INDUSTRIAL & MINING INVESTIGATIONS
PTY LIMITED

Report on Field Investigations within EL 4/61 - WEST COAST, TASMANIA - Summer Field Season 1981-82.

PART III : SPECIMEN REEF & MAIN CREEK DRILLING PROGRAMMES.

May 1982

755002

6 JUL 1982

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Received / Inspected: 6 JUL 1982

DEPT. OF MINES
File No. 5074/82

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OPEN FILE

INDUSTRIAL & MINING INVESTIGATIONS PTY LTD

REPORT ON INVESTIGATIONS WITHIN EL 4/61, WEST COAST, TASMANIA.
SUMMER FIELD SEASON 1981-82. PART III

DRILLING PROGRAMMES OF SPECIMEN REEF AND MAIN CREEK.

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A. SPECIMEN REEF

1. Introduction

During the 1980-81 field season a sampling grid system was established over the area of the "Old Specimen Reef" gold workings. Further activity included an I.P. Survey by Scintrex over the grid area. Based on the general field observations and the results of the I.P. Survey (see report by M. Edyvean - period ended 24 February, 1981), drilling targets were defined and a drilling programme was scheduled to commence in late March 1981 for the Specimen Reef area. However, due to delays by the drilling contractors and the onset of winter rains, the drilling programme was postponed until the 1981-82 field season. The original drilling programme was revised in M. Edyvean's Six-monthly Report on Field Investigations within EL 4/61 - West Coast, Tasmania - 24 August 1981. The drilling locations and specification of the holes were also changed during the course of the drilling programme on the basis of geological information from the initial drill hole.

2. Location and Access

The Specimen Reef drilling sites are located directly north of the Savage River Mine open cut, between grid lines 5410000 metres N and 5412000 metres N, and 352000 metres E and 353000 metres E. From the Savage River pipeline road, approximately 9 kilometres from the open cut mine, two short vehicle tracks were recently cleared to serve as an access route to the drill sites.

3. Topography, precipitation and vegetation

Relief is typical of the rugged Savage River area with slope as steep as 40% grade.

The average annual rainfall for the Savage River area is approximately 200 centimetres, relatively evenly distributed throughout the year. January through March are generally the most favourable months for field programmes.

Vegetation is that of a lush dense temperate rain forest, practically impenetrable in some areas.

4. Regional Geology

Rocks of the Specimen Reef area are known as the greenschist member of the Precambrian Whyte Schist Formation (Urquhart 1966). This metamorphic lithology is situated along a geanticline known as the Arthur Lineament (R.D. Gee 1967). This north-easterly trending feature extending from the Southern Ocean in the lower Pieman River area to Bass Strait at Wynyard is attributed to the Penguin Orogeny.

5. Drilling

5.1 General

Specimen Reef drillhole number one was collared at the A.M.G. grid location of 541116 metres N and 352250 metres E, with the purpose of intersecting mineralization beneath the "Old Specimen Reef" gold workings. Drilling commenced on January 14, 1982, at an inclination of 46° East along traverse (130° Mag). The type of drill used for this and other bores was a Mindrill 10L (Type 250) Diamond Drill. The drill penetrated dominantly greenschist lithology for the entire depth of the hole. At a depth of 140.85 metres a small gold-bearing vein was intersected. (For a complete list of drilling specifications lithology encountered, see appendix.) Drilling was completed at the target depth of 150 metres on February 12, 1982. SP.R.1 was logged by C.H.C. Shannon.

Drillholes number SP.R.2 and SP.R.3 were drilled beneath major I.P. anomalies, located by Scintrex during the 1980-81 field season. Drilling of SP.R.2 commenced on February 13, 1982, and was completed on February 21, 1982, at the grid location of 352125 m E and 541116 m N at an inclination of 55°, at a 100° magnetic bearing. Drillhole SP.R.3 was collared on 24 February and completed on 25 February 1982, at the grid co-ordinates 352184 m E and 5410739 m N with an inclination of 50°, west along traverse (310° Magnetic). Both drillholes bore through dominantly greenschist lithology. Due to insufficient indication of useful mineralization, drilling of SP.R.2 and SP.R.3 was discontinued short of the original targets, at depths of 70 metres and 94 metres respectively. Both drillholes were logged by the author.

In view of the lack of mineralization in holes SP.R.2 and SP.R.3, M. Edyvean decided to abandon the drilling programme as outlined in the Industrial & Mining Investigations' Six-Monthly Report on Field Investigations with EL 4/61 - West Coast, Tasmania - Period Ending 24 August 1981, which suggested further drilling in the major I.P. anomalies. As an alternative, drillholes SP.R.4 and SP.R.5 were collared in the "Old Specimen Reef" workings with the intention of intersecting the gold vein found in SP.R.1 at near surface depths.

Drillhole SP.R.4 was located at the A.M.G. grid co-ordinate 352296 m E and 5411059 m N. The A.M.G. drillhole co-ordinates of SP.R.5 are 352300 m E and 5411056 m N.

Drilling of SP.R.4 commenced on February 28, 1982, and was completed on March 5, 1982, at a depth of 94 metres. SP.R.5 was collared on March 7, 1982, and completed on March 10, 1982, at a depth of 70 metres. The inclination of SP.R.4 at the collar is 60° at a magnetic bearing of 280°; that of SP.R.5 is 50°, east along traverse (130° magnetic). Both drillholes were logged by the author.

NB: All core is stored at 1 Huon Street, Savage River.

5.2 Results

As previously mentioned, gold was encountered in drillhole SP.R.1, at only one point, in the interval 140.85-141.00 metres. The gold bearing vein has a true width of 1.5 centimetres and intersects the core axis with an angle of 12°. The gold is associated with dolomite-calcite and inclusions of haematite. Grains of gold are up to 3 millimetres across and constitute about 5% of the vein.

A second vein with similar gold-bearing characteristics was sited at a depth of 63.20-63.40 metres. This vein is narrower and lacks any obvious gold.

Other mineralization in SP.R.1 included disseminated pyrite common through most of the hole. Rare chalcopyrite occurs in some carbonate veins.

Drillholes SP.R.4 and SP.R.5 were also drilled in the old workings of Specimen Reef with the intent of better defining the gold vein of SP.R.1. No gold was observed nor veins which exhibit gold-bearing characteristics. However, in SP.R.4 at a depth of 82.35-83.85 a wooden mine shaft support from the old workings was encountered, followed by a 1.50 metre core loss as the drill passed through the mining cavity. Adjacent schist is altered and highly silicified. Numerous small carbonate veins were also observed. (See appendix A)

Drillholes SP.R.2 and SP.R.3 were discontinued short of the original target depths due to insufficient mineralization. Some disseminated pyrite was found in both drillholes, but even with indications of weathered-out pyrite, there wereless sulphides than in SP.R.1. Minor chalcopyrite in carbonate veins was found in SP.R.2. It is conceivable the I.P. anomaly through which SP.R.2 was drilled was caused by graphite-bearing phyllite which was the first fresh rock found in the drillhole.

In SP.R.3 weathered rock was penetrated to the bottom of the hole. Its I.P. response may be caused by wet clay in the section encountered. However, it does appear that the I.P. programme may have been insufficient to define the target adequately.

J. WOODMAN, H. SHANNON, M. EDYVEAN.

May 1982.

6. Conclusion

Nature of mineralization

There are essentially two types of mineralization present: (a) a general disseminated pyrite mineralization in the greenschist, and (b) a carbonate vein hosted mineralization containing gold and minor chalcopyrite. The majority of the carbonate veins which appear to be dolomite-calcite (but may be dolomite-magnesite) are barren or contain trace quantities of chalcopyrite only. The veins which contain the gold mineralization differ in some characteristics from the majority of the carbonate veins and may belong to a different set, but the principal characteristics are:

(1) The presence of haematite inclusions in the central portion of the vein-gold is found only in or adjoining the haematite.

(2) The presence of extensive wall rock alteration adjoining the gold-bearing vein. Indications are that the gold content is proportional to the extent of wall rock alteration.

The alteration was greatest in the area where the drillhole SP.R.4 intersected the old mine workings, which presumably contained a vein rather better than anything actually intersected in the drilling. In this area epidote and silification occurred in addition to the replacement of chlorite by talc, which was a common form of alteration sometimes found in association with barren carbonate veins as well as the gold-bearing vein, though not to the same degree. It may be inferred that the "reefs of quartz" referred to in the early records are in fact bodies of altered country rock, not the intrusive quartz veins vaguely implied by the old terminology.

The mined-out vein system penetrated in SP.R.4 may be represented by a narrow vein consisting mainly of haematite intersected in the 63.20-63.40 interval of SP.R.1, true thickness of 0.5 cm. The trimming out of this vein implies that the individual veins in the area do not persist. The gold-bearing vein that was intersected in SP.R.1 lies beyond the recorded limit of the old workings and appears to be a parallel vein. Its orientation is approximately strike 50° dip 60° SE. The gold-haematite inclusions hosted in carbonate would weather to produce spectacular surface occurrences of gold-haematite nuggets, and this apparently accounts for the rich but sparse specimens mentioned as leading to the mine's discovery.

The drilling effectively dashed hopes of base metal mineralization in the area, while establishing the nature of gold mineralization to be of a narrow vein type. In the modern company mining situation such deposits are considered impractical. Further field programmes in the Specimen Reef area are not envisaged.

7. References

Edyvean, M. 1981. Industrial & Mining Investigations Pty Limited. Six-Monthly Progress Report on Field Investigations within EL 4/61, for Period Ended 24 February 1981.

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Gee, R.D. 1967. The Proterozoic Rocks of the Rocky CapeGeanticline. Bull. Geol. Surv. Tas.

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B. MAIN CREEK

1. INTRODUCTION

Main Creek magnesite was first recorded by Rowe (1962). In 1964 Urquhart and Groves, geologists from the Department of Mines, examined the magnesite deposit in the bed of Main Creek between traverses 18000 N and 19000 N of the original ground magnetic survey of the BMR 1960-61. A further examination of Main Creek indicated lenses and bands of magnesite outcropping in the bed of Main Creek as far south as 17000 N. Based on the outcrop of magnesite exposed in Main Creek, a possible magnesite reserve of 300,000 tons was estimated.

In an attempt to define the extent and grade of the Main Creek magnesite, a drilling programme under the direction of M. Edyvean was conducted in 1971 and 1972. Two diamond drillholes MC 1 and MC 2 were drilled, 600 feet (180 metres) apart, on a bearing which was nearly perpendicular to the strike, and at inclinations of 45° and 60° respectively. Both drillholes intersected close to 1000 feet of magnesite with relatively narrow bands of dolomite and chloritic schist. Information from the two drillholes suggests an estimated 20 million tons of magnesium-rich carbonate.

Early in 1979, five composite samples from MC 1 and MC 2 drill cores were forwarded to the CSIRO. Subsequently, an extensive study of the Main Creek magnesite has been conducted by the CSIRO. Further studies included a research programme by the CSIRO aimed at determining a chemical process which would produce premium grade magnesia from Main Creek magnesite. In 1981 a pilot plant for producing premium grade magnesia was functioning.

To expose the underlying magnesite west of Main Creek, costeaning was attempted during the 1981-1982 field season. The three proposed costeans were to extend from Main Creek, a distance of 180 metres at a magnetic bearing of 270°, with 92 metre spacing between costeans. The overburden of clay proved to be greater than a bulldozer could manage, as superficial cover was stripped to as much as 4 metres in depth locally without encountering outcrop. Therefore the costeaning programme was abandoned. As a consequence of the failure of the costeaning programme, an airtrak drilling programme was substituted, and completed on 5 April, 1982.

Other field programmes in the Main Creek area included rock-chip sampling by C.H.C. Shannon and J. Woodman. A total of 210 kilograms of magnesite samples were collected along 200 metres of outcrop in the bed of Main Creek. The magnesite outcrops almost continuously along this 240° trending area of Main Creek. This section of Main Creek is nearly perpendicular to the strike of the magnesite and therefore probably the most representative section of outcrop across stratigraphic horizons at the prospect. These samples have been forwarded to the CSIRO pilot plant for testing. A formal report has not yet been made on the

2. LOCATION, ACCESS AND RELIEF

The Main Creek magnesite prospect is located approximately 5 kilometres southwest of the Savage River open-cut mine, along Main Creek. The prospect is situated between grid lines 5398000 metres N and 5400000 metres N and 3546000 metres E and 3548000 metres E, AMG.

To gain access from Savage River, the Corinna Road is followed approximately 9 kilometres south to a rough vehicle track. This vehicle access terminates at the magnesite deposit, just across Main Creek, approximately 5 kilometres from the Corinna Road. The condition of the vehicle track is poor. The track is narrow and when wet may be impassable, beyond AMG 477970, which is approximately 2 kilometres from the Corinna Road. The road is unsuitable for a heavy drilling rig.

The rugged relief common in many West Coast areas is strongly accentuated by the entrenching effect of Main Creek at the magnesite deposit.

3. GEOLOGY

3.1 Introduction

On a regional scale, the Main Creek magnesite lies within a belt of metamorphic rocks termed the Arthur Lineament by Gee (1967). On the local scale the magnesite body appears to be a stratum concordant with the greenschists that are in contact with it. Outcrop is limited to natural exposures adjoining the channel of Main Creek and two other exposures on a neighbouring oversteepened hillside. Bedding in the magnesite itself gives an attitude of 330°, 85°E near the eastern boundary of the deposit. Away from the creek section the magnesite is observed by a considerable thickness of superficial deposits.

3.2 Summary of Previous Work

The initial published reference to the deposit, by Urquhart (1966), describes the discovery of the deposit and the extent of natural outcrop noting evidence for a conformable relationship with the greenschists. For the origin of the deposit, metasomatic replacement of an original limestone or dolomite was favoured based on (a) the presence of wall rock alteration and (b) the absence of detrital impurity, with corresponding massive character of the rock.

Drilling work conducted by I.M.I. in 1971-1972 recorded by Edyvean (1977) showed that the deposit was at least 240 m across. (The drilling did not fix the western boundary of the deposit: the last core is magnesite.)

A tentative correlation could be made between the two diamond drillholes MC 1 and MC 2 on the basis of three dolomitic zones, but in general the greenschist bodies encountered did not correlate across the 180 m separating the two drillholes.

Frost (1981) worked mainly on the microtextural and chemical aspects of the deposit; he also favoured a metasomatic replacement origin for the magnesite based on (a) microtextural evidence of dolomite crystals replaced by magnesite and (b) a chemical trend towards reduction of iron content of the magnesite crystals from the deeper core samples. Also (c) by assuming that the outcrop and drillhole data provided approximate limits of the deposit, it then appeared to be a deep deposit with short strike length which is expected in a metasomatic deposit but not in a primary magnesite.

However, Frost (1981) also notes that the rock carries evidence for an original, fine-grained magnesite fabric. If this feature is considered in isolation, it favours a primary origin for the magnesite.

3.3 Discussion: Criticism of previous work

The choice of metasomatic origin for the deposit seems to be made on rather weak evidence. The nature of the original carbonate, for example, is unlikely to be controlled by either presence or absence of detrital impurity, and in a metamorphic situation the evidence could be obscured. Detrital impurity may be responsible for zones rich in quartz. The wall rock alteration, also cited by Urquhart (1966) as evidence for the passage of metasomatizing solutions, is restricted to a maximum of 4 m of talc alteration and it is often absent. It can be argued that the minor character of the alteration is evidence against the passage of solutions on the scale needed to convert the whole deposit.

In favouring a short strike length for the deposit, Frost (1981) is deceived by the outcrop conditions and underestimates the effect of masking by superficial cover: the deposit is in all probability very extensive laterally.

The correlation between the drillholes may be better than Edyvean (1977) suspected. Frost (1981) assumed poor correlation as supplementary evidence against a primary magnesite deposit. In addition to the three dolomitic zones,the greenschist bodies commencing at 134½' and 999' in MC 1 can be matched with those at 48' and 843' in MC 2 respectively, and this correlation is now supported by surface outcrop. The non-correlation of other greenschist bodies may reflect large scale boudinage effects in which formerly continuous, competent greenschist beds were broken up during deformation.

However, although correlation of the dolomitic zones suggests survival of original composition layering in the deposit, the match is not exact in either thickness or composition, so some metasomatic activity on at least the local scale is the most likely explanation for the variation.

3.4 Geomorphology and Vegetation

The area of the deposit is a rugged terrain in which no plateau elements survive and thus the ridgelines are narrow and spurs and hillsides are relatively steep. Some plateau relicts exist on the neighbouring major divides. To the west of the deposit an obviously strike controlled series of spurs runs parallel to a rudimentary alignment of saddles and gullies which hint at a continuation of topographically regressive rock (the magnesite in all probability), extending particularly to the north-west of the deposit then turning north-east.

Main Creek itself has a gentle grade and its gravel bed is not interrupted by any continuous rock bars. The stream passes between low cliffs in the magnesite outcrop but has a narrow alluvial flat elsewhere, and flanking the flat to the west of the MC 1 diamond drillhole, there is a lowland embayment up to 150 m across elevated 6-10 m above creek level. Two small dolines (sinkholes) have been located in this area. The great thickness of Quaternary deposits found here suggest that there is a complex of Karst depressions underneath the superficial cover.

3.5 Stratigraphy and Petrology

3.5.1 Quaternary Alluvium

Modern floodplain alluvium occurs along Main Creek with the flat reaching 50 m width upstream of the track crossing. The pyrite rich sand covering the flats, and the angular gravel in the stream bed derive from the Savage River Mines' dumps.

3.5.2 Periglacial? Quartz Gravel

A deposit of angular pebble-sized white quartz gravel covers a portion of the elevated bench where it adjoins the creek flats. It is somewhat finer than the ridge capping angular quartz gravels, but is otherwise identical. The deposit is up to 1.5 m in thickness. It is considered to be derived from the ridge capping gravels found east of the area, and transported from there by periglacial freeze-thaw action or comparable large scale mudflow.

3.5.3 Periglacial? Weathered Greenschist Breccia

A compacted deposit comprised of weathered greenschist boulders up to 1.5 m across and set in fines of presumably the same derivation, was well exposed in the costean excavations. Near MC 18 it can be shown to have travelled over the level surface of an underlying lake deposit for at least 50 m, which is considered good evidence for periglacial freeze-thaw activity although not impossible for a normal mudflow. The deposit exceeds 9 m in thickness in the MC 14-15-16 area, and adds considerably to the depth of overburden. The deposit is presumably derived from the hills immediately to the west.

3.5.4 Lacustrine Clay with Charcoal

The deposit is of yellow-grey stratified clay with charcoal and some vegetable matter imbedded in it. The stratification is well preserved, indicating that it is a lake deposit rather than alluvium, in which clear bedding planes are normally destroyed by worm activity. The deposit appears to be a sheet deposit 1.5 - 3.0 m thick, but reaches at least 6 m in MC 17 where it appears to fill a sinkhole. At this point there is a peat layer at the base of the deposit. The hypothetical lake is interpreted as a temporary feature formed after damming of the valley by a periglacial deposit such as the one that overlies it.

3.5.5 Alluvial Gravel

Rounded gravels which in places can be demonstrated to underlie the clay deposit may belong to two units. Surface outcrops include large quartz or quartzite cobbles which are apparently not present in the drillhole samples, which are mainly pebble gravels with abundant greenschist clasts. The surface outcropsindicate a thin gravel layer considered to be a lag deposit remaining after dissection of an alluvial terrace. The great thickness of gravel indicated by the drilling (if genuine and not simply an illusion caused by extensive caving of a gravel layer) imply infilling of some form of Karst cavity.

3.5.6 Residual Clay, Breccia and Soil

It was found in the drilling that areas underlain by magnesite were normally covered by clay and breccia material more than 10 m thick even where other forms of cover were absent. It is considered that, as the carbonate is selectively removed by solution, the space left over is filled partially by insoluble residue and partly by soil and rock float intercepted from the mantle undergoing soil creep.

Given a suitable road cutting in steep country, a good indication that magnesite was present was obtained if the transported soil mantle exceeded 1.5 m even if breccia clasts consisted only of weathered greenschist. More diagnostic features were frequently encountered. For example, a yellow clay with clasts of white talc, which is derived from talc schist alteration zones marginal to the magnesite contacts. The insoluble residue from the magnesite itself could be a purple ferruginous clay, a red sand and ferruginous clay mixture, or a clay containing very irregular clasts of spongy vein quartz of a type apparently confined to the magnesite rock.

3.5.7 Cave deposits

In two of the airtrak bores, MC 10 and MC 12, red clay material was found below substantial thicknesses of magnesite indicating actual cave fills. The material from MC 10 included irregular clasts of spongy vein material.

An odd spongy clay from MC 19, which would actually float in muddy water, is interpreted as a leached rock remaining after a cave silt, originally rich in carbonate silt, which has been leached.

3.6 Precambrian

No thorough investigation of the Precambrian outcrop was undertaken. However, in the greenschists east of the deposit there is an unrecorded magnesite/dolomite bed outcropping at 471994, and an unrecorded magnetite outcrop at 472988. The magnetite occurrence is a further link with the Bowry Creek magnesite deposit which has the Long Plains magnetite next to it in a similar position.

The magnesite itself, although superficially massive, shows clear bedding features on closer examination, particularly in the eastern part of the principal creek section. The outcrop here was measured for a near-continuous 175 m with an unrecorded greenschist at 100 m, starting from the eastern edge of the deposit. From 175 m to 200 m there is a larger bed of greenschist intruded by amphibolite. Magnesite outcrops further downstream are considered to be from beds west of the greenschist-amphibolite body.

Dip indications for the western part of the magnesite are of the order of 70°W but as these are based on schistocity of the greenschist, they are not reliable.

The amphibolite bodies are intrusive and possess relict igneous textures.

3.7 Structural Geology

The greenschists in the area have lineations suggesting multiple folding of the area, but the magnesite itself appears to be uniformly dipping and near vertical in attitude. Dips on schistocity planes of the greenschist are to the west and become shallower to the west, which indicates that the magnesite dips curve round to the west at depth.

4. DRILLING

4.1 General

The drilling programme was undertaken as a replacement of the intended costean programme. The priorities of the programme were:

(1) To obtain carbonate samples from the deposit for the CSIRO Division of Mineral Chemistry for the continuation of laboratory work on the beneficiation process.

(2) To obtain samples representative of the material which could be mined in the initial production from an open cut, within the area of the proven magnesite deposit.

(3) To obtain information on the depth of overburden in the area of the proved magnesite deposit.

An airtrak drilling rig provided by the contractors, G & G Drilling, was used for the programme. Drilling commenced on 22.3.82 and was completed on 5.4.82. The drillsites were located on a track system which followed the lines of the intended costean programme.

It was intended that each drillhole would penetrate the overburden followed by 9 metres of the underlying magnesite, from which 5 kilogram samples would be selected from each metre drilled for use by the CSIRO, and 2 smaller samples for analysis and records respectively. It was anticipated that overburden depths of approximately 3-6 metres would be encountered.

However, much greater depths of overburden prevailed. The minimum encountered was 6 metres, the maximum in excess of 30 metres. Furthermore, sticky clays were occasionally encountered which could not be removed from the hole. Thus, in some of the holes, the drilling conditions were in fact beyond the technical capacity of the drilling rig.

As a result of these technical difficulties created by the thick mantle of overburden, of the 17 percussion holes drilled, only six intersected magnesite from which samples could be obtained. In detail: 9-metre samples were obtained from MC 6, MC 7, MC 8 and MC 11. Five-metre samples were obtained from MC 10 and MC 12.

Of the other eleven holes:

- 2 holes reached Magnesite bedrock that could not be recovered: the two westerly holes MC 3 and MC 4, at depths of 15 and 12 metres respectively.
- 1 hole contained talcose Magnesite: MC 9. This hole was drilled adjacent to a known talcose greenschist band.
- 1 hole intersected a greenschist band: MC 13.
- 7 holes terminated in overburden (gravels, soils or clay fill) at depths up to 30 metres below surface: MC5, MC14, MC15, MC16, MC17, MC18 and MC19. These holes outlined an area of gravel, soil and clay-filled Karst holes, covering approximately one-third of the area investigated.

Some 150 Kg of magnesite was obtained from the sampled holes. This material has been stored until required by the CSIRO.

4.2 Results of Drilling

Detailed assay results of drilling can be found in Appendix C. Graphic logs, incorporating assays, and the relationship of overburden to Magnesite, can be found in Cross Sections 1 and 2 of Appendix C.

A summary of the Magnesite grade of the sampled holes is as follows:

Hole No	Depth/ Metres	MgO%	CaO%	SiO_2%	Al_2O_3%	Fe%
MC 6)	14-23	40.14	1.83	6.4	0.75	2.1
)	16-23	40.67	1.97	6.3	0.45	1.81
MC 7)	12-21	35.4	1.8	16.5	0.22	2.3
)	14-21	36.6	1.9	14.6	0.21	2.0
MC 8	19-28	40.1	3.7	6.1	0.09	1.4
MC 10)	12-17	32.7	2.5	21.14	0.13	1.7
)	14-17	35.5	3.1	14.7	0.06	1.2
MC 11)	6-15	38.7	4.0	3.9	0.19	2.9
)	8-15	40.0	3.8	1.7	0.11	2.9
MC 12)	12-14	38.5	3.9	0.74	0.14	4.0
)	9-14	36.7	4.5	0.95	0.22	4.7

The technical difficulty of obtaining uncontaminated samples from an air track drill is outlined by the assay results. The magnesia (MgO) values are generally downgraded as the clay, which is present in the fissures and cavities, is incorporated into the bulk powder sample obtained. Also, there is some mixing at the contact of the overburden clays and the Magnesite beneath. Thus the first few metres of magnesite sampled generally contain higher SiO_2, Al_2O_3 and Fe values, and lower MgO values. As casing was not effective, contamination from material falling down the hole could occur.

It was noted that Fe values were particularly high in MC 12. This is due to the presence of ferruginous clay in cavities.

The magnesite intersected in MC 6, from 16-23 metres; MC 8, from 19-28 metres; and in MC 11, from 8-15 metres, is comparable in grade to that intersected in the deep angle diamond drillholes MC 1 and MC 2, drilled in 1971-72.

NB (i) Bulk samples are being stored at 1 Huon Street, Savage River, until required by the CSIRO.
(ii) Smaller samples, for our record, are also stored at Savage River.

Table 1

4.3 Drilling Data

DRILLHOLE No	TOTAL DEPTH OF DRILLHOLE	METRES OF MAGNESITE SAMPLED	COMMENTS (for greater detail see drilling logs)
MC 3	15 metres	No sample	A few chips of magnesite from a depth of 15 m.
MC 4	13 metres	No sample	A few chips of magnesite from 12 metres.
MC 5	21 metres	No sample	No bedrock reached.
MC 6	23 metres	9 metres	Good magnesite sample.
MC 7	21 metres	9 metres	Good magnesite sample.
MC 8	28 metres	9 metres	Good magnesite sample
MC 9	25 metres	9 metres	Poor quality (talcose magnesite) sample.
MC 10	21 metres	5 metres	Good magnesite sample.
MC 11	15 metres	9 metres	Good magnesite sample.
MC 12	15 metres	4 metres	Good magnesite sample.
MC 13	13 metres	No sample	Bedrock greenschist encountered at 11 metres.
MC 14	17 metres	No sample	No bedrock at 17 metres.
MC 15	15 metres	No sample	No bedrock at 15 metres, hole could not be cleaned.
MC 16	27 metres	No sample	No bedrock encountered.
MC 17	30 metres	No sample	No bedrock encountered.
MC 18	9 metres	No sample	Hole cavings stopped progress.
MC 19	15 metres	No sample	Hole could not be cleared.

5. DISCUSSION: FACTORS AFFECTING ORE LOCATION

The airtrak drilling has revealed that depth of overburden may be a substantial problem in the area of the known deposit: the lowland embayment appears to have a general cover exceeding 20 m, the hillslope area has cover of the order of 15 m indicated by the drilling. However as the drillsites were selected at least partly for ease of access, they are inadvertently selective for greater overburden than normal. There are indications (specifically the two hillslope magnesite outcrops) that superficial deposits will be less than 15 m in general.

Within the area of proven magnesite the wester margin appears more favourable, because of greater relief above the creek, the surface magnesite outcrops, and indications of lower iron content in diamond drillhole samples.

The thick superficial cover explains why the magnesite outcrop is so rare away from the creek, so it now appears very likely that there is a continuous bed of magnesite linking the occurrences at Long Plains and Bowry Creek with the Main Creek deposit, and extending north into the next valley where surface features hint at an underlying carbonate.

This proven deposit at Main Creek, with a potential of 30-40 million tonnes of magnesite, is awkwardly placed for quarrying, and a better site for a mine probably exists elsewhere in the indicated belt.

6. CONCLUSIONS

With the magnesite body being so large that sheer quantity of ore is not likely to be a problem, it would be advantageous to explore in areas where better access, relief and overburden conditions are likely. Areas likely to be underlain by magnesite can usually be detected from the superficial cover exposed in road sections, and likely spots can be confirmed by percussion drilling.

There are non-geological factors which are important in framing the programme for further exploration. Overburden disposal costs will depend not only on thickness but on transportation and suitable disposal areas, which are adverse factors at the known deposit. There may be a significant advantage in mining the low-iron magnesite in the western half of the deposit, somewhat offset by a relatively thick greenschist bed in this section. Karst features may indicate a de-watering problem in mining below creek level. If transportation of the product is envisaged by truck along the Corinna Road, areas south of the known deposit are favoured. If a pipeline along the Savage River Mines' easement is to be used, the advantage is with the prospective area to the north.

7. RECOMMENDATIONS

1) Track access should be upgraded to the point where a modern diamond drilling rig can cope with it. Preference should be given to a new route, already pioneered, which is shorter than the present access. It is also possible to re-route the track down the hill to Main Creek.

2) An attempt should be made to extend the known deposit into areas likely to provide more convenient mine sites. Favoured areas are the Main Creek-Bowry Creek divide at 464980 (i.e., south of the drilled zone at Main Creek), and the Main Creek-Savage River divide at 466995 (i.e. north of the drilled zone at Main Creek).

   An initial programme would consist of an access track across each promising area cut deeply enough to distinguish greenschist bedrock from clay-breccia deposits indicative of underlying magnesite. Promising zones would then be tested with shallow percussion drilling. If successful, further tracks and drilling would be undertaken and finally diamond drilling to establish reserves.

3) Particularly if the search for a better mine site proves unsuccessful, it will become more necessary to find the western boundary of the known deposit. This could be done with track making and percussion drilling, but a diamond drillhole from the vicinity of MC 8 would be desirable because access at this site exists.

   Greenschist and amphibolite which outcrop here can be correlated with core in MC 1 and MC 2 diamond drillholes.

4) If our main priority is to quickly prove a significant mineable magnesite deposit, devoid of overburden problems, then the ridge area immediately to the south of the natural Main Creek costean at the proven "Deposit" should be examined first.

H. SHANNON, M. EDYVEAN, J. WOODMAN.

31 May, 1982.

8. REFERENCES

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APPENDIX A

GEOLOGICAL LOGS OF SPECIMEN REEF DRILLING PROGRAMME

755026

DRILLING LOG SPECIMEN REEF N° 1.

LOCATION: SPECIMEN CREEK, SAVAGE RIVER AREA, EL4/61

MAP N°: 7915 – III, HORTON 1:50,000

CO-ORDINATES: 352250 mE, 8541116 mN (AMG) — SPECIMEN REEF GRID: 20mS/50W

R.L OF SITE: 416 METRES

INCLINATION: AT COLLAR 45° BEARING: E ALONG TRAVERSE (130° Mag.)

CORE SIZE: HQ – 0 to 15 metres, NQ – 15 to 150 metres CORE RECOVERY: 81%

DRILL : DIAMOND DRILL – MINDRILL 10L (TYPE 250)

DRILLER : ASSOCIATED DIAMOND DRILLERS

DATE COMMENCED: 14th JANUARY 1982

DATE COMPLETED: 18th FEBRUARY 1982.

FINAL DEPTH: 150 METRES

755027

SPECIMEN REEF DDH 1. GEOLOGICAL LOG

FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
0.00	5.60	1.20	21	extensive core losses. recovered material broken; 0.30m. yellowish green leached foliated siltstone, low density. mainly quartz silt preserved; ~~+~~ qtz - feldspar chlorite rock. 0.90m. orange foliated siltstone cf. above.	5.60	
5.60	6.90	0.50	38	yellowish orange silt with chips of vein quartz and foliated siltstone. cf. above.	1.30	
6.90	8.60	0.95	50	yellowish green leached foliated siltstone CSA 30° some yellowish orange silt. cf. above. In lower portion 3 leached quartz sandstone beds? to 1.5cm.	1.90	
8.6	15.00	1.90	30	0.7m. yellowish green leached foliated siltstone. 0.35m greenish grey leached foliated siltstone with bands to 1 cm light grey fine sandstone. CSA 45°. 0.85m. leached grey graphitic micaceous foliated siltstone. ~~1~~ 1cm. band black graphite rich siltstone.	6.40	
15.00	17.80	1.15	41	~~1.10~~ m grey and ~~orange~~ yellow micaceous ~~sandstone~~ feldspar schist, broken with limonite stained joints and spots often pyrite blebs; ~~including~~ 0.5 m. graphitic phyllite and chlorite phyllite.	2.80	
17.80	22.35	0.70	15	0.6m grey micaceous ~~sandstone~~ feldspar schist with limonite spots. 0.1m. grey silty clay, and limonite stained ~~sandstone~~ feldspar schist with relict grey ~~sandstone~~ feldspar schist of pyritic ~~sandstone~~ feldspar schist, pyrite to 20%, minor yellow ~~sandstone~~ feldspar schist	4.55	
22.35	24.55	1.15	52	0.20m. ~~grey~~ feldspar and chlorite - ~~feldspar~~ schist, minor pyrite 0.25m. quartz body with chlorite - feldspar schist. 0.70m pale grey to greenish grey. mica - chlorite feldspar schist. CSA 40°. limonite spots and minor pyrite	2.20	

Continued over

ASSAY DATA

SAMPLE No.	FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	ASSAY RESULTS

755028

GEOLOGICAL LOG

FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
24·55	28·50	0·70	18	greenish grey feldspar-~~muscovite~~ chlorite schist with limonite spots and minor pyrite, 1 cm. quartz body at base.	3·95	
28·50	31·30	2·00	71	0·3 m. greyish yellow leached feldspar schist. 0·12 m. orange brown limonite stained leached feldspar schist. 1·38 m. greenschists alternating bands mainly 1-2 cm. rest upto 1 cm chlorite rich and albite rich material. with some bands of feldspar schist. limonite stained joints. CSA 55°	2·80	
31·30	35·29	1·85	46	1·80 m. grey-green feldspar schist and interlaminated chlorite and feldspar-chlorite schist limonite stained joints. limonite spots + minor pyrite. minor quartz at base 0·05 m. weathered basalt. (probably representative of most core loss CSA 60°, locally 15°	3·99	
35·29	36·70	1·20	85	yellowish grey and orange limonite stained albite schist grading to foliated meta-andesite. with pyrite rich segregations. In lower half some fresh cores of greenish grey foliated meta-andesite. with pyrite rich albite 'vein' segregations To 1 cm.	1·41	
36·70	38·25	0·86	55	0·50 m. yellowish grey to orange limonite stained foliated meta-andesite grading to albite-chlorite schist. with some fresh grey cores with pyrite. some limonitic feldspar veins with some relict pyrite 0·05 m pinkish grey weathered albite-chlorite schist.	1·55	
38·25	42·24	1·25	31	1·0m grey, fresh, and yellow and orange limonite stained albite-chlorite schist with some veins of albite-pyrite 0·25 m. limonited albite ~~schist~~ with / chlorite rich schist with minor quartz bodies	3·99	

Continued over

ASSAY DATA

SAMPLE No.	FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	ASSAY RESULTS

GEOLOGICAL LOG

FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
42.24	44.44	2.00	91	~~tonal~~ inter-laminated feldspar rich and chlorite rich greenschist with minor pyrite laminae approx 2mm quartz bodies at 43.20 and 43.50, limonite stained with more pyrite 44.00 - 44.15 below 44.30 chlorite rich greenschist, broken CSA 60°	2.20	
44.44	48.40	3.05	77	inter-laminated feldspar rich and chlorite rich greenschist. quartz bodies at 45.30, 45.50, 45.60 45.65, 45.70, 45.85, limonite stained joints, minor pyrite from 46.22 broken chlorite rich greenschist (zone of core loss) then to end, laminated greenschist as above.	3.95	
48.40	50.40	1.10	55	0.20m. laminated greenschist, as above. quartz body near base. (core loss zone). 0.05m quartz (core loss zone) 0.15m. laminated greenschist, as above, with quartz - chlorite vein. 0.35 chlorite dominant laminated greenschist with ptygmatic quartz veins. 50.05 - 50.40 laminated to albite dominant greenschist.	2.00	

Continued over

ASSAY DATA

SAMPLE No.	FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	ASSAY RESULTS

755030

GEOLOGICAL LOG

FROM (metres)	TO (metres)	RECOVERY (metres)	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
50.40	53.70	3.6	79	CSA 70° Carbonaceous schist, laminated with alternating 'albite' rock and chlorite rich (aphanitic ± 1mm, albite rich lenses predominant. at 50.60 zone traversed by pink carbonate vein (? magnesite, will not fizz in cone HCl.) CVA 30°, adjacent bleached alteration zone 3cm wide with carbonate or talc replacing chlorite, schistosity fades relative to normal rock. at 51.50. minor euhedral pyrite 51.60 - 53.5 as above but with ptygmatic quartz veins and boudins to 2cm, and contorted schistosity 53.5 - 53.7 albite - 'carbonate' schist.	3.30	
53.7	55.00	0.6	46	CSA 63° 'albite - talc' schist. extensive core loss 53.9 - 54.6. 54.7 - 54.8 quartz vein with minor pyrite	13	
55.00	58.10	3.10	100	55.00 - 55.40 albite - talc schist. trace pyrite 55.30 - 55.40 55.40 - 55.80 albite rich albite/chlorite schist. 55.80 - 56.05 as above, with pink carbonate veins core broken. 56.05 - 56.20 chlorite/albite schist with 5 cm ptygmatic quartz vein, minor pyrite near top 56.20 - 58.10 albite/chlorite schist, laminae spindly and contorted, occ minor pyrite 57.00, boudins of quartz to 1cm from 57.40 - 58.10.	3.10	
58.10	61.20	3.10	100	laminated green-grey schist and slightly foliated green-grey metavolcanic quartz bodies in laminated material 'metavolcanic rock' at 58.30 - 58.35, 58.45 - 59.35 59.40 - 59.60 sporadic minor pyrite blebs at 60.70 - 60.80 albite - talc schist with 5% pyrite	3.10	

Continued over

ASSAY DATA

SAMPLE No.	FROM (metres)	TO (metres)	RECOVERY (metres)	RECOVERY %	ASSAY RESULTS

GEOLOGICAL LOG

FROM ft. · ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
61.20	63.20	~~2.00~~ 1.97	98	61.20 - 61.50 laminated chlorite/albite schist, albite rich with 1% pyrite 61.30 - 61.35 metavolcanic tuff/porphyritic 61.50 - 61.65 laminated albite/chlorite rock with some chlorite schist beds to 2cm 61.65 - 63.17 foliated greenish grey metavolcanic tuff/porphyritic chlorite/albite rock. at 62.15 chlorite schist with quartz boudin. at 62.75 - 62.80 and 63.00 - 63.17 banded albite/talc rock with minor pyrite	~~1.97~~ 2.00	
				CSA 60°		
63.20	66.50	3.30	100	63.20 - 63.45. greyish grey foliated metavolcanic. (ex basic andesite?) quartz replacement at top 2cm. traversed by haematite veins with dolomite and some calcite, also visible CVA 10° indicating near vertical attitude paralleling DDH. no gold. the metavolcanic contains generally 1% pyrite with segregations (10% of rock) containing 10% pyrite and some talc 63.45 - 66.50 greyish grey foliated metavolcanic with minor pyrite (1%) some low CVA carbonate veins with talc-replacing-chlorite wall alteration. also minor quartz in veins themselves minor pyrite, mulch, haematite.	3.30	
66.50	69.60	3.10	100	foliated metavolcanic (greenish grey) alternating with (1) interlaminated albite rich and chlorite rich laminated greenschist with relict boudins of metavolcanic and segregated, ptygmatic quartz bodies: greenschist at 66.60 - 66.70, 66.85 - 67.00 (includes large quartz masses) 67.06 - 67.07, 67.11 - 67.12, 67.78 - 69.18. low CVA carbonate veins with wall rock alteration, minor pyrite disseminated and in segregated blebs.	3.10	
69.60	72.74	3.14	100	as above, greenschist intervals with quartz bodies 70.60 - 70.95; 71.30 - 71.50, 71.80 - 72.00	3.14	

Continued over

ASSAY DATA

SAMPLE No.	FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	ASSAY RESULTS

GEOLOGICAL LOG

FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
72.74	75.90	3.16	100	as above. chlorite schist with quartz bodies 72.99 - 73.10	3.16	
				73.65 73.70 a poorly laminated 74.15 - 75.40.		
75.90	79.07	3.17	100	75.90 - 76.02 quartz feldspar / chlorite schist. feldspar layers to 0.5 m.m.	3.17	
				chlorite layers to 0.5 m.m.		
				76.02 - 76.13 dolomite vein.		
				76.13 - 76.20 feldspar/chlorite schist. as above.		
				76.20 - 76.90 feldspar schist with parting of chlorite		
79.07				0.5 mm between "metamorphic layers" 2m - 2cm.		
				of quartz - feldspathic bands. quartz bodies at.		
				77.50 - 77.60 77.85 - 77.70 77.95 - 78.02		
				band without chlorite partings 77.87 - 77.95.		
				— — — —		
79.07	79.55	3.18	100	feldspathic schist with chlorite dominant partings between layers pyrite common at 79.55.	3.18	
79.55	80.90			grey metavolcanic 'pepper and salt' texture probably 'acidic' andesite. quartz segregation in chlorite - muscovite phyllite at 80.25 - 80.40		
		3.18		pyrite in blebs 10% of rock 80.64 - 80.69.		
80.90	81.95			feldspar schist and muscovite/chlorite phyllite with.		
				stringers quartz segregations and relicts of foliated		
				"acidic andesite"		
81.95	82.25			'acidic andesite'.		
				— — — —		
82.25	82.95	3.13	100	"acidic andesite"	3.13	
82.95	83.94			contorted feldspar schist and chlorite muscovite phyllite with relict bodies of "acidic andesite" altering to quartzite? 82.80 - 83.94		
83.94	84.40			micaceous quartzite, talc - muscovite schist and		
				quartz segregations. pale yellowish grey		
84.40	85.38			pale grey micaceous quartzite (ex rhyolite?).		

Continued over

ASSAY DATA

SAMPLE No.	FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	ASSAY RESULTS

GEOLOGICAL LOG

FROM ft. · ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
85·38	85·50	3·13	100	CSA 60° "quartzite" (variably altered andesite andesite with chlorite → talc interbanded dolomite schist, talc mica phyllite, quartz-quartzite (talc altered and silicified andesite) and some relict acidic andesite (pale grey)	3·13	
85·50	85·70					
85·70	86·83					
~~86·83~~	~~88·51~~			pale grey "acidic" andesite with brown foliation and carbonate (mainly dolomite) veins		
86·83	88·51			schistose intervals with quartz segregations 86·20-86·50, with some relict feldspar phenocrysts talc alteration gives yellow grey colour adjacent to carbonate veins notably 8775-8796		
88·51	89·00	3·13	100	acidic andesite, grey some bands schistose yellow brown with talc alteration and some quartz bodies	3·13	
~~89·00~~	~~89·20~~					
89·00	89·20			yellow grey talc altered and ? silicified schist. some pyrite		
89·20	91·64			schistose andesite, altered yellow grey andesite, quartzschist and quartz, acidic andesite with relict phenocrysts quartzite at 89·30-89·35 89·47-89·60 89·88-89·82. 91·60-91·64.		
~~91·64~~	~~94·80~~	~~3·16~~				
91·64	94·80	3·16	100	pale grey to medium grey andesite with feldspar phenocrysts, grading to pale grey schistose meta andesite with quartzschist - quartz intervals at. 91·64-91·70 91·95-91·98, 92·20-92·25 (qtz), 92·80-92·98 93·20-93·28, 93·58-93·70, 93·82-93·91.	3·16	
94·80	98·45	3·65	100	pale to medium grey foliated meta-andesite and andesite with relict phenocrysts with quartzschist / quartz intervals 95·43-95·56 96·45-96·52, 96·77-96·82. and some smaller intervals	3·65	

Continued over

ASSAY DATA

SAMPLE No.	FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	ASSAY RESULTS

GEOLOGICAL LOG

FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
98·45	100·36	1·91	100	pale to medium grey andesite with some greenschist with quartz bodies 98·82 – 98·93. carbonate veins with low CVA. CSA 65°.	1·91	
100·36	103·47	3·11	100	pale to medium grey andesite and schistose metaandesite with some quartz and greenschist. pyrite common in blebs 102·80 – 103·47 (greenschist 100·77 – 101·13, quartz body 102·02 – 102·11, greenschist with pyrite 102·33 – 102·75 at 103·40. carbonate vein with chalcopyrite and pyrite.	3·11	
103·47	104·95	3·18	100	foliated meta-andesite, greenschist, banded 'albite' schist with chlorite partings. pyrite blebs common minor chalcopyrite at 103·66. in carbonate veins.	3·18	
104·95	105·90			and grey foliated meta andesite		
105·90	105·42			grey foliated meta andesite, with purplish and green bands		
105·42	106·65			foliated meta andesite, pale grey to mid grey andesite, some carbonate veins. quartz bodies at base.		
106·65	108·75	3·15	100	foliated meta andesite and andesite pyrite abundant 106·82 – 106·88. in blebs	3·15	
108·75	108·90			banded schist/phyllite with bands 0·5 – 2cm of green chlorite dominant and brown ? muscovite dominant phyllite with bands of 'albite' pyrite rock.		
108·90	109·05			foliated meta andesite		
109·05	109·80			banded grey/tan brown and green phyllite with minor albite/pyrite rock and quartz bodies		
109·80	111·80	3·11	100	banded brown and green phyllite with quartz bodies and 'albite' pyrite. CBA 73°	3·11	
111·80	112·91			foliated and massive meta-andesite.		

Continued over

ASSAY DATA

SAMPLE No.	FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	ASSAY RESULTS

GEOLOGICAL LOG

FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
112.91	115.85	3.09	100	foliated meta andesite and andesite. minor quartz bodies and carbonate veins	3.09	
115.85	115.96			? uniform green-brown chlorite/mica phyllite schist.		
115.96	116.00			banded green and brown " " "		
				with quartz bodies at 115.85, 115.60, 115.78		
~~116.00~~						
116.00	118.65	2.65	100	banded and contorted brown and green phyllite sporadic quartz bodies, carbonate veins pyrite ~~bands~~ with bands	2.65	
118.65	119.55	3.12	100	banded brown and green phyllite, minor pyrite at base.	3.12	
119.55	119.85			andesite. (fine grained)		
119.85	120.65			brown and green phyllite some pyritic albite layers		
120.65	121.15			andesite		
121.15	121.46			brown to green phyllite		
121.46	121.77	52		banded ~~brown~~ green and ~~green~~ brown phyllite ~~partings~~ and ~~albite rich bands to 5cm~~		
121.77	123.50	3.18	100	banded to uniform green + brown phyllite.	3.18	
123.50	124.95			pale grey to grey brown banded meta-andesite quartz at 124.75		
124.95	125.85	3.10	100	grey to grey brown foliated meta andesite with phyllite at. 124.95 - 125.03 and 125.72-125.75	3.10	
125.85	126.55			pale grey altered (talcose) metaandesite		
~~125.55~~ 125.85	~~126.65~~ 126.55			carbonate vein - calcite, dolomite, quartz.		
126.65	127.35			pale grey altered (talcose) meta-andesite		
127.35	127.72			grey green andesite		
127.72	128.05			foliated meta-andesite grading to phyllite green to brown		

Continued over

ASSAY DATA

SAMPLE No.	FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	ASSAY RESULTS

GEOLOGICAL LOG

FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
128.05	128.45	3.15	100	green and brown banded phyllite	3.15	
128.45	131.20			grey foliated meta-andesite with green-brown phyllite at 128.85, with pyrite, pyrite/albite at 130.45 quartz at 130.55 - 130.60		
131.20	134.30	3.10	100	green and brown phyllite with ptygmatic quartz-carbonate veins, contorted in places some relicts of andesite with phenocrysts. quartz 131.98 - 132.08, 132.35 - 132.47 132.58, 132.70 - 132.75, 133.10; 133.40 - 133.70, 134.17 - 134.37.	3.10	
134.30	136.20	3.15	100	green and brown phyllite with ptygmatic quartz veins and some minor carbonate veins CSA 90° minor pyrite quartz 134.66 - 135.08, 136.45 - 136.61, 136.85 - 136.91, 136.16 - 136.20	3.15	
136.20	136.40			grey foliated meta-andesite, minor pyrite		
136.40	137.00			green and brown phyllite with minor carbonate veins		
137.00	137.30			grey pyritic meta-andesite and some phyllite. 137.08 - 137.12 pyrite blebs 5%		
137.30	137.41			green phyllite with quartz segregations.		
137.41	137.45			grey meta-andesite.		
137.45	138.90	3.15	100	green and brown phyllite with quartz and minor pyrite, some relicts of porphyritic meta-andesite. pyrite 3% 138.37 - 138.47 incipient talc alteration	3.15	
138.90	139.20			pale yellowish grey andesite (minor tal. alteration		
139.20	139.40			green and brown phyllite with areas of talc alteration trace pyrite		
139.40	139.97			pale grey silicified metavolcanic/ex phyllite. quartz body 139.90 - 139.97 minor pyrite (1%) concentrated in stylolites		
139.97	140.60			pale greyish yellow schistose metavolcanic with talc alteration and minor pyrite		

Continued over

ASSAY DATA

SAMPLE No.	FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	ASSAY RESULTS

GEOLOGICAL LOG

FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
140.60	141.20	1.0	100	greenish yellowish grey phyllite with talc alteration, minor pyrite throughout. muscovite prominent 141.05 - 141.20; pyrite 5% 141.07 - 141.02. CSA 55°; From 140.85 - ~~141.02~~ 141.02 Dolomite - calcite - haematite GOLD vein true width 1.5cm. CVA 15° ∠ schistosity/vein 30°. GOLD associated with haematite 140.88 - 140.91 and 140.93 - 140.97. remainder of vein is carbonates only. GOLD approx 5% of gold bearing interval.	1.0	140.85 - send 140.95 TO E.R. Hinds SYDNEY OFFICE
141.20	141.60			pale yellow slightly foliated and silicified. talc - altered metavolcanic with minor pyrite blebs to 5% at 141.45. quartz body at 141.60.		
141.60	147.02	3.11	100	pale grey to greyish yellow slightly foliated and silicified talc altered metavolcanic with minor pyrite blebs ~~from~~ from 141.60 - 141.62 quartz, from 141.66 - 141.95 core traversed by carbonate vein (dolomite - calcite) (pyrite concentrated on stylolite at 147.00) CSA 60° CVA 10° ∠ schistosity/vein 50°	3.11	
147.02	147.80			talc-altered ~~phyllite~~ ~~yellowish~~ greyish yellow. minor pyrite ~~pyrite 1% at 147.13, 148.73 148.75~~ pyrite to 1% at 147.63, 148.70, 148.75		
147.80	144.35			dark green chlorite phyllite with minor carbonate veins. minor pyrite throughout. pyrite to 1% at 143.44, 143.58 - 143.59, 143.66, 143.72 144.05 - 144.09.		
144.35	144.71			pale greyish yellow talc altered phyllite, silicified from 144.64. From 144.69 carbonate vein.		

Continued over

ASSAY DATA

SAMPLE No.	FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	ASSAY RESULTS

755038

GEOLOGICAL LOG

FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
144.71	144.92	2.90	<100	~~Bt~~ silicified. ex greyish yellow talc altered phyllite. 70% carbonate vein. including clasts of silicified rock. (above).	3.09	
144.92	145.15			greyish yellow talc-altered phyllite		
145.15	147.80			green and brown phyllite with minor pyrite bands to 15% pyrite at 145.40, 145.44 145.88 ~~146.35 [illegible] pyrite at 145.89~~ 146.35, 146.53, 147.14 quartz at 145.62 - 145.64. ~~contorted albite~~ folded "albite" veins 147.80 - 147.80		
~~147.80~~						
147.80	148.0	3.38	100	~~green phyllite with [illegible]~~ folded metaandesite ~~and esite~~ green phyllite with siliceous bands with 15% pyrite	3.38	
148.00	149.16			green phyllite with pyritic bands and areas of talc alteration (adjoining carbonate vein, See below)		
149.16	149.92			foliated meta andesite (green) and talc-altered foliated meta-andesite (pale greyish yellow) adjoining dolomite - calcite vein ~~of~~ 7cm true thickness C.U.A 10° CSA 50° / vein - sub vertical 60°		
149.2	150.18	.98	100	green foliated meta-andesite.	.98	

Continued over

ASSAY DATA

SAMPLE No.	FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	ASSAY RESULTS

755039

Drilling Log Specimen Reef No. 2

Location	: Specimen Creek, Savage River Area EL 4/61
Map No.	: 7915- 111, Horton 1:50,000
Co-ordinates	: ^{35}2125mE, ^{54}/1116mN (AMG)- Specimen Reef Grid: 4000,0E
R.L. of site	: 421 metres
Inclination	: At Collar 55°, Bearing: 100° magnetic
Core Size	: HQ- 0 to 6 metres, NQ- 6 to 120 meters, Core Recovery: 73%
Drill	: Diamond Drill - Mindrill 10L (Type 250)
Driller	: Associated Diamond Drillers
Date Commenced	: 13th Febraary 1982
Date Completed	: 21st February 1982
Final Depth	: 120 metres

Specimen Reef DDH2 — GEOLOGICAL LOG — Page: 1 of 12

FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
0.00	3.00	1.74	58	mica greenschist moderately foliated CSA = 45 0.00 - 1.40m greenschist is strongly weathered to hematite and limonite between foliation bands 1.40m - 3.00m greenschist is moderately weathered with strongly weathered zones along fractures. Also small blebs of phyllite in schist	3.00	
3.00	6.00	1.95	65	mica greenschist strong foliation CSA = 50° interval predominately weathered to hematite with minor limonite staining in small banded areas. Small blebs of phyllite throughout interval	3.00	
6.00	9.25	1.90	58	mica greenschist strong foliation CSA = 50° 6.00 - 7.15 core is red & white in color, numerous small quartz phenocrysts within bands. Also pitted texture with numerous vugs lined with hematite - possibly ~~after~~ weathered out feldspars. 7.15 - 9.25 greenschist contains bands of phylite approximately 1cm - 3cm thick parallel to foliation. Moderate limonite staining on fractured surfaces. Weak limonite staining locally.	3.25	
9.25	13.50	.90	21	mica greenschist with phylite bands CSA = 50° considerable core loss Moderate limonite staining on fractured surfaces. Limonite & hematite staining in foliated bands of greenschist. 13.00 - 13.50 core consists of phyllite chips.	4.25	

Continued over

ASSAY DATA

SAMPLE No.	FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	ASSAY RESULTS

Specimen Reef DDH 2 — GEOLOGICAL LOG — Page: 2 of 12

FROM ft.	FROM ins.	TO ft.	TO ins.	RECOVERY ft.	RECOVERY ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
13.50		15.95		1.35		55	greenschist with phyllide bands CSA = 50 Same as interval 9.25 – 13.50m except with two small quartz veins parallel to foliation.	2.45	
15.95		17.20		1.05		84	micaceous greenschist strong foliation CSA = 50° Moderate to strong limonite staining on fractures and adjacent to quartz veins Weak hematite staining locally Weak limonite staining in foliated bands Ptygmatic quartz parallel and cross-cut foliation throughout the entire interval	1.25	
17.20		21.70		.77		17	micaceous greenschist same as interval 15.95-17.20 with slightly more ptygmatic quartz veins. Also extensive core loss	4.50	
21.70		25.00		.86		26	Phyllite and greenschist extensive core loss again. Strong foliation CSA = 45° Weak limonite and hematite staining locally. 2 minor ptygmatic qtz veins	3.30	
2500		25.55		.25		45	Phyllite and greenschist same as interval 21.70 - 25.00m without quartz veins	.55	
25.55		28.80		2.90		89	Phyllite and greenschist. Numerous ptygmatic qtz veins parallel or nearly parallel to foliation CSA = 40° Qtz veins contain leached large leached out vugs lined with hematite	3.25	

Continued over

ASSAY DATA

SAMPLE No.	FROM ft.	FROM ins.	TO ft.	TO ins.	RECOVERY ft.	RECOVERY ins.	RECOVERY %	ASSAY RESULTS

Specimen Reef DDH 2 — GEOLOGICAL LOG —

FROM ft.	FROM ins.	TO ft.	TO ins.	RECOVERY ft.	RECOVERY ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
							staining. Limonite and hematite staining is strong adjacent to fractured surfaces. Otso weak limonite found locally within foliated bands 26.80m small zone of pyrite crystals, first appearance of fresh sulfides		
28.80		30.65		1.45		78	Phyllite and greenschist same as 25.55-28.80. With pyrite inclusions locally.	1.85	
30.65		33.37		1.36		50	greenschist with small bands of phyllite locally. Core is filled with small vugs lined with limonite, they appear to be weathered out feldspar phenocrysts Minor quartz veins with leached out zones. Limonite and hematite are found along fracture surfaces and quartz veins. greenschist is moderate to strongly foliated CSA = 50°	2.72	
33.37		36.60		1.01		31	greenschist with small bands of phyllite locally. Same as interval 30.65 - 33.37m 33.37 - 33.80 quartz vein area with carbonate leached zones and strong limonite staining	3.23	
36.60		38.95		1.60		68	greenschist with small bands of phyllite locally. Moderate to strong foliation CSA = 60°. Several small ptygmatic quartz veins containing cavities with limonite staining. Limonite and hematite are found along fractures. 36.60 - 37.00 greenschist with small	2.35	

Continued over

ASSAY DATA

SAMPLE No.	FROM ft.	FROM ins.	TO ft.	TO ins.	RECOVERY ft.	RECOVERY ins.	RECOVERY %	ASSAY RESULTS

Specimen Reef DDH2 — GEOLOGICAL LOG — Page: 4 of 12

FROM ft.	FROM ins.	TO ft.	TO ins.	RECOVERY ft.	RECOVERY ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
							small vugs lined with limonite they appear to be weathered out feldspar phenocrysts.		
38.95		40.60		1.45		88	Greenschist Moderately foliated CSA = 60 limonite staining strong on fractured surfaces, and weak limonite throughout interval 38.95 – 39.60 4 ptygmatic quartz veins in this zone containing cavities with limonite and hematite staining. Possibly weathered out carbonate cavities	1.65	
40.60		43.00		1.75		73	Greenschist Moderately foliated CSA = 50° Rock consists of large bands of albite – carbonate. Bands are separated by small laminations of micas. Containing small liesegang bands. Weak limonite throughout interval. Strong limonite staining on fractured surfaces. Small weathered out cavities locally – appear to be weather out feldspars Very little quartz vein material	2.40	
43.00		45.55		.79		31	Greenschist same as [redacted] 40.60 – 43.00m	2.55	
45.55		49.65		.87		21	Micaceous greenschist with bands of phyllite locally. Numerous ptygmatic qtz vein and adjacent cavities with strong limonite staining. Strong limonite staining of fractured surfaces. Weak limonite staining within foliated bands. Extensive core loss.	4.10	

Continued over

ASSAY DATA

SAMPLE No.	FROM ft.	FROM ins.	TO ft.	TO ins.	RECOVERY ft.	RECOVERY ins.	RECOVERY %	ASSAY RESULTS

Specimen Reef DDH 2 — GEOLOGICAL LOG — Page: 5 of 12

FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
49.65	51.27	1.50	93	graphitic phyllite & schist containing alternating bands of albite, ranging from .1mm to 8mm in thickness, low density, moderately foliated CSA 60° 51.75m - 51.80m, 52.95m - 52.98, 53.45 - 53.48m ptygmatic quartz veins with no prefered orientation. Minor pyrite in and adjacent to quartz veins	1.62	
51.27	52.55	1.28	95	graphite phyllite & schist with lammenated bands of albite, ranging from .1mm to 5mm thick, moderately foliated but weakly foliated locally CSA 45° 51.54 - 5157, 51.74 - 51.78, 52.05 - 52.31 ptygmatic quartz veins generally ~~fatte~~ parallel foliation - CVA 45° linear inclusions of pyrite in quartz veins, up to 3mm thick, ~~also~~ extending through the core approx. parellel to foliation, also disseminated pyrite adjacent to quartz veins in schist	1.28	
52.55	55.00	2.26	92	52.55 - 53.26m graphite phyllite schist same as above, except numerious band of chlorite - albite greenschist, ~~a~~ displaying a wide variety of sizes, commonly located adjacent to ptygmatic quartz veins 52.78 - 52.82, 52.97 - 53.02 ptygmatic quartz veins parallelving foliation - CVA 45° 53.26 - 55.00 chlorite - albite - tale greenschist with smaller twisted ptygmatic quartz veins (5mm to 20mm) throughout. Minor disseminated pyrite found locally CSA - 45°	2.45	

Continued over

ASSAY DATA

SAMPLE No.	FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	ASSAY RESULTS

Specimen Reef DDH 2 — GEOLOGICAL LOG —

FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
55.00	58.10	2.93	95	chlorite-albite greenschist, numerous sheared ptygmatic quartz veins (3mm to 30mm) throughout CVA 60°-80°. Foliation is moderate to strong CSA 60°. 56.05-58.10m rock displays what appears to be secondary foliation nearly perpendicular to primary foliation 58.04 albite vein leached of carbonates 1cm thick. Only minor disseminated pyrite throughout greenschist	3.10	
58.10	61.15	3.05	100	chlorite-albite greenschist CSA 60° 58.33-58.35, 58.54-58.56, 59.10-59.13 59.88-60.01 ptygmatic quartz veins CVA 30°-60°. Rock is moderately foliated. Trace of pyrite locally.	3.05	
61.15	64.15	2.70	90	chlorite-albite greenschist CSA 40°-60° Only 2 small ptygmatic quartz veins less than 1 cm thick CVA-70° Disseminated pyrite in greenschist, stronger pyrite and chalcopyrite in the numerous small leached albite-carbonate veins in area 63.06 — 64.15	3.00	
64.15	66.32	1.57	72	64.15-6605 chlorite-albite greenschist CSA 40°-70° 64.38-64.40, 64.75-64.78m ptygmatic quartz veins with no preferred orientation 64.27m small ~1-2mm inclusions of chalcopyrite; 64.87 and 65.17m numerous large pyrite inclusion up to 1cm in dia. 6605-6632 silicified andesite light grey in color with disseminated pyrite.	2.17	

Continued over

ASSAY DATA

SAMPLE No.	FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	ASSAY RESULTS

Specimen Reef DDH 2 — GEOLOGICAL LOG —

FROM ft.	FROM ins.	TO ft.	TO ins.	RECOVERY ft.	RECOVERY ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
66.32		66.97		.57		88	chlorite - albite greenschist, CSA 70°. 66.47 - 66.48, 66.55 - 66.59, 66.82 - 66.97 ptygmatic quartz veins, generally parallel to foliation, CVA 50°-70°. Rock exhibits weak to moderate foliation. Tracy of pyrite locally. 66.82 - 66.97 sericite adjacent to quartz vein	.65	
66.97		69.19		1.97		89	meta-andesite, weakly foliated CSA 60° 68.84 - 68.95m zone of ~~quartz~~ ptygmatic quartz with adjacent sericite - chlorite - albite greenschist containing small limonite after pyrite pseudomorphs No sulfide mineralization was found in ~~greenschist~~ meta-andesite	2.22	
69.19		70.57		1.27		92	meta-andesite, weakly foliated CSA 60° No sulfide mineralization. 69.37 - 69.47m, 70.11 - 70.15m zones of ptygmatic quartz with adjacent sericite - chlorite - albite greenschist with moderate foliation.	1.38	
70.57		73.00		2.33		96	Chlorite - albite greenschist with bands ~~interbed~~ of meta-andesite CSA 50°-70° Weak to moderate alteration. A trace of disseminated pyrite found locally. 71.27 - 71.31, 71.80 - 71.91, 72.21 - 72.34, 72.48 - 72.55 m zones of ptygmatic quartz veins with adjacent phyllite bands. Qtz veins exhibit 1mm to 5mm inclusions of pyrite and also contain small leached carbonate zones locally.	2.43	

Continued over

ASSAY DATA

SAMPLE No.	FROM ft.	FROM ins.	TO ft.	TO ins.	RECOVERY ft.	RECOVERY ins.	RECOVERY %	ASSAY RESULTS

Specimen Reef DDH 2 — GEOLOGICAL LOG —

FROM ft.	FROM ins.	TO ft.	TO ins.	RECOVERY ft.	RECOVERY ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
73.00		76.05		3.05		100	meta-andesite, weak foliation CSA = 70° 74.70 - 74.72 ptygmatic quartz vein containing pyrite inclusions. 73.54 - 73.55m, 73.80 - 73.92m zones of small (less than 2mm) carbonate veins 74.72 - 74.90 zone of leached carbonate - albite veins, up to 15mm thick Pyrite inclusion are found throughout this interval, but slightly more numerious near carbonate & quartz veins	3.05	
76.05		78.38		1.70		73	meta-andesite, weak foliation CSA = 60° 77.54 - 78.34 meta-andesite is inter-mixed with chloride-albite greenschist containing sericite locally. 76.99 - 77.10 quartz vein with carbonate-albite blebs, numerious small inclusions of pyrite in vein, vein exhibits no consistant attitude.	2.33	
78.38		81.55		3.05		96	chlorite-albite greenschist, CSA = 60° Pyrite in foliation bands 78.38 - 79.30m zone containing numerious contorted quartz veins with small leached albite-carbonate blebs. 80.03 - 80.04, 80.82 - 80.83, 81.28 - 81.55 ptygmatic quartz veins commonly parelleling foliation CVA = 45° - 60°, with several small albite-carbonate blebs	3.17	
81.55		84.60		2.95		97	meta-andesite, weak foliation CSA = 60° 81.55 - 81.87, 81.55 - 82.37, 84.18 - 84.60 zones of quartz veins and strongly silicified	3.05	

Continued over

ASSAY DATA

SAMPLE No.	FROM ft.	FROM ins.	TO ft.	TO ins.	RECOVERY ft.	RECOVERY ins.	RECOVERY %	ASSAY RESULTS

Specimen Reef DDH 2 — GEOLOGICAL LOG —

FROM ft.	FROM ins.	TO ft.	TO ins.	RECOVERY ft.	RECOVERY ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
							greenschist, also containing albite-carbonate veins and leached veins, elongate inclusion of pyrite parallel foliation in qtz vein areas. The adjacent meta-andesite has been metamorphosed to a moderate to strongly foliated greenschist		
84.60		87.73		2.97		95	meta-andesite, weak foliation with moderate to strong foliation nearly quartz veins. Numerious small quartz veins containing small blebs of albite-carbonate, veins have no prefered orientation. Elongate inclusion of pyrite found locally in qtz veins	3.13	
87.73		90.85		3.00		96	meta-andesite CSA = 60°-70° weak foliation, with equal granular texture 87.73-88.69 area of numerious quartz veins. 40% of veins are ptygmatic with strongly foliated greenschist adjacent to veins. 60% of veins are planar with consistant thicknesses, containing small elongate inclusions of pyrite. All veins have small carbonate-albite blebs	3.12	
90.85		93.95		3.00		97	meta-andesite CSA = 60 weak foliation numerious qtz veins containing minor pyrite. Smaller veins exhibit albite-carbonate zones. Disseminated pyrite throughout rock.	3.10	

Continued over

ASSAY DATA

SAMPLE No.	FROM ft.	FROM ins.	TO ft.	TO ins.	RECOVERY ft.	RECOVERY ins.	RECOVERY %	ASSAY RESULTS

Specimen Reef DDH 2 — GEOLOGICAL LOG — Page: 20 of 12

FROM ft.	FROM ins.	TO ft.	TO ins.	RECOVERY ft.	RECOVERY ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
93.95		96.40		2.35		96	meta-andesite CSA 60°, weak foliation with disseminated pyrite. Numerious qtz veins containing minor pyrite. 94.44–95.18, 93.41–93.95 zones of quartz veins and highly silicified meta-andesite containing 2 zones of strong pyrite, and numerious albite-carbonate zones. Disseminated pyrite throughout rock.	2.45	
96.40		99.60		3.05		95	meta-andesite CSA = 50° weak foliation 96.40–97.97 zones of qtz veins and strongly silicified meta-andesite containing disseminated pyrite and calcite blebs. Veins show no prefered orientation. 97.97–98.7 band of chlorite-albite greenschist with foliated bands of pyrite inclusions, also small quartz veins with albite-carbonate	3.20	
98.60		102.60		3.00		100	meta-andesite CSA = 60° weak foliation 99.78–100.76 zone of qtz veins and strongly silicified meta-andesite containing numerious small inclusion of chalcopyrite locally with minor disseminated chalcopyrite & pyrite ~~100.53–100~~ 102.05–102.17 area of greenschist surrounding 2 qtz veins, which contain disseminated chalcopyrite and pyrite. area shows moderately well foliated bands Small qtz veins with carbonate-plagioclase inclusions are throughout entire interval.	3.00	

Continued over

ASSAY DATA

SAMPLE No.	FROM ft.	FROM ins.	TO ft.	TO ins.	RECOVERY ft.	RECOVERY ins.	RECOVERY %	ASSAY RESULTS

Specimen Reef DDH2 — GEOLOGICAL LOG —

FROM ft.	FROM ins.	TO ft.	TO ins.	RECOVERY ft.	RECOVERY ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
102.60		105.70		3.10		100	meta-andesite, CSA = 50°, weak foliation numerous quartz veins containing carbonate and plagioclase blebs and small elongate pyrite inclusions Disseminated pyrite throughout interval	3.10	
105.70		108.90		3.20		100	meta-andesite with several small zones of moderately foliated greenschist CSA = 60°. 105.85 – 106.50 zone containing disseminated chalcopyrite and pyrite. Numerious quartz veins containing carbonate and plagioclase blebs exhibit no pretered orientation with respect to foliation	3.20	
108.90		112.05		3.15		100	meta-andesite with small zones of moderately foliated greenschist. Commonly located near qtz veins CSA = 60° 109.55 – 109.69 white in color, area is composed entirely of calcite and quartz*. Disseminated pyrite throughout, and numerious qtz veins with carbonate – ~~altide~~ blebs.	3.15	
112.05		115.20		2.31		73	meta-andesite with small zones of moderately foliated greenschist locally. Several small qtz veins cross-cutting foliation at various angles. 112.58 – 112.55, 112.79 – 112.83 dolomitic calcite zones which parallel foliation CSA = 60°. Also other small plagioclase carbonate veins are numerious throughout the entire interval. 113.14 – 113.19 linear inclusions of pyrite * interval 109.55 – 109.69 small piece of core sent to CSRO for analyses.	3.15	

Continued over

ASSAY DATA

SAMPLE No.	FROM ft.	FROM ins.	TO ft.	TO ins.	RECOVERY ft.	RECOVERY ins.	RECOVERY %	ASSAY RESULTS

Specimen Reef DDH 2

GEOLOGICAL LOG

FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
				with strong disseminated pyrite in surrounding rock		
115.20	118.25	3.05	100	meta-andesite weakly foliated CSA = 50° Numerious small and large qtz veins throughout interval, several contain small carbonate blebs. Weak disseminated pyrite locally.	3.05	
118.25	120.00	1.75	100	meta-andesite weakly foliated CSA = 60° Numerious small quartz veins with random orientation throughout interval 119.72 - 119.75 small planar zone of large pyrite inclusions. Disseminated pyrite locally strong near quartz veins.	1.75	

Continued over

ASSAY DATA

SAMPLE No.	FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	ASSAY RESULTS

755052

Drilling Log Specimen Reef No 3

Location : Specimen Creek, Savage River Area, EL 4/61
Map No : 7915-III, Norton 1:50,000
Co-ordinates : 352184m E, 5410739m N, (AMG) - Specimen Reef Grid: 500S, 225E
R.L of site : 452 metres
Inclination : At collar 50°, Bearing: W along traverse (310° Magnetic)
Core Size : HQ - 0 to 15 metres, NQ - 15 to 70 metres, Core Recovery 55%
Drill : Diamond Drill - Mindrill 10L (Type 250)
Driller : Associated Diamond Drillers
Date Commenced : 24th February 1982
Date Completed : 25th February 1982
Final Depth : 70 metres

755053

Specimen Reef DDH 3 — GEOLOGICAL LOG — Page: 1 of 4

FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
000	3.00	.57	19	Clay and silt Yellow in colour. Silt appears to be composed of quartz grains. Interval is homogeneous throughout	3.00	
3.00	~~10.00~~ 15.00	5.10	43	Strongly weathered foliated rock. Strong hematite bands between laminations containing numerous small aggregate crystals, which appear to be quartz but could possibly be feldspar crystals, they compose up to 30% of rock locally. Strong hematite and strong limonite staining on fractured surfaces	12.00	
15.00	19.00	1.00	25	Strongly weathered foliated rock. CSA = 50° Same as interval 3.00m - 15.00m with ptygmatic quartz veins, which appear to parallel to foliation (core is extremely shattered). Rock adjacent to qtz veins is strongly foliated and inclusions of mica are visible 18.5 - 19.0m aggregate quartz (?) crystals are larger, up to 3mm in lenght and rock is limonite stained rather than hematite	4.00	
19.00	25.30	2.35	37	Weathered greenschist. Weak to moderate hematite and limonite staining. Numerous kink bands in foliated greenschist suggest secondary foliation. 19.00 - 19.50m ptygmatic quartz veins, appear to be parallel to foliation, and adjacent rock ~~are~~ exhibit stronger foliation	6.30	

Continued over

ASSAY DATA

SAMPLE No.	FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	ASSAY RESULTS									

Specimen Reef DDH3

GEOLOGICAL LOG

FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
25.30	28.00	.10	4	Extensive core loss. This interval is composed of a handful of quartz and weathered greenschist. Greenschist is weakly foliated with moderate hematite staining	2.70	
28.00	31.30	1.40	42	Weathered greenschist Strong hematite stained bands, between lamination containing numerous small aggregate phenocrysts, which appear to be qtz but could possibly be feldspar phenos, they compose up to 20% of the rock locally. Two areas of ptygmatic quartz veins, which appear to be parallel to foliation.	3.30	
31.30	37.30	3.55	59	Weathered greenschist. All foliated bands are twisted in kinked suggesting secondary foliation. Strong limonite and hematite staining near and on fractured surfaces 32.15 - 32.57, 33.30 - 33.82 areas of only slight weathering, which exhibit trace amounts of hematite and limonite 31.47 - 31.75, 32.65 - 32.87, 33.12 - 33.25 zones of ptygmatic qtz veins	6.00	
37.30	40.30	1.08	36	Weathered greenschist. Pervasive strong hematite throughout interval. Weakly foliated CSA = 50°. strong hematite and limonite staining on fractured surfaces. No qtz veins.	3.00	

Continued over

ASSAY DATA

SAMPLE No.	FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	ASSAY RESULTS

Specimen Reef DDH 3 — GEOLOGICAL LOG —

FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
40.30	42.55	1.20	53	Weathered greenschist Moderately foliated CSA = 50° Ptygmatic quartz veins throughout this interval. Strong foliation near qtz veins. Moderate pervasive hematite and limonite staining, with strong Fe staining on fractured surfaces	2.25	
42.55	46.30	3.15	84	Weathered greenschist Moderately foliated Foliation bands are twisted and kinked possibly due to secondary foliation. Moderate to Strong banded hematite and limonite throughout. Strong limonite staining on fractured surfaces	3.75	
46.30	55.30	5.40	60	Weathered greenschist. Same as 42.55 – 46.30 except: 46.30 – 48.85 numerous ptygmatic quartz veins generally parallel to foliation. Adjacent rocks exhibit strong foliation, higher percentage of mica, and less weathering. Only a trace of hematite and/or limonite.	9.00	
55.30	58:30	2.65	88	Greenschist Moderately foliated CSA = 50° Numerious ptygmatic quartz veins throughout interval, veins are commonly elongate parallel to foliation. A trace of limonite and hematite staining on greenschist. Strong Fe staining on fractured surfaces and quartz veins. Large cavities in quartz veins, possibly leached carbonate blebs.	3.00	

Continued over

ASSAY DATA

SAMPLE No.	FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	ASSAY RESULTS

755056

Specimen Reef DDH3 GEOLOGICAL LOG Page: 1 of 4

FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
58.30	61.30	3.00	100	Weathered greenschist. Moderately foliated CSA = 45°. Several ptygmatic qtz veins, with leached cavities, possibly leached carbonate blebs, 58.30 - 59.65 Trace of limonite & hematite staining on greenschist with strong limonite staining on fractured surfaces 59.65 - 61.30. Strong Fe staining throughout interval	3.00	
61.30	65.80	3.75	83	Weathered greenschist Moderate to strongly foliated near qtz veins CSA = 50° Ptygmatic qtz veins, with leached cavities throughout. Trace of limonite and hematite in 60% of sample, Strong Fe staining in 40% of sample	4.50	
65.80	70.00	3.85	92	Weathered greenschist. Weakly foliated Strong limonite and hematite staining Very few ptygmatic qtz veins.	9.20	

Continued over

ASSAY DATA

SAMPLE No.	FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	ASSAY RESULTS

755057

Drilling Log Specimen Reef No 4

Location : Specimen Creek, Sewage River Area, EL 4/61
Map No : 7915-111, Horton 1:50,000
Co-ordinates : 352296 m E, 7911059 m N (AMG) - Specimen Reef Grid: 2008, 25E.
RL of site : 434 metres
Inclination : At collar 60°, Bearing : 280° magnetic
Core Size : HQ - 0 to 15 metres, NQ 15 to 94 metres. Core Recovery: 67%
Drill : Diamond Drill - Mindrill 10L (Type 250)
Driller : Associated Diamond Drillers
Date Commenced : 28th February 1982
Date Completed : 5th March 1982
Final Depth : 94 metres

755058

Specimen Reef DDH 4 — GEOLOGICAL LOG — Page: 1 of 6

FROM ft.	FROM ins.	TO ft.	TO ins.	RECOVERY ft.	RECOVERY ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
0		2.00		.32		16	Soil, organic material & quartz pebbles. Quartz pebbles have been weathered out of greenschist.	2.00	
2.00		6.00		1.20		30	Limonite stained clay & silt. Silt appears to be composed of quartz grains. Pieces are easily broken. Interval is homogenious throughout.	4.00	
6.00		17.00		3.25		30	Strongly weathered foliated rock. Relic foliation texture is preserved CSA = 20° Strong alterating bands of either limonite or hematite and laminations containing numerous small aggregate crystals which appear to be plagioclase. Strong hematite staining on fractured surfaces. At approximately 7.00 m a large quartz vein was encountered. No other significant quartz veins in this interval.	11.00	
17.00		25.50		3.65		43	Weathered greenschist, brown in color. Moderately limonite and hematite stained. Numerous limonite after pyrite inclusion and completely weathered out pyrite cavities throughout interval. Several areas of ptygmatic quartz veins which appear to be parallel to foliation and adjacent area exhibits stronger foliation and large chlorite bands. Strong hematite & limonite staining on fracture surfaces.	8.50	

Continued over

ASSAY DATA

SAMPLE No.	FROM ft.	FROM ins.	TO ft.	TO ins.	RECOVERY ft.	RECOVERY ins.	RECOVERY %	ASSAY RESULTS

Specimen Reef

GEOLOGICAL LOG

FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
25.50	33.00	5.60	75	Weathered greenschist light brown to green in color. Weak limonite & hematite staining. Limonite after pyrite pseudomorphs throughout interval. Only minor quartz veining, sponge like cross cutting foliation	7.50	
33.00	35.40	2.15	90	Weathered greenschist. Rock is green in color. Weak limonite staining is confined to small foliated bands in the greenschist. Limonite after pyrite locally and small weathered out cavities. Strong limonite & hematite staining on fracture surfaces	2.40	

Continued over

ASSAY DATA

SAMPLE No.	FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	ASSAY RESULTS

755060

Specimen Reef DDH 4 — GEOLOGICAL LOG —

FROM ft.	FROM ins.	TO ft.	TO ins.	RECOVERY ft.	RECOVERY ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
35.	40	43.	50	7.	40	91	Moderately foliated fresh greenschist CSA=30° Strong hematite & limonite staining on fractured surfaces and moderate to weak liesegang bands of hematite adjacent to fractures. Limonite after pyrite was observed in weathered intervals. Fresh greenschist is composed of sericite, plagioclase & chlorite, with a trace of pyrite locally. Sponge like quartz veins both cross-cut and are parallel to foliation. Relatively small quantities of quartz veining	8.10	
43.	50	48.	80	4.	90	92	Strongly to moderately foliated greenschist Again strong hematite & limonite staining on fractured surface with liesegang Fe banding near fractures. Greater segregation of minerals into bands. Ptygmatic quartz veins are numerous locally. Some containing leached carbonate vugs. A trace of pyrite in fresh rock & limonite after pyrite pseudomorphs in oxidised zones.	5.30	
48.	80	57.	70	5.	15	58	Strongly foliated bleached schist CSA = 20° Strong hematite & limonite staining on fractured surfaces with liesegang Fe banding near fractures. Minerals are well segregated into bands; chalk white bands are composed of quartz, feldspar & sericite; dark bands are composed of chlorite. Very little quartz veining and only a trace of pyrite	8.90	
57.	70	62.	45	3.	85	67	Moderated to Strongly foliated greenschist Strong hematite & limonite staining on	6.75	

Continued over

ASSAY DATA

SAMPLE No.	FROM ft.	FROM ins.	TO ft.	TO ins.	RECOVERY ft.	RECOVERY ins.	RECOVERY %	ASSAY RESULTS

Specimen Reef DDH 4 — GEOLOGICAL LOG —

FROM ft.	FROM ins.	TO ft.	TO ins.	RECOVERY ft.	RECOVERY ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
							fractured surfaces 58.80 - 60.50 bleached interval similar to interval 48.80 - 57.70 but with sponge quartz veins. Veins contain traces of pyrite & magnetite		
52	45	65	85	2	80	82	Moderately foliated greenschist CSA = 20° Hematite & limonite staining on fracture surfaces. Sponge quartz locally containing trace amounts of pyrite	3.40	
65	85	71	35	5	05	92	Weak to Strongly silicified greenschist. Areas of strong silicification contain numerous quartz - carbonate veins Disseminated pyrite throughout interval Very little Fe staining	5.50	
71	35	74	00	1	95	74	Weakly to Moderately foliated greenschist Very little quartz veining. A trace of hematite & a trace of pyrite locally	2.65	
74	00	76	00	2	00	100	Weakly foliated greenschist. Interval is marked with numerous ptygmatic quartz veins which compose 30% of rock Hematite staining along fracture surfaces Large (up to 3mm) inclusions of pyrite scattered throughout interval	2.00	
76	00	79	60	1	80	75	Weakly foliated greenschist CSA = 15° Numerous thin quartz veins with hematite staining. Hematite staining along fracture surfaces. Disseminated pyrite throughout interval	2.40	

Continued over

ASSAY DATA

SAMPLE No.	FROM ft.	FROM ins.	TO ft.	TO ins.	RECOVERY ft.	RECOVERY ins.	RECOVERY %	ASSAY RESULTS

Specimen Reef DDH 4 GEOLOGICAL LOG

FROM ft.	FROM ins.	TO ft.	TO ins.	RECOVERY ft.	RECOVERY ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
79.60		82.00		2.20		92	Moderately to Strongly foliated greenschist Numerous ptygmatic quartz veins parallel to foliation. Also several thin quartz veins with hematite staining cross-cut foliation. Disseminated pyrite 80.85 – 82.00 greenschist is strongly silicified and light brown in color, but still exhibits protolithic textures Pyrite is concentrated locally rather than disseminated.	2.40	
82.00		82.35		.35		100	Quartz vein material, silicified greenschist and epidote. Numerous small carbonate veins. Pyrite inclusion are found locally. No relic metamorphic textures.	.35	
82.35		83.85		0		0	A wooden mine-shaft support was penetrated followed by a 1.50 meter core loss as the drill past through the mining cavity	1.50	
83.85		88.15		4.15		97	Silicified & non silicified greenschist Numerous ptygmatic quartz vein and several larger quartz veins. Greenschist displays stronger foliation adjacent to ptygmatic quartz veins. Numerous calcite veins less than 2mm thick with no prefered orientation Pyrite inclusion up to 2mm in diameter occur locally.	4.30	
88.15		94.00		5.45		93	Weakly to moderately foliated greenschist CSA 15°-20°. Relatively small quantities of quartz veining occur as ptygmatic	5.85	

Continued over

ASSAY DATA

SAMPLE No.	FROM ft.	FROM ins.	TO ft.	TO ins.	RECOVERY ft.	RECOVERY ins.	RECOVERY %	ASSAY RESULTS

Specimen Reef DDH 4 GEOLOGICAL LOG

FROM ft.	FROM ins.	TO ft.	TO ins.	RECOVERY ft.	RECOVERY ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
							quartz veins which generally parallel foliation and in planar cross-cutting quartz veins. Foliation is more prominent near qtz veins. Several calcite veins cross-cut core nearly perpendicular to core [redacted] axis, up to 10 mm in thickness. Pyrite inclusions occur locally.		

Continued over

ASSAY DATA

SAMPLE No.	FROM ft.	FROM ins.	TO ft.	TO ins.	RECOVERY ft.	RECOVERY ins.	RECOVERY %	ASSAY RESULTS

755064

Drilling Log Specimen Reef No. 5

Location : Specimen Creek, Savage River Area, EL 4/61
Map No : 7915-111, Horton 1:50,000
Co-ordinates : 352300mE, 5411056mN (AMG) - Specimen Reef Grid : 200S, 25E.
R.L. of site : 434 metres
Inclination : At Collar 50°, Bearing: E along traverse (130° magnetic)
Core size : HQ - 0 to 6 metres, NQ - 6 to 70 metres, Core Recovery: 61%
Drill : Diamond Drill - Mindrill 10L (Type 250)
Driller : Associated Diamond Drillers
Date Commenced : 7th March 1982
Date Completed : 10th March 1982
Final Depth : 70 metres

755065

Specimen Reef DDH 5 — GEOLOGICAL LOG — Page: 1 of 4

FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
0	6.00	2.05	34	Strongly weathered foliated rock. Strong limonite staining throughout and minor localized hematite staining. Numerous small rounded aggregate crystals which appear to be feldspars	6.00	
6.00	18.60	1.25	8	Strongly weathered foliated rock. Strong to moderate limonite staining. Weak hematite staining locally on fracture surface. Rock is bleached	12.60	
18.60	22.50	.65	17	Weathered greenschist. Lesgang bands of hematite. Numerous quartz veins containing leached out cavities of possibly carbonate material are observed throughout interval. Areas adjacent to quartz veins exhibit strong bleaching.	3.90	
22.50	29.25	2.90	43	Weathered greenschist, greenish brown to light brown in color. Moderately limonite stained. Several limonite after pyrite inclusion and weathered out pyrite cavities throughout interval. Strong Fe staining on fracture surfaces.	6.75	
29.25	37.30	6.45	80	Weathered greenschist, greyish brown in color. Weak to moderate limonite staining. Strong Fe staining on fracture surfaces. Rock is bleached locally. 31.75 & 33.20 areas of polygmetic qtz veins containing leached out cavities.	8.05	

Continued over

ASSAY DATA

SAMPLE No.	FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	ASSAY RESULTS

Specimen Reef DDH 5 — GEOLOGICAL LOG —

FROM ft.	FROM ins.	TO ft.	TO ins.	RECOVERY ft.	RECOVERY ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
37.30		38.35		1.05		100	Moderately to Strongly foliated greenschist. This interval is marked with strong ptygmatic quartz veining which closely parallel foliation CSA = 45°. Greenschist exhibits stronger foliation adjacent to ptygmatic qtz veins, where chlorite, and plagioclase & dark oxidation products are segregated into distinct laminations. Disseminated pyrite throughout. Small inclusions of what appears to be chalcopyrite, but may be tarnished pyrite found in plagioclase bands	1.05	
38.35		39.60		1.25		100	Silicified meta-volcanic rock. Light grey in color. Strong hematite staining on fracture surfaces. Numerous inclusions of pyrite & limonite after pyrite throughout interval. Very little quartz veining. Core is quite homogeneous.	1.25	
39.60		43.30		1.75		47	Meta-volcanic rock. Strong limonite & hematite staining on fracture surfaces. Shattered inclusion of pyrite throughout interval. 40.10 – 40.45 silicified meta-volcanic rock. Light grey in colour 40.75 – 40.90 zone of ptygmatic qtz veins with stronger foliation on adjacent rocks.	3.70	
43.30		45.10		1.65		92	Micaous Greenschist & Phyllite. Weakly foliated. No quartz veins. Disseminated pyrite throughout.	1.80	

Continued over

ASSAY DATA

SAMPLE No.	FROM ft.	FROM ins.	TO ft.	TO ins.	RECOVERY ft.	RECOVERY ins.	RECOVERY %	ASSAY RESULTS

Specimen Reef DDH 5 — GEOLOGICAL LOG — Page: 3 of 4

FROM ft.	FROM ins.	TO ft.	TO ins.	RECOVERY ft.	RECOVERY ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
45.10		46.70		~~1.60~~ 1.20		75	Bleached meta-volcanic rock. Weak pervasive limonite and hematite staining with lineagang banding locally. Strong hematite staining on fracture surfaces. A trace of disseminated pyrite, large inclusions locally.	1.60	
46.70		48.70		1.85		93	Moderately foliated greenschist & micaous greenschist. Several polygmatic quartz veins with numerous pyrite inclusions locally. Strong hematite and limonite staining on fracture surfaces. A trace of disseminated pyrite. 47.36 – 47.60 zone of bleached greenschist with limonite staining.	2.00	
48.70		54.20		5.10		93	Weakly foliated greenschist. CSA = 50° Moderate hematite and limonite staining on fracture surfaces. A trace of disseminated pyrite. Core is silicified in 2 locations.	5.50	
54.20		60.25		5.55		92	Weakly foliated intermediate volcanic rock fresh & silicified. Silicification and limonite staining is concentrated near quartz veins at several locations. Strong limonite and hematite staining on fracture surfaces. Disseminated pyrite locally. Areas of silicification exhibit weak bleaching of volcanic rock.	6.05	

Continued over

ASSAY DATA

SAMPLE No.	FROM ft.	FROM ins.	TO ft.	TO ins.	RECOVERY ft.	RECOVERY ins.	RECOVERY %	ASSAY RESULTS

755068

Specimen Reef DDH 5 — GEOLOGICAL LOG — Page: 4 of 4

FROM ft.	FROM ins.	TO ft.	TO ins.	RECOVERY ft.	RECOVERY ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
60.	25	62.	50	2.	95	49	~~Micaceous~~ Micaceous greenschist moderately folicted. Two large ptygmatic quarte veins both approximately 15 cm thick, adjacent greenschist is strongly folicted and large areas of chlorite can be observed. Dissemmnately pyrite throughout interval. Several small inclusions of chalcopyrite were found locally.	60.05	
62.	50	64.	35	1.	65	89	Greenschist and micaiceous greenschist locally. Several plagioclase - carbonate veins containing numerous inclusion of pyrite up to 10% of vein materid locally, also minor chalcopyrite. Finely dissemmnately pyrite throughout interval.	1.85	
64.	35	70.	00	5.	10	90	Greenschist and micaiceous greenschist locally. Numerous ptygmatic quarte veins throughout some containing large pyrite inclusions. Adjacent greenschist is strongly folicted Ptygmatic veins parallel foliation. Other smaller qtz veins are found cross-cut foliation 67.30 - 67.60 zone of plagioclase - carbonate veining with high percentage of pyrite.	5.65	

Continued over

ASSAY DATA

SAMPLE No.	FROM ft.	FROM ins.	TO ft.	TO ins.	RECOVERY ft.	RECOVERY ins.	RECOVERY %	ASSAY RESULTS

82-1783.

755069

APPENDIX B

GEOLOGICAL LOGS - MAIN CREEK MAGNESITE DRILLING PROGRAMME

755070

Drilling Log MC[redacted].3.

Location	Main Creek EC4/61
Map No	7914-IV (CORINNA [redacted] 1:50,000); CORINNA A2, 1:15840
Co-ordinates	5397059 mN, 466978 mE (A.M.G)
RL of site	443.78 metres
Inclination	Vertical
Drill	AIRTRAK
Driller	G+G Drilling
Date Commenced	21st March 1982
Date Completed	22nd March 1982
Final Depth	15.1 metres
Logged By	H. Shannon

755071

MC 3

GEOLOGICAL LOG

Page:— 1-1

FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
0	15			soil and purple clay.		
15	15.17			magnesite (chips noticed after rain) hole abandoned due to loss of lift.		
				Interpretation 0-15m autochthonous and/or slumped residual ferruginous clay		
				15— magnesite, in situ		
				Continued over		

ASSAY DATA

SAMPLE No.	FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	ASSAY RESULTS

755072.

Shelley Tag MCA

Location:	Main Creek. EC4/61
Map No:	7914-IV (CORINNA [redacted] 1:50 000), CORINNA A2 1:15840
Co-ordinates:	5399061mN 346710mE (A.M.G.)
R.L. of Site:	144.33 metres
Inclination:	Vertical
Rig:	Airtrak
Driller:	G + G. drilling
Date Commenced:	7th March 1982
Date Completed:	13th March 1982
Final depth:	13 metres
Logged by:	R. Thomas

755073

MC 4.

GEOLOGICAL LOG

Page:— 1—1

FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
0	12			Soil and purple clay		
12	13			magnetite (very contaminated) hole abandoned due to loss of lift.		
				0 - 12 autochthonous (or slumped) residual ferruginous clay		
				12 - 13 magnetite in situ		

Continued over

ASSAY DATA

SAMPLE No.	FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	ASSAY RESULTS

755074

Drilling Log MC 5

Location	Moon Creek EL 4/61
Map No.	7914-IV CORINNA/ [redacted] (1:50000); CORINNA MAP 1:15840
Co-ordinates	5399113 mN 396781 mE (A.M.G.)
R.L. of Hole	116.12 metres
Inclination	Vertical
Drill	Airtrak
Driller	G. & G. Drilling
Date Commenced	23rd March 1982
Date Completed	23rd March 1982
Final Depth	21 metres
Logged By	H. Thomsen

755075

ML 5

GEOLOGICAL LOG

Page:— 1—1

FROM ft. m ins.	TO ft. m ins.	RECOVERY ft. ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
0	3			Soil and pink clay		
3	4			Pink clay and yellowish brown clay		
4	6			Yellowish brown clay, some purple clay and minor amounts of talc.		
6	9			Yellowish brown clay with minor amounts of talc		
9	12			Yellow brown clay, some talc as definite clasts in clay.		
12	15			Wet sloppy yellow brown clay, some drill chips and minor amounts of purple-brown clay.		
15	21			Yellow brown sloppy clay.		
				0-21m autochthonous and slumped residual breccia including clasts of weathered greenschist and talc.		

Continued over

ASSAY DATA

SAMPLE No.	FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	ASSAY RESULTS

755076

	Drilling Log MC 6
Location	Main Creek EG4/61
Map N°	7914-IV (COBINNA [redacted] 1:50,000); COBINNA AZ 1:15840
Co-ordinates	5379119 mN 336766 mE (AMG)
R.L. of Hole	113.36 metres
Inclination	Vertical
Drill	AIRTRAK
Driller	G. + G. Drilling
Date Commenced	14th March 1992
Date Completed	14th March 1992
Final Depth	13 metres
Logged by	H. Thomas, J. Woodman

MC 6 — GEOLOGICAL LOG — 75507 1-1

FROM ft. m. ins.	TO ft. m. ins.	RECOVERY ft. ins.	%	DESCRIPTION	SECTION Core	Sample
0	4			Greyish yellow-brown clay minor pink clay, some quartz and metamorphic rock chips.		
4	8			Purplish brown clay, quartz and purple schist chips.		
8	9			Yellow-brown clay with talc.		
9	10			Brown clay with some metamorphic clasts		
10	12			Brown clay with talc and metamorphic clasts		
12	13			Brown clay, some yellow brown clay containing few clasts		
13	14			Brown clay with talc		
14	23			Magnesite - chalk white, very light brown and pinkish brown found separately throughout the interval.		
				0-14 m autochthonous and slumped residual clay and breccia.		
				14-23. magnesite with leach cavities. filled with residual ferruginous clay, in situ		

Continued over

ASSAY DATA

SAMPLE No.	FROM ft. ins. M	TO ft. ins. M	RECOVERY ft. ins.	%	ASSAY RESULTS MgO %	CaO %	SiO_2 %	Al_2O_3 %	Fe %		$MgCO_3$ (assuming all MgO in magnesite) %	REMARKS	
820447	14	15			38·8	1·7	5·9	1·5	2·8		81.15	CLAY	TRACES
448	15	16			37·8	1·0	7·8	2·1	3·4		79.06	"	"
449	16	17			40·4	1·1	10·8	·85	2·1		84.5		
450	17	18			41·1	1·9	6·7	·42	1·7		85.96	AV 83.96	
451	18	19			39·4	2·2	8·6	·51	1·8		82.41	over 9 M	
452	19	20			40·8	1·9	5·2	·53	1·9		85.33		
453	20	21			40·0	2·2	4·6	·48	1·9		83.66		
454	21	22			41·9	1·9	3·8	·19	1·7		87.63		
455	22	23			41·1	1·6	3·5	"	1·7		85.96		

755078

Drilling Log M.C. 7

Location	Main Creek, ELA/61
Maps. No.	7914-IV /CORINNA [redacted] (1:50,000); CORINNA A2 1:15840
Co-ordinates	5399080 mN 346823 mE (AMG)
R.L. of Hole	112.88 metres
Inclination	Vertical
Drill	Airtrak.
Driller	G. + G. Drilling
Date Commenced	25th March 1982
Date Completed	25th March 1982
Final Depth	21 metres
Logged By	J. Woodman

755079

MC 7

GEOLOGICAL LOG

Page:— 1-1

FROM ft. ins. m.	TO ft. ins. m.	RECOVERY ft. ins.	%	DESCRIPTION	SECTION Core	Sample
0	3			Wet sloppy yellowish brown and pinkish brown clay.		
3	6			Dryer reddish brown clay containing chips of weathered schist and quartz.		
6	9			Purplish brown clay, with several chips of weathered schist, talc and quartz.		
9	11			Purplish brown clay, with numerous chips of quartz, minor amounts of schist and magnesite.		
11	12			Magnesite, poor recovery no samples taken		
12	21			Magnesite, light brown to chalk white.		
				0 – 11 autochthonous and slumped residual clay and breccia.		
				11 – 21 magnesite in situ with some ~~joint~~ cavities filled with residual ferruginous clay.		

Continued over

ASSAY DATA

SAMPLE No.	FROM ft. ins. m.	TO ft. ins. m.	RECOVERY ft. ins.	%	ASSAY RESULTS MgO %	CaO %	SiO_2 %	Al_2O_3 %	Fe %	% $MgCO_3$ equiv	Av %	Av %
50456	12	13			29.6	1.5	26.3	0.18	3.8	61.91		
										73.67		
										~~77.39~~		
										76.13	74.79	74.79 % $MgCO_3$ equiv over 8 m
										72.37		
										78.64		
										78.64		
										78.64		

755080

Drilling Log M.C. 8

Location	Main Creek, EL4/61
Map. N°	~~7914~~ 7914 – IV CORINNA – ~~III~~ (~~HORTON~~ 1:50,000); CORINNA A2 1:15840
Co-ordinates	53 77081 mN 346749 mE (AMG)
R.L. of Hole	116.69 metres
Inclination	Vertical
Drill	Airtrak
Driller	G. + G. Drilling
Date Commenced	26th March 1982
Date Completed	27th March 1982
Final Depth	28 metres
Logged By	M. Thomson, J. Goodman

755081

ML 8

GEOLOGICAL LOG

Page:— 1—1

FROM ft. ins. m.	TO ft. ins. m.	RECOVERY ft. ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
0	3			Purple and yellowish brown clays. Chips of talc, weathered schist and quartz are numerous.		
3	7			Yellowish brown clay, with chips of schist and quartz.		
7	9			Pink to reddish brown clay with numerous chips of talc, also minor greenschist and quartz chips.		
9	12			Dark reddish brown clay with chips of talc and greenschist.		
12	16			Sloppy brown clay containing chips of talc, minor amounts of greenschist and weathered greenschist, and a trace of quartz and magnesite.		
16	19			Contaminated sample? — magnesite and brown clay		
19	28			Mainly magnesite - Some clay material between 20 and 21 metres		
				0-16 autochthonous and slumped residual breccia and clay. 16-19 magnesite boulders in clay matrix. 19-28 magnesite in situ, some joint cavity fillings with ferruginous clay.		

Continued over

ASSAY DATA

SAMPLE No.	FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	ASSAY RESULTS
					eqiv $MgCO_3$
					57.52 x 3
					83.66 x 2
					83.66
					84.92
					84.02
					~~83.66~~
					82.41
					84.92
					av of above 76.87 over 12 m
					83.94 over 9 m
					eqiv $MgCO_3$

755082

Drilling Log M.C. 9

Location	Main Creek Elq/C1
Maps. N°.	7914 - IV CORINNA ~~7915 - III~~ (~~Hodgson~~ 1:50,000); CORINNA A2 1:15840
Co-ordinates	5399080 mN 346787 mE (A. M. G.)
R.L. of Hole	122.48 metres
Inclination	Vertical
Drill	Airtrak.
Driller	G. + G. Drilling
Date Commenced	29th March 1982
Date Completed	30th March 1982
Final Depth	25 metres
Logged By	H. Thomas, J. Woolman

755083

MC 9

GEOLOGICAL LOG

Page:— 1 —1

FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
0	3			60% yellowish brown clay and 40% chips of talc.		
3	6			70% light brown clay, 25% talc chips and 5% weathered schist chips.		
6	9			Light brown clay, fresh greenschist and talc.		
9	12			Brown clay with chips of talc and greenschist abundant.		
12	15			Purplish brown clay with chips of talc, talc-schist and minor greenschist abundant. Minor magnesite observable only when sample is washed.		
15	18			Purplish brown powder with chips of magnesite and talc.		
18	21			Brown powder grading to grey brown magnesite talc (?) and possibly clay.		
21	22			Brown to greyish brown powder magnesite with talc		
22	25			Yellowish grey-brown powder; magnesite with talc.		

0-6 residual clay and breccia.
9-12 detached boulder of green schist.
12-15 residual clay and breccia.
15-25 talcose magnesite bedrock.

Continued over

ASSAY DATA

SAMPLE No.	FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	ASSAY RESULTS
					52.92 7 51.66 % Mg in Hulls Rill Zn
					50.40) from above Dolomite.

755084

Drilling Log M.C. 10

Location	Main Creek EL4/61
Maps. No.	7914-IV (CORINNA) ~~7915-III~~ (~~HAMILTON~~ 1:50,000); CORINNA A2 1:15840
Co-ordinates	5399110 mN 376807 mE (A.M.G.)
R.L. of Hole	107.80 metres
Inclination	Vertical
Drill	Airtrak
Driller	G. + G. Drilling
Date Commenced	30th March 1982
Date Completed	30th March 1982
Final Depth	21 metres
Logged By	H. Thomson

VIC 10

FROM ft. m. ins.	TO ft. m. ins.	RECOVERY ft. ins.	%	DESCRIPTION	SECTION Core	Sample
0	1			Greyish brown clay.		
1	2			Yellow-brown clay.		
2	5.5			Yellow clay with quartz chips		
5.5	6			Purple partly consolidated sand.		
6	9			Brown dryer sand and clay.		
9	10			Brown clayish sand hard at 10m.		
10	12			No sample recovered.		
12	13			White magnesite and grey brown magnesite. Good sample		
13	14			Pinkish magnesite. Good sample		
14	15			Pinkish to white magnesite. Good sample		
15	16			White magnesite. Good sample		
16	17			White magnesite - yellow at base. Good sample		
17	18			Pinkish brown mud, caliche type concretionary veins, magnesite (cave fill)		
18	19			Pinkish brown to brown clayey sand, magnesite caliche Poor Sample (cave fill)		
19	21			Red-brown muddy sand with caliche and magnesite Poor Sample (Cave fill)		
				0-10m residual clay and sand		
				10-12 magnesite boulders in cemented clay matrix		
				12-17 magnesite with clay filled cavities continued over		
				17-21 cave fill.		

ASSAY DATA

SAMPLE No.	FROM ft. m. ins.	TO ft. m. ins.	RECOVERY ft. ins.	%	ASSAY RESULTS H_2O %	CaO %	SiO_2 %	Al_2O_3 %	Fe %	eqiv H_2O / CO_2		REMARK	
8L04494	12	13			16·7	2·0	36·1	0·30	2·8	55·84	66·48	SOME CAVE FILL FROM 12-14	FERRUGINOUS
95	13	14			20·4	1·4	25·4	0·18	2·2	63·58	DUPLICATE	METRES	
96	14	15			34·9	1·7	18·8	0·12	1·4	72·99	OR 71·63	BETTER QUALITY	
97	15	16			35·7	4·2	13·5	0·04	1·2	75·09	DUPL	"	"
98	16	17			35·8	3·1	12·9	0·03	1·1	74·86	ORIG	"	"
99	17	18			25·2	1·5	36·1	0·15	1·3			CAVE	FILL
8L04500	18	19			12·8	0·87	66·7	0·17	1·7			"	"
01	19	20			3·2	0·34	87·3	0·38	1·6			"	"

755086

Drilling Log M.C. 11

Location	Main Creek EL4/61
Maps. No.	7914-IV CORINNA ~~7915 – BF~~ (~~MACROSSAN~~ 1:50,000); CORINNA AR 1:15840
Co-ordinates	5399057 mN 346738 mE (A.M.G.)
R.L. of Hole	103.17 metres
Inclination	Vertical
Drill	Airtrak.
Driller	G. + G. Drilling
Date Commenced	31st March 1982
Date Completed	31st March 1982
Final Depth	15 metres
Logged By	H. Thomson

MC 11 GEOLOGICAL LOG 755087 1-1

FROM ft. ins. / m	TO ft. ins. / m	RECOVERY ft. ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
0	0.02			White quartz gravel.		
0.02	3			Yellow clay with talc chips		
3	4			Yellow-grey laminated clay with quartz		
4	5			Yellow-grey clay with magnesite		
5	6			Magnesite contaminated with yellow grey clay		
6	7			Magnesite with clay		
7	8			Magnesite - still with yellow ~~cla~~ color		
8	9			Pale yellow magnesite		
9	12			Very pale yellow magnesite.		
12	13			Very pale grey magnesite.		
13	15			Very pale yellow magnesite.		
				~~0-02~~ 0-0.02 - allochthonous quartz gravel 0.02 - 5.0 m. alluvial clay, gangue talc bowlders 5.0 - 15.0 magnesite, in situ.		
				Continued over		

ASSAY DATA

SAMPLE No.	FROM ft. ins. / m	TO ft. ins. / m	RECOVERY ft. ins.	RECOVERY %	ASSAY RESULTS MgO %	CaO %	SiO_2 %	Al_2O_3 %	Fe %	Equiv MgCO3		REMARKS
8293+93	6	7			32.0	5.6	14.6	0.55	1.9	66.93		81.01 Wet basis
94	7	8			36.9	4.2	8.0	0.38	1.7	77.18		
95	8	9			38.3	4.3	5.0	0.39	2.9	80.11		BETTER QUALITY
96	9	10			40.8	4.2	0.97	0.09	2.8	85.33		"
97	10	11			40.4	5.0	0.98	0.09	2.6	84.50		"
98	11	12			40.9	3.5	1.1	0.07	3.1	85.33		"
99	12	13			40.5	3.8	0.92	0.07	3.3	84.71		"
8293500	13	14			39.6	3.1	1.8	0.07	3.0	82.82	83.57	"
01	14	15			39.3	2.5	1.3	0.06	2.6	82.20		"

755088

Drilling Log M.C. 12

Location	Main Creek Elq/61
Map. No.	7914-IV CORINNA ~~7915-III~~ (~~MACLEAN~~ 1:50,000); CORINNA A2 1:15840
Co-ordinates	5399063 mN. 346893 mE (A.M.G.)
R.L. of Site	105.66 metres
Inclination	Vertical
Drill	Airtrak.
Driller	G. + G. Drilling
Date Commenced	31st March 1992
Date Completed	31st March 1992
Final Depth	15 metres
Logged By	A. Shannon

755089

MC 12 — GEOLOGICAL LOG — Page:— 1-1

FROM ft. m ins.	TO ft. m ins.	RECOVERY ft. ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
0	7			Purple, orange and yellow clay.		
7	8			Hard and some magnesite chips at the top the interval, followed by sloppy purple clay		
8	9			Brown clay and magnesite		
9	10			White magnesite and purple brown clay.		yes
10	11			White magnesite and purple brown clay - less clay		yes
11	14			White magnesite and purple -brown clay - less clay		yes
14	15			Water struck after ~~and heaps of~~ 0.1 m magnesite, followed by dark yellow - brown clay (cave fill) circulation lost - open cavity.		
				0-7 m. residual clay. 7-14.1 magnesite with clay filled cavities. 14.1 - 15+ open cavity.		

Continued over

ASSAY DATA

AMPLE No.	FROM ft. m ins.	TO ft. m ins.	RECOVERY ft. ins.	RECOVERY %	ASSAY RESULTS MgO %	CaO %	SiO_2 %	Al_2O_3 %	Fe %	$MgCO_3$ equiv		REMARKS		
160302	9	10			35.3	4.6	1.4	0.43	6.1	73.83		FERRUGINOUS SOME, CLAY PRESENT		
03	10	11			35.0	5.1	0.8	0.26	5.0	73.20	76.72	"	"	"
04	11	12			36.0	4.8	1.1	0.16	4.4	75.29	over	"	"	"
05	12	13			38.6	3.1	0.64	0.15	4.2	80.73	5 kg	LESS	CLAY	
06	13	14			38.5	4.7	0.83	0.12	3.8	80.57		"	"	

755090

Drilling Log M.C. 13

Location	Main Creek EL4/61
Maps No.	7914-IV CORINNA ~~7915-III~~ (~~HERSCHEL~~ 1:50,000); CORINNA A2 1:15840
Co-ordinates	5399105mN 396 848mE
R.L. of Hole	103.34 metres
Inclination	Vertical
Drill	Airtrak
Driller	G. + G. Drilling
Date Commenced	1st April 1982
Date Completed	1st April 1982
Final Depth	13 metres
Logged By	H. Shannon

755091

M6 13

GEOLOGICAL LOG

Page:— 1-1

FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
0	5			Yellow-brown clay with quartz and ironstone clasts		
5	11			Yellow clay with quartz etc.,		
11	13			Water struck at 11 metres Chips include mica-schist, quartz ironstone concretions and greenschist which becomes more common in the lower samples 0-11 m. residual clay 11-13. greenschist bedrock (possibly boulders).		

Continued over

ASSAY DATA

SAMPLE No.	FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	ASSAY RESULTS

755092

Drilling Log M.C. 14

Location	Main Creek EL4/61
Map. No.	~~7915~~ 7919-IV CORINNA ~~-III~~ (~~AUREOLE~~ 1:50,000); CORINNA A2 1:15840
Co-ordinates	5379186 mN 346725 mE (AMG)
R.L. of Hole	107.04 metres
Inclination	Vertical
Drill	Airtrak.
Driller	G. + G. Drilling
Date Commenced	1st April 1982
Date Completed	1st April 1982
Final Depth	17 metres
Logged By	H. Shannon

755093

MC 14

GEOLOGICAL LOG

Page:— 1-1

FROM m. ins.	TO m. ins.	RECOVERY ft. ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
0	5			Brown clay with abundant weathered metamorphic clasts.		
5	6			Pink clay with weathered metamorphic clasts — yellow clay at bottom		
5	9			Sloppy yellow clay — chips of brown stratified clay and green unstratified clay and some quartz. Increased water content.		
9	12			Brownish yellow mud. Brown clay probably main component — some green clay and metamorphics and quartz. Possibly contaminated.		
12	14			Yellow-brown sloppy clay with more brown clay chips with white material included in the mud.		
14	15			Greenschist — brownish weathered and weathered to a pinkish colour, quartz and white clay.		
15	17			Greenschist lithology in various states of weathering with quartz in chips, but possibly all cavings allochthonous 0-6 m. slumped residual breccia 6-17 residual clay and breccia		

Continued over

ASSAY DATA

SAMPLE No.	FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	ASSAY RESULTS

755094

Drilling Log M.C. 15

Location	Main Creek Elq/C1
Map. No.	~~7914 - IV~~ CORINNA ~~7914 - IV~~ (~~1:50,000~~); CORINNA AZ 1:15840
Co-ordinates	5399180mN 346674mE (A.M.G.)
R.L. of Hole	112.74 meters
Inclination	Vertical
Drill	Airtrak.
Driller	G. + G. Drilling
Date Commenced	1st April 1992
Date Completed	2nd April 1992
Final Depth	15 meters
Topped By	A. Thomsen

755095

GEOLOGICAL LOG

Page:— 1-1

MC 15

FROM ft.	FROM ins.	TO ft.	TO ins.	RECOVERY ft.	RECOVERY ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
0		3					Pinkish brown, grey brown and purplish brown clay with relict metamorphic clasts		
3		4					Pinkish brown clay and relict metamorphic clasts. Watery sloppy mud encountered at 4 metres.		
4		6					Abundant weathered greenschist, light brown sloppy mud		
6		9					Light brown to yellow brown mud. Chips include metamorphics and clay lumps pink to pale yellow fresh looking greenschist. At 8½ metres water and metamorphic gravel was encountered.		
9		12					Talc, chert and greenschist gravel with concretion coating		
12		15					Gravel with yellow clay matrix — diverse lithology, quartz becomes more common toward the base.		
							0-8½ m allochthonous slumped residual breccia		
							8½ - 12 m alluvial gravel.		
							12 - 15 m residual clay - autochthonous.		

Continued over

ASSAY DATA

SAMPLE No.	FROM ft.	FROM ins.	TO ft.	TO ins.	RECOVERY ft.	RECOVERY ins.	RECOVERY %	ASSAY RESULTS

755096

Drilling Log M.C. 16

Location	Main Creek EL4/61
Maps. N°.	7714-IV CORINNA ~~7615 — II~~ (~~HOLWELL~~ 1:50,000); CORINNA A2 1:15840
Co-ordinates	5379190 mN 346679 mE (AMG)
R.L. of Site	115.76 metres
Inclination	Vertical
Drill	Airtrak
Driller	G. + G. Drilling
Date Commenced	2nd April 1992
Date Completed	3rd April 1992
Final Depth	27 metres
Logged By	H. Thomas, J. Woodman

755097

MC 16

GEOLOGICAL LOG

Page:— 1-1

FROM ft. m. ins.	TO ft. m. ins.	RECOVERY ft. ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
0	3			Brown and purplish brown clay with weathered (brown) greenschist, quartz talc schist and talc		
3	6			Brown, pinkish brown and yellowish brown clay, with clasts of purple weathered greenschist.		
6	9			Same as 3-6 metres, with talc towards the base in the brown clay		
9	12			Brown clay with clasts of weathered greenschist, yellow-brown-purple in colour, minor talc schist and fresh greenschist.		
12	15			Watery sloppy mud, with numerous fresh greenschist chips & the odd quartz chip.		
15	21			Green rounded fresh greenschist pebbles and some quartz minor talc, brown clay in sloppy matrix.		
21	24			Clay and chips of fresh and weathered greenschist, talc and minor quartz.		
24	27			Sloppy brown clay. 90% of chips are fresh greenschist 5% talc and 5% weathered greenschist		
				0-11m. allochthonous slumped meichal breccia		
				11-27m alluvial gravel.		

Continued over

ASSAY DATA

SAMPLE No.	FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	ASSAY RESULTS

755098

Drilling Log M.C. 17

Location	Main Creek EL4/61
Map. No.	7914-IV CORINNA ~~7914-II~~ (~~[redacted]~~ 1:50,000); CORINNA A2 1:15840
Co-ordinates	5399179 mN 396786 mE (A.M.G.)
R.L. of Hole	101.65 metres
Inclination	Vertical
Drill	Airtrak.
Driller	G. + G. Drilling
Date Commenced	4th April 1982
Date Completed	4th April 1982
Final Depth	30 metres
Logged By	J. Woodman

755099

MC 17

GEOLOGICAL LOG

Page:— 1—1

FROM ft. m. ins.	TO ft. m. ins.	RECOVERY ft. ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
0	3			Quartz gravel and a small amount of limonite clay.		
3	6			Quartz gravel, limonite clay and small amounts of greenschist chips		
6	9			Sloppy sticky clay with numerous greenschist chips. Clay is yellow in colour.		
9	12			Dark brown clay, very sticky with numerous greenschist chips		
12	15			Chips of greenschist with a thin watery green clay.		
15	21			Chips of greenschist with minor amounts of quartz and talc in a thin watery green mud.		
21	24			Same as 15-21 except with more quartz and talc.		
24	27			Same as 21-24 but with chips of phyllite		
27	30			Sloppy thin green mud, with chips of phyllite, greenschist quartz and talc.		
				0-1m allochthonous quartz gravel.		
				1-2m ~~alluvial~~ greenschist bedrock		
				3-9m alluvial clay.		
				9-9.5m peat		
				9.5-30m alluvial gravel.		

Continued over

ASSAY DATA

SAMPLE No.	FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	ASSAY RESULTS

755100

Drilling Log M.C. 18

Location	Main Creek, ELA/61
Maps. N°	7914 - IV CORINNA ~~7915 - III~~ (~~HORSETAIL~~ 1:50,000); CORINNA AZ 1:15840
Co-ordinates	5399178 mN 346830 mE (AMG)
R.L. of Hole	99.08 metres
Inclination	Vertical
Drill	Airtrak.
Driller	G. + G. Drilling
Date Commenced	4th April 1982
Date Completed	4th April 1982
Final Depth	9 metres
Logged By	J. Woodman

755101

M.C. 18

GEOLOGICAL LOG

Page:— 1-1

FROM ft. m ins.	TO ft. m ins.	RECOVERY ft. ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
0	1.5			Yellow clay containing chips of weathered greenschist and talc.		
1.5	3			Sloppy thin green mud with weathered greenschist chips		
3	6			Sloppy thin watery green mud with chips of greenschist, quartz and minor talc.		
6	9			Same as 3-6 metres but with severed chips of basalt		
				0-1.5 m peripheral greenschist breccia.		
				1.5-3 m alluvial clay		
				3-9 m alluvial gravel		

Continued over

ASSAY DATA

SAMPLE No.	FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	ASSAY RESULTS

755102

Drilling Log M.C. 19

Location	Main Creek EL4/61
Maps No.	~~7915~~ 7914 - IV CORINNA ~~- III~~ (~~[illegible]~~ 1:50,000); CORINNA A2 1:15840
Co-ordinates	5379145 mN 346884 mE
R.L. of Hole	99.23 metres
Inclination	Vertical
Drill	Airtrak.
Driller	G. + G. Drilling
Date Commenced	5th April 1992
Date Completed	5th April 1992
Final Depth	18 metres
Logged By	A. Shannon.

755103

M.C. 19

GEOLOGICAL LOG

Page:— 1-1

FROM ft. m ins.	TO ft. m ins.	RECOVERY ft. ins.	RECOVERY %	DESCRIPTION	SECTION Core	SECTION Sample
0	1			Sand and orange clay		
1	2			Orange and yellow-grey clay		
2	3			Yellow grey clay. Greenschist gravel with brown clay matrix Water incountered.		
3	4			Yellow to brown clay with organic fragments		
4	6			Orange brown clay and course grained sand.		
6	9			Probably orange-brown clay (lost) with angular quartz fragments and rounded greenschist etc as cavings		
9	12			Same as 6-9 metres. but with fewer cavings		
12	15			"Floating" orange brown clay chips.		
15	18			no recovery.		
				0-1½ allochthonous quartz gravel.		
				1½-2½ alluvial clay		
				2½-3 alluvial gravel.		
				3-18 leached cave fill, originally with high carbonate content.		

Continued over

ASSAY DATA

SAMPLE No.	FROM ft. ins.	TO ft. ins.	RECOVERY ft. ins.	RECOVERY %	ASSAY RESULTS

92-1783

755104

APPENDIX C

ASSAY RESULTS AND CROSS SECTIONS OF MAIN CREEK MAGNESITE DRILLING

M 1588

755105

DEPARTMENT OF MINES—TASMANIA

TELEPHONES:
Metallurgical Research .. ..
Laboratory .. .. ..
Mines Inspection .. .. ..
Explosives & Inflammable Liquids
44 2431-2 (2 lines)

LAUNCESTON OFFICES
287 WELLINGTON STREET
SOUTH LAUNCESTON 7250

14th May 1982

Industrial & Mining Investigations P/L,
1st Floor,
A.M.P. Building,
46 St. John Street,
LAUNCESTON 7250

Attention Mr. M. Edyvean

Dear Sir,

Magnesites 820427-435
820456-506

Please find results for the above.

The sorting of these results by "Loss on Ignition" (L.O.I.) has indicated that samples 820474 to 820481 inclusive have L.O.I. between 20 & 32% and hence would not be high grade magnesite. Analysis of this has been deferred.

Samples 820457 to 820474 are between 39.6 and 47.5% L.O.I. and are being assayed as indicated.

Yours faithfully,

(H. K. Wellington)
Chief Chemist & Metallurgist

75106

Industrial & Mining Investigations Pty. Ltd.

Reg. Nos. 820427 - 435, 820456 & 820482 - 506

Reg. No.	Description		CaO	MgO	SiO2	Al2O3	Fe	L.O.I.
820427	Hole M.C. 6 "A"	14 - 15m	1.7	38.8	5.9	1.5	2.8	
428		15 -16	1.0	37.8	7.8	2.1	3.4	
429		16 - 17	1.1	40.4	10.8	0.85	2.1	
430		17 - 18	1.9	41.1	6.7	0.42	1.7	
431		18 - 19	2.2	39.4	8.6	0.51	1.8	
820432		19 - 20	1.9	40.8	5.2	0.53	1.9	48.0
433		20 - 21	2.2	40.0	4.6	0.48	1.9	
434		21 - 22	1.9	41.9	3.8	0.19	1.7	
435		22 - 23	2.6	41.1	3.8	0.16	1.7	
820456	Hole M.C. 7	12 - 13m	1.5	29.6	26.3	0.18	3.8	
820482	Hole M.C. 9	23 - 24m	15.2	25.3	16.9	0.59	2.9	33.6
483		24 - 25	16.6	24.1	15.4	0.62	3.0	
484	Hole M.C. 10	12 - 13m	2.0	26.7	36.1	0.30	2.8	
485		13 - 14	1.4	30.4	25.4	0.18	2.2	
820486		14 - 15	1.9	34.9	18.8	0.12	1.4	
487		15 - 16	4.2	35.9	12.5	0.04	1.2	
488		16 - 17	3.1	35.8	12.9	0.03	1.1	
489		17 - 18	1.5	25.2	36.1	0.15	1.3	
820490		18 - 19	0.87	12.8	66.7	0.77	1.7	
491		19 - 20	0.34	3.2	89.3	0.38	1.6	
492		20 - 21	0.34	2.8	89.8	0.26	1.4	
493	Hole M.C. 11	6 - 7m	5.6	32.0	14.6	0.55	2.8	
494		7 - 8	4.2	36.9	8.0	0.38	2.7	
820495		8 - 9	4.3	38.3	5.0	0.34	2.9	

75107

Reg. No.	Description		CaO	MgO	SiO2	Al2O3	Fe
820496	Hole M.C. 11	9 - 10m	4.2	40.8	0.97	0.09	2.8
497		10 - 11	5.0	40.4	0.98	0.09	2.6
498		11 - 12	3.5	40.8	1.1	0.07	3.1
499		12 - 13	3.8	40.5	0.92	0.07	3.3
820500		13 - 14	3.1	39.6	1.8	0.07	3.0
501		14 - 15	2.5	39.3	1.3	0.06	2.6
502	Hole M.C. 12	9 - 10m	4.6	35.3	1.4	0.43	6.1
503		10 - 11	5.1	35.0	0.80	0.26	5.0
504		11 - 12	4.8	36.0	1.1	0.16	4.4
505		12 - 13	3.1	38.6	0.64	0.15	4.2
820506		13 - 14	4.7	38.5	0.83	0.12	3.8

Analyses by... J. R. Letthorn ....
L. M. Shaw.

H K Wellington

(H. K. Wellington)
Chief Chemist & Metallurgist

M 1588

755108

DEPARTMENT OF MINES—TASMANIA

TELEPHONES:
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287 WELLINGTON STREET
SOUTH LAUNCESTON 7250

2nd June 1982

Industrial & Mining Invest. P/L,
1st Floor,
A.M.P. Building,
46 St. John Street,
LAUNCESTON 7250

Attention Mr. M. Edyvean

Main Creek Magnesite
Reg. Nos 820457-473 Holes 7 & 8

Dear Sir,

Please find attached results from above holes. This completes the work on these samples as 820474 to 820481 inclusive were too low on loss on ignition to be worth analysis.

Yours faithfully,

(H. K. Wellington)
Chief Chemist & Metallurgist

Fee $510.00

I & M.I. Pty Ltd Reg. Nos 820457-473 Main Creek Hole 7 & 8

Reg. No	Description		%CaO	%MgO	%SiO_2	%Al_2O_3	%Fe	%L.O.I.
820457	Main Creek Hole 7	13 - 14m	1.4	32.8	19.9	0.30	3.0	39.6
458		14 - 15	1.5	35.2	16.1	0.42	2.8	41.8
459		15 - 16	2.3	37.0	13.9	0.32	2.3	43.1
460		16 - 17	2.4	36.4	15.2	0.15	1.8	42.8
461		17 - 18	2.0	34.6	17.7	0.17	1.9	41.9
462		18 - 19	1.7	37.6	13.2	0.13	1.7	44.1
463		19 - 20	1.6	37.6	13.1	0.11	1.7	44.3
464		20 - 21	1.7	37.6	13.2	0.17	1.8	44.8
465*	Hole 8	16 - 19	1.1	27.5	32.7	1.8	8.4	43.7
466		19 - 21	2.8	40.0	9.0	0.13	1.9	43.5
467		21 - 22	2.9	40.0	5.1	0.09	1.6	47.2
468		22 - 23	3.6	40.6	4.7	0.08	1.5	47.5
469		23 - 24	4.3	40.6	5.8	0.08	1.5	46.7
470		24 - 25	4.4	40.0	5.6	0.08	1.4	46.5
471		25 - 26	4.3	39.4	5.2	0.08	1.5	46.9
472		26 - 27	3.9	40.6	5.4	0.08	1.6	46.5
473		27 - 28	4.6	40.0	5.2	0.04	1.4	46.9

* Provisional result.

Analyses by... L.M. Clay
J.K. Lethlean

(H. K. Wellington)
Chief Chemist & Metallurgist

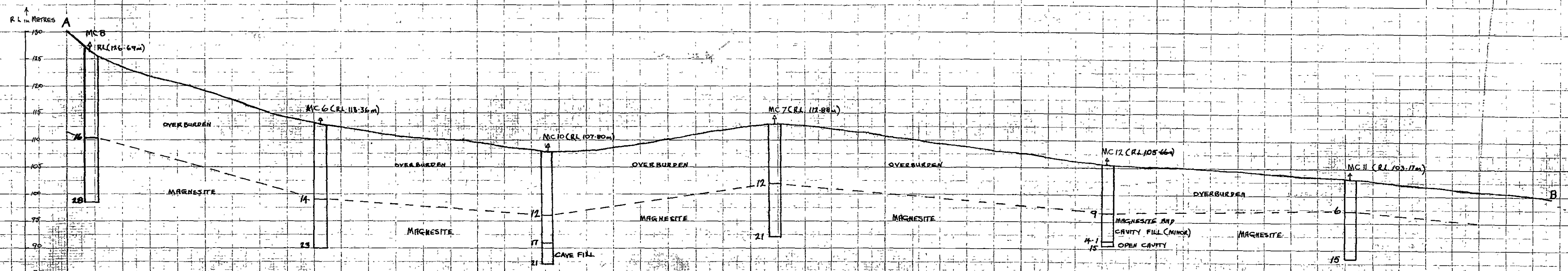
82-1783.

755110

SECTION 1.

MAIN CREEK MAGNESITE - EL 4/61

OVERBURDEN TO MAGNESITE RELATIONSHIP IN SAMPLED DRILLHOLES



SCALE 1:500 (1 cm = 5 metres)

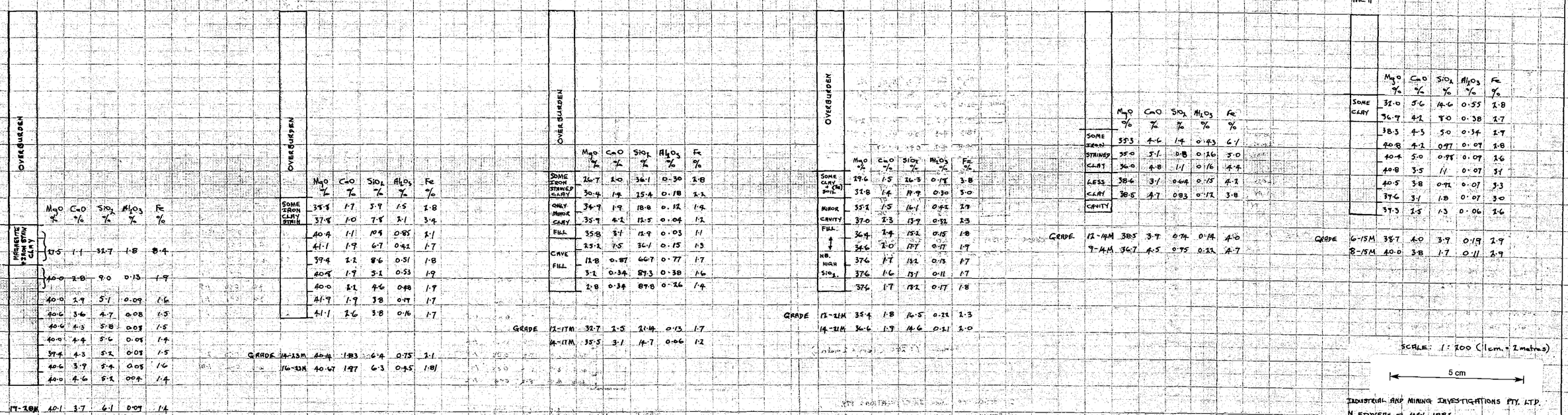
INDUSTRIAL AND MINING INVESTIGATIONS PTY. LTD.
M. EPYNEAN. — MAY 1981.

5 cm

SECTION 2

MAIN CREEK MAGNESITE - EL4/61

GRAPHIC DRILLING LOGS AND ASSAYS



MC8	MgO %	CaO %	SiO_2 %	Al_2O_3 %	Fe %
	47.5	1.1	32.7	1.8	8.4
	40.0	2.8	9.0	0.13	1.9
	40.0	2.9	5.1	0.09	1.6
	40.6	3.6	4.7	0.08	1.5
	40.6	4.3	5.8	0.08	1.5
	40.0	4.4	5.6	0.09	1.9
	39.4	4.3	5.2	0.09	1.5
	40.6	3.9	5.4	0.08	1.6
	40.0	4.6	5.2	0.09	1.4
GRADE 19-20M	40.1	3.7	6.1	0.09	1.4

MC6	MgO %	CaO %	SiO_2 %	Al_2O_3 %	Fe %
SOME IRON STAINED CLAY	35.8	1.7	5.9	1.5	2.8
	37.8	1.0	7.8	2.1	3.4
	40.4	1.1	10.9	0.85	2.1
	41.1	1.9	6.7	0.42	1.7
	39.4	2.2	8.6	0.51	1.8
	40.8	1.9	5.2	0.53	1.9
	40.0	2.2	4.6	0.48	1.9
	41.9	1.9	3.8	0.17	1.7
	41.1	2.6	3.8	0.16	1.7
GRADE 14-15M	40.4	1.83	6.4	0.75	2.1
16-18M	40.67	1.97	6.3	0.45	1.81

MC10	MgO %	CaO %	SiO_2 %	Al_2O_3 %	Fe %
SOME IRON STAINED CLAY	26.7	2.0	36.1	0.30	2.8
	30.4	1.9	25.4	0.18	2.2
ONLY MINOR CLAY	34.9	1.9	18.8	0.12	1.9
	35.9	4.2	12.5	0.04	1.2
FILL	35.8	3.1	12.9	0.03	1.1
	23.2	7.5	36.1	0.15	1.3
CAVE FILL	12.8	0.87	66.7	0.77	1.7
	3.2	0.34	89.3	0.38	1.6
	2.8	0.34	89.8	0.26	1.4
GRADE 12-17M	32.7	2.5	21.4	0.13	1.7
14-17M	35.5	3.1	14.7	0.06	1.2

MC7	MgO %	CaO %	SiO_2 %	Al_2O_3 %	Fe %
SOME CLAY + FILL	29.6	1.5	26.3	0.18	3.8
	32.8	1.4	19.9	0.30	5.0
MINOR CAVITY	35.1	1.5	16.1	0.42	2.9
	37.0	2.3	13.9	0.32	2.3
FILL ↕ NB. HIGH SiO_2	36.4	2.4	15.2	0.15	1.8
	34.6	2.0	18.7	0.17	1.9
	37.6	1.7	13.2	0.13	1.7
	37.6	1.6	13.1	0.11	1.7
	37.6	1.7	13.2	0.17	1.8
GRADE 12-21M	35.4	1.8	16.5	0.22	2.3
14-21M	36.6	1.9	14.6	0.21	2.0

MC12	MgO %	CaO %	SiO_2 %	Al_2O_3 %	Fe %
SOME IRON STAINED CLAY	35.3	4.6	1.4	0.43	6.1
	35.0	5.1	0.8	0.26	5.0
LESS IRON STAINED CLAY	36.0	4.8	1.1	0.16	4.4
	38.6	3.1	0.64	0.15	4.2
CAVITY	38.5	4.7	0.83	0.12	3.8
GRADE 12-14M	38.5	3.7	0.74	0.14	4.0
9-14M	36.7	4.5	0.75	0.22	4.7

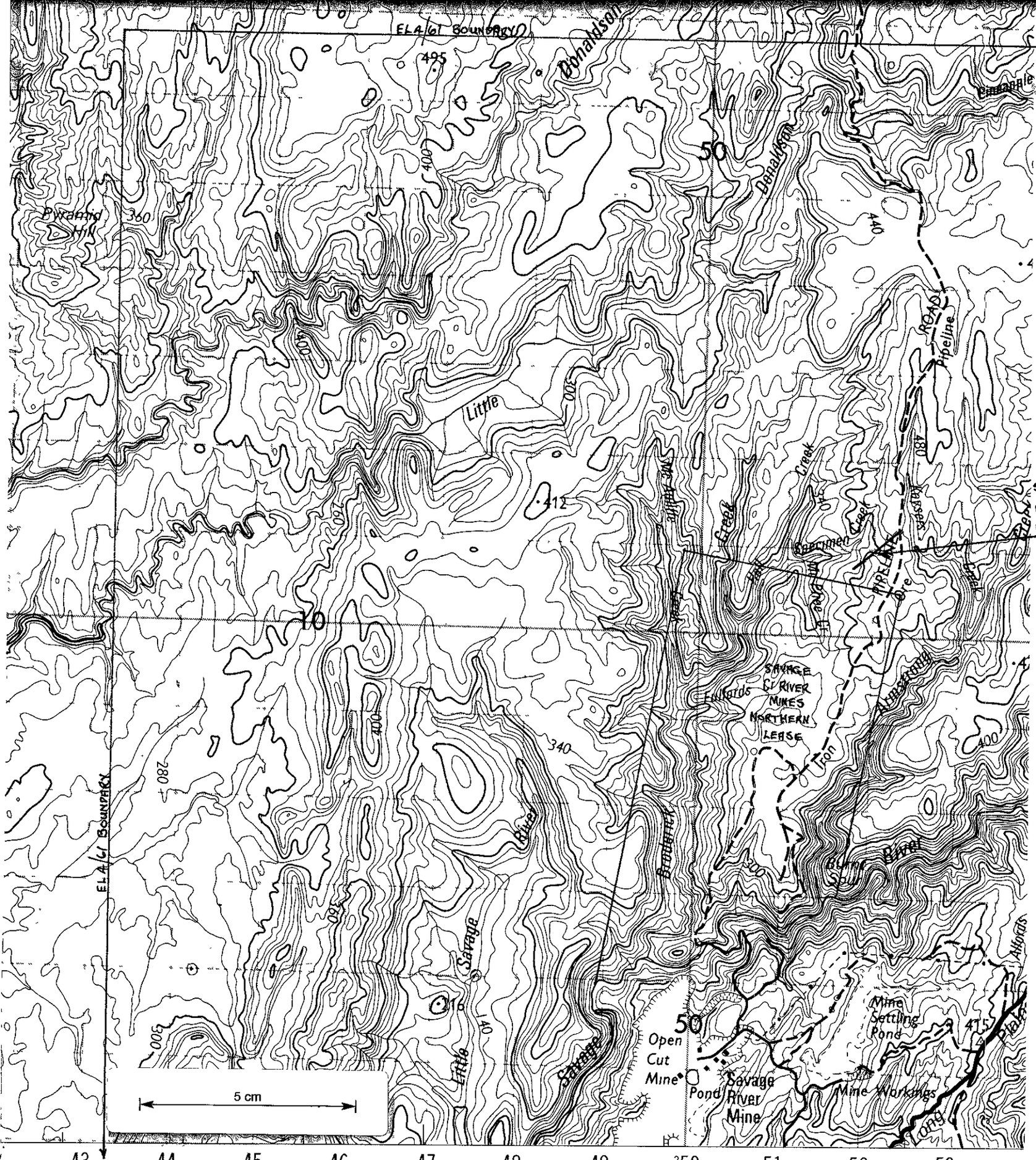
MC11	MgO %	CaO %	SiO_2 %	Al_2O_3 %	Fe %
SOME CLAY	32.0	5.6	14.6	0.55	2.8
	36.7	4.2	8.0	0.38	2.7
	38.5	4.5	5.0	0.34	2.9
	40.8	4.2	0.97	0.09	2.8
	40.4	5.0	0.98	0.09	2.6
	40.8	3.5	1.1	0.07	3.1
	40.5	3.8	0.72	0.07	3.3
	37.6	3.1	1.8	0.07	3.0
	37.3	2.5	1.3	0.06	2.6
GRADE 6-15M	38.7	4.0	3.9	0.19	2.9
8-15M	40.0	3.8	1.7	0.11	2.9

SCALE: 1:200 (1cm. = 2 metres)

5 cm

INDUSTRIAL AND MINING INVESTIGATIONS PTY. LTD.

N. EDIVEAN — MAY 1982



LOCATION:
SPECIMEN REEF
DRIVING GRID
BASELINE.

75512

CONTOUR INTERVAL 20 METRES

82-1783.

PLAN No. 1 : RELIEF NORTHERN ELA/61

(PART MAP No. 7915-III :- HORTON 1:50,000)

PRODUCED BY LANDS DEPARTMENT TASMANIA
M. EDYVEAN - MAY 1982
INDUSTRIAL AND MINING INVESTIGATIONS PTY. LTD.

82-1783

82-1781
part 3

755113

1

LOCATION: SPECIMEN REEF

PART 3. PLAN 2.

DRILLING - EL 4/61

GN MN

To PT. LATTA.

BASALT (TERTIARY)

2.0Km.

TILLITE

PERMIAN MUDSTONE

1.73Km.

PRECAMBRIAN SCHIST

4.0Km.

PIPELINE ROAD.

OLD SILVER LEAD LEASES.

BRODRICK CREEK

DAVIS CREEK

SP.R.No 1.

SP.R.No 2.

SP.R.Nos 4 + 5.

SPECIMEN CREEK

SPECIMEN REEF GRID.

SP.R.No 3.

HALL CREEK

McPHEE'S CREEK

OLD ADIT'S

5410

SAVAGE RIVER MINES NORTHERN LEASE.

To SAVAGE RIVER

3550

0 100 400 600 800 1000 1200 METRES

5 cm

HORTON (part map)

INDUSTRIAL AND MINING INVESTIGATIONS PTY. LTD.

AUTHOR : M. EDYVEAN

DATE : MAY, 1982

SCALE : 1:20000

82-1783

82-1781
part 3 755114

2

PART 3. PLAN 3.

SPECIMEN REEF AREA

TOPOGRAPHIC SURVEY

OUTLINING DRILLING PROGRAMME

GRID NORTH

MAGNETIC NORTH

352

5411

TRAVERSE 00

TRAVERSE 100S

TRAVERSE 200S

TRAVERSE 300S

TRAVERSE 400S

TRAVERSE 500S

TRAVERSE 600S

TO PORT LATTA

SPECIMEN CREEK

No 1 TUNNEL (INFERRED)

No 4 TUNNEL

No 2 TUNNEL

No 3 TUNNEL

D.D.H. No S.C.1

D.D.H No 3 S.C.4+5

D.D.H No 2 S.C.2

D.D.H. No S.C.3

PIPELINE ROAD

To SAVAGE RIVER

INDUSTRIAL AND MINING INVESTIGATIONS PTY. LTD. EL 4/61
SPECIMEN CREEK, N.W. TASMANIA
SCALE : 1CM. TO 25METRES--1:2500
AUTHOR: M EDYVEAN
DATE: MAY, 1982
REDUCED LEVEL AT 5 METRE INTERVAL

MAJOR I.P. AXES

SECONDARY I.P. AXES

POSSIBLE FAULTLINE

OLD WORKINGS

0 25 50 75 100 125 150 175 200 225 250 METRES

5 cm

82-1783

82-1781

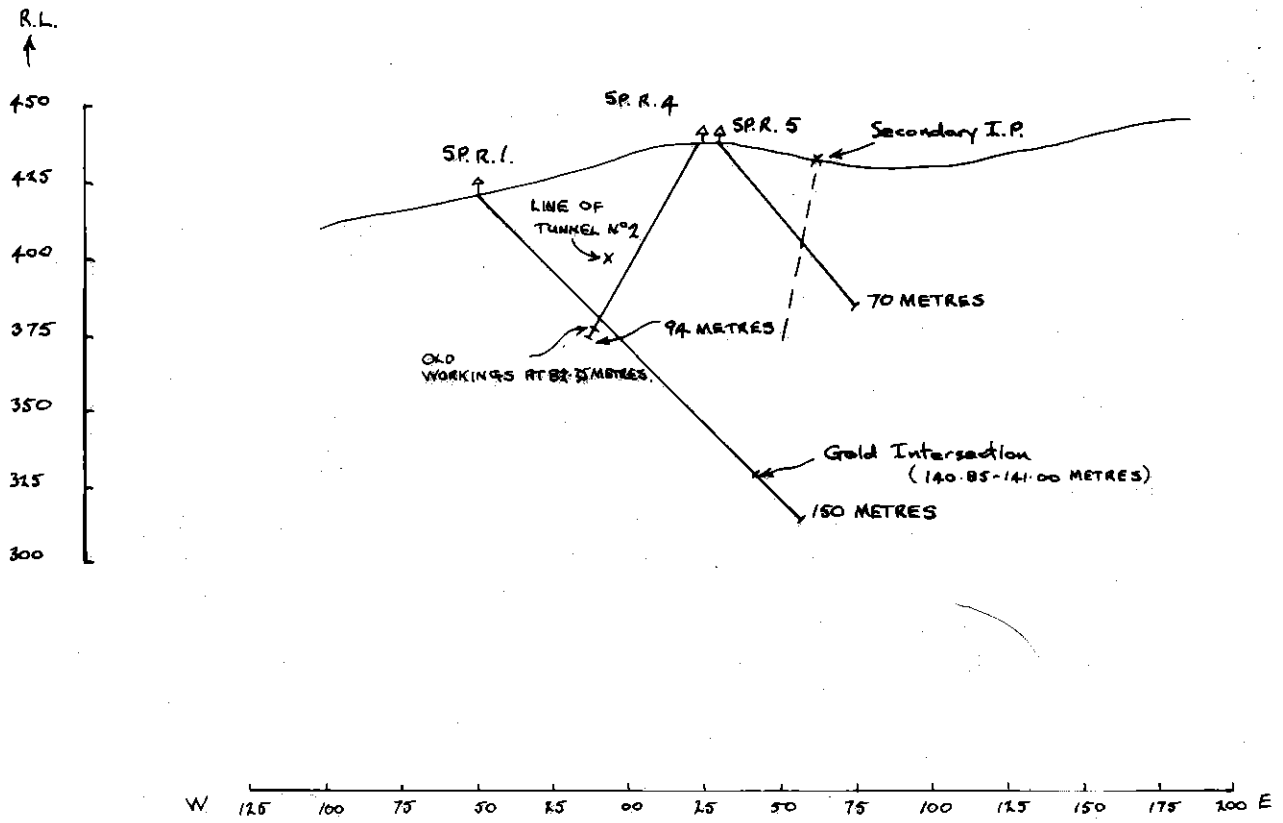
part 3 755115.

3

PART 3. PLAN 4.

SECTION Nº 1. SPECIMEN REEF DRILLING - EL4/61 - INDUSTRIAL AND MINING INVESTIGATIONS PTY. LTD.

CROSS SECTIONS TRAVERSE 200 S :- DRILLHOLES SP.R.1, SP.R.4, SP.R.5.



SCALE: 1:2500

0 25 50 75 100 125 150 175 METRES.

5 cm

CO-ORDINATES :

SP.R.1. 200 S / 50 W

INCLINATION : 46°
BEARING : E ALONG TRAVERSE (130° MAGNETIC)
DEPTH : 150 METRES.

SP.R.4. 200 S / 25 E

INCLINATION : 60°
BEARING : 180° MAGNETIC
DEPTH : 94 METRES

SP.R.5. 200 S / 20 E

INCLINATION : 50°
BEARING : E ALONG TRAVERSE (130° MAGNETIC)
DEPTH : 70 METRES

M.E DYVERN.
MAY 1982.

82-1783

82-1781

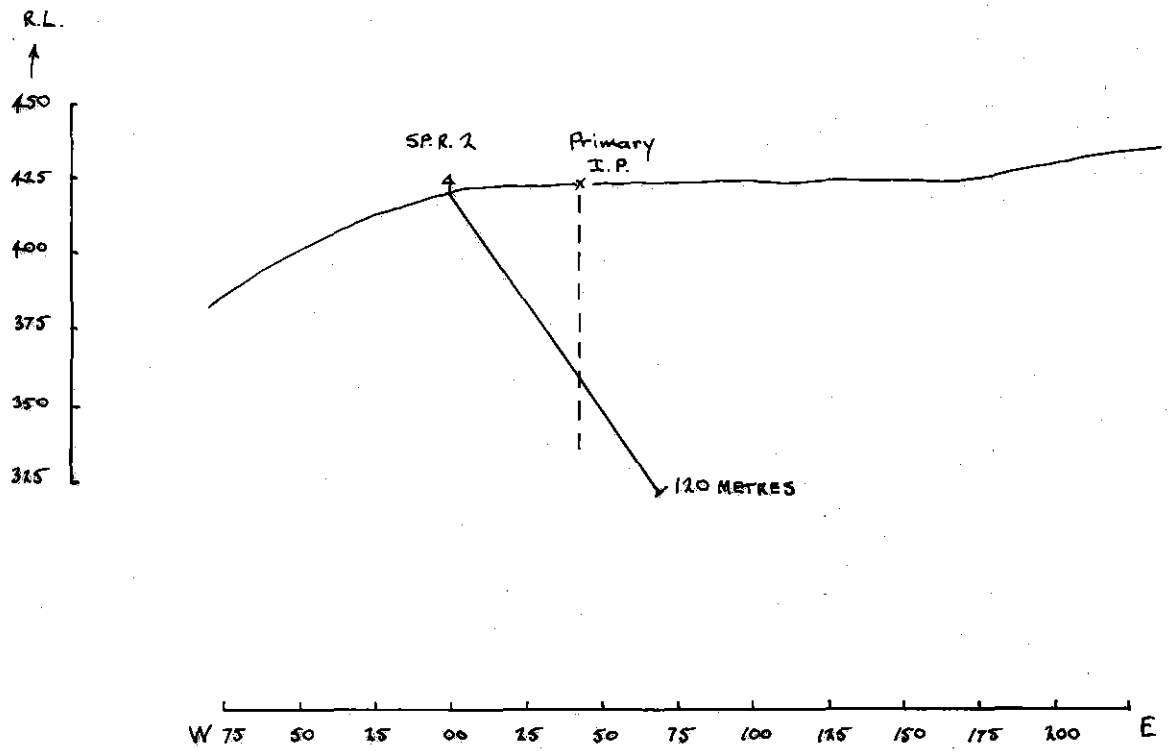
part 3 755116

4

PART 3. PLAN 5.

SECTION Nº 2. SPECIMEN REEF DRILLING - EL 4/61 - INDUSTRIAL AND MINING INVESTIGATIONS PTY. LTD.

CROSS SECTION TRAVERSE 400 S :- DRILLHOLE SP. R. 2.

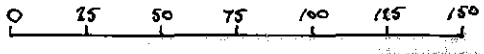


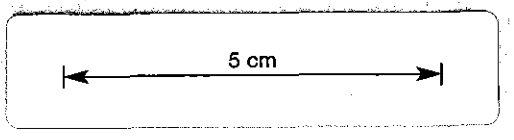
CO-ORDINATES:

SP. R. 4 400 S/00

INCLINATION: 55°
BEARING : 100° MAGNETIC
DEPTH : 120 METRES

SCALE: 1:1500





M. EDYVEAN
MAY 1982.

82-1783

82-1781

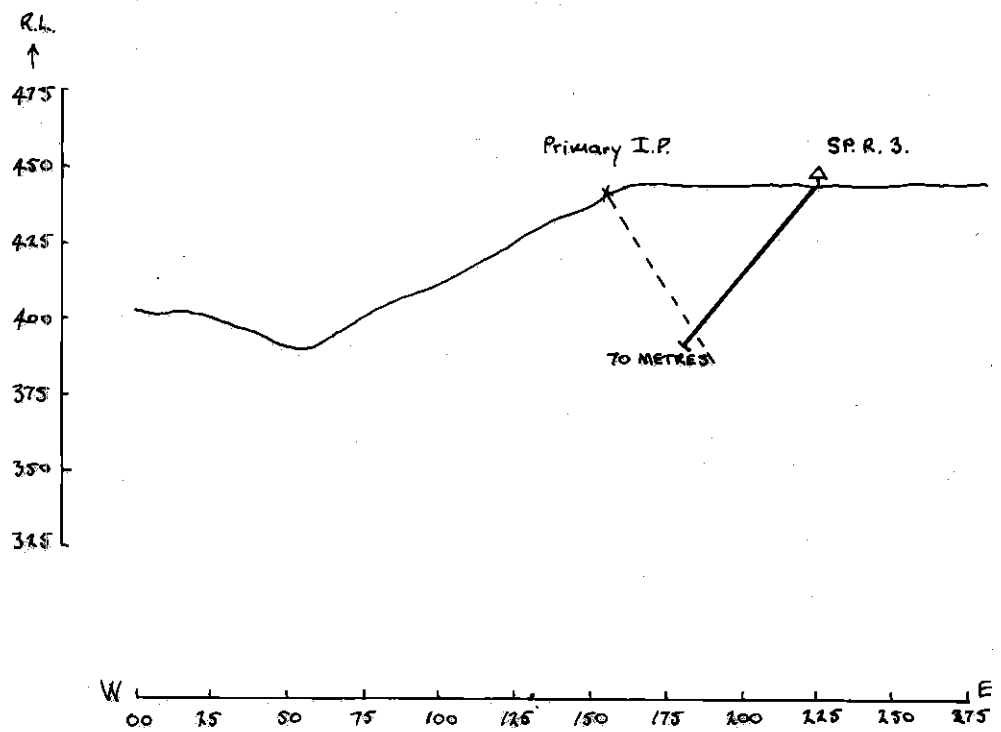
part 3 755117

5

PART 3. PLAN 6.

SECTION Nº 3. SPECIMEN REEF DRILLING - EL4/61 - INDUSTRIAL AND MINING INVESTIGATIONS PTY. LTD.

CROSS SECTION TRAVERSE 500S:- DRILLHOLE SP.R. 3

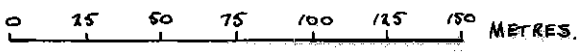


CO-ORDINATES:

SP.R 3. 500S/225E

INCLINATION : 50°
BEARING : W ALONG TRAVERSE (310° MAGNETIC)
DEPTH : 70 METRES.

SCALE: 1:1500



M.EDYVEAN
MAY 1982.

Plan No 7. 1 : 50 000 PROVISIONAL EDITION **CORINNA** LOCATION: RELIEF, ACCESS. - MAIN CREEK MAGNESITE, EL4/61 SHEET No: 7914-IV

755118

145°00' 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53

41°30' 03 02 01 54 99 98 97 96 95 94 93 92 91 90 53 89 88 87 86 40' 85 84 83 82 81 80 79 78 77

MT SUNDAY
Interview River
Interview Pinnacle
Interview
Badger Plains
The Longback
Longback Creek
Savage River
Savage Rivers
Obsidian
Big Duffer Creek
Long Plains
Heazlewood
Whyte
ROAD
MAIN CREEK MAGNESITE AREA
PROPOSED TRACK CORINNA
Eldons Track
Donaldson River
Destination Creek
Sabbath Creek
437 MT DONALDSON
Guthrie Creek
Savage Ridge
Goodie Creek
Club Foot Ck
Tomlinsface Ck
Timbs Creek
Bracken Creek
Eight Mile Ck
Plains Creek
Blackguards Hill
295
Nine Mile Creek
Office Creek
West Plain
Brown Creek
Brown Plains Creek
CORINNA
259
PIEMAN RIVER
Donaldson Landing
Yanns Reach
Wilsons Point
Arnberg Hill
Elizabeth Ridge
Middleton Creek
Brothers Creek
Little Hamilton Creek
Whyte River
Frenchmans Creek
Corinna
Plateau
Corinna Ridge
Tikkarwoppa Creek
Bernafai Creek
Derville Creek
Nancy Creek
Lefroy Ridge
Hades Ridge
Lugg Creek
Paradise Creek
Breadknife Creek
Boundary Creek
Water Race
Whaleback Ridge
Owen
Meredith
Eades Creek
Dannellys Crossing
Hannahans Creek
Derville Saddle
Newdegate
George Town
Packet Creek
Hayle Creek
DEVILLE
HEC RESERVE
EL4/61 Boundary
To Tullah
82-1783.

CROWN COPYRIGHT RESERVED

5 cm

CONTOUR INTERVAL 40 METRES

M. EDYVEAN - MAY 1982.
INDUSTRIAL AND MINING INVESTIGATIONS PTY. LTD.
PRODUCED BY LANDS DEPARTMENT TASMANIA.

Plan No 8.

890 LOCATION, RELIEF: MAIN CREEK MAGNESITE, EL4/61

320 325 330

1: 15 840

5 cm

MAP SHEET : CORINNA

1 | 2
3 | A | 4

EL4/61 Boundary

347000 mE

350000 mE

889 887 885 881

SAVAGE RIVER

MAIN CREEK MAGNESITE

Proposed Track

Existing Track

Corinna Road

Bowry Ck.

To Corinna Road.

5399000 mN

755119

82-1783.

M.E.DYVEAR - MAY 1982.

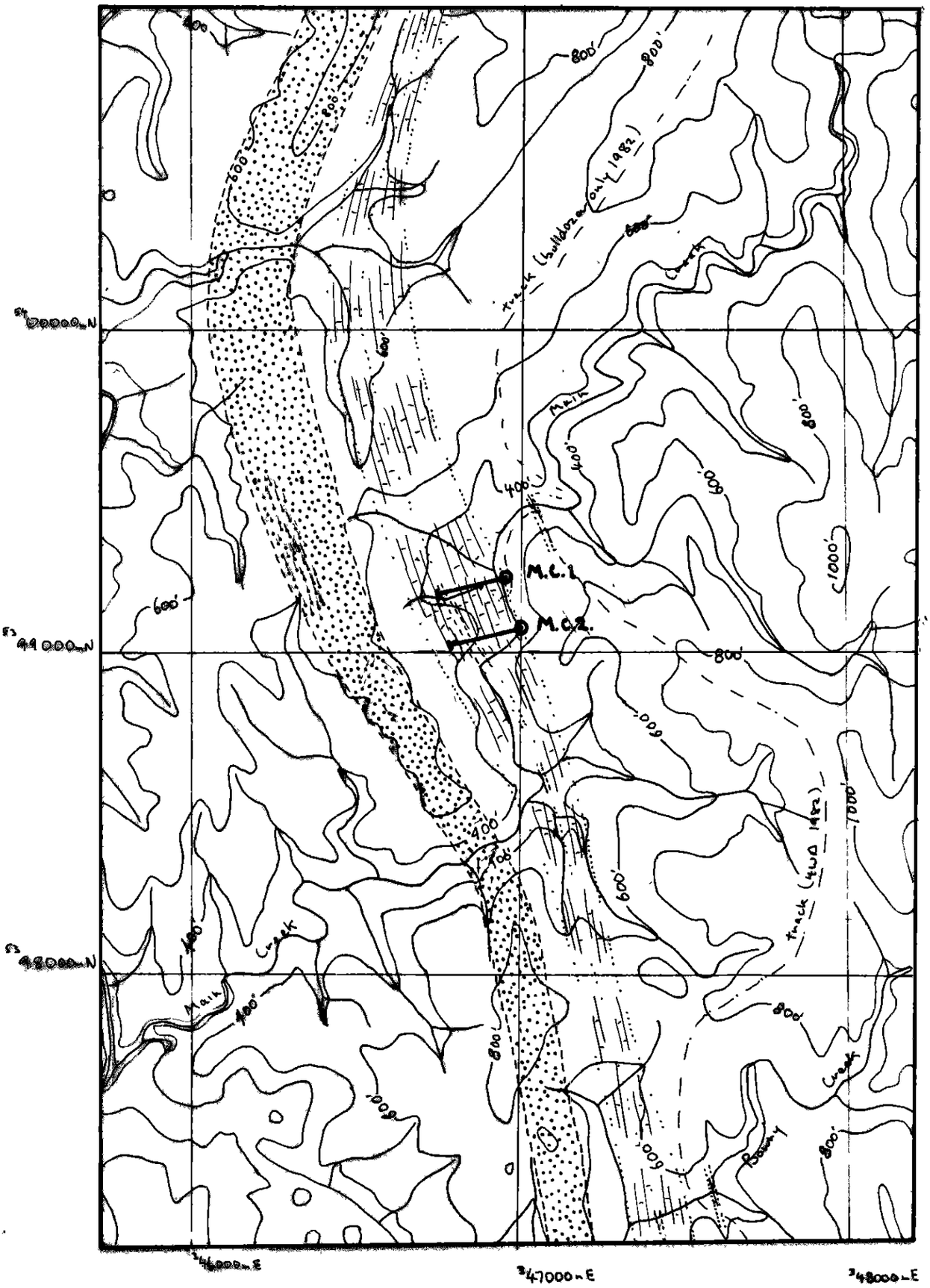
INDUSTRIAL AND MINING INVESTIGATIONS PTY. LTD.

82-1783

82-1781

part 3 755120.

PART 3 PLAN 9.



inferred resistant bed.

inferred magnesite

5 cm

500

E.L. 4/61 MAIN CREEK AREA

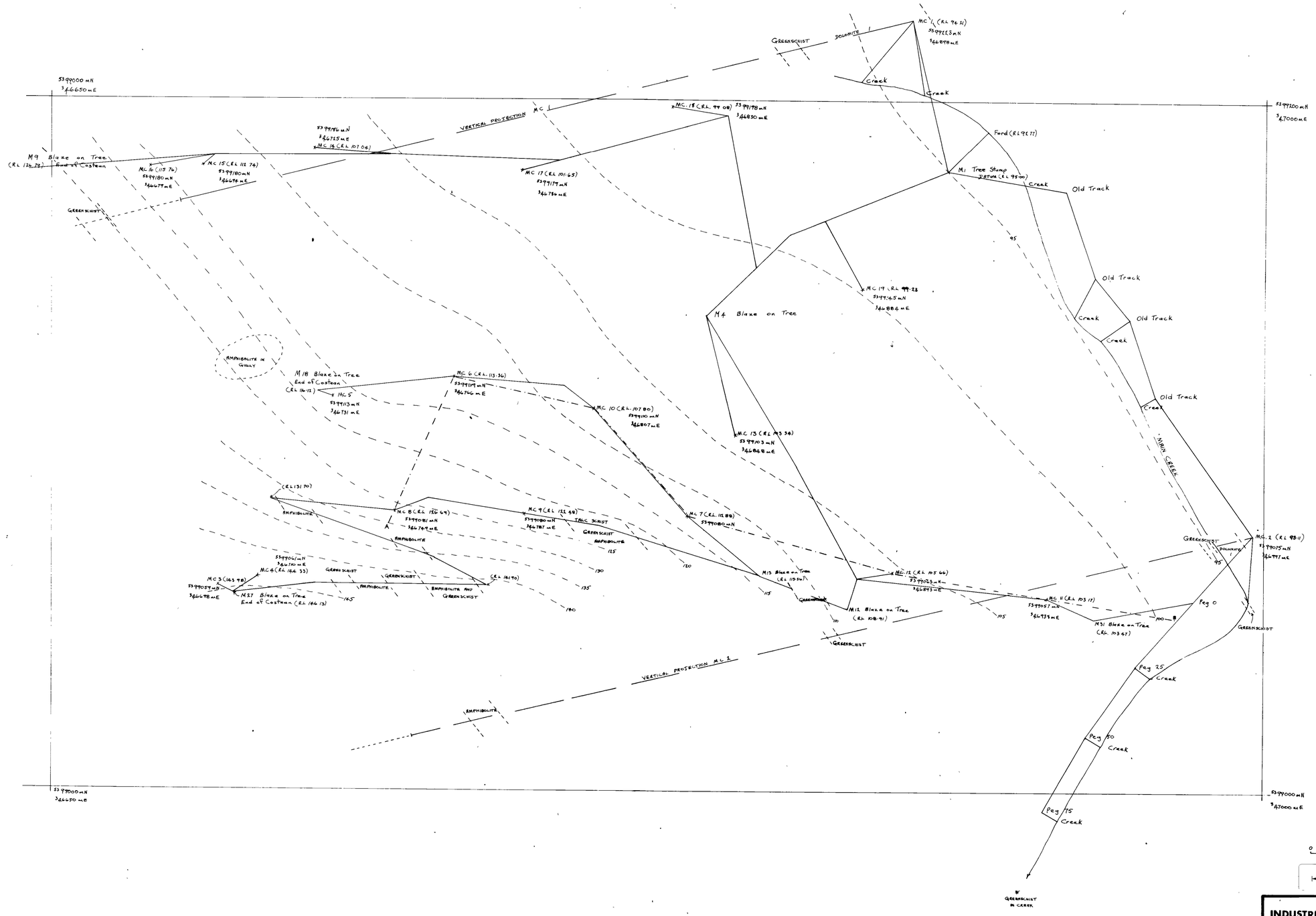
H. Shannon - May 1982
Industrial and Mining Investigations P/L.

Scale: 1:15840

PART 3 PLAN 10

MAIN CREEK MAGNESITE

COSTEANS ----- DRILLHOLES ----- CONTOURS



INDUSTRIAL AND MINING INVESTIGATIONS PTY. LTD.
SCALE. 1:500
AUTHORS. M.EDYVEAN & P.COVER
DRAWN BY. M.EDYVEAN
DATE. MAY, 1982
EL4/61

82-1781
Pt of 3. 755121

82-1783

7