



G L E N G A R R Y

EL 21/2003 – YOLANDE RIVER

FINAL REPORT

**For the period
12 July 2003 to 30 June 2005**

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GLENGARRY RESOURCES LIMITED

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SUMMARY

EL 21/2003 was acquired to explore for Cambrian volcanic-hosted gold mineralisation in a structural and stratigraphic setting considered prospective because of its broad similarities with the Henty deposit.

A program of reconnaissance field exploration was undertaken during the two-year term of EL 21/2003.

In Year 1, 15 kilometres of access lines were cut and gridded. An "A" horizon soil survey was conducted on the Yolande South grid which detected weak gold and base metal anomalism centred on the Diamond Hill quartz porphyry and a similar probable intrusive porphyry, 2 km along strike to the north.

A north-south zone including the two porphyries showed evidence of veining, weak alteration and magnetic depletion. Stratigraphically this zone occurs at a break in volcanism near the top of the Yolande River Sequence. It was selected as the main target for Year 2 exploration.

Exploration during Year 2 comprised follow up soil sampling to confirm the weak gold and base metal anomalism detected in Year 1 and better delineate the anomalous zones. A total of 95 "A" horizon soil samples were collected and assayed for gold, arsenic, copper, lead and zinc.

The follow up soil sampling confirmed the previous anomalies at Porphyry, Diamond Hill and at a single point lead-only anomaly on the northernmost line. Two single point gold anomalies on the southern line could not be repeated.

The anomalous values, while elevated, are not considered high enough to reflect near surface, economic gold and/or base metal mineralisation. In view of this, in June 2005, the decision was made by Glengarry to relinquish EL21/2003 without undertaking any further work.

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TENEMENT INFORMATION

Exploration Licence 21/2003 at Yolande River covered 64 square kilometres to the west-northwest of the Mt Lyell mineral field at Queenstown, western Tasmania (Figure 1).

The ground was formerly held by Copper Mines of Tasmania Pty Ltd as EL 27/1995, and was offered for application in early 2003 as Exploration Release Area 586. Glengarry Resources Limited was the successful applicant for this area which was granted to the company as EL 21/2003 for a five-year term from 12 July 2003. Glengarry Resources Limited held 100% equity in EL 21/2003 throughout its term.

A program of reconnaissance field exploration was undertaken during Years 1 and 2 of the licence term. The results did not identify any targets that warranted detailed follow-up work or drilling and in June 2005 Glengarry decided to relinquish EL 21/2003 in its entirety. This final report describes exploration completed during the two-year term of EL 21/2003.

ACCESS & LAND TENURE

All weather two wheel drive vehicular access is restricted to the Zeehan Highway, which traverses diagonally through the EL from the southeast to the central north, and the Lyell Highway in the southeast corner of the EL (Figure 1). Useful four-wheel drive tracks exist in the southeast corner but most of the prospective parts of the EL require foot or helicopter access. Some walking tracks and grid lines were cut by previous explorers in the Yolande River valley and in the Diamond Hill area, and part of the current program involves re-establishing and extending this access. The limited access to the EL interior is in part offset by closeness to Queenstown and its established infrastructure and services. This enables some field activities to continue through the winter.

Apart from several small freehold and leasehold land blocks bordering the highways in the southeast, the EL is essentially Crown Land. Land north of the Yolande River forms part of the Dundas Regional Reserve and therefore field activities in that area are permitted under the Mineral Exploration Working Group (MEWG) process.

Most of the ground is covered by thick regrowth forest dominated by understorey trees, and patches of button grass heathland scrub. Minor narrow ribbons of rainforest confined to river and creek valleys have survived a history of frequent firing across the area.

EXPLORATION PHILOSOPHY & AIMS

Glengarry's primary exploration target at Yolande River was gold in the Mount Read Volcanics. Prospectivity was considered to be enhanced, in particular for a Henty-style deposit, by two aspects of the regional geology and geophysics within the EL (Figures 2a and 2b).

- The group of rhyodacitic and andesitic porphyries and their host tuffaceous volcanoclastics, in the central east of the EL, probably occur near the stratigraphic top of the Yolande River Sequence (Central Volcanic Sequence equivalent in this area). This idea is based partly on an interpretation of the linear magnetic high, located some 2 km west of the porphyries (Figure 2a), being a near-basal Tyndall Group correlate of the Lynchford Tuff (Corbett, 1979, White and McPhie, 1996).
- Three major fault structures converge within the EL (Figure 2b). The southern end of the Henty Fault system and a major fault controlling the position of the Yolande River are truncated by the east-west strike slip Firewood Siding Fault system. Regional mapping on the Mineral Resources Tasmania (MRT) Professor 1:25,000 Sheet indicates that the South Henty and Firewood Siding Faults were active during the Cambrian and therefore by analogy with the Henty deposit, potential exists for mineralisation where the basal Tyndall – upper Yolande River Sequence rocks are cut by these faults.

SUMMARY OF EXPLORATION PRIOR TO EL 21/2003

Despite the fact that the hand dug hard rock and alluvial gold workings at Diamond Hill probably date to circa 1880, prior to the discovery of the Iron Blow at Mt Lyell, and much of the EL is underlain by Mount Read Volcanics, little modern exploration has been conducted.

Three shallow drill holes drilled by the Department of Mines on the Madam Howards barite occurrence in 1962 are the only exploration holes in the EL. Prior to the 2001 Western Tasmanian Regional Minerals Program (WTRMP) airborne geophysical surveys, regional coverage consisted of a 1980 airborne EM survey, several generations of stream sediment surveys and a 1993 aeromagnetic/radiometric survey.

All effective exploration has been conducted since 1971 by four groups - Mt Lyell Mining and Railway Company Ltd/Gold Fields Exploration Pty Ltd, Cyprus Minerals Australia, Pasminco Exploration and Copper Mines of Tasmania Pty Ltd, on five exploration licences, ELs 9/66, 47/71, 11/85, 25/91 and 27/95.

The Mount Lyell Mining and Railway Company Ltd held the area between 1971 and 1983, within EL 47/71 until 1976 and later as part of EL 9/66. Small outcrops of gossan-like ironstone were noted near the junction of the Zeehan and Lyell Highways, where mafic volcanics have subsequently been mapped against the eastern (Pearl Creek) end of the Firewood Siding Fault. Sampling for base metal checks yielded a maximum 340 ppm Cu assay.

In 1973-75 approximately 80 stream sediments were taken within the area later covered by EL 21/2003 and assayed for Cu, Pb, Zn, Co and Ni. A Zn value of 115 ppm in a tributary of Langdon River (Gold Creek) was considered anomalous, with statistically determined anomaly thresholds of 60, 80 and 80 ppm for Cu, Pb and Zn respectively on the volcanics.

A seven-line (6.4 line km) grid was also established over Madam Howards (Figure 2b), and IP and magnetics generated 7 weak plus 1 moderate IP anomalies. It was noted

that the “quartz keratophyre” host rocks were intensely altered to clay. Resistivities ranged from 1000 to 3000 ohm and reportedly showed no correlation with rock type.

The “moderate” IP anomaly gave no soil response and MLMRC concluded that no more work was warranted. The Diamond Hill and Sisters Hills workings were rock chip sampled, detecting one gold in quartz vein value of 2 ppm at Diamond Hill (Figure 2b) and several minor base metal kicks at both sites.

In March 1980 a helicopter Dighem survey was flown over the Henty-Yolande area of EL 9/66, encompassing 344 line km at 150 metre line spacing. The survey picked up 55 weak anomalous responses which were screened to 4 definite and 8 possible geological anomalies. In 1981, John Bishop of Mitre Geophysics reinterpreted the data, concluding that 3 of Dighem’s 12 “geological” anomalies were due to roads but that an additional 5 non-cultural anomalies could be identified and required follow-up work. No record that this recommendation was followed has been located.

Between 1981 and 1983, 379 stream sediment (-80# plus some additional -10#) and 72 rock chip samples were taken from the Henty - Yolande area of EL 9/66 and assayed mainly for base metals, with some samples tested for gold as well. Five anomalous sites were recognised:

- (i) A tributary of Langdon River (Gold Creek), west of Lake Margaret township produced anomalous Zn values in stream sediments (maximum 330 ppm Zn) and a 1.2 ppm Au value in rock chips from sericitic tuffs and black shales. Small alluvial gold workings are present in the area.
- (ii) In Pearl Creek near the Firewood Siding fault, anomalous Cu, Pb and Zn (up to 1050 ppm Cu) were encountered from stream sediments on the Eldon Group Bell Shale.
- (iii) A single value of 1.2 ppm Au from stream sediments in a creek south of the Madam Howards barite prospect.
- (iv) A single 270 ppm Zn value from stream sediments in a tributary of Cliffords Creek which drains the Sisters Hills workings.
- (v) A series of high Cu and Zn values from stream sediments in Truscott Creek close to Zeehan Highway. Further down stream in Truscott Creek, another site recorded 620 ppm Zn in stream sediments.

By 1983 Gold Fields Exploration Ltd were operating EL 9/66 and in a review of previous work, supplemented by some more drainage and rock chip sampling around known workings and anomalies, concluded that only the zinc stream sediment anomaly in Gold Creek and the copper stream sediment anomaly in Pearl Creek deserved follow-up as base metal targets and that the two gold anomalies appear genuine and remain unexplained. The copper anomaly in Pearl Creek was checked and could not be repeated. At that time the Central Volcanic Complex was considered to be the only base metal prospective part of the Mount Read Volcanics and on that basis, combined with the lack of regional base metal encouragement and the notion that any gold was probably in E-W Devonian veins and of small scale, Gold Fields relinquished the ground.

In 1985 the area was included in EL 11/85, operated by Cyprus Minerals Australia Company, a subsidiary of Amoco. Between 1987 and 1989, the Sisters Hills prospect was rock chip sampled and assayed for Au, As, Sb without any scores above level of detection. In 1990 a Joint Venture on EL 11/85 resulted in Pasminco Exploration becoming operator. In 1991 the Henty-Yolande block of EL 11/85 was relinquished, then re-acquired as EL 25/91 by Pasminco and included in the JV with Hudspeth, Norgold and Arimco.

Pasminco developed the idea that Tyndall Group rocks correlating with those associated with mineralisation at Newton Creek-Howards Anomaly, near Henty, may exist at Yolande River. This idea was based on comparing magnetic character between known Tyndall Group outcrop and the results of a 1993 helimag/radiometric survey by Geoterrex Pty Ltd over EL 21/95. The survey was flown at 80 metre nominal sensor height and 200 metre line spacings on an E-W orientation.

The results were interpreted by David Leaman of Leaman Geophysics, concluding that sedimentary units in the west of the EL have low magnetic background and are interbanded with high magnetic tuffs. The magnetic contrast highlights structures, including a major syncline shaped by NE, NW and subordinate E-W structures. A major high magnetic zone within the western-central area was considered to possibly be Tyndall Group.

Pasminco relinquished EL 21/95 in mid 1995 after collating all prior stream sediment survey sites.

In 1996 Copper Mines of Tasmania Pty Ltd acquired the ground as EL 27/95. Reconnaissance prospecting identified middle-upper Tyndall Group volcanics in the west of the area, indicating the potential for a Yolande River Sequence-Tyndall contact to be mapped further east and possibly also to the west if the Tyndall Group rocks are folded in a syncline.

In the Madam Howards area outcropping quartz and barite veins were chip sampled and assayed. No gold was detected although trace amounts of pyrite, galena and fluorite were present in some samples. Core from three Department of Mines drill holes at Madam Howards was also sampled and assayed, with the highest result being MHD1: 225.6 - 230 feet @ 0.12 ppm Au.

A small grid was established over the Diamond Hill quartz-feldspar porphyry gold prospect. 51 surface rock chip samples were taken, with 10 assaying > 1ppm gold and a maximum of 18.3 ppm. B/C horizon soil geochemistry suggests depletion in lead over the porphyry, relative to the adjacent volcanics, however most of Diamond Hill appears to have been ground sluiced and the lack of genuine residual soil may have skewed the results. Patchy soil gold anomalies correlated with old diggings.

A pan concentrate drainage survey over 11 km² between Pearl Creek and Yolande River produced coherent gold anomalies around Diamond Hill and Madam Howards, in marked contrast to an earlier -80# survey. This contrast may reflect gold particle size distribution (Morrison and Griffiths, 1998). A BSc Honours project on the Diamond Hill area included surface and underground mapping and grid based magnetics and soil sampling (Griffiths, 1998). A-horizon soil samples appeared to give a stronger gold response than B/C-horizon samples on Diamond Hill.

During licence year 3 the company developed serious financial problems and work ceased in December 1998. EL 27/95 was relinquished in 2002.

YEAR 1 EXPLORATION RESULTS

Year 1 exploration aims included confirmation of the stratigraphy and testing the target area for evidence of mineralisation by a combination of geology and soil geochemistry.

Data Acquisition and Compilation

Publicly available technical data considered relevant was acquired and compiled to assist Glengarry's exploration at Yolande River. This included aeromagnetic and geological data from the 2001 Western Tasmanian Regional Minerals Program and data from previous CMT exploration reports.

Track Cutting and Gridding

15 km of contract track cutting were completed to provide walking access to the magnetic anomalies north and south of the Yolande River. Lines were pegged at 50 metre non-slope corrected centres and peg positions were surveyed by hand held GPS, during the course of mapping and soil sampling. Where satellite coverage was insufficient due to tree cover (estimated to be about 20-30% of sites), peg positions were estimated and scaled at 1:25,000.

Geology

Geological logging of the three east-west cross lines on the Yolande South grid was undertaken in conjunction with soil sampling (*Appendix 3*). The data show three main units (*Maps 1-5*) which correlate north-south along strike. Recognition of stratigraphic associations was much clearer on the gridlines than in the Yolande River valley, where wrench faulting has dragged the rocks into the strike of the fault. No alteration or mineralisation was observed.

Unit 1 (eastern unit): A dominantly volcanic association of porphyritic andesite, quartz and quartz feldspar porphyry, tuffaceous ash mudstone grading to chert and tuffaceous crystal, pumice, ash sandstone. The andesite shows peperitic textures at its contact with the tuffs in the Yolande Valley, so is probably lava. The acid porphyries are roughly circular in plan, are surrounded by the volcanoclastics and their textures are consistent with intrusions. The volcanoclastics appear to be primary fall and flow deposits with no evidence of subaqueous re-sedimenting. They are characteristically bleached, soft and clayey, suggesting the possibility of argillic alteration. The volcanoclastics extend about 200 metres further west than the acid porphyries, which in turn lie in a belt west of the andesites. Vein quartz is prevalent on the western side of this unit, apparently associated with the intrusives and their host volcanoclastics. This unit extends to the western margin of volcanogenic rocks in the Dundas Trough, in the Yolande area.

Unit 2 (central unit): A dominantly sedimentary volcanoclastic association of interbedded quartz crystal sandstone, felsic wacke, coarse crystal lithic breccia and black slate. The sandstones have a characteristic grey colour due to disseminated flecks of black shale/slate. The unit probably formed in a black shale marine basin with pulses of crystal-rich volcanoclastic mass flow sedimentation eroding the shale. The contact between Units 1 and 2 may interdigitate or be gradational within the tuffaceous

volcaniclastics between the quartz feldspar porphyries and the grey crystal/black shale sandstone, but it is also possible that Unit 2 belongs in the base of the Tyndall Group.

Unit 3 (western unit): A uniform massive to thickly bedded unit of coarse, polymict, juvenile volcaniclastic crystal sandstone composed mainly of plagioclase, pyroxene, quartz and ilmenite, with variable volcanic and sedimentary lithic fragments. The rock is hard and has a characteristic speckled and slightly welded/indurated texture, giving it a prominent outcrop expression. It is easily recognised in the field by its high magnetic response and correlates regionally with the Lynchford Tuff on aeromagnetics. The unit appears to have abrupt eastern and western margins and its crystal composition and stratigraphic position are consistent with a resedimented correlate of the Howards Basalt, which occupies the basal Tyndall Group position in the South Henty area.

Rock Chip Sampling

Thirty rock chip samples were taken from around Madam Howards, Diamond Hill and on the North and South Yolande tracks (*Appendix 1*). The highest gold assay returned 1.4 ppm from outcropping vein quartz on Diamond Hill, however at Madam Howards, heavily oxidised and pitted vein quartz with abundant pyrite and galena returned a disappointing maximum assay of 0.4 ppm Au. Two samples of vein quartz from the Yolande North access track returned weakly anomalous assays of 8 and 10 ppb Au.

Soil Orientation

Following the indication from previous work at Diamond Hill (Griffiths 1998) that "A"-horizon soil may be more sensitive to gold than samples deeper in the profile, a small orientation survey was conducted in the Madam Howards area where pre-Glengarry pan concentrate stream sampling had recorded moderately anomalous results. The results (*Appendix 2*) show consistently higher values for gold, copper and zinc in A-horizon samples. When the added advantage of lower sampling cost for "A"-horizon soils is considered there is a strong case for the method in this locality.

Yolande South Soil Survey

147 "A"-horizon soil samples were taken at 50-metre spacing, along the three east-west lines of the Yolande South grid. Samples were dried, pulped and assayed for gold, arsenic and base metals by SGS/Analabs, Cooee. The results are tabulated in *Appendix 3* and shown on *Figures 3-8*. Weak to moderate gold, arsenic, lead and copper anomalies exist over Diamond Hill and another quartz porphyry body along strike to the north ("Porphyry Prospect"). In contrast to Diamond Hill, which is a prominent topographic high, Porphyry Prospect is a slight depression. The hill at Diamond Hill may be due to the erosion resistance of the outcropping quartz veins and given that the level of soil anomalism is similar over the two porphyries, a north-south trend enclosing these intrusions is prospective for further exploration. The absence of gold on line YS2 correlates with the absence of porphyry, although patchy copper and arsenic highs exist on YS2. The additional single-point gold anomalies further west on line YS3 have not been explained from the rocks exposed.

The Lynchford Tuff is consistently elevated in copper, lead and arsenic, but not gold. A relatively high background base metal concentration would be expected from this rock type, given the probable basaltic contribution to its composition.

No follow up was considered warranted in the Madam Howards area due to limited size potential of the prospective zone.

YEAR 2 EXPLORATION

Exploration during Year 2 comprised follow up soil sampling to confirm the Year 1 results and to better delineate the anomalous zones (Figure 1). A total of 95 “A” horizon samples were collected during Year 2 and assayed for gold, arsenic, copper, lead and zinc by SGS/Analabs near Burnie in north-west Tasmania. Results are tabulated in *Appendix 4* and plotted in *Figures 4 to 8*.

Results

The follow up soil sampling confirmed the previous anomalies at Porphyry, Diamond Hill and at a single point lead-only anomaly on the northern most line. Two single point gold anomalies on the southern line could not be repeated.

The anomalous values, while elevated, are not considered high enough to reflect near surface, economic gold and/or base metal mineralisation. They may however represent leakage from a blind ore body at depth and given the very rich metal endowment of the host Mount Read Volcanics, it was recommended that IP or EM surveys be carried out to detect possible deeper mineralisation.

Due to the likely high cost of exploring at depth, and without any clear targets on which drilling and other activities could be focused, the decision was made in June 2005 to cease exploration and relinquish EL 21/2003.

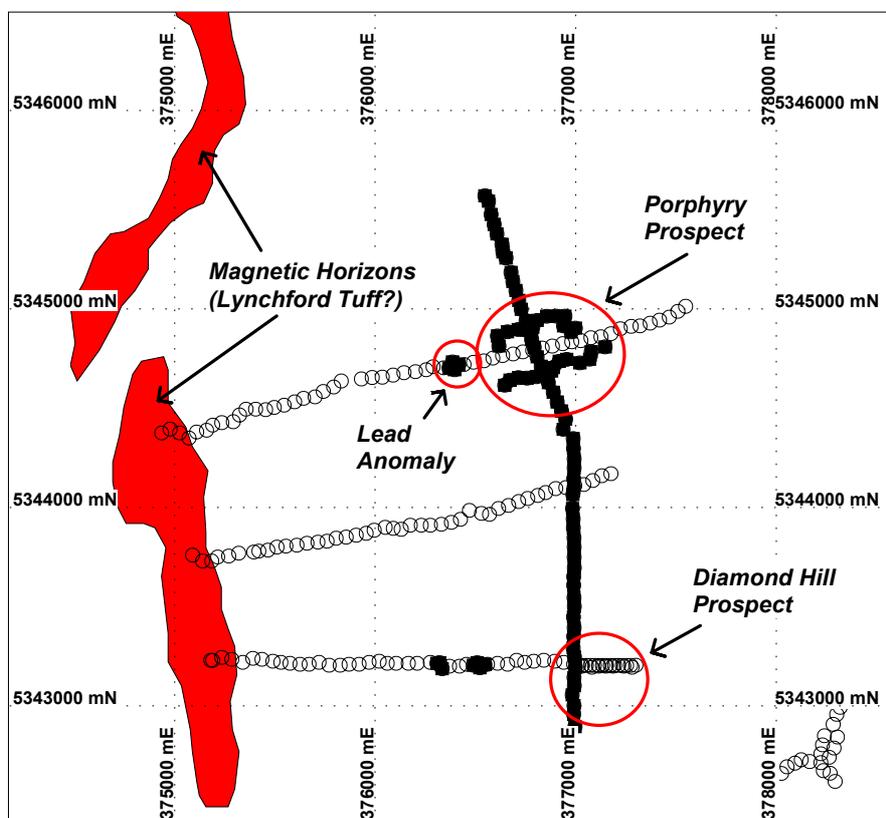


Figure 3: Yolande River Project – Location of 2003 (open circles) and 2004 (closed squares) “A” Horizon soil samples.

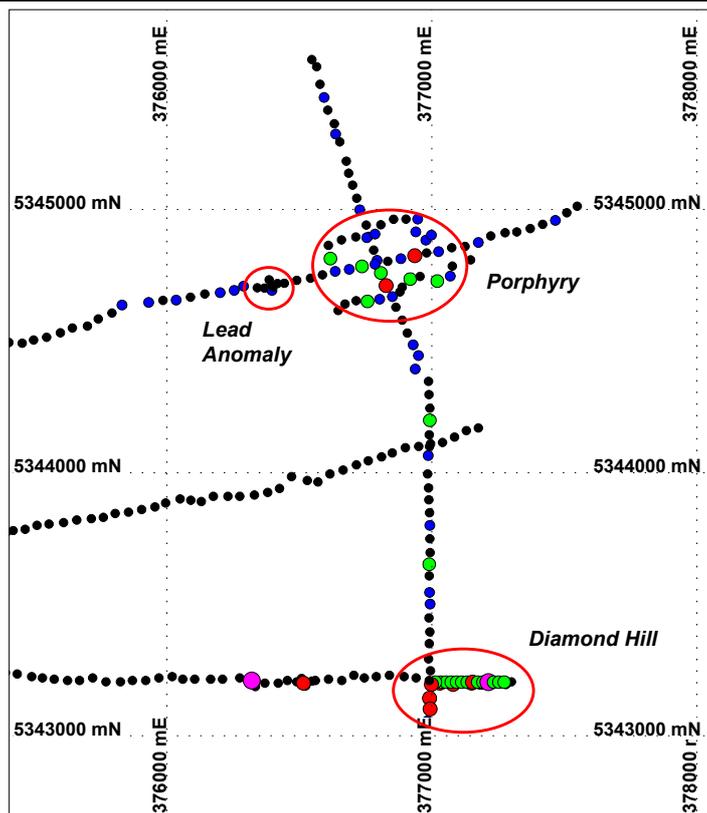


Figure 4: Soil sampling showing gold results (black<1 ppb, blue 1- 5 ppb, green 5 – 10 ppb, red 10 – 50 ppb, purple >50 ppb).

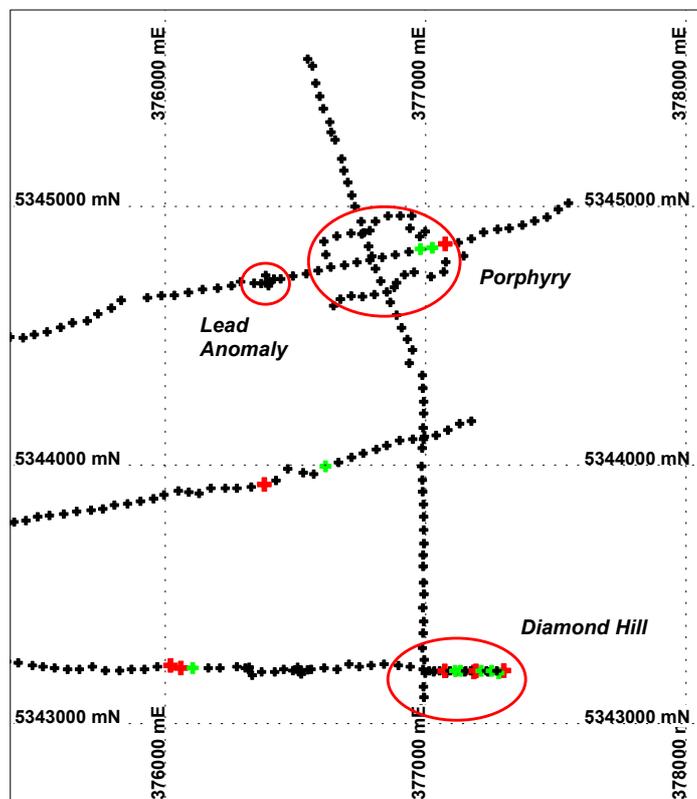


Figure 5: Soil sampling showing arsenic results (black<5 ppm, green 5 – 10 ppm, red >10 ppm).

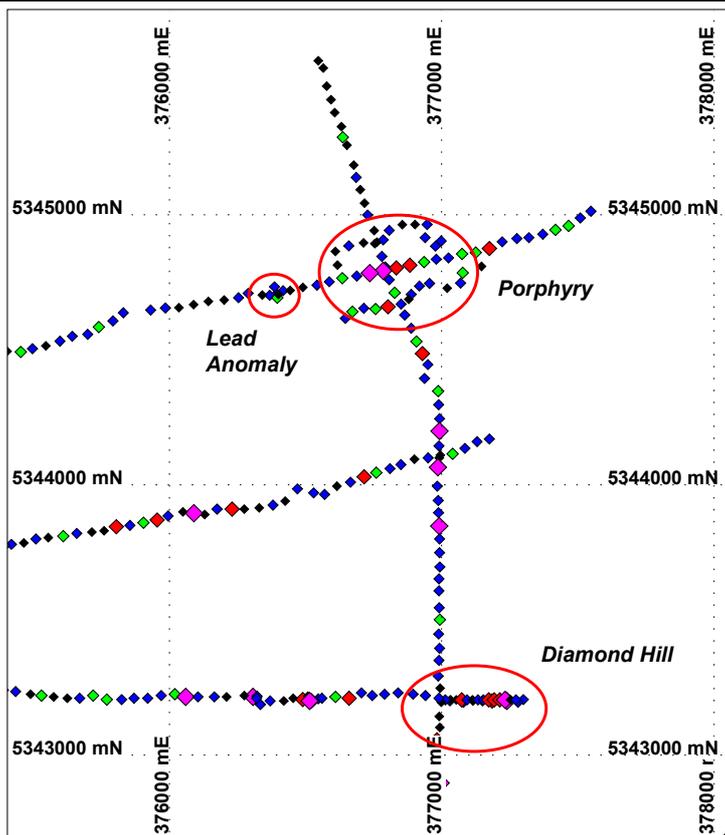


Figure 6: Soil sampling showing copper results (black<25 ppm, blue 25-50 ppm, green 50-75 ppm, red 75-100 ppm, purple >100 ppm).

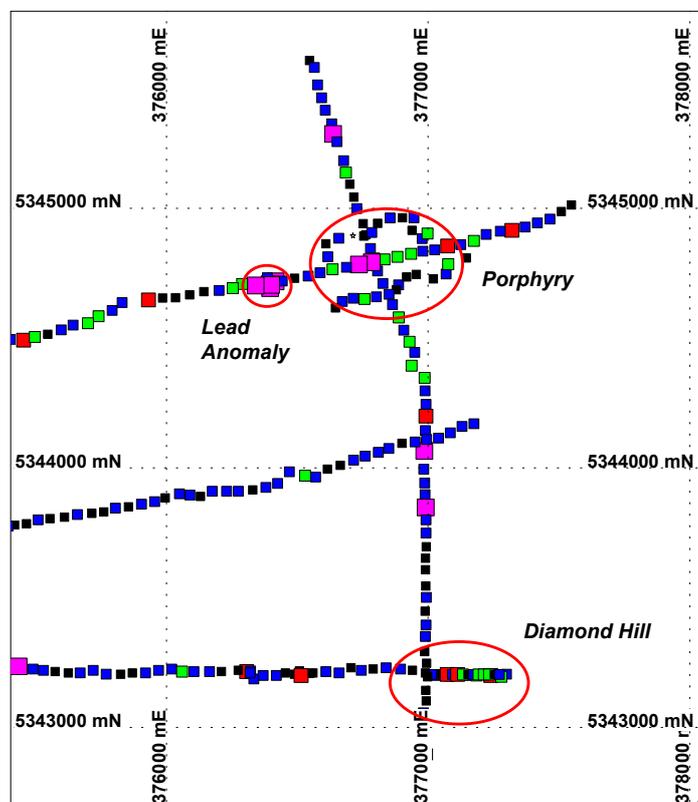


Figure 7: Soil sampling showing lead results (black<25 ppm, blue 25-50 ppm, green 50-75 ppm, red 75-100 ppm, purple >100 ppm).

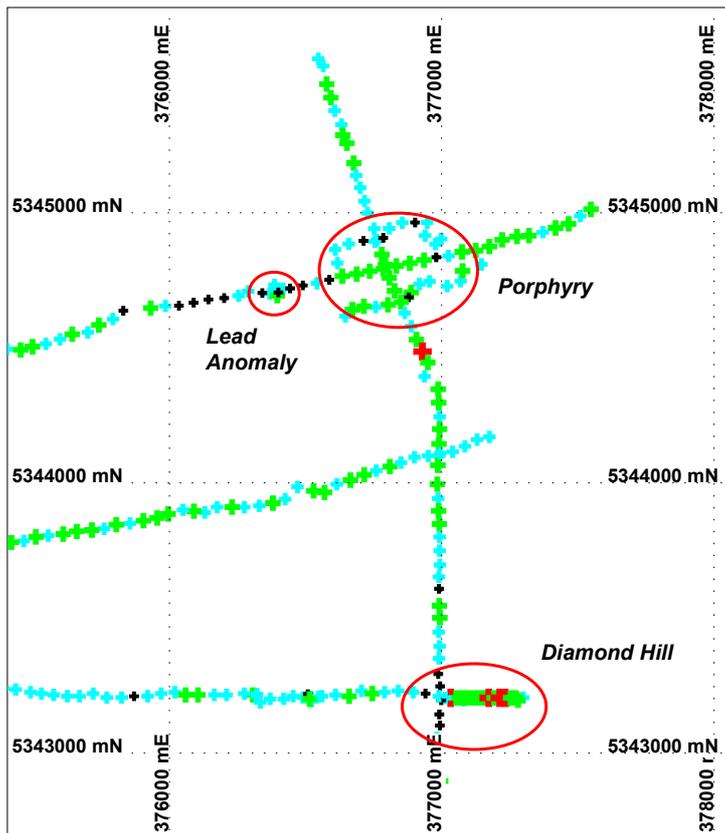


Figure 8: Soil sampling showing zinc results (black <10 ppm, blue 10-20 ppm, green 20-50 ppm, red >50 ppm).

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APPENDIX 1

ROCK CHIP SAMPLING DATA

Digital File: EL21-2003_2005_F_05_Appendix1.txt

APPENDIX 2

SOIL SAMPLING ORIENTATION DATA

MADAM HOWARDS

Digital File: EL21-2003_2005_F_06_Appendix2.txt

APPENDIX 3
SOIL SAMPLING DATA
YEAR 1

Digital File: EL21-2003_2005_F_07_Appendix3.txt

APPENDIX 4
SOIL SAMPLING DATA
YEAR 2

Digital File: EL21-2003_2005_F_08_Appendix4.txt