trenching targeting soil auger highs.
- Portable diamond drill rig targeting focused Au soil anomaly.
- Complete geological mapping and rock chip sampling of the southern end of the Clark Grid, as well as tenement wide assessment. (Incl. investigate compelling features such as an elevated TI in soils zone plus a green Fuchsite? occurrence.)
- Continued geological field work extending tenement wide to support GIS modeling.
- Marketing to attract JV partner(s) to significantly increase financial input and progress to additional surveys required to best test the Clark Grid and environs.

Phase 2 – Continued Target upgrade / generation via IP and drilling (2018-2020)

- Re-establish / clear existing Clark Grid and extend into EL31/2014 to facilitate geophysical surveys.
 - Extend grid to the south and into south east across the ERA/tenement boundary into the adjoining EL31/2014 .
 - Extend CG grid west to enable better IP penetration to depth on the assumed west dipping target VHMS horizon, including potential fold repeats.
- *2D dipole-dipole surveys with 3D inversion on select grids or a 3D Induced Polarisation survey*, both aiming to define potential ore zone and pyritic halo (potential search to 400m+ depth).
- Extend existing ground magnetics to cover grid additions.
- Fixed loop ground EM.
- 3+ diamond drill holes for ~1000m to assess best 3D IP, geological and geochemical targets.
- Down Hole EM to improve drill targeting.

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