# Moonraker Minerals Pty Ltd

# (a wholly owned subsidiary of RMG Ltd)

# Final Report

# McLean's Creek

# EL 17/2003

# 9 July 2013

**D.Elder**

RMG Limited

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# 1 Introduction

## 1.1 Location Access and Tenements

EL 17/2003 is located (approx -41.9038 lat, 145.313 long) approximately three kilometres southwest of the west coast mining township of Zeehan. Access to the initial prospects of interest is from the northeast via the Spray Tunnel and tramway, or from the north, via the Comstock mine site and thence via the Britannia or Swansea Tramways. The tramways have a generally well-compacted surface suitable for 4WD during the wet winter months or two-wheel drive during drier periods.

Retention Licence RL2/2012 (previously 20M/2001), and known as Sunshine is located within EL17/2003. The mining licence was converted to a Retention Licence on 25 September, 2012.

The topography provides varied foot access, ranging from gently to moderately sloping, fairly open, button grass covered ground to, heavily forested gullies and incised steep hill slopes (inaccessible by foot) with relief of three to five hundred metres. The annual rainfall in the area is usually heavy – up to 2.5m, with most falling in the winter months. Outcrop over both open ground and hill slopes is generally sparse; however tramway cuttings provide excellent rock exposures.

All map co-ordinates in this report are relative to the GDA94 datum and located in UTM Zone 55 and use MGA94 coordinates.

## 1.2 Regional Geology

The main features of the regional geology are a large granite dome which intruded a sequence of Proterozoic and Cambrian sedimentary rocks during Late Devonian times. The granite is known as the Mt Heemskirk Granite. Mt Agnew, a significant topographic feature within the Heemskirk Granite, rises to 848m, and lies 9km due west of the township of Zeehan.

The granite is coarse grained, tourmaline rich muscovite granite. Its outcrop is roughly oval in shape, elongated E-W, with the western portions extending to the west under the sea. The outcrop is 10km north to south and the granite is not homogeneous with several different variations able to be mapped. The intrusion shows chilled margins within 2m to 3m of the contact where it is a fine grained, white, aplitic granite. The main body of the intrusion is formed of a red granite but in some areas a white granite is present and tin mineralisation may be associated with the leuco-granite.

The Proterozoic rocks are mainly quartzite, micaceous quartzite, dolomites and black shale of the Oonah Formation. These rocks have undergone medium grade regional metamorphism and may also have been subjected to contact metamorphic effects close to the Heemskirk granite. In the south east and the south, rocks of Cambrian age are present. These are mostly sedimentary but also include some ultramafic bodies which are attracting attention as part of a new geological model for economic nickel deposits such as that being currently developed at Avebury to the west.

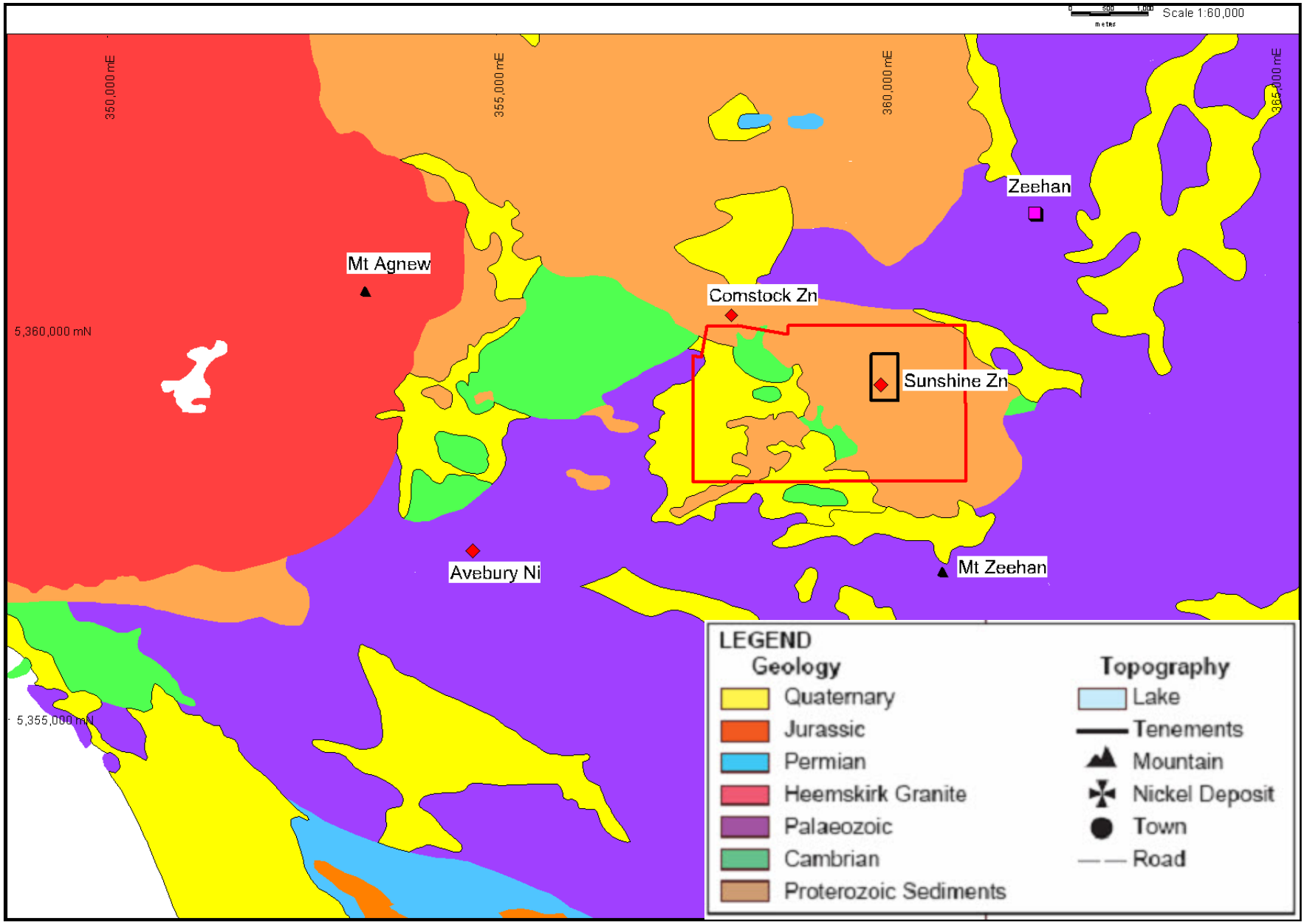


**Figure 1 Regional geology and location of Licences**

## 1.3 Local Geology

The geology of the region covering the tenement is complex and is comprised principally of the Oonah and the Crimson Creek Formations. The Proterozoic Oonah Formation comprises quartzites, micaceous quartzites, siltstones, shales, graphitic shales and dolomitic units, and has been thrust over the younger Cambrian sediments of the Crimson Creek Formation (interbedded volcaniclastics, basalts, mudstones and shales) by the low angle Tenth Legion Thrust. Five sets of folds have been identified in the area (Upton 1996). The axes of the folds trend north-west with an inferred wavelength of approximately 2km. North trending and east trending faults transect the tenement, crenulation cleavage, with variable orientation, is visible in outcrops of phyllite and slate along several of the track cuttings. Fault trends (Devonian?) are generally west-northwest and north-northwest to north-northeast. The Devonian age Heemskirk Granite lies about 3 to 4km to the northwest of the EL and is gravity-inferred to underlie the project area at a depth of 1 to 2km.

# 2 Previous Exploration

## 2.1 Historical

EL 17/2003 is located within the historical South Heemskirk Mineral Field. The general area has been the subject of exploration activity since the 1870s. It contains numerous old silver-lead-zinc fissure-load prospects most of which were worked in the period 1882-1910. The field was left largely untouched from 1919 until 1946 except for occasional, sporadic, relatively low-intensity exploration activity. During the 1980's and 1990s the Stonehenge area was targeted for stanniferous sulphide-rich carbonate replacement (Renison-Bell style) mineralisation by RGC and for Proterozoic shale-hosted zinc deposits by CRAE. CRAE entered a joint venture arrangement with Allegiance Mining NL during the 1990s; this work resulted in the discovery of the Avebury nickel deposit to the southwest. When CRA withdrew from the JV (and the State) in 1996, Allegiance gained title to the entire EL. Allegiance relinquished the eastern half of EL 28/88 and 7km$^2$ of it was taken up by the McDermott brothers, as EL 17/2003. McDermotts also applied for, and were granted, a Mining Lease over the Sunshine workings (ML20/2001). These holdings were subsequently sold to Stonehenge Metals Limited – in December 2006. Stonehenge Metals sold both licences to Moonraker Minerals Pty Ltd, a wholly owned subsidiary of RMG Ltd, in March 2012.

This Exploration Licence (EL17/2003) contains the Mining Lease (20M/2001) wholly within its boundaries so in describing the 33 prospects in this area those within the Mining Lease will not be identified separately and all will be described as being located within the Exploration Licence. The locations of the prospects are presented in Figure 2. The location information has been obtained from Mineral Resources Tasmania however the accuracy of the location information can be low.

The prospects and old mines have been put into two groups based on their location within the Exploration Licence. The groups are:

1. TLE and Stonehenge group
2. Tasmanian Mine group
3. Swansea group
4. Grubbs to Sunshine Line
5. Sprays to  Nubeena line

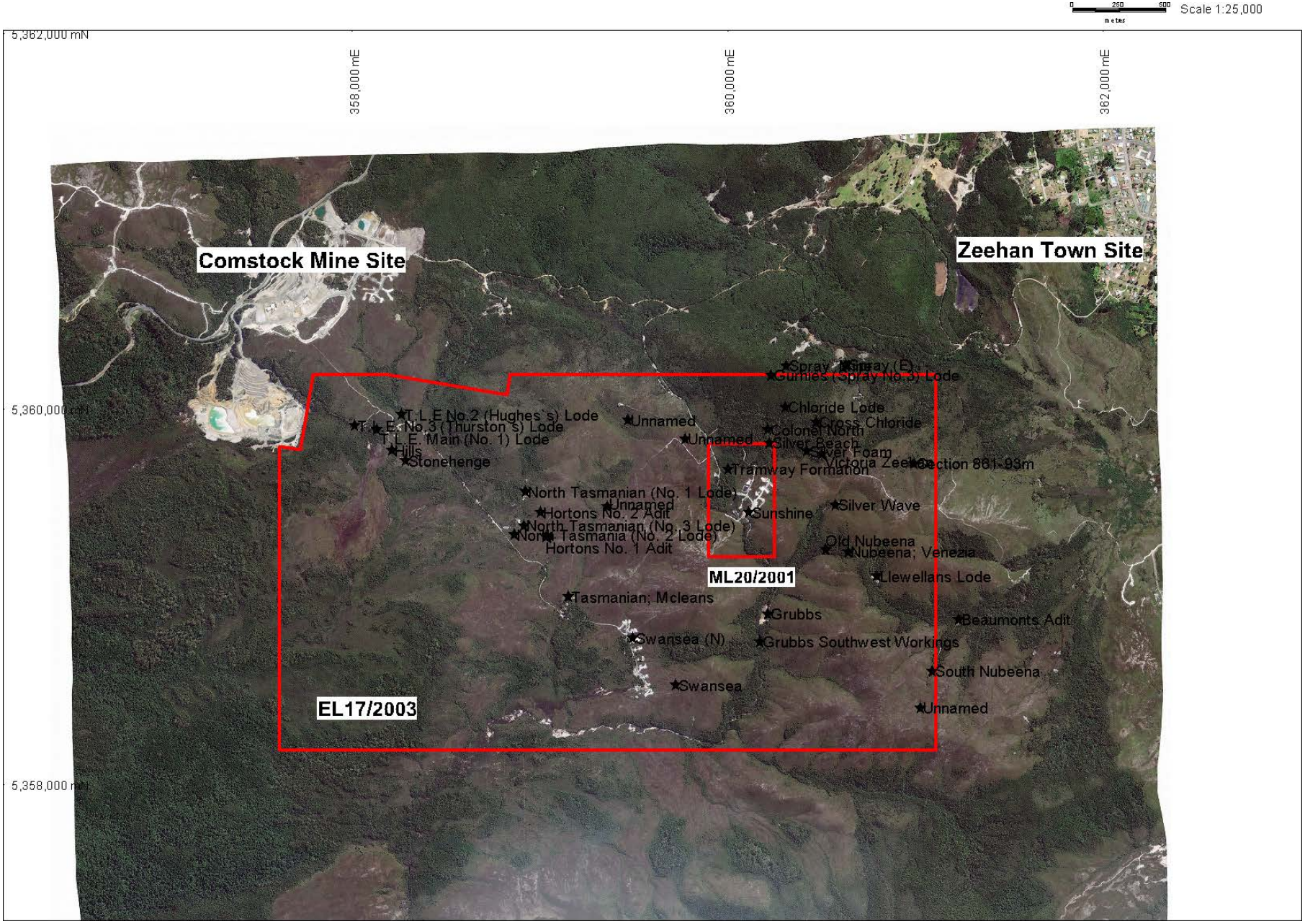


**Figure 2 Historical zinc-lead prospects**

These prospects were typically pegged and relinquished quite regularly, often with limited periods of production which will not be described in detail. In the early days it was the lead/silver ore that was sought after and the presence of the zinc mineral sphalerite incurred penalties. The ore had to be amenable to hand cobbing and hand sorting to produce a high grade product ready for smelting.

If the topography at a mine was suitable a drainage adit would be driven from the nearest low topographic point to remove water from the workings and enable extraction of ore above the adit. After this ore had been won it was necessary to sink a shaft below the water table and this was a problem during the 19th Century and the early days of the 20th Century. At a number of mines, shafts were sunk to 50m but efficient pumping equipment and the means of powering it were lacking and expensive so it was impossible or uneconomical for many to go deeper.

Exposure within the licence area is poor and selective. The limestones and shales, which drilling indicates are a major proportion of the stratigraphy, are rarely seen in outcrop. One of the features of the area is the presence of numerous outcrops of Precambrian Oonah Formation. Work during the 1990s has confirmed that these areas of Oonah rocks are bounded by sections of the 10th Legion Fault which is present as a low angle thrust. The older Precambrian rocks have been thrust over the younger rocks and subsequent weathering and erosion has removed much rock leaving isolated patches of Proterozoic rock resting on the Cambrian and Post-Cambrian succession in some places. These are known as klippe and these klippen rest on the fragmented thrust plane. Some of the larger klippe of Oonah Formation are reported to be up to 300m thick.

### 2.1.1 The TLE and Stonehenge Group

**The T.L.E. Prospect**

This prospect (Tasmanian Land Exploration) is located on the northwest end of the line of lode in the northwest corner of the licence. The first lease on the property was taken out in 1888. The Main Lode (No.1.) strikes at 36° and dips 75° W with a shaft to about 34m. The No.2. Lode (67m east of No.1.) strikes at 34° and was found soon after and subsequently the No.3. Lode was found to the west of No.1 Lode striking at 356°. In 1913 a government prospecting party cut 830m of trenches near the T.L.E. without success. Some ore was raised in 1925 and the ground held from1951-1959. The Mines Dept. attempted to drill the lode in 1957 but the hole was abandoned at 7m.

The country rocks are Cambrian conglomerate, greywacke, and shale. The Tenth Legion Fault Zone lies a short distance to the north bringing Proterozoic quartzite and slate over the Cambrian rocks. The ore is described as massive pale yellow to mid brown sphalerite with minor galena and quartz gangue but galena rich patches and shoots occur with good silver grades.
Up until 1911 at least 300t of galena was produced containing 200t of lead and 30,000oz of silver. In 1954 5.52t of ore were raised containing 2.85t of lead, 0.76t zinc, and 31oz silver.

**Mr Hill's Prospect**

The location of the prospect is given on the MRT database. In fact Mr R.B. Hill was a very active prospector in this area in the 1950s and held the T.L.E., Stonehenge, and Tasmanian prospects. The prospect named after him is a small copper show located about 120m west of Stonehenge. The

outcrop showed copper mineralisation grading 15% copper. A shaft put down 6m failed to find any sign of a lode or vein.

**The Stonehenge Prospect**

The Stonehenge Prospect is located 200m southeast of the T.L.E. Main Shaft, and was first pegged in 1888. In 1893, the Stonehenge Silver Mining Company NL was formed to work the property. The company ceased work in 1894. Approximately 45t of ore was raised containing some 30t of lead and 2,700oz silver.

Three lodes were present striking NNE but only one was exploited. This lode strikes at a bearing of 025° and had a very steep SE dip in the upper workings changing to NW dip in the lower workings. The mineralisation was present in a vein of sulphides 150mm wide within quartz siderite gangue up to 0.5m wide. The sulphides consisted of pyrite and sphalerite with some chalcopyrite with galena as bands and blebs.

In the 1990s, CRA mounted an exploration programme for skarn style mineralisation in calc-silicate hosts and Irish style base metal model mineralisation in limestones and shales. One of the areas identified as prospective was that secured by Stonehenge Metals current tenement. This area was covered by a large grid which had its origin just west of the Stonehenge Mine and also near Stonehenge Creek and was named the Stonehenge Grid. Work by CRA was followed by Renison/Goldfields and then by Allegiance Mining NL.

## 2.1.2 Tasmanian Mine Group

These mines are located about 700m southeast of Stonehenge and were part of a group of mines acquired by the Tasmanian Silver Mining Co. Ltd between the T.L.E. Mine in the northwest and McLeans Creek in the southeast.

**North Tasmanian No.1 and Tasmanian No. 2, No.3**

At the North Tasmanian Mine there are two lodes. The No.1 Lode strikes at 20° and dips NE. There was a shallow adit drive for about 60m and stoping to surface. A shaft was sunk to 58m with a level at 30m and a good shoot of galena and sphalerite was taken out up to surface. About 65m to the west of the shaft, the No.2 Lode was discovered striking at 190° and dipping 80° W. This was worked from adit stopes to surface for about 50m.

The Tasmanian No.3 Lode may be a faulted continuation of the No.2 Lode. It was discovered by a tributor named Riley and is also referred to as Riley's Workings. The lode strikes at 322° with a vertical dip. The ore was not of high enough grade at 20% lead and 40% zinc for the 16t parcel mined failing to cover cartage costs due to penalties for the zinc content so mining was halted.

These workings are in Proterozoic Oonah Formation and Cambrian Dundas Group basalts, shales and greywackes. The host rock for the No.1 Lode is hydrothermally altered, soft pale shale of the Oonah Formation. The vein consists of pyrite, siderite, and sphalerite, being replaced by galena and arsenopyrite with the galena containing minor copper mineralisation.

Production figures for these mines are not quoted but the production is included in the figures for the Tasmanian Mine.

A government prospecting trench 350m long was put in about 70m north of Main Shaft in 1913 on a bearing of 070°. No mineralisation was found. In 1957 three boreholes were drilled by the Mines Department under the No.3 Lode for 29.6m, 29.9m, and 31.4m depressed at 55°. A few veinlets of galena, sphalerite, and pyritized shale were cut and the results discouraged further exploration.

**Tasmanian Mine**

The Tasman Mine is also known as Tasmanian; McLeans. The Main Shaft is situated 640m SE of the North Tasmanian shaft. The mineralized zone was traced NNW from the Swansea Mine about 750m to the SSE in 1888 passing through Swansea North.

An adit was driven the on the lode and its bearing for 64m but no mineralisation was found after 36m. The ground was described as “broken and the lode was found not to rise into it.” The northern part of the workings lie within sheared and shattered Proterozoic quartzite, siltstone, and shale which are faulted to the south against Cambrian chert-conglomerate and siltstone. The lode strikes at 327° and generally varies from 0.5m to 1m but may be up to 1.5m. The ore is sphalerite – pyrite associated with quartz.

The main shaft was sunk to 22m. Stoping was carried out up to the adit level. Sulphide mineralisation ranged from 100mm up to 1.2m wide but was patchy and contained much sphalerite. Little production occurred until 1933 when it was acquired by J.Hill and there was steady production to 1941. From 1942 until 1961 the lease was held by J. J. Hill and small quantities of ore were produced spasmodically.

Total production for the Tasmanian Mines was 1,200t for 730t of lead, 41,299oz silver, and 8t of zinc.

## 2.1.3 Swansea Group

**The Swansea North Shaft**

This shaft is located about 300m NNE of the Swansea Mine and is on the extension of the lode from the Swansea Mine and is really part of that mine. The workings can be followed to within 30m of an E – W cross-cutting fault about 50m north of the shaft.

**The Swansea Mine**

The mine is located 200m north of McLeans Creek. The lode channel strikes at 335° and dips shallowly at about 45° and is 9.9m wide. The sulphides occur in shoots striking obliquely across the channel at 319°. These shoots tend to anastomose within the lode and extend along strike to the NNW for 320m just past the Swansea North Shaft. Host rocks are considered to be Cambrian (Dundas Group) sediments.

The lode was worked to the No.4 Level at 46m but the lowest level was only just being developed when the mine closed. There were three main ore shoots in the upper levels with two of them merging at the No.2 Level (24m) and it was thought that development on the No.4 Level (46m) would find that they had merged into one shoot at this depth.

In 1922 A. M. Reid reported the presence of a narrow pyroxenite dyke at Swansea striking NW and bearing small quantities of various nickel sulphides. This dyke therefore lies roughly along the axis of the large magnetic anomaly on this tenement. The occurrence of nickel sulphides within the magnetically anomalous area does not confirm the presence of prospective nickeliferous ultramafic rocks at depth but is certainly a very positive feature.

Production to 1929 was 2,260t of galena ore and 1,240t of sphalerite ore containing 1,340t of lead, 35,630oz silver, 579t zinc, and 41t cadmium.

**The Silver Wave**

This mine is located about 700m east of the North Tasmanian Mine and worked two main lodes consisting of fracture zones containing veins of galena bearing at 30° and dipping NE at 80°. It had a shaft to 12m and operated during the early years of the field. Production took place under the ownership of the Nubeena and also the Victoria Zeehan mining companies and was not reported separately.

### 2.1.4 The Grubbs Mine to Sunshine Line

**The Grubbs Mine**

This mine is located just south of the centre of the eastern half of EL17/2003 on the eastern side of McLeans Creek. From 1888 to 1903 the mine was worked by W.C.Grubbs when it was taken over by Colonel North Mines and Railway Co. NL.

This was one of the more substantial mines with the main shaft finally sunk to 98m with five levels developed. The mine closed due to lack of ore but the reason is not clearly explained. The lode may have been faulted out between the No.4 and No.5 Levels, where a fault is shown on a section of the mine. While this might be the case the mineralisation was reported to be weakening with depth and below the No.3 Level there was sphalerite veining reported but little galena. The proportion of recovered silver to lead at close down had fallen to half that at the start of mining and together with the galena ore becoming less abundant with depth mining may have become uneconomic.

The Beauments Prospect is located just east of Grubbs Mine but no data is available.

**The Sunshine Prospect**

This prospect is located south of the Colonel North mine.

The strike here is NE and roughly parallel to the strike of the Grubbs lode but is off line to the east. Mineralisation and gangue material along the lode may be present in the wall of the current shallow pit but is difficult to interpret. A 22m long adit was driven by the old miners along the structure.

There is no lode structure visible in the main area of the shallow pit that has been excavated by McDermott Mining P/L (MDM). Prior to mining by MDM there was a small hill about 30m high on this site. The pit is in a broad zone of pyritic material which looks like a loose fine black sand containing rock fragments that are hard to see or pick out until the material is washed when the fragments can be separated. These appear to be fragments of slate that are bleached and contain mostly sphalerite with some galena. This material is believed to be an eluvial deposit formed by the near surface enrichment of sulphides by the solution of the carbonates forming a calc-silicate. This process has left a layer of black sulphidic sand sitting on what is surmised to be limestone underneath. The chemistry of this process has not been established but it is possible that a low pH in the swampy peaty conditions combined with the acidic products of the weathering of pyrite has led to solution of the calc-silicate leaving the minerals that were dispersed within it to accumulate. The black sand is reported to be commonly found on calc-silicate units. The zinc grade of these deposits is considered to be related to the presence of stratiform mineralisation in the limestone and is very likely to form ore bodies.

No production reported to MRT.

**The Tramway Formation**

This is located on McLeans Creek just east of Grubbs Tramway about 300m SW of the Colonel North Shaft.

The lode is 1.2m wide containing a sulphide vein 450mm wide. The gangue is porous quartz and pyrite with galena and sphalerite veining. The lode is exposed in two holes but trenching north and south has failed to pick it up.

### 2.1.5 Sprays to Nubeena Line

**Silver Foam Adit and Shaft**

In 1901 the Silver Foam Tributing Co. drove an adit 183m NE from a point near the tramway 60m west of the later Victoria-Zeehan Shaft. The target was the southern extension of the Spray No.1 Lode from the Spray Mine to the north. Records are not consistent but it seems probable that the intersection with the lode was made at 127m. It was then driven for 25m to the north but only a little pyrite was found. Some patches of galena were found in a winze sunk 18m. Only traces of galena occurred on the hanging wall in a shaft sunk 30m from the adit. At the 15m level in the shaft the Victoria-Zeehan Co. later found a small vein of jamesonite and galena which was followed for 8m.

**Colonel North**

The shaft here was sunk by Grubbs Silver Mining Co. NL in 1890. The operation was suspended in 1896 due to financial difficulties and was sold to Colonel North Mines and Railway Co. NL in 1903. This company bought up a number of properties in this area and had mining operations on several of them at different times. The shaft was sunk to a final depth of 61m. A crosscut was then driven northeast from the bottom level but not completed. Further work on this crosscut was carried out by Silver Beach tributors and then the Victoria Zeehan Co. with it being driven a total length of 137m. The end of the crosscut intersected two barren quartz siderite lodes. No Further work was reported.

The mineralisation was in two lodes dipping to the east. The sulphides were in siderite quartz gangue.

**The Victoria-Zeehan Mine**

This is located ESE of the Colonel North Shaft. In 1907 a shaft was sunk by the Colonel North Mines and Railway Co. NL to a depth of 95m. A crosscut was driven east for 66m with the Spray No.1 lode being intersected at 56m. The lode was 1.8m wide and was driven on for 47m where a thin vein of galena was found. Further driving was prevented by an inrush of water which flooded the lower part of the mine. More powerful pumping equipment was installed in 1909 but failed to drain the shaft.

In 1908 recorded production of 28.5t of ore (including ore from the Foam Adit.

**Office Adit**

From about 60m due south of the Colonel North Shaft the Silver Beach Tribute Party drove an adit 183m to the NE. Three siliceous gossans were intersected within the decomposed slate but no mineralisation of significance was found.

**Chloride and Cross Chloride Lodes**

The Chloride Lode lies 150m N of the Silver Beach Adit and the Cross Chloride 200m ENE. The lode contains bands and nodules of hematite and limonite bearing silver chloride and native silver which were worked by tributors around 1900. Small patches of ore are reputed to have graded 1,000 oz/t but average stoped ore graded 40 oz/t.

**Silver Wave Workings**

These consist of a shaft and several adits and are found about 400m due east of the Sunshine Mine. The Silver Wave Tributing Party explored at least one ore body striking NNW and dipping east prior to 1900. Further investigation by later parties also found small sphalerite veins with galena that were rapidly worked out.

**The Nubeena Workings**

These workings extend SSE in a line from the Silver Wave Workings. The Old Nubeena workings are located about 100m to the W of Nubeena; Venezia and were on a galena-pyrite lode striking at 17° and dipping east. The mineralisation was first discovered in 1889. The vein was reported to be up to

120mm wide. The vein was subsequently driven on for 40m and the lode drive was accessed from a crosscut adit. Production was small and intermittent and the property changed hands frequently over the following years with another lode drive being driven above the original one.

In 1904 at the Nubeena Venezia an E-W adit was driven and intersected three lodes – Jaeger's, No.1, and Barnet's. Jaeger's Lode was up to 1.5m wide with 150mm vein of galena but limited stoping revealed the mineralisation was irregular. The No.1 Lode contained only minor veining and was not exploited. Barnet's Lode was intersected 60m east of Jaeger's and was a quartz lode in slate with patches of ore and a 150mm vein near the footwall. It was driven on for over 50m and stoped to a height of 30m over a strike of 45m.

About 100m ESE of Venezia adits were driven in 1904 that found Llewellin's lode. Two lode drives were driven one 12m above the other. The mineralisation was patchy but a shoot about 12m long and up to 0.5m thick was found in the upper lode drive.

The country rock in the Nubeena locality appears to have suffered greater stress than the surrounding areas and the rocks are highly fissured and faulted. The mineralisation that is present is more variable than that typically found in the Zeehan field which makes it difficult to assess and mine.

It has been estimated that about 500t of concentrates were produced from the Nubeena Mine containing around 325t of lead and 42,000oz of silver.

**South Nubeena**

This lode was considered to be like Llewellin's Lode. The galena veins were only up to 50mm wide but assayed at 70% lead and 100 oz/t silver. About 78t of ore were produced containing 50t of lead and 7,000oz silver.

About 220m and 530m south of South Nubeena prospecting has been conducted but these areas are not named and there is no information on them.

## 2.2 Previous Exploration

### 2.2.1 North Broken Hill

Between 1946 and 1960 Zeehan Explorations Pty Ltd (a joint venture between North Broken Hill and Broken Hill South) carried out ground surveys to determine the continuity of the Spray – Nubeena lode zone and initiated the BMR managed magnetic, gravity, and electrical, surveys.

### 2.2.2 Placer Prospecting and Minops Pty Ltd

From 1966-1970 Placer Prospecting Pty Ltd focussed their attention on the Spray Mine conducting a TURAM EM survey over the main lode. Minops Pty Ltd farmed into the project and drilled several holes. This work was largely to the north of EL17/2003.

### 2.2.3 Tenneco

From 1970-1972 Tenneco Pty Ltd dewatered, sampled, and drilled the Spray Lodes. They cut a jamesonite lode (0.2m at16.8% Pb, 0.08% Zn, 8.8% Sb, 1.4% Cu, and 271 oz/t Ag.) but it was of very limited extent. A TURAIR airborne EM survey covered much of the Gordon Limestone outcrop. Follow up gravity, Turam ground EM, and SP surveys, produced mixed results. Again this work concentrated mainly to the north of El17/2003.

### 2.2.4 Renison Goldfields

From 1974 Mt Lyell Mining and Railway Co. Ltd (SPL129) and Renison Ltd (EL11/1976) commenced an extensive programme of exploration on the area between the coast and Zeehan. Prior to this, most exploration had consisted of further investigation of known deposits. The eastern region of SPL129 included the ground within EL17/2003. Gold Fields Exploration Pty Ltd (backed by RGC Ltd) joined Mt Lyell and Renison and became operator of the JV which continued until 1986.

In 1974-75 the Barringer Input Airborne EM System was trialed and obtained a number of conductive anomalies with associated magnetic anomalies. In 1981-82 the Turair and Dighem airborne EM systems were compared. The Dighem was considered to be more sensitive and gave similar responses to the Input system. In 1982-83 the ground based VLF EM was used as follow up and identified weaker anomalies than Dighem.

In 1982 the Stonehenge Grid was put in over the north eastern area of the SPL. It seems it was named Stonehenge because the origin of the grid lies to the NW of the prospect of that name and also the creek of that name. This grid covered most of the prospective area now within EL17/2003. R.Poltock, for Renison Ltd, mapped the eastern end of SPL129 in detail during May-June 1981 however exposure is generally poor in the area. In 1983 a DIGHEM survey was carried out over the grid and a report on the results of geophysical surveys was made. SPL129 was amalgamated into EL11/1976 in 1984. The Gold Fields group drilled six diamond core holes within the area of EL17/2003 (TH12-17) completing the programme in 1985-86. With no further work recommended the licence was surrendered in 1987.

| Hole_ID | Hole_Type | Max_Depth | Grid_ID | East MGA | North MGA | Orig_RL | Azimuth MGA | Dip |
|---|---|---|---|---|---|---|---|---|
| TH12 | DDH | 401.5 | MGA94_55 | 359911.7 | 5359567.5 | 257.6 | 199.0 | -55.0 |
| TH13 | DDH | 431.2 | MGA94_55 | 360261.4 | 5359613.5 | 263.5 | 21.0 | -46.0 |
| TH14 | DDH | 170 | MGA94_55 | 359429.9 | 5360023.8 | 325.4 | 202.0 | -55.0 |
| TH15 | DDH | 599 | MGA94_55 | 360361.0 | 5359878.0 | 308.5 | 201.0 | -59.6 |
| TH16 | DDH | 450 | MGA94_55 | 360602.0 | 5360185.0 | 252.3 | 237.6 | -50.0 |
| TH17 | DDH | 308.3 | MGA94_55 | 360002.1 | 5359802.0 | 262.3 | 276.7 | -63.2 |

**Table 1 Location of Renison drill holes**

**TH12** was drilled in an attempt to test the broad VLF EM anomaly at depth. The hole intersected dolomites and shales.

Two significant base metal rich fault zones were intersected which also contained high values of arsenic and antimony.

32.0–41.0m (9m) 1.0% Pb, 2.49% Zn, 32 g/t Ag

79.0-82.0m (3m): 1.5% Pb, 10.0% Zn, 261 g/t Ag

Note well, less than 30% core recovery for samples to 79m depth and 55% core recovery for samples to 82m depth

**Hole TH13** was drilled to test the southern extension of the Spray No.3. Lode within black shales and dolomites. The significant intersections are;

67.0-80.0 (13m): 0.16% Pb, 0.44% Zn, 5 g/t Ag [20-60% core recovery]

87.0-148.0 (61m): 0.82% Pb, 0.51% Zn, 24.8 g/t Ag [3 – 80% core recovery]

Within this wider interval is a very high-grade vein

105.0 to 105.8m (0.8m) 41%Pb, 0.1%Zn, 1540g/t Ag

**Hole TH14** was designed to test a brecciated sandstone with a combined geochemical and VLF EM anomaly. Core recovery was reasonable, there are no significant intersections, with weak lead mineralisation occurring at;

37.8-48.5m, (10.3m) 0.12%Pb, 2g/t Ag

55.1-58.7m (3.6m) 0.12%Pb, 1g/tAg

143.1 to 147m (3.9m) 0.02%Pb, 7g/tAg

**Hole TH15** was also designed to test the southern extension of the Spray Lodes.

Assay Summary

| | | |
|---|---|---|
| 61.4-100.5 (39.1m) | 0.25% Pb, 0.22% Zn, 3 g/t Ag. | [core recovery <30%] |
| 167.0-191.0 (24m) | 0.27% Pb, 0.54% Zn, 1 g/t Ag | [core recovery <43%] |
| 557.8-563.75 (5.95m) | 0.22% Pb, 0.12% Zn, 35 g/t Ag | |

This hole intersected a different sequence from that in hole TH13 which it scissored and also intersected zones of low grade mineralisation.

**Hole TH16** was drilled in a further attempt to locate extensions of the Spray mineralisation to the north. This hole was just outside the northern boundary of EL17/2003 and intersected the Spray No.1.Lode in shale and sandstone and not dolomite as planned. It was only weakly mineralised.

**Hole TH17** was designed to investigate a subtle combined magnetic and EM anomaly located in what is now the north east corner of EL17/2003. The anomaly was considered to be due to graphitic black shales and limited assaying was carried out.

The location of the drill hole collars is shown in Figure 3. The underlying geology plan is compiled by Allegiance Mining for EL28/88 and reported in Report 98-4184. It is at a scale of 1:10,000.

Figure 4 shows the Stonehenge soil grid completed by Renison Goldfields and results for Zn+Pb.

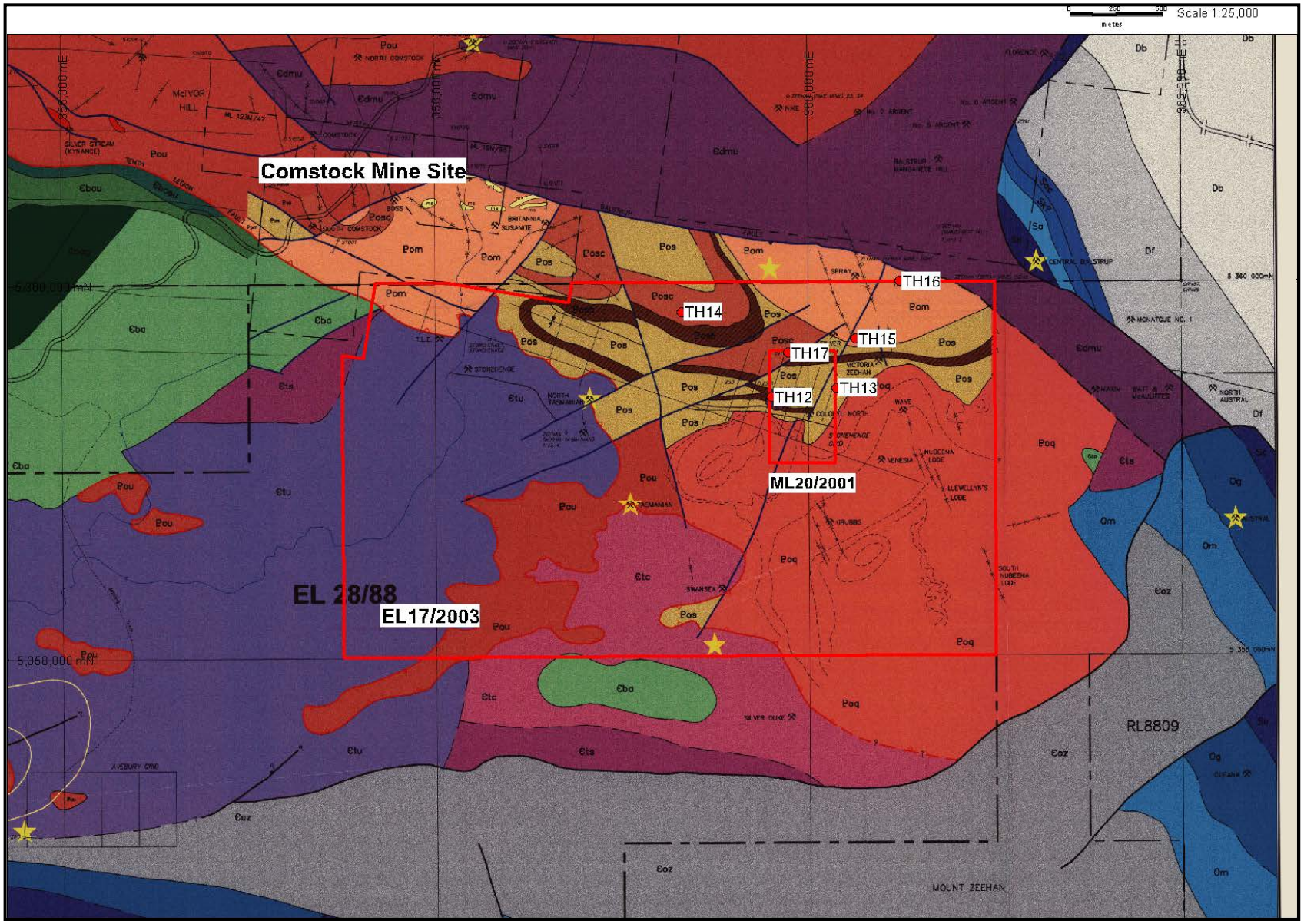


**Figure 3 Plan of Renison drill holes**

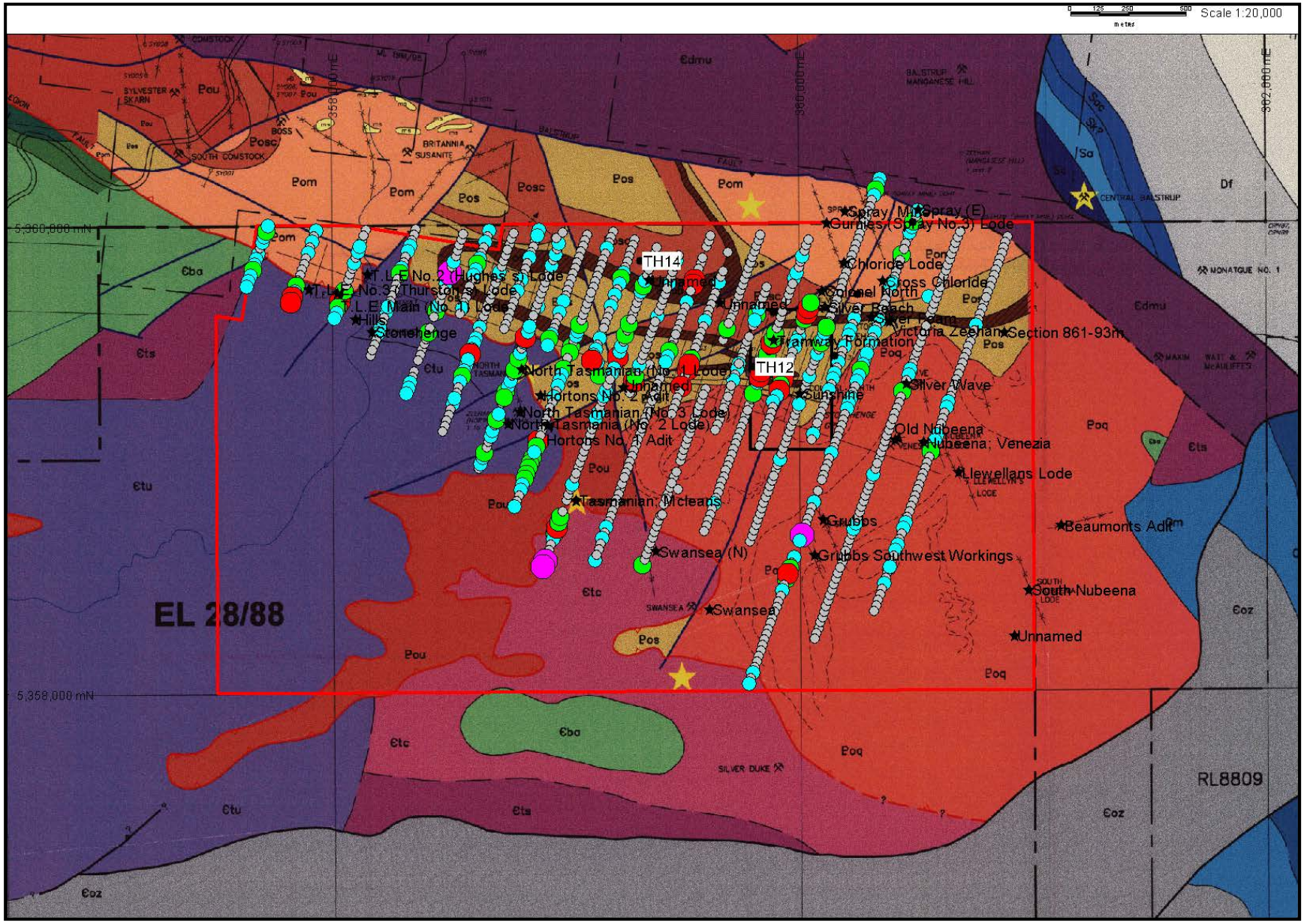


**Figure 4 Plan of Renison soil geochemistry**

### 2.2.5 Allegiance and CRA

The Exploration Licence EL28/1988 was granted to the Duke of Avram in 1988. In May 1989 it was acquired by Major Mining Ltd (subsequently renamed Allegiance Mining Ltd). This was a large licence with the main body of the tenement extending 17km from the coast in the west, to east of Zeehan in the east, and 9km north to south. EL17/2003 was located within this licence on its north eastern boundary.

Major Mining formed a joint venture partnership with CRA (Rio Tinto Exploration Pty Ltd) in 1991. CRA considered the Zeehan area showed fundamental similarities with Lawn Hill in NW Queensland and was prospective for shale hosted stratabound Zn-Pb deposits.

In 1992 CRA conducted geochemical testing of IP targets near the Sunshine workings which were encouraging with IP suggesting a possible strike of 1,000m. The valley running west of Sunshine and the swamp near the workings were anomalous. The Stonehenge Mine was also identified as a target area within the TLE to Swansea trend.

Three diamond core holes were drilled near Sunshine with S1 and S2, 100m apart, investigating mineralisation in the Grubbs Shear NW of Sunshine. S3 was collared about 200m west of S1 to test the potential for stratiform mineralisation in the black shale. The area of the S3 drill hole is referred to as the CRA Zinc Zone.

Refer to Figure 5 for the drillhole locations plotted on CRA mapping.

| Hole_ID | Company | Hole_Type | Max Depth | Grid_ID | East_Z55 | North_Z55 | Orig_RL | Azimuth MGA | Dip |
|---|---|---|---|---|---|---|---|---|---|
| DD92ZS1 | CRA | DDH | 251 | MGA94_55 | 359912.0 | 5359483.0 | 251.0 | 61.0 | -50.0 |
| DD92ZS2 | CRA | DDH | 250 | MGA94_55 | 359912.0 | 5359568.0 | 257.5 | 61.0 | -45.0 |
| DD92ZS3 | CRA | DDH | 231 | MGA94_55 | 359730.0 | 5359663.0 | 265.0 | 201.0 | -45.0 |
| DD95ZS31 | CRA | DDH | 209.5 | MGA94_55 | 359834.0 | 5359646.0 | 260.0 | 200.0 | -50.0 |
| S33 | Allegiance | DDH | 250.5 | MGA94_55 | 359847.4 | 5359727.6 | 267.0 | 192.0 | -50.0 |
| S34 | Allegiance | DDH | 245 | MGA94_55 | 359679.0 | 5359796.0 | 271.0 | 191.0 | -50.0 |

**Table 2 Location of CRA drill holes**

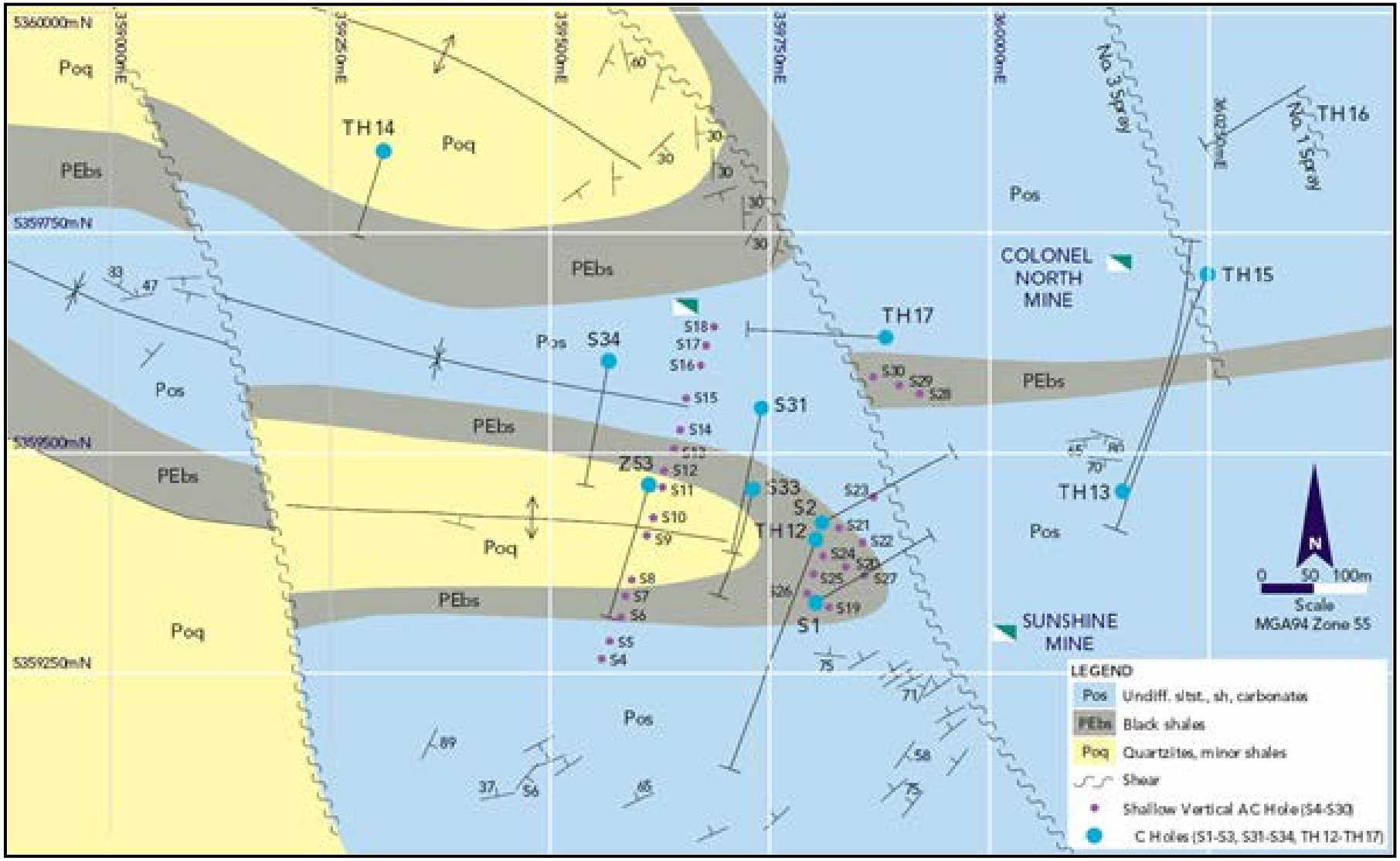


**Figure 5 Plan of CRA and Renison drill holes**

Intersections better than 1% Zn were :

DD92ZS1 - 119.2-121.35m - 2.15m at 7.8% Zn, 10.1% Pb, 191 g/t Ag.
- 150.5-162.35m - 12.35m at 2.1% Zn, 0.4% pb.
- 223.8-232.65m - 8.85m at 1.5% Zn, 0.4% Pb.

DD92ZS2 - 100.5-112.0m - 11.5m 4.1% Zn, 1.1% Pb, 10 g/t Ag.
- 124.0-136.0m - 12.0m at 1.8% Zn, 0.4% Pb, 19.5 g/t Ag.
- 190.25-190.5m - 0.25m at 20.0% Zn, 12.3% Pb, 415 g/t Ag, 2.9% Cu, 2.2% Sb.

DD92ZS3 – 159.5-160.6m – 1.1m at 3.5% Zn, 0.1% Pb, 19 g/t Ag

The drilling of S1 and S2 on the Sunshine black shale in 1992 showed the mineralisation is dominated by shear controlled ankerite-sulphide veins of limited tonnage potential. No stratiform base metal sulphides were intersected.

In 1995 geochemical sampling by 27 aircore holes (S4 to S30) spaced at 25m was undertaken. Holes were shallow and drilled to sample fresh bedrock under the swampy button-grass valley. Sampling was over 3m intervals and analysed for Ag, Fe, Mn, Cu, Pb, and Zn.

The bedrock aircore sampling indicated a 400m strike length for the zinc mineralisation with peak values of 3.3%Pb, 3.5%Zn and 22g/t Ag in holes S04 and S05.

A follow up diamond core hole DD95ZS31 (S31) was drilled on the geochemical anomaly revealed by the AC programme. S31 yielded an intersection of 6.5m at 6.3% Zn, 2.9% Pb, 41 g/t Ag, from 34m with several lower grade intervals deeper down. Recoveries in the shale were poor reducing confidence in the grade estimates. The sphalerite/galena mineralisation is hosted in black shales at the contact with an underlying mixed siltstone-dolomitic limestone-sandstone sequence.

Two phases of sulphide mineralisation were recognised. The first pre-cambrian stratiform pyrite in black shale and the second Heemskirk granite related veins (and one skarn) of Devonian age.

CRA withdrew from the Joint Venture in in 1997 and Allegiance Mining resumed exploration management. In 2000 Allegiance Mining drilled two diamond core holes S33 and S34.

S33 was designed cover the same geology as S31 at a deeper level and S34 to test the mineralisation 200m to the west. Core recoveries in the black shale were extremely poor with no core from 87.0 to 102.0 in S33 which interval appears to correlate with the high grade interval in S31. Poor recoveries were experienced in the black shale and particularly where it was mineralized.

Allegiance then decided to concentrate all their attention on the Avebury nickel sulphide deposit about 10km WSW of Sunshine and therefore in October 2002 they relinquished the eastern portion of EL28/1988 containing the Stonehenge grid.

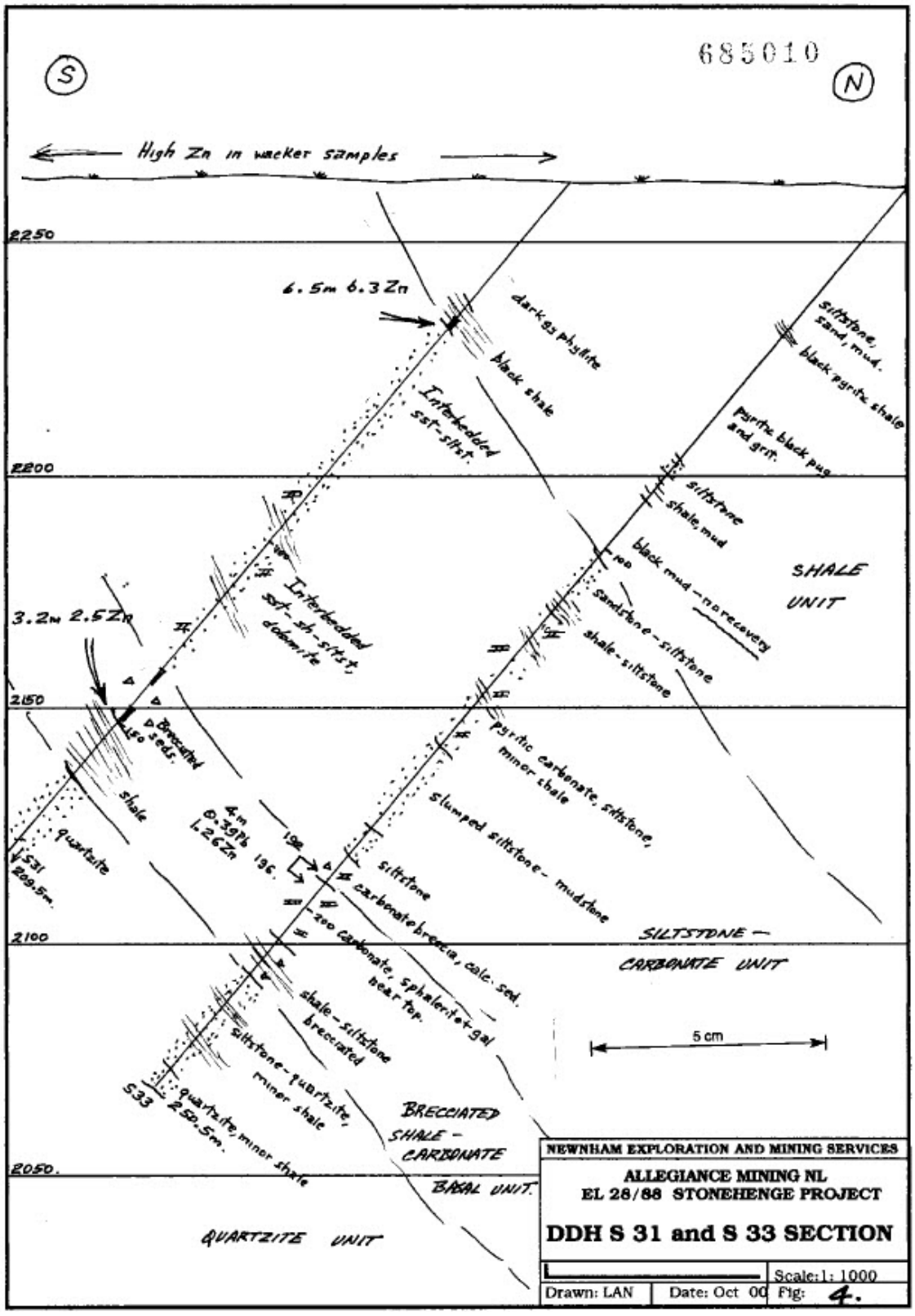


**Figure 6 Drill cross-section through CRA zinc zone**

### 2.2.6 Stonehenge Metals

Stonehenge Metals acquired EL17/2003 and undertook a diamond and RC drilling programme along the Sunshine and Swansea mine workings.

**Nickel Target**

Stonehenge also drilled 2 diamond holes to test a deep magnetic target postulated to be similar to the Avebury nickel bearing intrusion. These holes (SDD01 and SDD02) both failed to intersect any nickeliferous alteration or mineralisation.

SDD02 did intersect a weak zinc mineralised zone within a dolomite at the contact of the dolomites and a sedimentary breccia.

151.6 to 156.8 (5.2m) 0.4%Pb, 0.1%Zn, 27g/t Ag

Including 0.5m @ 1%Pb, 0.3%Zn, 198g/t Ag

**Sunshine Drilling**

Stonehenge drilled a total of 18 diamond drill holes and 7 RC percussion holes along the Sunshine zinc lode.

The drilling was characterised by very poor core recovery through the mineralised shales, and by very wet drilling conditions when RC percussion drilling (most likely poor RC sample recovery as well, but this is not recorded).

The Stonehenge drilling intersected a number of very high grade intercepts;

| Hole ID | From | To | Type | Width metres | Ag g/t | Pb% | Zn% | m% |
|---|---|---|---|---|---|---|---|---|
| SUN027 | 11 | 26 | RC | 15 | 94 | 3.4 | 7.1 | 157.5 |
| SUN002 | 4.95 | 19.7 | DDH | 14.75 | 28 | 1.5 | 7.9 | 138.65 |
| SUN001 | 0 | 4.4 | DDH | 4.4 | 67 | 2.9 | 25.5 | 124.96 |
| SUN003 | 10.4 | 26.8 | DDH | 16.4 | 18 | 0.9 | 6.4 | 119.72 |
| SUN013 | 21 | 30 | RC | 9 | 18 | 1.3 | 10.7 | 108 |

**Table 3 Sunshine 100m% intercepts**

At the conclusion of the drilling Stonehenge reported an Inferred resource from surface to a depth of 60 metres below surface of;

287,600 tonnes @ 2.8%Zn, 1.5%Pb, 31g/t Ag at a 0.5%Zn cutoff grade.

| HoleId | Type | Depth | Grid | East_Z55 | North_Z55 | Elevation | Azimuth | Dip |
|---|---|---|---|---|---|---|---|---|
| SDD001 | DDH | 603.6 | MGA94_55 | 359451.0 | 5358861.0 | 242.0 | 45.0 | -70.0 |
| SDD002 | DDH | 420 | MGA94_55 | 358675.0 | 5359500.0 | 225.0 | 45.0 | -60.0 |
| SUN001 | DDH | 20 | MGA94_55 | 360099.0 | 5359451.0 | 252.8 | 134.0 | -70.0 |
| SUN002 | DDH | 60 | MGA94_55 | 360102.0 | 5359449.0 | 252.7 | 134.0 | -45.0 |
| SUN003 | DDH | 29 | MGA94_55 | 360126.0 | 5359464.0 | 255.2 | 193.0 | -60.0 |
| SUN005 | DDH | 81.95 | MGA94_55 | 360128.7 | 5359513.0 | 252.8 | 130.0 | -45.0 |
| SUN007 | DDH | 104 | MGA94_55 | 360112.6 | 5359443.2 | 254.3 | 293.0 | -50.0 |
| SUN008 | DDH | 28.5 | MGA94_55 | 360174.7 | 5359520.4 | 255.4 | 124.0 | -45.0 |
| SUN009 | DDH | 29 | MGA94_55 | 360149.9 | 5359475.0 | 255.2 | 130.0 | -45.0 |
| SUN010 | RC | 61 | MGA94_55 | 360095.0 | 5359436.4 | 252.3 | 0.0 | -90.0 |
| SUN011 | DDH | 81 | MGA94_55 | 360063.0 | 5359474.3 | 251.7 | 127.0 | -52.6 |
| SUN012 | DDH | 69 | MGA94_55 | 360063.3 | 5359476.3 | 251.7 | 132.0 | -70.0 |
| SUN013 | RC | 41 | MGA94_55 | 360095.0 | 5359453.8 | 252.5 | 0.0 | -90.0 |
| SUN014 | DDH | 93 | MGA94_55 | 360062.8 | 5359474.5 | 251.7 | 131.8 | -64.0 |
| SUN015 | RC | 41 | MGA94_55 | 360132.1 | 5359478.3 | 252.8 | 0.0 | -90.0 |
| SUN016 | DDH | 59 | MGA94_55 | 360104.4 | 5359535.7 | 253.0 | 159.7 | -42.0 |
| SUN017 | RC | 38 | MGA94_55 | 360169.1 | 5359521.9 | 255.5 | 0.0 | -90.0 |
| SUN018 | DDH | 82.5 | MGA94_55 | 360123.5 | 5359515.7 | 252.5 | 139.9 | -66.7 |
| SUN019 | RC | 31 | MGA94_55 | 360145.6 | 5359507.1 | 253.0 | 131.0 | -50.0 |
| SUN020 | DDH | 54 | MGA94_55 | 360152.6 | 5359552.5 | 254.5 | 126.9 | -49.4 |
| SUN021 | DDH | 45 | MGA94_55 | 360203.5 | 5359562.4 | 261.6 | 130.0 | -48.3 |
| SUN022 | DDH | 66 | MGA94_55 | 360178.0 | 5359585.0 | 260.0 | 126.4 | -50.0 |
| SUN026 | RC | 60 | MGA94_55 | 360116.0 | 5359441.4 | 254.5 | 127.3 | -59.7 |
| SUN027 | RC | 26 | MGA94_55 | 360119.8 | 5359466.3 | 253.0 | 0.0 | -90.0 |
| SUN028 | DDH | 60 | MGA94_55 | 360097.8 | 5359422.9 | 252.2 | 142.7 | -60.2 |
| SWAN001 | DDH | 25 | MGA94_55 | 359564.0 | 5358477.0 | 242.0 | 257.0 | -60.0 |
| SWAN002 | DDH | 22 | MGA94_55 | 359589.0 | 5358482.0 | 245.0 | 257.0 | -60.0 |
| SWAN003 | DDH | 25.5 | MGA94_55 | 359554.0 | 5358525.0 | 238.0 | 257.0 | -60.0 |
| SWAN004 | DDH | 52.5 | MGA94_55 | 359578.0 | 5358531.0 | 239.0 | 257.0 | -60.0 |
| SWAN005 | DDH | 25.5 | MGA94_55 | 359542.0 | 5358574.0 | 238.0 | 257.0 | -60.0 |
| SWAN006 | DDH | 36 | MGA94_55 | 359566.0 | 5358580.0 | 239.0 | 257.0 | -60.0 |
| SWAN007 | DDH | 30 | MGA94_55 | 359531.0 | 5358623.0 | 239.0 | 257.0 | -60.0 |
| SWAN008 | DDH | 50 | MGA94_55 | 359555.0 | 5358628.0 | 240.0 | 257.0 | -60.0 |
| SWAN010 | DDH | 50 | MGA94_55 | 359544.0 | 5358677.0 | 240.0 | 257.0 | -60.0 |

**Table 4 Location of all Stonehenge drill holes**

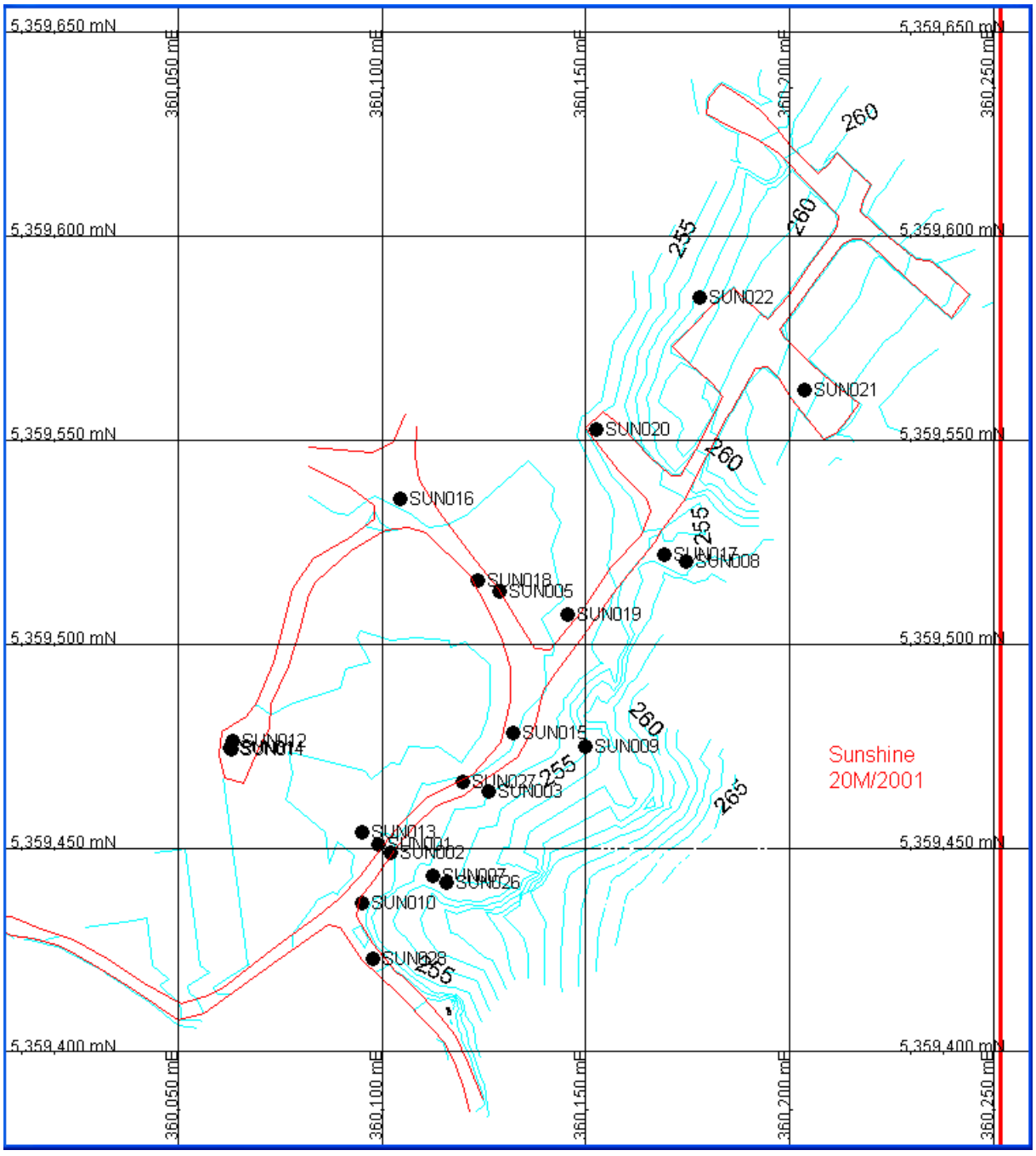


**Figure 7 Plan of Stonehenge Sunshine drill holes**

**Swansea Drilling**

Stonehenge drilled 9 diamond holes for 346m's along the Swansea line of lode. There were no significant intersections. A review of the drill holes by RMG indicates that most holes failed to reach the target lode as defined by the historical workings.


**Figure 8 Plan of Stonehenge Swansea drill holes**

# 3 Exploration Activities

## 3.1 Introduction

RMG Ltd has conducted the following work on EL17/2003 and RL2/2012.

- Diamond drilling (3 drillholes) of the Sunshine Prospect
- Diamond drilling (3 drillholes) of the CRA Zinc Zone.
- Compilation of historical, geological, geochemical, geophysical and topographic data into a GIS (MapInfo) database.
- Acquisition of high resolution GeoEye-1 and World View 2 imagery.
- Acquisition of high resolution 1 metre contour Digital Surface Model (DSM).
- Acquisition of SkyTEM heli-borne EM data covering the EL from a competitor.
- Rehabilitation of the Stonehenge's Swansea drill sites.
- Rehabilitation of RMG drill sites.

RMG Ltd completed its diamond drilling program in mid-June, 2012. A total of 3 diamond drill holes have been drilled on RL2/2012 at Sunshine and 3 diamond holes on EL17/2003 on the CRA Zinc Zone, for a total of 590m.

## 3.2 Regional Activity

Regional activities include acquisition of GeoEye-1, Worldview-2 and SkyTEM data sets.

**GeoEye-1**

New capture Stereo GeoEye-1 was captured 6/04/2012, which included 100 sq km of 2m resolution 4-band multispectral imagery. A 1 metre gridded Digital Surface Model (DSM) was created from the imagery.

**WorldView-2**

25 sq km of 50cm resolution Archived WorldView-2 was purchased and orthorectified. The archived imagery was captured 31/12/2011.

**SkyTEM Survey**

SkyTEM is a helicopter-borne time-domain electromagnetic system. The system acquisition parameters are summarized below. The data covering EL17/2003 was flown by Zeehan Zinc (now Creat Resources Ltd). The SkyTEM survey was purchased from Creat by RMG.

The survey specifications are:

| | |
|---|---|
| Survey Company: | Geoforce Pty Ltd |
| Dates Flown: | 20 – 31 January 2008 |
| Terrain Clearance: | 30 metres (nominal) |
| EM System: | SkyTEM (High moment and low moment) |
| Sample Rate: | EM 4 Hz (~4-10m) |
| Magnetometer: | Scintrex CS-2 Cesium vapour |
| Sample Rate: | mag 10 Hz |
| Peak transmitter moment: | 119,320 A.turns.m2 |
| Delay times: | 59.8 µs (SkyTEM channel 8) – 8.8 ms (SkyTEM channel 32) |
| Traverse Line Spacing: | 100 metres |
| Traverse Line Direction: | E – W |
| Tie Line Spacing: | 1000 metres (required to level magnetics data) |
| Tie Line Direction: | N – S |
| Datum: | MGA55/GDA94 |

Figure 9 below, shows Channel 15 of the EM data with the soil geochemistry of Renison overlaid. The geochemical data is Zn+Pb and the thresholds are blue = 160ppm to 750ppm; green = 750ppm to 2,770ppm; red = 2,770 to 23,870ppm.

The soil geochemistry is generally elevated along the southern contact of the elevated EM region. Assuming the elevated EM is a result of the carbonaceous shales within the Oonah Formation (see mapping in previous figure) then the geochemical anomaly is located along the contact of the shale member and a sandstone-dolomite member.

It also appears that the Sunshine prospect is located at the south-east fold closure of the shale member.

Further work to re-interpret the EM data and integrate it with the geochemical and drill hole data is required.

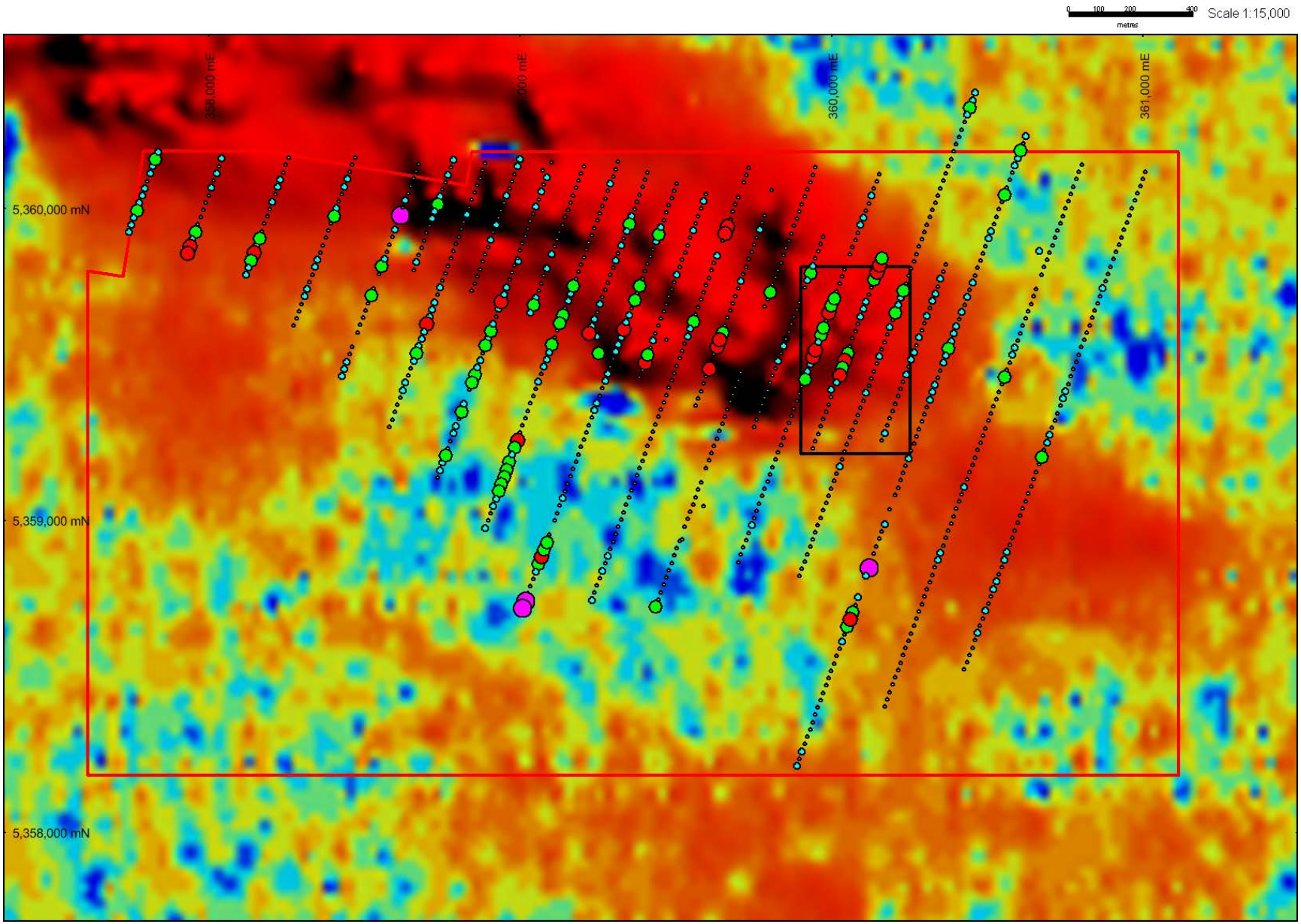


**Figure 9 Plan of AEM anomaly and Renison soil geochemistry**

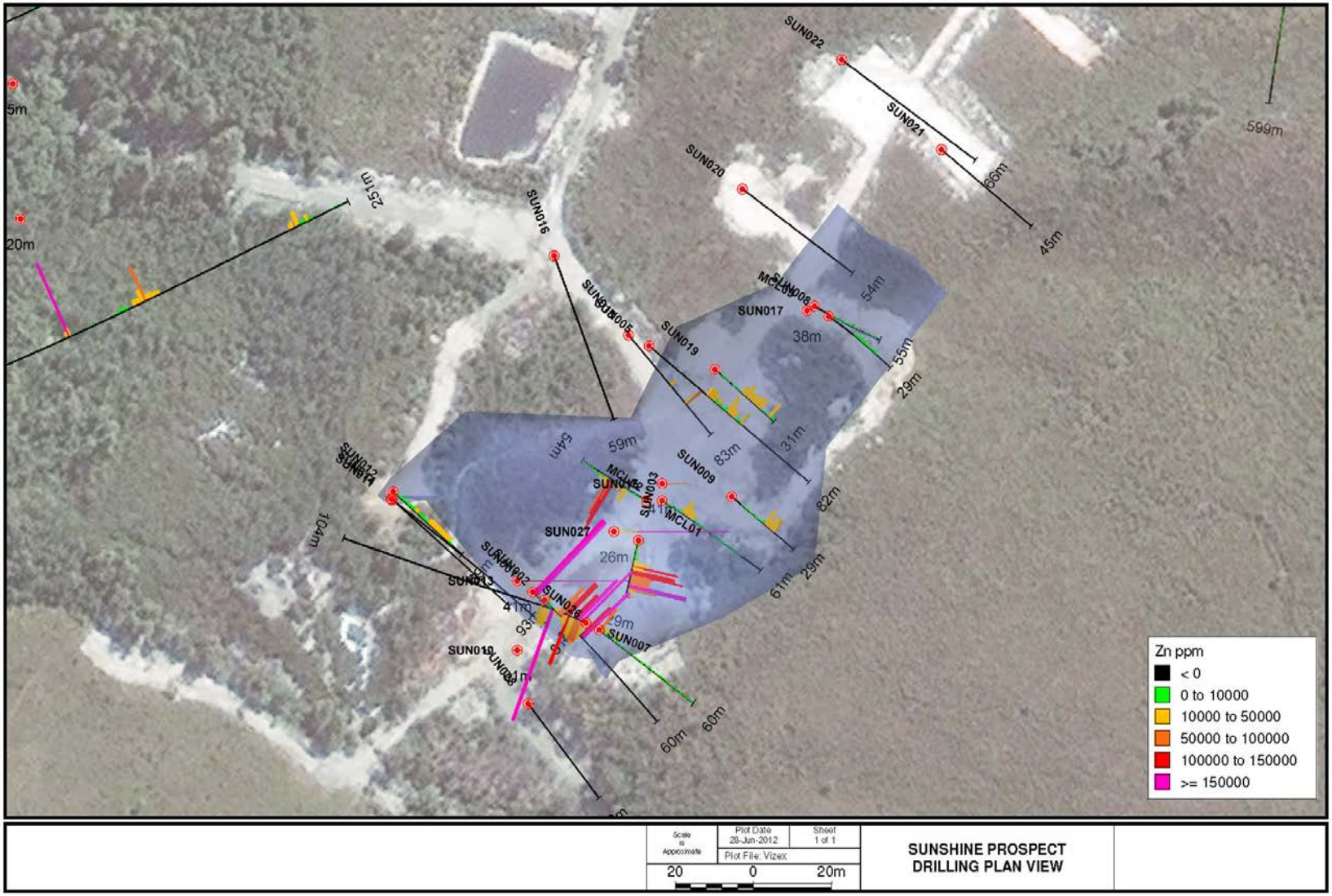


**Figure 10 Plan of RMG Sunshine drill holes**

## 3.3 CRA Zinc Zone EL17/2013

### 3.3.1 Drilling

During 2012 3 diamond drill holes, for a total of 420.2m was drilled at the CRA Zinc zone prospect (EL17/2003). Due to environmental constraints on the low lying button grass, the drilling was moved to a higher less favourable position than initially planned.

The drilling was planned to intercept the mineralized black shale unit that contained 6m @ 6% Zn that was intercepted in S31 by CRA.

Allegiance had previously followed up the zinc intercept in CRA's drilling with drill holes S33 and S34, however very poor core recovery did not enable any assessment of the zone.

RMG drilled with HQ3 to try and maximise core recovery, again recoveries were poor and ground was extremely weathered.

Drill sites are summarised in Figure 11, 12 and 13 below.

Table 5 below lists CRA Zinc Zone drill hole details completed by RMG Ltd.

| HoleID | Type | Azi(True) | Dip | TD m | E GDA94z55 | N GDA94z55 | RL | Company | Method | Date Started | Date Completed |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MCL04 | Diamond HQ | 192 | -50 | 105.9 | 359841 | 5359727 | 267 | Van Dieman | GPS | 9/05/2012 | 18/05/2012 |
| MCL05 | Diamond HQ | 192 | -80 | 175.6 | 359841 | 5359727 | 267 | Van Dieman | GPS | 21/05/2012 | 1/06/2012 |
| MCL05A | Diamond HQ | 192 | -60 | 138.7 | 359813 | 5359727 | 265 | Van Dieman | GPS | 4/06/2012 | 13/06/2012 |

**Table 5 Location of RMG drill holes at CRA Zinc zone**

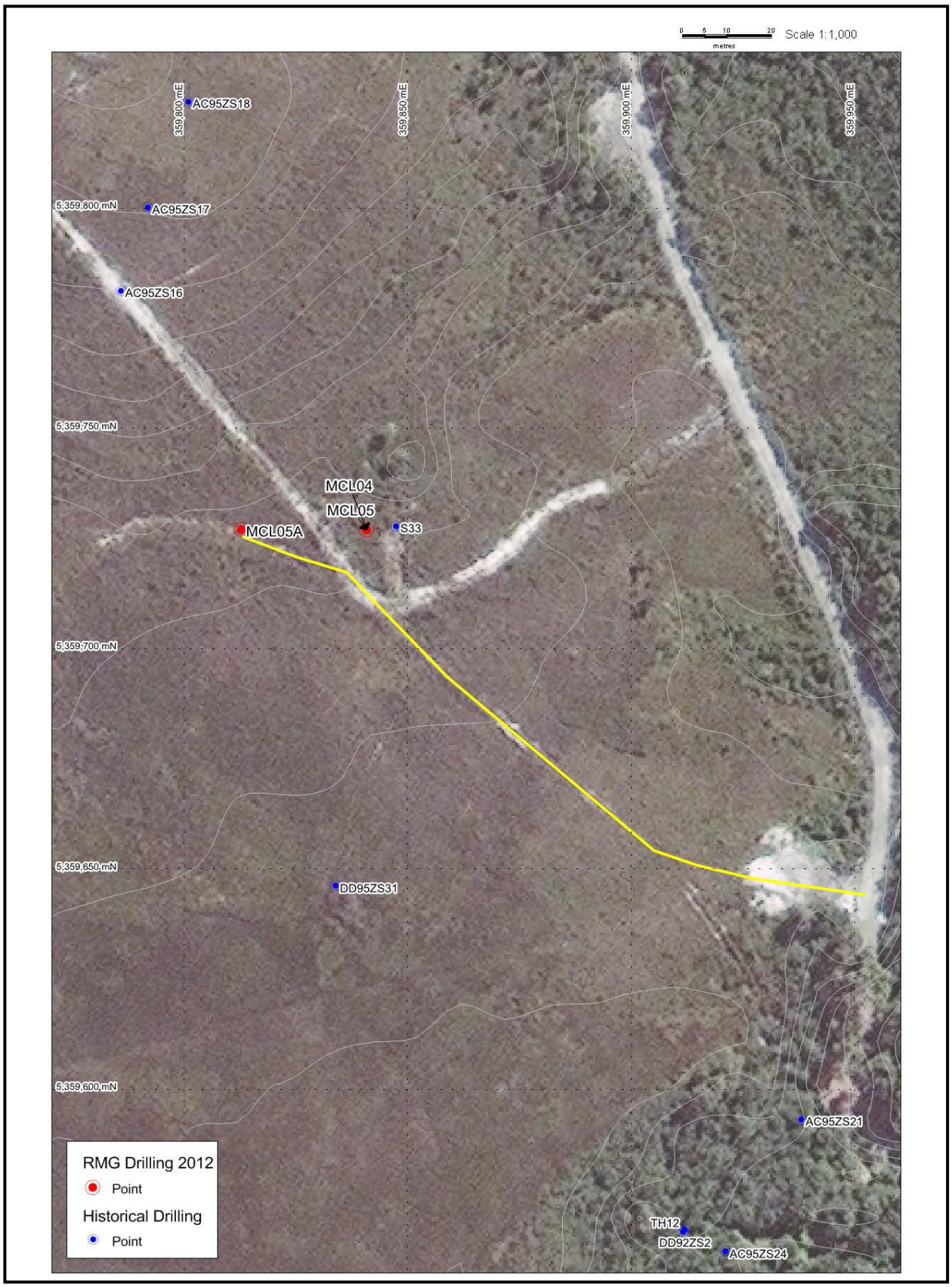


**Figure 11 Plan of RMG drill holes at CRA Zinc zone**


**Figure 12 Plan of RMG Drill sites**

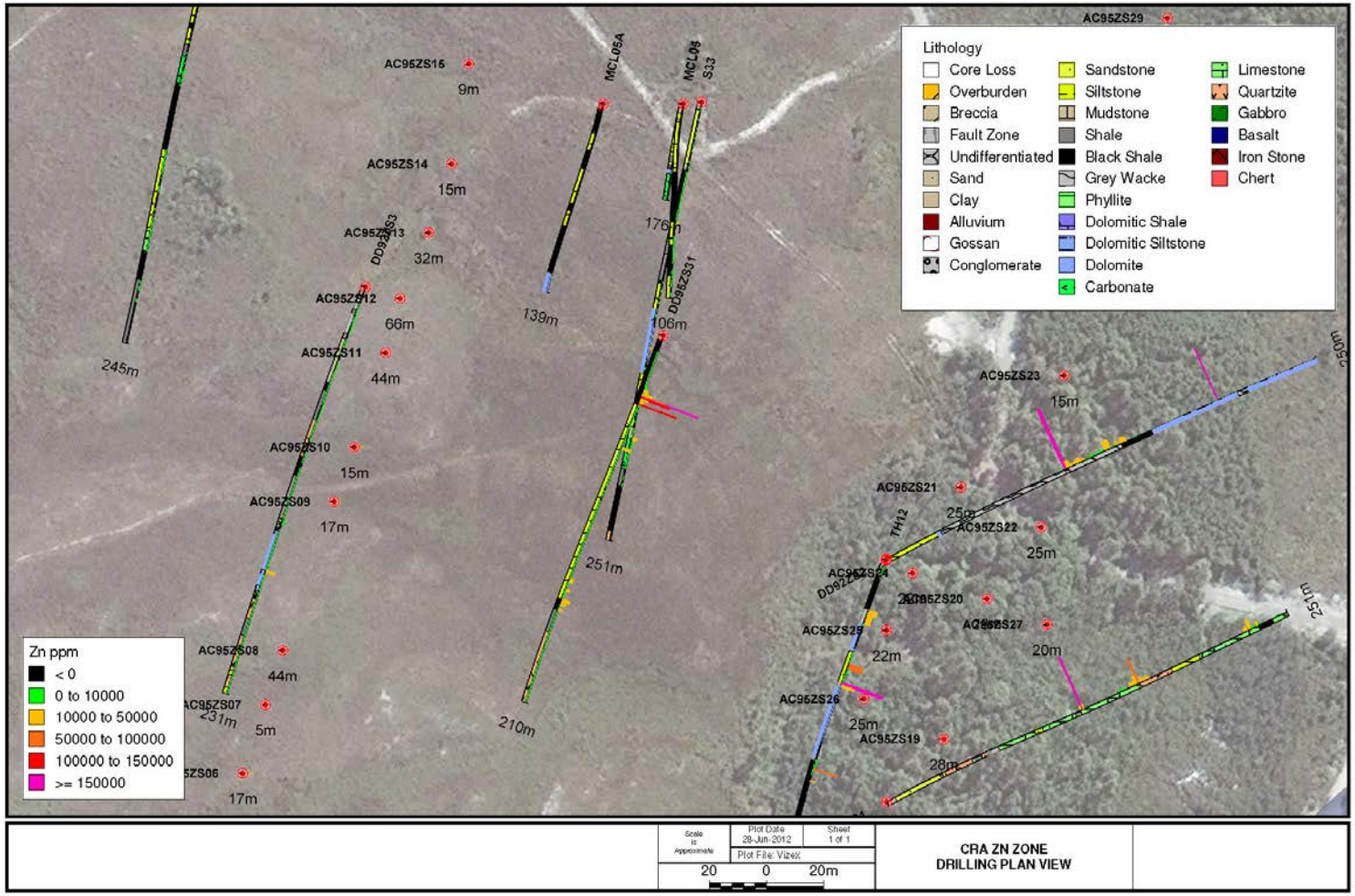


**Figure 13 Plan of all holes at CRA zinc zone**

**MCL04**

MCL04 was designed to primarily test the zone from 80-100m in Allegiance drill hole S33 which suffered ~ 100% core loss. This zone was thought to represent the down dip extension of a shallow (15-40m) black shale zone in CRAE drill hole S31. Whilst better recovery was experienced in hole MCL04, drilling conditions were extremely poor and the hole was eventually abandoned before the design depth of 120m was reached.

The presence of a large pyrite-sphalerite-quartz fragments and the generally elevated zinc values (0.3 – 0.5% Zn) in the lower MCL04 black shale indicates the mineralised zone was intercepted.

There were no significant intersections (2m > 1%Zn+Pb) but two strongly anomalous zones

46 – 66m 20m @ 0.3%Zn, 0.06%Pb
82 – 95m 13m @ 0.2%Zn, 0.1%Pb

**MCL05**

MCL05 was drilled to intercept the highly weathered zinc zone in MCL04 at greater depth in an attempt to achieve better core recoveries.

Drilling consisted of HQ3 to 133.20m where it was switched to NQ for the remainder of the hole. Two separate mineralised shale units were intercepted. The first zone at 22.5m - 38.5m contained disseminated pyrite, whilst the second zone from 118.2m - 125.8m contained disseminated pyrite, galena and sphalerite.

Significant intersections (>2m > 1%Zn+Pb) are;

53 – 55m 2m @ 0.27%Zn, 5.85%Pb, 174 g/t Ag
122 – 124m 2m @ 0.6%Zn, 1.33%Pb, 12.5g/t Ag within a broad mineralised envelope of
117 – 162m 45m @ 0.2%Zn, 0.12%Pb

**MCL05A**

MCL05A was designed to intercept the Black shale carbonate contact that contained 6m @ 6% Zn in S31. Four zones of black shale where encountered 5.6m -19.9m, 33.7-47.2m, 73-78m, 90.2 -125m. None of these zones contained significant sphalerite mineralisation. Disseminated pyrite was present in all black shale units.

Drilling conditions were very poor with low core recoveries from 90 - 125m. Flowing sands were encountered at 130m and with the risk of bogging rods it was decided to end the hole.

One significant intersection of;
45 – 47m 2m @ 1.4%Zn, 2%Pb, 34.5g/t Ag within a broad mineralised envelope of
45 – 138.7m 93.7m @ 0.4%Zn, 0.14%Pb

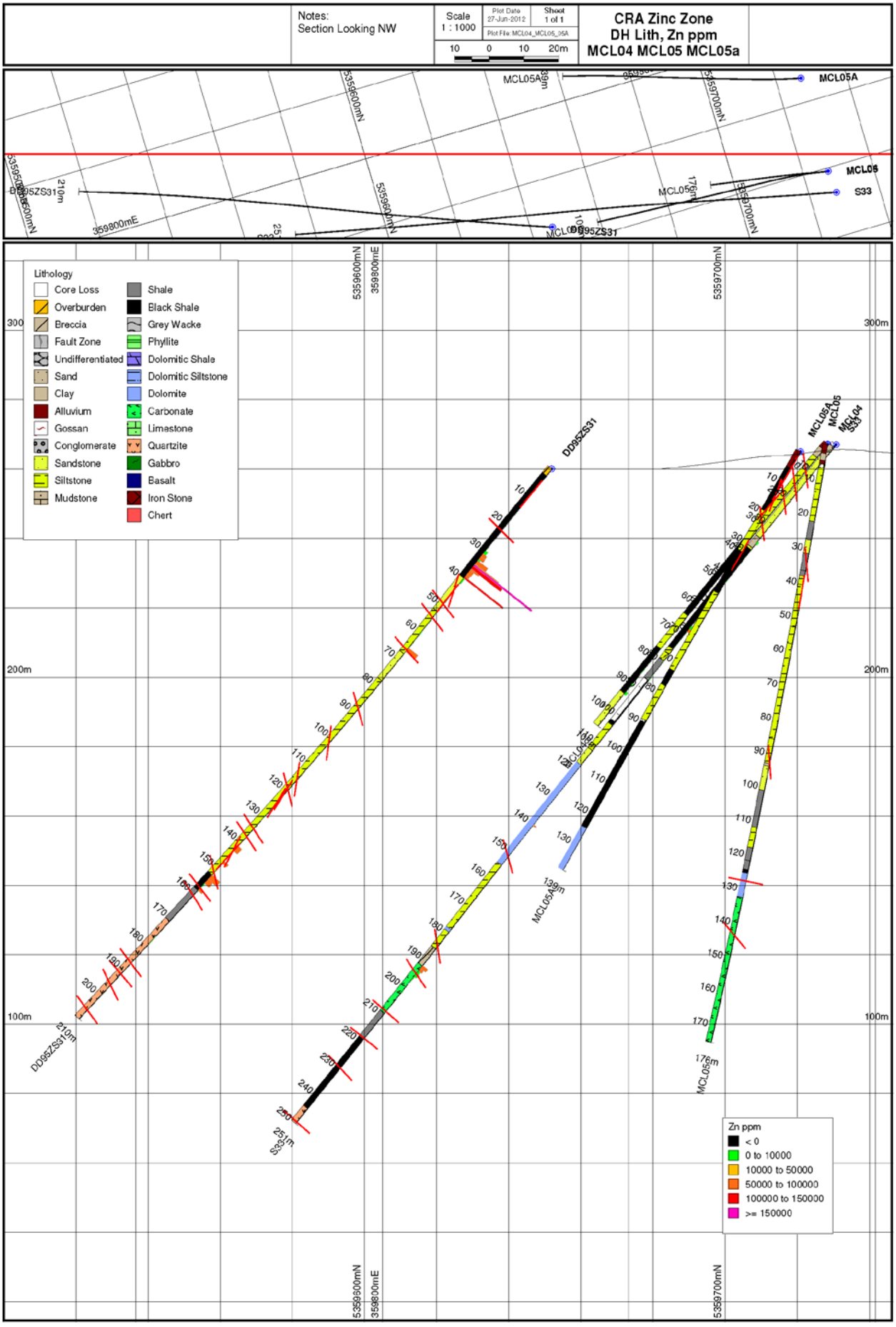


**Figure 14 Cross section of drill holes at CRA zinc zone**

## 3.4 Sunshine RL2/2012 Drilling Results

### 3.4.1 Drilling

During 2012 3 diamond drill holes, total of 169.8m at Sunshine (20M/2001) was completed. The drilling was planned to confirm the zinc-lead-silver black shale unit previously intercepted by Stonehenge Metals.

Table 6 below shows Sunshine drillholes completed by RMG Ltd.

| HoleID | Type | Azi(True) | Dip | TD m | E GDA94z55 | N GDA94z55 | RL | Company | Method | Date Started | Date Completed |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MCL01 | Diamond HQ | 300 | -70 | 53.8 | 360128 | 5359474 | 258 | Van Dieman | GPS | 3/05/2012 | 4/05/2012 |
| MCL02 | Diamond HQ | 120 | -60 | 61.2 | 360132 | 5359474 | 258 | Van Dieman | GPS | 24/04/2012 | 3/05/2012 |
| MCL03 | Diamond HQ | 120 | -70 | 54.8 | 360171 | 5359523 | 256 | Van Dieman | GPS | 17/04/2012 | 24/04/2012 |

**Table 6 Location of RMG Sunshine drill holes**

Figure 15 below shows the location of the 3 Sunshine drill holes drilled by RMG.

**MCL01**

MCL01 was drilled to a total depth of 53.8m and intercepted the expected mineralized black shale pug unit (15.1m wide) between 16.3m and 31.4m. Drilling conditions were difficult with zones of poor core recovery experienced. Large voids, possibly old workings were encountered with no core return.

46 samples were assayed at 1m intervals, total of 46m sampled. Significant results included a 4m zone between 27m - 31m @ 8.5% Zn.

**MCL02**

MCL02 was drilled to a total depth of 61.2m and intercepted the expected mineralized black shale pug unit (9.2m wide) between 11.3m and 20.5m.

50 samples were assayed at 1m intervals, total of 50m sampled. Significant results included a 7m zone between 12m – 18m @ 2.5% Zn. 9m zone between 11m - @ 14 g/t Ag.

**MCL03**

MCL03 was drilled to a total depth of 54.8m and intercepted the mineralized black shale pug unit (7.3m wide) between 25.8m and 33.1m.

36 samples were assayed at 1m intervals, total of 36m sampled. Minor traces of Zinc were intercepted ~0.69% Zn. A rich 8m Pb Ag zone was intercepted between 25.8m – 34m, 19.75 g/t Ag and 3.4% Pb.

**Summary**

The 3 diamond holes by RMG have not affirmed the RC drill results of Stonehenge in SUN017 and SUN015. The diamond holes appear to indicate that the samples from the Stonehenge drilling have been contaminated and upgraded.

The diamond drilling confirms the association of the zinc-lead mineralisation with a particular black shale unit that is strongly pyritic.

The diamond drilling also confirms significant structural complexity in the continuity of the black shale horizon.

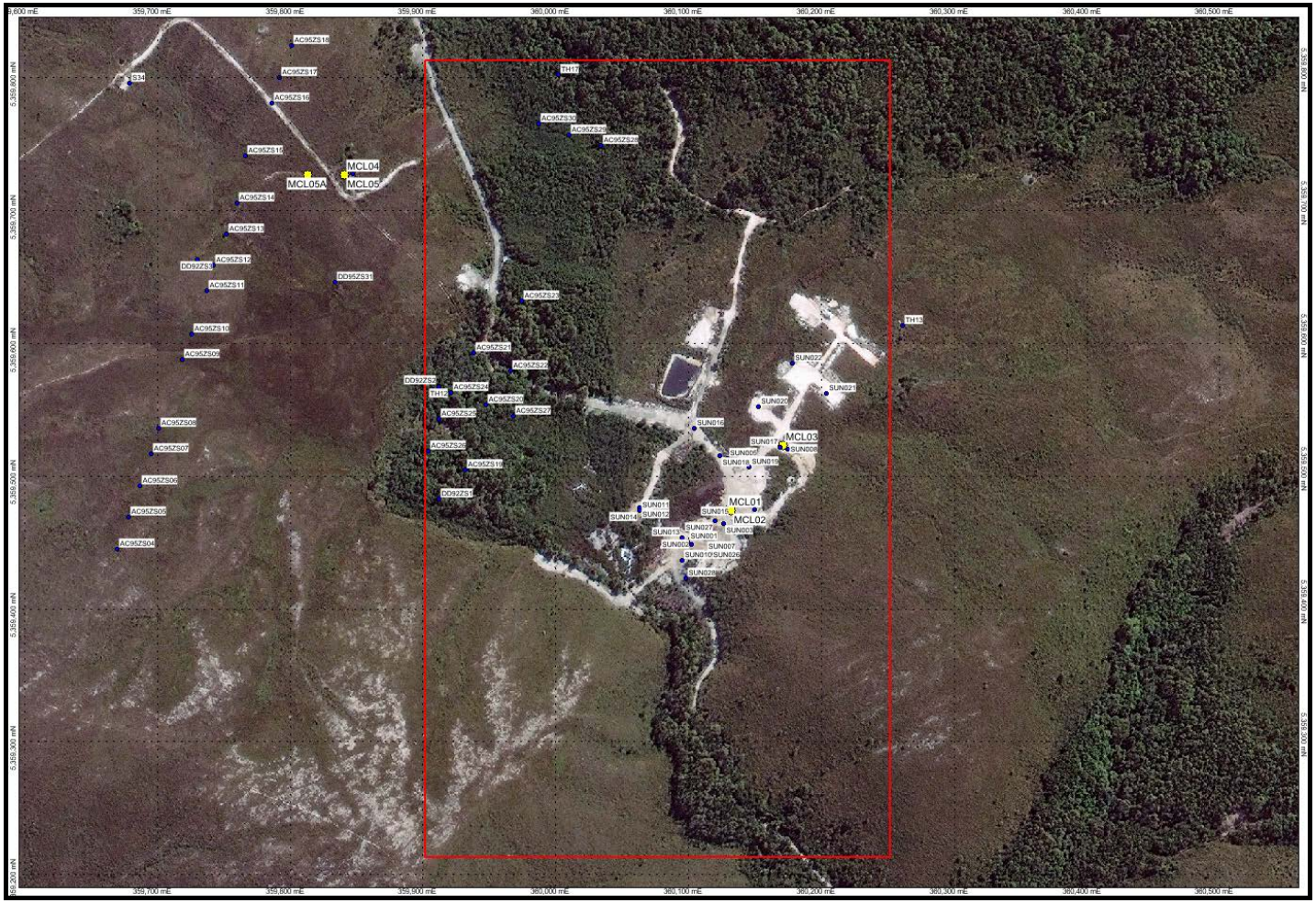


**Figure 15 Plan view of Sunshine drill sites**

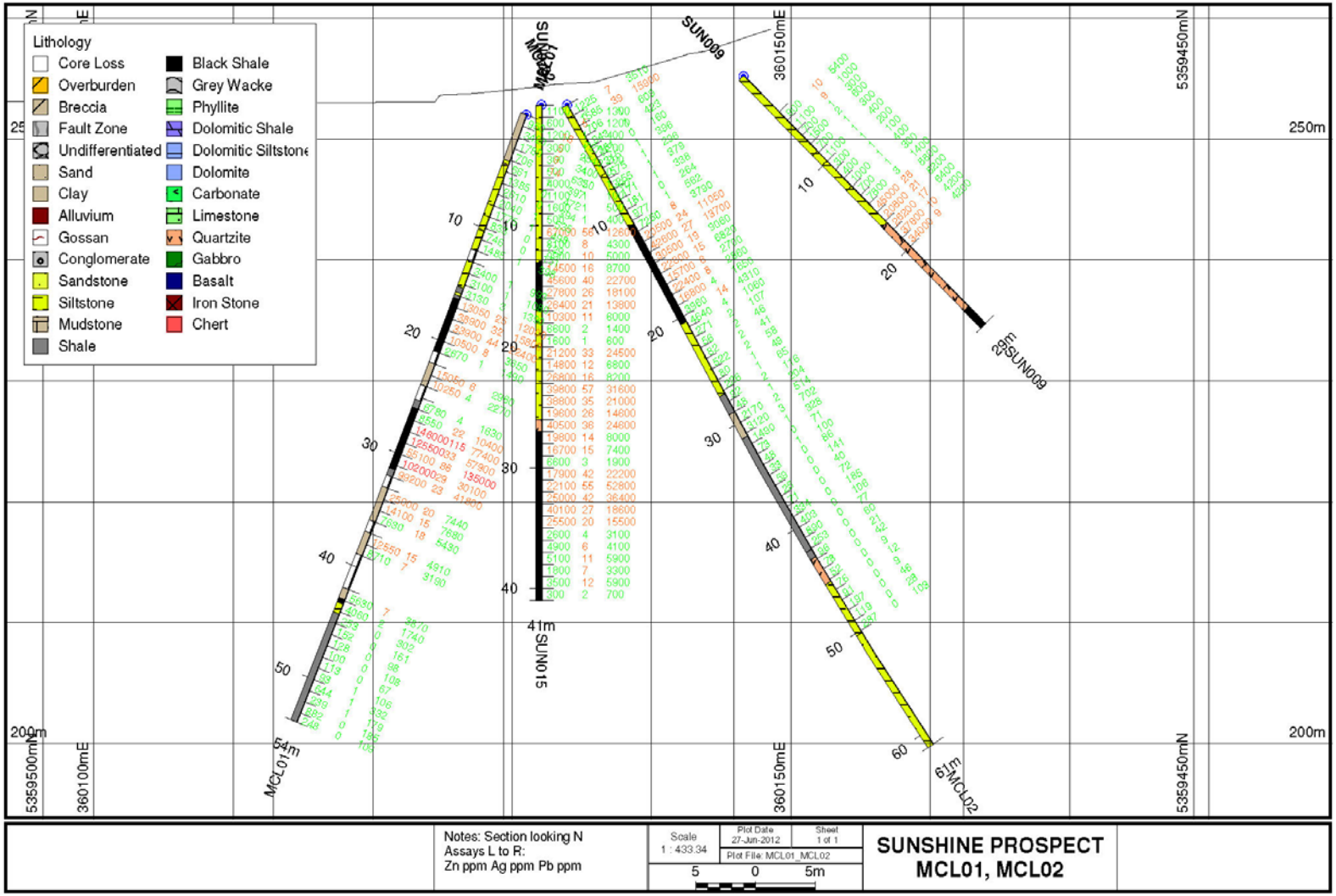


**Figure 16 Cross section Sunshine MCL01 and MCL02**

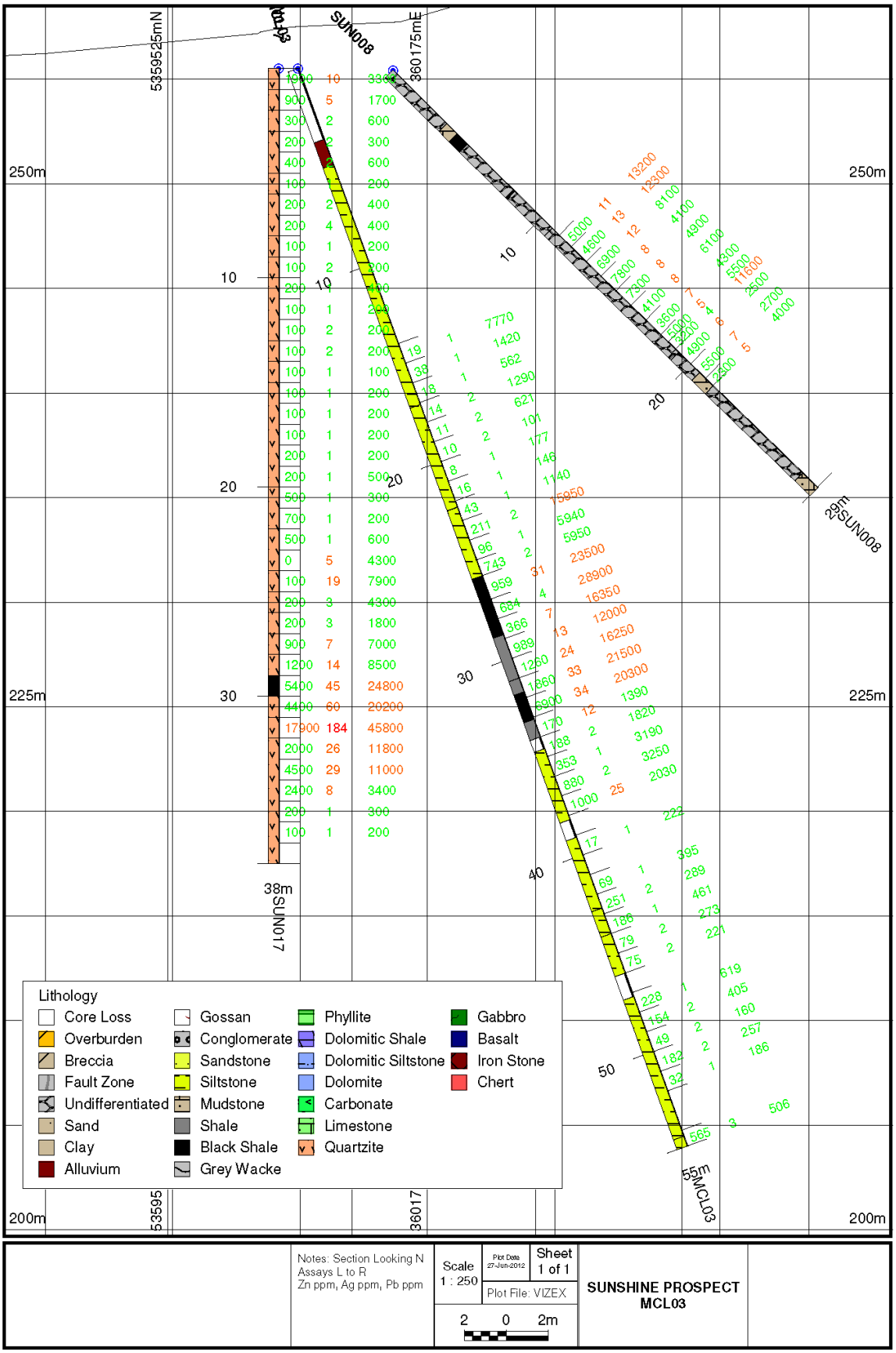


**Figure 17 Cross section Sunshine MCL03**

### 3.4.2 Kim McDermott - Sunshine Interpretation

A meeting was held with Kim McDermott from McDermott Mining. Kim, originally a prospector previously held 20M/2001 and extracted small amounts of ore from the Sunshine deposit.

The locations of all costeans and workings at Sunshine were established.

McDermott interpreted the ore body to extend along strike to the SW and to the NE. The presence of the Grubbs Shear indicates the body could be shifted along the Grubbs shear to the NW. Anomalous soils and wacker results (Zn ~ 6210 ppm) in the SW is evidence to support this interpretation. McDermott's interpretation and summary of features at Sunshine is summarised in the below plan (Figure 13).

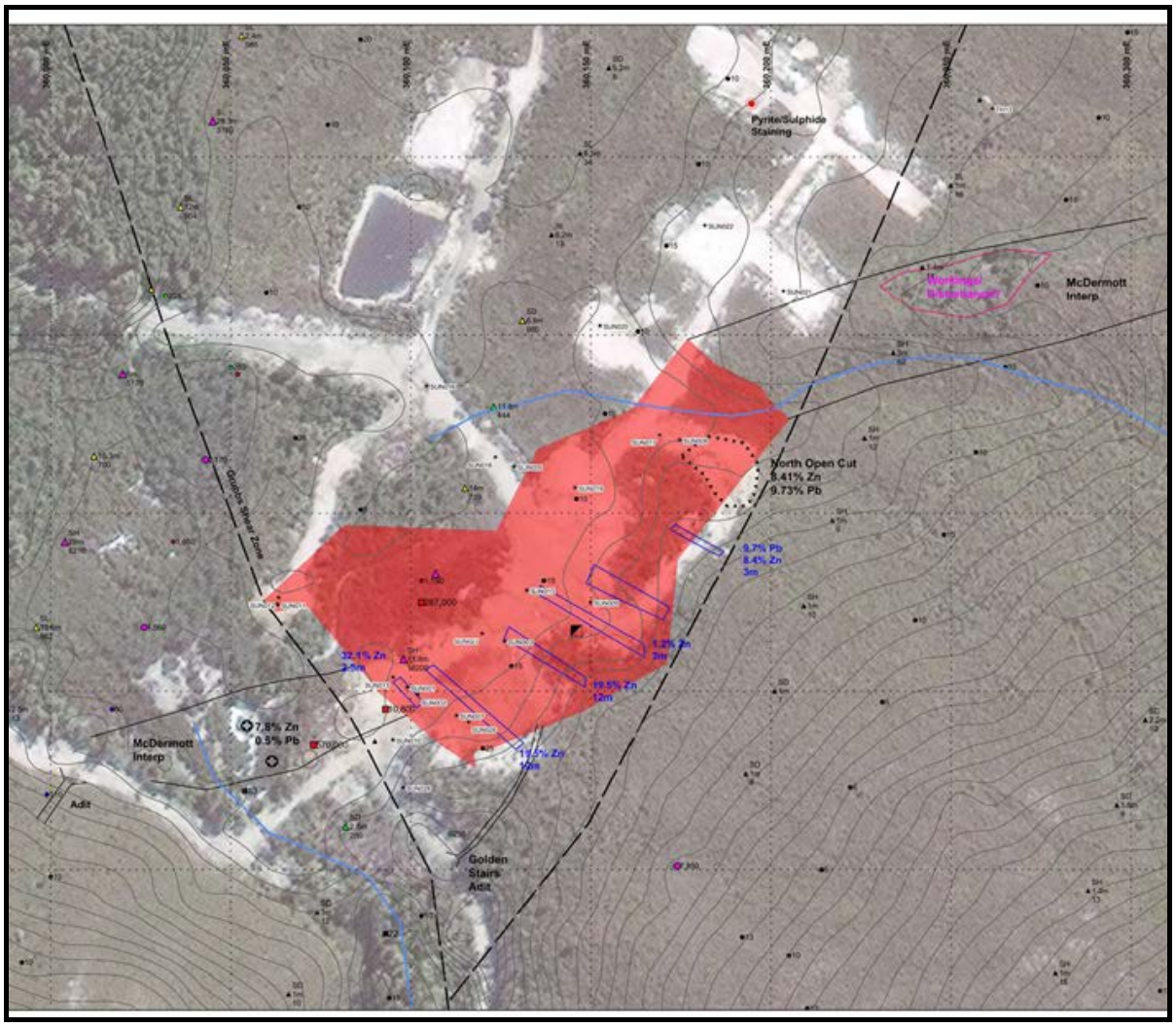


**Figure 18 Plan of McDermotts trends at Sunshine**

# 4 Conclusion

RMG has completed the diamond drilling of 6 holes on 2 prospects within EL17/2003 at CRA Zinc Zone and RL2/2012 (previously ML20/2001) at the Sunshine Prospect.

The drilling was to achieve 2 purposes:

1. To validate the higher grade zinc zones at the Sunshine prospect
2. To achieve higher core recoveries at the CRA zinc zone and possibly better continuity to the mineralisation.

RMG drilling at the CRA Zinc zone whilst achieving better core recovery compared to CRA and Allegiance Mining (albeit, still very poor), has still not resulted in better mineralisation continuity.

The drill results did not confirm the higher grade zones at the Sunshine zinc prospect. The Stonehenge drill results are believed to be affected by excessive water ingress and poor sample recovery.

Further review of the permit prospectivity concludes limited opportunity to define a significant, economic resource.

# 5 Environment

See the attached Appendix One for a discussion of the site preparation and rehabilitation activities.

# 6 Key Words

Zinc, lead, silver, Oonah Formation, dolomite, Zeehan, Comstock, Sunshine Prospect