Huskisson River
Exploration Licence 6/2022

Final Report for the period 16/12/2022 to 30/8/2024

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5th September 2024
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GDA94 Zone 55

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1 Summary

Exploration Licence 6/2022 located in the Huskisson River area of NW Tasmania has been explored minimally during the last century. Since grant of the licence in December 20022 Venture Minerals conducted a search and compilation of historic exploration data into GIS format and sampling of some gabbro-diorite exposures. The historic data compilation, rock sampling locations and assay results are included in the associated appendices.

2 Introduction

Huskisson River Exploration Licence 6/2022 was granted on the 16th December 2022. It is located on the eastern margin of the tin-tungsten province of western Tasmania. The Meredith Granite, exposed within a kilometre to the northeast of EL6/2022 is part of a suite of Devonian granites and is very important to tin-tungsten mineralization in Tasmania. Deposits associated with this suite include Renison Bell (26 Mt at 1.46% Sn), Mount Bischoff (10.54 Mt at 1.1% Sn), Cleveland (12.4 Mt at 0.62% Sn, 0.25% Cu) and King Island (17 Mt at 0.85% WO_3). EL6/2022 is situated adjacent to Venture's EL21/2005, from which 7M/2012, and 3M/2012 have been excised and comprise Main and No.2 Sn-W-magnetite deposits at Mt Lindsay and the Livingstone and Reward Sn-W-Fe deposits in the Stanley River area respectively. Exploration Licence 6/2022 also abuts Venture exploration licences EL45/2010 and EL72/2007.

EL6/2022 lies on the eastern side of the Huskisson Syncline with prospective basement rocks Gordon Limestone, Crimson Creek Formation (CCF) and Huskisson River Ultramafic Complex (HRUC) which also feature in outcrop on the western half of the Huskisson Syncline on EL45/2010.

3 Location and Access

EL6/2022 currently covers 30 km^2 and is located c. 120 km southwest of the port of Burnie (Figure 1). Road access to the south of the lease is via a gravel road beginning near Boco Siding c. 11 km north from Tullah along the Murchison Highway. Road access from the south to the bulk of the lease is blocked by the Eco Lodge centred in the restricted area in the John Lynch Forest Reserve. Road access from the north along the gated forestry road, Huskisson Drive, is blocked by washed out bridges over the Hatfield and Que Rivers. A natural open area in the far northwest corner of EL6/2022, over a small patch of buttongrass moorland, may allow for a potential helipad.

The southern boundary of the licence is approximately 12 km northeast of the Renison Bell tin mine and 10 km northwest of the Rosebery lead-zinc-silver-gold mine. The licence is covered by the Pieman 1:100,000 map sheet, and Parsons and Ramsay 1:25,000 map sheets. The Huskisson River almost bisects EL6/2022 from north to south, a valley around which the topography steepens moderately to the east and west. Webbs Creek flows from north to south also, with the confluence of Webbs & Huskisson just south of the lease boundary. Lynch and Higgins Creeks flow from the east to west of the southern end of the lease.

Average annual rainfall is approximately 2000mm. The vegetation is dominantly temperate nothofagus rainforest, with areas of celery top and eucalypt canopy. There is a small zone of dry eucalypt in the southwest corner of the lease.

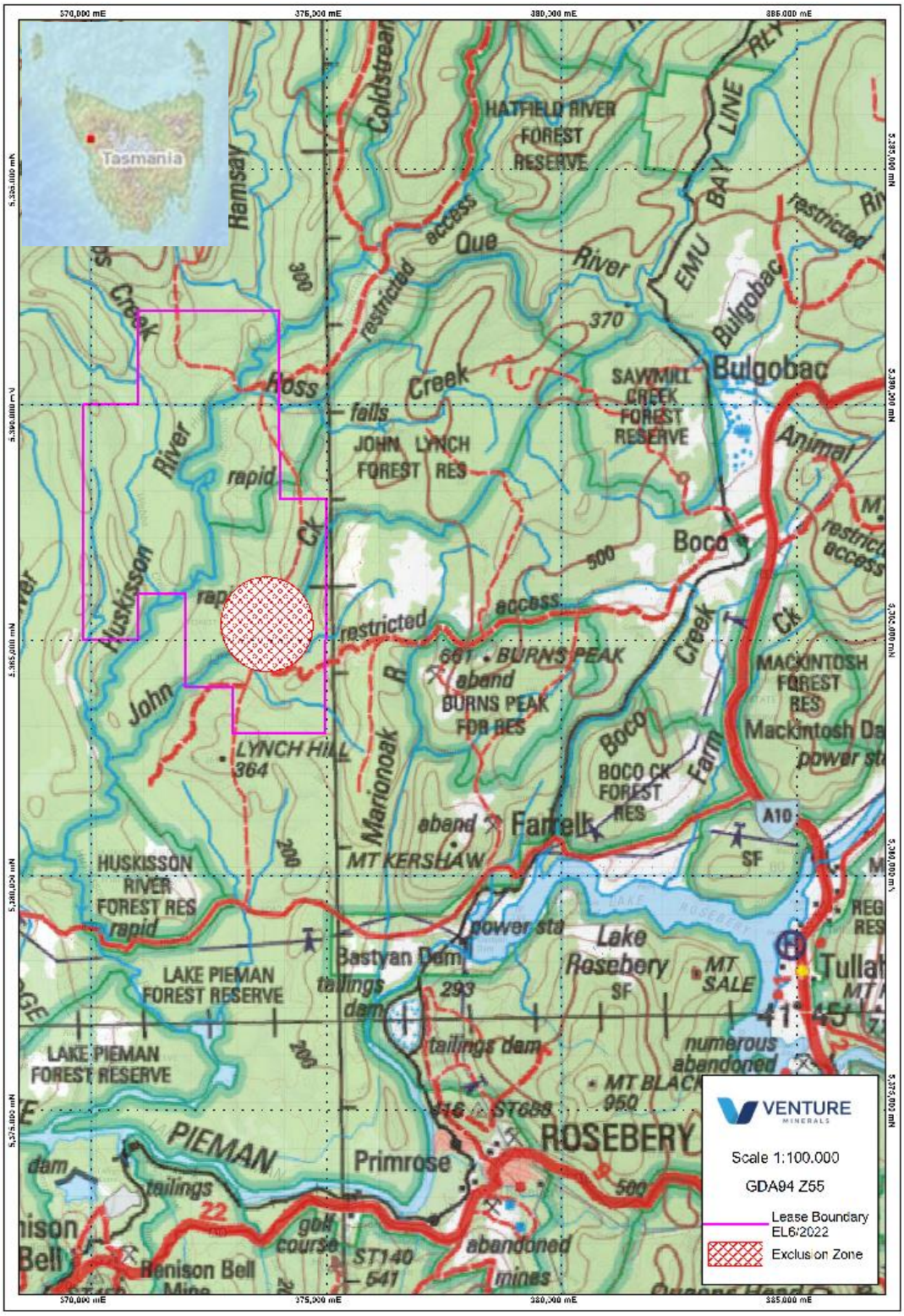

Figure 1: EL6/2022 Location Map

4 Geological Setting

EL6/2022 is situated in the Dundas Trough of western Tasmania and underlain from east to west by the Cambrian volcaniclastic sediments and turbidites of the Wurawina Supergroup, Precambrian Oonah Formation, Cambrian volcaniclastics of the Crimson Creek Formation, Gordon Limestone,

Crotty Sandstone and the Eldon Group (Figure 2). Sedimentary stratigraphy is moderately dipping to vertical.

The Neoproterozoic - Early Cambrian Crimson Creek Formation (CCF) comprises mainly thin to thick bedded greenish grey lithic sandstones, siltstones, and mudstones with scattered horizons of laminated to thinly bedded light grey, green and pink felsic to mafic tuffites and thin to thick bedded calcareous sandstones, along with rare tholeiitic basalt flows. Total thickness in the Mt Lindsay area is estimated at c. 5000 m, and EL6/2022 includes a large swathe of the Crimson Creek Formation through the centre (Figure 2). The calcareous sandstones of the CCF are potential host to skarn mineralisation where it lies in proximity to intrusion by the Meredith Granite.

The Ordovician Gordon Limestone is another potential host rock to mineralisation where it lies adjacent to the granite. The Meredith Granite was emplaced in the Devonian, along with several other granitoids around Tasmania which have been the source of several significant ore bodies such as Renison Bell and Mount Bischoff.

A major episode of folding during the Devonian formed the northwest to north trending Huskisson Syncline, the major structural feature in EL6/2022. Vein and replacement-style tin and tungsten mineralization appears to be associated regionally with the intrusion of the Meredith Granite beneath the Huskisson Syncline. Significant deformation is recognised in the Crimson Creek Formation with narrow zones of bedding-parallel isoclinal folding with an associated S0-parallel cleavage (S1), and a later generation of metre-scale gentle to open folds with north to north-northeast striking axial planes and crenulation cleavage (S2).

Quaternary fluvioglacial sediments and Quaternary-Recent alluvial gravels cover much of the basement geology in EL6/2022. Osmiridium, gold, and chromite are locally concentrated in the Quaternary-Recent alluvial gravels.

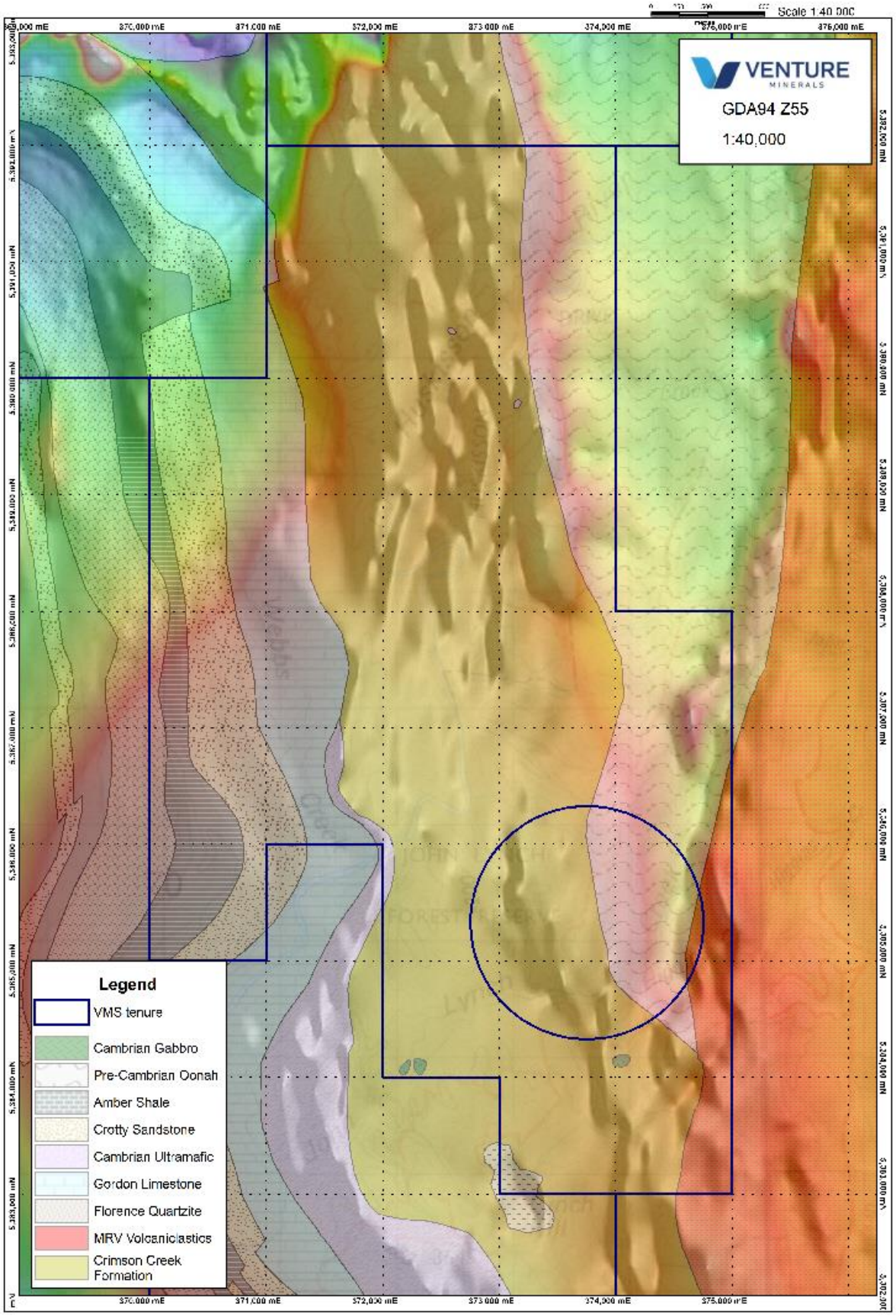

Figure 2: EL6/2022 basement geology shown over reduced to pole magnetic image rainbow coloured with NE sunshade

5 Exploration and Mining History

The first record of exploration in the Huskisson River valley was in 1862 when William Robert Bell and Leopold von Bibra crossed the Hatfield Plain previously explored by Henry Hellyer and then proceeded to follow the Hatfield River down through to the Huskisson River. Bell and von Bibra followed the Huskisson "…until Parsons Hood figured prominently on the skyline." (Haygarth & Cubit, 2008). In the late 19th century, the Emu Bay Railway was extended from Waratah to Zeehan allowing greater access for explorationists in this area where previously only a handful of foot tracks provided any ingress.

The Lynch Creek Prospect was discovered by Acting Assistant Government Geologist A. McIntosh Reid in 1918. Reid felt the lead-barite occurrence was a continuation of the Just-In-Time galena deposit to the east of Lynch Creek, south of Que River, being also siliceous and hosted in limestone (Reid, 1918). A sample of the gossan outcropping in Lynch Creek returned assays of 1.7% Pb, 3 dwt. per ton Ag. A report to the secretary of Tasmanian Mines in 1949 detailed gold carried down by the Huskisson River from its western catchment however no sampling was conducted in the area covered by EL6/2022 (Coldham, 1949). The Huskisson Group of rocks was first described as such in 1955 by Taylor (1954) who also identified them as a correlate of the Dundas Group. He described 19 sedimentary formations many of which are fossiliferous and confirm the Cambrian age of these rocks.

EL22/74, Marionoak, was explored in the 70s & 80s as a joint venture between Aberfoyle and Billiton. The northern portion of this historic lease coincides with EL6/2022 but it extended further to the south covering Bastyan Dam which was the sole focus of exploration in the last years prior to relinquishment of this lease.

Between 1963 and 1988, Comstaff P/L, operating under the EL5/1963 historic license, was involved in a regional program exploring for various commodities including asbestos, nickel (Ni), tin (Sn), gold (Au), and base metals. The exploration activities encompassed stream sediment sampling, geological mapping, Ground Magnetic surveys, and EM surveys, auger geochemistry, rock chip sampling, among others. Geological mapping completed by Comstaff traversing Lynch Creek found the ultramafic bodies which had been mapped to the south and north of the confluence of Lynch Ck & Huskisson River were connected. The stream sediment sampling conducted along Lynch Ck during mapping found Ni to 1600ppm and Co 160ppm in a sample taken ~400 m downstream from EL6/2022 (Anon., 1970).

In 1969-1970, a program focused on the alluvial flats of Webb Creek involved pitting, augering, and heavy mineral concentrate sampling to assess the potential for hosting tin, gold, and/or osmiridium. Despite finding tin in one heavy concentrate sample, the alluvials were essentially barren. In 1972, heavy concentrate sampling in the Ramsay and Huskisson rivers, along with geological mapping and rock chip sampling, revealed geochemical anomalies for lead (Pb), copper (Cu), zinc (Zn), nickel (Ni), and tin (Sn). A detailed follow-up of drainage anomalies in 1973 included soil sampling for Cu, Pb, Zn, and Sn, although only a few of these samples were collected within the boundaries of EL6/2022.

During the 1976-1977, Australia and New Zealand Exploration Company (ANZECO) ran an extensive exploration program from Mt Lindsay to Mt Ramsay, for the mineral potential of the

southern flank of the Meredith Granite and adjacent sediments. Some stream sediments were taken within EL6/2022, but with average results.

In 1981-1982, Broken Hill Proprietary Co Ltd operated within historic license EL32/79, covering most of this report's license area. Activities included a literature study, evaluation of available data, 1:10,000 geological mapping program, stream and rock sampling, petrological study, airborne EM-magnetic survey, and interpretation of Landsat imagery. Stream sediment sampling covered a density of 3.5 samples/square kilometre, revealing tin values ranging from less than 5 ppm to 750 ppm. Anomalies were noted in streams draining the eastern part of the area. A helicopter-borne EM survey (Dighem II) in 1981 showed no consequential anomalies. A follow-up of Sn stream anomalies involved collecting nine rock samples (with no anomalous results) and thirty-five stream sediment samples, resulting in only one sample being anomalous for Sn (65ppm) and W (30ppm). Soil sample traverses were conducted to locate the source of previously found tin and magnetic anomalies, but none of the samples were anomalous for tin or tungsten. Low order anomalies were recorded for gold. A 3.3-kilometer ground magnetic survey over roads and cut lines was completed, and mineralogical examination of panned concentrates from streams in the South-East of EL6/2022 revealed minor cassiterite consistent with a dominantly ultramafic source.

From 1982 to 1984, Getty Oil Development Company Ltd assumed control of the license area. During this period, they gathered 18 stream samples, 91 rock chips, and 715 soil samples along the Crimson Creek Fm and Oonah Fm contact. Additionally, the company conducted a ground magnetic survey and geological mapping. No anomalies were identified to proceed with further activities.

A small portion of the western part of EL6/2022 was operated by Gold Fields Exploration Pty Ltd between 1978 and 1985 (historic licence EL17/1977). They conducted an Airborne INPUT EM/magnetics survey, helicopter-supported geological mapping. No geochemical samples were registered within the EL6/2022 area.

Refer to Figure 3 and Appendices for compiled historic data.

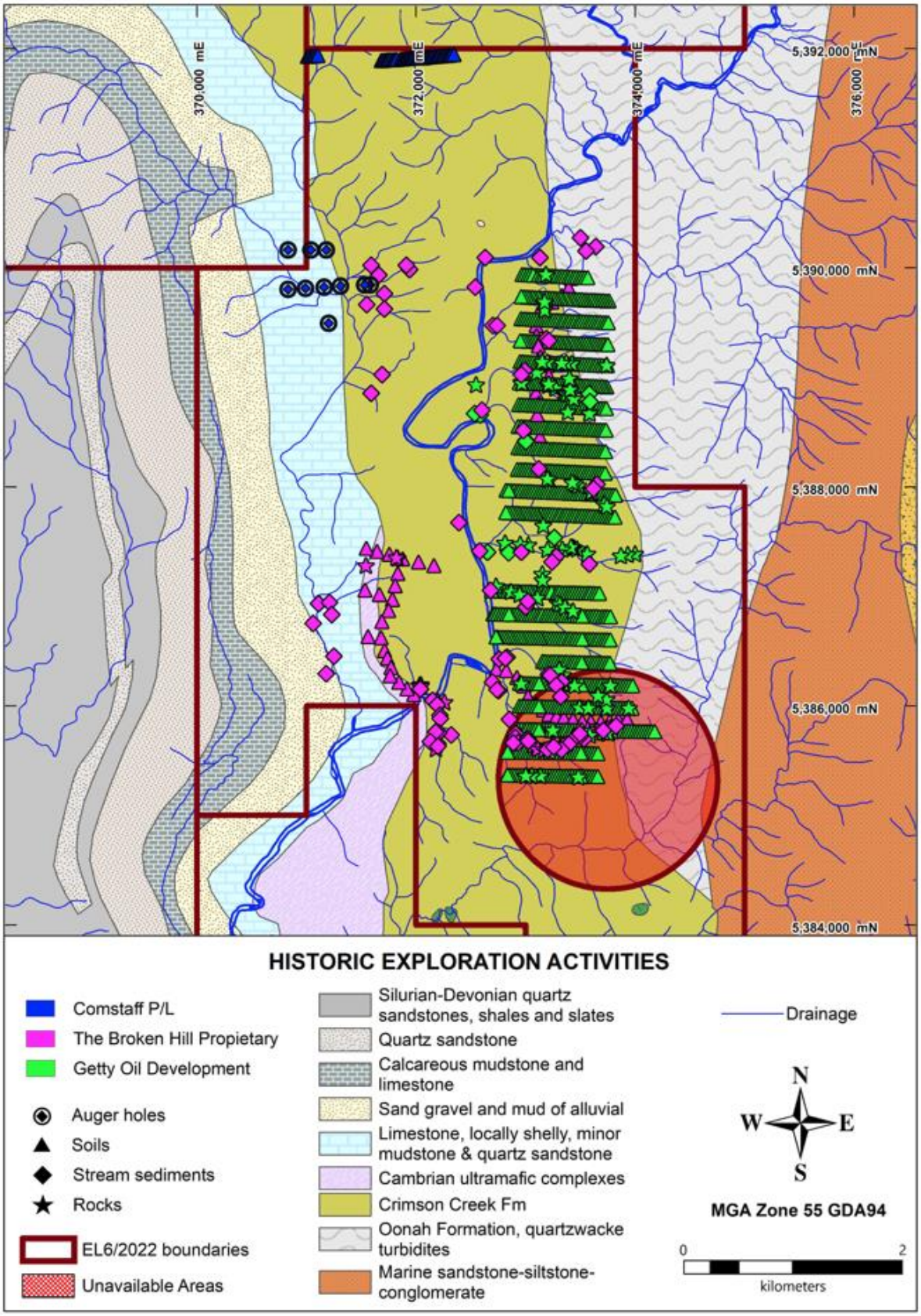

Figure 3: Historic exploration activities within EL6/2022 on basement geology.

6 Venture Minerals Exploration Activities

6.1 Historic data research and compilation

Venture Minerals conducted an analysis of publicly available historic exploration data within the EL6/2022 area. The research involved meticulous compilation, digitization from images, and mapping processes, utilizing Access, Excel, and MapInfo GIS software. Detailed results and visual representations of the sampling data can be found in the Appendices and Figures 3 to 12. Information from this research is also covered in Section 5 above.

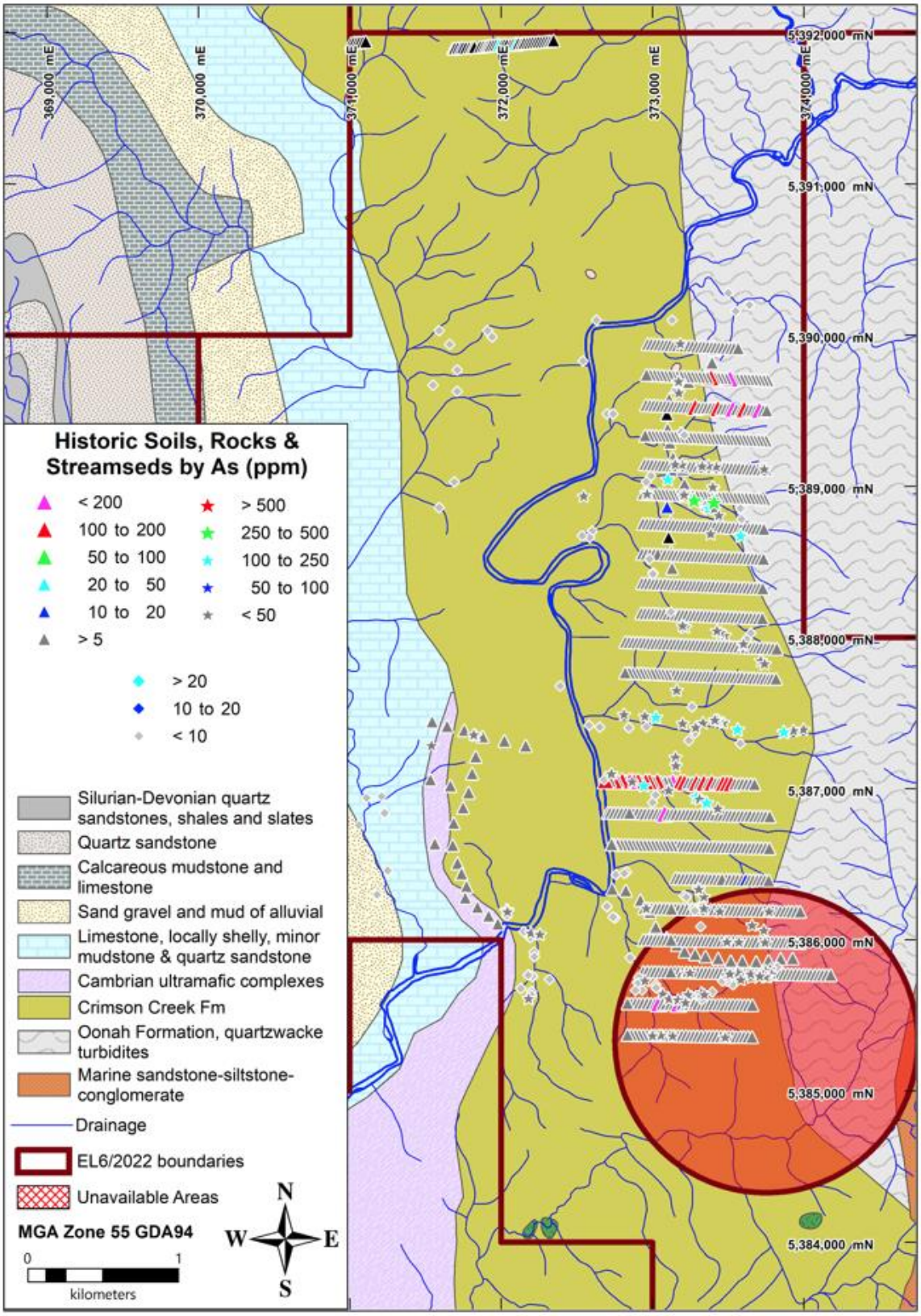

Figure 4: Historic exploration results within EL6/2022 coloured by As (ppm).

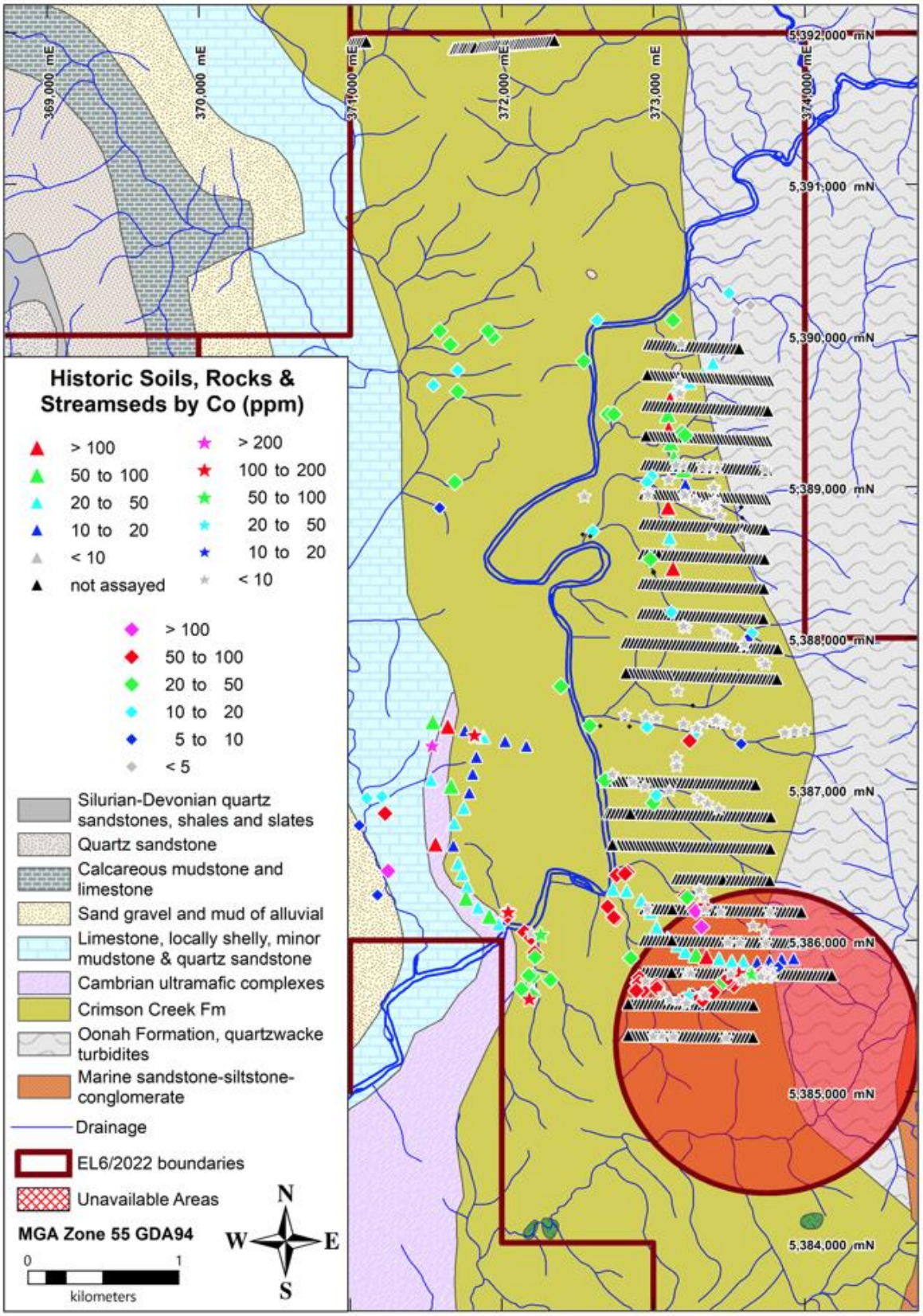

Figure 5: Historic exploration results within EL6/2022 coloured by Co (ppm).

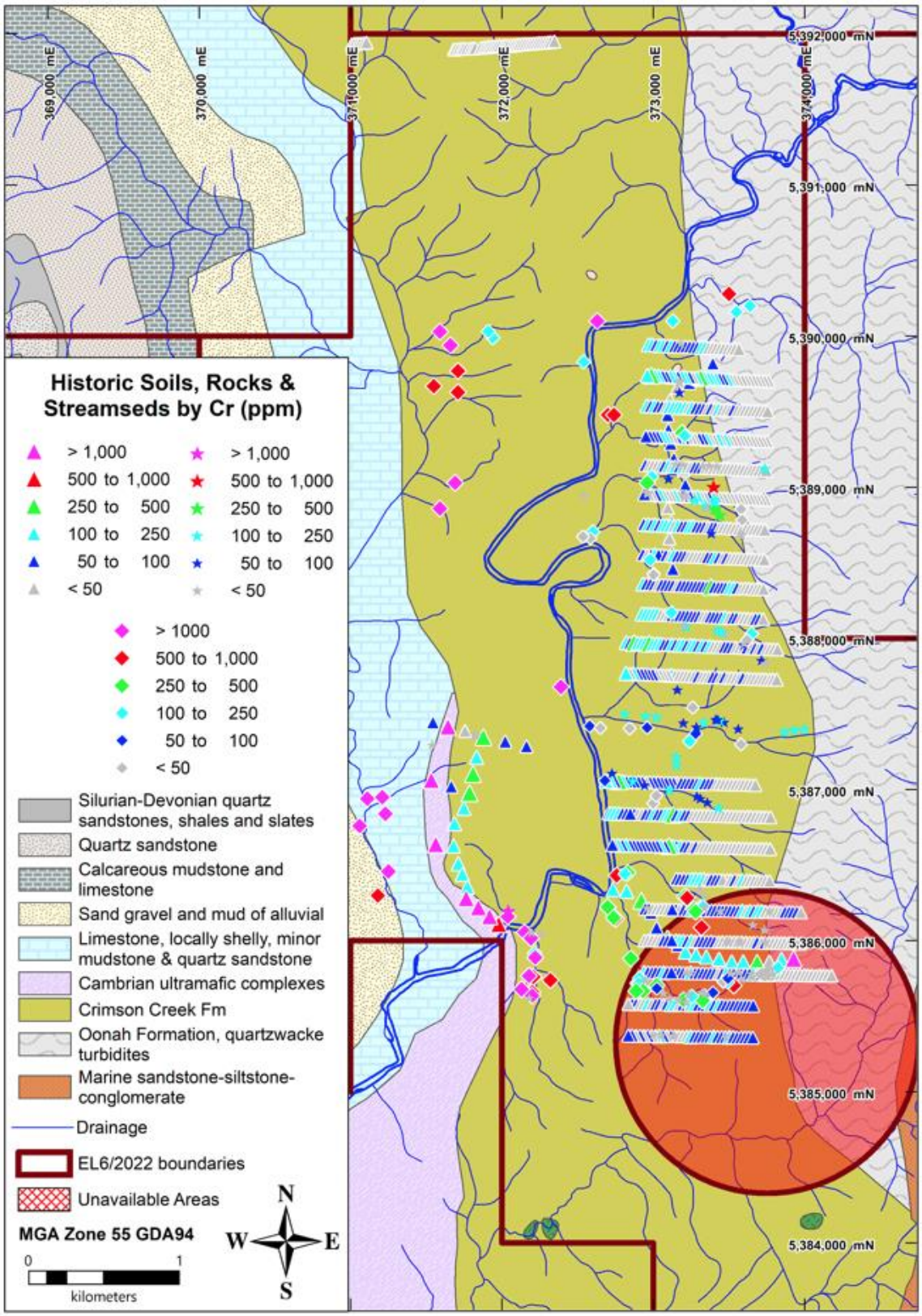

Figure 6: Historic exploration results within EL6/2022 coloured by Cr (ppm).

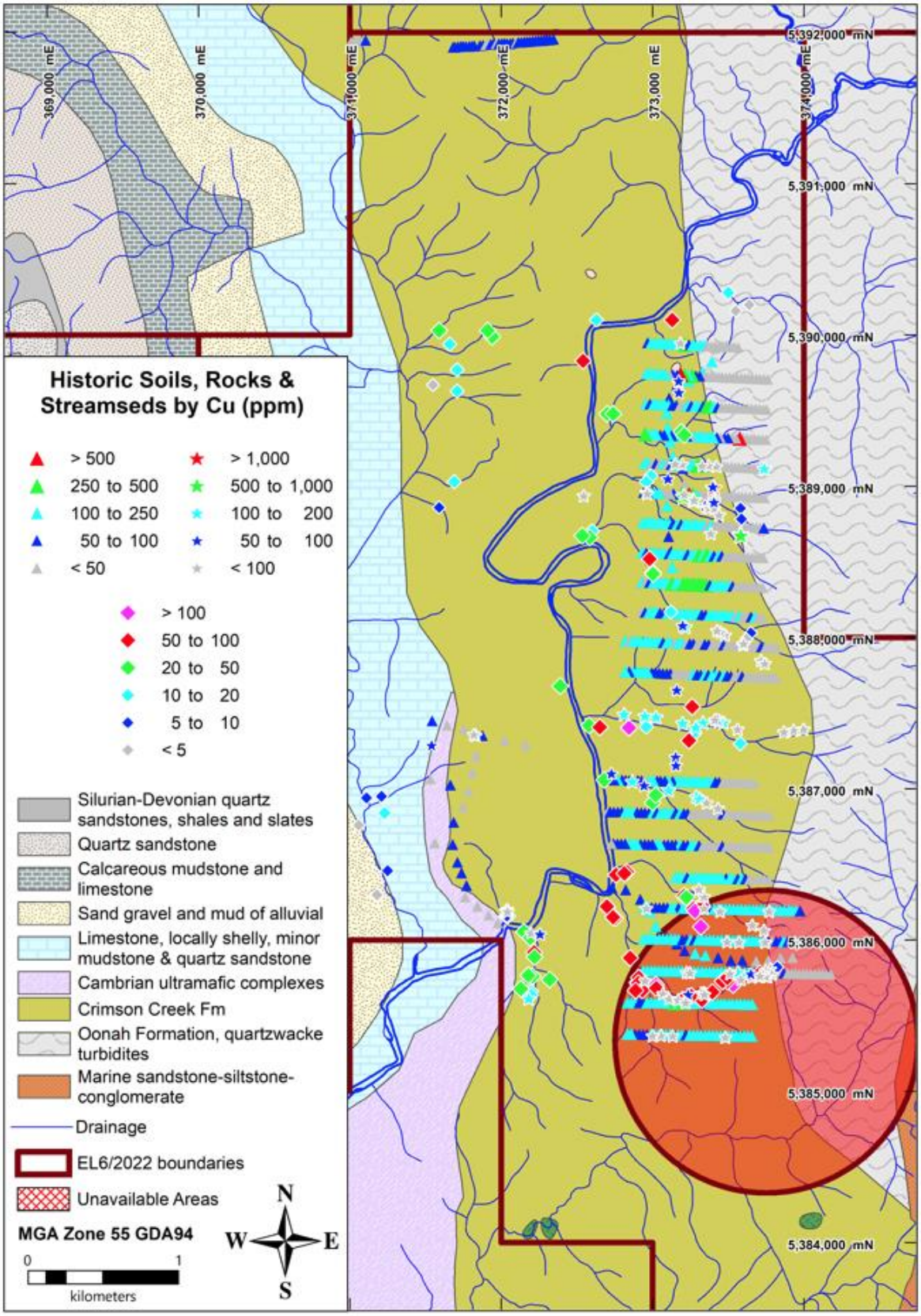

Figure 7: Historic exploration results within EL6/2022 coloured by Cu (ppm).

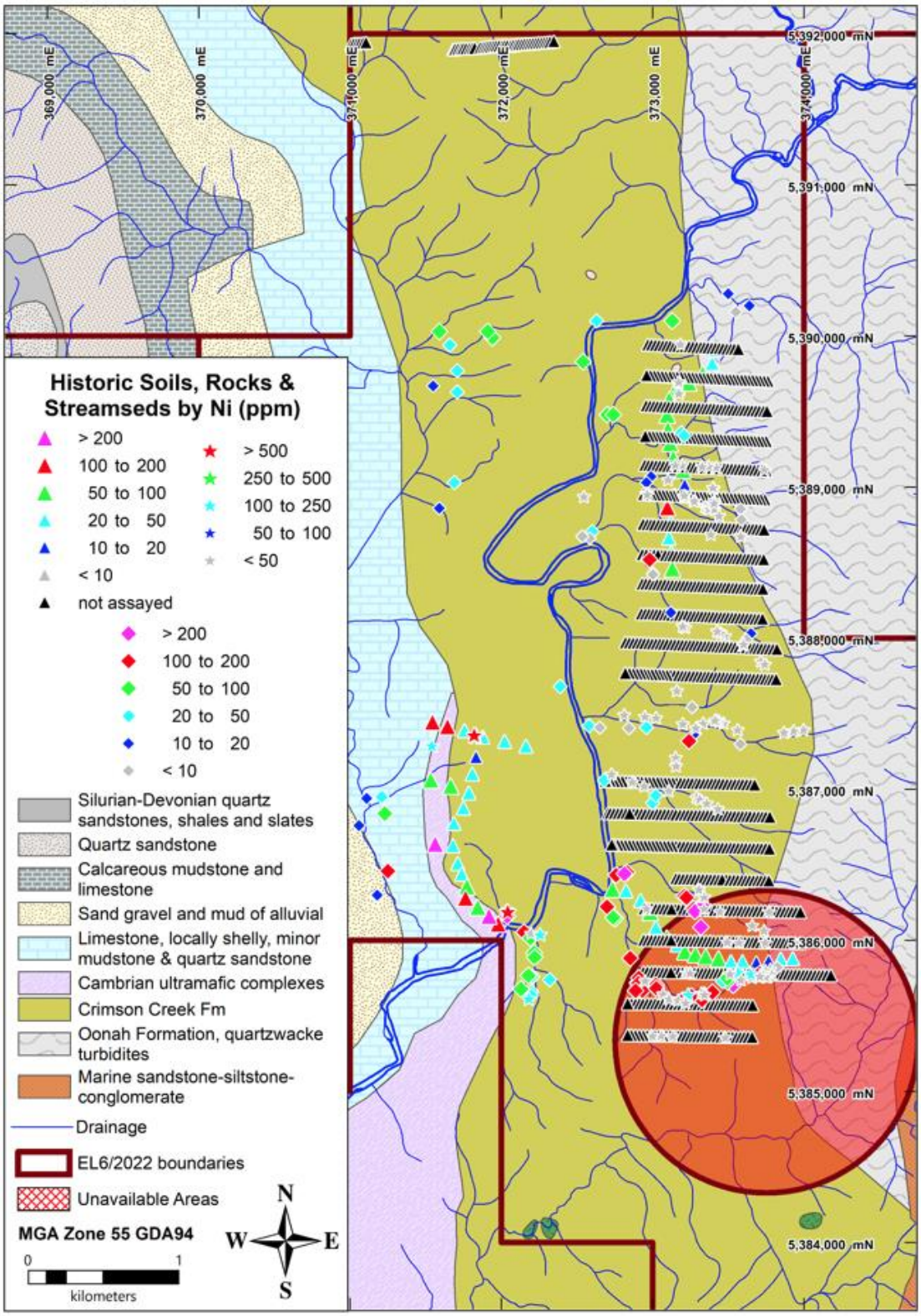

Figure 8: Historic exploration results within EL6/2022 coloured by Ni (ppm).

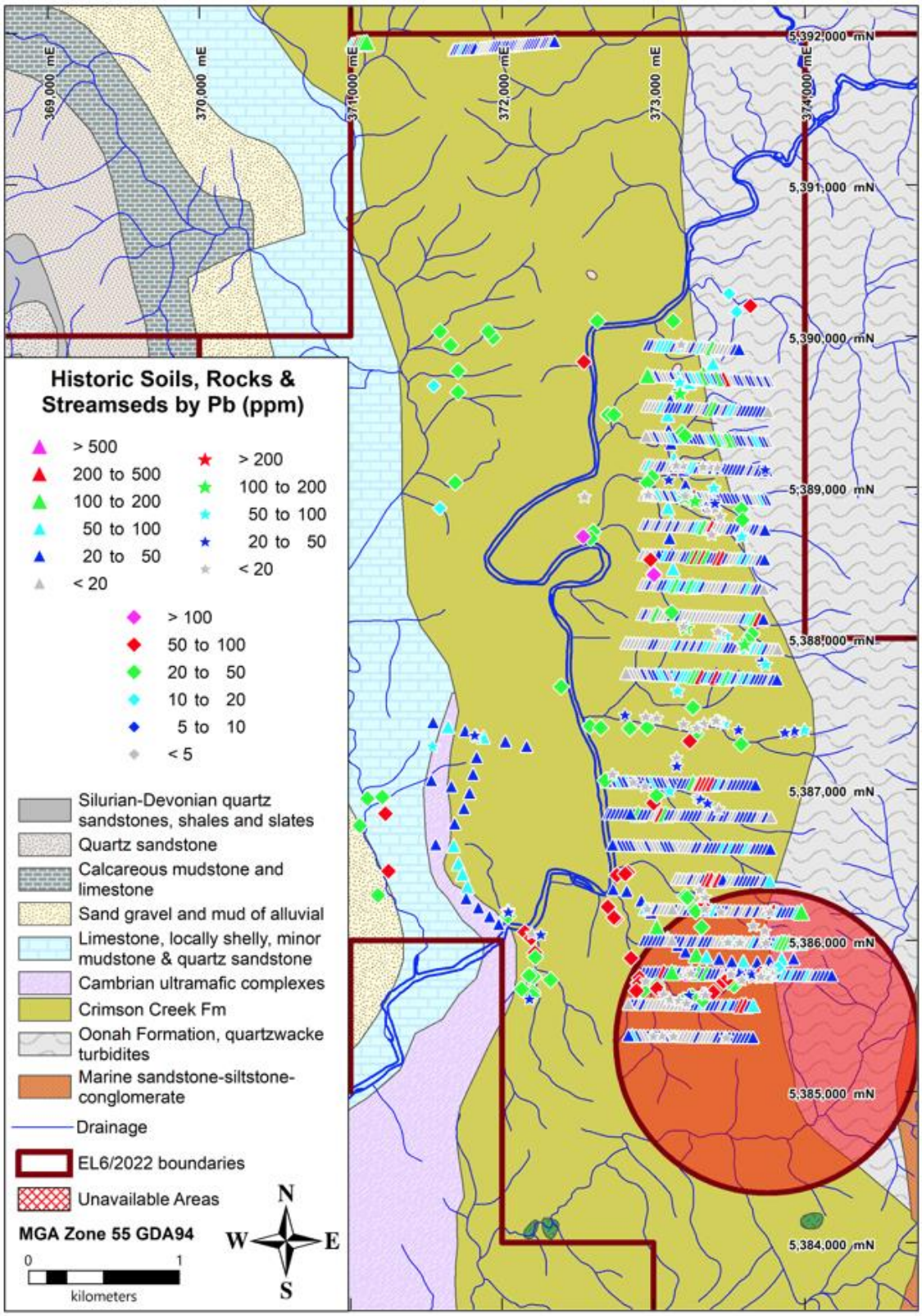

Figure 9: Historic exploration results within EL6/2022 coloured by Pb (ppm).

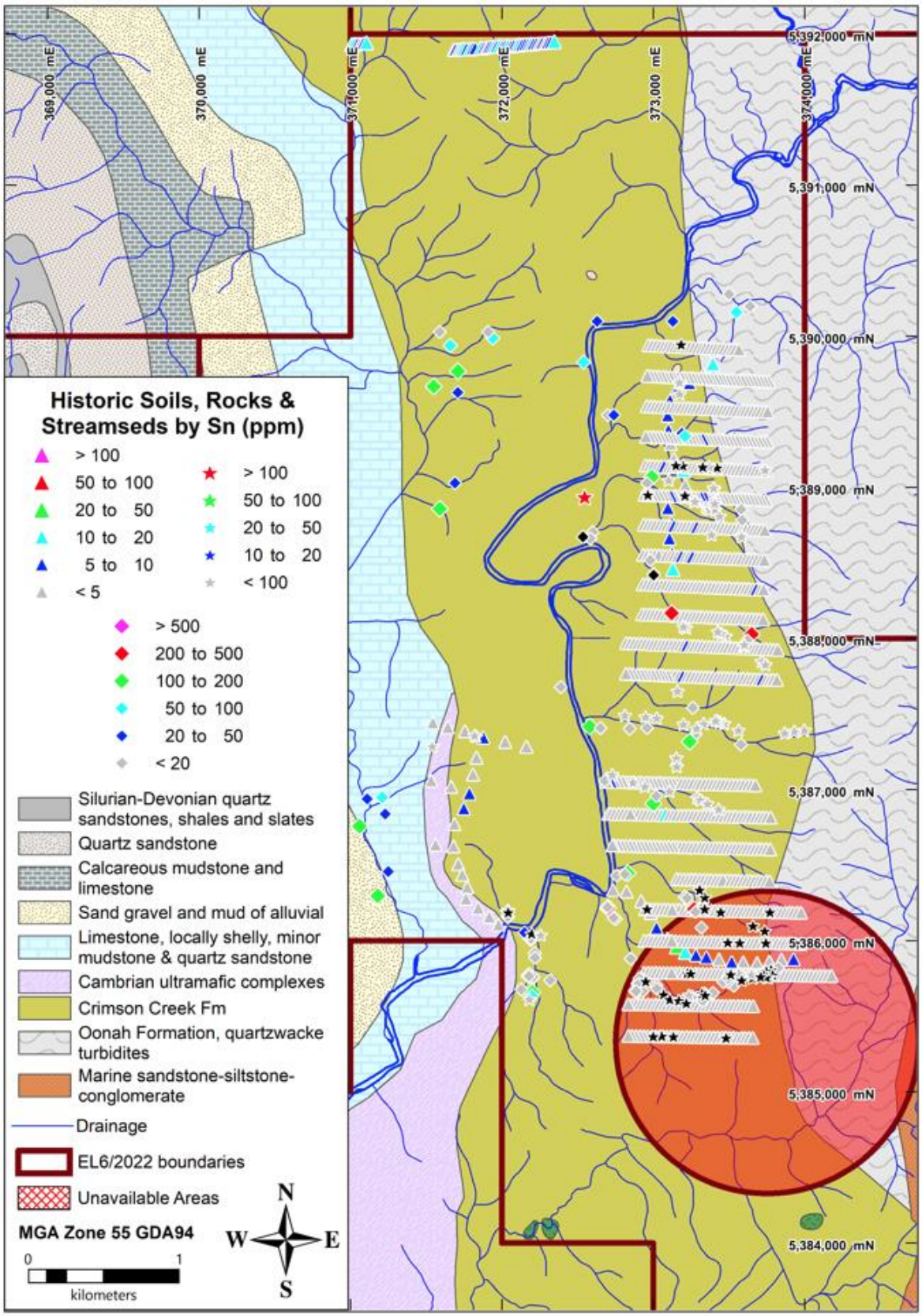

Figure 10: Historic exploration results within EL6/2022 coloured by Sn (ppm).

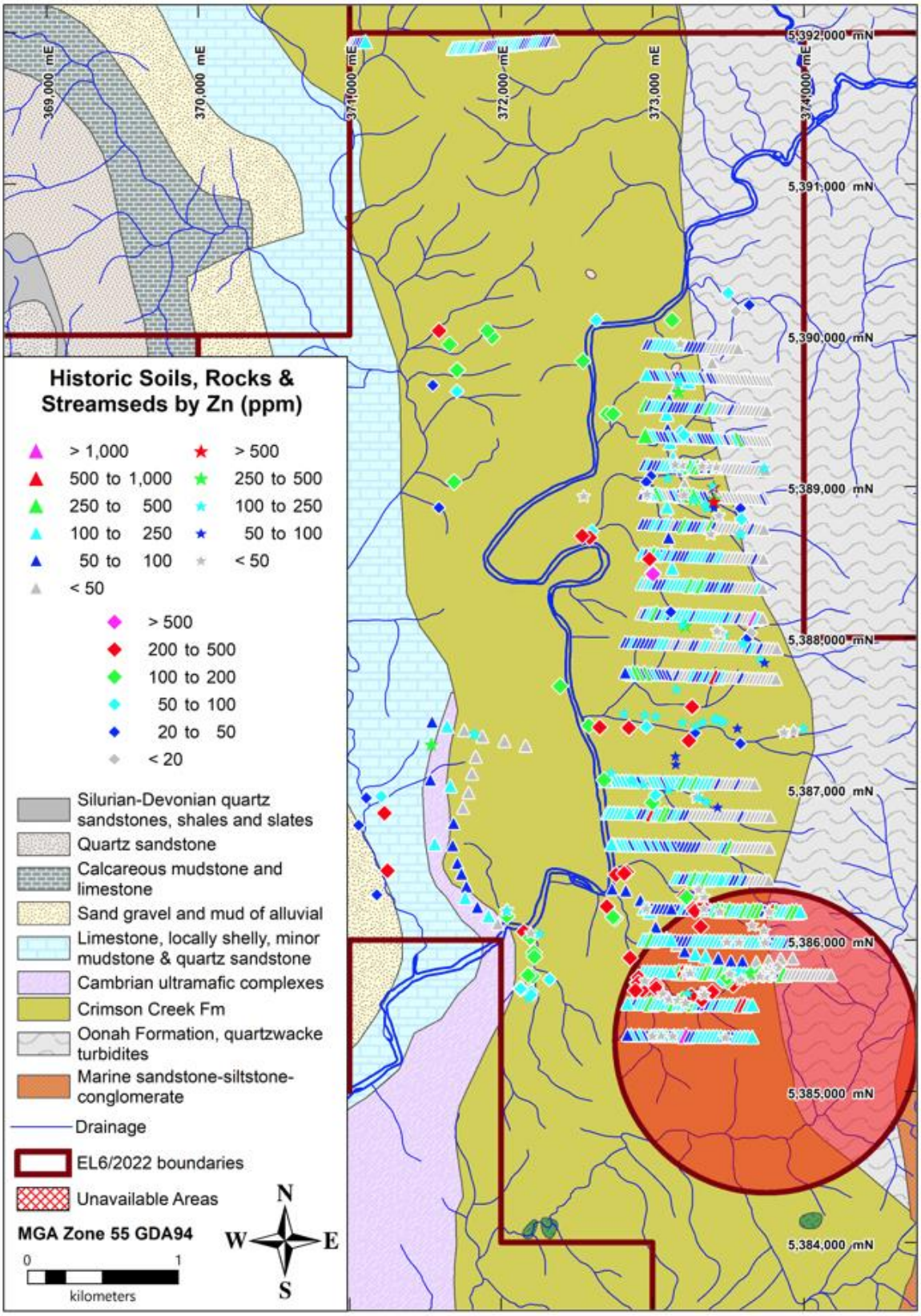

Figure 11: Historic exploration results within EL6/2022 coloured by Zn (ppm).

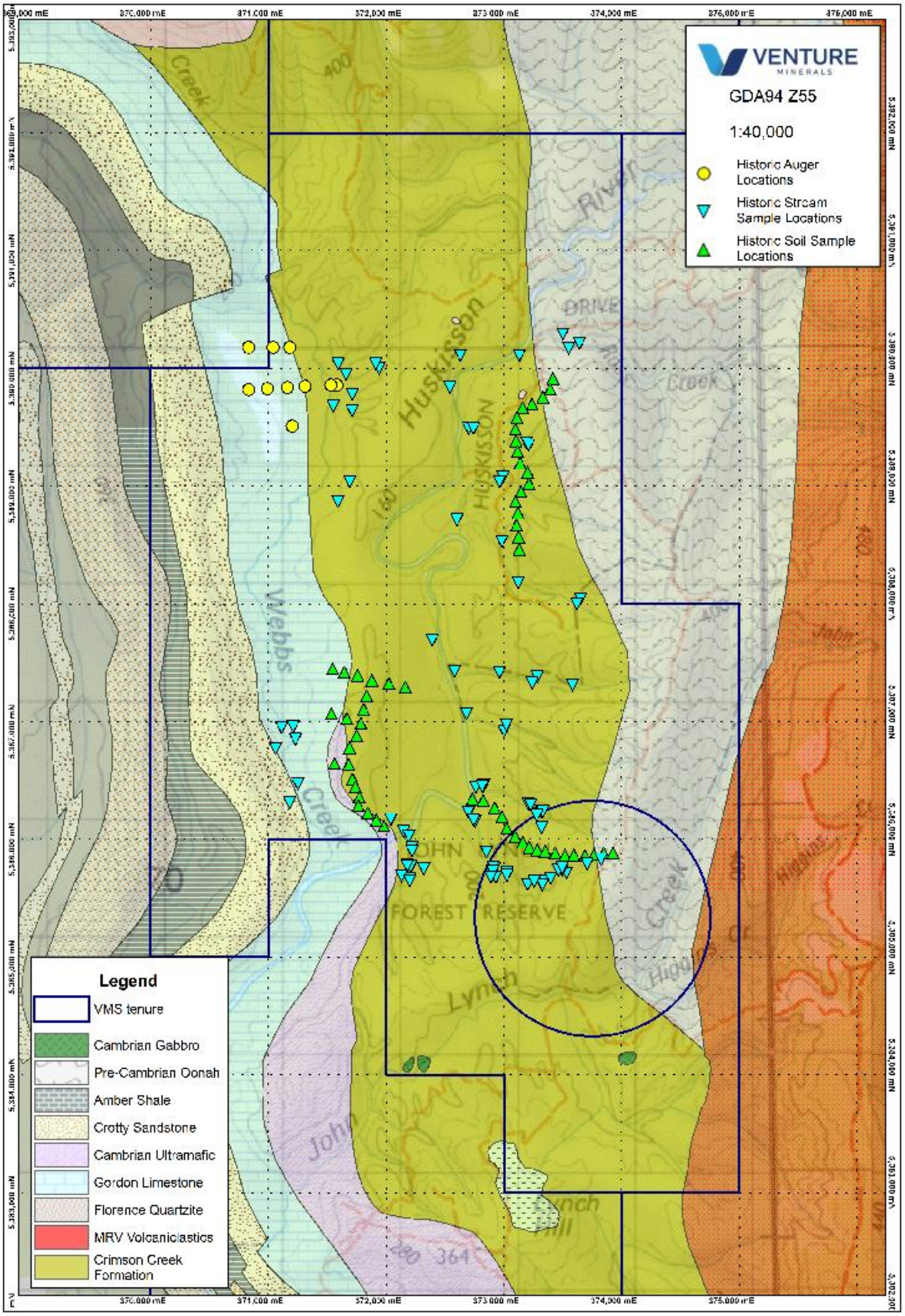

Figure 12: EL6/2022 Historic data locations on basement geology shown over 1:25,000 topography

6.2 Geological mapping and sampling

Geological mapping and sampling around the southern portion of the lease accessible by road was focussed on gabbro and diorite intrusions within the Crimson Creek Formation (Figure 13). Outcrop is generally limited to creeks and the steep hillsides. The gabbro was found in and around the areas previously mapped by Minerals Resources Tasmania. Samples of the gabbro were taken to assay primarily for gold, platinum and palladium. The samples were sent to ALS for multielement analysis with lithium borate fusion & ICP-MS finish and four acid digestion with ICP-AES finish. Platinum, palladium and gold were assayed for with lead oxide collection fire assay with ICP-AES finish. There were no significant results.

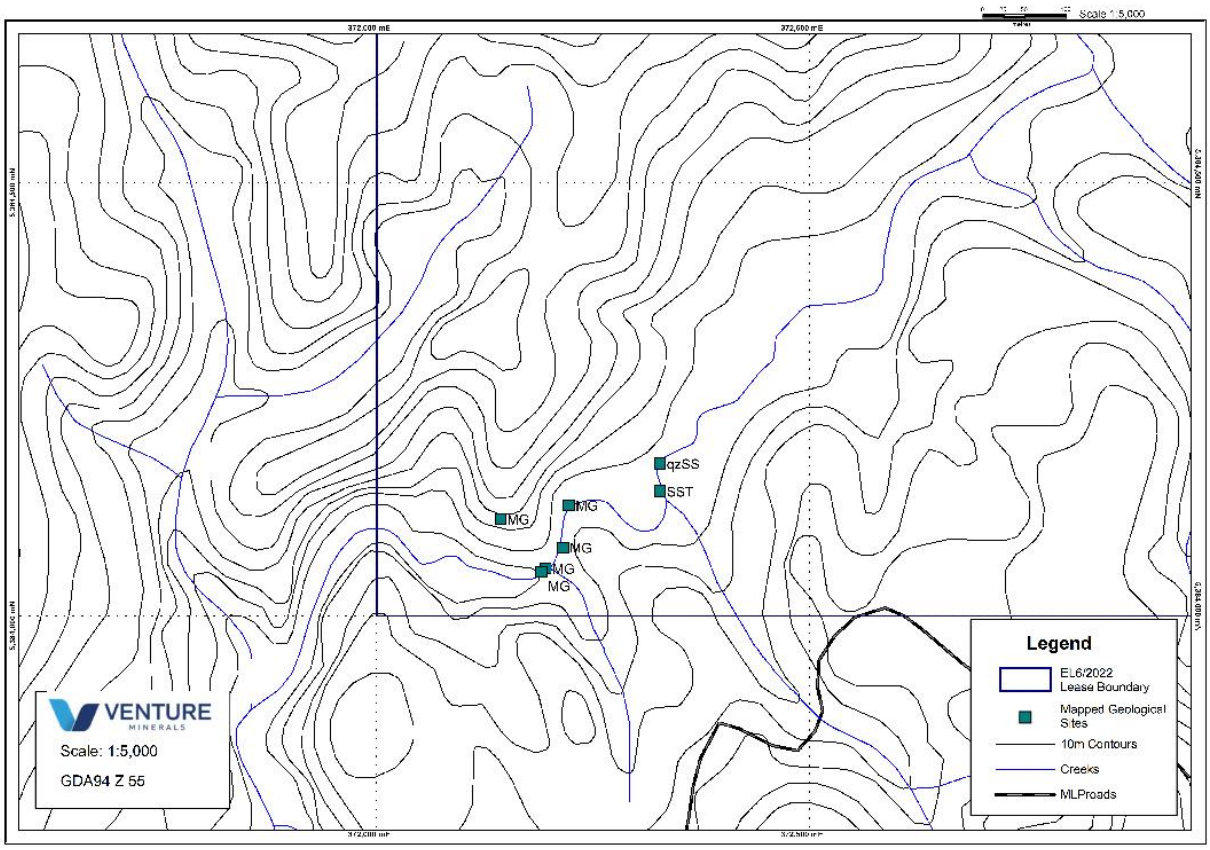

Figure 13: EL6/2022 Venture Minerals geological mapping and sampling locations

7 Conclusions and Recommendations

A search of historic exploration data, compilation into a GIS database and review identified several geological and geochemical Sn-W and Ni targets for follow up investigation within EL6/2022. Several mafic intrusions previously mapped by the Tasmanian Geological Survey were sampled for Ni sulfide mineralisation, but assaying did not demonstrate any significant Ni or related element anomalism and the only sulfide present was pyrrhotite. Due to a change in company focus Venture Minerals no longer proposes any further work on the licence and has surrendered EL6/2022.

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