PLUTON

PLUTON RESOURCES LIMITED

Cethana Project

Combined Annual Report 2013

EL 29/2006

and

EL16/2008

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SUMMARY

This report is the sixth Annual Report for the North Lorinna (Cethana) exploration licence (EL29/2006) and Lorinna exploration licence (EL16/2008) and is submitted in accordance with the Mineral Resources Development Act (1995) by Dove River Pty Ltd a wholly owned subsidiary of Pluton Resources Ltd (Australian Stock Exchange Code: PLV, hereafter Pluton). Pluton also submits the report on behalf of Joint Venture partners Gujarat NRE Minerals (ASX code: GNM), Metalstocks Australia (formerly Southern Ocean Science Pty Ltd) and John McDougall.

Plutons primary focus is to add value to the Cethana Project by demonstrating the potential for large-scale copper-gold mineralisation in close proximity to the Cethana Magnetic Anomaly. The potential for other bulk tonnage mineralisation styles is also being investigated.

For the period 2012-2013, Pluton commissioned an independent desktop review of exploration work completed to date by Pluton including recommendations for exploration at the Project for 2013-2014.

Additional diamond drilling is recommended to test the mineralisation potential of the Southern Chargeability Zone defined by Pluton during a previous IP/resistivity survey. The Southern Chargeability Zone remains open to the south and occurs in close proximity to the interpreted extension of the Bismuth Creek Fault or related splay structure. The Bismuth Creek Fault has acted as a conduit for mineralising fluids elsewhere in the region.

It is Pluton Resources intention to drill proposed diamond drill hole CETD5 (angled at -70° to the south) in the 2013-2014 year of tenure to test the Southern Chargeability Zone.

Approximately $745,144 has been spent on exploration to date with the majority of this on drilling.

No reduction in the current licence area is requested.

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1. INTRODUCTION

Pluton Resources Limited is an Australian Stock Exchange listed mineral exploration company managing and conducting exploration on EL 29/2006 (Cethana) and EL16/2008 (Lorinna) for metallic minerals by way of a wholly owned subsidiary Dove River Pty Ltd on behalf of its Joint Venture partners. Pluton continues to assess the tenement with the primary objective of identifying potential for bulk tonnage copper-gold mineralisation. The tenement is considered attractive for exploration due to similarities in aspects of the geology to porphyry-style copper-gold districts on mainland Australia and possible hybrid porphyry-VHMS systems in Tasmania e.g. Mt Lyell.

2. TENURE

A tenement application (ELA 46/2004) for an area of approximately 15km^2 was made by John McDougall and Southern Ocean Science Pty. Ltd. (SOSM) in 2004. The licence application was subsequently Joint Ventured with Gujurat NRE Minerals (Gujurat). A new application (a Joint Venture between Gujurat and SOSM) over a portion of this area was then approved as EL 29/2006 (9 km^2) on the 4th April 2007.

EL29/2006 was then partnered with an earn-in period for Pluton Resources (Pluton). Pluton has acquired 60% of the Project through drilling and field based sample collection and geophysics with Gujurat contributing 33.3% and Pluton contributing 66.6% subsequent to the earn-in date. SOSM hold a free carried interest of 10% to Bankable Feasibility.

The exploration licence is located within the Mt Read Strategic Prospectivity Zone. This provides for security of exploration tenure by way of compensation of reasonable cost of work conducted (or resource defined) if a change in the tenement's land status results in the licence being revoked.

The Lorinna licence EL16/2008 has been granted and covers the area previously applied for to the south of the current licence. The licence covers private land and is held in the same 60/30/10 proportion as the original licence. EL16/2008 Lorinna has been granted "Joint Project" status by Mineral Resources Tasmania (MRT) and allows sharing of expenditure and combined reporting commitments.

3. LOCATION AND LAND CLASSIFICATION

The licences are located approximately 15km south of the township of Sheffield (pop approximately 1000) and approximately 60km south west from the port facilities at Devonport **(Figure 1)**. The licence land classification consists of State Forest, Informal Reserves, Regional Reserve and lakeside Hydro Tasmania land. The Cethana tenement is situated adjacent to Lake Cethana (a Hydro-Electric lake).

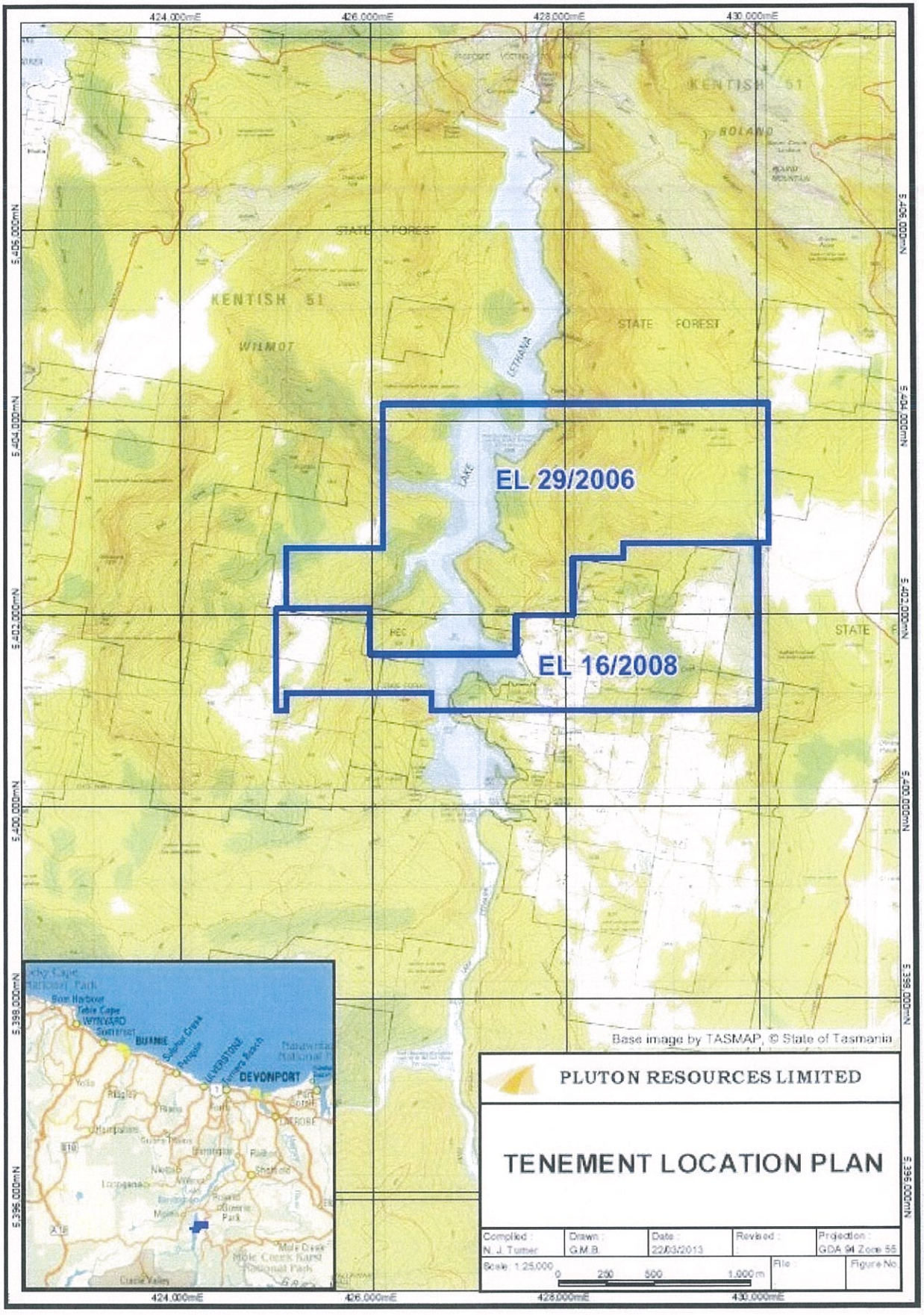

Figure 1: **Location of EL29/2006 and EL16/2008**

4. TOPOGRAPHY

The topography of the licence is variable with a relatively flat area in the centre of the tenement and Lake Cethana covering the incised topography of the hydro dam flooded Forth River. Topographic contours range from 230m at the edge of the lake to 680m on Oliver's Hill. The slopes above the Lorinna Road are steep with areas below and to the west of the road being mostly moderately steep.

5. VEGETATION AND SOIL

Vegetation within the tenement comprises wet and dry eucalypt forest typically dominated by Eucalyptus Viminalis, Obliqua and Amygdalina spp. On wetter south facing slopes and near river banks, there is " dogwood" scrub and Acacia Dealbata forest. Rainforest is occasionally developed adjacent to creeks. Undergrowth is dependent on how dry the site is, but typically consists of spiky heath or ferns.

A thin soil profile (<1m) is generally developed throughout the major rock units in the tenement with outcropping bedrock generally restricted to steep slopes, road cuttings, ridge tops, cliffs and creek/river beds. A deeper soil profile is developed over Tertiary basalts and Tertiary sediments. A talus is commonly developed over the Ordovician Sandstone and a coarse talus is commonly developed over Cambrian Volcanics.

6. ACCESS

Access to the tenement is via Lemonthyme Road (C139) and then an unsealed road locally known as the River Road. Internal access within the licences is via Old Lorinna Road, formed roads (e.g. Wilks' Road) and four wheel driveable fire breaks and tracks. Previous access to the north of Lorinna has been closed by the Kentish Council due to safety concerns with sections of the road north of the licence boundary. Considerable negotiation was required to gain access to the CETD4 drill site north of the gate defining the closed section of Lorinna Rd.

7. GEOLOGY

EL 29/2006 (Cethana) and EL16/2008 (Lorinna) are contained within the northern portion of the c500Ma Cambrian Mt Read Volcanics (MRV). The MRV comprises mainly acid and lesser mafic volcanics and associated intrusive rocks. The MRV unconformably overlies Proterozoic metasedimentary rocks and, is itself unconformably overlain by Cambro-Ordovician siliciclastics and limestones. Rocks to the north of the licence are intruded by the Devonian Dolcoath Granite and there is in part a variable veneer of Tertiary basalt, sedimentary rocks and sediment.

The Mt Read Volcanic belt is highly mineralised. It contains numerous and some very large polymetallic VHMS-style deposits (e.g. Hellyer, Que River, Rosebery) and volcanogenic porphyry-VHMS hybrid copper-gold deposits (e.g. Mt Lyell, Henty).

A description of the known lithologies and observed variations within the licence and potential correlations is summarised below.

7.1. Cambrian Volcanics

The Cambrian Volcanics within the licence area have not been assigned a formal correlation with the Mt Read Volcanic stratigraphy. It has been inferred they should be grouped with the Eastern Quartz Phyric Sequence (Corbett, 2003) or the Tyndall Group (Herrmann, 1989 in Fleming and Castro, 1989). More recent work by Pluton suggests that correlation with any one part of the MRV may be simplistic.

7.2. Mixed Volcanic and Volcaniclastic Rocks

A quartz-rich volcano-sedimentary sequence was mapped within the tenement as Lorinna Greywacke on regional maps by Jennings (1963). This sequence comprises angular, clast rich, poorly sorted sandstone, pumecious sandstone, and quartz rich volcaniclastic sandstones. Fine "grain flow" greywackes and possible volcanics of near identical composition to the quartz rich volcaniclastics were observed in the drill core on the adjacent Dove River licence (licence held by Pluton).

A second sequence was mapped as Bull Creek Volcanics and Burns (1960) subdivided the Bull Creek Volcanics into the Upper Porphyry, Geales Bridge Member and Lower Porphyry Member. Reid (1963) agreed with these subdivisions. The Bull Creek Volcanics are likely to be the main unit encountered in drilling and within the licence. The sequence has superficial similarities to the Tyndall Group. The porphyry units mentioned are almost certainly quartz rich volcaniclastics or quartz phyric lavas.

7.3. Mixed Volcanic and Volcaniclastic Rocks

Although the Dove Granite is not known to outcrop in the licence area it is of regional significance. The Dove Granite is regionally mapped as three occurrences, one in each of the Mersey, Forth and

Dove valleys. Montgomery (1893) remarked on the similarity between granite at Gads Hill with Devonian Dolcoath Granite located north of the licence. In contrast, on visiting the Five Mile Rise Goldfield, Twelvetrees (1913) concluded that the granite showed greater affinity with other Cambrian age granites of the West Coast. In producing the last geological map and explanatory notes of the area, Jennings (1963) described a relationship of granite intruding what he thought to be Ordovician rocks. He concluded the following:

> *"The Dove Granite was Devonian. Radiometric K-Ar and Rb-Sr ages determined by McDougall and Leggo, (1965) firmly suggested the Dove Granite is Cambrian, albeit with some outlying Ordovician ages that were attributed to argon loss. Unfortunately, Jennings interpretation persists in citation through much of the literature and company reports until the 1980's".*

The reality is that few workers completed little if any work on the Dove Granite. Pluton is the first Company to systematically map and sample the granite to the south of the current licence, mainly to determine if the Dove Granite is of the right composition to produce copper-gold style porphyry deposits. The presence of this granite may provide a potential "parent rock" for porphyry style mineralisation within the tenement.

7.4. Dolcoath Granite

The Dolcoath Granite is not known to outcrop in the licence area. Gravity modelling completed by Leaman and Richardson (2003) indicates that the Dolcaoth Granite is at a shallow depth of approximately 1km beneath the Cethana Magnetic Anomaly. The Dolcoath Granite is a mineralising granite with deposits of Sn, W, F, Fe, Au, Mo-Sb-Bi-Cu and Ag-Pb-Zn occurring around the eastern, northern and western margins of the granite. These deposits are considered to be genetically related to the granite.

7.5. Owen Group

Conglomerate and sandstone sequences are regionally unconformable on Middle Cambrian volcanic rocks. However, no true conglomerates occur at the base of the Ordovician on the licence. At Cethana, the Ordovician rocks observed in drill core are bioturbated coarse to pebbly sandstones. The sequence has been identified by several previous workers as Moina Sandstone. The sandstone dips gently (15-20 degrees) to the south forming a veneer over the Cambrian stratigraphy and is likely to be unconformable on the volcanics.

Several kilometres northeast of the licence, the Moina Sandstone is underlain by thick sequences of Roland Conglomerate. The absence of the conglomerate units on the licence may indicate extensional conditions in the late Cambrian. The structures controlling this facies variation may be coincident with west-northwest-trending aeromagnetic linears including the main structural trend of the Cethana Anomaly.

Gordon Limestone conformably and gradationally overlies the Moina Sandstone just south of the

licence near Lorinna. Both this and the Moina Sandstone were faulted during the Devonian Tabberabberan Orogeny.

7.6. Tertiary Basalt

The Tertiary Basalt at the Cethana Prospect has been identified through regional mapping and on the current grid. Herrmann in Fleming and Castro (1989) estimated Tertiary Basalt flows over much of the region to be only a few tens of metres thick. This appears to be true of the thin basaltic soils in the south of the grid and would be confirmed should drilling occur in this location.

7.7. Tertiary Sediments

Tertiary sediments resembling fine lake sediments were encountered to 45m depth in CETD2. Similar sub-basaltic sediments were encountered in drilling south of the licence at the Powerful Prospect suggesting a Tertiary age.

8. PREVIOUS EXPLORATION

In 1859, James Smith discovered gold in the Forth River at "Golden Point" located north of the later developed Campbell's Reward Mine (Twelvetrees 1913). Campbell's Reward was discovered by the Campbell Brothers and opened in 1882. The discovery was prospected for several years by the brothers and by 1887 the lease was held by John H Glover according to lease documents. In 1890, the Campbell's Reward Company was formed and took over the leases from Glover.

Twelvetrees (1913) described Campbell's Reward as being located on the "new road to Lorinna on the eastern bank of the Forth River" (now referred to as the Old Lorinna Road in this report) however the workings were abandoned at this time. The Campbell's Reward workings are mentioned in a number of government reports but their isolation meant that they were rarely visited and never described in any geological detail.

The mine was used to float a company in circa 1890, however this venture appears to have lasted only a few years. The gold was reported to be in free and barbed wire form occurring within a kaolin vein which widened out into a 30-38cm barren vein. The vein was rich in silver and this made it difficult to market the ore (description by A. Campbell to Twelvetrees 1913).

In 1963, the adit accessing the workings (described as being just below the old Lorinna Rd) had been cleared and although in poor condition was accessible to 73m beyond which there was fallen ground. Veins similar to those described from the main lode were present up to the 73m mark.

8.1. Mt Lyell (1965-1971)

Modern exploration began in 1966-67 when the area was examined by the Mt Lyell Mining and Railway Company Ltd as part of exploration for base metal or tin mineralisation within EL8/65.

The Mt Lyell Co. undertook an aeromagnetic survey and a regional -80# stream sediment survey for tin, copper and zinc (Reid, 1967). A close association between zinc and copper was noted regionally however individual results were considered doubtful with known anomalous areas not all registering on the survey. Reid (1967) concluded that there could be real interest in the copper and zinc anomalies if it could be confirmed (by resampling) that the tenor of mineralisation at known localities such as Round Mount were not being identified.

Several areas were recommended for follow up stream sediments including the anomalous copper (22ppm) stream sediment anomaly found to be coincident with anomalous zinc (150ppm). This sample was taken from the small creek draining the western end of the Cethana aeromagnetic anomaly.

Particular anomalies were followed up by more detailed exploration consisting of soil geochemistry and geological mapping on grids and reconnaissance geophysical surveys with VHEM equipment and a magnetometer (Foster 1969).

The magnetic anomaly at Cethana was first identified by the Mt Lyell Mining and Railway Co as "Anomaly 24" with a NW-SE trending feature identified on an east-west ¼ mile spaced survey. Anomaly 24 had an intensity of 1400 gammas, the highest amplitude anomaly in the whole survey area.

The Anomaly was originally interpreted as being 200-500 feet below surface with a dip of 86 degrees to the south, 500-1200 feet in width and a susceptibility of 12000x 10-6 and 14000x10-6 cgs units. By comparison with the anomaly at Savage River (127000x10-6 cgs units) the susceptibility of Anomaly 24 was attributed to 5-6% magnetite by volume and 10% by weight (Zarzavatjian, 1966). The anomaly was believed to be located within the Bull Creek Volcanics below Ordovician cover (Reid 1967).

A ground magnetics survey was recommended by Webb (1968) after discussion with K O Reid. Webb noted that the Cethana Anomaly "lies at the junction of a WNW-ESE trend with a N-S trend and therefore has a good structural position for mineralisation". Webb also noted the proximity of Campbell's Reward Mine to the Anomaly.

Ground magnetics were conducted over Anomaly 24/Anomaly A (the Cethana Anomaly) in 1967-1968. Peak magnetism was found to be associated with north dipping sheared quartz-magnetite-chlorite schist on the southern side of the main Cethana aeromagnetic anomaly. The results of rock chip samples collected from the schist were not reported, but did not reveal any significant economic concentrations of elements. In contrast, a small number of soil samples collected on the southern flank of the anomaly revealed cobalt anomalism of 380ppm, as well as lesser zinc and copper anomalism (circa 100ppm).

Mt Lyell Co. geologists were uncertain as to whether cobalt anomalism was due to the Tertiary basalt. However, the geochemistry of sixteen Tertiary basalts from the region (provided courtesy of John Everard, Mineral Resources Tasmania) showed an average Co content of 50ppm, with a standard deviation of only 7ppm. If the residual soil value of ~400ppm is derived from the basalt then it is highly unusual.

Reid (1967) also recognised that there were two ages of granite and therefore a possibility of two phases of mineralisation. The possibility of Cambrian mineralisation being remobilised in the Devonian was not precluded.

Part of EL8/65 was relinquished in 1971 (~ 35km^2). However the part containing the current exploration licence was kept due to the sheared and pyritic nature of the Bull Creek Volcanics in the zone adjacent to the Bismuth Creek Fault which had similar lithological characteristics to the Mt Lyell sulphide deposits and similar age host rocks. The Bull Creek Volcanics in this zone were considered to represent a worthwhile target (McKibben, 1971). Later in the 1970's, they concluded the probability of locating an economically viable deposit of their target type was low and relinquished the whole licence.

As a result of their investigations, the Mt Lyell geologists recommended more detailed soil sampling

(including gold) and two drill holes. However, subsequent exploration focused on other areas. This coupled with a disastrous loss of base camp due to flooding of the Iris River saw work on the Cethana Anomaly never completed and the ground was finally relinquished.

8.2. Comalco (1974 to 1980)

In 1974, the Cethana Anomaly was included within Exploration Licence 7/74, held by Comalco. Like EL8/65, EL7/74 included large tracts of land and included deposits located north of the outcropping Dolcoath Granite. Comalco's exploration was primarily focused on locating extensions to fluorite mineralisation previously found at Moina (TCR's 78-1305 A-D78-1306, 78-1389). The fluorite was to be used in Comalco's aluminium smelters. Most reports up until 1980 deal almost exclusively with exploration in the Moina area.

Like the Mt Lyell Company, Comalco embarked on a regional stream sediment program in the mid 1970's (TCR80-1416). However, unlike Mt Lyell, Comalco used -20# (mesh) in the belief that -80# would not yield enough fine material in the steep terrane.

Freeport had already run tests a year or so earlier in areas south of EL46/2004 (TCR73-977) and had shown that sampling using -40# underestimated results using -80# by 60% to 85%. Comalco ultimately switched to using more conventional -80# sampling when areas of known mineralisation failed to show up in -20# mesh data.

Streams north and south of the Cethana Anomaly were sampled using only -20#. Like the Mt Lyell Company, Comalco did not include the small seasonal streams draining the Cethana Anomaly. Comalco's -20# results show only very weak zinc anomalism (circa 85ppm) and moderate fluorine anomalism (500-1300ppm) in the vicinity of the Cethana Anomaly.

Comalco went on to explore the Cethana Anomaly further. Unlike the Mt Lyell Company, Comalco assumed that magnetite associated with the Cethana Anomaly was of Devonian age. This exploration model appealed because a Devonian deposit was more likely to yield a fluorine-rich 'wrigglite' skarn, similar to that hosted by Ordovician rocks at Moina. A program of gridding, ground magnetics, geological mapping and soil sampling (Pb, Zn, Cu, Co) was undertaken over the Cethana Anomaly.

Samples of quartz-veined scree, typical of the Ordovician sandstone, were barren. The geologists did note Cu and Pb anomalism in Cambrian rocks overlying the Cethana Anomaly but concluded that these results reflected elevated background values. Given the proximity to Campbell's Reward, it was recommended that the area be sampled for gold but was not completed.

8.3. Shell (1980-1985)

EL7/74 was transferred to a Joint Venture to the Shell Company of Australia in early 1980 (Smyth,

1981). Like Comalco, Shell considered its focus to be Devonian mineralisation associated with the wrigglite/pyrrhotite/sphalerite skarns in the Shepherd & Murphy Mine (Moina), and a possible low-grade Sn-Au zone in the Tin Spur area.

Shell reviewed Comalco's exploration of the Cethana Anomaly (now renamed Lorinna North). They conducted their own regional aeromagnetic survey and noted that measured magnetic susceptibilities in surface rocks at Cethana did not account for the intensity of the aeromagnetic anomaly at Cethana.

A 144m length percussion hole (PD1) was drilled in the approximate centre of the Anomaly but away from previously detected geochemical anomalism and distal to the Campbell's Reward Mine.

PD1 passed through 58m of interpreted Tertiary cover before intersecting weak metal anomalism in Cambrian magnetite-altered volcanics. The hole was assayed every 2m through cover but only once every 10m in the mineralised volcanic. The hole suffered from water problems and sample dilution. Although only mildly anomalous in copper (the log showing up to 280ppm Cu and 290ppm Zn), the results were under-reported as being a maximum of only 105ppm Cu. Gold was not assayed.

Susceptibilities measured from drill chips were believed at the time to explain the anomaly as being a magnetite-altered andesite. No attempt was made to determine the cause of the alteration.

Shell also noted that the Comalco grid was not centred on the Anomaly but was biased south of the Anomaly and into areas of Ordovician and Tertiary cover. This may have been due to the poor registration of the aeromagnetic anomaly noted in the 1960's geophysical data. Instead of collecting new samples, Shell re-assayed soil samples previously collected by Comalco, but this time for Sn, W, As, and Bi. They did not explore the possibility of extensions to Pb and Cu anomalism Comalco had previously identified in Cambrian rocks along the western edges of their grid.

Shell assumed a Devonian age for mineralisation, consistent with the age of mineralisation in their main areas of focus around Moina. Unlike Moina, they found no appreciable mineralisation at Cethana.

Shell re-submitted two lines of Comalco soil samples for gold assay. PD1 had already shown that Cu-Zn anomalism extended no more than a few meters into overlying Tertiary cover. Only six of the thirty-nine soil samples resubmitted for Au were from soils overlying Cambrian rocks. The balance is from areas of thick Ordovician or Tertiary cover. None of the samples were from areas previously showing copper or lead anomalism or from the vicinity of the Campbell's Reward Goldmine. All the samples were up hill and/or in separate catchments to sites previously showing metal anomalism. All samples returned <50ppb Au, which by regional today is now considered anomalous.

8.4. CRAE (1985-1988)

In 1985, CRAE became managers of EL7/74 in a three-way Joint Venture with the Commonwealth

Aluminium Corporation and Shell. CRAE completed a widely spaced reconnaissance stream sediment survey (TCR86-2554). The only sample collected from the vicinity of the Cethana Anomaly was upstream of the Lorinna Road, located both up-stream and east of the Cethana Anomaly.

In 1986-1987 CRAE reprocessed and reinterpreted Shell's aeromagnetic data (TCR87-2700) and highlighted the Cethana Anomaly although this time it was referred to as Anomaly 36. It was noted to be the largest anomaly within the region and the association was made between the Anomaly and the Campbell's Reward Goldmine.

CRAE interpreted the Anomaly as representing a basic volcanic with high magnetite content. This interpretation made no reference to the earlier work already identifying the rock as variously being rhyolitic, dacitic and andesitic. It also did not consider that the magnitude of the Anomaly exceeded that easily explained by most basic Cambrian volcanic rocks known from the Mt Read Volcanic Belt.

Exploration licence EL7/74 was subsequently dropped, with the Joint Venture maintaining tenure over the Moina fluorite deposit via Retention Licence (RL10/1988).

8.5. RGC (1988-1990)

The Cethana Anomaly was included in EL8/88, held by RGC (TCR89-3038). RGC also undertook reconnaissance stream sediment sampling, collecting both -200# and panned concentrate samples from eighty-four locations. In contrast to CRAE, RGC collected two samples from the streams north of and below the Cethana Anomaly. One -200# sample proved weakly anomalous in Au (15ppb) relative to surrounding areas (<5ppb), whereas the panned concentrate returned a significantly higher value of 135ppb Au.

Importantly, CRAE's sample from above the Lorinna Road returned only 0.1ppb Au (TCR86-2554). The anomalous samples from RGC, therefore, could only have originated from the Cethana Anomaly.

RGC also embarked on two re-interpretations of regional geophysical data previously collected by Shell and a more recent survey over the area by the Mines Department (TCR89-3038 and 90-3163). This was the first time that the Cethana Anomaly was recognised as associated with one of two regional-scale north-northwest trending magnetic linears.

RGC did not conduct any further work in the vicinity of the Cethana Anomaly. RGC concentrated subsequent exploration efforts in Ordovician rocks in the Five Mile Rise and Round Hill areas. The soil results for Cu in the Round Hill area were significantly less than that that had already been identified at Cethana by Comalco. RGC relinquished most of its interest in the Moina and Cethana areas in 1990.

8.6. Mineral Resources Tasmania

8.6.1. Magnetics

As part of the Western Tasmanian Regional Minerals Program (WTRMP) of 2000-2002, Mineral Resources Tasmania (a Tasmanian Government agency) collected airborne magnetic, radiometric and electromagnetic data over much of the western and northern areas of Tasmania. The survey provided good definition of the Cethana Magnetic Anomaly having a peak value of 2100nT that measures approximately 2km x 1km in size and is elongated in a WNW-ESE direction (Morrison et al, 2003).

The Anomaly is located approximately 2 to 3km south of the Devonian-Carboniferous Dolcoath Granite and is a mineralising granite. Deposits of Sn, W, F, Fe, Au, Mo-Sb-Bi-Cu and Ag-Pb-Zn that occur around the eastern, northern and western margins of the granite are considered to be genetically related to the granite. West of the granite in the vicinity of Moina, the Bismuth Creek Fault appears to have been a conduit for the mineralising fluids that formed some of the deposits. The Bismuth Creek Fault extends SSE to Lake Cethana where either it or a splay from it may have played a part in the genesis of the Cethana Magnetic Anomaly **(Figure 2)**.

8.6.2. Gravity

Leaman and Richardson (2003) applied residual gravity data to determine the subsurface form of the main Devonian-Carboniferous granite intrusions in Tasmania. The gravity modelling indicates that the Dolcaoth Granite is at a shallow depth of approximately 1km beneath the Cethana Magnetic Anomaly. Seismic reflection results enhanced the gravity interpretation and led Leaman and Richardson (2003) to conclude that the form of the Dolcoath Granite east of 405,000mE and along its southern face is well defined.

Leaman and Richardson results for the Dolcoath Granite are combined with the regional geology and mineral prospects in the Cethana tenement and are given in **Figure 3**.

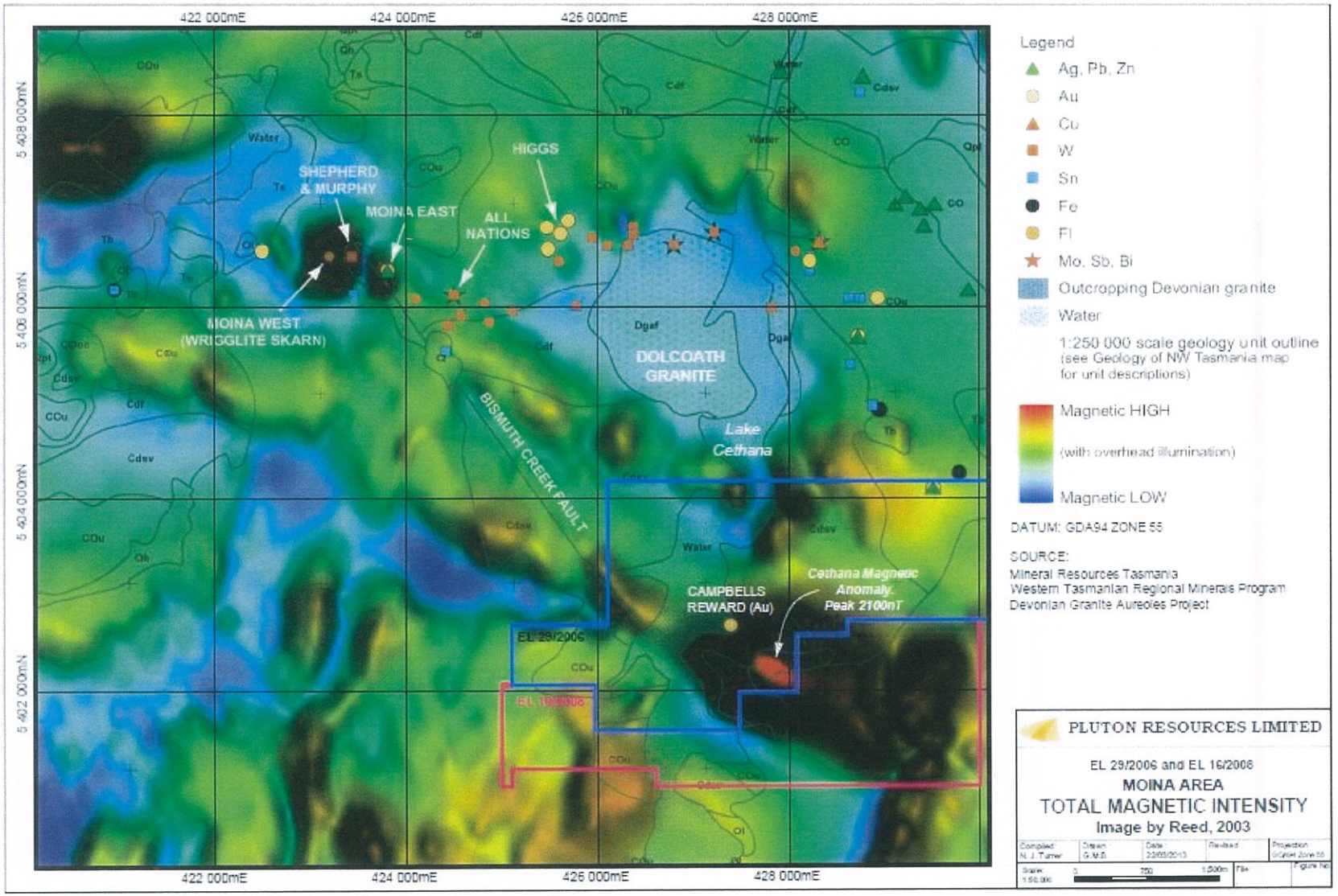

Figure 2: Cethana Magnetic Anomaly, Dolcoath Granite and Mineral Deposits

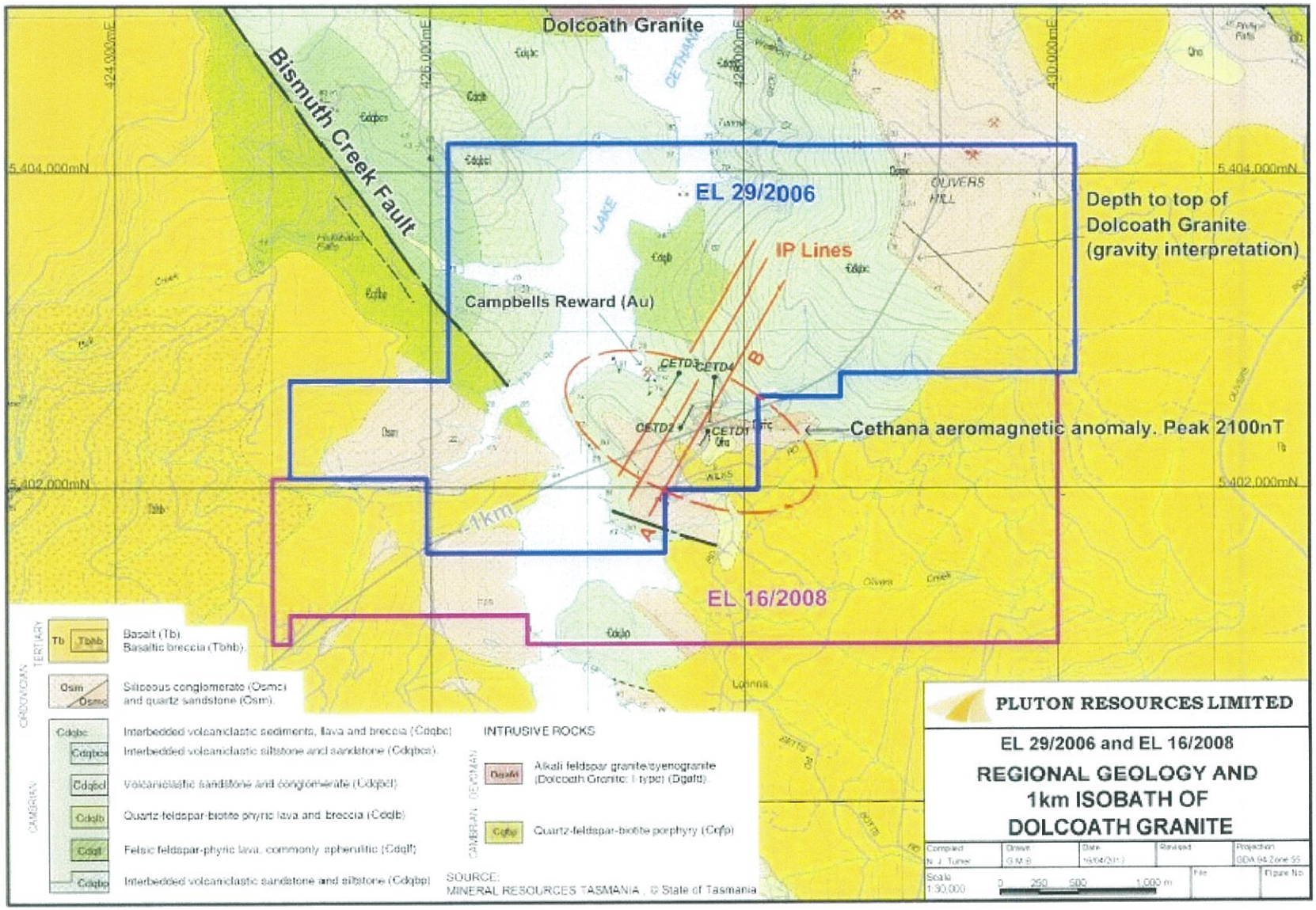

Figure 3: **Regional Geology and 1km Isobath of Dolcoath Granite**

8.7. Exploration by Pluton Resources Ltd 2008-2012

8.7.1. Geophysical Surveys

Three lines at a nominal spacing of 150 metres were IP/resistivity surveyed in February 2008 by Planetary Geophysics at the Cethana Project. Two zones of elevated chargeability were identified on all three lines.

Modelling of the northern zone indicates a source that dips steeply north. The southern zone is less well defined since it has not been closed off to the south and may not be possible due to the proximity of Lake Cethana. Each zone has a generally north westerly strike similar to the strike of the Bismuth Creek Fault.

8.7.2. Diamond Drilling

Four diamond drill holes for a total advance 1929.2m have been drilled in the vicinity of the Cethana Magnetic Anomaly.

Drill hole CETD1 targeted the peak of the magnetic anomaly and intersected Cambrian rocks from 50.9m to the end of the hole at 600.9m. Scattered intervals of high magnetic susceptibility were encountered throughout CETD1 with chlorite-magnetite alteration and magnetite veining becoming continuous from 443.4m to the end of the hole at 600.9m. Spotted hornfels were intersected in the lower part of the hole and garnet is present at 528m. Scattered intervals of very low grade copper-gold-silver were encountered from 213m to 562m with chalcopyrite usually occurring in veins and commonly with magnetite.

Drill holes CETD2, CETD3 and CETD4 specifically target the northern chargeability zone with CETD2 making a good intersection with the two dimensional chargeability model. Substantial intervals of high magnetic susceptibility were encountered in CETD2 that reflect both the veined and disseminated magnetite. CETD3 mostly intersected rocks with low magnetic susceptibility with higher values only appearing near the base of the hole where magnetite bearing veins occur. Garnetiferous skarn occurs near the bottom of the hole from 307m to 341m depth.

Drill hole CETD4 is similar to CETD3 in that magnetite was logged towards the base of the hole. Extensive magnetite bearing, garnetiferous skarn is developed from 435m to 622.5m and is intensely developed from 477.6m to 510.5m. Similar to CETD1 there are scattered intervals of very low grade copper-gold-silver in CETD2, CETD3 and CETD4.

The significant intersections in drill holes CETD1 to CETD4 inclusive are summarised in **Table 1** below.

Hole_ID	From (m)	To (m)	Significant Interval
CETD1	213.00	218.00	5m @ 0.21% Cu, 0.13g/t Au, 4g/t Ag, 144ppm Mo and 137ppm Co
	245.00	263.00	18m @ 0.1% Cu, 0.08 g/t Au, 2.6 g/t Ag, 120ppm Mo and 73ppm Co
CETD2	125.00	127.00	2m @ 0.14% Cu, 0.12 g/t Au and 1.6 g/t Ag
	232.00	236.00	4m @ 0.16% Cu, 0.09 g/t Au and 2.1 g/t Ag
CETD3	236.00	239.00	4m @ 0.085% Cu, 0.065 g/t Au and 91ppm Mo
	254.00	277.00	24m @ 0.09% Cu, 0.05 g/t Au, 23ppm Mo and 22ppm Bi
including	254.00	257.00	3m @ 0.13% Cu
	265.00	277.00	13m @ 0.12% Cu, 0.07g/t Au, 28ppm Mo
CETD4	353.00	366.00	13m @ 0.025% Cu, 0.02g/t Au, 0.4g/t Ag, 35ppm Mo
	399.00	430.00	31m @ 0.04% Cu, 0.03g/t Au, 0.3g/t Ag, 36ppm Mo
including	408.00	410.00	2m @ 0.1% Cu 0.08g/t Au, 1.5g/t Ag, 70ppm Mo
	663.00	663.00	9m @ 0.024%Cu, 0.025g/t Au, 0.4g/t Ag, 53ppm Co,59ppm Mo

Table 1: Significant Intersections from Cethana CETD1 to CETD4

8.7.3. Independent Consultant Reviews

Two independent consultant reviews have been completed on the Cethana tenements by Corbett (March 2009) and Van Dongen (December 2010) to assess the potential for porphyry style deposits. Copies of the independent report have been provided previously in McDougall (2010) and McDougall (2011).

8.7.4. Petrology

Ashley Petrographic Services have completed three separate petrological examinations of outcrop samples and drill core from the Cethana and Dove River tenements on behalf of Pluton Resources Ltd. Copies of the reports are provided in McDougall (2009) and McDougall (2011).

9. EXPLORATION 2012-2013

Limited exploration was completed by Pluton Resources in 2012-2013.

An independent desktop review of previous exploration and recommendations for future exploration work on the Cethana tenements was compiled by NJ Turner in March 2013. The following discussion is based on comments and recommendations contained within the report. A copy of the report is given in **Appendix 1.**

9.1. Discussion

Previous work by Pluton Resources has largely been driven by exploration for and assessment of the Cethana tenements to host a large scale, bulk tonnage copper-gold porphyry deposit in close proximity to the Cethana Magnetic Anomaly. The mineralised source has previously been interpreted to be related to Cambrian Dove Granite which outcrops approximately 3km to the south of the Cethana Magnetic Anomaly.

Ashley Petrographic Services (in McDougall 2009, 2011) described four samples from CETD1, five from CETD2 and twenty-nine field samples. The field samples were mostly collected along the Lorinna Road north of the magnetic anomaly and from the shores of Lake Cethana to the west of the magnetic anomaly. Ashley found that within the anomaly a multi-stage alteration sequence has been superimposed on the primary volcanic and volcaniclastic textures.

Early hydrothermal alteration of the primary materials produced an assemblage of fine-grained quartz, chlorite and sericite that exhibits foliation due to the alignment of layer silicates. A subsequent, thermal metamorphic overprint was imposed with the development of disseminated fine-grained, randomly orientated biotite together with magnetite, pyrite and trace chalcopyrite. Intervals of abundant magnetite suggest metasomatic introduction of material.

This sequence of textural events is consistent with the metamorphic overprint being a consequence of the intrusion of the Dolcoath Granite. Leaman and Richardson (2003) have interpreted the position of the Dolcoath Granite to be located approximately 1 km beneath the Cethana tenement based on the interpretation of both residual gravity data and reflection seismic data.

The foliation is regarded as being due to the pre-granite, early Devonian deformation that is a feature of the Tasmanian geology. It is also noted that magnetite-skarn is a feature of Devonian-Carboniferous granite related mineralisation in both north western and western Tasmania most notably around the Housetop Granite and the Meredith Granite.

McDougall, Corbett and Van Dongen present a different interpretation of the textural evolution and argue for a porphyry copper-gold system related to the Cambrian Dove Granite. Ashley (in McDougall 2011) counters that the intense fracturing of a high fluid pressure porphyry copper-gold system is not evident and that the biotite-magnetite alteration is pervasive rather than fracture related.

10. CONCLUSIONS AND FUTURE WORK

Irrespective of the genetic relationships developed at the Cethana Project, the copper-gold mineralisation that has been intersected in drill holes CETD1 to CETD 4 inclusive is of very low grade. Based on these results, it is not considered worthwhile to further drill test the Northern Chargeability Zone with further deep drilling at this stage.

However, the Southern Chargeability Zone remains to be drill tested and offers the potential to intersect higher grade copper-gold mineralisation at shallower depth. The Southern Chargeability Zone drill target remains open largely due to the proximity of Lake Cethana.

Van Dongen (in McDougall 2011) notes that despite being either Cambrian or Devonian, the magnetite bodies intersected in drilling to date represent zones of high fluid flow that have probably exploited pre-existing structures. Based on the total magnetic intensity image of Reed (2003), it is considered likely that either the Bismuth Creek Fault or a related splay extends into the Cethana tenement in the vicinity of the Southern Chargeability Zone. The Bismuth Creek Fault has acted as a conduit for mineralising fluids at Moina.

Two drill hole locations have been proposed for drill hole CETD5 to test the Southern Chargeability Zone at the Cethana tenement **(Figure 4)**. Of the two proposed locations, the hole directed to the south towards the interpreted position of the fault is to be drilled. The hole would be drilled as an angled hole at -70° to the south, with an estimated length of approximately 650 metres.

It is Pluton Resources intention to drill CETD5 in the 2013-2014 year of tenure.

In addition, the elements assayed to date in the drill core at Cethana for CETD1 to CETD4 are to be reviewed. It is unclear at this stage if tin, tungsten, fluorine, scheelite were routinely assayed and examined for in all the drill core given the spatial association of the Dolcoath Granite and mineral deposits in the adjacent tenements.

A program of re-assaying diamond drill core will be implemented if the elements above have not been previously assayed.

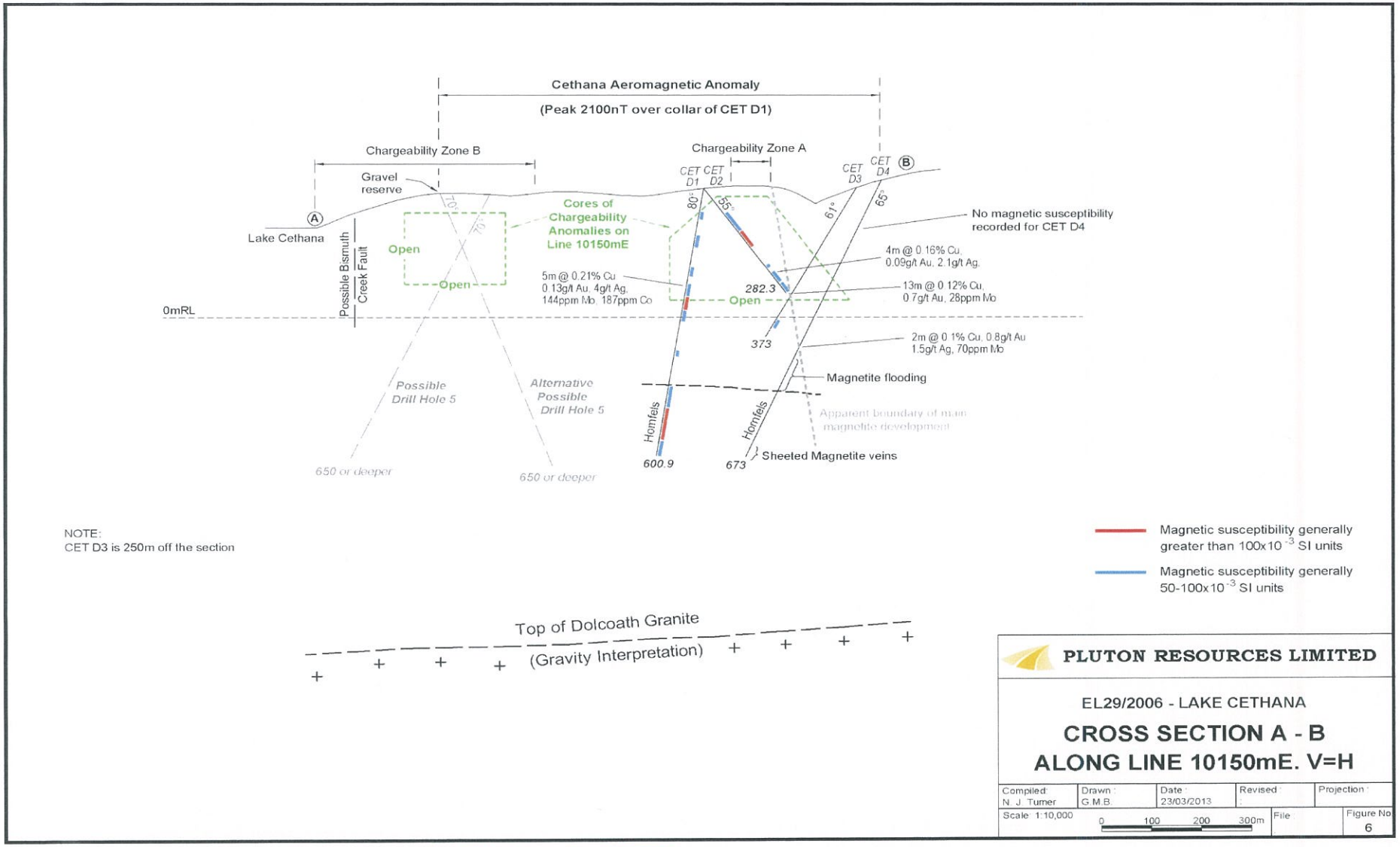

Figure 4: **Cross Section A-B Showing Proposed Drill Hole Location(s) CETD5**

11. ENVIRONMENT

The drill pads used in previous exploration by Pluton Resources are well rehabilitated. No material impact is present on EL29/2006 or EL16/2008.

12. EXPENDITURE

Total Expenditure for the Cethana Project (EL 29/2006 and EL 16/2008) currently stands at **$745,144** with **$33,029** expended this year.

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Keywords

Porphyry, Skarn, Aeromagnetics, Induced Polarisation, Petrography, Copper, Gold, Molybdenum, Cambrian Volcanics, Mt Read Volcanics, Dolcoath Granite, Chargeability, Diamond Drilling

APPENDIX 1