



**Tim Callaghan – Resource and Exploration Geology**

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**EL11/2005**

**SPECIMEN REEF**

**NW TASMANIA**

**EXPLORATION REPORT**

**APRIL 2012**

**Prepared for: Nimrodel Mining Pty Ltd.**

**Tim Callaghan, April 2012**



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**EXECUTIVE SUMMARY**

Nimrodel Mining Ltd has entered into an agreement with Regency Resources Ltd to explore EL11/2005. EL11/2005 is a mature exploration tenement and requires an extension of term. Site access to the EL has been problematic with the site accessed via Grange Resources pipeline access road. Grange does not allow access to the road unsupervised. An access agreement has been negotiated but took most of the 2011-2012 year to finalize.

Nimrodel are targeting Iron-oxide-copper-gold (IOCG) style mineralisation within the Arthur Metamorphic Complex (AMC). The AMC is highly magnetically anomalous and hosts significant iron oxide deposits as well as numerous occurrences of copper and gold mineralisation, not least of which is the Savage River Magnetite Mine, long Plain s magnetite and Alpine copper-gold deposits.

The Specimen Reef Gold Mine is a small historic gold mine that has been adequately tested by previous explorers.

Exploration work completed during 2011-2012 includes processing and interpretation of Mineral Resources Tasmania open file aeromagnetic and radiometric data by consultant geophysicists Southern Geoscience (SGC). Five magnetic targets and six gold targets were generated by SGC

Historic drilling and geochemical data was compiled and assessed by consultant geologist Murray Surtees and two of the five anomalies were delineated for follow up exploration drilling. After reviewing the target sites, a two hole helicopter supported drilling program has been proposed for initial drill testing. Contract drillers Van Dieman Drilling have been contracted to complete the program. Environmental permitting was been submitted to MRT in March 2012 and is awaiting approval.



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## **1 INTRODUCTION**

EL11/2005 is located in NW Tasmania, approximately 5-10km north of the Savage River Magnetite Mine. The EL is held by Regency Resources Limited and currently operated by Nimrodel Mining Ltd. The EL is in its final year of tenure and a Term of Extension has been applied for. This year will be the first year of operations by Nimrodel.

The EL is accessed via the Savage River Pipeline Road extending southwards from Port Latta on the north coast of Tasmania. Grange do not allow access through the Savage River Mine site for OH&S reasons as the road runs through their northern open pit. The pipeline road is an all weather dirt road privately owned by Grange Resources Limited. An access agreement to use the pipeline road has been signed by Nimrodel and Grange. The pipeline access agreement had not been finalized until April 2012 so site visits have been restricted to only 2 reconnaissance trips through 2011-2012.

The EL is located within an environmentally sensitive area known as the Tarkine Wilderness and is in the Savage River Recommended Area for Protection. All exploration works must be approved by the Mineral Exploration Working Group (MEWG) consisting of representatives from Mineral Resources Tasmania, Parks and Wildlife, the Environment department and forestry Tasmania.

The area receives a high annual rainfall and the topography is rugged and steeply incised. Access is difficult to most areas, requiring cut tracks. Vegetation consists of old growth rainforest ranging from large myrtle forests in the valleys to low horizontal and leatherwood dominated forest on ridge tops. Areas of re-growth tea tree and eucalypt forest dominate areas previously damaged by fires.



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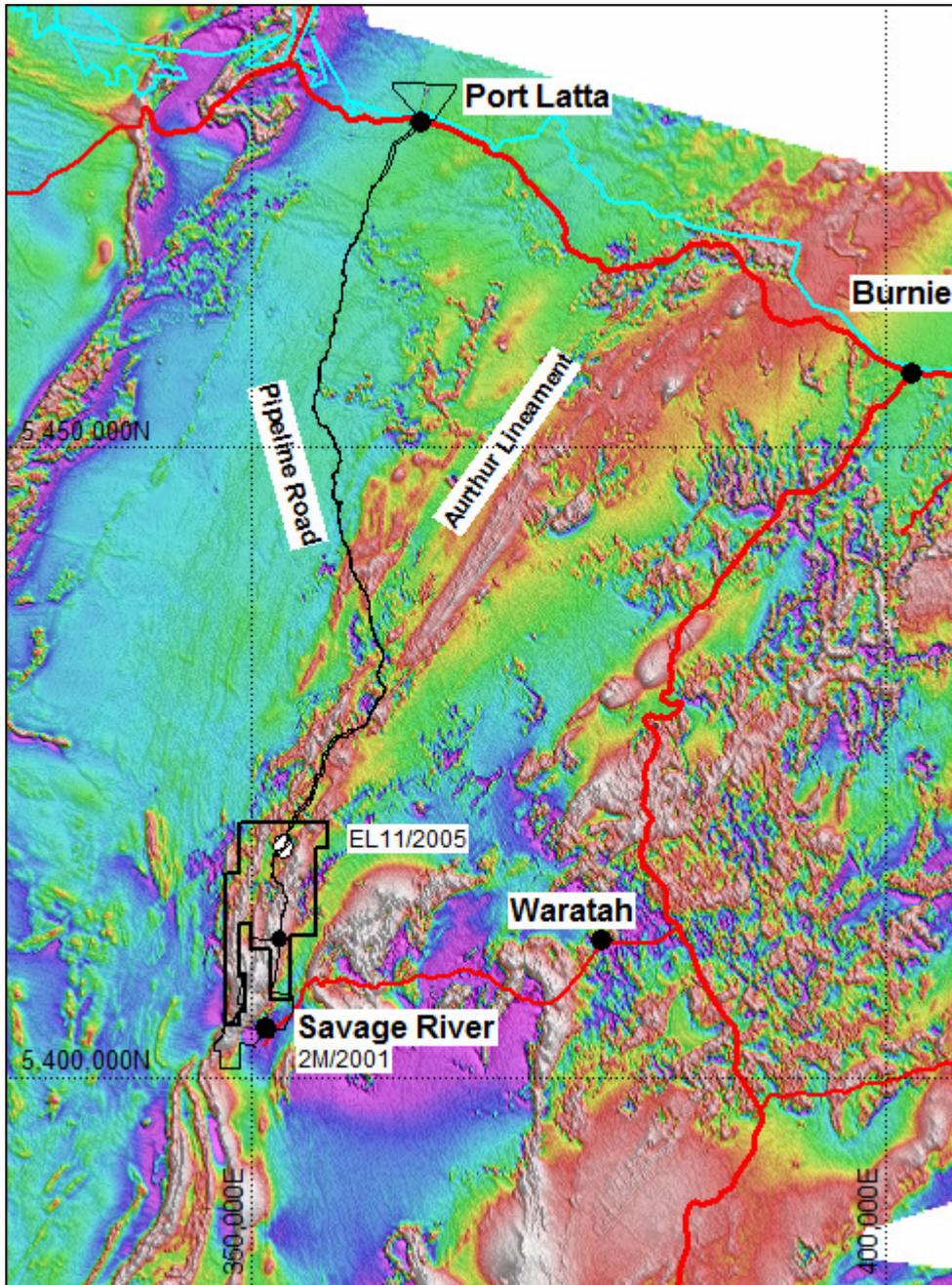


Figure 1. EL11/2005 Location Plan and TMI.



## 2 REGIONAL GEOLOGY

The NW Tasmanian Geology is separated from the geology of Western Tasmania by the 510Ma Arthur Lineament, a major NNE trending thrust lineament (Figure 2). Regionally the Arthur Lineament separates the northwestern Neoproterozoic Rocky Cape Group and Ahrberg Group from the low strain Oonah Formation to the southeast (Everard *et al*, 2007). The Lefroy Ridge Fault forms the western boundary to the lineament.

The Arthur Metamorphic Complex, a steep east dipping, NE-SW striking structural lineament of metamorphosed Cambrian mafic volcanics, carbonates and sediments of the Ahrberg Group, the Bowry Formation and a high strain part of the Oonah Formation (Keith Schist). The lineament is associated with isoclinal folding and a strong penetrative cleavage generally striking NNE and dipping west (Turner and Bottrill, 1993). The Lineament is folded just south of the Savage River Mine during the later Devonian Deformation event.

Geology to the west of the lineament is complex and not completely resolved. From west to east approaching the lineament the geology comprises the quartzite and slates of the Rocky Cape Group, overlain by the Donaldson Group composed of micaceous quartzwacke and pelitic siltstone with minor chert and conglomerate near the base. The Savage Dolomite conformably overlies the Donaldson Group which is in turn overlain by the Bernafai Volcanics consisting of basaltic volcanoclastics, quartzite and phyllitic siltstone. These are overlain by the Corinna Dolomite and the Tunnel Race mafic volcanics.

East of the Lefroy Ridge Fault the geology is dominated by metasediments and amphibolites of the Arthur Metamorphic Complex (AMC). The amphibolites occur in the Lucy (magnetic), Nancy, (weakly magnetic) and the Bowry Formations (strongly magnetic). The Bowry Formation consists of chloritic, schistose mafic volcanics with interbedded dolomite and magnesite. The Bowry formation is strongly altered with associated banded magnetite-pyrite-silica, reaching maximum intensity at the Savage River Magnetite Mine just south of EL11/2005. The western margin of the AMC is dominated by the quartz-mica schist and phyllites of the Keith Schist which is gradational with the unmetamorphosed quartz-wacke turbidites of the Oonah Formation.

The lineament occupies a gravity divide between the Devonian Pieman and Meredith Granites. Cambrian deformation has produced steep west dipping thrust faults and a strong regional lineament visible in magnetic images.

Tertiary sediments comprise channel fill gravel, sand and clay in ridge top positions generally overlain by basalt. They have been sporadically explored for gold/tin placers with minor historic workings in the district. Gold from the sediments has redistributed into the Quaternary creeks, contaminating heavy mineral stream sediment exploration efforts.

The Lucy and Bowry Formations which contain tholeiitic basalt and volcanoclastics are prospective for gold, copper, magnetite and magnesite. An important style of iron-oxide-copper-gold mineralisation is hosted in the Alpine Deposit, located several kilometers south of the Pieman River. The enigmatic Savage River magnetite mine consists of sub vertical lenses of massive magnetite with varying amounts of pyrite



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and trace chalcopyrite. Other smaller deposits of the same style are located in the Bowry Formation including the Long Plains deposit to the south. Substantial magnesite deposits are found at the Arthur River and are associated with the Savage River deposit to the north and south at Main Creek and Lyons River.

Silica flour has been the focus of exploration northeast of Corinna on the Tasmanian Advanced Minerals Leases within the Savage Dolomite. Minor epithermal gold is reported from within the Savage Dolomite, although most of the gold from the district appears to be associated with Tertiary alluvial deposits. Titan-Goldstream used a combination of #80mesh copper analyses and gold grain morphology as a means of discriminating between alluvial gold and bedrock gold anomalies with limited success.

<b>TABLE 1. DEPOSITS IN THE ARTHUR METAMORPHIC COMPLEX</b>	
Savage River	371 Mt @ 31.9%Fe
Arthur River	29 Mt @ 42.8% Mg
Main Creek	42.8 Mt @ 42.4% Mg



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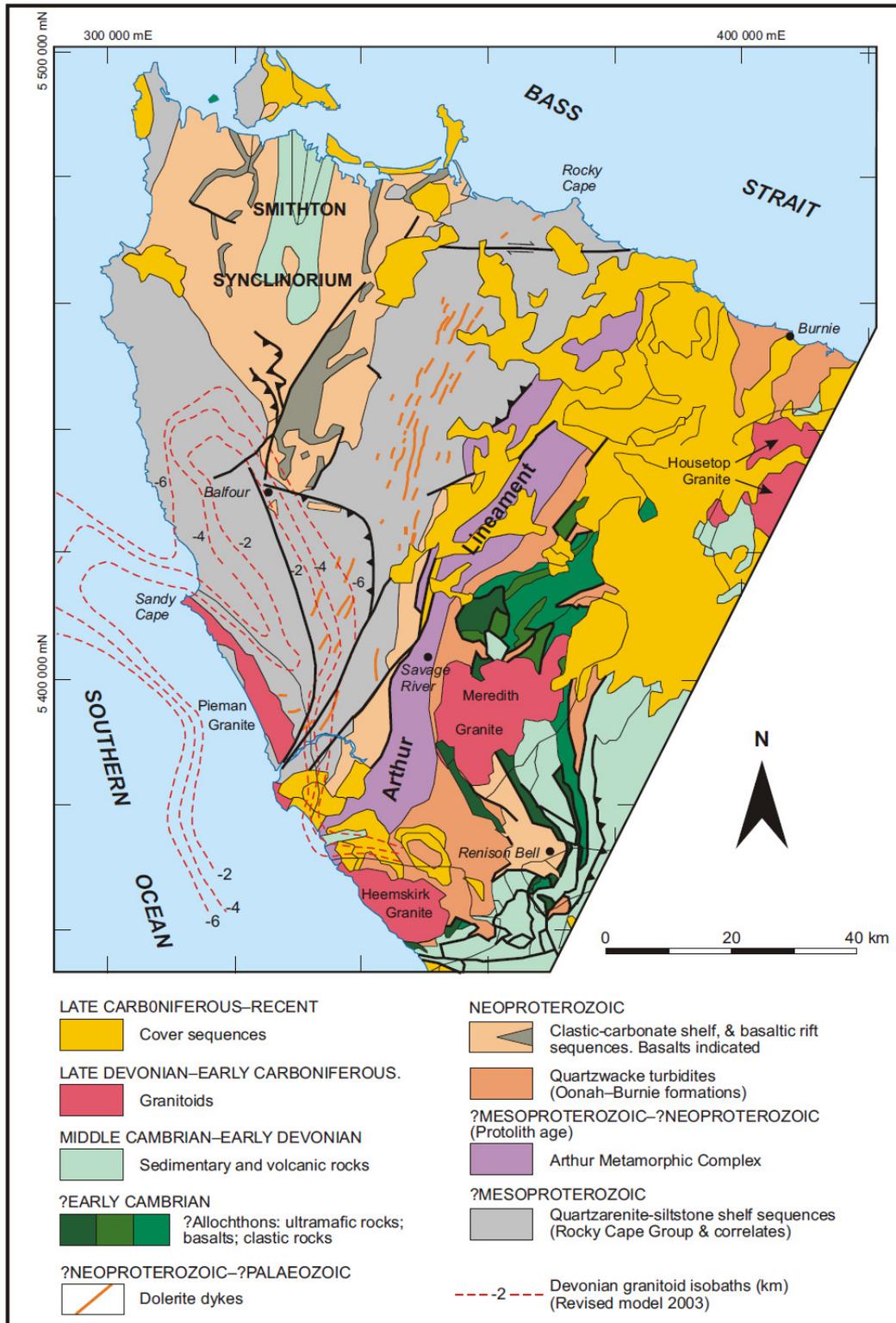


Figure 2. Regional Geology Northwest Tasmania (Everard *et al*, 2007).



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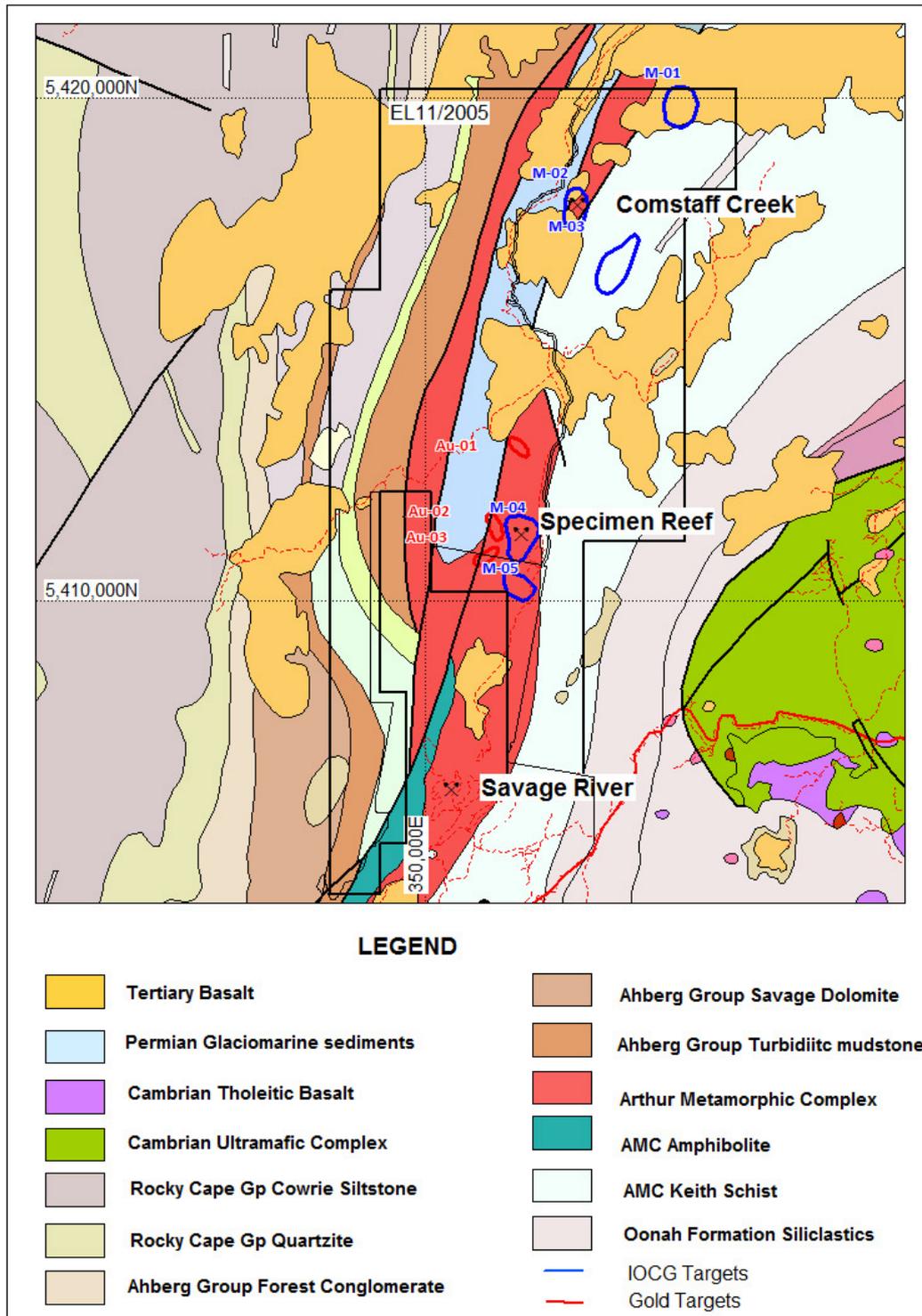


Figure 3. Specimen Reef Regional Geology (modified from MRT 1:250 scale Mapping)



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### 3 WORK COMPLETED, APRIL 2011 – APRIL 2012

Work completed on EL11/2005 includes geophysical modeling and interpretation, compilation of historic geochemical data and targeting.

#### 3.1 GEOPHYSICAL MODELING AND INTERPRETATION.

Nimrodel contracted Southern Geoscience to acquire process and interpret open file aeromagnetic and radiometric data flown over the Specimen Reef area by Mineral Resources Tasmania. Southern Geoscience completed a geological interpretation based mainly on the aeromagnetic data with some input from Mineral Resources Tasmania 1:250 000 mapping (Roberts, 2011). They identified 5 potential Iron Oxide Copper Gold (IOCG) targets and six gold targets on the EL (Figure 2 and 3). Their full report is located in Appendix 1.

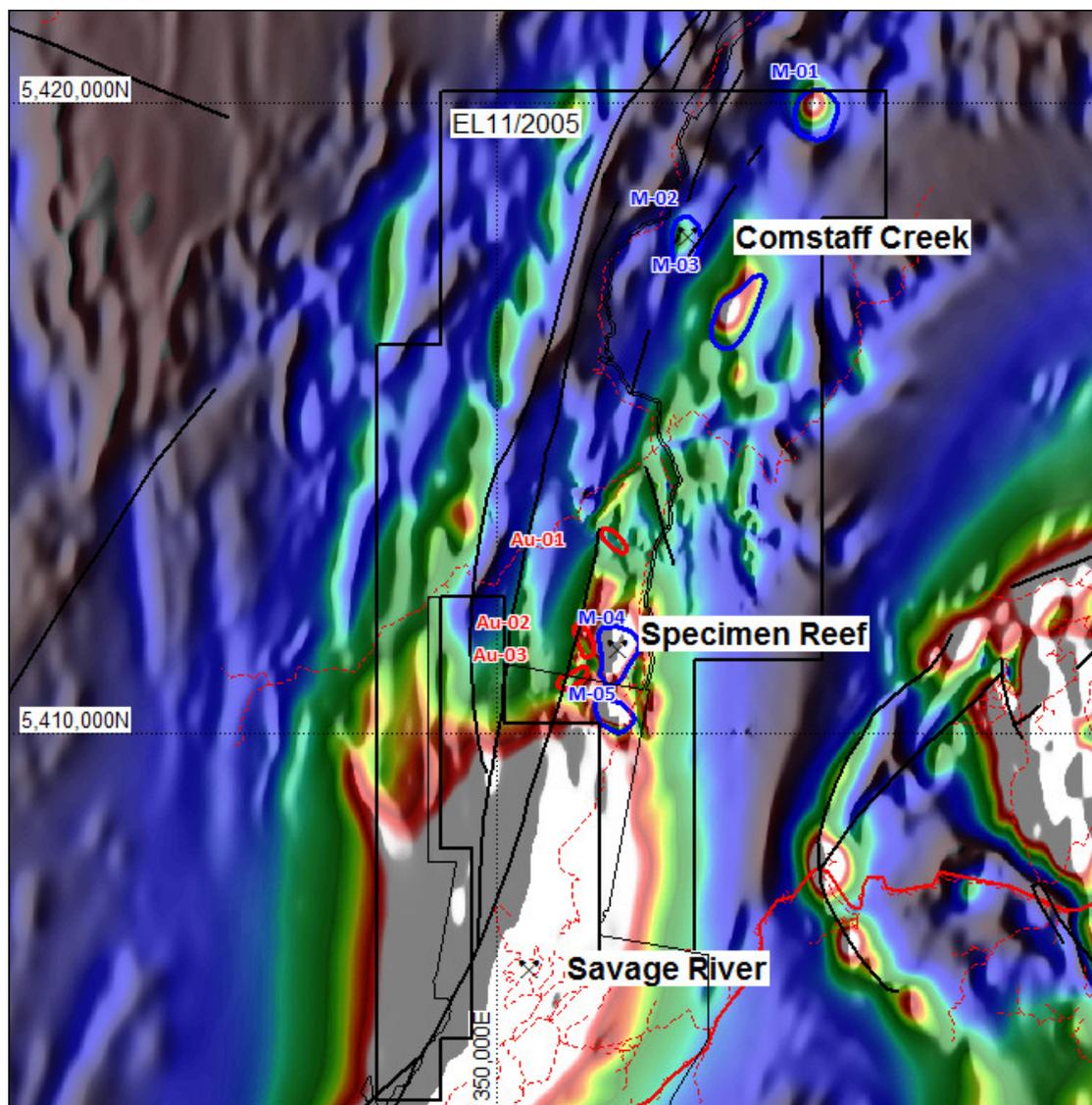


Figure 3. TMI and geophysical targets.



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Southern Geoscience considered IOCG targets M-04 and M-05 to be highest priority. They also recommended that ground validation of the anomalies be completed.

Uranium and ternary radiometric images were also examined as part off the process but no anomalies were generated.

### 3.2 GEOLOGICAL REVIEW AND GEOCHEMICAL COMPILATION

A review of the exploration history of the locality and compilation of historic geochemical and drilling data was completed by geological consultant Murray Surtees in September 2011 (Surtees, 2011a). An excerpt of Murray's exploration history follows:

- 1882 – Specimen Reef Mine started and subsequently developed on 3 levels
- 1981-82: Industrial and Mining Investigations Pty Ltd – track construction
- 1982: Industrial and Mining Investigations Pty Ltd – soil sample grid largely on the western side of the mine. Samples collected here were assayed for Cu, Pb and Zn (or at least these are the only ones that I have seen plotted)
- 1987: Savage Resources Limited – a soil sampling and geological mapping grid to the north of the Mine with sample analysis for Au, Cu and As (again the only ones I have found).
- 1989: Savage Resources Limited - drilling 15 holes at Specimen Reef Mine. These holes are designated SPC 1 – to 15. The first 6 are diamond core holes the last 9 are RC holes.
- 1997: Goldstream Titan (Corinna) JV – drilling 2 holes at Specimen Reef Mine. The holes are designated SC1 and SC2 – they are diamond core holes
- 2008: Coffey Mining on behalf of Red Rock Resources - collation of Stream Sediment sampling results. Samples were sieved to various fractions and the grade of a comprehensive list of elements was determined, including gold, uranium, arsenic, copper, lead and zinc. This work located 3 anomalous areas. These are cross-hatched in red on the plans. Although Coffey used MGA1994 for their maps I believe the samples were collected and referenced in AMG (AGD 66). Certainly the location of the samples makes more sense in this system, i.e. the samples are nearer to the mapped creeks
- 2011: Southern Geoscience Consultants – interpretation of airborne magnetic and radiometric data. SGC isolated various magnetic and gold targets which are circled on the plans in blue and red respectively. Although they studied the radiometric data, no results of interest were identified.

Surtees (2011a) reviewed the five IOCG targets generated by SGC for follow up exploration. He noted that one of the high priority targets was actually located on the northern end of the Savage River Mine Lease held by Grange Resources, removing this one from the project. The historic data was collated as Mapinfo files and overlaid over the SGC geological interpretation. An example of the data collation is included in Figure 5. The full report is located in Appendix 2.





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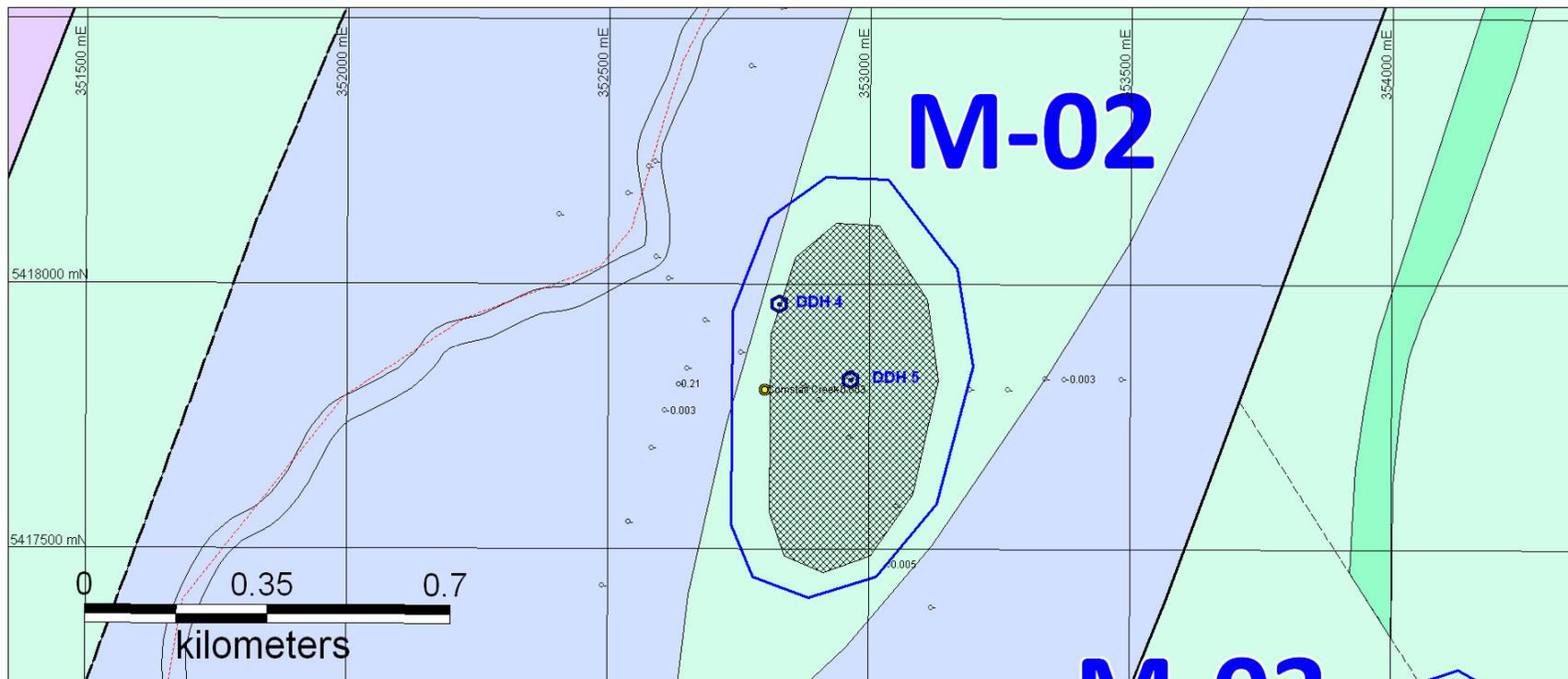


Figure 6: (from Surtees, 2011b) SGC's Magnetic Target M-02. The small circles are stream sediment samples with the -40 mesh assay grades in ppm. For other description see Figure 5.



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### 3.3 TARGET GENERATION

Surtees (2011b) proposed an initial drilling program consisting of 5 RC holes of 250m length testing SGC's IOCG anomalies M-04 and M-02 (Figures 3, 4 and 5). and 2 testing M-02.

Target M-04 is located just north of Specimen Reef and has numerous coincident soil Cu anomalies and peripheral Au stream sediment anomalies. The source of the magnetic anomaly is unknown but is considered to be analogous to the Savage River magnetite style of mineralisation. Surtees (2011b) proposed the M-04 target be tested with three RC holes.

Target M-02 is a smaller and weaker magnetic anomaly associated with a weak Au stream sediment geochemical anomaly (peak 200ppb) in the Comstaff Creek area 7km north of Specimen Reef. Two RC holes were proposed to test this target.

Surtees (2011b) did comment that the terrain may be too rugged to allow RC drilling of the targets and suggested a helicopter supported program be employed as an alternative.

A brief field trip was made to the area in January 2012 by contract Geologist Tim Callaghan and personnel from Grange Resources. The proposed drill sites were inspected and found to be unsuitable for RC drilling. A revised helicopter program was proposed and a cost estimate submitted to the board of Nimrodel. After review a 2 hole program was approved testing the targets recommended by Surtees, one hole into the centre of each anomaly.



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#### **4 DISCUSSION AND RECOMMENDATIONS**

Nimrodel are targeting the Iron-Oxide-Copper-Gold-(Uranium) spectrum of deposit styles. The Savage River Magnetite Mine fits into the spectrum of IOCG deposit styles supporting the exploration strategy. The magnetite-hematite-copper-gold Alpine Deposit hosted in the Bowry Formation south of the Pieman River lends further support to the exploration model. The Specimen Reef Gold Prospect has been adequately tested by historic exploration and no further work has been recommended. However the district remains prospective for Nimrodel's target model which has been largely untested for this style of mineralisation.

SGC have delineated 5 IOCG targets on Nimrodel's EL. Unfortunately the southern target M-05 lies on Grange Resources Mine Lease and is not available for exploration.

Historic data compilation and analysis by Surtees (2011a) highlighted two of the remaining 4 targets for initial follow up exploration drilling. Target M-04 located immediately north of Specimen Reef is a high intensity, moderate sized magnetic anomaly hosted in the Bowry Formation coincident with significant soil and stream geochemical anomalies. M-04 represents a significant target for potential IOCG mineralisation and its proximity and stratigraphic position relative to the Savage River Mine supports its prospectivity.

Initially an RC program was proposed but site investigations proved the terrain to be too rugged to allow access for a large RC rig and associated equipment. Consequently a 2 hole helicopter supported program has been proposed with the drillers accessing the drill sites by foot from a field camp based on the Pipeline Road. The environmentally sensitive location of the program also lends weight to a helicopter supported program to reduce the initial impact of the program and facilitate permitting. Access to the camp will be via the pipeline road accessed from the north.

It should be noted that the remaining two targets M-01 and M-03 are remote and did not have coincident geochemical anomalies. The lack of a geochemical signature may be a consequence of their remoteness resulting in little historic work being completed on these magnetic targets.



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## 5 PROPOSED WORK 2012-2013

A two hole helicopter supported diamond drilling program is proposed for 2012-2013.

Hole 1, located just northwest of the historic Specimen Reef Gold Mine is designed to test the M-04 magnetic anomaly where it is coincident with a 565ppm Cu soil anomaly identified from historic exploration (Figure 1). The hole has been moved 50m east of the original position and collared at  $-75^{\circ}$  west to intersect the generally vertically dipping north striking geology at a higher angle from a level drilling platform on a ridge top.

Hole 2, is designed to test the northern magnetic anomaly at Comstaff Creek (Figure 2). The hole is designed to test the centre of the Southern Geoscience magnetic body, similar the original proposed Hole 5 (Surtees, 2011). The hole has been moved slightly from the original hole to a topographically a better location to site a drill rig.

**Table 2. Drill Hole Details**

Hole_Id	Easting (Agd66)	Northing (Agd66)	Target	Depth	Dip	Azm
DDH1	351800	5411500	NW edge area of Target M-04 on soil anomaly of 565 ppm Cu	250 m	$-75^{\circ}$	270
DDH2	352910	5418030	North of centre Target M-02	250 m	$-90^{\circ}$	0

Contract diamond drillers Van Dieman Drilling have been contracted to complete the program. Contract Geologist Tim Callaghan will supervise the drilling and process the drill core. A contract field assistant will be used to help with core handling. Contract track cutters will be used for site preparation. Tasmanian Helicopters will be used for the rig mobilisation.

A field camp consisting of caravans will be established on the pipeline road for the drilling crews. Foot access tracks will be cut to the drill sites from the pipeline road allowing daily access to the drill sites. Supervision and servicing will be conducted via the pipeline road.

The drill rig will be mobilized from and to the Savage River Township. All fuel, drilling equipment and field supplies will be flown into and out of the site.

Drill core will be flown out from the drill site at the end of each hole to Savage River and transported to a logging facility for processing.



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## **ADDITIONAL NOTES**

### ***STATEMENT OF INDEPENDENCE***

Tim Callaghan has no material interest or entitlement in the securities or assets of Nimrodel Mining Ltd or any associated companies.

### ***LIMITATIONS AND CONSENT***

The report has been prepared for Nimrodel Mining Ltd using information provide by Nimrodel Mining and open file information available to the Author at the time of writing. The opinions stated herein are given in good faith and with the belief that the basic assumptions are factual and correct and the interpretations reasonable.

This report is not intended for the use as a public document nor, in whole or in part, in a public document without written consent to the form and context in which it appears.

**All coordinates in this report are recorded in AMG66 Zone 55**



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- Bottrill, R and Taheri, JR, 2007. Petrology of the host rocks, including mineralisation and adjacent rock sequences, Savage River Mine. Tasmanian Geological Survey Record 2007/05.
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- Turner NJ and Bottrill R, 1993. Blue amphibole in the Proterozoic to Cambrian Arthur Metamorphic Complex, NW Tasmania. *MRT report 1993/26*.



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## **Appendix 1**

**Southern Geoscience Consultants**

**Airborne Magnetic Data, Processing and Interpretation**



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## **Appendix 2**

**Collation of Exploration Data for Specimen Reef**

**Surtees, A M, 2011**



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**A. M. SURTEES**

EXPLORATION GEOLOGIST

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**MEMORANDUM**

To: George Kenway

From: Murray Surtees

Date: 22 September 2011

Subject: **Collation of Exploration Data for Specimen Reef**

After the briefing by Southern Geoscience Consultants on 21<sup>st</sup> inst. I realized the need to collate the data pertaining to the Specimen Reef tenements.

Three maps of the Specimen Reef EL 11/2005 are attached; each at a successively more detailed scale. They show the results of work carried out there since 1882, namely:

- 1882 – Specimen Reef Mine started and subsequently developed on 3 levels
- 1981-82: Industrial and Mining Investigations Pty Ltd – track construction
- 1982: Industrial and Mining Investigations Pty Ltd – soil sample grid largely on the western side of the mine. Samples collected here were assayed for Cu, Pb and Zn (or at least these are the only ones that I have seen plotted)
- 1987: Savage Resources Limited – a soil sampling and geological mapping grid to the north of the Mine with sample analysis for Au, Cu and As (again the only ones I have found).
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Points of Note

1. SGC's Magnetic Anomaly or Target M-05– the southern one that forms the hillock – is actually in Grange Resources' Savage River Mine tenement. Contrary to what SGC showed in their briefing of 21<sup>st</sup> September that tenement is historically of a shape which does not conform to the AMG graticule – it has an inclusion zone which covers this anomaly.
2. There is a marked copper, zinc and lesser lead anomaly (only copper is shown on the attached map) in soils lying just west of the Specimen Reef mine workings. The reef which was mined actually dips eastward away from this base metal enrichment.
3. Magnetic Anomaly M-04 underlies much of this BM anomaly.
4. A small gold anomaly from the Savage Resources work also overlies Target M-04
5. Two other single point small gold anomalies (in soil) occur 900 m north of the centre of Target M-04
6. The geological mapping traces the Specimen Reef north-eastwards for some 1800 metres across the SE corner of the EL and along the SE margin of Target M-04 (see purple line on the maps below)
7. Other adits, namely McPhee's and Specimen Creek Adits (3 in all) were observed to the west of Target M-04, actually over and near to SGS Target Au-03
8. The Davis Creek gold occurrence occurs 500 m north of Target Au-02. It is marked by a single point gold anomaly of 1680 ppb in the soil.
9. Davis Creek has been a centre of considerable excavation in the form of open cuts, trenches and water races. The map that shows this work has sketchy survey data and it is not able to be geo-referenced for use in MapInfo.
10. There are 2 single point anomalies of over 300 ppb Au on adjacent sample lines 100 m apart a further 700 m NE of the marked Davis Creek occurrence. These 2 samples are on a carbonate horizon on a contact, so they probably represent one continuous occurrence. Additionally another single point gold anomaly of 100+ ppb occurs between these.
11. The stream sediment samples around Targets Au-02 and Au-03 are anomalous in zinc and copper. Additionally, Target AU-03 is anomalous in gold
12. At the northern end of the tenement Target M-03 has stream sediment gold anomalies of over 200 ppb (in the -40 mesh fraction). There is a named gold occurrence, Comstaff Creek, over this target
13. The arsenic anomaly in stream sediments (100 ppm) to the far NW of the tenement has no magnetic back-up according to SGC.
14. There were no soil sample assays for gold over the Specimen Reef mine area (that I have found)
15. The geochemistry explains why Savage Resources Ltd drilled holes SPC 7 to 11 off to the NE of the mine, on the other (east) side of the Pipeline Road. There are small but strong anomalies (with 1300 ppm Cu and 544 ppb Au



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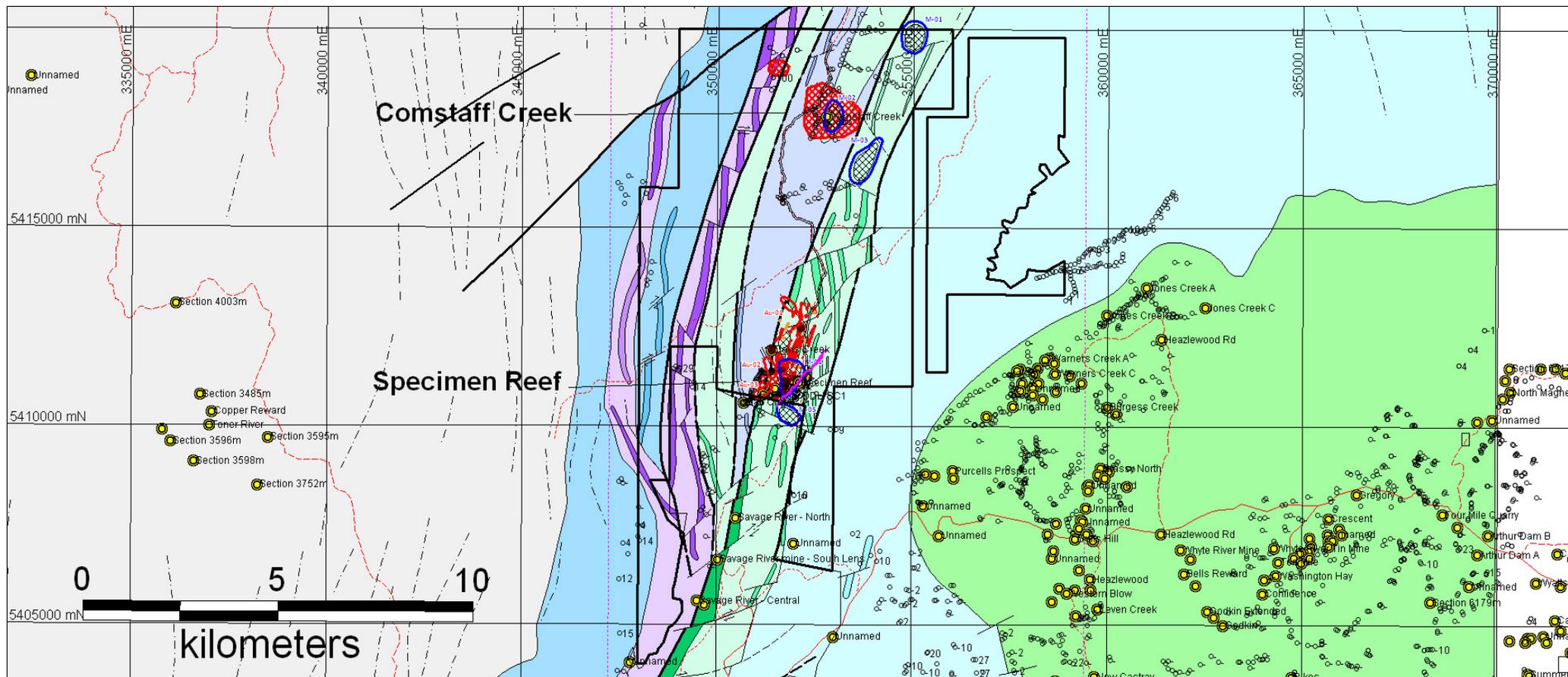
maximum grades in soil) there. However if the mineralization dips the same way as Specimen Reef these holes are drilling largely downdip.

16. DDH SPC1 (the one which intersected 910 g/t Au over 20 cm DW and the brannerite) was drilling near down dip. It apparently passed through the main reef and struck another reef beneath that in which the gold and brannerite were found.
17. The gold intersection of 910 g/t X 20 cm DW in DDH SPC1 is described in an unclear scanned handwritten log by Newnham as sourcing from a vein having a true width of 1.5 cm. This is confirmed in a drafted section of the hole, and a later typed version of the log, which I located during this current data search. Subsequent reports of a width of 1.5 m are incorrect.
18. The main access to the tenement is the Pipeline road. There is also a diagonal SW to NE road marked, as well as a number of constructed foot paths. There are also constructed water races which might afford foot access.

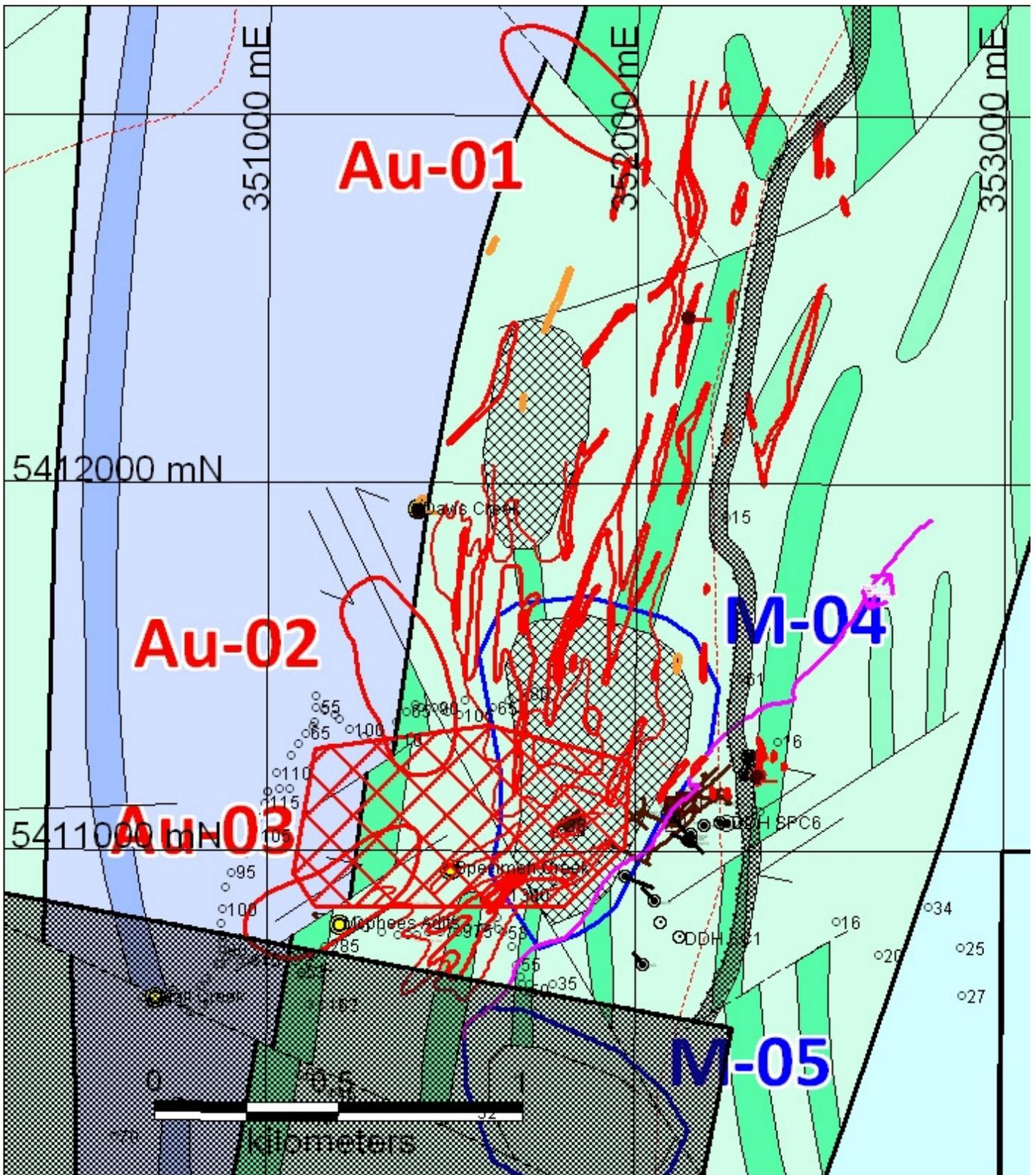
### Conclusions

All this data is now in MapInfo format and is ready for exploration planning.

There are a number of targets to be investigated. SGC's targets are generally backed up by varied results of past work.



Map 1: The whole of EL 11/2005, showing the mix of data collated



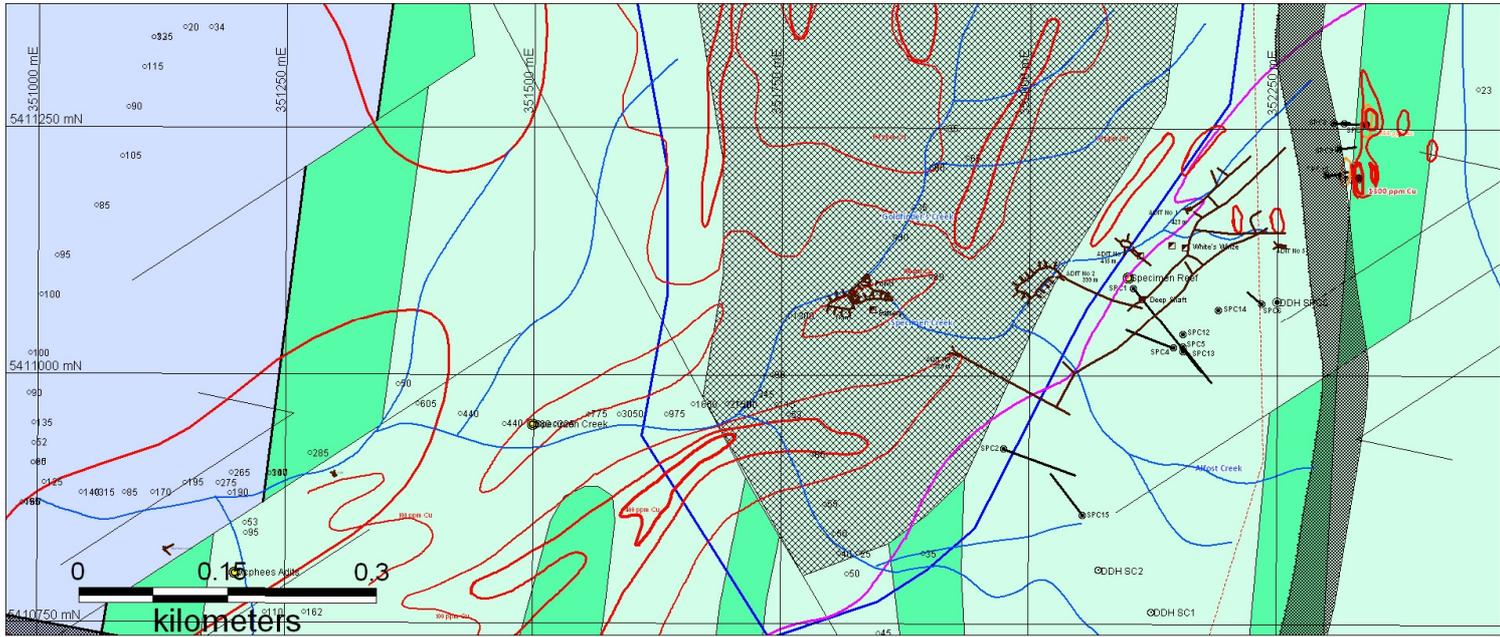
Map 2: the southern part of EL 11/2005 around the Specimen Reef Mine. The blue and red SGC targets are marked “M” for magnetic and “Au” for gold. The grey cross-hatched zones are SGC’s magnetic anomalies. The large red cross-hatched area is a stream sediment sample Au and Zn anomaly defined by Coffey Mining. The purple line is the trace of the Specimen Reef. The red contoured zones are soil sample copper anomalies of 100+, 200+ and 400+ ppm. The lesser orange contours are 100+ ppb Au anomalies. The background is the geology of the Arthur River Complex, undefined in this memorandum. Faults are the black lines. The licence protecting Grange Resources Pipeline Road is the grey crosshatched zone running N to S. Yellow bulls-eyes are historically identified gold occurrences.



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*Map 3: Detail of Specimen Reef Mine and the 17 drillholes. The red contours are 100, 200 and 400 ppm Cu in soils by IMI. The orange contours are 100 ppb Au (in the NE). The purple line is the trace of Specimen Reef. The open circles are stream sediment sample locations which are marked with -80 mesh Zinc assay grades. The blue lines are the creeks. There is a 15 – 20 metre discrepancy between the positions of the stream sediments samples and the mapped creeks.*

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**Appendix 3**

**Proposal for phase 1 drilling to test the Iron Oxide-Copper-Gold -. (Uranium)  
potential of Specimen Reef Tenement EL11/2005**

**Surtees, A M, 2011**

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**Nimrodel Resources Limited**

**Proposal for Phase I Drilling to Test the Iron Oxide Copper Gold + Uranium  
Potential of Specimen Reef Tenement EL 11/2005**

**Introduction**

The results of an interpretation of the Specimen Reef airborne magnetics and radiometrics data by Southern Geoscience Consultants were recently received by Nimrodel Resources Ltd. This proposal considers these results, together with previous geochemical and geological work and proposes the drilling of 5 drillholes to test the IOCG(U) potential of two of the magnetic / geochemical anomalies.

**Work Done and Results Obtained**

Work has been carried out at Specimen Reef since 1882 by various companies, namely:

- 1882 – Specimen Reef Mine was started and subsequently developed on 3 levels. There was also the excavation of the two McPhee Adits and another at Specimen Creek to the west of the mine, as well as some open cutting at Davis Creek to the northwest. Additionally, some excavation was probably done at Comstaff Creek gold occurrence in the northern part of EL11/2005
- 1981-82: Industrial and Mining Investigations Pty Ltd – track construction
- 1982: Industrial and Mining Investigations Pty Ltd – soil sample grid largely on the western side of the Specimen Reef mine. Samples collected here were assayed for Cu, Pb and Zn. There are robust, coincident copper and zinc anomalies.
- 1987: Savage Resources Limited – a soil sampling and geological mapping grid to the north of the Mine with sample analysis for Au, Cu and As. This shows coherent copper anomalies of over 400 ppm (peaking at 4100 ppm Cu) and spotty +100 ppb Au zones (peaking at 1680 ppb Au at Davis Creek). The anomalies trend NNE, apparently following the structural geology. The rocks are chloritic schists, phyllite (graphitic), amphibolitic rocks and some breccia; all lie within the Arthur Metamorphic Complex. The rocks are steeply dipping to vertical.
- 1989: Savage Resources Limited - drilled 15 holes at Specimen Reef Mine. These holes are designated SPC 1 to 15. The first 6 are diamond core holes the last 9 are RC holes. The drillholes were aligned to intersect a variety of targets and the results are not conclusive. The first hole SPC1 intersected a gold bearing vein (other than the one that was mined) with associated brannerite (uranium) mineralization. The gold assay incorporating the vein is 910 ppm Au over 20 cm DW.

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- 1997: Goldstream-Titan (Corinna) JV – drilled 2 holes at Specimen Reef Mine. The holes are designated SC1 and SC2 – they are diamond core holes which were intended to further investigate the gold intersection in SPC1. As such they were aligned to intersect a reef of the same attitude as the mined Specimen Reef – which is not necessarily the case for this subsidiary reef. Hole SC1 intersected 0.5 g/t Au over 2m DW at a position which could be equated to the mined Specimen Reef.
  - 2008: Coffey Mining on behalf of Red Rock Resources did a collation of Stream Sediment sampling results. I do not know who collected the samples. The samples were sieved to various factions and the grade of a comprehensive list of elements was determined, including gold, uranium, arsenic, copper, lead and zinc. This work located 3 anomalous areas.
  - 2011: Southern Geoscience Consultants interpreted the airborne magnetic and radiometric data. SGC isolated various magnetic and gold targets which are circled on the figures below in blue and red respectively. Although they studied the radiometric data, no results of interest were identified.

#### Drilling Proposal Philosophy

The magnetic anomalies are expected to be indicating the presence of magnetite bodies like that mined at Savage River iron ore mine (on the southern border of EL11/2005). In terms of their genesis the magnetite bodies are believed to be within the IOCG(U) continuum of deposit types.

The copper soil anomalies shown on Fig 1, below, seemingly emanate from copper mineralization filling NNE trending structures. This mineralization is thought to be peripheral to the supposed IOGC(U)-type mineralization that we are targeting and it is probably generated from this IOCG(U) system. It thus seems reasonable that this first phase of drilling, herein proposed, should be aimed to drill down into the magnetite body. Additionally, if we were to site the holes on these copper anomalies, added information will be provided.

No modelling of the depth of the magnetite body was done so it is proposed as a first pass to drill down to, say, 250 metres. Phase I can be restricted to one hole, but the more parts of the magnetite body we investigate (edges, middle, etc.) the more chance there is of finding economic mineralization. The mineralization in IOCG's is not homogenous and if the first hole, say, goes into magnetite without associated Cu, Au or U, then the possibilities of finding economic mineralization elsewhere in the magnetite body will not therefore be exhausted.

#### Proposed Drilling

I thus propose the drilling of 3 Reverse Circulation holes into Magnetic Anomaly M-04, shown and numbered in order of completion on Figure 1, below.

To improve our chances I have proposed 2 other RC holes into SGC's Magnetic Anomaly M-02.

To summarise the proposed holes:

HOLE	EASTING (AGD66)	NORTHING (AGD66)	LOCATION DESCRIPTION	DEPTH	DECLI- NATION
DDH1	351786	5411498	NW edge area of Target M-04 on soil anomaly of 565 ppm Cu	250 m	-90°
DDH2	351688	5410934	SW edge of M-04 near fault delineating edge of supposed magnetite body, on +400 ppm Cu anomaly	250 m	-90°
DDH3	351970	5411249	Centre of M-04 on +200 ppm Cu anomaly	250 m	-90°
DDH4	352829	5417962	On edge of Magnetic Target M-02, which has the Comstaff Creek gold occurrence and some elevated (peak is +200 ppb) Au stream sediment grades near Pipeline Road	250 m	-90°
DDH5	352966	5417819	At centre M-02	250 m	-90°

#### Other Work Required

There will no doubt be the need for some road making to allow access for the RC rig. The hire of a bulldozer is necessary for this. This will require permission from MRT and the local forestry protection authorities, as well as Grange Resources, the owners of the Pipeline Road that provides access to the general area.

It is possible that the country is too rugged to allow easy and reasonably priced road construction. In this case a smaller skid-mounted diamond drill rig might need to be used. This could be transported to prepared drill-pads by helicopter.

#### Conclusion

The drilling of these 5 holes, provided they all go into the expected iron oxide (magnetite) body, should either set up a more extensive resource development drilling program, or perhaps put an end to Nimrodel's testing of Specimen Reef for IOCG(U) mineralization.

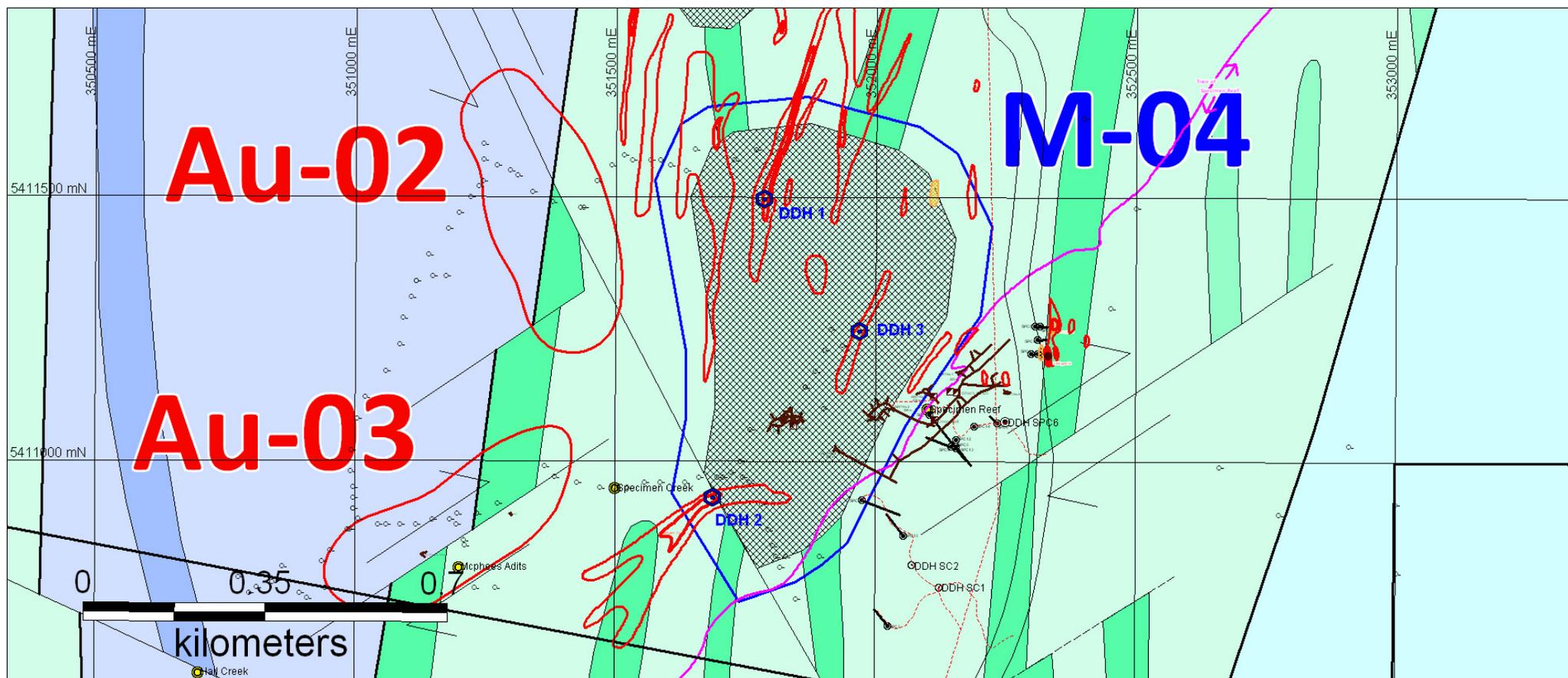


Figure 1: The location of the 3 proposed drill holes (the blue bull's eyes) into SGC's Magnetic Target M-04. The grey cross-hatched area surrounded by the blue line shows the Target. The red contours are copper values in soils showing the +200 ppm and the +400 ppm grades. To the west are SGC's Structural Gold Targets marked Au-02 and 03, not to be confused with the copper in soil contours. The dark brown lines in the east are the drillholes and workings of the Specimen Reef Mine. The purple line through the top of the mine is the trace of the Specimen Reef. Background is the geology of the Arthur Metamorphic Complex.

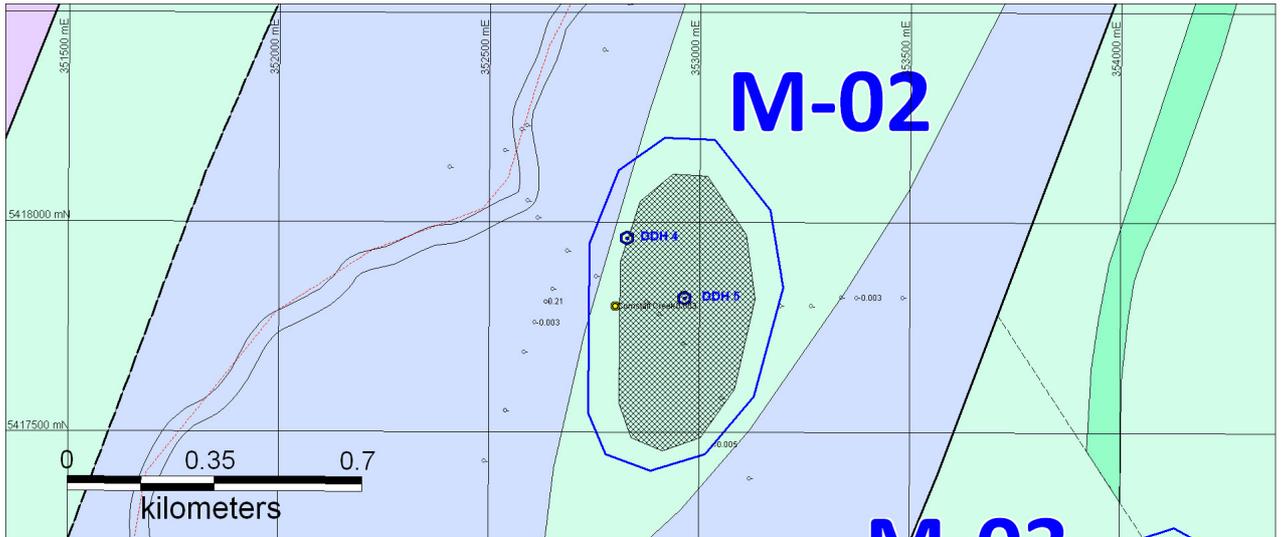


Figure 2: the proposed drillholes (blue bull's eyes) into SGC's Magnetic Target M-02. The small circles are stream sediment samples with the -40 mesh assay grades in ppm. For other description see Figure 1.