RGC EXPLORATION PTY. LIMITED

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E.L. 42/87, INCORPORATING M.L.'s

43M/85 AND 123M/47 - ZEEHAN AREA

ANNUAL REPORT FOR THE PERIOD

OCT. 1991 TO SEPT. 1992

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SUMMARY

EL 42/87 is centred on the silver-lead mining centre of Zeehan, and completely encloses the Aberfoyle/Gippsland joint venture M.L.'s over Queen Hill, where a reported geological resource of 3.6 Mt at 1.2% Sn has been defined.

Work began in 1989 and was initially aimed at delineating areas with potential for Queen Hill/Renison style tin mineralisation, and as a result the Sylvester and Parting Lake grids were established. Early results from the Sylvester area were sufficiently encouraging for RGC to sign an Option to Purchase agreement with Oceania (Tas) P/L over two MLs they hold in the area. Since then, exploration has mainly focussed on the Sylvester grid, and only recently has attention returned to Parting Lake. Since 1991 exploration focus has shifted to base metals (Ag-Pb-Zn) as a consequence of the continued decline in tin prices.

In the Sylvester area, targetting of Sn Pb Zn anomalism and a deep sourced magnetic anomaly within Upper Oonah Fm carbonates in the footwall of the Balstrup Fault has resulted in the discovery of a significant massive sulphide replacement body with sub-economic levels of Pb-Zn-Ag. 13 diamond drillholes totalling 5,165m have been drilled along this line of mineralisation, and the sulphide body has now been intersected over a 1 km strike length and remains open at depth, below 450m, over its entire length. An inferred resource of 6 Mt @ 3.3% Pb, 5.5% Zn and 40 g/t Ag is estimated, however the spacing between drillholes is too wide to guarantee continuity of grade and thickness between holes. This figure is therefore only a guide to the maximum resource that could be firmed up by further drilling.

The mineralisation is distal to and genetically related to a skarn complex that stretches 3.5 km from the Heemskirk granite to the ESE along the footwall of the Balstrup Fault. The massive sulphide lens replaces a portion of a

magnetite serpentinite skarn and more distal recrystallised carbonate. In turn the magnetite skarn is distal to and replacing a portion of early anhydrous, prograde skarn assemblages characterised by Diopside-Andraditic Garnet-Tremolite. These high temperature assemblages have been identified as far east as the Comstock Mine in the hangingwall of the Tenth Legion Fault (SY001) and high temperature hornfels was logged in SY010. This suggests that a granitic ridge or porphyry dyke may be intruded at a shallow depth along an ESE axis beneath the area. However, gravity interpretation does not support such a conclusion, and the depth to granite based on gravity data is estimated as 2 km.

Exploration of the deposit ceased during 1992 because of the failure of wide spaced holes drilled east and west of the deposit to increase the resource. The resource so far outlined remains sub-economic and although potential remains for additional discoveries along the Balstrup Fault and Tenth Legion Fault, the potential for improving the grade does not look promising. Although a slight mineralisation trend toward higher Cu values (0.15% Cu) is present from west to east, Pb-Zn-Ag grades do not vary significantly and Pb: Zn ratios are constant. This trend suggests there is some potential for cupriferous and/or stanniferous deposits more proximal to the granite and off-hole conductors near SY010 and 014 could be due to such mineralisation.

At Parting Lake a single deep stratigraphic hole was drilled to test for potential base metal and/or stanniferous replacement deposits within Upper Oonah Formation carbonates above a gravity defined cupola. The hole failed to intersect significant carbonates, and the large thrust faults identified at the surface proved insignificant at depth. Some low grade disseminated galena and sphalerite was associated with recrystallised Gordon Limestone at shallow depth, adjacent to a fault, however the style of mineralisation is very distal and the hole failed to intersect any sulphide rich mineralisation suggestive of proximity to a granite cupola.

CONTENTS

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058006

FIGURES - IN TEXT

PLANS

APPENDICES

1. Zeehan Project Rock Chip Sampling Analytical Results
2. Petrological Reports (AMDEL)
3. Results of Microscopic Examination of 15 samples from the Sylvester Prospect
4. Downhole Directional Gyro Surveys (SURTRON)
5. Interpretation of Down Hole TEM Results, drill holes SY010 and SY014
6. Report M050392-Flotation Tests on Sylvester Grid Ore (Enviromet)
7. Rock Property Measurements
8. Diamond Drill Logs
9. Graphite Samples, Mineralogical Reports (CMS)

TABLES

1. Rock Property Measurements
2. Summary of Sylvester Drilling Results
3. Grade and thickness calculations, Method 1
4. Grade and thickness calculations, Method 2
5. Mineralogy of Comstock-Tenth Legion mineralisation trend
6. Gold Standards

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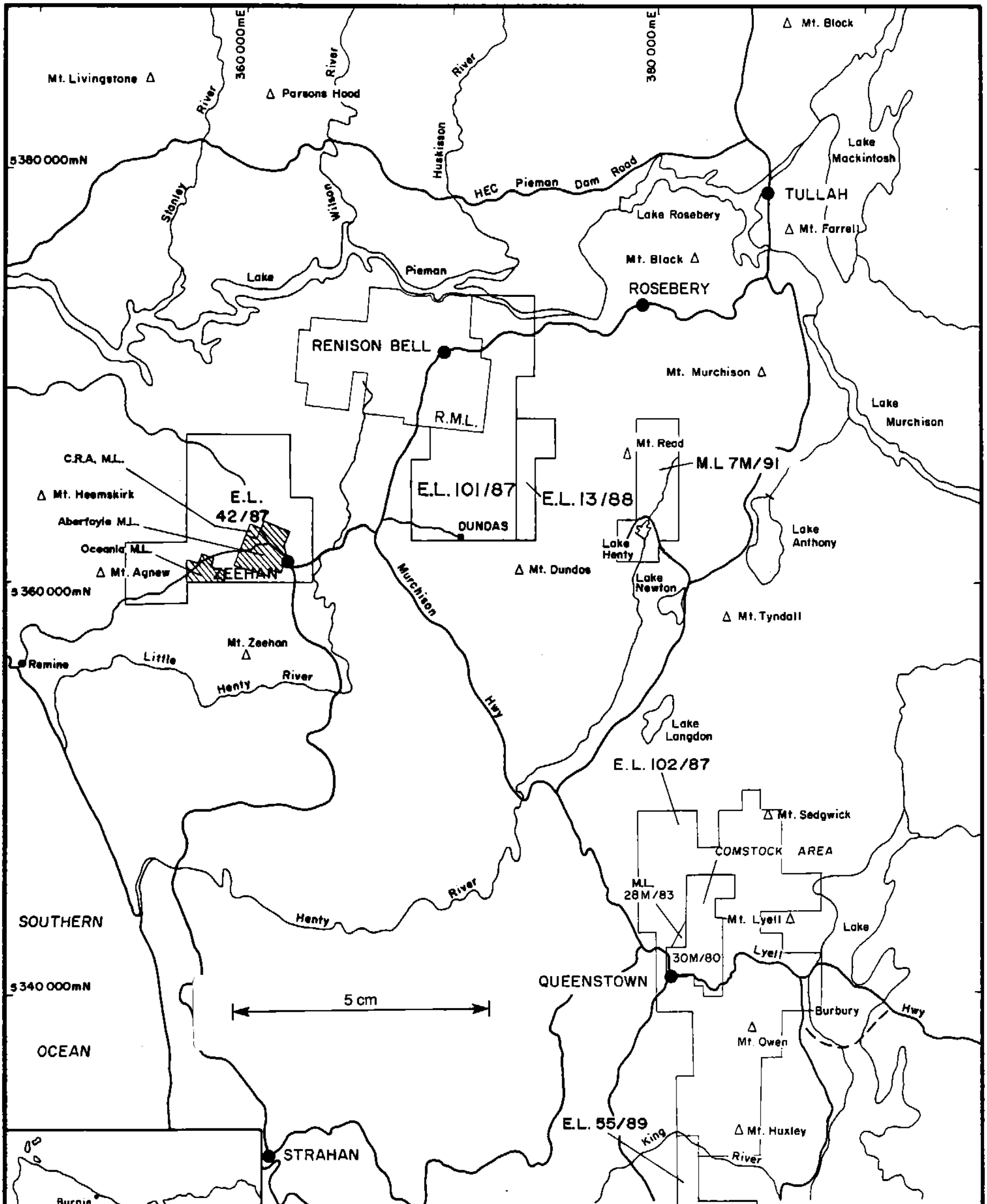

RGC EXPLORATION PTY. LIMITED
(INC. IN N.S.W.)

COMPILED		WEST COAST TENEMENTS
DRAWN		
DATE		
CHECKED		
1:25,000 Reference		

BASE PLAN No.
OVERLAY PLAN No.
SCALE 1:250,000 2·5 0 5·0 Kilometres
FIG. 1

1. INTRODUCTION

EL 42/87 was acquired by Renison Ltd. in August 1987 as a result of a successful tender application. The EL encloses the Aberfoyle/Gippsland joint venture consolidated MLs over Queen Hill, and Renison's interest in the area was initially linked to negotiations with the joint venture partners over the possible acquisition of the MLs (Figure 1).

Work on the EL was deferred while negotiations continued, with the intention that once the MLs were in Renison's control, a combined exploration programme would be conducted over both the MLs and the surrounding EL. However negotiations fell through, and in 1989 RGC Exploration began an exploration programme on behalf of Renison Ltd., without control of Queen Hill having been obtained.

As a result of detailed mapping, rock chip geochemistry and an aeromagnetic survey, conducted during 1988/89, two areas were chosen as warranting more detailed follow-up work. The Comstock and Parting Lake grids were established to cover these two areas, however the Comstock area was later renamed the Sylvester area to avoid confusion with the Comstock prospect near Queenstown.

In the Sylvester area, three major regional faults intersect highly deformed psammo-pelites and carbonates of the Upper Oonah Formation and less deformed turbidites of the Crimson Creek Formation. Several lines of evidence suggest a granitoid ridge extends E-W beneath the area, toward the postulated Queen Hill cupola. The Sylvester, Balstrup and Tenth Legion faults could reasonably be expected to communicate at depth with such a ridge and provide fluid access to sedimentary carbonates.

Two MLs in the area, held by Oceania (Tas.) P/L., were considered to cover a portion of the prospective geology and as a result RGC signed an Option to Purchase agreement with the holders of the MLs to secure tenure of the area.

During 1990 former EL 95/87, which adjoined EL 42/87 to the west of the Sylvester area, became available as ETA 219. RGCE tendered for the area because it covered the westward extension of the major regional faults mentioned above. The area was granted to RGCE and ultimately amalgamated into EL 42/87.

The expanded EL covers 40 square kilometres of countryside that varies from buttongrass and tea-tree swamp to partially forested hilly terrain. It covers Zeehan townsite and many of the old silver-lead mines of the now abandoned Zeehan field. Access is provided by a number of all-weather roads, as well as numerous 4WD tracks and old, partially overgrown tramways.

Work on the EL was initially targetted at locating economic concentrations of tin of the style typified by the Montana deposit (carbonate replacement), the Severn deposit (Fault stockwork) and Queen Hill (fault and carbonate replacement). The Upper Oonah Formation and the so-called Poverty Point Beds (also called Montana Beds) were considered the most prospective units because of the presence within them of significant carbonate beds capable of hosting replacement-style deposits.

However as a result of the location of a significant base metal skarn on the Sylvester grid, the emphasis shifted toward testing the base metal potential of the prospect. This trend was reinforced during 1990/91 when RGCE decided to drastically reduce its tin exploration programme as a result of continued low tin prices and the consequent poor performance of the Renison Bell tin mine.

After the completion of 15 diamond drillholes, exploration of the Sylvester Grid was suspended in 1992 when it became apparent that neither the grade nor tonneage of the resource could be improved to economic limits with further drilling. Exploration then focussed on the Parting Lake Grid, where exploration culminated in the drilling of a single diamond drillhole to test for the possibility of base metal and/or stanniferous replacement deposits above a gravity interpreted granitic cupola.

2. LAND TENURE

EL 42/87 is held solely by Renison Ltd. and explored by RGC Exploration Ltd. (RGCE). It covers 40 square kilometres, most of which is vacant Crown land. The following mining leases are excluded from the EL.

35M/72;	*C.R.A. Exploration P/L (Oonah Hill)*
36M/81;	*Aberfoyle Exp. P/L & Gippsland Oil & Min's NL (Queen Hill)*
43M/85;	*Oceania (Tas) P/L (Sylvester Mine)*
123M/47;	*Oceania (Tas) P/L (Comstock Mine)*
64M/73;	*Kynance P/L (Kynance Mine)*

In May, 1990 an Option Agreement to purchase MLs 43M/85 and 123M/47 was signed with Oceania (Tas.) P/L. Under the terms of the agreement Renison may explore the area for up to five years.

In December, 1990, RGCE successfully tendered for ETA 219 which adjoined EL 42/87 to the west. The ETA was given EL No. 39/90, and in April 1991 was amalgamated into EL 42/87.

3. PREVIOUS WORK

Silver-lead veins were discovered near the present day town of Zeehan in 1882, resulting in the rapid development of the Zeehan field, which flourished until 1914. A brief resurgence of silver-lead mining occurred during the period 1947-1960, when the Montana SL mine was opened and the Oceana lodes were re-developed. By 1960, the field had produced 194,816 tonnes of lead and 26,585 ozs of silver. (refer Plan 4).

The presence of tin in the Zeehan field was recognised early, and small quantities of stannite were mined from the Stannite Lode of the Oonah mine and Clarkes Lode of the Zeehan-Queen mine. Small quantities of cassiterite were mined from the Stormsdown lode at various times, and in the early 1980s Aberfoyle extracted 2,900 tonnes for matte fuming trials (Anderson, 1986). By 1960, tin production totalled 5.3 tonnes tin metal, although no figures are available for tin contained in stannite.

Modern exploration began during the period 1946-47, when Zeehan Explorations NL drilled a number of holes in the Oceana, Despatch and King-Bell areas, with the main target being replacement-style galena mineralisation in the Gordon Limestone. Subsequently Tenneco, Aberfoyle and Amoco have also explored the Gordon Limestone, without success. Additionally, various companies have explored for continuations of the typical Ag-Pb-Zn lodes of the Zeehan Field at the old Tasmanian Crown, Spray, Comstock and Sylvester workings, and for skarn hosted base metal deposits near Tenth Legion.

Significant exploration for stanniferous polymetallic veins has occurred at the Oonah mine, and for replacement tin deposits at Queen Hill and in the Stonehenge area south of E.L. 42/87. Stanniferous magnetite-serpentinite skarns at Tenth Legion have been explored for iron and tin deposits. Details of modern exploration is included in previous reports.

4. REGIONAL GEOLOGY (Plans 3, 6)

4.1 Stratigraphy

Proterozoic

The oldest rocks in the area are psammo-pelitic sediments of the Oonah Formation (Po), which form the core of the Heemskirk Anticlinorium northwest of Zeehan. It has been interpreted as a distal turbidite sequence (Brown, 1986). The sequence typically consists of a monotonous repetition of the following components, in order of relative abundance.

a) Thin bedded grey, micaceous sandstones and siltstones.
b) Massive grey, saccharoidal, quartzitic sandstones.
c) Black, carbonaceous shales.

Toward the top of the Oonah Formation, finer grained lithologies become more dominant and carbonates and spilitic volcanics appear. The Upper Oonah Formation (Pou) has been defined to include these distinctive lithologies, which include:

a) Thinly bedded grey, micaceous sandstones and siltstones.
b) Black, carbonaceous shales.
c) Finely interbedded, laminated sandstones, siltstones, shales. (Posp).
d) Massive grey, saccharoidal, quartzitic sandstones.
e) Dolomites, limestones and calcareous sediments.
f) Spilites, including vesicular lavas, tuffs and breccias (Montana Melaphyre Volcanics - Pom).

The prevalence of the various lithologies shows marked lateral variation. In the Queen Hill area, irregular lenses of spilitic volcanics form a significant proportion of the stratigraphic column, whilst in the Comstock mine area spilites are rare and carbonates are the dominant lithology.

The Oonah Formation has been subject to an early phase of isoclinal folding, which appears to be responsible for the structural repetition of some units, particularly noticeable in Pou sediments. The additional presence of numerous WNW trending thrusts makes stratigraphic correlations extremely difficult.

A significant feature of the Upper Oonah Formation is the presence of broad "melange" zones characteristically consisting of chaotic, unsorted angular to lenticular fragments of Oonah sandstone in a fine carbonaceous matrix. They sometimes exhibit gradational contacts, merging laterally with highly strained psammo-pelites characterised by boudinaged sandstone interbeds and graphitic shales. These melanges occur throughout the Upper Oonah, but are most abundant toward the contacts with younger units. They are virtually ubiquitous along the Upper Oonah/Crimson Creek contact on the Sylvester Grid, where they include some fragments derived from the latter unit. The exact relationship between these melanges and faulting is not completely understood.

<u>Cambrian</u>

The Crimson Creek Formation (Ɛc) consists of a poorly outcropping sequence of weathered turbidites. The dominant lithologies are light brown labile lithic arenites, wackestones and tuffs of (intermediate to mafic) volcanic origin, and mudstones. Massive, poorly bedded siltstones and shales are also present, along with occasional carbonate interbeds. The lithic arenites intercepted by SY002 commonly displayed rythmically graded beds typical of turbiditic sequences. Volcaniclastics in the Argent Flat area were described by Twelvetrees and Ward (1910) as "Keratophyric Tuffs and Breccias", and petrographic descriptions in Blissett & King (1968) identify the main-constituents as fragments of altered plagioclase and quartz, with minor glass, pyroxene, muscovite etc.

A 45 metre thick sequence of massive dolomites interbedded with shales and interlaminated sandstone and siltstone has been recorded at the base of the Crimson Creek Formation at two locations as a result of drilling by Aberfoyle (Anderson, 1986). Anderson correlates the sequence, referred to as the Poverty Point Beds (or Montana Beds), with the Success Creek Group (Ɛs) at Renison because of its conformable relationship with overlying Ɛc lithologies. These Ɛs beds are mostly faulted out at the surface by the Severn fault.

Regionally, an unconformity is inferred at the base of the Cambrian sequence because the underlying Oonah Formation sediments have been affected by isoclinal folding which has not been recorded in the younger units.

South of Comstock mine is a large area of poorly outcropping basic volcanics, shales, siltstones, sandstones, grits, conglomerates and cherts bound to the north by the Tenth Legion Fault. The sequence has been variously ascribed to the Crimson Creek Formation (Blissett, 1962) and the Dundas Group (Poltock, 1981) based on lithological criteria. More recently Brown (1986) has studied mafic rocks from Comstock Creek and determined them to be high magnesian andesitic lavas rather than typical Ɛc tholeiites.

On Dunkley's tramway, north of Parting Lake, are scattered outcrops of siltstone, mudstone and shale which Blissett ascribed to the Crimson Creek Formation.

Palaeozoic

The east and southeastern portions of the EL are occupied by the large Zeehan Syncline, which has a core of Devonian, Silurian and Ordovician sediments (DSO). The base of the sedimentary sequence within and north of Zeehan townsite is occupied by the Gordon Limestone, which is poorly exposed and can only be described on the basis of material from old mine dumps (e.g. Tasmanian Crown). It varies from a massive, grey limestone to a black, arenaceous limestone which decomposes to dark clay that resembles deeply weathered puggy shale in outcrop.

The contact between the Gordon Limestone and older units in the area was previously interpreted to be a major regional structure, the Despatch Fault, which marks the boundary between the Zeehan Syncline and the Heemskirk Anticlinorium to the west. However a conglomerate bed consisting of Pou quartz and quartzite detritus occurs along the contact and is conformable with the overlying Siluro-Ordovician units. This indicates that much of the contact is an unconformity.

Apart from the Gordon Limestone, units of the sequence are considered to have little prospectivity for hosting significant tin mineralisation. Therefore for a detailed lithological description, readers are referred to Blissett (1962).

Permian

Tillites (Pt) of the Zeehan Glacial Formation unconformably overly part of the Oonah Formation north and west of Zeehan.

Intrusives

Cambrian gabbros (Єg) occur in outcrop SW of Comstock (McIvor Hill gabbro). A highly altered gabbro (or mafic extrusive?) was intersected at the bottom of drillhole SY001. Additionally, an ultramafic dyke (Єus) was mapped in the summit cutting of the Comstock tramway, where it is associated with a significant shear. Other parallel dykes are suspected from ground magnetic data. The McIvor Hill gabbro is chemically similar to gabbros in the Serpentine Hill mafic-ultramafic complex (Brown, 1986).

A Devonian granitoid ridge is interpreted to extend regionally from the Heemskirk granite toward Pine Hill (Figure 2). Along this ridge, a culmination (cupola) is interpreted beneath Queen Hill, and another culmination may occur beneath the Sylvester grid. However the only granitoid rocks exposed at the surface are a number of thin quartz-porphyry dykes.

4.2 Structure

Proterozoic sediments of the Oonah Formation display evidence of an early phase of tectonism that is absent from Cambrian and younger units. Its main features are:

a) Isoclinal folds with refolded axes, e.g. Piney Creek

b) Extreme local variability in bedding attitude and facing

c) Locally developed crenulation cleavages

A significant feature of the Sylvester Grid is the presence of broad melanges which occur throughout the Upper Oonah Formation and which are almost ubiquitous along the Oonah/Cambrian contacts. Most of the intraformational melanges appear to have formed during a period of intense flattening strain which preceded deposition of Crimson Creek turbidites, hence unambiguous intraformational melanges are absent from the Crimson Creek Formation and younger units.

However the melanges along the Upper Oonah/Cambrian contacts and some intraformational melanges are spatially associated with major structures, and the presence in the former of fragments derived from the Cambrian units indicates they formed after the deposition of these units. These melanges may have formed during the mid-Devonian Tabberabberan orogeny.

The D2 deformation of the mid-Devonian Tabberabberan orogeny was the most significant period of deformation in the area. It involved two main phases of deformation:

a) NE-SW compression that produced tight NW trending folds including the Zeehan Syncline and Heemskirk Anticlinorium.

b) NW-SE compression that produced open NE trending folds.

The superimposition of these two phases of deformation produced strong interference patterns of folds that can be clearly seen in Lower Palaeozoic units of the Zeehan area. The more significant NE-SW compression resulted in the development in some areas of a strong NW axial plane cleavage (e.g. Oonah-Queen Hill).

The D2 orogeny also produced a series of faults trending NW and dipping NE at 45-50°, mostly with reverse to oblique displacement indicated where measurable. The most significant of these is the Tenth Legion Fault, along which Oonah Formation sediments have been thrust SW over Cambrian units and a portion of the Devonian granite. Parallel structures located NW of Zeehan are reverse-oblique, involving displacement of NE blocks up and to the NW. The Sylvester Fault has the same trend but is steeper dipping and the sense of displacement is not known. The Balstrup Fault trends WNW with a steep northerly dip and the north block is thought to have moved down and to the west. NW trending structures at the Spray Mine are steep NE dipping strike slip faults.

Another major set of faults trends NNE with dips mainly steeply south, and apparently involving normal displacement. These faults are generally displaced by NW trending thrusts. They include the Severn Fault, Wallers Fault and Brickfields Fault.

The Heemskirk batholith is thought to have intruded toward the end of the D2 event, and is known from regional gravitational data to extend as a ridge beneath Zeehan townsite. The form of the intrusion appears to have been controlled by major D2 folds and regional structures, with culminations occurring between major anticlinal axes where they cross the regional trend.

Finally, there is evidence of post-Permian thrusting 4km NW of Zeehan townsite, where Proterozoic quartzites of the Oonah Formation are thrust over Permian tillites of the Zeehan Glacial Formation in the vicinity of the abandoned Montana SL mine.

4.3 Mineralisation

Virtually all economic production from the Zeehan Field was silver-lead, and most of the major mines were located within the boundaries of EL 42/87. The lodes occupy small faults belonging to the NNE and NW trending sets mentioned in Subsection 4.2. They rarely occupy major structures, but often appear to be spatially related to them (e.g. Oonah, Montana). Host lithologies have little effect on mineralisation, and wallrock alteration is mostly absent.

A regional mineralogical zonation pattern has long been recognised for the lodes, based primarily on distance from the Heemskirk granite. Beyond the limits of contact metasomatism, the following generalised zones were recognised:

a) Pyritic Belt; lodes contain sphalerite-galena in a pyritic gangue;

b) Sideritic Belt; lodes contain mainly galena in a sideritic gangue;

The Pyritic Belt occurs closer to the granite, with the anomalous exception of the Queen Hill area. With increasing distance from the granite, galena becomes dominant over sphalerite, and siderite becomes the dominant gangue mineral. Systematic changes in sphalerite geochemistry parallel this zonation, and involves a decline in Fe S content, and a sudden drop in Mn S content with the first appearance of siderite.

Queen Hill is anomalous firstly in that pyritic lodes dominate within a portion of the regional "Sideritic Belt", and secondly in that economic concentrations of tin occur in many of them. Three main styles of mineralisation are present:

a) Fissure Lode; e.g. Stannite Lode, Clarkes Lode
b) Shear hosted stockworks; e.g. Severn
c) Carbonate replacement; e.g. Montana, Queen Hill.

The mineralogical zonation and distribution of orebody morphologies at Queen Hill is consistent with the postulated presence of a cupola located at depth beneath the area.

In the Comstock mine-Tenth Legion area, mineralisation is spatially associated both with the Heemskirk granite and with major structures, notably the Balstrup and Tenth Legion faults. Three main styles of mineralisation are present:

1) Magnetite-serpentinite skarns hosted by carbonates mostly within the contact metamorphic aureole (Tenth Legion).

2) Base metal sulphide skarns hosted by carbonates mostly outside the contact metamorphic aureole (Kynance, SY003, 005, 009 & 012).

3) Sphalerite rich base metal-pyrite veins hosted by various lithologies (Kynance, Comstock, Boss, Britannia etc.)

5. WORK COMPLETED, 1991/92

5.1 Geological Mapping

Detailed 1:1,000 scale supplementary mapping was completed in selected areas in an attempt to refine interpretation of the complex structural history of the region. This involved mapping all accessible adits of the Comstock, Britannia and Spray Mines, and a portion of the Granville Highway where it crosses Piney Creek. Reconnaissance mapping was completed elsewhere to improve coverage of the 1:5,000 series of Geological Fact Maps. This included mapping of old workings and outcrop along the Tenth Legion Fault as far SE as the Swansea Mine. This mapping is included on Plans 7-13 and 21.

Additionally, a literature review of all reports pertaining to the old silver-lead mines north of Zeehan townsite was completed to improve interpretation of sub-surface and the relationship between structure and mineralisation. Some limited follow-up mapping around old workings was involved. Plans 4 and 22 summarises the information obtained.

5.2 Geophysics

Downhole Sirotem surveys were completed by McSkimming Geophysics on drillholes SY010, 014 and 016 to delineate any off-hole conductor that might represent missed massive sulphide bodies. The surveys involved 4-5 surface transmitting loops per hole, all measuring 300 x 300m. The results and interpretation are included as Appendix 5.

Dr. David Leaman was contracted to provide a more detailed interpretation of gravity data to supplement his 1990/91 interpretation of the form of the Heemskirk Granite. At David's suggestion, the interpretation will utilise existing gravity data from the Tasgrav database supplemented by up-to-date geological interpretation, drilling results and rock property measurements to provide geological constraints that should enable gravity modelling to be refined. It is hoped that the more detailed interpretation will outline additional granitic cupolas and possibly delineate areas of mass imbalance that could be due to large scale mineralisation and alteration. The data will be analysed to see if the Comstock-Tenth Legion mineralisation is detectable.

To provide the rock property measurements requested, density measurements were taken for 59 rock chip and drill core samples (T34701-34759) chosen to represent principle lithological types present in the region. Additionally, about a thousand downhole and surface measurements of magnetic susceptibility have been collected. The rock property measurements are included as Appendix 7 and summarised as Table 1. Density and magnetic susceptibility measurements of drillcore are also included in the Drill Logs (Appendix 8).

The gravity re-interpretation has not been completed.

5.3 Drilling

Seven diamond drillholes (SY010-016 inclusive) were completed on the Sylvester grid to test for continuation laterally and at depth of the Comstock massive sulphide replacement body. Metreage for the holes totalled 2,988.7m. Diamond Drilling (Tas) drilled SY010, 014 and 016, and Longyear (Aust) drilled the remainder.

SY010 was collared 400m NW of SY005, and inclined southward at -60 degrees to intersect the western extension of the mineralisation at an estimated downhole depth of around 500m. It was specifically targetted at the modelled source of a large WNW trending magnetic anomaly, thought to be caused by the magnetite-serpentinite skarn that occurs adjacent to the mineralisation in SY005.

SY011 was collared 800m ESE of SY003 and inclined southward at -55 degrees to intersect the interpreted position of the Balstrup Fault at a downhole depth of about 100m.

SY012 was collared 200m north of SY003 and inclined southward at -60 degrees to test the mineralisation about 300m downdip from the SY003 intersection.

SY013 was collared 400m ESE of SY003 (midway between SY003 and SY011), and inclined -55 degrees southward to intersect the Balstrup Fault about 100m downhole.

SY014 was collared 400m WNW of SY010 and inclined southward at -60 degrees to intersect the same magnetic source as that targetted by SY010. This hole was the westernmost hole drilled to test the mineralisation.

SY015 was collared 200m north of SY013 and inclined southward at -55 degrees to intersect the Balstrup Fault about 200m down dip from the SY013 intersection.

SY016 was collared 200m north of SY011 and inclined southward at -50 degrees to intersect the Balstrup Fault about 200m downdip from the SY011 intersection. These two holes are the easternmost drilled to date.

Downhole surveys were taken generally every 30m using an Eastman single shot downhole camera, and when drilling NQ core orientation makers were also made every 30m where practicable utilising a Van Ruth orientator (SY010, 014, 015, 016) or a tapered spear (SY011-SY013). All holes were cased with 40 mm PVC except for SY013, where attempts to lower the casing failed. Diamond drill core from all holes was removed to the Zeehan core shed where all core was geologically and structurally logged (oriented core), photographed, and estimates made of RQD and recovery.

Selected intervals (usually 1m) were split and submitted to Analabs where whole samples were crushed and pulverised to nominal -150# then a portion of each was analysed. Drillholes SY010-014 were analysed for Cu, Pb, Zn, Ag (AAS-Method 101), Sn

W (XRF-Method 401), and Au (FA/AAS-Method 309). Au and W analyses were omitted from remaining holes.

Complete drill logs and analytical results are included as Appendix 8 and results are summarised as Plans 5 and 14-19.

Because of the presence of magnetite in SY010 and 014, these holes were also surveyed at 20m intervals by Surtron, using a downhole gyro system accurate to 2 degrees azimuth (Appendix 4).

All drillhole collars were surveyed by contractor Len MacKenzie.

Five drillcore samples were despatched to Amdel for petrographic and mineragraphic description of skarn assemblages (Appendix 2).

On the Parting Lake Grid a single diamond hole, PL001 was collared on the Parting Lake road near the old Tasmanian Crown workings and was drilled at an inclination of -55 degrees and azimuth of 250 degrees (True) to a total depth of 673m. The hole shallowed significantly below about 300m, resulting in an inclination of only -37.8 degrees at the bottom of the hole. The hole was drilled above a gravity interpreted cupola in Upper Oonah Fm psammo-pelites, and was designed to test for carbonates and for evidence of significant magmatically derived hydrothermal fluid movement along the shallow NE dipping thrusts that appear to have provided the main fluid conduits for the old Zeehan Western and Zeehan Montana Ag-Pb-Zn mines. It was hoped that if any carbonates were present at depth adjacent to such structures, they could host significant replacement style Ag-Pb-Zn or Sn deposits.

As with Sylvester Grid holes, downhole surveys and core orientation surveys were conducted every 30m, the latter using a Van Ruth orientator. Attempts were made to lower 40mm PVC but due to bad hole conditions it was only possible to lower to a depth of about 350m. All core has been removed to Zeehan core shed where it has been geologically and structurally logged.

At the time of writing of this report the core had been selectively split and submitted to Analabs but no analytical results had been received. The drill log is included in Appendix 8 and the drill section is included as Plan 20.

5.4 Metallurgical Assessment

Three samples of massive sulphide from the Sylvester Grid drilling programme were submitted to Enviromet for metallurgical assessment. The original sample was composited from pulp rejects, however due to oxidisation of the pyrrhotite the sample gave unsatisfactory results and two samples of freshly split core were then sent to complete the tests. One sample was composited from pyrite rich intersections and the other from pyrrhotite rich intersections, to ensure the two main styles of sulphide mineralisation were represented. Results are summarised as Appendix 6.

Fifteen samples of massive sulphides and wallrock were submitted for microscopic examination by Dr. Carol Halsall, to complement the metallurgical assessment. All petrographic reports completed by AMDEL (including 5 completed during 1991/92) were forwarded to Dr. Halsall along with relevant geological data as background material to assist her assessment (Appendix 3).

Finally, three graphitic samples were submitted to Central Mineralogical Services for mineralogical assessment. (Appendix 10).

5.5 Rehabilitation

Drillsites SY012, SY013 and SY015 have been completely rehabilitated and SY011 is partially rehabilitated. Holes still requiring rehabilitation are listed below:

PL001; sump and pad
SY009; sump and pad
SY010; sump, pad and access road
SY011; sump
SY014; sump, pad and access road
SY016; sump, pad and access road

TABLE 1

ROCK PROPERTY MEASUREMENTS

FORMATION	COMMENTS	AVERAGE MAGNETIC SUSCEPTIBILITY	AVERAGE DENSITY
Bell Shale		8.5	2.39
Florence Quartzite		3.8	2.42
Austral Ck.Siltstone		3.0	-
Keel Quartzite		1.5	2.63
Amber Slate		3.0	2.37
Crotty Quartzite		2.6	2.25
Moina Sandstone		0.5	2.48
Gordon Limestone		8.5	2.76
Gabbro		31.7	2.81
Ultramafic	Serpentinite	2660.0	2.52
Crimson Ck. Fm.		56.3	2.81
Montana Volcanics		18.6	2.36
Upper Oonah Fm.	Magnetite-Serp.Skarn	53030.0	3.28
Upper Oonah Fm.	Massive Sulphides	20799.0	
Upper Oonah Fm.	Psammo-Pelites, PTL	2.9	
Upper Oonah Fm.	Psammo-Pelites, SYL	190.1	2.71
Upper Oonah Fm.	Melange	2599.1	2.68
Upper Oonah Fm.	Carbonate, mineralised	1402.1	2.88
Upper Oonah Fm.	Carbonate,unmineralised	8.1	2.78
Upper Oonah Fm.	Hornfels	-	2.94

TABLE 2

SUMMARY OF SYLVESTER DRILLING RESULTS

Hole	From	To	Thickness	Cu	Pb	Zn	Ag	Au	Sn
SY002	270.0	284.0	14.0		0.7	2.1		0.1	
SY003	148.0	158.2	10.2		3.3	6.4	40		
SY005	507.4	535.8	28.4	0.2	1.9	3.0	18		
SY008	129.0	139.9	10.9		3.7	5.8	25		
SY009	378.7	395.1	16.4		0.6	1.1	8		
SY010	510.6	512.3	1.7			2.4	1		
	551.0	553.0	2.0						0.1
SY011	142.0	161.5	19.5		1.2	3.3	15		
SY012	443.8	457.0	13.2		0.6	1.3	15		
	457.0	470.0	13.0		0.1	0.1	4		
SY013	122.0	125.3	3.3		0.3	0.2	7		
SY014	113.0	120.0	7.0		2.0	4.1	32		
	239.0	245.0	6.0	0.3	0.2	0.6	13		
	392.0	394.0	2.0			0.1		0.2	
SY015	403.3	404.4	1.1	0.9	2.3	0.2	200		
SY016	274.6	280.1	5.5		0.2	1.1	28		
	337.0	338.9	1.9		0.3	0.4	6		

TABLE 3

GRADE AND THICKNESS CALCULATIONS, METHOD 1

LOCATION			ETT CALCULATIONS				AVERAGE GRADES			
Hole	From	To	HT	HD	HB	ETT	Cu	Pb	Zn	Ag
SY003	148.0	158.0	10.2	50.8	187.5	8.76		3.26	6.41	40.4
SY005	507.4	535.8	28.4	57.0	353.0	5.75	0.15	1.90	2.97	18.3
SY008	129.0	139.9	10.9	52.0	000.5	3.28		3.68	5.81	25.0
SY009	378.7	397.1	16.4	73.0	197.3	9.83		0.60	1.06	8.5
SY012	443.8	457.0	13.2	63.0	204.5	9.47		0.64	1.31	14.8
OVERALL AVERAGE						7.42		2.02	3.51	21.4

HT = (Down) hole thickness

HD = Hole Dip

HB = Hole Bearing

ETT = Estimated True Thickness

TABLE 4

GRADE AND THICKNESS CALCULATIONS, METHOD 2

LOCATION			ETT CALCULATIONS				AVERAGE GRADES			
Hole	From	To	HT	HD	HB	ETT	Cu	Pb	Zn	Ag
SY003	148.7	156.0	7.7	50.8	187.5	6.61		4.13	8.23	47.7
SY005	507.4 519.0	514.0 535.8	6.0 16.8	57.0 57.0	353.0) 353.0)	4.62	0.18	3.50	3.34	21.1
SY008	129.0	139.9	10.9	52.0	000.5	3.28		3.68	5.81	25.0
SY009	392.8	395.1	2.3	73.0	197.3	1.35		4.02	7.72	50.7
SY012	450.0	457.0	6.4	63.0	204.5	4.31		1.18	2.42	24.9
OVERALL AVERAGE						4.03		3.30	5.50	33.9

HT = (Down) hole thickness

ETT = Estimated True Thickness

HD = Hole Dip

HB = Hole Bearing

Mineralogy of Comstock - Tenth Legion

DRILLHOLE	HOST ROCK	MAIN MINERALS	ACCESSORY MIN.	RETROGRADE MIN.	VEINS	COMMENTS
TLC1	Psammo-pelite	Tr Dp	Ap Qz Py T.	Ep	Ep Pr + Qz	Hornfels
TLC2	Carbonate	Tr Dp	Sp Py Tc	Tr - Tc Ep	Ep + Dm Ha	Hornfels
	Pelite	Qz Mv Cl	To Sp Zo	Cl		Spotted hornfels
	Pelite	Co - Se + Tr		Tr Ph - Cl		
TLC3	Carbonate ?	Dp Tr To Mt	Sl Ph Sp	Tr - Cl	Sl + Ep	Prograde Skarn
	Carbonate ?	Dp Gr/Ad	Cl Ph Tr Sp		Ep + Dp + Gr	Prograde Skarn
	Serpentinite ?	Dp Cl Ad	Ov Mt Iv Sl Po			Prograde Skarn
	Serpentinite ?	Tc Cb Gn	Ov Ph Mt	Dp - Se - Tc+ Cb		Prograde Skarn
	Psammo-pelite	Dp Tr Cc Qz	Sp Ph	Tr - Cl		Prograde Skarn
TLC4	Pelite	Dp Tr Sp	Py Po Le		Pr Qz + Ab + Dp	Prograde Skarn
	Carbonate ?	Dp Tr Tc		Ph - Cl	Cl+Ph+Ep+Ax	Hornfels
				Dp Tr - Tc		
	Pelite	Qz Mv Ph Fp	To	Mv - Se		Hornfels
TLC5	Limestone ?	Dp Ad Ve	Ep Ax Po Mt	Ep	Ep	Prograde Skarn
	Pelite	Tr To Dp	Py Po		Fp Mn-Ep	Hornfels?
TLC8	Carbonate ?	Cc Se Tc Tr	Iv	Ov - Se		
		Dp Ov Mt		Se - Tc + Cb		
TLC9	Pelite	Se Ph Tr Co	Sp Py	Co - Ph + Se		Hornfels

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TABLE 5 (contd.)

DRILLHOLE	HOST ROCK	MAIN MINERALS	ACCESSORY MIN.	RETROGRADE MIN.	VEINS	COMMENTS
SY001	Carbonate	Cl Cc At	Gl Sl Mt Cp	Dp - Tc At		Skarn
		Ac Tc Dp				
	Carbonate	Cc Ad Gl	Sl Qz Ep Cp			Skarn
	Carbonate	Cc Ac Cl Ep	Cp Hm	Cb - Hm		Skarn
SY003	Carbonate	Cb Py Po Ap Qz	Gl Bo Cp Ma Mt	Po - Py + Ma	Cc Po Py	Recrystallised carbonate
	Carbonate	Chl Ep Ac Se	Cc Qz Py			
	Carbonate	Cb Se Tc Po	Cp			? ultrabasic precursor
SY005	Carbonate	Cb Mt Se Cl	Py Po	Po - Py Mt	Se Cl + Mt	Retrograde skarn
	Carbonate	Mt Se	Br ? Po			Retrograde skarn
	Carbonate	Po Py Sl Gl Mt	Cp	Po - Py Mt	Py + Mt	Massive sulphide
SY009	Carbonate	Cb Br Mg	Mt	Br - Ma?		Retrograde Skarn
SY010	Mafic Breccia	Cl Se Le Qz Pl	Ep Ac Py Po To	Pl - Cl	Cc Qz + To	Altered ? Com
	Psammo-pelite	Bt Cl Se Im	Po Cp Ru Cb		Qz + Im Qz + Mt	Hornfels
SY012	Carbonate	Qz Py Se? Cl?	Po Cb Ap Sl Gl			Massive Sulphide
	Carbonate	Py Po Sl Gl		Po - Py		Massive Sulphide
SY014	Carbonate	Tr Cc Sl Po	Cp Gl			Skarn
	Carbonate	Gn Dp Cc Cl Cp	Po Py	Dp - Cc		Skarn

TABLE 5

Abbreviations

Ac	Actinolite
Ab	Albite
Ad	Andradite
At	Anthophylite
Ap	Apatite
Ax	Exinite
Bo	Boulangerite
Br	Brucite
Bt	Biotite
Cb	Carbonate
Cc	Calcite
Cl	Chlorite
Co	Cordierite
Cp	Chalcopyrite
Dp	Diopside
Ep	Epidote
Fp	Feldspar
Gl	Galena
Gr	Grossularite
Gn	Garnet
Ha	Hastingsite
Hm	Hematite
Lm	Ilmanite
Iv	Ilvaite
Le	Leucoxene
Mg	Magnesite
Mt	Magnetite
Ma	Marcasite
Mn	Manganese
Mv	Muscovite
Ph	Phlogopite
Pr	Prehnite
Py	Pyrite
Po	Pyrrhotite
Pl	Plagioclase
Qz	Quartz
Se	Serpentinite
Sp	Sphene
Sl	Sphalerite
Ta	Talc
To	Tourmaline
Tr	Tremolite
Ve	Vesuvianite
Zo	Zoisite

TABLE 6

GOLDFIELDS EXPLORATION PTY.LTD.

GOLD ASSAY STANDARDS
Current recommended values. 22.APR.992

ID	MEAN GRADE	PREC. %	ACCEPT. RANGE(95%)		STAT	DATE	LAB	DESCRIPTION
B0	-0.002	100	-0.00	-0.00	60	1.NOV.87	BEQ**	BURRAGA QTZ SST AND MINOR CHLORITE
B10	0.051	5	0.05	0.06	530	20.MAR.90		LUCKY DRAW BLENDED WITH BASALT
B11	5.050	4	4.55	5.56	80	5.JUL.89	BEQ	LUCKY DRAW OXIDIZED
B12	3.280	5	2.95	3.61	530	20.MAR.90	BEQ	LUCKY DRAW BLENDED WITH BASALT
B12X	0.104	4	0.09	0.11	90	1.APR.91	BEQ	LUCKY DRAW BASALT BLENDED
B13	0.498	2	0.45	0.55	60	20.MAR.90		LUCKY DRAW BLENDED WITH BASALT
B20	1.770	2	1.59	1.95	120	5.JUL.89	BEQ	LUCKY DRAW OXIDIZED
B4	0.250	30	0.18	0.33	30	1.JAN.88	BEQ	BURRAGA HC QTZ CHLORITE
B5	3.500	8	3.15	3.85	30	1.NOV.87	BEQ**	BURRAGA HC QTZ CHLOR
B6	17.000	5	15.30	18.70	20	1.JUN.87	NAA	BURRAGA RAB
B66	6.900	5	6.21	7.59	10	1.JUN.87	NAA	BURRAGA RAB
B8	1.190	3	1.07	1.31	120	5.JUL.89	BEQ	LUCKY DRAW OXIDIZED
B9	3.140	3	2.83	3.45	100	5.JUL.89	BEQ	LUCKY DRAW OXIDIZED
BRB1	3.565	30	2.50	4.63	30	1.MAY.87	BEQ	BARAMBAH OXIDIZED
BRB3	0.308	8	0.28	0.34	30	1.MAY.88	BEQ	BARAMBAH OXIDIZED
FMC1	0.236	35	0.15	0.32	160	1.JUN.88	BEQ	FOUR MILE CK. NSW SERI. CARBONATE PYF
FMC2	2.911	13	2.53	3.29	230	1.JUN.88	BEQ	FMC NSW SILTSTONE
FMC3	1.797	15	1.53	2.07	50	1.JUN.88	BEQ	FMC NSW PYRITIC ACID INTRUSIVE
FMC4	0.370	10	0.33	0.41	90	1.JUN.88	BEQ	FMC NSW CHERTY SILT
FMC5	0.771	40	0.46	1.08	30	1.JUN.88	BEQ	FMC NSW CARBON SILTSTONE
FMC6	0.300	30	0.21	0.39	60	1.JUN.88	BEQ	FMC NSW CHERTY SILTSTONE
FMC7	1.731	45	0.95	2.51	120	1.JUN.88	BEQ	FMC NSW SULPHIDIC SILTSTONE
GC12	3.500	15	2.98	4.03	90	1.AUG.87	BEQ	PINE CREEK OXIDIZED
GC14	1.917	4	1.73	2.11	650	1.FEB.90	BEQ	PINE CREEK PART OXIDIZED
GC15	3.276	4	2.95	3.60	460	1.FEB.90	BEQ	PINE CREEK PART OXIDIZED
GC3A	1.258	20	1.01	1.51	60	1.MAR.88	BEQ**	PINE CREEK OXIDIZED
GC4A	1.329	8	1.20	1.46	60	1.AUG.87	BEQ	PINE CREEK OXIDIZED
GC5	1.442	10	1.30	1.59	60	1.MAR.88	BEQ**	PINE CREEK OXIDIZED
GC7	7.400	15	6.29	8.51	60	18.JUN.87	ANALAB	PINE CREEK OXIDIZED
GC8	0.753	15	0.64	0.87	30	1.JUN.87	ANALAB	PINE CREEK OXIDIZED
HQ	0.000	0	0.00	0.00	210	. .		
MA	0.000	0	0.00	0.00	330	. .		
MAG	0.540	15	0.46	0.62	30	1.MAR.88	BEQ**	MT.MAGNET BIF OXIDIZED
MC1	1.600	10	1.44	1.76	30	1.NOV.87	BEQ**	MT.COOLON OXIDIZED
MC2	1.550	8	1.40	1.71	70	1.MAR.88	BEQ**	MT.COOLON OXIDIZED
MC6	0.888	5	0.80	0.98	100	1.FEB.90	BEQ	MOUNT COOLON OXIDIZED
MD1	0.387	5	0.35	0.43	60	1.AUG.87	BEQ	MT.DAVID CLAY OXIDIZED
MD2	0.400	25	0.30	0.50	30	1.AUG.87	BEQ	MT.DAVID CLAY OXIDIZED
MD3	1.000	15	0.85	1.15	30	1.MAR.88	BEQ**	MT.DAVID CLAY OXIDIZED
MM1	0.555	15	0.47	0.64	60	1.JUN.87	ANALAB	MT.MORGAN STREAM SED.
MM3	0.370	15	0.31	0.43	30	1.MAR.88	BEQ	MILKY WAY PART OXID
MV	0.000	0	0.00	0.00	330	. .		
ML	0.000	0	0.00	0.00	300	. .		
PHO	1.510	10	1.36	1.66	20	1.JUN.87	ANALAB	PEAK HILL
PHR	0.668	10	0.60	0.74	20	1.JUN.87	ANALAB	PEAK HILL
POX	1.220	15	1.04	1.40	50	1.MAR.88	BEQ**	WAU PNG PARTIALLY OXIDIZED
PRIM	0.990	15	0.84	1.14	60	1.NOV.87	BEQ**	WAU PNG PRIMARY
T1	0.000	0	0.00	0.00	210	. .		
T2	0.000	0	0.00	0.00	270	. .		
T3	0.000	0	0.00	0.00	60	. .		
WAU	0.617	16	0.52	0.72	40	1.JAN.88	BEQ	WAU PNG OXIDIZED

SORRY FOR DELAYS

Best Regards,

Adrian.

Gannet

6. RESULTS

6.1 Sylvester Grid

6.1.1 Geology

Supplementary mapping of old mine workings along the Tenth Legion Fault confirmed it as a major regional thrust along which Pou sediments have been thrust over Cambrian gabbros (west of Comstock), altered mafic volcanics and grits. In the Tenth Legion area the structure dips at about 70 degrees NNE, and is linear. In the Comstock area the dip has decreased to about 45 degrees, and southeast of Comstock the dip continues to decline and becomes non-linear because of the combined effect of low dips and hilly terraine. At the Swansea Mine the fault is exposed in several adits, where dips of 45°N, 25°E, 50°ENE and 40°SE were recorded. The fault trace is quite convoluted in the area.

Mapping of the Comstock Main Adit provided a complete structural/stratigraphic section of the hangingwall of the fault (Plan 11). The main feature noted was a major fault zone 100m from the entrance, which is parallel to the Tenth Legion Fault. This "Son of Tenth Legion" fault has previously been tentatively interpreted, on the basis of surface mapping, as the faulted contact between a band of strongly foliated psammo-pelites (mostly sandstone/siltstone) in the immediate hangingwall of the Tenth Legion Fault, and a more flat lying sequence of shales, carbonates and melange further NE. In the adit this proved to be the case, with the fault forming the contact between steep NNE dipping psammo-pelites and a massive shallow NE dipping recrystallised carbonate. Numerous other structures of similar orientation were recorded, and it is known from measurements of orientated core that such structures display mostly reverse movement and have an average attitude of 50° toward 040° AMG. A detailed stereonet analysis of structural data was included in the 1990/91 Annual Report.

A drive heading ESE from the Main Adit passes under the Comstock Opencut, and massive quartz-pyrite is exposed. This mineralisation forms a lense in massive carbonates adjacent to a northerly trending steep easterly dipping fault. The massive sulphide passes outward into semi-massive and disseminated pyrite, then into massive (recrystallised) carbonate. This mineralisation appears to be replacing the carbonate, and mapping of the opencut itself has demonstrated that a talcose alteration is generally associated with such carbonate hosted mineralisation.

The Main Adit mapping also demonstrated that the Pou sediments between the Balstrup and Tenth Legion Faults are intensely folded and faulted at all scales, with the dominant fault trend parallel to the Tenth Legion Fault. Another common fault trend is northerly, with steep dips, sub-parallel to the Comstock Lodes. The sequence east of "Son of Tenth Legion" fault is about 50% carbonate (beds up to 60m thick), 40% shale and 10% melange.

An exploration adit located 200m south of the open cut actually exposes the Tenth Legion Fault, which consists of a 0.5-1.0m puggy zone dipping 45° NNE. It has a well defined footwall of massive, altered Cambrian mafic volcanics (spilitic), and a hangingwall of melange in excess of 60m horizontal thickness. Numerous well defined structures cut the melange, and most are sub-parallel to the Tenth Legion Fault.

Additional mapping at the Spray Mine identified the main lodes (e.g. No. 1 Lode) as dextral strike slip faults trending NNW (Plan 12). These possibly displace the Balstrup Fault, which is not well exposed in the workings. Weathered ? gabbroic intrusives were identified in Crimson Creek turbidites near the Balstrup Fault hangingwall.

6.1.2 Geophysics

Downhole TEM surveys of SY010 recorded high frequency "in-hole" anomalies through the two skarn zones (510.6-518.0m and 547.4-567.9m) and a broad (100m wide) off-hole anomaly about 50-100m above a downhole depth of 540m. As no conductive lithologies were encountered below 200m, these results could be interpreted to mean that the hole "just missed" a massive sulphide lens at the stratigraphic level of the skarn zones. This interpretation is supported by the presence of disseminated pyrrhotite in the uppermost skarn and 0.5m of massive sulphide over the interval 515.5-516.0m. This mineralisation is at the same structural/ stratigraphic position as the main sulphide lens intersected by SY003, 005, 009 and 012, and it is possible that the lenses NW margin is just short of SY010. The skarn mineralogy encountered is not conductive enough to explain the anomaly.

A smaller off-hole conductor was interpreted for SY014, 50m from the hole at a depth of 410m. However there is uncertainty as to whether it is above or below the hole. A magnetite-serpentinite-calc silicate skarn was logged at this depth. As this mineral assemblage is relatively non-conductive it offers some hope that a massive sulphide lense occurs within the skarn near the hole. No conductive lithologies were recorded below 26m.

Results of TEM surveys of SY016 had not been interpreted when this report was written, however a preliminary analysis of results suggests a large off-hole conductor located beyond the bottom of the hole. The source could be sulphides, but more likely is caused by graphitic shales and/or melange.

The remaining holes were not surveyed because it seemed unjustified and/or significant graphite was present.

6.1.3 Drilling

The mineralisation intersected by all drillholes completed to date is summarised in Table 2, and the results of the seven holes drilled during 1991/92 are briefly summarised below:

SY010	0.0-201.6m;	Pou melange/remnant psammo-pelites
	201.6-510.6m;	Po sandstone/siltstone
	510.6-518.0m;	Magnetite-serpentinite skarn
		515.5-516.0; Massive Po (Mt Cp Sl)
	518.0-547.4m;	Pou siltstone/shale
	547.4-567.9m;	Magnetite-Serpentinite Skarn
	567.9-670.8m;	Pou melange/psammo-pelites
		Hornfelsed below 578m

The hole intersected two skarns and explained the source of the targetted magnetite anomaly, but only minor massive sulphide mineralisation was present. No major fault was observed in the HW of mineralisation, although a core loss zone over the interval 508.6-510.4 may be a fault. Skarn mineralogy is discussed in Section 7.

SY011	0.0-104.9m;	Єc turbidites/gabbroic intrusives
	104.9-108.0m;	Balstrup Fault
	108.0-147.0m;	Pou melange/pelites
		131.1-133.6; dolomite with dissem. Py Sl Gl
	147.0-157.5m;	Pou sandstone with Qz Py Sl Gl vein stockwork
	157.5-218.0m;	Pou psammo-pelites

Only minor carbonate was intersected in the FW of the Balstrup Fault, and it hosted minor semi-massive pyrite-sphalerite-galena mineralisation along the upper contact. A sandstone unit hosted a stockwork of Quartz-pyrite-sphalerite-galena veins averaging 2.9% Pb, 7.9% Zn and 36 ppm Ag over 7.4m (152.0-159.4m), however although this mineralisation is spatially related to the Balstrup Fault it is a totally different style of mineralisation compared to the main sulphide lense. It is interpreted as a stockwork vein system related to (incipient) brecciation of a brittle sandstone unit adjacent to the fault, as a consequence of competency contrast relative to adjacent sediments. The veins are open-space filling, and the host rock is pervasively altered (quartz-pyrite) where veining is most intense.

SY012 0.0-432.5m; Ꞓc turbidites/gabbroic intrusives
15.0-86.1m; numerous faults
432.5-440.0m; Pou sandstone
440.0-443.8; Balstrup Fault
443.8-457.0m; Massive sulphides (Po Py Sl Gl)
457.0-495.1m; Pou recrystallised carbonate
457.0-469.5m; Po Py Sl Gl vein stockwork

This hole intersected "classical" replacement massive sulphides in the FW of the Balstrup Fault. Pyrrhotite is the dominant sulphide, but is partially replaced by pyrite. Sphalerite and galena occur toward the "marble front" and around remnants of unreplaced carbonate in the massive sulphide body. A diffuse stockwork of pyrite-carbonate-sphalerite-galena extends into the recrystallised carbonate host (cf. SY003). As with holes SY003, 005, and 009 the massive sulphide is only partly base metal mineralised, with about half the sulphide body virtually devoid of sphalerite and galena. Mineralogy is discussed in more detail in Subsection 6.1.4 and Section 7.

SY013 0.0-30.0m; No recovery
30.0-41.3m; Pou melange
41.3-103.3m; Pou psammo-pelites, disturbed/faulted
103.3-147.2m; Fault
123.0-125.5 massive Py
147.2-154.5m; Pou shales, disturbed/faulted

This hole failed to intersect carbonates in the FW of the Balstrup Fault, and ended in highly strained, graphitic shales. Drilling conditions were very poor and the hole nearly had to be abandoned.

SY014 0.0-26.2m; Pou melange
26.2-391.0m; Po sandstone/siltstone
218.8-230.4; Calc-silicate and melange
391.0-429.9m; Calc-silicate Skarn with trace Sl, Gl
429.9-438.1m; Diopside Skarn
438.1-503.3m; Pou melange/pelites. Mostly hornfelsed.

This hole intersected a skarn that explained the source of the targetted magnetic anomaly but no massive sulphides were encountered. Minor disseminated sphalerite and galena were present in the calc-silicate/diopside skarn assemblages, similar in style to that encountered by CRA Exploration during drilling of their Tenth Legion prospect (Dickson, 1981).

SY015 0.0-277.9m; Ec shale/turbidites
61.3-86.0m; Fault
183.6-209.1m; (80%) Limestone
277.9-284.9m; (Pou) melange (? Balstrup Ft)
284.9-317.7m; Pou psammo-pelites
317.7-329.3m; Fault (? Balstrup Ft)
319.8-324.6; Carbonate
329.3-336.2; Pou Carbonate-talcose altered
336.2-412.5; Pou sandstone/siltstone
403.3-404.4m; Py-Boulangerite-Sl-Gl vein

The Balstrup Fault zone proved to be a complex, composite structure in this intersection. Some carbonates were encountered in the FW but apart from the talc-carbonate alteration showed no evidence of mineralisation.

SY016 0.0-77.2m; Ec turbidites
77.2-90.9m; Fault with cavities
267.5-280.1m; Porphyritic mafic dyke
292.6-299.9m; Gabbro
299.9-332.4m; Pou melange with faulted FW
332.4-340.0m; Pou carbonate/shale
334.3-337.6 Fault
337.6-338.9 Massive Qtz-Py-Sl (replacive)
340.0-413.0m; Pou psammo-pelites/thin carbonates

The Balstrup Fault Zone was again complex, as in SY015, and some thin carbonates were encountered in the footwall. One carbonate was partially replaced by quartz-pyrite-sphalerite adjacent to a fault. The stockwork Qtz-Py-Sl-Gl mineralisation of up-dip hole SY011 was not encountered. An interesting high temperature Sanidine rich porphyritic mafic dyke has intruded along a fault breccia (267.5-280.1m), producing a distinct chilled margin and hornfelsing of the adjacent breccia.

The 1991/92 drilling programme was successful in delineating the lateral extent of the mineralisation and provided another intersection (SY012) enabling refining of estimations of true thickness and average grade. The approximate dimensions of the massive sulphide lense are;

Strike Length; 1,000m (57,000mE-58,000mE)
Down-dip extent; 400m + (50-450m +)
Average true thickness; 7.4m
Average Dip; -70° NNE

The lens is open at depth along the entire strike length so far drilled. It is in the immmediate footwall of the Balstrup Fault zone along its entire length. The mineralisation is discussed in detail in Section 7.

East of SY003 the Balstrup Fault zone is a complex, composite structure and is characterised by;

a) Multiple discrete fault zones
b) Presence of melanges at/near the Єc/Po contact
c) Melanges composed principally of Po fragments, with subordinate Єc fragments near Єc contact
d) Gabbroic intrusives are common in adjacent hangingwall Єc turbidites. Unusual high temperature Sanidine-rich porphyritic mafic dykes (SY016) and ultramafic dykes less commonly occur.

(e) Footwall Pou sediments are often highly deformed/strained resulting in graphitisation of pelites and brecciation/boudinaging of competent sandstones.

The fault zone is up to 40m wide with variable morphology, sometimes "splitting" to enclose lenses of relatively undeformed Pou sediments. The composite nature of the fault is indicative of a long and complex structural history, which is interpreted to have included the following stages:

a) Early ductile/brittle deformation producing melange fabrics. The earliest stages may have been co-eval with Ꞓc deposition, and provided a locus for gabbro intrusives.

b) Main brittle deformation stage co-eval with Devonian granite intrusion and involving sinistral oblique-slip displacement (northern block moved WNW and down). This produced discrete slickensided faults and angular fault breccias.

c) Post-mineralisation displacement as evidenced by fracturing of sulphide mineralisation (Appendix 3).

Structural measurements of orientated core indicate that Pou sediments steepen as they approach the footwall of the fault zone, in a manner similar to the steepening of carbonates in the footwall of the Federal-Bassett Fault at Renison.

West of SY003 the Balstrup Fault no longer forms the Po/Cc contact, but instead forms the contact between a dominantly psammo-pelitic unit (? Lower Oonah) and typical Pou pelites, carbonates and melange. The Po/Ꞓc contact in SY009 is marked by a melange containing both Po and Cc fragments, but in SY012 is marked only by a thin (5mm), talcy, sharp and irregular contact between Ꞓc mudstone and Po sandstone.

Between SY003 and 005, where the main body of sulphide mineralisation occurs, the Balstrup Fault is a narrower more well defined structure. Vuggy, calcareous, angular fault breccias are a feature and melanges are subordinate or absent. Fault textures are obliterated by mineralisation in SY005. The average dip of the fault in the area is -70 degrees NNE, and if this dip persists the fault would intersect the Tenth Legion Fault at a depth of 1.2 km, and the gravity interpreted granite at 2km. The Tenth Legion fault dips about -45 degrees NE and would intersect the granite at a depth of 1.5 km, or 2.1 km down the structure. Both faults provided fluid conduits during the Devonian mineralising event.

West of SY005 the (West) Balstrup fault has a shallower dip of -60 degrees NNE, and is at a shallow angle to bedding. No obvious fault textures are observed in the core; though it is possible that they have been obliterated by skarn related metasomatism. An alternate explanation would be that the contact between Po psammo-pelites and Pou pelites/carbonates/melange is unfaulted and conformable. In the latter case, this would imply the units are overturned.

Some deep holes (SY005, 008, 009 & 016) encountered psammo-pelites with increasingly well developed cleavage and a fine crenulation cleavage toward the bottom. The strong cleavage gives the rocks a "phyllitic" appearance, which is also evident in outcrop where psammo-pelites occur adjacent to the Tenth Legion Fault between 356,400mE and 357,800mE. The cleavage appears to be the result of increasing strain toward the hangingwall of the Tenth Legion Fault, and may be evidence that the abovementioned holes were approaching the fault.

West of SY014 the (West) Balstrup Fault and Tenth Legion Fault merge, and the resulting fault continues WNW as a major structure that displaces both the granite margin and the contact metamorphic aureole by about 2 km. In both SY010 and SY014, hornfelsing was restricted to below the Footwall of the (West)

Balstrup Fault, and in the CRA exploration holes drilled at Tenth Legion hornfelsing was likewise restricted to the footwall sequence of the Tenth Legion Fault. This pattern of hornfelsing is probably a consequence primarily of the focussing of fluid movement and metasomatism along the footwall of the two faults, and the more reactive nature of the rocks. It would also have been accentuated by subsequent sinistral displacement along the structures.

The presence of hornfelsing as far east as SY010 and the presence of high temperature anhydrous skarn assemblages (Act. + Andraditic Gn) as far east as SY001 suggest the possibility that a granite ridge or perhaps a porphyry dyke may be present on an ESE axis beneath the area at a much shallower depth than the 2 km suggested by gravity interpretation. Hornfelsing at the surface around the Heemskirk granite is restricted to a zone 500m wide at the surface, which converts to a true width of only 150m, whereas contact metasomatism (calc-silicate skarn) has been mapped as far east as Kynance (? 450m from granite surface).

6.1.4 Metallurgical Assessment

On the basis of a microscopic examination of 15 samples of massive sulphides and wallrock from the Comstock-Tenth Legion mineralisation, Dr. Halsall identified four distinct sulphide assemblages:

1) "Massive Pyrrhotite";	Sl Gl and Cp are present as irregular patches & inclusions in Po.
2) "Euhedral Pyrite";	Sl Gl are associated with masses of euhedral Py.
3) "Interstitial Pyrrhotite";	Sl Gl and Cp are intergrown with Po which occurs interstitial to coarse euhedral Py

4) "Secondary Pyrite"; Sl and Gl are associated with Po which is extensively replaced by fine grained Py Mt.

There is clear evidence in all cases of deformation of the sulphides, and remobilisation of Gl and to a lesser extent Sl into veinlets. The relationship between the sulphide minerals is obscured by the deformation, however the following paragenesis is suggested:

1) Po-Sl-Gl-(Cp) mineralisation postdating skarn development
2) Partial replacement of interstitial Po by fine Py during a S-rich event
3) Replacement of Po by fine Py Mt during local oxidation

The sphalerite is present in 3 forms, (in order of abundance):

1) Anhedral masses from 50 um to several mm in size
2) Interstitial Sl associated with euhedral Py
3) < 50 um inclusions in Po and Py

All the sphalerite contains small inclusions of Po + Cp, some of which will not be liberated by grinding. Likewise the Sl inclusions in Po and Py may not be liberated. However, the remaining forms of Sl should be relatively easy to liberate.

Galena is mostly present as coarse intergrowths with Sl, and as relatively thick veins, all of which should be easily recoverable. However, Gl also occurs in four other forms, including unrecoverable inclusions in Sl and Py.

The first sample submitted for flotation testwork was composited from pulp rejects, and produced very poor results. This proved to be because the pyrrhotite had extensively oxidised. However testwork carried out on the subsequent two samples were much more encouraging. The main results are summarised below:

		Pb%	Zn%	Ag g/t	Max. Recovery Pb	Zn
SY003	Massive Pyrite	4.09	8.00	56	80%	83%
SY005	Massive Pyrrhotite	2.42	3.04	21	90%	90%

These tests were preliminary and conditions were not optimised because RGC decided to discontinue the testwork. It was concluded therefore that considerably improved results could be achieved. The analytical results for the composited samples are very close to the grades expected based on analytical results of 1m samples obtained over the same intervals.

The mineralogical assessment of four "graphite" samples confirmed that although the rocks are carbonaceous, there is little true graphite present. There are traces of "subgraphite" and perhaps some graphite on shear surfaces, which gives the material its shiny appearance (and high conductivity). The carbonaceous material is amorphous and the metamorphic conditions for crystallisation of graphite have not been attained.

6.2 PARTING LAKE GRID

6.2.1 Geology

Additional mapping of old workings combined with a literature review of the old Zeehan-Western and Zeehan-Montana workings enabled the geological interpretation to be refined to help target DDH PL 001. The geology of the old lodes is summarised on Plan 4 and 22.

A series of shallow angle oblique thrusts were recognised in the old workings, dipping 45-50 degrees NE on average. These thrusts were observed to displace the mainly NNE trending lodes which bent into parallelism with the thrusts as they approach them. The most significant of these thrusts is the "Main Slide" of the Zeehan-Montana which probably continues NW as the "No. 4 Lode" of the Zeehan Western. The structure was described as 60m wide at the surface and 30m wide at a depth of 150m, with a well defined Footwall and diffuse hangingwall (Twelvetrees, 1910). Displacement was interpreted as upper block up and west (Waller, 1904).

Small structures of similar orientation were observed during surface mapping by RGC (Plans 7, 9), and they appear to form a broad structural corridor trending WNW from Zeehan townsite toward Montana Flats. This structural corridor is observeable on airphoto mosaics, and spilites of the Zeehan Glacial Formation are spatially related to it, indicating glaciation preferentially followed this zone of structural weakness. The structural corridor was interpreted to relate to a deep seated major structure, which possibly had some control on the gravity interpreted cupola located beneath the southern end of the Parting Lake Grid.

The additional mapping also located an additional exposure of the base of the Ordovician just west of the Zeehan Caravan Park, where a conglomeratic sandstone bed with an attitude conformable to the overlying Gordon Limestone unconformably overlies Crimson Creek turbidites. The base of the Ordovician south of Parting Lake has previously been interpreted to be entirely faulted (the Despatch Fault) however this is obviously not the case.

No other modifications were made to previous interpretations.

6.2.2 Drilling

PL001	0-52.2m;	Og Gordon Limestone
	52.2-52.5m;	Fault
	52.5-101.5m;	Pou siltstone/sandstone, (50%) Faulted
	101.5-106.0m;	Fault Breccia
	106.0-130.5m;	Pou siltstone
	130.5-136.7m;	Pom Montana Melaphyre Volcanics
	136.7-366.5m;	Pou Siltstone + Sandstone/greywacke/melange
		210-211.7m; Dolomite
	366.5-371.0m;	Pom Montana Melaphyre Volcanics
	371.0-513.6m;	Pou Sandstone/Siltstone
		492.0-494.0; Vein (Qtz, Sid, tr. Gl)
	513.6-601.8m;	Pom Montana Melaphyre Volcanics
	601.8-673.0m;	Pou Sandstone/Siltstone
		639.6-640.7; Fault (Qtz, Sid, tr. Sl)

The hole collared in Gordon Limestone and traversed a much greater thickness than expected before passing through a significant fault zone into Upper Oonah Formation. Although the attitude of the fault has not been measured, it is interpreted to be a SW dipping thrust based on a comparison of the surface position of the Og/Pou contact and the position in PL001. The mineralisation in the Gordon Limestone was not entirely unexpected as it has been reported previously (Daly, 1954). It occurs in recrystallised limestone as disseminated subhedral crystals, irregular stringers and euhedral crystals lining vughs, and is accompanied by minor red/reddish brown translucent sphalerite. The mineralisation is in a gangue of calcite and siderite occurring as veins and irregular patches associated with incipient brecciation. Veins generally possess a calcite core rimmed with siderite. About 1% galena and .3% sphalerite is associated with this alteration, although these visual estimates have yet to be confirmed by analyses.

The hole then traversed 621m of Upper Oonah sediments and a number of beds of Montana Melaphyre Volcanics (Pom-altered "spilitic" basaltic agglomerate), including a thick bed interpreted as the downdip extension of the Pom recorded in the Zeehan-Western workings. No significant carbonates were intersected, and no significant structures were intersected at the downhole depth expected by extrapolation of the orientations recorded for the "slides" in the Zeehan-Western/Zeehan-Montana workings (about 500-600m downhole). Either the fault zone has narrowed considerably (NB minor faults occur at 639.6-640.7m and 658.4-660.0m) or has been cross-faulted to occur elsewhere (significant faulting is present at various intervals from 48.2 to 394.0m).

The hole was a failure for the following reasons:

1) It failed to locate significant carbonates in Pou sediments.
2) It failed to locate a major structure with evidence of

significant hydrothermal fluid movement.

3) The style of mineralisation has not changed with depth, still being essentially composed of quartz-siderite with trace sphalerite-galena. Trace Jamesonite (?) was logged in a vein over the interval 622.7-623.2m but this identification is yet to be confirmed by analytical results.
4) There is no significant alteration/mineralisation at depth.

The galena-sphalerite mineralisation in the Gordon Limestone is probably related to the (Devonian) faulting that forms the Og/Pou contact. However it is a very distal style of mineralisation, and although it is possible that the same structure might cause Comstock-Tenth Legion style base metal deposits or Queen Hill style stanniferous deposits at depth, the anticipated depth would probably be too great and there is no guarantee the Gordon Limestone would be present in the FW.

6.3 Regional

Some reconnaissance mapping and selected detailed structural mapping was undertaken along the Granville Highway near Piney Creek firstly to refine structural interpretation of the Parting Lake Grid and secondly to try and locate NW extensions of the NW trending thrusts present in the Zeehan-Western/Zeehan-Montana workings or those of the Oonah Mine (Oonah Fault). The area was chosen because it offers excellent exposure compared to the Parting Lake Grid.

No significant fault zones were located, although the NW extension of the Oonah Fault may be represented by a series of W to WNW trending structures that dip north at 70 degrees. These cross the Granville Highway 300m west of Piney Creek bridge.

No carbonates were recognised, and the only significant outcome was the recognition of reclined isoclinal folds with a wavelength of about 5-10m on average, well exposed 150m east of Piney Creek bridge. These folds are common at this location, and their presence underlines the problems associated with stratigraphic correlations in Pou sediments.

7. DISCUSSION OF COMSTOCK-TENTH LEGION MINERALISATION

7.1 Mineral Zonation and Morphology

The Comstock massive sulphide lense is distal to and genetically related to a skarn complex that extends ESE along the footwall of the Balstrup Fault from the margins of the Pine Hill granite to east of Comstock, a distance of 3.5km. This skarn complex displays well developed mineralogical zonation alongstrike, and this zonation reflects typical skarn paragenesis (Plan 5). Table 5 summarises the mineralogy of the complex based on petrographic work and mapping by both RGC and CRA (Dickson, 1981).

The following broad skarn zones are recognised:

1) Contact Metamorphic Aureole

This is a relatively uniform zone of intense hornfelsing with an estimated true thickness of 150m. The interpreted outer limit is the dashed line on Plan 5. Contact metamorphism around large granitic plutons generally involves temperatures in the range 500-700°c. Reactions are anhydrous and there is essentially no addition of components, so that the resultant mineralogy reflects the bulk composition of the country rocks. At Tenth Legion, Pou sediments within this zone are recrystallised, hardened and brittle, forming weathering resistent outcrops. Typical mineral assemblages are given below;

Limestone/Dolomite	;	Marble
Impure dolomites	;	Tr + Dp skarn
Pelitic sediments	;	Qtz + Mv + Phl (Fsp Cord) hornfels

2) Prograde (Infiltration) skarns

This is a less well defined zone characterised by patchy calc-silicate skarns developed mainly within carbonates and carbonate-rich clastics. It extends as far east as the Kynance mine, and the approximate outer limit is the dotted line on Plan 5. The skarns are mostly clustered along faults (Balstrup & Tenth Legion Faults) and along lithological contacts between carbonates and non-carbonates. The bulk of carbonates are unaltered within this zone. This skarn distribution results because such skarns are the result of metasomatism by magmatically derived hydrothermal fluids typically in the range 400-600°c. Such fluids are focussed along permeable zones such as faults, zones of secondary dolomitisation (which involves volume reduction) and along permeability barriers such as lithological contacts. Typical assemblages in this zone are:

Dolomite/dolomitic sediments; Dp+And-Gn(Tr To Mt Sl)
Pelitic sediments; Dp + Tr (Sph Phl)

3) Retrograde (hydrous) skarns
This zone broadly overlaps the previous zone, but extends a little further east along the Balstrup Fault. It is characterised by the presence of magnetite-serpentinite skarns, the distribution of which is similar to the prograde skarns. These skarns are the product of retrograde alteration during cooling of the hydrothermal system by fluids usually in the range 200-400°c. Reactions are hydrous, and the resultant skarns cut across/replace earlier skarn assemblages. Their distribution is controlled by the same factors. Typical retrograde skarn assemblages at Comstock-Tenth Legion are:

Mt+Serp (Tc Cc Act Chl Ep Bruc Mg Po)

This assemblage probably results from the following generalised retrograde processes:

Dp → Tr Act
And → Gn - Qz Mt Cc

Tr + Act → Tc Serp
Serp → Bruc Mag

4) Replacement massive sulphides
This mainly consists of the Comstock massive sulphide body, however some of the sulphides exposed in the old Comstock workings are probably also of this type. Petrographic evidence suggests Po (Sl Gl) crystallised first, replacing earlier formed magnetite-serpentinite skarns and/or recrystallised carbonate. Some of the Po was then replaced by Py (Mt) generally along fractures. This alteration of Po to Py is more common at higher (more oxidised) levels. A weak mineralogical zonation is apparent with respect to Cu Sn and W which are relatively enriched at the western end of the deposit (up to 0.4% Cu, 0.2% Sn, 0.2% W). However Pb-Zn-Ag levels remain fairly similar and the Pb: Zn ratio is constant at around 1:2.

A more regional base metal zonation is also apparent along the Balstrup Fault system, including stanniferous Mt-Serp skarns at Tenth Legion, Cupriferous Mt-Serp skarns further east at Kynance, the Zn dominant Pb-Zn-Ag rich massive sulphides and veins at Comstock, and east of the Spray mine Pb dominant Pb-Zn-Ag veins.

Quartz-tourmaline veins are common in the granite and in Po psammo-pelites near the granite (north of Tenth Legion) but are rare in Pou pelites and carbonates.

Pb-Zn-Ag veins begin to appear east of Kynance, and these show a strong spatial association with the Tenth Legion and Balstrups Faults. In the immediate Comstock-Boss area, the veins are mineralogically similar to the massive sulphide body and are almost certainly genetically related.

7.2 Inferred Resource Calculations

The following calculations are based on four definite drillhole intersections of massive replacement sulphides (SY003, 005, 009, 012) and one doubtful intersection (SY008). SY008 is considered doubtful because of very poor drilling conditions and consequent high core loss in the mineralised zone, resulting in doubt as to the accuracy of average grade and true thickness calculations, and some doubt as to the style of mineralisation. However exclusion of SY008 would not significantly alter either average grade or average estimated true thickness.

These drillhole intersections are 300-400 metres apart on average, and continuity of mineralisation grade and thickness between intersections is not guaranteed, even though the mineralisation occurs at the same structural/stratigraphic position in all cases and is without doubt of similar style with the possible exception of SY008. For this reason the calculated tonnage and grades should only be used as a guide to the maximum possible resource that could be proved up by further drilling, (to a depth of 450m).

Two methods of calculation have been used. Method 1 calculates a resource based on the entire sulphide body whilst Method 2 only calculates a resource based on sulphide intervals with average grades in excess of 1% Pb and/or 1% Zn. It is valid to subdivide the orebody this way as the base metal rich zones are well defined and there is no interdigitating of base metal rich and barren zones.

Both methods incorporate the following general assumptions:

1) Grade and thickness do not decline toward the margins of the body.
2) Strike length is 1,000m (57,000mE-58,000mE)
3) Sulphides extend 400m downdip (50-450m. below surface)
4) Sulphide density = 3.8 g/cc
5) Structural Dip (SD) = -70°
6) Structural Bearing (SB) = 010° AMG (i.e. dip direction)

7) Estimated True Thickness (ETT) is given by the formula

ETT=HT [Sin HD x Cos SD-Cos HD x Sin SD x Cos (HB-SB)]
where HT = Downhole thickness
HD = Hole Dip
HB = Hole Bearing

Method 1:
This method further assumes
1) Global grade = average grade of ALL sulphide intersections
2) Thickness = average of ETT's of ALL sulphide intersections

Grade and thickness calculations are summarised as Table 2, and the Inferred Resource Calculation is completed below:

Tonnage = Average ETT x Length x Depth x Density
= 7.42m x 1,000m x 400m x 3.8 t/m^3
= 11,278,400 tonnes
Grade = 2.0% Pb, 3.5% Zn, 21 g/t Ag (from Table 2)
Inferred Resource = 11 Mt @ 2.0% Pb, 3.5% Zn, 21 g/t Ag

Method 2:
This method further assumes:
1) Global grade = average grade of SELECTED sulphide intersections
2) Thickness = average of ETT's of SELECTED sulphide intersections

Grade and thickness calculations are summarised as Table 3, and the Inferred Resource calculation is completed below:

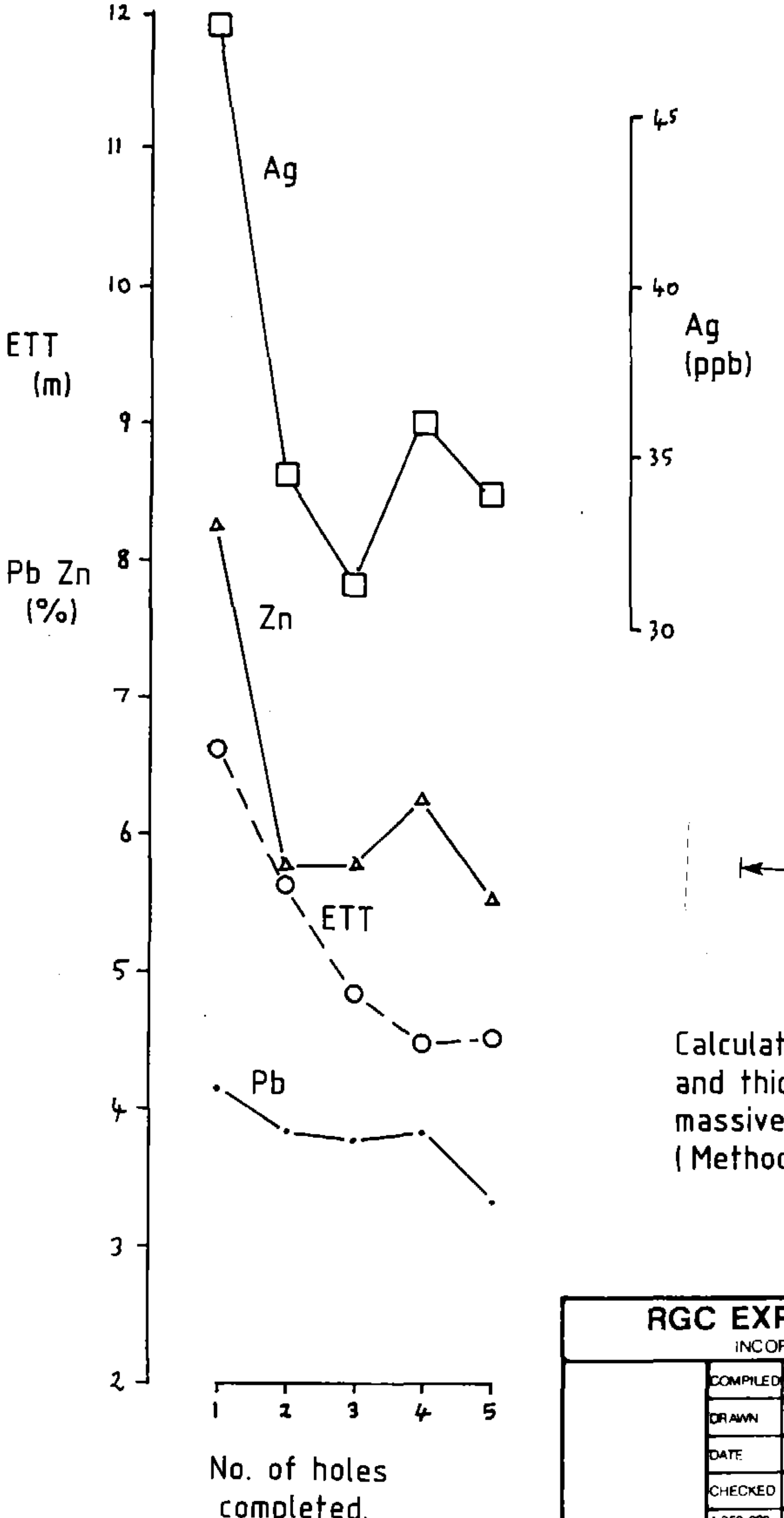
Tonnage = 4.03m x 1,000m x 400m x 3.8 t/m^3
= 6,125,600 tonnes
Grade = 3.3% Pb, 5.5% Zn, 40 g/t Ag

Inferred Resource = 6 Mt @ 3.3% Pb, 5.5% Zn, 40 g/t Ag

In both cases the mineralisation is considered open at depth along the entire strike length. Weak mineral zonation is apparent from west to east, with the western end having elevated Cu values (average 0.15% Cu) compared to the east. The Pb: Zn ratio remains fairly constant throughout (approximately 1:2), and within the base metal rich zone the grade is fairly constant with the exception of the pyrite rich SY003 intersection, which is the most peripheral intersection. Figure 2 summarises the average grades encountered during drilling of the massive sulphide body and Table 2 summarises all mineralised intersections on the Sylvester Grid.

SYLVESTER PROSPECT

AVERAGE GRADE / THICKNESS



Calculations of average global grade and thickness, excluding barren massive sulphides.
(Method 2)

RGC EXPLORATION PTY. LIMITED INCORPORATED IN NEW SOUTH WALES		
COMPILED	D.J.C.	ZEEHAN PROJECT
DRAWN	D.J.C.	SYLVESTER PROSPECT
DATE	8/92	AVERAGE GRADE / THICKNESS
CHECKED		
1:250 000 Reference		
BASE PLAN No / OVERLAY PLAN No	SCALE	FIG. 2

8. CONCLUSIONS AND RECOMMENDATIONS

8.1 Sylvester Grid

An inferred resource of 6 Mt @ 3.3% Pb, 5.5% Zn and 40 g/t Ag is estimated, however hole spacings are too great to guarantee continuity of grade and thickness between holes. The figure quoted is therefore merely a guide to the maximum resource that could be firmed up by further drilling, to a depth of 450m. This resource is clearly sub-economic at current base metal prices, and would require a significant rise in prices to ever become economic.

It is doubtful that global grades would improve with further drilling, as Pb Zn Ag grades do not vary significantly and Pb: Zn ratios are fairly constant. The only exception is the SY003 intersection of 7.7m @ 4.1% Pb, 8.2% Zn and 48 g/t Ag, which indicates that small zones of economic grade may occur. However there is no guarantee that such zones would be large enough to mine individually even with the grades encountered by SY003.

There is potential for the discovery of additional deposits along the Tenth Legion and Sylvester faults, as well as smaller deposits analogous to the so-called "Updip" deposits at Renison between the Tenth Legion and Balstrup Faults. However the Balstrup Fault appears to be the main hydrothermal fluid conduit and it is reasonable to assume that deposits along other structures would prove smaller, and of similar or lower grade.

In conclusion it is recommended that the Sylvester drilling programme be suspended and no further work be undertaken on the Sylvester grid, at least for the time being.

8.2 Parting Lake Grid

Work on the grid culminating in the drilling of PL001 has produced disappointing results. No significant sedimentary carbonates were recognised in the Upper Oonah Formation, and the NE dipping thrust faults mapped at the surface proved relatively insignificant at depth. No significant sulphide mineralisation was encountered and the few veins intersected at depth proved sideritic in composition. This does not suggest proximity to a blind granitic cupola.

The low grade disseminated galena and sphalerite encountered within recrystallised Gordon Limestone adjacent to a fault is a distal style of mineralisation and unlikely to include economic grades. Whilst it is possible that massive sulphide replacement mineralisation could occur at depth, it is unlikely that the Gordon Limestone occurs adjacent to the fault at the depths envisaged.

It is therefore recommended that no further exploration be conducted on the Parting Lake Grid.

8.3 Regional

The regional work has failed to produce new exploration targets. The most significant outcome is the recognition of significant thrusting, and isoclinal folding in Po sediments, giving rise to the possibility that suitable host carbonates may occur at depth in areas where no carbonates are recorded at the surface. A reinterpretation of gravity data, as discussed in Subsection 5.2, is seen as the only method of generating new exploration targets outside of the Parting Lake and Sylvester grids.

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APPENDIX 1

Zeehan Project Rock Chip Sampling Analytical Results

RGC EXPLORATION PTY.LTD. DATA SHEET

12/ 8/92

PROJECT: ZEEHAN (E.L. 42\87) - ROCK CHIP SAMPLING PROGRAMME

AMPLE UMBER	TNORTH metres	TEAST metres	CODE	SAMPLR	DATE	MAP	GRID	KIND	ROCK	UNIT	ALTER	OREMIN	VEINS
26491	364060	356365	5521	DJC	MAR.91	1166	AMG	RC	SILT			FE	
	Remark:POSSIBLY DOLOMITIC SILTSTONE OR SILTY DOLOMITE.												
26492	363594	356554	5521	DJC	MAR.91	1168	SYL	RC	BRXX	PO		QZ	
	Remark:IRON STAINED QUARTZ FILLED BRECCIA IN OONAH SANDSTONE.												
27690	361154	357093	5521	DJC	OCT.91		SYL	RC	SHAL		PY		

boratory:
thod :
t. Limit:

058062

RGC EXPLORATION PTY.LTD. DATA SHEET

PROJECT: ZEEHAN (E.L. 42\87) - ROCK CHIP SAMPLING PROGRAMME

AMPLE UMBER	SN PPM	AS PPM	CU PPM	PB PPM	ZN PPM	AG PPM	AU PPM	SB PPM	BA PPM	BR PPM	CE PPM	CS PPM	CR PPM	CO PPM	EU PPM
26491	19	3	6	32	60	-5	-0.005	2	-100	3	51	1	163	8	0.7
26492	6	3	15	39	84	-5	-0.005	4	-100	2	35	-1	27	11	0.9
27690	8	10	87	347	500	-5	-0.005	9	346	8	105	7	149	25	2.4
oratory	ANALAB	BECQ	ANALAB	ANALAB	ANALAB	REN	BECQ	BECQ	BECQ	BECQ	BECQ	BECQ	BECQ	BECQ	BECQ
hod	401	INAA30	101	101	101	AAS	INAA30	INAA30	INAA30	INAA30	INAA30	INAA30	INAA30	INAA30	INAA30
. Limi	3.000	2.000	5.000	5.000	5.000	1.000	0.005	1.000		2.000	2.000	1.000	5.000	1.000	0.500

RGC EXPLORATION PTY.LTD.   DATA SHEET

Page 1
12/ 8/92

PROJECT: ZEEHAN (E.L. 42\87) - ROCK CHIP SAMPLING PROGRAMME

AMPLE UMBER	HF PPM	FE %	LA PPM	MO PPM	K %	RB PPM	SM PPM	SC PPM	TH PPM	W PPM	YB PPM	AU(R) PPM	AU(S) PPM
26491	6	7.13	25.2	-5		41	4.7	6	7.9	5	1.9		
26492	4	13.30	18.1	-5		37	3.5	5	7.8	6	1.5		
27690	6	4.00	47.7	-5		120	10.5	24	11.6	-2	3.2		
boratory	BECQ	BECQ	BECQ	BECQ	BECQ	BECQ	BECQ	BECQ	BECQ	BECQ	BECQ	ANALAB	ANALAB
thod	INAA30	INAA30	INAA30	INAA30	INAA30	INAA30	INAA30	INAA30	INAA30	INAA30	INAA30	GG309	GG309
t. Limi	1.000	0.050	0.500	5.000	0.200	20.000	0.200	1.000	0.500	2.000	0.500	0.008	0.008

058064

APPENDIX 2

Petrological Reports (AMDEL)

058066

Geological Services Division

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Thebarton SA 5031
AUSTRALIA

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AUSTRALIA

amdel

Amdel Limited
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13 February 1992

RGC Exploration Pty Limited
PO Box 320
ROSNY PARK TAS 7018

Attention: Mr John Crossing

REPORT G 6462/92

YOUR REFERENCE:	Letter dated 16/12/91
IDENTIFICATION:	T30745, T35568, T35569, T35570, T35571
MATERIAL:	Drill core rock samples
LOCATION:	Tasmania
DATE RECEIVED:	23 December 1991
WORK REQUIRED:	Polished thin sections, combined routine petrographic and mineragraphic descriptions, XRD

Investigation and Report by: Dr Douglas R Mason

Frank Radke
for

Dr Keith J Henley
Manager, Geological Services

hk

PETROGRAPHIC DESCRIPTIONS FOR ROCK SAMPLES FROM THE OONAH FORMATION, TASMANIA

1. INTRODUCTION

Five (5) rock samples were received from Mr. John Crossing (Senior Geologist, RGC Exploration Pty. Ltd., Hobart, Tasmania) on 23 December 1992.

Particular requests were:

1. To prepare a polished thin section and routine combined petrographic and mineragraphic description for each of the following samples:

   T30745, SY010, 173.45-173.6m
   T35568, " , 640.7-640.9m
   T35569, SY014, 408.75-408.8m
   T35571, " , 450.96-451.0m

2. To determine the mineralogy by X-ray diffraction for sample:

   T35570, SY014, 429.9-430.0m

The results of the XRD determination were conveyed to Mr. Crossing by facsimile on 9 January 1992.

This report presents the full results of this work.

2. METHODS

Polished thin sections (C56683-686) were prepared from the samples provided. Standard transmitted and reflected polarised light microscopy were used to prepare a combined petrographic and mineragraphic description from each section.

For sample T35570, a representative 100g portion containing both white and dark grey phases was sawn from the sample. It was finely ground, subsampled, mounted, and presented to the X-ray beam. The resulting trace was interpreted.

3. RESULTS

3.1 Mineralogy by X-ray Diffraction

The mineralogy of sample T35570, as obtained by X-ray diffraction, is:

Dominant diopsidic clinopyroxene
Accessory magnetite

No other phases were identified in the trace.

3.2 Combined Petrographic and Mineragraphic Descriptions

The combined routine petrographic and mineragraphic descriptions follow.

SAMPLE: T30745 (SY010, 173.45-173.6m)

Polished Thin Section: C56683

Rock Name:

Altered fragmental rock

Hand Specimen:

The drill core rock sample is composed of abundant, closely-packed, even-grained angular fragments that are moderately lineated. The rock has an overall dark greenish grey colour. Thin fractures and veinlets cut the rock, some of which effervesce in reaction to dilute HCl (suggesting calcite fills some veinlets).

Petrography and Mineragraphy:

Mineral	**Vol.%**	**Origin**
Chlorite	65	alteration
Leucoxene	7	alteration
Sericite	15	alteration
Quartz	5	alteration
Plagioclase	5	alteration
Epidote	2	alteration
Actinolite	Tr	alteration
Pyrite	1	alteration
Pyrrhotite	Tr	alteration
Tourmaline	Tr	alteration
Calcite	Tr	vein filling

In polished thin section, this sample displays a relict fragmental texture that has been modified by intense pervasive alteration.

Chlorite dominates the rock. It occurs as massive fine-grained patches that define angular fragment sites ~1-3 mm in size. It also occurs in interstitial areas.

Sericite occurs as very fine-grained, massive patches that have partly replaced some fragments. It also occurs in interstitial areas in similar form.

Leucoxene is anomalously abundant as cryptocrystalline massive patches, irregularly distributed throughout the rock in both fragment sites and in interstices.

Quartz occurs mainly as polycrystalline aggregates in interstitial areas. It may be accompanied by small sheaves of actinolitic amphibole.

Plagioclase occurs in two forms: as small relict prismatic crystals in some fragments, and as polycrystalline aggregates in interstitial areas. The former appear to be relict phenocrysts, while the latter appear to be of alteration origin.

Epidote is present in minor amount as small granules sparsely disseminated through the rock.

Pyrite occurs mainly as porous aggregates up to ~1 mm in size, commonly within fragment sites. It also occurs as minute grains sparsely disseminated through the rock.

Pyrrhotite is rare, occurring as small angular grains associated with disseminated pyrite.

Tourmaline is rare. It occurs as small subhedral prismatic crystals in discontinuous quartz-filled veinlets. It is pleochroic in browns and greenish browns.

A trace of calcite occurs as fillings in a thin veinlet.

Interpretation:

This sample has a mineralogy that is consistent with intense hydrothermal alteration to generate the assemblage chlorite + sericite + leucoxene + minor quartz + plagioclase + epidote + accessory pyrite + tourmaline + pyrrhotite. The assemblage is consistent with alteration within the aureole of a granitoid intrusion.

The nature of the precursor rock has been largely obscured by the intensity of the alteration. However, some relict textures are noteworthy:

(i) All of the fragments are of similar size, falling generally in the range 1-3 mm, most being ~1-2 mm. This uniformity of fragment size is more likely to indicate sedimentary reworking than hydrothermal brecciation. The latter commonly generates coarser and more varied particle sizes.

(ii) Some of the fragments display ovoid structures, ~0.1-0.3 mm in size, now filled by quartz. These may represent relict primary vesicular structures.

(iii) Some of the fragments contain small relict plagioclase crystals that have the appearance of phenocrysts. Elsewhere, small stumpy crystal sites replaced by chlorite may also be precursor phenocryst sites.

(iv) The abundance of fine-grained leucoxene is consistent with a Ti-rich precursor rock, such as a basaltic igneous rock.

These textural features suggest that the precursor rock was a moderately reworked clastic sedimentary rock composed of fragments of basic (to ultrabasic) igneous origin. Subsequent intense hydrothermal alteration has generated the present mineral assemblage.

SAMPLE: T35568 (SY010, 640.7-640.9m)

Polished Thin Section: C56684

Rock Name:
Biotite(-pyrrhotite-ilmenite) meta-psammitic hornfels

Hand Specimen:
The drill core rock sample is composed mainly of mauvish brown, fine-grained meta-sedimentary rock with small, uniformly distributed pale particles lending a sandy texture to the rock. In places, bedding is defined by finer-grained, darker brown laminae and green bands.

Petrography and Mineragraphy:

Mineral	**Vol.%**	**Origin**
Quartz	7	relict detrital crystal particles
Lithics	5	relict detrital lithic particles
Biotite	20	metamorphic
Quartzo-feldspathic matrix	45	metamorphic matrix
Chlorite	3	metamorphic
Sericite	15	metamorphic
Ilmenite	3	metamorphic
Pyrrhotite	2	metamorphic
Chalcopyrite	Tr	metamorphic
Rutile	Tr	metamorphic alteration
Carbonate	Tr	metamorphic alteration

In polished thin section, this sample displays a relict clastic sedimentary texture and lamination, modified by hornfelsic metamorphic alteration.

Quartz occurs in various forms:

(i) As relict detrital particles ~0.2 mm in size and angular in shape. These are moderately abundant in the psammitic bands.

(ii) As anhedral small grains in polycrystalline aggregates, commonly associated with chlorite and other alteration phases.

(iii) As fillings in thin veins.

Lithic fragments similar in size to the detrital quartz fragments were present in the psammitic bands. They have been recrystallised to fine-grained, massive assemblages of quartz and perhaps some feldspar.

Biotite is most abundant in the psammitic bands, where it occurs as small pleochroic orange-brown flakes in random orientation throughout the matrix. It is intergrown with other recrystallised components such as quartz and feldspar.

Sericite occurs as massive, very fine-grained aggregates that are irregularly distributed in patches.

Chlorite occurs in irregularly distributed patches, where it forms densely intergrown aggregates with quartz, plagioclase, carbonate, and biotite.

Ilmenite is present in significant amount as very small (<0.2mm) ragged grains and aggregates, irregularly distributed throughout. It also occurs as somewhat larger grains and granular aggregates within thin quartz-rich veinlets.

Pyrrhotite is the dominant sulphide. It occurs as irregularly distributed aggregates. Coarser-grained aggregates are associated with the thin quartz-magnetite veinlet.

Chalcopyrite occurs in trace amount as small angular patches closely associated with pyrrhotite aggregates.

Accessory rutile occurs as anhedral grains in small aggregates.

A small amount of carbonaceous material is inferred to be present in thin, very fine-grained laminae that have the appearance of carbonaceous silty laminae.

Interpretation:

This sample represents a psammitic sedimentary rock that contained occasional thin silty and carbonaceous laminae. It has suffered contact metamorphism, presumably within the aureole of a granitoid intrusion, resulting in recrystallisation and alteration, producing the assemblage biotite + sericite + chlorite + ilmenite + pyrrhotite + chalcopyrite + minor carbonate + rutile.

SAMPLE: T35569 (SY014, 408.75-408.8m)

Polished Thin Section: C56685

Rock Name:

Tremolite-sulphide skarn rock

Hand Specimen:

The drill core rock sample is composed of abundant, mottled pale greenish cream material, through which is scattered irregular aggregates of fine-grained brownish sulphide.

The sample effervesces in small scattered patches, suggesting that calcite is present.

Petrography and Mineragraphy:

Mineral	**Vol.%**	**Origin**
Tremolite	91	metamorphic
Carbonate (calcite)	2	metamorphic
Sphalerite	4	metamorphic
Pyrrhotite	3	metamorphic
Chalcopyrite	Tr	metamorphic
Galena	Tr	metamorphic

In polished thin section, this sample displays a massive granoblastic metamorphic texture, with no suggestion of any relict precursor minerals or texture.

Tremolite completely dominates the rock. It occurs as colourless, randomly oriented intergrown blades that range from very fine-grained (<<0.1 mm) to ~3 mm.

Sphalerite mostly occurs as ragged aggregates ~0.2-0.5 mm in size. It also occurs as very small ragged granules in loose aggregates up to ~2 mm in size. In transmitted light, the sphalerite has a very dark reddish brown colour suggestive of a high Fe content.

Pyrrhotite commonly occurs as ragged cores within sphalerite aggregates. There is no obvious replacement relationship, rather it appears that sphalerite has mantled pyrrhotite. Less commonly, pyrrhotite occurs as discrete anhedral grains.

Chalcopyrite occurs as small (<0.1 mm) ragged grains associated with pyrrhotite. It also forms very small inclusions within sphalerite.

Galena is present in trace amount as minute ragged pale grey inclusions within some sphalerite grains. It also occurs as slightly larger ragged grains intergrown with pyrrhotite.

Interpretation:

This sample represents a massive skarn rock that has formed under thermal metamorphic conditions. Accessory sulphide minerals formed during the metamorphic event (sphalerite ~ pyrrhotite > > chalcopyrite > > galena).

SAMPLE: T35571 (SY014, 450.96-451.0m)

Polished Thin Section: C56686

Rock Name:
Garnet-diopside-calcite(-sulphide) skarn rock

Hand Specimen:
The drill core rock sample is a massive, fine-grained, brownish rock with scattered small dark green and white patches. A minor amount of disseminated yellowish chalcopyrite is evident as small angular grains and patches.

Petrography and Mineragraphy:

Mineral	**Vol.%**	**Origin**
Garnet	58	metamorphic
Clinopyroxene (diopside)	30	metamorphic
Carbonate (calcite)	10	metamorphic
Chlorite	1	metamorphic
Chalcopyrite	1	metamorphic
Pyrrhotite	<1	metamorphic
Pyrite	<1	metamorphic vein fillings

In polished thin section, this sample displays a massive granoblastic metamorphic texture.

Garnet is abundant. It occurs mainly as anhedral intergrowths, but in places it becomes idioblastic where in contact with carbonate. A tendency to compositional zoning is displayed in some areas where pale yellowish green cores are overgrown by pale to colourless rims that commonly have anomalous grey birefringence.

Diopsidic clinopyroxene forms colourless anhedral grains up to ~1 mm in size. They tend to occur in polycrystalline aggregates in which partial replacement by calcite is evident. In places, fine-grained diopside is intimately intergrown with fine-grained garnet.

Carbonate (calcite) occurs mainly as angular interstitial patches that are irregularly scattered throughout the rock.

Chlorite occurs as rare small radiating aggregates of green flakes, usually associated with interstitial carbonate.

Chalcopyrite occurs mainly as relatively large (up to ~2 mm) ragged patches associated with interstitial carbonate. Elsewhere it forms smaller ragged grains in garnet.

Pyrrhotite mostly occurs as ragged patches associated with chalcopyrite and carbonate. It also occurs as finer-grained ragged granules intergrown with garnet, diopside, and chalcopyrite.

Pyrite is present in different forms:

(i) As fillings in thin discordant veinlets;

(ii) As subhedral small crystals associated with interstitial chlorite and carbonate;

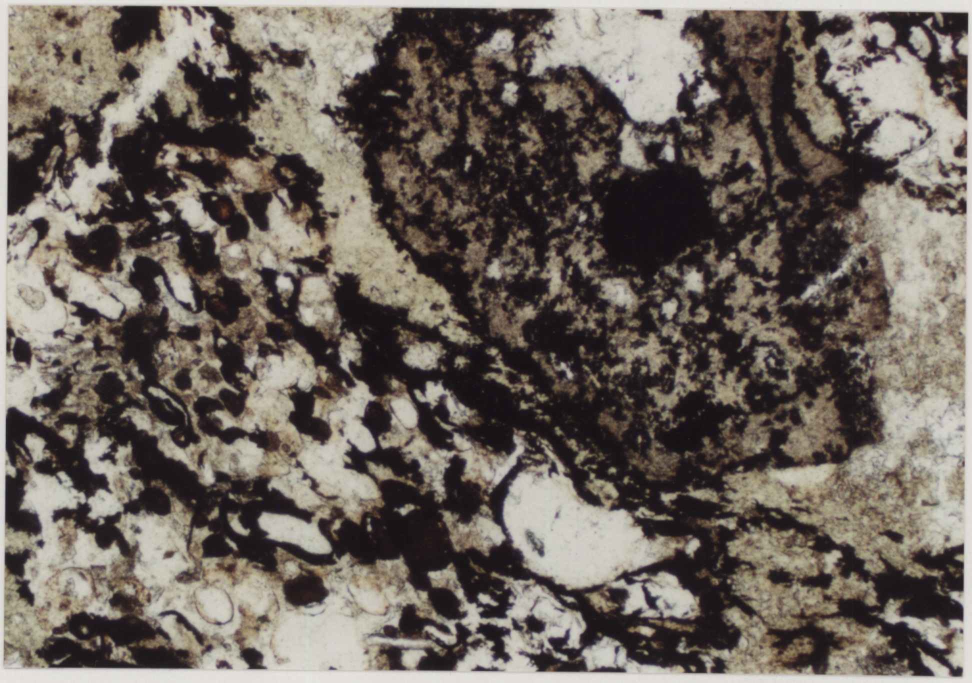
(iii) As sparsely scattered small grains in garnet.

Interpretation:

This sample represents a calc-silicate rock that has recrystallised under thermal metamorphic conditions to produce the assemblage garnet + diopside + calcite + sulphides (chalcopyrite ~ pyrrhotite > pyrite).

PLATE 1

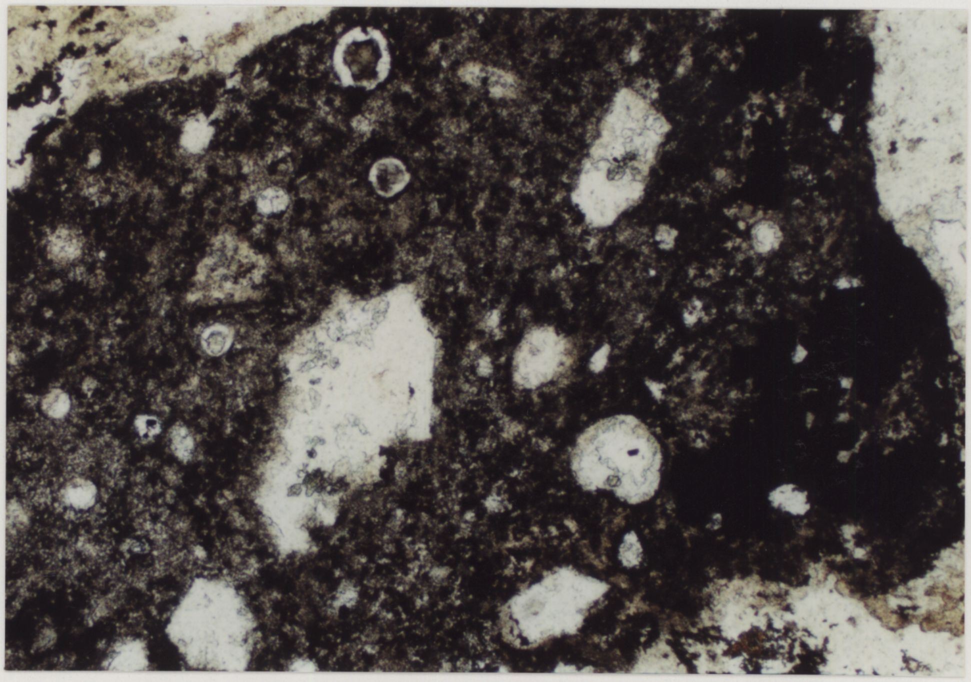
Sample T30745 (Altered fragmental rock)



500 μm

a) Transmitted plane polarised light (2/1,5)

This view shows angular lithic fragments altered to sericite, chlorite and leucoxene (fine turbid patches).



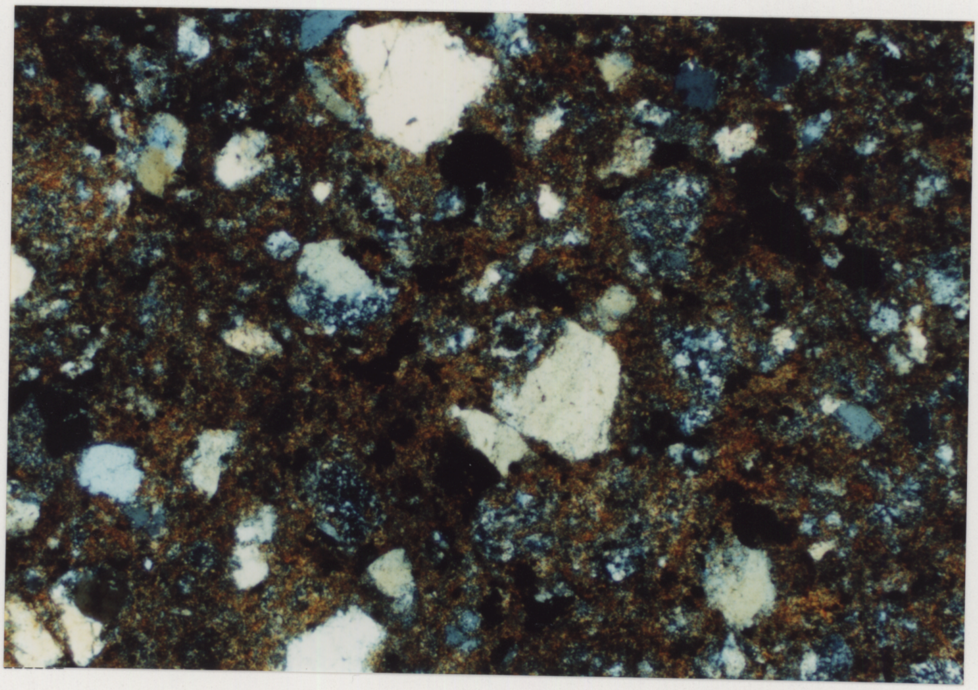
500 μm

b) Transmitted plane polarised light (3/1,5)

This altered lithic fragment contains small ovoid structures reminiscent of vesicles. Small sericite-altered blocky crystals sites (upper right, lower left) represents microphenocryst sites.

PLATE 2

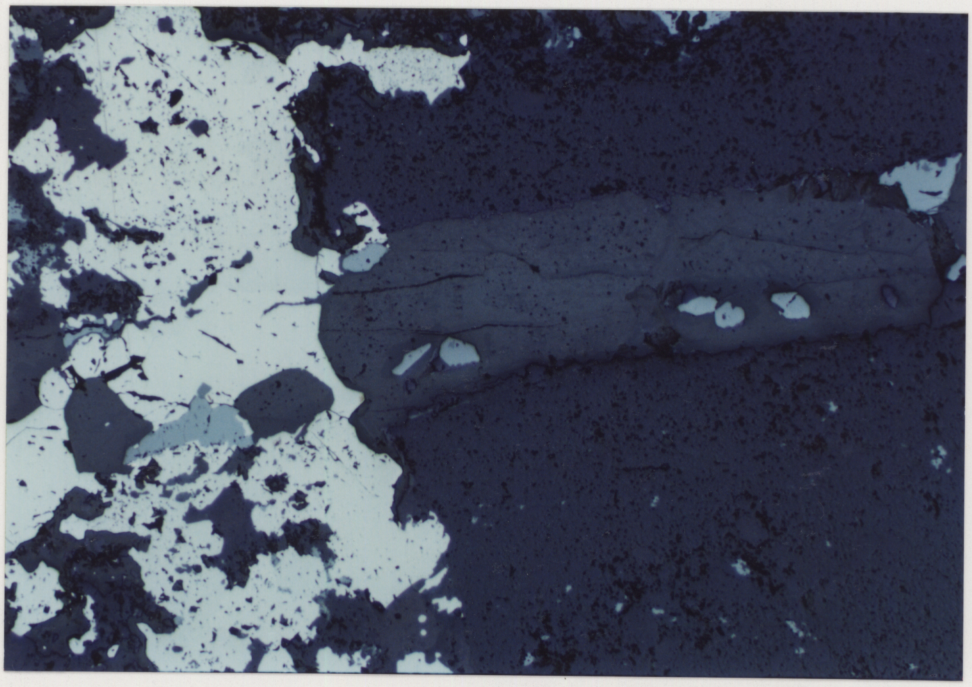
Sample T35568 (Biotite-pyrrhotite-ilmenite meta-psammitic hornfels)



500 μm

a) Transmitted light, crossed polarisers (4/1,5)

This view shows the relict sandy sedimentary texture. Note the angular quartz clastic particles. The matrix is rich in fine grained, non-oriented metamorphic biotite (orange-brown).



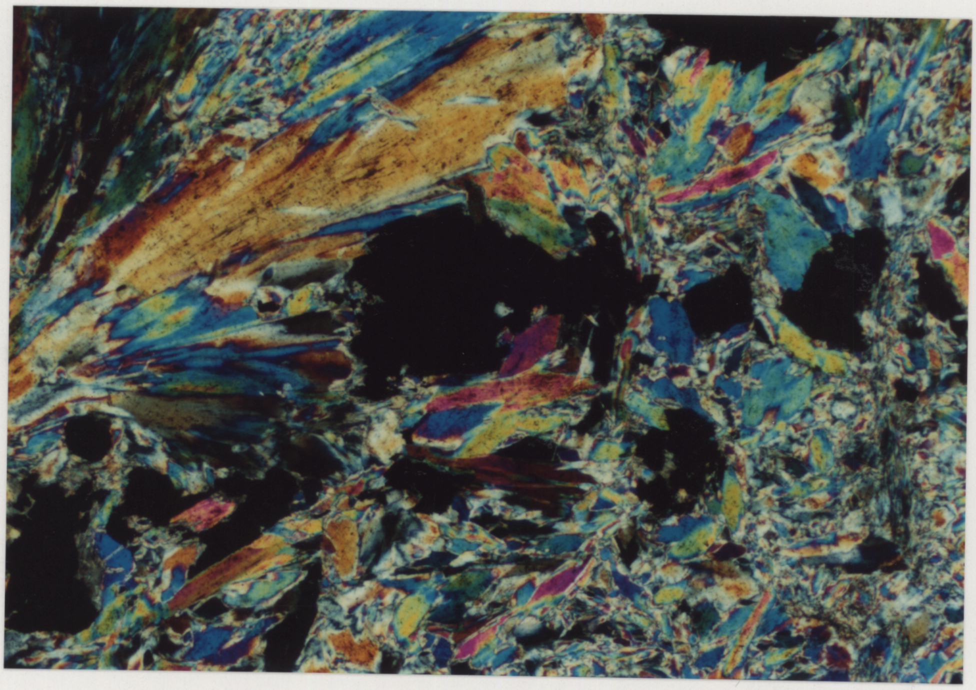
500 μm

b) Reflected plane polarised light (5/1,5)

A vein oriented E-W is filled mainly by quartz, but contains significant pyrrhotite (white) and ilmenite (bluish grey). Note that pyrrhotite and ilmenite also occurs disseminated through the host rock.

PLATE 3

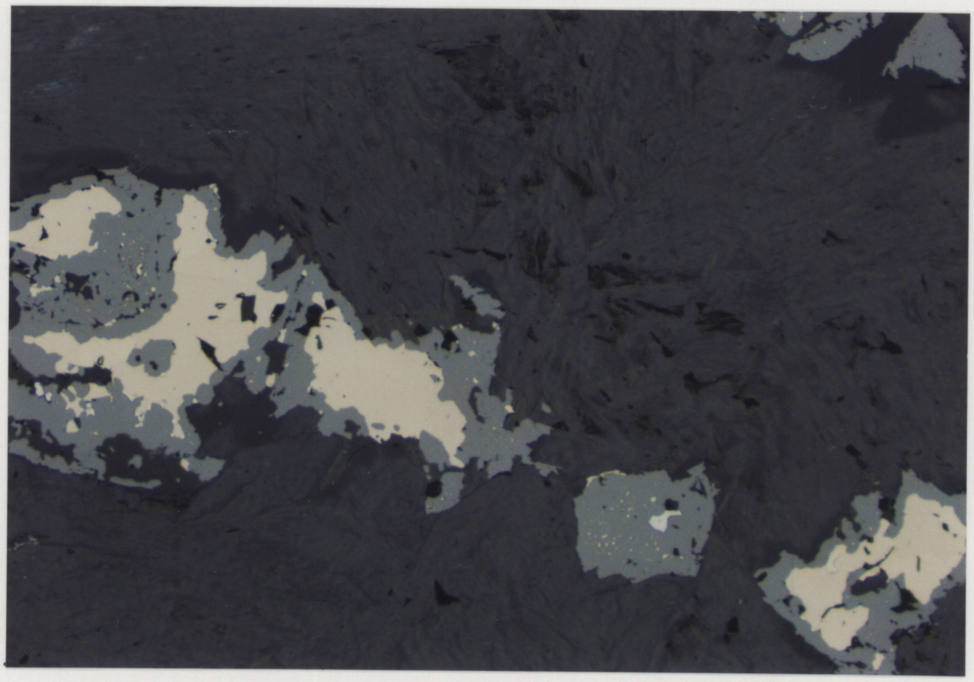
Sample T35569 (Tremolite-sulphide skarn rock)



500 μm

a) Transmitted light, crossed polarisers (6/1,5)

Tremolite (bright colours) is abundant, occurring as massive fine grained intergrowths and coarser grained sheaves. Opaques (centre) are sphalerite, pyrrhotite, galena and chalcopyrite (see 3b).



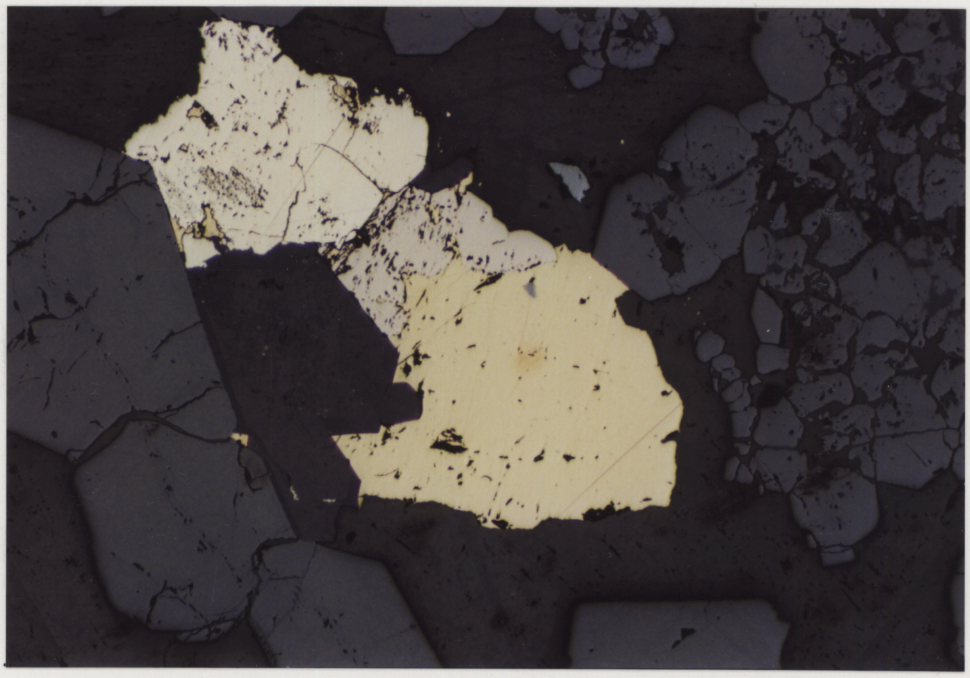
200 μm

b) Reflected plane polarised light (7/1,10)

This is a closer view of the central opaque patches in 3a. Note that pyrrhotite (pale brownish-cream) is invariably mantled by sphalerite (medium grey). Minor galena (pale grey) occurs as small inclusions within sphalerite (lower right). Chalcopyrite occurs as minute yellow inclusions in sphalerite (lower right, upper left).

PLATE 4

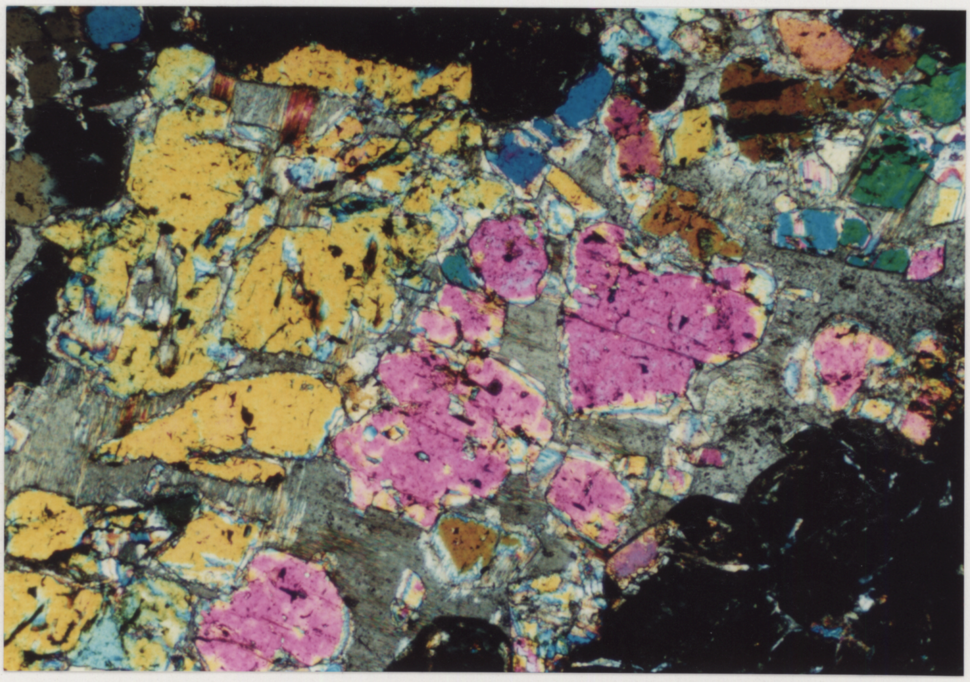
Sample T35571 (Garnet-diopside-calcite-sulphide skarn rock)



500 μm

a) Reflected plane polarised light (8/1,5)

This view of a sulphide aggregate shows chalcopyrite (yellow), pyrite (white, upper left) and pyrrhotite (pale brown, between chalcopyrite and pyrite). Idiomorphic crystal outlines of garnet are evident (left, right). Calcite occurs interstitially to the garnet.



500 μm

b) Transmitted light, crossed polarisers (10/1,5)

Optically continuous islands of diopsidic clinopyroxene (bright colours) are relict forms, having been partly replaced by calcite (high pastel colours). Isotropic garnet occurs at top and bottom right.

APPENDIX 3

Results of Microscopic Examination of 15 samples

from the Sylvester Prospect

JOHN CROSSING
5521/282

058083

RESULTS OF MICROSCOPIC EXAMINATION OF 15 SAMPLES FROM THE SYLVESTER (PB-ZN) PROSPECT, ZEEHAN

BY

CAROL HALSALL

10th March, 1992

058084

RESULTS OF MICROSCOPIC EXAMINATION OF 15 SAMPLES FROM THE SYLVESTER (Pb-Zn) PROSPECT, ZEEHAN

1. INTRODUCTION

15 drill core samples from the Sylvester Prospect were despatched by Mr John Crossing (RGC Exploration, Hobart) to the RGC Exploration Canberra office on 31st January 1992 for polished section preparation and subsequent petrological examination by Dr Carol Halsall. A regional geological interpretation of the Zeehan project area, drill hole plans and cross-sections of the Sylvester Prospect, copies of previous mineralogical reports produced by AMDEL, and extracts from the RGC Annual Report, were provided as background information.

This report presents the results of the petrological investigation. It is divided into three parts. Routine mineralogical descriptions are presented first. These include a visual estimation of the % distribution of phases in each sample and details of grain size, morphology, etc.. The descriptions are followed by a discussion of the mineralogy and petrology of the sample suite overall, including classification of "sulphide associations" and possible paragenetic relationships. Finally, the mineralogical characteristics of the sample suite are discussed in terms of mineral processing.

Throughout this report abbreviations are used for the commonly occurring sulphide and oxide minerals. These abbreviations are:

as	-	arsenopyrite
cp	-	chalcopyrite
gn	-	galena
py	-	pyrite
po	-	pyrrhotite
sp	-	sphalerite
mt	-	magnetite

2. ROUTINE MINERALOGICAL DESCRIPTIONS

2.1 T35571

Pyrite	55%
Sphalerite	20%
Galena	2%
Pyrrhotite	1%
Gangue	22%

Pyrite is present as relatively coarse (0.1mm-0.5mm), euhedral crystals which locally appear to overprint earlier sp-gangue fabrics. Growth zones in euhedral py phenocrysts are marked by trails of v. fine (<1μm) gangue inclusions. Some grains of py also contain 10μm-50μm inclusions of sp and/or gn. The euhedral py phenocrysts have been fractured during deformation.

Sphalerite Most of the sp is present in elongate anhedral patches. In the sample studied the largest of these measures approximately 15mmx3mm. Smaller patches of sp occur interstitially to py, and tiny fragments of sp are present as inclusions in py. All the sp contains inclusions of po which range in size from <1μm to 10μm. These inclusions are mostly orientated along grain boundaries and/or cleavage planes and they are interpreted as being the result of exsolution. Exsolved po accounts for up to 5% (visual estimate) of the sp by area. Larger (<100μm) inclusions of gn and gangue are also present in the sp. These are randomly distributed and are interpreted to be the result of mechanical mixing.

Galena occurs as relatively coarse (~0.1mm) anhedral intergrowths with sp and gangue. Some gn is also present as entrained inclusions (1-100μm) in sp (see above). Locally, gn has been remobilised into late fractures in

These fractures are generally <10µm wide.

Pyrrhotite occurs as small (<1µm to 10µm) inclusions in sp (see above).

Gangue minerals occur interstitially to, and as inclusions in, sulphides. In drill core a relatively strong fabric is defined by segregations of sp and gangue. Locally this fabric appears to be overprinted by euhedral py. Gangue minerals have also been remobilised into late fractures which cut across the entire sulphide assemblage.

2.2 T35572

Pyrite	40%
Sphalerite	15%
Galena	10%
Pyrrhotite	<1%
Gangue	35%

Pyrite is present as masses of fine (10µm-30µm) euhedral crystals in a predominantly gangue matrix. A moderate to strong fabric is developed in parts of the py + gangue assemblage, and there are local accumulations of coarser py phenocrysts. The relationship between the euhedral py and the other sulphide minerals is unclear A secondary form of py is present as a fine grained alteration product after po. Po alteration is not extensive and the secondary py is intergrown with minute grains of mt.

Sphalerite occurs in elongate anhedral patches within the py-gangue matrix. In the polished section these patches are commonly between 0.3mm and 1mm in length, although the largest is 10mmx4mm. Extensive fracturing means that individual fragments of sp within the patches are seldom more than 0.3mm in size and are separated by thin zones of remobilised gangue and/or py. All of the sp contains inclusions of po which are interpreted to be the result of exsolution. Po inclusions range in size from <1µm to 20µm and are concentrated towards the margins of sp grains apparently oriented along crystal growth zones and/or cleavage planes. Inclusions of po account for up to 7% (visual estimate) of the sp by area.

Galena occurs as coarse anhedral patches 0.1mm to 0.5mm in size intergrown with sp or isolated in the py-gangue matrix. A significant proportion of gn, and some sp, has been remobilised into late discontinuous veinlets, up to

1mm wide, which appear to cross-cut earlier py-gangue fabrics. Gn is also present as small entrained inclusions in sp and has locally been remobilised into thin (<10μm) fractures in sp.

Pyrrhotite occurs as small (<1μm to 20μm) inclusions in sp (see above) and as rare (<20μm) inclusions in gn which are assumed to have been entrained. Where gn is intergrown with sp there are commonly accumulations of blebby (20μm) po inclusions along the gn-sp grain boundaries.

Gangue minerals are mostly located interstitially to sulphides, particularly py. Gangue minerals have also been remobilised into fractures, particularly late fractures in sp.

058090

2.3 T35573 SY005

Magnetite	90%
Gangue (Serpentinite?)	10%
Pyrrhotite	<<1%

Magnetite The bulk of the sample is made up of massive euhedral-subhedral mt with an average grainsize of around 0.5mm. The mt contains abundant <20μm inclusions of gangue minerals which are probably remnant or entrained, and occasional <10μm inclusions of po which may be remnant. A single inclusion of a white reflective phase was observed at a mt-gangue grain boundary. This has been tentatively identified as gn.

Gangue Green/cream gangue minerals (probably serpentinite), are speckled throughout the mt. A couple of flakes of what appears to be remnant biotite were also observed. There has been some remobilisation of gangue minerals into late fractures.

Possibly Brucite ($Mg(OH)_2$)

Pyrrhotite is present as occasional small (10μm) inclusions in mt (see above).

2.4 T35574

Pyrrhotite	70%
Galena	20%
Chalcopyrite	2%
Sphalerite	1%
Pyrite	1%
Arsenopyrite	<1%
Magnetite	<1%
Gangue	6%

Pyrrhotite The bulk of the sample is made up of massive po with an average grainsize of around 0.5mm. The po is fractured but there is no evidence of plastic deformation of individual grains. The massive po contains intergrowths, inclusions, and veinlets of other sulphides and gangue minerals (see below). Po is also present as small inclusions in sp (see below).

Galena The gn examined represents part of a network of gn veinlets observed in the drill core sample. These veinlets are up to 1cm wide and contain very little entrained material. At the vein margins there may be extensive mixing between gn and po. Some gn has been remobilised into thin veinlets (50-100μm wide) in massive po. Gn is also present as small (<20μm) inclusions in sp.

Chalcopyrite is present as anhedral patches in po and as small inclusions in sp. Patches of cp in po are a few hundred microns in size and tend to be associated with sp ± gangue in the vicinity of the main gn vein. Cp inclusions in sp are numerous and range in size from <1μm to 20μm.

Sphalerite Anhedral patches of sp, up to 2mm x 0.5mm in size, extend into the massive po from the margins of the gn vein. Smaller (≈100μm) patches are also present enclosed in massive po. All the sp contains inclusions of cp (<1μm-20μm size), and to a lesser extent, po (10μm-20μm size). These inclusions account for up to 10% (visual est.) of the sp by area. Inclusions are interpreted to be the result of exsolution along crystal growth zones/cleavage planes and are most numerous towards the margins of coarser sp grains.

Pyrite can be seen to be replacing po in anhedral patches (average 100μm size) and along fractures. In general the grainsize of the py is <1μm. The py is intergrown with angular fragments of mt (up to 20μm in size). Both the py and the mt are interpreted to be the result of late alteration of po. Most of this alteration post dates the fractures. Small euhedral phenocrysts of py may also be scattered throughout the massive po but they are difficult to distinguish from as.

Arsenopyrite is present in the massive po as euhedral phenocrysts up to 100 μm in size. These phenocrysts are generally found at po grain boundaries.

Magnetite is associated with fine grained secondary py (see above).

Gangue occurs as patchy inclusions throughout the sulphide. These inclusions are generally <100μm in size. At least half the gangue has been remobilised into late fractures.

2.5 T35575

Pyrrhotite	90%
Sphalerite	5%
Galena	1%
Chalcopyrite	1%
Arsenopyrite	<1%
Pyrite	<<1%
Magnetite	<<1%
Gangue	3%

Pyrrhotite The bulk of the sample is made up of granular po with an average grainsize of 0.5mm. The po is fractured and individual grains of po have developed strain lamellae. The massive po contains numerous inclusions of other sulphides and gangue (see below).

Sphalerite In the drill core sample sp is present as elongate anhedral patches which are associated with gangue minerals. The largest of these measures approximately 8mm x 3mm. The patches of sp are intensely fractured and there has been extensive remobilisation of gangue into the fractures. In addition to these sp + gangue patches, sp is present as smaller (<50μm), patches enclosed in massive po. All the sp contains inclusions of cp, po, and to a lesser extent gn. Cp inclusions are generally <20μm in size, po inclusions are <40μm in size, and gn inclusions tend to be 30μm - 40μm in size. The larger po inclusions and the gn inclusions are mostly a result of mechanical mixing. The small cp and po inclusions are mainly due to exsolution along cleavage planes and grain boundaries. Exsolved cp and po account for up to 7% (visual est.) of the sp by area.

Galena is present as <100μm inclusions in po, as 30μm-40μm inclusions in sp, and as coarse (0.5mm) intergrowths with sp at the margins of the larger sp + gangue patches. Gn is relatively inclusion free and locally displays evidence of plastic deformation.

Chalcopyrite occurs as 50μm to 100μm anhedral patches in po. These patches are often elongate and are concentrated around the margins of the larger sp + gangue patches. Cp is also present as exsolved inclusions in sp (see above).

Pyrite Fine grained py is locally intergrown with mt in the vicinity of late fractures in po as a result of po alteration. The secondary py + mt assemblage clearly post dates the fractures.

Magnetite is present with py as a result of late po alteration (see above). Fine grained mt is also locally associated with gangue minerals.

Arsenopyrite is present in the massive po as euhedral phenocrysts ranging in size from 5μm to 100μm. The coarsest as phenocrysts are associated with po grain boundaries.

Gangue The gangue minerals show a patchy distribution similar to that of sp. Locally the gangue contains fine nuclei of mt (<20μm size). Late remobilised gangue is present in fractures which cut across earlier sulphide-gangue fabrics.

2.6 T35576

Pyrite	40%
Pyrrhotite	30%
Magnetite	15%
Gangue	15%

Pyrite is present as a fine grained secondary alteration product replacing po. The py is closely associated with several forms of mt (see below).

Pyrrhotite is present as anhedral remnants in the secondary py + mt assemblage. Remnant po can be optically continuous over large areas even when these areas are broken up by zones of alteration. The intensity of po alteration increases around grains and masses of euhedral mt (remnant skarn?), and along fine fractures (<10µm) which are often infilled with (secondary?) mt. Rare 10-20µm inclusions of po are present in the euhedral mt. These inclusions appear to have been incorporated prior to the onset of po oxidation.

Magnetite There are three types of mt present:

(a) A large area of mt, several cm in size, made up of clean euhedral 0.1mm-0.2mm grains. This area is cut by veins of later remobilised gangue and may represent the edge of the main mt skarn. Adjacent to this mt there has been complete replacement of po by py.

(b) Isolated euhedral grains and masses within the sulphide assemblage. These range in size from <10µm (individual grains), to 2mm and are foci for po alteration. They may represent remnant skarn fragments.

(c) Thin veinlets and angular grains of mt (<10µm) are closely associated with the secondary py. This is most likely to be secondary mt, generated during po alteration, and locally recrystallised and/or remobilised.

Gangue There appears to have been a significant amount of remobilisation and recrystallisation of gangue minerals following sulphide emplacement. As well as vein filling, there are anhedral inclusions of gangue throughout the sulphides. Some large euhedral gangue phenocrysts (0.5mm), have locally overgrown sulphides, including secondary py + mt. Relict biotite grains were observed associated with coarse euhedral mt, and patchy serpentinite is associated with the main area of mt skarn.

2.7 T35577

Pyrite	80%
Pyrrhotite	7%
Sphalerite	5%
Magnetite	3%
Galena	<1%
Gangue	5%

Pyrite Two types of py are present. The dominant type is coarse grained massive py which makes up the bulk of the sample. The grainsize of the massive py averages between 1mm and 3mm. It is heavily fractured, with fractures up to 100µm wide infilled by remobilised gangue and/or mt. The second type of py is a fine grained secondary py which replaces po. The secondary py (±mt) is present as anhedral patches and along fractures and crystallographic structures in the po. The two types of py probably represent two distinct generations although grains of massive py locally act as a focus for po alteration and replacement.

Pyrrhotite occurs as anhedral patches up to 2mm long. The po is extensively fractured and has largely been replaced by fine grained py + mt. A small amount of po is present as fine inclusions in sp (see below).

Sphalerite is present as anhedral patches, usually associated with po + secondary py ± mt. Individual areas of sp are generally >100µm in size, angular in outline, and heavily fractured. All of the sp contains exsolved inclusions of po. These inclusions are <10µm in size and are not extensive - usually occupying <1% (visual est.) of the sp by area. Locally, the sp contains larger (up to 0.5mm) inclusions of po which are probably a result of mechanical mixing. These inclusions were evidently incorporated into the sp prior to the onset of extensive po alteration.

Magnetite is present in three distinct forms. Coarse, angular fragments, >200µm in size and possibly representing remnant skarn material, are associated with the massive py. Fine grained (<50µm) secondary mt is intergrown with secondary py as a result of po alteration. Mt is also present infilling wide (100µm) fractures which cut across earlier sulphide fabrics and which locally act as foci for po alteration.

Galena is present as anhedral patches averaging 100µm in size and associated with sp and po. Gn has undergone plastic deformation particularly around gn-sp and gn-po grain boundaries. Gn has locally been remobilised into fractures in the massive py.

Gangue Most of the gangue that is present has been remobilised into late fractures. Some interstitial gangue is associated with the massive py.

2.8 <u>T35578</u> - Polished thin section

Carbonate	65%
Chlorite	2%
Serpentine	3%
Other fine grained secondary minerals	6%
Magnetite	17%
Unidentified phase (carbonaceous matter?)	7%
Pyrite	<1%
Pyrrhotite	<1%

Carbonate The bulk of the sample is composed of carbonate with a mean grainsize of around 1mm although there are local concentrations of much finer grained material. The carbonate has a variable composition with limited reaction to dilute HCl. Throughout the carbonate groundmass there is a patchy distribution of opaque minerals and fine grained alteration assemblages.

Chlorite Fine grained fibrous chlorite is associated with fine grained inclusion rich mt (see below). The chlorite is colourless to very pale green in colour and has deep blue birefringence. Locally this chlorite has been remobilised into late <100μm wide veinlets.

Serpentine In the drill core sample serpentine is associated with mt in an area of coarse mt skarn. In the thin section, most of the serpentine is present in a discontinuous veinlet 2-3mm wide, which locally has a rim of blocky mt. Isolated anhedral patches of serpentine up to 1mm in size and locally associated with mt, occur throughout the carbonate groundmass.

Other fine grained secondary minerals have a patchy distribution throughout the carbonate. Secondary minerals such as sericite, talc, brucite may all be present but they are too fine grained for individual species to be distinguished without the aid of additional techniques such as XRD analysis.

Magnetite is present in three distinct forms:

(a) Clean euhedral crystals and anhedral masses ranging in size from 0.1mm (individual grains) to 5mm. These are dispersed throughout the carbonate groundmass and are locally associated with serpentine. Discontinuous 1-2mm rims of euhedral mt are associated with the serpentine veinlet and with fibrous masses of an unidentified phase (see below).

(b) A fine grained inclusion rich form of mt is present in elongate discontinuous zones associated with chlorite and/or the unidentified fibrous phase. The grainsize of this mt ranges from 10μm to 50μm. It occurs as individual rounded grains and as globular aggregates up to 1mm in diameter. This fine grained, apparently remobilised, mt probably post-dates the blocky mt described in (a).

(c) Mt is also present as fine (<1μm) angular inclusions in anhedral patches of py in the carbonate groundmass. This py + mt assemblage is interpreted to be a secondary assemblage resulting from po alteration (see below).

Unidentified phase In the drill core sample this phase is present as anhedral fibrous masses up to 1cm long. It is soft and is usually associated with mt. In transmitted light it is opaque. In reflected light it has strong bireflectance (blue-grey to orange-brown), and birefringence (silver-orange to black). There is a strong possibility that this represents carbonaceous matter.

Pyrite is present in the carbonate groundmass as small euhedral grains 20μm to 50μm in size, and as anhedral patches up to 1mm in size. In the anhedral patches py is intergrown with mt sometimes around a core of remnant po. This fine-grained py + mt assemblage is interpreted as to be the result of po alteration. The small euhedral py grains are probably primary in origin.

Pyrrhotite Most of the po has been altered to give a fine grained secondary py + mt assemblage. Some remnant po persists (see above).

2.9 **T35579** SY009

Pyrrhotite	78%
Sphalerite	7%
Pyrite	3%
Arsenopyrite	1%
Magnetite	1%
Galena	<1%
Chalcopyrite	<1%
Gangue	10%

Pyrrhotite The bulk of the sample is made up of massive granular po. The grainsize of the po is mostly in the range 0.1-0.5mm. A lot of the po shows evidence of deformation in the form of late fractures and strain lamellae. Within the massive po there are variations in colour (grey-brown to yellow-pink), and degree of anisotropy. These variations may be due to slight compositional changes and/or uneven polishing effects. However, the possibility that unidentified phases are intergrown with the po cannot be ruled out without further investigation eg microprobe analysis. Po also occurs as fine exsolved inclusions in sp (see below).

Sphalerite Anhedral areas of sp occur throughout the massive po and range in size from <10µm to 4mm. The sp is fractured and in places displays a lamellar fabric which may be attributable to deformation. All the sp contains exsolved inclusions of po. These inclusions are mostly <1µm in size although coarser linear inclusion trails are also present. Po inclusions account for up to 5% (visual est.) of the sp by area.

Pyrite Fine grained intergrowths of py ± mt are present as a result of local po alteration. These intergrowths are up to 1mm in diameter. The secondary py ± mt assemblage evidently pre-dates some of the major fractures but has overgrown others. Po alteration may have been initiated during the latest stage of deformation.

Arsenopyrite is present throughout the section as euhedral phenocrysts in the size range 0.1mm-1.0mm. These phenocrysts are all fractured.

Galena Occurs as rare anhedral patches in po (<100μm) and as occasional inclusions in sp (<10μm).

Chalcopyrite occurs as rare anhedral patches in po (<100μm).

Magnetite occurs as small angular grains (1-10μm) associated with py as a result of po alteration (see above).

Gangue is present as angular, sometimes euhedral, inclusions in massive po. These inclusions are up to 1mm in size. Gangue has also been remobilised into veinlets (up to 0.5mm wide). Remobilisation and recrystallisation of gangue post-date observed sulphide textures.

2.10 T35580

Pyrrhotite	64%
Sphalerite	20%
Galena	5%
Arsenopyrite	1%
Pyrite	<1%
Gangue	10%

Pyrrhotite The bulk of the sample is made up of granular massive po with a grainsize ranging from 0.1mm to 1.0mm. Many of the coarser grains display strain lamellae and the massive po is extensively fractured. As with sample T35579 there are variations in colour and degree of anisotropy within the massive po, and the possibility of chemical variations and/or unidentified phases cannot be ruled out. Po is also present as exsolved inclusions in sp (see below), and as blebby (<20µm) inclusions along sp-gn grain boundaries.

Sphalerite Anhedral patches of sp ± gn are present in the massive po. The sp is fractured but not as extensively as the po. Individual patches of sp are up to 2cm long (in the drill core sample), and there has been a degree of mixing between sp and po at their margins. The sp contains inclusions of exsolved po ranging from <1µm grains to 50µm long lamellae. The number of inclusions tends to increase towards the margins of the sp, with included po accounting for up to 10% (visual est.) of the sp by area.

Galena is present as anhedral patches 3-5mm in size which are closely associated with sp. Small (<50µm) grains of gn are also present as inclusions in massive po. Gn has been remobilised into thin (<10µm) fractures in both po and sp. the gn is relatively inclusion free and most of the observed gn textures are the result of plastic deformation.

Arsenopyrite is present as euhedral phenocrysts up to 0.5mm in size, usually associated with massive po. The phenocrysts are fractured, with po and/or sp commonly infilling the fractures.

Pyrite Occasional small (<10μm) euhedral yellow phenocrysts are present in the massive po. They are more yellow in colour than the larger as grains and are tentatively identified as py.

Gangue is present infilling late fractures and as coarse (up to 5mm) patchy intergrowths with sp and gn. These intergrowths may represent remnant host. They are cut by fractures which have been infilled by later remobilised gangue and/or sulphides.

2.11 T35581 - Polished thin section

Quartz	48%
Fine grained secondary assemblage	34%
Carbonate	3%
Pyrite	10%
Pyrrhotite	5%
Arsenopyrite	<1%
Sphalerite	<<1%
Chalcopyrite + Galena	<<1%

Quartz occurs as anhedral patches up to 2cm in size which are separated by a network of fine veinlets and zones of remobilised alteration products. The quartz has a variable grainsize ranging from 10μm to 0.5mm. Some of the coarser grains display strain extinction.

Fine grained secondary minerals A fine grained secondary assemblage occurs as a network of veinlets and zones of remobilised material, up to 1cm wide, which impart a strong fabric to the rock. Most of this material is dark green-brown in colour and in places has completely obliterated the quartz groundmass. The grainsize of the secondary minerals is <<1μm. Mg/fe oxides, sericite, chlorite and a significant amount of carbonate may all be present, but accurate identification would require further analysis eg. by XRD.

Carbonate Recognisable anhedral grains of carbonate 50μm to 0.3mm in size appear to be intergrown with quartz. These grains tend to be isolated and are variably altered.

Pyrite has a patchy distribution in the drill core sample. Large patches (several cm size) of coarse grained py are associated with quartz. Fine disseminated py tends to be associated with the fine grained secondary assemblage. In the thin section most of the py is present as coarse (average size = 0.5mm) subhedral grains which have ragged outlines and which contain numerous inclusions of gangue minerals. Finer grained disseminated py associated with the secondary assemblage is cleaner, euhedral, and has a grainsize ranging from 10µm to 100µm.

Pyrrhotite occurs as discontinuous anhedral patches interstitial to py and as isolated inclusions in the quartz groundmass. Some of these inclusions have an elongate rectangular shape and appear to be pseudomorphing an earlier crystalline phase. All the po contains inclusions of gangue ranging in size from 1µm to 50µm. A very small amount of po is present as exsolved inclusions in sp (see below).

Arsenopyrite is present as euhedral grains up to 0.5mm in size associated with py. Fine grained as may also be present in the secondary mineral assemblage in zones of pervasive alteration.

Sphalerite is present as ragged anhedral patches averaging 100µm in size. The main association is with coarse py + po but fragments of sp have also been entrained in the fine grained secondary mineral assemblage. The sp contains small (<5µm) exsolved inclusions of po which account for up to 5% (visual est.) of the sp by area.

Chalcopyrite is present as rare anhedral patches, usually <50µm in size and associated with coarse py + po, or entrained in the fine grained secondary mineral assemblage.

Galena occurs as very rare anhedral fragments <50µm in size which have been incorporated into the fine grained secondary mineral assemblage.

2.12 T35582

S4012

Pyrrhotite	63%
Pyrite	25%
Chalcopyrite	1%
Arsenopyrite	1%
Galena	<1%
Gangue	10%

Pyrrhotite The bulk of the sample is made up of massive granular po. Individual po grains tend to be elongate, up to 1mm in size, and display distinct strain lamellae. The massive po is extensively fractured with remobilised gangue minerals infilling many of the fractures. There are also numerous anhedral inclusions of gangue in the massive po. These inclusions range in size from around 50µm to 1mm and may represent remnant host.

Pyrite Coarse euhedral to subhedral phenocrysts of py are present throughout the massive po. The py phenocrysts range in size from 100µm to 3mm. There is no evidence of replacement of po by py and the two minerals could be contemporaneous. The py phenocrysts have undergone a similar degree of fracturing as the massive po.

Chalcopyrite is present as 100µm to 300µm anhedral patches in massive po. Cp tends to be concentrated adjacent to, and between, large py phenocrysts. Locally the cp has been remobilised into later fractures in the py.

Arsenopyrite is present as euhedral grains and masses associated with po and/or gangue. The grain size of as ranges from <100µm to 500µm and it is locally intensely fractured. The main concentrations of as are in massive po in the vicinity of coarser gangue inclusions.

Galena is present as <100μm inclusions in massive po. Locally these inclusions become quite numerous. Gn is usually intergrown with fine py, and may be concentrated into thin (<50μm) veinlets.

Gangue Gangue is present infilling fractures and as inclusions in massive po. The larger inclusions (up to 1mm in size), show some orientation and may represent remnant host. There has clearly been extensive deformation related remobilisation of both gangue and sulphides, with sulphides infilling fractures in gangue and vice-versa.

2.13 T35583

Pyrite	55%
Pyrrhotite	13%
Sphalente	20%
Galena	5%
Arenopyrite	<1%
Chalcopyrite	<<1%
Gangue	7%

Pyrite is present as masses of coarse grained (>1mm) euhedral phenocrysts. The py is moderately fractured with other sulphides and gangue infilling the fractures. Finer grained anhedral py (grainsize <50μm) is locally associated with interstitial po. This finer grained py appears to have been derived as a result of po alteration, but the relatively coarse grainsize and the lack of associated mt suggest a more complex origin than that of the secondary py observed in previous samples.

Pyrrhotite is present as anhedral patches interstitial to coarse grained py, and as a single granular mass associated with coarse grained sp and gn. The po has an average grainsize of around 1mm, contains numerous inclusions of sp, gn and gangue, and is extensively fractured. Subhedral 50μm-100μm grains of py are commonly intergrown with po adjacent to the fractures (see above). Po is also present as exsolved inclusions in sp.

Sphalerite Most of the sp in the polished block is concentrated in a single large mass, approximately 2cm x 1cm in size, which is cut by a 1-2mm wide py vein. Away from this mass smaller anhedral areas of sp (± po) occur interstitial to the coarse grained py. The sp may contain inclusions of entrained and fracture-fill gangue (commonly >10μm size), exsolved po (<5μm size), and exsolved cp

(<5μm size). Exsolved po and cp account for less than 1% (visual est.) of the sp by area. Gangue inclusions and intergrowths are locally numerous - up to 10% (visual est.) of the sp by area, but are mostly confined to small areas of interstitial sp.

Galena is closely associated with po and occurs as anhedral patches interstitial to coarse grained py. Gn has undergone extensive plastic deformation including remobilisation into fractures in py. Locally there appears to have been extensive mixing of gn with po and/or gangue. These "mixing" textures may be deformation related. Gn also occurs as isolated inclusions in coarse py.

Arsenopyrite is present as coarse angular grains, 0.5-1.0mm in size. These grains are extensively fractured and contain inclusions of po, gangue, and gn. The main concentration of as is associated with heavily fractured areas of interstitial po and gangue.

Chalcopyrite Very fine grained inclusions of cp are present in po (see above).

Gangue There is a patchy distribution of gangue minerals throughout the section. Most of the gangue has been remobilised into veinlets. Locally there appears to have been extensive mixing and mutual replacement of gangue and coarser po-sp-gn assemblages. This mixing and replacement may predate crystallisation of coarse py. Unfortunately later deformation and possibly recrystallisation has obscured original gangue - sulphide relationships.

2.14 T35584

Pyrite	84%
Pyrrhotite	7%
Sphalerite	1%
Galena	1%
Chalcopyrite	<1%
Gangue	7%

Pyrite The bulk of the sample is made up of massive, coarsely crystalline py which is locally intensely fractured. The fracturing is mainly associated with interstitial concentrations and veinlets (1-2mm wide) of a fine grained py ± po ± gangue assemblage. The py of the fine grained assemblage is subhedral with an average grainsize of <50µm. This fine grained py may be a product of po alteration. It is similar in appearance to the fine grained py associated with po in sample T35583 but in sample T35584 its development is more extensive. Segregations of py and gangue result in locally strong fabrics being developed in the fine grained assemblages.

Pyrrhotite is present as elongate anhedral patches in the fine grained assemblages. These patches are up to 1mm in length and contain masses of subhedral py. The po can be optically continuous over large areas with strain lamellae locally preserved across zones of py. Blocky, relatively py-free areas of po around 0.5mm in size are locally associated with areas of py-free gangue. Po is also present as exsolved grains in sp.

Sphalerite There is a patchy distribution of sp throughout the sample. The patches vary from 0.1mm to 1.0mm in size and are usually associated with areas of gangue or fine grained po±py±gangue assemblages. In the fine grained assemblages, sp is present as relatively coarse masses which are locally fractured but which have not been incorporated into the overall fabric of the assemblage. Most sp grains, particularly those associated with gangue, have thin discontinuous rims of po. All the sp contains exsolved inclusions of po which are commonly <10μm in size and which account for up to 5% (visual est.) of the sp by area. Sp + po mineralisation appears to pre-date both the py of the fine grained assemblages and the coarsely crystalline py.

Galena Anhedral patches of gn up to 20μm in size are present in the fine grained assemblages. They tend to be elongate parallel to the main fabric and are closely associated with po. Interstitial gn is associated with py phenocrysts at the margins of the fine-grained assemblages. Gn may also infill fractures in these phenocrysts. Most of the observed gn textures can be attributed to plastic deformation.

Chalcopyrite is present as anhedral patches up to 100μm in size in the fine grained assemblages and as inclusions in coarsely crystalline py.

Gangue is mostly associated with py±po in the fine grained interstitial assemblages. In the drill core there are also coarser, interstitial areas of sulphide-free gangue, the largest of which measures approximately 2cm x 0.5cm. Some gangue has been remobilised into fractures. Both the coarse interstitial and the fracture fill gangue includes a component of calcite (reacts with dilute HCl).

2.15 T35585 - Polished thin section   SY012 457-457.05m

Carbonate	94%
fine grained secondary assemblage	1%
Quartz	<1%
Pyrrhotite	3%
Pyrite	2%
Sphalerite	<1%
Galena	<1%
Arsenopyrite	<<1%
Chalcopyrite	<<1%

Carbonate The bulk of the sample is made up of granular carbonate which contains minor disseminations and veinlets of sulphide. The grainsize of the carbonate is in the range 10μm to 1mm. Testing with dilute HCl suggests that a significant proportion of the carbonate is composed of calcite.

Fine grained secondary assemblage Replacement of carbonate by fine grained secondary silicates and/or oxides is common in the vicinity of sulphide minerals. These secondary assemblages are too fine grained for accurate optical identification although colourless chlorite and fine grained sericite appear to be common constituents.

Quartz Small grains of quartz up to 100μm in size are present in the carbonate groundmass. Coarser quartz (100μm-500μm) is locally associated with sulphides. Rare discontinuous veinlets (<50μm wide) of fine grained quartz are also present.

Pyrrhotite is present as ragged inclusion rich grains (≈0.5mm grainsize) associated with variable amounts of py±gn±sp±cp ± fine grained secondary minerals. In most cases the sulphide+secondary mineral assemblage overprints the calcite groundmass. Po is also present as exsolved inclusions in sp (see below).

Pyrite Most of the py is present as subhedral phenocrysts, 50μm to 100μm in size, in po. Clean, relatively euhedral py phenocrysts, up to 0.5mm in size, are disseminated through parts of the carbonate groundmass. In this sample there is also a 5mm x 1mm accumulation of fine grained (10μm) euhedral py with minor interstitial cp.

Sphalerite occurs as anhedral patches in the size range 200μm-300μm. The sp may be isolated in the carbonate groundmass or it may be intergrown with ragged po ± py. The sp contains exsolved inclusions of cp, and to a lesser extent po. These inclusions are mostly <10μm in size and account for up to 5% (visual est.) of the sp by area.

Galena is present as anhedral grains, up to 0.5mm in size intergrown with ragged po. Smaller inclusions of gn (<100μm) may be present in the carbonate groundmass in the vicinity of these larger grains. The gn is relatively inclusion-free but in places appears to have been overgrown by carbonate.

Arsenopyrite Isolated euhedral phenocrysts of as are present in the carbonate groundmass. They are mostly <100μm in size.

Chalcopyrite mainly occurs as fine (<20μm), anhedral grains associated with the fine grained secondary alteration assemblage. Some cp is also present as inclusions in sp (see above).

3. DISCUSSION : OVERVIEW OF MINERALOGY, PARAGENESIS

Based on the observed relationships between sulphide species, the samples studied can be classified in terms of four distinct sulphide associations. These associations are described below. A set of photomicrographs are included at the end of this report (page 39), to illustrate some of the points made in this and the following sections.

Massive Pyrrhotite in 54005, 54004 " " mod grade

(1) Samples T35774, T35575, T35579, T35580. **"MASSIVE PYRRHOTITE"** Sp + gn ± cp are present as irregular patches and inclusions in massive po (Plate 1). The four sulphides, po, sp, gn and cp, appear to be contemporaneous. Subsequent deformation has resulted in fracturing of po + sp, limited remobilisation of sp, and more extensive remobilisation and plastic deformation of gn. The only py present in these samples is fine grained, secondary, and together with fine grained mt can be seen to be replacing massive po along fractures and in isolated patches.

Massive Pyrite in 54003 " " hi grade

(2) Samples T35571, T35572 **"EUHEDRAL PYRITE"** Sp + gn ± gangue are associated with masses of medium to fine grained, euhedral py, (Plate 2). There is no evidence of any precursor po. The exact relationships between sp + gn mineralisation, py phenocrysts, and the development of locally strong sp-gangue fabrics, are unclear. The euhedral py locally overprints the sp-gangue fabrics, but in sample T35572, masses of fine grained euhedral py appear to pseudomorph early silicate and/or carbonate textures which pre-date sp+gn mineralisation (Plate 3). It is not inconceivable that the sp, gn, and py are contemporaneous and the observed fabrics are structurally imposed. Deformation has resulted in fracturing of sp and local mixing of fragmental sp and gangue. Gn may be plastically deformed and in T25572 there has been late

remobilisation of gn, and to a lesser extent sp, into thin discontinuous veins. Of the two samples T35572 appears to be the most intensely deformed.

Pyrite - Pyrrhotite in SY012 mod/hi

(3) Samples T35582, T35583, and T35584 **"INTERSTITIAL PYRRHOTITE"** Sp + gn ± cp are intergrown with po which occurs interstitially to coarse euhedral py (Plate 4). The po is locally associated with masses of finer grained subhedral py. The origins of the two types of py are debatable. The coarse grained py may be contemporaneous with po, sp, gn and cp. The fine grained py appears to be a secondary py which has replaced po. Observations supporting a replacement origin for the fine grained py are (a) fine py often appears to be associated with early fractures in po (b) po is optically continuous across zones of fine py, and (c) po which has been shielded from later fluids, eg. as inclusions in fracture-free gangue, does not contain fine py. Deformation has resulted in the fracturing and flattening of areas of interstitial po + sp, and plastic deformation of gn. The most intense deformation appears to have been in T35584 where the po+sp±gn is confined to thin bands between fractured py phenocrysts. Sample T35583 is problematic, containing significant accumulations of coarse grained sp + gn. In this sample, additional methods of remobilisation and concentration of sp and gn (eg. structural), cannot be ruled out.

Secondary Pyrite in SY005 mod/lo

(4) Samples T35576 and T35577. **"SECONDARY PYRITE"** or **OXIDISED PYRRHOTITE"** In both samples, the original po has been extensively replaced by a fine grained py + mt assemblage. In sample T36676, massive po has been replaced around fragments of coarse mt (remnant skarn) and along fractures (Plate 5). In sample T35577 interstitial po has been replaced in patches and along fractures (Plate 6). Sp ± gn associated with po in sample T35577 appear to be

unaffected by the replacement. According to Ramdohr (1980), the alteration of po to give py + mt probably takes place as a result of oxidation, possibly according to the reaction:

$$6FeS + 4O \rightarrow Fe_3O_4 + 3FeS_2$$

This reaction commonly occurs when acidic groundwater comes into contact with po, eg. in a fault zone.

In all the samples, clear evidence of the relationships between sp+gn±cp, po, py, and gangue has been obscured by the effects of deformation, including remobilisation and possibly recrystallisation. Most of the available evidence suggests that sp+gn±cp were introduced with po soon after skarn development. In some places this gave rise to massive po±sp±gn±cp mineralisation. In other areas, interstitial po±sp±gn±cp mineralisation is associated with coarse grained euhedral py. There is no reason why this euhedral py should not pre-date, or be contemperaneous with, the interstitial po±sp±gn±cp. A subsequent S-rich event caused partial replacement of interstitial po by finer grained py. More recently, local oxidation, possibly related to groundwater circulation, has resulted in the development of a fine grained secondary py + mt assemblage replacing po.

The origin of the "Euhedral Pyrite" assemblage in two of the samples is enigmatic particularly as there is no evidence of any precursor po.

It has not been possible to define any large scale zonation of sulphide mineral associations but this may be because the sample suite is not extensive enough. Further investigations into the possible existence of such a zonation may be warranted. As well as zonation of sulphide species, the number and composition of exsolved inclusions in sp may display systematic variation related to the initial composition and temperature of formation of the host sp.

4. DISCUSSION : MINERALOGICAL FACTORS LIKELY TO AFFECT PROCESSING OF SP, GN AND CP

Sphalerite is present in three major forms:

(1) Most of the sp is concentrated in anhedral masses which range in size from 50μm to several mm. This sp should be easily recoverable although at the margins of these masses there can be considerable mechanical mixing of sp with gangue, po, and/or py, particularly in more highly deformed material eg. T35572 and T35584.

(2) Interstitial sp (± po) is associated with euhedral py phenocrysts. The interstitial sp is relatively coarse grained and, assuming py breakage along grain boundaries, should be recoverable.

(3) Sub-50μm inclusions of sp in po and py account for a small proportion of the sp present. Some of these inclusions may be recoverable but fine inclusions of sp, particularly in py, will be lost.

All of the Sylvester sp examined so far contains minute inclusions of po (Plate 7), and cp (Plate 8). These inclusions locally account for up to 10% of the sp (visual est.) by area. Inclusions of cp in sp have been referred to by previous workers as "chalcopyrite disease". According to Petruk (1990), in a study of the processing characteristics of volcanogenic sp in the ore of Brunswick Mining & Smelting, Canada, "chalcopyrite disease" is much more evident in unground ore than in ground ore. This is because, during grinding, a large proportion of the sp breaks along cleavage planes where the cp inclusions are concentrated, thus liberating the included cp. In the Sylvester samples "pyrrhotite disease" is much more common than "chalcopyrite disease" but it is possible that included po will be liberated in the same way. Breakage along cleavage planes however, will only ensure liberation of the po and cp exsolved along these planes and mechanically entrained inclusions, most commonly of po and gn, will not necessarily be liberated.

Galena Several different associations of gn were observed in the Sylvester samples:

(1) Most gn is present as relatively coarse (>50μm) intergrowths with sp, and to a lesser extent po. This gn should be easily liberated, although such intergrowths may have a tendency to break randomly (Petruk, et al., 1990), resulting in gn + sp and gn + po composite particles.

(2) In sample T35574, and to a lesser extent T35572 gn appears to have been mechanically concentrated into relatively thick veins. This gn is inclusion-free and should be easily liberated.

(3) In some samples mechanical mixing between gn and host po has given rise to local concentrations of blebby gn inclusions in po. These inclusions range in size from 10μm to 100μm. Inclusion rich areas will probably break randomly to give gn + po composite particles.

(4) In sample T35583 areas of interstitial gn are associated with euhedral py phenocrysts (Plate 10). Assuming py breakage along grain boundaries, this gn should be easily recoverable.

(5) Small inclusions of gn occur in sp and py. Most of these are <20μm in size and the majority will be unrecoverable.

(6) Deformation has resulted in minor amounts of gn being remobilised into thin (<10μm wide) fractures in sp, py, po and gangue (Plate 10). A lot of this gn will be unrecoverable or will remain as inclusions in sp.

Any Ag associated with these samples is either present in solid solution in gn, or as minute inclusions of separate minerals which cannot be discriminated during routine microscopic examination.

Chalcopyrite Cp is a relatively minor constituent of the samples studied. Most of the cp is present as small anhedral patches, usually <300μm in diameter, associated with sp and gn. Cp is also present as small inclusions in po, and as minute exsolved inclusions in sp (see above). A lot of the cp will probably be recovered in composite particles with sp and gn. Many of the smaller inclusions of cp in po will probably be lost.

5. REFERENCES

Petruk, W. 1990 Mineralogical characteristics that affect recoveries of Sphalerite from volcanogenic base metal ores. In "Lead-Zinc '90" Eds T.S. Mackey and R.D. Prengaman.

Petruk, W., Chen, T.T., and Wilson, J.M. 1990 Mineralogical characteristics that affect recoveries of galena from base metal ores. In "Lead-Zinc '90" Eds. T.S. Mackey and R.D. Prengaman.

Ramdohr P. 1980 The ore minerals and their intergrowths (2 Vols). Publ. Pergamon Press.

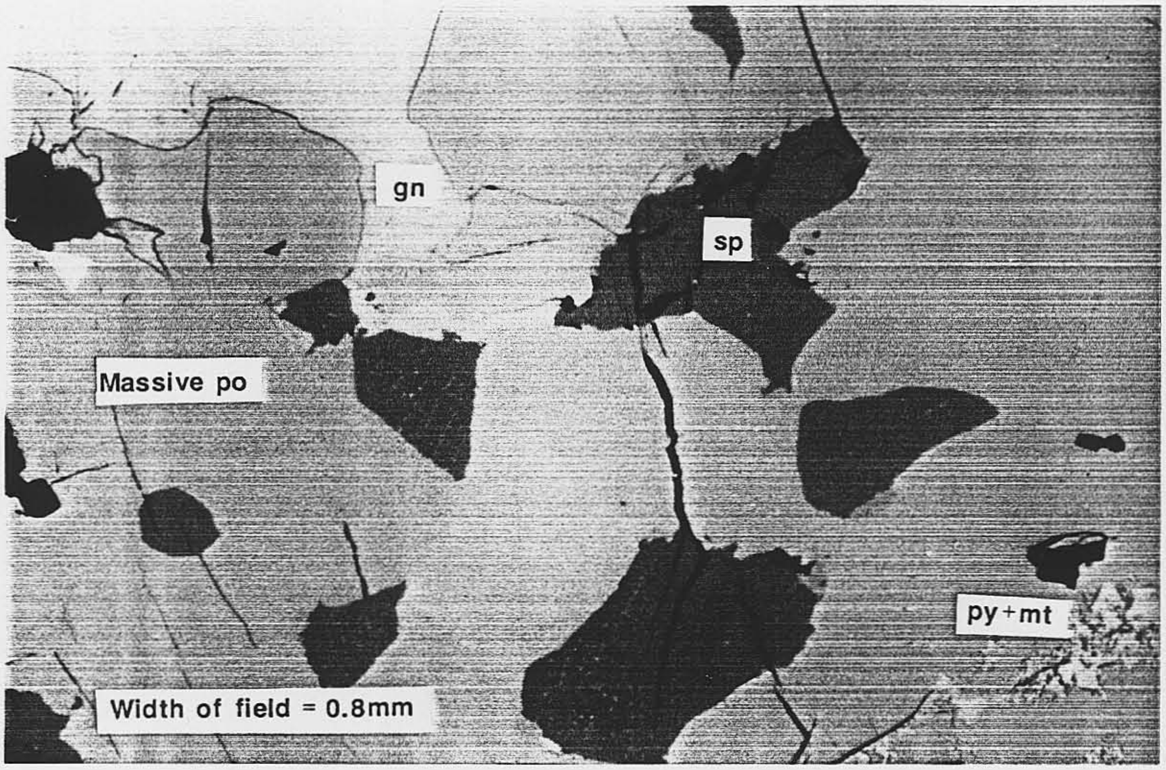


Plate 1, T35574. Inclusions of sp (brown) in massive po (yellow) at the edge of a gn vein (white). In the bottom left hand corner, secondary py + mt (cream + grey) can be seen replacing po along a small fracture.

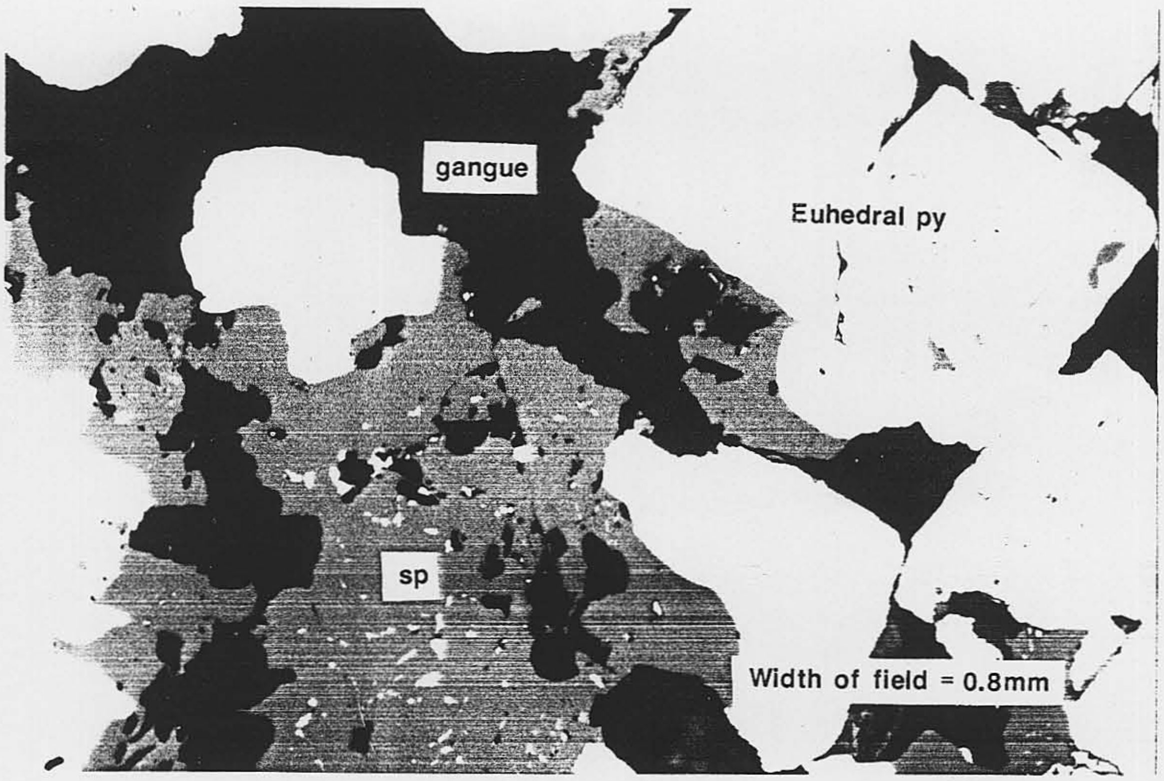


Plate 2, T35571. Euhedral py (white) associated with sp (brown) and gangue (dark brown-black). The sp contains inclusions of po (yellow). The euhedral py contains inclusions of sp (brown-grey) and gn (white).

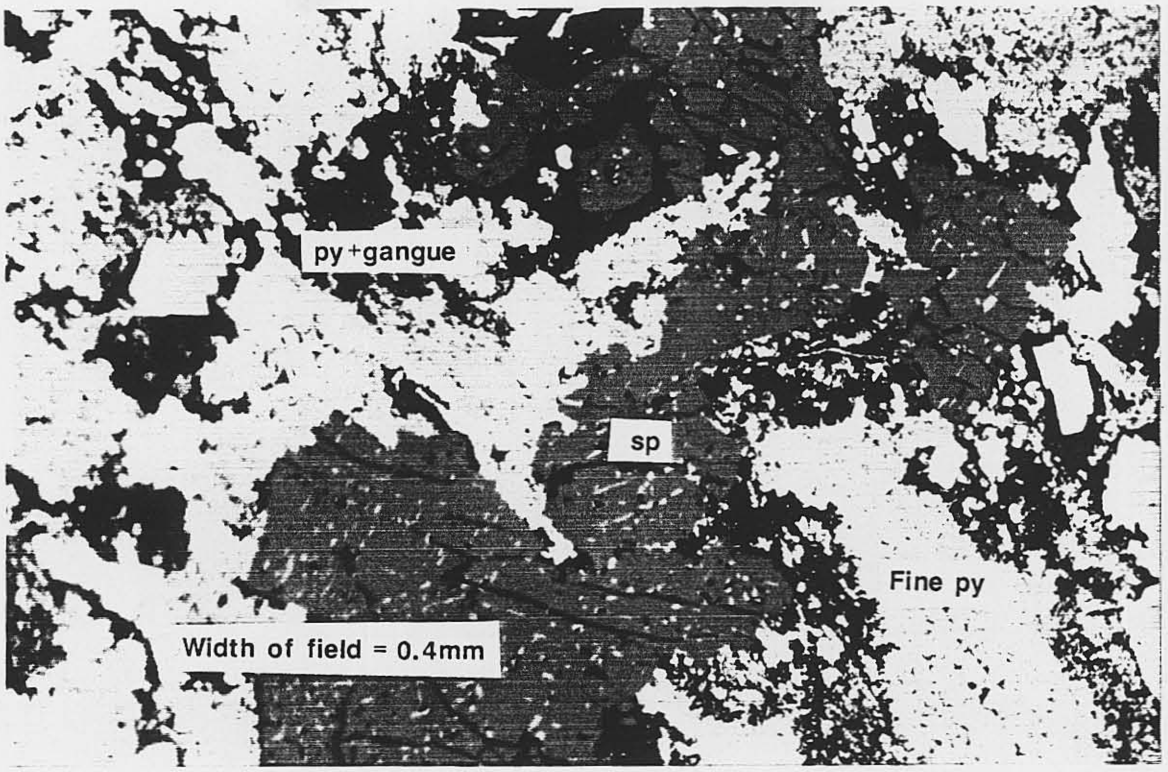


Plate 3, T35572. Masses of fine grained py (cream) with sp (brown). Gangue (dark brown-black) is intergrown with py and infills fractures in sp. The sp also contains inclusions of po (yellow).

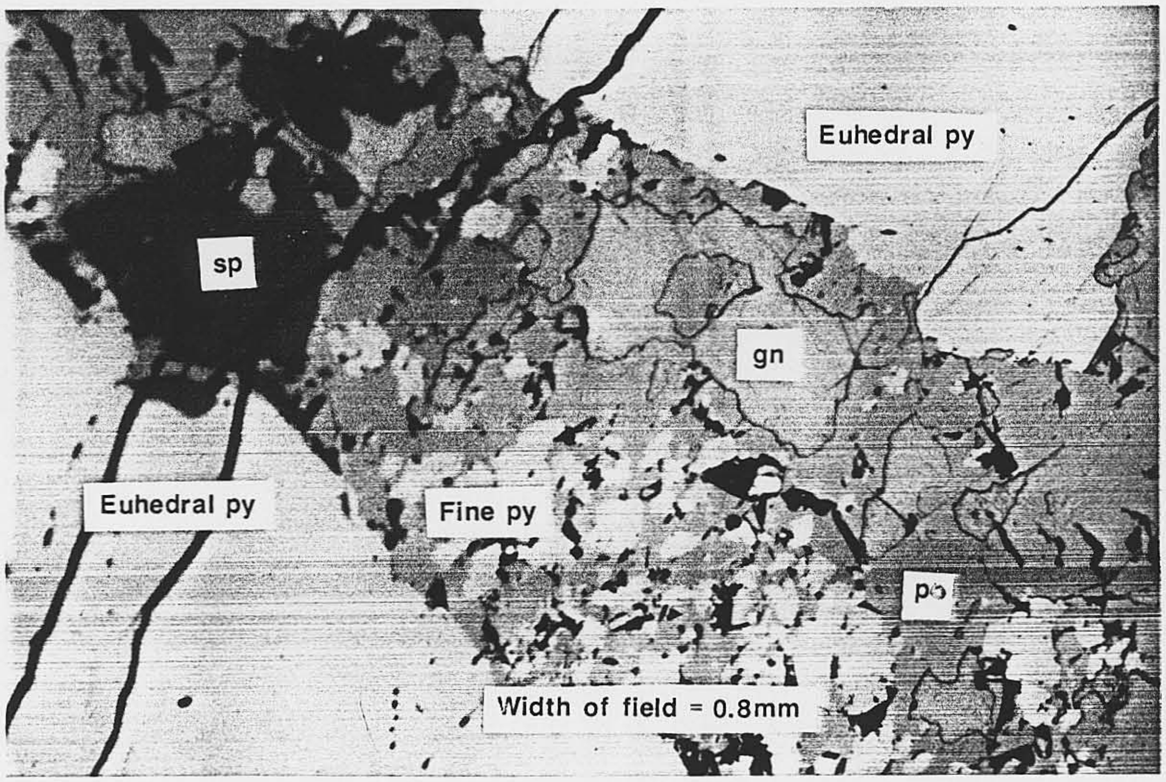


Plate 4, T35584. Coarse euhedral py (cream) with interstitial po (orange), gn (white) and sp (brown). Finer grained py locally appears to be overgrowing po. Gangue (dark brown) is present as inclusions (mainly in po) and infilling veins.

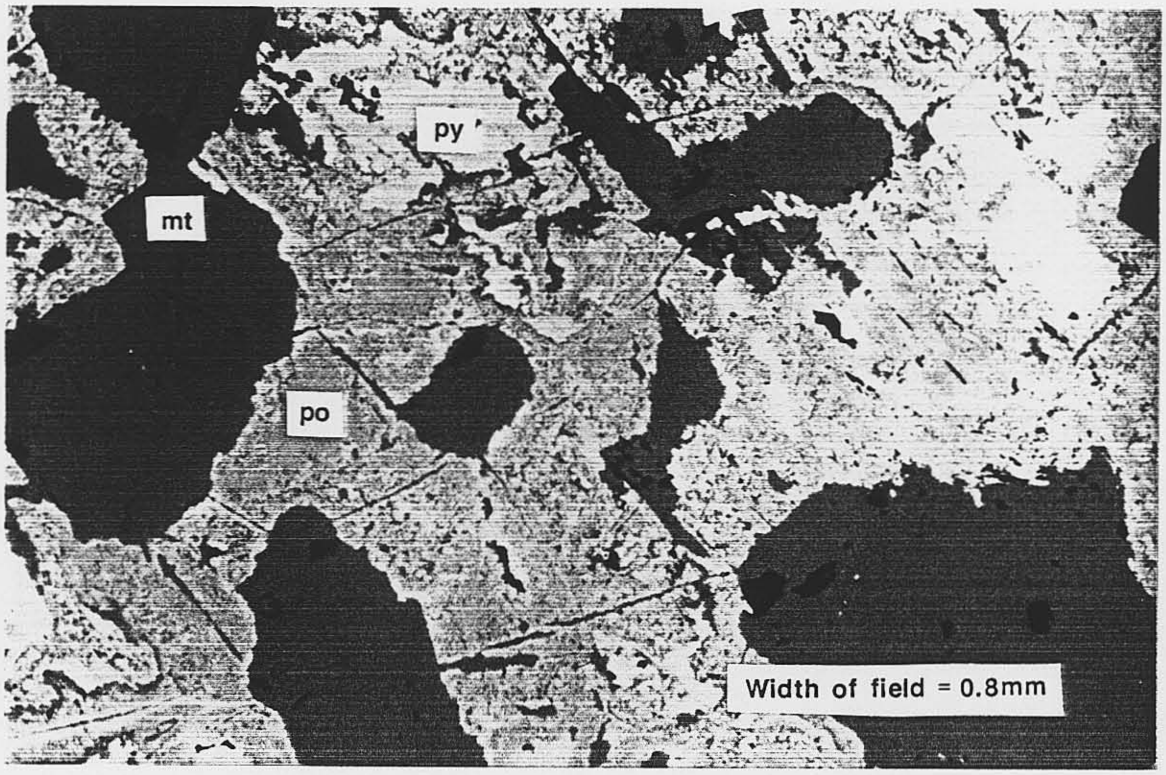


Plate 5, T35576. Blocky mt (brown) with interstitial po (yellow) which has been extensively replaced by fine py (cream) and mt (brown). Gangue inclusions (dark brown) are associated with the coarser mt.

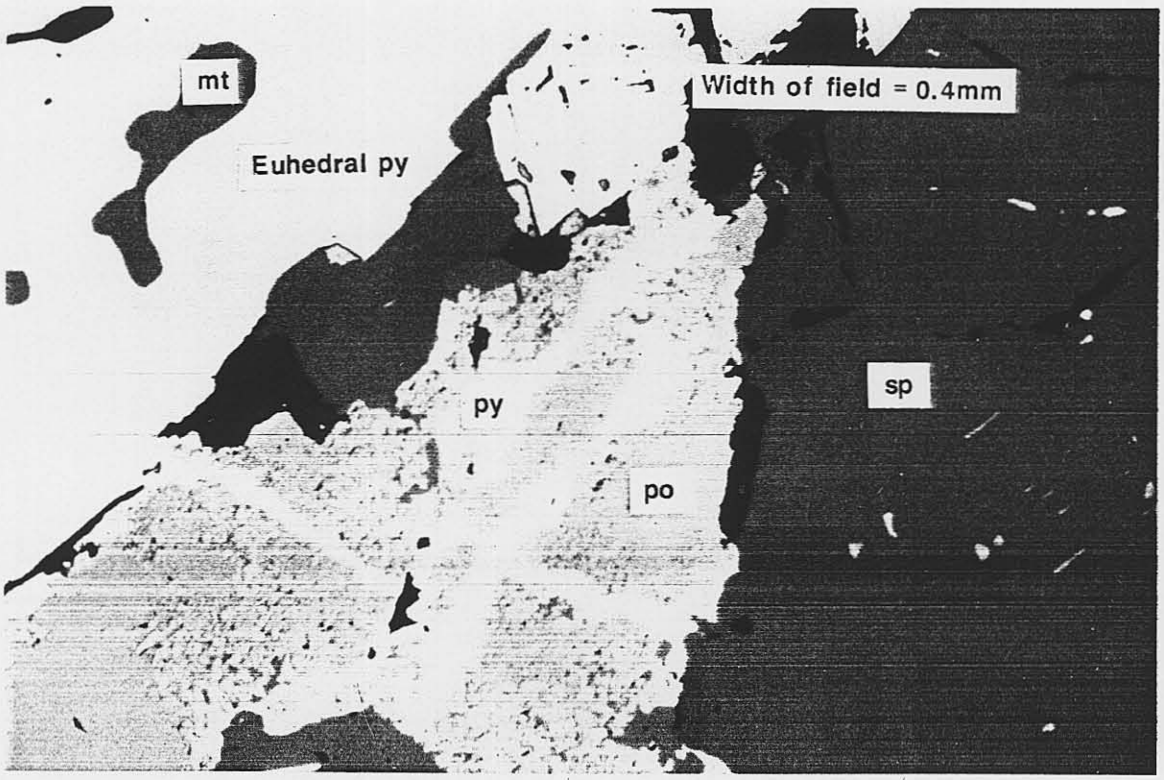


Plate 6, T35577. Coarse sp (brown) and euhedral py (cream) with interstitial po (yellow) which is being replaced by fine grained py and mt (cream + brown). Some gangue (dark brown) is associated with the sp. In this photo it is difficult to distinguish between mt and sp.

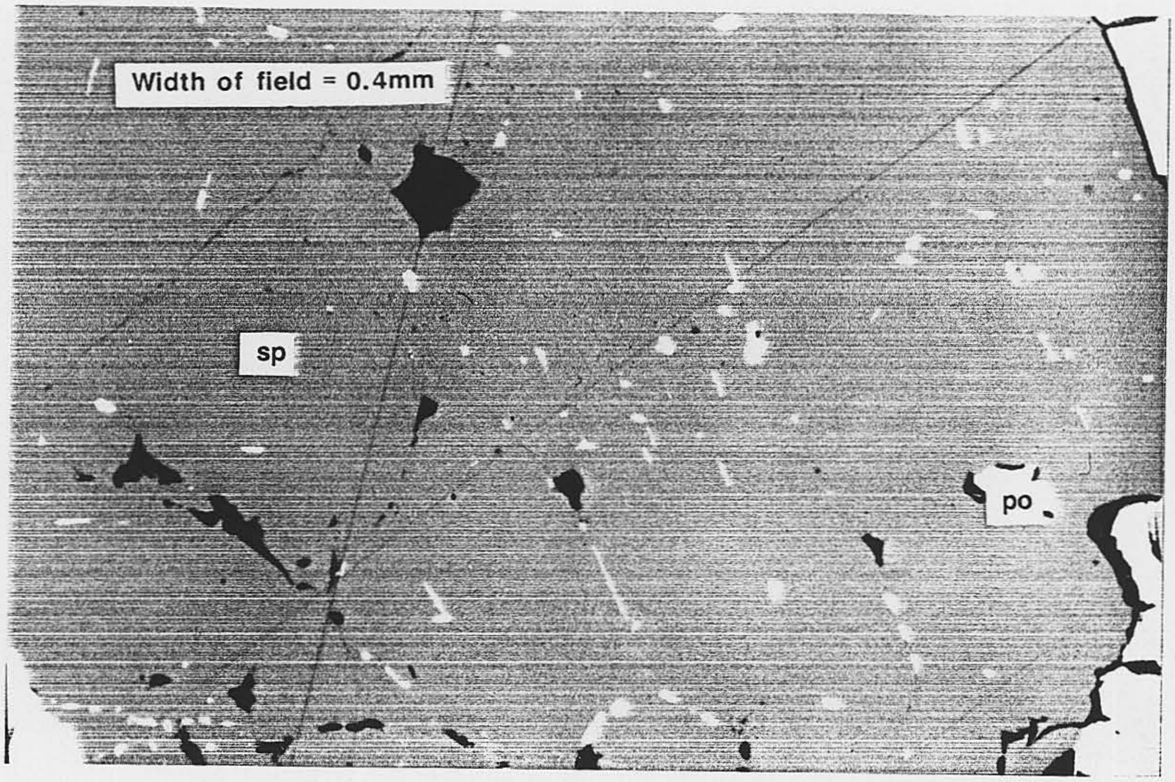


Plate 7, T35577. Relatively inclusion-free sp (brown). The inclusions present are exsolved po (yellow), and entrained gangue (dark brown).

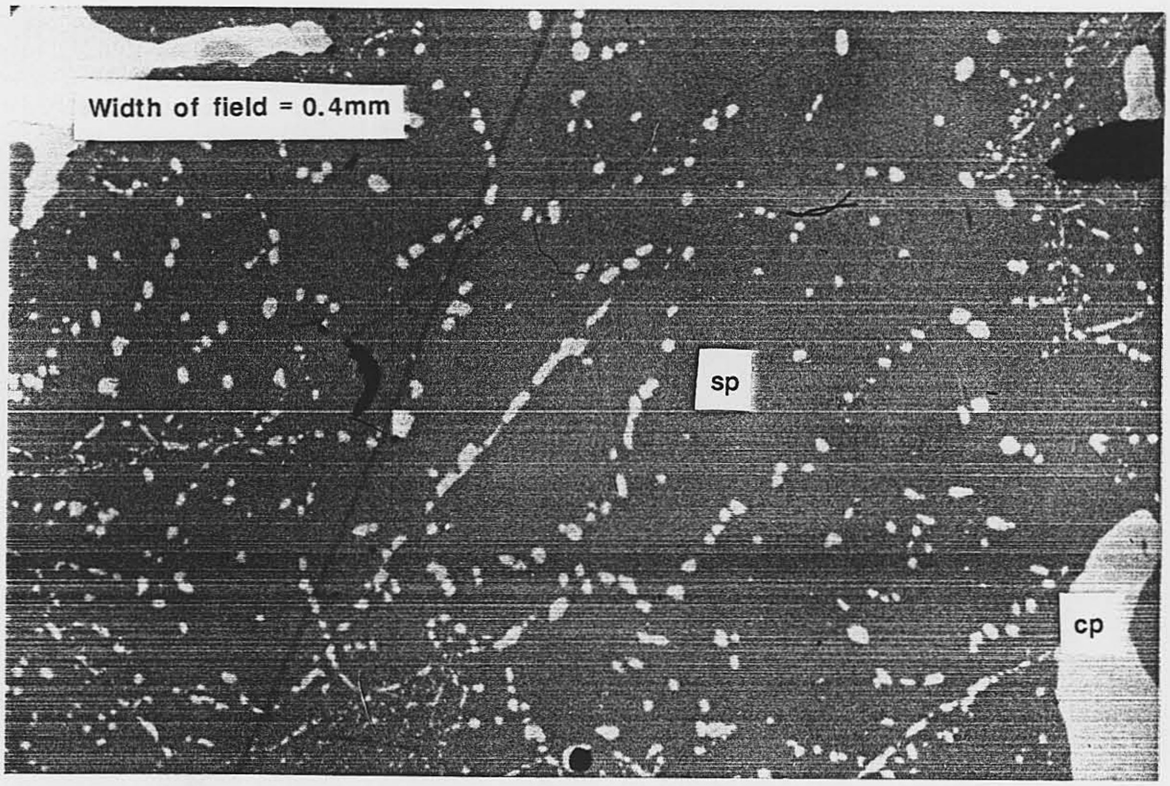


Plate 8, T35574. Sp (brown) with numerous inclusions of cp (yellow). This is a particularly inclusion-rich area of sp.

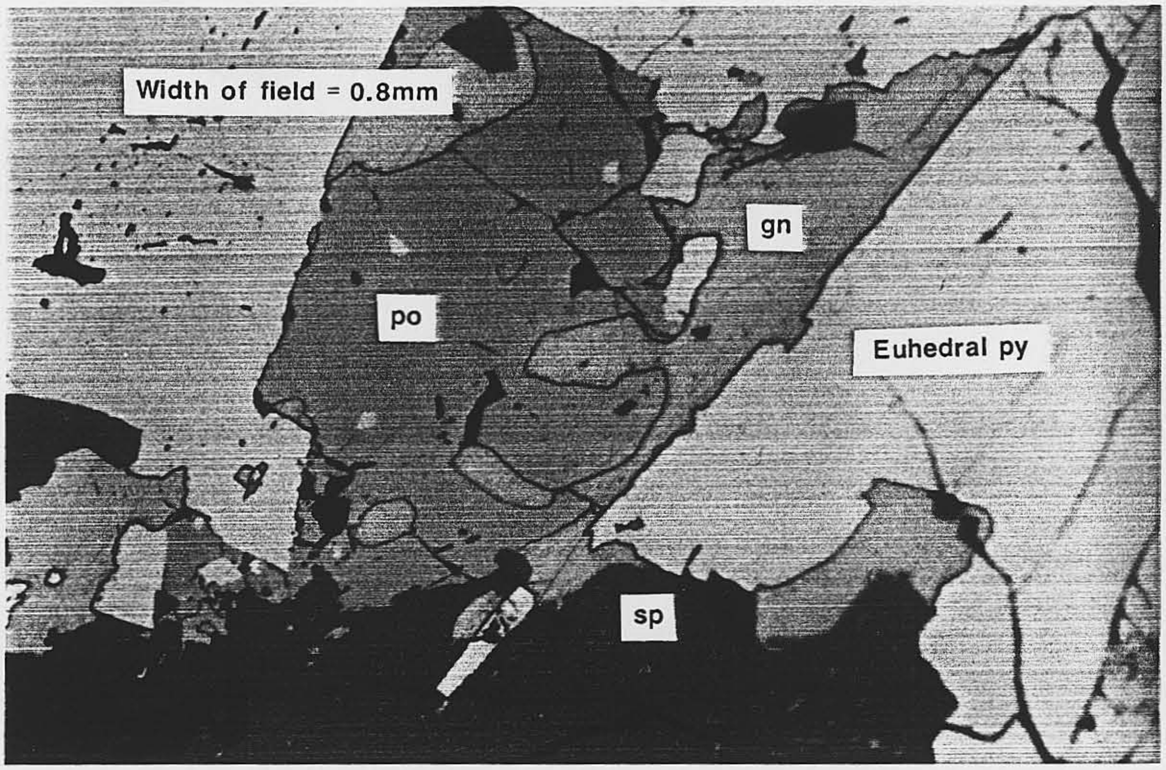


Plate 9, T35583. Euhedral py (cream) with interstitial po (yellow), gn (white), and sp (brown). Gangue (dark brown) is also present as inclusions and infilling fractures.

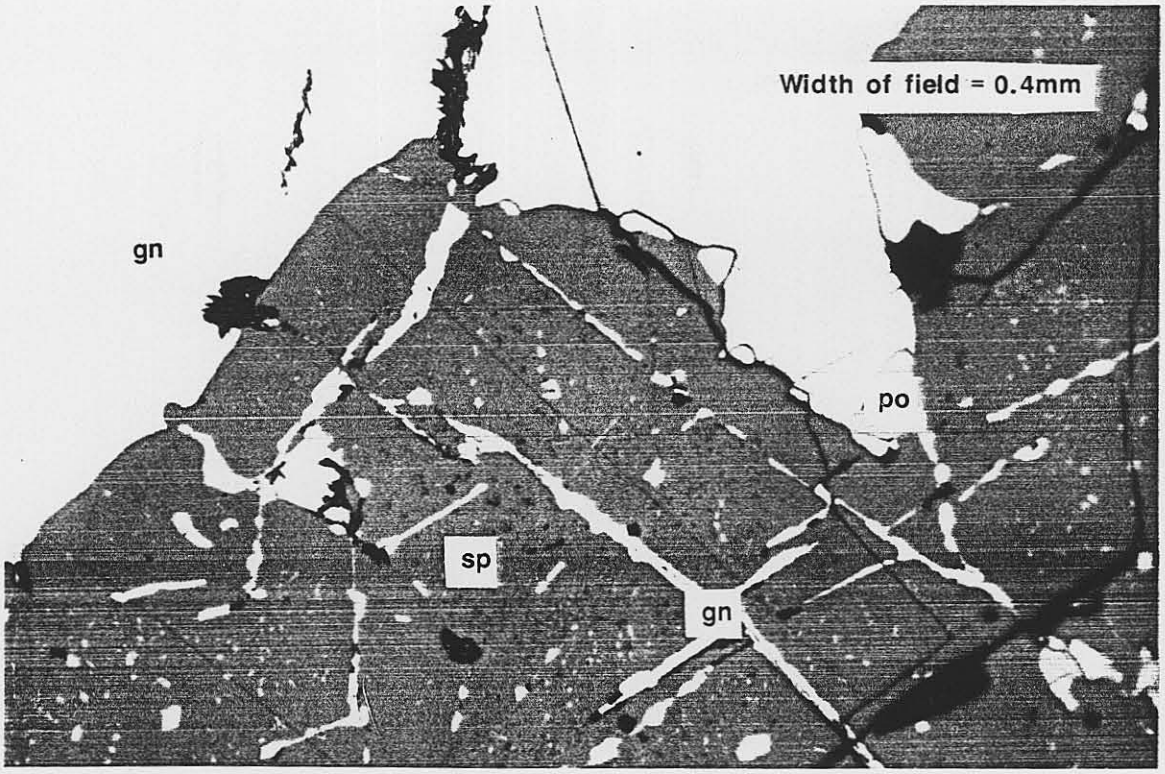


Plate 10, T35580. Coarse gn (white) and sp (brown). The sp contains inclusions of po (yellow), gn, and gangue (dark brown). Gn inclusions in sp are mostly due to gn remobilisation along thin fractures.

APPENDIX 4

Downhole Directional Gyro Surveys (SURTRON)

30 JAN 1992

058129

SURTRON TECHNOLOGIES

The True Direction in Downhole Surveying.

our ref:MST124

20 January 1992

R G C Exploration Pty Ltd
P O Box 320
ROSNY PARK TAS 7018

For the attention of Ian Rogers

Dear Sir

Please find attached our report for 1 drill hole surveyed with our gyro system during December 1991 at Zeehan.

On occasions this final report may differ from the data already supplied in the field, any amended reports are listed below : -

N/A

The gyroscope takes its orientation from a sometimes assumed initial collar direction.

All data collected on your behalf will be kept in our files and in strict confidence. Should you at any time require access to this data it will be made readily available.

If you have any queries regarding this report please contact this office.

We thank you for this opportunity to be of service.

Yours very truly
SURTRON TECHNOLOGIES PTY LTD

Richard Grigg
Managing Director

SURTRON TECHNOLOGIES PTY LTD
A.C.N. 009 253 338

PERTH
3/1 High Street, Fremantle. 6160.
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270 Egan Street, Kalgoorlie. 6430.
Telephone (090) 217 562
Fax (09) 217 799

058100

SURTRON TECHNOLOGIES

The True Direction in Downhole Surveying.

DOWNHOLE DIRECTIONAL GYRO SURVEY

R G C EXPLORATION PTY LTD

ZEEHAN

DECEMBER 1991

REF:R006/02/GY/91

SURTRON TECHNOLOGIES PTY LTD
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SURTRON TECHNOLOGIES PTY LTD
TEL 09-430 5116

058131

Company : R.G.C EXPLORATION
Hole No : SY 014
Lease :
Location: ZEEHAN
State : TASMANIA

Date : 11-12-91
Engineer: DICKESON
Job No : R006/02/GY/91
Service : GYRO
File No : SY014.REN

Northing: 0.00 Easting: 0.00 RL: 0.00

DEPTH	INCL	DIR
0.0	59.75	180.30
20.0	59.00	180.41
40.0	59.25	179.38
60.0	59.00	179.50
80.0	58.75	180.20
100.0	58.00	181.49
120.0	57.25	182.37
140.0	57.25	182.09
160.0	57.00	182.99
180.0	57.00	184.49
200.0	56.75	184.80
220.0	56.25	184.55
240.0	55.75	185.15
260.0	56.00	186.06
280.0	56.00	188.18
300.0	55.25	190.32
320.0	55.25	191.24
340.0	55.25	192.16
360.0	55.25	192.17
380.0	55.25	192.79
400.0	55.25	191.28
420.0	54.50	194.40
440.0	53.50	194.44
460.0	53.25	195.70
480.0	52.25	194.80
495.0	51.75	194.49

DEPTH = MEASURED DEPTH IN METRES
INCL = INCLINATION IN DEGREES FROM HORIZONTAL
DIR = DIRECTION IN DEGREES AZIMUTH REFERENCED TO A.M.G

GYRO WAS IN HOLE ORIENTED TO AN INITIAL DIRECTION PROVIDED BY R.G.C EXPLORATION

GYRO ACCURACY IS +/- 2 DEG. AZIMUTH

APPENDIX 5

Interpretation of Down Hole TEM Results, drill holes SY010 and SY014

5521/205

058133

Interpretation of Down Hole TEM Results, drill holes SYØ1Ø and SYØ14

from the

Sylvester Grid, Zeehan, Tasmania.

on behalf of

R.G.C. Exploration Pty. Ltd.

by

R.C. Deakin

February 1992

R. DEAKIN & ASSOCIATES
52 PARARI STREET
WARANA BEACH. 4575

CONTENTS

ACCOMPANYING PLANS

1. INTRODUCTION

1.1 The Sylvester exploration grid, near Zeehan in S.W. Tasmania, has to date been investigated by a minimum of 14 drill holes, a magnetometer survey and two down hole TEM surveys. Earlier (1990-1991) work consisted of a surface magnetometer survey (Wyatt, 1991) and down hole TEM in drill holes SY002, SY003, SY004 and SY005 (Deakin, 1991).

The focus of exploration at Sylvester is base metal mineralisation associated with massive pyrrhotite bodies and with magnetite-skarns. To date only sub-economic base metals have been delineated by drilling however large magnetite and pyrrhotite bodies are indicated by the magnetic results (Wyatt 1991).

Recent drilling has included drill holes SY010 and SY014, designed to test western extensions of the main magnetic bodies intersected in drill hole SY005. Both these drill holes have been investigated by down hole TEM methods to assist in the delineation of untested sulphides. The field survey was conducted by McSkimming Geophysics in January 1992 using a Sirotem II system.

1.2 Interpretation of the magnetics (Wyatt 1991) indicates two large (500m x 50m x 1500m - approximately) tabular pyrrhotite bodies and two similar magnetite-skarn bodies. All four are virtually parallel with a strike of -75deg (Grid) and a steep (70 - 75 deg) dip to the north. These four interpreted magnetic sources are Wyatt's models 6 (Pyrrhotite) and 7 (Magnetite) which occur in the approximate grid interval: 57000E to 57600E at a depth of about 250m (40m to 46m RL.) and models 18 (Pyrrhotite) and 19 (Magnetite) which occur further west, in the approximate interval: 56200E to 56900E, and are about 50m deeper. Wyatt concluded that these two zones were separated by faulting with relative downward movement on the western side.

1.3 Drill holes SY002, SY003 and SY004 are well east of the principal magnetic sources and of the main area of interest. Drill hole SY005 intersected the magnetic sources No's 6 and 7 of Wyatt, at about 500m depth and the subsequent TEM survey of that hole recorded 'in-hole' TEM anomalies coincident with the sulphide-magnetite intersections. Late time TEM behavior in those results suggested that more conductive 'off-hole' material may exist further to the east and up dip (Deakin 1991).

1.4 Drill hole SY010 was collared at 56800E, 61250N and inclined to the south to test the magnetic sources 18 and 19. In the 510m to 518m interval disseminated and thinly veined sulphides, including pyrrhotite, are associated with a serpentinized, magnetite skarn; this intersection is the expected pyrrhotite, magnetic model No 18. In the 547m to

567m interval a similar magnetite skarn with 2Ø% of patchy pyrrhotite and serpentinite was encountered which represents magnetite model No. 19.

1.5 Drill hole SYØ14, collared approximately 35Øm further west and also drilled towards the south, was similarly designed to test magnetic models 18 and 19. Similarly to DH. SYØ1Ø, two skarns were encountered, one in the 391m to 43Øm interval (model No 18) another in the interval 45Øm to 452m (model No 19). No details of associated mineralisation are currently available to the author.

2. TEM METHODS AND RESULTS.

2.1 A total of six surface transmitting loops were used for the down hole TEM surveys of drill holes SYØ1Ø and SYØ14. The positions of these square, 3ØØm x 3ØØm, surface loops (Numbered 1,2,3,4,5 and 6) are shown on Figure 1. Drill hole SYØ1Ø was surveyed with the down hole TEM probe using Tx loops 1,2,3 and 4; drill hole SYØ14 was similarly surveyed using Tx loops 2,3,4,5 and 6.

2.2 The down hole TEM results for each drill hole, for each surface Tx loop used, are presented in the appendix. Two plots per data set are presented; one produced by the contractor using log-linear scaling and another using displaced linear vertical scaling which illustrates the data more clearly.

2.3 The results from drill hole SYØ1Ø are most dominant for the Tx loop 1 data set and all SYØ1Ø data sets show low amplitude, narrow, high frequency, 'in-hole' anomalies at 51Øm, 53Øm, 55Øm and 56Øm. These anomalies encompass the two zones of interest i.e. the mineralisation encountered in the two intervals 51Øm-518m and 547m-567m. The peak at 51Øm corresponds to the first skarn intersection and the complexity of anomalies in the 55Øm to 565m zone, represent the second skarn body. The narrow spike at 53Øm is related to narrow veins of pyrrhotite logged at 529m.

The TEM results for Tx loops 1,2 and 3 clearly show the existence of a broad low (1ØØm wide - approximately), apparently centered at about 54Øm depth, and encompassing the higher frequency 'in-hole' noise associated with the sulphides. This broad low is clearly an 'off-hole' anomaly indicating a conductor at about 5Øm to 1ØØm from the drill hole.

2.4 The SYØ14 TEM results are similar with a distinct 'off-hole' low centred at about 41Øm which encompasses minor, high frequency noise caused by minor sulphides that were encountered in the drill hole. This low is most dominant for Tx loops 4,5 and 6 and appears to indicate a conductor at about 2Øm to 5Øm from the drill hole.

2.5 The interpreted 'off-hole' anomalies for both drill holes are late time phenomena whereby they do not manifest themselves until about channel 15. The broad anomalies flip from a weak positive 'in-hole' response at early times to a negative 'off-hole' response at late times. This effect may be the result of induced eddy currents in the conductive bodies migrating towards a more conductive centre, and away from the drill hole, at late times.

3. INTERPRETATION METHODS.

3.1 No attempt has been made to model the spiky 'in-hole' anomalies as they are clearly directly related to weak mineralisation that has been encountered in the drilling.

3.2 In order to estimate the location, orientation and approximate size of the inferred 'off-hole' anomalies current filament modelling has been used. This method entails the assumption of causative conductors as simple rectangular or circular current filaments with no control on absolute conductivities and therefore amplitudes.

The interpretation is derived from forward modelling using one or more filament models each defined by the co-ordinates of its centre and for a circular filament its radius, dip and azimuth of the dip. For a rectangular filament model the body size is defined by length and width and body orientation by azimuth of the length, dip and plunge.

The modelling algorithm, designed by the author, incorporates one or all of the data sets each representing one drill hole data profile and one Tx loop. The theoretical anomaly response for the target filaments is computed for each set and an amplitude normalization factor is derived from one selected set. Relative anomaly amplitudes are a function of (a) the theoretical response of the filament models; and (b) the calculated, relative, current strength of filament models induced by the different surface Tx loops.

3.3 The topography of the survey area is variable with an overall relief of the order of 80m. The surface loops therefore, are each represented by up to 9 co-ordinates to simulate as accurately as possible, their true 3D, geometry.

Sirotem time channel No. 20 was used for the current filament modelling of these Sylvester drill hole results. Channel 20 was selected on the basis of optimum late time signal behavior and favourable signal to noise ratio.

3.4 Using this interpretation method, various current filament positions, sizes and orientations were used until a reasonable data fit was obtained.

The difficulty of simultaneously fitting four data profiles for DH SYØ1Ø (Loops 1,2,3, and 4) and five data profiles for DH SYØ14 (Loops 2,3,4,5 and 6) is not trivial. Due to the data complexity which is related to (a) the 'in-hole' noise and (b) the simplification of the geology in the modelling, only approximate overall (i.e. all data sets) data fits were possible.

3.5 The modelling results for SYØ1Ø are shown on Figure 5 and two alternative results for SYØ14 on figures 6 and 7. The TEM modelling results as well as rectangular filament representations of the Wyatt magnetic models 6 and 18, are summarised on Figures 2,3,4,4a and 4b. Figures 2 to 4b are various Orthographic parallel projections providing a plan view (Fig. 2), a long section (Fig. 3), a cross section (Fig. 4), a view from the SE and above (Fig. 4a) and a view from the SW and above (Fig 4b).

4. INTERPRETATION.

4.1 DH SYØ1Ø.

4.1.1 The TEM, current filament modelling results obtained for DH SYØ1Ø (Figure 5), places the 'off-hole' conductor, filament No. 1, to the east, about 5Øm from the hole and at a relative level equivalent to the mineralised intersections.

This result is considered a reasonable fit to the field data and has little ambiguity as the separate anomaly shapes and amplitudes confine the model position and size within an error window of 3Øm or less. The derived attitude, (strike = -65 deg and dip = 7Ø deg) agrees reasonably well with the strike and dip of the magnetic models and the filament indicates that the conductive source occurs near the top eastern part of magnetic model No. 6. and extending to magnetic model No. 18.

A modelling result using two rectangular filaments, the one shown on Figure 5 and another representing magnetic body No. 6, was run with no significantly different result. It was concluded therefore, that the effect of the small interpreted body about 5Øm east of SYØ1Ø is much larger than the effect of the large (No. 6) conductor which is about 2ØØm to the east.

4.1.2 The SYØ1Ø modelling result can be related to the residual magnetic field obtained by Wyatt (1991) which represents a residual magnetic anomaly field after his modelling results are subtracted from the field results. A small residual magnetic anomaly centred at approximately 57ØØØE, 6Ø85ØN has a (similar) orientation of about -75 deg Azimuth and a strike length of approximately 15Øm. This residual could be indicative of a small unmodelled magnetic source which, considering its position, can be the source of the 'off-hole' TEM anomaly in SYØ1Ø.

4.1.3 Several filament models that were invoked for the SYØ1Ø interpretation produced anomalous spikes and gradients in the 52Øm - 58Øm depth interval. This phenomena is related to the rather radical changes in the borehole azimuth recorded at 538m (2Ødeg increase) and at 568m (3Ødeg decrease). This change in borehole orientation (if real and not a measuring error) will be the reason for some of the noise in the field data in that depth interval.

4.1.4 The DH SYØ1Ø TEM results, apart from the one 'off-hole' anomaly, are generally very weak, noise spikes and indicate that magnetic models 18 and 19 are relatively non-conductive. The SYØ1Ø TEM results can be compared to those of DH SYØØ5 where the 'in-hole' anomaly, coincident with the magnetic - sulphide bodies is approximately two or three times the amplitude (for SYØØ5 - Loop 5 (1991)) of the SYØ1Ø 'off-hole' anomaly (Deakin 1991).

4.2 DH SYØ14.

4.2.1 The interpretation of the results for this drill hole lead to some ambiguity, whether the causative 'off-hole' conductor is above or below the drill hole and uncertainty due to the complexity of the anomaly.

The relative anomaly shapes, amplitudes and polarities for the different data sets (Tx Loops 2,3,4,5 and 6) confine the filament model to an approximately central position above or below the drill hole intersection at about 41Øm. Results, radically different from the field data, are obtained for bodies centred either east or west of the drill hole easting.

4.2.2 The modelling result for filament No. 2 is shown on Figure 6 and this model is a small body 12Øm x 5Øm below the drill hole with an azimuth of -115 deg and a (shallower) dip of about 6Ø deg.

Figure 7 shows the result for filament No. 3, a (similarly) small body above the drill hole, strike -1ØØ deg and dip 85 deg.

4.2.3 The filament No. 2 result is a better fit to the field data and is the preferred result. The interpretation however is not adequately resolved as significant residuals are evident in both results. This is no doubt the result of a complex geology and the existence of two or more (separate) conductors.

The anomaly centred at about 410m is a low with high shoulders on both flanks. This shape can be reasonably explained by the dipolar response for filament No. 2 for Tx loops 5 and 6. The high at 470m for Tx Loop 4 is not however adequately explained.

The high centred at 470m may be explained as separate 'in-hole' response of the mineralisation at approximately 450m in which case the filament No. 3 (Figure 7) result may be considered preferable.

4.2.4 All possible or probable solutions to the SY014 anomaly (or anomalies) give rise to a small body close (within 50m) to the drill hole. The results therefore suggest that a small anomalously conductive zone has been 'just missed' by the drill hole and that zone or conductor is of minor significance because of its inferred size and the relatively low amplitude of the TEM anomalies.

4.2.5 Similarly to SY010, the SY014 TEM results indicate that the magnetic bodies (No's 18 and 19) are not significantly conductive. The SY014 TEM results show that (a) There are very weak 'in-hole' anomalies associated with the intersected skarns, and (b) The 'off-hole' anomaly is indicative of only minor mineralisation.

4.3 The TEM results from both drill holes are indicative of a conductive half space (ie. background). Assuming a late time exponential decay, highly anomalous decay constants (18 m.S. - 24 m.S.) are obtained for the 'off-hole' anomalies. This effect is the result of non exponential decay in the presence of a conductive host and the true time constants are expected to be in the range 4 m.S. - 6 m.S. (Eaton & Hohmann 1984). The effect of a conductive host is a loss, interpretatively, of information on size and conductivity of the target, however relative location can generally be reliably estimated from spatial anomaly characteristics (Mc Neill et. al. 1984).

5 CONCLUSIONS.

5.1 Down hole TEM surveys of SY010 have delineated an 'off-hole' anomaly which is interpreted as the response of a body, approximately concordant with magnetic body No. 6, and just west of the upper-eastern corner of that body. The interpreted 'off-hole' conductor correlates with a small residual magnetic anomaly from the interpretation of Wyatt (1991) and therefore represents a viable drill target.

5.2 Down hole TEM surveys of SY014 have delineated a group of anomalies, approximately half the amplitude of the SY010 anomaly, which are at least partly due to an 'off-hole' conductor. Although there is uncertainty and ambiguity in the interpretation of these results a small missed conductor either above or below the drill hole is inferred at a distance of 5Ø m or less from the drill hole.

5.3 Both drill holes SYØ1Ø and SYØ14 were targeted on the (Wyatt) magnetic bodies No's 18 and 19. Both the drilling results and the down hole TEM results indicate that these bodies are poor conductors with only minor sulphide mineralisation.

The down hole TEM results from SYØ1Ø and from the earlier SYØØ5 survey, indicate that magnetic bodies No's 6 and 7 are anomalously conductive and should be the main focus of future drilling.

6. RECOMMENDATIONS.

6.1 The conductor interpreted from the SYØ1Ø 'off-hole' TEM anomaly and coincident with a (Wyatt) residual magnetic anomaly should be tested with a drill hole, inclined towards the south and designed to intersect the point 569ØØE, 6Ø9ØØN, -5Øm R.L.

6.2 The zones 5Øm above and 5Øm below the 4ØØm (depth) point of drill hole SYØ14 should be tested with holes wedged upward and downward from that drill hole.

6.3 Further drilling at the Sylvester grid should concentrate on evaluating the bodies 6 and 7 of Wyatt which are anomalously conductive. Further down hole TEM in such holes is recommended if poorly or non mineralised intersections of these bodies are discovered.

7. REFERENCES.

Deakin, R.C., 1991. Interpretation of Down Hole Geophysical Results from the Sylvester Grid, Zeehan, Tasmania. R. Deakin & Assoc. rep for R.G.C. Exploration Pty. Ltd. April 1991.

Eaton, P.A., & Hohmann, G.W. 1984. The Influence of a conductive host on two-dimensional borehole transient electromagnetic response. Geophysics. Vol. 49. No. 7. Pg 861.

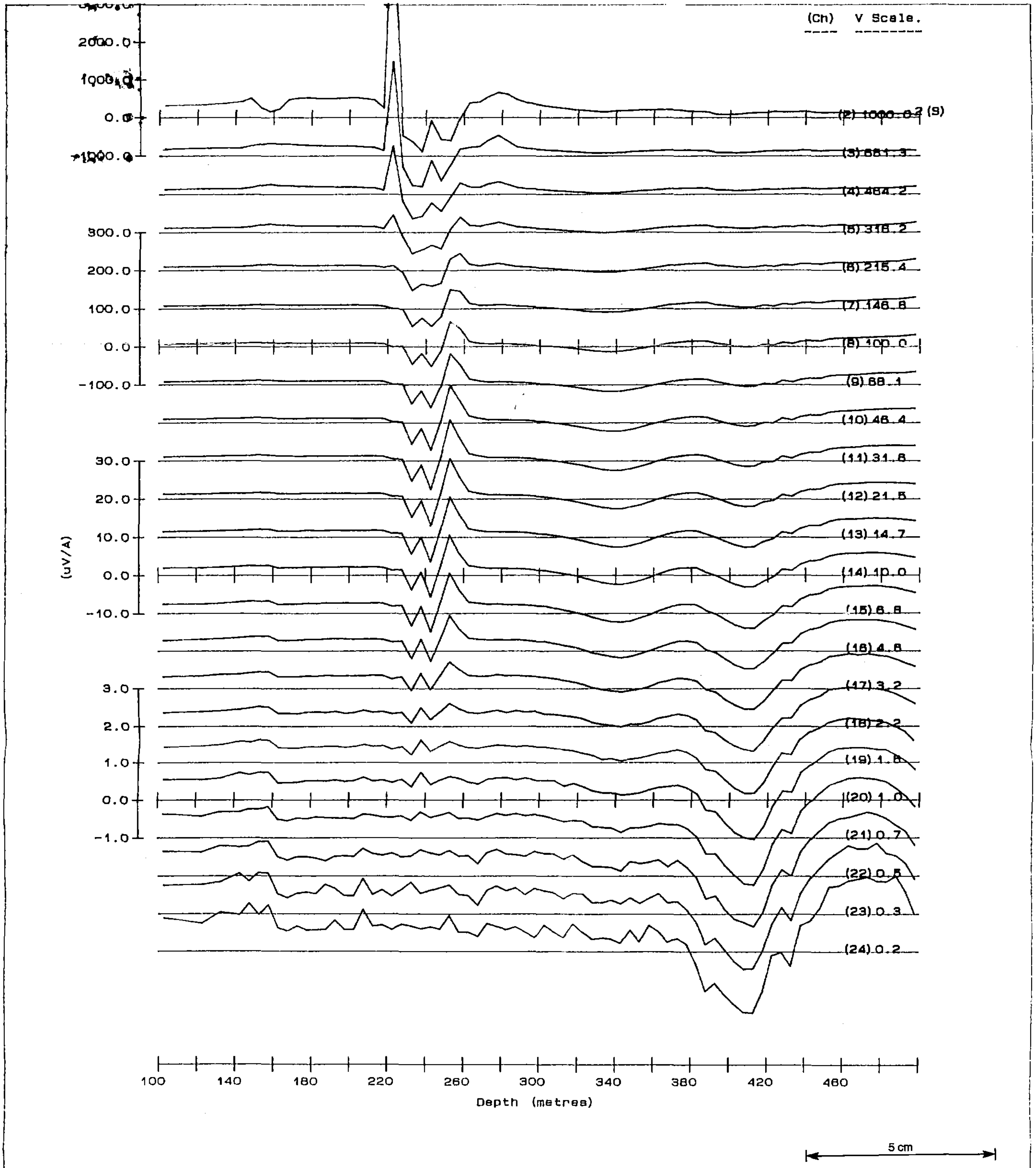
McNeill, J.D. et. al. 1984. Approximate calculations of the transient EM response from buried conductors in a conductive half space. Geonics. Technical Note TN-14.

Wyatt, B., 1991. Interpretation of ground magnetic data from the Sylvester Prospect, Zeehan, Tasmania.

Wyatt & Associates Rep. for R.G.C. Exploration Pty. Ltd. Sept. 1991.

APPENDIX

TEM PROFILES FOR SYØ1Ø and SYØ14



Specifications :

Survey By:
MCSKIMMING GEOPHYSICS
Operator: P McSKIMMING
Date: JAN 1992
Down Hole Loop Configuration
Instr: Sirotem 1224

Current = 12.70 Amp
Standard time Series

Vertical Scaling:
Displaced Linear

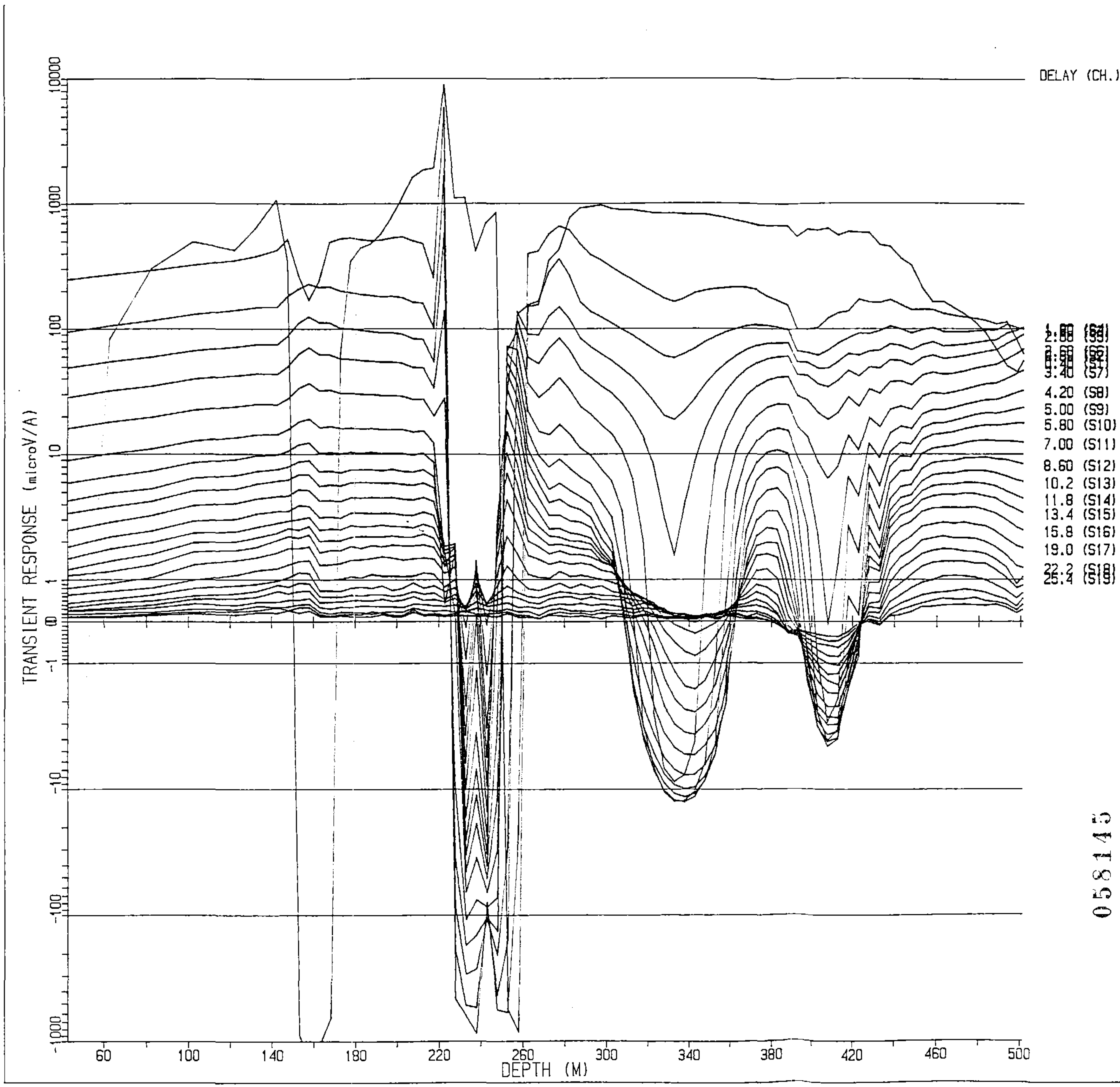
Fixed Tx. Loop - 6
5600E-61400N-320RL
56300E-61400N-320RL
56300E-61100N-340RL
5600E-61100N-320RL

R.G.C. EXPLORATION

Sylvester Grid
ZEEHAN TAS.
DH SY014 - 6
Tem Survey
Axial Component

Hor. Scale - 1 : 2000

058144



SURVEY SPECIFICATIONS

DATA ACQUIS'N : McSKIMMING GEOPHYSICS

SURVEY DATE : JAN 1992
CONFIGURATION : 300M SQUARE TX. LOOP, DRILL HOLE SURVEY
READING INT. : 20 METRES
NO. OF STACKS : 256
TRANSMITTER : MEDIUM POWER
RECEIVER : SIROTEM II S/N 1224
CURRENT : 12.7 AMPS
OPERATOR : P McSKIMMING

PLOT SPECIFICATIONS

HORIZONTAL SCALE - 1:2000
VERTICAL SCALE - LOGARITHMIC 3CM. PER DECADE LINEAR BETWEEN -1 AND +1

TIME DELAYS IN MILLISECONDS
E - EARLY TIME WINDOW
S - STANDARD TIME WINDOW

5 cm

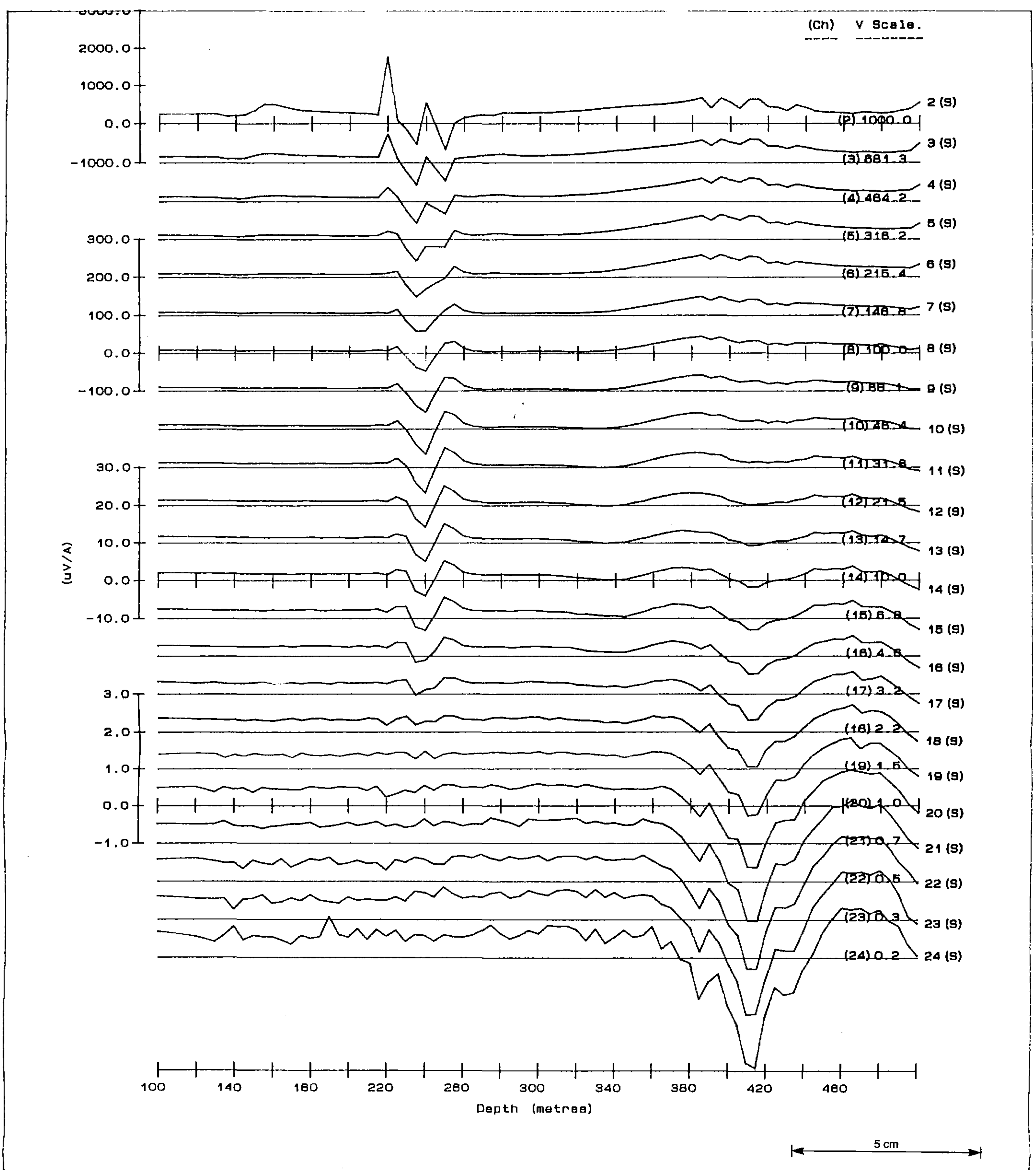
058145

R.G.C. EXPLORATION

ZEEHAN
SYLVESTER

SIROTEM PROFILE
LINE SY014 LP6

SCALE - 1:2000



Specifications :

Survey By:
MCSKIMMING_GEOPHYSICS
Operator: P_McSKIMMING
Date: JAN_1992
Down Hole Loop Configuration
Instr: Sirotem 1224

Min. Curr. = 13.40 Amp
Max. Curr. = 13.60 Amp
Standard time Series

Vertical Scaling:
Displaced Linear

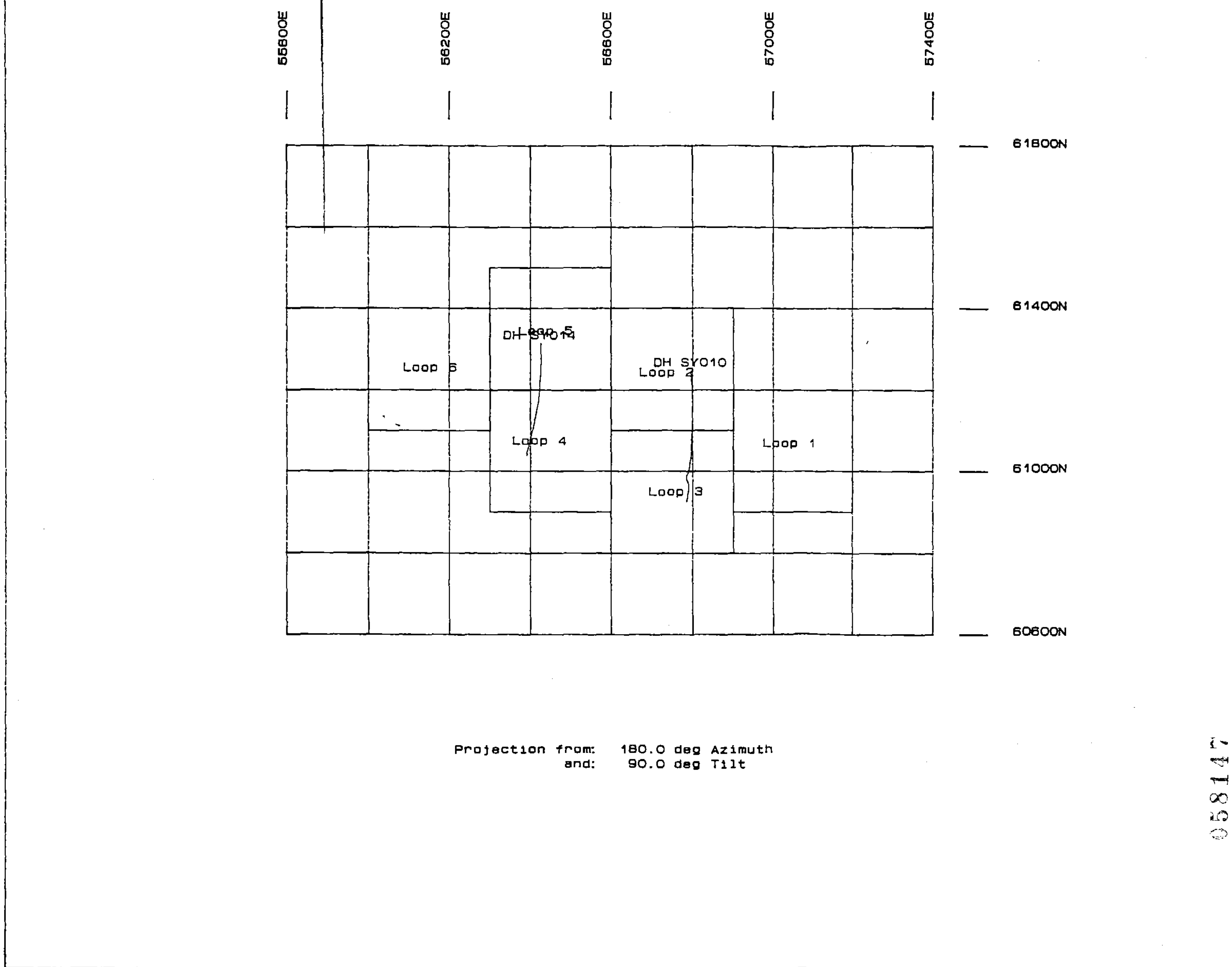
Fixed Tx. Loop - 5
56300E-61500N-320RL
56600E-61500N-305RL
56600E-61200N-312RL
56300E-61200N-320RL

058146

R.G.C._EXPLORATION

Sylvester Grid
ZEEHAN TAS.
DH SY014 - 5
Tem Survey
Axial Component

Hor. Scale - 1 : 2000



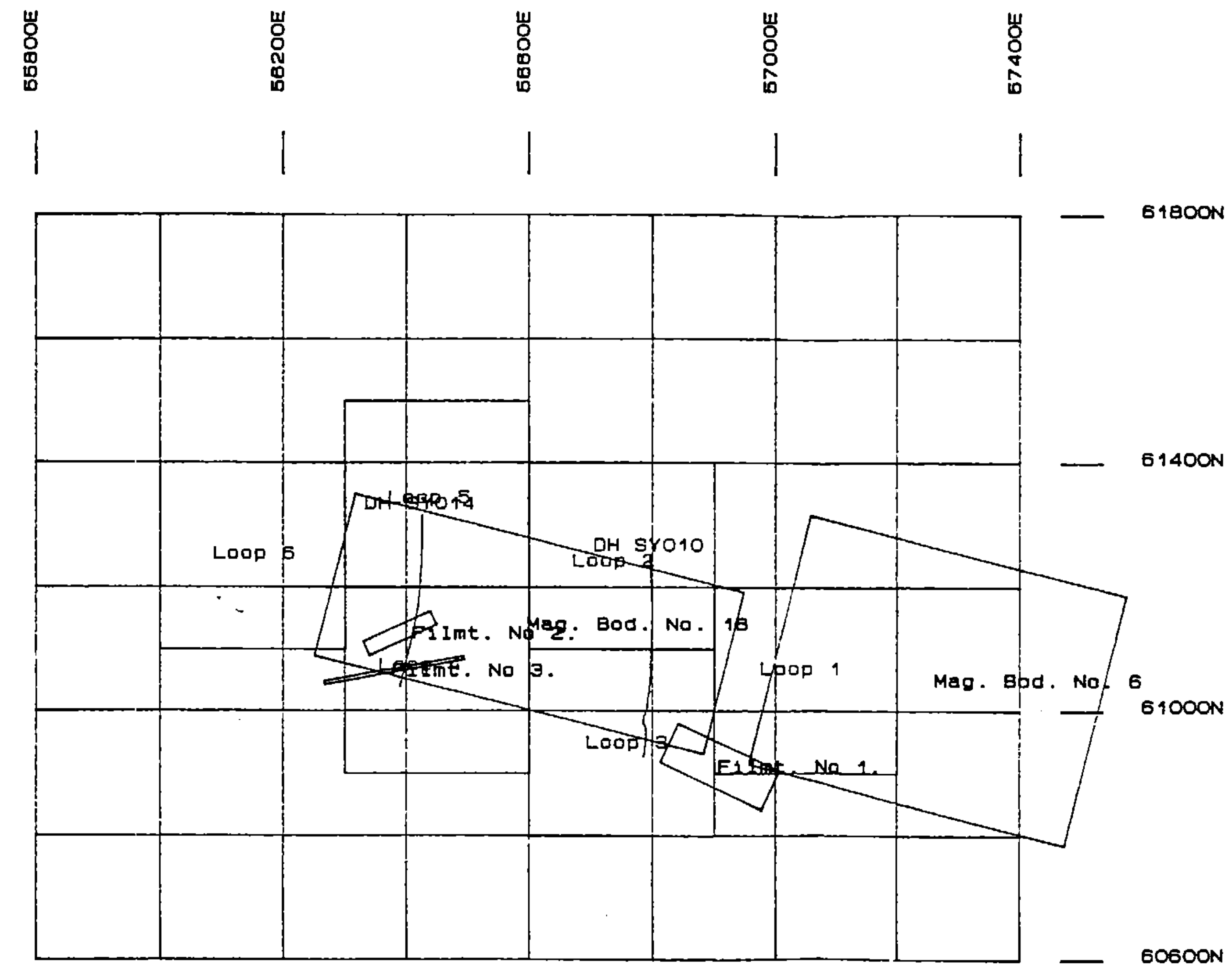
058147

A.G.C. Exploration Pty. Ltd.

Sylvester Grid
Zeehan Tas.
TEM Survey
Locality Diagram

Hor. Scale - 1 : 10000

Figure No. 1



Projection from: 180.0 deg Azimuth
and: 90.0 deg Tilt

Filmt. No 1.
Type = Rectangle
Centre x, y, z Co-ords are :
56910.0E 60910.0N -50.0RL
Az & Dip = -65.0 70.0 deg
Plunge, Length, Width = :
0.0 deg 180.0 m 200.0 m

Filmt. No 2.
Type = Rectangle
Centre x, y, z Co-ords are :
56390.0E 61125.0N -85.0RL
Az & Dip = -115.0 60.0 deg
Plunge, Length, Width = :
0.0 deg 120.0 m 50.0 m

Filmt. No 3.
Type = Rectangle
Centre x, y, z Co-ords are :
56380.0E 61065.0N 0.0RL
Az & Dip = -100.0 85.0 deg
Plunge, Length, Width = :
0.0 deg 230.0 m 70.0 m

Mag. Bod. No. 6
Type = Rectangle
Centre x, y, z Co-ords are :
57265.0E 61050.0N -725.0RL
Az & Dip = -76.0 75.0 deg
Plunge, Length, Width = :
0.0 deg 530.0 m 1600.0 m

Mag. Bod. No. 18
Type = Rectangle
Centre x, y, z Co-ords are :
56600.0E 61140.0N -760.0RL
Az & Dip = -76.0 80.0 deg
Plunge, Length, Width = :
0.0 deg 650.0 m 1550.0 m

5 cm

058148

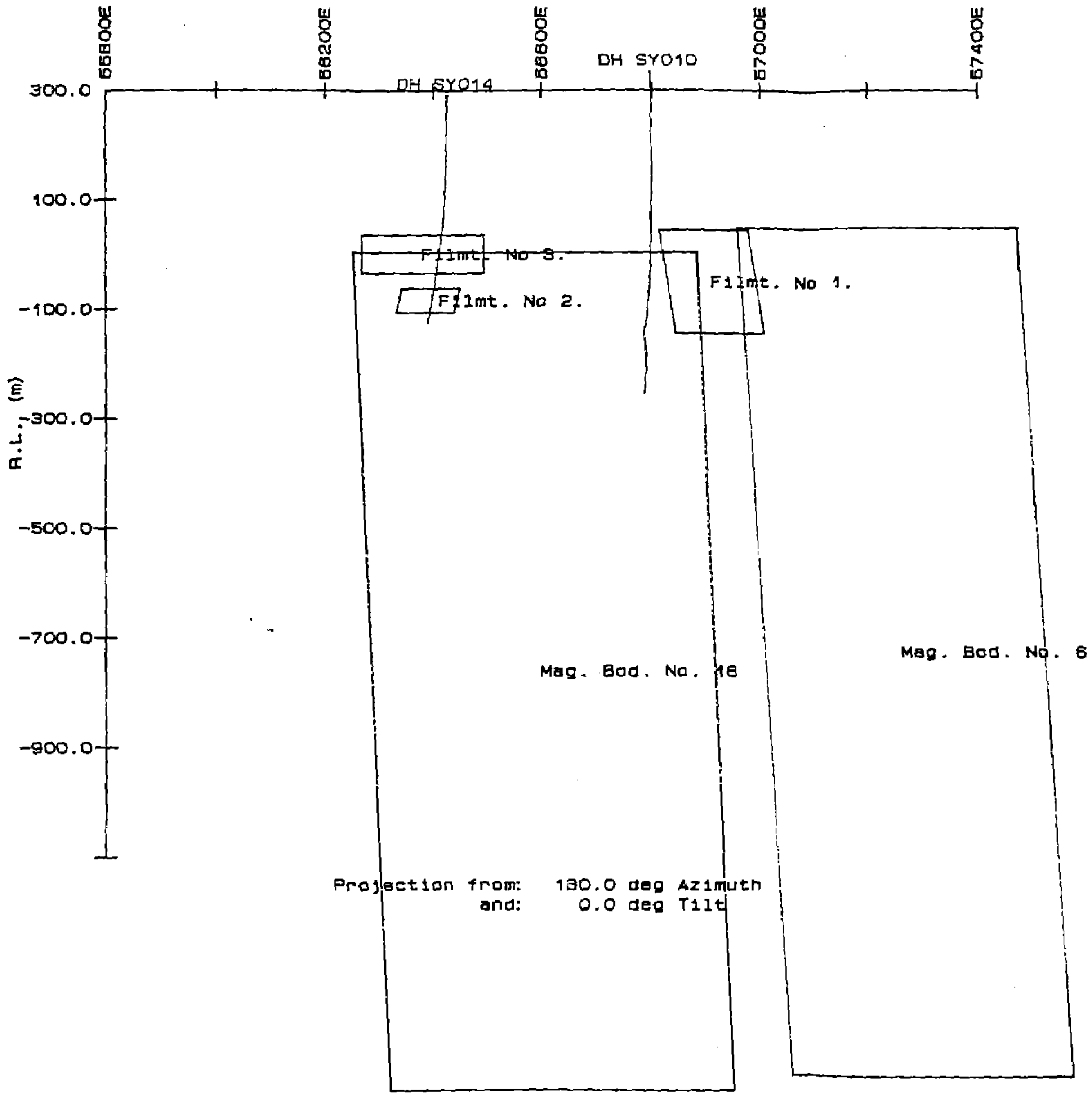
R.G.C. Exploration Pty. Ltd.

Sylvester Grid
Zeehan Tas.
TEM Survey

Interpretation - Plan View

Hor. Scale - 1 : 10000

Figure No 2



5 cm

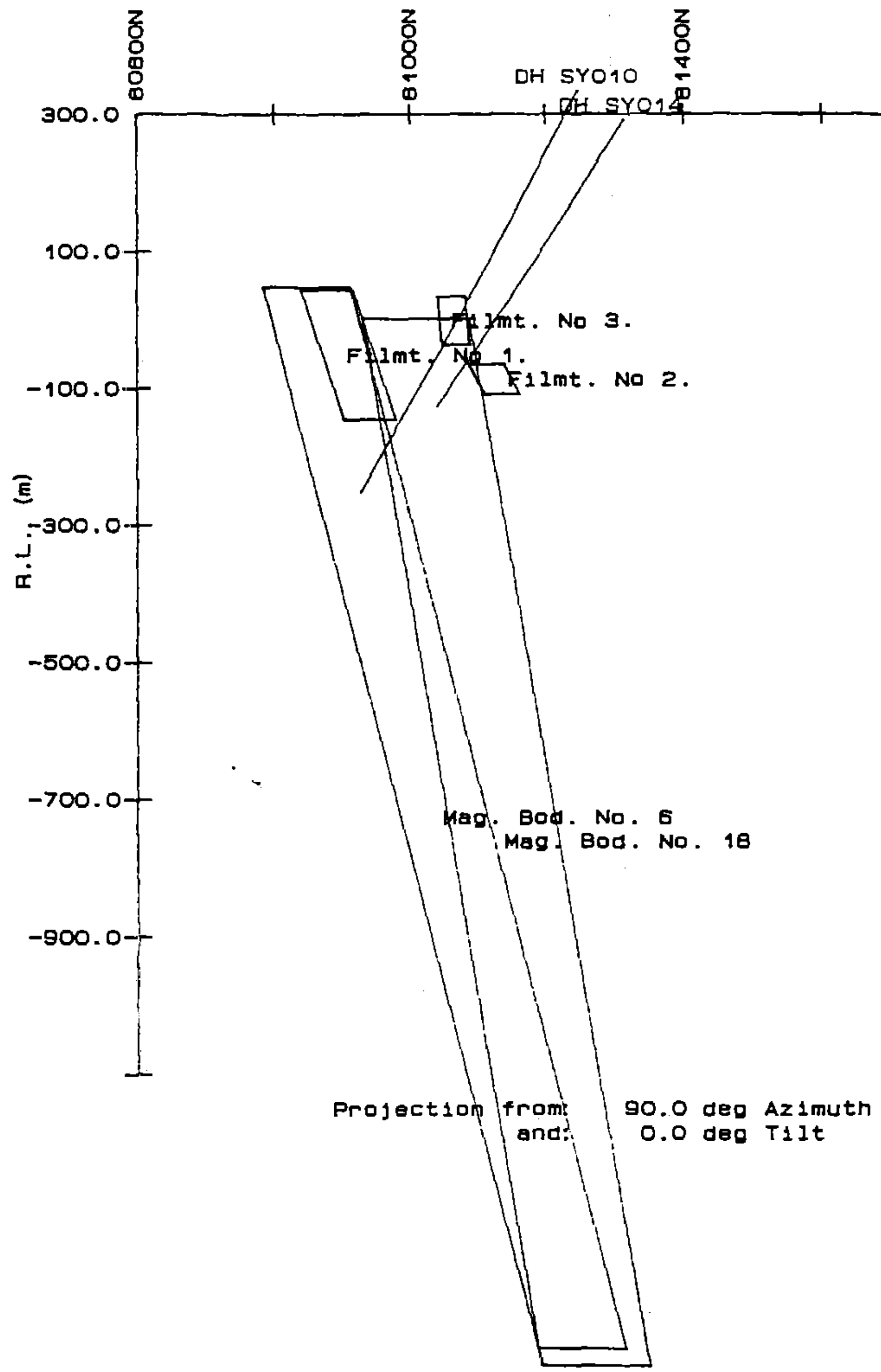
058149

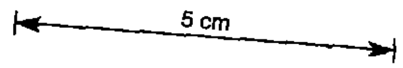
R.G.C. Exploration Pty. Ltd.

Sylvester Grid
Zeehan Tas.
TEM Survey

Interpretation - Long Section

Hor. Scale - 1 : 10000





058150

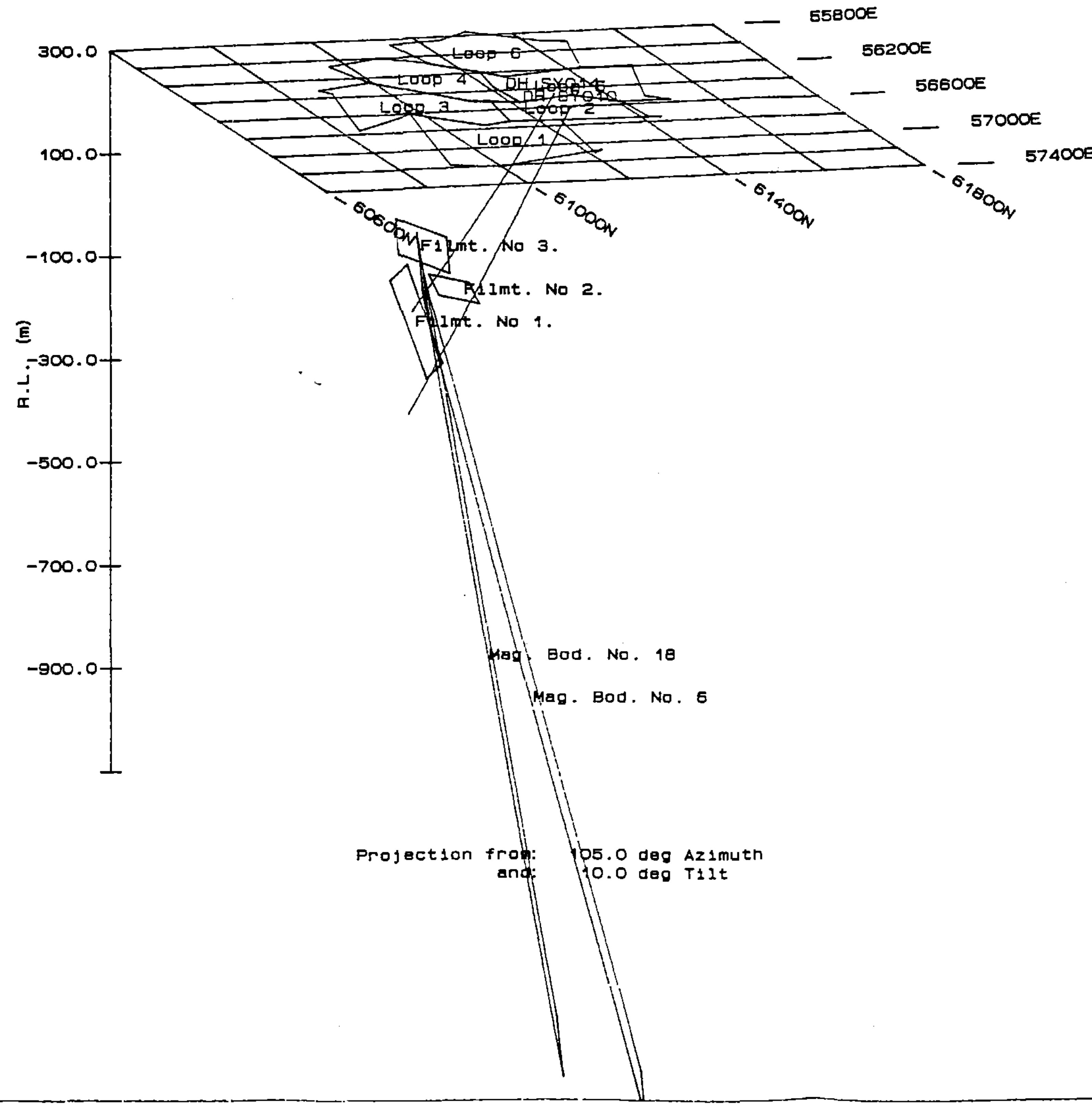
R.G.C. Exploration Pty. Ltd.

Sylvester Grid
Zeehan Tas.
TEM Survey

Interpretation - Cross Section

Hor. Scale - 1 : 10000

Figure No. 4



058151

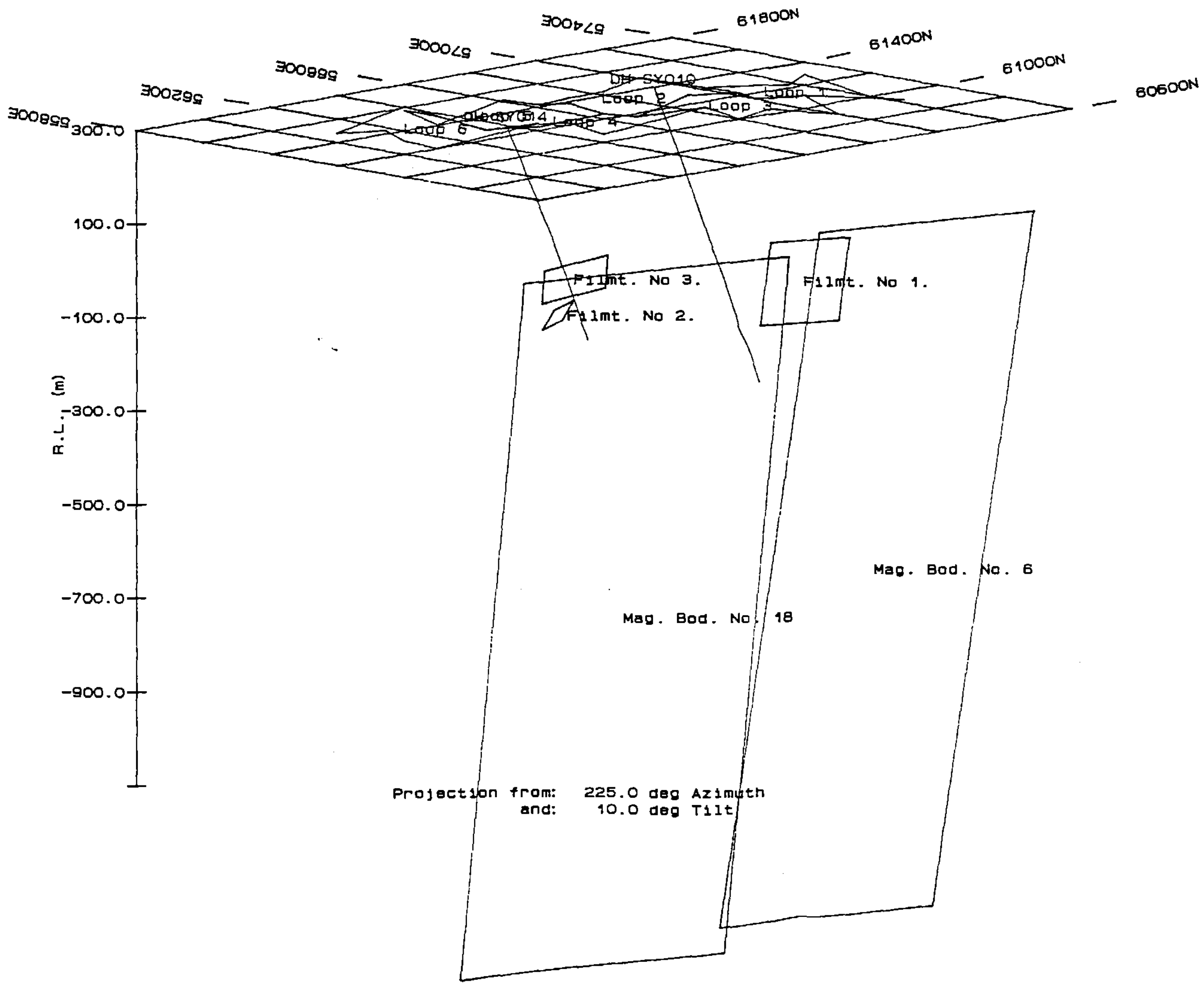
R.G.C. Exploration Pty. Ltd.

Sylvester Grid
Zeehan Tas.
TEM Survey

Interpretation - Oblique View

Hor. Scale - 1 : 10000

Figure No. 4a



5 cm

058152

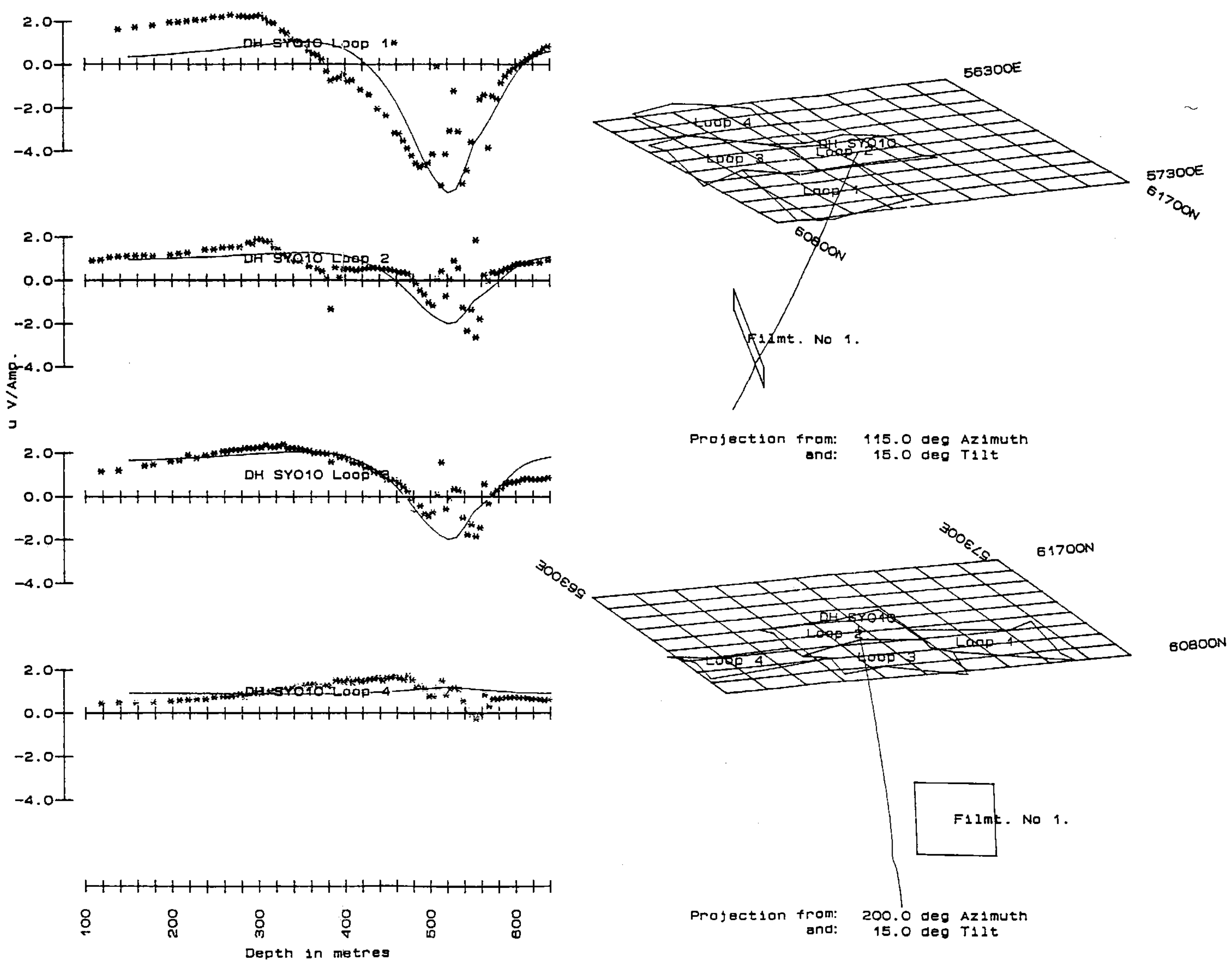
R.G.C. Exploration Pty. Ltd.

Sylvester Grid
Zeehan Tas.
TEM Survey

Interpretation - Oblique View

Hor. Scale - 1 : 10000

Figure No. 4b



Scale for Orthographic Projections = 1: 10000

Filmt. No 1.
Type = Rectangle
Centre x, y, z Co-ords are :
56910.0E 60910.0N -50.0RL
Az & Dip = -65.0 70.0 deg
Plunge, Length, Width = :
0.0 deg 180.0 m 200.0 m

5 cm

058153

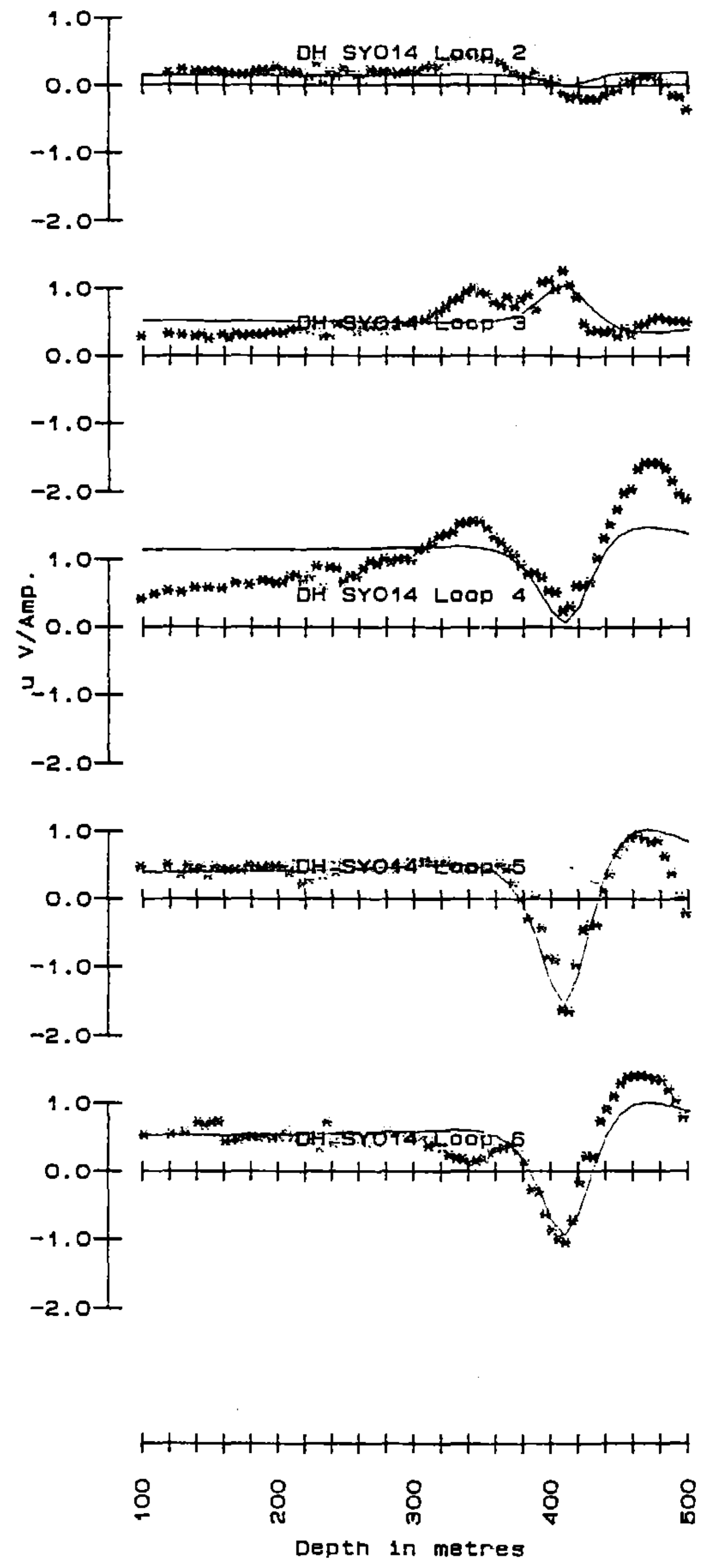
R.G.C. EXPLORATION

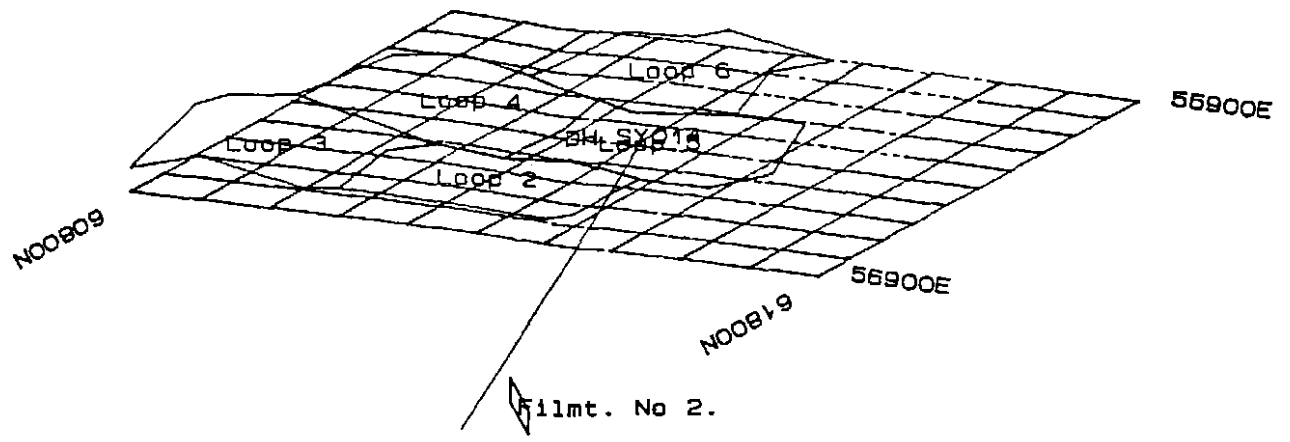
SYLVESTER
Zeehan Tas.
Tem Survey

Filament Modelling - Ch 20

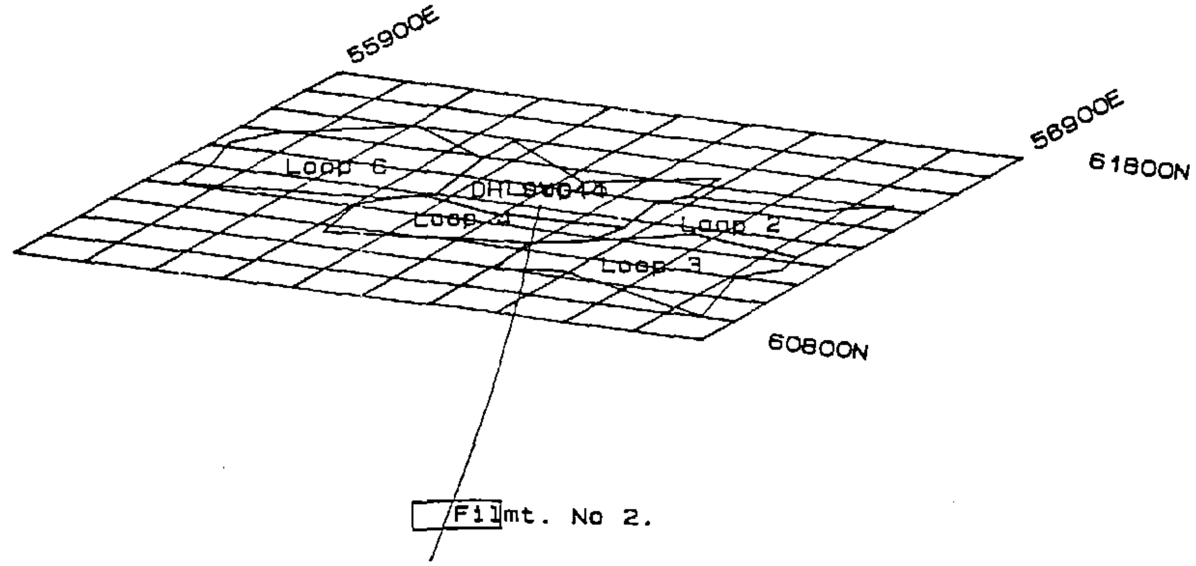
Hor. Scale - 1 : 5000

Figure No. 5





Projection from: 65.0 deg Azimuth
and: 15.0 deg Tilt



Projection from: 155.0 deg Azimuth
and: 15.0 deg Tilt

Scale for Orthographic Projections = 1: 10000

Filmt. No 2.
Type = Rectangle
Centre x, y, z Co-ords are :
56390.0E 61125.0N -85.0RL
Az & Dip = -115.0 60.0 deg
Plunge, Length, Width = :
0.0 deg 120.0 m 50.0 m

5 cm

058154

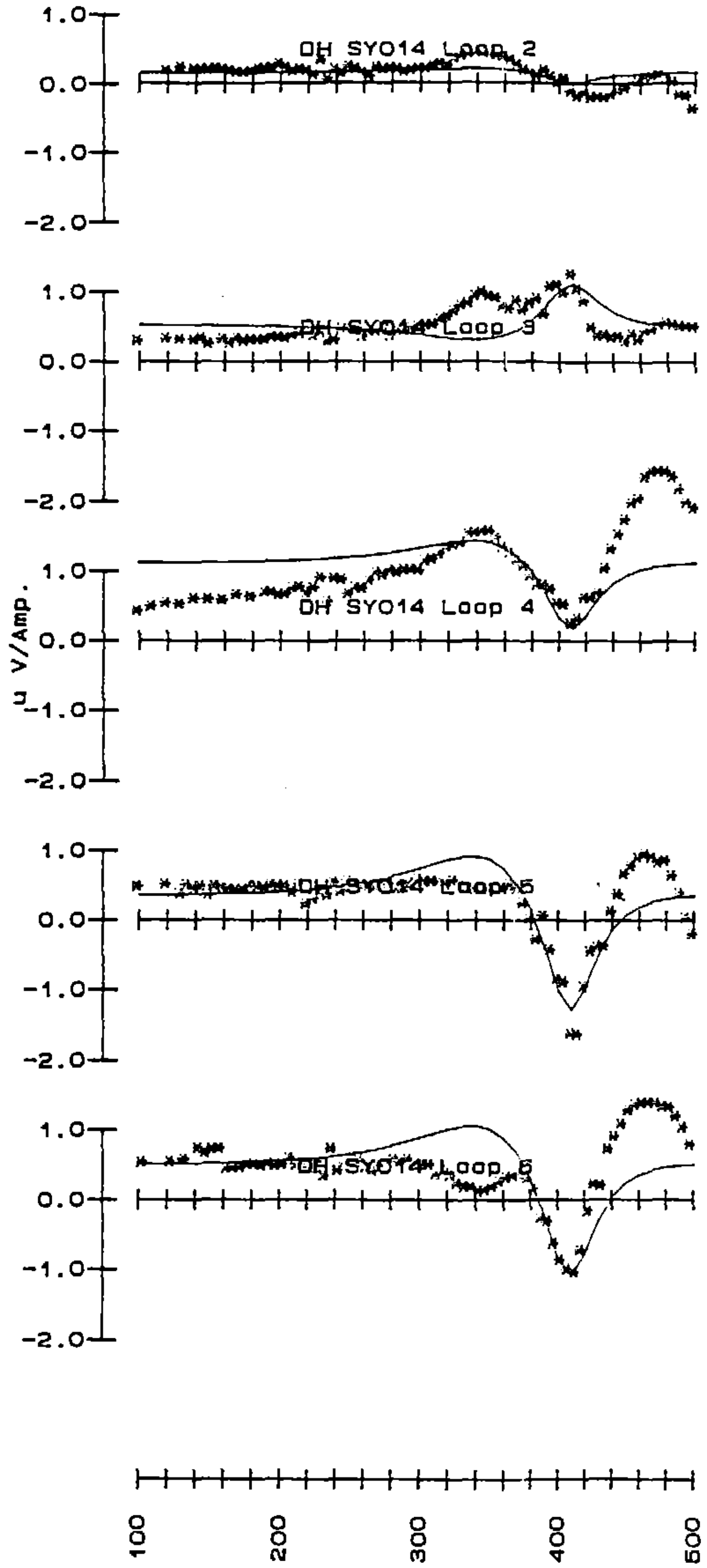
R.G.C. EXPLORATION

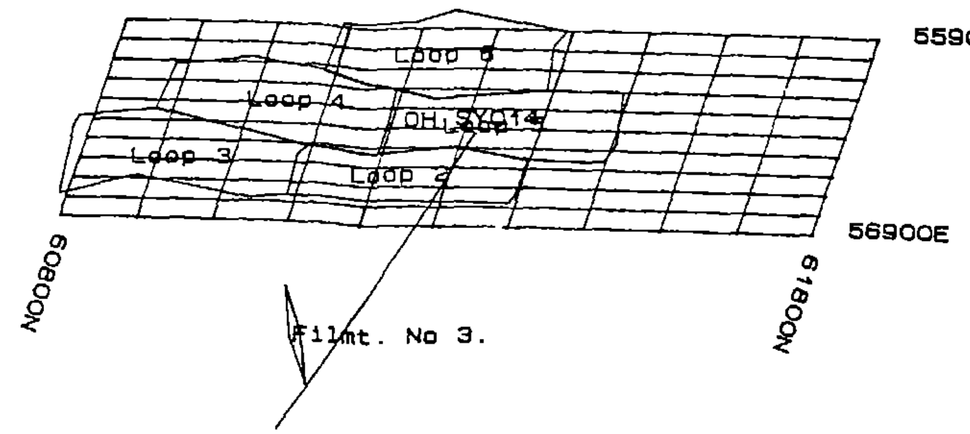
SYLVESTER
Zeehan Tas.
Tem Survey

Filament Modelling - Ch 20

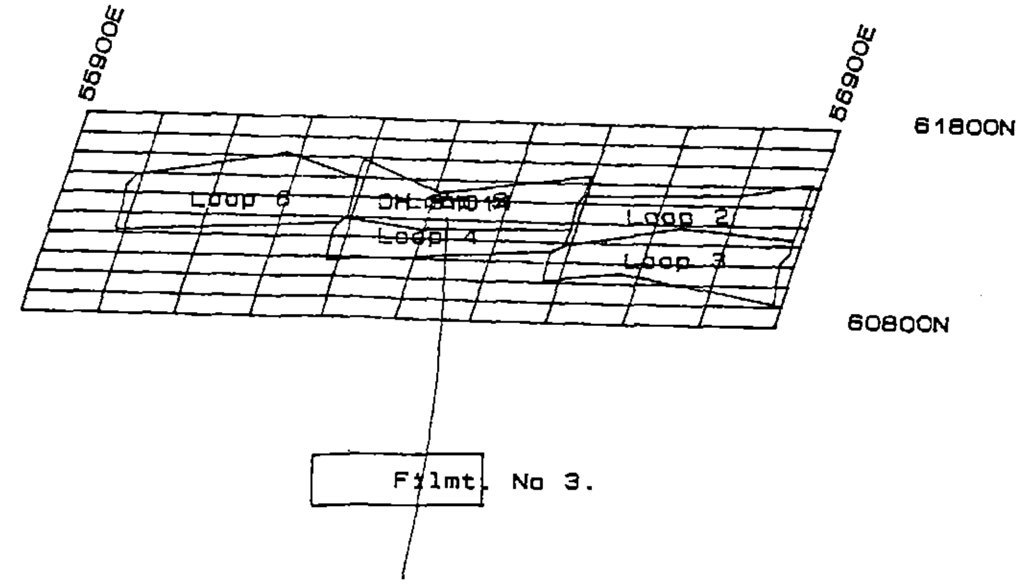
Hor. Scale - 1 : 5000

Figure No. 6





Projection from: 85.0 deg Azimuth
and: 15.0 deg Tilt



Projection from: 175.0 deg Azimuth
and: 15.0 deg Tilt

Scale for Orthographic Projections = 1: 10000

Filmt. No 3.
Type = Rectangle
Centre x, y, z Co-ords are :
56360.0E 61065.0N 0.0RL
Az & Dip = -100.0 85.0 deg
Plunge, Length, Width = :
0.0 deg 230.0 m 70.0 m

5 cm

058155

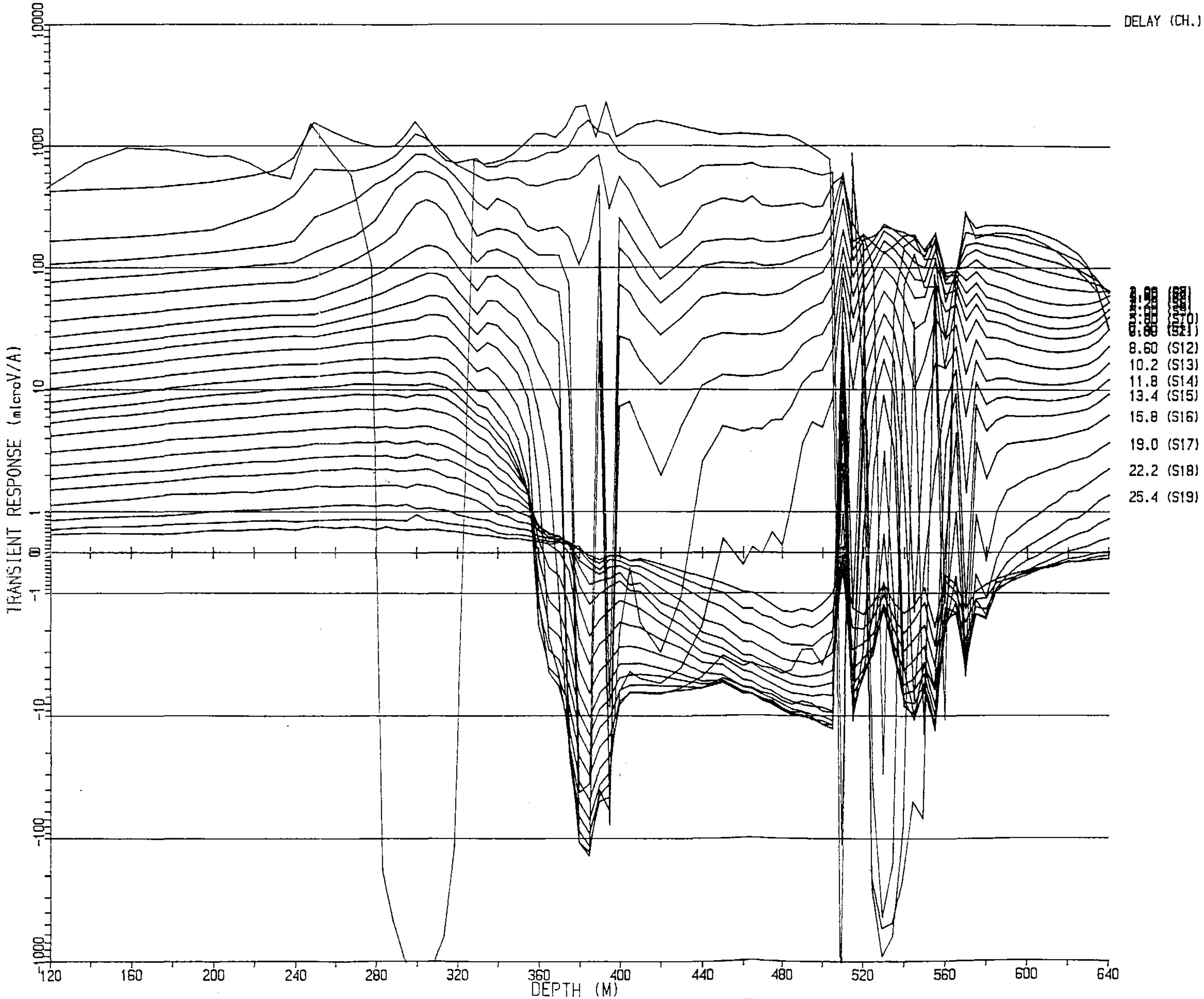
R.G.C. EXPLORATION

SYLVESTER
Zeehan Tas.
Tem Survey

Filament Modelling - Ch 20

Hor. Scale - 1 : 5000

Figure No. 7



SURVEY SPECIFICATIONS

DATA ACQUIS'N : McSKIMMING GEOPHYSICS

SURVEY DATE : JAN 1992
CONFIGURATION : 300M SQUARE TX. LOOP, DRILL HOLE SURVEY
READING INT. : 20 METRES
NO. OF STACKS : 512
TRANSMITTER : MEDIUM POWER
RECEIVER : SIROTEM II S/N 1224
CURRENT : 12.6 AMPS
OPERATOR : P McSKIMMING

PLOT SPECIFICATIONS

HORIZONTAL SCALE - 1:2000
VERTICAL SCALE - LOGARITHMIC 3CM. PER DECADE LINEAR BETWEEN -1 AND +1

TIME DELAYS IN MILLISECONDS
E - EARLY TIME WINDOW
S - STANDARD TIME WINDOW

5 cm

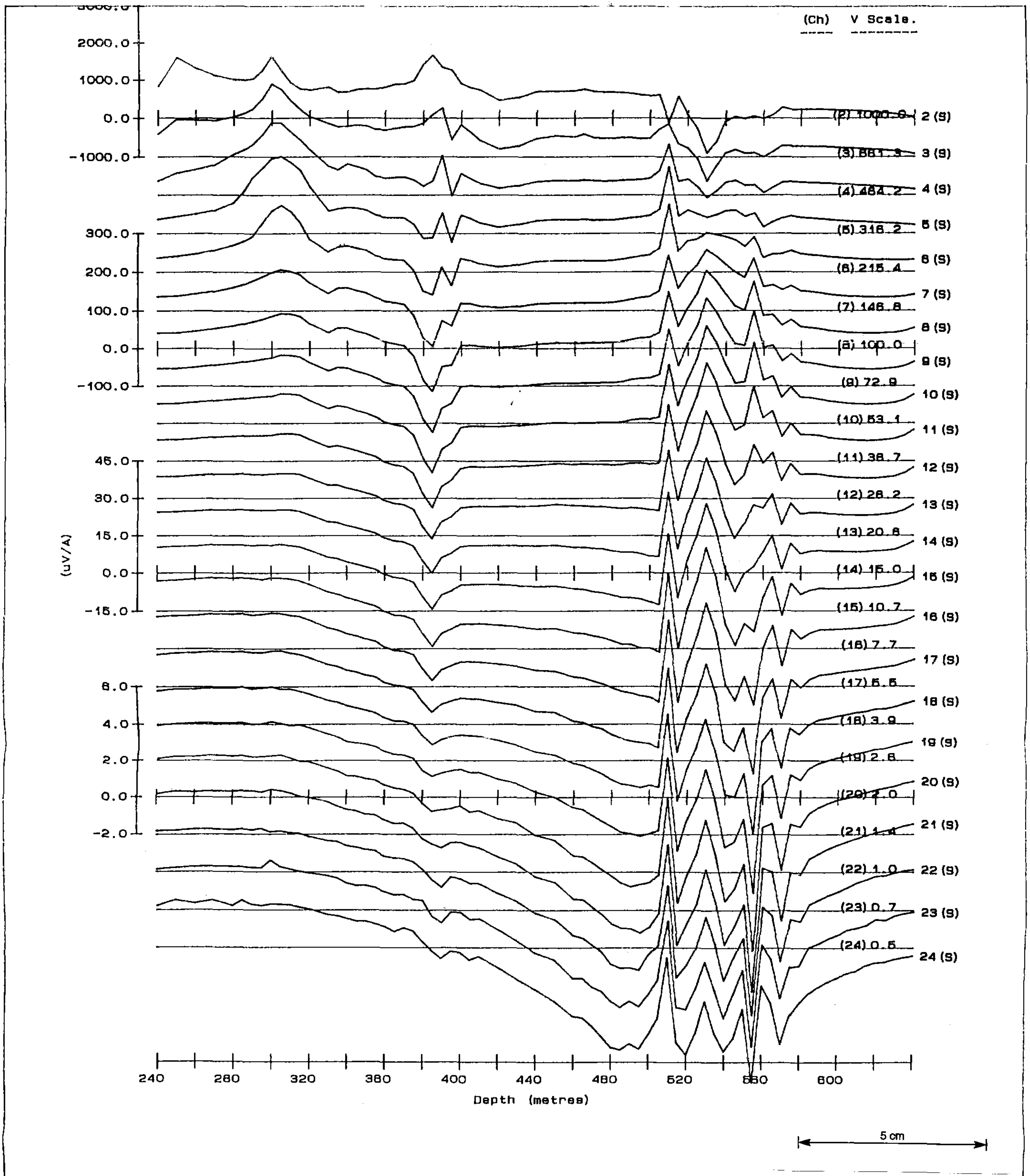
R.G.C. EXPLORATION

ZEEHAN
SYLVESTER

SIROTEM PROFILE
LINE SY010 LP1

SCALE - 1:2000

058156



Specifications :

Survey By:
MCSKIMMING_GEOPHYSICS
Operator: P_McSKIMMING
Date: JAN_1992
Down Hole Loop Configuration
Instr: Sirotem 1224

Min. Curr. = 12.20 Amp
Max. Curr. = 12.60 Amp
Standard time Series

Vertical Scaling:
Displaced Linear

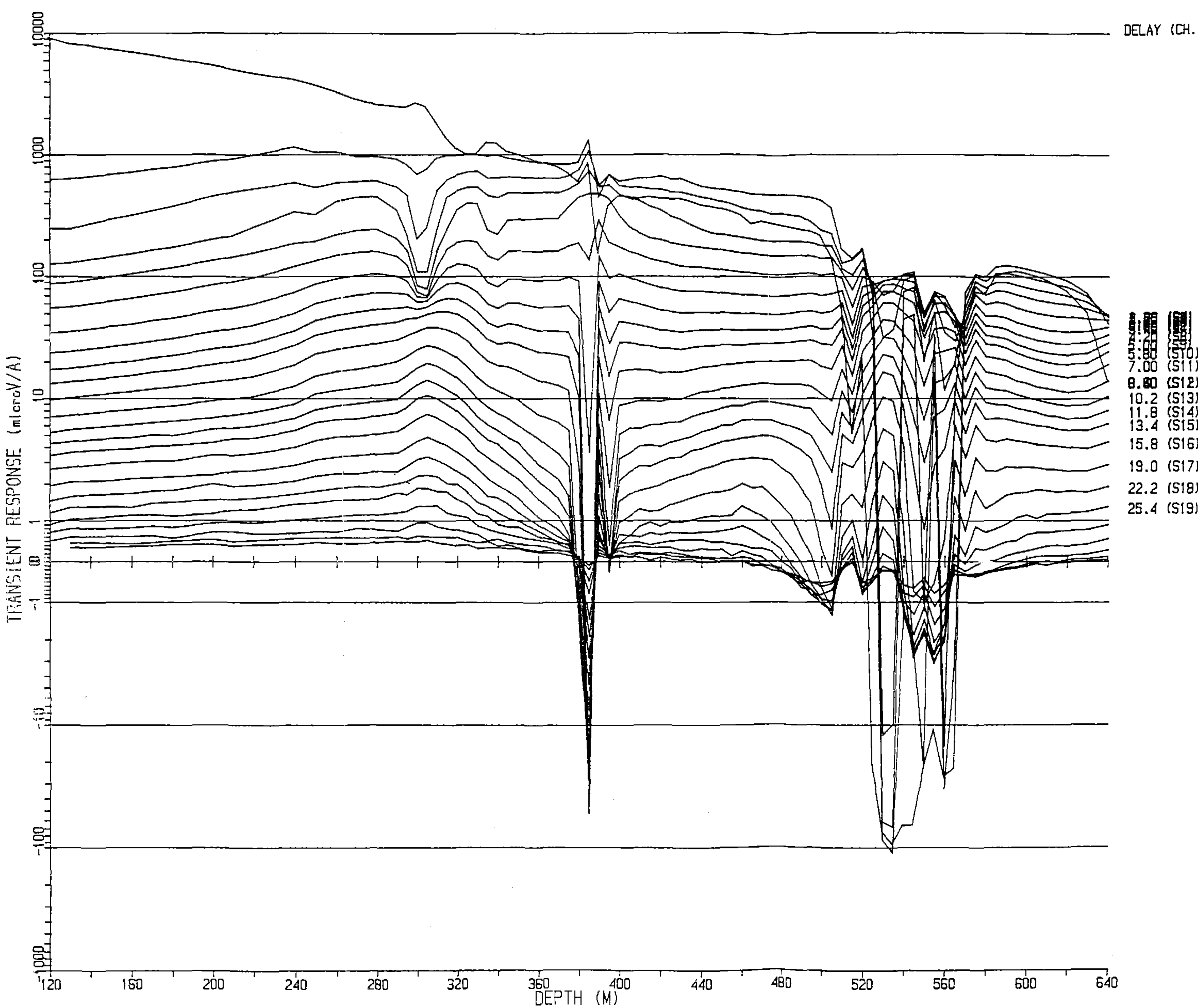
Fixed Tx. Loop - 1
56900E-61200N-330RL
57200E-61200N-323RL
57200E-60900N-306RL
56900E-60900N-353RL

R.G.C._EXPLORATION

Sylvester Grid
ZEEHAN TAS.
DH SYO10 - 1
Tem Survey
Axial Component

Hor. Scale - 1 : 2000

058157



SURVEY SPECIFICATIONS

DATA ACQUIS'N : McSKIMMING GEOPHYSICS

SURVEY DATE : JAN 1992

CONFIGURATION : 300M SQUARE TX. LOOP, DRILL HOLE SURVEY

READING INT. : 20 METRES

NO. OF STACKS : 512

TRANSMITTER : MEDIUM POWER

RECEIVER : SIROTEM II S/N 1224

CURRENT : 11.7 AMPS

OPERATOR : P McSKIMMING

PLOT SPECIFICATIONS

HORIZONTAL SCALE - 1:2000

VERTICAL SCALE - LOGARITHMIC
3CM. PER DECADE
LINEAR BETWEEN
-1 AND +1

TIME DELAYS IN MILLISECONDS
E - EARLY TIME WINDOW
S - STANDARD TIME WINDOW

5 cm

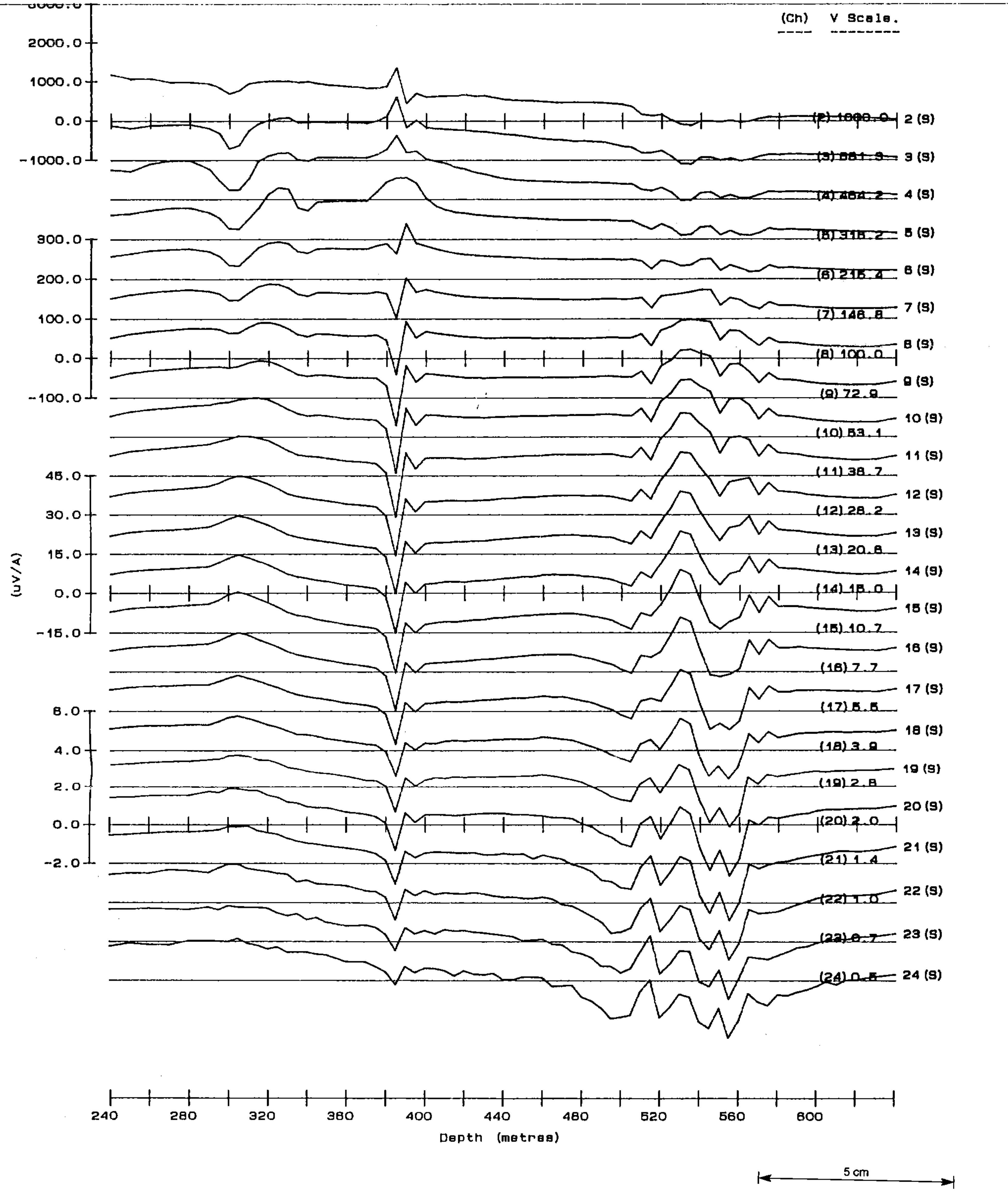
R.G.C. EXPLORATION

ZEEHAN
SYLVESTER

SIROTEM PROFILE
LINE SY010 LP2

SCALE - 1:2000

058158



Specifications :

Survey By:
MCSKIMMING_GEOPHYSICS
Operator: P_McSKIMMING
Date: JAN_1992
Down Hole Loop Configuration
Instr: Sirotem 1224

Current = 11.70 Amp
Standard time Series

Vertical Scaling:
Displaced Linear

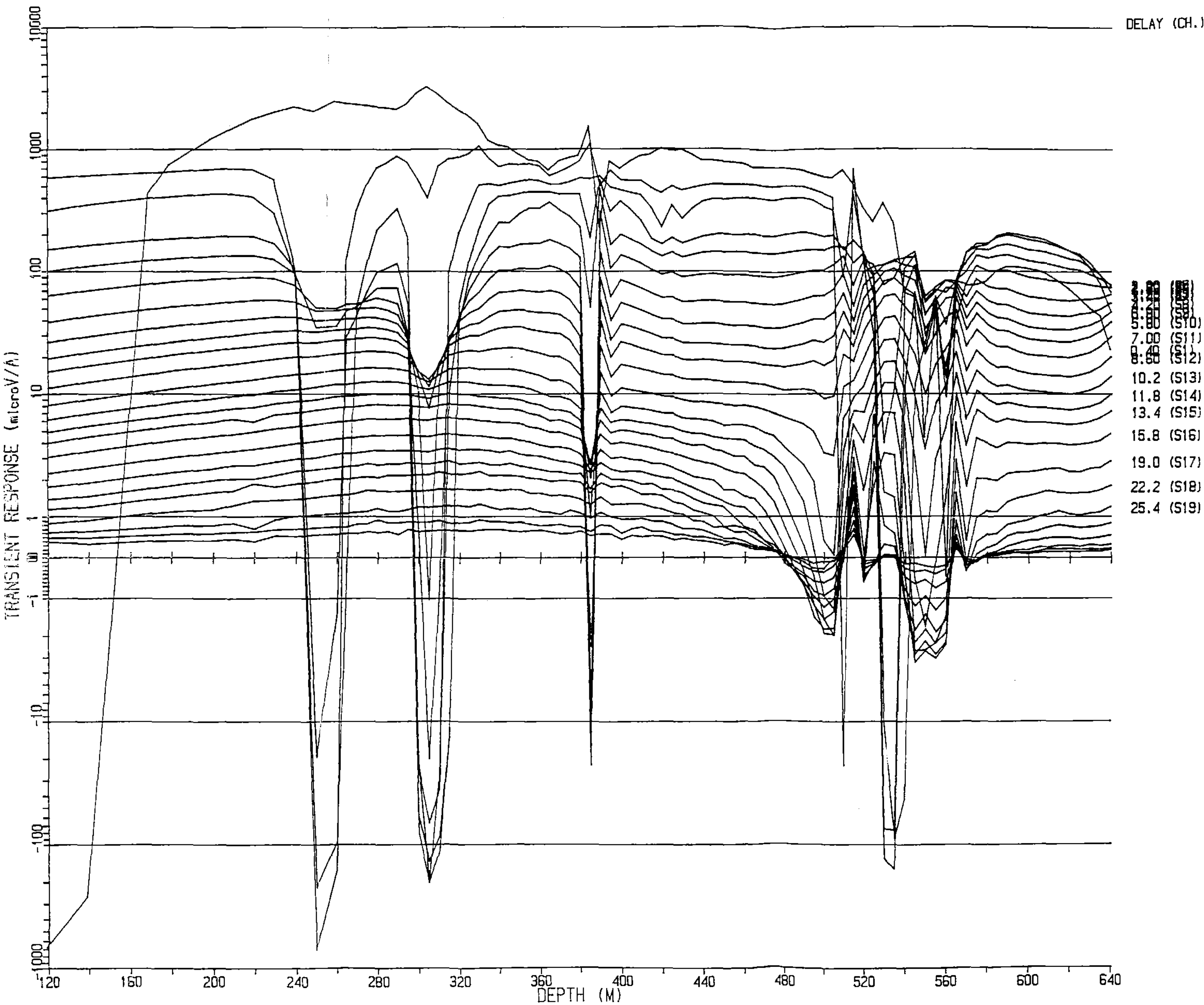
Fixed Tx. Loop - 2
56600E-61400N-306RL
56900E-61400N-327RL
56900E-61100N-331RL
56600E-61100N-318RL

R.G.C._EXPLORATION

Sylvester Grid
ZEEHAN TAS.
DH SY010 - 2
Tem Survey
Axial Component

Hor. Scale - 1 : 2000

058159



SURVEY SPECIFICATIONS

DATA ACQUIS'N : McSKIMMING GEOPHYSICS

SURVEY DATE : JAN 1992
CONFIGURATION : 300M SQUARE TX. LOOP, DRILL HOLE SURVEY
READING INT. : 20 METRES
NO. OF STACKS : 256
TRANSMITTER : MEDIUM POWER
RECEIVER : SIROTEM II S/N 1224
CURRENT : 13.6 AMPS
OPERATOR : P McSKIMMING

PLOT SPECIFICATIONS

HORIZONTAL SCALE - 1:2000
VERTICAL SCALE - LOGARITHMIC 3CM. PER DECADE LINEAR BETWEEN -1 AND +1

TIME DELAYS IN MILLISECONDS
E - EARLY TIME WINDOW
S - STANDARD TIME WINDOW

5 cm

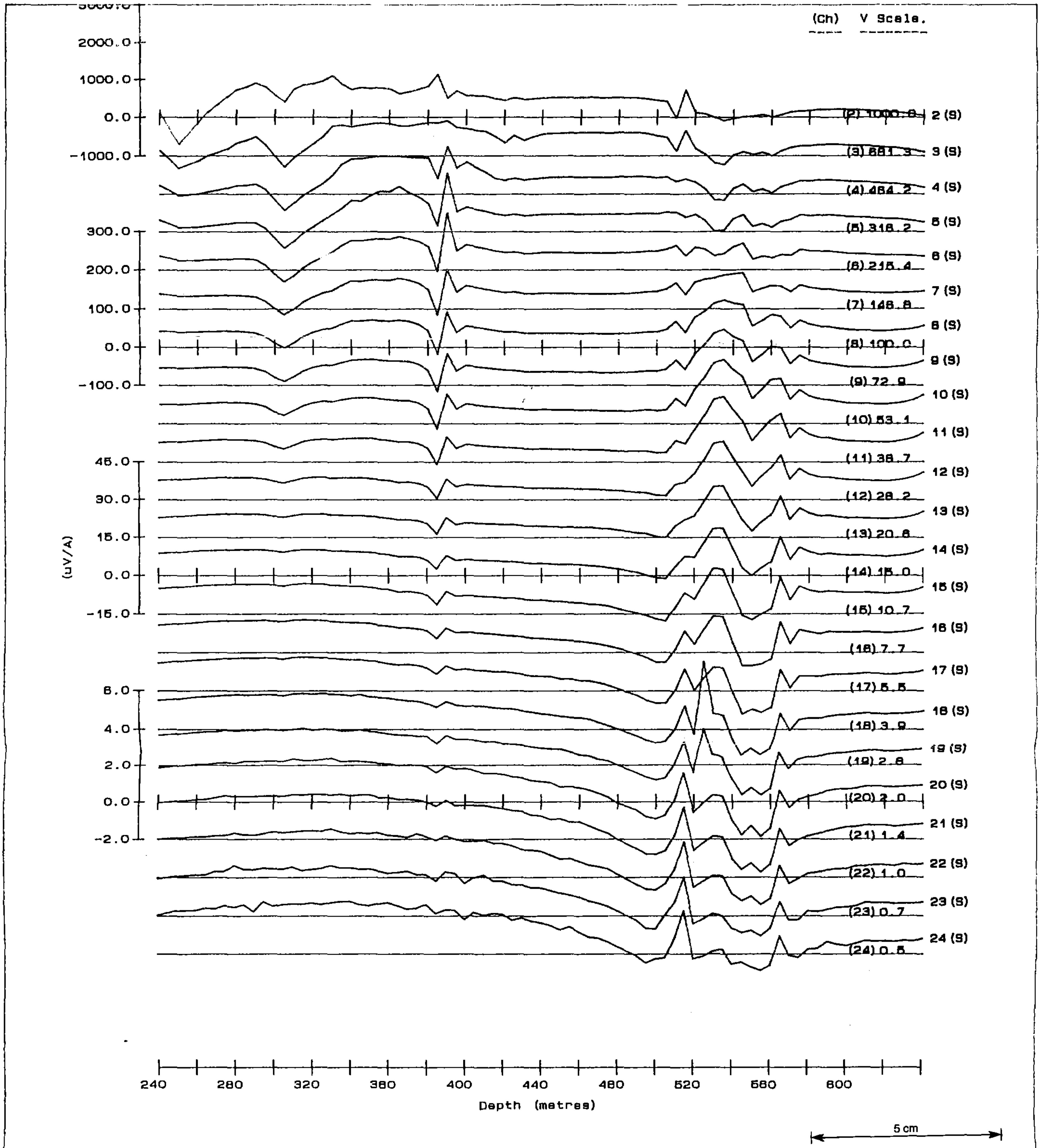
R.G.C. EXPLORATION

ZEEHAN
SYLVESTER

SIROTEM PROFILE
LINE SY010 LP3

SCALE - 1:2000

058160



Specifications :

Survey By:
MCSKIMMING_GEOPHYSICS
Operator: P_McSKIMMING
Date: JAN_1992
Down Hole Loop Configuration
Instr: Sirotem 1224

Min. Curr. = 13.60 Amp
Max. Curr. = 13.90 Amp
Standard time Series

Vertical Scaling:
Displaced Linear

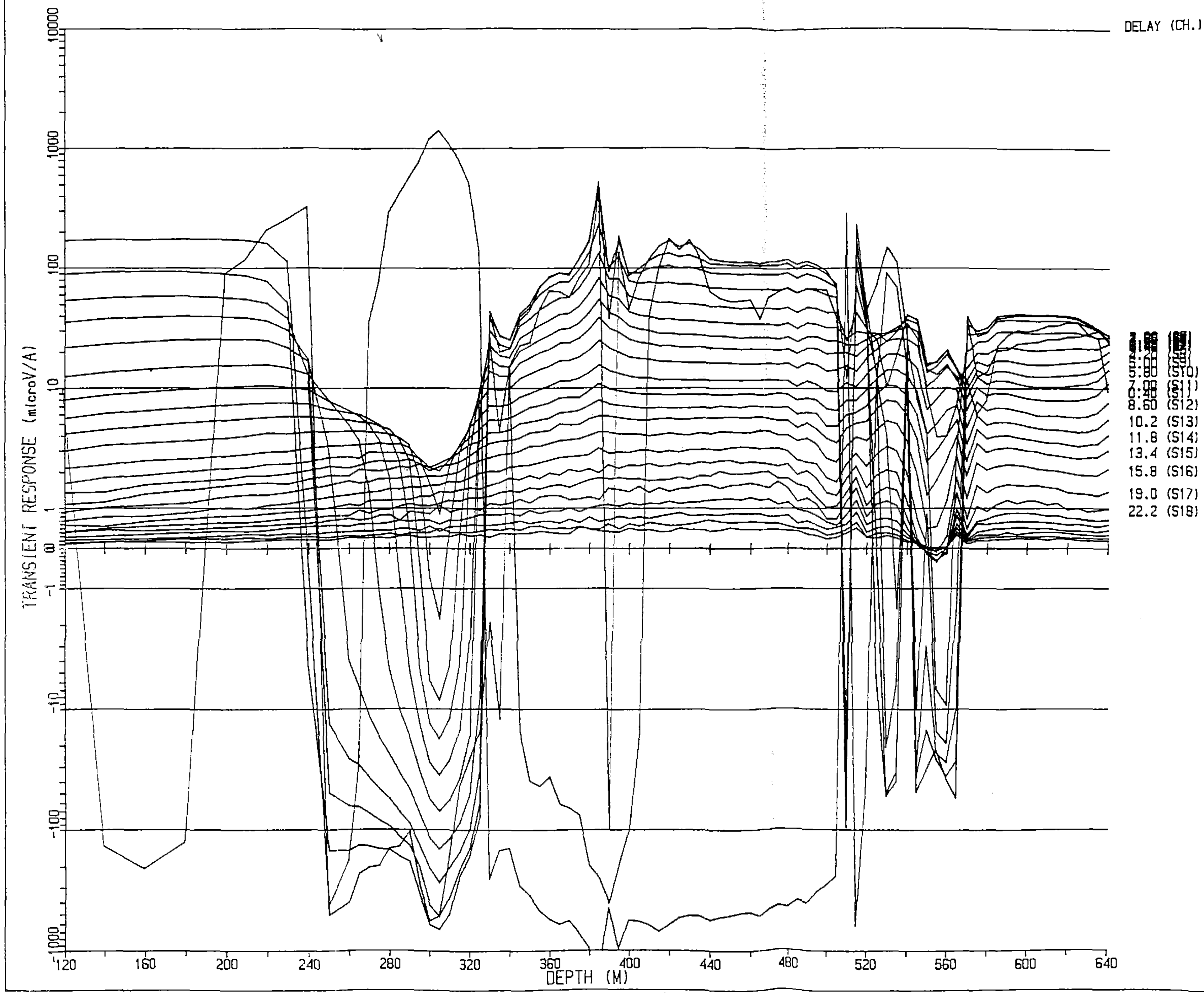
Fixed Tx. Loop - 3
56600E-61100N-318RL
56900E-61100N-331RL
56900E-60800N-325RL
56600E-60800N-351RL

R.G.C._EXPLORATION

Sylvester Grid
ZEEHAN TAS.
DH SY010 - 3
Tem Survey
Axial Component

Hor. Scale - 1 : 2000

058161



SURVEY SPECIFICATIONS

DATA ACQUIS'N : McSKIMMING GEOPHYSICS

SURVEY DATE : JAN 1992
CONFIGURATION : 300M SQUARE TX. LOOP, DRILL HOLE SURVEY
READING INT. : 20 METRES
NO. OF STACKS : 256
TRANSMITTER : MEDIUM POWER
RECEIVER : SIROTEM II S/N 1224
CURRENT : 12.0 AMPS
OPERATOR : P McSKIMMING

PLOT SPECIFICATIONS

HORIZONTAL SCALE - 1:2000
VERTICAL SCALE - LOGARITHMIC 3CM. PER DECADE LINEAR BETWEEN -1 AND +1

TIME DELAYS IN MILLISECONDS
E - EARLY TIME WINDOW
S - STANDARD TIME WINDOW

5 cm

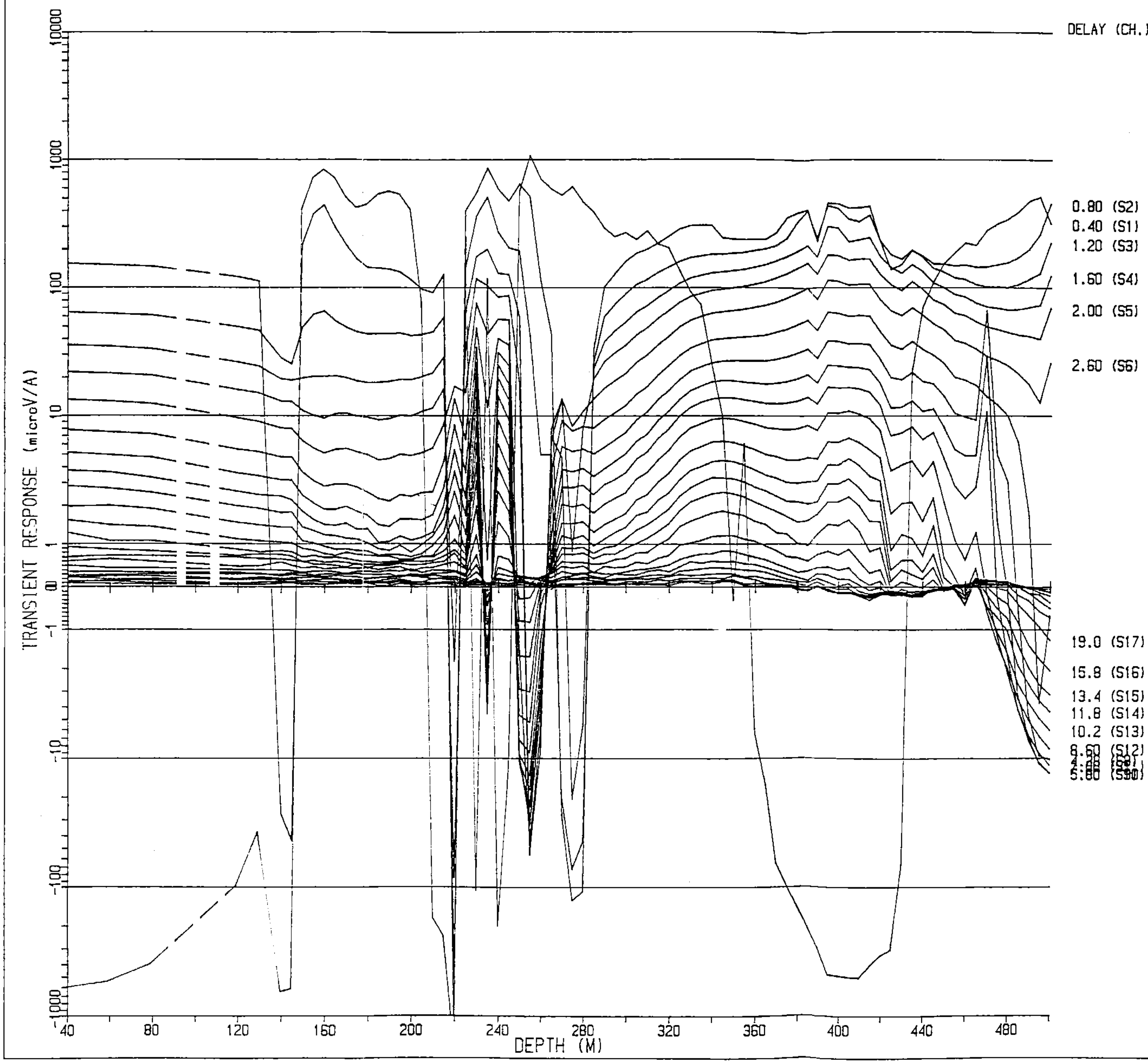
R.G.C. EXPLORATION

ZEEHAN
SYLVESTER

SIROTEM PROFILE
LINE SY010 LP4

SCALE - 1:2000

058162



SURVEY SPECIFICATIONS

DATA ACQUIS'N : McSKIMMING GEOPHYSICS

SURVEY DATE : JAN 1992
CONFIGURATION : 300M SQUARE TX. LOOP, DRILL HOLE SURVEY
READING INT. : 20 METRES
NO. OF STACKS : 256
TRANSMITTER : MEDIUM POWER
RECEIVER : SIROTEM II S/N 1224
CURRENT : 13.4 AMPS
OPERATOR : P McSKIMMING

PLOT SPECIFICATIONS

HORIZONTAL SCALE - 1:2000
VERTICAL SCALE - LOGARITHMIC
3CM. PER DECADE
LINEAR BETWEEN
-1 AND +1

TIME DELAYS IN MILLISECONDS
E - EARLY TIME WINDOW
S - STANDARD TIME WINDOW

5 cm

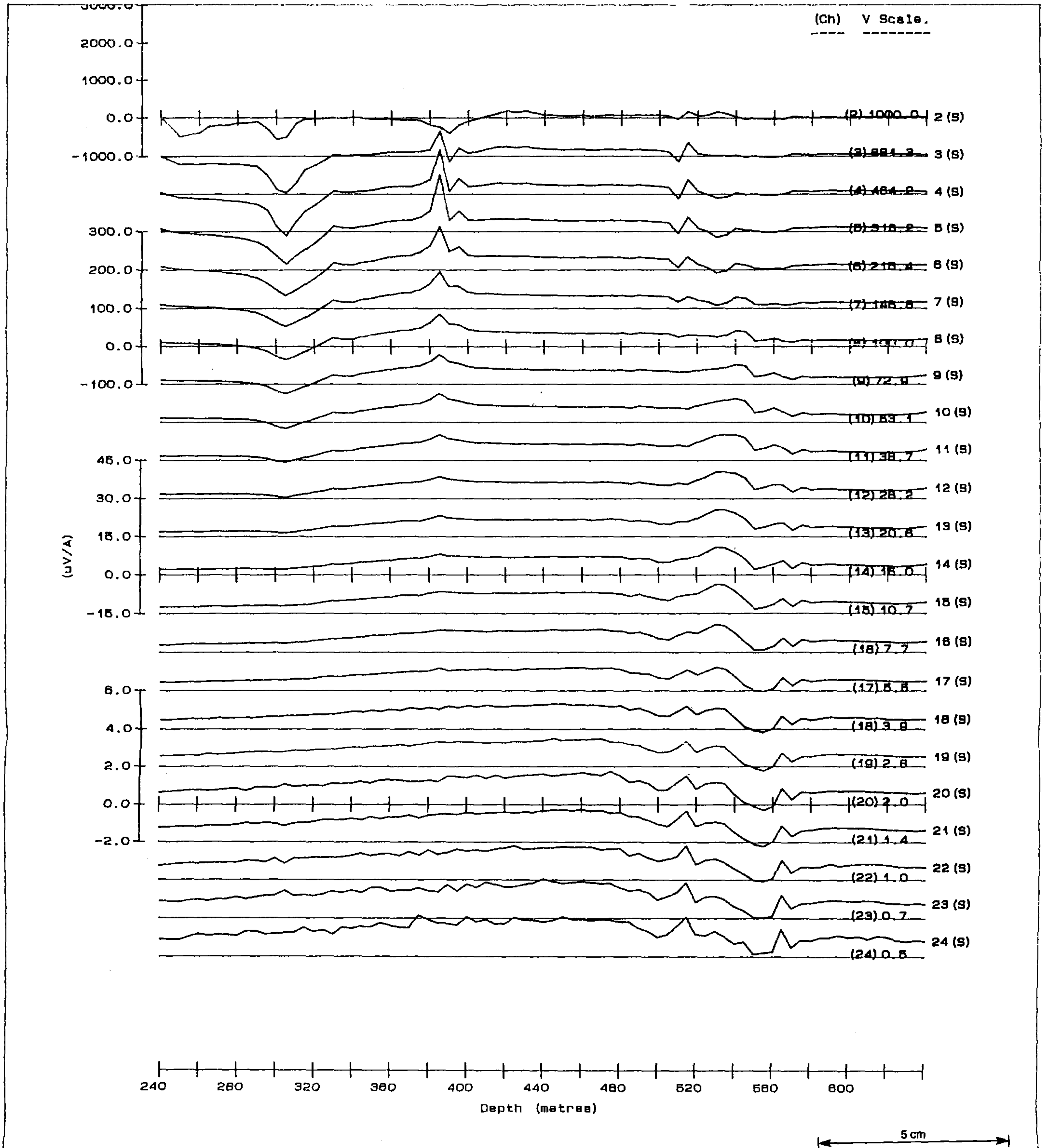
R.G.C. EXPLORATION

ZEEHAN
SYLVESTER

SIROTEM PROFILE
LINE SY014 LP2

SCALE - 1:2000

058163



058164

Specifications :

Survey By:
MCSKIMMING_GEOPHYSICS
Operator: P_McSKIMMING
Date: JAN_1992
Down Hole Loop Configuration
Instr: Sirotem 1224

Min. Curr. = 11.90 Amp
Max. Curr. = 12.00 Amp
Standard time Series

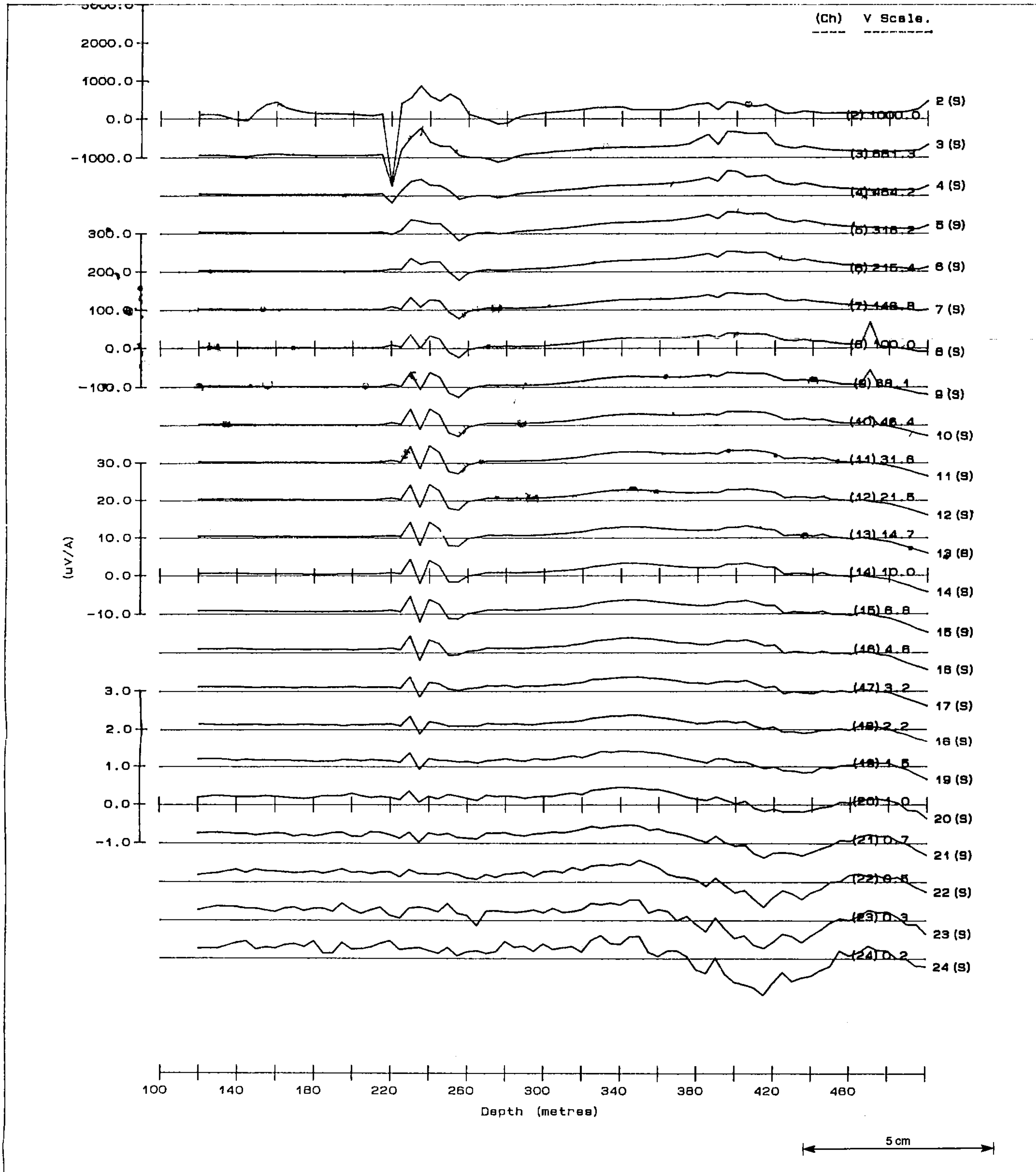
Vertical Scaling:
Displaced Linear

Fixed Tx. Loop - 4
5600E-61200N-320RL
56600E-61200N-312RL
56600E-60900N-363RL
56300E-60900N-343RL

A.G.C._EXPLORATION

Sylvester Grid
ZEEHAN TAS.
DH SY010 - 4
Tem Survey
Axial Component

Hor. Scale - 1 : 2000



Specifications :

Survey By:
MCSKIMMING_GEOPHYSICS
Operator: P_McSKIMMING
Date: JAN_1992
Down Hole Loop Configuration
Instr: Sirotem 1224

Min. Curr. = 13.30 Amp
Max. Curr. = 13.40 Amp
Standard time Series

Vertical Scaling:
Displaced Linear

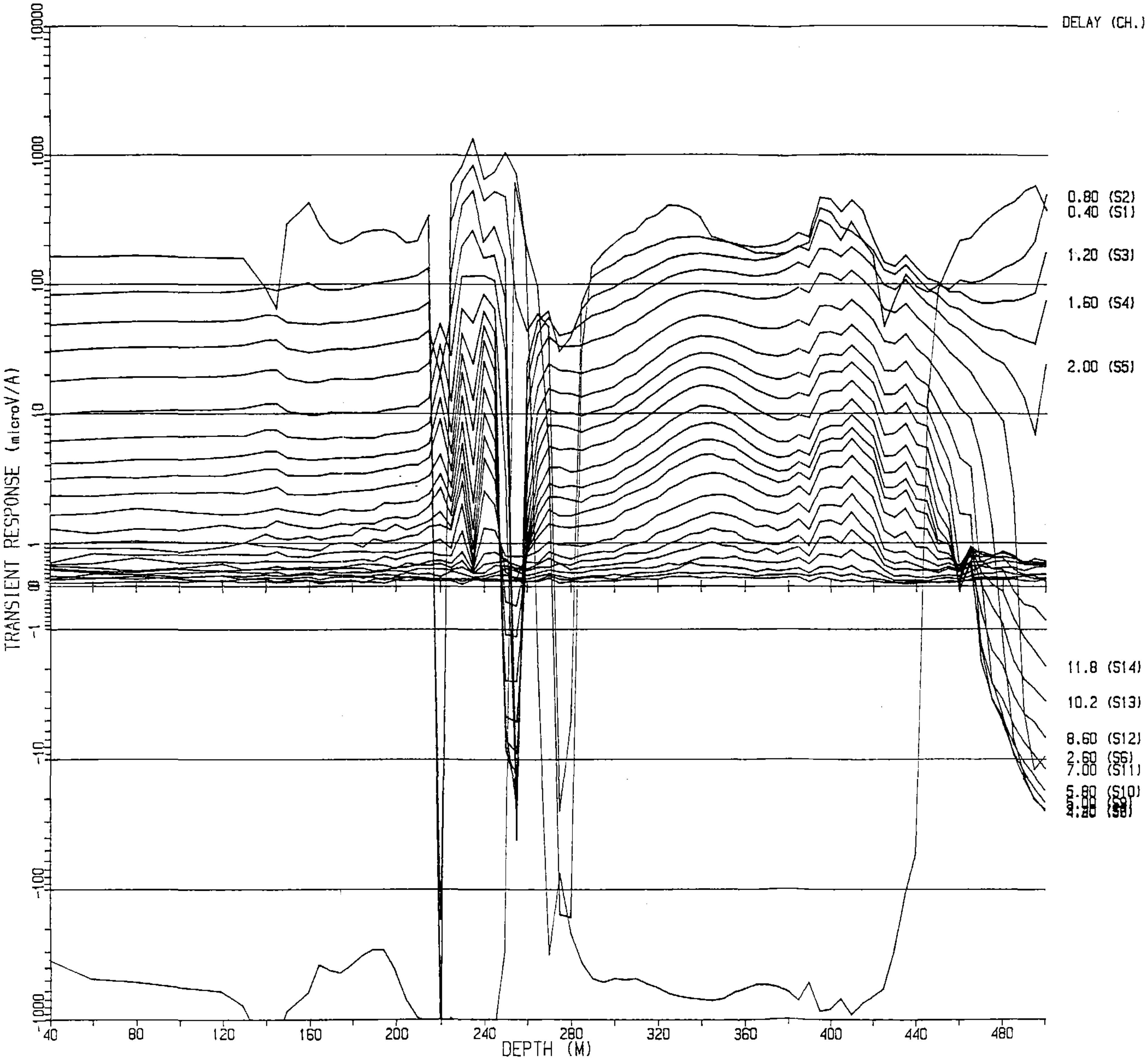
Fixed Tx. Loop 2
56600E-61400N-306RL
56900E-61400N-327RL
56900E-61100N-331RL
56600E-61100N-318RL

R.G.C._EXPLORATION

Sylvester Grid
ZEEHAN TAS.
DH SY014 - 2
Tem Survey
Axial Component

Hor. Scale - 1 : 2000

058165



SURVEY SPECIFICATIONS

DATA ACQUIS'N : McSKIMMING GEOPHYSICS

SURVEY DATE : JAN 1992
CONFIGURATION : 300M SQUARE TX. LOOP, DRILL HOLE SURVEY
READING INT. : 20 METRES
NO. OF STACKS : 256
TRANSMITTER : MEDIUM POWER
RECEIVER : SIROTEM II S/N 1224
CURRENT : 12.7 AMPS
OPERATOR : P McSKIMMING

PLOT SPECIFICATIONS

HORIZONTAL SCALE - 1:2000
VERTICAL SCALE - LOGARITHMIC
3CM. PER DECADE
LINEAR BETWEEN
-1 AND +1

TIME DELAYS IN MILLISECONDS
E - EARLY TIME WINDOW
S - STANDARD TIME WINDOW

5 cm

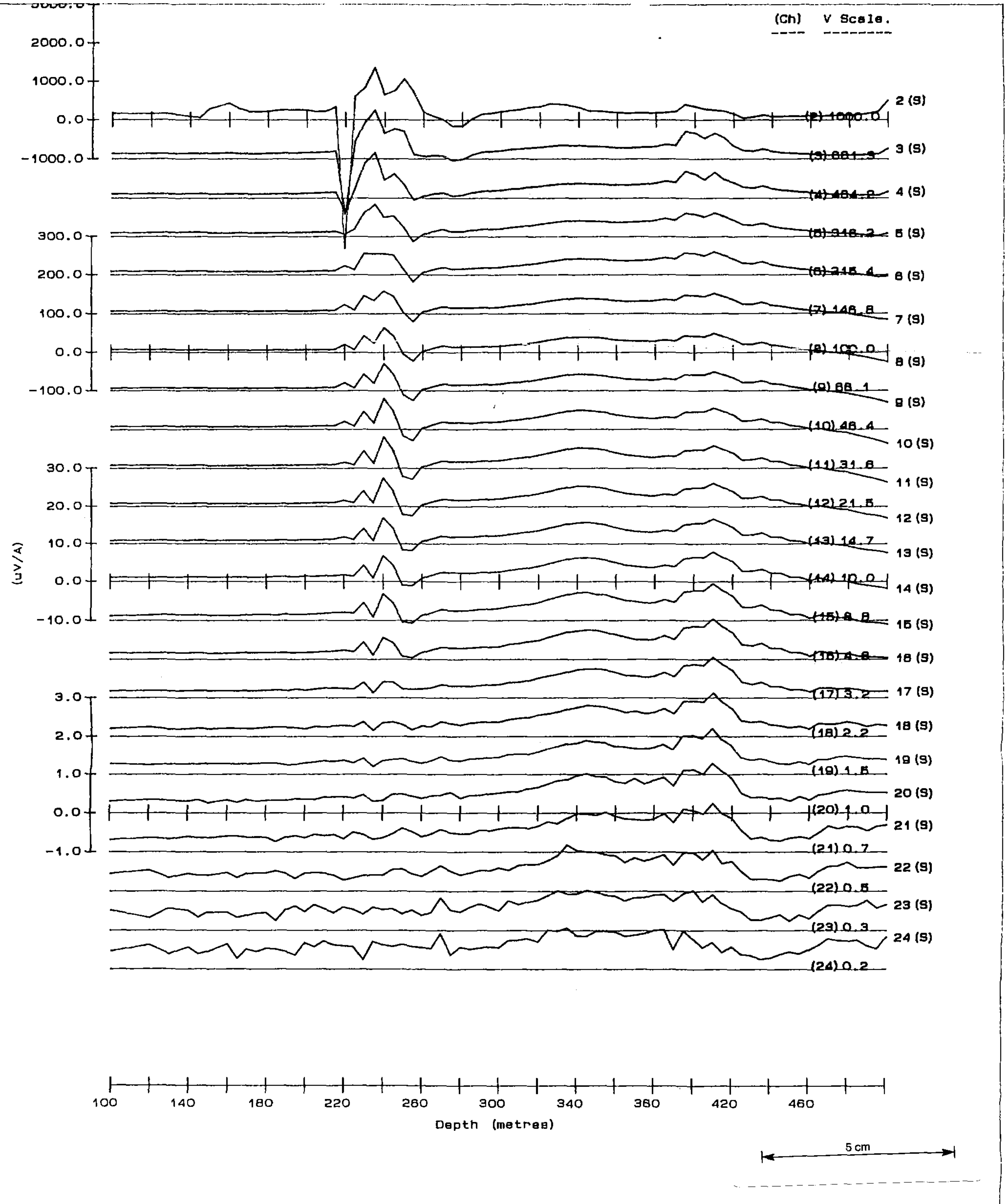
R.G.C. EXPLORATION

ZEEHAN
SYLVESTER

SIROTEM PROFILE
LINE SY014 LP3

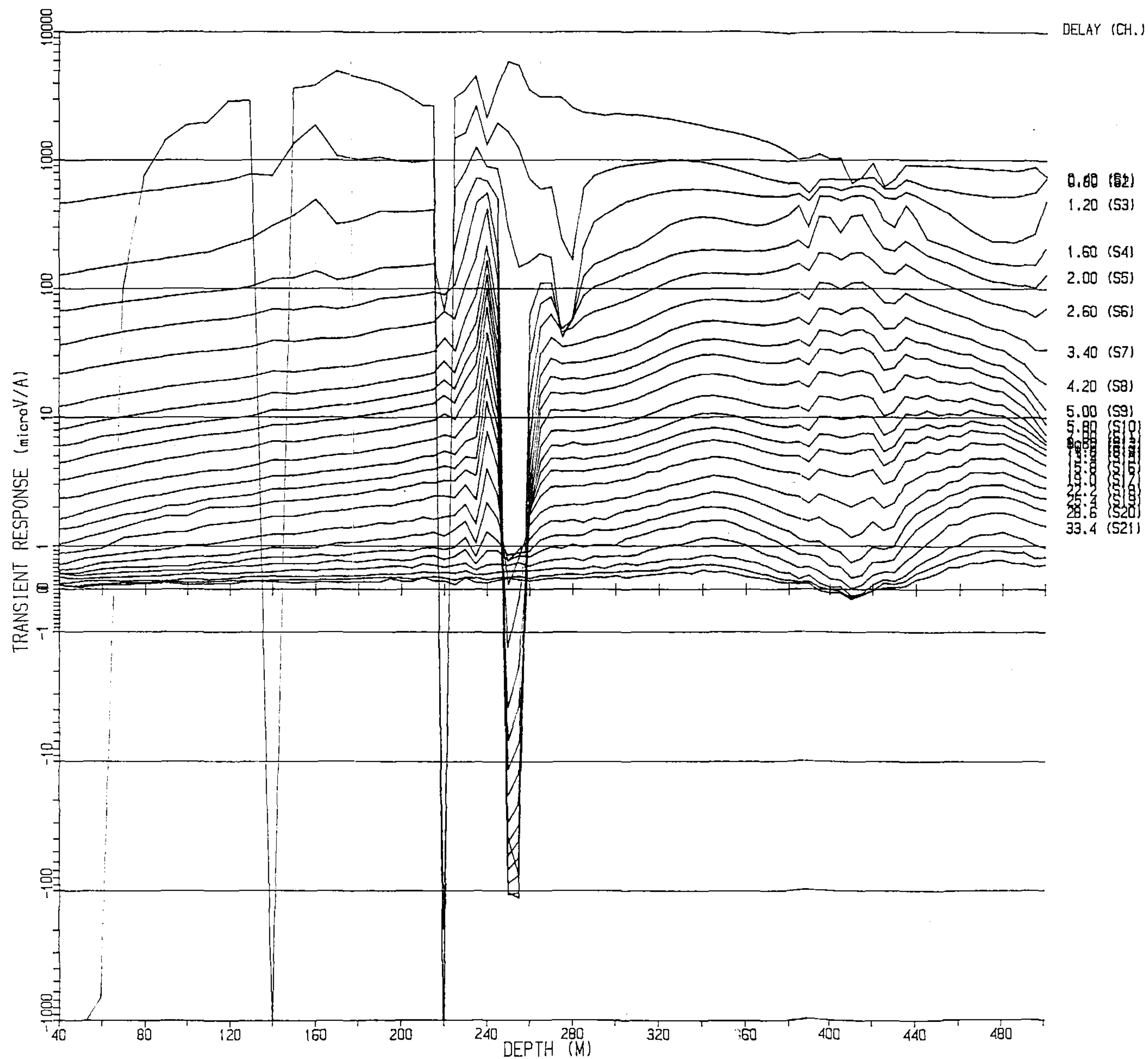
SCALE - 1:2000

058166



Specifications :			R.G.C. EXPLORATION
Survey By: MCSKIMMING_GEOPHYSICS	Min. Curr. = 12.70 Amp	Vertical Scaling:	Sylvester Grid
Operator: P_McSKIMMING	Max. Curr. = 12.80 Amp	Displaced Linear	ZEEHAN TAS.
Date: JAN_1992	Standard time Series		DH SYO14 - 3
Down Hole Loop Configuration		Fixed Tx. Loop - 3	Tem Survey
Instr: Sirotem 1224		56600E-61100N-318RL	Axial Component
		56900E-61100N-331RL	
		56900E-60800N-325RL	
		56600E-60800N-351RL	Hor. Scale - 1 : 2000

058167



SURVEY SPECIFICATIONS

DATA ACQUIS'N : McSKIMMING GEOPHYSICS

SURVEY DATE : JAN 1992
CONFIGURATION : 300M SQUARE TX. LOOP, DRILL HOLE SURVEY
READING INT. : 20 METRES
NO. OF STACKS : 256
TRANSMITTER : MEDIUM POWER
RECEIVER : SIROTEM II S/N 1224
CURRENT : 12.0 AMPS
OPERATOR : P McSKIMMING

PLOT SPECIFICATIONS

HORIZONTAL SCALE - 1:2000
VERTICAL SCALE - LOGARITHMIC 3CM. PER DECADE LINEAR BETWEEN -1 AND +1

TIME DELAYS IN MILLISECONDS
E - EARLY TIME WINDOW
S - STANDARD TIME WINDOW

5 cm

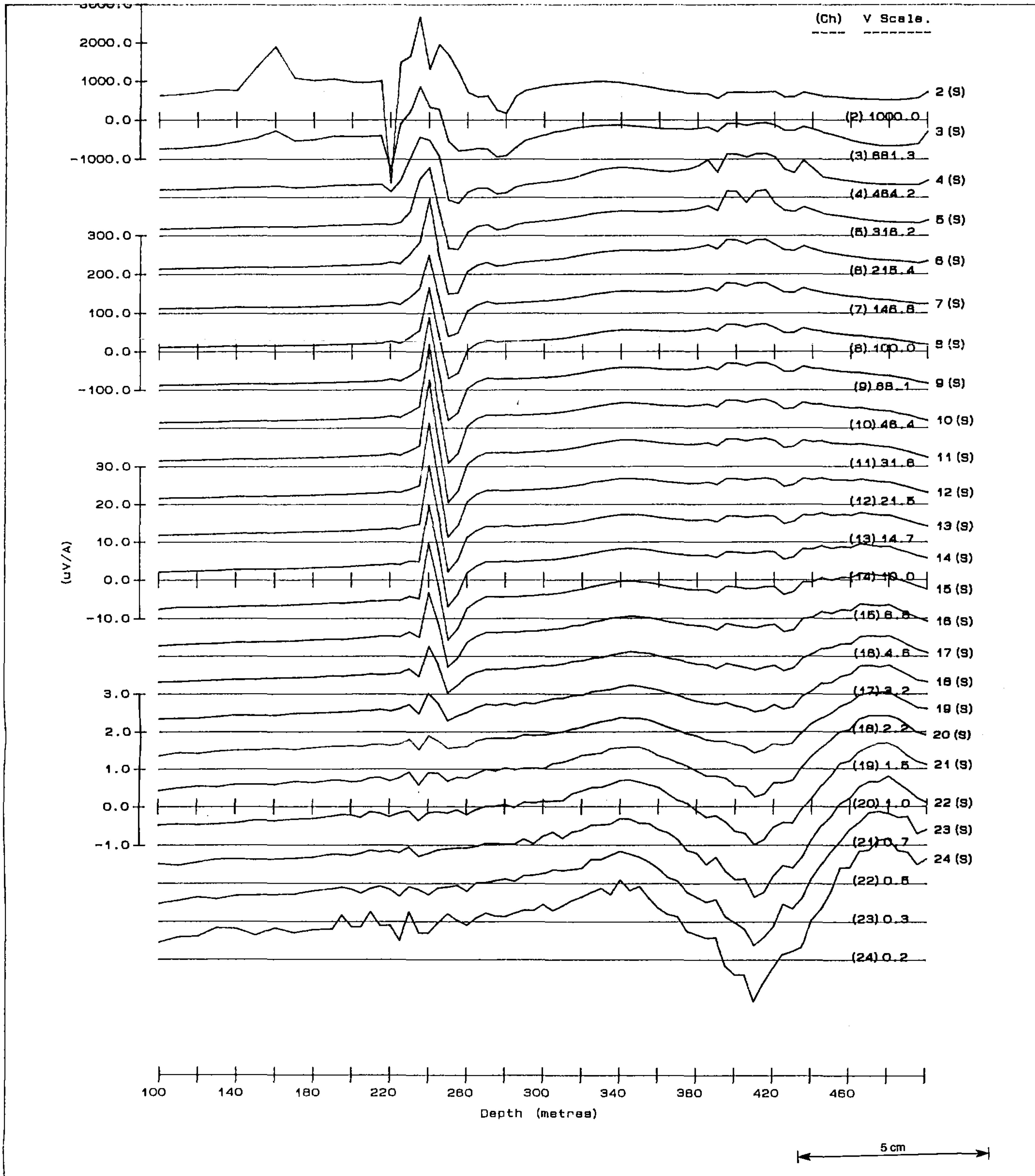
R.G.C. EXPLORATION

ZEEHAN
SYLVESTER

SIROTEM PROFILE
LINE SY014 LP4

SCALE - 1:2000

058168



Specifications :

Survey By:
MCSKIMMING_GEOPHYSICS
Operator: P_McSKIMMING
Date: JAN_1992
Down Hole Loop Configuration
Instr: Sirotem 1224

Current = 12.00 Amp
Standard time Series

Vertical Scaling:
Displaced Linear

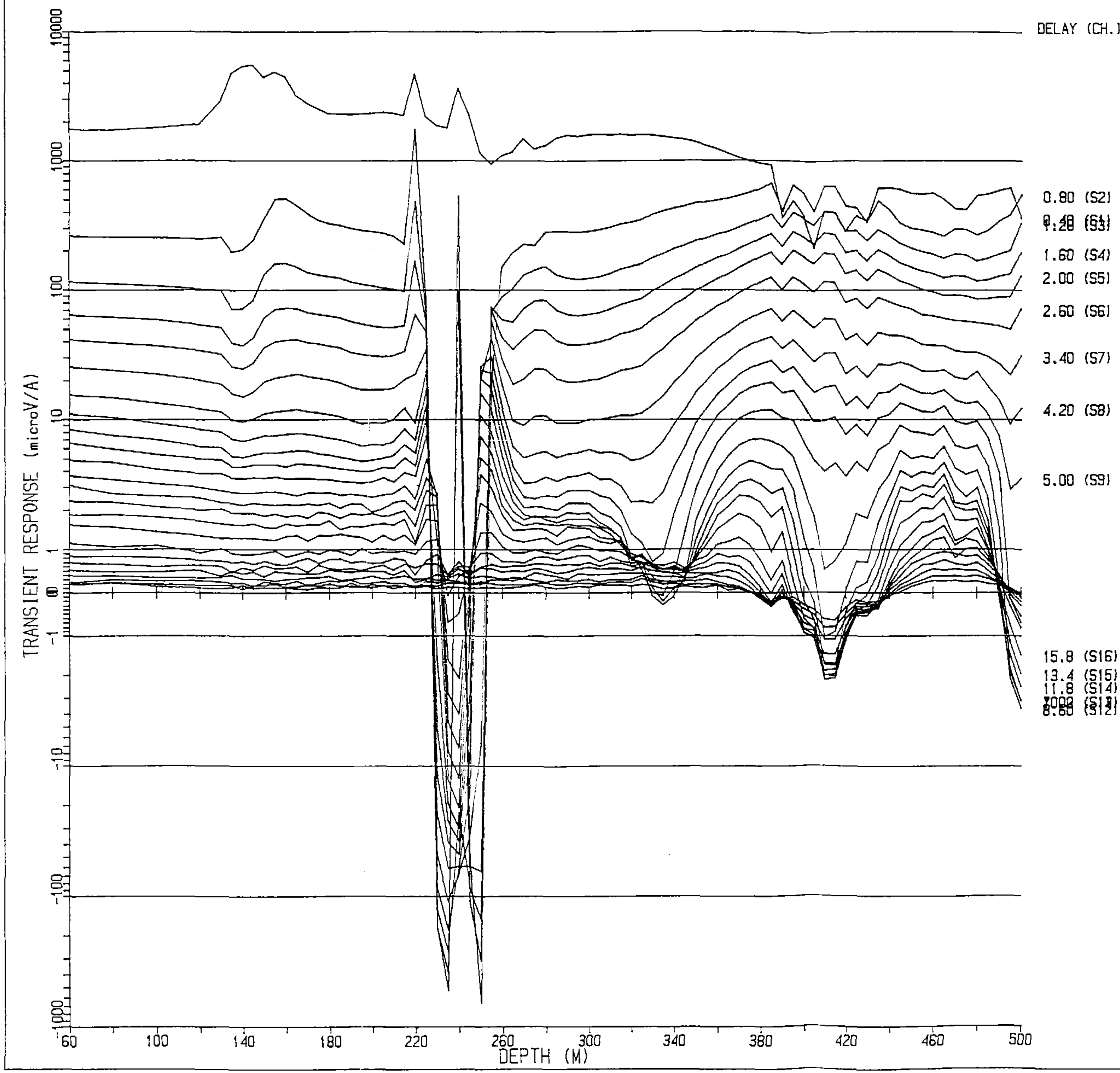
Fixed Tx Loop - 4
56300E-61200N-320RL
56600E-61200N-312RL
56600E-60900N-363RL
56300E-60900N-343RL

A.G.C._EXPLORATION

Sylvester Grid
ZEHAN TAS.
DH SY014 - 4
Tem Survey
Axial Component

Hor. Scale - 1 : 2000

058169



SURVEY SPECIFICATIONS

DATA ACQUIS'N : McSKIMMING GEOPHYSICS

SURVEY DATE : JAN 1992
CONFIGURATION : 300M SQUARE TX. LOOP, DRILL HOLE SURVEY
READING INT. : 20 METRES
NO. OF STACKS : 256
TRANSMITTER : MEDIUM POWER
RECEIVER : SIROTEM II S/N 1224
CURRENT : 13.5 AMPS
OPERATOR : P McSKIMMING

PLOT SPECIFICATIONS

HORIZONTAL SCALE - 1:2000
VERTICAL SCALE - LOGARITHMIC 3CM. PER DECADE LINEAR BETWEEN -1 AND +1

TIME DELAYS IN MILLISECONDS
E - EARLY TIME WINDOW
S - STANDARD TIME WINDOW

5 cm

R.G.C. EXPLORATION

ZEEHAN
SYLVESTER

SIROTEM PROFILE
LINE SY014 LP5

SCALE - 1:2000

058171

APPENDIX 6

Report M050392-Flotation Tests on Sylvester Grid Ore (Envirомet)

058172

ENVIROMET LIMITED
A.C.N. 003 526 430
12 Clearview Place, P.O. Box 677, Brookvale N.S.W. 2100. Telephone: (02) 905 0618 Facsimile: (02) 905 0556

GJP:ka
92/239

Report M050392
(including M060292)

Flotation Tests on Sylvester Grid Ore

for

Renison Goldfields Consolidated

Reported by	:	G.J. Parsons
Testwork by	:	G.J. Parsons
		G.P. Sheldon

April 30, 1992

058173

RENISON GOLDFIELDS CONSOLIDATED LIMITED
A.C.N. 002 048 464

MEMORANDUM

TO	: P.J. Uttley, Hobart
FROM	: J.E. Butler
COPY	: P.W. Cassidy, R.A. Shakesby, G.G. Northcote
SUBJECT	: **SYLVESTER PROJECT FLOTATION TESTWORK**
DATE	: 12 May 1992 **REF:** JEB/1210

Enclosed is report M050392 (including M060292) from Enviromet, dated 30 April 1992, covering scouting froth flotation tests with three Sylvester project samples. I understand report M060292 was specific to the original oxidised sample submitted to the laboratory, and was included in one combined document at my request.

As you are aware the original sample, with a natural acidic slurry pH of 5.5, served mainly to illustrate the possible negative nature of performing physical separations based upon particle surface characteristics with pulverised sulphidic samples stored over a protracted period. In this case the abysmal results do not require further comment.

Although not entirely satisfactory, but at least encouraging, the subsequent limited drill core testwork programme gave results upon which an optimisation schedule could be planned. The most relevant findings included the potential for obtaining acceptable lead and zinc recoveries into individual concentrates, although the differential flotation of zinc and iron would probably involve an "interesting exercise", and the likelihood that a high proportion of the silver values would not report to the financially favourable lead concentrate product.

In conclusion it should be emphasised that the work to date has been relatively superficial, with the potential to improve our knowledge and conclusions significantly in any future exercise as illustrated in the abbreviated list of variables on page 7 of the Enviromet report.

Jim Butler

J.E. Butler

CONTENTS

SUMMARY

Preliminary flotation testwork was carried out on two Pb-Zn-Ag drill core samples from the Sylvester Grid Area, near Zeehan, Tasmania.

The head assays were as follows :

	Pb %	Zn %	Ag ~~%~~ ppm	Fe %	Described as :
SY003	4.09	8.00	56	29.8	Massive Pyrite
SY005	2.42	3.04	21	46.1	Massive Pyrrhotite

Results from rougher flotation tests demonstrated lead concentrates of 50% Pb grade could be produced with lead recoveries of around 80% for SY003 and 90% for SY005. Zinc concentrate zinc grades were low (30% to 40% Zn for SY003) and were lowest for SY005 due to high recoveries of iron sulphides, diluting the concentrates. Additions of lime to pH 10.8 for zinc roughing showed some (although insufficient) depression of iron sulphides. Zinc recoveries were 83% for SY003 and 90% for SY005.

The tests were preliminary and conditions were not developed or optimised. There is considerable scope to improve on the results achieved. The testwork was halted by RGC, apparently due to insufficient reserves to warrant further metallurgical testing.

1. INTRODUCTION

Laboratory flotation tests were undertaken on Sylvester Grid (Zeehan) Pb-Zn-Ag ore. The initial sample, comprising assay rejects, produced very poor flotation recoveries, probably due to oxidation of the sulphide minerals. Two samples of quarter core; one described as massive pyrite, the other as massive pyrrhotite were subsequently received for additional flotation testing.

2. SAMPLES

2.1 Original Sample

The first sample received was 20 kg of assay pulp residues composited by RGC Exploration. This sample comprised equal portions from each subsample from :

T28650-656	7 samples
T30639-644 (no T30640)	5 samples
T30646-653	8 samples
	20

This composite sample was designated No T33601.

2.2 Core Samples

The second batch comprised :

a)	Massive pyrite	SY003;	148.7-156 m	8kg
b)	Massive pyrrhotite	SY005;	518-522m }	
			526-534m }	16kg

3. SAMPLE PREPARATION

One kilogram of the assay reject sample was trial ground for 10 minutes in the laboratory steel ball mill. The product fineness was determined to be 84.6% passing 75 μm. A 9 minute grind time was selected for a 80% passing 75 μm target for flotation tests. A separate sample was also pulverised and submitted for head assay.

The subsequent quarter core samples, SY003 and SY005, were stage crushed to minus 2mm and riffled into 1kg portions for testwork. Trial grinds were not conducted on these samples. Both SY003 and SY005 were ground for 9 minutes with subsamples extracted from the first flotation test feeds for sizing.

The sizings for a 9 minute grind were

SY003	pyrite	78% passing 75 μm
SY005	Pyrrhotite	70% passing 75 μm

Subsamples from each ore sample were pulverised for head assay.

4. HEAD ASSAYS

The head assays on the three composites are listed in Table 1.

TABLE 1

HEAD ASSAYS

All results in ppm unless
otherwise stated.

	T33601	SY 003 Pyrite	SY 005 Pyrrhotite
Pb	2.57%	4.09%	2.42%
Zn	5.12%	8.00%	3.04%
Ag	21	56	21
Fe	39.9%	29.8%	46.1%
Au	0.01	0.06	0.04
S	24.9%	30.0%	32.6%
Cu	798	314	2170
As	430	135	570
Mo	<5	<5	<5
Sb	70	155	35
Cd	200	312	126
Co	<1	<1	<1
Ni	24	61	21
Mn	2610	4390	1870
Cr	20	34	6
V	22	20	32
Al	665	460	690
Ba	16	15	7
Se	<10	<10	<10

5. FLOTATION TESTS

5.1 Sample T33601

A scouting staged rougher flotation test (FT1) was conducted on sample T33601. Reagents included 500g/t NaCN depressant added to the grind, and 50g/t sodium ethyl xanthate additions (SEX) to both lead and zinc roughers. Lime was used for initial pH adjustment, to 8.0 as the natural pH was 5.5, copper sulphate was used for zinc activation and MIBC for frother.

From a feed lead grade of 2.57% lead rougher flotation produced very poor results of 14.6% Pb grade at 45.4% recovery. Total zinc rougher grade was 28.1% Zn at a similarly poor recovery of 49.1% from a head grade of 5.12% Zn. The flotation tails assayed 1.23% Pb and 2.98% Zn. It was considered the fine size of the as received sample may have allowed oxidation of the sulphides which would have contributed to the poor flotation results.

No further tests were conducted on this sample. Subsequently competent core was shipped to Enviromet Limited for flotation tests. As the sample had been stored as quartered cored the extent of any oxidation would be reduced.

5.2 Sample SY003 Pyrite

The conditions of flotation test FT1 were applied to composite SY003 in test FT2 with exception that the zinc rougher pH was raised to 9.0 with lime.

Total lead rougher grade improved to 53.3% Pb at 79.5% recovery. Although significantly better than FT1 results, loss of lead to tails of 14.1% at 0.86% Pb grade was still excessive.

Zinc rougher performance was still poor with 22.3% Zn grade at 66.3% recovery. Iron recovery was high at 23.8% for a grade of 29.1% Fe in the combined zinc rougher. Zinc loss to tails were 29.6% at a grade of 3.35% Zn. The zinc flotation result indicated insufficient collector addition.

Test FT4 was based on FT2 but with additional staged additions of collector, slightly longer lead flotation time and pH adjusted to 10.5-11 with lime for zinc roughing.

Total lead rougher grade decreased to 41.7% Pb but at a slightly higher recovery of 81.2%. The tails lead loss was similar with 14.9% of the lead at 0.84% Pb grade. Lead recovery to the zinc rougher was reduced from 6.4% in FT2 to 3.9% in FT4. Silver recovery was poor at 39.2%.

The zinc rougher result was significantly improved with a 34.0% Zn grade at 82.7% recovery. Zinc losses to tails were still high at 12.4%. Zinc reporting to the lead rougher was 4.9% of the head. The iron grade in the zinc rougher was reduced to 20.6% Fe with a significantly lower recovery of 12.9%. This result was a significant improvement over the initial test.

Silver loss to tails was 43.7%.

At termination of the test program (apparently due to insufficient ore reserves) no further optimisation tests had been trialled. Any further work should examine :

Grind Size
Alternative Collectors
Different Depressants (and different dosage rates)
Rougher/Cleaner Tests

5.3 Sample SY005 Pyrrhotite

The conditions of flotation test FT1 were applied to composite SY005 although no lime additions were made due to the higher natural pH of this sample.

For test FT3 total lead rougher grade was satisfactory at 50.0% Pb at 91.0% recovery. The final tails assayed 0.27% Pb for a recovery loss of 4.7%. Silver recovery was 45.4%.

Although zinc rougher recovery of 91.1% was satisfactory the grade of 5.31% Zn was very poor due to the high iron recovery. The combined zinc rougher assayed 51.6% iron at 64.2% recovery.

This flotation test was repeated (test FT5) with additional staged additions of collector and with a higher pH for zinc roughing (to 10.5-11 with lime) to try to improve depression of iron.

The lead rougher lead recovery was similar at 89.4% but with a lower grade of 43.1% Pb due to marginally higher recoveries of zinc and iron. Silver recovery remained poor at 44.2%.

The zinc rougher performance was virtually the same with 6.39% Zn grade at 90.3% recovery with 50.3% Fe at 49.4% recovery. As with test FT3, iron recovery was substantially reduced with comparatively minor zinc loss for shorter collection time. The first 2 minute zinc rougher assay 32.6% Zn at 68.2% recovery, and 27.7% Fe at 4% recovery, in comparison to the total 12 minute rougher concentrate.

Any further tests should examine the factors recommended for composite SY003, with particular reference to depression of iron.

FLOTATION TEST 1

		GRIND	FLOTATION	
DATE	11/2/92	Ball mill	cell	Denver D1
SAMPLE	Pb/ Zn/Ag ore	9 mins	rpm	1300
WEIGHT	1kg	60% solids	Vol.	2.7 L
		P80 = 75μm		

OBJECTIVE: Staged rougher test

OPERATION	REAGENTS NaCN g/t	CaO g/t	SEX g/t	CuSO4 g/t	MIBC g/t	pH	cond. time (min)	float time (min)
Grind	500							
Aeration		4580				5.5	3.0	
Conditioning			50			8.0	2.0	
Pb float 1					20	7.8		2.0
Pb float 2								2.0
Pb float 3						7.3		3.0
Conditioning				800		6.9	5.0	
Conditioning			50				2.0	
Zn float 1					10	7.0		2.0
Zn float 2								2.0
Zn float 3								4.0
Zn float 4						7.0		4.0

PRODUCT	wt. g	wt. %	ASSAYS Pb %	Zn %	Ag g/t	Fe %	Distribution (%) Pb	Zn	Ag	Fe
Pb Conc 1	34	3.5	21.2	3.91	142	29.7	32.0	2.5	23.6	2.5
Pb Conc 2	15	1.5	10.5	5.01	81	38.9	6.7	1.3	5.7	1.4
Pb Conc 3	22	2.2	6.97	5.79	47	41.9	6.7	2.3	4.9	2.2
Zn Conc 1	23	2.3	3.06	34.2	39	25.2	3.0	14.2	4.2	1.4
Zn Conc 2	18	1.8	2.47	32.7	32	26.7	2.0	10.9	2.8	1.2
Zn Conc 3	31	3.2	2.33	25.5	28	30.2	3.2	14.6	4.2	2.3
Zn Conc 4	23	2.3	2.31	22.1	29	32.0	2.3	9.3	3.2	1.8
Tail	815	83.2	1.23	2.98	13	43.4	44.1	44.8	51.3	87.2
Calc Head	981	100.0	2.32	5.53	21	41.4	100.0	100.0	100.0	100.0
Pb Conc 1	34	3.5	21.2	3.91	142	29.7	32.0	2.5	23.6	2.5
Pb Cons 1 to 2	49	5.0	18.0	4.24	124	32.4	38.7	3.8	29.3	3.9
Pb Cons 1 to 3	71	7.2	14.6	4.72	100	35.4	45.4	6.1	34.2	6.1
Zn Cons 1	23	2.3	3.06	34.2	39	25.2	3.0	14.2	4.2	1.4
Zn Cons 1 to 2	41	4.1	2.80	33.5	36	25.9	5.0	25.1	7.0	2.6
Zn Cons 1 to 3	72	7.3	2.59	30.1	32	27.8	8.2	39.7	11.3	4.9
Zn Cons 1 to 4	95	9.6	2.53	28.1	32	28.8	10.5	49.1	14.5	6.7
Actual Head			2.57	5.12	21	39.9				

FLOTATION TEST 2

		GRIND	FLOTATION	
DATE	19/3/92	Ball mill	cell	Denver D1
SAMPLE	SY003 Pyrite	9 mins	rpm	1300
WEIGHT	1kg	60% solids	Vol.	2.7 L
		78% pass 75μm		

OBJECTIVE: Staged rougher test

OPERATION	REAGENTS					pH	cond. time (min)	float time (min)
	NaCN g/t	CaO g/t	SEX g/t	CuSO4 g/t	MIBC g/t			
Grind	500							
Aeration		240				6.2	3.0	
Conditioning			50			8.0	2.0	
Pb float 1					20	7.9		2.0
Pb float 2						7.7		2.0
Pb float 3						7.6		3.0
Conditioning		370		800		5.7	5.0	
Conditioning			50			9.0	2.0	
Zn float 1					10	8.9		2.0
Zn float 2						8.7		2.0
Zn float 3						8.5		4.0
Zn float 4						8.3		4.0

PRODUCT	wt. g	wt. %	ASSAYS				Distribution (%)			
			Pb %	Zn %	Ag g/t	Fe %	Pb	Zn	Ag	Fe
Pb Conc 1	45	4.6	67.1	3.55	351	7.19	71.5	2.0	24.9	1.1
Pb Conc 2	9	0.9	24.8	8.54	193	22.6	5.4	1.0	2.8	0.7
Pb Conc 3	9	0.9	12.4	9.63	130	26.5	2.5	1.1	1.8	0.8
Zn Conc 1	161	16.3	1.03	23.9	57	28.9	3.9	49.1	14.5	16.4
Zn Conc 2	42	4.2	1.23	20.2	132	29.3	1.2	10.8	8.7	4.3
Zn Conc 3	20	2.0	1.59	16.6	54	29.4	0.7	4.2	1.7	2.0
Zn Conc 4	10	1.0	1.94	16.7	58	29.5	0.5	2.2	0.9	1.1
Tail	694	70.1	0.86	3.35	41	30.2	14.1	29.6	44.7	73.5
Calc Head	991	100.0	4.27	7.93	64	28.8	100.0	100.0	100.0	100.0
Pb Conc 1	45	4.6	67.1	3.55	351	7.19	71.5	2.0	24.9	1.1
Pb Cons 1 to 2	54	5.5	59.9	4.40	324	9.82	77.0	3.0	27.7	1.9
Pb Cons 1 to 3	63	6.4	53.3	5.12	297	12.1	79.5	4.1	29.5	2.7
Zn Cons 1	161	16.3	1.03	23.9	57	28.9	3.9	49.1	14.5	16.4
Zn Cons 1 to 2	203	20.5	1.07	23.2	72	29.0	5.1	59.9	23.1	20.7
Zn Cons 1 to 3	223	22.5	1.12	22.6	71	29.0	5.9	64.1	24.8	22.7
Zn Cons 1 to 4	233	23.6	1.15	22.3	70	29.1	6.4	66.3	25.8	23.8
Actual Head			4.09	8.00	56	29.8				

FLOTATION TEST 3

		GRIND	FLOTATION	
DATE	19/3/92	Ball mill	cell	Denver D1
SAMPLE	SY005 Pyrrhotite	9 mins	rpm	1300
WEIGHT	1kg	60% solids	Vol.	2.7 L
		70% pass 75μm		

OBJECTIVE: Staged rougher test

OPERATION	REAGENTS					pH	cond. time (min)	float time (min)
	NaCN g/t	CaO g/t	SEX g/t	CuSO4 g/t	MIBC g/t			
Grind	500							
Aeration						9.7	3.0	
Conditioning			50			9.4	2.0	
Pb float 1					20	9.3		2.0
Pb float 2						9.2		2.0
Pb float 3						9.1		3.0
Conditioning				800		9.0	5.0	
Conditioning			50			7.6	2.0	
Zn float 1					10	7.8		2.0
Zn float 2						7.9		2.0
Zn float 3						8.0		4.0
Zn float 4						8.1		4.0

PRODUCT	wt. g	wt. %	ASSAYS				Distribution (%)			
			Pb %	Zn %	Ag g/t	Fe %	Pb	Zn	Ag	Fe
Pb Conc 1	33	3.3	60.2	2.68	323	11.1	85.9	2.8	41.7	0.8
Pb Conc 2	5	0.5	18.5	5.23	133	24.7	4.2	0.9	2.8	0.3
Pb Conc 3	4	0.4	5.13	5.81	58	29.2	0.8	0.7	0.9	0.3
Zn Conc 1	161	16.3	0.21	14.4	12	43.2	1.5	73.6	7.6	16.0
Zn Conc 2	83	8.4	0.18	3.39	18	53.4	0.6	8.9	5.9	10.2
Zn Conc 3	208	21.0	0.18	1.13	13	55.0	1.6	7.4	10.6	26.3
Zn Conc 4	89	9.0	0.14	0.41	15	57.1	0.5	1.2	5.3	11.7
Tail	405	41.0	0.27	0.35	16	36.9	4.7	4.5	25.4	34.4
Calc Head	988	100.0	2.34	3.19	26	44.0	100.0	100.0	100.0	100.0
Pb Conc 1	33	3.3	60.2	2.68	323	11.1	85.9	2.8	41.7	0.8
Pb Cons 1 to 2	38	3.9	54.4	3.03	297	12.9	90.2	3.7	44.5	1.1
Pb Cons 1 to 3	42	4.3	50.0	3.28	275	14.4	91.0	4.4	45.4	1.4
Zn Cons 1	161	16.3	0.21	14.4	12	43.2	1.5	73.6	7.6	16.0
Zn Cons 1 to 2	245	24.7	0.20	10.7	14	46.7	2.1	82.5	13.4	26.2
Zn Cons 1 to 3	452	45.7	0.19	6.28	14	50.5	3.7	90.0	24.0	52.5
Zn Cons 1 to 4	541	54.8	0.18	5.31	14	51.6	4.3	91.1	29.3	64.2
Actual Head			2.42	3.04	21	46.1				

FLOTATION TEST 4

		GRIND	FLOTATION	
DATE	7/4/92	Ball mill	cell	Denver D1
SAMPLE	SY003 Pyrite	9 mins	rpm	1300
WEIGHT	1kg	60% solids	Vol.	2.7 L
		78% pass 75μm		

OBJECTIVE: As for FT 2 but with additional collector to Pb and Zn roughers and Zn roughing at pH 10.5 - 11

OPERATION	REAGENTS					pH	cond. time (min)	float time (min)
	NaCN g/t	CaO g/t	SEX g/t	CuSO4 g/t	MIBC g/t			
Grind	500							
Aeration		330				6.1	3.0	
Conditioning			50			8.5	2.0	
Pb float 1					20	8.2		2.0
Pb float 2			20		10	8.0		2.0
Pb float 3			20			7.8		5.0
Conditioning		860		800		7.6	5.0	
Conditioning			50			10.8	2.0	
Zn float 1					10	10.7		2.0
Zn float 2		130	20			10.8		2.0
Zn float 3		110	10			11.0		4.0
Zn float 4			10			10.7		4.0

PRODUCT	wt. g	wt. %	ASSAYS Pb %	Zn %	Ag g/t	Fe %	Distribution (%) Pb	Zn	Ag	Fe
Pb Conc 1	42	4.2	68.6	2.43	386	5.26	69.5	1.4	30.1	0.8
Pb Conc 2	10	1.0	29.0	7.55	221	22.4	7.2	1.0	4.2	0.8
Pb Conc 3	28	2.8	6.45	6.45	93	36.3	4.4	2.5	4.9	3.5
Zn Conc 1	104	10.5	0.76	41.6	50	16.0	1.9	58.4	9.7	5.7
Zn Conc 2	60	6.0	0.92	25.2	48	27.2	1.3	20.3	5.3	5.6
Zn Conc 3	11	1.1	1.56	20.4	67	24.9	0.4	3.0	1.3	0.9
Zn Conc 4	6	0.6	1.63	12.5	61	28.5	0.2	1.0	0.7	0.6
Tail	733	73.7	0.84	1.26	32	32.5	14.9	12.4	43.7	82.1
Calc Head	993	100.0	4.15	7.46	54	29.2	100.0	100.0	100.0	100.0
Pb Conc 1	42	4.2	68.6	2.43	386	5.26	69.5	1.4	30.1	0.8
Pb Cons 1 to 2	52	5.2	60.8	3.44	353	8.64	76.8	2.4	34.3	1.6
Pb Cons 1 to 3	80	8.1	41.7	4.50	262	18.3	81.2	4.9	39.2	5.1
Zn Cons 1	104	10.5	0.76	41.6	50	16.0	1.9	58.4	9.7	5.7
Zn Cons 1 to 2	164	16.5	0.82	35.6	49	20.1	3.2	78.7	15.0	11.3
Zn Cons 1 to 3	175	17.6	0.86	34.7	50	20.4	3.7	81.7	16.4	12.3
Zn Cons 1 to 4	181	18.2	0.89	34.0	51	20.6	3.9	82.7	17.1	12.9
Actual Head			4.09	8.00	56	29.8				

FLOTATION TEST 5

		GRIND	FLOTATION	
DATE	8/4/92	Ball mill	cell	Denver D1
SAMPLE	SY005 Pyrrhotite	9 mins	rpm	1300
WEIGHT	1kg	60% solids	Vol.	2.7 L
		70% pass 75μm		

OBJECTIVE: As for FT 3 but with additional collector to Pb and Zn roughers and Zn roughing at pH 10.5 - 11

OPERATION	REAGENTS					pH	cond. time (min)	float time (min)
	NaCN g/t	CaO g/t	SEX g/t	CuSO4 g/t	MIBC g/t			
Grind	500							
Aeration						9.8	3.0	
Conditioning			50			9.5	2.0	
Pb float 1					20	9.5		2.0
Pb float 2			20			9.4		2.0
Pb float 3			20			9.3		3.0
Conditioning		620		800		9.2	5.0	
Conditioning			50			10.8	2.0	
Zn float 1					10	10.7		2.0
Zn float 2		130	20		10	10.9		2.0
Zn float 3			10		10	10.7		4.0
Zn float 4		70	10			10.8		4.0

PRODUCT	wt.	wt.	ASSAYS				Distribution (%)			
	g	%	Pb %	Zn %	Ag g/t	Fe %	Pb	Zn	Ag	Fe
Pb Conc 1	38	3.8	53.7	2.98	298	13.9	86.6	3.6	41.5	1.2
Pb Conc 2	4	0.4	9.15	5.21	91	29.2	1.6	0.7	1.4	0.3
Pb Conc 3	7	0.7	4.29	5.91	54	32.2	1.2	1.3	1.3	0.5
Zn Conc 1	65	6.5	0.23	32.6	26	27.7	0.6	68.2	6.2	4.0
Zn Conc 2	96	9.6	1.10	5.32	37	51.2	4.5	16.4	13.0	11.0
Zn Conc 3	182	18.2	0.12	0.83	7	55.4	0.9	4.9	4.7	22.5
Zn Conc 4	96	9.6	0.46	0.25	42	55.0	1.9	0.8	14.9	11.8
Tail	512	51.2	0.12	0.25	9	42.5	2.6	4.1	17.0	48.7
Calc Head	1000	100.0	2.34	3.11	27	44.7	100.0	100.0	100.0	100.0
Pb Conc 1	38	3.8	53.7	2.98	298	13.9	86.6	3.6	41.5	1.2
Pb Cons 1 to 2	42	4.2	49.3	3.20	278	15.4	88.2	4.3	42.9	1.4
Pb Cons 1 to 3	49	4.9	43.1	3.57	247	17.7	89.4	5.6	44.2	1.9
Zn Cons 1	65	6.5	0.23	32.6	26	27.7	0.6	68.2	6.2	4.0
Zn Cons 1 to 2	161	16.1	0.75	16.4	33	41.7	5.1	84.6	19.3	15.0
Zn Cons 1 to 3	343	34.3	0.41	8.11	19	48.9	6.1	89.5	24.0	37.5
Zn Cons 1 to 4	439	43.9	0.42	6.39	24	50.3	7.9	90.3	38.8	49.4
Actual Head			2.42	3.04	21	46.1				

058187

APPENDIX 7

Rock Property Measurements

PROJECT: ZEEHAN (E.L. 42\07) - ROCK CHIP SAMPLING PROGRAMME

SAMPLE NUMBER	TNORTH metres	TEAST metres	CODE	SAMPLR	DATE	GRID	KIND	ROCK	UNIT	ALTER	OREMIN	VEINS
T 34701	360600	362300	5521	JC	MAY.92	AMG	RC	SILT	Db			
Remark:SISN from King st, between Blackwood & Leventhorpe st. Density: 2.36												
T 34702	360850	362100	5521	JC	MAY.92	AMG	RC	SILT	Db			
Remark:SNSI from Main st, about 50m east of Gellibrand st. Density : 2.42												
T 34703	360500	361500	5521	JC	MAY.92	AMG	RC	SAND	Df			
Remark:Florence "Quartzite" from Cst tramway, 200m W of Zeehan. Density:2.40												
T 34704	360200	361200	5521	JC	MAY.92	AMG	RC	SAND	Sc			
Remark:SNST&pebbly grit of Crotty "Qtzite",Cst tramway quarry. Density: 2.25												
T 34705	360150	361300	5521	JC	MAY.92	AMG	RC	SAND	Sa			
Remark:Amber slate (strongly cleaved shale), from Cst tramway. Density: 2.37												
T 34706	360150	361425	5521	JC	MAY.92	AMG	RC	SAND	Sk			
Remark:Keel Quartzite from Comstock Tramway. Density: 2.63												
T 34707	360350	362300	5521	JC	MAY.92	AMG	RC	SILT	Db			
Remark:From Bell Shale, on King St, east of Pillinger St. Density: 2.39												
T 34708	359900	362500	5521	JC	MAY.92	AMG	RC	Sand	Df			
Remark:Florence qtzite from quarry,W of Strahan Hwy. Density : 2.58												
T 34709	359900	362500	5521	JC	MAY.92	AMG	RC	SAND	Df			
Remark:Density: 2.33. Same quarry as T34708,Sth side of pit.fossiliferous.												
T 34710	360050	362550	5521	JC	MAY.92	AMG	RC	SILT	Db			
Remark:Siltstone & silty sandstone from cutting on Strahan Hwy.Density: 2.31												
T 34711	360150	362550	5521	JC	MAY.92	AMG	RC	SILT	Db			
Remark:As for T34710. Density: 2.38.												
T 34712	358850	362550	5521	JC	MAY.92	AMG	RC	SILT	Sc			
Remark:SISN ?Crotty qtzite.from road to Tasmanian smelter site.Density:2.30												
T 34713	357400	362200	5521	JC	MAY.92	AMG	RC	LIMS	Og			
Remark:Sample taken from Oceana minesite. Density: 2.71												
T 34714	354400	364400	5521	JC	MAY.92	AMG	RC	SHAL	Db			
Remark:Str.cleaved shale from Strahan Hwy,near little Henty bdg.Density:2.44												
T 34715	354700	364650	5521	JC	MAY.92	AMG	RC	SHAL	Db			
Remark:Of T34714 from North of Little Henty bridge. Density: 2.43												
T 34716	355000	364900	5521	JC	MAY.92	AMG	RC	SAND	Dm			
Remark:Qtzite of Moina sst,from Strahan Hwy,Nth little Henty Rv.Density:2.48												
T 34717	359950	362450	5521	JC	MAY.92	AMG	RC	SAND	Df			
Remark:Fossiliferous sandstone from quarry west of Strahan Hwy.Density: 2.36												

Laboratory:
Method :
Det. Limit:

058188

RGC EXPLORATION PTY.LTD.   DATA SHEET   Page 2
12/ 8/92

PROJECT: ZEEHAN (E.L. 42\87) - ROCK CHIP SAMPLING PROGRAMME

SAMPLE NUMBER	TNORTH metres	TEAST metres	CODE	SAMPLR	DATE	GRID	KIND	ROCK	UNIT	ALTER	OREMIN	VEINS
T 34718	363100	361200	5521	JC	MAY.92	AMG	RC	LIMS	Og			
Remark:Gordon Limestone from Tasmanian Crown mineshaft. Density : 2.82												
T 34719	363800	361300	5521	JC	MAY.92	AMG	RC	SAND	Sc			
Remark:Coarse sst and grit from Parting lake Rd.at Parting Lake.Density:2.20												
T 34720	359600	355150	5521	JC	MAY.92	AMG	RC	GABR	Cg			
Remark:McIvor Hill gabbro from Daverns/Kynance Rd,Near Trial.H.Rd.Den: 2.76												
T 34721	360270	357400	5521	JC	MAY.92	AMG	RC	SHAL	Po			
Remark:Graphitic shale from Comstock opencut(Zeehan) Sth ? , middle bench?												
T 34722	361770	360120	5521	JC	MAY.92	AMG	RC	BASL	Po			
Remark:Montana Spilite from Trial Harbour Road near Cemetery? Density: 2.44												
T 34723	361850	359660	5521	JC	MAY.92	AMG	RC	BASL	Po			
Remark:Montana Spilite from Trial Harbour Road. Density : 2.29												
T 34724	367250	368000	5521	JC	MAY.92	AMG	RC	GABR	Cg			
Remark:From Murchison Hwy, Tunnel Hill. Density : 2.86												
T 34725	367350	368050	5521	JC	MAY.92	AMG	RC	SERP	Cv			
Remark:Density : 2.55, from Stychtite quarry, Tunnel Hill.												
T 34726	367750	368100	5521	JC	MAY.92	AMG	RC	SERP	Cv			
Remark:From stichitic quarry. Density : 2.49												

Laboratory:
Method :
Det. Limit:

058189

058190

APPENDIX 8

Diamond Drill Logs

LYNX GEOSYSTEMS INCORPORATED

R.G.C. Exploration Pty Ltd

SYLVESTER GRID

DIAMOND DRILLHOLE : SY002

PROJECT IDEN :SYLVESTER START DATE : 31 MAY 90 COMPLETION DATE : 26 JUN 90 LOGGED BY:DAVID JOHN CROSSING
COLLAR NORTHING: 61368.30 COLLAR EASTING : 58889.09 COLLAR ELEVATION: 321.75 GRID AZIMUTH : 0.00
DRILLED BY : D.D.T TOTAL LENGTH : 534.50 CORE/HOLE SIZE : HQNQ

DRILL SAMPLE DENSITY MEASUREMEN

From	To	NumberC	DENSITY
60.00	70.00	34727	2.63
120.00	130.00	34728	2.80
190.00	200.00	34729	2.88
300.00	310.00	34730	2.83

CRA Exploration Pty Ltd

SYLVESTER GRID

DIAMOND DRILLHOLE : SY003

PROJECT IDEN :SYLVESTER
COLLAR NORTHING: 60790.41
DRILLED BY : D.D.T

START DATE : 14 JUN 90
COLLAR EASTING : 57785.80
TOTAL LENGTH : 526.50

COMPLETION DATE :
COLLAR ELEVATION: 305.75
CORE/HOLE SIZE : HQNQ

LOGGED BY:DAVID JOHN CROSSING
GRID AZIMUTH : 0.00

DRILL SAMPLE DENSITY MEASUREMEN

From	To	NumberC	DENSITY
180.00	190.00	34731	3.64
220.00	230.00	34732	2.52
340.00	350.00	34733	3.06
430.00	440.00	34734	2.70
512.00	525.00	34735	2.77

05080152

N.G.C. Exploration Pty Ltd

SYLVESTER GRID

DIAMOND DRILLHOLE : SYD04

PROJECT IDEN :SYLVESTER START DATE : 14 NOV 90 COMPLETION DATE : 29 NOV 90 LOGGED BY:MARK J FLEMMING
COLLAR NORTHING: 60854.24 COLLAR EASTING : 57635.13 COLLAR ELEVATION: 304.92 GRID AZIMUTH : 0.00
DRILLED BY : D.D.T TOTAL LENGTH : 343.50 CORE/HOLE SIZE : HQNQ

DRILL SAMPLE DENSITY MEASUREMEN

From	To	NumberC	DENSITY
100.00	110.00	34736	2.87
220.00	230.00	34737	2.86
310.00	320.00	34738	2.71

R.G.C. Exploration Pty Ltd

SYLVESTER GRID

SURFACE DIAMOND DRILLHOLE : SY005

PROJECT IDEN :SYLVESTER
START DATE : 27 NOV 90
COMPLETION DATE : 3 DEC 90
LOGGED BY:MARK J FLEMMING
COLLAR NORTHING: 60649.53
COLLAR EASTING : 57201.05
COLLAR ELEVATION: 292.42
GRID AZIMUTH : 0.00
DRILLED BY : L.Y.
TOTAL LENGTH : 666.80
CORE/HOLE SIZE : HQNQ

DRILL SAMPLE DENSITY MEASUREMEN

From	To	NumberC	DENSITY
110.00	120.00	34739	2.83
200.00	210.00	34740	2.70
490.00	500.00	34741	3.08
610.00	620.00	34742	2.77

05814

LYNX GEOSYSTEMS INCORPORATED

Page: 1 Date: 8 AUG 92

R.G.C. Exploration Pty Ltd

SYLVESTER GRID

SURFACE DIAMOND DRILLHOLE : SY008

PROJECT IDEN :SYLVESTER START DATE : 1 APR 91 COMPLETION DATE : 13 MAY 91 LOGGED BY:DAVID JOHN CROSSING
COLLAR NORTHING: 60773.76 COLLAR EASTING : 57199.90 COLLAR ELEVATION: 309.49 GRID AZIMUTH : 0.00
DRILLED BY : D.D.T TOTAL LENGTH : 421.00 CORE/HOLE SIZE : HQNQ

DRILL SAMPLE DENSITY MEASUREMEN

From	To	NumberC	DENSITY
300.00	310.00	34743	2.74
350.00	360.00	34744	2.70

058195

R.G.C. Exploration Pty Ltd

SYLVESTER GRID

SURFACE DIAMOND DRILLHOLE : SY009

PROJECT IDEN :SYLVESTER
COLLAR NORTHING: 60963.00
DRILLED BY : D.D.T

START DATE : 14 MAY 91
COLLAR EASTING : 57434.00
TOTAL LENGTH : 597.90

COMPLETION DATE :
COLLAR ELEVATION: 310.00
CORE/HOLE SIZE : HQNQ

LOGGED BY:DAVID JOHN CROSSING
GRID AZIMUTH : 0.00

DRILL SAMPLE DENSITY MEASUREMEN

From	To	NumberC	DENSITY
90.00	100.00	34745	3.00
220.00	230.00	34746	2.62
310.00	320.00	34747	2.72
440.00	450.00	34748	3.00
550.00	560.00	34749	2.23

0581096

LYNX GEOSYSTEMS INCORPORATED

R.G.C. Exploration Pty Ltd

SYLVESTER GRID

SURFACE DIAMOND DRILLHOLE : SY010

PROJECT IDEN :SYLVESTER
START DATE : 14 OCT 91
COMPLETION DATE : 14 NOV 91
LOGGED BY:DAVID JOHN CROSSING
COLLAR NORTHING: 61249.00
COLLAR EASTING : 56797.00
COLLAR ELEVATION: 334.89
GRID AZIMUTH : 0.00
DRILLED BY : D.D.T.
TOTAL LENGTH : 670.80
CORE/HOLE SIZE : HQNQ

SURVEY FLAG	SURVEY POINT LOCATION	FORESIGHT	AZIMUTH (DEGREES)	VERTICAL ANGLE (DEGREES)	NORTHING	EASTING	ELEVATION
000	0.00		180.00	-62.00	61249.00	56797.00	334.89
001	20.00		178.56	-60.75			
002	40.00		178.71	-62.00			
003	60.00		178.91	-62.25			
004	80.00		179.11	-62.50			
005	100.00		178.76	-62.25			
006	120.00		179.53	-62.25			
007	140.00		179.73	-62.25			
008	160.00		181.08	-62.00			
009	180.00		181.85	-62.00			
010	200.00		183.18	-62.00			
011	220.00		183.00	-62.00			
012	240.00		183.50	-61.75			
013	260.00		183.44	-61.50			
014	280.00		183.64	-61.50			
015	300.00		183.86	-61.25			
016	320.00		184.57	-61.50			
017	340.00		184.18	-61.00			
018	360.00		184.34	-60.75			
019	380.00		184.78	-60.75			
020	400.00		186.09	-60.50			
021	420.00		186.45	-60.00			
022	440.00		186.91	-59.75			
023	460.00		187.09	-59.25			
024	480.00		187.53	-59.25			
025	500.00		187.70	-59.00			
026	520.00		189.13	-59.00			
027	540.00		187.64	-59.25			
028	560.00		189.60	-59.75			
029	580.00		189.27	-60.00			
030	600.00		188.39	-60.00			

R HED	This hole was collared to intersect the western extension of
R HED	the magnetite-serpentinite skarn and masiive pyrrhotite
R HED	replacement body first intersected by SY005. Based on detailed
R HED	magnetic interpretation, the steeply northerly dipping body
R HED	would be intersected at a downhole depth of about 500m.
R HED	The hole remained in melange to 101.5m then traversed

058197

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY010 (CONTINUED)

R HED psammo-pelites and melange to 210.6m. From 210.6 - 510.6
R HED sandstone dominated the sediments intersected. Over the
R HED interval 510.6 - 518m (7.4m) the hole intersected
R HED magnetite-serpentinite skarn and patchy pyrrhotite with minor
R HED sphalerite, galena and chalcopyrite. From 518 - 547.4m the hole
R HED passed through pelites then encountered another magnetite skarn
R HED over the interval 547.4 - 567.9m. The skarn had a diffuse lower
R HED contact, passing downward into carbonate with only patchy
R HED magnetite-serpentinite. Below 575m the hole encountered melange
R HED and pelites to total depth (670.8m). These were hornfelsed
R HED below 578m.
R HED The hole explained the source of the magnetic anomaly but
R HED failed to encounter significant base metal mineralisation.

	- Interval - From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
	0.00	22.00			PRECOLLAR.	
	22.00	101.50			MELANGE: medium grey, moderately carbonated, massive, strongly foliated, brecciated, gradational base, hard, moderately broken core, 1% patches of pyrite.	
R	22.00	101.50			A typical (upper?) Oonah melange, with the following features;	
R	22.00	101.50			1) Monomict; clasts are virtually all sandstone.	
R	22.00	101.50			2) Clasts are sub-rounded to sub-angular.	
R	22.00	101.50			3) Clasts vary from high sphericity to elongate/lenticular.	
R	22.00	101.50			4) Clasts are <1mm - 50cm in diameter (poorly sorted).	
R	22.00	101.50			5) Matrix is fine grained, carbonaceous/graphitic.	
R	22.00	101.50			6) Matrix has well developed foliation of variable orientation.	
R	22.00	101.50			(ie. folded)	
R	22.00	101.50			7) Lenticular clasts (boudins) are aligned with foliation.	
R	22.00	101.50			8) Matrix supported.	
R	22.00	101.50			9) Contacts are gradational grading laterally into strained	
R	22.00	101.50			boudinaged psammo-pelites (interbedded psammites and pelites).	
R	22.00	101.50			The melange is probably formed as a result of intense	
R	22.00	101.50			flattening strain, as there is little evidence of rotation of	
R	22.00	101.50			boudins. Occasional small faults cross-cut melange, displacing	
R	22.00	101.50			boudins.	
					22.00 101.50 100% MELANGE: medium grey, moderately carbonated, massive, strongly foliated, brecciated, gradational base, hard, moderately broken core, 1% patches of pyrite, 1% veins of sercite.	
					95.90 97.60 100% SANDSTONE WITH SILTSTONE.	
					97.60 101.50 100% MELANGE: medium grey, moderately carbonated, microfaults, strongly foliated, brecciated, microfault: ca gradational base, 45, hard, moderately broken core, 1% patches of pyrite.	

058198

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY010 (CONTINUED)

	- Interval - From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
	101.50	121.50			SILTSTONE: grey-tan, medium bedded, indistinctly bedded. disrupted bedding, boudinaged, bedding: ca 50, microfault: ca 45, hard, moderately broken core, 3 % veins of quartz, 1% veins of epidote, 3 % disseminations (veins of pyrite.	UPPER OONAH
R	101.50	121.50			Microfaults form at least two sets, and most have strong	
R	101.50	121.50			slickensiding and/or fibre growth. Siltstone is occasionally	
R	101.50	121.50			limey.	
					101.50 121.50 100% SILTSTONE: grey-tan, medium bedded, indistinctly bedded, sheared, faulted, foliation: ca 45, fault: ca 45, hard, moderately broken core, 3 % veins of quartz, 1% veins of epidote, 5% patches of pyrite.	UPPER OONAH
					112.50 114.50 100% DOLOMITE: grey-tan, massive, indistinctly bedded, basal contact: ca 30.	
	121.50	149.60			MELANGE: medium dark grey, massive, moderately foliated, brecciated, basal contact: ca sharp base, 65, hard, moderately broken core, 3 % patches of pyrite, 1% patches of pyrrhotite.	UPPER OONAH
					121.50 125.00 100% MELANGE: medium dark grey, massive, strongly foliated, brecciated, foliation: ca sharp base, 10, hard, moderately broken core, 3 % patches of pyrite, 1% patches of pyrrhotite.	UPPER OONAH
					146.40 146.90 100% ROCK TYPE UNIDENTIFIED: grey-green, highly altered.	
					147.00 147.20 100% BRECCIA: grey-green, moderately altered, microfaults, closed structure.	
R	149.60	161.10			Rock is intensely altered but breccia texture is still visible.	
R	149.60	161.10			Possibly either metasomatised melange or auto-metasomatised	
R	149.60	161.10			melange is much darker (more graphitic) near contacts.	
R	149.60	161.10			hydrothermal breccia. Contacts are sharp, irregular and host	
	149.60	161.10			ROCK TYPE UNIDENTIFIED: grey-green, highly altered, massive, textures obliterated by alteration, spotted, basal contact: ca sharp base, 35, 10% disseminations = veins of carbonate, 3 % disseminations of chlorite.	
R THN	150.85	151.00			T30744; sampled for petrography.	
R	161.10	184.10			The interval is disturbed firstly by an early (flattening)	
R	161.10	184.10			increased strain into thin melange zones sub-parallel to	
R	161.10	184.10			several metres) fractures, often with slickensides. BCA's vary	
R	161.10	184.10			uphole. Sulphides mostly selectively concentrated in and/or	
R	161.10	184.10			vary 30 - 60 degrees to core axis.	
R	161.10	184.10			replacing certain beds/lamellae (?calcareous beds). Fractures	
R	161.10	184.10			45 - 80 degrees (ave. 70), and occasional graded beds face	
R	161.10	184.10			bedding, and secondly by numerous thin, widely spaced (10cm -	
R	161.10	184.10			strain that has produced localised boudinaging, grading with	

058169

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY010 (CONTINUED)

	- Interval - From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
	161.10	184.10			SILTSTONE: very dark grey, slightly graphitic, fine bedded,	UPPER OONAH
					indistinctly bedded, graded bedding, disrupted bedding, uphole	
					facing, faulted base, hard, moderately broken core, 3 % veins	
					of quartz, 1% veins of carbonate, 1% patches of epidote, 3 %	
					laminations of pyrite, 1% laminations of pyrrhotite.	
					161.10 184.10 20% SANDSTONE: medium grey, irregularly	
					interbedded, fine bedded, medium bedded, 3 % veins of quartz,	
					3 % laminations of pyrite, 1% laminations of pyrrhotite.	
					161.10 184.10 10% MELANGE: black.	
					164.60 171.50 5% LIMESTONE: medium grey.	
R	172.10	173.70			Similar to interval 149.6 - 161.1m, however breccia texture is	
R	172.10	173.70			calc-silicates. Some contain numerous perfectly spherical	
R	172.10	173.70			olive-green spots (?chloritic). Probably a hydrothermal breccia	
R	172.10	173.70			well preserved. Clasts are mostly angular, microfaulted, grain	
R	172.10	173.70			composed of decussate acicular crystals, probably	
R	172.10	173.70			related to granite intrusion.	
R	172.10	173.70			supported. Under 50x magnification, the clasts are seen to be	
					172.10 173.70 90% BRECCIA: grey-green, moderately altered,	
					massive, spotted, brecciated, small pebble, extremely angular,	
					very high sphericity shape, closed structure, top contact: ca	
					60, basal contact: ca 30, 1% interstitial carbonate, 3 %	
					interstitial chlorite.	
	184.10	184.15			FAULT: slickensided, fibrous, fault: ca 45.	
	184.15	210.60			MELANGE: very dark grey, massive, moderately foliated,	
					moderately folded, open structure, hard, moderately broken	
					core, 0.3% patches of pyrite, 1% disseminations = veins of	
					pyrrhotite.	
R	184.15	210.60			Not as well developed, varying in intensity from boudinaged	
R	184.15	210.60			remnants of interbeded sandstone/siltstone to typical sandstone	
R	184.15	210.60			dominant matrix supported breccia with numerous lenticular	
R	184.15	210.60			clasts aligned with foliated matrix. Foliations are locally	
R	184.15	210.60			strongly folded.	
					193.40 200.00 50% SANDSTONE: medium grey, fine bedded, coarse	
					bedded, boudinaged, medium grained.	
R	207.40	207.41			Melange fabric.	
					207.40 207.41 100% STRUCTURAL MEASUREMENT: foliation: 008 /	
					79.	
R	207.50	207.51			Melange fabric.	
					207.50 207.51 100% STRUCTURAL MEASUREMENT: foliation: 008 /	
					70.	
					208.30 208.31 100% STRUCTURAL MEASUREMENT: fault: 037 / 78.	

058200

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY010 (CONTINUED)

	- Interval - From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
R	208.50	208.51			Fibre growth indicates reverse movement (upper block south). 208.50 208.51 100% STRUCTURAL MEASUREMENT: fault: 007 / 71, fibre: 049 / 74. 208.60 208.61 100% STRUCTURAL MEASUREMENT: fault: 016 / 75, fibre: 360 / 80.	
R	209.40	209.41			Melange fabric. 209.40 209.41 100% STRUCTURAL MEASUREMENT: foliation: 350 / 77.	
R	210.15	210.16			Fibre growth poorly developed, suggests reverse movement. 210.15 210.16 100% STRUCTURAL MEASUREMENT: fault: 007 / 65, fibre: 357 / 66.	
R	210.20	210.21			Fibre growth poorly developed, suggests reverse movement. 210.20 210.21 100% STRUCTURAL MEASUREMENT: fault: 360 / 50, fibre: 345 / 55.	
	210.60	280.50			SANDSTONE: light grey, medium bedded, coarse bedded, bedding: ca 45, gradational base, hard, moderately broken core, 1% veins of quartz.	OONAH FM UNDIFFERENT
R	210.60	280.50			Well developed graded beds face consistently uphole. BCA's vary	
R	210.60	280.50			30 - 80 degrees (ave 45). Sandstone beds decrease in abundance	
R	210.60	280.50			toward base, which is gradational. 210.60 280.50 50% SANDSTONE WITH SILTSTONE: light grey, irregularly interbedded, fine bedded, medium bedded, graded bedding, uphole facing. 210.65 210.66 100% STRUCTURAL MEASUREMENT: bedding: 338 / 83. 211.15 211.55 100% BRECCIA: moderately altered, small pebble.	
R	211.20	211.21			Breccia dyke contact. 211.20 211.21 100% STRUCTURAL MEASUREMENT: basal contact: 167 / 10.	
R	211.50	211.51			Breccia dyke contact. 211.50 211.51 100% STRUCTURAL MEASUREMENT: basal contact: 024 / 82.	
					211.55 214.56 100% SANDSTONE: light grey, medium bedded, coarse bedded, bedding: ca 10, gradational base, hard, moderately broken core, 1% veins of quartz.	OONAH FM UNDIFFERENT
					214.00 214.01 100% STRUCTURAL MEASUREMENT: bedding: 240 / 74. 216.60 216.61 100% STRUCTURAL MEASUREMENT: bedding: 353 / 76. 217.00 217.01 100% STRUCTURAL MEASUREMENT: bedding: 338 / 66. 236.20 236.21 100% STRUCTURAL MEASUREMENT: bedding: 360 / 76. 236.30 236.31 100% STRUCTURAL MEASUREMENT: fault: 273 / 63, slickensides: 192 / 32. 237.50 237.51 100% STRUCTURAL MEASUREMENT: vein: 241 / 78. 238.50 239.90 20% VEIN: vein: ca 0, 30% massive/ semi - massive quartz, 20% interstitial carbonate, 50% massive/ semi	

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY010 (CONTINUED)

	- Interval - From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
					+ massive pyrrhotite.	
					239.90 239.91 100% STRUCTURAL MEASUREMENT: bedding: 357 / 82.	
					241.20 241.21 100% STRUCTURAL MEASUREMENT: bedding: 005 / 84.	
R	241.70	241.71			?cleavage.	
					241.70 241.71 100% STRUCTURAL MEASUREMENT: foliation: 019 / 90.	
					242.80 242.81 100% STRUCTURAL MEASUREMENT: foliation: 330 / 84.	
R	242.90	246.90			A complex zone exhibiting an early "melange" style tectonic	
R	242.90	246.90			breccia with foliations at 50 - 80 degrees to core axis and a	
R	242.90	246.90			later penetrative foliation at 30 degrees to core axis	
R	242.90	246.90			(?cleavage).	
					242.90 246.90 100% SANDSTONE: light grey, slightly altered, disrupted bedding, brecciated, sheared, lightly foliated, bedding: ca 45, foliation: ca gradational base, 30, hard, moderately broken core, 5% disseminations (veins of quartz, 3 % veins of carbonate, 3 % disseminations (veins of pyrite.	OONAH FM UNDIFFERENT
					243.30 243.31 100% STRUCTURAL MEASUREMENT: foliation: 180 / 86.	
					243.60 243.61 100% STRUCTURAL MEASUREMENT: fault: 256 / 34.	
R	244.00	244.01			Fibre growth indicates upper block moved toward 330 degrees	
R	244.00	244.01			(azimuth).	
					244.00 244.01 100% STRUCTURAL MEASUREMENT: fault: 049 / 83, fibre: 330 / 60.	
R	244.90	244.91			Slickensides indicate upper block moved(downslip) toward 042	
R	244.90	244.91			degrees (azimuth).	
					244.90 244.91 100% STRUCTURAL MEASUREMENT: fault: 284 / 45, slickensides: 266 / 42.	
					245.10 245.11 100% STRUCTURAL MEASUREMENT: fault: 032 / 52, fault: 042 / 56.	
					245.40 245.41 100% STRUCTURAL MEASUREMENT: foliation: 358 / 60, fault: 274 / 30.	
					247.50 247.55 100% FAULT: fault: ca 45.	
					250.00 270.00 100% SANDSTONE: light grey, graded bedding, coarse bedded, microfaults, microfault: ca 20, uphole facing, microfault: ca gradational base, 50, hard, moderately broken core, 1% veins of quartz.	OONAH FM UNDIFFERENT
					256.00 256.30 100% SANDSTONE: light grey, microfaults, coarse bedded, microfault: ca 70, gradational base, hard, moderately broken core, 1% veins of quartz.	OONAH FM UNDIFFERENT
					279.20 280.50 100% SANDSTONE: light grey, medium bedded, coarse bedded, stockworked, faulted, fault: ca 05, basal contact: ca faulted base, 30, hard, moderately broken core, 1% veins of quartz, 5% stockwork of pyrite.	OONAH FM UNDIFFERENT

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY010 (CONTINUED)

	- Interval - From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
	280.50	323.00			SANDSTONE WITH SILTSTONE: medium grey, fine bedded, medium bedded, well bedded, bedding: ca 70, uphole facing, gradational base, hard, moderately broken core, 1% disseminations < veins of pyrite, 1% disseminations < veins of pyrrhotite.	OONAH FM UNDIFFERENT
R	298.40	298.41			Fibres indicate upper block moved down.	
					298.40 298.41 100% STRUCTURAL MEASUREMENT: fault: 288 / 40, fibre: 268 / 36.	
					299.35 299.60 100% STRUCTURAL MEASUREMENT: microfault: 280 / 88, bedding: 158 / 80.	
R	300.75	300.76			Fibres indicate upper block has moved up.	
					300.75 300.76 100% STRUCTURAL MEASUREMENT: fault: 060 / 35, fibre: 072 / 30.	
					301.20 301.21 100% STRUCTURAL MEASUREMENT: vein: 325 / 72.	
					302.10 302.11 100% STRUCTURAL MEASUREMENT: bedding: 282 / 70.	
					310.40 310.41 100% STRUCTURAL MEASUREMENT: bedding: 046 / 40.	
					312.45 312.46 100% STRUCTURAL MEASUREMENT: bedding: 342 / 49.	
					317.00 317.01 100% STRUCTURAL MEASUREMENT: bedding: 320 / 41.	
	323.00	505.70			SANDSTONE: light grey, coarse bedded, medium bedded, hard, slightly broken core, 1% disseminations < veins of pyrite, 1% disseminations < veins of pyrrhotite.	OONAH FM UNDIFFERENT
					323.00 505.70 30% SILTSTONE: pale tan, irregularly interbedded, fine bedded, medium bedded, lenticular, graded bedding, uphole facing, 1% disseminations < veins of pyrite, 1% disseminations < veins of pyrrhotite.	
					335.20 335.21 100% STRUCTURAL MEASUREMENT: vein: 134 / 35.	
					336.00 337.50 100% SANDSTONE: light grey, coarse bedded, medium bedded, hard, slightly broken core, 1% disseminations < veins of pyrite, 0.3% veins of galena, 3 % disseminations < veins of pyrrhotite, 1% veins of sphalerite.	OONAH FM UNDIFFERENT
					336.40 336.41 100% STRUCTURAL MEASUREMENT: vein: 310 / 80.	
					355.40 355.41 100% STRUCTURAL MEASUREMENT: bedding: 015 / 45.	
					358.80 358.81 100% STRUCTURAL MEASUREMENT: bedding: 022 / 40.	
					364.55 364.56 100% STRUCTURAL MEASUREMENT: bedding: 035 / 42.	
					393.15 393.16 100% STRUCTURAL MEASUREMENT: bedding: 356 / 60.	
					394.90 394.91 100% STRUCTURAL MEASUREMENT: bedding: 351 / 88.	
					398.00 505.70 50% SANDSTONE WITH SILTSTONE: medium grey, fine bedded, medium bedded, well bedded, bedding: ca 70, gradational base, 0.3% disseminations < veins of pyrite, 0.3% disseminations < veins of pyrrhotite.	
					403.00 411.00 100% SANDSTONE: green-brown, slightly altered, coarse bedded, medium bedded, hard, slightly broken core, 3 %	OONAH FM UNDIFFERENT

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY010 (CONTINUED)

	- Interval - From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
					disseminations = veins of siderite, 1% disseminations = veins of epidote, 1% disseminations < veins of pyrite, 1% disseminations < veins of pyrrhotite, 3 % disseminations = veins of calc-silicates.	
					414.90 415.90 100% MELANGE: medium dark grey, sheared, shear: ca 45, 3 % disseminations of epidote.	
					415.90 428.30 80% SANDSTONE: light grey, moderately altered, moderately silicified, coarse bedded, medium bedded, bedding: ca 50, vein: ca 30, hard, slightly broken core, 10% patches of quartz, 1% disseminations of chlorite, 1% stockwork of pyrite, 0.1% stockwork of galena, 3 % stockwork of pyrrhotite, 0.3% stockwork of sphalerite.	OONAH FM UNDIFFERENT
R	430.20	454.00			Psammo-pelites are moderately disrupted and altered, with	
R	430.20	454.00			widespread boudinaging of pelitic beds and quartz veins, and	
R	430.20	454.00			some localised brecciation in brittle psammite beds.	
					430.20 454.00 100% SANDSTONE: light grey, moderately altered, moderately silicified, coarse bedded, medium bedded, boudinaged, brecciated, hard, slightly broken core, 10% disseminations < veins of quartz, 1% breccia fillings of carbonate, 3 % stockwork of pyrite, 1% stockwork of pyrrhotite, .03% stockwork of sphalerite.	OONAH FM UNDIFFERENT
					451.80 451.81 100% STRUCTURAL MEASUREMENT: foliation: 006 / 70.	
					473.80 505.70 100% SANDSTONE WITH SILTSTONE: dark grey, fine bedded, soft sediment slumping, bedding: ca 75.	
					473.80 476.00 100% MELANGE: very dark grey, foliation: ca 25.	
					480.00 480.01 100% STRUCTURAL MEASUREMENT: bedding: 215 / 72.	
					480.90 480.91 100% STRUCTURAL MEASUREMENT: microfault: 205 / 76.	
					481.45 481.46 100% STRUCTURAL MEASUREMENT: bedding: 010 / 80.	
					481.50 481.51 100% STRUCTURAL MEASUREMENT: melange foliation: 015 / 80.	
					482.60 482.61 100% STRUCTURAL MEASUREMENT: melange foliation: 232 / 85.	
					483.70 483.71 100% STRUCTURAL MEASUREMENT: bedding: 340 / 70.	
					484.70 484.71 100% STRUCTURAL MEASUREMENT: melange foliation: 339 / 83.	
					485.30 485.31 100% STRUCTURAL MEASUREMENT: melange foliation: 194 / 85.	
					485.90 485.91 100% STRUCTURAL MEASUREMENT: microfault: 146 / 86.	
					491.00 501.90 50% MELANGE: very dark grey, 3 % disseminations = veins of pyrite.	

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY010 (CONTINUED)

	- Interval - From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
	505.70	506.10			VEIN: 90% massive/ semi - massive quartz, 1% disseminations < veins of pyrite, 3 % veins of clay.	
	506.10	508.00			SANDSTONE WITH SILTSTONE: light grey, fine bedded, well bedded, bedding: ca 70, basal contact: ca 55. 507.60 507.90 100% FAULT: fault: ca 45.	
	508.00	510.60			SANDSTONE: brecciated, hard, exceptionally broken core, 5% breccia fillings of carbonate, 3 % veins of chlorite, 1% disseminations = veins of galena, 3 % veins of sercite.	OONAH FM UNDIFFERENT
R	508.00	510.60			Core block 511.4 and 511.7 are either miss-labelled or	
R	508.00	510.60			miss-placed. The material recovered is altered and moderately	
R	508.00	510.60			brecciated sandstone. Carbonate occurs as breccia fill and	
R	508.00	510.60			related stockwork veining. Interval 508.6 - 510.4 (no core) may	
R	508.00	510.60			be a fault. 508.60 510.40 100% NO CORE.	
	510.60	518.00			SKARN: green-black, serpentinized, magnetite, massive, hard, moderately broken core, 10% patches of carbonate, 30% patches of magnetite, 10% disseminations of pyrrhotite, 50% interstitial serpentine.	UPPER OONAH
					510.60 512.30 100% SKARN: light green, serpentinized, magnetite, massive, hard, moderately broken core, 10% patches of carbonate, 80% interstitial magnetite, 10% disseminations of pyrrhotite, 1% veins of sphalerite, 10% disseminations of serpentine.	UPPER OONAH
					512.30 515.50 100% SKARN: green-black, serpentinized, magnetite, massive, hard, moderately broken core, 10% patches of carbonate, 20% patches of magnetite, 0.1% disseminations of chalcopyrite, 10% disseminations of pyrrhotite, .03% disseminations = veins of sphalerite, 50% interstitial serpentine.	UPPER OONAH
					515.50 516.00 100% MASSIVE SULPHIDES: green-black, serpentinized, magnetite, massive, hard, moderately broken core, 5% disseminations = veins of carbonate, 20% disseminations of magnetite, 0.3% disseminations of chalcopyrite, 60% massive/ semi - massive pyrrhotite, 5% interstitial serpentine.	UPPER OONAH
					517.50 517.70 100% VEIN: green-black, serpentinized, magnetite, vuggy, brecciated, faulted, vein: ca 25, hard, moderately broken core, 80% massive/ semi - massive carbonate, 30% patches of magnetite, 10% disseminations of pyrrhotite, 50% interstitial serpentine.	UPPER OONAH

005205

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY010 (CONTINUED)

	- Interval - From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
	518.00	519.00			FAULT: medium light green, sheared, shear: ca 60, 70% massive/ semi - massive carbonate, 3 % disseminations of chlorite, 0.3% disseminations of pyrite, 3 % disseminations of sercite. 518.00 519.00 40% SHALE: black, indistinctly bedded, 1% veins of carbonate.	
	519.00	524.50			SHALE: black, highly carbonaceous, slightly graphitic, indistinctly bedded, bedding: ca 20, diffuse base, hard, moderately broken core, 3 % veins of carbonate, 3 % veins of pyrrhotite.	UPPER OONAH
	524.50	528.90			MELANGE: black, highly carbonaceous, slightly graphitic, shear: ca 35, hard, moderately broken core, 3 % veins of quartz, 3 % disseminations = veins of carbonate, 3 % veins of pyrrhotite.	UPPER OONAH
R	524.50	528.90			Melange fabric has chaotically variable orientation, however	
R	524.50	528.90			locally a more regular foliation at 35 degrees to core axis	
R	524.50	528.90			overprints the original fabric. Boudins are sandstone, vein	
R	524.50	528.90			quartz up to 10cm but mostly <1cm.	
	528.90	547.40			SHALE: black, highly carbonaceous, slightly calcareous, indistinctly bedded, moderately folded, basal contact: ca 45, hard, moderately broken core, 5% veins of carbonate, 5% veins of pyrrhotite.	UPPER OONAH
R	528.90	547.40			Variable BCA's, variable strain deformation typified by	
R	528.90	547.40			boudinaging of siltstone interbeds, folded.	
					528.90 547.40 20% SILTSTONE: dark grey, inter bedded, boudinaged, medium bedded.	
					531.60 531.70 100% SHALE: black, highly carbonaceous, slightly calcareous, indistinctly bedded, moderately folded, bedding: ca 80, hard, moderately broken core, 5% veins of carbonate, 5% veins of pyrrhotite.	UPPER OONAH
					541.00 541.30 100% SHALE: black, highly carbonaceous, slightly calcareous, indistinctly bedded, moderately folded, bedding: ca 45, hard, moderately broken core, 5% veins of carbonate, 5% veins of pyrrhotite.	UPPER OONAH
					541.20 541.21 100% STRUCTURAL MEASUREMENT: bedding: 015 / 74.	
					541.70 541.71 100% STRUCTURAL MEASUREMENT: bedding: 340 / 70.	
					543.60 543.61 100% STRUCTURAL MEASUREMENT: foliation: 231 / 90, joint: 288 / 41.	
					544.00 544.01 100% STRUCTURAL MEASUREMENT: bedding: 245 / 86.	
	547.40	567.90			SKARN: green-black, magnetite, serpentinized, massive, mottled, banding: ca 45, hard, moderately broken core, 10%	

058206

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY010 (CONTINUED)

	- Interval - From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
					patches of carbonate, 3 % patches of talc, 20% disseminations of magnetite, trace patches of pyrrhotite, 60% interstitial serpentine.	
R	547.40	567.90			Magnetite is generally euhedral, varying from disseminated to	
R	547.40	567.90			patchy massive/semi-massive clusters.	
					551.00 553.20 100% SKARN: green-black, magnetite, serpentinized, massive, mottled, banding: ca 45, hard, moderately broken core, 10% patches of carbonate, 3 % patches of talc, 80% massive/ semi - massive magnetite, trace patches of pyrrhotite, 20% interstitial serpentine.	
					567.85 567.86 100% STRUCTURAL MEASUREMENT: microfault: 320 / 22.	
	567.90	575.00			CARBONATE: white, massive, stylolitic, partly recrystallised, fault: ca 20, fault: ca 45, hard, slightly broken core. 567.90 575.00 40% SKARN: light green, intermixed, magnetite, serpentinized, basal contact: ca 45, 50% interstitial carbonate, 10% disseminations of magnetite, 40% interstitial serpentine.	
	575.00	597.20			MELANGE: grey-green, massive, mottled, hornfelsic structured, gradational base, hard, slightly broken core.	UPPER OONAH
R	575.00	597.20			Typical Upper Oonah melange, hornfelsed below 578m. Matrix is	
R	575.00	597.20			usually strongly foliated, with varying foliation orientation	
R	575.00	597.20			and intensity. Foliation wraps around boudins. Boudins are	
R	575.00	597.20			sub-angular to sub-rounded, consising mainly of sandstone and	
R	575.00	597.20			vein quartz, up to 5cm, matrix supported.	
					579.60 580.90 100% SANDSTONE: white, medium grained, massive.	
	597.20	602.90			HORNFELS: medium green, laminated, remnant bedding, strongly folded, hard, slightly broken core, 3 % veins of carbonate. 598.70 598.71 100% STRUCTURAL MEASUREMENT: melange foliation: 050 / 60.	UPPER OONAH
	602.90	603.70			FAULT: green-brown, fault: ca 60, hard, slightly broken core.	
R	602.90	603.70			Faulted, hornfelsed melange and mudstone.	
					603.00 603.01 100% STRUCTURAL MEASUREMENT: microfault: 060 / 40, melange foliation: 111 / 15. 603.30 603.31 100% STRUCTURAL MEASUREMENT: melange foliation: 120 / 10.	
END	603.70	670.80			HORNFELS: grey-brown, moderately altered, massive, medium grained, fine grained, equigranular, foliation: ca 35, hard, slightly broken core, 3 % veins of quartz, 0.3% veins of	UPPER OONAH

058207

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY010 (CONTINUED)

	- Interval - From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
					carbonate, 1% patches of chlorite, 1% disseminations > veins of pyrite.	
R	603.70	670.80			Probably a hornfelsed sequence of massive, poorly bedded	
R	603.70	670.80			pelites. Weak foliation sometimes visible.	
END					625.80 627.00 100% HORNFELS: grey-brown, moderately altered, massive, medium grained, remnant bedding, fine bedded, foliation: ca 35, fault: ca 30, hard, slightly broken core, 3 % veins of quartz, 0.3% veins of carbonate, 1% patches of chlorite, 1% disseminations > veins of pyrite.	UPPER OONAH
					626.80 626.81 100% STRUCTURAL MEASUREMENT: fracture: 107 / 65.	
END					631.50 634.10 100% HORNFELS: grey-brown, moderately altered, remnant bedding, fine bedded, fine grained, equigranular, bedding: ca 25, hard, slightly broken core, 3 % veins of quartz, 0.3% veins of carbonate, 1% patches of chlorite, 1% disseminations > veins of pyrite.	UPPER OONAH
					633.70 633.71 100% STRUCTURAL MEASUREMENT: bedding: 043 / 85.	
					643.30 643.31 100% STRUCTURAL MEASUREMENT: bedding: 210 / 84.	

058208

K.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY010 (CONTINUED)

ASSAYS

From	To	NumberC	CU(PPM)	PB(PPM)	ZN(PPM)	SN(PPM)	AU(PPM)	AG(PPM)	AS(PPM)	SB(PPM)
30.00	31.00	30815	28	12	165	3	-0.008	-0.50		
40.00	41.00	30816	29	30	100	-3	-0.008	-0.50		
50.00	51.00	30817	29	16	147	-3	-0.008	-0.50		
60.00	61.00	30818	27	15	75	-3	-0.008	-0.50		
70.00	71.00	30819	28	14	92	5	-0.008	-0.50		
80.00	81.00	30821	26	82	336	6	-0.008	-0.50		
90.00	91.00	30822	32	19	112	4	-0.008	-0.50		
100.00	101.00	30823	78	159	145	-3	-0.008	-0.50		
102.00	103.00	30824	52	184	112	-3	0.010	-0.50		
104.00	105.00	30825	65	470	125	-3	0.026	0.80		
107.00	108.00	30826	135	308	1942	-3	-0.008	1.20		
109.00	110.00	30827	145	84	60	-3	-0.008	1.10		
112.00	113.00	30828	98	37	55	-3	-0.008	0.90		
118.00	119.00	30829	52	188	106	-3	0.020	1.00		
122.00	123.00	30830	29	-5	86	-3	-0.008	-0.50		
126.00	127.00	30831	22	31	71	-3	-0.008	-0.50		
130.00	131.00	30832	20	104	279	-3	-0.008	-0.50		
134.00	135.00	30833	26	5	57	-3	-0.008	-0.50		
138.00	139.00	30834	25	6	89	-3	-0.008	-0.50		
142.00	143.00	30835	50	67	73	-3	-0.008	0.90		
146.00	147.00	30836	36	56	483	-3	-0.008	0.60		
150.00	151.00	30837	40	30	123	-3	-0.008	-0.50		
154.00	155.00	30838	20	25	182	-3	-0.008	0.60		
158.00	159.00	30839	27	10	118	-3	-0.008	-0.50		
162.00	163.00	30841	28	28	85	-3	-0.008	0.50		
166.00	167.00	30842	75	88	152	3	-0.008	0.80		
168.00	169.00	30843	55	115	108	-3	-0.008	1.10		
172.10	173.00	30844	37	5	99	-3	-0.008	-0.50		
176.00	177.00	30845	54	20	64	-3	-0.008	0.60		
180.00	181.00	30846	27	20	53	-3	-0.008	-0.50		
190.00	191.00	30847	29	14	37	-3	-0.008	-0.50		
200.00	201.00	30848	25	32	34	-3	-0.008	-0.50		
210.00	210.60	30849	27	-5	24	-3	-0.008	-0.50		
220.00	221.00	30850	24	12	47	-3	-0.008	-0.50		
230.00	231.00	30851	21	9	26	-3	-0.008	-0.50		
238.50	239.90	30852	306	56	77	30	-0.008	0.90		
242.90	244.00	30853	59	-5	70	-3	-0.008	-0.50		
245.00	246.00	30854	33	13	178	-3	-0.008	-0.50		
250.00	251.00	30855	29	103	141	-3	-0.008	0.70		
260.00	261.00	30856	22	17	28	-3	-0.008	-0.50		
270.00	271.00	30857	34	9	37	6	-0.008	-0.50		
279.20	280.50	30858	35	23	34	-3	-0.008	-0.50		

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY010 (CONTINUED)

ASSAYS

From	To	NumberC	CU(PPM)	PB(PPM)	ZN(PPM)	SN(PPM)	AU(PPM)	AG(PPM)	AS(PPM)	SB(PPM)
290.00	291.00	30859	25	21	43	18	-0.008	0.60		
300.00	301.00	30861	25	37	26	-3	-0.008	0.50		
310.00	311.00	30862	23	10	30	-3	-0.008	0.50		
320.00	321.00	30863	25	-5	29	-3	-0.008	-0.50		
330.00	331.00	30864	62	9	40	6	-0.008	0.60		
336.00	337.50	30865	74	6500	4320	20	-0.008	13.50		
340.00	341.00	30866	47	34	46	8	-0.008	-0.50		
360.00	361.00	30867	35	46	126	4	-0.008	-0.50		
380.00	381.00	30868	22	50	38	5	-0.008	0.60		
400.00	401.00	30869	33	891	1720	-3	-0.008	5.70		
410.00	411.00	30870	65	14	36	-3	-0.008	0.50		
415.90	417.00	30871	72	39	62	6	-0.008	-0.50		
417.00	418.00	30872	50	48	82	4	-0.008	-0.50		
418.00	419.00	30873	56	84	702	7	-0.008	1.30		
419.00	420.00	30875	17	432	209	-3	-0.008	1.90		
420.00	421.00	30876	17	203	84	-3	-0.008	1.00		
421.00	422.00	30877	19	65	75	-3	-0.008	0.70		
422.00	423.00	30878	8	21	37	-3	-0.008	-0.50		
423.00	424.00	30879	9	15	37	-3	-0.008	-0.50		
424.00	425.00	30881	9	25	73	-3	-0.008	-0.50		
425.00	426.00	30882	21	3320	5390	4	-0.008	12.10		
426.00	427.00	30883	10	763	1260	4	-0.008	4.40		
427.00	428.30	30884	9	12600	3020	5	-0.008	29.00		
430.20	431.00	30885	20	685	1060	6	-0.008	4.70		
434.00	435.00	30886	10	169	343	6	-0.008	1.10		
438.00	439.00	30887	28	6200	31	3	-0.008	10.10		
450.00	451.00	30888	16	53	64	3	-0.008	0.60		
467.70	469.00	30889	51	100	86	5	-0.008	1.40		
480.00	481.00	30890	23	34	52	3	-0.008	-0.50		
490.00	491.00	30891	15	17	42	4	-0.008	-0.50		
500.00	501.00	30892	30	12	28	-3	-0.008	1.10		
510.50	511.50	30893	42	87	43000	50	0.103	1.40		
511.50	512.30	30894	32	72	1850	35	-0.008	0.70		
512.30	513.50	30895	79	54	863	45	-0.008	0.60		
513.50	514.50	30896	226	20	111	40	-0.008	0.50		
514.50	515.50	30897	306	23	218	25	-0.008	-0.50		
515.50	516.00	30898	110	-5	47	8	-0.008	-0.50		
516.00	517.00	30899	1100	98	135	-3	0.034	1.30		
517.00	518.00	28456	346	-5	80	35	-0.008	-0.50		
518.00	519.00	28457	192	28	238	40	-0.008	-0.50		
520.00	521.00	28458	66	6	40	16	-0.008	-0.50		
522.00	523.00	28459	53	28	60	30	0.012	-0.50		

058210

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY010 (CONTINUED)

ASSAYS

From	To	NumberC	CU(PPM)	PB(PPM)	ZN(PPM)	SN(PPM)	AU(PPM)	AG(PPM)	AS(PPM)	SB(PPM)
526.00	527.00	28461	64	24	69	18	-0.008	-0.50		
530.00	531.00	28462	89	5	32	11	-0.008	-0.50		
534.00	535.00	28463	56	-5	38	21	-0.008	-0.50		
538.00	539.00	28464	69	5	35	13	-0.008	-0.50		
542.00	543.00	28465	70	44	98	12	-0.008	-0.50		
546.00	547.40	28466	173	15	64	24	-0.008	-0.50		
547.40	548.40	28467	22	-5	103	130	-0.008	-0.50		
551.00	552.00	28468	10	-5	70	1050	0.037	-0.50		
552.00	553.00	28469	9	-5	86	1250	0.023	-0.50		
556.00	557.00	28470	-5	27	390	350	-0.008	-0.50		
560.00	561.00	28471	6	-5	50	520	-0.008	-0.50		
564.00	565.00	28472	5	32	203	100	0.076	-0.50		
570.00	571.00	28473	8	240	806	40	0.012	0.80		
582.50	583.50	28474	173	5	114	30	-0.008	-0.50		
600.00	601.00	28475	6	21	41	55	-0.008	0.50		
620.00	621.00	28476	13	-5	51	20	-0.008	-0.50		
640.00	641.00	28477	5	-5	85	30	-0.008	0.50		
651.40	652.50	28478	23	-5	47	18	-0.008	-0.50		
652.50	653.40	28479	45	-5	61	20	-0.008	-0.50		
655.00	656.00	29481	75	-5	46	15	-0.008	-0.50		

05829 11

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY010 (CONTINUED)

ASSAYS

From	To	NumberC	W(PPM)	AU(R) PPM	AU(S) PPM
30.00	31.00	30815	-10		
40.00	41.00	30816	-10		
50.00	51.00	30817	-10	-0.008	
60.00	61.00	30818	-10		
70.00	71.00	30819	-10	-0.008	
80.00	81.00	30821	-10	-0.008	
90.00	91.00	30822	-10		
100.00	101.00	30823	-10		
102.00	103.00	30824	-10		
104.00	105.00	30825	-10		
107.00	108.00	30826	-10	-0.008	
109.00	110.00	30827	-10		
112.00	113.00	30828	-10		
118.00	119.00	30829	-10	0.022	
122.00	123.00	30830	-10		
126.00	127.00	30831	-10	-0.008	-0.008
130.00	131.00	30832	-10		
134.00	135.00	30833	-10		
138.00	139.00	30834	-10		
142.00	143.00	30835	-10		
146.00	147.00	30836	-10	-0.008	
150.00	151.00	30837	-10		
154.00	155.00	30838	-10		
158.00	159.00	30839	-10		
162.00	163.00	30841	-10		
166.00	167.00	30842	-10		
168.00	172.10	30843	-10		
172.10	173.00	30844	-10		
176.00	177.00	30845	-10		
180.00	181.00	30846	-10		
190.00	191.00	30847	-10		
200.00	201.00	30848	-10		
210.00	210.60	30849	-10		
220.00	221.00	30850	-10		
230.00	231.00	30851	-10	-0.008	
238.50	239.90	30852	10		
242.90	244.00	30853	-10		
245.00	246.00	30854	-10		
250.00	251.00	30855	-10		
260.00	261.00	30856	-10		
270.00	279.20	30857	-10		
279.20	280.50	30858	-10	-0.008	

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY010 (CONTINUED)

ASSAYS

From	To	NumberC	W(PPM)	AU(R) PPM	AU(S) PPM
290.00	291.00	30859	-10		
300.00	301.00	30861	-10		
310.00	311.00	30862	-10		
320.00	321.00	30863	-10		
330.00	331.00	30864	-10		
336.00	337.50	30865	-10	-0.008	
340.00	341.00	30866	-10		
360.00	361.00	30867	-10		
380.00	381.00	30868	-10		
400.00	401.00	30869	-10		
410.00	411.00	30870	-10		
415.90	417.00	30871	-10		
417.00	418.00	30872	-10		
418.00	419.00	30873	-10	-0.008	
419.00	420.00	30875	-10		-0.008
420.00	421.00	30876	-10		
421.00	422.00	30877	-10	-0.008	
422.00	423.00	30878	-10		
423.00	424.00	30879	-10		-0.008
424.00	425.00	30881	-10		
425.00	426.00	30882	-10		
426.00	427.00	30883	-10		
427.00	428.30	30884	-10		
430.20	431.00	30885	-10		
434.00	435.00	30886	-10		
438.00	439.00	30887	-10	-0.008	
450.00	451.00	30888	-10		
467.70	469.00	30889	-10		
480.00	481.00	30890	-10		
490.00	491.00	30891	-10		
500.00	501.00	30892	-10		
510.60	511.50	30893			
511.50	512.30	30894	-10		
512.30	513.50	30895	-10		
513.50	514.50	30896	-10		
514.50	515.50	30897	-10		-0.008
515.50	516.00	30898	-10		
516.00	517.00	30899	-10		
517.00	518.00	28456	-10		
518.00	519.00	28457	-10		
520.00	521.00	28458	-10		
522.00	523.00	28459	-10		

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY010 (CONTINUED)

ASSAYS

From	To	NumberC	W(PPM)	AU(R) PPM	AU(S) PPM
526.00	527.00	28461	-10		
530.00	531.00	28462	-10		
534.00	535.00	28463	-10		
538.00	539.00	28464	-10		
542.00	543.00	28465	-10		
546.00	547.40	28466	18		
547.40	548.40	28467	110	-0.008	
551.00	552.00	28468	70	0.038	
552.00	553.00	28469	10	0.025	
556.00	557.00	28470	30	-0.008	
560.00	561.00	28471	50	-0.008	
564.00	565.00	28472	35		
570.00	571.00	28473	-10		
582.50	583.50	28474	-10		-0.008
600.00	601.00	28475	-10		
620.00	621.00	28476	-10		
640.00	651.40	28477	-10	-0.008	
651.40	652.50	28478	-10		
652.50	653.40	28479	-10		
655.00	656.00	29481	-10		-0.008

058214

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY010 (CONTINUED)

DRILL SAMPLE DENSITY MEASUREMEN

From	To	NumberC	DENSITY
260.00	270.00	34750	2.74
620.00	630.00	34751	2.76

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY010 (CONTINUED)

ROCK QUALITY DESIGNATION (RQD)

From	To	Number	MEASURED RQD m	CALCULATED RQD %	MEAS. RECOVERY m	CALC. RECOVERY %
22.00	24.60		0.00	0.00	1.13	0.43
24.60	26.60		0.10	0.05	0.60	0.30
26.60	28.30		0.00	0.00	1.33	0.78
28.30	31.00		0.34	0.12	1.33	0.49
31.00	33.80		1.65	0.59	2.59	0.92
33.80	36.50		1.25	0.46	2.60	0.96
36.50	37.80		0.71	0.55	1.07	0.82
37.80	39.90		0.62	0.29	1.54	0.73
39.90	40.90		0.10	0.10	0.86	0.86
40.90	43.50		1.64	0.63	2.20	0.85
43.50	46.50		2.23	0.74	2.75	0.92
46.50	49.50		2.49	0.83	2.90	0.97
49.50	51.50		1.12	0.56	1.63	0.81
51.50	52.50		0.23	0.23	0.70	0.70
52.50	54.30		0.30	0.17	1.30	0.72
54.30	55.50		0.46	0.38	1.16	0.96
55.50	57.50		1.10	0.55	1.96	0.98
57.50	60.60		1.50	0.48	2.93	0.94
60.60	63.70		1.92	0.62	2.95	0.95
63.70	66.80		2.20	0.71	2.90	0.93
66.80	69.90		2.18	0.70	2.93	0.94
69.90	73.00		2.51	0.81	2.86	0.92
73.00	76.10		2.64	0.85	2.88	0.93
76.10	78.20		1.10	0.52	1.73	0.82
78.20	81.50		0.90	0.27	2.84	0.86
81.50	82.80		0.50	0.38	1.30	1.00
82.80	85.50		1.55	0.57	2.44	0.90
85.50	88.40		2.15	0.74	2.93	1.01
88.40	91.50		2.39	0.77	2.84	0.92
91.50	94.50		2.66	0.89	2.96	0.99
94.50	97.50		2.23	0.74	2.98	0.99
97.50	99.10		1.18	0.74	1.50	0.94
99.10	102.10		2.06	0.69	2.93	0.98
102.10	106.50		2.45	0.56	4.10	0.93
106.50	108.20		0.38	0.22	1.39	0.82
108.20	112.50		2.49	0.58	4.20	0.98
112.50	118.20		2.36	0.41	6.00	1.05
118.20	121.50		1.51	0.46	2.72	0.82
121.50	127.50		4.70	0.78	6.00	1.00
127.50	133.50		2.80	0.47	6.00	1.00
133.50	139.50		4.85	0.81	5.80	0.97
139.50	145.50		4.20	0.70	6.00	1.00

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY010 (CONTINUED)

ROCK QUALITY DESIGNATION (RQD)

From	To	NumberC	MEASURED RQD m	CALCULATED RQD %	MEAS. RECOVERY m	CALC. RECOVERY %
145.50	148.20		0.65	0.24	2.67	0.99
148.20	154.50		4.80	0.76	5.80	0.92
154.50	160.50		4.60	0.77	5.20	0.87
160.50	166.30		4.60	0.79	6.00	1.03
166.30	169.40		2.80	0.90	3.10	1.00
169.40	175.50		3.60	0.59	5.80	0.95
175.50	181.50		3.17	0.53	5.63	0.94
181.50	184.60		1.19	0.38	2.97	0.96
184.60	187.90		2.12	0.64	3.21	0.97
187.90	193.40		4.66	0.85	5.00	0.91
193.40	199.50		4.58	0.75	5.58	0.91
199.50	205.50		4.35	0.72	5.60	0.93
205.50	211.50		4.18	0.70	5.83	0.97
211.50	216.70		3.45	0.66	5.00	0.96
216.70	219.40		0.62	0.23	2.40	0.89
219.40	219.90		0.16	0.32	0.50	1.00
219.90	224.60		2.85	0.61	5.10	1.08
224.60	229.40		3.15	0.66	5.00	1.04
229.40	234.40		3.40	0.68	5.00	1.00
234.40	236.80		0.72	0.30	2.12	0.88
236.80	241.50		4.30	0.91	4.40	0.94
241.50	247.50		4.10	0.68	5.80	0.97
247.50	253.50		3.80	0.63	5.78	0.96
253.50	258.80		4.30	0.81	4.28	0.81
258.80	262.40		2.80	0.78	3.70	1.03
262.40	264.80		1.17	0.49	2.40	1.00
264.80	267.30		1.60	0.64	2.46	0.98
267.30	268.40		0.70	0.64	1.04	0.94
268.40	271.50		2.35	0.76	3.00	0.97
271.50	273.70		1.60	0.73	2.20	1.00
273.70	279.90		3.80	0.61	5.79	0.93
279.90	282.80		1.35	0.46	2.86	0.99
282.80	285.00		0.70	0.32	2.10	0.95
285.00	288.30		1.60	0.48	3.17	0.96
288.30	289.70		0.95	0.68	1.27	0.91
289.70	293.40		2.55	0.69	3.62	0.98
293.40	298.40		3.70	0.74	4.58	0.92
298.40	301.50		1.76	0.57	2.94	0.95
301.50	307.50		4.24	0.71	5.70	0.95
307.50	313.50		4.10	0.68	5.97	0.99
313.50	318.60		3.20	0.63	5.10	1.00
318.60	322.30		2.46	0.66	3.60	0.97

058217

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY010 (CONTINUED)

ROCK QUALITY DESIGNATION (RQD)

From	To	Number	CMEASURED RQD m	CALCULATED RQD %	MEAS. RECOVERY m	CALC. RECOVERY %
322.30	327.60		4.07	0.77	5.10	0.96
327.60	331.50		3.00	0.77	3.78	0.97
331.50	337.50		5.10	0.85	5.81	0.97
337.50	343.40		4.30	0.73	5.72	0.97
343.40	349.50		4.60	0.75	6.10	1.00
349.50	355.50		4.80	0.80	5.86	0.98
355.50	361.50		5.20	0.87	5.79	0.96
361.50	367.20		4.30	0.75	5.47	0.96
367.20	373.40		5.00	0.81	5.98	0.96
373.40	377.40		2.44	0.61	3.78	0.94
377.40	380.30		1.86	0.64	2.85	0.98
380.30	384.40		2.39	0.58	4.07	0.99
384.40	390.60		4.37	0.70	5.90	0.95
390.60	394.50		3.36	0.86	3.90	1.00
394.50	397.50		2.30	0.77	2.90	0.97
397.50	400.50		2.30	0.77	2.75	0.92
400.50	403.50		1.80	0.60	3.00	1.00
403.50	406.50		2.06	0.69	2.92	0.97
406.50	409.50		2.80	0.93	2.82	0.94
409.50	411.20		1.10	0.65	1.67	0.98
411.20	414.30		2.60	0.84	3.04	0.98
414.30	417.40		2.20	0.71	3.09	1.00
417.40	420.50		2.63	0.85	3.04	0.98
420.50	423.60		1.30	0.42	3.10	1.00
423.60	430.20		5.10	0.77	6.30	0.95
430.20	434.40		3.20	0.76	4.20	1.00
434.40	436.70		1.40	0.61	2.23	0.97
436.70	440.50		2.40	0.63	3.57	0.94
440.50	443.60		1.50	0.48	3.10	1.00
443.60	446.00		1.02	0.42	2.40	1.00
446.00	448.90		1.80	0.62	2.80	0.96
448.90	451.50		1.96	0.75	2.50	0.96
451.50	454.30		1.07	0.38	2.41	0.86
454.30	455.70		0.80	0.57	1.00	0.71
455.70	457.10		0.60	0.43	1.45	1.03
457.10	459.50		1.54	0.64	2.15	0.89
459.50	461.50		1.70	0.85	1.90	0.95
461.50	465.60		2.30	0.56	4.00	0.97
465.60	471.70		5.05	0.83	6.10	1.00
471.70	474.10		1.10	0.46	2.25	0.94
474.10	476.00		1.35	0.71	1.90	1.00
476.00	477.80		0.60	0.33	1.70	0.94

058218

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY010 (CONTINUED)

ROCK QUALITY DESIGNATION (RQD)

From	To	Number	MEASURED RQD m	CALCULATED RQD %	MEAS. RECOVERY m	CALC. RECOVERY %
477.80	481.50		2.82	0.76	3.55	0.96
481.50	487.50		6.00	1.00	6.00	1.00
487.50	490.40		1.87	0.64	2.70	0.93
490.40	492.40		1.20	0.60	2.00	1.00
492.40	493.30		0.20	0.22	0.70	0.78
493.30	494.60		0.50	0.38	1.30	1.00
494.60	499.00		3.56	0.81	4.23	0.96
499.00	502.10		1.96	0.63	3.00	0.97
502.10	503.40		0.80	0.61	1.15	0.88
503.40	507.20		2.85	0.75	3.44	0.90
507.20	508.50		0.24	0.18	1.00	0.77
508.50	511.40		0.00	0.00	0.50	0.17
511.40	511.70		0.00	0.00	0.30	1.00
511.70	514.90		2.63	0.82	3.60	1.12
514.90	518.20		2.43	0.74	3.30	1.00
518.20	518.70		0.13	0.26	0.40	0.80
518.70	519.30		1.47	2.45	0.60	1.00
519.30	521.00		1.34	0.79	1.60	0.94
521.00	523.80		2.10	0.75	2.64	0.94
523.80	529.50		5.30	0.93	5.70	1.00
529.50	535.50		4.60	0.77	5.80	0.97
535.50	541.50		4.87	0.81	5.90	0.98
541.50	543.80		1.70	0.74	2.37	1.03
543.80	548.40		3.70	0.80	4.50	0.98
548.40	549.70		1.20	0.92	1.30	1.00
549.70	555.80		4.05	0.66	5.85	0.96
555.80	561.90		4.90	0.80	6.00	0.98
561.90	568.10		5.10	0.82	6.10	0.98
568.10	574.10		5.40	0.90	5.73	0.95
574.10	577.50		3.05	0.90	2.70	0.79
577.50	583.50		4.80	0.80	5.90	0.98
583.50	588.40		4.20	0.86	4.90	1.00
588.40	594.50		5.63	0.92	6.00	0.98
594.50	598.50		3.54	0.88	3.90	0.97
598.50	604.50		5.00	0.83	5.84	0.97
604.50	610.50		4.90	0.82	5.93	0.99
610.50	613.50		2.40	0.80	2.93	0.98
613.50	619.50		5.00	0.83	5.90	0.98
619.50	625.50		5.50	0.92	6.00	1.00
625.50	627.00		1.20	0.80	1.45	0.97
627.00	631.50		3.90	0.87	4.50	1.00
631.50	637.50		5.54	0.92	5.90	0.98

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY010 (CONTINUED)

ROCK QUALITY DESIGNATION (RQD)

From	To	Number	CMEASURED RQD m	CALCULATED RQD %	MEAS. RECOVERY m	CALC. RECOVERY %
637.50	643.50		5.20	0.87	5.80	0.97
643.50	649.50		5.10	0.85	6.00	1.00
649.50	653.40		3.20	0.82	3.90	1.00
653.40	659.40		4.65	0.77	5.90	0.98
659.40	664.10		3.22	0.68	4.60	0.98
664.10	666.90		2.30	0.82	2.80	1.00
666.90	670.80		2.75	0.70	2.80	0.72

058220

R.G.C. Exploration Pty Ltd

SYLVESTER GRID

SURFACE DIAMOND DRILLHOLE : SY011

JECT IDEN :SYLVESTER START DATE : 18 OCT 91 COMPLETION DATE : 29 OCT 91 LOGGED BY:DAVID JOHN CROSSING
LAR NORTHING: 60534.00 COLLAR EASTING : 58616.00 COLLAR ELEVATION: 300.82 GRID AZIMUTH : 0.00
LLED BY : LONGYEAR TOTAL LENGTH : 218.00 CORE/HOLE SIZE : HQNQ

SURVEY FLAG	SURVEY POINT LOCATION	FORESIGHT	AZIMUTH (DEGREES)	VERTICAL ANGLE (DEGREES)	NORTHING	EASTING	ELEVATION
	0.00		180.00	-55.00	60534.00	58616.00	300.82
	68.00		180.00	-54.50			
	100.00		182.00	-53.00			
	127.00		178.00	-53.20			
	160.00		177.50	-54.00			
	193.00		179.00	-54.00			

ED This hole was drilled from the comstock tramway north of the
ED old Britannia mine. It was sited to test for base metal
ED mineralisation in the footwall of the Balstrup fault beneath a
ED large c-horizon soil geochemical anomaly. The area is
ED interpreted to have potential for base metal replacement
ED deposits hosted by upper Oonah carbonates. The distal
ED equivalent of the mineralisation encountered by SY005.
ED
ED The hole traversed Crimson creek turbidites and gabbroic
ED intrusives to 104.9m where a broad melange zone was entered and
ED traversed to 122.1m. A number of shear zones in the melange
ED probably represent the Balstrup fault (eg 104.9 - 108m) in the
ED immediate footwall of the melange, upper Oonah psammo-pelites
ED host a stockwork of quartz-pyrite and carbonate-pyrite-
ED sphalerite veins in a zone of incipient brecciation. The
ED remainder of the hole encountered psammo-pelites and calcareous
ED siltstones and conglomerates which were relatively unaltered.

052221

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY011 (CONTINUED)

Interval From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
0.00	27.00			PRECOLLAR.	
27.00	65.80			LITHIC ARENITE: grey-green, slightly weathered, medium bedded, coarse bedded, graded bedding, fine sand, closed structure, bedding: ca 50, uphole facing, microfault: ca 45, firm, highly broken core, 0.3% disseminations of chlorite, 1% disseminations = veins of pyrite.	CAMBRIAN CRIMSON CK FOR
27.00	65.80			Lithic-arenite varies from fine to occasionally coarse grained,	
27.00	65.80			consisting of sub-rounded labile lithic fragments which appear	
27.00	65.80			to be composed principally of decomposed feldspars. Quartz is	
27.00	65.80			rare. Transected by micro-faults. NB; Due to extremely broken	
27.00	65.80			condition of core, recoveries could not be accurately	
27.00	65.80			determined, but appear to be close to 100%.	
				27.00 65.80 50% MUDSTONE: light grey, irregularly interbedded, medium bedded, microfaults, 1% disseminations = veins of pyrite.	
				35.00 35.40 100% CLAY: medium grey.	
				38.20 46.00 40% LITHIC ARENITE: grey-green, slightly weathered, disrupted bedding, vuggy, brecciated, sheared, fine sand, closed structure, bedding: ca 50, uphole facing, microfault: ca 45, firm, highly broken core, 3 % veins of quartz, 0.3% disseminations of chlorite, 1% disseminations = veins of pyrite.	CAMBRIAN CRIMSON CK FOR
65.80	72.60			GABBRO: grey-green, slightly weathered, massive, coarse grained, decussate, basal contact: ca 05, intrusive contacts, firm, highly broken core, 3 % disseminations of chlorite.	CAMBRIAN CRIMSON CK FOR
72.60	79.20			MUDSTONE: grey-green, medium bedded, bedding: ca 55, microfault: ca 35, firm, highly broken core. 72.60 79.20 40% LITHIC ARENITE: grey-green, irregularly interbedded, medium bedded.	CAMBRIAN CRIMSON CK FOR
				72.60 77.00 100% MUDSTONE: grey-green, medium bedded, disrupted bedding, bedding: ca 55, microfault: ca 35, firm, highly broken core, 0.3% disseminations of pyrite.	CAMBRIAN CRIMSON CK FOR
79.20	84.30			GABBRO: grey-green, massive, medium grained, equigranular, spotted, basal contact: ca 35, intrusive contacts, 3 % disseminations of chlorite.	
79.20	84.30			Spotting is possibly due to xenoliths stoped from country	
79.20	84.30			rocks.	
84.30	86.40			MUDSTONE: light grey, medium bedded, slightly folded, microfaults, bedding: ca 60, microfault: ca 35, hard, highly	CAMBRIAN CRIMSON CK FOR

058222

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY011 (CONTINUED)

- Interval - From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
				broken core. 0.3% veins of pyrite.	
86.40	89.80			GABBRO: fine grained, massive, equigranular, basal contact: ca 20, hard, moderately broken core.	
89.80	104.90			MUDSTONE: grey-black, medium bedded, microfaults, microfault: ca 25, hard, moderately broken core. 89.80 104.90 30% LITHIC ARENITE: grey-green, irregularly interbedded, medium bedded, graded bedding, uphole facing, diffuse base. 100.80 104.89 100% MUDSTONE: grey-black, slightly altered, medium bedded, microfaults, microfault: ca 05, fibre: ca 65, hard, moderately broken core. 3 % veins of carbonate.	
101.99	102.00			There are three sets of micro-faults with well developed	
101.99	102.00			fibres. 101.99 102.00 100% MUDSTONE: microfault: ca 20, fibre: ca 55. 101.99 102.00 100% MUDSTONE: microfault: ca 30, fibre: ca 30.	
104.90	108.00			SHEAR (ZONE): shear: ca gradational base, 45, firm, highly broken core, 1% patches of quartz, 10% disseminations = veins of carbonate, 3 % patches of pyrite.	
104.90	108.00			The contacts of the fault are gradational, passing downward	
104.90	108.00			from increasingly sheared Crimson creek turbidites into a puggy	
104.90	108.00			shear with a calcareous brecciated core. Toward the base it	
104.90	108.00			grades into non-calcareous melange.	
108.00	122.10			MELANGE: dark grey, moderately carbonated, massive, sheared, shear: ca 45, firm, highly broken core, 10% disseminations = veins of quartz, 1% disseminations of pyrite.	UPPER OONAH
108.00	122.10			Typical Oonah melange consisting of sub-angular to lenticular	
108.00	122.10			boudins mostly composed of sandstone or quartz in a	
108.00	122.10			carbonaceous matrix. The matrix usually displays a well	
108.00	122.10			developed tectonic fabric with orientation varying from 30 - 50	
108.00	122.10			degrees to core axis. Lenticular boudins are aligned with this	
108.00	122.10			fabric, which wraps around them. Numerous graphitised	
108.00	122.10			slickensided fault surfaces occur sub-parallel to this fabric,	
108.00	122.10			and some boudins are truncated by them, suggesting displacement	
108.00	122.10			post-dating melange formation, quartz boudins are formed by	
108.00	122.10			boudinaging of early formed veins. The zone exhibits a complex	
108.00	122.10			history of deformation, with overprinting of early fabric by	
108.00	122.10			later (?Devonian) tectonic fabric, the latter decreasing in	
108.00	122.10			intensity toward base of interval.	
122.10	122.50			FAULT: clayey, puggy, soft, exceptionally broken core. 3 %	

058223

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY011 (CONTINUED)

- Interval - From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
				disseminations of pyrite.	
122.50	124.90			MUDSTONE: pale grey, medium bedded, lensoid-banded, firm, highly broken core.	UPPER OONAH
122.50	124.90			Resembles Crimson creek mudstones.	
124.90	127.60			SILTSTONE: dark grey, medium bedded, indistinctly bedded, disrupted bedding, firm, moderately broken core, 3 % veins of carbonate, 3 % disseminations) veins of pyrite. 126.60 127.30 100% SILTSTONE: dark grey, medium bedded, indistinctly bedded, disrupted bedding, brecciated, firm, moderately broken core, 5% veins of carbonate, 3 % disseminations) veins of pyrite, 3 % breccia fillings of carbonates. 127.30 127.60 100% VEIN: 30% veins of carbonate, 3 % disseminations of chlorite, 10% disseminations of pyrite, 1% disseminations of sphalerite, 30% veins of barite.	
127.60	131.10			SHEAR (ZONE): very dark grey, carbonated, sheared, brecciated, slickensided, basal contact: ca 30, shear: ca 05, crumbly, highly broken core, 5% disseminations = veins of siderite, 3 % disseminations = veins of pyrite.	
131.10	133.60			DOLOMITE: light grey, massive, stylolitic, hard, moderately broken core, 10% veins of carbonate, 1% disseminations = veins of pyrite. 131.10 131.40 100% MASSIVE SULPHIDES: 70% interstitial quartz, 20% disseminations of pyrite, 3 % disseminations of galena, 3 % disseminations of sphalerite.	
133.60	145.10			MELANGE: grey-black, slightly carbonaceous, massive, brecciated, basal contact: ca 20, firm, highly broken core, 0.3% disseminations = veins of pyrite. 135.80 137.10 100% SILTSTONE: dark grey, fine bedded, moderately folded, fissile. 137.10 138.30 100% SANDSTONE: medium grey, massive, medium grained.	UPPER OONAH
141.50	145.09			Below 141.5m the melange is highly strained and strongly	
141.50	145.09			graphitised, fine quartz veins have been tightly folded into	
141.50	145.09			contorted discordant folds. Several slickensided fault surfaces	
141.50	145.09			cut these earlier structures at 0-40 degrees to core axis.	
141.50	145.09			Pyritic veins are also folded. Sheared at 0-50 degrees to core	
141.50	145.09			axis.	
				141.50 145.09 100% MELANGE: grey-black, highly graphitic,	UPPER OONAH

058224

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY011 (CONTINUED)

- Interval - From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
				moderately calcareous, massive, sheared, very strongly folded. shear: ca 40, fault: ca 05, firm, highly broken core, 5% veins of quartz, 10% disseminations = veins of carbonate, 3 % disseminations = veins of pyrite, 0.1% disseminations of sphalerite.	
145.10	147.00			SEMI-MASSIVE SULPHIDES: yellow-white, basal contact: ca sharp irregular base, 50, hard, slightly broken core, 80% massive/ semi - massive quartz, 1% disseminations of carbonate, 3 % veins of siderite, 1% interstitial chlorite, 10% stockwork of pyrite, 0.3% disseminations of galena, 1% disseminations of sphalerite.	
145.10	147.00			Possibly a vein, with contacts concordant to bedding.	
147.00	157.50			SANDSTONE: light grey, moderately altered, medium bedded, fine bedded, disrupted bedding, brecciated, gradational base, hard, moderately broken core, 10% disseminations < veins of quartz, 1% disseminations = veins of carbonate, 1% veins of chlorite, 10% disseminations = veins of pyrite, 1% disseminations < veins of galena, 3 % disseminations < veins of sphalerite.	UPPER OONAH
147.00	157.50			An incipient breccia with stockwork veining and pervasive	
147.00	157.50			quartz-pyrite alteration associated with stockwork veins.	
147.00	157.50			Intensity of alteration is proportional to intensity of veins.	
147.00	157.50			Near top of intervals veins are dominantly quartz-pyrite	
147.00	157.50			(sphalerite-galena) identical to the interval 145.1 - 147m.	
147.00	157.50			These veins become progressively more carbonate and base metal	
147.00	157.50			rich downwards becoming carbonate-pyrite-sphalerite	
147.00	157.50			(galena-quartz) veins below about 152m. Near the top the veins	
147.00	157.50			are dominantly concordant, lenticular/boudinaged, passing	
147.00	157.50			downward into a stockwork of irregular veins related to	
147.00	157.50			incipient brecciation.	
				147.00 157.50 40% SILTSTONE: light grey, irregularly interbedded, moderately altered, fine bedded, light to moderately folded, 10% disseminations < veins of quartz, 1% disseminations = veins of carbonate, 1% veins of chlorite, 10% disseminations = veins of pyrite, 1% disseminations < veins of galena, 3 % disseminations < veins of sphalerite.	
				147.00 148.60 100% SANDSTONE: light grey, moderately altered, medium bedded, fine bedded, disrupted bedding, brecciated, bedding: ca 45, vein: ca gradational base, 45, hard, moderately broken core, 10% disseminations < veins of quartz, 1% disseminations = veins of carbonate, 1% veins of chlorite, 10% disseminations = veins of pyrite, 0.1% disseminations < veins of galena, 1% disseminations < veins of sphalerite.	UPPER OONAH

058225

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY011 (CONTINUED)

- Interval - From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
				148.60 149.00 100% SANDSTONE: black, moderately graphitic, medium bedded, fine bedded, strongly foliated, strongly folded, gradational base. hard, moderately broken core, 10% disseminations < veins of quartz, 1% disseminations = veins of carbonate, 1% veins of chlorite, 10% disseminations = veins of pyrite, 0.1% disseminations < veins of galena, 3 % disseminations < veins of sphalerite.	UPPER OONAH
				149.00 152.20 100% SANDSTONE: light grey, moderately altered, medium bedded, fine bedded, disrupted bedding, brecciated, basal contact: ca gradational base, 30, hard, moderately broken core, 10% disseminations < veins of quartz, 1% disseminations = veins of carbonate, 1% veins of chlorite, 10% disseminations = veins of pyrite, 1% disseminations < veins of galena, 3 % disseminations < veins of sphalerite.	UPPER OONAH
152.20	154.65			Vein is approximately concordant with bedding.	
				152.20 154.65 100% VEIN: vein: ca 25, basal contact: ca 20, 1% patches of quartz, 30% massive/ semi - massive carbonate, 3 % veins of chlorite, 30% massive/ semi.- massive pyrite, 3 % veins of galena, 30% massive/ semi - massive sphalerite.	
157.50	165.00			SANDSTONE: medium light grey, limey, fine bedded, medium bedded, graded bedding, coarse sand, bedding: ca 65, uphole facing, hard, moderately broken core, 3 % disseminations > veins of pyrite.	UPPER OONAH
157.50	165.00			Sandstone varies from light grey/very calcareous to dark	
157.50	165.00			grey/slightly calcareous.	
				157.50 165.00 30% SILTSTONE: grey-brown, inter bedded, fine bedded, laminated, 1% veins of quartz, 3 % veins of carbonate, 3 % disseminations > veins of pyrite.	
				157.50 159.40 100% SANDSTONE: medium light grey, limey, fine bedded, medium bedded, graded bedding, coarse sand, bedding: ca 65, uphole facing, hard, moderately broken core, 3 % disseminations > veins of pyrite, 1% disseminations < veins of galena, 1% disseminations < veins of sphalerite.	UPPER OONAH
				163.50 164.50 100% SANDSTONE: limey, moderately altered, bedding: ca 50, 20% replacive quartz, 3 % veins of chlorite, 3 % disseminations > veins of pyrite, 1% disseminations > veins of galena, 1% disseminations > veins of sphalerite.	
165.00	172.30			SANDSTONE WITH SILTSTONE: dark grey, inter bedded, fine bedded, laminated, strongly folded, soft sediment slumping, 3 % veins of quartz, 3 % veins of carbonate, 1% veins of chlorite, 3 % disseminations of pyrite.	
				165.00 172.30 10% MELANGE: near base of interval, massive,	

058226

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY011 (CONTINUED)

- Interval - From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
				strongly foliated. 3 % disseminations of pyrite.	
172.30	173.20			CONGLOMERATE: grey-green, limey, massive, 3 % veins of quartz, 5% veins of carbonate, 3 % disseminations of chlorite, 3 % disseminations of pyrite.	
172.30	173.20			Distinguishable from tectonic melange by following features;	
172.30	173.20			1) Polymict with dominantly calcareous pebbles, also mudstone	
172.30	173.20			etc.	
172.30	173.20			2) Matrix is coarse grained, compositionally similar and lacks	
172.30	173.20			foliation.	
172.30	173.20			3) Clasts have high sphericity (none are lenticular).	
172.30	173.20			Clasts are mostly idenytical in composition and texture to	
172.30	173.20			underlying limey siltstones.	
173.20	185.40			SILTSTONE: grey-tan, limey, fine bedded, well bedded, slightly folded, bedding: ca 30, basal contact: ca faulted base, 60, hard, moderately broken core, 3 % veins of carbonate, 0.1% veins of pyrite.	
173.20	185.40			Localised strong folding with variable hinge line orientation	
173.20	185.40			suggesting slump structures. Otherwise BCA's vary 0-45 degrees.	
				176.20 176.50 100% STRUCTURAL MEASUREMENT: grey-tan, limey, fine bedded, well bedded, slightly folded, bedding: 034 / 80, bedding: 026 / faulted base, 78, hard, moderately broken core, 3 % veins of carbonate, 0.1% veins of pyrite.	
				177.10 177.11 100% STRUCTURAL MEASUREMENT: grey-tan, limey, fine bedded, well bedded, slightly folded, bedding: 040 / 75, basal contact: ca faulted base, 60, hard, moderately broken core, 3 % veins of carbonate, 0.1% veins of pyrite.	
				177.35 177.36 100% STRUCTURAL MEASUREMENT: grey-tan, limey, fine bedded, well bedded, slightly folded, bedding: 020 / 86, basal contact: ca faulted base, 60, hard, moderately broken core, 3 % veins of carbonate, 0.1% veins of pyrite.	
				177.70 177.71 100% STRUCTURAL MEASUREMENT: grey-tan, limey, fine bedded, well bedded, slightly folded, bedding: 209 / 74, basal contact: ca faulted base, 60, hard, moderately broken core, 3 % veins of carbonate, 0.1% veins of pyrite.	
				178.10 178.11 100% STRUCTURAL MEASUREMENT: grey-tan, limey, fine bedded, well bedded, slightly folded, bedding: 360 / 78, basal contact: ca faulted base, 60, hard, moderately broken core, 3 % veins of carbonate, 0.1% veins of pyrite.	
				178.80 178.81 100% STRUCTURAL MEASUREMENT: grey-tan, limey, fine bedded, well bedded, slightly folded, bedding: 225 / 80, basal contact: ca faulted base, 60, hard, moderately broken core, 3 % veins of carbonate, 0.1% veins of pyrite.	

058227

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY011 (CONTINUED)

- Interval - From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
				182.70 184.00 100% FAULT: black, moderately graphitic, basal contact: ca 60, 3 % veins of quartz, 10% veins of carbonate, 3 % disseminations = veins of pyrite.	
185.40	186.60			FAULT: black, moderately graphitic, 3 % veins of carbonate, 3 % disseminations = veins of pyrite.	
186.60	189.30			CONGLOMERATE: grey-green, limey, slightly altered, massive, coarse bedded, coarse sand, small pebble, 20% coarse, extremely well sorted, angular, low sphericity shape, open structure, sharp irregular base, hard, moderately broken core, 3 % veins of carbonate, 5% disseminations of pyrite.	
187.00	188.00			Core was mixed up from about 187 - 190.5m. It has been restored	
187.00	188.00			to "best fit" core either side.	
				187.00 188.00 100% SILTSTONE: grey-green, limey, fine bedded, 3 % disseminations of chlorite.	
189.30	189.90			FAULT: black, moderately graphitic, basal contact: ca 45, hard, moderately broken core, 3 % disseminations of chlorite, 3 % disseminations of pyrite.	
189.90	206.90			SANDSTONE WITH SILTSTONE: medium dark grey, inter bedded, fine bedded, medium bedded, soft sediment slumping, bedding: ca 45, cleavage: ca 80, hard, moderately broken core, 1% veins of carbonate, 1% veins of talc, 1% disseminations) veins of pyrite.	
189.90	206.90			BCA's vary 35-60 degrees, minor localised small-scale slump	
189.90	206.90			structures, weakly developed cleavage is sometimes present in	
189.90	206.90			siltstones at 45 degrees to bedding (80 degrees to CA).	
				193.40 193.41 100% STRUCTURAL MEASUREMENT: medium dark grey, inter bedded, fine bedded, medium bedded, soft sediment slumping, bedding: 004 / 30, cleavage: ca 80, hard, moderately broken core, 1% veins of carbonate, 1% veins of talc, 1% disseminations) veins of pyrite.	
				193.65 193.66 100% STRUCTURAL MEASUREMENT: medium dark grey, inter bedded, fine bedded, medium bedded, soft sediment slumping, bedding: 350 / 30, cleavage: ca 80, hard, moderately broken core, 1% veins of carbonate, 1% veins of talc, 1% disseminations) veins of pyrite.	
206.90	211.40			CONGLOMERATE: grey-green, limey, slightly altered, massive, strained, basal contact: ca 30, hard, slightly broken core, 1% veins of carbonate, 1% veins of talc, 5% disseminations of chlorite, 5% disseminations of pyrite, .03% disseminations =	

058228

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY013 (CONTINUED)

- Interval - From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
				veins of sphalerite.	
206.90	211.40			Highly strained (?sheared) at 45 degrees to core axis, causing	
206.90	211.40			elongation of clasts, giving foliated appearance. Decreases in	
206.90	211.40			intensity downward.	
211.40	216.30			SANDSTONE: light grey, medium bedded, coarse bedded, hard, slightly broken core, 3 % veins of carbonate, 1% disseminations of pyrite. 211.40 216.30 30% SILTSTONE: light brown, irregularly interbedded, fine bedded, medium bedded, bedding: ca 40, cleavage: ca 20. 211.40 213.20 100% SANDSTONE: light grey, slightly altered, medium bedded, coarse bedded, hard, slightly broken core, 3 % veins of carbonate, 5% disseminations of pyrite.	
216.30	218.00			SHALE: black, moderately graphitic, coarse bedded, indistinctly bedded, moderately foliated, hard, slightly broken core, 3 % disseminations of pyrite.	
216.30	218.00			Possesses well developed folded cleavage in shale beds, and	
216.30	218.00			contorted folding.	
				216.30 218.00 30% SANDSTONE: medium grey, irregularly interbedded, fine bedded, medium bedded, moderate to strongly folded, disrupted bedding, 3 % disseminations of pyrite.	

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY011 (CONTINUED)

ASSAYS

From	To	NumberC	CU(PPM)	PB(PPM)	ZN(PPM)	SN(PPM)	AU(PPM)	AG(PPM)	AS(PPM)	SB(PPM)
30.00	31.00	34110	52	21	383	-3	-0.008	-0.50		
40.00	41.00	34111	128	35	754	-3	-0.008	-0.50		
50.00	51.00	34112	106	449	2550	6	-0.008	-0.50		
60.00	61.00	34113	120	119	1278	6	-0.008	-0.50		
70.00	71.00	34114	93	21	411	-3	-0.008	-0.50		
80.00	81.00	34115	85	33	438	4	-0.008	-0.50		
90.00	91.00	34116	92	-5	241	-3	-0.008	-0.50		
100.00	101.00	34117	82	6	468	-3	-0.008	-0.50		
104.90	106.00	34118	60	161	127	3	-0.008	0.60		
107.00	108.00	34119	20	122	54	5	-0.008	0.60		
115.00	116.00	34121	20	192	43	-3	-0.008	0.50		
120.00	121.00	34122	19	149	101	-3	-0.008	1.00		
124.90	126.00	34123	22	3995	779	29	0.016	4.00		
126.00	127.30	34124	30	469	791	28	0.017	1.50		
127.30	128.00	34125	52	236	2773	17	0.025	1.50		
128.00	129.00	34126	24	94	114	14	0.016	1.00		
129.00	130.00	34127	14	131	83	4	-0.008	0.80		
130.00	131.10	34128	18	221	180	24	0.026	1.40		
131.10	131.40	34129	261	15600	16000	55	0.172	23.00		
131.40	132.50	34130	17	291	438	10	0.019	0.80		
134.00	135.60	34131	45	110	59	4	-0.008	0.90		
138.00	139.00	34132	33	85	84	3	-0.008	0.70		
141.00	142.00	34133	57	680	626	3	0.010	2.20		
142.00	143.00	34134	51	900	3628	-3	0.012	3.00		
143.00	144.00	34135	54	756	1360	16	0.012	2.90		
144.00	145.10	34136	69	1895	4589	47	0.016	5.00		
145.10	146.00	34137	68	2458	1671	21	0.047	3.40		
146.00	147.00	34138	88	680	3206	23	0.080	1.90		
147.00	148.00	34139	16	1484	4568	16	0.081	2.20		
148.00	149.00	34141	21	471	6793	20	0.038	3.50		
149.00	150.00	34142	46	1100	12400	45	0.026	-0.50		
150.00	151.00	34143	21	579	3001	18	0.016	1.90		
151.00	152.00	34144	66	1052	5878	29	0.027	2.70		
152.00	153.00	34145	290	31100	173000	178	0.055	94.00		
153.00	154.00	34146	552	104000	232000	198	0.038	324.00		
154.00	155.00	34147	222	17400	72000	102	0.036	30.00		
155.00	156.00	34148	59	7600	27200	76	-0.008	22.00		
156.00	157.00	34149	136	22900	44500	127	0.014	39.00		
157.00	158.00	34150	67	9200	12400	62	0.022	16.00		
158.00	159.40	34151	46	13400	14200	41	0.016	26.00		
159.40	160.50	34152	23	1041	1900	45	-0.008	1.90		
160.50	161.50	34153	28	915	2400	38	-0.008	1.00		

058230

R.G.C. Exploration Pty Ltd

SYLVESTER GRID

SURFACE DIAMOND DRILLHOLE : SY011 (CONTINUED)

ASSAYS

From	To	NumberC	CU(PPM)	PB(PPM)	ZN(PPM)	SN(PPM)	AU(PPM)	AG(PPM)	AS(PPM)	SB(PPM)
161.50	162.50	34154	6	201	150	20	-0.008	0.70		
162.50	163.50	34155	44	370	333	33	-0.008	1.20		
163.50	164.50	34156	144		9234	15	0.084	7.10		
164.50	166.00	34157	9	689	275	19	0.008	2.10		
170.00	171.00	34158	18	130	239	24	-0.008	1.40		
172.30	173.20	34159	13	-5	61	-3	-0.008	-0.50		
182.70	184.00	34161	14	132	135	7	-0.008	1.00		
188.00	189.30	34162	49	895	824	48	0.028	1.50		
200.00	201.00	34163	14	25	37	3	-0.008	-0.50		
206.90	208.00	34164	5	448	1471	8	-0.008	-0.50		
208.00	209.00	34165	12	3604	4893	60	-0.008	4.70		
209.00	210.00	34166	14	378	2065	57	-0.008	2.20		
210.00	211.40	34167	20	598	4111	47	-0.008	3.10		
211.40	212.00	34168	-5	340	506	81	-0.008	-0.50		

058231

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY011 (CONTINUED)

ASSAYS

From	To	Number	CW(PPM)	AU(R) PPM	AU(S) PPM
30.00	31.00	34110	-20		
40.00	41.00	34111	-20		
50.00	51.00	34112	-20		-0.008
60.00	61.00	34113	-20	-0.008	
70.00	71.00	34114	-20		
80.00	81.00	34115	-20		
90.00	91.00	34116	-20		
100.00	101.00	34117	-20		
104.90	106.00	34118	-20		
107.00	108.00	34119	-20	-0.008	
115.00	116.00	34121	-20	-0.008	
120.00	121.00	34122	-20		
124.90	126.00	34123	-20		
126.00	127.30	34124	-20		
127.30	128.00	34125	-20		
128.00	129.00	34126	-20		
129.00	130.00	34127	-20	-0.008	
130.00	131.10	34128	-20		
131.10	131.40	34129	-20		
131.40	132.50	34130	-20		
134.00	135.60	34131	-20	-0.008	-0.008
138.00	139.00	34132	-20	-0.008	
141.00	142.00	34133	-20		
142.00	143.00	34134	-20		
143.00	144.00	34135	-20		
144.00	145.10	34136	-20		
145.10	146.00	34137	-20		
146.00	147.00	34138	-20	0.082	
147.00	148.00	34139	-20		
148.00	149.00	34141	-20		
149.00	150.00	34142	-20		
150.00	151.00	34143	-20		
151.00	152.00	34144	-20		
152.00	153.00	34145	-20		
153.00	154.00	34146	-20	0.048	0.040
154.00	155.00	34147	-20		
155.00	156.00	34148	-20		
156.00	157.00	34149	-20		
157.00	158.00	34150	-20		
158.00	159.40	34151	-20		
159.40	160.50	34152	-20		
160.50	161.50	34153	-20		

058232

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY011 (CONTINUED)

ASSAYS

From	To	NumberC	W(PPM)	AU(R) PPM	AU(S) PPM
161.50	162.50	34154	-20		
162.50	163.50	34155	-20		
163.50	164.50	34156	-20	0.096	
164.50	166.00	34157	-20		
170.00	171.00	34158	-20		
172.30	173.20	34159	-20		
182.70	184.00	34161	-20		
188.00	189.30	34162	-20		
200.00	201.00	34163	-20		
206.90	208.00	34164	-20		
208.00	209.00	34165	-20		
209.00	210.00	34166	-20		
210.00	211.40	34167	-20	-0.008	-0.008
211.40	212.00	34168	-20		

058233

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY011 (CONTINUED)

DRILL SAMPLE DENSITY MEASUREMEN

From	To	NumberC	DENSITY
190.00	200.00	34752	2.79

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY011 (CONTINUED)

ROCK QUALITY DESIGNATION (RQD)

From	To	NumberC	MEASURED RQD m	CALCULATED RQD %	MEAS. RECOVERY m	CALC. RECOVERY %
27.00	28.20		0.00	0.00	0.60	0.50
28.20	29.60		0.70	0.50	1.29	0.92
29.60	30.30		0.00	0.00	0.62	0.88
30.30	32.00		0.30	0.18	1.13	0.66
32.00	33.10		0.00	0.00	0.55	0.50
33.10	34.50		0.60	0.43	0.81	0.58
34.50	35.40		0.00	0.00	0.60	0.67
35.40	36.30		0.00	0.00	0.75	0.83
36.30	38.20		0.00	0.00	1.52	0.80
38.20	39.70		0.00	0.00	0.90	0.60
39.70	40.80		0.80	0.73	0.87	0.79
40.80	42.60		0.00	0.00	1.20	0.67
42.60	43.60		0.00	0.00	1.00	1.00
43.60	44.50		0.50	0.55	0.78	0.87
44.50	45.90		0.25	0.18	1.00	0.71
45.90	46.80		0.00	0.00	0.82	0.91
46.80	47.60		0.00	0.00	0.66	0.82
47.60	49.10		0.13	0.09	1.30	0.87
49.10	50.10		0.00	0.00	0.69	0.69
50.10	51.20		0.00	0.00	0.76	0.69
51.20	52.30		0.10	0.09	0.87	0.79
52.30	53.50		0.00	0.00	1.07	0.89
53.50	54.30		0.29	0.36	0.76	0.95
54.30	55.10		0.10	0.12	0.58	0.72
55.10	56.00		0.00	0.00	0.54	0.60
56.00	57.10		0.00	0.00	0.77	0.70
57.10	58.00		0.17	0.19	0.84	0.93
58.00	59.00		0.00	0.00	0.74	0.74
59.00	59.70		0.00	0.00	0.53	0.76
59.70	60.40		0.00	0.00	0.62	0.88
60.40	61.10		0.00	0.00	0.65	0.93
61.10	62.00		0.00	0.00	0.70	0.78
62.00	62.70		0.00	0.00	0.48	0.68
62.70	63.70		0.35	0.35	0.90	0.90
63.70	64.50		0.34	0.42	0.71	0.89
64.50	65.80		0.28	0.21	1.02	0.78
65.80	66.90		0.00	0.00	0.79	0.72
66.90	68.10		0.17	0.14	1.13	0.94
68.10	69.00		0.00	0.00	0.71	0.79
69.00	70.50		0.49	0.33	1.17	0.78
70.50	71.60		0.21	0.19	0.81	0.74
71.60	73.70		1.20	0.57	1.80	0.86

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY011 (CONTINUED)

ROCK QUALITY DESIGNATION (RQD)

From	To	Number	MEASURED RQD m	CALCULATED RQD %	MEAS. RECOVERY m	CALC. RECOVERY %
73.70	74.60		0.36	0.40	0.72	0.80
74.60	75.60		0.00	0.00	0.53	0.53
75.60	76.50		0.00	0.00	0.84	0.93
76.50	77.70		0.40	0.33	0.89	0.74
77.70	79.50		0.89	0.49	1.58	0.88
79.50	81.80		1.09	0.47	2.16	0.94
81.80	83.30		0.63	0.42	1.10	0.73
83.30	85.40		0.61	0.29	1.51	0.72
85.40	86.40		0.19	0.19	0.88	0.88
86.40	89.50		2.18	0.70	2.77	0.89
89.50	92.60		1.77	0.57	2.73	0.88
92.60	94.60		0.72	0.36	1.53	0.76
94.60	96.50		0.83	0.44	1.74	0.91
96.50	97.80		0.42	0.32	1.15	0.88
97.80	99.10		0.46	0.35	1.12	0.86
99.10	100.90		0.82	0.45	1.64	0.91
100.90	102.90		1.10	0.55	1.68	0.84
102.90	103.50		0.41	0.68	0.60	1.00
103.50	105.70		0.84	0.38	2.07	0.94
105.70	106.60		0.10	0.11	0.75	0.83
106.60	107.40		0.00	0.00	0.57	0.71
107.40	108.00		0.00	0.00	0.50	0.83
108.00	108.50		0.16	0.32	0.57	1.14
108.50	109.10		0.00	0.00	0.60	1.00
109.10	110.90		0.23	0.13	1.43	0.79
110.90	111.60		0.00	0.00	0.60	0.86
111.60	112.80		0.00	0.00	0.86	0.72
112.80	113.90		0.25	0.23	0.89	0.81
113.90	116.70		1.23	0.44	2.34	0.83
116.70	118.40		0.45	0.26	1.34	0.79
118.40	119.00		0.00	0.00	0.57	0.95
119.00	120.80		1.13	0.63	1.60	0.89
120.80	122.10		0.25	0.19	1.04	0.80
122.10	123.50		0.29	0.21	1.07	0.76
123.50	124.70		0.00	0.00	1.02	0.85
124.70	126.40		0.00	0.00	1.48	0.87
126.40	127.90		0.70	0.47	1.56	1.04
127.90	128.50		0.13	0.22	0.25	0.42
128.50	129.10		0.00	0.00	0.60	1.00
129.10	129.70		0.00	0.00	0.62	1.03
129.70	130.50		0.13	0.16	0.63	0.79
130.50	131.30		0.25	0.31	0.74	0.92

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY011 (CONTINUED)

ROCK QUALITY DESIGNATION (RQD)

From	To	Number	MEASURED RQD m	CALCULATED RQD %	MEAS. RECOVERY m	CALC. RECOVERY %
131.30	133.60		0.82	0.36	2.28	0.99
133.60	135.60		0.12	0.06	0.97	0.48
135.60	136.60		0.46	0.46	0.96	0.96
136.60	137.70		0.10	0.09	0.90	0.82
137.70	138.80		0.00	0.00	0.93	0.84
138.80	140.00		0.60	0.50	1.39	1.16
140.00	141.50		0.00	0.00	0.86	0.57
141.50	144.60		1.29	0.42	1.59	0.51
144.60	147.70		2.35	0.76	1.14	0.37
147.70	150.80		2.40	0.77	2.79	0.90
150.80	153.90		1.33	0.43	2.75	0.89
153.90	157.00		2.06	0.66	2.89	0.93
157.00	160.10		2.30	0.74	3.10	1.00
160.10	163.20		2.44	0.79	2.92	0.94
163.20	166.30		2.40	0.77	2.97	0.96
166.30	168.00		1.25	0.73	1.62	0.95
168.00	171.70		1.94	0.52	2.93	0.79
171.70	176.20		4.00	0.89	4.50	1.00
176.20	177.40		0.91	0.76	1.13	0.94
177.40	178.90		1.16	0.77	1.38	0.92
178.90	183.90		4.46	0.89	5.00	1.00
183.90	188.90		3.75	0.75	4.93	0.99
188.90	193.90		2.78	0.56	4.87	0.97
193.90	198.00		1.81	0.44	4.10	1.00
198.00	199.80		0.69	0.38	1.95	1.08
199.80	201.90		0.63	0.30	2.10	1.00
201.90	205.20		0.81	0.24	2.86	0.87
205.20	208.10		2.26	0.78	2.86	0.99
208.10	213.00		4.73	0.96	4.90	1.00
213.00	218.00		4.00	0.80	4.82	0.96

LYNX GEOSYSTEMS INCORPORATED Page: 1 Date: 7 AUG 92

R.G.C. Exploration Pty Ltd

SYLVESTER GRID

SURFACE DIAMOND DRILLHOLE : SY012

JECT IDEN :SYLVESTER START DATE : 14 NOV 91 COMPLETION DATE : 7 DEC 91 LOGGED BY:DAVID JOHN CROSSING
LAR NORTHING: 60998.75 COLLAR EASTING : 57816.76 COLLAR ELEVATION: 305.45 GRID AZIMUTH : 0.00
.LED BY : LONGYEAR TOTAL LENGTH : 495.10 CORE/HOLE SIZE : HQ

SURVEY FLAG	SURVEY POINT LOCATION	FORESIGHT	AZIMUTH (DEGREES)	VERTICAL ANGLE (DEGREES)	NORTHING	EASTING	ELEVATION
	0.00		190.00	-60.00	60998.75	57816.76	305.45
	30.00		192.50	-61.00			
	60.00		192.00	-61.00			
	90.00		192.00	-61.50			
	120.00		191.00	-62.00			
	150.00		191.50	-62.80			
	180.00		192.50	-63.50			
	210.00		194.00	-63.50			
	240.00		192.00	-63.80			
	258.00		194.00	-64.00			
	297.00		199.00	-64.00			
	333.00		199.00	-64.00			
	366.00		200.50	-63.80			
	400.00		200.00	-63.80			
	430.00		204.50	-63.00			
	494.00		204.50	-63.80			
	495.10		204.50	-63.80			

ED This hole was collared from the Trial Harbour road and was
ED designed to intersect the Balstrup Fault about 250m downdip
ED from the SY003 intersection. The hole traversed Crimsom Creek
ED turbidites to 432.5m, where it entered Oonah Formation.
ED Sandstone across a sharp contact marked by an insignificant
ED (5mm) fault. The hole intersected the Balstrup fault over the
ED interval 440 - 443.8m. Then it intersected 12.6m of massive
ED pyrite-pyrrhotite with up to 10% combined sphalerite-galena.The
ED sulphides are replacing recrystallised carbonate and the base
ED metals are concentrated toward the carbonate contact.Below 457m
ED the hole remained in recrystallised carbonate to the end of the
ED hole(495.1m). These carbonates contain a stockwork of
ED pyrite-carbonate-sphalerite-galena veinlets.
ED The mineralisation encountered is almost identical to that
ED encountered in SY003, and occurs at the same
ED structure/stratigraphic position.Based on the SY003/SY012
ED intersections the Balstrup Fault dips North - NorthEast at 70
ED degrees, and the true thickness of sulphides in SY012 is about
ED 9 metres.

058238

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY012 (CONTINUED)

- Interval - From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
0.00	15.00			PRECOLLAR.	
15.00	82.10			MUDSTONE: grey-green, slightly weathered, medium bedded, massive, bedding: ca 30, firm, highly broken core, 0.3% veins of epidote.	CAMBRIAN CRIMSON CK FOR
15.00	82.10			Wide spaced fault surface, often with fibre and epidotized.	
15.00	82.10			form set at 45 degrees and 10 - 30 degrees to the C.A. BCA's	
15.00	82.10			vary 20 - 45 degrees.	
				15.00 30.00 100% MUDSTONE: grey-green, slightly weathered, medium bedded, disrupted bedding, fractured, microfaults, fault: ca 25, fault: ca gradational base, 45, firm, highly broken core, 1% veins of epidote.	CAMBRIAN CRIMSON CK FOR
20.00	23.00			Fault sets well developed with strong fibre growth.	
				30.00 35.00 5% LITHIC ARENITE: light grey, irregularly interbedded, graded bedding, medium bedded, bedding: ca 20.	
				42.20 43.20 50% LITHIC ARENITE: disrupted bedding, fractured, fracture: ca 05, 3 % veins of quartz, 1% veins of epidote, 1% veins of pyrite, 1% veins of sercite.	
				67.40 67.50 100% FAULT: fault: ca 30.	
				69.00 69.01 100% STRUCTURAL MEASUREMENT: bedding: 312 / 64.	
82.10	86.10			FAULT: light grey, vuggy, sheared, brecciated, fault: ca 40, 3 % veins of carbonate.	
82.10	86.10			A composite structure with an early formed shear fabric which	
82.10	86.10			has been refolded and cross - cut by later brittle structures	
82.10	86.10			at 30-50 degrees to the C.A. The latter are slickensided.	
82.10	86.10			Puggy zones and breccia zones are also present.	
				82.10 86.10 30% LITHIC ARENITE: light grey, slightly altered, slightly carbonated, massive, disrupted bedding.	
				82.10 84.90 100% FAULT: light grey, vuggy, sheared, brecciated, fault: ca 40, 3 % veins of carbonate, 0.3% disseminations = veins of epidote, 5% disseminations = veins of pyrite.	
86.10	127.50			MUDSTONE: dark grey, medium bedded, coarse bedded, bedding: ca 30, basal contact: ca intrusive contacts, 60, hard, moderately broken core, 0.3% veins of epidote, 3 % veins of pyrite.	CAMBRIAN CRIMSON CK FOR
				86.10 127.50 30% LITHIC ARENITE: medium grey, irregularly interbedded, medium grained, medium bedded, 3 % veins of carbonate, 0.3% veins of epidote, 3 % veins of pyrite.	
				108.50 127.50 100% MUDSTONE: dark grey, moderately calcareous, medium bedded, coarse bedded, bedding: ca 15, basal contact: ca intrusive contacts, 60, hard, moderately broken core, 0.3% veins of epidote, 3 % veins of pyrite.	CAMBRIAN CRIMSON CK FOR

058239

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY012 (CONTINUED)

- Interval - From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
				115.00 121.00 100% MUDSTONE: dark grey, medium bedded, coarse bedded, bedding: ca 30, basal contact: ca intrusive contacts, 60, hard, moderately broken core, 0.3% veins of epidote, 3 % veins of pyrite, 0.1% veins of galena, 0.1% veins of sphalerite.	CAMBRIAN CRIMSON CK FOR
				124.00 126.00 100% MUDSTONE: dark grey, medium bedded, coarse bedded, bedding: ca 30, basal contact: ca intrusive contacts, 60, hard, moderately broken core, 5% veins of quartz, 3 % veins of carbonate, 3 % veins of epidote, 3 % veins of pyrite, 0.1% veins of galena, 0.1% veins of sphalerite.	CAMBRIAN CRIMSON CK FOR
127.50	143.00			LITHIC ARENITE: grey-green, slightly bleached, moderately calcareous, massive, coarse bedded, medium grained, bedding: ca 15, basal contact: ca intrusive contacts, 60, hard, moderately broken core, 1% veins of quartz, 3 % veins of carbonate, 1% veins of epidote, 1% veins of pyrrhotite. 127.50 143.00 10% MUDSTONE: light grey. 132.60 132.61 100% STRUCTURAL MEASUREMENT: vein: 243 / 35, 70% veins of siderite, 20% veins of epidote, 10% veins of pyrrhotite.	CAMBRIAN CRIMSON CK FOR
134.00	134.01			Upper block has moved east and up. 134.00 134.01 100% STRUCTURAL MEASUREMENT: fault: 211 / 32, fault: 266 / 15. 134.90 134.91 100% STRUCTURAL MEASUREMENT: vein: 302 / 17, 60% veins of talc, 30% veins of siderite, 10% veins of pyrite.	
143.00	147.60			GABBRO: grey-green, moderately calcareous, massive, medium grained, basal contact: ca intrusive contacts, 5, hard, moderately broken core, 1% veins of epidote.	
147.60	151.80			MUDSTONE: light grey, medium bedded, basal contact: ca intrusive contacts, 35, hard, moderately broken core, 1% veins of quartz, 3 % veins of carbonate, 1% veins of epidote. 147.60 151.80 20% LITHIC ARENITE: irregularly interbedded, fine bedded, graded bedding.	
151.80	153.80			GABBRO: grey-green, moderately calcareous, massive, medium grained, basal contact: ca intrusive contacts, 45, hard, moderately broken core, 3 % veins of quartz, 1% veins of epidote, 1% veins of pyrite.	
153.80	161.00			LITHIC ARENITE: light grey, coarse bedded, medium bedded, hard, moderately broken core, 3 % veins of carbonate. 153.80 161.00 40% MUDSTONE: medium dark grey, microfaults,	CAMBRIAN CRIMSON CK FOR

058240

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY012 (CONTINUED)

- Interval - From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
				microfault: ca 45. 3 % veins of carbonate.	
161.00	167.40			GABBRO: grey-green, massive, medium grained, basal contact: ca intrusive contacts, 20, hard, moderately broken core. 161.00 162.40 100% GABBRO: grey-green, moderately altered, spotted, medium grained. fractured, basal contact: ca intrusive contacts, 20, hard, moderately broken core, 3 % in fractures of clay.	
166.60	166.61			Upper block moved toward 072, upward. 166.60 166.61 100% STRUCTURAL MEASUREMENT: fault: 180 / 30, fibre: 252 / 10.	
167.40	171.60			LITHIC ARENITE: medium bedded. disrupted bedding. convolute folds, brecciated, basal contact: ca intrusive contacts. 35. hard, moderately broken core, 1% veins of quartz, 5% veins of carbonate, 3 % veins of epidote, .03% disseminations = veins of pyrrhotite. 167.40 171.60 40% MUDSTONE: 1% veins of quartz, 5% veins of carbonate, 3 % veins of epidote, .03% disseminations = veins of pyrrhotite.	CAMBRIAN CRIMSON CK FOR
168.20	168.21			Upper block moved toward 076. 168.20 168.21 100% STRUCTURAL MEASUREMENT: fault: 200 / 25. fibre: 256 / 10.	
168.60	168.61			Upper block moved upward toward 070 (very definite,based on	
168.60	168.61			well developed fibres). 168.60 168.61 100% STRUCTURAL MEASUREMENT: fault: 204 / 15. fibre: 250 / 14.	
171.60	191.50			GABBRO: medium grey, massive, coarse grained, basal contact: ca intrusive contacts, 45, hard, moderately broken core, 1% veins of carbonate. 190.70 191.50 60% GABBRO: medium brown, highly calcareous, massive, coarse grained, basal contact: ca intrusive contacts, 45, 1% veins of carbonate. 191.45 191.46 100% STRUCTURAL MEASUREMENT: basal contact: 035 / 70, intrusive contacts.	
191.50	268.50			MUDSTONE: light grey, fine bedded, medium bedded, bedding: ca 25, microfault: ca gradational base, 35, hard, moderately broken core, 1% veins of quartz, 3 % veins of carbonate, 0.3% veins of epidote, .03% disseminations = veins of pyrrhotite.	CAMBRIAN CRIMSON CK FOR
191.50	268.50			The sequence is disrupted near top, with numberous micro	
191.50	268.50			meso-scale faults. BCA varies 0 - 35 degrees, AVE 25. 191.50 268.50 30% LITHIC ARENITE: medium grey, irregularly	

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY012 (CONTINUED)

- Interval - From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
				interbedded, medium bedded, graded bedding. 1% veins of quartz, 3 % veins of carbonate, 0.3% veins of epidote, .03% disseminations = veins of pyrrhotite.	
				193.45 193.46 100% STRUCTURAL MEASUREMENT: bedding: 210 / 80.	
				199.00 199.01 100% STRUCTURAL MEASUREMENT: bedding: 200 / 68.	
				222.00 222.01 100% STRUCTURAL MEASUREMENT: bedding: 198 / 67.	
				224.00 224.01 100% STRUCTURAL MEASUREMENT: vein: 196 / 75, 60% veins of talc, 30% veins of siderite, 10% veins of pyrite.	
				226.20 226.21 100% STRUCTURAL MEASUREMENT: bedding: 194 / 90.	
				234.00 234.01 100% STRUCTURAL MEASUREMENT: bedding: 170 / 75.	
				234.10 234.11 100% STRUCTURAL MEASUREMENT: bedding: 150 / 80.	
				237.10 237.11 100% STRUCTURAL MEASUREMENT: bedding: 140 / 77, fault: 230 / 60.	
				238.00 239.00 100% MUDSTONE: light grey, fine bedded, medium bedded, bedding: ca 25, microfault: ca gradational base. 35, hard, moderately broken core, 1% veins of quartz, 3 % veins of carbonate, 0.3% veins of epidote, .03% veins of galena, .03% disseminations = veins of pyrrhotite, .03% veins of sphalerite.	CAMBRIAN CRIMSON CK FOR
				246.50 246.51 100% STRUCTURAL MEASUREMENT: bedding: 180 / 48.	
				252.50 252.51 100% STRUCTURAL MEASUREMENT: bedding: 226 / 70.	
				257.90 257.91 100% STRUCTURAL MEASUREMENT: bedding: 060 / 65.	
				266.60 266.61 100% STRUCTURAL MEASUREMENT: bedding: 096 / 65, vein: 246 / 55, 90% veins of epidote.	
268.50	305.90			LITHIC ARENITE: medium grey, medium bedded, graded bedding, medium grained, intraclastic, bedding: ca 50, uphole facing, hard, slightly broken core, 3 % veins of carbonate.	CAMBRIAN CRIMSON CK FOR
				291.00 293.00 100% LITHIC ARENITE: medium grey, medium bedded, graded bedding, medium grained, intraclastic, bedding: ca 50, uphole facing, hard, slightly broken core, 3 % veins of carbonate, 3 % disseminations > veins of pyrite, .03% veins of sphalerite.	CAMBRIAN CRIMSON CK FOR
				293.50 293.51 100% STRUCTURAL MEASUREMENT: bedding: 040 / 50.	
				298.50 298.51 100% STRUCTURAL MEASUREMENT: bedding: 035 / 42.	
				299.50 305.90 30% MUDSTONE: irregularly interbedded, 3 % veins of carbonate.	
305.90	325.60			MUDSTONE: light grey, medium bedded, bedded, disrupted bedding, microfaults. 80. fault: ca 45. hard, moderately broken core, 1% veins of quartz, 3 % veins of carbonate.	CAMBRIAN CRIMSON CK FOR
				305.90 325.60 30% LITHIC ARENITE: intergradational, medium bedded, graded bedding.	
				316.60 325.60 100% MUDSTONE: medium dark grey, medium bedded,	CAMBRIAN CRIMSON CK FOR

058242

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY012 (CONTINUED)

- Interval - From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
				bedded, disrupted bedding, microfaults, 80, fault: ca 45, hard, moderately broken core. 1% veins of quartz, 3 % veins of carbonate.	
325.60	366.00			LITHIC ARENITE: grey-green, massive, coarse bedded, intraclastic, bedding: ca 60, uphole facing, gradational base, hard, slightly broken core.	CAMBRIAN CRIMSON CK FOR
326.40	330.00			Disturbed, with boudinaged intraclasts of lithic arenite and	
326.40	330.00			mudstone cut by occasional slickensided fault surfaces (near	
326.40	330.00			top). Numerous carbonate veins. Moderately calcareous.	
357.50	357.80			Intraclast conglomerate.	
366.00	432.50			MUDSTONE: light grey, medium bedded, bedding: ca 55, basal contact: ca sharp base, 60, hard, moderately broken core. 366.00 432.50 20% LITHIC ARENITE: irregularly interbedded, medium bedded, graded bedding.	CAMBRIAN CRIMSON CK FOR
				375.20 378.40 100% MUDSTONE: light grey, disrupted bedding, boudinaged, brecciated, bedding: ca 55, basal contact: ca sharp base, 60, hard, moderately broken core, 3 % veins of quartz.	CAMBRIAN CRIMSON CK FOR
				383.00 400.70 100% MUDSTONE: light grey, medium bedded, bedding: ca 55, basal contact: ca sharp base, 60, hard, moderately broken core, 0.3% veins of quartz, 3 % veins of carbonate, 0.1% veins of epidote, 1% disseminations = veins of pyrite, 1% disseminations = veins of pyrrhotite. 407.40 407.41 100% STRUCTURAL MEASUREMENT: bedding: 045 / 84. 409.40 409.41 100% STRUCTURAL MEASUREMENT: bedding: 250 / 55.	CAMBRIAN CRIMSON CK FOR
412.70	412.71			Reverse movement (upper block up, toward 276 AMG). 412.70 412.71 100% STRUCTURAL MEASUREMENT: fault: 070 / 45, fibre: 096 / 40.	
				429.80 432.50 100% MUDSTONE: light grey, slightly altered, slightly bleached, disrupted bedding, microfaults, bedding: ca 55, basal contact: ca sharp base, 60, hard, moderately broken core, 3 % disseminations = veins of pyrrhotite. 431.80 432.10 100% FAULT: fault: ca 50, 1% infilling shear/fault pyrite, 20% infilling shear/fault pyrrhotite.	CAMBRIAN CRIMSON CK FOR
432.49	432.50			The basalt contact is sharp, somewhat iregular and marked by	
432.49	432.50			5mm of talcy selvedge. It is sub-parallel to weak foliation in	
432.49	432.50			underlaying sandstone, and approximately parallel to	
432.49	432.50			recognizeable faults both above and below. It may represent a	
432.49	432.50			relatively insignificant fault.	
432.50	434.80			SANDSTONE: medium grey, massive, coarse bedded, disrupted bedding, faulted, fault: ca 60, hard, moderately broken core,	UPPER OONAH

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY012 (CONTINUED)

- Interval - From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
				5% veins of quartz, 3 % disseminations = veins of pyrite, 1% disseminations = veins of pyrrhotite.	
434.80	434.90			FAULT: slickensided, fault: ca 55, 90% infilling shear/fault carbonate, 10% infilling shear/fault pyrrhotite.	
434.90	440.00			SANDSTONE: medium grey, fine bedded, well bedded, strongly folded, microfaults, basal contact: ca 25, hard, moderately broken core, 1% disseminations = veins of pyrite, 3 % disseminations = veins of pyrrhotite. 436.00 436.20 100% FAULT: fault: ca 25, 50% infilling shear/fault quartz, 3 % infilling shear/fault pyrite.	UPPER OONAH
440.00	443.80			FAULT: sheared, brecciated, basal contact: ca 30, crumbly, highly broken core, 5% disseminations = veins of carbonate.	BALSTRUP FAULT
440.00	443.80			A composite structure comprising of early formed strain fabric	
440.00	443.80			(angular vein quartz fragments in carbonaceous, foliation	
440.00	443.80			matrix grading to lenticular quartz and sandstone, boudins	
440.00	443.80			aligned with strong foliation - cf melange. Fabric is at 25 -	
440.00	443.80			45 degrees to the CA.) Which is cut by later brittle features	
440.00	443.80			(eg breccia at 45 degrees to CA and puggy breccia at 50 degrees	
440.00	443.80			to CA).	
				441.80 442.70 100% FAULT: highly calcareous, puggy, brecciated, vuggy, brecciated, fault: ca 50, crumbly, highly broken core, 20% disseminations = veins of carbonate.	BALSTRUP FAULT
443.80	457.00			MASSIVE SULPHIDES: yellow brown, massive, coarse grained, basal contact: ca diffuse base, 80, hard, slightly broken core.	
443.80	457.00			The massive sulphides are replacing carbonate adjacent to the	
443.80	457.00			Balstrup Fault.Pyrite is euhedral and pyrrhotite is interstitial	
443.80	457.00			to pyrite where they occur together.Sphalerite is irregularly	
443.80	457.00			distributed and interstitial to pyrite.The outer contact is	
443.80	457.00			diffuse over a 3cm wide interval. Sphalerite and galena tend to	
443.80	457.00			concentrate toward the outer contact and around remnant patches	
443.80	457.00			of carbonate within the interval.	
				443.80 447.00 100% MASSIVE SULPHIDES: yellow brown, massive, coarse grained, basal contact: ca diffuse base, 80, hard, slightly broken core, 10% interstitial quartz, 3 % interstitial carbonate, 70% massive/ semi - massive pyrite, 0.3% disseminations of pyrrhotite.	
				447.00 450.60 100% MASSIVE SULPHIDES: yellow brown, massive, coarse grained, basal contact: ca diffuse base, 80, hard, slightly broken core, 1% interstitial quartz, 3 % interstitial	

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY012 (CONTINUED)

	- Interval - From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
					carbonate, 10% patches of pyrite, .03% veins of galena, 80% massive/ semi - massive pyrrhotite. 0.1% veins of sphalerite. 450.60 457.00 100% MASSIVE SULPHIDES: yellow brown, massive, coarse grained, basal contact: ca diffuse base, 80, hard, slightly broken core, 70% massive/ semi - massive pyrite. 3 % disseminations of galena. 10% patches of pyrrhotite, 5% disseminations of sphalerite. 451.40 451.80 100% SHALE: black. bedding: ca 45. 3 % interstitial quartz, 3 % interstitial carbonate, 5% disseminations of pyrite. 5% disseminations of pyrrhotite.	
ND	457.00	495.10			CARBONATE: mottled-grey, massive, recrystallised, coarse grained, hard, slightly broken core, 0.3% stockwork of magnetite, 1% stockwork of pyrite, .03% stockwork of galena, 0.3% stockwork of pyrrhotite, .03% stockwork of sphalerite, 0.3% stockwork of serpentine.	UPPER OONAH
	457.00	495.10			Galena and sphalerite occur associated with a stockwork of	
	457.00	495.10			regular pyrite-carbonate veins and replacive patches.These	
	457.00	495.10			veins typically contain about 5 % combined sphalerite-galena	
	457.00	495.10			and accessory minerals including magnetite and pyrrhotite.	
ND					457.00 469.50 100% CARBONATE: mottled-grey, massive, recrystallised. coarse grained. hard. slightly broken core. 0.1% stockwork of magnetite, 1% stockwork of pyrite, 0.3% stockwork of galena, 0.3% stockwork of pyrrhotite, 0.3% stockwork of sphalerite, 0.3% stockwork of serpentine. 477.70 477.71 100% STRUCTURAL MEASUREMENT: vein: 052 / 75. 483.40 483.41 100% STRUCTURAL MEASUREMENT: vein: 280 / 56.	UPPER OONAH

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY012 (CONTINUED)

ASSAYS

From	To	NumberC	CU(PPM)	PB(PPM)	ZN(PPM)	SN(PPM)	AU(PPM)	AG(PPM)	AS(PPM)	SB(PPM)
42.20	43.20	23970	105	-5	138	-3	-0.008	-0.50		
82.10	83.00	23971	80	11	332	-3	-0.008	-0.50		
100.00	101.00	23972	110	243	1720	-3	-0.008	-0.50		
115.00	116.00	23973	23	1080	1480	-3	-0.008	0.90		
116.00	117.00	23974	56	4090	4360	4	-0.008	2.30		
117.00	118.00	23975	108	4680	5720	4	-0.008	2.50		
118.00	119.00	23976	41	32	377	-3	-0.008	-0.50		
119.00	120.00	23977	41	2890	4320	-3	-0.008	2.30		
120.00	121.00	23978	152	189	838	5	-0.008	1.10		
124.00	125.00	23979	27	903	1240	-3	-0.008	1.00		
125.00	126.00	23980	17	9	135	-3	-0.008	-0.50		
151.80	152.80	23981	127	-5	211	-3	-0.008	0.70		
200.00	201.00	23982	87	13	159	-3	-0.008	0.50		
240.00	241.00	23983	77	-5	100	-3	-0.008	-0.50		
280.00	281.00	23984	92	-5	154	-3	-0.008	-0.50		
291.00	292.00	23985	113	430	1370	-3	-0.008	0.70		
320.00	321.00	23986	125	10	141	-3	-0.008	-0.50		
360.00	361.00	23987	41	-5	153	-3	-0.008	-0.50		
400.00	401.00	23988	92	-5	92	-3	-0.008	-0.50		
429.80	431.00	23989	59	11	60	3	-0.008	-0.50		
431.00	432.10	23990	153	-5	84	7	-0.008	-0.50		
434.00	434.90	23991	59	174	356	50	-0.008	-0.50		
438.00	439.00	23992	54	28	52	-3	-0.008	-0.50		
443.00	443.80	23993	102	507	1026	55	-0.008	4.00		
443.80	445.00	23994	170	1470	2110	40	0.011	12.00		
445.00	446.00	23995	70	250	85	3	0.030	-5.00		
446.00	447.00	23996	160	100	60	3	0.066	-5.00		
447.00	448.00	23997	910	-25	55	-3	0.039	-5.00		
448.00	449.00	23998	1080	80	65	-3	0.031	-5.00		
449.00	450.00	23999	1150	180	630	19	0.024	-5.00		
450.00	451.00	28482	950	5900	4900	8	0.067	15.00		
451.00	452.00	28483	280	5200	6000	55	0.033	14.00		
452.00	453.10	28484	610	10800	30800	6	0.045	20.00		
453.10	454.00	28485	240	26600	24800	19	0.077	50.00		
454.00	455.00	28486	440	19000	83000	100	0.054	37.00		
455.00	456.00	28487	740	3300	1800	7	0.026	12.00		
456.00	457.00	28488	350	8800	12800	-3	0.055	15.00		
457.00	458.00	28489	76	1510	165	-3	-0.008	3.40		
458.00	459.00	28490	78	2080	101	-3	-0.008	4.30		
459.00	460.00	28491	28	3310	363	-3	-0.008	10.20		
460.00	461.00	28492	24	554	99	4	-0.008	1.70		
461.00	462.00	28493	124	720	1230	-3	-0.008	1.80		

058246

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY012 (CONTINUED)

ASSAYS

From	To	NumberC	CU(PPM)	PB(PPM)	ZN(PPM)	SN(PPM)	AU(PPM)	AG(PPM)	AS(PPM)	SB(PPM)
462.00	463.00	28494	14	673	1090	-3	-0.008	2.00		
463.00	464.00	28495	18	912	452	-3	-0.008	2.70		
464.00	465.00	28496	16	95	124	-3	-0.008	0.80		
465.00	466.00	28497	11	131	176	-3	-0.008	0.60		
466.00	467.00	28498	22	1650	805	4	0.020	7.00		
467.00	468.00	28499	43	770	1140	-3	-0.008	0.70		
468.00	469.00	33501	17	155	261	-3	-0.008	-0.50		
469.00	470.00	33502	62	4800	1310	45	0.019	23.00		
474.00	475.00	33503	6	254	235	-3	-0.008	1.10		
477.00	478.00	33504	31	876	540	-3	-0.008	0.90		
478.00	479.00	33505	22	51	40	-3	-0.008	0.50		
479.00	480.00	33506	43	211	72	-3	-0.008	1.50		
480.00	481.00	33507	26	231	293	-3	-0.008	0.80		
484.00	485.00	33508	10	254	282	-3	-0.008	0.70		
488.00	489.00	33509	17	774	570	-3	-0.008	1.00		
492.00	493.00	33510	33	7	105	-3	-0.008	-0.50		

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY012 (CONTINUED)

ASSAYS

From	To	NumberC	W(PPM)	AU(R) PPM	AU(S) PPM
42.20	43.20	23970	-10		
82.10	83.00	23971	-10		
100.00	101.00	23972	-10		
115.00	116.00	23973	-10		
116.00	117.00	23974	-10		
117.00	118.00	23975	-10		
118.00	119.00	23976	-10		
119.00	120.00	23977	-10		
120.00	121.00	23978	-10		
124.00	125.00	23979	-10		
125.00	126.00	23980	-10		
151.80	152.80	23981	-10	-0.008	
200.00	201.00	23982	-10		
240.00	241.00	23983	-10		-0.008
280.00	281.00	23984	-10		
291.00	292.00	23985	-10		
320.00	321.00	23986	-10		
360.00	361.00	23987	-10		
400.00	401.00	23988	-10		
429.80	431.00	23989	-10		
431.00	432.10	23990	-10		
434.00	434.90	23991	-10	-0.008	
438.00	439.00	23992	-10		-0.008
443.00	443.80	23993	-10		
443.80	445.00	23994	12		
445.00	446.00	23995	-10		
446.00	447.00	23996	-10		
447.00	448.00	23997	10		
448.00	449.00	23998	-10		
449.00	450.00	23999	-10		
450.00	451.00	28482	-10		
451.00	452.00	28483	-10		
452.00	453.10	28484			
453.10	454.00	28485			
454.00	455.00	28486			
455.00	456.00	28487	-10	0.036	
456.00	457.00	28488			
457.00	458.00	28489	-10		
458.00	459.00	28490	-10		
459.00	460.00	28491	-10		
460.00	461.00	28492	-10		
461.00	462.00	28493	-10		

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY012 (CONTINUED)

ASSAYS

From	To	NumberC	W(PPM)	AU(R) PPM	AU(S) PPM
462.00	463.00	28494	-10		
463.00	464.00	28495	-10		
464.00	465.00	28496	-10		
465.00	466.00	28497	-10	-0.008	
466.00	467.00	28498	-10		
467.00	468.00	28499	-10		
468.00	469.00	33501	-10		
469.00	470.00	33502	-10		
474.00	475.00	33503	-10		
477.00	478.00	33504	-10		
478.00	479.00	33505	-10		
479.00	480.00	33506	-10	-0.008	
480.00	481.00	33507	-10		
484.00	485.00	33508	-10		
488.00	489.00	33509	-10		
492.00	493.00	33510	-10		-0.008

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY012 (CONTINUED)

DRILL SAMPLE DENSITY MEASUREMEN

From	To	NumberC	DENSITY
480.00	490.00	34753	2.89

058250

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY012 (CONTINUED)

ROCK QUALITY DESIGNATION (RQD)

From	To	Number	CMEASURED RQD m	CALCULATED RQD %	MEAS. RECOVERY m	CALC. RECOVERY %
15.00	15.90		0.00	0.00	0.70	0.78
15.90	16.70		0.00	0.00	0.50	0.62
16.70	18.00		0.20	0.15	0.55	0.42
18.00	18.90		0.24	0.27	0.60	0.67
18.90	20.10		0.16	0.13	0.95	0.79
20.10	21.00		0.20	0.22	0.80	0.89
21.00	22.60		0.35	0.22	1.40	0.87
22.60	23.50		0.00	0.00	0.90	1.00
23.50	24.70		0.30	0.25	1.00	0.83
24.70	25.30		0.15	0.25	0.60	1.00
25.30	26.90		1.15	0.72	1.50	0.94
26.90	27.80		0.00	0.00	0.90	1.00
27.80	29.00		0.00	0.00	0.90	0.75
29.00	29.30		0.00	0.00	0.25	0.83
29.30	30.40		0.13	0.12	1.05	0.95
30.40	31.70		0.13	0.10	0.95	0.73
31.70	33.10		0.30	0.21	1.20	0.86
33.10	34.20		0.24	0.22	0.95	0.86
34.20	35.80		0.26	0.16	1.40	0.87
35.80	36.50		0.28	0.40	0.50	0.71
36.50	37.00		0.00	0.00	0.45	0.90
37.00	38.10		0.13	0.12	1.10	1.00
38.10	39.70		0.80	0.50	1.50	0.94
39.70	40.60		0.50	0.55	0.80	0.89
40.60	42.10		0.75	0.50	1.50	1.00
42.10	42.40		0.00	0.00	0.30	1.00
42.40	43.40		0.00	0.00	0.80	0.80
43.40	45.00		0.80	0.50	1.50	0.94
45.00	45.70		0.33	0.47	0.70	1.00
45.70	47.10		0.12	0.09	1.20	0.86
47.10	48.10		0.40	0.40	0.90	0.90
48.10	49.60		0.11	0.07	1.50	1.00
49.60	50.50		0.20	0.22	0.70	0.78
50.50	52.00		0.75	0.50	1.50	1.00
52.00	53.60		0.75	0.47	1.40	0.87
53.60	55.10		0.70	0.47	1.45	0.97
55.10	56.00		0.43	0.48	0.86	0.95
56.00	57.60		0.90	0.56	1.45	0.91
57.60	59.00		0.90	0.64	1.30	0.93
59.00	60.00		0.20	0.20	1.00	1.00
60.00	60.80		0.12	0.15	0.80	1.00
60.80	61.30		0.45	0.90	0.50	1.00

058251

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY012 (CONTINUED)

ROCK QUALITY DESIGNATION (RQD)

From	To	Number	MEASURED RQD m	CALCULATED RQD %	MEAS. RECOVERY m	CALC. RECOVERY %
61.30	62.30		0.20	0.20	0.95	0.95
62.30	63.70		0.33	0.23	1.40	1.00
63.70	64.80		0.50	0.45	1.10	1.00
64.80	66.40		0.65	0.41	1.50	0.94
66.40	66.60		0.00	0.00	0.20	1.00
66.60	68.10		0.60	0.40	1.50	1.00
68.10	69.00		0.40	0.44	0.90	1.00
69.00	70.50		0.36	0.24	1.30	0.87
70.50	71.70		0.30	0.25	1.20	1.00
71.70	73.30		1.10	0.69	1.60	1.00
73.30	74.70		0.80	0.57	1.40	1.00
74.70	76.20		0.40	0.27	1.10	0.73
76.20	77.00		0.40	0.50	0.80	1.00
77.00	78.50		0.95	0.63	1.30	0.87
78.50	80.30		1.20	0.67	1.70	0.94
80.30	80.90		0.00	0.00	0.46	0.77
80.90	81.50		0.13	0.22	0.31	0.52
81.50	82.50		0.20	0.20	0.70	0.70
82.50	82.80		0.00	0.00	0.20	0.67
82.80	83.40		0.00	0.00	0.50	0.83
83.40	84.90		0.70	0.47	1.03	0.69
84.90	86.30		0.87	0.62	1.11	0.79
86.30	87.80		0.80	0.53	1.50	1.00
87.80	89.20		1.00	0.71	1.25	0.89
89.20	90.10		0.00	0.00	0.30	0.33
90.10	91.20		0.13	0.12	0.85	0.77
91.20	92.40		1.00	0.83	1.20	1.00
92.40	94.00		1.30	0.81	1.60	1.00
94.00	95.60		1.00	0.62	1.55	0.97
95.60	97.24		1.00	0.61	1.55	0.94
97.24	99.10		1.80	0.97	1.90	1.02
99.10	100.70		1.40	0.87	1.50	0.94
100.70	102.33		1.20	0.74	1.50	0.92
102.33	103.17		0.30	0.36	0.80	0.95
103.17	104.60		1.40	0.98	1.50	1.05
104.60	106.24		1.30	0.79	1.53	0.93
106.24	107.80		1.30	0.83	1.55	0.99
107.80	108.42		0.30	0.48	0.60	0.97
108.42	109.16		0.20	0.27	0.70	0.94
109.16	110.60		1.00	0.69	1.45	1.01
110.60	112.14		1.10	0.71	1.50	0.97
112.14	112.80		0.00	0.00	0.30	0.45

058252

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY012 (CONTINUED)

ROCK QUALITY DESIGNATION (RQD)

From	To	NumberCMEASURED RQD m	CALCULATED RQD %	MEAS. RECOVERY m	CALC. RECOVERY %
112.80	114.22	0.00	0.00	0.46	0.32
114.22	115.70	1.50	1.01	1.50	1.01
115.70	117.33	1.52	0.93	1.52	0.93
117.33	118.80	1.50	1.02	1.50	1.02
118.80	120.42	1.52	0.94	1.52	0.94
120.42	122.00	1.44	0.91	1.54	0.97
122.00	123.50	1.20	0.80	1.48	0.99
123.50	125.00	1.10	0.73	1.50	1.00
125.00	126.60	0.60	0.37	1.60	1.00
126.60	127.20	0.00	0.00	0.40	0.67
127.20	127.40	0.00	0.00	0.10	0.50
127.40	127.90	0.00	0.00	0.30	0.60
127.90	128.90	0.20	0.20	0.80	0.80
128.90	129.40	0.00	0.00	0.50	1.00
129.40	131.00	1.00	0.62	1.40	0.87
131.00	132.50	1.50	1.00	1.50	1.00
132.50	134.00	1.30	0.87	1.35	0.90
134.00	135.60	0.80	0.50	1.40	0.87
135.60	137.10	1.10	0.73	1.45	0.97
137.10	137.40	0.00	0.00	0.20	0.67
137.40	139.10	1.20	0.70	1.45	0.85
139.10	140.50	1.10	0.78	1.40	1.00
140.50	142.00	1.10	0.73	1.45	0.97
142.00	143.50	0.60	0.40	1.00	0.67
143.50	144.50	0.20	0.20	1.40	1.40
144.50	145.00	0.50	1.00	0.50	1.00
145.00	148.10	2.80	0.90	3.10	1.00
148.10	150.00	1.30	0.68	1.90	1.00
150.00	152.80	2.20	0.78	2.80	1.00
152.80	155.72	1.70	0.58	2.70	0.92
155.72	158.53	1.70	0.60	2.83	1.01
158.53	160.80	0.80	0.35	2.00	0.88
160.80	162.90	0.80	0.38	2.10	1.00
162.90	165.90	2.70	0.90	3.00	1.00
165.90	169.00	2.40	0.77	3.10	1.00
169.00	172.10	2.80	0.90	3.10	1.00
172.10	175.20	3.00	0.97	3.10	1.00
175.20	178.30	3.00	0.97	3.10	1.00
178.30	181.30	2.80	0.93	3.00	1.00
181.30	184.40	2.80	0.90	3.10	1.00
184.40	187.50	2.80	0.90	3.10	1.00
187.50	190.50	2.70	0.90	3.00	1.00

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY012 (CONTINUED)

ROCK QUALITY DESIGNATION (RQD)

From	To	NumberC	MEASURED RQD m	CALCULATED RQD %	MEAS. RECOVERY m	CALC. RECOVERY %
190.50	193.50		2.70	0.90	3.00	1.00
193.50	196.50		2.90	0.97	3.00	1.00
196.50	199.50		2.80	0.93	3.00	1.00
199.50	202.50		2.90	0.97	3.00	1.00
202.50	205.50		2.50	0.83	3.00	1.00
205.50	208.50		2.70	0.90	3.00	1.00
208.50	210.60		1.80	0.86	2.10	1.00
210.60	213.70		2.80	0.90	3.00	0.97
213.70	216.90		2.90	0.91	3.10	0.97
216.90	220.00		2.90	0.93	3.10	1.00
220.00	222.30		2.00	0.87	2.30	1.00
222.30	225.30		2.90	0.97	3.00	1.00
225.30	228.30		3.00	1.00	3.00	1.00
228.30	229.50		1.00	0.83	1.10	0.92
229.50	229.80		0.20	0.67	0.30	1.00
229.80	230.90		1.00	0.91	1.10	1.00
230.90	234.10		2.30	0.72	3.10	0.97
234.10	237.20		2.90	0.93	3.10	1.00
237.20	240.30		3.10	1.00	3.10	1.00
240.30	243.30		2.90	0.97	3.00	1.00
243.30	246.40		2.90	0.93	3.00	0.97
246.40	249.50		3.00	0.97	3.10	1.00
249.50	252.70		2.90	0.91	3.10	0.97
252.70	255.80		3.10	1.00	3.10	1.00
255.80	258.90		3.10	1.00	3.10	1.00
258.90	262.00		3.10	1.00	3.10	1.00
262.00	265.10		2.80	0.90	3.00	0.97
265.10	268.20		2.90	0.93	3.00	0.97
268.20	268.40		0.20	1.00	0.20	1.00
268.40	270.00		1.50	0.94	1.60	1.00
270.00	271.60		1.40	0.87	1.60	1.00
271.60	273.00		1.40	1.00	1.40	1.00
273.00	274.40		1.30	0.93	1.30	0.93
274.40	276.00		1.30	0.81	1.60	1.00
276.00	277.50		1.40	0.93	1.50	1.00
277.50	279.00		1.50	1.00	1.50	1.00
279.00	280.50		1.50	1.00	1.60	1.07
280.50	282.00		1.30	0.87	1.40	0.93
282.00	283.50		1.40	0.93	1.60	1.07
283.50	285.00		1.30	0.87	1.40	0.93
285.00	288.00		2.70	0.90	2.90	0.97
288.00	289.50		1.40	0.93	1.50	1.00

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY012 (CONTINUED)

ROCK QUALITY DESIGNATION (RQD)

From	To	NumberC	MEASURED RQD m	CALCULATED RQD %	MEAS. RECOVERY m	CALC. RECOVERY %
289.50	291.00		1.20	0.80	1.40	0.93
291.00	294.60		2.00	0.55	3.00	0.83
294.60	297.00		2.70	1.12	2.90	1.21
297.00	298.50		1.40	0.93	1.50	1.00
298.50	301.50		3.00	1.00	3.00	1.00
301.50	304.50		2.80	0.93	3.00	1.00
304.50	307.50		2.80	0.93	2.90	0.97
307.50	310.50		2.80	0.93	3.00	1.00
310.50	316.50		5.10	0.85	5.80	0.97
316.50	319.50		2.60	0.87	2.73	0.91
319.50	321.80		1.76	0.76	2.30	1.00
321.80	324.30		2.00	0.80	2.40	0.96
324.30	327.20		1.60	0.55	2.70	0.93
327.20	330.30		2.80	0.90	3.10	1.00
330.30	333.30		2.60	0.87	3.00	1.00
333.30	336.40		2.60	0.84	3.10	1.00
336.40	339.40		2.60	0.87	3.00	1.00
339.40	342.50		2.60	0.84	2.90	0.93
342.50	345.60		3.10	1.00	3.10	1.00
345.60	348.60		2.70	0.90	3.00	1.00
348.60	351.70		2.80	0.90	3.10	1.00
351.70	354.80		2.20	0.71	3.00	0.97
354.80	357.80		2.70	0.90	3.00	1.00
357.80	361.00		2.60	0.81	3.00	0.94
361.00	364.10		2.60	0.84	3.10	1.00
364.10	367.20		2.40	0.77	2.90	0.93
367.20	370.20		2.90	0.97	3.10	1.03
370.20	373.30		3.00	0.97	3.00	0.97
373.30	376.30		2.50	0.83	3.00	1.00
376.30	379.40		2.90	0.93	3.10	1.00
379.40	382.50		2.98	0.96	3.00	0.97
382.50	385.50		2.57	0.86	2.90	0.97
385.50	388.50		2.30	0.77	2.94	0.98
388.50	391.50		2.04	0.68	2.85	0.95
391.50	394.30		1.62	0.58	2.70	0.96
394.30	397.50		2.67	0.83	2.96	0.92
397.50	400.50		2.42	0.81	2.90	0.97
400.50	403.50		2.03	0.68	2.76	0.92
403.50	406.50		2.35	0.78	2.70	0.90
406.50	409.50		3.00	1.00	3.00	1.00
409.50	412.50		2.72	0.91	2.92	0.97
412.50	415.50		2.37	0.79	2.86	0.95

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY012 (CONTINUED)

ROCK QUALITY DESIGNATION (RQD)

From	To	Number	MEASURED RQD m	CALCULATED RQD %	MEAS. RECOVERY m	CALC. RECOVERY %
415.50	418.50		2.70	0.90	2.90	0.97
418.50	421.20		1.82	0.67	2.47	0.91
421.20	424.30		2.27	0.73	3.00	0.97
424.30	427.00		1.50	0.55	2.63	0.97
427.00	429.80		1.06	0.38	2.17	0.77
429.80	432.80		2.10	0.70	2.94	0.98
432.80	433.90		0.66	0.60	0.96	0.87
433.90	436.20		0.75	0.33	2.14	0.93
436.20	439.30		2.90	0.93	3.00	0.97
439.30	442.30		2.00	0.67	2.56	0.85
442.30	444.20		0.93	0.49	1.46	0.77
444.20	447.20		2.40	0.80	2.92	0.97
447.20	450.30		3.00	0.97	3.00	0.97
450.30	453.40		2.90	0.93	3.00	0.97
453.40	456.50		2.80	0.90	3.10	1.00
456.50	459.70		3.00	0.94	3.00	0.94
459.70	462.80		2.50	0.81	3.00	0.97
462.80	464.70		1.30	0.68	1.70	0.89
464.70	467.80		2.52	0.81	3.10	1.00
467.80	469.00		0.25	0.21	1.20	1.00
469.00	470.30		0.45	0.35	1.25	0.96
470.30	471.90		1.40	0.87	1.60	1.00
471.90	475.00		2.60	0.84	3.00	0.97
475.00	477.40		2.12	0.88	2.40	1.00
477.40	480.50		2.77	0.89	3.00	0.97
480.50	483.20		2.17	0.80	2.45	0.91
483.20	486.30		2.80	0.90	3.10	1.00
486.30	489.20		2.57	0.89	2.57	0.89
489.20	492.30		2.40	0.77	3.00	0.97
492.30	495.10		1.90	0.68	2.86	1.02

058256

LYNX GEOSYSTEMS INCORPORATED   Page: 1   Date: 7 AUG 92

R.G.C. Exploration Pty Ltd

SYLVESTER GRID

SURFACE DIAMOND DRILLHOLE : SY013

PROJECT IDEN :SYLVESTER	START DATE : 31 OCT 91	COMPLETION DATE : 11 NOV 91	LOGGED BY:DAVID JOHN CROSSING
COLLAR NORTHING: 60640.88	COLLAR EASTING : 58189.00	COLLAR ELEVATION: 307.88	GRID AZIMUTH : 0.00
DRILLED BY : LONGYEAR	TOTAL LENGTH : 154.50	CORE/HOLE SIZE : HQNQ	

SURVEY FLAG	SURVEY POINT LOCATION	FORESIGHT	AZIMUTH (DEGREES)	VERTICAL ANGLE (DEGREES)	NORTHING	EASTING	ELEVATION
000	0.00		180.00	-55.00	60640.88	58189.00	307.88
001	50.00		177.00	-58.80			
002	80.00		178.50	-58.00			
003	110.00		181.00	-58.00			

R HED This hole was drilled southward from the intersection of line
R HED 58200E and the abandoned Comstock tramway. The hole was
R HED designed to intersect the Balstrup fault and traverse Upper
R HED Oonah sediments in its footwall. beneath an area of broad
R HED patchy base metal anomalism associated with ironstones. The
R HED hole was collared in Crimson creek turbidites, passing into
R HED Upper Oonah melange, at about 30m (base of precollar). The hole
R HED passed through a siliceous pyritic fault brecia at 71.7 - 79.9m
R HED and entered highly strained strongly graphitised shales. Below
R HED 203.3m the hole remained in a broad puggy fault zone with
R HED shale remnants. The entire hole was in extremely difficult
R HED broken ground with consequent high core loss necessitating a
R HED change to NQ at 148m. As no carbonates had been intersected,
R HED and the ground conditions were continuing to deteriorate, the
R HED hole was abandoned.

	- Interval - From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
	0.00	30.00			PRECOLLAR.	
	30.00	41.30			MELANGE: black, moderately graphitic. strongly sheared, gradational base. highly broken core. 0.1% disseminations of pyrite.	
R	34.60	36.30			Evidence of altered veining. corroded and brecciated -	
R	34.60	36.30			ferruginous.	
					34.60 36.30 100% SILTSTONE: moderately limonitic. slightly bleached, bedded, sheared, veined. top contact: ca 40, bedding: ca 65, moderately broken core.	
					35.85 35.86 100% STRUCTURAL MEASUREMENT: fault: 054 / 28.	
					35.90 35.91 100% STRUCTURAL MEASUREMENT: fault: 030 / 55.	
					36.00 36.01 100% STRUCTURAL MEASUREMENT: bedding: 235 / 10.	

058257

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY013 (CONTINUED)

	- Interval - From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
	41.30	41.60			FAULT: black, puggy, 1% disseminations of pyrite.	
	41.60	65.80			SILTSTONE: grey, limonitic, bedded, strongly sheared, veined, bedding: ca 70, moderately broken core, .03% veins of pyrite.	
R	41.60	65.80			Numerous small puggy faults/shears. Relict veins are leached /	
R	41.60	65.80			corroded and show evidence of sulphide mineralisation-pyrite.	
R	41.60	65.80			Flecks of muscovite common on foliation (?) surfaces in the	
R	41.60	65.80			more sandy beds. 41.60 65.80 30% SANDSTONE: inter bedded, massive. 46.00 47.40 100% SHALE: black, highly graphitic, bedded, moderately sheared, 70, brecciated base, puggy zones, 3 % disseminations of pyrite. 53.00 65.80 90% SILTSTONE: highly limonitic, crumbly, highly broken core, 1% veins of quartz.	
BOX	65.80	71.70			FAULT: black, puggy, poor recovery, highly broken core, 3 % disseminations = veins of pyrite, 50% massive/ semi - massive clay. 65.80 71.70 30% SANDSTONE WITH SILTSTONE: medium grey, intermixed, 5% veins of quartz. 65.80 71.70 20% MELANGE: black, intermixed, 5% veins of quartz, 3 % disseminations = veins of pyrite.	
	71.70	79.90			FAULT: highly silicified, massive, brecciated, brittle, highly broken core, 10% stockwork of pyrite, 3 % interstitial clay.	
	79.90	103.30			SHALE: black, moderately graphitic, fissile, remnant bedding, disrupted bedding, faulted, firm, highly broken core, 1% veins of carbonate, 3 % disseminations = veins of pyrite, 1% pyrite laminations of.	
R	79.90	103.30			Highly strained, locally intensely graphitised and fissile.	
R	79.90	103.30			Graphite is very platey. Cleavage is at about 50 degrees to	
R	79.90	103.30			bedding. Occasional puggy fault zones become more common	
R	79.90	103.30			downward. 79.90 87.00 100% SHALE: black, moderately graphitic, fossiliferous, remnant bedding, cleaved, faulted, bedding. ca 30, cleavage: ca 35, firm, highly broken core, 1% veins of carbonate, 3 % disseminations = veins of pyrite. 1% pyrite laminations of. 87.00 92.00 70% SHALE: black, exceptionally graphitic, fissile, indistinctly bedded, disrupted bedding, faulted. fracture set: 45, firm. highly broken core. 1% veins of carbonate, 3 % disseminations = veins of pyrite, 1% pyrite laminations of.	

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY013 (CONTINUED)

	- Interval From (m)	- To (m)	Rec. (m)	RQD (m)	Description	Unit
	103.30	123.00			SHEAR (ZONE): black, carbonaceous, puggy, crumbly, highly broken core, 3 % disseminations = veins of pyrite.	
R	103.30	108.50			Core is in poor condition, very broken crumbley. Fault material	
R	103.30	108.50			is generally soft puggy carbonaceous brecciated. Fabric is	
R	103.30	108.50			indistinct, poorly developed, generally at low angles to core	
R	103.30	108.50			axis (0-30 degrees).	
					103.30 108.50 30% SHALE: very dark grey, indistinctly bedded, remnant bedding, 1% disseminations = veins of pyrite.	
					114.70 114.90 100% SHEAR (ZONE): black, microfaults, sheared, remnant bedding, shear: ca 50, bedding: ca 05, crumbly, highly broken core, 10% laminations of pyrite.	
					118.50 123.00 100% SHEAR (ZONE): black, puggy, crumbly, highly broken core, 5% disseminations = veins of pyrite.	
	123.00	125.30			MASSIVE SULPHIDES: yellow, vuggy, massive, crumbly, highly broken core, 3 % interstitial quartz, 50% massive/ semi - massive pyrite.	
	125.30	147.20			SHEAR (ZONE): black, carbonaceous, puggy, basal contact: ca 45, shear: ca 25, crumbly, exceptionally broken core, 3 % veins of quartz, 3 % disseminations = veins of pyrite.	
R	125.30	147.20			Similar to interval 103.3 - 108.5m.	
					125.30 147.20 40% SHALE: black, indistinctly bedded, remnant bedding, disrupted bedding, brecciated, firm, highly broken core.	
	147.20	148.60			CLAY: white, 5% patches of pyrite.	
	148.60	152.80			SHALE: grey-black, massive, brecciated, basal contact: ca 55, hard, moderately broken core, 5% veins of quartz, 1% veins of siderite, 3 % disseminations of pyrite.	
	152.80	154.45			CLAY: white, basal contact: ca 60, 5% disseminations of quartz, 5% disseminations = veins of pyrite.	
END	154.45	154.50			SHALE: grey-black.	

058256

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY013 (CONTINUED)

ASSAYS

From	To	NumberC	CU(PPM)	PB(PPM)	ZN(PPM)	SN(PPM)	AU(PPM)	AG(PPM)	AS(PPM)	SB(PPM)
34.00	35.00	34170	77	10	96	-3	-0.008	-0.50		
40.00	41.00	34171	32	27	67	-3	-0.008	-0.50		
52.40	54.00	34172	48	362	124	-3	-0.008	1.00		
64.00	65.00	34173	59	495	252	-3	-0.008	0.60		
65.80	67.00	34174	86	243	66	-3	-0.008	0.50		
68.00	69.00	34175	100	371	181	-3	-0.008	1.20		
70.00	71.70	34176	44	681	93	4	-0.008	1.40		
71.70	73.00	34177	11	149	26	-3	0.039	0.50		
73.00	74.00	34178	9	171	30	3	0.012	0.80		
74.00	75.00	34179	8	128	33	-3	0.013	-0.50		
75.00	76.00	34181								
76.00	77.00	34182	11	122	72	4	0.022	0.50		
77.00	78.00	34183								
78.00	79.00	34184	21	267	34	6	-0.008	0.90		
79.00	79.90	34185	26	1400	38	-3	-0.008	1.90		
84.00	85.00	34186	37	86	71	4	-0.008	1.00		
93.00	94.00	34187	52	56	55	-3	-0.008	1.30		
99.00	100.00	34188	54	69	71	4	-0.008	1.30		
114.00	115.00	34189	31	207	58	13	0.008	1.70		
116.00	117.00	34190	26	85	84	45	-0.008	1.80		
118.00	119.00	34191	18	359	73	95	-0.008	2.20		
120.00	121.00	34192	32	602	377	80	0.013	2.70		
122.00	123.00	34193	40	1270	1350	70	0.022	4.00		
123.00	124.00	34194	61	1400	4250	50	0.041	8.30		
124.00	125.30	34195	128	4620	867	25	0.037	8.30		
134.00	135.00	34196	55	107	88	-3	-0.008	1.80		
141.00	142.00	34197	49	88	105	7	-0.008	1.30		
147.20	148.60	34198	65	199	2050	5	-0.008	0.80		
152.80	153.80	34199	285	33	70	3	-0.008	2.20		

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY013 (CONTINUED)

ASSAYS

From	To	Number	CW(PPM)	AU(R) PPM	AU(S) PPM
34.00	35.00	34170	-10		
40.00	41.00	34171	-10	-0.008	
52.40	54.00	34172	-10		
64.00	65.80	34173	-10		
65.80	67.00	34174	-10		
68.00	69.00	34175	-10		
70.00	71.70	34176	-10		
71.70	73.00	34177	-10	0.042	
73.00	74.00	34178	-10		
74.00	75.00	34179	-10		
75.00	76.00	34181			
76.00	77.00	34182	-10	0.022	
77.00	78.00	34183			
78.00	79.00	34184	-10		
79.00	79.90	34185	-10		
84.00	85.00	34186	-10		
93.00	94.00	34187	-10		
99.00	100.00	34188	-10		
114.00	115.00	34189	-10		
116.00	117.00	34190	-10		
118.00	119.00	34191	25		
120.00	121.00	34192	-10		
122.00	123.00	34193	12		
123.00	124.00	34194	15		
124.00	125.30	34195	-10		
134.00	135.00	34196	-10		
141.00	142.00	34197	-10		
147.20	148.60	34198	-10	-0.008	
152.80	153.80	34199	-10		

058291

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY013 (CONTINUED)

ROCK QUALITY DESIGNATION (RQD)

From	To	NumberC	MEASURED RQD m	CALCULATED RQD %	MEAS. RECOVERY m	CALC. RECOVERY %
30.00	30.50		0.00	0.00	0.50	1.00
30.50	31.30		0.17	0.21	0.62	0.77
31.30	32.20		0.20	0.22	0.80	0.89
32.20	33.50		0.25	0.19	0.90	0.69
33.50	34.40		0.27	0.30	0.60	0.67
34.40	36.00		0.28	0.17	1.30	0.81
36.00	37.50		0.24	0.16	1.45	0.97
37.50	38.10		0.00	0.00	0.50	0.83
38.10	39.60		0.28	0.19	1.23	0.82
39.60	40.10		0.10	0.20	0.54	1.08
40.10	41.40		0.00	0.00	1.30	1.00
41.40	42.10		0.12	0.17	0.70	1.00
42.10	43.80		0.20	0.12	1.18	0.69
43.80	45.00		0.45	0.37	1.10	0.92
45.00	48.30		0.36	0.11	2.43	0.74
48.30	49.30		0.33	0.33	0.80	0.80
49.30	51.00		0.77	0.45	1.50	0.88
51.00	52.40		0.50	0.36	1.22	0.87
52.40	54.00		0.40	0.25	1.45	0.91
54.00	56.90		0.53	0.18	2.22	0.76
56.90	57.60		0.00	0.00	0.43	0.61
57.60	59.20		0.77	0.48	1.60	1.00
59.20	60.80		0.14	0.09	1.40	0.87
60.80	62.50		0.27	0.16	1.57	0.92
62.50	63.50		0.00	0.00	0.85	0.85
63.50	64.60		0.10	0.09	1.06	0.96
64.60	65.70		0.13	0.12	0.74	0.67
65.70	66.20		0.00	0.00	0.30	0.60
66.20	66.80		0.00	0.00	0.30	0.50
66.80	68.00		0.00	0.00	0.80	0.67
68.00	68.70		0.00	0.00	0.42	0.60
68.70	70.80		0.00	0.00	0.40	0.19
70.80	71.70		0.00	0.00	0.10	0.11
71.70	72.10		0.00	0.00	0.42	1.05
72.10	72.80		0.23	0.33	0.45	0.64
72.80	73.00		0.00	0.00	0.05	0.25
73.00	73.20		0.00	0.00	0.13	0.65
73.20	73.40		0.00	0.00	0.12	0.60
73.40	73.90		0.15	0.30	0.35	0.70
73.90	74.20		0.00	0.00	0.24	0.80
74.20	74.80		0.00	0.00	0.18	0.30
74.80	76.40		0.00	0.00	0.47	0.29

058292

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY013 (CONTINUED)

ROCK QUALITY DESIGNATION (RQD)

From	To	Number	CMEASURED RQD m	CALCULATED RQD %	MEAS. RECOVERY m	CALC. RECOVERY %
76.40	78.00		0.00	0.00	0.07	0.04
78.00	78.80		0.12	0.15	0.64	0.80
78.80	79.80		0.00	0.00	0.10	0.10
79.80	80.60		0.00	0.00	0.20	0.25
80.60	81.80		0.00	0.00	0.56	0.47
81.80	82.80		0.00	0.00	0.30	0.30
82.80	83.50		0.00	0.00	0.40	0.57
83.50	84.30		0.13	0.16	0.44	0.55
84.30	84.70		0.00	0.00	0.38	0.95
84.70	85.00		0.00	0.00	0.22	0.73
85.00	85.40		0.00	0.00	0.17	0.42
85.40	85.80		0.00	0.00	0.05	0.12
85.80	86.00		0.00	0.00	0.05	0.25
86.00	87.00		0.00	0.00	0.35	0.35
87.00	87.20		0.00	0.00	0.10	0.50
87.20	87.50		0.00	0.00	0.00	0.00
87.50	87.70		0.00	0.00	0.05	0.25
87.70	87.80		0.00	0.00	0.00	0.00
87.80	88.00		0.00	0.00	0.08	0.40
88.00	88.40		0.00	0.00	0.25	0.62
88.40	88.80		0.00	0.00	0.00	0.00
88.80	88.90		0.00	0.00	0.07	0.70
88.90	89.00		0.00	0.00	0.10	1.00
89.00	89.20		0.00	0.00	0.14	0.70
89.20	89.30		0.00	0.00	0.06	0.60
89.30	89.40		0.00	0.00	0.05	0.50
89.40	89.60		0.00	0.00	0.07	0.35
89.60	89.80		0.00	0.00	0.10	0.50
89.80	89.90		0.00	0.00	0.10	1.00
89.90	90.00		0.00	0.00	0.03	0.30
90.00	90.10		0.00	0.00	0.04	0.40
90.10	90.20		0.00	0.00	0.12	1.20
90.20	90.60		0.00	0.00	0.24	0.60
90.60	90.70		0.00	0.00	0.08	0.80
90.70	91.10		0.11	0.27	0.30	0.75
91.10	91.20		0.00	0.00	0.07	0.70
91.20	91.70		0.00	0.00	0.30	0.60
91.70	91.80		0.00	0.00	0.07	0.70
91.80	92.20		0.00	0.00	0.30	0.75
92.20	93.00		0.00	0.00	0.47	0.59
93.00	93.70		0.10	0.14	0.70	1.00
93.70	94.80		0.12	0.11	0.75	0.68

058263

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY013 (CONTINUED)

ROCK QUALITY DESIGNATION (RQD)

From	To	NumberC	MEASURED RQD m	CALCULATED RQD %	MEAS. RECOVERY m	CALC. RECOVERY %
94.80	95.30		0.00	0.00	0.50	1.00
95.30	96.00		0.00	0.00	0.33	0.47
96.00	96.70		0.00	0.00	0.41	0.58
96.70	97.40		0.00	0.00	0.40	0.57
97.40	98.10		0.00	0.00	0.40	0.57
98.10	99.60		0.40	0.27	1.32	0.88
99.60	100.90		0.40	0.31	0.70	0.54
100.90	101.60		0.00	0.00	0.50	0.71
101.60	102.40		0.00	0.00	0.64	0.80
102.40	103.50		0.00	0.00	0.90	0.82
103.50	105.00		0.00	0.00	0.81	0.54
105.00	106.40		0.30	0.21	1.13	0.81
106.40	108.00		0.00	0.00	0.80	0.50
108.00	109.10		0.00	0.00	0.90	0.82
109.10	110.20		0.00	0.00	0.55	0.50
110.20	110.70		0.00	0.00	0.27	0.54
110.70	111.70		0.00	0.00	0.50	0.50
111.70	112.90		0.00	0.00	1.00	0.83
112.90	113.60		0.00	0.00	0.70	1.00
113.60	114.60		0.00	0.00	0.47	0.47
114.60	115.30		0.10	0.14	0.45	0.64
115.30	116.20		0.00	0.00	0.77	0.85
116.20	117.00		0.00	0.00	0.80	1.00
117.00	117.20		0.00	0.00	0.00	0.00
117.20	118.30		0.00	0.00	0.70	0.64
118.30	119.20		0.00	0.00	0.44	0.49
119.20	120.30		0.00	0.00	0.57	0.52
120.30	121.20		0.16	0.18	0.74	0.82
121.20	122.20		0.00	0.00	1.08	1.08
122.20	123.00		0.10	0.12	0.74	0.92
123.00	124.30		0.00	0.00	1.10	0.85
124.30	125.80		0.00	0.00	0.66	0.44
125.80	127.30		0.30	0.20	1.50	1.00
127.30	128.60		0.35	0.27	1.06	0.81
128.60	130.10		0.33	0.22	1.47	0.98
130.10	131.50		0.14	0.10	1.16	0.83
131.50	132.70		0.00	0.00	0.95	0.79
132.70	133.40		0.12	0.17	0.44	0.63
133.40	134.10		0.00	0.00	0.47	0.67
134.10	135.10		0.23	0.23	0.75	0.75
135.10	136.70		0.32	0.20	1.37	0.86
136.70	138.40		0.00	0.00	0.30	0.18

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY013 (CONTINUED)

ROCK QUALITY DESIGNATION (RQD)

From	To	NumberCMEASURED RQD m	CALCULATED RQD %	MEAS. RECOVERY m	CALC. RECOVERY %
138.40	139.20	0.00	0.00	0.50	0.62
139.20	139.40	0.00	0.00	0.12	0.60
139.40	140.00	0.00	0.00	0.40	0.67
140.00	140.50	0.00	0.00	0.33	0.66
140.50	141.20	0.00	0.00	0.60	0.86
141.20	141.60	0.16	0.40	0.34	0.85
141.60	142.10	0.17	0.34	0.72	1.44
142.10	142.70	0.00	0.00	0.63	1.05
142.70	144.10	0.50	0.36	1.37	0.98
144.10	144.70	0.17	0.28	0.57	0.95
144.70	145.70	0.18	0.18	0.38	0.38
145.70	146.60	0.70	0.78	0.84	0.93
146.60	148.60	1.60	0.80	0.67	0.33
148.60	149.90	0.00	0.00	0.23	0.18
149.90	151.50	1.27	0.79	1.33	0.83
151.50	154.50	1.45	0.48	2.33	0.78

R.G.C. Exploration Pty Ltd

SYLVESTER GRID

SURFACE DIAMOND DRILLHOLE : SY014

]ECT IDEN :SYLVESTER	START DATE : 20 NOV 91	COMPLETION DATE : 6 DEC 91	LOGGED BY:DAVID JOHN CROSSING
LAR NORTHING: 61315.42	COLLAR EASTING : 56426.41	COLLAR ELEVATION: 293.06	GRID AZIMUTH : 0.00
.LED BY : D.D.T	TOTAL LENGTH : 503.30	CORE/HOLE SIZE : PQHQ	

SURVEY FLAG	SURVEY POINT LOCATION	FORESIGHT	AZIMUTH (DEGREES)	VERTICAL ANGLE (DEGREES)	NORTHING	EASTING	ELEVATION
	0.00		180.30	-59.75	61315.42	56426.41	293.06
	20.00		180.41	-59.00			
	40.00		179.38	-59.25			
	60.00		179.50	-59.00			
	80.00		180.20	-58.75			
	100.00		181.49	-58.00			
	120.00		182.37	-57.25			
	140.00		182.09	-57.25			
	160.00		182.99	-57.00			
	180.00		184.49	-57.00			
	200.00		184.80	-56.75			
	220.00		184.55	-56.25			
	240.00		185.15	-55.75			
	260.00		186.06	-56.00			
	280.00		188.18	-56.00			
	300.00		190.32	-55.25			
	320.00		191.24	-55.25			
	340.00		192.16	-55.25			
	360.00		192.17	-55.25			
	380.00		192.79	-55.25			
	400.00		191.28	-55.25			
	420.00		194.40	-54.50			
	440.00		194.44	-53.50			
	460.00		195.70	-53.25			
	480.00		194.80	-52.25			
	495.00		194.49	-51.75			

ED This hole was part of a two-hole programme (SY010 & SY014)
ED designed to test a deep sourced magnetic anomaly for base metal
ED massive sulphide mineralisation of the style encountered by
ED SY005. The hole collared in melange and then intersected
ED psammo-pelites (mostly sandstone) from 26.2m to 391.0m with
ED the exception of a short interval of calc-silicate (225.4 -
ED 234.1m). Over the interval 391.0 - 438.1m the hole
ED encountered a mixture of magnetite-serpentinite and
ED calc-silicate skarn.Below 438.1m the hole encountered
ED melange and pelites which were hornfelsed below 451.4m.The
ED hole explained the source of the magnetite anomaly,but failed

058266

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY014 (CONTINUED)

ED

to locate significant base metal sulphides.

- Interval - From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
0.00	14.00			PRECOLLAR.	
14.00	26.20	8.5		MELANGE: dark grey, slightly carbonated, very slightly micaceous, massive, soft, highly broken core, 3 % disseminations = veins of pyrite.	OONAH FM UNDIFFERENT
14.00	26.20			Mostly sandstone boudins, aligned with moderate to strongly	
14.00	26.20			foliated matrix. Foliation decreases in intensity toward	
14.00	26.20			gradational base.	
26.20	81.50			SANDSTONE: medium grey, massive, hard, moderately broken core, 1% veins of quartz, 1% disseminations = veins of pyrite, 0.1% disseminations = veins of pyrrhotite.	OONAH FM UNDIFFERENT
				57.00 62.50 100% SANDSTONE: medium grey, fine bedded, moderately folded, soft sediment slumping, hard, moderately broken core, 1% veins of quartz, 1% disseminations = veins of pyrite, 0.1% disseminations = veins of pyrrhotite.	OONAH FM UNDIFFERENT
				77.00 81.50 100% SANDSTONE: medium grey, massive, hard, moderately broken core, 5% veins of quartz, 3 % veins of pyrite, 0.1% disseminations = veins of pyrrhotite.	OONAH FM UNDIFFERENT
81.50	96.00			SANDSTONE WITH SILTSTONE: dark grey, fine bedded, moderately folded, soft sediment slumping, bedding: ca 35, basal contact: ca sharp base, 35, hard, moderately broken core, 5% veins of quartz, 3 % disseminations = veins of pyrite.	OONAH FM UNDIFFERENT
				86.00 88.00 100% SANDSTONE WITH SILTSTONE: dark grey, brecciated, moderately folded, soft sediment slumping, bedding: ca 35, basal contact: ca sharp base, 35, hard, moderately broken core, 3 % veins of quartz, 3 % veins of epidote, 3 % disseminations = veins of pyrite.	OONAH FM UNDIFFERENT
				92.00 94.00 60% SANDSTONE: black, moderately micaceous, foliated.	
96.00	127.70			SANDSTONE: medium grey, massive, hard, highly broken core.	OONAH FM UNDIFFERENT
				96.00 127.70 20% SANDSTONE WITH SILTSTONE: irregularly interbedded, fine bedded.	
				99.00 100.00 100% SANDSTONE: medium lime, moderately altered, brecciated, hard, highly broken core.	OONAH FM UNDIFFERENT
				99.90 99.91 100% STRUCTURAL MEASUREMENT: bedding: 030 / 68.	
				100.00 111.00 100% SANDSTONE: medium grey, moderately silicified, massive, hard, highly broken core, 10% veins of quartz, 1% veins of epidote.	OONAH FM UNDIFFERENT
				111.00 121.00 100% SANDSTONE: medium grey, brecciated, stockworked, vein: ca 5, hard, highly broken core, 10% veins	OONAH FM UNDIFFERENT

058267

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY014 (CONTINUED)

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 -  Interval   -        Rec.   RQD    Description                                        Unit
 From (m)   To (m)      (m)    (m)

                                        of pyrite, 3 % stockwork of galena, 5% stockwork of
                                        sphalerite.
   113.00    117.00                   Stockwork veining centred around irregular vein at 0-15 degrees
   113.00    117.00                   to the c.a., averaging 10% pyrite, 6% sphalerite and 4% galena.

   127.70    204.30                     SANDSTONE WITH SILTSTONE: medium grey, fine bedded, well    OONAH FM UNDIFFERENT
                                        bedded, strongly folded, soft sediment slumping, faulted base,
                                        uphole facing, hard, moderately broken core, 1% veins of
                                        quartz, 1% disseminations ( veins of pyrite.
   127.70    204.30                   Extremely convoluted bedding (soft sediment slumping?), folds
   127.70    204.30                   are sometimes truncated by (unfolded) bedding and sometimes by
   127.70    204.30                   microfaults at about 30 degrees to the c.a. Bca's are
   127.70    204.30                   variable.Becomes less folded and bca's increase downward.
   127.70    204.30                   Graded beds generally face uphole.
                                        130.60 133.00 100% SANDSTONE WITH SILTSTONE: medium grey, fine    OONAH FM UNDIFFERENT
                                        bedded, well bedded, strongly folded, soft sediment slumping,
                                        faulted base, uphole facing, hard, moderately broken core. 5%
                                        veins of quartz, 5% disseminations (.veins of pyrite, 3 %
                                        veins of galena, 1% veins of sphalerite.
                                        138.90 138.91 100% STRUCTURAL MEASUREMENT: bedding: 330 / 73.
                                        158.20 166.00 100% SANDSTONE WITH SILTSTONE: black, moderately    OONAH FM UNDIFFERENT
                                        carbonated, slightly micaceous, fine bedded, well bedded,
                                        strongly folded, soft sediment slumping, bedding: ca 20,
                                        faulted base, uphole facing, hard, moderately broken core, 1%
                                        veins of quartz, 1% disseminations ( veins of pyrite.
                                        159.90 159.91 100% STRUCTURAL MEASUREMENT: bedding: 144 / 68.
                                        160.90 160.91 100% STRUCTURAL MEASUREMENT: bedding: 142 / 54.
                                        162.90 162.91 100% STRUCTURAL MEASUREMENT: bedding: 145 / 20.
                                        191.00 191.01 100% STRUCTURAL MEASUREMENT: bedding: 138 / 75.
                                        191.70 191.71 100% STRUCTURAL MEASUREMENT: fold axis: 336 /
                                        40.
                                        193.00 193.10 100% STRUCTURAL MEASUREMENT: bedding: 053 / 30.

   204.30    206.50                     FAULT: fault: ca 30, 10% infilling shear/fault quartz, 1%
                                        veins of carbonate, 1% infilling shear/fault chlorite, 1%
                                        infilling shear/fault pyrite, 1% infilling shear/fault
                                        pyrrhotite.

   206.50    225.20                     SANDSTONE: light grey, massive, medium grained, hard,      OONAH FM UNDIFFERENT
                                        moderately broken core.
                                        206.50 210.70 100% SILTSTONE: inter bedded, medium bedded,
                                        graded bedding, bedding: ca 50, gradational base, 3 % veins of
                                        quartz.
                                        206.50 210.70 100% SILTSTONE: inter bedded, medium bedded,
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050808

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY014 (CONTINUED)

- Interval - From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
				graded bedding, bedding: ca 50, gradational base, 3 % veins of quartz.	
218.80	222.00			A highly strained medium bedded sandstone (melange) appears to	
218.80	222.00			have been highly sheared after melange formation.	
				218.80 222.00 100% MELANGE: moderately altered, disrupted bedding, sheared, shear: ca 45, 5% disseminations < veins of quartz, 1% disseminations = veins of pyrite, 1% disseminations of sercite.	
				219.70 219.71 100% STRUCTURAL MEASUREMENT: melange foliation: 174 / 89.	
				221.90 221.91 100% STRUCTURAL MEASUREMENT: melange foliation: 334 / 65.	
				222.00 225.20 100% SANDSTONE: light grey, moderately altered, silicified, brecciated, medium grained, hard, moderately broken core, 20% disseminations < veins of quartz, 10% stockwork of pyrite, .03% stockwork of chalcopyrite, 0.3% stockwork of sphalerite, 3 % disseminations of sercite.	OONAH FM UNDIFFERENT
				225.10 225.11 100% STRUCTURAL MEASUREMENT: shear: 142 / 80.	
225.20	225.40			FAULT: moderately altered, fault: ca 15, 5% disseminations > veins of carbonate, 5% disseminations > veins of magnetite, 3 % stockwork of pyrite, 1% stockwork of pyrrhotite, 80% massive/ semi - massive calc-silicates.	
225.40	234.10			CALC-SILICATE ROCK: green, medium grained, massive, recrystallised, textures obliterated by alteration, basal contact: ca 30, hard, slightly broken core, 5% disseminations > veins of carbonate, 5% disseminations of magnetite, 3 % disseminations > veins of pyrite, 0.3% disseminations > veins of chalcopyrite, 1% disseminations > veins of pyrrhotite, 80% massive/ semi - massive calc-silicates.	
225.40	234.10			Massive green calc-silicate with discordant contacts.Probably	
225.40	234.10			mostly actinolite.	
				227.30 230.40 100% SANDSTONE: moderately altered, brecciated, 5% stockwork of pyrite, 0.3% stockwork of pyrrhotite, 0.3% stockwork of sphalerite.	
				230.30 230.31 100% STRUCTURAL MEASUREMENT: basal contact: 316 / 80.	
				234.05 234.06 100% STRUCTURAL MEASUREMENT: basal contact: 104 / 85.	
234.10	391.00			SANDSTONE: light grey, medium grained, massive, basal contact: ca sharp base, 70, hard, moderately broken core, 5% veins of quartz, 1% veins of pyrite, 1% veins of pyrrhotite.	OONAH FM UNDIFFERENT

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY014 (CONTINUED)

- Interval - From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
234.10	242.60	100%		SANDSTONE: light grey, moderately altered, medium grained, graded bedding, brecciated, bedding: ca 30, basal contact: ca sharp base, 70, hard, moderately broken core, 5% veins of quartz, 3 % stockwork of pyrite, 0.1% stockwork of chalcopyrite, 0.3% stockwork of galena, 3 % stockwork of pyrrhotite, 0.1% stockwork of sphalerite.	OONAH FM UNDIFFERENT
235.10	235.11	100%		STRUCTURAL MEASUREMENT: bedding: 110 / 50.	
238.10	238.11	100%		STRUCTURAL MEASUREMENT: fault: 130 / 78.	
238.20	238.21	100%		STRUCTURAL MEASUREMENT: bedding: 030 / 80.	
238.90	239.91	100%		STRUCTURAL MEASUREMENT: bedding: 066 / 61.	
242.60	243.80	80%		VEIN: top contact: ca 35, basal contact: ca 15, 5% veins of quartz, 80% veins of pyrite, 3 % veins of chalcopyrite, 10% veins of sphalerite.	
242.70	242.71	100%		STRUCTURAL MEASUREMENT: basal contact: 290 / 70.	
243.60	243.61	100%		STRUCTURAL MEASUREMENT: basal contact: 295 / 85.	
243.80	252.40	100%		SANDSTONE: light grey, slightly altered, brecciated, massive, basal contact: ca sharp base, 70, hard, moderately broken core, 5% veins of quartz, 0.1% veins of siderite, 3 % stockwork of pyrite, 1% stockwork of pyrrhotite, 0.1% stockwork of sphalerite.	OONAH FM UNDIFFERENT
255.00	263.00	100%		SANDSTONE: dark grey, medium bedded, fine bedded, moderate to strongly folded, cleavage: ca 45, basal contact: ca sharp base, 70, hard, moderately broken core, 5% veins of quartz, 1% veins of pyrite, 1% veins of pyrrhotite.	OONAH FM UNDIFFERENT
264.00	270.80	100%		SANDSTONE: light grey, slightly altered, medium grained, massive, basal contact: ca sharp base, 70, hard, moderately broken core, 5% veins of quartz, 1% stockwork of chlorite, 3 % stockwork of pyrite, 1% veins of pyrrhotite, 0.1% stockwork of sphalerite.	OONAH FM UNDIFFERENT
276.80	276.81	100%		STRUCTURAL MEASUREMENT: bedding: 197 / 30.	
279.90	289.81	100%		STRUCTURAL MEASUREMENT: bedding: 055 / 15.	
287.30	290.30	100%		SANDSTONE WITH SILTSTONE: light grey, well bedded, fine bedded, cleavage: ca 20, bedding: ca sharp base, 70, hard, moderately broken core, 1% veins of quartz, 1% veins of carbonate, 0.3% veins of pyrite, 1% veins of pyrrhotite.	OONAH FM UNDIFFERENT
303.20	307.80	100%		SANDSTONE WITH SILTSTONE: well bedded, fine bedded, bedding: ca 45.	
305.50	306.80	100%		SANDSTONE: light grey, medium grained, massive, basal contact: ca sharp base, 70, hard, moderately broken core, 3 % stockwork of quartz, 1% veins of pyrite, 3 % stockwork of pyrrhotite, 1% stockwork of sphalerite.	OONAH FM UNDIFFERENT
307.90	307.91	100%		STRUCTURAL MEASUREMENT: bedding: 016 / 45.	

058270

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY014 (CONTINUED)

- Interval - From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
				314.00 321.00 100% SANDSTONE WITH SILTSTONE: well bedded, fine bedded, graded bedding, graded bedding: ca uphole facing, 60.	
				321.00 327.00 100% SANDSTONE: light grey, slightly altered, medium grained, massive, basal contact: ca sharp base, 70, hard, moderately broken core, 5% veins of quartz, 1% disseminations = veins of epidote, 1% veins of pyrite, 1% veins of pyrrhotite.	OONAH FM UNDIFFERENT
				330.40 334.10 100% SANDSTONE: light grey, medium grained, massive, basal contact: ca sharp base, 70, hard, moderately broken core, 20% veins of quartz, 1% veins of pyrite, 1% veins of pyrrhotite.	OONAH FM UNDIFFERENT
				331.00 391.00 10% SANDSTONE WITH SILTSTONE: irregularly interbedded, well bedded, fine bedded, graded bedding.	
342.70	342.71			Upper block displaced upward, toward 295 AMG.	
				342.70 342.71 100% STRUCTURAL MEASUREMENT: fault: 200 / 80, fibre: 115 / 35.	
				343.55 343.56 100% STRUCTURAL MEASUREMENT: bedding: 035 / 30.	
				346.10 346.11 100% STRUCTURAL MEASUREMENT: bedding: 025 / 65.	
				347.30 347.70 100% FAULT: fault: ca 45, 80% infilling shear/fault quartz, 3 % infilling shear/fault pyrite, 0.1% disseminations of chalcopyrite, 100% infilling shear/fault pyrrhotite, 1% disseminations of sphalerite.	
				372.90 372.91 100% STRUCTURAL MEASUREMENT: bedding: 055 / 45.	
				380.00 391.00 60% SANDSTONE: light grey, moderately altered, silicified, brecciated, veined, basal contact: ca sharp base, 70, hard, moderately broken core, 5% veins of quartz, 1% veins of pyrite, 1% veins of pyrrhotite.	OONAH FM UNDIFFERENT
391.00	429.90			SKARN: mottled green, magnetite, serpentinized, carbonated, massive, hard, moderately broken core, 30% disseminations of magnetite, .03% veins of sphalerite, 60% interstitial serpentine.	UPPER OONAH
391.00	429.90			The skarn is an irregular intermixture of the three components	
391.00	429.90			at all scales, plus intermediate types.Light reddish brown	
391.00	429.90			sphalerite is sometimes present as patchy disseminations in the	
391.00	429.90			calc-silicate and carbonate units, and in rare veins.	
				391.00 429.90 40% CALC-SILICATE ROCK: grey, intermixed, 20% disseminations of magnetite, 0.1% disseminations (veins of sphalerite, 10% disseminations of serpentine, 60% calc-silicates disseminations of.	
				391.00 429.90 20% CARBONATE: white, intermixed, 10% patches of talc, 5% disseminations of magnetite, 0.1% disseminations (veins of sphalerite, 5% disseminations of serpentine, 20% magnesite patches of.	

058271

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY014 (CONTINUED)

	- Interval - From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
					400.00 400.01 100% STRUCTURAL MEASUREMENT: foliation: 360 / 81.	
					404.00 405.00 100% CALC-SILICATE ROCK: mottled green, magnetite, serpentinized, carbonated, massive, hard, moderately broken core, 30% disseminations of magnetite, 1% disseminations of sphalerite, 60% interstitial serpentine.	UPPER OONAH
					408.10 409.40 100% CALC-SILICATE ROCK: mottled green, magnetite, serpentinized, carbonated, massive, hard, moderately broken core, 30% disseminations of magnetite, 3 % disseminations of sphalerite, 60% interstitial serpentine.	UPPER OONAH
N	408.75	408.80			T35569: Calc-silicate rock: mostly tremolite-actinolite?	
					412.00 412.80 30% SKARN: mottled green, magnetite, serpentinized, carbonated, massive, hard, moderately broken core, 30% disseminations of magnetite, 3 % disseminations of sphalerite, 60% interstitial serpentine.	UPPER OONAH
	429.90	438.10			CARBONATE: white, basal contact: ca 50, hard, moderately broken core.	UPPER OONAH
4N	429.90	430.00			T35570: Opaque to translucent, dull white? carbonate,	
4N	429.90	430.00			unreactive in dilute hcl. Probably mostly magnesite.	
	433.60	433.61			Faint compositional banding with diffuse margins.	
					433.60 433.61 100% STRUCTURAL MEASUREMENT: banding: 170 / 85.	
	438.10	450.70			MELANGE: medium dark grey, massive, sharp base, hard, moderately broken core.	UPPER OONAH
	438.10	450.70			Partly hornfelsed typical Oonah melange.Clasts to 10cm.	
	450.70	451.40			SKARN: grey-brown, highly altered, massive, fine grained, top contact: ca 45, basal contact: ca sharp base, 15, hard, moderately broken core, 10% disseminations of pyrite, 10% disseminations of pyrrhotite.	UPPER OONAH
	450.70	451.40			A fine grained skarn, apparently conformable consisting	
	450.70	451.40			principally of a yellowish-amber translucent mineral and a	
	450.70	451.40			reddish-brown translucent/transparent mineral(garnet?).	
	450.70	451.40			Generally too fine grained for positive identification.	
	450.96	451.00			Typical specimen taken for petrography.	
	451.40	463.50			HORNFELS: mottled lime, massive, textures obliterated by alteration, hornfelsic structured, hard, moderately broken core.	UPPER OONAH
	451.40	463.50			Faint remnant bedding suggests precursor is a mixture of	
	451.40	463.50			pelites and melange.	
					459.90 459.91 100% STRUCTURAL MEASUREMENT: foliation: 200 / 79.	

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY014 (CONTINUED)

	- Interval - From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
					461.70 461.71 100% STRUCTURAL MEASUREMENT: fracture: 195 / 50.	
	463.50	471.80			MELANGE: mottled green, massive, hornfelsic structured, gradational base, hard, moderately broken core.	UPPER DONAH
	463.50	471.80			Partially hornfelsed typically Donah melange.Fabric orientation	
	463.50	471.80			is variably, but generally is around 45 degrees to the c.a.	
					463.50 471.80 20% MELANGE: very dark grey, intermixed, slightly carbonaceous, massive.	
ND	471.80	503.30			HORNFELS: very dark brown, massive, textures obliterated by alteration, hornfelsic structured, fine grained, hard, slightly broken core, 0.3% veins of quartz, 0.3% veins of carbonate, 0.3% patches of pyrite, 0.3% patches of pyrrhotite.	UPPER DONAH

058273

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY014 (CONTINUED)

ASSAYS

From	To	NumberC	CU(PPM)	PB(PPM)	ZN(PPM)	SN(PPM)	AU(PPM)	AG(PPM)	AS(PPM)	SB(PPM)
40.00	41.00	33511	5	5	61	6	-0.008	-0.50		
78.00	79.00	33512	8	12	47	30	-0.008	-0.50		
80.00	81.00	33513	23	-5	24	11	-0.008	-0.50		
82.00	83.00	33514	25	-5	16	17	-0.008	-0.50		
86.00	87.00	33515	11	25	78	13	-0.008	-0.50		
90.00	91.00	33516	60	44	133	16	-0.008	-0.50		
94.00	95.00	33517	11	20	26	7	-0.008	-0.50		
110.00	111.00	33518	15	91	106	12	-0.008	-0.50		
111.00	112.00	33519	24	742	992	13	-0.008	1.00		
112.00	113.00	33520	24	529	975	17	-0.008	0.70		
113.00	114.00	33521	573	28300	136000	50	0.027	39.00		
114.00	115.00	33522	1131	106000	73000	60	0.021	169.00		
115.00	116.00	33523	170	1557	1090	35	-0.008	4.00		
116.00	117.00	33524	184	1500	64000	60	0.026	11.00		
117.00	118.00	33525	29	490	4852	50	0.010	1.10		
118.00	119.00	33526	10	877	2103	45	0.008	0.90		
119.00	120.00	33527	23	3400	8600	70	-0.008	5.00		
120.00	121.00	33528	-5	335	890	65	-0.008	-0.50		
121.00	122.00	33529	23	28	88	13	-0.008	-0.50		
130.60	132.00	33530	52	323	365	55	0.013	1.10		
132.00	133.00	33531	467	21000	5600	75	0.225	35.00		
180.00	181.00	33532	25	54	68	8	-0.008	-0.50		
221.00	222.00	33533	12	9	39	19	-0.008	-0.50		
222.00	223.00	33534	344	171	1100	35	-0.008	2.10		
223.00	224.00	33535	126	1586	4382	65	0.089	9.30		
224.00	225.20	33536	467	266	1951	75	0.012	1.40		
225.20	226.00	33537	677	576	1566	700	-0.008	3.40		
226.00	227.00	33538	2004	368	351	400	-0.008	2.20		
227.00	228.00	33539	63	34	160	710	-0.008	-0.50		
228.00	229.00	33540	42	38	108	220	-0.008	-0.50		
229.00	230.40	33541	100	56	141	70	-0.008	-0.50		
233.00	234.10	33542	4534	188	326	330	-0.008	4.20		
234.10	235.00	33543	639	87	2545	100	-0.008	-0.50		
235.00	236.00	33544	152	16	2013	30	-0.008	-0.50		
236.00	237.00	33545	38	12	157	14	-0.008	-0.50		
237.00	238.00	33546	57	83	1309	25	-0.008	-0.50		
238.00	239.00	33547	125	173	1473	30	-0.008	0.50		
239.00	240.00	33548	89	218	441	20	-0.008	-0.50		
240.00	241.00	33549	45	339	1893	15	-0.008	-0.50		
241.00	242.00	33551	118	586	1355	20	-0.008	2.30		
242.00	242.60	33552	155	733	2750	16	-0.008	1.90		
242.60	243.80	33553	20800	10100	42200	160	0.134	95.00		

052874

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY014 (CONTINUED)

ASSAYS

From	To	NumberC	CU(PPM)	PB(PPM)	ZN(PPM)	SN(PPM)	AU(PPM)	AG(PPM)	AS(PPM)	SB(PPM)
243.80	245.00	33554	2429	700	1626	40	0.012	7.90		
245.00	246.00	33555	1906	432	1150	45	0.010	7.50		
247.00	248.00	33556	423	100	674	45	-0.008	2.10		
249.00	250.00	33557	114	47	257	110	-0.008	-0.50		
251.00	252.40	33558	141	81	808	25	-0.008	-0.50		
264.00	265.00	33559	55	43	83	12	-0.008	-0.50		
265.00	266.00	33560	55	650	2004	20	-0.008	1.80		
267.00	268.00	33561	58	24	75	20	-0.008	-0.50		
269.00	270.00	33562	30	53	134	30	-0.008	-0.50		
306.50	306.80	33563	33	139	844	12	-0.008	0.60		
347.30	347.70	33564	309	51	3686	18	0.008	-0.50		
380.00	381.00	33565	46	125	317	15	-0.008	-0.50		
390.00	391.00	33566	9	87	209	25	0.010	0.70		
391.00	392.00	33567	7	109	1190	80	0.021	0.60		
393.00	394.00	33568	-5	12	666	40	0.314	-0.50		
395.00	396.00	33569	-5	-5	147	45	-0.008	-0.50		
397.00	398.00	33570	-5	175	197	40	-0.008	-0.50		
399.00	400.00	33571	-5	30	324	40	-0.008	-0.50		
401.00	402.00	33572	-5	58	311	40	-0.008	-0.50		
404.00	405.00	33573	-5	41	1237	35	-0.008	-0.50		
406.00	407.00	33574	-5	-5	110	30	-0.008	-0.50		
408.10	409.40	33575	18	200	3574	35	0.011	0.50		
410.00	411.00	33576	-5	12	86	70	-0.008	-0.50		
412.00	412.80	33577	5	56	655	25	-0.008	-0.50		
416.00	417.00	33578	-5	110	173	80	-0.008	-0.50		
420.00	421.00	33579	16	35	191	55	0.009	-0.50		
424.00	425.00	33580	-5	15	87	55	-0.008	-0.50		
428.00	429.00	33581	-5	16	80	45	-0.008	-0.50		
432.00	433.00	33582	-5	5	-5	20	-0.008	-0.50		
436.00	437.00	33583	-5	6	-5	70	-0.008	-0.50		
440.00	441.00	33584	25	10	249	14	-0.008	-0.50		
450.70	451.40	33585	9035	44	385	1350	0.028	6.00		
460.00	461.00	33586	16	33	69	55	-0.008	-0.50		
480.00	481.00	33587	-5	-5	210	11	-0.008	-0.50		
500.00	501.00	33588	88	6	128	15	-0.008	-0.50		

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY014 (CONTINUED)

ASSAYS

From	To	NumberC	W(PPM)	AU(R) PPM	AU(S) PPM
40.00	41.00	33511	-10		-0.008
78.00	79.00	33512	-10		
80.00	81.00	33513	-10		
82.00	83.00	33514	12		
86.00	87.00	33515	-10		
90.00	91.00	33516	-10		
94.00	95.00	33517	-10		
110.00	111.00	33518	-10		
111.00	112.00	33519	-10		
112.00	113.00	33520	-10		
113.00	114.00	33521			
114.00	115.00	33522		0.024	
115.00	116.00	33523	-10		
116.00	117.00	33524			
117.00	118.00	33525	-10		
118.00	119.00	33526	-10		
119.00	120.00	33527	10		
120.00	121.00	33528	-10		
121.00	122.00	33529	-10		
130.60	132.00	33530	-10		
132.00	133.00	33531	-10		
180.00	181.00	33532	-10	-0.008	
221.00	222.00	33533	-10		
222.00	223.00	33534	-10		
223.00	224.00	33535	-10		
224.00	225.20	33536	-10		
225.20	226.00	33537	-10		
226.00	227.00	33538	3000		
227.00	228.00	33539	950		-0.008
28.00	229.00	33540	-10		
229.00	230.40	33541	-10		
233.00	234.10	33542	-10		
234.10	235.00	33543	-10		
235.00	236.00	33544	-10		
236.00	237.00	33545	-10		
237.00	238.00	33546	-10		
238.00	239.00	33547	-10	-0.008	
239.00	240.00	33548	-10		
240.00	241.00	33549	-10		
241.00	242.00	33551	-10		
242.00	242.60	33552	-10		
42.60	243.80	33553		0.133	

058276

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY014 (CONTINUED)

ASSAYS

From	To	Number	CW(PPM)	AU(R) PPM	AU(S) PPM
243.80	245.00	33554	-10		
245.00	246.00	33555	-10		
247.00	248.00	33556	-10		
249.00	250.00	33557	-10	-0.008	
251.00	252.40	33558	-10		
264.00	265.00	33559	-10		
265.00	266.00	33560	-10		
267.00	268.00	33561	-10		
269.00	270.00	33562	-10		
306.50	306.80	33563	-10		
347.30	347.70	33564	-10		
380.00	381.00	33565	-10		
390.00	391.00	33566	-10		
391.00	392.00	33567	45	0.022	
393.00	394.00	33568	-10	0.311	
395.00	396.00	33569	55		
397.00	398.00	33570	-10		-0.008
399.00	400.00	33571	30		
401.00	402.00	33572	-10	-0.008	
404.00	405.00	33573	-10		
406.00	407.00	33574	-10		
408.10	409.40	33575	-10		
410.00	411.00	33576	45		
412.00	412.80	33577	-10		
416.00	417.00	33578	-10		-0.008
420.00	421.00	33579	-10		
424.00	425.00	33580	16	-0.008	
428.00	429.00	33581	10	-0.008	
432.00	433.00	33582	-10	-0.008	
436.00	437.00	33583	20		
440.00	441.00	33584	-10		
450.70	451.40	33585	1690		
460.00	461.00	33586	-10		
480.00	481.00	33587	-10	-0.008	
500.00	501.00	33588	-10		

058277

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY014 (CONTINUED)

DRILL SAMPLE DENSITY MEASUREMEN

From	To	NumberC	DENSITY
130.00	140.00	34754	3.06
260.00	270.00	34755	2.73
310.00	320.00	34756	2.57
490.00	500.00	34757	3.30

058278

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY014 (CONTINUED)

ROCK QUALITY DESIGNATION (RQD)

From	To	Number	MEASURED RQD m	CALCULATED RQD %	MEAS. RECOVERY m	CALC. RECOVERY %
0.12	1.40		0.14	0.11	1.35	1.05
14.00	15.50		0.00	0.00	0.90	0.60
15.50	17.50		0.15	0.07	0.50	0.25
17.50	19.00		0.00	0.00	0.80	0.53
19.00	20.60		0.00	0.00	0.70	0.44
20.60	22.20		0.12	0.07	1.40	0.87
22.20	23.80		0.14	0.09	1.35	0.84
23.80	25.40		0.40	0.25	1.25	0.78
25.40	27.00		0.25	0.16	1.45	0.91
27.00	28.50		0.32	0.21	1.25	0.83
28.50	30.00		0.27	0.18	1.40	0.93
30.00	31.50		0.80	0.53	1.36	0.91
31.50	34.00		0.80	0.32	2.24	0.90
34.00	36.00		0.95	0.47	1.85	0.92
36.00	37.00		0.60	0.60	0.85	0.85
37.00	39.60		1.66	0.64	2.35	0.90
39.60	40.70		0.12	0.11	1.00	0.91
40.70	41.40		0.24	0.34	0.60	0.86
41.40	43.00		0.54	0.34	1.40	0.87
43.00	45.80		1.60	0.57	2.65	0.95
45.80	48.60		1.80	0.64	2.75	0.98
48.60	51.70		2.70	0.87	3.00	0.97
51.70	54.80		2.30	0.74	2.95	0.95
54.80	57.40		1.15	0.44	2.45	0.94
57.40	60.50		2.68	0.86	3.00	0.97
60.50	63.60		2.70	0.87	2.97	0.96
63.60	65.30		1.20	0.70	1.70	1.00
65.30	67.00		1.40	0.82	1.55	0.91
67.00	70.00		2.40	0.80	2.90	0.97
70.00	73.00		2.00	0.67	2.83	0.94
73.00	76.00		1.67	0.56	2.77	0.92
76.00	79.00		1.75	0.58	2.87	0.96
79.00	82.00		1.40	0.47	2.60	0.87
82.00	85.00		2.20	0.73	2.90	0.97
85.00	88.00		1.33	0.44	2.70	0.90
88.00	91.00		2.10	0.70	2.95	0.98
91.00	94.00		2.70	0.90	3.00	1.00
94.00	97.00		2.60	0.87	2.80	0.93
97.00	100.00		0.75	0.25	3.00	1.00
00.00	102.50		1.15	0.46	2.45	0.98
02.50	104.20		0.40	0.23	1.30	0.76
04.20	105.10		0.00	0.00	0.70	0.78

058279

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY014 (CONTINUED)

ROCK QUALITY DESIGNATION (RQD)

From	To	NumberC	MEASURED RQD m	CALCULATED RQD %	MEAS. RECOVERY m	CALC. RECOVERY %
105.10	106.30		0.20	0.17	1.00	0.83
106.30	107.30		0.00	0.00	0.70	0.70
107.30	108.90		0.36	0.22	1.20	0.75
108.90	110.00		0.35	0.32	1.10	1.00
110.00	112.00		1.54	0.77	1.65	0.82
112.00	115.00		2.76	0.92	3.00	1.00
115.00	118.00		2.04	0.68	2.78	0.93
118.00	121.00		1.46	0.49	2.70	0.90
121.00	124.00		2.16	0.72	2.78	0.93
124.00	127.00		1.96	0.65	2.82	0.94
127.00	130.00		1.90	0.63	2.98	0.99
130.00	133.00		2.50	0.83	2.84	0.95
133.00	135.70		1.68	0.62	2.70	1.00
135.70	138.80		1.63	0.52	2.84	0.92
138.80	141.80		2.33	0.78	2.80	0.93
141.80	144.90		2.70	0.87	3.00	0.97
144.90	147.20		1.50	0.65	2.10	0.91
147.20	150.30		2.33	0.75	2.90	0.93
150.30	152.10		1.20	0.67	1.70	0.94
152.10	154.00		0.90	0.47	1.78	0.94
54.00	156.90		1.24	0.43	2.78	0.96
156.90	160.00		2.17	0.70	3.10	1.00
60.00	163.00		2.70	0.90	2.90	0.97
63.00	166.00		1.52	0.51	2.70	0.90
66.00	168.50		1.40	0.56	2.50	1.00
68.50	172.00		2.13	0.61	3.25	0.93
72.00	174.70		1.00	0.37	2.53	0.94
74.70	177.80		2.30	0.74	3.10	1.00
77.80	180.30		1.40	0.56	2.30	0.92
80.30	181.00		0.54	0.77	0.70	1.00
81.00	184.00		2.30	0.77	3.00	1.00
84.00	184.50		0.00	0.00	0.50	1.00
84.50	186.20		0.60	0.35	1.60	0.94
86.20	189.30		2.00	0.64	3.00	0.97
89.30	191.00		0.80	0.47	1.40	0.82
91.00	193.00		1.20	0.60	1.95	0.97
93.00	196.00		1.65	0.55	2.85	0.95
96.00	199.00		2.20	0.73	3.10	1.03
99.00	201.50		1.15	0.46	2.50	1.00
01.50	204.60		1.80	0.58	2.95	0.95
04.60	207.70		2.30	0.74	3.00	0.97
07.70	210.80		2.10	0.68	3.15	1.02

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY014 (CONTINUED)

ROCK QUALITY DESIGNATION (RQD)

From	To	Number	MEASURED RQD m	CALCULATED RQD %	MEAS. RECOVERY m	CALC. RECOVERY %
210.80	213.90		2.70	0.87	2.93	0.94
213.90	216.90		2.50	0.83	3.00	1.00
216.90	220.00		2.40	0.77	3.00	0.97
220.00	223.00		2.60	0.87	3.00	1.00
223.00	226.00		2.00	0.67	3.00	1.00
226.00	229.00		2.10	0.70	2.85	0.95
229.00	231.80		2.40	0.86	2.90	1.03
231.80	234.90		2.50	0.81	2.95	0.95
234.90	237.90		2.50	0.83	3.05	1.02
237.90	241.00		2.70	0.87	3.10	1.00
241.00	244.00		2.65	0.88	3.00	1.00
244.00	247.00		1.90	0.63	3.00	1.00
247.00	249.40		1.20	0.50	2.40	1.00
249.40	252.50		2.20	0.71	3.00	0.97
252.50	255.30		1.75	0.62	2.80	1.00
255.30	258.30		2.10	0.70	3.10	1.03
258.30	261.30		2.00	0.67	3.00	1.00
261.30	264.40		2.75	0.89	2.95	0.95
264.40	267.50		2.65	0.85	3.00	0.97
267.50	270.60		2.50	0.81	3.00	0.97
270.60	273.60		2.50	0.83	2.90	0.97
273.60	276.60		2.50	0.83	3.10	1.03
276.60	279.70		2.95	0.95	3.10	1.00
279.70	282.80		2.40	0.77	2.95	0.95
282.80	285.90		2.90	0.93	3.10	1.00
285.90	289.00		2.60	0.84	3.10	1.00
289.00	292.00		2.00	0.67	2.80	0.93
292.00	295.00		3.00	1.00	3.00	1.00
295.00	298.00		2.45	0.82	3.00	1.00
298.00	301.00		2.60	0.87	2.90	0.97
301.00	304.00		2.20	0.73	2.90	0.97
304.00	307.00		2.30	0.77	2.80	0.93
307.00	310.00		2.45	0.82	3.05	1.02
310.00	313.00		2.65	0.88	2.85	0.95
313.00	316.00		2.00	0.67	3.00	1.00
316.00	319.00		1.60	0.53	2.80	0.93
319.00	320.80		0.90	0.50	1.80	1.00
320.80	323.90		2.55	0.82	3.00	0.97
323.90	327.00		2.40	0.77	2.95	0.95
327.00	330.00		2.90	0.97	3.00	1.00
330.00	330.50		0.50	1.00	0.50	1.00
330.50	333.60		2.70	0.87	3.05	0.98

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY014 (CONTINUED)

ROCK QUALITY DESIGNATION (RQD)

From	To	NumberC	MEASURED RQD m	CALCULATED RQD %	MEAS. RECOVERY m	CALC. RECOVERY %
333.60	336.70		2.00	0.64	3.00	0.97
336.70	339.90		2.25	0.70	2.90	0.91
339.90	341.70		0.75	0.42	1.70	0.94
341.70	344.70		2.20	0.73	3.00	1.00
344.70	346.00		0.90	0.69	1.25	0.96
346.00	348.30		1.60	0.69	2.20	0.96
348.30	351.40		2.50	0.81	3.00	0.97
351.40	354.50		3.05	0.98	3.05	0.98
354.50	357.60		2.40	0.77	3.05	0.98
357.60	360.70		2.40	0.77	3.10	1.00
360.70	363.80		1.40	0.45	3.10	1.00
363.80	366.90		2.30	0.74	3.00	0.97
366.90	370.00		2.70	0.87	2.90	0.93
370.00	372.90		3.00	1.03	3.00	1.03
372.90	375.90		2.65	0.88	3.00	1.00
375.90	379.00		2.60	0.84	3.00	0.97
379.00	380.60		0.75	0.47	1.50	0.94
380.60	383.70		2.70	0.87	3.00	0.97
383.70	385.00		1.10	0.85	1.30	1.00
385.00	388.00		1.95	0.65	2.90	0.97
388.00	388.80		0.50	0.62	0.70	0.87
388.80	391.00		1.00	0.45	1.85	0.84
391.00	394.00		2.25	0.75	2.90	0.97
394.00	397.00		2.80	0.93	2.90	0.97
397.00	400.00		2.30	0.77	2.60	0.87
400.00	403.00		2.30	0.77	3.05	1.02
403.00	406.00		2.80	0.93	2.90	0.97
406.00	409.00		3.10	1.03	3.10	1.03
409.00	412.00		3.00	1.00	3.10	1.03
412.00	415.00		2.60	0.87	3.00	1.00
415.00	418.00		2.60	0.87	2.90	0.97
418.00	421.00		2.80	0.93	3.10	1.03
421.00	424.00		2.60	0.87	2.95	0.98
424.00	427.00		2.00	0.67	2.55	0.85
427.00	430.00		2.50	0.83	2.75	0.92
430.00	433.00		2.65	0.88	2.80	0.93
433.00	435.50		1.60	0.64	2.45	0.98
435.50	438.50		1.85	0.62	2.85	0.95
438.50	441.60		2.70	0.87	3.00	0.97
441.60	444.70		2.85	0.92	3.00	0.97
444.70	448.00		2.85	0.86	3.05	0.92
448.00	451.00		2.25	0.75	2.90	0.97

058282

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY014 (CONTINUED)

ROCK QUALITY DESIGNATION (RQD)

From	To	NumberC	MEASURED RQD m	CALCULATED RQD %	MEAS. RECOVERY m	CALC. RECOVERY %
451.00	454.00		2.40	0.80	2.80	0.93
454.00	457.00		2.55	0.85	2.90	0.97
457.00	460.00		2.50	0.83	2.85	0.95
460.00	463.00		2.65	0.88	3.00	1.00
463.00	466.00		2.30	0.77	2.90	0.97
466.00	469.00		2.75	0.92	2.95	0.98
469.00	472.00		2.50	0.83	2.90	0.97
472.00	475.00		2.80	0.93	2.95	0.98
475.00	478.00		2.55	0.85	3.00	1.00
478.00	481.00		2.95	0.98	3.05	1.02
481.00	484.00		2.95	0.98	2.95	0.98
484.00	487.00		2.75	0.92	3.05	1.02
487.00	490.00		2.95	0.98	3.00	1.00
490.00	493.00		3.00	1.00	3.00	1.00
493.00	496.00		2.85	0.95	3.00	1.00
496.00	499.00		2.70	0.90	2.90	0.97
499.00	502.00		2.95	0.98	2.95	0.98
502.00	503.30		1.20	0.92	1.20	0.92

058283

R.G.C. Exploration Pty Ltd

SYLVESTER GRID

SURFACE DIAMOND DRILLHOLE : SY015

PROJECT IDEN :SYLVESTER START DATE : 5 FEB 92 COMPLETION DATE : 4 MAR 92 LOGGED BY:DAVID JOHN CROSSING
COLLAR NORTHING: 60836.80 COLLAR EASTING : 58192.98 COLLAR ELEVATION: 306.60 GRID AZIMUTH : 0.00
DRILLED BY : LONGYEAR TOTAL LENGTH : 412.50 CORE/HOLE SIZE : HQNQ

SURVEY FLAG	SURVEY POINT LOCATION	FORESIGHT	AZIMUTH (DEGREES)	VERTICAL ANGLE (DEGREES)	NORTHING	EASTING	ELEVATION
000	0.00		180.00	-55.00	60836.80	58192.98	306.60
001	22.50		182.00	-55.75			
002	60.00		181.50	-57.00			
003	103.50		181.00	-57.30			
004	147.00		182.50	-58.00			
005	176.50		182.00	-57.25			
006	207.00		183.00	-57.00			
007	238.00		182.50	-57.00			
008	269.50		182.00	-57.00			
009	301.00		183.00	-57.00			
010	331.00		185.00	-57.00			
011	361.00		183.00	-55.50			
012	394.00		185.00	-55.00			

R HED This hole was drilled to test for replacment massive sulphides
R HED in carbonates of the Upper Oonah Formation in the footwall of
R HED the Balstrup Fault.It was positioned to intersect the fault at
R HED a depth of about 300m, below unsuccessful hole SY013.
R HED The hole intersected the fault over the interval 317.7 - 319.8
R HED and immediately passed into Upper Oonah Formation carbonates
R HED with talcose alteration, but no massive sulphides.
R HED
R HED

	Interval From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
	0.00	0.30			NO CORE.	
	0.30	61.30			SHALE: medium dark grey, slightly carbonaceous, slightly weathered, indistinctly bedded, disrupted bedding, firm, highly broken core, 1% disseminations = veins of pyrite.	CAMBRIAN CRIMSON CK FOR
R	0.30	61.30			The interval is partially disrupted by faulting which is	
R	0.30	61.30			locally intense, and is consequently broken and partially	
R	0.30	61.30			decomposed.	
					0.30 20.40 100% SHALE: orange-brown, slightly carbonaceous, highly weathered, indistinctly bedded, disrupted bedding, crumbly, highly broken core, 1% disseminations = veins of	CAMBRIAN CRIMSON CK FOR

058284

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY015 (CONTINUED)

	- Interval - From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
					pyrite.	
					31.00 35.00 40% FAULT: slickensided, fault: ca 10, crumbly, exceptionally broken core, 3 % disseminations of pyrite.	
					35.00 38.20 100% LITHIC ARENITE: light grey, slightly weathered, massive, medium grained.	
	61.30	86.00			FAULT: orange-brown, moderately oxidised, crumbly, highly broken core.	
R	61.30	86.00			The interval is essentially a large fault zone varying in	
R	61.30	86.00			intensity from disturbed and highly strained shale with	
R	61.30	86.00			indistinct bedding to completely shattered shaley pugg	
R	61.30	86.00			generally oxidised which is broken and caused high core loss.	
					61.30 86.00 50% SHALE: medium grey, intermixed, disrupted bedding, boudinaged, faulted, firm, moderately broken core, 3 % disseminations of pyrite.	
R	63.00	64.50			Either oxidised lithic arenite or mylonite.	
	86.00	107.50			MUDSTONE: light grey, shaley, slightly carbonaceous, slightly weathered, indistinctly bedded, disrupted bedding, bedding: ca 10, firm, highly broken core, 0.3% disseminations of pyrite.	CAMBRIAN CRIMSON CK FOR
					86.00 107.50 40% LITHIC ARENITE: medium dark grey, irregularly interbedded, medium bedded, medium grained, firm, moderately broken core.	
					91.40 93.20 100% FAULT: crumbly, exceptionally broken core.	
					101.50 105.00 100% FAULT: crumbly, exceptionally broken core.	
	107.50	120.90			FAULT: very dark grey, vuggy, puggy, fault: ca 45, crumbly, exceptionally broken core, 3 % disseminations of pyrite.	
					107.50 120.90 30% MUDSTONE: very dark grey, slightly carbonaceous, disrupted bedding, indistinctly bedded, faulted, 3 % disseminations of pyrite.	
	120.90	161.60			MUDSTONE: medium dark grey, slightly weathered, disrupted bedding, indistinctly bedded, firm, moderately broken core, 1% disseminations of pyrite.	CAMBRIAN CRIMSON CK FOR
R	120.90	161.60			The interval is increasingly strained downhole, and has	
R	120.90	161.60			deformed in a ductile manner producing a melange as the end	
R	120.90	161.60			product (Below 145m). Slight weathering presists to 161.6m as	
R	120.90	161.60			evidenced by weathering of carbonate leaving "empty" veinlets.	
					120.90 161.60 20% LITHIC ARENITE: light grey, irregularly interbedded, medium bedded, boudinaged.	
					130.40 131.60 100% FAULT: crumbly, exceptionally broken core.	
					146.40 161.60 30% MELANGE: very dark grey, moderately carbonaceous, melange foliation: ca 45.	

058285

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY015 (CONTINUED)

- Interval - From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
161.60	177.60			MUDSTONE: medium dark grey, medium bedded, bedding: ca 70, sharp base, hard, moderately broken core, 5% veins of quartz, 5% veins of carbonate, 1% disseminations = veins of pyrite. 161.60 177.60 40% LITHIC ARENITE: light grey, inter bedded, medium bedded, graded bedding, uphole facing, 5% veins of quartz, 5% veins of carbonate, 1% disseminations = veins of pyrite.	CAMBRIAN CRIMSON CK FOR
177.60	183.60			LITHIC ARENITE: light grey, coarse bedded, graded bedding, bedding: ca 50, uphole facing, sharp base, hard, moderately broken core, 3 % veins of carbonate. 177.60 183.60 20% MUDSTONE: medium dark grey, medium bedded.	CAMBRIAN CRIMSON CK FOR
183.60	209.10			LIMESTONE: medium grey, medium bedded, well bedded, bedding: ca 50, hard, moderately broken core, 5% veins of carbonate, 1% disseminations of pyrite. 183.60 209.10 20% SHALE: dark grey, irregularly interbedded, medium bedded, 5% veins of carbonate, 1% disseminations of pyrite. 189.30 189.50 100% STRUCTURAL MEASUREMENT: bedding: 344 / 78. 191.30 191.40 100% STRUCTURAL MEASUREMENT: bedding: 020 / 60.	CAMBRIAN CRIMSON CK FOR
209.10	229.80			MUDSTONE: dark grey, moderately calcareous, medium bedded, coarse bedded, bedding: ca 45, hard, moderately broken core, 5% veins of carbonate, 3 % disseminations = veins of pyrite. 209.10 229.80 30% LITHIC ARENITE: light grey, irregularly interbedded, slightly calcareous, medium bedded, 5% veins of carbonate, 3 % disseminations = veins of pyrite.	CAMBRIAN CRIMSON CK FOR
229.80	230.70			LIMESTONE: medium grey, coarse bedded, bedding: ca 65, hard, moderately broken core, 3 % veins of carbonate, 1% disseminations of pyrite.	CAMBRIAN CRIMSON CK FOR
230.70	277.90			LITHIC ARENITE: light grey, coarse bedded, graded bedding, basal contact: ca 20, uphole facing, sharp base, hard, moderately broken core, 3 % veins of carbonate. 230.70 277.90 10% MUDSTONE: dark grey, irregularly interbedded, medium bedded.	CAMBRIAN CRIMSON CK FOR
				233.50 241.50 100% LITHIC ARENITE: light grey, coarse bedded, graded bedding, basal contact: ca 20, uphole facing, sharp base, hard, moderately broken core, 5% veins of carbonate, 3 % disseminations = veins of pyrite, 0.3% veins of epidote. 251.00 255.00 60% MUDSTONE: moderately calcareous, medium	CAMBRIAN CRIMSON CK FOR

052896

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY015 (CONTINUED)

	- Interval - From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
					bedded, soft sediment slumping, 10% veins of carbonate, 1% disseminations < veins of pyrite.	
					251.00 277.90 100% LITHIC ARENITE: light grey, slightly calcareous, coarse bedded, graded bedding, basal contact: ca 20, uphole facing, sharp base, hard, moderately broken core, 3 % veins of carbonate.	CAMBRIAN CRIMSON CK FOR
					262.80 262.90 100% STRUCTURAL MEASUREMENT: fault: 280 / 85.	
	277.90	284.90			MELANGE: basal contact: ca 40, 3 % veins of quartz, 1% veins of carbonate, 1% disseminations = veins of pyrite.	
R	277.90	284.90			This is unlike most other melanges in having mostly Crimson	
R	277.90	284.90			Creek Formation turbidites as fragments and in having fewer,	
R	277.90	284.90			fragments with a wide size range.Sheared on contacts.	
	284.90	314.50			SANDSTONE: light grey, coarse bedded, gradational base, hard, moderately broken core, 10% veins of quartz, 3 % veins of carbonate, 1% disseminations > veins of pyrite, 0.3% veins of epidote.	UPPER OONAH
					284.90 314.50 30% SANDSTONE WITH SHALE: medium grey, irregularly interbedded, fine bedded, laminated, soft sediment slumping, 3 % veins of quartz, 1% veins of carbonate.	
					290.30 290.60 100% STRUCTURAL MEASUREMENT: bedding: 360 / 90.	
R	292.45	292.46			Fibres indicate upper block moved up (toward 054 deg AMG).	
					292.45 292.46 100% STRUCTURAL MEASUREMENT: fault: 318 / 65, fibre: 234 / 15.	
					292.90 292.91 100% STRUCTURAL MEASUREMENT: fault: 296 / 74.	
					295.00 295.01 100% STRUCTURAL MEASUREMENT: fracture: 360 / 75.	
R	295.50	295.96			Upper block moved toward 270 deg AMG.	
					295.50 295.96 100% STRUCTURAL MEASUREMENT: fault: 006 / 70, fibre: 090 / 12.	
R	295.80	295.81			Fibres indicate upper block down(toward 106 deg AMG).	
					295.80 295.81 100% STRUCTURAL MEASUREMENT: fault: 020 / 70, fibre: 106 / 28.	
R	296.05	296.06			Upper block moved toward 295 degrees AMG.	
					296.05 296.06 100% STRUCTURAL MEASUREMENT: fault: 035 / 75, fibre: 115 / 18.	
R	296.45	296.46			Upper block moved toward 295 deg AMG.	
					296.45 296.46 100% STRUCTURAL MEASUREMENT: fault: 205 / 80, fibre: 115 / 10.	
	314.50	317.70			MELANGE: dark grey, slightly graphitic, slightly calcareous, basal contact: ca 70, hard, moderately broken core. 1% disseminations of pyrite.	

058287

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY015 (CONTINUED)

	- Interval - From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
	317.70	319.80			FAULT: black, slightly conglomerate, puggy, crumbly, exceptionally broken core.	
R	317.70	319.80			Balstrup Fault.	
	319.80	324.60			CARBONATE: medium grey, massive, sharp irregular base, firm. moderately broken core, 1% disseminations of talc, 0.3% disseminations of pyrrhotite.	UPPER OONAH
	324.60	329.30	2.0		FAULT: black, moderately calcareous, highly graphitic, fault: ca 40. crumbly, highly broken core.	
	329.30	336.20			CARBONATE: grey-green, highly talcose, fine bedded, laminated, bedding: ca 65, 10% disseminations of talc.	UPPER OONAH
R	329.30	336.20			A talcose altered carbonate, similar to carbonates intersected	
R	329.30	336.20			in SY003 below 431.5 m.	
	336.20	391.50			SANDSTONE WITH SILTSTONE: medium grey, fine bedded, laminated, well bedded, microfaults, bedding: ca 55, hard, moderately broken core, 5% veins of quartz, 1% veins of carbonate, 0.3% disseminations = veins of pyrite.	UPPER OONAH
R	336.20	391.50			Finely interbedded/interlaminated light grey sandstone (40%),	
R	336.20	391.50			and dark grey siltstone/shale (60%). Occasional limey interbeds	
R	336.20	391.50			near top. Occasional slump folds. BCA's vary 40 - 80 degrees,	
R	336.20	391.50			ave 55.	
					336.20 338.70 100% SANDSTONE WITH SILTSTONE: medium grey, fine bedded, laminated, well bedded, microfaults, bedding: ca 55. hard, highly broken core, 5% veins of quartz, 1% veins of carbonate, 0.3% disseminations = veins of pyrite.	UPPER OONAH
					346.70 359.10 100% SANDSTONE: light grey, irregularly interbedded, medium bedded, coarse bedded.	
					358.50 362.00 100% SANDSTONE WITH SILTSTONE: medium grey, graded bedding, laminated, well bedded, microfaults, bedding: ca 55, downhole facing, hard, moderately broken core, 5% veins of quartz, 1% veins of carbonate, 0.3% disseminations = veins of pyrite.	UPPER OONAH
					371.60 371.80 100% STRUCTURAL MEASUREMENT: bedding: 240 / 15.	
					373.00 373.10 100% STRUCTURAL MEASUREMENT: bedding: 018 / 68.	
					374.70 374.80 100% STRUCTURAL MEASUREMENT: fracture: 006 / 55. bedding: 005 / 78.	
					376.20 376.21 100% STRUCTURAL MEASUREMENT: fault: 230 / 85. slickensides: 318 / 63.	
					377.20 377.30 100% STRUCTURAL MEASUREMENT: bedding: 015 / 86.	
	391.50	396.00			FAULT: black, slightly graphitic, slightly calcareous,	

058280

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY015 (CONTINUED)

	- Interval - From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
					brecciated, slickensided, fault: ca 45, firm, highly broken core, 10% patches of quartz, 5% disseminations of carbonate.	
END	396.00	412.50			SANDSTONE WITH SILTSTONE: medium grey, fine bedded, laminated, well bedded, soft sediment slumping, bedding: ca 55, hard, moderately broken core. 396.35 396.40 100% STRUCTURAL MEASUREMENT: bedding: 015 / 62. 396.40 396.45 100% STRUCTURAL MEASUREMENT: bedding: 037 / 50. 402.40 402.50 100% STRUCTURAL MEASUREMENT: bedding: 020 / 70. 403.10 403.20 100% STRUCTURAL MEASUREMENT: vein: 102 / 65.	UPPER OONAH
R	403.30	404.40			The boulangerite (or jamesonite?) occurs toward upper contact	
R	403.30	404.40			whilst sphalerite-galena is toward base.They don't occur	
R	403.30	404.40			together. 403.30 404.40 100% VEIN: yellow, vein: ca 10, 30% veins of quartz, 5% veins of carbonate, 50% veins of pyrite, 1% veins of galena, 1% veins of sphalerite, 5% veins of boulangerite, 0.3% epidote veins of. 403.50 403.65 100% STRUCTURAL MEASUREMENT: vein: 074 / 75. 404.15 404.30 100% STRUCTURAL MEASUREMENT: fault: 094 / 75. 405.50 405.60 100% STRUCTURAL MEASUREMENT: bedding: 040 / 75. 405.90 406.00 100% STRUCTURAL MEASUREMENT: bedding: 040 / 84. 406.20 406.30 100% STRUCTURAL MEASUREMENT: bedding: 020 / 70.	

058289

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY015 (CONTINUED)

ASSAYS

From	To	NumberC	CU(PPM)	PB(PPM)	ZN(PPM)	SN(PPM)	AU(PPM)	AG(PPM)	AS(PPM)	SB(PPM)
32.00	33.00	33645	157	85	194	6		-2.00		
34.00	35.00	33646	141	72	153	6		-2.00		
64.00	65.00	33647	134	12	1371	10		-2.00		
68.00	69.00	33648	106	83	380	8		-2.00		
72.00	73.00	33649	164	73	320	10		-2.00		
76.00	77.00	33650	133	87	844	11		-2.00		
80.00	81.00	33651	145	69	697	11		-2.00		
84.00	85.00	33653	134	5	2412	9		-2.00		
108.00	109.00	33654	138	57	610	13		-2.00		
112.00	113.00	33555	71	119	663	7		-2.00		
116.00	117.00	33656	118	93	493	12		-2.00		
120.00	121.00	33657	49	1336	13200	20		8.00		
130.00	131.00	33658	124	142	957	9		-2.00		
170.00	171.00	33659	83	23	147	4		-2.00		
180.00	181.00	33661	82	9	151	6		-2.00		
190.00	191.00	33662	54	35	80	7		-2.00		
200.00	201.00	33663	50	22	262	8		-2.00		
210.00	211.00	33664	47	23	209	7		-2.00		
220.00	221.00	33665	107	16	195	-3		-2.00		
240.00	241.00	33666	151	1050	3465	30		3.00		
280.00	281.00	33667	64	93	461	11		-2.00		
317.00	317.70	33668	124	85	59	6		-2.00		
317.70	319.00	33669	55	247	132	13		-2.00		
319.00	319.80	33670	95	1484	539	-3		2.00		
319.80	321.00	33671	20	678	42	18		-2.00		
330.00	331.00	33672	7	9	33	7		-2.00		
334.00	335.00	33673	15	-5	36	7		-2.00		
403.30	404.40	33674	8513	22900	1853	360		200.00		

058290

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY015 (CONTINUED)

DRILL SAMPLE DENSITY MEASUREMEN

From	To	NumberC	DENSITY
260.00	270.00	34758	2.76
340.00	350.00	35759	2.61

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY015 (CONTINUED)

ROCK QUALITY DESIGNATION (RQD)

From	To	NumberC	MEASURED RQD m	CALCULATED RQD %	MEAS. RECOVERY m	CALC. RECOVERY %
0.30	4.20		0.00	0.00	0.55	0.14
4.20	5.40		0.00	0.00	0.70	0.58
5.40	6.00		0.00	0.00	0.22	0.37
6.00	7.20		0.00	0.00	0.95	0.79
7.20	8.10		0.00	0.00	0.73	0.81
8.10	9.00		0.00	0.00	0.43	0.48
9.00	10.50		0.00	0.00	0.64	0.43
10.50	12.00		0.00	0.00	0.85	0.57
12.00	15.00		0.00	0.00	2.55	0.85
15.00	16.50		0.00	0.00	0.58	0.39
16.50	17.20		0.00	0.00	0.00	0.00
17.20	18.00		0.00	0.00	0.00	0.00
18.00	19.00		0.28	0.28	0.85	0.85
19.00	20.20		0.15	0.12	0.95	0.79
20.20	21.00		0.00	0.00	0.47	0.59
21.00	22.50		0.00	0.00	1.00	0.67
22.50	24.00		0.00	0.00	1.29	0.86
24.00	25.50		0.00	0.00	1.30	0.87
25.50	27.00		0.00	0.00	0.81	0.54
27.00	28.50		0.00	0.00	0.70	0.47
28.50	31.50		0.00	0.00	1.85	0.62
31.50	33.00		0.00	0.00	1.00	0.67
33.00	34.50		0.00	0.00	0.99	0.66
34.50	36.00		0.00	0.00	1.05	0.70
36.00	37.50		0.00	0.00	1.30	0.87
37.50	39.00		0.00	0.00	0.82	0.55
39.00	40.50		0.00	0.00	1.00	0.67
40.50	42.00		0.00	0.00	0.64	0.43
42.00	43.50		0.00	0.00	1.00	0.67
43.50	45.00		0.00	0.00	1.12	0.75
45.00	46.50		0.00	0.00	1.10	0.73
46.50	48.00		0.00	0.00	0.91	0.61
48.00	49.50		0.00	0.00	0.83	0.55
49.50	51.00		0.00	0.00	0.78	0.52
51.00	52.50		0.00	0.00	0.81	0.54
52.50	54.00		0.00	0.00	0.83	0.55
54.00	55.50		0.00	0.00	0.81	0.54
55.50	57.00		0.00	0.00	1.24	0.83
57.00	58.50		0.00	0.00	1.17	0.78
58.50	60.00		0.25	0.17	0.86	0.57
60.00	61.50		0.00	0.00	0.47	0.31
61.50	63.00		0.00	0.00	0.96	0.64

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY015 (CONTINUED)

ROCK QUALITY DESIGNATION (RQD)

From	To	NumberC	MEASURED RQD m	CALCULATED RQD %	MEAS. RECOVERY m	CALC. RECOVERY %
63.00	64.50		0.00	0.00	0.83	0.55
64.50	66.00		0.00	0.00	1.13	0.75
66.00	67.50		0.00	0.00	0.92	0.61
67.50	69.00		0.00	0.00	1.08	0.72
69.00	70.50		0.00	0.00	1.10	0.73
70.50	72.00		0.00	0.00	1.10	0.73
72.00	73.50		0.00	0.00	1.05	0.70
73.50	75.00		0.31	0.21	1.28	0.85
75.00	76.50		0.00	0.00	1.18	0.79
76.50	78.00		0.42	0.28	1.60	1.07
78.00	79.50		0.30	0.20	1.14	0.76
79.50	81.00		0.00	0.00	0.50	0.33
81.00	82.50		0.37	0.25	1.38	0.92
82.50	84.00		0.52	0.35	1.35	0.90
84.00	85.50		0.75	0.50	1.50	1.00
85.50	87.00		0.00	0.00	1.16	0.77
87.00	88.50		0.00	0.00	1.40	0.93
88.50	90.00		0.00	0.00	0.63	0.42
90.00	91.50		0.16	0.11	1.43	0.95
91.50	93.00		0.00	0.00	1.19	0.79
93.00	94.50		0.13	0.09	0.82	0.55
94.50	96.00		0.00	0.00	1.00	0.67
96.00	97.50		0.00	0.00	0.94	0.63
97.50	99.00		0.00	0.00	1.05	0.70
99.00	101.50		0.00	0.00	0.65	0.26
101.50	103.00		0.00	0.00	0.63	0.42
103.00	104.50		0.00	0.00	0.50	0.33
104.50	106.00		0.00	0.00	1.40	0.93
106.00	107.50		0.15	0.10	1.20	0.80
107.50	109.00		0.00	0.00	1.50	1.00
109.00	109.70		0.00	0.00	0.70	1.00
109.70	111.00		0.00	0.00	1.40	1.08
111.00	112.00		0.00	0.00	1.10	1.10
112.00	113.30		0.00	0.00	1.05	0.81
113.30	114.50		0.00	0.00	1.20	1.00
114.50	115.00		0.13	0.26	0.80	1.60
115.00	116.20		0.00	0.00	0.70	0.58
116.20	116.50		0.00	0.00	0.50	1.67
116.50	117.50		0.00	0.00	0.75	0.75
117.50	118.70		0.25	0.21	1.25	1.04
118.70	119.90		0.18	0.15	1.05	0.87
119.90	120.90		0.00	0.00	0.70	0.70

058293

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY015 (CONTINUED)

ROCK QUALITY DESIGNATION (RQD)

From	To	Number	CMEASURED RQD m	CALCULATED RQD %	MEAS. RECOVERY m	CALC. RECOVERY %
120.90	122.00		0.10	0.09	1.04	0.94
122.00	123.40		0.00	0.00	0.83	0.59
123.40	124.60		0.00	0.00	1.39	1.16
124.60	127.00		0.48	0.20	2.00	0.83
127.00	127.90		0.12	0.13	0.86	0.95
127.90	129.40		0.51	0.34	1.48	0.99
129.40	130.40		0.12	0.12	0.83	0.83
130.40	131.60		0.00	0.00	1.20	1.00
131.60	132.90		0.00	0.00	0.70	0.54
132.90	134.40		0.16	0.11	1.10	0.73
134.40	135.10		0.00	0.00	0.84	1.20
135.10	136.00		0.00	0.00	0.78	0.87
136.00	137.50		0.00	0.00	0.53	0.35
137.50	138.60		0.00	0.00	0.59	0.54
138.60	140.20		0.18	0.11	0.90	0.56
140.20	141.40		0.35	0.29	0.80	0.67
141.40	143.10		0.00	0.00	0.83	0.49
143.10	143.60		0.00	0.00	0.76	1.52
143.60	144.20		0.00	0.00	0.53	0.88
144.20	144.80		0.12	0.20	0.68	1.13
144.80	146.40		0.15	0.09	0.98	0.61
146.40	147.80		0.31	0.22	1.19	0.85
147.80	149.40		0.17	0.11	1.37	0.86
149.40	150.90		0.00	0.00	0.46	0.31
150.90	152.50		0.37	0.23	1.31	0.82
152.50	155.50		0.47	0.16	1.54	0.51
155.50	156.80		0.11	0.08	0.45	0.35
156.80	158.40		0.00	0.00	0.98	0.61
158.40	160.70		0.00	0.00	1.11	0.48
160.70	161.60		0.15	0.17	0.60	0.67
161.60	163.20		1.42	0.89	2.27	1.42
163.20	164.60		1.21	0.86	1.56	1.11
164.60	166.20		1.48	0.92	1.48	0.92
166.20	167.90		1.37	0.80	1.69	0.99
167.90	169.50		1.20	0.75	1.57	0.98
169.50	171.00		1.33	0.89	1.49	0.99
171.00	172.60		1.55	0.97	1.55	0.97
172.60	174.00		1.80	1.28	1.36	0.97
174.00	175.60		1.31	0.82	1.57	0.98
175.60	177.00		1.23	0.88	1.33	0.95
177.00	178.50		1.11	0.74	1.50	1.00
178.50	180.00		1.23	0.82	1.23	0.82

05829 4

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY015 (CONTINUED)

ROCK QUALITY DESIGNATION (RQD)

From	To	NumberC	MEASURED RQD m	CALCULATED RQD %	MEAS. RECOVERY m	CALC. RECOVERY %
180.00	186.20		4.19	0.67	6.10	0.98
186.20	189.30		2.55	0.82	3.05	0.98
189.30	192.40		2.19	0.71	3.03	0.98
192.40	195.50		2.83	0.91	2.98	0.96
195.50	196.70		1.07	0.89	1.23	1.02
196.70	199.50		2.44	0.87	2.68	0.96
199.50	202.50		2.91	0.97	2.98	0.99
202.50	205.50		2.99	1.00	3.02	1.01
205.50	208.50		2.87	0.96	2.99	1.00
208.50	211.50		2.46	0.82	2.97	0.99
211.50	214.50		2.10	0.70	2.92	0.97
214.50	217.50		2.43	0.81	3.09	1.03
217.50	220.50		2.52	0.84	2.88	0.96
220.50	223.50		2.36	0.79	3.02	1.01
223.50	225.00		1.42	0.95	1.42	0.95
225.00	228.10		2.63	0.85	3.04	0.98
228.10	229.00		0.78	0.87	1.02	1.13
229.00	232.00		2.65	0.88	2.96	0.99
232.00	235.10		3.00	0.97	3.00	0.97
235.10	236.70		1.44	0.90	1.47	0.92
236.70	239.80		3.10	1.00	3.13	1.01
239.80	242.90		2.88	0.93	3.07	0.99
242.90	246.00		2.78	0.90	2.98	0.96
246.00	249.10		2.68	0.86	2.32	0.75
249.10	251.00		0.76	0.40	1.92	1.01
251.00	253.40		1.12	0.47	2.51	1.04
253.40	256.50		2.64	0.85	3.04	0.98
256.50	259.50		2.90	0.97	3.00	1.00
259.50	262.50		2.57	0.86	2.95	0.98
262.50	265.50		2.61	0.87	3.00	1.00
265.50	268.50		2.89	0.96	2.93	0.98
268.50	271.50		2.56	0.85	2.97	0.99
271.50	274.50		2.71	0.90	2.96	0.99
274.50	277.50		2.75	0.92	2.97	0.99
277.50	278.60		0.49	0.44	1.15	1.04
278.60	280.40		0.67	0.37	1.74	0.97
280.40	283.40		2.21	0.74	3.00	1.00
283.40	286.50		2.22	0.72	3.16	1.02
286.50	289.50		2.45	0.82	2.93	0.98
289.50	292.50		2.02	0.67	3.00	1.00
292.50	295.50		1.84	0.61	2.97	0.99
295.50	298.50		2.00	0.67	2.96	0.99

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY015 (CONTINUED)

ROCK QUALITY DESIGNATION (RQD)

From	To	Number	MEASURED RQD m	CALCULATED RQD %	MEAS. RECOVERY m	CALC. RECOVERY %
298.50	301.50		1.82	0.61	3.08	1.03
301.50	304.50		1.95	0.65	2.93	0.98
304.50	307.50		2.32	0.77	2.95	0.98
307.50	310.50		2.23	0.74	3.03	1.01
310.50	313.50		2.55	0.85	3.00	1.00
313.50	316.50		2.32	0.77	3.00	1.00
316.50	318.20		0.23	0.13	1.54	0.90
318.20	319.50		0.00	0.00	0.47	0.36
319.50	319.80		0.00	0.00	0.24	0.80
319.80	323.00		2.33	0.73	3.00	0.94
323.00	325.60		1.55	0.60	2.49	0.96
325.60	326.90		0.00	0.00	0.50	0.38
326.90	330.60		1.00	0.27	1.36	0.37
330.60	332.20		1.38	0.86	1.56	0.97
332.20	333.80		1.27	0.79	1.63	1.02
333.80	335.30		1.17	0.78	1.58	1.05
335.30	336.90		0.44	0.27	1.52	0.95
336.90	338.50		0.00	0.00	0.69	0.43
338.50	339.90		0.47	0.33	1.62	1.16
339.90	343.00		1.53	0.49	2.91	0.94
343.00	346.10		2.03	0.65	3.10	1.00
346.10	349.20		2.48	0.80	3.09	1.00
349.20	352.20		1.81	0.60	3.06	1.02
352.20	355.50		1.55	0.47	3.06	0.93
355.50	358.40		1.65	0.57	3.13	1.08
358.40	359.10		0.00	0.00	0.87	1.24
359.10	362.20		0.49	0.16	2.94	0.95
362.20	362.50		0.13	0.43	0.27	0.90
362.50	365.40		2.00	0.69	2.93	1.01
365.40	368.50		2.19	0.71	3.13	1.01
368.50	371.65		1.14	0.36	3.08	0.98
371.65	374.70		3.02	0.99	3.90	1.28
374.70	377.80		2.21	0.71	3.00	0.97
377.80	380.90		1.85	0.60	3.08	0.99
380.90	384.50		2.07	0.57	3.05	0.85
384.50	387.10		2.14	0.82	3.07	1.18
387.10	329.20		1.05	0.50	2.02	0.96
389.20	390.70		0.10	0.07	1.67	1.11
390.70	391.40		0.00	0.00	0.70	1.00
391.40	393.30		0.78	0.41	2.17	1.14
393.30	396.40		1.91	0.62	3.11	1.00
396.40	399.45		2.20	0.72	3.07	1.01

05829 6

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY015 (CONTINUED)

ROCK QUALITY DESIGNATION (RQD)

From	To	NumberC	MEASURED RQD m	CALCULATED RQD %	MEAS. RECOVERY m	CALC. RECOVERY %
399.45	402.50		1.76	0.58	3.04	1.00
402.50	405.60		2.43	0.78	3.14	1.01
405.60	408.60		1.31	0.44	3.00	1.00
408.60	410.50		0.35	0.18	2.04	1.07
410.50	412.50		0.63	0.31	2.17	1.08

05829 7

R.G.C. Exploration Pty Ltd

SYLVESTER GRID

SURFACE DIAMOND DRILLHOLE : SY016

PROJECT IDEN :SYLVESTER START DATE : 27 MAR 92 COMPLETION DATE : 2 APR 92 LOGGED BY:DAVID JOHN CROSSING
COLLAR NORTHING: 60728.50 COLLAR EASTING : 58589.90 COLLAR ELEVATION: 318.90 GRID AZIMUTH : 0.00
DRILLED BY : D.D.T TOTAL LENGTH : 413.00 CORE/HOLE SIZE : HQNQ

SURVEY FLAG	SURVEY POINT LOCATION	FORESIGHT	AZIMUTH (DEGREES)	VERTICAL ANGLE (DEGREES)	NORTHING	EASTING	ELEVATION
000	0.00		177.50	-52.00	60728.50	58589.90	318.90
001	29.00		177.50	-52.00			
002	74.50		176.00	-51.00			
003	106.00		177.50	-50.00			
004	136.00		179.00	-49.00			
005	166.00		182.00	-49.00			
006	196.00		182.50	-48.50			
007	226.00		183.50	-48.00			
008	257.50		184.50	-48.00			
009	288.50		186.00	-48.00			
010	323.00		187.00	-48.00			
011	359.50		190.00	-47.50			
012	394.50		191.00	-48.00			
013	413.00		191.00	-48.00			

R HED This hole was drill to test for replacement of massive
R HED sulphides in cabonates of the Upper Oonah Formation in the
R HED immediate footwall of the Balstrup Fault.The fault was
R HED intersected over the interval 330 - 337.6m, and Limestones in
R HED the immediate footwall were partially replaced by
R HED quartz-pyrite-sphalerite over 1.3m. Below that depth, the
R HED limestones were unaltered.

Interval From (m)	Interval To (m)	Rec. (m)	RQD (m)	Description	Unit
0.00	43.50			NO CORE.	
43.50	77.20			MUDSTONE: light grey, medium bedded, coarse bedded, bedding: ca 30, firm, highly broken core.	CAMBRIAN CRIMSON CK FOR
				43.50 77.20 40% LITHIC ARENITE: light grey, inter bedded, medium bedded, coarse bedded, completely broken core.	
				43.50 72.00 100% MUDSTONE: light grey, slightly weathered, medium bedded, coarse bedded, bedding: ca 30, firm, highly broken core.	CAMBRIAN CRIMSON CK FOR
				74.50 75.00 100% MUDSTONE: light grey, medium bedded, coarse bedded, microfault: ca 10, firm, highly broken core.	CAMBRIAN CRIMSON CK FOR

058298

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY016 (CONTINUED)

	- Interval - From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
	77.20	90.90	4.5		FAULT: black, slightly carbonated, puggy, brecciated, basal contact: ca 30, firm, exceptionally broken core, 5% disseminations of pyrite.	
R	77.20	90.90			Driller reports numerous water-filled cavities over this	
R	77.20	90.90			interval.	
					77.20 90.90 60% NO CORE.	
	90.90	194.70			LITHIC ARENITE: light grey, medium bedded, coarse bedded, graded bedding, bedding: ca 45, uphole facing, sharp base, firm, moderately broken core, 5% veins of carbonate.	CAMBRIAN CRIMSON CK FOR
					90.90 194.70 40% MUDSTONE: light grey, inter bedded, 5% veins of carbonate.	
R	95.10	98.30			A 0 - 60cm wide tensional vein that lenses out at ends, with	
R	95.10	98.30			jagged jig-saw fit edges and some entrained breccia fragments .	
R	95.10	98.30			No displacement observed.	
					95.10 98.30 30% VEIN: vein: ca 0, 40% veins of quartz. 3 % veins of talc, 3 % veins of galena.	
					178.00 194.40 100% LITHIC ARENITE: light grey, medium bedded, coarse bedded, graded bedding, bedding: ca 60, uphole facing, sharp base, firm, moderately broken core, 5% veins of carbonate.	CAMBRIAN CRIMSON CK FOR
	194.70	267.50			MUDSTONE: very dark grey, moderately calcareous, medium bedded, well bedded, bedding: ca 45, basal contact: ca faulted base, 25, firm, moderately broken core, 10% veins of carbonate, 5% disseminations of pyrite.	CAMBRIAN CRIMSON CK FOR
R	194.70	267.50			Varies from slightly to strongly calacerous.Locally highly	
R	194.70	267.50			strained and boudinaged at shallow angle to bedding.Fine	
R	194.70	267.50			grained disseminated pyrite is common showing preference for	
R	194.70	267.50			mudstone beds which can have up to 50% syngenetic pyrite.	
					194.70 267.50 20% LITHIC ARENITE: irregularly interbedded, medium bedded, well bedded, 10% veins of carbonate.	
R	214.00	247.50			A disturbed interval displaying moderate to locally high strain	
R	214.00	247.50			and consequantly boudinaging of coarser beds (lithic arenite).	
					214.00 247.50 40% MUDSTONE: very dark grey, moderately calcareous, disrupted bedding, sheared, boudinaged, shear: ca 45, basal contact: ca faulted base, 25, firm, moderately broken core, 10% veins of carbonate, 3 % patches of pyrite.	CAMBRIAN CRIMSON CK FOR
					257.80 264.00 100% MUDSTONE: very dark grey, moderately calcareous, medium bedded, well bedded, breccia: ca 45, basal contact: ca faulted base, 25, firm, moderately broken core, 10% veins of carbonate, 5% disseminations of pyrite.	CAMBRIAN CRIMSON CK FOR
					261.00 262.00 100% FAULT: very dark grey, highly calcareous, brecciated, well bedded, bedding: ca 45, basal contact: ca	CAMBRIAN CRIMSON CK FOR

058299

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY016 (CONTINUED)

	- Interval - From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
					faulted base, 25, firm, moderately broken core, 50% alteration haloes of carbonate, 5% disseminations of pyrite, .03% disseminations of sphalerite.	
	267.50	268.00			FAULT: fault: ca 15, 10% infilling shear/fault quartz, 20% infilling shear/fault carbonate, 5% patches of pyrite.	
	268.00	274.60			DYKE: medium grey, porphyritic, massive, chilled margin, basal contact: ca intrusive contacts, 55, hard, moderately broken core, 1% disseminations of pyrite.	
R	268.00	274.60			Unusual porphyritic mafic dyke with phenocrysts ranging 0.5 to	
R	268.00	274.60			20mm, consisting of A) Euhedral/subhedral, translucent dull	
R	268.00	274.60			white often zoned phenocrysts (= H6, moderately cleaved in 3	
R	268.00	274.60			directions, ?plagioclase.	
R	268.00	274.60			B) Subhedral transparent phenocrysts	
R	268.00	274.60			brillant to vitreous lustre, (highly refractive), cleavage not	
R	268.00	274.60			dominant,)H6.	
R	268.00	274.60			C) An intermediate type, zoned with	
R	268.00	274.60			alternating translucent and transparent bands.Sometimes	
R	268.00	274.60			poikilitically enclosed matrix toward outer margins. ?Perthitic	
R	268.00	274.60			plagioclase/sanidine.	
R	268.00	274.60			D) Anhedral mafic mineral possibly a	
R	268.00	274.60			pyroxene.	
R	268.00	274.60			E) Euhedral pyrite.	
R	268.00	274.60			The dyke is undeformed clearly postdating highly deformed and	
R	268.00	274.60			altered host rocks.Both margins are chilled margins.Matrix is	
R	268.00	274.60			medium grained.The intrusive has intruded a fault zone.	
	274.60	280.10			FAULT BRECCIA: altered, brecciated, sheared, hornfelsic structured, fault: ca 30, hard, moderately broken core, 5% disseminations = veins of quartz, 10% disseminations = veins of carbonate, 5% disseminations (veins of pyrite, 0.3% veins of sphalerite.	
R	274.60	280.10			A zone of brecciated altered Crimson Creek turbidites,	
R	274.60	280.10			hornfelsed near dyke.Graphitised slickensided fault surfaces	
R	274.60	280.10			are common.	
					277.70 279.10 100% FAULT BRECCIA: altered, brecciated, sheared, hornfelsic structured, fault: ca 30, hard, moderately broken core, 30% patches of quartz, 10% interstitial carbonate, 30% interstitial pyrite, 3 % interstitial sphalerite.	
	280.10	290.50			LITHIC ARENITE: medium light grey, slightly calcareous, medium bedded, coarse bedded, bedding: ca 50, basal contact: ca 55,	CAMBRIAN CRIMSON CK FOR

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY016 (CONTINUED)

	- Interval - From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
					hard, moderately broken core, 1% veins of quartz, 3 % veins of carbonate, 1% disseminations < veins of pyrite. 280.10 290.50 30% MUDSTONE: medium light grey, irregularly interbedded, medium bedded, coarse bedded, 1% veins of quartz, 3 % veins of carbonate, 1% disseminations < veins of pyrite. 280.10 290.50 20% SHALE: very dark grey, irregularly interbedded, fine bedded, laminated, 1% veins of quartz, 3 % veins of carbonate, 1% disseminations < veins of pyrite.	
	290.50	291.30			DYKE: medium grey, porphyritic, massive, basal contact: ca 55, hard, moderately broken core, 1% disseminations of pyrite.	
R	290.50	291.30			Identical to dyke at 267.6 - 274.6 m.	
	291.30	292.65			MUDSTONE: dark grey, slightly altered, slightly graphitic, disrupted bedding, hard, moderately broken core, 5% veins of magnetite, 5% disseminations = veins of pyrite, 0.3% veins of sphalerite.	CAMBRIAN CRIMSON CK FOR
	292.65	299.90			GABBRO: medium grained, massive, basal contact: ca 45. 295.80 296.50 100% LITHIC ARENITE: medium grey, slightly altered, basal contact: ca 30. 298.00 299.10 90% CARBONATE: light grey, 40% patches of quartz. 299.10 299.50 100% MUDSTONE: medium grey, disrupted bedding.	
	299.90	330.00			MELANGE: mottled-grey, moderately graphitic, massive, hard, moderately broken core, 0.3% disseminations of fe-oxides.	UPPER OONAH
R	299.90	330.00			Typical Oonah Formation melange, grading from moderately	
R	299.90	330.00			strained psammo-pelites featuring boudinaged quartzite	
R	299.90	330.00			interbeds to highly strained and broken rock featuring angular	
R	299.90	330.00			to lenticular quartzite/quartz fragments in sheared, graphite	
R	299.90	330.00			pelitic matrix. Near the top of the interval, fragments of	
R	299.90	330.00			Crimson Creek turbities and carbonate are common decreasing in	
R	299.90	330.00			occurance downward to become absent below 321m. Hematitic	
R	299.90	330.00			alteration 317.7m to 320m. 303.40 303.50 100% STRUCTURAL MEASUREMENT: bedding: 023 / 75. 303.50 303.70 100% STRUCTURAL MEASUREMENT: shear: 212 / 86.	
	330.00	332.40	1.4		FAULT: black, moderately graphitic, puggy, crumbly, highly broken core, 10% patches of quartz.	
	332.40	334.30			CARBONATE: disrupted bedding, brecciated, stockworked, firm, moderately broken core, 10% veins of quartz, 10% veins of carbonate, 1% patches of talc, 5% disseminations = veins of	

103850

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY016 (CONTINUED)

	- Interval - From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
					pyrite. 332.40 334.30 30% SHALE: inter bedded, disrupted bedding, brecciated, stockworked, 10% veins of quartz, 10% veins of carbonate, 5% disseminations = veins of pyrite.	
	334.30	337.60			FAULT: moderately graphitic, slickensided, fault: ca 30, crumbly, highly broken core, 20% patches of quartz, 10% disseminations) veins of carbonate, 1% disseminations of pyrite. 336.10 337.60 50% SHALE: moderately graphitic, laminated, disrupted bedding.	
	337.60	340.00			CARBONATE: light grey, massive, stylolitic, gradational base, 40% patches of talc, 0.3% disseminations of pyrite.	UPPER OONAH
R	337.60	338.90			The carbonate is replaced by quartz-pyrite-sphalerite adjacent	
R	337.60	338.90			to fault.	
					337.60 338.90 100% CARBONATE: light grey, highly altered, recrystallised, stylolitic, gradational base, 50% massive/ semi - massive quartz, 3 % patches of talc, 30% massive/ semi - massive pyrite, 1% disseminations of sphalerite.	UPPER OONAH
	340.00	343.15			SHALE: dark grey, laminated, bedding: ca 60, gradational base, hard, moderately broken core. 340.00 343.15 50% SANDSTONE: medium light grey, finely interbedded, fine bedded. 340.80 341.10 100% STRUCTURAL MEASUREMENT: bedding: 347 / 60. 342.80 343.00 100% STRUCTURAL MEASUREMENT: bedding: 345 / 61. 343.00 343.10 100% STRUCTURAL MEASUREMENT: bedding: 336 / 55. 343.10 343.11 100% STRUCTURAL MEASUREMENT: fault: 354 / 55, fibre: 070 / 20.	UPPER OONAH
	343.15	348.20			LIMESTONE: light green, fine bedded, medium bedded, bedding: ca 60, firm, moderately broken core, 5% veins of carbonate. 345.40 345.41 100% STRUCTURAL MEASUREMENT: vein: 080 / 70. 345.80 345.81 100% STRUCTURAL MEASUREMENT: bedding: 328 / 55.	
	348.20	350.60			FAULT: black, moderately graphitic, fault: ca 40, 10% disseminations = veins of quartz, 1% disseminations of pyrite. 349.80 350.40 100% BRECCIA: light green, highly altered, highly calcareous, 5% disseminations of chlorite, 10% disseminations of pyrite, 1% disseminations of sphalerite.	
	350.60	363.80			SHALE: moderately carbonaceous, laminated, fine bedded, bedding: ca 80, hard, moderately broken core.	

058302

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY016 (CONTINUED)

	- Interval - From (m)	To (m)	Rec. (m)	RQD (m)	Description	Unit
					350.60 363.80 50% SANDSTONE: light grey, finely interbedded, fine bedded, medium bedded.	
					350.60 354.10 100% SHALE: moderately carbonaceous, disrupted bedding, strongly folded, cleaved, bedding: ca 80, hard, moderately broken core.	
					354.10 355.00 80% CARBONATE: 10% disseminations of pyrite.	
END	363.80	413.00			SANDSTONE: light grey, medium bedded, fine bedded, bedding: ca 70, hard, moderately broken core, 3 % veins of quartz.	
R	363.80	413.00			Silty intervals are generally moderately to strongly cleaved	
R	363.80	413.00			and facings of graded beds give conflicting facings (both	
R	363.80	413.00			uphole and downhole).Around 387m the cleavage is axial planar	
R	363.80	413.00			to small tight asymmetrical folds, but near E.O.H. 2 cleavages	
R	363.80	413.00			are present neither axial planar to small folds. One cleavage	
R	363.80	413.00			is locally folded by small folds.	
					353.90 413.00 20% SILTSTONE: medium grey, inter bedded, fine bedded, laminated, graded bedding.	
					378.00 378.10 100% STRUCTURAL MEASUREMENT: bedding: 320 / 35.	
R	379.10	379.11			Fibres indicate upper block moved toward 368 degrees AMG.	
					379.10 379.11 100% STRUCTURAL MEASUREMENT: fault: 282 / 15.	
					379.11 379.12 100% STRUCTURAL MEASUREMENT: fibre: 358 / 5.	
R	407.20	407.21			Fibres indicate upper block moved up (toward 076 deg AMG.).	
					407.20 407.40 100% STRUCTURAL MEASUREMENT: bedding: 278 / 10.	
					407.20 407.21 100% STRUCTURAL MEASUREMENT: fault: 302 / 45.	
					407.20 407.21 100% STRUCTURAL MEASUREMENT: fibre: 356 / 40.	
					410.40 410.60 100% STRUCTURAL MEASUREMENT: cleavage: 180 / 80.	
					410.50 410.51 100% STRUCTURAL MEASUREMENT: fold axis: 110 / 5.	
					411.40 411.41 100% STRUCTURAL MEASUREMENT: fold axis: 200 / 5.	
R	411.50	411.60			Cleavage measured was crenulation (c2), and was consistent in	
R	411.50	411.60			orientation but earlier (c1) cleavage was folded. "Fold axes"	
R	411.50	411.60			measurement was a measure of bedding/cleavage (c2)	
R	411.50	411.60			intersection.	
					411.50 411.60 100% STRUCTURAL MEASUREMENT: cleavage: 300 / 45, fold axis: 205 / 02.	
					412.00 412.10 100% STRUCTURAL MEASUREMENT: cleavage: 310 / 60.	
					412.00 412.10 100% STRUCTURAL MEASUREMENT: bedding: 150 / 18.	
					412.50 412.60 100% STRUCTURAL MEASUREMENT: cleavage: 302 / 30, cleavage: 310 / 45.	
					412.50 412.60 100% STRUCTURAL MEASUREMENT: fold axis: 015 / 02.	

058303

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY016 (CONTINUED)

ASSAYS

From	To	NumberC	CU(PPM)	PB(PPM)	ZN(PPM)	SN(PPM)	AU(PPM)	AG(PPM)	AS(PPM)	SB(PPM)
78.00	79.00	33602	95	138	483	7		-2.00		
82.00	83.00	33603	99	205	833	9		-2.00		
86.00	87.00	33604	105	258	1050	9		-2.00		
90.00	90.90	33605	86	38	1557	8		-2.00		
95.10	96.00	33606	22	975	2497	11		3.00		
96.00	97.00	33607	238	22200	9311	90		43.00		
97.00	98.30	33608	137	945	1610	40		5.00		
200.00	201.00	33609	101	62	427	5		-2.00		
204.00	205.00	33610	107	30	272	11		-2.00		
208.00	209.00	33611	67	26	195	8		-2.00		
212.00	213.00	33612	27	41	95	11		-2.00		
216.00	217.00	33613	118	87	426	7		-2.00		
220.00	221.00	33614	111	26	142	12		-2.00		
224.00	225.00	33615	94	43	154	9		-2.00		
228.00	229.00	33616	105	64	268	8		-2.00		
232.00	233.00	33617	107	38	239	10		-2.00		
236.00	237.00	33618	96	49	340	10		-2.00		
240.00	241.00	33619	89	57	323	8		-2.00		
244.00	245.00	33621	94	17	88	16		-2.00		
257.80	259.00	33622	42	130	164	15		-2.00		
259.00	260.00	33623	51	187	855	25		-2.00		
260.00	261.00	33624	105	263	578	15		2.00		
261.00	262.00	33625	56	501	981	18		-2.00		
262.00	263.00	33626	106	133	902	13		-2.00		
263.00	264.00	33627	97	431	1354	20		-2.00		
270.00	271.00	33628	27	8	95	12		-2.00		
274.60	276.00	33629	69	431	1442	11		2.00		
276.00	277.00	33630	79	905	3890	25		3.00		
277.00	278.00	33631	84	2514	17200	40		7.00		
278.00	279.00	33632	108	1324	27100	25		7.00		
279.00	280.10	33633	110	4056	10100	45		5.00		
291.30	292.65	33634	60	1806	2785	18		3.00		
332.40	333.40	33635	34	135	53	6		-2.00		
333.40	334.30	33636	6	36	21	7		-2.00		
334.30	335.00	33637	350	661	123	7		-2.00		
336.00	337.00	33638	703	1332	146	7		2.00		
337.00	337.60	33639	285	2220	1559	35		7.00		
337.60	338.90	33641	184	3249	4609	17		5.00		
338.90	340.00	33642	4	30	29	9		-2.00		
349.80	350.40	33643	28	12	72	-3		-2.00		
354.10	355.00	33644	21	291	194	70		-2.00		

058304

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY016 (CONTINUED)

ROCK QUALITY DESIGNATION (RQD)

From	To	Number	CMEASURED RQD m	CALCULATED RQD %	MEAS. RECOVERY m	CALC. RECOVERY %	
43.50	46.00		1.18	0.47	2.50	1.00	
46.00	49.00		0.00	0.00	2.65	0.88	
49.00	52.00		0.28	0.09	2.75	0.92	
52.00	55.00		1.10	0.37	2.65	0.88	
55.00	58.00		0.72	0.24	2.94	0.98	
58.00	60.80		0.50	0.18	2.66	0.95	
60.80	64.00		1.10	0.34	2.94	0.92	
64.00	67.00		0.70	0.23	2.80	0.93	
67.00	69.60		0.50	0.19	2.60	1.00	
69.60	72.20		0.42	0.16	2.60	1.00	
72.20	73.25		0.14	0.13	1.05	1.00	
73.25	75.90		0.32	0.12	2.45	0.92	
75.90	79.00		0.00	0.00	1.33	0.43	
79.00	82.00		0.00	0.00	0.95	0.32	CAVITIES - 0.25M.0.40M & 0.35M.
82.00	85.00		0.00	0.00	0.80	0.27	
85.00	86.20		0.00	0.00	0.00	0.00	
86.20	88.00		0.00	0.00	0.50	0.28	
88.00	91.00		0.00	0.00	1.20	0.40	
91.00	93.25		0.55	0.24	2.00	0.89	
93.25	94.30		0.25	0.24	1.05	1.00	
94.30	97.00		1.60	0.59	2.50	0.92	
97.00	99.90		1.26	0.43	2.60	0.90	
99.90	102.30		1.65	0.69	2.26	0.94	
102.30	106.00		3.13	0.84	3.65	0.99	
106.00	109.00		2.52	0.84	3.00	1.00	
109.00	112.00		2.87	0.96	2.94	0.98	
112.00	116.25		3.50	0.82	4.12	0.97	START NQ 113.4 METRES
116.25	121.00		3.90	0.82	4.70	0.99	
121.00	127.00		5.75	0.96	5.81	0.97	
127.00	133.00		5.60	0.93	6.00	1.00	
133.00	139.00		5.54	0.92	5.90	0.98	
139.00	143.50		3.40	0.75	4.15	0.92	
143.50	148.00		4.07	0.90	4.70	1.04	
148.00	154.00		4.96	0.83	5.90	0.98	
154.00	157.30		1.63	0.49	2.94	0.89	
157.30	162.20		3.30	0.67	4.90	1.00	
162.20	164.40		1.80	0.82	2.20	1.00	
164.40	166.80		1.32	0.55	2.25	0.94	
166.80	169.10		1.11	0.48	2.16	0.94	
169.10	171.10		1.21	0.60	2.00	1.00	
171.10	174.40		2.50	0.76	3.22	0.97	
174.40	175.95		0.30	0.19	1.55	1.00	

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY016 (CONTINUED)

ROCK QUALITY DESIGNATION (RQD)

From	To	NumberC	MEASURED RQD m	CALCULATED RQD %	MEAS. RECOVERY m	CALC. RECOVERY %
175.95	178.10		0.73	0.34	1.88	0.87
178.10	184.00		5.00	0.85	5.87	0.99
184.00	190.00		5.58	0.93	5.92	0.99
190.00	196.00		5.00	0.83	5.90	0.98
196.00	201.80		4.84	0.83	5.61	0.97
201.80	207.70		5.24	0.89	6.13	1.04
207.70	213.90		5.74	0.92	5.92	0.95
213.90	220.00		5.95	0.97	6.13	1.00
220.00	226.30		5.76	0.91	6.08	0.96
226.30	232.00		5.32	0.93	6.00	1.05
232.00	238.00		5.63	0.94	5.89	0.98
238.00	244.00		5.84	0.97	6.00	1.00
244.00	246.50		2.15	0.86	2.55	1.02
246.50	252.70		5.16	0.83	6.00	0.97
252.70	258.90		4.91	0.79	6.08	0.98
258.90	261.30		2.10	0.87	2.32	0.97
261.30	262.00		0.00	0.00	0.25	0.36
262.00	262.90		0.00	0.00	0.90	1.00
262.90	263.50		0.00	0.00	0.60	1.00
263.50	267.50		2.72	0.68	3.70	0.92
267.50	270.40		2.28	0.79	2.90	1.00
270.40	275.80		4.32	0.80	5.28	0.98
275.80	279.10		2.57	0.78	3.27	0.99
279.10	283.60		4.17	0.93	4.50	1.00
283.60	289.00		4.69	0.87	5.13	0.95
289.00	292.65		2.72	0.74	3.39	0.93
292.65	298.00		5.04	0.94	5.32	0.99
298.00	303.30		5.03	0.95	5.26	0.99
303.30	307.60		3.60	0.84	4.05	0.94
307.60	311.30		2.20	0.59	3.50	0.94
311.30	316.00		3.70	0.79	4.60	0.98
316.00	321.90		4.96	0.84	5.85	0.99
321.90	324.15		0.59	0.26	2.21	0.98
324.15	326.40		1.24	0.55	2.02	0.90
326.40	329.50		1.57	0.51	3.10	1.00
329.50	331.10		0.11	0.07	0.58	0.36
331.10	331.90		0.00	0.00	0.70	0.87
331.90	335.30		2.00	0.59	2.75	0.81
335.30	338.30		1.51	0.50	2.67	0.89
338.30	343.00		4.39	0.93	4.58	0.97
343.00	347.20		2.93	0.70	3.90	0.93
347.20	348.90		0.39	0.23	1.46	0.85

R.G.C. Exploration Pty Ltd
SYLVESTER GRID
SURFACE DIAMOND DRILLHOLE : SY016 (CONTINUED)

ROCK QUALITY DESIGNATION (RQD)

From	To	Number	CMEASURED RQD m	CALCULATED RQD %	MEAS. RECOVERY m	CALC. RECOVERY %
348.90	351.80		1.68	0.58	2.66	0.92
351.80	356.00		3.00	0.71	4.20	1.00
356.00	360.10		2.71	0.66	3.95	0.96
360.10	363.85		1.07	0.28	3.75	1.00
363.85	369.50		3.65	0.65	5.54	0.98
369.50	373.80		2.53	0.59	4.30	1.00
373.80	375.60		0.76	0.42	1.56	0.87
375.60	379.00		2.02	0.59	3.45	1.01
379.00	382.70		1.70	0.46	3.55	0.96
382.70	388.00		3.15	0.59	5.25	0.99
388.00	394.00		3.07	0.51	6.00	1.00
394.00	400.00		3.50	0.58	6.00	1.00
400.00	403.00		1.10	0.37	2.98	0.99
403.00	406.60		2.30	0.64	3.60	1.00
406.60	412.00		4.44	0.82	5.34	0.99
412.00	413.00		0.95	0.95	0.95	0.95

058307

R.G.C. Exploration Pty Ltd

PARTING LAKE

SURFACE DIAMOND DRILLHOLE : PL001

?T IDEN :PARTING_LA	START DATE : 1 JAN 90	COMPLETION DATE :	LOGGED BY:
NORTHING: 362230.00	COLLAR EASTING : 361190.00	COLLAR ELEVATION: 190.00	GRID AZIMUTH : 0.00
?D BY :	TOTAL LENGTH : 673.00	CORE/HOLE SIZE :	

?RVEY FLAG	SURVEY POINT LOCATION	FORESIGHT	AZIMUTH (DEGREES)	VERTICAL ANGLE (DEGREES)	NORTHING	EASTING	ELEVATION
	0.00		250.00	-55.00	362230.00	361190.00	190.00
	15.00		251.00	-56.00			
	45.00		251.50	-55.00			
	75.00		252.00	-54.80			
	105.00		252.00	-54.40			
	135.00		250.00	-54.00			
	165.00		248.50	-53.80			
	195.00		248.00	-53.00			
	225.00		248.50	-52.80			
	255.00		249.00	-52.00			
	285.00		249.00	-52.00			
	315.00		248.00	-50.80			
	345.00		248.00	-49.00			
	375.00		248.50	-47.00			
	405.00		248.00	-45.50			
	435.00		248.00	-44.50			
	465.00		247.50	-43.00			
	495.00		247.50	-42.00			
	525.00		248.00	-42.00			
	555.00		248.00	-41.30			
	585.00		248.00	-41.00			
	615.00		248.00	-41.00			
	645.00		249.00	-38.50			
	666.50		250.50	-37.80			
	673.00		249.50	-36.00			

This hole was drilled Westward from the Parting Lake Road at an inclination of -55 degrees. It was targetted to intersect a series of Westerly dipping thrust faults below 500m downhole.These thrusts are located above a gravity interpreted cupola, and appear to be the feeder conduits for the old Zeehan Montana and Zeehan Western silver-lead mines. The hole was drilled to determine if carbonates are interbedded within the Upper Donah Formation , and if such carbonates show evidence of replacement base metal and/or stanniferous mineralisation in the vicinity of the thrust faults. The style of mineralisation expected is modelled on Queen Hill, and Sylvester replacemant deposits.

058308

R.G.C. Exploration Pty Ltd
PARTING LAKE
SURFACE DIAMOND DRILLHOLE : PL001 (CONTINUED)

The hole was collared in Gordon Limestone which is partially recrystallised, with minor disseminated galena. At 525 ? 521.15m the hole passed through a fault into Upper Oonah Formation siltstones, mudstones and greywackes, which are highly disturbed and intersected by numerous faults. These sediments became less deformed below about 300m, and a large body of agglomeritic Montana Metaphyric Volcanics was encountered over the interval 513.6 - 601.7m . No significant carbonates were encountered in the Upper Oonah Formation, and no significant mineralisation was encountered. A few minor sideritic veins were intersected.

- Interval - From (m)	To (m)	Description	Unit
0.00	10.00	NO CORE (PRECOLLAR).	
10.00	52.15	WEATHERED LIMESTONE: light grey. STRUCTURE: moderately broken core faulted. TEXTURE: massive, stylolitic.	ORDOVICIAN GORDON LIMESTONE
10.00	52.15	Massive medium grained Gordon Limestone. Fizzes strongly	
10.00	52.15	in diluted HCL, locally moderately weathered,	
10.00	52.15	vuggy and broken. Partially altered and recrystallised toward	
10.00	52.15	base.Characterised by presence of abundant calcite and siderite	
10.00	52.15	occuring as regular veins, irregular veins and patches	
10.00	52.15	associated with incipent brecciation and as disseminations.	
10.00	52.15	Veins and patches typically possess a calcite core rimmed with	
10.00	52.15	siderite. About 1% galena is present in these altered zones as	
10.00	52.15	disseminated subhedral crystals, irregular stringers and	
10.00	52.15	occasionally as euhedral crystals/lining vughs. Lesser amounts	
10.00	52.15	of red to reddish-brown translucent sphalerite occurs as	
10.00	52.15	disseminated crystals. Some sideritic alteration is associated	
10.00	52.15	with stylolites	
		10.00 - 28.30 40% WEATHERED LIMESTONE: light grey. STRUCTURE: very strongly broken core with core loss, faulted. TEXTURE: vuggy, stylolitic.	ORDOVICIAN GORDON LIMESTONE
		35.70 - 36.50 100% LIMESTONE: grey brown. STRUCTURE: moderately broken core faulted. TEXTURE: massive, recrystallised. ALTERATION: moderately altered, weakly weathered, veins disseminations & scattered crystals of siderite. MINERALOGY: 10% disseminations = veins of siderite, 1% disseminations & scattered crystals of galena.	ORDOVICIAN GORDON LIMESTONE
		38.30 - 40.00 90% LIMESTONE: grey brown. STRUCTURE: moderately broken core faulted. TEXTURE: massive, recrystallised. ALTERATION: moderately altered, weakly weathered, veins disseminations & scattered crystals of siderite.	ORDOVICIAN GORDON LIMESTONE

050309

R.G.C. Exploration Pty Ltd
PARTING LAKE
SURFACE DIAMOND DRILLHOLE : PL001 (CONTINUED)

- Interval - From (m)	To (m)	Description	Unit
		MINERALOGY: 20% disseminations > veins of siderite, 0.3% disseminations & scattered crystals of galena.	
42.60	50.70	This zone is variably brecciated and faulted, with up to 2.5%	
42.60	50.70	galena. Microfaults at 45-50 degrees to the CA post-date	
42.60	50.70	mineralisation. Siderite patches and galena veins are clearly	
42.60	50.70	displaced across these microfaults, which have observed	
42.60	50.70	displacements of a few cm's. The microfaults also post-date	
42.60	50.70	a locally devloped foliation at 45 degrees to C.A. (shear	
42.60	50.70	fabric?).	
		42.60 - 48.20 90% LIMESTONE: grey brown.	ORDOVICIAN GORDON LIMESTONE
		STRUCTURE: faulted. TEXTURE: massive, recrystallised, veined, microfaults. ALTERATION: moderately altered, weakly weathered, veins disseminations & scattered crystals of siderite. MINERALOGY: 30% disseminations = veins of siderite, 10% disseminations < veins of carbonate, 1% disseminations > veins of galena, 0.1% disseminations & scattered crystals of sphalerite. veins disseminations & scattered crystals of carbonates.	
		48.20 - 50.70 100% LIMESTONE: light grey.	ORDOVICIAN GORDON LIMESTONE
		STRUCTURE: strongly broken core due to faulting, fault: ca 50. fault: ca 45. TEXTURE: tightly folded, brecciated. ALTERATION: weakly altered, weakly weathered. MINERALOGY: 5% patchy siderite, 1% disseminations & scattered crystals of galena.	
		50.70 - 52.14 100% LIMESTONE: grey brown.	ORDOVICIAN GORDON LIMESTONE
		STRUCTURE: moderately broken core faulted. TEXTURE: massive, recrystallised. ALTERATION: moderately altered, weakly weathered, patchy siderite. MINERALOGY: 20% patchy siderite, 5% patchy carbonate, 1% disseminations & scattered crystals of galena.	
52.15	52.45	FAULT: medium grey. STRUCTURE: fault: ca 40. TEXTURE: sheared. ALTERATION: moderately graphitic. MINERALOGY: 1% disseminations & scattered crystals of pyrite, 20% disseminations & scattered crystals of graphite.	
52.45	101.50	SILTSTONE: medium grey. STRUCTURE: strongly broken core along bedding. TEXTURE: fine bedded, medium bedded, disturbed, boudinaged. ALTERATION: moderately carbonaceous.	PRECAMBRIAN UPPER OONAH FM

058310

R.G.C. Exploration Pty Ltd
PARTING LAKE
SURFACE DIAMOND DRILLHOLE : PL001 (CONTINUED)

- Interval - From (m)	To (m)	Description	Unit
		MINERALOGY: 1% disseminations & scattered crystals of pyrite.	
52.45	101.50	The interval in general exhibits high strain with consequent	
52.45	101.50	boudinaging of some thin sandy interbeds & localised	
52.45	101.50	graphitisation of carbonaceous siltstones. A weak cleavage is	
52.45	101.50	occasionally observed. BCA's vary 20 - 70. AVE 40.	
		52.45 - 101.50 100% SANDSTONE: medium grey.	
		TEXTURE: medium bedded, disturbed, sand - coarse fraction.	
		52.45 - 58.00 40% FAULT,SHEAR ZONE.	
		STRUCTURE: very strongly broken core shear: ca 40.	
		TEXTURE: strongly sheared.	
		ALTERATION: strongly graphitic.	
		MINERALOGY: 20% disseminations & scattered crystals of graphite.	
		61.00 - 66.00 40% SILTSTONE: medium grey.	PRECAMBRIAN UPPER OONAH FM
		STRUCTURE: very strongly broken core.	
		TEXTURE: moderately sheared. medium bedded. disturbed. boudinaged.	
		ALTERATION: strongly graphitic.	
		MINERALOGY: 1% disseminations & scattered crystals of pyrite, 10% disseminations & scattered crystals of graphite.	
		69.50 - 70.00 100% BRECCIA.	
		STRUCTURE: lower contact: ca 50.	
		72.70 - 73.40 100% FAULT.	
		STRUCTURE: fault: ca 80.	
		TEXTURE: folded, strongly sheared. fibrous.	
		ALTERATION: strongly graphitic.	
		MINERALOGY: 10% patchy quartz, 5% patchy pyrite, 10% disseminations & scattered crystals of graphite.	
		74.60 - 76.00 60% FAULT.	
		STRUCTURE: fault: ca 70.	
		ALTERATION: moderately graphitic.	
		MINERALOGY: 10% disseminations & scattered crystals of graphite.	
		83.60 - 85.90 100% BRECCIA.	
		STRUCTURE: strongly broken core due to faulting. upper contact: ca 35, lower contact: ca 15.	
		ALTERATION: pervasive breccia fillings of silica alteration.	
		MINERALOGY: 10% breccia fillings of quartz, 5% breccia fillings of carbonate.	
		87.90 - 90.30 100% FAULT.	
		STRUCTURE: strongly broken core due to faulting. fault: ca 35.	
		ALTERATION: moderately graphitic, moderately puggy.	
		MINERALOGY: 10% disseminations & scattered crystals of graphite.	
		90.20 - 90.30 100% SILTSTONE: medium grey.	PRECAMBRIAN UPPER OONAH FM
		STRUCTURE: strongly broken core along bedding.	
		TEXTURE: fine bedded, medium bedded, disturbed, boudinaged.	

053811

R.G.C. Exploration Pty Ltd
PARTING LAKE
SURFACE DIAMOND DRILLHOLE : PL001 (CONTINUED)

- Interval - From (m)	To (m)	Description	Unit
		ALTERATION: intensely graphitic.	
		MINERALOGY: 1% disseminations & scattered crystals of pyrite, 90%	
		massive graphite.	
98.00	101.50	This interval has graphitic stylolites developed in the	
98.00	101.50	incipient brecciated carbonaceous siltstone host.The stylolites	
98.00	101.50	clearly truncate and thus post-date the quartz-carbonate	
98.00	101.50	stockwork.	
		98.00 - 101.50 100% SILTSTONE: medium grey.	PRECAMBRIAN UPPER OONAH FM
		STRUCTURE: strongly broken core along bedding. fault: ca 45.	
		TEXTURE: brecciated, tightly folded. disturbed. boudinaged.	
		ALTERATION: weakly graphitic.	
		MINERALOGY: 2.5% breccia fillings of quartz, 5% breccia fillings	
		of carbonate, 1% disseminations & scattered crystals of pyrite,	
		5% disseminations & scattered crystals of graphite.	
101.50	106.00	FAULT,BRECCIA: medium grey.	
		STRUCTURE: strongly broken core due to faulting. fault: ca 15.	
		shear: ca 45.	
		MINERALOGY: 10% interstitial carbonate, 2.5% disseminations &	
		scattered crystals of sericite, 2.5% amygdaloids of chlorite.	
101.50	106.00	This is a complex fault interval containing the following :	
101.50	106.00	A) Fragmental spilite - consisting of angular/lenticular	
101.50	106.00	fragments of highly vesicular spilitic lava aligned with a	
101.50	106.00	variable developed (shear) fabric. Larger sub-angular fragments	
101.50	106.00	up to 10 cm occur infrequently and the fabric "wraps" around	
101.50	106.00	these. Matrix is carbonate rich.	
101.50	106.00	B) Highly deformed pelites, exhibiting deformation grading from	
101.50	106.00	isoclinal folding and boudinaging of sandy interbeds, to	
101.50	106.00	complete brecciation.	
101.50	106.00	C) Discrete faults with fibre development, cutting earlier	
101.50	106.00	tectonic features listed above at 5 - 15 degrees to the C.A.	
101.50	106.00	The contacts between spilitic and pelitic breccia's are mostly	
101.50	106.00	sharp and disconformable to remnant bedding in the pelites.	
101.50	106.00	However, some contacts are jagged and the adjoining spilite	
101.50	106.00	contains up to 50% pelitic fragments, the amount declining away	
101.50	106.00	from the contact. Deformation features include an early ductile	
101.50	106.00	high strain fabric at about 45 degrees to the C.A. on average,	
101.50	106.00	and later ductile structures at 5 - 15 degrees to the C.A.	
101.50	106.00	The interval is summarised as a highly deformed interbedded	
101.50	106.00	spilite and pelite.	
		101.50 - 101.80 100% FAULT,BRECCIA: medium grey.	
		STRUCTURE: strongly broken core due to faulting. fault: ca 15.	
		shear: ca 45.	
		MINERALOGY: 10% interstitial carbonate, 2.5% disseminations &	

R.G.C. Exploration Pty Ltd
PARTING LAKE
SURFACE DIAMOND DRILLHOLE : PL001 (CONTINUED)

- Interval - From (m)	To (m)	Description	Unit
		scattered crystals of sericite. 2.5% amygdaloids of chlorite, 2.5% disseminations & scattered crystals of pyrite.	
106.00	130.50	SILTSTONE: dark grey. STRUCTURE: strongly broken core along bedding, bedding: ca 50, facing down-hole. TEXTURE: fine bedded, disturbed, boudinaged, soft sediment slumping. ALTERATION: strongly carbonaceous, weakly micaceous. MINERALOGY: 0.1% patchy pyrite, 2.5% disseminations & scattered crystals of graphite.	PRECAMBRIAN UPPER OONAH FM
		110.20 - 112.50 50% BASALT: light grey. STRUCTURE: lower contact: ca 50, sharp - irregular. TEXTURE: moderately foliated, vesicular, boudinaged. ALTERATION: strongly altered. MINERALOGY: 40% pervasive carbonate, 2.5% pervasive sericite, 2.5% patchy chlorite, 1% disseminations & scattered crystals of pyrite, 20% pervasive clay.	PRECAMBRIAN MONTANA METAPHYRIC VOLCAN
110.21	112.50	The contacts are sharp, irregular and discordant, and the lava	
110.21	112.50	is altered(spilitic), and very vesicular. Probably upper	
110.21	112.50	level intrusive/extrusive. High strain has collapsed vesicles	
110.21	112.50	locally to produce strong foliation, and thinner spilites are	
110.21	112.50	boudinaged.	
		113.90 - 114.50 40% FAULT. STRUCTURE: fault: ca 30.	
		118.30 - 118.50 100% BASALT: light brown. STRUCTURE: bedding: ca 45. TEXTURE: fine grained. ALTERATION: strongly altered.	
		123.00 - 126.00 40% FAULT: dark grey. STRUCTURE: very strongly broken core due to faulting, fault: ca 40, facing down-hole, vein: ca 10. TEXTURE: fine bedded, disturbed, boudinaged, soft sediment slumping. ALTERATION: strongly carbonaceous, weakly micaceous. MINERALOGY: 0.3% veins of siderite, 1% veins of carbonate, 0.1% patchy pyrite, 2.5% patchy graphite.	PRECAMBRIAN UPPER OONAH FM
		127.50 - 128.00 100% BASALT. TEXTURE: massive, vesicular. ALTERATION: strongly altered.	
130.50	136.70	BASALT: medium grey. STRUCTURE: weakly broken core lower contact: ca 60. TEXTURE: massive.	PRECAMBRIAN MONTANA METAPHYRIC VOLCAN

058313

R.G.C. Exploration Pty Ltd
PARTING LAKE
SURFACE DIAMOND DRILLHOLE : PL001 (CONTINUED)

- Interval - From (m)	To (m)	Description	Unit
		ALTERATION: strongly altered. MINERALOGY: 40% pervasive carbonate, 5% pervasive sericite, 5% patchy chlorite, 20% pervasive clay.	
130.50	136.70	Both contacts are puggy and broken.	
136.70	194.00	SILTSTONE: dark grey. STRUCTURE: weakly broken core bedding: ca 45, facing down-hole. TEXTURE: massive, coarse bedded, graded bedded. 145.60 - 148.00 100% SILTSTONE: light grey. STRUCTURE: bedding: ca 65. TEXTURE: medium bedded, boudinaged.	PRECAMBRIAN UPPER OONAH FM
		151.90 - 168.10 90% SILTSTONE: dark grey. STRUCTURE: weakly broken core bedding: ca 45, facing down-hole. TEXTURE: massive, coarse bedded, graded bedded. MINERALOGY: 5% stockwork of carbonate, 0.3% patchy pyrite, 2.5% styolite fillings of graphite.	PRECAMBRIAN UPPER OONAH FM
		152.40 - 153.10 100% SILTSTONE: dark grey. STRUCTURE: weakly broken core lower contact: ca 45, facing down-hole. TEXTURE: massive, coarse bedded, graded bedded. MINERALOGY: 90% massive graphite.	PRECAMBRIAN UPPER OONAH FM
168.40	177.90	This is an intraclastic greywacke possessing sub-angular clasts	
168.40	177.90	similar to light grey siltstones,in a dark grey matrix. The	
168.40	177.90	matrix is locally sandy and graded.	
		168.40 - 177.90 90% GREYWACKE: medium grey. TEXTURE: massive. 169.70 - 169.95 100% STRUCTURAL MEASUREMENT. STRUCTURE: bedding: 010 / 80. 170.15 - 170.25 100% STRUCTURAL MEASUREMENT. STRUCTURE: bedding: 360 / 80. 176.90 - 177.40 90% CONGLOMERATE: light grey. ALTERATION: strongly calcareous. 176.90 - 177.10 100% STRUCTURAL MEASUREMENT. STRUCTURE: bedding: 220 / 80. 177.90 - 178.00 100% STRUCTURAL MEASUREMENT. STRUCTURE: bedding: 015 / 65. 179.50 - 179.60 100% STRUCTURAL MEASUREMENT. STRUCTURE: bedding: 010 / 65.	
194.00	204.90	SILTSTONE: medium grey. STRUCTURE: weakly broken core bedding: ca 60. TEXTURE: massive. MINERALOGY: 2.5% disseminations & scattered crystals of pyrite.	PRECAMBRIAN UPPER OONAH FM

058314

R.G.C. Exploration Pty Ltd
PARTING LAKE
SURFACE DIAMOND DRILLHOLE : PL001 (CONTINUED)

- Interval - From (m)	To (m)	Description	Unit
204.90	207.60	FAULT,SHEAR ZONE: black. STRUCTURE: very strongly broken core due to faulting, fault: ca 65. MINERALOGY: 2.5% infilling of shear/fault by quartz, 5% infilling of shear/fault by carbonate, 2.5% patchy pyrite, 10% infilling of shear/fault by graphite.	
207.60	293.50	SILTSTONE: medium grey. STRUCTURE: moderately broken core bedding: ca 50, gradational. TEXTURE: massive, graded bedded. MINERALOGY: 1% veins of quartz, 0.3% veins of siderite, 0.3% veins of carbonate. 207.60 - 209.70 100% SANDSTONE+SILTSTONE: light grey. TEXTURE: fine bedded, disturbed. ALTERATION: weakly dolomitised,ic. MINERALOGY: 2.5% disseminations & scattered crystals of pyrite. 210.00 - 211.70 20% DOLOMITE: light grey. MINERALOGY: 2.5% disseminations & scattered crystals of pyrite. 210.30 - 232.90 40% FAULT,SHEAR ZONE: black. STRUCTURE: very strongly broken core due to faulting. TEXTURE: moderately sheared. ALTERATION: strongly graphitic. MINERALOGY: 1% disseminations & scattered crystals of pyrite, 20% infilling of shear/fault by graphite. 219.10 - 288.80 5% GREYWACKE: dark grey. ALTERATION: weakly calcareous. 249.60 - 249.90 100% STRUCTURAL MEASUREMENT. STRUCTURE: fault: 050 / 55. 250.20 - 250.30 100% STRUCTURAL MEASUREMENT. STRUCTURE: fault: 010 / 55. 250.80 - 250.95 100% STRUCTURAL MEASUREMENT. STRUCTURE: fault: 060 / 75. 273.80 - 274.10 100% STRUCTURAL MEASUREMENT. STRUCTURE: bedding: 010 / 80. 273.80 - 273.81 100% STRUCTURAL MEASUREMENT. STRUCTURE: fault: 040 / 75. 274.50 - 276.90 100% CHERTY SILTSTONE: medium grey. STRUCTURE: moderately broken core bedding: ca 50, gradational. TEXTURE: massive, graded bedded. ALTERATION: siliceous. MINERALOGY: 5% veins of quartz, 5% veins of siderite, 0.3% veins of carbonate. 275.10 - 275.12 100% STRUCTURAL MEASUREMENT. STRUCTURE: fault: 195 / 50, slickensides: 180 / 50.	

058815

R.G.C. Exploration Pty Ltd
PARTING LAKE
SURFACE DIAMOND DRILLHOLE : PL001 (CONTINUED)

- Interval - From (m)	 To (m)	Description	Unit
		288.80 - 293.50 100% GREYWACKE: black. TEXTURE: disturbed. ALTERATION: moderately graphitic.	
293.50	295.30	FAULT. STRUCTURE: very strongly broken core due to faulting. TEXTURE: slickensided. ALTERATION: moderately graphitic. MINERALOGY: 2.5% disseminations & scattered crystals of pyrite, 20% infilling of shear/fault by graphite.	
295.30	335.50	SANDSTONE+SILTSTONE: medium grey. STRUCTURE: strongly broken core. TEXTURE: fine bedded, disturbed, soft sediment slumping. 295.30 - 335.50 40% MELANGE: medium grey. TEXTURE: massive. 300.90 - 302.10 100% SANDSTONE+SILTSTONE: medium grey. STRUCTURE: strongly broken core. TEXTURE: convoluted folded, disturbed. soft sediment slumping. 302.10 - 310.00 100% SANDSTONE: light grey. TEXTURE: medium bedded. 318.20 - 319.20 100% PUGGY SANDSTONE+SILTSTONE: medium grey. STRUCTURE: strongly broken core. TEXTURE: sheared, disturbed, soft sediment slumping. ALTERATION: moderately graphitic. MINERALOGY: 10% infilling of shear/fault by quartz, 10% infilling of shear/fault by graphite. 319.20 - 320.80 50% VEIN. MINERALOGY: 80% veins of quartz, 10% veins of siderite.	
335.50	366.50	SANDSTONE+SILTSTONE: medium grey. STRUCTURE: lower contact: ca 50. TEXTURE: fine bedded, cleaved, tightly folded. MINERALOGY: 1% veins of quartz, 1% veins of siderite.	PRECAMBRIAN UPPER OONAH FM
335.50	366.50	Tightly folded with moderate to weak cleavage. Beds have	
335.50	366.50	deformed without fracturing or boudinaging. 342.90 - 348.30 50% FAULT. STRUCTURE: fault: ca 05. ALTERATION: strongly graphitic. MINERALOGY: 2.5% infilling of shear/fault by quartz, 1% patchy pyrite, 20% infilling of shear/fault by graphite.	
366.50	371.00	BASALT. STRUCTURE: lower contact: ca 45, sharp - planar.	PRECAMBRIAN MONTANA METAPHYRIC VOLCAN

058316

R.G.C. Exploration Pty Ltd
PARTING LAKE
SURFACE DIAMOND DRILLHOLE : PL001 (CONTINUED)

- Interval - From (m)	To (m)	Description	Unit
		TEXTURE: massive, vesicular.	
		ALTERATION: strongly altered.	
		MINERALOGY: 10% disseminations & scattered crystals of carbonate, 10% disseminations & scattered crystals of sericite, 5% amygdaloids of chlorite, 1% disseminations & scattered crystals of pyrite.	
366.50	371.00	Massive, altered (spilitic) vesicular basalt.	
366.70	366.71	Fibre ? normal movement.	
		366.70 - 366.71 100% STRUCTURAL MEASUREMENT.	
		STRUCTURE: fault: 040 / 50, slickensides: 060 / 60.	
		367.30 - 367.35 100% STRUCTURAL MEASUREMENT.	
		STRUCTURE: fault: 260 / 80, fibre: 190 / 60.	
367.31	367.35	The fibres indicate reverse movement (slightly oblique).	
		368.40 - 368.50 100% STRUCTURAL MEASUREMENT.	
		STRUCTURE: fault: 215 / 75, slickensides: 280 / 60.	
		MINERALOGY: disseminations & veins of quartz.	
		370.98 - 371.00 100% STRUCTURAL MEASUREMENT.	
		STRUCTURE: fault: 080 / 80.	
371.00	374.00	SANDSTONE+SILTSTONE: medium grey.	PRECAMBRIAN UPPER OONAH FM
		STRUCTURE: moderately broken core along bedding, bedding: ca 45. gradational.	
		TEXTURE: fine bedded, disturbed.	
371.00	374.00	Beds are broken over about 50% of th interval, grading into	
371.00	374.00	angular intraclast conglomerate. A soft-sediment deformation	
371.00	374.00	feature.	
		371.08 - 371.10 100% STRUCTURAL MEASUREMENT.	
		STRUCTURE: fault: 030 / 70.	
		371.20 - 371.22 100% STRUCTURAL MEASUREMENT.	
		STRUCTURE: fault: 065 / 70, slickensides: 020 / 65.	
371.21	371.22	Fibres suggest reverse movement.	
		371.40 - 371.50 100% STRUCTURAL MEASUREMENT.	
		STRUCTURE: bedding: 060 / 75.	
374.00	464.00	SILTSTONE: light grey.	PRECAMBRIAN UPPER OONAH FM
		STRUCTURE: weakly broken core along bedding, bedding: ca 45.	
		TEXTURE: massive, coarse bedded, disturbed, soft sediment slumping.	
374.00	464.00	A monotonous sequence of massive light grey siltstone and black	
374.00	464.00	calcareous carbonaceous mudstone. The former is often	
374.00	464.00	dismembered due to slumping. Both are poorly bedded except for	
374.00	464.00	occasional gradded beds.	
		374.00 - 464.00 50% MUDSTONE: black.	
		TEXTURE: massive.	

058317

R.G.C. Exploration Pty Ltd
PARTING LAKE
SURFACE DIAMOND DRILLHOLE : PL001 (CONTINUED)

- Interval - From (m)	To (m)	Description	Unit
		ALTERATION: weakly calcareous, moderately carbonaceous.	
		374.00 - 389.00 100% SILTSTONE: light grey.	PRECAMBRIAN UPPER DONAH FM
		STRUCTURE: weakly broken core along bedding, bedding: ca 45.	
		TEXTURE: massive, coarse bedded, disturbed, soft sediment slumping.	
		MINERALOGY: 1% veins of siderite, 2.5% veins of carbonate, 1% disseminations & scattered crystals of pyrite.	
		374.20 - 374.30 100% STRUCTURAL MEASUREMENT.	
		STRUCTURE: fibre: 270 / 65.	
374.21	374.30	Fibres indicate reverse movement.	
		390.50 - 392.30 100% SILTSTONE: light grey.	PRECAMBRIAN UPPER DONAH FM
		STRUCTURE: weakly broken core along bedding, shear: ca 30.	
		TEXTURE: moderately sheared, coarse bedded, disturbed, soft sediment slumping.	
		MINERALOGY: 5% clasts of graphite.	
		393.10 - 394.00 100% FAULT.	
		STRUCTURE: fault: ca 75.	
		403.50 - 403.60 100% STRUCTURAL MEASUREMENT.	
		STRUCTURE: fault: 290 / 45.	
		404.40 - 404.50 100% STRUCTURAL MEASUREMENT.	
		STRUCTURE: bedding: 320 / 35.	
		406.30 - 406.35 100% STRUCTURAL MEASUREMENT.	
		STRUCTURE: fault: 355 / 55.	
		408.10 - 408.30 100% STRUCTURAL MEASUREMENT.	
		STRUCTURE: fault: 355 / 65.	
		413.50 - 413.65 100% STRUCTURAL MEASUREMENT.	
		STRUCTURE: fault: 340 / 65.	
427.10	428.90	Medium bedded possibly tufaceous siltstone with graded beds,	
427.10	428.90	facing downhole, B.C.A. 15.	
		440.30 - 440.35 100% STRUCTURAL MEASUREMENT.	
		STRUCTURE: fault: 100 / 35, fibre: 055 / 30.	
440.31	440.35	Fibres suggest reverse movement.	
		441.25 - 441.30 100% STRUCTURAL MEASUREMENT.	
		STRUCTURE: fault: 125 / 20, fibre: 060 / 10.	
464.00	478.00	SANDSTONE+SILTSTONE: medium grey.	
		STRUCTURE: strongly broken core along bedding, gradational.	
		TEXTURE: fine bedded, laminated, folded.	
		MINERALOGY: 1% veins of quartz, 1% veins of siderite.	
478.00	513.60	SILTSTONE: light grey.	PRECAMBRIAN UPPER DONAH FM
		STRUCTURE: moderately broken core.	
		TEXTURE: medium bedded, disturbed, soft sediment slumping.	
		478.00 - 513.60 40% MUDSTONE: black.	

R.G.C. Exploration Pty Ltd
PARTING LAKE
SURFACE DIAMOND DRILLHOLE : PL001 (CONTINUED)

- Interval - From (m)	To (m)	Description	Unit
		ALTERATION: weakly calcareous.	
		482.40 - 486.60 100% SANDSTONE+SILTSTONE: medium grey.	
		TEXTURE: fine bedded, disturbed, folded.	
		492.10 - 494.00 100% VEIN.	
		STRUCTURE: vein: ca 80, basal contact: ca 45.	
		MINERALOGY: 30% veins of quartz, 50% veins of siderite, 0.3% patchy galena.	
		494.30 - 495.50 100% SILTSTONE: light grey.	PRECAMBRIAN UPPER OONAH FM
		STRUCTURE: moderately broken core shear: ca 70.	
		TEXTURE: sheared, disturbed, soft sediment slumping.	
		ALTERATION: moderately graphitic.	
		MINERALOGY: 10% clasts of graphite.	
		498.30 - 498.32 100% STRUCTURAL MEASUREMENT.	
		STRUCTURE: fault: 065 / 05, fault: 065 / 05.	
		498.70 - 498.75 100% STRUCTURAL MEASUREMENT.	
		STRUCTURE: fibre: 085 / 40, fibre: 045 / 35.	
498.71	498.75	Fibres indicate normal movement.	
		499.10 - 499.12 100% STRUCTURAL MEASUREMENT.	
		STRUCTURE: fault: 085 / 35, fibre: 020 / 15.	
499.11	499.12	Fibres indicate sinistral strike slip.	
		505.70 - 507.00 50% VEIN.	
		STRUCTURE: vein: ca 45.	
		MINERALOGY: 30% veins of quartz, 60% veins of siderite, 2.5% disseminations & scattered crystals of pyrite.	
		508.50 - 513.60 80% SANDSTONE+SILTSTONE.	
		STRUCTURE: strongly broken core along bedding. bedding: ca 50.	
		TEXTURE: fine bedded.	
513.60	601.75	BASALT: grey green.	PRECAMBRIAN MONTANA METAPHYRIC VOLCAN
		STRUCTURE: weakly broken core.	
		TEXTURE: vesicular, massive.	
		MINERALOGY: 1% styolite fillings of quartz, 10% macroveins of carbonate, 10% pervasive sericite, 10% amygdaloids of chlorite, 0.1% disseminations & scattered crystals of pyrite, 20% pervasive clay.	
513.60	601.75	Altered (spilitic) basalt, highly vesicular with agglomerate	
513.60	601.75	texture. Chloritic alteration in vesicles. The texture exhibits	
513.60	601.75	strain near top of interval exhibited by compression of angular	
513.60	601.75	agglomerate fragments and collapse of larger vesicles. The	
513.60	601.75	strain decreases downhole and is mostly absent below 560m.	
513.60	601.75	Alteration of fragments is dominatly sericite-clay (?), and of	
513.60	601.75	matrix and vesicles is mostly chlorite-carbonate-(quartz).	
		536.70 - 536.72 100% STRUCTURAL MEASUREMENT.	
		STRUCTURE: fault: 078 / 45, fibre: 020 / 25.	

058319

R.G.C. Exploration Pty Ltd
PARTING LAKE
SURFACE DIAMOND DRILLHOLE : PL001 (CONTINUED)

- Interval - From (m)	To (m)	Description	Unit
536.71	536.72	Reverse/oblique.	
		537.04 - 537.06 100% STRUCTURAL MEASUREMENT. STRUCTURE: fibre: 065 / 35, fibre: 360 / 20. 537.70 - 537.72 100% STRUCTURAL MEASUREMENT. STRUCTURE: fault: 070 / 30, fibre: 325 / 05.	
537.71	537.72	Dextral strike slip (upper block south).	
		539.00 - 539.02 100% STRUCTURAL MEASUREMENT. STRUCTURE: fibre: 085 / 60.	
539.01	539.02	Dextral strike slip.	
		552.60 - 552.75 100% STRUCTURAL MEASUREMENT. STRUCTURE: bedding: 045 / 70. 558.00 - 558.05 100% STRUCTURAL MEASUREMENT. STRUCTURE: fault: 005 / 80.	
558.01	558.05	Strike slip.	
		584.65 - 584.70 100% STRUCTURAL MEASUREMENT. STRUCTURE: shear: 100 / 70.	
		594.40 - 600.50 100% BASALT: grey brown. STRUCTURE: strongly broken core. TEXTURE: brecciated, massive. MINERALOGY: 1% styolite fillings of quartz, 10% breccia fillings of siderite, 10% macroveins of carbonate, 10% pervasive sericite, 10% amygdaloids of chlorite, 0.1% disseminations & scattered crystals of pyrite, 0.3% disseminations & scattered crystals of galena, 0.1% disseminations & scattered crystals of sphalerite, 20% pervasive clay.	PRECAMBRIAN MONTANA METAPHYRIC VOLCAN
594.41	600.50	Nb: some of the disseminated grey mineral maybe an antimonial	
594.41	600.50	sulphide (?jamesonite) or even stannite.	
601.75	624.70	SANDSTONE: medium grey. STRUCTURE: weakly broken core bedding: ca 50, facing down-hole. TEXTURE: graded bedded, medium bedded, coarse bedded. ALTERATION: moderately micaceous. MINERALOGY: 1% veins of quartz, 1% veins of siderite. 601.75 - 624.70 20% SILTSTONE: dark grey. STRUCTURE: moderately broken core along bedding. TEXTURE: graded bedded, fine bedded. MINERALOGY: 1% veins of quartz, 1% veins of siderite. 603.10 - 603.40 100% BASALT: grey green. STRUCTURE: moderately broken core along bedding. TEXTURE: brecciated. 603.20 - 603.25 100% STRUCTURAL MEASUREMENT. STRUCTURE: bedding: 100 / 50. 603.50 - 603.60 100% STRUCTURAL MEASUREMENT. STRUCTURE: bedding: 070 / 60.	

R.G.C. Exploration Pty Ltd
PARTING LAKE
SURFACE DIAMOND DRILLHOLE : PL001 (CONTINUED)

	- Interval - From (m)	To (m)	Description	Unit
			622.70 - 623.20 100% VEIN. STRUCTURE: vein: ca 40. ALTERATION: 0.1% veins of jamesonite. MINERALOGY: 1% veins of quartz, 90% veins of siderite, 1% veins of pyrite, 0.1% veins of sphalerite.	
30H	624.70	673.00	SANDSTONE: light grey. STRUCTURE: moderately broken core along bedding, bedding: ca 45. TEXTURE: fine bedded, graded bedded. ALTERATION: moderately micaceous. MINERALOGY: 2.5% veins of quartz, 2.5% veins of siderite, .03% veins of sphalerite.	
	624.70	673.00	B.C.A.'s vary 0 - 90 and graded beds give good facing.	
	624.70	673.00	indicating facing reversal about every 10 metres. Average	
	624.70	673.00	B.C.A 45 degrees. Minor pale sphalerite in siderite veinlets.	
	624.70	673.00	Siltstones are midly graphitic adjacent to faults. 624.70 - 673.00 30% SILTSTONE: dark grey. TEXTURE: fine bedded. MINERALOGY: 2.5% veins of quartz, 2.5% veins of siderite, .03% veins of sphalerite. 624.70 - 673.00 30% SILTSTONE: dark grey. TEXTURE: fine bedded. MINERALOGY: 2.5% veins of quartz, 2.5% veins of siderite, .03% veins of sphalerite. 639.60 - 640.65 100% FAULT. STRUCTURE: fault: ca 35. ALTERATION: strongly graphitic. MINERALOGY: 10% infilling of shear/fault by quartz, 2.5% styolite fillings of siderite, 0.3% styolite fillings of sphalerite. 644.25 - 644.35 100% STRUCTURAL MEASUREMENT. STRUCTURE: bedding: 045 / 70. 645.20 - 645.30 100% STRUCTURAL MEASUREMENT. STRUCTURE: bedding: 060 / 75. 646.00 - 646.05 100% STRUCTURAL MEASUREMENT. STRUCTURE: bedding: 035 / 75. 647.05 - 647.15 100% STRUCTURAL MEASUREMENT. STRUCTURE: bedding: 030 / 70. 658.40 - 660.00 30% FAULT. STRUCTURE: fault: ca 10. MINERALOGY: 10% infilling of shear/fault by quartz, 2.5% veins of siderite, 0.3% veins of sphalerite. 663.00 - 663.02 100% STRUCTURAL MEASUREMENT. STRUCTURE: shear: 130 / 25. 664.00 - 664.10 100% STRUCTURAL MEASUREMENT.	

058321

R.G.C. Exploration Pty Ltd
PARTING LAKE
SURFACE DIAMOND DRILLHOLE : PL001 (CONTINUED)

- Interval - From (m)	To (m)	Description	Unit
		STRUCTURE: bedding: 110 / 50.	

058322

058323

APPENDIX 9

Graphite Samples, Mineralogical Reports (CMS)

058324

FACSIMILE TRANSMISSION SHEET (004 731333)

RENISON LIMITED

(Incorporated in Victoria)

A.C.N. 004 490 304

P.O. Box 20, Zeehan 7460 Phone 004 731203

URGENT ☐ CONFIDENTIAL ☐ No OF PAGES (INCLUDING THIS SHEET) 5

DATE 6.8.92 NO. BEING CALLED 002 447363

TO R.G.C EXPLORATION (COMPANY NAME)

FROM NICK MOONY

ATTENTION JOHN CROSSING

RENISON FACSIMILE REF. NO. 6214

Please find attached 'Mineralogical Report' and Assays of 'Graphite Samples' submitted in June.

058325

Central Mineralogical Services

8 Bradshaw Avenue, Crafers, S.A. 5152
Telephone (08) 370 9779 Fax (08) 370 9788
International: Telephone + 618 370 9779 Fax + 618 370 9788

CMS

21 July 1992

Mr N E-Moony
C/- Renison Ltd
P O Box 20
ZEEHAN TASMANIA 7469

REPORT CMS 92/7/7 (INC. 92/6/18)

YOUR REFERENCE: P.O.D.401862

DATE RECEIVED: 11 July 1992

SAMPLE NO'S: 34721, 34760, 34761.

SUBMITTED BY: N. E-Moony

WORK REQUESTED: Mineralogy

H.W. Fander, M.Sc.

CENTRAL MINERALOGICAL SERVICES 058326 Date 21 July 1992

SAMPLE REPORT (Mineralogy, Petrology, Ore Microscopy)

IDENTIFICATION

Job No. CMS 92/7/7 Date Received: 11 July 1992

Reference P.D. No. D401862

Sample No. 34721, 34760, 34761

Nature of Sample: + 425um fractions

DESCRIPTION **SECTION No.** 62845-47

a. Hand Specimen:

Black shales with shiny black shear-plane surfaces.

b. Microscopic:

The +425um fractions were selected for polished section and examination as being the most representative samples likely to give the best overall information.

The rocks are black, carbonaceous shales with variable amounts of syngenetic and introduced (34760) pyrite; sample 34760 also contains very small pyritised bivalve fossils. The pyrite occurs as well-formed crystals and as framboids. The rocks show crenulation/tight folding and shearing, with polished shear-plane surfaces.

Although the rocks are carbonaceous, little or no true graphite is present; there are traces of "subgraphite", less than 30um in size.

In view of these results, there seemed little value in incurring the expense of examining the other samples (drill core, -425um fractions).

Results of the examination of the first sample (i.e. previously submitted - received on 29.6.93) are enclosed.

CENTRAL MINERALOGICAL SERVICES 058327 Date 30 June 1992

SAMPLE REPORT (Mineralogy, Petrology, Ore Microscopy)

IDENTIFICATION

Job No. CMS 92/6/18 **Date Received:** 29 June 1992

Reference Verbal request N. E-Moony

Sample No. "Graphite" sample.

Nature of Sample: Drill core.

DESCRIPTION **SECTION No.** 62823

a. Hand Specimen:

Black, fine-grained rock with shiny black shear surfaces.

b. Microscopic:

A polished section was prepared, mainly to determine the presence and parameters of any graphite.

The rock can be classified as carbonaceous, pyritic shale; it contains no graphite except possibly on the shear surfaces where some may have formed through shearing. The carbonaceous material present is amorphous, perhaps incipiently recrystallised to a type of "sub-graphite" with grainsizes <10um.

Pyrite is very abundant throughout, as well-defined framboids in the 1-10um size range, and as occasional larger grains; the black colour of the rock is partly due to this very finely-divided pyrite. The pyrite is clearly syngenetic in origin. Occasional <10um grains of possible sphalerite are scattered through the rock. Assays for Cu, Pb, Zn, Au and Ag are recommended.

Although graphite seems to form under quite moderate metamorphic conditions, it is clear (from the presence of pyrite framboids and other considerations) that this rock is essentially unmetamorphosed; thus it appears unlikely that conditions conducive to the development of graphite have been attained.

058328

	C*	SiO_2	Ba*	Au*	Ag*	Bi	Sb	Sn	S	As	Cu	Pb	Zn	WO_3	Fe
T34721	4.0	69.5	<0.1	<0.1	4	<0.001	<0.01	<0.01	0.1	<0.01	0.01	<0.01	<0.01	<0.01	<0.1
T34760	10.4	55.1	<0.1	<0.1	3	<0.001	<0.01	<0.01	2.5	0.01	0.02	<0.01	0.01	<0.01	2.2
T34761	3.8	63.7	<0.1	<0.1	2	<0.001	<0.01	<0.01	0.9	0.01	0.01	0.01	0.01	<0.01	<0.1*

* C non-carbonate
* Ba - Trace
* Au - g/t
* Ag - g/t
* Fe - assay error?

JOHN,

HERE ARE THE 'SIGHTER' TESTS OF COMSTOCK 'SUB GRAPHITE'. AS YOU CAN SEE ALL THE GRAPHITE IS LESS THAN 30 µm IN SIZE AND IS CONSIDERED 'AMORPHOUS'. THE COMMERCIAL VALUE IS VERY LOW AND THE CARBON CONTENT IS LOW. THE Ag ASSAY MAY BE GEOLOGICALLY INTERESTING?

REGARDS
NICK MOONY
7.8.92

RGC EXPLORATION PTY. LIMITED 058329

E.L. 42/87, INCORPORATING M.L.'s

43M/85 AND 123M/47 - ZEEHAN AREA

ANNUAL REPORT FOR THE PERIOD

OCT. 1991 TO SEPT. 1992

VOLUME 2

Compiled by: D.J.F. Crossing
Senior Geologist

Endorsed by: M.J. Fleming
Senior Exploration Geologist

Report No. T/92-17

Distribution:
- RGC Exploration Hobart
- RGC Exploration Zeehan
- Tasmania Dept. of Mines
- Oceania Tas. - Amended

<u>EXCLUSIONS</u>

123M/87 - OCEANIA TASMANIA P/L.
43M/85 - OCEANIA TASMANIA P/L.
35M/72 - CRA EXPLORATION P/L.
36M/81 - GIPPSLAND OIL & MINERALS N/L & ABERFOYLE EXPLORATION P/L.

RGC EXPLORATION PTY. LIMITED
INCORPORATED IN NEW SOUTH WALES

92-3386.

COMPILED	M.O.W.
DRAWN	M.O.W.
DATE	Aug. 1990
CHECKED	
1:250,000 REFERENCE	

ZEEHAN PROJECT
E.L. 42/87.

DRILLHOLE & GRID LOCATION PLAN

5 cm

BASE PLAN No. 5521/038
OVERLAY PLAN No.
SCALE 1: 25 000
PLAN1

EXPLORATION TARGETS :

TRIAL HARBOUR	~ Ni deposits in ultramafics (Єum)
AGNEW, FEDERATION	~ large tonnage, low grade Sn deposits in granite (Dg) ~ "Sweeneys" style Sn, Zn, Ag sulphide deposits in Dg
AREA D, E. HEEMSKIRK	~ Renison style Sn deposits replacing Oonah Fm carbonates ~ Sn skarns
TENTH LEGION	~ Iron deposits in magnetite skarns ~ Base metal skarns
STONEHENGE	~ Renison style Sn deposits
SYLVESTER / DORIC MONTANA S.L.	~ Pb ~ Zn ~ Ag veins
OONAH	~ Polymetallic veins (Cu, Pb, Zn, Ag, Sn)
QUEEN HILL	~ Renison style Sn deposits ~ Fault related Sn (Severn deposit)
CUNI	~ Cu~Ni deposits in gabbro sill
BLACK JACKS MARIPOSA BANNOCKBURN PYRAMID OCEANA AUSTRAL NUBEENA	"Irish" style Pb~Zn~Ag deposits replacing Gordon Limestone (Og)

RGC EXPLORATION PTY. LIMITED 058331
INCORPORATED IN NEW SOUTH WALES

5 cm

COMPILED	DJC
DRAWN	JB
DATE	9/91
CHECKED	
1:250,000 REFERENCE	

ZEEHAN EL 42/87

PREVIOUS WORK
LOCALITY PLAN

92-3386.

BASE PLAN No. 5521/090
OVERLAY PLAN No.
SCALE 1:25000 0 500 1000m
PLAN 2

PERMIAN	Pt	ZEEHAN GLACIAL FM.
DEVONIAN	Db	BELL SHALE
	Df	FLORENCE QUARTZITE
SILURIAN	S	UNDIFFERENTIATED SEDIMENTS
	Sc	CROTTY QUARTZITE
ORDOVICIAN	Og	GORDON LIMESTONE
	Om	MOINA SANDSTONE
	Oz	MT. ZEEHAN CONGLOMERATE
CAMBRIAN	Єd	DUNDAS GP. SEDIMENTS
	Єc	CRIMSON CK. FM. TURBIDITES
	Єs	SUCCESS CK. GP. SEDIMENTS
PROTEROZOIC	Pou	UPPER OONAH FM. SEDIMENTS
	Pom	MONTANA SPILITE
	Po	(LOWER) OONAH FM. SEDIMENTS
INTRUSIVES	Dg	DEVONIAN GRANITE
	Єg	CAMBRIAN GABBRO

GEOLOGICAL CONTACT
UNCONFORMITY
LIMIT OF HORNFELSING
BEDDING 0–30°
" 31–60°
" 61–90°
MAGNETIC SKARNS

ANTICLINE
ANTICLINE, RECLINED
SYNCLINE
SYNCLINE, RECLINED
FAULT, NORMAL
FAULT, REVERSE

RGC EXPLORATION PTY. LIMITED
INCORPORATED IN NEW SOUTH WALES

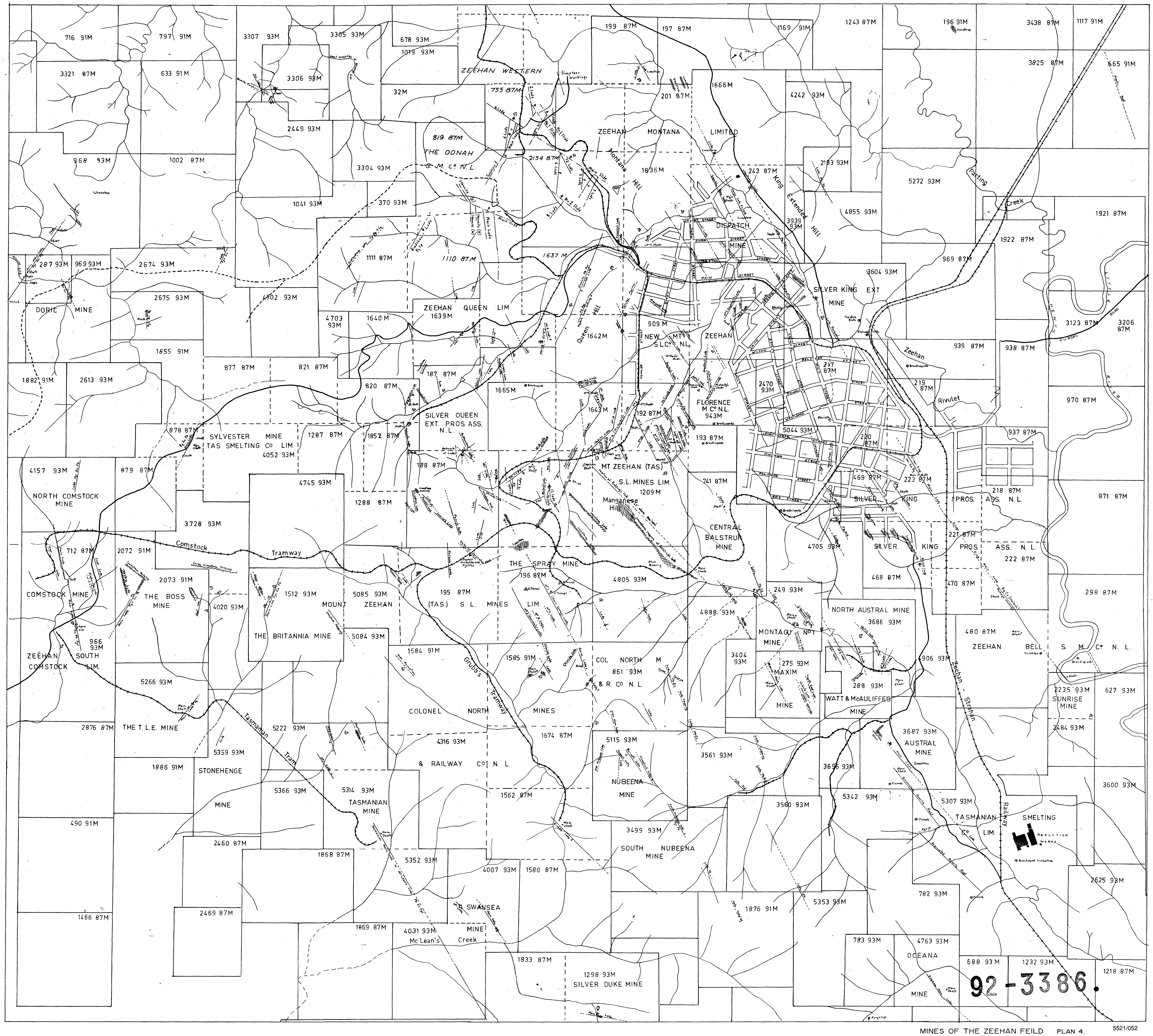
92-3386.

COMPILED	J.C.
DRAWN	M.O.W.
DATE	7/92
CHECKED	
1:250,000 REFERENCE	

ZEEHAN PROJECT E.L. 42/87
058332
REGIONAL GEOLOGICAL INTERPRETATION

5 cm

BASE PLAN No. 5521/051
OVERLAY PLAN No.
SCALE 1:25 000
PLAN 3



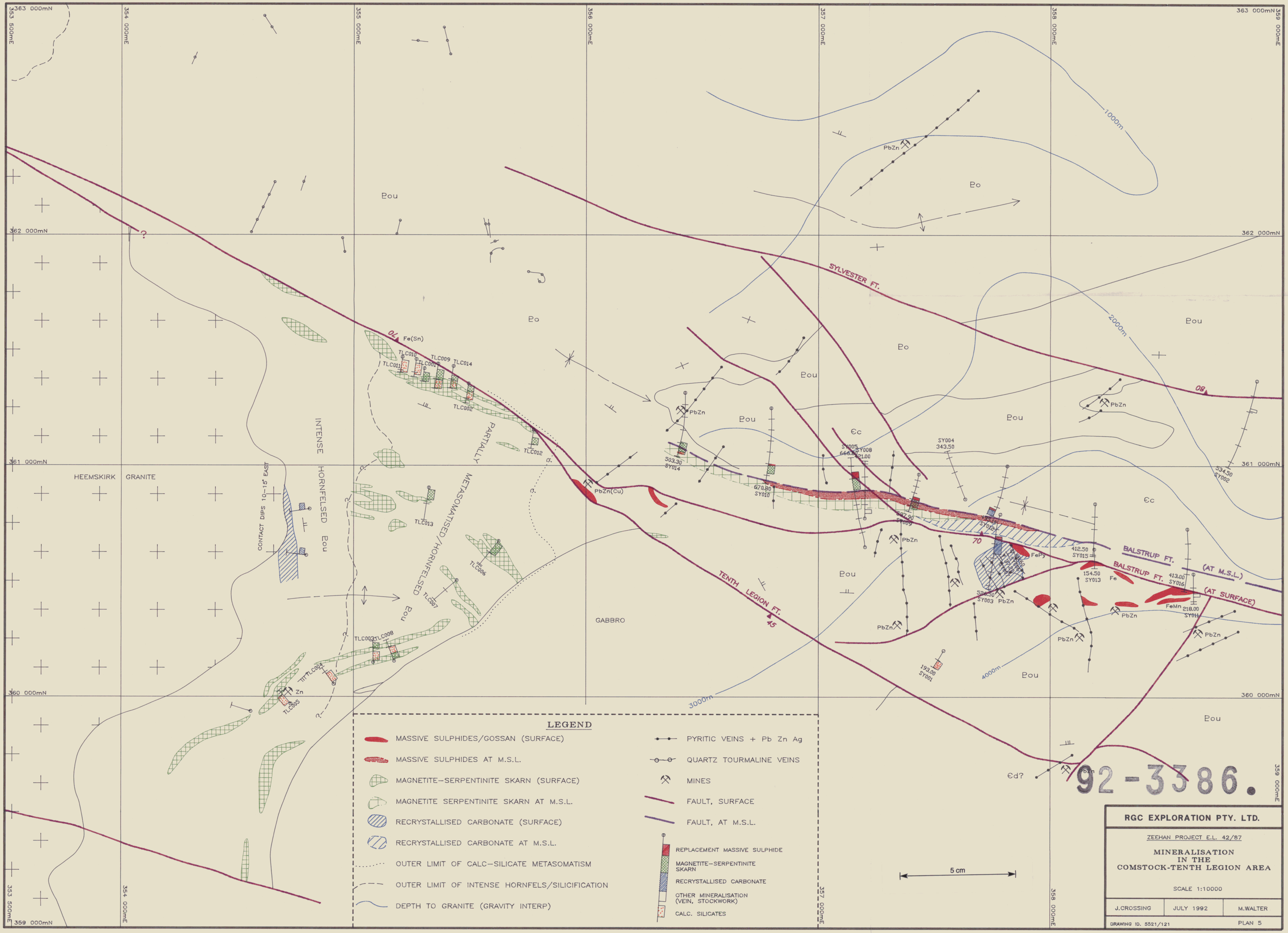
0583333

MINES OF THE ZEEHAN FEILD PLAN 4.

SCALE 1:10 000

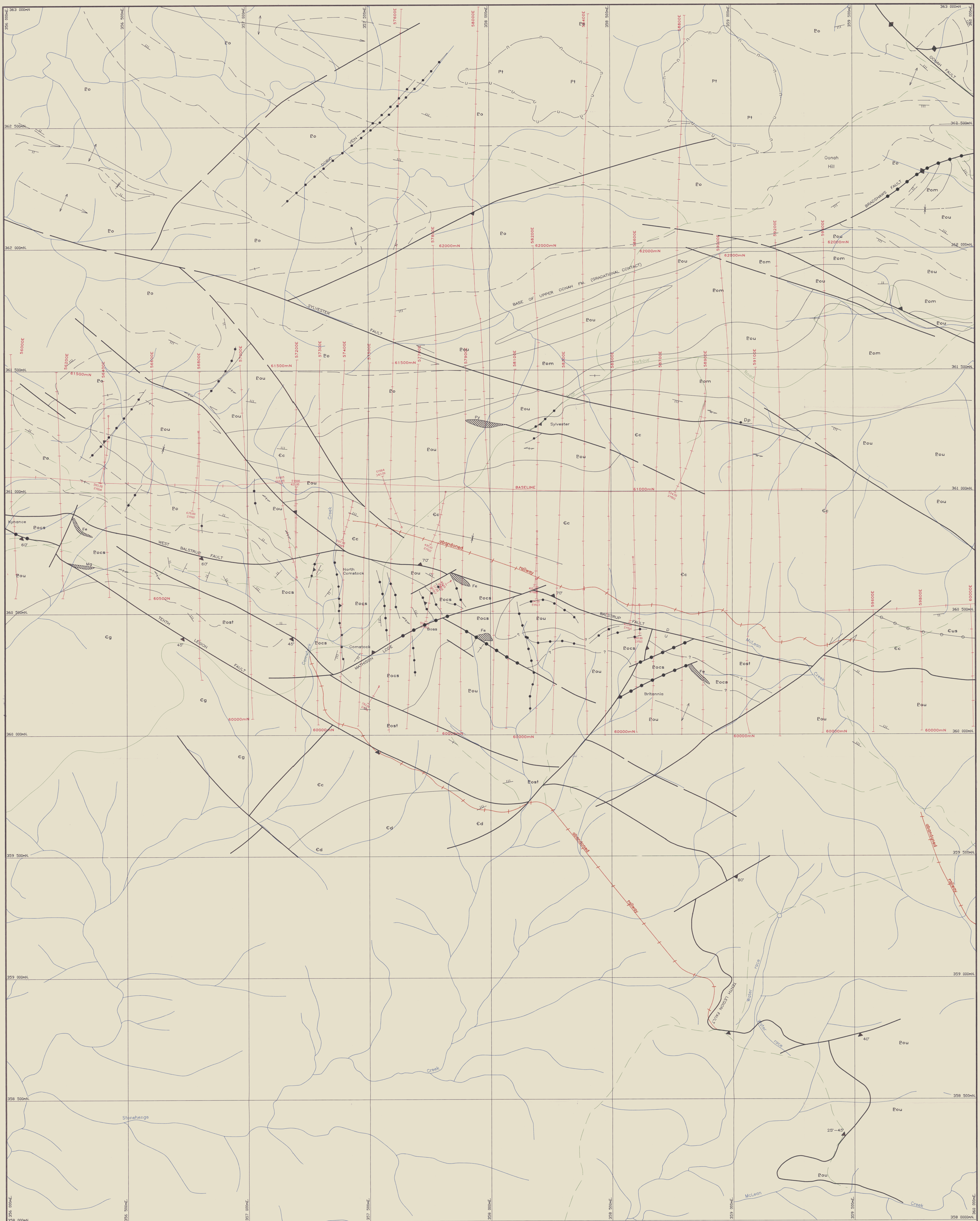
5521/052

5 cm



92-3386.

058334



LEGEND

PERMIAN	Pt	ZEEHAN GLACIAL FM.
CAMBRIAN	Єd	DUNDAS GP. GRITS AND CONGLOMERATE
	Єc	CRIMSON CK. FM. TURBIDITES
PROTEROZOIC	Ꝑou	UPPER OONAH FM., UNDIFFERENTIATED
	Ꝑocs	CARBONATES AND CARBONACEOUS SHALE
	Ꝑost	SANDSTONE AND SILTSTONE
	Ꝑom	MONTANA MELAPHYRE VOLCANICS
	Ꝑo	LOWER OONAH FM. PSAMMO–PELITES
INTRUSIVE	Dp	DEVONIAN PORPHYRY
	Єg	CAMBRIAN GABBRO
	Єus	CAMBRIAN SERPENTINITE

MINERALISATION

Fe IRONSTONE
Mg MAGNETITE
Py PYRITE

BASE METAL VEINS
DYKE
FAULT
MINERALISED FAULT
LITHOLOGICAL CONTACT
BEDDING TREND
UNCONFORMITY
SHEAR FABRIC
VERTICAL BEDDING
BEDDING ATTITUDE 0–29°
" " 29–59°
" " 60–90°
ANTCLINE
SYNCLINE

5 cm

SHEET LOCATION

	SHEET A	SHEET B
SHEET E	SHEET C	SHEET D

GN
TN
MN
GRID CONVERGENCE 1.2?
GRID/MAGNETIC 11.6?

92-3386.
058335

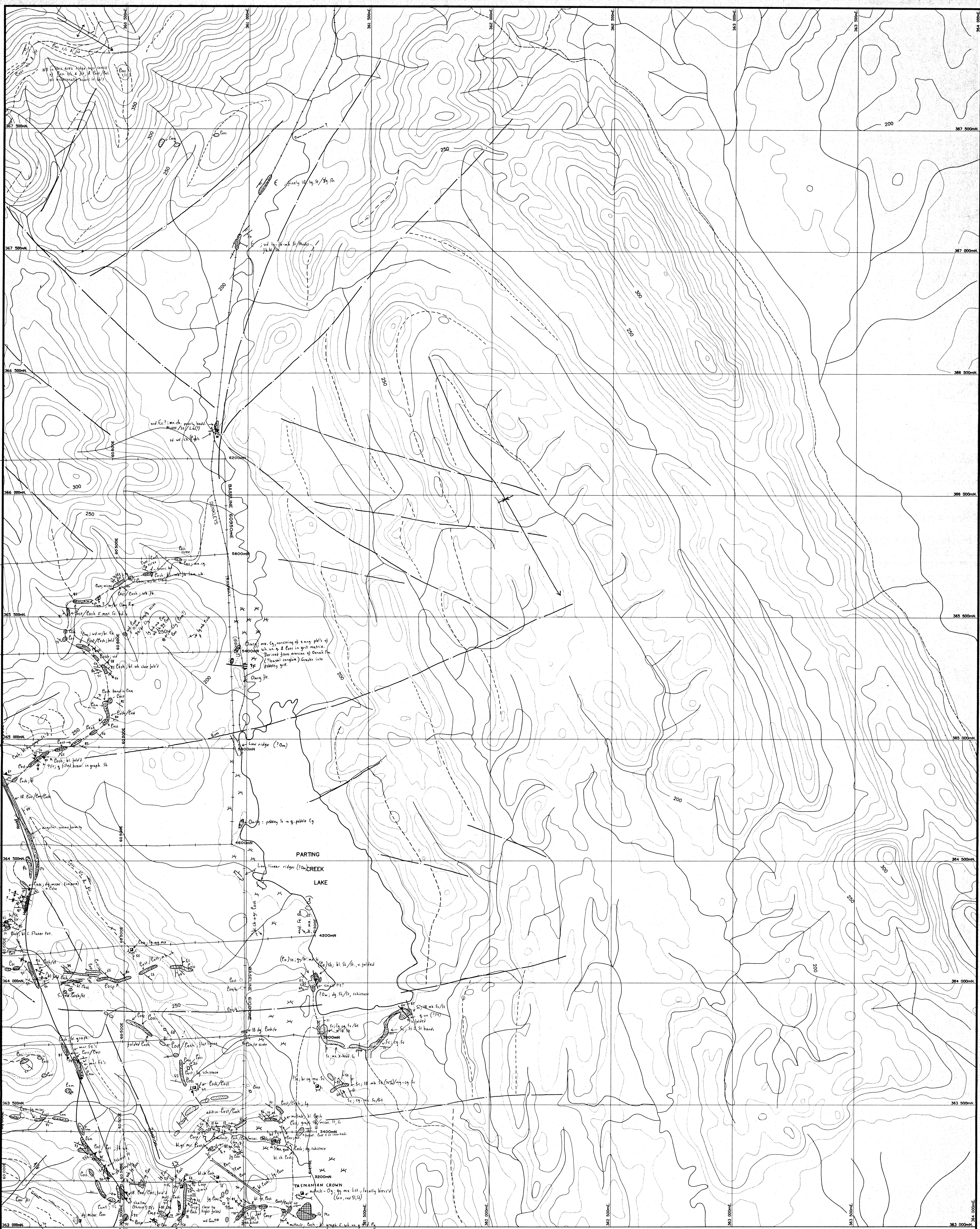
RGC EXPLORATION PTY. LTD.

COMPILED	J.CROSSING	SYLVESTER GRID E.L. 42/87
DRAWN	M.WALTER	
DATE	7/92	GEOLOGICAL INTERPRETATION
CHECKED :		
1:25,000 REFERENCE :		

DRAWING ID. 5521/003

100 0 100 200 500
SCALE: 1 : ~~10~~ 5,000

PLAN 6



STRATIGRAPHY

SILURIAN	ELDON GP.	Sc	Crotty quartzite
ORDOVICIAN	JUNEE GP.	Og	Gordon limestone
		Om	Moina sandstone
CAMBRIAN		Є	Unassigned sediments
PROTEROZOIC	OONAH FM.	Єos	Unassigned sediments
		Єosh	Shales
		Єost	Siltstone
		Єoss	Sandstone (quartzite)
		Єosp	Finely interbedded Єosh / Єost / Єoss
		Єom	Montana spilite
		Єomt	Montana tuff (spilitic)

Bedding trend

Bedding attitude; measured

0 – 29°

30 – 59°

60 – 89°

vertical

Joint ; vertical

inclined

Shear ; vertical

inclined

Cleavage ; vertical

inclined

Fault ; vertical

inclined

Small anticline

syncline

Plunge of minor fold

Vein / fissure lode, inclined

Outcrop

Float / scree

Trench

Pit

Shaft

Adit

Mullock heap (or escarpment)

Old workings

Ironstone

Airphoto lineaments (probably fault traces)

bd	band	gy	grey
bedd	bedding / bedded	IB	interbedded
bl	black	lam	laminated
br	brown	lg	light grey
brecc	brecciated	Lst	limestone
cb	coarse bedded	mb	medium bedded
cg	coarse grained	micac	micaceous
ck	creek	mnr	minor
Clayst	Claystone	Mudst	mudstone
Cp	chalcopyrite	mx	massive
d	disseminated	v	very
dg	dark grey	vn	vein
fb	fine bedded	wb	well bedded
flt	float	wd	weathered
Ft	fault	wh	white
Gt	grit	X-bedd	cross-bedded
Gn	galena		

SHEET LOCATION

SHEET A	SHEET B
SHEET C	SHEET D

Mapping was conducted along roads, tramways, creeks and ridge tops mostly prior to construction of the grids. The geology was then plotted against topography, and may be in error by up to 50 metres with respect to the grid.

GN TN MN

GRID CONVERGENCE 1·2°

GRID/MAGNETIC 11·6°

058336

5 cm

92-3386.

RGC EXPLORATION PTY. LIMITED
(INC. IN N.S.W.)

COMPILED :	D.J.C.
DRAWN :	D.T.C.
DATE :	July '90
CHECKED :	
1: 25,000 REFERENCE :	DUNDAS OCEANA HEEM. & TRIAL

ZEEHAN AREA
SHEET B

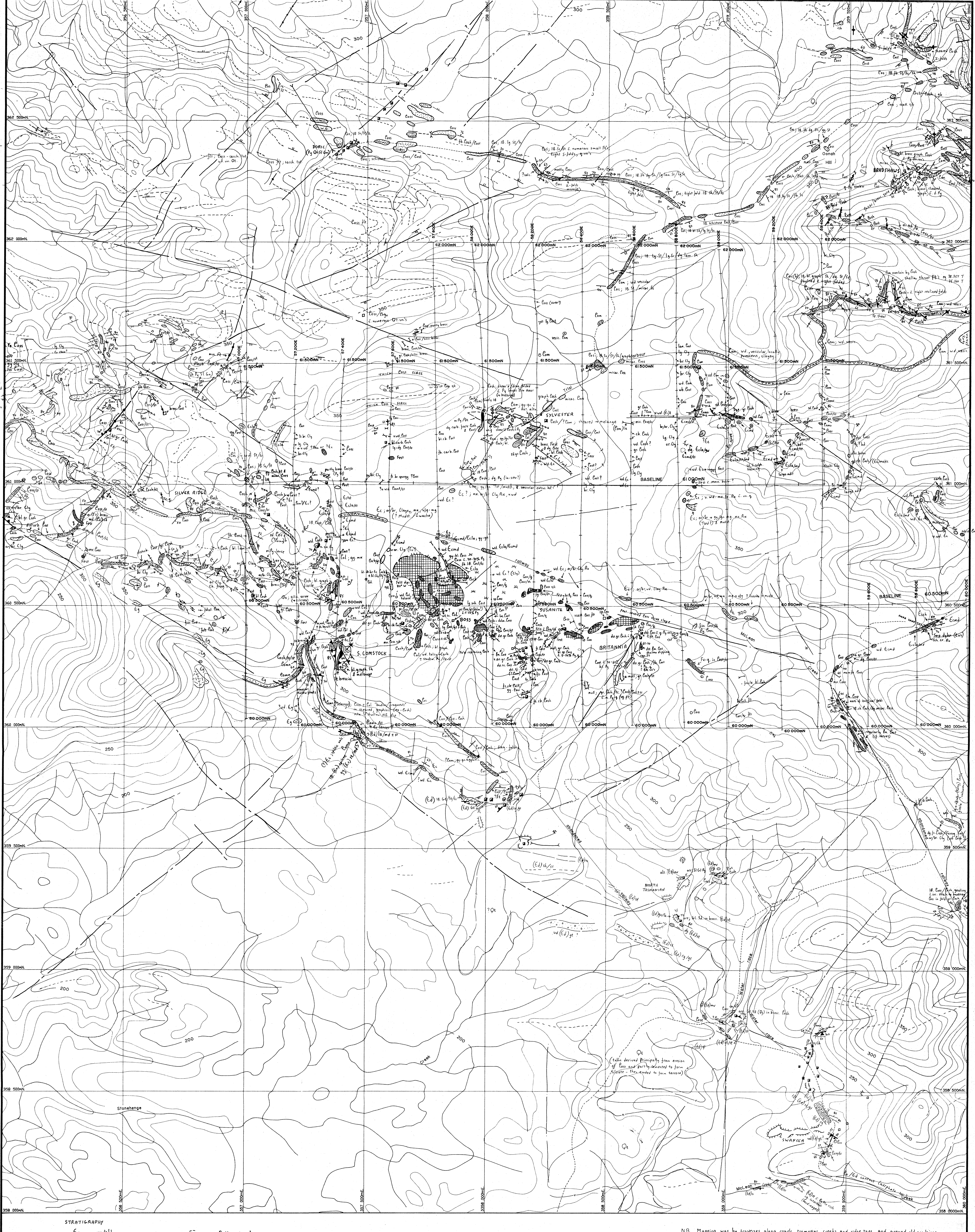
GEOLOGICAL FACT MAP

BASE PLAN No. 5521/034

OVERLAY PLAN No.

200 0 200 400 1000
SCALE: 1 : 5,000

PLAN 7



STRATIGRAPHY

CAMBRIAN CRIMSON CK. FM.	Ɛc	undiff.	
	Ɛct	turbidite	
	Ɛcg	greywacke	
	Ɛcla	lithic arenite (volc. ss)	
	Ɛcmd	mudstone	
PROTEROZOIC OONAH FM.	Pos	sediments, undiff	
	Posh	shale	
	Post	siltstone	
	Poss	sandstone	
	Pogw	greywacke	
	Pol	limestone / carbonate	
	Pom	Montana spilite	
	Pomn	melange	
	Poch	chert	
INTRUSIVE	Ɛus	serpentinite	
	Ɛg	gabbro	

Bedding trend
Bedding attitude, measured
, 0 - 29°
30 - 59°
60 - 89°
vertical
Joint, vertical
inclined
Shear, vertical
inclined
Cleavage, vertical
inclined
Fault, vertical
inclined
Small anticline
syncline
Plunge of minor fold
Vein, inclined
Outcrop
Float / Scree

Trench
Pit
Shaft
Adit
Ironstone
Massive sulphides
Airphoto lineaments (? Faults)
Auger hole / cuttings

agglom	agglomerate	graph	graphitic	Rx	rock
bd	band	Gt	grit	sacch	saccharoidal
bl	black	gy	grey	s/c	sub - crop
boxw	boxwork	IB	interbedded	silic	siliceous
br	brown	lam	laminated	Sl	sphalerite
brecc.	breccia (ted)	lg	light grey	Sm	semi - massive
carb/cc	carbonated / calcareous	larenite	lithic - arenite	Ss	sandstone
cg	coarse grained	lwacke	lithic - wacke	St	siltstone
d	disseminated	m, mass	massive	stockw	stockwork
dg	dark grey	micac	micaceous	Tf	tuff
fb	fine bedded	mg	medium grained	Tst	tuffaceous siltstone
Fe	iron, ferruginous	mudst	mudstone	txt	texture
Fe - st	ironstone	mv	mafic volcanic	v	very
fg	fine grained	mx	massive texture	vesic.	vesicular
flt	float	or	orange	vfg	very fine grained
Ft	fault	Py	pyrite	vn	vein
Gn	galena	Qt, q	quartz	wd	weathered
gn	green	remn	remnant	wh	white

N.B. Mapping was by traverses along roads, tramways, creeks and ridge tops, and around old workings. The geology was then plotted against topography, and the position of any point could err by up to 50 m. with respect to the local grid.

058337

ADDITIONS

sp	spongy
tc	talcose
tf	tuffaceous
vg	vuggy

GN
TN
MN
GRID CONVERGENCE 1.2°
GRID/MAGNETIC 11.6°

5 cm

SHEET LOCATION

SHEET A	SHEET B
SHEET C	SHEET D

ADDITIONS

Bm	base metal
dolm	dolomitic
dp	dipping
fs	fissile
pr	porous
sch	schistose

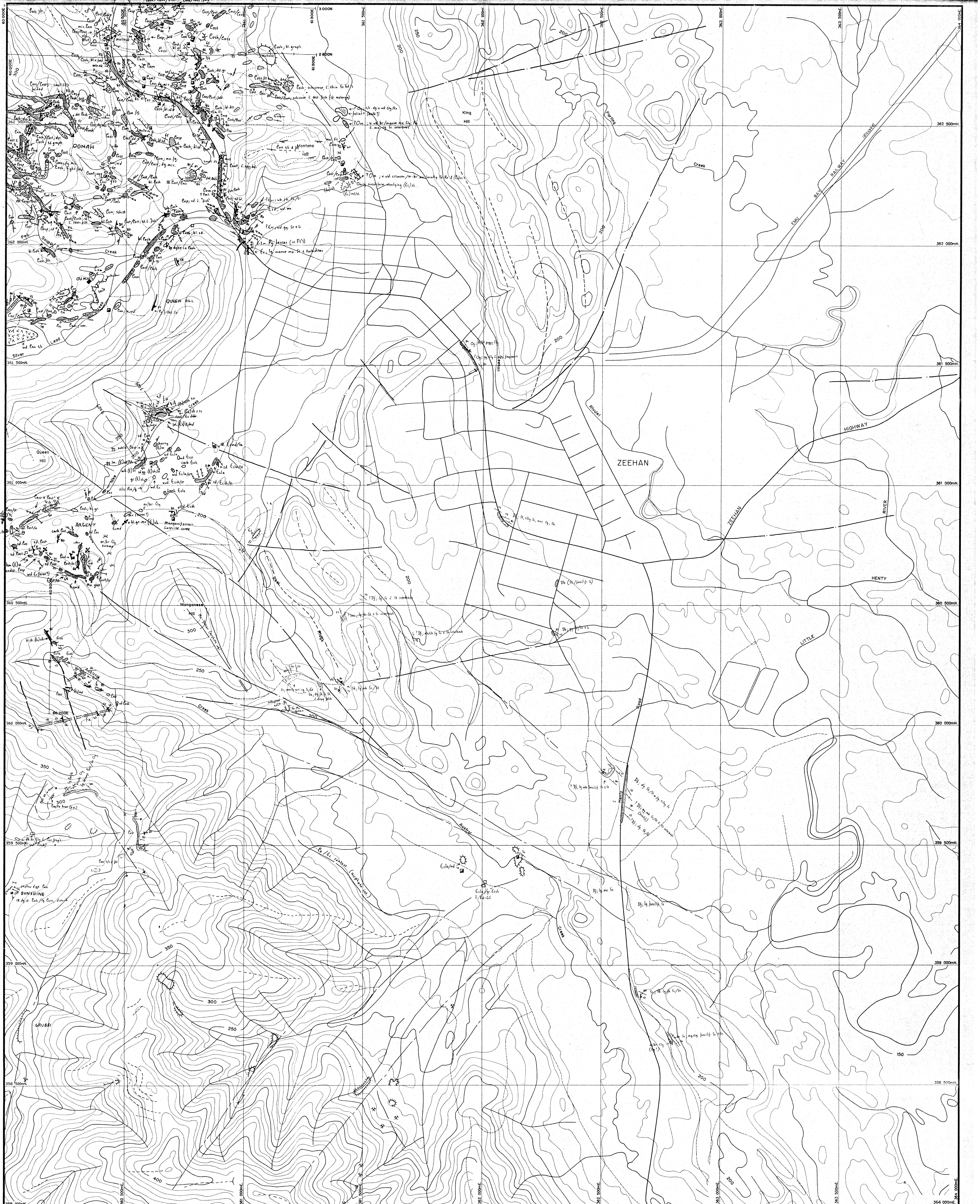
92-3386.

RGC EXPLORATION PTY. LIMITED
(INC. IN N.S.W.)

COMPILED :	D.J.C.	ZEEHAN AREA SHEET C
DRAWN :	D.J.C.	
DATE :	July '90	GEOLOGICAL FACT MAP
CHECKED :		
1:25,000 REFERENCE :	DUNDAS OCEANA HEEM.&TRIAL	

BASE PLAN No.	OVERLAY PLAN No.		
5521/033		100 0 100 200 500 SCALE: 1 : 5,000	PLAN 8

N.W. Coast Computer Aided Drafting Centre. Phone (004 354315)



STRATIGRAPHY

DEVONIAN		Db	Bell Shale
		Dj	Florence Quartzite
SILURIAN		Sk	Keel Quartzite
		Sa	Amber Slate
		Sc	Crotty Quartzite
ORDOVICIAN	JUNEE GP	Og	Gordon Limestone
		Om	Moina Sandstone
CAMBRIAN		Є	Unassigned Cambrian
	CRIMSON CK. FM.	Єc	Unassigned sediments / turbidites
	SUCCESS CK. GP.	Єss	Sandstone
		Єsd	dolomite
DEVONIAN INTRUSIVE		Dp	Porphyry

PROTEROZOIC OONAH FM.

Ᵽos	sediments; unassigned
Ᵽosh	shales
Ᵽost	siltstone
Ᵽoss	sandstone
Ᵽosp	finely IB. Ss/St/Sh
Ᵽom	Montana spilite; unassigned
Ᵽomt	tuff

Trench
Pit
Shaft
Adit
Mullock or escarpment
Old workings, misc.
Ironstone
Airphoto lineament (Ft. trace ?)

Bedding trend
Bedding attitude; measured
0 – 29°
30 – 59°
60 – 89°
vertical
Joint; vertical
inclined
Shear; vertical
inclined
Cleavage; vertical
inclined
Fault; vertical
inclined
Small anticline
syncline
Plunge of minor fold
Vein / fissure lode, inclined
Outcrop
Float / scree

agg	agglomerate	mic	micaceous	vn	veined
bed	bedded	mk	mark	ves	vesicular
bd	band	mnr	minor	wd	weathered
bl	black	mull	mullock		
br	brown	mx	massive		
c/	with	o/c	outcrop		
cg	coarse grained	o/cut	open cut		
Cl	Clay(ey)	or	orange		
dg	dark grey	Py	pyrite		
dst	disturbed	q	quartz		
fb	fine bedded	Rx	rock		
Fe	Ferruginous	s/c	sub-crop		
fg	fine grained	schist	schistose		
fish	undeformed lenses (in shear)	sd	sheared		
flt	float	Sh	shale		
fold	folded	Ss	sandstone		
Ft	fault	St	siltstone		
gr	graphitic	text	texture		
lg	light grey	v	very		

Mapping was along roads, tramways, creeks and ridge tops mostly prior to construction of grids. Geology was plotted against topography, and may be in error by up to 50 m. with respect to grids.

SHEET LOCATION

SHEET A	SHEET B
SHEET C	SHEET D

5 cm

GN TN MN
GRID CONVERGENCE 1.2°
GRID / MAGNETIC 11.6°

058338

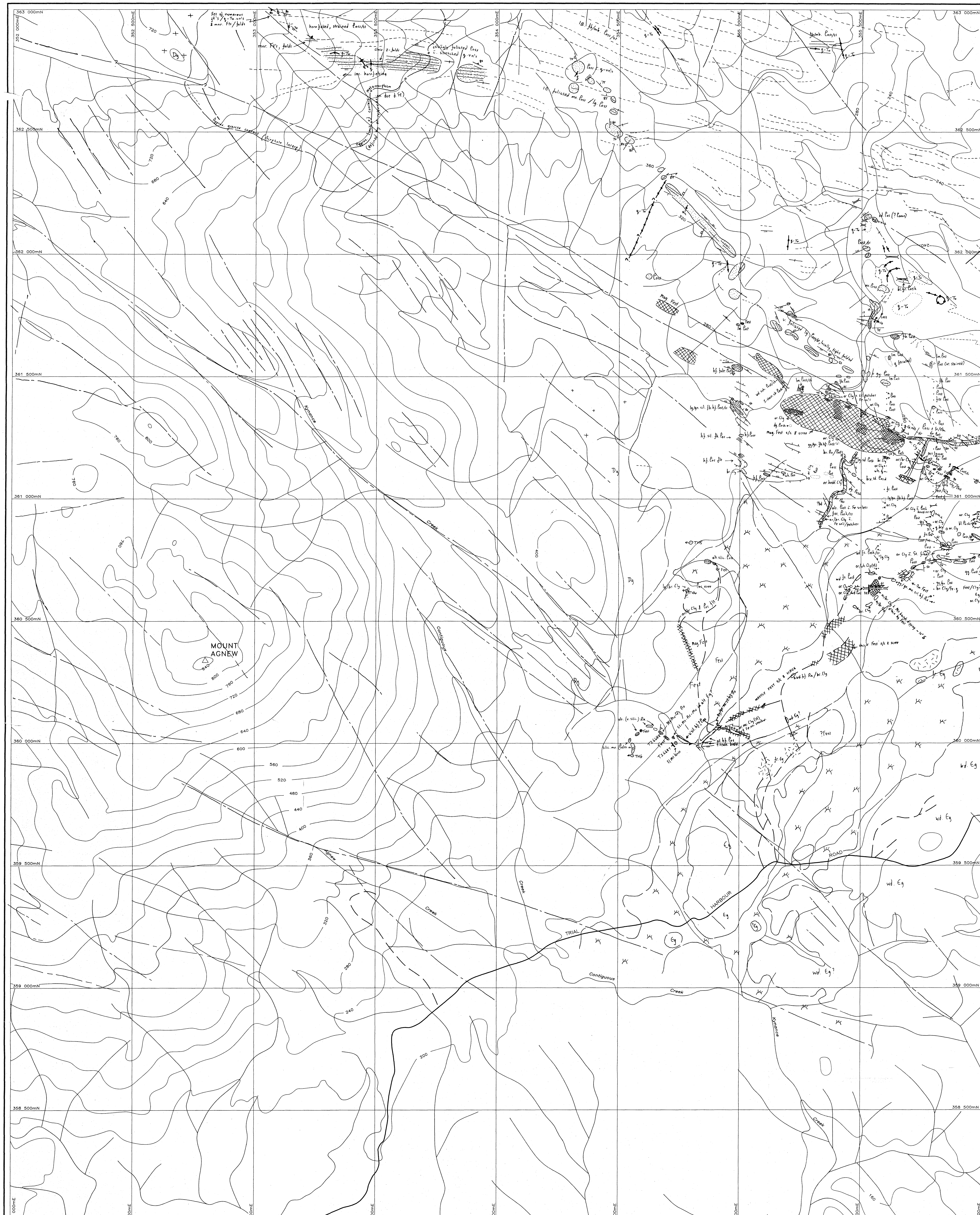
92-3386.

RGC EXPLORATION PTY. LIMITED
(INC. IN N.S.W.)

COMPILED:	D.J.C.
DRAWN:	D.J.C.
DATE:	July '90
CHECKED:	
1:25,000 REFERENCE:	DUNDAS OCEANA HEEM. & TRIAL

ZEEHAN AREA
SHEET D
GEOLOGICAL FACT MAP

BASE PLAN No.	OVERLAY PLAN No.		
5521/035		100 0 100 200 500 SCALE: 1 : 5,000	PLAN 9



DEVONIAN	Dg	granite
CAMBRIAN	Єg	gabbro
PROTEROZOIC OONAH FM.	Pos	sediments, undiff.
	Posh	shale
	Post	siltstone
	Poss	sandstone

Bedding trend
Bedding attitude ; measured
; 0 - 29° estimated
30 - 59°
60 - 89°
Vertical
Joint ; vertical
inclined
Shear ; vertical
inclined
Cleavage ; vertical
inclined
Fault ; vertical
inclined

Airphoto Lineament
Vein

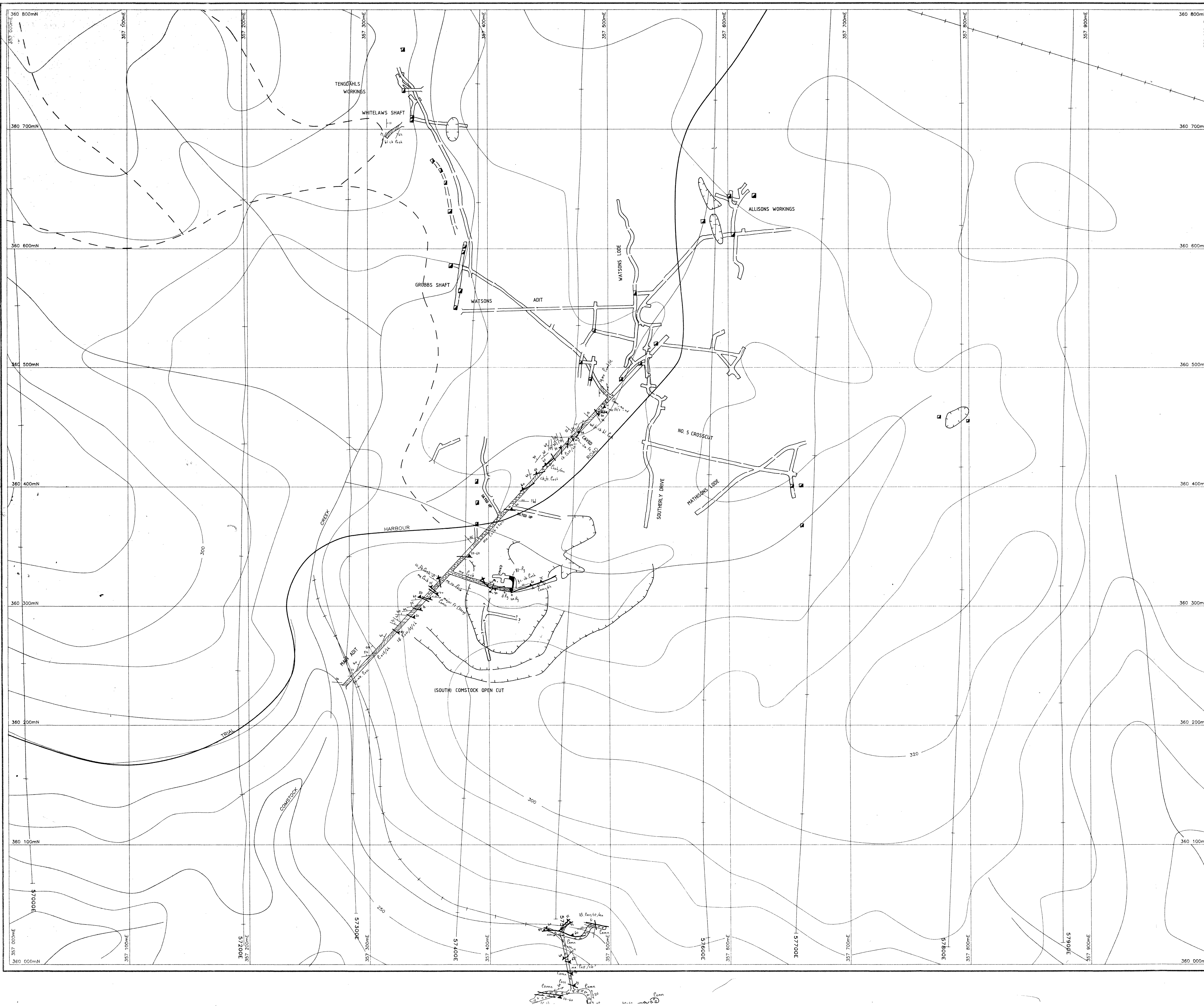
alt	altered	gn	green	q	quartz		
br	brown	gy	grey	Rx	rock (undiff.)		
brx	brecciated	hf	hornfelsed	Sd	sheared		
cb	coarse bedded	IB	interbedded	Sil	siliceous		
Cly	clay	jt	jointed	To	Tourmaline		
d.	disseminated	lg	light grey	v	very		
dg	dark grey	Lm	laminated	Vn	vein		
fb	fine bedded	mag	magnetic	Wh	white		
Fe	Ferruginous	mb	medium bedded	wd	weathered		
Fest	Ironstone	Mt	Magnetite				
fiss	fissile	mv					
fr	fresh	mx	massive				
Ft	fault	or	orange				

5 cm

RGC EXPLORATION PTY.LTD. 058339

COMPILED		ZEEHAN AREA E.L. 42/86 SHEET E
DRAWN	DJ.C.	
DATE	March 1991	GEOLOGICAL FACT MAP
CHECKED		92-3386.
1:25000 REF.		

DRAWING ID. 5521/081 SCALE 1:5000 PLAN10



Plans are derived from various Mine Plans and are approximate only.

Legend as for 1;5,000 Geological Fact Map Sheet C.

5 cm

SHEET LAYOUT

SHEET 7	SHEET 1	SHEET 2	SHEET 3
	SHEET 4	SHEET 5	SHEET 6

058340 PLAN11

RGC EXPLORATION PTY. LIMITED
INCORPORATED IN NEW SOUTH WALES

COMPILED	J.C.	ZEEHAN E.L. 42/87
DRAWN	M.O.W.	
DATE	21/3/91	FACTUAL GEOLOGY
CHECKED		OLD WORKINGS
SCALE		

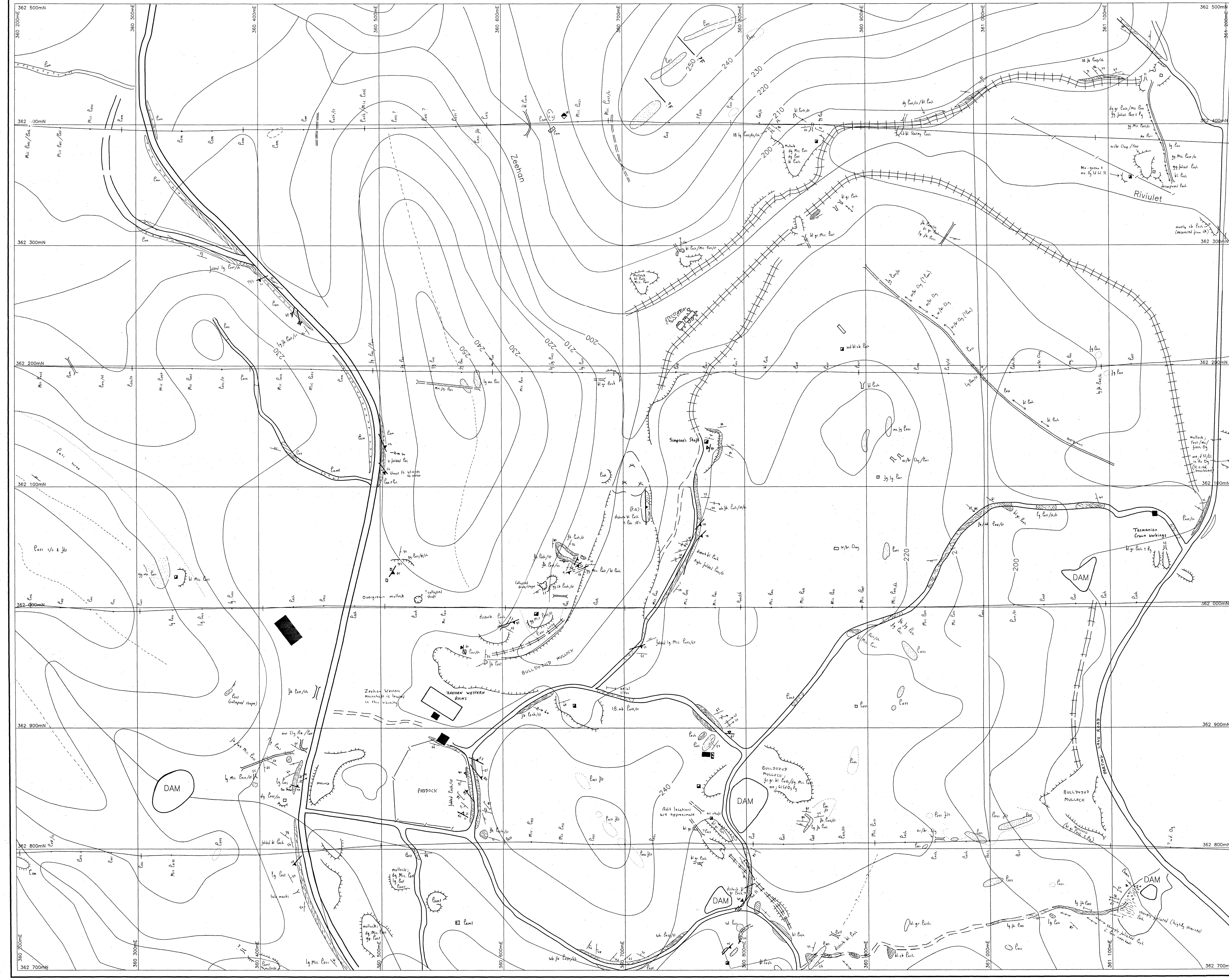
DRAWING ID. 5521/111

92-3386.

RGC EXPLORATION PTY. LIMITED
INCORPORATED IN NEW SOUTH WALES

COMPILED	D.J.F.C.	SPRAY MINE
DRAWN	D.J.F.C.	FACTUAL GEOLOGY
DATE	Jan. 92	**92-3386.**
CHECKED	D.J.F.C.	
1:250,000 REFERENCE		

BASE PLAN No. PLAN12
OVERLAY PLAN No.
SCALE 1:1,000 0 10 20 30 50m



Legend as for 1;5,000 Geological Fact Map Sheet B. (5521/034).....

5 cm

058342

RGC EXPLORATION PTY. LTD.

COMPILED	D.J.C.
DRAWN	M.O.W.
DATE	7/92
CHECKED	
SCALE 1:1000	

E.L. 42/87 MONTANA HILL AREA

FACT. GEOLOGY

92-3386.

PLAN 13

DRAWING ID. 5521/123

NO OUTCROP
NO OUTCROP
Quartz-Pyrite-Sphalerite-(galena) Vein
OONAH FM. PSAMMO - PELITES (MOSTLY SANDSTONE)
UPPER OONAH FM.
Upper Limit of Hornfels
DIOPSIDE SKARN
HORNFELSED PSAMMO-PELITES AND MELANGE
MAGNETITE - SERPENTINITE - ACTINOLITE SKARN
SY014
5 cm
LEGEND
Unconformity
Orientated bedding instrument
Direction of younging (facing)
Fault
058343
RGC EXPLORATION PTY. LTD.
SYLVESTER GRID E.L. 42/87
SY014 DRILLHOLE SECTION
56400mE
SCALE 1:500
0 10 20 30 40 50 M
J.CROSSING
MARCH 1992
M.WALTER
DRAWING ID. 5521/116
PLAN 14

92-3386.

058344

RGC EXPLORATION PTY. LTD.

SYLVESTER GRID E.L. 42/87

SY010 DRILLHOLE SECTION
S56800mE

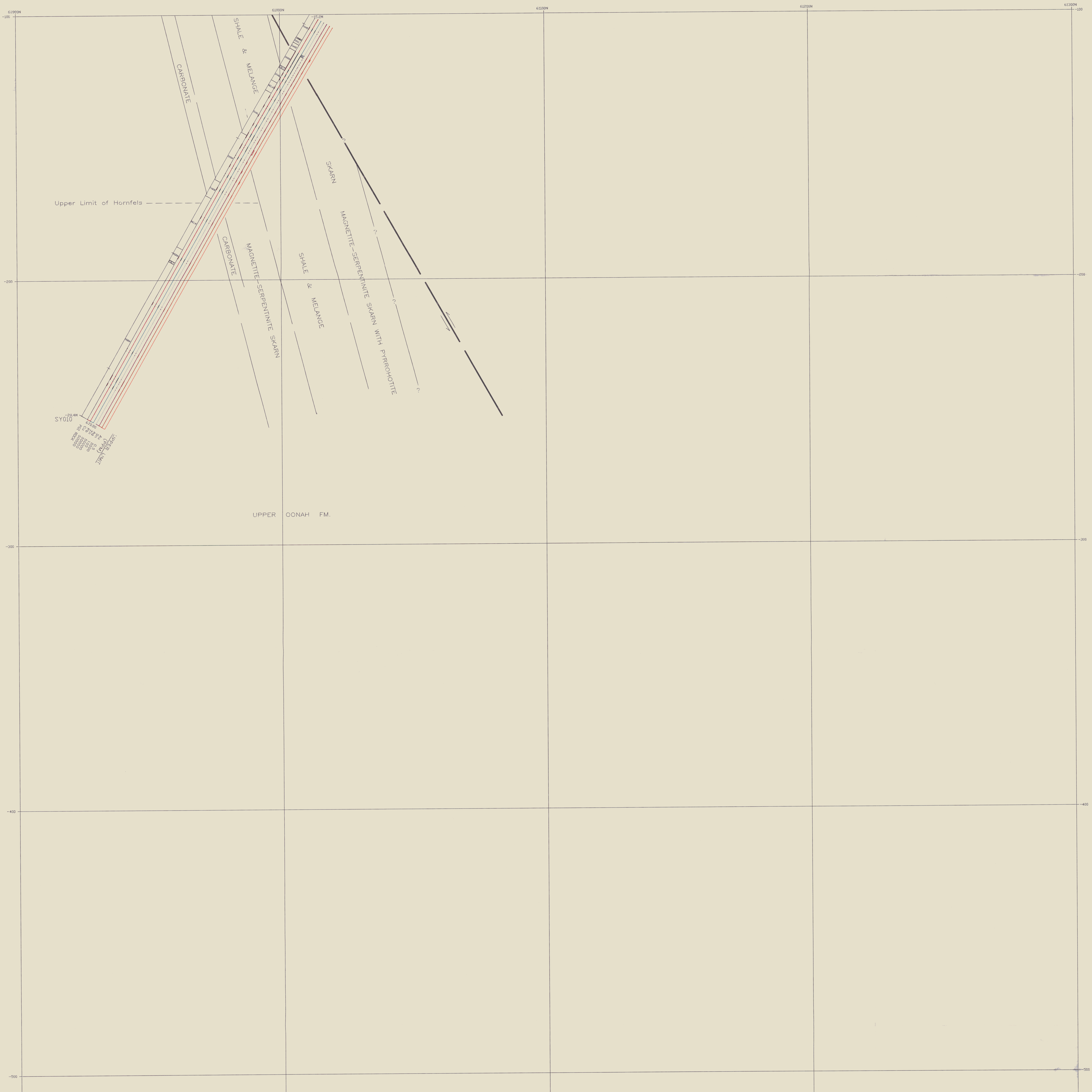
SHEET 1

SCALE 1:500

0 10 20 30 40 50 M

J.CROSSING	MARCH 1992	M.WALTER
DRAWING ID. 5521/117		PLAN 15

92-3386.



5 cm

LEGEND

Unconformity

Orientated bedding measurement

Direction of younging (facing)

Fault

058345

RGC EXPLORATION PTY. LTD.

SYLVESTER GRID E.L. 42/87

SY010 DRILLHOLE SECTION
S56800mE

SHEET 2

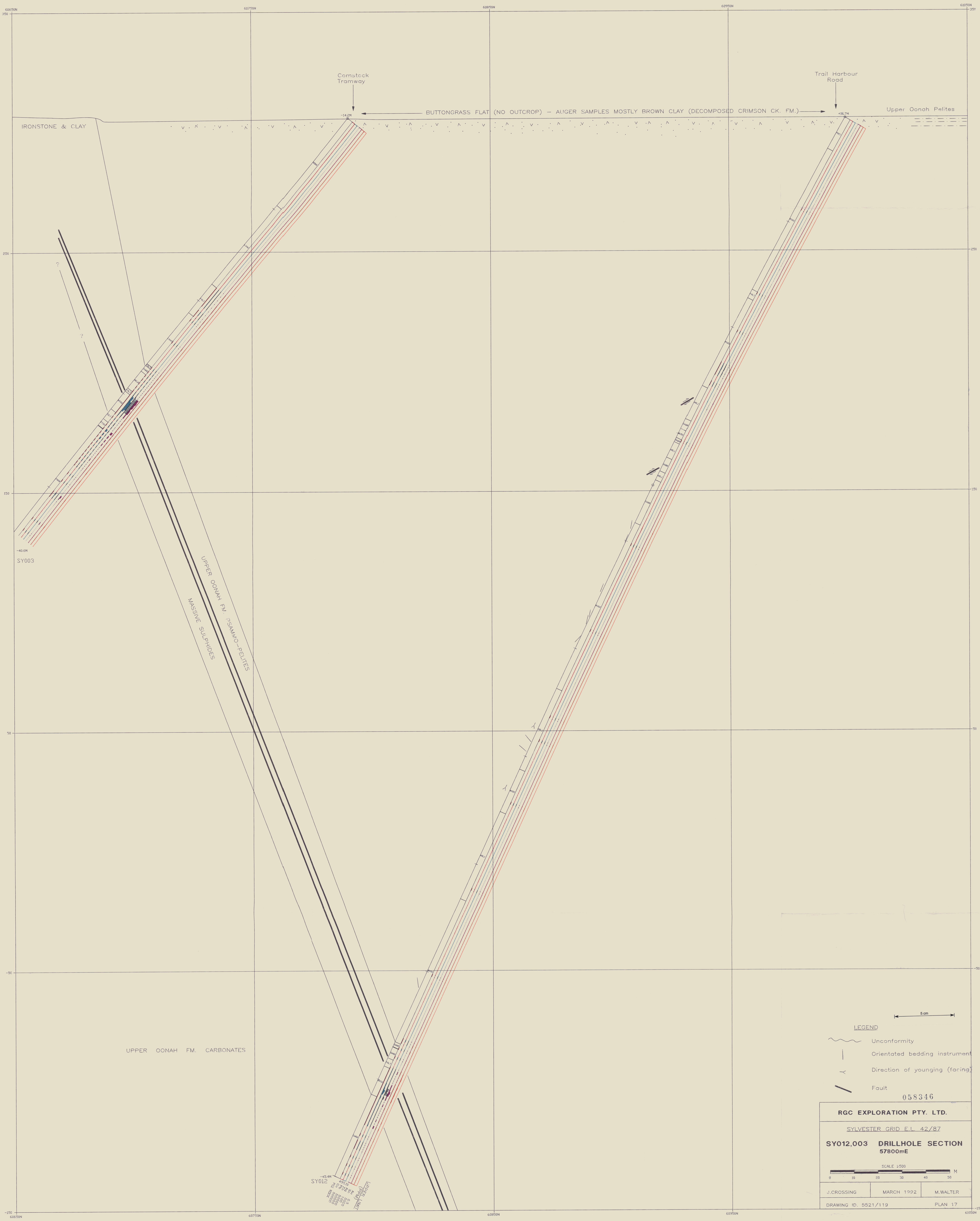
SCALE 1:500

0 10 20 30 40 50 M

J.CROSSING	MARCH 1992	M.WALTER
DRAWING ID. 5521/118		PLAN 16

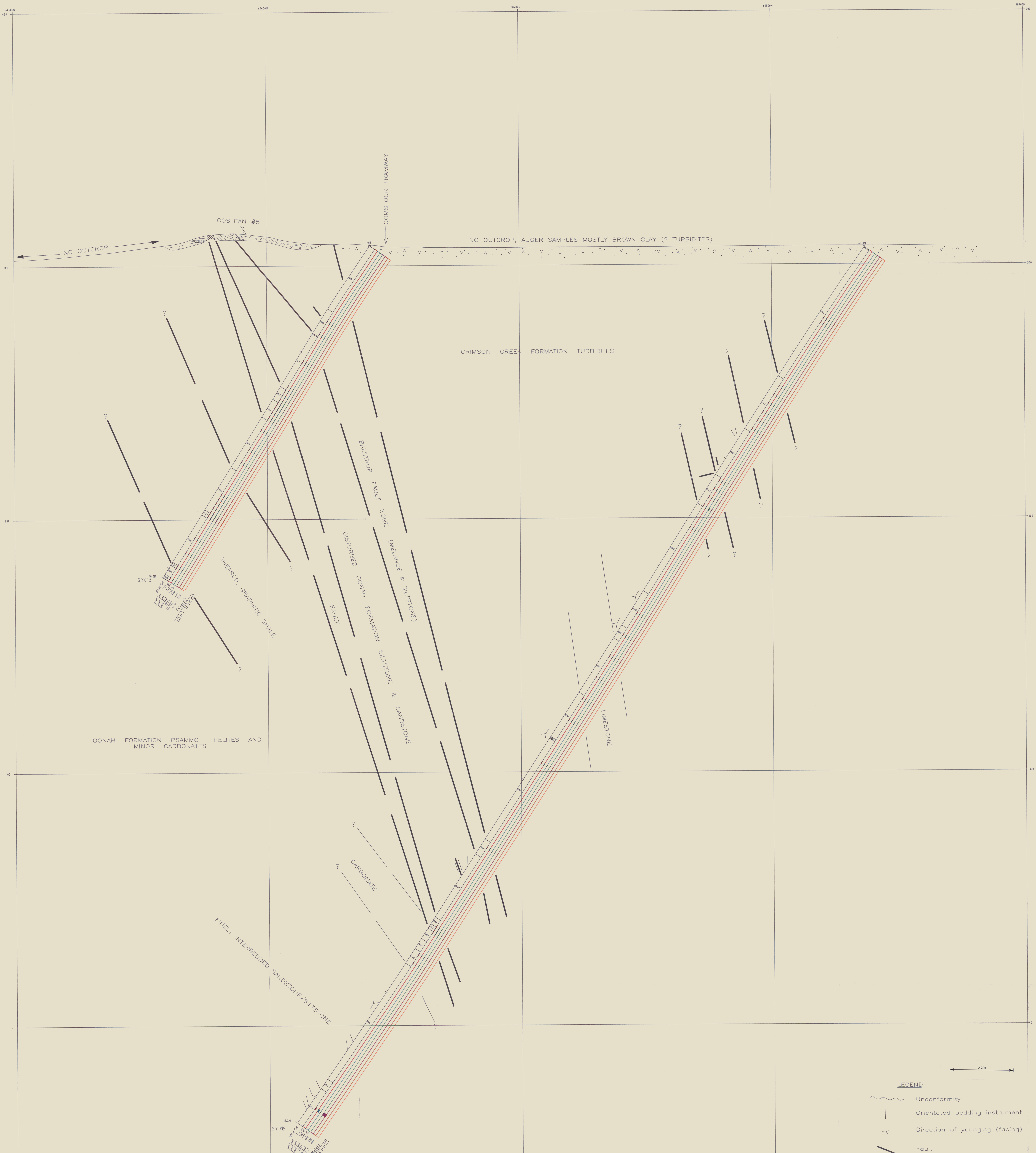
-600
61300N

92-3386.



058346

92-3386.



058347

RGC EXPLORATION PTY. LTD.

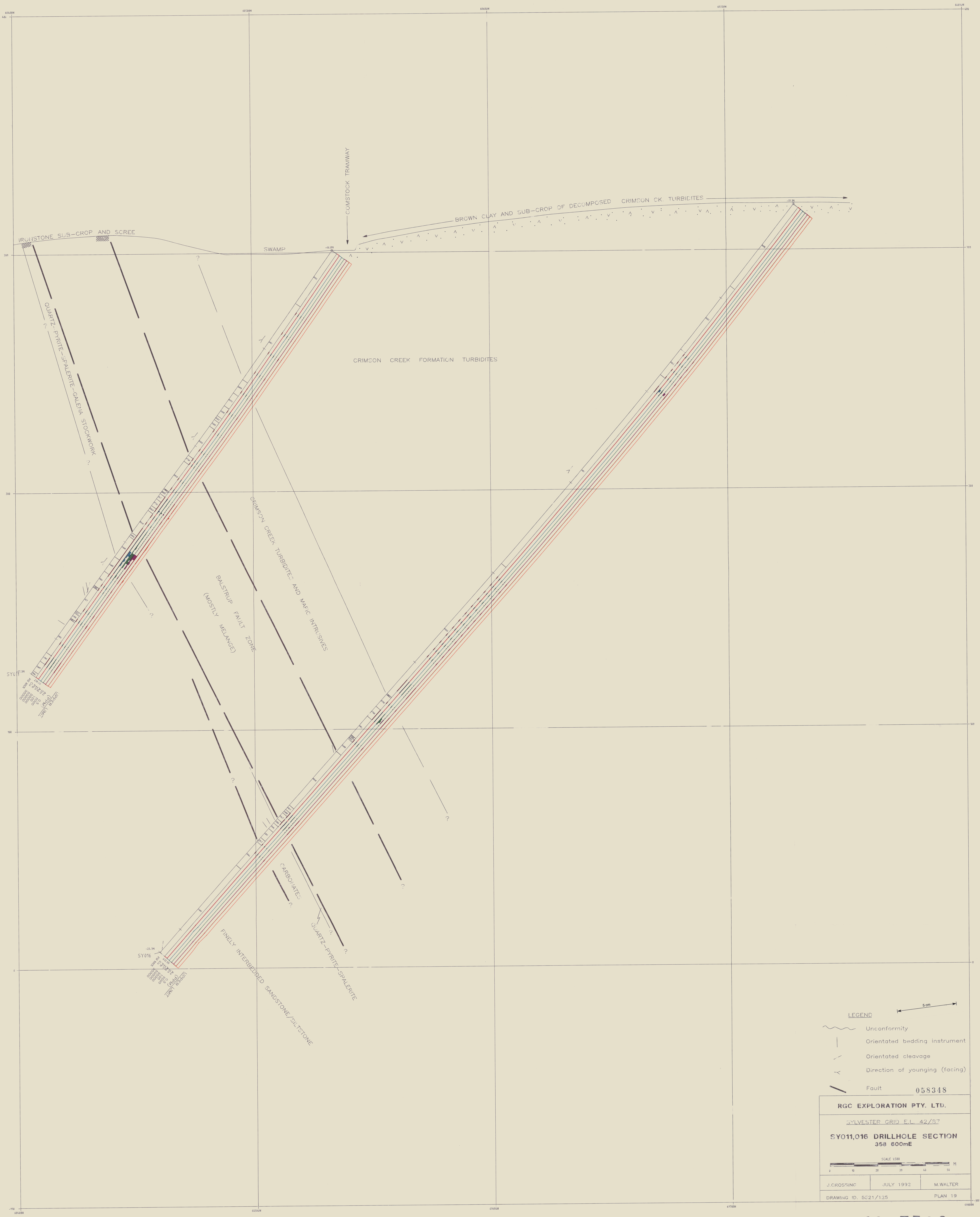
SYLVESTER GRID E.L. 42/87

SY013,015 DRILLHOLE SECTION
358 200mE

SCALE 1:500

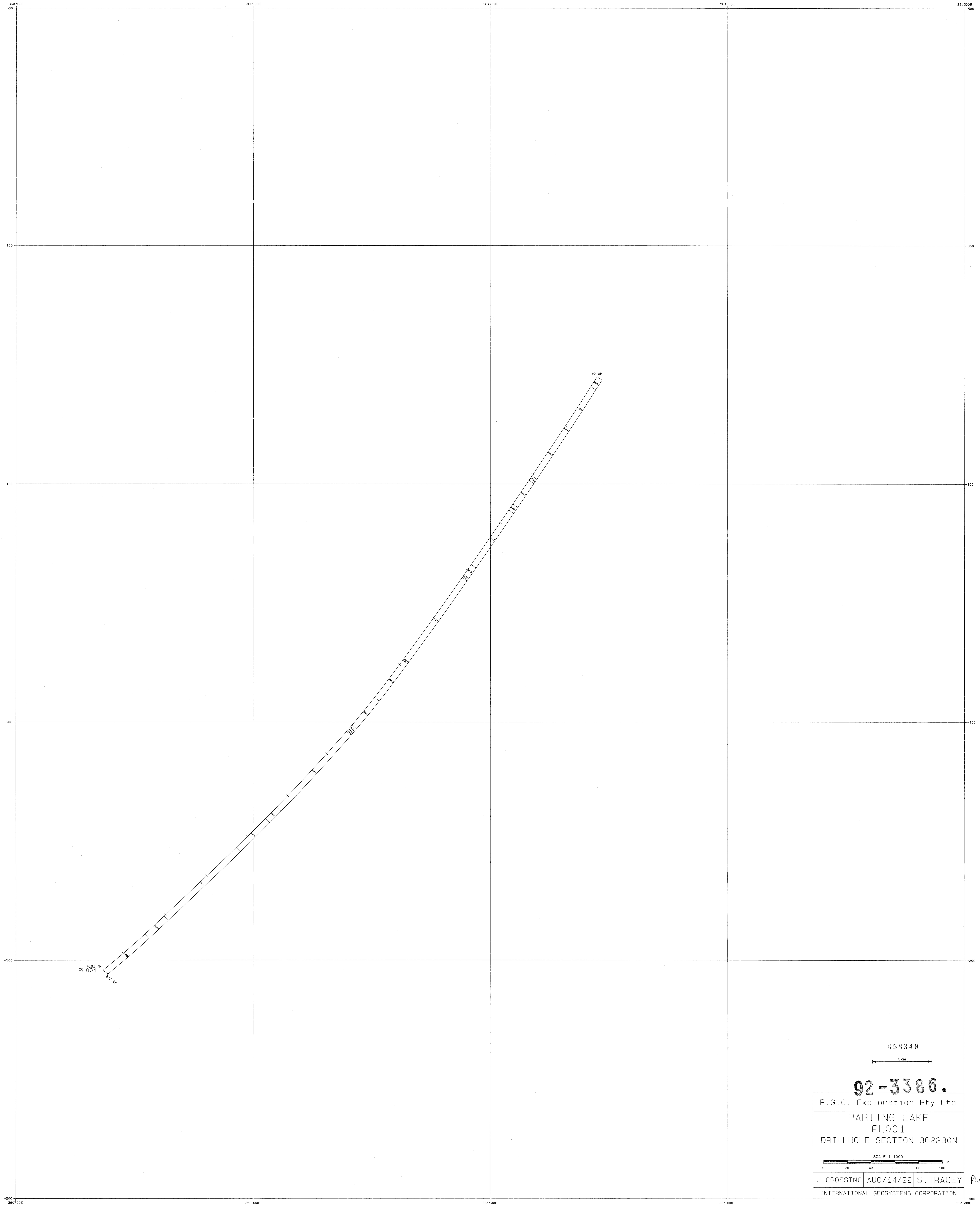
J.CROSSING	JULY 1992	M.WALTER
DRAWING ID. 5521/124		PLAN 18

92-3386.



COMSTOCK TRAMWAY
BROWN CLAY AND SUB-CROP OF DECOMPOSED CRIMSON CK TURBIDITES
IRONSTONE SUB-CROP AND SCREE
SWAMP
CRIMSON CREEK FORMATION TURBIDITES
QUARTZ-PYRITE-SPALERITE-GALENA STOCKWORK
CRIMSON CREEK TURBIDITES AND MAFIC INTRUSIVES
BALSTRUP FAULT ZONE
(MOSTLY MELANGE)
CARBONATES
QUARTZ-PYRITE-SPALERITE
FINELY INTERBEDDED SANDSTONE/SILTSTONE
SY011
SY016
5 cm
LEGEND
Unconformity
Orientated bedding instrument
Orientated cleavage
Direction of younging (facing)
Fault
058348
RGC EXPLORATION PTY. LTD.
SYLVESTER GRID E.L. 42/87
SY011,016 DRILLHOLE SECTION
358 600mE
SCALE 1:500
0 10 20 30 40 50 M
J.CROSSING
JULY 1992
M.WALTER
DRAWING ID. 5521/125
PLAN 19

92-3386.



058349

5 cm

92-3386.

R.G.C. Exploration Pty Ltd

PARTING LAKE
PL001
DRILLHOLE SECTION 362230N

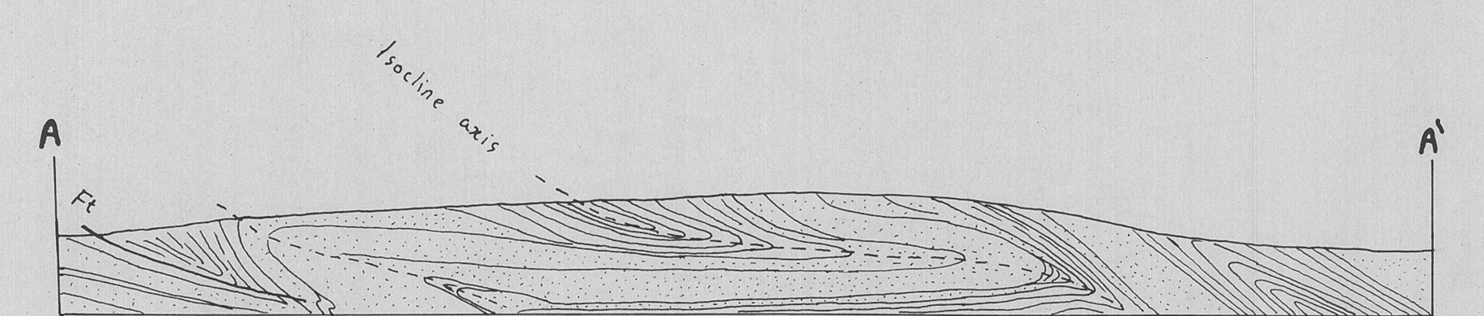
SCALE 1: 1000

0 20 40 60 80 100 M

J.CROSSING	AUG/14/92	S.TRACEY

PLAN 20

INTERNATIONAL GEOSYSTEMS CORPORATION



1:500 Sketch of embankment looking North

058350

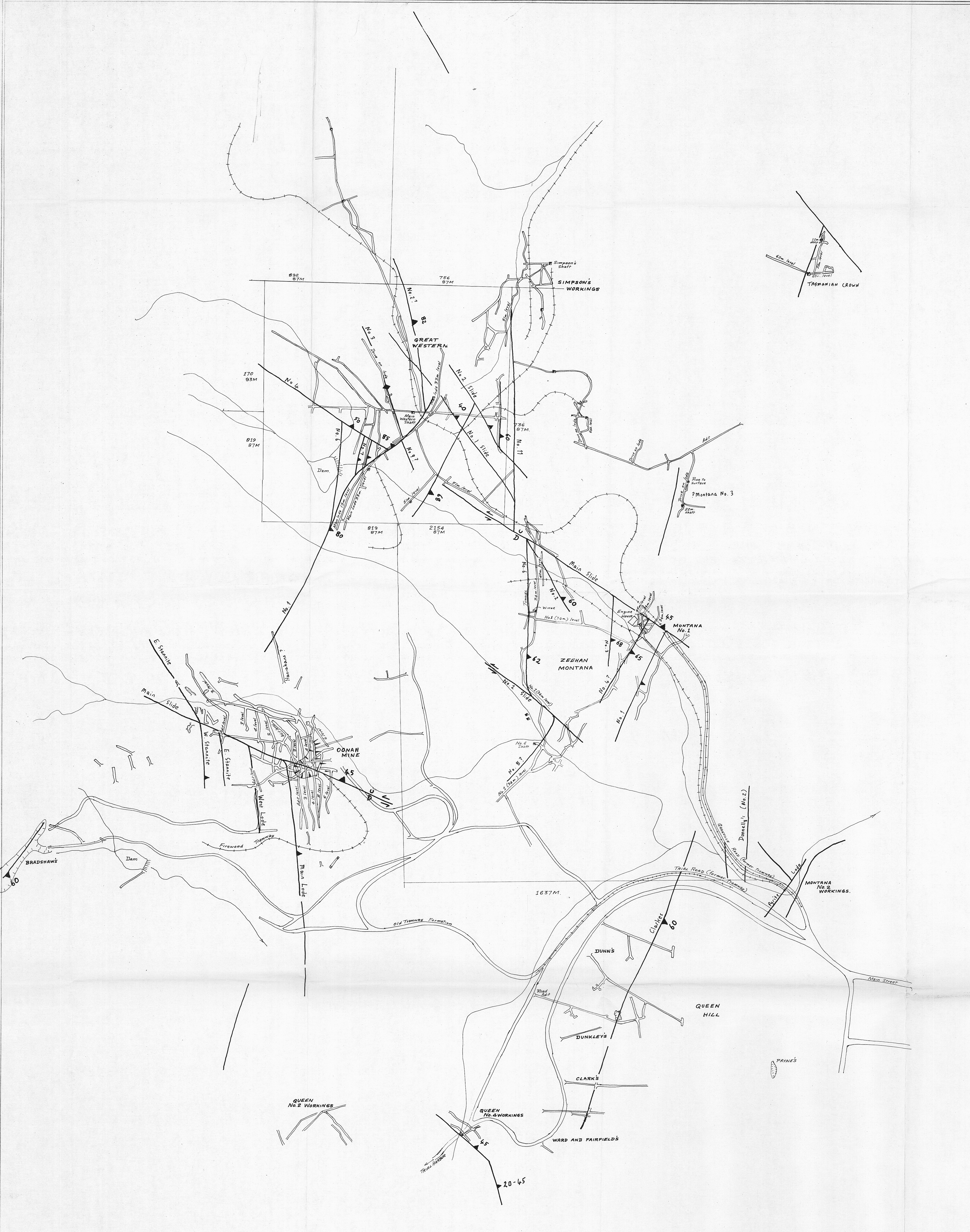
5 cm

92-3386.

RGC EXPLORATION PTY. LIMITED
INCORPORATED IN NEW SOUTH WALES

COMPILED	D.J.C.	ZEEHAN PROJECT
DRAWN	D.J.C.	FACTUAL GEOLOGY
DATE	July 1992	PINEY CREEK
CHECKED		
1:250,000 REFERENCE		

BASE PLAN No. 5521/126
OVERLAY PLAN No.
SCALE 1:2500 0 50 100m
Plan 21



POSITIONS OF WORKINGS AND LODES BASED ON HISTORICAL RECORDS.

058351

5 cm

92-3386.

RGC EXPLORATION PTY. LIMITED
INCORPORATED IN NEW SOUTH WALES

COMPILED	D.J.C.	MINE WORKINGS NORTH OF ZEEHAN TOWN
DRAWN	D.J.C.	
DATE	Aug. 92	
CHECKED		
1:250 000 Reference		

BASEPLAN No.	SCALE 12,500	0 500 M	PLAN 22
OVERLAY PLAN No.			