GOLD FIELDS EXPLORATION PTY. LIMITED

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E.L. 11/76

TRIAL HARBOUR AREA

ANNUAL REPORT FOR 1983/84

OPEN FILE

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SUMMARY

Until April, 1984, E.L. 11/76 covered an 88 sq. km. area underlain by the tin-bearing Heemskirk Granite. The E.L. was then reduced to 33 sq. km. and amalgamated with S.P.L. 129. The resulting "new" E.L. 11/76 now covers a 79 sq. km. area which is underlain by late Proterozoic to lower Devonian sediments, volcanics and basic-ultrabasic intrusives as well as the Heemskirk Granite. Currently, the main exploration target on the E.L. is Queen Hill-style, carbonate-replacement tin mineralisation.

Work completed on the E.L. during 1983/84 comprised ground surveys on the West Agnew Grid, drilling and limited ground surveys on the Stonehenge Grid and stream sediment sampling on the southern part of the licence area and on the eastern margin of the Heemskirk Granite.

The West Agnew Grid was established to test for stanniferous polymetallic sulphide deposits within the Heemskirk Granite west of the Agnew Grid. Unfortunately, soil geochemical and gradient array I.P. results on this grid were very disappointing and suggest that the area has little potential for such mineralisation.

Three diamond drill holes (totalling 1201m) were completed on the Stonehenge Grid at the eastern end of the E.L. to test for carbonate replacement tin mineralisation. The first hole, TH 13, intersected 61.0m (down-hole) of altered and mineralised dolomite containing 0.9% Pb, 0.6% Zn and 29 g/t Ag; unfortunately tin values were very low (<0.01%). The second hole, TH 14, which was drilled about 900m further to the northwest, intersected 3.6m (down-hole) of tourmalinised breccia, however base metal and tin values were very disappointing. The third hole, TH 15, was drilled to test for possible carbonate-replacement tin mineralisation at depth beneath the TH 13 base metals-silver intersection; unfortunately, tin values were low

throughout, however the hole did intersect 6.0m (down-hole) carrying 0.43% As and 35 g/t Ag in an arsenopyrite-bearing, pyritic breccia. The latter may represent the upper or lateral limit of a zoned, tin-mineralised system.

Limited additional ground magnetics on the Stonehenge Grid helped define the large magnetic anomaly better so that computer modelling of small "residual" anomalies on the flanks of the major anomaly could be carried out effectively. The modelling then indicated that the residual anomalies could be reflecting stanniferous, sulphide-rich orebodies.

The results of both stream sediment sampling programs were largely disappointing. Only one area of significant interest was highlighted by this work, viz. a button grass flat possibly underlain by dolomitic units of the Oonah Formation, south-west of the Stonehenge Grid. This area is prospective for carbonate-replacement tin mineralisation.

The above programs cost $200,000 to complete.

Work proposed for the remainder of 1984-85 comprises:

(1) Diamond drilling one hole of 300 to 400m in the vicinity of the Spray Mine.

(2) The completion of a ground E.M. Survey.

(3) Extension of the Stonehenge Grid east and completion of Ground magnetics and bedrock geochemical surveys thereon.

(4) Limited ground follow-up on the possible Oonah dolomite area, south-west of the Stonehenge Grid.

The above program is expected to cost $69,500 to complete.

1. INTRODUCTION

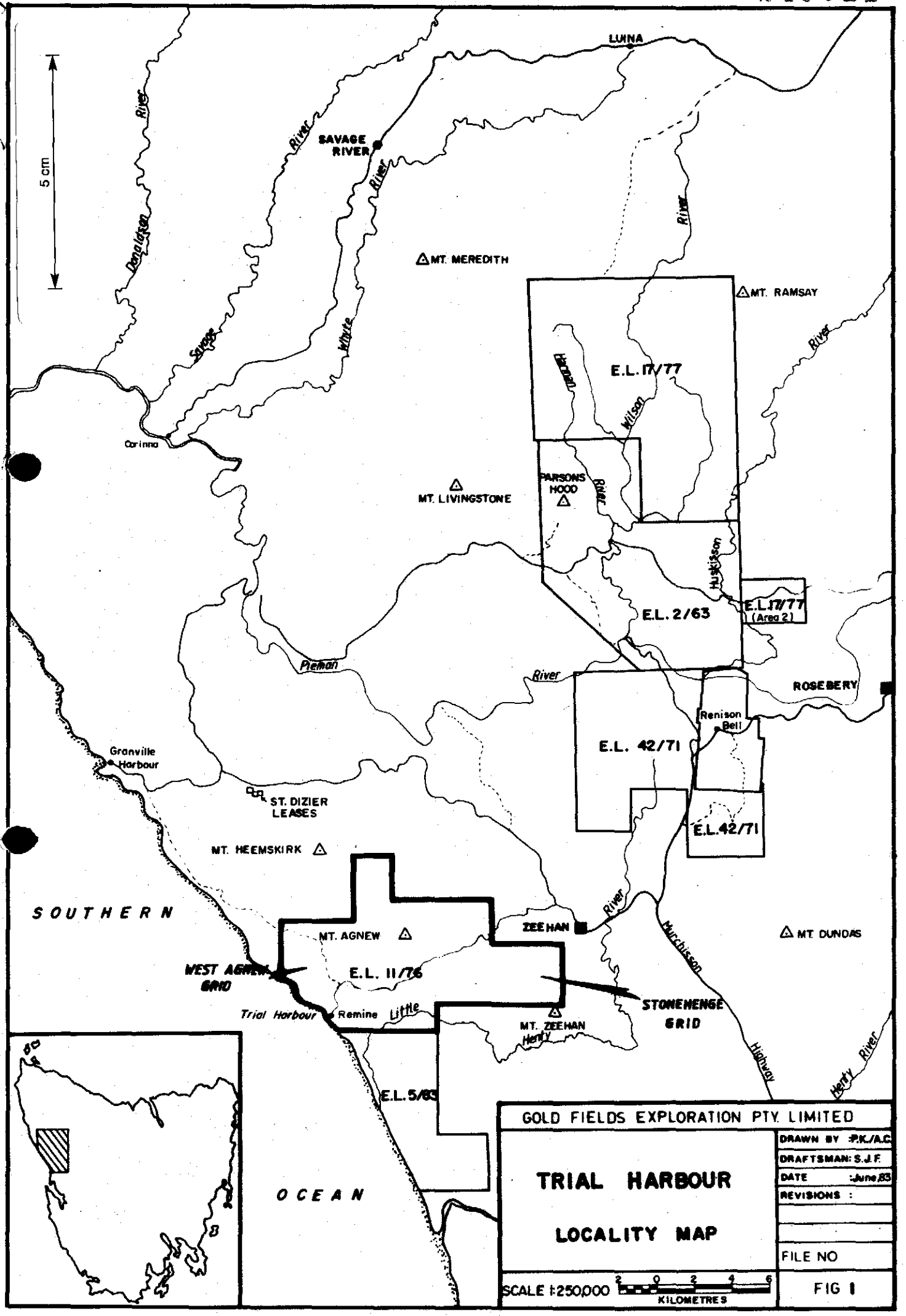
E.L. 11/76 covers an area of 79 sq. km. between Zeehan and Trial Harbour in West Tasmania (Figure 1). The area is partly rugged and heavily forested, particularly near its northern and southern boundaries, with more moderate topography and button grass or regrowth vegetation elsewhere.

Geologically, the licence area covers a sequence of faulted and folded Upper Proterozoic and Paleozoic sediments, volcanics and basic to ulatrabasic intrusives, intruded by the Upper Devonian Heemskirk Granite.

Known mineralisation within E.L. 11/76 comprises base metals-silver mineralisation in veins and fault infillings at the eastern end of the licence area (Stonehenge grid), cassiterite in tourmaline veins just south of the granite contact (Kelvin and Maynes) and a variety of styles of tin ± base metals mineralisation within the Heemskirk Granite.

During the past year, E.L. 11/76 has been reduced in area and amalgamated with S.P.L. 129. As a consequence previous reports on the current licence area refer to both tenements.

Exploration on the Heemskirk Granite commenced in 1976 and has been focussed, in recent years, on stanniferous, polymetallic, sulphide-rich deposits near the granite's south-east margin. Elsewhere on the E.L., exploration commenced earlier, in 1973. Until 1980, work was concentrated on areas adjacent to the granite margin, mainly testing the skarn potential of the hornfelsed country rocks. Since 1980, the exploration effort has been directed at Queen Hill-style, stanniferous sulphide targets primarily on the Stonehenge Grid.



GOLD FIELDS EXPLORATION PTY. LIMITED

TRIAL HARBOUR

LOCALITY MAP

DRAWN BY : P.K./A.C.
DRAFTSMAN: S.J.F.
DATE : June 83
REVISIONS :
FILE NO

SCALE 1:250,000 2 0 2 4 6 KILOMETRES

FIG 1

This report describes a program of ground surveys on the southern and eastern margins of the Heemskirk Granite, drilling and limited ground geophysical surveys on the Stonehenge Grid and reconnaissance stream sediment sampling in the vicinity of the Little Henty River. Recommendations are made for further work on the eastern part of the E.L. in 1984-85.

2. EXPENDITURE

Expenditure on the licence area during the 16 months to the end of October, 1984 amounted to $200,039. This figure includes $110,884 which was incurred on the former S.P.L. 129 during 1983-84 before its amalgamation with E.L. 11/76.

Detailed expenditure breakdowns are listed in Appendix 1.

Total spending on the licence area to the end of October, 1984, was $1,482,918. Work proposed for the rest of the financial year, 1984-85, is expected to cost $69,500 (Appendix 1)

3. LAND TENURE

E.L. 11/76 is held in the name of Renison Limited, a wholly owned subsidiary of Renison Goldfields Consolidated Limited (R.G.C.). Exploration on the licence is currently being undertaken by Gold Fields Exploration Pty. Ltd., the exploration arm of R.G.C.

In March, 1984, application was made to reduce the existing area of E.L. 11/76 from 88 sq. km. to 33 sq. km. and then amalgamate it with S.P.L. 129 (46 sq. km.). This

proposal was accepted and the E.L. therefore now covers 79 sq. km.

Within the E.L., there are 16 current mining leases held by other parties, which cover a total of about 3 sq. km.; these all lie within the old area of S.P.L. 129 (i.e. south and east of the granite contact). Details of the leases are given in Roberts (1981) and Kilpatrick (1982). During 1983-84, two small mining leases within the granite were relinquished and subsequently incorporated into the E.L., viz:

(1) M.L. 103M/71 of 8.1 ha, formerly held by K.P. Cornish.

(2) M.L. 90M/47 of 2.0 ha, formerly held by Renison Limited.

4. STONEHENGE AREA (P. Komyshan)

4.1 Introduction-Previous Work

The discovery of several tin bearing sulphide replacement bodies within rocks of the Oonah Formation at Queen Hill (7 Mt. of 0.7% Sn including 3 Mt. Of 1.0% Sn) has stimulated search for a similar system on the eastern end of E.L. 11/76. This area has a long history of exploration and lead-silver mining which is summarised below:

(1) 1890-1920's : extensive prospecting and mining of silver-lead-zinc fissure lodes, the most substantial being the Spray-Nubeena lodes and Grubb's lode.

(2) 1920-1930's : prospecting and drilling assistance from Mines Dept. at the Spray, Swansea (McIntosh Reid 1922-25) and North Tasmanian (latter 3 DDH with recovery of 6-8%, drilled during 1937). An attempt made to drill at the T.L.E. was abandoned before reaching the target.

(3) 1946-1947 : Zeehan Exploration Pty. Ltd. diamond drilling at Spray Mine, also ground surveys testing Loftus-Hill's (1947) concept of the Spray-Nubeena shear zone.

(4) R.B. Hills mining and re-evaluation of the T.L.E.-Swansea mines, reported by Mines Dept (Taylor, 1953).

(5) 1966-1970 : Placer Prospecting Pty. Ltd. Again a concentration of work on the Spray-Nubeena lode system as outlined by Loftus-Hills (1947) with soil sampling for the Ag-Pb system and a Turam survey on grid lines at right angles to the Spray lode. Diamond drill hole, Minops No. 1 intersected the Spray No. 1 lode (2.5 cm of galena) between the No. 5 and No. 6 levels.

(6) 1971 : Tenneco Pty. Ltd. dewatered the Spray Mine and carried out underground sampling and mapping. Work also included completion of four drillholes (Numbers 5,1; 5,2; 5,3; 5,4) from the No. 5 level of the No. 1 Spray lode drilled west to test a 45cm wide jamesonite lode. Tenneco drill hole No. 2 was drilled east from the adit level crosscut intersecting the Spray No.1 lode 90m below the No. 6 level.

(7) 1975 : Renison Ltd. Limited airborne Input E.M. survey, with follow up on 2 N.E. oriented lines, using ground magnetics and Cu-Pb-Zn-Ag-Sn soil geochemistry between North Tasmanian and T.L.E. Mines.

(8) May-June, 1981 : R. Poltock, for Renison Ltd., mapped the eastern end of S.P.L. 129 in detail.

(9) February 1982 : Airborne Dighem survey for Renison Ltd.

(10) 1982/83 : Gold Fields Exploration established the Stonehenge Grid on the N.E. corner of the licence area in the vicinity of a strong aeromagnetic anomaly. Bedrockgeochemistry, ground magnetics, VLF EM and gradient array I.P. surveys were carried out over the whole grid. Diamond drill hole TH 12 intersected two fault zones rich in base metals, antimony and arsenic but low in tin.

During 1983/84, work concentrated on following up encouraging results obtained on the Stonehenge Grid in 1982/83 by diamond drilling. In addition, data on the old workings in the area were reviewed and some minor geophysical work was carried out.

4.2 Work Completed and Results 1983-84

4.2.1 Access

Three drill site access tracks, totalling 1.4km, were bulldozed. Tracks to drill sites TH 13 and TH 14 were established from Grubbs Tram, whereas the access track to drill site TH 15

was bulldozed from an existing track at the top of the Spray Mine Hill.

Stonehenge grid line 2200E was extended from 800N to 1100N to improve ground magnetic coverage in the Spray Mine Area.

4.2.2 Geology

Limited new mapping was carried out during 1983-84. Creeks not previously mapped were generally found to be lacking in outcrop. A review of mine and prospect data within the Stonehenge area (see Section 4.2.3 , this report) and information from diamond drilling has enabled some reinterpretation of existing data. A revised geological interpretation is presented on Figure 2.

The rocks within the Stonehenge area consist of the PreCambrian Oonah Formation (a sequence of sandstones, siltstones, graphitic shales, dolomites and spilites) unconformably overlain or faulted against Cambrian Dundas Group sediments and basic volcanics.

The Oonah Formation, which is strongly cleaved and folded, has undergone at least two phases of deformation. Overturning of part of the Oonah Formation sequence is proposed at Queen Hill (Luttley, 1975) and facings within diamond drill hole TH 14 in the Stonehenge Area indicate overturning for a major part of the intersection.

The lack of outcrop, the complexity of the folding and extensive faulting has made the determination of the stratigraphy within the Oonah

Formation difficult. The previously interpreted sequence of sandstone overlain by spilites, overlain by shales, overlain by dolomite (Roberts et al, 1983) may be too simplified and more information is required before a clear picture is established. A generalised sketch of the interpreted regional structure is given in Figure 3.

The Cambrian Dundas Group rocks consist of pyroxene-rich lavas, overlain by black to grey shales, overlain by chert-rich grits and conglomerates, overlain by an undifferentiated sequence of siltstones and conglomerate. This group of rock units is clearly differentiated from the Oonah Formation by the lack of multiple cleavage development and intense local folding.

Minor acid intrusive rocks have been noted in the area. A quartz feldspar porphyry in an outcrop near the Comstock Tram is described by Twelvetrees and Ward (1910), however this has not been seen by the present writer. Reid (1922) tentatively described a broad zone, including the Swansea Mine Lodes, as a kaolinised quartz porphyry; however, no mention of this is given in later reports. From the description, it appears that this may be a broad, weathered, carbonate-rich lode zone which contains minor quartz. An unaltered intrusive, porphyritic quartz trachyte located within Cambrian basic lavas (near the North Tasmanian Mine) was probably a feeder to Cambrian acid volcanism.

Faulting within the Stonehenge area appears to be extensive. PreCambrian Oonah Formation

is faulted against Cambrian Dundas Group by two major W.N.W. trending faults (Balstrup and Tenth Legion). N.E. trending and E.N.E. trending faults also appear to show considerable displacement. N.W. trending faulting appears to be less prominent.

Hydrothermal mineralisation is sometimes associated with faults (e.g. T.L.E. No. 1 lode), but generally occurs within fissure lodes.

4.2.3 Review of Reports on Old Workings

During the past three months, old reports on the abandoned mines and prospects in this area have been reviewed in some detail in order to:

(1) Gain a better understanding of the nature of and depositional controls on the known lead-zinc-silver mineralisation to help quide exploration for tin orebodies related to the same hydrothermal system.

(2) Improve the geological interpretation, particularly of the complexly folded and faulted Oonah Formation, by incorporating geological descriptions of old underground openings into the geological interpretation (Figure 2).

The results of this review are described below. Summarised descriptions of all of the mine workings are attached (Appendix 2).

In the immediate vicinity of Stonehenge, a large number of fissure lodes were worked at the turn of the century for lead and silver. The development of mine workings on such lodes depended on several factors:

(1) Discovery of outcropping or subcropping mineralisation:

a) within creeks or tramway exposures
b) by opening up exposed gossanous zones
c) by shallow trenching (generally in a N.E. direction).
d) by driving at right angles to, and along strike from, known mineralised trends.

(2) The presence of suitable grades for mining i.e. clean galena-bearing ore with high silver/lead ratios and low zinc and antimony, for which penalties were imposed at the smelters.

Mineralogy within the worked lodes consists predominantly of galena and sphalerite with secondary minerals of boulangerite, bournonite, arsenopyrite, chalcopyrite and tetrahedrite in a siderite-quartz-pyrite gangue. These lodes generally increase in pyrite content and decrease in siderite content towards the west. This is part of a broad mineralogical zonation of the lodes around the Heemskirk Granite which was first noted by Waller (1904) and later expanded on by Twelvetrees and Ward (1910), and Both and Williams (1968).

Lead-silver grades within most of the lodes were generally found to be irregular. This factor, coupled with a lack of finance, prevented

the development of most mines much deeper than 30m below the surface. Producing mines such as the Spray Mine and the Grubbs Mine, which initially had high grades and were developed to 136m and 98m below the surface respectively, were eventually closed due to decreasing galena and silver contents with depth.

Most of the workings in the Stonenhenge Area were developed on N.W. trending fissure lodes. A lesser number exploited N.E. trending structures; these included the T.L.E., Stonehenge, Britannia, Boss, Cross Chloride and Old Nubeena lodes. Early exploration emphasis was placed on N.W. trending lodes which were the deposits richest in galena. It is possible, therefore, that hydrothermally mineralised N.E. trending lodes are more extensive than is currently recognised.

Apart from lead, silver and zinc, some mines within the Stonehenge area produced other minor commodities. The Susannite workings were mined for pyrite (42% S) during 1919-1923 for the Mt. Lyell Mining and Railway Co. Forty tons of cadmium ore were retrieved from the Swansea Mine. Minor gold obtained from lead-silver ores from the Comstock and Nubeena Mines. Antimony, although not retrieved for commercial purposes, occurs extensively within the Spray Mine Lodes. Assays up to 11% Sb are recorded.

Stanniferous mineralisation within the Stonehenge area was not recognised during the early mining phase . However, Green (1973) recognised stannite mineralisation at the lowest level of the Spray Mine within the Spray No. 1 Lode, (136m below adit level i.e. approx. 104m A.S.L.). Assays

of two samples, also from this level of the Spray Mine, by Tenneco gave values of 0.12% Sn. Dump samples from mines along strike from the Spray Lode (within Loftus Hill's "Spray Shear Zone") give assays of 220 to 600 ppm Sn (Roberts et al, 1983). With the exception of a small pyritic base metal vein at 800E, 150N which contains 760 ppm Sn, the Spray Lode and its on strike extensions carry the best tin assays yet located within the Stonehenge Area. Other assays of interest are dump samples from the Sunshine Mine (300 ppm Sn), the Britannia Mine (280 ppm Sn) and the Tramway Formation (120 ppm Sn). Drill holes have not intersected any significant stanniferous mineralisation, as yet,however.

4.2.4 Geophysics

On analysis of the ground magnetic data obtained in 1982-83, it was recognised that some extensions to the coverage would be necessary in order to model the magnetic anomalies effectively. As a result , a ground magnetic survey was carried out between lines 1800E and 2600E south of the main magnetic anomaly, on the grid base line and to the north on lines 2000E and 2200E. Contractor R. Poltock used Geometrics G816 magnetometers, taking readings at 12.5m intervals, on topolite and compass traverses where grid lines did not already exist. The raw data are presented in Appendix 5. Corrected data are presented in contour form on Figure 16 and in line profiles on Figures 17 to 24.

The results show minor anomalies in the vicinity of the North Swansea and Swansea Mines as well as other small responses further to the south.

Examination of the complete ground magnetic contour map (Figure 16) shows that there are small anomalies superimposed on the major magnetic anomaly in the centre of the grid. Such "residual" anomalies could be caused by buried pyrrhotite orebodies. In order to test this idea, four lines of magnetic data were modelled by consultant geophysicist, Dr. J.R. Bishop; his report is attached (see Appendix 6).

Magnetic susceptibility readings were taken on all the drill core from diamond drill holes TH 12 to 15. No significantly anomalous magnetic units were located (see Appendix 7). There is still no clear explanation as to the source of the major magnetic anomaly in the Stonehenge area.

4.2.5 Diamond Drilling

During the financial year to the end of June, 1984, two diamond drill holes were completed in the Stonehenge area for a total of 601.7m. In addition, a diamond drill hole of 599.0m was drilled during July and August, 1984.

Diamond drill hole, TH 13, was designed to test the southern extension of the Spray No. 3 Lode, in the vicinity of the Colonel North Mine workings, in contact with a carbonate bearing sequence. Diamond drill hole TH 14 was designed to test beneath a strong, combined

Pb-Zn-Cu-As-WO_3 anomaly coincident with an outcrop of brecciated limonitic sandstone and a strong V.L.F. anomaly.

Following the intersection of some interesting lead-zinc mineralisation in TH 13, it was decided to drill a further hole in the area (TH 15) to test for carbonate replacement tin mineralisation postulated to occur at depth, in a zonal fashion, beneath the TH 13 intersection.

Complete drill logs are presented in Appendix 7. Drill hole profiles are shown on composite profiles for lines 1500E and 2400E (Figures 17 and 23, respectively) and on Figures 25 and 26. Results of the drilling are summarised below:

Diamond Drill Hole TH13

Collar Co-ordinates : 5,359,431N; 360,149E
Stonehenge Grid Co-ordinates : Line 2400E, 325N
Azimuth : 021° AMG
Dip : -46°
Depth : 431.2m
Commenced : 5-3-84
Completed : 18-4-84

Summary Log :

0- 10.0m :	Surface debris.
- 64.0m :	Poor recovery zone (weathered dolomite or fault zone?).
- 75.3m :	Mineralised breccia.
-165.5m :	Altered dolomite.
-220.2m :	Dolomitic siltstone.
-272.8m :	Shale.

-389.4m : Dolomite
-397.7m : Black Shale.
-418.2m : Dolomite.
-421.0m : Quartz Dolomite Vein.
-431.2m : Dolomite.

Assay Summary:

64.0-75.3m (11.3m) <0.01%Sn, <0.01%WO_3, 0.13%Pb, 0.43%Zn, 6 ppm Ag
87.0-148.0m(61.0m) <0.01%Sn, 0.01%WO_3, 0.90%Pb, 0.59%Zn, 29 ppm Ag.
418.2-422.0m (3.8m) <0.01%Sn, <0.01%WO_3, 0.01%Pb, <0.01%Zn, <1 ppm Ag.

Comments:

This drill hole confirmed the presence of a thick sequence of dolomite and dolomitic siltstone within the Stonehenge Area. The "altered dolomite" within this hole (75.3-165.5m), which contains extensive base metal mineralisation, can be interpreted in three ways:

(1) As a sedimentary carbonate altered and mineralised by hydrothermal fluids from the adjacent breccia zone.

(2) As a block of sedimentary carbonate altered and mineralised but entirely within the fault breccia zone.

(3) As sideritic and dolomitic carbonate hydrothermally derived together with associated lead-zinc mineralisation.

Any of the above possibilities may apply as this zone shows clear brecciation and replacement textures in some places while other parts are uniformly altered with little vein-style overprinting.

The massive quartz-dolomite vein intersected at 418.2-422.6m which is interpreted to be the extension of the Spray No. 3 (or Gurnies Lode, contained no significant mineralisation. This supports old reports of the Spray mine which indicate that the Spray No. 3 Lode bifurcates, decreases in galena content and increases in siderite content to the south.

Diamond Drill Hole TH14

Collar Co-ordinates : 5,359,841N; 359,318E
Stonehenge Grid Co-ordinates : Line 1500E, 450N
Azimuth : 202° AMG
Dip : -55°
Depth : 170.0m
Commenced : 28-4-84
Completed : 2-5-84

Summary Log:

0- 37.8m : Weathered siltstone and shale.
- 48.6m : Weathered fault zone.
- 55.1m : Black shale.
- 58.7m : Fault Zone.
- 67.35m: Dolomitic siltstones and shale.
- 68.5m : Breccia.
-125.7m : Silty Sandstone and Black Shale.
-170.0m : Sandstone.

Assay Summary:

37.8-48.5m <0.01%Sn, <0.01%WO_3, 0.12%Pb, 0.04%Zn, 2 ppm Ag.
55.1-58.7m <0.01%Sn, <0.01%WO_3, 0.02%Pb, 0.05%Zn, 1 ppm Ag.
143.1-147.0m <0.01%Sn, <0.01%WO_3, 0.24%Pb, 0.01%Zn, 7 ppm Ag.

Comments:

Assay results indicate stanniferous mineralisation is not significant within the intersected fault and breccia zones. However, ultra fine dravite and green schorl located within the fault zone at 55.1-58.7m indicates an increase in hydrothermal and contact metasomatic activity not previously located in drill holes to the east. This may reflect TH14's relative proximity to the Heemskirk Granite as compared with the other holes.

Diamond Drill Hole TH15

Collar Co-ordinates : 5,359,695N; 360,249E
Stonehenge Grid Co-ordinate : Line 2400N, 600E
Azimuth : 201° AMG
Dip : -60°
Depth : 599.0m
Commenced : 11-7-84
Completed : 21-8-84

Summary Log:
0- 61.4m : Quartzite.
-206.0m : Fault Zone (breccia and clay)
-240.8m : Interbedded black shale and dolomite.
-305.7m : Black shale and siltstone.

-369.2m : Interbedded black shale and dolomite.
-464.1m : Black Shale.
-487.3m : Interbedded black shale and dolomite.
-508.85m : Dolomite.
-518.6m : Black Shale.
-521.6m : Pyritic mineralised zone.
-557.8m : Dolomite
-563.75m : Pyritic mineralised fault zone.
-599.0m : Dolomite and minor black shale.

Assay Summary:

61.4-100.5m (39.1m) <0.01%Sn, <0.01%WO_3, 0.30%Pb, 0.21%Zn, 7 ppm Ag.
167.0-191.0m (24m) <0.01%Sn, <0.01%WO_3, 0.27%Pb, 0.54%Zn, <1 ppm Ag.
557.8-563.75m (5.95m) <0.01%Sn, 0.43%As, 0.01%WO_3, 0.08%Cu, 0.22%Pb, 0.12%Zn, 35 ppm Ag, 0.05%Sb.

Comments:

Diamond drill hole TH15 was drilled on the same section as, but in the opposite direction to, diamond drill hole TH13, to test for carbonate-replacement tin mineralisation at depth beneath the altered and mineralised dolomite encountered in TH13. However, correlation between the two drill holes, which intersected major fault and breccia zones cannot satisfactorily be made because of:

(1) lack of lithological similarity

(2) low B.C.A.'s in both holes

Diamond drill hole TH13 intersected a broad breccia zone and altered, mineralised dolomites which showed some minor breccias and possible replacement textures. Down hole, the sequence was predominantly a massive dolomite with a zone of minor black shales and dolomitic siltstones. The B.C.A.'s were low throughout the drill hole. Diamond drill hole TH15 intersected a quartzite, a broad breccia and limonitic gossan zone including mineralised clay (after altered sideritic dolomite?), mostly black graphitic shale, minor dolomites towards the end of the hole and two zones of pyritic mineralisation. The B.C.A.'s within this hole were also initially low but increased to 40° at depth.

Possible explanations for the lack of correlation between the two drill holes are:

(1) A steeply dipping fault zone may be present, striking at a low angle to the section, with diamond drill hole TH13 collared either in the fault or on its eastern side intersecting units on the western side of the fault, and diamond drill hole TH15 collared on the western side of the fault then intersecting units on its eastern side.

(2) Lithological units may strike at a low angle to the drilled section, resulting in low B.C.A.'s in both drill holes. The breccia zones of TH13 and TH15 would then be either two different zones or the same fault zone which is flat or shallow dipping.

The first explanation is favoured for the following reasons:

(1) The two breccia zones are of similar lithological character with the exception of a broad, altered mineralised dolomite zone within TH13 which shows only minor evidence of brecciation. A cavity and mineralised clay zone encountered in TH15 may be an equivalent of this zone.

(2) Assays of the two breccia zones of TH13 and TH15 are of the same order i.e. low tin, tungsten, copper, silver, antimony, and moderate lead and zinc values.

(3) The proposed fault correlates with an air photo lineament which in turn corresponds to a boundary between two structural domains. In the Spray Mine area, units of the western domain dip moderately to shallowly to the north-east whereas units of the eastern domain dip steeply to the south-west. This explains the low B.C.A's encountered in the two drill holes.

(4) The air photo lineament corresponds with workings which are 40m in length at the entrance of the main Spray Mine adit. It is also parallel to the Cross Chloride Lode (with native silver and lead chloride mineralisation) which is 50m to the east of TH15 collar.

(5) The postulated fault zone also corresponds to a major boundary in the resistivity contours.

The low levels of tin within the mineralised intersections of TH15 were disappointing. However pyritic breccia mineralisation intersected at depth contained high levels of arsenic. These pyritic breccias in themselves may not be significant hydrothermal feeder structures but may indicate hydrothermal zonation with depth or along strike.

Diamond drill hole TH15 confirmed the existence of conditions for the development of stanniferous, sulphide-rich carbonate replacement ore deposits within the Stonehenge Area.

4.3 Discussion

The development of a stanniferous sulphide-rich carbonate replacement deposit requires the alteration of carbonates by tin-bearing hydrothermal fluids derived, along faults or fractures, from a buried granite source. If exploration for such a body is to be successful, the area searched must contain carbonates and fracture-controlled stanniferous mineralisation. Such a situation occurs at Queen Hill where, within a possibly overturned, north-east trending sequence of spilite, dolomites, dolomitic siltstones and sandstones, dolomites have been replaced by hydrothermal fluids which formed several cassiterite-bearing, sulphide-rich orebodies (Luttley, 1975).

The Stonehenge area contains both carbonate and hydrothermal, fracture-controlled mineralisation which is weakly stanniferous in places. In addition, there is some evidence of carbonate replacement by base metal sulphides.

Carbonates rarely outcrop, however dolomites or dolomitic siltstones have been encountered in all four diamond drill holes drilled in the Stonehenge area. This, together with some mine working descriptions, indicates an extensive occurrence of dolomite within the Grubbs Tram-Victoria Zeehan Mine area (see Figure 2). It is the writer's belief that, outside of the drilled area (i.e. to the south and east), it is possible that dolomitic horizons do occur within the finer grained units of the PreCambrian Oonah Formation, not as thick massive beds as intersected in diamond drill hole TH13 but as thin units interbedded with black shales and siltstones as seen in diamond drill hole TH15. Dolomites also outcrop in the Comstock Mine Area.

Hydrothermal mineralisation in the form of galena-sphalerite-pyrite-siderite-quartz fissure lodes occurs throughout the Stonehenge area. A number of these lodes such as those in the Tasmanian, Grubbs, Spray and Comstock Mines were worked successfully at the turn of the century for galena and silver. Zonation of the mineralogy with depth within the fissure lodes is apparent in most mines (e.g. the decrease of galena ore and increase in jamesonite with depth in the Spray Mine and the decrease of siderite with increasing pyrite in many of the other lodes with depth such as encountered in diamond drill hole TH15). It may be that these lodes also become stanniferous with depth.

The only significant stanniferous mineralisation recognised to date, associated with the fissure lodes, occurs within the No. 1 Spray Lode (assays of up to 0.12% tin have been recorded, at 2104 R.L.*) and within lode

* Note: All R.L.'s quoted on this report are heights above sea level plus 2000m.

mineralisation along strike from the Spray Lodes (these contain 220 to 600 ppm Sn). A minor pyrite vein at 800E, 150N contained 760 ppm Sn.

The strong possibility of carbonate replacement within the Stonehenge area is indicated by the altered dolomite intersection in diamond drill hole TH 13 and by descriptions of the Comstock Mine e.g. "mineral matter occurs partly as replacement of wall rock, partly as fissure filling" (Waller 1903). Replacement is also indicated at the Swansea Mine : "The effect of the country rock on ore deposition is not apparent. However the large bodies of ore appear to accompany the volcanic ash and there is some evidence of selective replacement" (Reid, 1925).

Stanniferous, sulphide-rich carbonate replacement mineralisation may occur at depth below the Spray Mine. A thick sequence of dolomites which dips to the northeast and was intersected in the lower part of TH13 could occur in contact with the strongly mineralised, stanniferous Spray No. 1 Lode below the adit level shaft at 1950 R.L. Drilling on this target is recommended.

Work in the Stonehenge area to date has centered on an elongate magnetic anomaly which comprises a larger eastern and smaller western section. Modelling of the eastern part of the anomaly indicates a large body (1km wide with its top 400m below the surface) with smaller, residual bodies at shallower depths (see Appendix 6). The geological explanations for such a model could be hornfelsing around a granite

cupola with peripheral sulphide or magnetite skarn bodies, or a very large pyrrhotite-rich orebody or an ultrabasic intrusive. If the magnetic anomaly is due to an ultrabasic intrusive it is unlikely that peripheral, residual magnetic anomalies are due to pyrrhotite-cassiterite orebodies.

The western anomaly has been modelled as a 50m wide body at 50m below the surface. The geological explanation for this anomaly could again be either an ultrabasic intrusive or a sulphide-rich pyrrhotite body. It has been argued that such a shallow sulphide-rich body would be reflected in higher chargeability values than observed and also in the soil geochemistry.

At present there is no clear evidence as to the source of the magnetic anomalies. Measurement of the magnetic susceptibility of drill core has shown no anomalous zones. An E.M. survey over the two parts of the magnetic anomaly would help locate buried sulphide bodies and determine future drilling targets.

5. STREAM SEDIMENT SAMPLING VICINITY OF LITTLE HENTY RIVER

(P. Komyshan, P.A. Roberts)

5.1 Introduction

During 1982-83, it was recognised that the southern part of the E.L. remained largely unexplored. As a result, a stream sediment sampling survey was carried out over the southern, ungridded portion of the E.L. during 1983/84 to test for hydrothermal tin mineralisation in the area. A secondary target was gold mineralisation; traces of gold have been reported in the Little Henty River (Waterhouse, 1916, p. 421).

The sampling program was carried out in January-February, 1984, in conjunction with a similar program completed on E.L. 5/83, the adjacent E.L. to the south.

5.2 Work Completed and Results, 1983/84

5.2.1 Access

Walking tracks, totalling 4.5km, were cut south of the Trial Harbour road, in the vicinity of Comstock Creek. Access to the area was then obtained either by walking into the area via the tracks or flying in by helicopter.

5.2.2 Geology

Limited mapping was carried out on creeks and cut tracks during the stream sediment program. An interpretation of available data is presented in Figure 71.

The area extending south of the McIvor Hill Gabbro is underlain by Cambrian metasediments (possibly Dundas Group), rocks possibly of the PreCambrian Oonah Formation and undifferentiated ultramafics. These rocks are faulted against Ordovician sediments near the southern boundary of E.L. 11/76. A large, high contrast, east-west trending magnetic anomaly which was located by a Dighem Survey (see Kilpatrick, 1982) near Comstock Creek is attributed to the ultramafic outcropping in Comstock Creek. The ultramafic body is not shown on earlier geological maps such as the Zeehan 1 mile sheet.

5.2.3 Geochemistry

The stream sediment program comprised sampling of the "active" sediment roughly at 500m spacings along stream drainages and panned concentrate samples at less frequent intervals. The latter were taken primarily to test for gold; they were obtained by reducing two pans of sediment at each sampling point (from heavy mineral trap sites) to a concentrate of around 50 to 100g.

"Active" stream sediment samples were dried and sieved to -80# and then assayed for Sn, As, WO_3, Cu, Pb and Zn. Panned concentrates were dried then pulverised whole and assayed for Cr, Sn, As, WO_3, Cu, Pb, Zn and Au. Rock chips collected during this program were assayed for Sn, As, WO_3, Cu, Pb, Zn and Cr. All sample descriptions and assays are presented in Appendix 3. Assay data is also presented on Figures 4 to 15. Contamination from mine dumps within two of the major creeks sampled is severe. The Comstock Mine dumps actively contribute sediment to Comstock Creek, and the Swansea and Grubbs Mine dumps contribute sediment to McLeans Creek. This contamination explains the high level of base metals and arsenic found within these streams. A 500 ppm tin anomaly from a panned concentrate within Comstock Creek may indicate anomalous levels of tin within Comstock mine dump material. Similarly a 110 ppm tin stream sediment anomaly from McLeans Creek may also be attributed to mine dump material, however it is still of considerable interest. Follow-up sampling is required.

A panned concentrate from Stonehenge Creek, a tributary of Comstock Creek, assayed 360 ppm tin, 2.98 ppm gold, but <50 ppm for all other assayed elements. A stream sediment taken from the same sample point had assays of <50 ppm for all elements except for lead (150 ppm). This may indicate the source of the tin occurs within the headwaters of the Stonehenge Creek i.e. in the Stonehenge grid area. However, this creek not only drains the Stonehenge grid but also a broad, flat swampy area which corresponds to a moderate aeromagnetic anomaly south-west of the grid. Follow-up of this drainage system is required.

Stream sediments from other tributaries of Comstock Creek, McLeans Creek and a small drainage system east of Comstock Creek are moderately to strongly anomalous in Pb and Zn but assay at <60 ppm for Cu, Sn, As and WO_3. Although these streams may be draining areas of hydrothermal lead-zinc mineralisation, the lack of anomalous tin assays does not encourage further follow-up.

Streams draining into the Little Henty River from the north were sampled and panned for gold as well as assayed for other elements. Panned concentrate samples all had assays of <0.01 ppm gold except for one assay of 0.38 ppm. This is not considered significant. As expected, the assays were high in tin. The sampled streams either drain directly from the tin-bearing Heemskirk Granite or from known workings e.g. Kelvin and Maynes. Some of the creeks have been previously worked for alluvial tin.

A stream draining into the Little Henty River from the south assayed at 500 ppm tin within a panned concentrate, and also had moderately anomalous lead and zinc values within stream sediments taken from the same location. This creek occurs in the vicinity of a major N.N.W. trending fault structure (as interpreted by Blissett, 1962) and may be draining Ordovician Limestone. No workings are known within the creek drainage area. A reconnaissance traverse up this creek is suggested.

5.3 Discussion

The stream sediment survey has only highlighted two creeks which may require follow-up by ground reconaissance of the drainage areas. The first is a creek draining into the Little Henty River from the south. A sample weighing 5 to 8 kg, which was panned down to 29 g, assayed at 500 ppm Sn. Although a high assay, the panned weight was small so this drainage is considered only of secondary interest. The second is Stonehenge Creek which yielded 360 ppm Sn from a 168 g panned concentrate. What highlights this anomaly even further is that the creek drains a broad flat swampy area over which a moderate aeromagnetic anomaly was recorded during the 1982 Dighem survey (see Kilpatrick, 1982). The outcrop in this area is poor but it is possible that dolomitic units of the Oonah Formation underlie this swamp. Further mapping and ground follow-up in this area is recommended.

6. WEST AGNEW GRID (A.J. Cartwright)

6.1 Introduction

The West Agnew Grid covers the area between the West Coast north of Trial Harbour and the Western edge of the Agnew Grid, extending from the White Granite margin in the north to the Granite/sediment contact in the south (Figure 1). The grid was established over Red Granite thought to be shallowly underlain by the White Granite, as this geological environment is believed to host polymetallic sulphide pipes such as those at Sweeneys and Anomaly 1.

6.2 Work Completed 1983-84

The grid was cut during September/October 1983 by contractor R. Poltock, who also obtained soil samples at 25m intervals for geochemical analysis. A total of 45.45 line km was cut in lines 100m apart, pegged at 25m intervals and slope corrected. A further 4.4 km was cut in a central baseline and 1.2 km was cut for electrode lines in a gradient array I.P. survey.

The soil sampling was performed using a hand auger. Samples were collected from the B/C soil horizon wherever possible. The contractor also dried and sieved the samples to -80#.

In January 1984, the grid was surveyed with gradient-array I.P. by contractor Scintrex Pty. Ltd. Readings were taken every 25m.

The terrain covered by the grid is a gently sloping plain with numerous, small, but relatively steep,

gullies cut by creeks and rivers draining to the south. As this surface is quite regular, it has been assumed that the lines are straight and correctly spaced. Confirmation of this is indicated where the lines cross the Trial Harbour-Zeehan road. Therefore the grid was not surveyed and the idealised grid has been used in all plan presentations.

6.3 Results

6.3.1 Geology

Geological mapping over the gridded area was carried out by R. Poltock during the 1980-81 and 1981-82 summer field seasons. This mapping was originally recorded on 1:5,000 scale base maps, however it was presented in the 1981-82 Annual Report (Kilpatrick, 1982) at 1:25,000. The 1:5,000 geology has been used as the basis for the grid geological plans (Figures 69 and 70) as well as the composite line profiles (Figures 41 to 68) presented in this report. The two interpretative geological plans also includes geological mapping by previous workers on the areas adjacent to the West Agnew Grid (see Figures 69 and 70 for attribution).

In general, the grid covers medium to coarse grained, porphyritic Red Granite, commonly containing small low tourmaline nodules. It's northern contact is shallow dipping to the north, the Red Granite being overlain by a variety of White Granite phases. The southern contact dips moderately south and represents the intrusive contact with the surrounding country rocks. Hornfelsing is well developed

in the sandstones and siltstones of the Oonah Formation which is the unit which marks the southern margin of the grid.

6.3.2 Geochemistry

The soil samples collected from the grid were all analysed for Sn, As, Cu , Pb, and Zn. A descriptions of each sample with its assay result is given in Appendix 9 and contoured geochemical plans for each element are shown on Figures 27 to 36.

The results obtained for Sn and As (Figures 27 to 30) appear to fall into two main categories : a singular or perhaps two adjacent, very high values surrounded by background values, occurring throughout the gridded area, and, particularly for the Sn results, large zones with values slightly elevated above background, occurring on the northern edges of the grid. This behaviour can probably best be accounted for when the geology of the area is also taken into consideration. The zone of generally elevated values to the north represents White Granite which occurs on the northern ends of the lines. Also in the north eastern corner of the grid, elevated Sn values are probably due to the known Sweeney's mineralisation and alteration exposed on the slopes above. The isolated high values which occur randomly throughout the grid possibly result from samples being taken on old, small, alluvial and colluvial deposits.

The Cu, Pb and Zn geochemical results (Figures 31 to 36) generally follow similar patterns to the Sn and As results and can therefore be explained in a similar fashion. However there are several differences. The Cu results were particularly poor, with only a very few, isolated values occurring above background, perhaps indicating a general lack of Cu in this area of granite. The Pb values appear to match the Sn-As results more than the other base metals. The Zn results show a relatively large variability, which probably reflects Zn's greater mobility in the weathering environment.

6.3.3 Geophysics

Each of the lines of Gradient Array I.P. data are presented on composite line profiles (Figures 41 to 68), with both resistivity and chargeability profiles displayed. Contoured plans of resistivity and chargeability are also shown (Figures 37 to 40).

A detailed description of the geophysical survey at West Agnew has been made by Dr. J. Bishop (Mitre Geophysics) in Appendix 8 of this report.

6.4 Discussion

Overall, the results from the West Agnew Grid can only be described as disappointing. Exploration targets on this grid were polymetallic sulphide bodies such as those on the nearby Agnew Grid e.g. Anomalies 1 and 4. Although the latter mineralised systems are partially exposed and buried respectively, significant geophysical and geochemical responses

were recorded over them during the work on the Agnew Grid. It was hoped that similar responses, corresponding to outcropping or shallowly buried sulphide bodies, would be found on the West Agnew Grid. A comparison of the two sets of geophysical and geochemical results from the West Agnew Grid and the Agnew Grid reveals that it is most unlikely any buried (or exposed) polymetallic sulphide mineralisation occurs on the former.

7. SOUTH-EASTERN MARGIN, HEEMSKIRK GRANITE (A.J. Cartwright)

7.1 Introduction

This area encompasses the southern portion of the granite in E.L. 11/76 between the West Agnew Grid in the west, around to the Tenth Legion Fault in the east. It hosts all the known polymetallic sulphide bodies from Sweeney's to the Globe. The work that was proposed for this region is presented in Cartwright (1983). However, since then, the economic potential of the Sweeneys-style polymetallic sulphide bodies has been reviewed. As a result, they are now thought to be a less attractive economic target. Therefore, last year's recommendations (Cartwright, 1983) were altered in the following way:

(1) Anomaly 3 on the Agnew Grid would not be drilled.

(2) No Winkie drilling or further evaluation of Sweeneys and Anomaly 1 would be carried out.

In addition, the proposed North Agnew Grid was abandoned in favour of a stream sediment program. Also, two short lines were cut and surveyed with Gradient Array I.P. (as part of the West Agnew Grid Survey)

north west of Sweeneys. This work was designed to fill in the small 'hole' between all the grids in that area (see Figure 38) and to test for a possible extension to the "tubular" body at Sweeneys on the northern side of Pikes Creek.

7.2 Work Completed and Results

The geophysical results from the two short lines near Sweeneys are shown on the 1:5,000 resistivity and chargeability contour plans of the West Agnew Grid, Figures 38 and 40. No anomalous results were obtained.

Earlier this year, some of the better intersections obtained from previous holes drilled at Anomalies 1 and 4 were sent to Mt. Lyell for Au analysis by fire assay. The results are recorded below

Prospect	Hole	Depth	Sn wt%	Ag ppm	Au ppm
ANOMALY 1	FED 24	79.0-83.0(4.0m)	0.49	2	0.2
		83.0-86.0(3.0m)	0.83	2	0.1
		98.0-102.0(4.0m)	1.14	1	0.1
	FED 21	41.0-44.0(3.0m)	1.23	2	0.1
		46.0-49.0(3.0m)	0.74	1	0.1
	FED 20	44.0-47.0(3.0m)	0.24	37	0.3
		33.0-36.0(3.0m)	1.43	235	0.4
		30.0-33.0(3.0m)	0.34	58	0.1
ANOMALY 4	FED 26	33.7-35.7(2.0m)	0.49	334	0.1
		53.7-55.7(2.0m)	1.18	11	0.2

Significant amounts of Au occur in the more intensely mineralised intervals but there appears to be no distinct correlation between Au and Sn or Ag.

The stream sediment sampling program on the eastern slopes of Mt. Agnew (the North Agnew Grid area) was completed by R. Poltock. A total of 37 stream sediment, one rock chip and 4 panned concentrate samples were taken and analysed for Sn, As, WO_3, Cu, Pb, Zn and Mo. Plans with the sample locations for each element (except Mo) are shown in Figures 10 to 15 and sample descriptions with analytical results are given in Appendix 3.

All of the stream sediment assays returned background or only very slightly elevated results for each element. Better results, especially for Sn and WO_3 were obtained from the panned concentrate samples and one stream sediment sample which contained hornfelsed sediments. As all the panned concentrate samples also contained hornfelsed sediments it is likely that this is contributing the higher Sn and WO_3 (and slightly higher base metal) values. The one rock chip sample was taken because of visible molybdenite on a joint surface and assayed 420 ppm Mo.

7.3 Discussion

In general, the results of the geochemistry at North Agnew and the geophysics near Sweeneys were disappointing. In the light of the present attitude towards the economic potential of the Sweeneys-style of mineralised sulphide bodies, major, new anomalies would have to have been found before any further work could be countemplated. The poor results obtained strongly indicates that very little or no potential now exists in these areas for significant, new Sn mineralisation.

8. CONCLUSIONS AND RECOMMENDATIONS

8.1 Stonehenge Area (Figure 72)

Drilling and ground surveys on the Stonehenge Grid have now demonstrated that there is a thick sequence of completely faulted and folded carbonate-bearing sediments there. This sequence is set in an area of widespread hydrothermal mineralisation not far from major carbonate replacement tin orebodies at Queen Hill. Clearly, the Stonehenge Grid remains an area of considerable potential for carbonate replacement tin mineralisation.

The base metal mineralisation most consistently anomalous in tin is located in the north-west trending belt of lead-zinc occurrences between the Spray and Nubeena Mines. It is suggested that the dolomite-rich unit intersected at the bottom of TH13 probably dips north and therefore contacts the Spray No. 1 Lode at depth (The latter is known to contain up to 0.12% Sn at the deepest mined level, No 6). It is proposed to test this Lode-carbonate contact with one diamond drill hole 300 to 400m deep.

Analysis of "residual" magnetic anomalies on the larger Stonehenge anomaly suggests that the "residuals" may represents pyrrhotite orebodies. A ground E.M. survey is proposed to test these "residual" anomalies, as well as the smaller, western aeromagnetic anomaly and the dolomite-rich sequence north of the grid baseline.

The Stonehenge Grid was initially designed to cover only the aeromagnetic anomalies overlying Oonah

Formation rocks. However, the area between the grid and the eastern E.L. boundary is now thought to be equally prospective because:

(1) It is also underlain by the Oonah Formation which includes the dolomitic sequence.

(2) There are some workings in the areas which reflect weakly stanniferous hydrothermal mineralisation.

Therefore, it is recommended that the Stonehenge Grid be extended east in order to carry out ground magnetic and bedrock geochemical surveys similar to those completed on the main grid.

South-west of the Stonehenge Grid, there is an area of low relief partly mapped as Oonah Formation. This area is part of the catchment of a stream from which a panned concentrate containing 360 ppm Sn was obtained. That assay may reflect very subdued tin values from altered Oonah Formation dolomites in this area. In addition, this area coincides with a large magnetic anomaly which might reflect a hornfelsed zone around a granite cupola at depth. Thus, this area has some potential for carbonate replacement tin mineralisation. As a result, it is proposed that the area be geologically mapped and the magnetic anomaly traversed with ground magnetics, both in an east-west and north-south direction. If analysis of the ground magnetic and geological data so collected suggests that the area has potential for hydrothermal mineralisation, a program of gridding, ground magnetics and bedrock geochemical surveys should be carried out.

This program is expected to cost $69,500 (Appendix 1).

8.2 Heemskirk Granite

Exploration results from the Heemskirk Granite in 1983-84 were most disappointing. It is now apparent that the known mineralisation and perhaps several of the undrilled anomalies on the Agnew Grid represent all that is likely to be found on the south-east margin of the granite. Although this mineralisation has not been properly defined, on the drilling results to date, it is clearly subeconomic.

No further work is recommended for this area in 1984-85.

8.3 Vicinity of Little Henty River

The results of the stream sediment survey in this area were also disappointing. One anomalous tin value was obtained in a pan concentrate from a stream draining north into the Little Henty River. This is a low priority anomaly which should be followed up when time permits.

REFERENCES

Besley, R.E., 1971 — Final Report, Spray Mine Evaluation E.L. 49/70 Tasmania. Tenneco Australia Inc.

Blake, F., 1936 — Notes on the Comstock Adit Workings in the vicinity of Allison's Lode Unpubl. Report. Tasmania Department of Mines

Blissett, A.H., 1962 — One mile geological map series K/55-5-50 Zeehan. Explan. Rep. Geol. Survey. Tasmania

Both, R.A. and Williams, K.L.,1968 — Mineralogical zoning in the Lead-Zinc Ores of the Zeehan Field, Tasmania. Part (1) Introduction and Review; J. Geol. Soc. Aust., I5(1). Part (2) Paragenetic and Zonal Relationships; J. Geol. Soc. Aust, 15(2)

Cartwright, A.J., 1983 — E.L. 11/76 Federation Area. Annual Report 1982-83. GFEL Unpublished Report

Green, G.R., 1973 — Mineragraphy of the Spray Mine, Zeehan Tech. Rep. Dept. Mines. Tas. 16 (p16-18)

Hills, C.L., 1947a — Old Mines on the Zeehan Lodes. The Spray Unpublished Report for Zeehan Exploration

Hills, C.L., 1947b — Old Mines on the Zeehan Lodes.South Spray. Unpublished Report for Zeehan Exploration

Kilpatrick, D.J., 1982 — Federation and Trial Harbour Areas, E.L. 11/76 and S.P.L. 129 Annual Report 1981-82. Renison Limited Unpublished Report.

Luttley, W.M., 1975 — Cassiterite sulphide mineralisation at Queen Hill, Zeehan, Western Tasmania. Hons. Thesis Unpublished University of Adelaide

Montgomery, A., 1890 — Report on the state of the mining industry on the West Coast. Rep. Sec. Min., (1889-90);

Montgomery, A., 1891 — The progress of the Mount Zeehan and Mount Dundas silver-lead fields and report on the coal measures at the Henty River., Rep. Sec. Min. (1890-91); Tas. Parl. Pap., 129, 26-43.

Montgomery, A., 1893a — Interim report on the discovery of coal at Barn Bluff, and on the progress of the mineral fields of the County of Montagu, Mount Zeehan, Mount Dundas, Mount Reid, Mount Heemskirk, Mount Lyell, &c. Rep. Sec. Min. (1892-93) Tas. Parl. Pap. 50.

Montgomery, A., 1893b — Report on the progress of the mineral fields of the County of Montagu. Rep. Sec. Min. (1892-93); Tas. Parl. Pap. 50

Montgomery, A., 1895 — Report on the progress of the mineral fields in the neighbourhood of Zeehan. Rep. Sec. Min. (1894-95; Tas. Parl. Pap 42. vii-li.

Montgomery, A., 1896 — Report on the Zeehan-Dundas mineral fields. Rep. Sec. Min. (1895-96); Tas. Parl. Pap. 60. xxi-xxxvii.

Nye, P.B., 1929 — The Swansea Mine - Zeehan. Unpublished Report Tasmania Dept. Mines.

Reid, A.M., 1922 — The Swansea Mine-Zeehan. Unpublished Report Tasmania Dept. of Mines.

Reid, A.M., 1925 — Report on the Swansea Mine Zeehan. Unpublished Report. Tasmania Dept. of Mines

Roberts, P.A., 1981 — Federation and Trial Harbour Areas E.L. 11/76 and S.P.L. 129, Annual Report 1980-81 Renison Limited Unpublished Report

Roberts, P.A., Komyshan, P., and Cartwright, A.J., 1983 — Trial Harbour Area S.P.L. 129 Annual Report 1982-83 Gold Fields Exploration Unpublished Report

Taylor, B.L., 1953 — Report on R.B. Hills Area Unpublished Report Tasmania Dept. of Mines

Taylor, B.L., 1954 — R.B. Hills Area - Second Report. Unpublished Rept. Tasmania Dept. of Mines

Thureau, G., 1885 — Report on the silver-lead deposits near Mount Zeehan, Montagu County, West Coast Tasmania. Tas. Parl. Pap. 63

Thureau, G, 1888a — Report on the Mount Zeehan silver-lead lodes and other deposits. Tas. Parl. Pap. 48

Thureau,G, 1888b — Progress report on the Mount Zeehan silver and argentiferous lead lodes, and other ore deposits in the County of Montagu, West Tasmania, Tas. Parl. Pap. 144

Twelvetrees, W.H. 1901 — Report on the mineral districts of Zeehan and neighbourhood. Rep. Sec. Min. Tas (1900-01) pp. 5-108.

Twelvetrees, W.H. and Reid, A.M., 1919 — The iron ore deposits of Tasmania Miner. Resourc. Geol. Surv. Tas., 6.

Twelvetrees, W.H, and Ward, L.K., 1910
The orebodies of the Zeehan field. Bull. Geol. Surv. Tas., 8

Waller, G.A., 1903 Report on the iron and zin-lead ore deposits of the Comstock District. Dep. Min. Tas.

Waller, G.A., 1904 Report on the Zeehan silver-lead mining field Dep. Min. Tas.

Waterhouse, L.L., 1916 The South Heemskirk Tin Field. Tas. Dept. Mines Geol. Surv. Bull. No. 21

050

GOLD FIELDS EXPLORATION PTY. LIMITED

249051

APPENDIX 1

Expenditure for the 16 months to the end of October, 1984
Budget for the period, November 1984 to end June, 1985

051

GOLD FIELDS EXPLORATION PTY. LIMITED

249052

EXPENDITURE

	1983-84 YEAR SPL 129 AND E.L. 11/76	FOUR MONTHS TO END OCTOBER, 1984 E.L. 11/76
	$	$
GEOLOGY		
- Salaries	27,073	16,652
Salary on costs	1,790	1,017
Transport	106	157
Outside Contractors	6,406	1,070
Travel	1,603	159
Stores	2,429	405
	39,407	19,460
GEOPHYSICS		
- Outside Contractors	27,916	3,200
GEOCHEMISTRY		
- Transport	206	-
Assays	11,018	240
Outside Contractors	13,858	355
	25,082	595
DRILLING		
- Assays	993	868
Outside Contractors	35,123	33,789
Stores	747	356
	36,863	35,013
LAND ACQUISITION		
- Miscellaneous	1,802	27
SITE PREPARATION		
- Outside Contractors	3,915	2,228

EXPENDITURE (Continued)

SURVEYING		
- Outside Contractors	440	377
LABORATORY COSTS	-	91
INDIRECT MOTOR VEHICLE EXPENSES	2,747	876
TOTALS	138,172	61,876

053

GOLD FIELDS EXPLORATION PTY. LIMITED

249054

E.L. 11/76

Budget for the period November, 1984 to end June, 1985

		$
GEOLOGY		
- Salaries		16,000
- On Costs		900
- Transport		200
- Outside Contractors		1,000
- Travel		600
- Stores		1,000
		19,700
GEOPHYSICS		
- Outside Contractors		15,000
GEOCHEMISTRY		
- Assays		2,000
- Outside Contractors		3,000
- Stores		300
		5,300
DRILLING		
- Assays		1,000
- Outside Contractors		22,000
- Stores		1,300
		24,300
LAND ACQUISITION		
- Miscellaneous		2,000
SITE PREPARATION		
- Outside Contractors		1,000
SURVEYING		
- Outside Contractors		400
-		
INDIRECT MOTOR VEHICLE EXPENSES		1,800
	TOTAL	69,500

APPENDIX 2

Old Workings, Stonehenge Area - Summaries

055

85-2315 249056

INDEX

Description of mines and prospects within the Stonehenge Area

Boss
Britannia
Britannia Block No. 1
Chloride Lode and Cross Chloride Lode
Colonel North
Comstock, South Comstock
East Britannia
Grubbs
Pyritic Formation
Silver Beach Adit
Silver Duke
Silver Wave
Stonehenge
Spray
South Nubeena
Susanite
Swansea
T.L.E.
Tasmanian
Tramway Formation
Nickel Prospect
North Tasmanian
Nubeena
Victoria Zeehan (shaft)
Victoria Zeehan (adit)

Mine Plans at scale 1:2,000

Britannia
Comstock and South Comstock
Grubbs
North Tasmanian
Spray
South Nubeena
Tasmanian
Victoria Zeehan

Longitudinal Section and Cross sections at scale 1:2,000

Britannia
Grubbs
Spray No. 1 Lode
Tasmanian
Victoria Zeehan

056

249057

ZEEHAN MINERAL FIELD

PROSPECT: Boss **COMMODITIES:** Pb, Ag

OTHER NAMES:

LOCALITY: East of the Comstock Mine, South of the Trial Harbour Road and The Comstock Tram)

MINING TITLE/S: 1240-87M, 2073-91M; 3914M; 123-47M

MINING HISTORY: 1890-93: Boss Silver Mining Co. N.L
1893-1908: Fairthorne and Quiggan
1908: J Dunn
1913-1916: BHP Block 10 Co Ltd
1948-present: EZ Co of Australasia

PAST PRODUCTION:
700 tons of low grade ore containing:
70 tons lead
6500 oz Ag

GRADE AND CHIP ASSAYS:
From main lode - open workings
pyrite - with sphalerite and galena
105 oz Ag/ton.

STYLE OF MINERALISATION: 3 fissure lodes
Main lode: Bearing N32°E dip W - pyritic (16'-25' wide)
West lode: " N 30°W dip NE - iron gossan
East lode: " W of N dip W - sphalerite, pyrite, galena (2' wide)

STRUCTURE & HOST ROCKS: Oonah Formation
East and Main lodes in "black fissile slate"
Main Lode: in yellow clay (after carbonate?)

MINERALOGY: pyrite, sphalerite, galena, (chalcopyrite, pyrrhotite); quartz

COMMENTS: Note lodes not tested deeper than 30' below the surface
Workings on Main lode - 50' N.E trending trench and cross cut drive (inside boundary from Comstock)
- further N.E. open workings
- " " drive for 70' at angle to
- shaft to depth of 28'

East Lode - surface trench
- adit drive 200' from eastern boundary - did not intersect lode at 100' a 1½" galena vein with quartz and pyrite (driven on South and North for 6'

West lode - two small shafts and a small tunnel (in "oxidised lode matter") To South inside the eastern boundary shaft sunk on lode or vein trending W of N and also a tunnel driven from this boundary

REFERENCES:
Montgomery 1895, Twelvetrees 1900; Waller 1903,
Blissett 1962 Bottrell Williams 1971, Montgomery 1903

057

249058

ZEEHAN MINERAL FIELD

PROSPECT: Britannia **COMMODITIES:** Pb, Ag

OTHER NAMES:

LOCALITY: 1·3km due east of the Comstock Mine (and south of the Comstock Tram)

MINING TITLE/S: 994-87M ; E.C. Mace, Britannia Prop. Silver Mining Co (1890) Mount Zeehan (Tasmania) Co 1890; 1512-93M, F.J. Bailey 1896, A.J. Dolan 1899, Mount Zeehan Tasmania Co ; 123-97M EZ Co. Australia

MINING HISTORY:

Most of the work was carried out on two north east trending pyrite lodes

PAST PRODUCTION:

1914 – 1923 : Included with Mount Zeehan (Tasmania) production but estimated at 400 tons lead ore

GRADE AND CHIP ASSAYS:

1½ oz Ag/ton per unit % Pb

STYLE OF MINERALISATION: "The lodes are irregular veins and masses of pyrite and sphalerite with impersistent bands or dissemination's of galena"

STRUCTURE & HOST ROCKS: Oonah Formation slate.

MINERALOGY: pyrite, sphalerite, galena, tetrahedrite, boulangerite, "a little copper"

COMMENTS: Work on this mine extended only 40' below adit level on two north east trending pyritic lodes which extend north from the T.L.E mine. Twelvetrees (1901) also mentions two parrallel north west trending lodes with an adit on one of these

REFERENCES: Twelvetrees 1901, Waller .. 1904, Twelvetrees and Ward 1910, Blissett 1962

058

249059

ZEEHAN MINERAL FIELD

PROSPECT: Britannia Block No.1 **COMMODITIES:**

OTHER NAMES:

LOCALITY: Immediately south of the Britannia section and North of the North Tasmanian Mine

MINING TITLE/S: 1005 - 8719*

MINING HISTORY: Prospecting to pick up North Tasmanian No.1 lode

PAST PRODUCTION: **GRADE AND CHIP ASSAYS:**

STYLE OF MINERALISATION:

STRUCTURE & HOST ROCKS:

MINERALOGY:

COMMENTS: Horton's No.2 Adit - driven due west for 300' (a chain north of the southern boundery of the lease)
- 130' from adit entrance - two small stringers of quarte and pyrite

trenches - chain from northern lease boundary contained. "quartz highly charged with pyrites containing a few specks of galena"

REFERENCES: Montgomery 1890.

059

249060

ZEEHAN MINERAL FIELD

PROSPECT: Chloride Lode and Cross Chloride Lode **COMMODITIES:** Ag

OTHER NAMES:

LOCALITY: "200' below crown of hill" (South of the Spray Mine)

MINING TITLE/S: 1585-91M

MINING HISTORY:

PAST PRODUCTION:

GRADE AND CHIP ASSAYS:

Small patches 1000 oz Ag/ton

average stopes 40 oz Ag/ton

STYLE OF MINERALISATION: "bands and nodules of ironstone in light coloured slate."

STRUCTURE & HOST ROCKS: The Chloride lode has a N.W trend and occurs 40' to the east of the Spray No.3 Lode projected continuation
The Cross Chloride Lode - has a bearing of 035° - 2' wide with veins 3"-6" wide

MINERALOGY: hematite, limonite, bearing silver chloride and native silver

COMMENTS: Chloride Lode - small adit driven 30' (lower level)
- upper adit driven on lode for 100'-110'
(at 30' winze - lode stoped in both directions)

Cross Chloride Lode - shaft to 50' below surface - then drives to the N.E for 40' and stoped nearly to the surface
- drive South for 30' and partly stoped
- lower level adit for 100' and stoped out (100' short of shaft)

REFERENCES: Twelvetrees and Ward 1910, Blissett 1962.

060

249061

ZEEHAN MINERAL FIELD

PROSPECT: Colonel North **COMMODITIES:**

OTHER NAMES: No.1 Shaft (Victoria Zeehan)

LOCALITY: South of the Spray Mine.

MINING TITLE/S: 1595-91M.

MINING HISTORY: Shaft began in 1896 by Colonel North Co
Further driving at the 200' level was carried out by Silver Beech
tributors and the Victoria Zeehan Co

PAST PRODUCTION: **GRADE AND CHIP ASSAYS:**

STYLE OF MINERALISATION: Two siderite quartz lodes intersected
dipped east

STRUCTURE & HOST ROCKS: Oonah Formation - soft clay (after carbonate?)

MINERALOGY: siderite, quartz.

COMMENTS: Shaft sunk on "good looking gossan" to 200'. The shaft
remained in the lode till 50' (northerly underlay to the lode). At the 200'
level a drive in a "northerly" direction for 450' was developed and
crosscut on a siderite quartz lode

REFERENCES: Twelvetrees and Ward 1910, Blissett 1962.

061

249062

ZEEHAN MINERAL FIELD

PROSPECT: Comstock, South Comstock. **COMMODITIES:** Zn, Pb, Ag, Au

OTHER NAMES:

LOCALITY: 6km west of Zeehan on the Trial Habour Road.

MINING TITLE/S: 712-87M · W. Barlow - Comstock Mining Co. N.L.
803-87M } W.H Foley (1884) South Comstock Silver Mining Co N.L.
966-93M } 1896 F. O'Neil and N.H. Flaherty. Both leases worked by Broken Hill Proprietary Block 10 Co.
123-47M — Electrolytic Zinc Co. of Australasia

MINING HISTORY:
4 lodes worked to a maximum depth of 100' by numerous shafts to the north, open cut (south of the Trial Harbour Road), drives worked from a N.E. trending adit. Lodes not developed at depth due to diminishment of galena and water problems

PAST PRODUCTION:
1988 - 1952: Total galena ore 4021 tons
zinc ore 3245 tons
estimated at 625 tons of Pb, 165,000 oz Ag
2100 tons of Zn

GRADE AND CHIP ASSAYS:
No.1 lode 12 ft at 24.1% Zn
14.5% Pb, 14 oz/ton Ag
trace gold.
first class ore: 30% Pb, 600 oz Ag/ton

STYLE OF MINERALISATION: The main or No.1 lode - fissure lode (over 50 ft wide) "mineral matter occurs partly as replacement of wall-rock partly as a fissure filling." - irregular lenses of sphalerite and galena ± a little chalcopyrite - increase of sphalerite at depth?

STRUCTURE & HOST ROCKS: No.1 lode N.5°W dipping NE; West lode, No.2 (Watsons) lode and East (Allisons) lode striking N.N.W dipping N.E: lodes occur within Oonah Formation limestone (dolomite), calcareous limestone, slate, greywacke, quartzite

MINERALOGY: pyrite pyrrhotite altered to marcasite, galena, sphalerite, quartz, siderite tetrahedrite, boulangerite, talc, tremolite.

COMMENTS: 4 N.N.W trending lodes worked, were broad in width, irregular in mineralisation and associated with wall rock alteration of carbonates. Twelvetrees 1901 also mentions other lodes within the South Comstock lease ie "parallel east lode bearing N 45°W, a N and S lode (Montgomery's) and two lodes running N.E., viz the Stockyard lode N 30°E and the Boss lode N 32°E. Blake also refers to a lode channel bearing 274° and dipping S, the location of which is unclear

REFERENCES: Waller 1903, Twelvetrees 1901, Blissett 1962; Both and Williams 1971, Blake 1936

062

249063

ZEEHAN MINERAL FIELD

PROSPECT: "East Britannia" **COMMODITIES:**

OTHER NAMES:

LOCALITY: 'Immediately east of Britannia Section'

MINING TITLE/S: 5085-93M, 1003-87M

MINING HISTORY:

PAST PRODUCTION: **GRADE AND CHIP ASSAYS:**

STYLE OF MINERALISATION:

STRUCTURE & HOST ROCKS:

MINERALOGY:

COMMENTS: "big lode striking west of north from which a good deal of medium grade gossan obtained'..... great deal of gossan blows in this vicinity..... most however contain very little silver"

REFERENCES: Waller 1904

063

249064

ZEEHAN MINERAL FIELD

PROSPECT: Grubbs **COMMODITIES:** Pb, Ag, Zn

OTHER NAMES: Colonel North

LOCALITY: 1·5km South of the Spray Mine (at the end of Grubbs Tram)

MINING TITLE/S: 1562 - 87 · M

MINING HISTORY: 1888 - W.C Grubb.
1903 - Colonel North Mines and Railway Co.

PAST PRODUCTION:

	Ore (tons)	Silver Content (oz)	Lead content (tons)
1890 - 1893	587	40,465	375
1895	748	45,000	490
1900 - 1909	1044	41,760	668
Blissett 1962	2,379	127,225	1,534
King and Blissett 1968	3,212		

GRADE AND CHIP ASSAYS: Average above N. level 60% Pb, 40 oz Ag/ton

Pb, Ag assays decrease at depth with the increase of siderite and pyrite

STYLE OF MINERALISATION: "Lode channel has an average width of 2 feet". Ore has an average width of 8" - 10". The lode is N.W trending dipping east to 130' (below surface) the dipping west from 160'

STRUCTURE & HOST ROCKS: Oonah Formation: Northern crosscut - "a mass of stuff coloured green by a light serpentinous material". No. 1 level south - graphitic shale. No. 3 level north end - melaphyre
Gossan working - "silicified and oxidised country striking N.W dipping N.E.

MINERALOGY: quartz, pyrite, siderite, sphalerite, galena, boulangenite, bournonite, minor tetrahedrite, cerussite (upper levels), barite, minor rutile?, pyrrhotite, chalcopyrite.

COMMENTS:
Three accesses to the mine a) Northern crosscut adit, b) eastern side of McLeans Creek an adit was driven on lode c) the main shaft sunk to 320' with five levels developed at 90', 130', 200', 270', 320'
other workings:
S.W. or gossan workings - westerly drive on altered sil'd rocks
N.W outcrop - spur N.W of mine - short drive and winze sunk on lode o/c
The mine was closed due to lack of ore at depth - possibly faulted out

REFERENCES: Twelvetrees and Ward 1910, Montgomery 1893, Blissett 1962 Williams and Both 1971, King and Blissett 1968.

064

249065

ZEEHAN MINERAL FIELD

PROSPECT: Pyritic Formation COMMODITIES: Zn, Pb,

OTHER NAMES: Sunshine ??

LOCALITY: South of the Silver Beach (on southern boundary of 1585-91M)

MINING TITLE/S: 1585-91M.

MINING HISTORY:
Discovered in Trenching parallel to lease boundary
Adit driven but no lode located

PAST PRODUCTION:

GRADE AND CHIP ASSAYS:

STYLE OF MINERALISATION: Soft black pyritic formation with sphalerite and galena in slate fragments

STRUCTURE & HOST ROCKS:

MINERALOGY: pyrite, sphalerite galena

COMMENTS:
Adit driven 79ft - no lode located

REFERENCES: Twelvetrees and Ward. 1910

065

249066

ZEEHAN MINERAL FIELD

PROSPECT: Silver Beach Adit **COMMODITIES:**

OTHER NAMES: "Office Adit", Colonel North

LOCALITY: South of the Spray Mine, "3 chains S of the Colonel North shaft

MINING TITLE/S: 1585-91M

MINING HISTORY:
Silver Beach Tunnel driven aproximately 600' on a N30°E bearing
Winze sunk on second intersected lode to 60' bellow adit

PAST PRODUCTION: **GRADE AND CHIP ASSAYS:**

STYLE OF MINERALISATION: 3 gossan lodes intersected - no indication as to the bearing or trend of these zones

STRUCTURE & HOST ROCKS: Oonah Formation
"Much weathered and stained with iron oxide" up to 1st ironstone lode the rock is clay - then soft decomposed slate up to 2nd ironstone then banded slate (conformable with ironstone) then gritty clay at the end is slate

MINERALOGY:
gossan

COMMENTS: lode intesections (along adit) 1st lode 66'-72'
2nd lode 240'-295'
3rd lode 413'-?

REFERENCES: Twelvetrees and Ward 1910, Montgomery 1896

066

249067

ZEEHAN MINERAL FIELD

PROSPECT: Silver Duke **COMMODITIES:** Pb, Cu, Ni

OTHER NAMES:

LOCALITY: North of Mount Zeehan (1km)

MINING TITLE/S: 1679-87M, 1298-93M

MINING HISTORY: Silver Duke Mining Co N.L. - 1890
J. Robertson and J Owen - 1896
Transfered to R Beeston and surrendered in 1898

PAST PRODUCTION:

None recorded

GRADE AND CHIP ASSAYS:

STYLE OF MINERALISATION: Fault breccia "up to 40ft wide loosely cemented by quartz and siderite included fragments of galena, sphalerite, pyrite and chalcopyrite"

STRUCTURE & HOST ROCKS: Oonah Formation quartzite and slate "faulted to the S.W against Cambrian siltstone and greywacke intruded by pyroxenite and to the south again against Ordovician rhyolite. Conglomerate"

MINERALOGY: gersdorffite, millerite, pentlandite (in pyroxenite), galena sphalerite, pyrite, chalcopyrite, quartz siderite

COMMENTS: Two adits driven on the fault zone
Upper adit: 52 ft
Lower adit: 152 ft.

REFERENCES: Montgomery 1890, Blissett 1962

067

249068

ZEEHAN MINERAL FIELD

PROSPECT: Silver Wave **COMMODITIES:** Pb, Ag

OTHER NAMES: Wave

LOCALITY: 0.9km SSE of The Spray Mine

MINING TITLE/S: 1134-87M; 816-93M

MINING HISTORY: Worked by both The Nubeena and Victoria Zeehan mining companies

PAST PRODUCTION: Production figures probably included in Nubeena or Victoria Zeehan production

GRADE AND CHIP ASSAYS:

STYLE OF MINERALISATION: Fracture filled veins

STRUCTURE & HOST ROCKS: Two main lodes bearing N30°W dipping N.E (80°) generally as fracture zones containing veins of galena

MINERALOGY: galena.

COMMENTS: Developments: – upper adit on lode (100' length?)
– shaft to 40' at upper adit entrance
– lower adit crosscut (400' length)
12 chains East – cross cut adit to N.W trending lode (40-50' back)

Note: details of the main Wave workings cannot be reconciled between the reports of Twelvetrees and Ward 1910 and Waller 1904

REFERENCES: Twelvetrees and Ward 1910, Waller 1904, L. Hills 1947

068

249069

ZEEHAN MINERAL FIELD

PROSPECT: Stonehenge **COMMODITIES:** Pb, Ag

OTHER NAMES:

LOCALITY: 2000m S.E of the T.L.E mine, 1.1km S.E of the South Comstock Mine

MINING TITLE/S: 1886-87M, 3106M, 6M/73, 5359-93M

MINING HISTORY: W.E Brooks 1888, Stonehenge Silver Mining Co 1893, C. Brumby and A Nicholas 1907, L.J. James 1973

PAST PRODUCTION:
45 tons including 30 tons Pb, 2700 oz Ag/ton

GRADE AND CHIP ASSAYS:
68% Pb, 71 oz Ag/ton (first class galena)

STYLE OF MINERALISATION: 5-6" ore within 18" of lode (which is self contained with no fissures impregnations or alteration into country rock. Strike N 25° E with slight SE dip in upper workings and changing to NW in lower level

STRUCTURE & HOST ROCKS: Host Rocks Cambrian basalts (Dundas Group.?)

MINERALOGY: sphalerite, pyrite, chalcopyrite, galena, (magnetite, tetrahedrite, boulangerite), quartz, siderite.

COMMENTS: From a shaft developed on two levels 30' & 60'

30 ft level - 200 ft of driving & stoping almost to surface North of the shaft.

60 ft level - 150 ft of driving

" a considerable flow of water... has hampered mining operations to some extent "

REFERENCES: Twelvetrees and Ward 1910, Blissett 1962

069

249070

ZEEHAN MINERAL FIELD

PROSPECT: Spray COMMODITIES: Pb, Ag, Sb

OTHER NAMES: Silver Spray

LOCALITY: 1.5 km SW of Zeehan P.O.

MINING TITLE/S: 1886-87 M, 1887 E Clark, 1888 E.J Freeman, 1889 Silver Spray Mining Co N.L, 1890 Mount Zeehan (Tasmania) Silver Lead Mines Ltd.

MINING HISTORY: Mined initially by tributors and then by the Mount Zeehan Silver Lead Co. till 1910 when the mine was closed.
1932 - Mines Dept completed drill hole to test No.1 lode 250' below No.6 level (siderite pyrite trace jamesonite
1949 - Zeehan Explorations - one unsuccessful drill hole
1970 - Minops & Tennessee - two drill holes on No.1 lode
& 4 drill holes (underground) on "jamesonite vein"

PAST PRODUCTION:

63,141 tons (1898-1918) King & Blissett 1968
68,958 tons (1893-1923) Blissett (1962)
Estimated 41700 Pb tons, 6,456,671 oz Ag
Note: Blissetts figure included production from Britannia mine (aprox 400 tons)

GRADE AND CHIP ASSAYS:

Concentrates Dec 1900 Pb 67.9% Ag 100 oz/ton
" March 1901 Pb 62.7% Ag 102.3 oz/ton
Silver Spray ore: Pb 40%, Sb 29%, S 18%
Average to smelters Pb 40%, 6 oz Ag/ton.
Bulk sample between No.6 & No.5 level Pb 19%, 140z Ag/ton, 1% Sb
Note samples at No.6 level assayed at no more than 0% Sb
Two samples at No.6 level assayed at 0.12% Sn.
Bulk sample No.3 lode at No.3 level 68% Pb, 8 oz/ton Ag

STYLE OF MINERALISATION:
Fissure vein. striking 28°W of N dipping E Then W below No.2 level.

STRUCTURE & HOST ROCKS: Oonah Formation: black graphitic shale quartzites in southern Part of the workings. Metaphyres reported in northern part of No.2, No.3, No.4, No.5 levels probably part of Crimson Creek formation through which E level and the main Shaft pass in the Northern part of the workings.

MINERALOGY:
pyrite, arsenopyrite, quartz, sphalerite, siderite
pyrrhotite, marcasite, galena, boulangerite, bournonite, tetrahedrite & stannite.
Montgomery 1890 notes a trace of gold in a minor lode (30" width) ^N 65°E extending from No.1 lode.

COMMENTS:
Four lodes found with only two (No.1 and No.3 or Gunnies lodes) extensively developed
No.1 lode was worked from two shafts, 6 levels below adit level (ie to 104m ASL, 447' below adit) and three levels above main adit level, worked from adits
No.3 or Gunnies lode worked from 3 upper adits and two more cuts from main adit and No.3 levels of No.1 lode. This lode appears to splay to the south.
Note 1. stannite recorded in lowest level in No.1 lode
2. galena content decreasing with depth

REFERENCES: Besley 1971, Blissett 1962, Montgomery 1890, Lester Hills 1947
King and Blissett 1968, Twelvetrees & Ward 1910. Walker 1904

070

249071

ZEEHAN MINERAL FIELD

PROSPECT: South Nubeena **COMMODITIES:** Pb, Ag

OTHER NAMES:

LOCALITY: 1km east of Grubbs Mine, 1.6km S.W. of the Spray Mine

MINING TITLE/S: 667M, 3499-93M

MINING HISTORY:

PAST PRODUCTION:

1906 - 1913 : 77 tons with
50 tons lead ore and
7000 oz silver

GRADE AND CHIP ASSAYS:

70% Pb, 100 oz Ag/ton

STYLE OF MINERALISATION: "... seam of metal 1" to 2" in thickness"... within "sheared and broken country of undetermined width" NW-SW trending

STRUCTURE & HOST ROCKS: Oonah Formation - shale

MINERALOGY: quartz, siderite, galena

COMMENTS: Two adits developed.
Upper adit - driven on lode (120')
Butlers tunnel - adit driven on bearing of 220° to intersect lode at lower level (150' in long R)

REFERENCES: Twelvetrees and Ward 1910, Waller 1904, Loftus Hills 1947, Blissett 1962.

071

249072

ZEEHAN MINERAL FIELD

PROSPECT: Susannite **COMMODITIES:** Pb, Ag, S

OTHER NAMES: Brittannia Extended.

LOCALITY: 800m due E of the Comstock Mine

MINING TITLE/S: 1589-87M, 2630-87M, 3728-93M, 8311M 1929M
1913-1915 part of consolidated lease of H. Dimaugh 6565M
1948 - part of E.2. to consolidated lease 123-47M.

MINING HISTORY:
Work commenced on two N.W trending lodes for Pb, Ag but not developed below adit level
1919-1923 An unknown quantity of pyrite was mined (assaying 42% S) for ICI Lyell

PAST PRODUCTION:
40 tons Galena
20 tons Pb
3500 oz Ag/ton.

GRADE AND CHIP ASSAYS:
Two classes galena:
dense fine grained - ½ oz Ag/unit Pb
cubical galena - 1 oz Ag/unit Pb

STYLE OF MINERALISATION: Fissure lodes still gossanous a mined depth
Eastern lode - 12ft of sulphide bearing gossan
Western lode - 16-18ft wide.

STRUCTURE & HOST ROCKS: Two NW trending lodes within Oonah Formation.
The east lode cross cut adit encountered slate then "through kaolinised rock with disseminated pyrite"

MINERALOGY: camp ylite, pyrite, galena, cerussite

COMMENTS: The eastern lode was explored by a cross cut adit bearing N 25° E
The western lode was driven on.
No indication is given as to the lack of development of the mine

REFERENCES: Ward 1903, Twelvetrees 1901, Twelvetrees and Ward 1910
Blissett 1962

072

249073

ZEEHAN MINERAL FIELD

PROSPECT: Swansea Mine **COMMODITIES:** Pb, Zn, Ag, Cd,

OTHER NAMES:

LOCALITY: 3.5 km SW of Zeehan P.O ; 600m S.E of the Tasmania mine.

MINING TITLE/S: 1950/87M (White + Doody) 1888-1892
4007-9319 Montgomery (1899 - 1901) → Swansea Mining Co. 1901 - 1902
633M - C Burslan 1902 - L Murphury 1902; 7351M(10) + 5218M J Dunn 1916-1918
Swansea Prospecting Syndicate N.L 1922-1927; Swansea Silver lead Mining Co. N.L.

MINING HISTORY: 11888M (40) J.J. Hill 1937-1961 ; 10M/7350, 1M/23 1927-1929 (15)

PAST PRODUCTION:

To 1929 2200 Tons galena ore
1200 Tons zinc ore

Containing 1319 tons Pb
35,630 ozs Ag
570 tons Zn
40 ton Cd.

GRADE AND CHIP ASSAYS:

ore : 61.1 - 63.05% Pb, 7 - 8.9% Zn
15.55 - 17 oz Ag /ton

sphalerite ore 1.9 - 6.55% Pb,
42.35% to 52.35% Zn
1.2 to 3.35 oz Ag /ton

STYLE OF MINERALISATION: Fissure lodes (shoots) conning obliquely 319° across a 32' wide lode channel (strike 335° dipping, shallowly NE, aproximately 45°). lodes tend to split and join.
lode channel initially described as kaolinised quartz felspar porphyry

STRUCTURE & HOST ROCKS: No mention of this is given by the same geologist in future reports (A.M. Klau)
Host rocks appear to be Cambrian (Dundas Group?) sediments faulted against Precambrian Comet Formation shales to the South

MINERALOGY: galena, sphalerite, chalcopyrite, bournonite, quartz siderite, pyrite, arsenopyrite, tetrahedrite

COMMENTS: The mineralised zone extends for 1050' to the North of the Main workings. These workings are concentrated to within 100' of an E-W normal fault and proceeded to a depth of 156' with levels at : adit level, 40ft 80ft, 110ft, 150ft worked from the main shaft. However trenches and shallow shafts (30ft) follow this mineralised zone North. "The effect of the country rock on ore deposition is not apparent. However the larger bodies of ore appear to accompany the .. volcanic schance there is some evidence of selective replacement." lode names : Hills, Murphreys, Main.

REFERENCES: Twelvetrees and Ward 1910; Reid 1922; Reid 1925; Nye 1929; Blissett 1962; Williams and Both 1971;

073

249074

ZEEHAN MINERAL FIELD

PROSPECT: T.L.E **COMMODITIES:** Pb, Ag, Zn

OTHER NAMES:

LOCALITY: 400m S.E of the Comstock Mine, located on the Tasmanian Tram.

MINING TITLE/S: 1848/87M V Ellis 1888-9; 2277/87M W.W Lamb 1889 → Tasmanian Land Exploration Co. Ltd 1891-1894; 905/93M; 4094/93M; 1244M C Brumby & A Nicholas (1906); 8551M R.B. Hill (1920) → 2.L. Syndicate; 3219/57 1951-59 R.B Hill, 8551M.

MINING HISTORY:
Two parallel NNE trending lodes were worked from adits and later No.1 lode was worked from a shaft sunk to 110 ft.
No.3 lode was worked from a single surface adit
Drilling on the lode in 1957 by the Mines Department was abandoned at 23' without report.

PAST PRODUCTION:
305 tons galena ore.
203 Pb tons
30,031 oz Ag
1 ton Zn.

GRADE AND CHIP ASSAYS:
76.5% Pb 105 oz Ag/ton
75.5% Pb 105.3 oz Ag/ton
75.4% Pb 118.3 oz Ag/ton
No.2 lode 80% Pb 130 oz Ag/ton

STYLE OF MINERALISATION: Fissure lodes of galena and sphalerite with the eastern No.2 lode occupying a NNE trending Fault zone

STRUCTURE & HOST ROCKS: Host rock of Cambrian (Dundas Group?) greywacke-conglomerate grit, greywacke and shale.

MINERALOGY: galena, sphalerite, pyrite, pyrrhotite, chalcopyrite, arsenopyrite, quartz.

COMMENTS: Three lodes
No.1 lode: strike 36° E of N dipping 75° W
No.2 lode: strike 34° E of N - located within a fault zone
No.3 lode (Thurston's lode): strike 004° W of N
It appears that inadequate machinery and capital hampered development of this mine

REFERENCES: Twelvetrees 1901, Twelvetrees and Ward 1910, Taylor 1953 Blissett 1962, Both and Williams 1971

074

249075

ZEEHAN MINERAL FIELD

PROSPECT: Tasmanian **COMMODITIES:** Pb, Ag, Zn

OTHER NAMES: (No. 1 lode), New Tasmanian

LOCALITY:

MINING TITLE/S: 1469-87M; 8950M (40) Swansea Prospecting Syndicate N.L. (1923) 1146M (40) J. Hill 1933-1941); 19M/42 J.J Hill (1942-1961)

MINING HISTORY: L Susman 1888, McLean Prospecting Co. N.L. 1889, Tasmanian Silver Mining Co Ltd 1890,

PAST PRODUCTION: (Including North Tasmanian)
To 1893 : 957 tons, est Pb 575 tons, 28,700 oz Ag
1933 - 1953 · 227 tons, Pb 145 tons, 12,599 oz Ag
7.8 tons Zn

GRADE AND CHIP ASSAYS:
Bulk assay of
64% Pb, 360z Ag/ton

STYLE OF MINERALISATION: lode generally 18" to 3' but up to 5' galena "The lode is a large blende-pyrites ore associated with quartz" "The galenas does not carry much silver" Lode bearing N 33°W

STRUCTURE & HOST ROCKS: Northern part of the workings lies within Oonah Formation quartzites and shales "which are faulted to the south against Cambrian chert conglomerate and siltstone" Host rocks strike NE dip S.E

MINERALOGY: galena; sphalerite, pyrite, chalcopyrite, pyrrhotite, magnetite
tetrahedrite, (boulangerite)
non metallic : siderite quartz

COMMENTS: Adit - driven on lode 210' (mine plan shows 550')
Shaft - sunk on lode to 57' (adit level), 117', 177'
Within the adit at 120' from entrance - broken country and "the lode was found not to rise into this"
The base of the shaft 120' below adit level. "was being opened out... within conglomerate country"

REFERENCES: Montgomery 1890, Montgomery 1893, Twelvetrees 1901, Blissett 1962, Williams and Both 1971,

075

249076

ZEEHAN MINERAL FIELD

PROSPECT: Nickel Prospect COMMODITIES: Ni

OTHER NAMES:

LOCALITY: Between Swansea and Silver Dake Mines

MINING TITLE/S:

MINING HISTORY:

PAST PRODUCTION: GRADE AND CHIP ASSAYS:

STYLE OF MINERALISATION: nickel bearing gentite in narrow pyroxenite dyke which courses NW'ly

STRUCTURE & HOST ROCKS:

MINERALOGY: gentite, millerite, pentlandite

COMMENTS:
"Basic rocks converted to dolomite."

REFERENCES: A. McIntosh Reid. (1922)

076

249077

ZEEHAN MINERAL FIELD

PROSPECT: Tramway Formation COMMODITIES: Pb, Zn

OTHER NAMES:

LOCALITY: On McLeans Creek, East of Grubbs Tramway

MINING TITLE/S:

MINING HISTORY:

PAST PRODUCTION: GRADE AND CHIP ASSAYS:

STYLE OF MINERALISATION: porous quartz and pyrites carrying a little galena and sphalerite. Formation is 4' wide and the ore vein about 18"

STRUCTURE & HOST ROCKS: Oonah Formation - graphitic slate.

MINERALOGY:

COMMENTS: "Two holes have been sunk". - "it has been trenched both north and south but so far has not been picked up again"

REFERENCES: Twelvetrees and Ward 1910.

249078

ZEEHAN MINERAL FIELD

PROSPECT: North Tasmanian COMMODITIES: Pb, Ag, Zn

OTHER NAMES: Tasmanian (No.2 lode), New Tasmanian

LOCALITY: 1.8km SW of the Spray Mine (on the Northern side of the Tasmanian Tram)

MINING TITLE/S: 1470-87M to J.J Martin 1888, Mclean Prospecting Co 1889
Tasmanian Silver Mining Co Ltd 1890
5222-93M, 1295M P.Lloyd 1905-1910, 9035M G.W Williams 1923-26

MINING HISTORY: 18M/51 R.B. Hill 1951-1960
Three lodes were located at the turn of the century and worked by adits, shafts and prospect pits with work concentrating on No.1 lode.
Post 1933, work concentrated on No.3 lode extending drives & shafts.

PAST PRODUCTION:

Included in figures for Tasmanian Mine.
To 1893: 957 tons.
1933-1953: 227 tons.

GRADE AND CHIP ASSAYS:

No.1 lode: Sale assays
1st 73% Pb, 69oz Ag/ton
2ND 60% Pb, 49oz Ag/ton

No.3 lode:
Sale assay: Ag 5.9oz, Pb 52.9%, Zn 13.2%
North face drive: Ag 6.8oz, Pb 34.8% Zn 0.7%

STYLE OF MINERALISATION:
Characterised by a) fair to poor Pb content
b) moderate Zn
c) low Ag

STRUCTURE & HOST ROCKS: Mineralization occurs in both the Conch Formation shales and Cambrian (Dundas Group?) basalts, argillites and greywackes
Host No.1 lode: "soft pale coloured material... considered original argillaceous material hydrothermally altered kaolinised"

MINERALOGY: siderite, sphalerite both replaced by galena & arsenopyrite
The galena contains tetrahedrite, bournonite and minor boulangerite.

COMMENTS: No.1 Lode: N20°W dip N.E
: shallow adit drive for about 200ft, 25ft backs, stoped to surface
: Shaft to 190ft, levels at 100ft
: prospective adit 240ft S — poor values.
No.2 Lode: 200ft W of main shaft, 100°W of N dip 80°W, worked by pits for 200ft
No.3 Lode: 500ft S of main (No.1 lode) shaft, 38°W of N vertical dip; 140ft crosscut to lode,
: shaft where crosscut hits lode, drive 60ft N, 40ft S
Horton's No.1 Adit: 400ft E of main shaft, driven 180ft E, trace of lode (No.4) at end.
Horton's No.2 Adit: 500ft N " " " , driven W for 430', No.1 lode not located
North of No.1 lode workings — 1200ft prospect trench.

REFERENCES: Taylor 1953a, Taylor 1953b, Blissett 1962, Both and Williams 1971.

078

249079

ZEEHAN MINERAL FIELD

PROSPECT: Nubeena **COMMODITIES:** Pb, Ag, (Au)

OTHER NAMES: Old Nubeena, Llewellino, Venezia

LOCALITY: 1·2km S.W. of the Spray Mine

MINING TITLE/S: 2230-87M., 5115-93M

MINING HISTORY: E Mace 1889,
1891 Nubeena Silver Co.
1893-1895 New " " "
1903-1913 A Shillington

PAST PRODUCTION:

Total to 1918 Pb/Ag ore 367 tons

GRADE AND CHIP ASSAYS:

Old Nubeena lode (clean galena) : 78% Pb 95 oz Ag

Venezia ore (includes, Jaegers No.1 and Barnetts Lodes) : 59% Pb 38 oz Ag
60% Pb 40 oz Ag
61.3% Pb 42.9 oz Ag
56.5% Pb 37.3 oz Ag

STYLE OF MINERALISATION: Fissure lode
Old Nubeena: bearing 017°, dip E — galena pyrite
Jaegers : " N10°E, dip E — quartz, pyrite, siderite, galena
Barnetts : " SE — pyritic galena with minor sphalerite and quartz gug
Llewellins : " 330°, dip vertical No.1 lode : — strike N-S

STRUCTURE & HOST ROCKS:

Oonah Formation — black slate

MINERALOGY: galena, pyrite, tetrahedrite, ophalerite, arsenopyrite, chalcopyrite boulangerite, bournotite, siderite, quartz with inclusions of pyrargyrite and gold

COMMENTS: Three sets of workings developed:
Old Nubeena lode driven on for 130' (4-5' width) but worked from crosscut adit
Venezia tribute tunnel - driven easterly intersecting No.1 lode, Jaegers lode and Barnetto lode
Llewellins lode — Two adits driven on lode with lower adit 40' below upper adit.

REFERENCES: Twelvetrees and Ward 1910, Waller 1904, Williams and Both 1971, King and Blissett 1968

079

249080

ZEEHAN MINERAL FIELD

PROSPECT: Victoria Lochan **COMMODITIES:** Pb, Ag

OTHER NAMES:

LOCALITY: East of Foam Adit & Colonel. North shaft, south of the Spray Mine

MINING TITLE/S: 1585-91M.

MINING HISTORY: 1907 – Shaft dug to 310' (below surface)
then crosscut east to 215' (lode intersected at 184' – 6' width)
Lode was driven on for 150'

PAST PRODUCTION:

1908 – 28 tons silver-lead ores
(includes Foam adit production)

GRADE AND CHIP ASSAYS:

STYLE OF MINERALISATION: Fissure lode – "pug seam on each wall with an intermediate portion of quartz, decomposed slate and siderite containing some lead ore

STRUCTURE & HOST-ROCKS: Oonah Formation – black shale.
shaft geology – "layer upon layer of rotten slate with thin beds of sandstone"

MINERALOGY: quartz., siderite, galena

COMMENTS: Lode correlated with No.1 Spray lode

REFERENCES: Twelvetrees and Ward 1910, King and Blissett 1968.

080

249081

ZEEHAN MINERAL FIELD

PROSPECT: Victoria Zeehan (Adit) **COMMODITIES:** Pb, Ag

OTHER NAMES: Silver Foam, Foam

LOCALITY: East of Colonel North shaft, 300m south of Re Spray Mine

MINING TITLE/S: 1685-91M.

MINING HISTORY: Adit driven 600 ft in N.E direction (040°)
Lode at 400' and driven on North - with a winze sunk on lode to 100'
Levels were developed at 50' (below adit level) - driven South (plans show N!),
and 100' (below adit level) driven North for 125'

PAST PRODUCTION:

	Silver lead ores (tons)
1906	14
1908	28
	42 tons (includes Victoria Zeehan shaft production for 1908)

GRADE AND CHIP ASSAYS:
20% Pb - 1 oz Ag/ton
Bulk sample

STYLE OF MINERALISATION: "Soft oxidised clayey matter with pyrite in pug and quartzose material" 6-7 inches wide with a trace of galena

STRUCTURE & HOST ROCKS: Oonah Formation
Country "first slate and clay, then sandstone, then slate again" - "a few clay cross courses, cross the tunnel"
Lode bearing N 5°W dip E Country Rock - N 60°E dip S.E

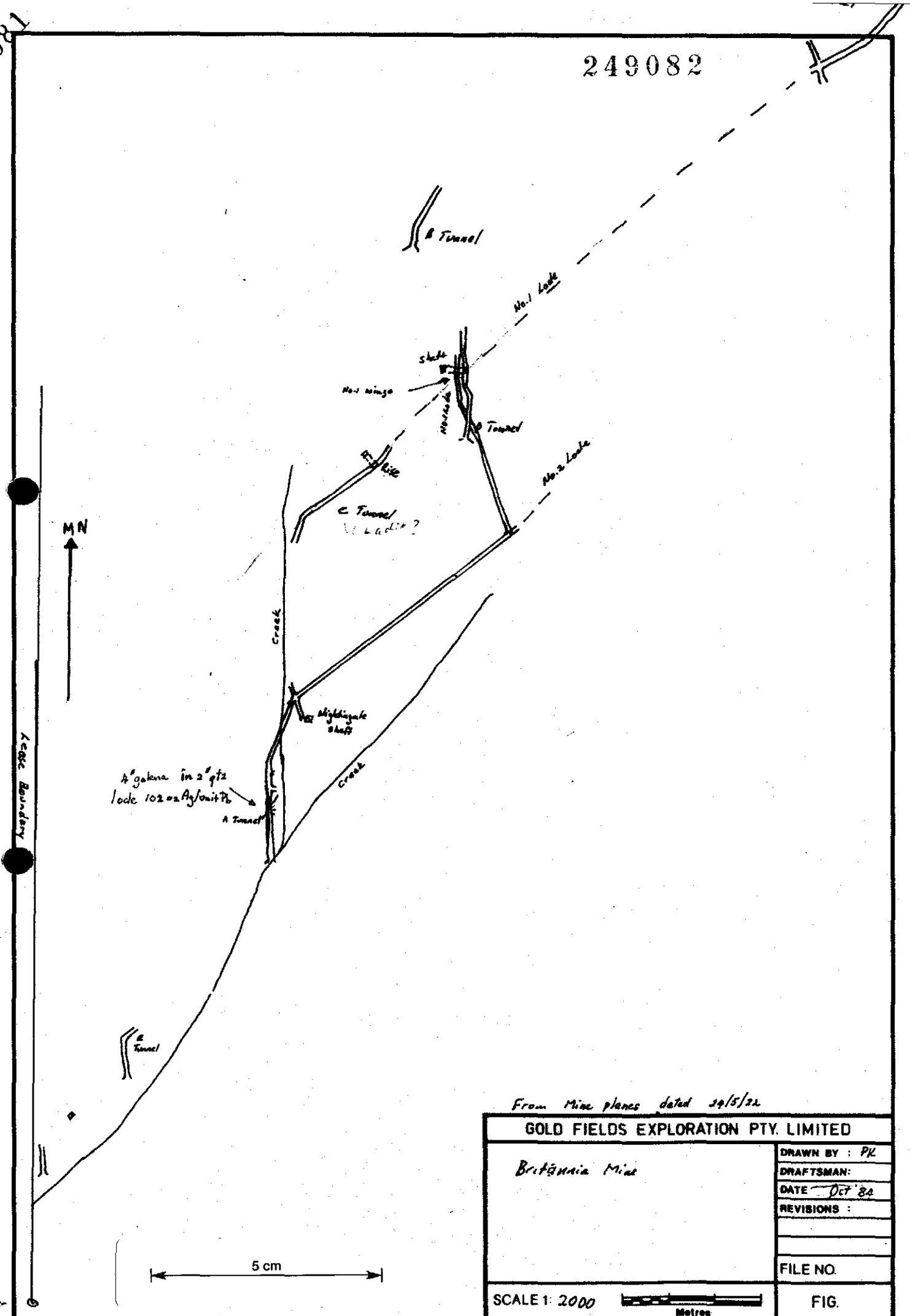
MINERALOGY:
pyrite, quartz, clay, (galena), "antimonial lead ore"

COMMENTS: Lode at 50': 3"-4" wide, swells to 7"-8" pug on west wall with ore, East wall pug and black puggy clay slate
on Re drive north from Re adit - lode 6"-7" wide pyritic pug
30' from end.
The drive north at the end - soft oxidised clayey mater.
! no trace of lode stuff"
Lode correlated with the Spray No. 1 lode

REFERENCES: Twelvetrees and Ward 1901, Blissett 1962, King and Blissett 1968,

081

249082



From Mine plans dated 29/5/22.

GOLD FIELDS EXPLORATION PTY. LIMITED

Britannia Mine

DRAWN BY : PL
DRAFTSMAN:
DATE Oct '82
REVISIONS :

FILE NO.

SCALE 1: 2000 Metres

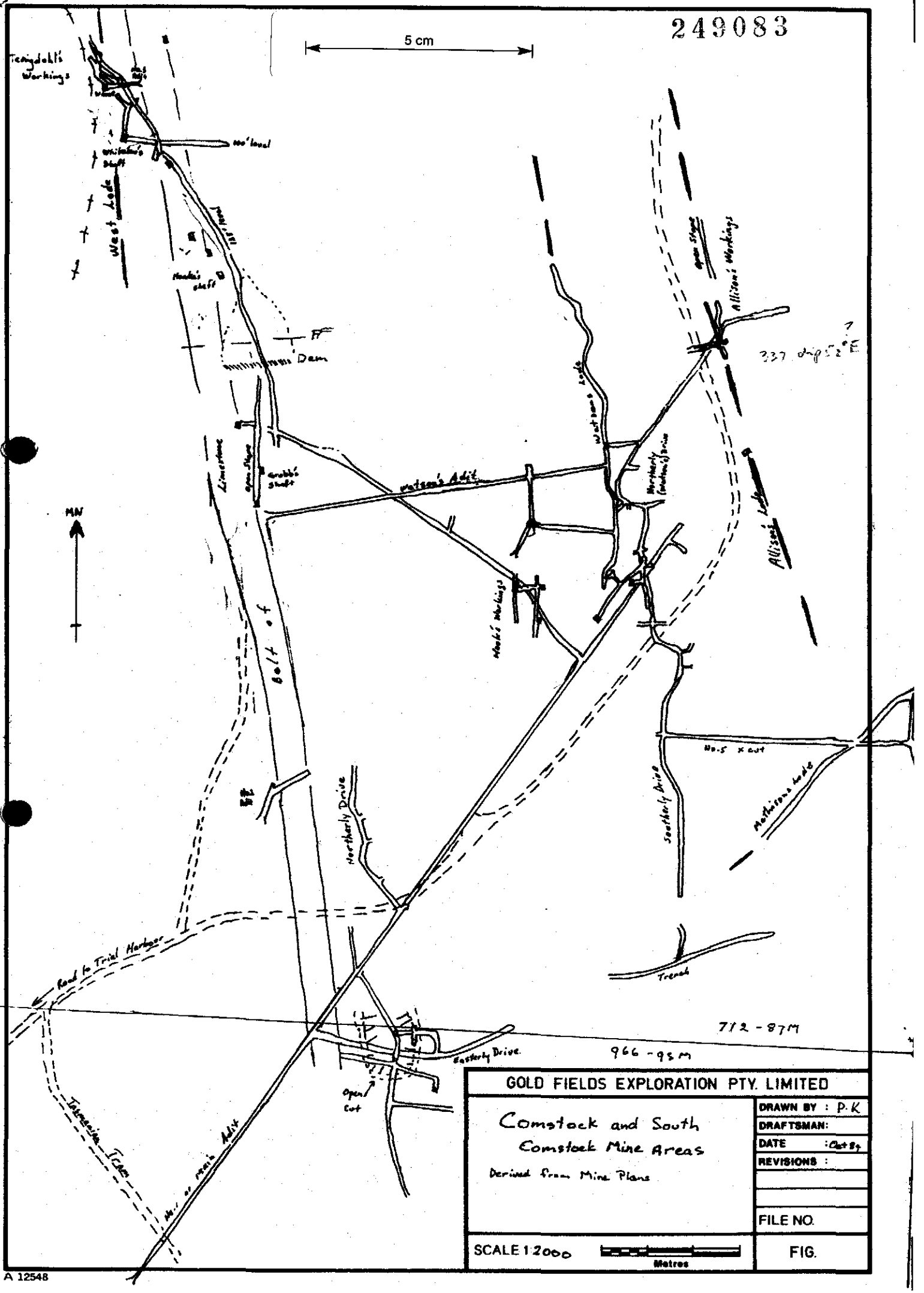
FIG.

W corner

A 12548

082

249083



GOLD FIELDS EXPLORATION PTY. LIMITED

Comstock and South Comstock Mine Areas

Derived from Mine Plans

DRAWN BY : P.K

DRAFTSMAN:

DATE : Oct 84

REVISIONS :

FILE NO.

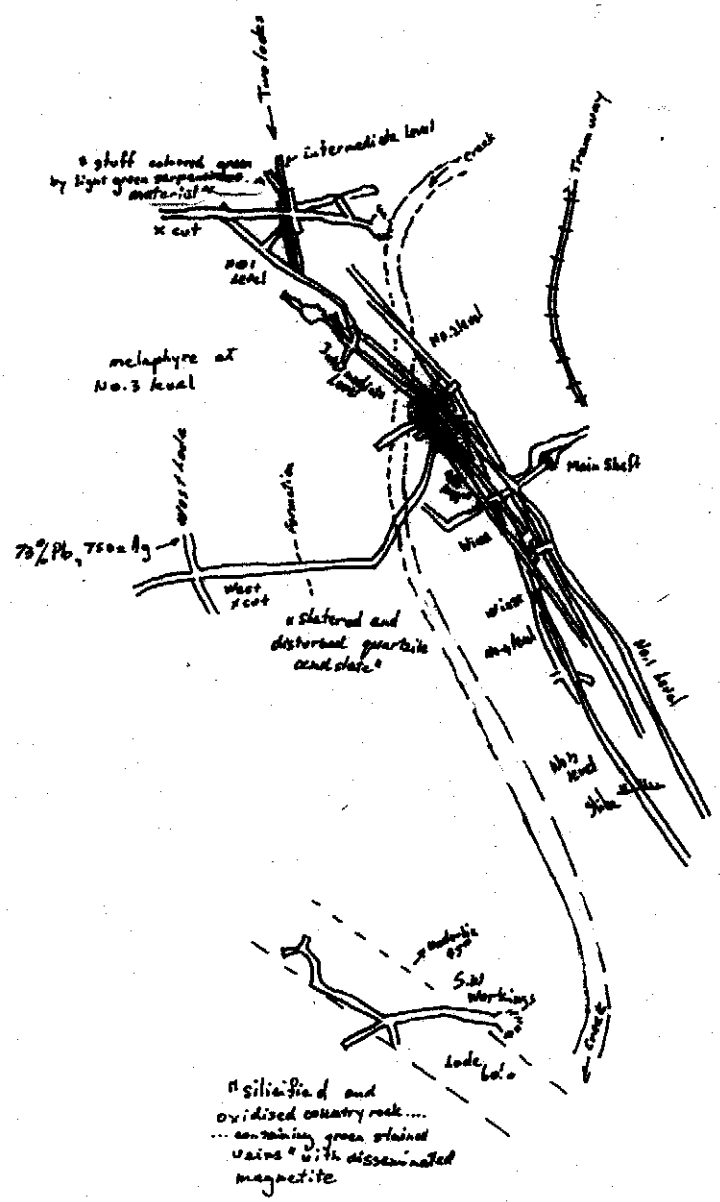
SCALE 1:2000 Metres

FIG.

A 12548

083

249084



GOLD FIELDS EXPLORATION PTY. LIMITED

Grubbs Mine

(All rises not shown)

Derived from early Mine plans

DRAWN BY : RK

DRAFTSMAN:

DATE Dec : 1907

REVISIONS :

FILE NO.

SCALE 1:2000 Metres

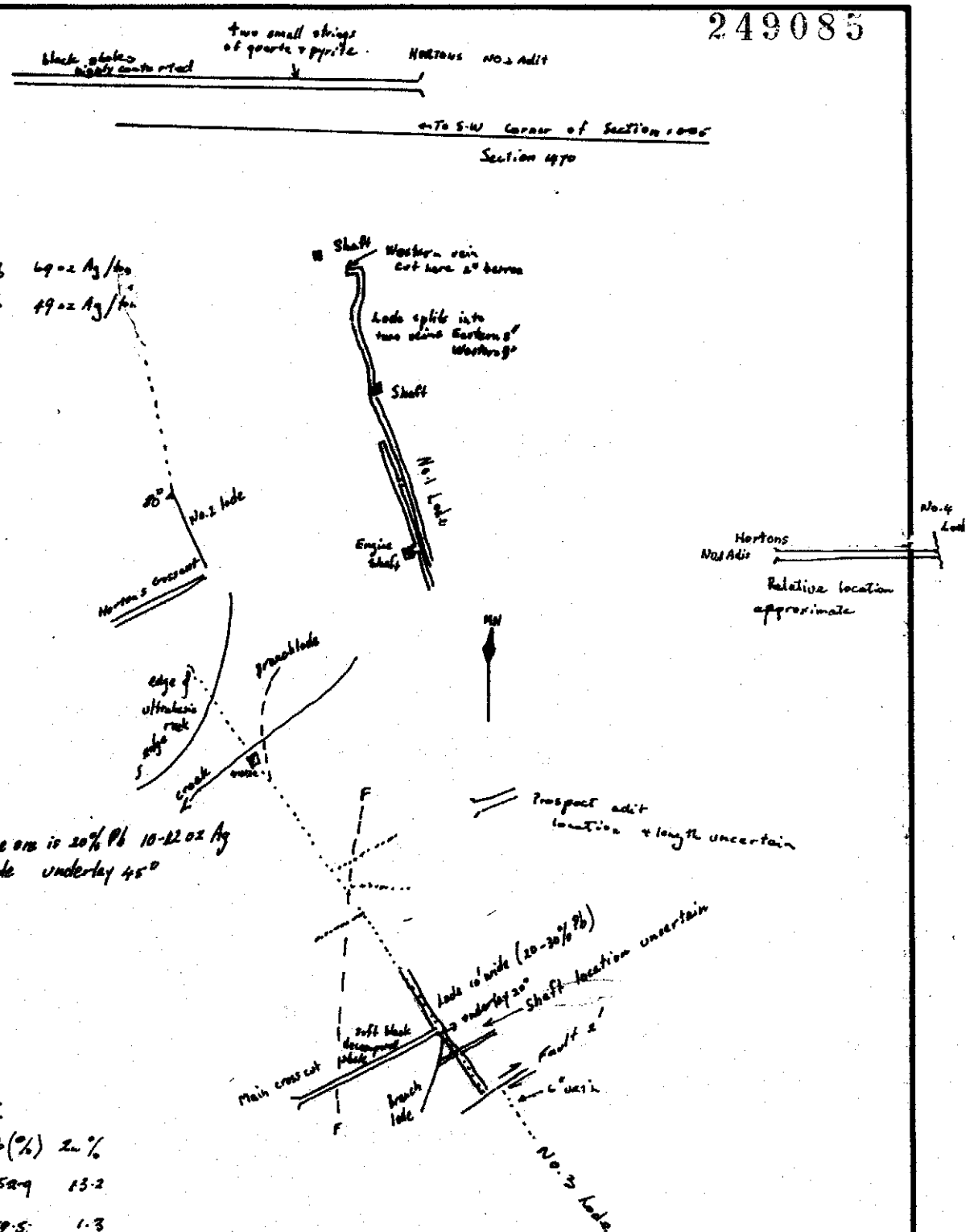
FIG.

5 cm

A 12548

081

249085



No.3 Lode Assays

	Ag (oz)	Pb (%)	Zn %
Sale assay	5·9	58·9	13·2
9ft width at bottom of shaft	1·6	19·5	1·3
North face drive	6·8	39·8	0·7
6" vein in Crosscut	2·1	18·1	0·3

..... Lode extension.

Note : No.1 Lode workings relative to other workings is approximate

Mine Plans Jan 1894 & K.L. Burns 1957

GOLD FIELDS EXPLORATION PTY. LIMITED

North Tasmanian

(Derived from Jan 1894 Mine Plans and K.L. Burns 1957 plan)

DRAWN BY : P.K
DRAFTSMAN:
DATE : Nov 84
REVISIONS :
FILE NO.

SCALE 1:2000 Metres

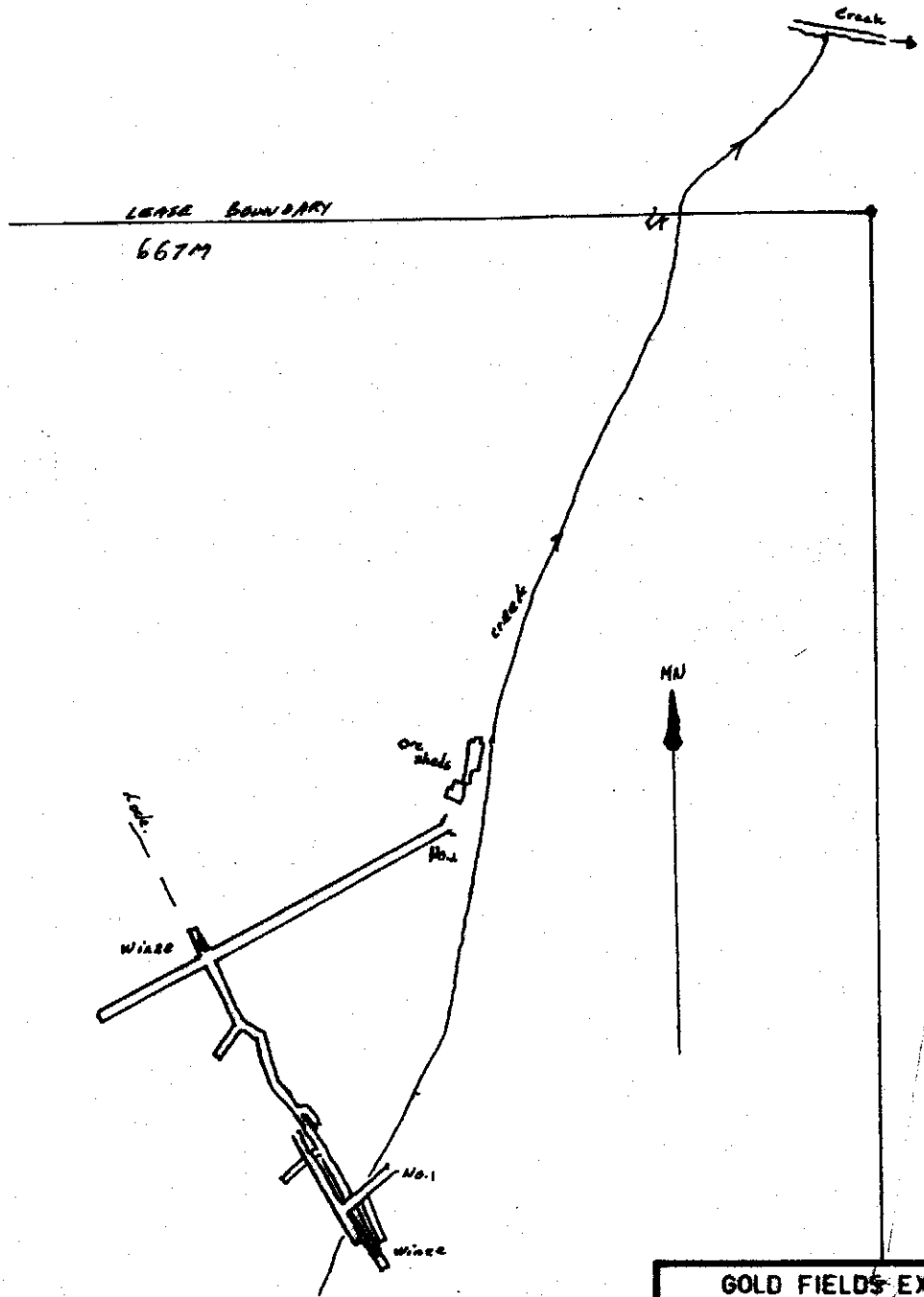
FIG.

5 cm

A 12548

086

249086



5 cm

GOLD FIELDS EXPLORATION PTY. LIMITED

South Nubeena
667M

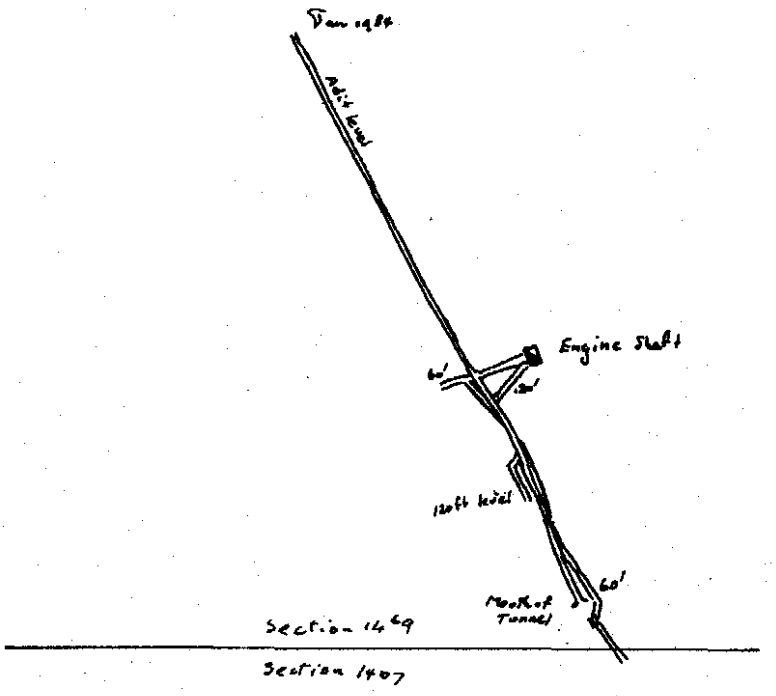
DRAWN BY : P.K.
DRAFTSMAN:
DATE :
REVISIONS :
FILE NO.
FIG.

SCALE 1: 2,000
Metres

A 12548

087

249087



MN

From Mine Plans dated Jan 1884

GOLD FIELDS EXPLORATION PTY. LIMITED

Tasmanian Silver Mine.

DRAWN BY : PK
DRAFTSMAN:
DATE : Oct 84
REVISIONS :

FILE NO.

SCALE 1 1000

Metres

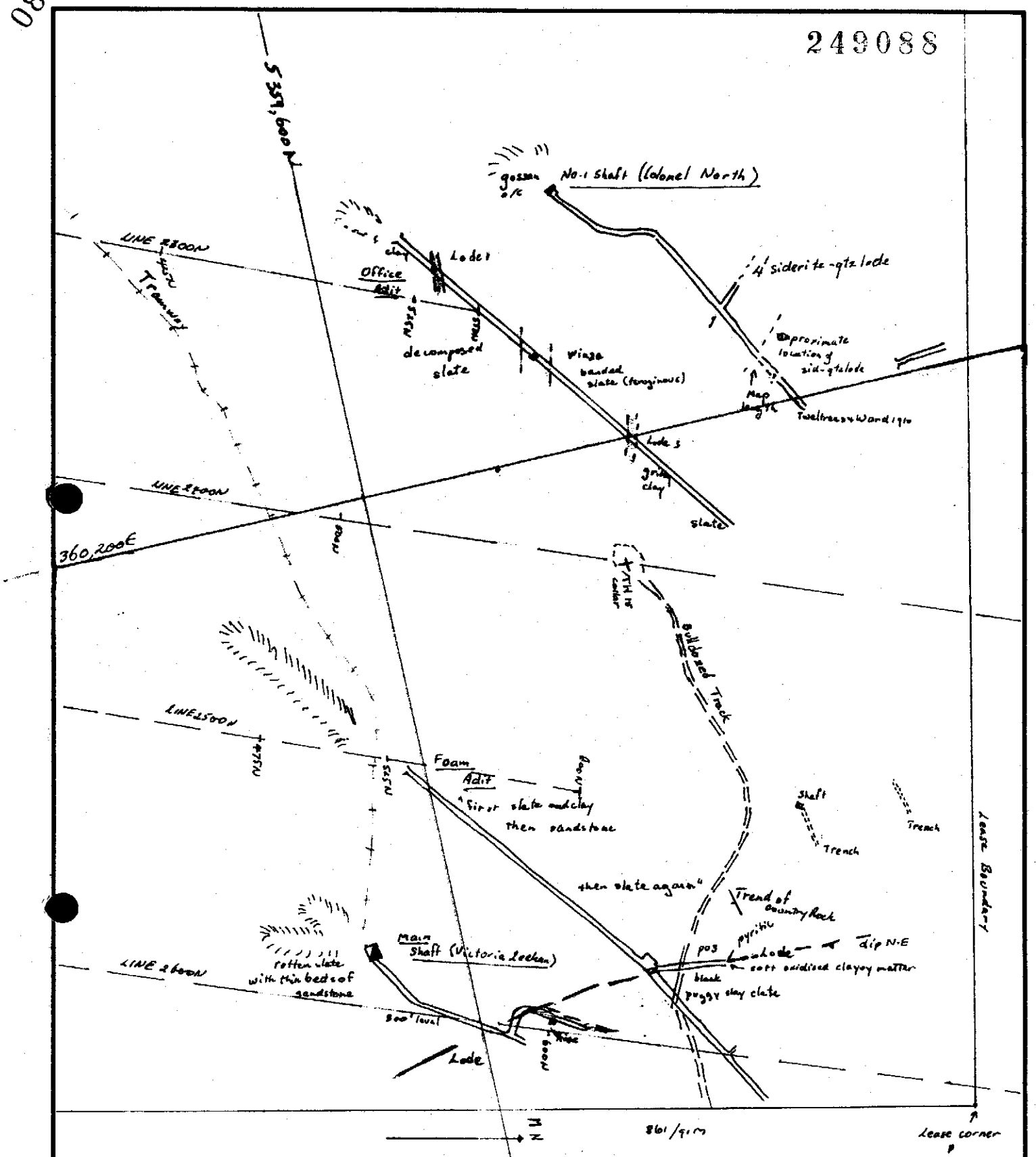
FIG.

5 cm

A 12548

088

249088

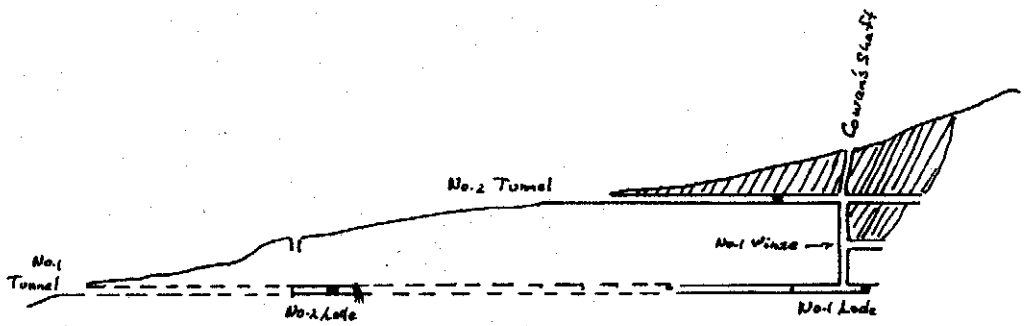


GOLD FIELDS EXPLORATION PTY. LIMITED	
Lease 1595M 91M Victoria Leehan Co in relation to A.M.G and Stonehenge grid lines	DRAWN BY : P.K. DRAFTSMAN: DATE : REVISIONS : FILE NO.
SCALE 1:2,000 Metres	FIG.

D. 13548

089

249089



Old stopes

From Mine plans dated 31/12/21

GOLD FIELDS EXPLORATION PTY. LIMITED

Britannia Mine

Section - magnetic N-S

DRAWN BY : PK
DRAFTSMAN:
DATE
REVISIONS :
FILE NO.

5 cm

SCALE 1 2000

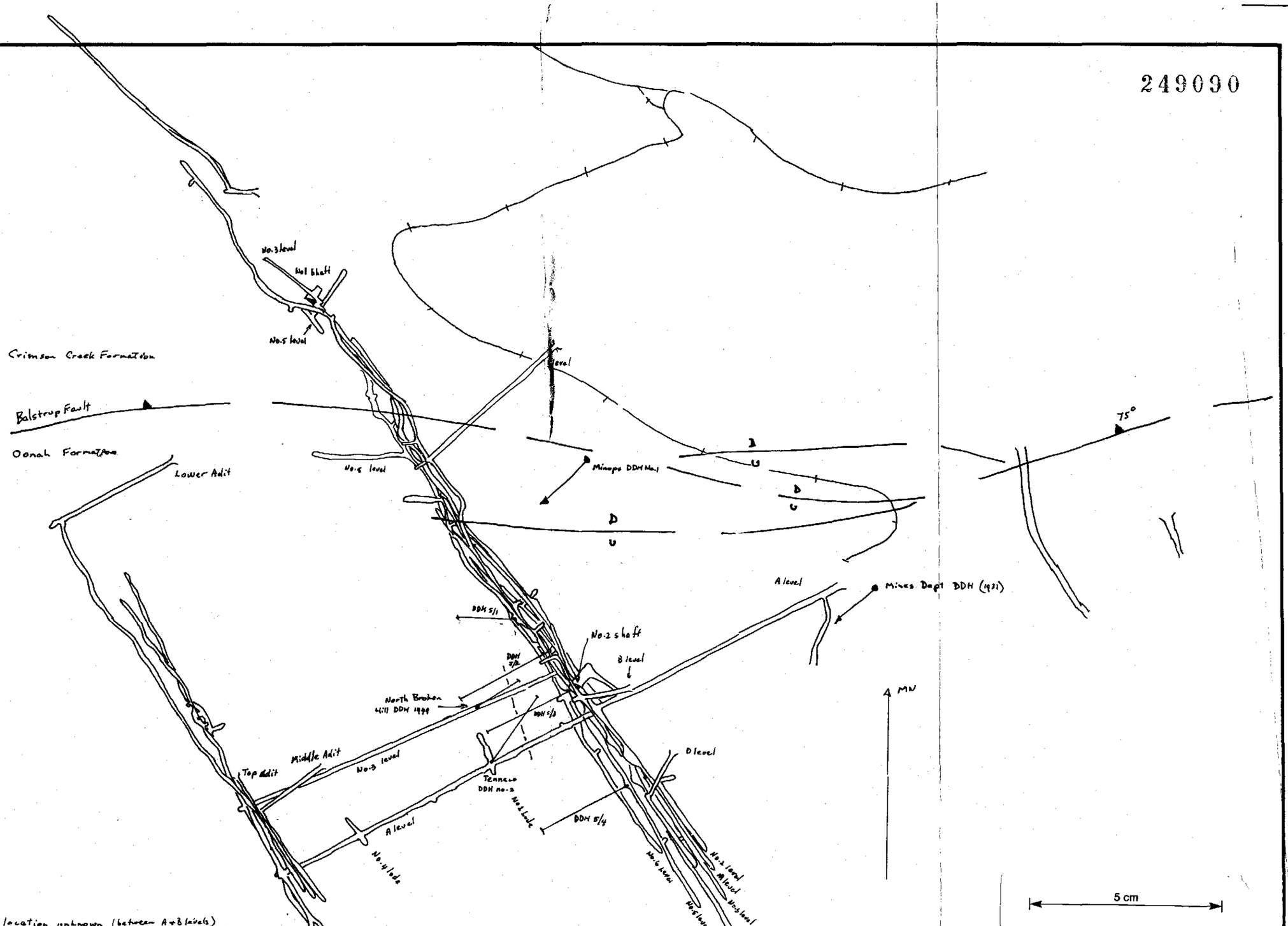
Metres

FIG.

A 12548

085

249090



Note : C level adit not shown as location unknown (between A+B levels)

Tenneco Drill Holes 5/1, 5/2, 5/3, 5/4 were drilled from No.5 level

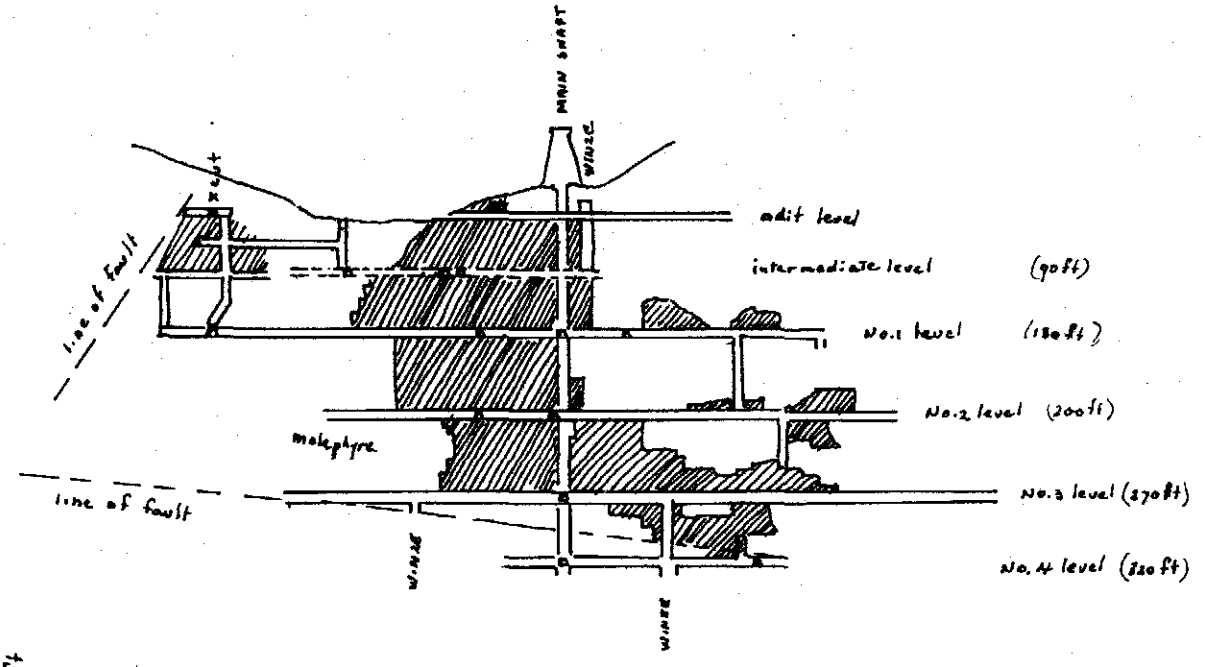
Tenneco Spray No.2 Drill Hole drilled from adit level

North Broken Hill (1944) DDH drilled from No.3 level (did not reach target)

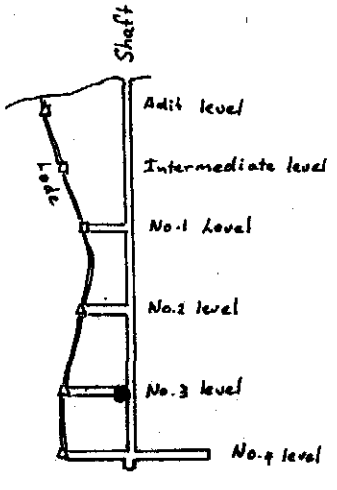
GOLD FIELDS EXPLORATION PTY. LIMITED	
Spray Mine (Derived from old Mine Plans and Tenneco data)	DRAWN BY : P.K. DRAFTSMAN: DATE : Nov 84 REVISIONS : FILE NO.
SCALE 1:2000 Metres	FIG.

A 12548

5 cm



Longitudinal Section



Cross Section at Shaft (1894)

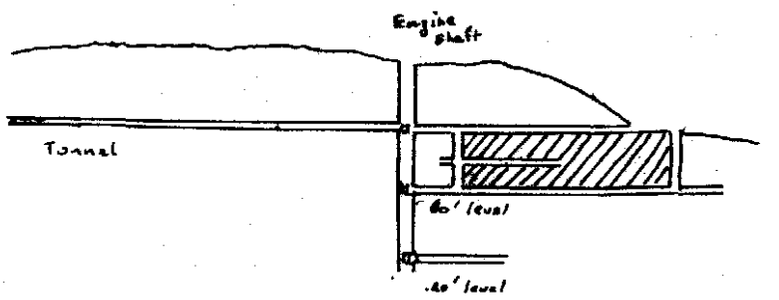
Ore stoped out.
Derived from mine plans dated Dec 1908

GOLD FIELDS EXPLORATION PTY. LIMITED	
Grubbs Mine Longitudinal Section (bearing 335° mag) + Cross Section	DRAWN BY : PK DRAFTSMAN: DATE : Oct 1994 REVISIONS : FILE NO.
SCALE 1 2000 Metres	FIG.

A 12548

091

249092



Derived from mine plans dated Jan 1894

GOLD FIELDS EXPLORATION PTY. LIMITED

Tasmanian Silver Mine
Main Lode (Section)

DRAWN BY : PK
DRAFTSMAN:
DATE : Oct 1994
REVISIONS :
FILE NO.
FIG.

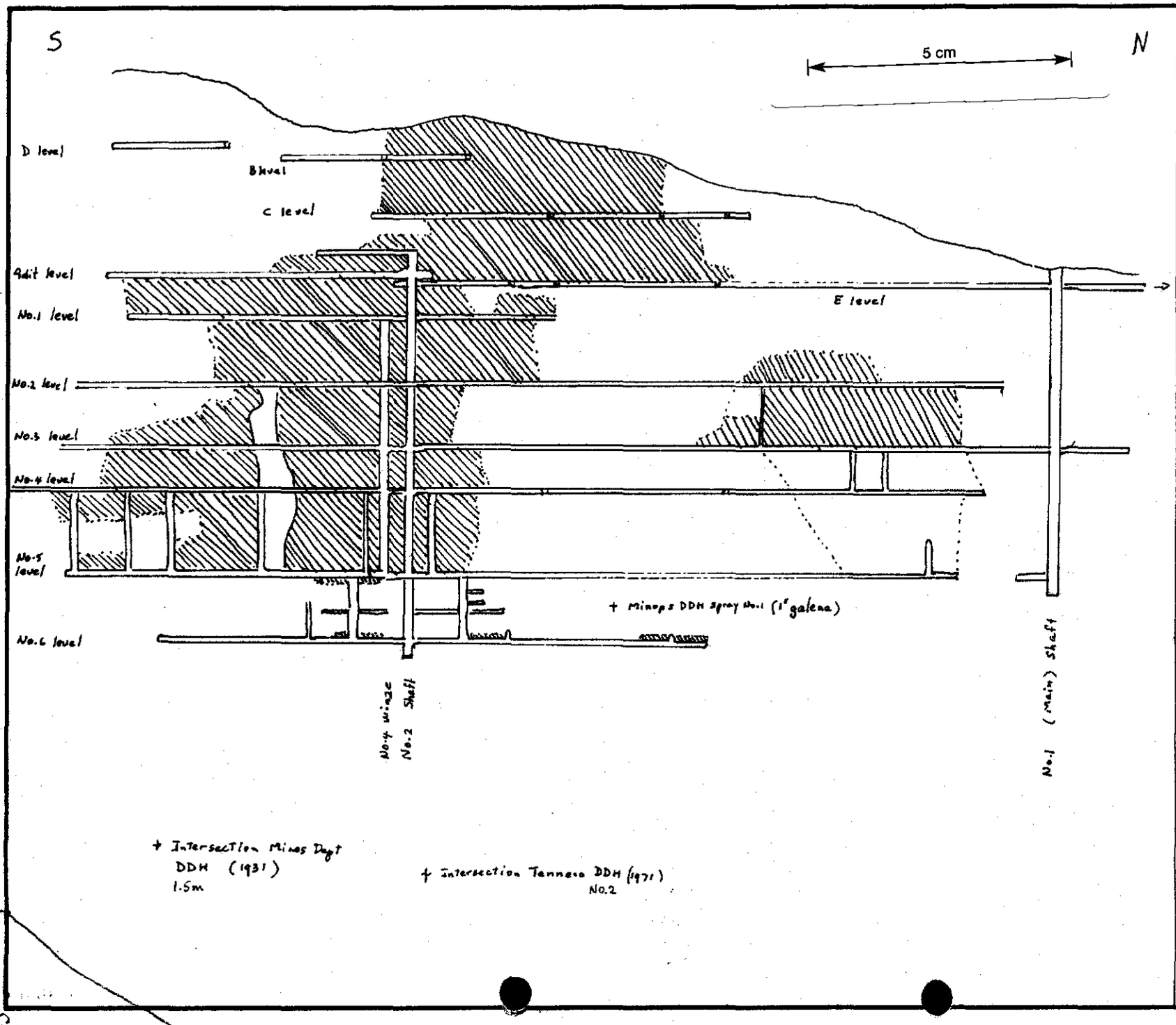
SCALE 1:2000

Metres

5 cm

A 12548

249093



GOLD FIELDS EXPLORATION PTY. LIMITED

DRAWN BY : P.K.
DRAFTSMAN: P.K.
DATE Oct: 84
REVISIONS :

FILE NO.

FIG.

Longitudinal

Spray No.1 Lode

SCALE 1:2000

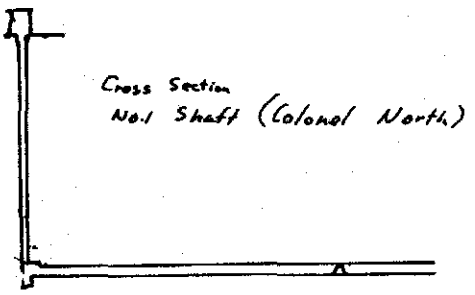
Metres

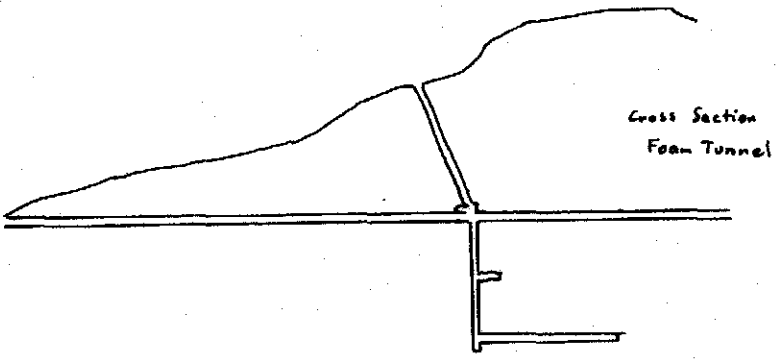
A 12548

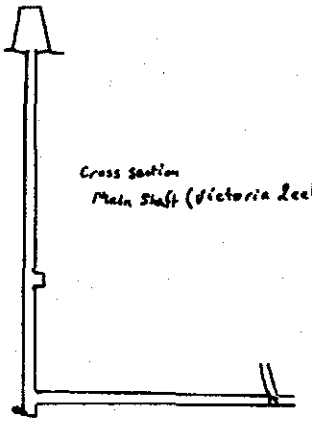
R 260

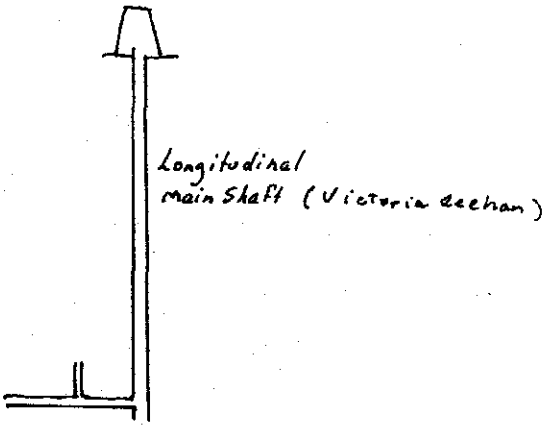
093

249094









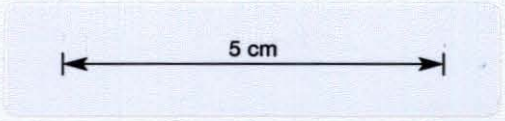
5 cm

GOLD FIELDS EXPLORATION PTY. LIMITED	
Cross Sections of 1585 q/m Victoria Leehan Co	DRAWN BY : P.K DRAFTSMAN: DATE : 0d84 REVISIONS : FILE NO.
SCALE 1:2,000 Metres	FIG.

A 12548

APPENDIX 3

Sample Descriptions and Assays



GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET** COLLECTED BY: POLTOCK

PROJECT: EL 11/76 PROSPECT: Mt Agnew SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

1:250.000 SHEET: TYPE OF SAMPLE: Stream Sample SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION	ANALYSES							
				Sn	As	WO_3	Cu	Pb	Zn	Ag	Mo
10564			Stream sediment - all granite detritus	50	10	10	5	<10	<10	<1	<10
10565			" " " " "	50	10	20	10	10	"	"	"
10566			pan concentrate, abundant dark "heavies"	1·30%(0·98%)	<10	130	55	40	170	"	"
10567			Stream sediment - hornfels/granite contact	10	<10	10	10	<10	10	"	"
10568	LINE 160E	70N Globe	" " all granite detritus	50	<10	30	5	"	<10	"	"
10569			" " granite & hornfels detritus	20	<10	<10	<5	"	"	1	"
10570			" "	10	<10	10	"	"	"	<1	"
10571			" "	40	<10	10	"	"	"	"	"
10572			pan con, abundant dark heavies, hornfels c/e	0·76%(0·59%)	<10	190	10	20	40	"	"
10573	100m Sth	32N/400E	Stream Sediment, all granite detritus	70	<10	20	<10	10	10	"	"
10574			" " " " "	<10	<10	10	<5	<10	<10	"	"
10575			" " " " "	20	<10	10	"	10	"	"	"
10576			" " " " "	20	10	<10	"	<10	"	"	"
10577			" " " " "	10	10	<10	"	"	"	"	10
10578			pan con. granite, hornfels, magnetite, gossan, py	0·29%	<10	200	15	"	60	1	10
10579			Stream sediment all granite	10	<10	<10	10	"	10	<1	<10
10580			" " granite + hornfels contact	10	10	10	5	10	<10	"	"
10581			" " granite detritus	10	<10	<10	<5	<10	"	"	"
10582			" " " "	10	<10	<10	"	"	"	"	"
10583			" " " "	10	<10	10	"	"	"	"	"
10584			" " " "	10	<10	10	"	10	"	"	"

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET** COLLECTED BY: POLTOCK

PROJECT: EL 11/76 PROSPECT: Mt Agnew SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

1:250,000 SHEET: TYPE OF SAMPLE: Stream SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION	DESCRIPTION	ANALYSES Sn	As	WO_3	Cu	Pb	Zn	Ag	Mo
10585		stream sediment all granite detritus	<10	<10	<10	<5	10	<10	1	<10
10586		" " " "	<10	<10	<10	"	<10	"	"	"
10587		" " " "	<10	<10	10	"	"	"	"	"
10588		" " " "	10	<10	10	"	"	"	"	"
10589		" " " "	10	10	10	"	20	"	"	"
10590		" " " "	<10	<10	<10	"	<10	"	<1	"
10591		" " " "	10	<10	<10	"	"	"	"	"
10592		" " granite, hornfels detritus	20	<10	10	"	"	"	"	"
10593		" " granite detritus	<10	<10	<10	"	10	"	"	"
10594		" " " "	10	<10	<10	"	"	"	"	"
10595		" " " "	10	<10	<10	"	<10	"	"	"
10596		" " " "	20	<10	10	"	"	"	1	"
10597		" " " "	10	<10	10	"	"	"	"	"
10598		" " " "	<10	<10	10	"	10	"	<1	"
10599		" " granite, hornfels detritus	10	<10	10	"	"	"	"	"
11296		" " granite detritus only	60	90	30	*10	<10	<10	<1	<10
11297		pan concentrate gran, hornfels detritus abundant dark heavies + pale yellow.	40	<10	10	*10	30	90	<1	<10
11298		stream sediment	740	<10	70	*10	10	<10	<1	<10
11299		" "	20	40	10	*5	<10	<10	<1	<10
11295		" " dom hornfels float	280	20	40	35	<10	140	<1	<10
11294		Rock MoS_2 joint face and quartz tourm vein	10	<10	<10	75	250	40	<1	420

5 cm

GOLD FIELDS EXPLORATION PTY. LTD.

SAMPLE RECORD AND ANALYTICAL DATA SHEET

COLLECTED BY: P. KOMYSHAN

PROJECT: SPL 129 | PROSPECT: STONEHENGE | SAMPLE STORAGE REQ'D: | LABORATORY: RENISON | DATE DISPATCHED: APRIL 84

1:250,000 SHEET: | TYPE OF SAMPLE: ROCK | SAMPLE PREP. REQ'D: | ANALYSIS REQ'D: | DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION	ANALYSES								
				Sn	As	WO_3	Cu	Pb	Zn			
9976		Wave's Adit	dump pyrite on fracture, qtz on bedding quartzite	170	3950	470	55	4.0%	1040			
9977		Wave Adit	quartzite brecciated & pyrite mineralization	100	540	1170	135	5%	8.7%			

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET**

COLLECTED BY: P. ROMYSHAN

PROJECT: SPL 124 PROSPECT: TRIAL HARBOUR SAMPLE STORAGE REQ'D: LABORATORY: RENISON DATE DISPATCHED:

1:250,000 SHEET: TYPE OF SAMPLE: STREAM SEDIMENTS SAMPLE PREP. REQ'D: -80 # ANALYSIS REQ'D: DATE RECEIVED:

	SAMPLE NUMBER	LOCATION		DESCRIPTION	ANALYSES								
					Sn	As	WO$_3$	Co	Pb	Zn			
✓	9969	5,356,870N	355,600E	few fines, 70% Must slst gravel, 30% brn sand	10	30	30	30	210	640			
✓	9970	5,356,860N	355,510E	grey qtz sand 40%, slst gravel 10%, qtz ss/sh gravel 50%	10	10	10	10	20	90			
✓	9971	5,356,830N	354,980E	qtz sand 50%, Must gravel 50%	20	10	10	<5	<10	60			
✓	9972	5,357,010N	354,980E	30% gravel Must, 70% brn sand	10	<10	10	30	40	520			
✓	9974	5,357,090N	355,070E	60% sand + clay 40% Must gravel	20	<10	10	80	<10	160			
✓	9975	5,357,130N	355,350E	70% brn sand 30% Must gravel	<10	<10	20	<5	<10	60			

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET**

COLLECTED BY: P. ROMYSHAN

PROJECT: SPL 129 PROSPECT: TRIAL HARBOUR SAMPLE STORAGE REQ'D: LABORATORY: RENISON DATE DISPATCHED:

1:250,000 SHEET TYPE OF SAMPLE: STREAM SEDS SAMPLE PREP. REQ'D: -80# ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION	ANALYSES								
				Sn	As	WO3	Cu	Pb	Zn			
9943	5,359,720N	356,170E	90% clay 20% gravel	<10	<10	60	20	30	100			
9944	5,358,530N	356,100E	90% clay 10% humus				35	560	290			
9945	5,358 500N	356 140E	sand + ss & qtz gravel	20	20	10	15	150	40			
9947	5,358,530N	356,840E	rusty brn clay + 80% sandy gravel	10	720	40	85	2490	3400			
9949	5 358,480N	356,070E	50% slst gravel, 50% sand	10	<10	20	20	20	90			
9950	5358240	356,020E	40% Oonah ss gravel 60% gray sand	10	<10	10	<5	<10	10			
9951	5,358 190N	355,940E	50% " " " 50% " "	10	<10	10	10	50	40			
9952	5,358 310N	355,720E	40% hfld slst gravel 60% brn "	10	<10	10	10	<10	10			
9953	5,358 260N	355,580E	40% gravel of gry ss 60% gry mbrn "	20	<10	10	10	10	20			
9954	5,358 190N	355 730E	— —	80	350	40	35	60	210			
9955	5,358 270N	355 510E	10% humus 45% gry brn clay, 45% brn sand	<10	<10	10	20	60	40			
9956	5 358 250N	355 390E	hfld Must slst gravel	10	320	40	30	860	360			
9957	5,358 260N	355 380E	qtz gravel & minor grn hfld slst	10	<10	<10	20	90	810			
9958	5,358 860N	355 150E	qtz gravel + slst + u/m	50	20	40	65	110	2010			
9959	5,358, 960N	355 140E	qtz gravel " " "	50	<10	30	30	50	210			
9960	5,358, 010N	355,920	50% gry sand + ss gravel 50%	<10	<10	10	15	<10	60			
9962	5 357 890N	355,850E	60% gry sand + 40% Must	10	<10	<10	5	<10	30			
9963	5,357 700N	355,750E	50% brn sand 50% coarse gravel Must	10	<10	10	10	60	80			
9965	5,357 090N	355, 580E	60% brn clay 10% sand 30% Must gravel	10	30	10	25	350	370			
9966	5,357 100N	355, 600E	60% brn sand + clay, 30% Must gravel, 10% hfld "	20	20	30	25	310	460			
9967	5,357 060N	355 620E	60% brn clay 40% Must gravel slst	10	40	30	45	580	1280			

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET** COLLECTED BY: P.K

PROJECT: 392 129 PROSPECT: STONEHENGE SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED: SUMMER 83-84

1:250,000 SHEET: TYPE OF SAMPLE: ROCK SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION	ANALYSES								
				Sn	As	WO_3	Cu	Pb	Zn	Cr		
3065	2200 E	1450S	pale o/c pale rock ± vuggy qtz + sulph. stains	<10	40	10	20	30	50			
3066	2000 E	1300 N	f/g gossanous over serp??									
9945	5,357,860 N	358,380 E	o/c hematitic chert breccia.	<10	30	<20	55	30	40	0.25%		
9934	5,359,030 N	356,420 E	blk hf'd shale ± dis py 1-5%	40	130	20	510	180	190	0.12%		
9961	5,358,000 N	355,930 E	(flt) weathered ss ± veins of gmn quartz min + blk to strong min	20	<10	40	50	100	120	0.05%		
9964	5,357,210 N	355,500 E	o/c hf'd qtz-ss breccia ± dis py	30	20	10	100	20	10	0.25%		
9968	5,356,920 N	355,560 E	flt (sub o/c) layered pale cream s/st ± veins silicif	90	10	10	15	20	510	0.01%		
9973	5,357,110 N	355,930 E	o/c fg uniform, massive U/m	10	<10	10	10	10	270	0.13%		

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. — SAMPLE RECORD AND ANALYTICAL DATA SHEET

PROJECT: SPL 124 | PROSPECT: TRIAL HARBOUR | SAMPLE STORAGE REQ'D: | LABORATORY: | COLLECTED BY: P.K.
1:250,000 SHEET: | TYPE OF SAMPLE: PANNED CONCENTRATE | SAMPLE PREP. REQ'D: | ANALYSIS REQ'D: | DATE DISPATCHED: FEB '84 | DATE RECEIVED:

√ = LOCATED

SAMPLE NUMBER	LOCATION		DESCRIPTION	ANALYSES								
				Weight gms	Sn	As	Cr	Cu	Pb	Zn	WO_3	Au
7942 √	Macleans Creek 5,359, 920N	338, 240E	few heavy minerals - minor blk mineral + very fine colour	035	170	610	0.7%	80	960	36000		<0.01
7949 √	5,359, 510N	358, 560E	" " " " " " "	101	70	220	0.5%	180	1,430	98000		
7958 √	Little Hardy R. 5,355, 660N Extraction Rd.	Area 351, 630E	" " " quartz + minor blk mineral	087	2370	<10	0.1%	45	<10	80		0.38
9879 √	5,356, 390N	353, 740E	fg r.f. + vfg cassiterite?	054	3910	<10	0.8%	5	<10	30		<0.01
9882 √	5,356, 100N	353, 080E	fg brn sand few heavies	029	500	<10	0.3%	5	150	170		<0.01
9883 √	5,356, 270N	353 080E	brn sand + fine grained blk min cas?	043	2200	20	1.4%	15	10	70		<0.01
9898 √	5, 357, 120N	356, 640E	sand, r.f + minor blk min.	54	50	<10	0.7%	15	10	70	10	<0.01
9946 √	5, 353, 300N	356, 140E	sand + fine - mg blk min (chromite)	169	360	<10	159	10	40	20	<10	2.98 (1.77 opt)
9948 √	5, 353, 510N	356, 040E	brn sand + fine blk min.	92	500	<10	163	10	90	210	30	<0.01

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET**

COLLECTED BY: P.K.

PROJECT: SPL 129 | PROSPECT: TRIAL HARBOUR | SAMPLE STORAGE REQ'D: | LABORATORY: RENISON | DATE DISPATCHED: FEB '82

1:250,000 SHEET | TYPE OF SAMPLE: STREAM SEDIMENT | SAMPLE PREP. REQ'D: -80# | ANALYSIS REQ'D: | DATE RECEIVED:

√ = LOCATED

SAMPLE NUMBER	LOCATION		DESCRIPTION	ANALYSES								
				Sn	As	WO_3	Cu	Pb	Zn			
✓ 7937	5,356,970N	358,270E	Clasts of quartz veins, quartz in gravel	<10	10	10	5	180	170			
✓ 7938	5,356,940N	358,270E	Mg. gravel of ε sediments & Ordovician veins.				115	355	27000			
✓ 7939	5,357,180N	358,180E	sand + humus	<10	<10	<10	<5	20	130			
✓ 7940	5,357,280N	358,220E	gravel ordovician veins.				10	160	260			
✓ 7941	5,357,490N	358,150E	sand + humus	30	<10	<10	<5	20	10			
✓ 7943	5,357,510N	358,360E	sand + humus.	10	<10	<10	5	60	90			
✓ 7944	5,357,730N	358,280E	humus and fine sand	10	10	10	5	130	360			
✓ 7946	5,357,930N	358,400E	humus + fine sand	<10	10	<10	5	280	80			
✓ 7947	5357 860N	358,540E	humus + sand + gravel.	10	10	10	5	130	60			
✓ 7948	5,358,120N	358,740E	mainly gravel	40	340	90	75	2690	16000			
✓ 7950	5,358,060N	358,350E	humus + sand + gravel.	<10	<10	10	<5	60	120			
✓ 7951	5,358,020N	359,680E	fine sand + humus	10	<10	10	5	60	30			
✓ 7952	5,358,040N	359,700E	gravel - few fines	110	2410	350	205	10,400	48000			
✓ 7953	5,358,180N	359,930E	gravel + fine sand ε py?	40	390	40	40	3,060	5000			
✓ 7954	5,358,120N	359,930E	qtz-ss gravel				10	70	180			
✓ 7955	5,358,450N	359,570E	humus + fine sand	<10	<10	<10	10	140	30			
✓ 7956	5,358,680N	359,370E	qtz gravel few fines	<10	<10	<10	5	40	50			
✓ 7957	5,358,860N	359,120E	" " " "	<10	<10	10	30	90	40			
✓ 9878	5,356,260N	353,730E	qtz + other r.f. gravel				15	70	130			
✓ 9880	5,356,250N	353,600E	70% v fg grey sand + 30% gravel	<10	<10	10	15	30	230			
✓ 9881	5,356,090N	353,090E	60% rounded gravel + minor sand	10	<10	60	5	140	500			

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET** COLLECTED BY: P. KOMYSHAN

PROJECT: S, PROSPECT: TRIAL HARBOUR SAMPLE STORAGE REQ'D: LABORATORY: RENISON DATE DISPATCHED:

1:250,000 SHEET TYPE OF SAMPLE: STREAM SEDIMENT SAMPLE PREP. REQ'D: -80A ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION	ANALYSES								
				Sn	As	WO_3	Cu	Pb	Zn			
✓ 9884	5,356, 260N	353, 090E	gravel of ltl'd sedo, few fines	130	30	30	60	30	280			
✓ 9885	5,355, 670N	352, 350E	Mn st. owen conq gravel	10	40	20	145	60	660			
9886	5,357, 040N	356, 560E	50% f-m sand, 40% clay, 10% humus	<10	<10	<10	10	70	170			
9887	5,356 950N	356, 950E	pink sand.	80	<10	<10	45	<10	10			
9888	5,356 990N	356, 610E	varied f-f gravel	<10	<10	10	20	90	240			
9889	5,357, 060N	356, 560E	Mn st gravel	50	20	20	30	490	550			
9890	5,357, 110N	356, 710E	r.f. gravel	<10	<10	20	20	90	300			
9892	5,357, 130N	356, 780E	gravel of r.f.	<10	<10	10	20	30	90			
9893	5,357, 290N	356, 700E	" " "	<10	<10	10	25	<10	60			
9894	5,357, 330N	356, 740E	" " "	<10	<10	20	20	60	120			
9895	5,357, 370N	356, 760E	" "	<10	<10	20	30	30	80			
9896	5,357, 480N	356, 910E	" "	<10	<10	10	15	70	100			
9897	5,357, 470N	356, 930E	Mn st gravel	<10	<10	10	20	10	100			
9898	5,357, 450N	356, 960E	sand + minor r.f.	<10	<10	<10	45	<10	20			
9899	5,357, 270N	357, 060E	brn clay c vfg sand & r.f.	<10	<10	10	55	90	570			
9900	5,357, 250N	357, 080E	60% r.f. gravel 40% sand	<10	<10	10	10	60	150			
9901	5,357, 200N	357, 160E	brn sand + gravel	<10	<10	<10	10	40	90			
9939	5, 358, 740N	356, 230E	Mn st s/st gravel	10	670	<10	45	1230	950			
9940	5, 358, 950N	356, 500E	qtz sand + ss gravel + min qtz	10	320	150	5	40	40			
9941	5, 358, 950N	356, 480E	60% blk s/st gravel, 40% rusty brn clay	<10	710	<10	70	2140	1890			
9942	5, 358, 670N	356, 360E	qtz sand + bonah ss gravel	10	<10	10	5	20	10			

APPENDIX 4

Petrological Descriptions

105

249106

Central Mineralogical Services

39 Beulah Road
Norwood, S.A. 5067
Telephone 42 5659

Mr. P.A. Roberts
Senior Geologist
Gold Fields Exploration Pty. Ltd.
P.O. Box 835
BURNIE / TAS. 7320

26th October, 1984

REPORT CMS 84/9/18

YOUR REFERENCE:	Letter dated 14.9.1984
DATE RECEIVED:	17th September, 1984
SAMPLE NOS.:	14 Samples
SUBMITTED BY:	P.A. Roberts
WORK REQUESTED:	Petrology

for

H.W. Fander, M. Sc.

106

249107

REPORT CMS 84/9/18

Fourteen rock and drill core samples, in two groups, were received for petrological examination. Representative thin-sections were prepared and examined together with their respective offcuts, with carbonate stain tests performed as warranted. Attached tabulated descriptions summarise the microscopic data and include interpretative comments.

Summary

Drill core samples from DDH-TH15 in the Stonehenge area reflect a sequence of variously silicified and siderite-metasomatised carbonaceous pelites. Primary features are partly obscured, but it appears likely that these sediments were primarily limey or dolomitic in part. Silicification, yielding cherty interbeds, may be a strictly diagenetic phenomenon in part, but is elsewhere clearly metasomatic. Siderite veining and replacements postdate silicification. These rocks are variably mineralised with recrystallized and locally partly remobilised syngenetic pyrite assemblages, locally complexed by siderite vein-hosted, semi-massive, fine-grained arsenopyrite, pyrite, or locally minor disseminations of galena and sphalerite.

Mineragraphic examination of individual samples may be warranted on the basis of assay data. This broadly Zeehan-type alteration and veining pattern could support concentrations of silver.

The Grand Prize area rock chip samples are dominated by polymict and variably basic-volcanomict turbiditic sandstones. These rocks carry ubiquitous and significant concentrations of clastic magnetite, typically comprising a few volume percent of the total rock and thus consistent with the relatively high magnetic susceptibility. The magnetite is partly degraded (martitised), apparently in response to weathering and is derived from basalts and basic-tuffacoues psammo-pelites, both facies appearing as clasts with the sandstones.

In contrast, sample 9769 represents a carbonated and subsequently thoroughly silicified ultramafic.

D. Cowan, B. Sc.

Sample No.	Classification - Composition	Fabric	Accessories	Comments
TH 15 315.5 (T.S. 51493)	Carbonated Breccia. Fine- to medium-grained sideritic carbonate with interspersed clasts, zones of siderite-stained cherty, carbonaceous pelite. Sporadic siderite veinlets, vugs with disseminated sphalerite,galena.Minor late quartz veinlets.	Breccia-like, with random contorted pelite, chert clasts, carbonate matrix.	Minor traces of pyrite.	Thoroughly sideritic-carbonated breccia composite of carbonaceous pelite, chert (silicified ?pelite) components with carbonate vein-, vug hosted sulphide disseminations.
423.2	Carbonaceous Pelite. Fine-grained muscovite and fine to microcrystalline quartz with abundant carbonaceous matter, thinly disseminated to locally conspicuous very fine pyrite. Minor discontinuous quartz-siderite veinlets.	Weakly microlaminated, incipiently concordantly sheared silty shale.	Minor microcrenulated diagenetic quartz veinlets.	Weakly syngenetic-pyritic, strongly carbonaceous pelite. Weakly quartz-siderite-veined on a microscale.
521.6	Silicified Pelite. Fine to microcrystalline quartz with interspersed disseminations, stringers, semi-massive aggregates of fine-grained pyrite. Disseminated clots, films of carbonaceous matter.	Breccia-like, with ill-defined clasts of silicified pelite, pyritic quartz matrix. Mildly stressed.	Traces of sericite in silicified pelite zones.	Relict features consistent with a brecciated, thoroughly silicified/quartz-pyrite-matrixed carbonaceous pelite.
547.2	Carbonated Breccia. Veins, veinlets of sideritic carbonate with interspersed clasts, zones of cherty silicified/siderite-stained carbonaceous pelite. Semi-pervasive fine-grained pyrite disseminations.	Strongly veined to brecciated/siderite-healed.	Minor relics of sericite in altered pelite. Minor microscopic blebs of galena, sphalerite in vein-siderite.	Affinities with 526.6 m and particularly 315.5 m. Alteration pattern comprises silicification/fractur siderite-veining. Pyrite is of recrystallized/partly remobilised syn genetic character.
562.1	Altered, Veined Pelite. Cherty-silicified carbonaceous pelite with sideritic-carbonated interbeds, disseminated pyrite. Discordant centimetric siderite vein with interspersed zones of semi-massive fine-grained arsenopyrite.	Laminated pelite with bedding-controlled silicification/carbonation. High-angle discordant vein.	Sporadic cherty quartz veinlets grading into quartz-siderite, late siderite veinlets in pelite.	Pelite alteration pattern closely analogous to 547.2 m. Vein is mediu grained unstressed, zoned, with massive siderite marginal-, fine arsenopyrite-quartz core zones.
563.1	Pyritic Siderite Vein. Massive siderite grading sharply into semi-massive fine-grained "siderite-gangued" pyrite aggregates.	Medium- to coarse-grained siderite-/fine-grained siderite-pyrite aggregates. Incipiently stressed.	Traces of quartz, rare extremely fine-grained arsenopyrite.	Affinities with 562.1 m vein. In contrast, the banding pattern is siderite(-quartz)/pyrite-siderite (-quartz) rather than siderite/arsenopyrite-quartz.
566.5	Altered Pelite. Fine- to medium-grained sideritic carbonate with semi-pervasive relics of carbonaceous matter. Interbands of variably siderite-veined/impregnated carbonaceous chert.	Banded on a sub- to millimetric scale. Frequent variously concordant to discordant siderite veinlets. Incipiently sheared.	Ultrafine pyrite, concentrated in relict carbonaceous partings.	Extensively sideritised, carbonace pyritic pelite with siderite-veine cherty-silicified interbeds analog to e.g. 562.1 m.
598.9	Impure Dolomite. Fine to microcrystalline ankeritic dolomite with more or less pervasive fine-grained corroded "authigenic" quartz, minor films, clots of cherty quartz. Minor carbonaceous matter. Sporadic dolomite veinlets.	Vague relict limestone breccia-like fabric. Incipiently sheared veinlets.	Minor traces of ultrafine pyrite. Minor discontinuous quartz films as selvedges on dolomite veinlets.	Dolomitised limestone breccia with authigenic, minor cherty-replacive quartz, concentrated in ill-define "matrix" (interclast) zones.

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Sample No.	Classification - Composition	Fabric	Accessories	Comments
9762	Chloritic Greywacke. Framework of sericitic pelite and basalt clasts, sericitic feldspar, quartz grains, subordinate chert, quartzite clasts. Conspicuous clastic, variably martitised magnetite. Ill-defined chloritic matrix.	Moderately sorted, incipiently graded fine to medium sandstone.	Minor detrital leucoxene, ilmenite, dark rutile. Conspicuous fine magnetite in basalt clasts.	Basic-volcanomict turbiditic sandstone with conspicuous magnetite (total circa 5 % of rock) in lithic clasts and as discrete detrital grains.
9764	Chloritic Greywacke. Framework of sericitic-chloritic pelite, minor basalt clasts, subordinate quartz, albitised plagioclase, minor impure chert clasts. Conspicuous fine clastic magnetite. Fine-grained chloritic matrix.	Analogous to 9762, relatively bedded and finer-grained (silty fine sandstone).	Detrital muscovite, chloritised biotite flakes.	Close affinities with 9762, finer-grained, relatively weakly basic-volcanomict. Magnetite is relatively martitised, predominantly as silt-sized detrital grains.
9765	Chloritic Greywacke. Framework of chloritic labile (tuffaceous) siltstone, chloritic-sericitic shale, subordinate similarly altered basalt clasts, quartz, feldspar grains, clastic opaques. Sparse chloritic matrix.	Weakly bedded, poorly sorted (fine to coarse sandstone. Relative-rounded framework.	Conspicuous fine siltstone and basalt clast-hosted magnetite. Minor dolomite, felsite clasts.	Coarser-grained basic-volcanomict sandstone. Clastic and clast-hosted magnetite content similar to that 9762, 9764, extensively martitised.
9766	Chloritic Greywacke. Framework of chloritic-sericitic shale and labile siltstone, subordinate basalt clasts, quartz and minor feldspar grains, conspicuous detrital magnetite. Sparse chloritic matrix.	Similar to 9765, relatively coarse-grained.	Conspicuous fine siltstone and basalt clast-hosted magnetite.	Close affinities with 9765 in terms of clastic components. Relatively weathered/Fe-pigmented. Variably martitised magnetite.
9767	Chloritic Greywacke. Framework of sericitic-chloritic pelite, minor basalt clasts, subordinate albite, quartz grains, conspicuous clastic magnetite. Chloritic matrix. Sporadic chloritic silty shale partings, interbeds.	Lenticular to planar alteration of siltstone, fine to medium sandstone, silty shale Variably graded.	Detrital leucoxenic semi-opaques, muscovite and minor chloritised biotite flakes.	Relatively fine-grained, shale-parte weakly to moderately basic-volcanomict turbiditic psammopelite. Significant clastic magnetite in common with 9762, 9764, 9765, 9766.
9769 (T.S. 51506)	Silicified Ultramafic. Fine subpolygonal to microcrystalline quartz with more or less pervasive degraded/ferruginised carbonate rhombs. Evenly disseminated relict primary chromite.	Featureless to vaguely relict olivine-derived mesh-textured.	Patchy degraded/ferruginised fine-grained "mica" (indeterminate).	Interpreted as a carbonated, subsequently silicified serpentinite, derived from a dunite or peridotite on relict textural grounds.

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7th June, 1984

REPORT CMS 84/5/22

YOUR REFERENCE:	Letter dated 16.5.1984 PK/9504/3 - 9503/3
DATE RECEIVED:	17th May, 1984
SAMPLE NOS.:	24 Samples
SUBMITTED BY:	P.A. Roberts
WORK REQUESTED:	Petrology

for

H.W. Fander, M. Sc.

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249111

REPORT CMS 84/5/22

Twenty-four drill core samples from drill holes GP 7 and GP 8 (Grand Prize), TH 13 and TH 14 (Stonehenge) were received for petrological examination. Representative thin-sections were prepared and examined together with their respective offcuts. Attached tabulated descriptions summarise the microscopic data, incorporate results of carbonate stain tests, where warranted, and include interpretative comments. Two polished sections were prepared; one from Grand Prize and the second from Stonehenge mineralised zones to confirm the opaque assemblages, and mineragraphic notes are appended.

Summary

Stonehenge cores reflect a sequence of altered carbonate- and carbonaceous psammopelitic sediments, reminiscent of the Renison Mine sequence, and complexed by variably mineralised sideritic carbonate veins and replacements, and elsewhere (TH 14) by chloritic breccia zones.

Alteration assemblages are dominated by sideritic to ankeritic carbonates with the ankeritic types concentrated in relatively weakly sulphide mineralised zones. Pelitic rocks are locally partly tourmalinised with the contact-metasomatic effects predating a brittle deformation phase and near-contemporaneous Fe-carbonation. Metasomatic and vein carbonate-hosted, disseminated to near-massive sulphides comprise a galena-sphalerite-rich assemblage with traces of tetrahedrite and Pb-sulphosalts. There are marked affinities with the Zeehan-type sideritic Pb-Zn-Ag association.

D. Cowan, B. Sc.

Sample No.	Classification - Composition	Fabric	Accessori	Comments
TH 13 116 5	Sideritic Pyrite Rock. Granular to sparry sideritic carbonate with relatively minor single grains, discontinuous films, clots of poikilitic pyrite; minor quartz euhedra with zonally arranged siderite micro-inclusions.	Medium-grained, with pyrite concentrated at vague fracture intersections. Unstressed.	Rare single grains, loose clusters of red sphalerite.	Weakly sphalerite-mineralised pyritic siderite(-quartz) rock. Typical Zeehan-type characteristics. Apparently a vein in absence of metasomatic features.
119.0	Siderite-Sphalerite Rock. Microcrystalline to semi-porcellaneous siderite with frequent small vugs, veinlets of coarser-grained siderite, more or less pervasively disseminated to semi-massive, colour-zoned red-brown sphalerite.	Crudely banded on coarse scale with marginal, weakly sphalerite-mineralised zones; discordant veinlets.	Traces of siderite-stained quartz. Thinly disseminated to locally conspicuous fine pyrite, traces of galena.	Apparently a metasomatically sideritised banded "dolomite". Sphalerite is even-grained (mean 350-400 μ), concentrated with vuggy, medium-grained siderite.
TH 14 55.4	Altered "Breccia". Sparry ankeritic carbonate, fine-grained quartz and sericite in varying proportions with a poorly defined framework of quartzose psammopelite, carbonaceous pelite clasts. Disseminated fine pyrite. Sporadic late veins, films of kaolin, barite	Obscured by alteration but essentially weakly banded sandy clastic with boudinaged shaly partings.	Minor clasts of recrystallized chert. Traces of fine to ultrafine metasomatic dravite, green schorl.	Weakly brecciated/thoroughly carbonate-quartz-sericite-altered lithic sandstone. Pyrite is recrystallized "syngenetic"; predates alteration.
55.5	Altered Breccia. Clasts of variably pyritic/weakly carbonaceous, ankeritic carbonate-stained to chloritic, tourmalinised and sericitic pelite. Fine-grained, schorl-stained chlorite-quartz matrix. Minor vugs, veinlets of barite.	Semi-mylonitic, breccia-like with random, semi-orientated clasts, featureless matrix.	Minor incipient Fe-oxide stainings in carbonate.	Affinities with 55.4 m, but distinctly brecciated in comparison. Deformation postdates tourmaline-sericite-chlorite (after ?phlogopite) alteration of pyritic pelite.
56.3	Altered Breccia. Clasts, zones of chloritic/ankeritic carbonate-stained orthoquartzite interspersed with chloritised, weakly schorl-ankerite-stained shale and quartzose silty to fine sandy shale.	Thoroughly stressed to sheared/semi-mylonitic intercalation of fine-medium sandstone, pelite.	Patchy, weakly hematite-stained secondary fine-grained quartz.	Chlorite-quartz(-schorl)-altered quartzose psammopelite; stressed to sheared/semi-brecciated and moderately carbonated/silicified.
06.0	Siderite Rock. Granular to sparry siderite with an interspersed band of granular to euhedral quartz. Disseminated siderite- and quartz-intergranular colour-zoned red-brown sphalerite crystals.	Medium- to coarse-grained banded; crustiform-textured.	Traces of galena, rare pyrite euhedra in carbonate.	Crustiform-banded vein-type characteristics. Sphalerite is intricately colour-zoned with red (Fe-rich) core and submarginal zones.
32.9	Breccia. Clasts of vein-quartz, variably carbonaceous/pyritic sericitic pelite, quartzose psammopelite veined with Fe-chlorite ± siderite, minor sulphides. Matrix of sparry sideritic carbonate with sporadic vugs of chlorite.	Random angular clasts, chlorite-siderite-veined, refractured and siderite(-chlorite) matrixed.	Traces of arsenopyrite, galena as fine-grained impregnations in chlorite aggregates, veinlets.	Reflects multistage brecciation and veining with a barren quartz/weakly mineralised chlorite-siderite/barren siderite-chlorite vein sequence.
51.9 (T.S. 49925)	Veined Pelite. Weakly recrystallized silt-sized quartz, semi-sericitic white mica in varying proportions with pervasive carbonaceous matter. Sporadic irregular veinlets of quartz, Fe-chlorite, siderite with films of marcasite.	Stressed, incipiently shale-parted siltstone with millimetric-scale shale interbeds; displacive veinlets.	Minor late crosscutting displacive quartz veinlets. Traces of "syngenetic" pyrite.	Chloritic veins analogous to those at 132.9 m, zoned with chloritic margins/carbonate core zones in vugs connected by films of quartz.

H 13 9.0	Altered ?Dolomite. Fine- to medium-grained, semi-massive pyrite. sparry to granular sideritic carbonate with thinly disseminated pyrite euhedra, corroded quartz crystals/aggregates, locally conspicuous Fe-red sphalerite. Irregular weakly Fe-stained zones. stained zones are	Massive to vaguely relict limestone breccia-like. Sporadic siderite veinlets. Fe- vuggy.	Minor traces secondary Mn-oxide in vuggy Fe-stained zones.	Interpreted as a sideritised dolom te-or limestone breccia. Sphalerite as loosely clustered, colour-zoned sub-hedra (to 300 μ) partly degraded to limonitic cavities.
9.8	Altered Impure Dolomite. Variably kaolin-stained cherty microcrystalline quartz with more or less pervasive carbonaceous matter. Semi-pervasive fine-grained sideritic carbonate extensively replaced by cloudy semi-porcellaneous siderite.	Variable. Massive to laminated, more or less pervasively contorted to slump-breccia-like.	Traces relict detrital silt-sized quartz, muscovite, "syngenetic" pyrite. Sporadic carbon-ate veinlets with rare secondary porcellaneous siderite sphalerite (< 50 μ). impregnations.	Primarily a laminated impure dolom te/ dolomitic chert. Alteration analogous to 79.0 m, but complexed by late
1.6	Altered Dolomite. Fine- to medium-grained ankeritic carbonate with sporadic corroded relict patches of microcrystalline dolomite. Thinly disseminated pyrite, minor corroded quartz. Sporadic ankeritic carbonate (+ quartz)	Vaguely relict lime-stone breccia-like (sim. 79.0 m). Stressed, locally recrystallized veinlets. directed.	Rare fine-grained red, weakly colour-zoned sphalerite. Minor crosscutting siderite-calcite veinlets.	"Ankeritised" dolomite-breccia with accessory "syngenetic" pyrite supplemented by traces of secondary sphalerite.
4.0	Breccia. Corroded clasts of porcellaneous dolomite in a matrix of medium- to coarse-grained ankeritic carbonate with minor vugs, films of euhedral quartz. Pervasive late crosscutting ankeritic carbonate films.	Angular to irregular, millimetric to centi-metric corroded clasts, mildly stressed matrix.	Thinly disseminated fine-grained pyrite in clasts.	Ankerite-healed tectonic breccia w t with porcellaneous dolostone represented as clasts. Pyrite is of weakly recrystallized syngenetic character.
05.4	Massive Sulphides. Semi- to near-massive galena with subordinate to minor intergrown quartz and sparry sideritic carbonate.	Medium-grained, essentially massive (unbanded); unstressed.	Traces of sphalerite.	"Massive" galena with quartz-siderit gangue. The accessory sphalerite is red/pale brown colour-mottled to weakly zoned.

REPORT CMS 84/5/22

Mineragraphic Notes

TH 13/105.4 m (P.S. 49917)

Exhibits a continuous aggregate of medium-grained (mean about 500 μ) galena with interspersed single grains and clusters of quartz and minor carbonate. Minor sphalerite occurs as an- to subhedral grains (< 50-500 μ) intergranular to galena and at galena-silicate contacts. Traces of tetrahedrite are present as micro-inclusions (< 20 μ) in galena, isolated relatively coarse (to 200 μ) equant galena-intergranular blebs, and as sporadic discontinuous microscopic films (to 40 μ in width) along galena-sphalerite contacts, or, composite with galena, transecting sphalerite grains.

Rare microscopic (< 20 μ) blebs of a Pb-sulphosalt, probably boulangerite were observed as inclusions in galena grains hosting tetrahedrite inclusions. This phase is partly concentrated on galena-tetrahedrite contacts and is too fine-grained and rare for positive optical determination.

Two extremely fine (< 10 μ) particles of native silver were observed as micro-inclusions in a galena grain hosting tetrahedrite and ?boulangerite inclusions.

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249115

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5th July, 1984

REPORT CMS 84/5/38

YOUR REFERENCE:	Letter dated 24.5.1984 PK/9504/3 - 9503/3
DATE RECEIVED:	25th May, 1984
SAMPLE NOS.:	11 Samples
SUBMITTED BY:	P.A. Roberts
WORK REQUESTED:	Petrology

H.W. Fander, M. Sc.

REPORT CMS 84/5/38

Eleven samples of drill core, two from GP 6 (Grand Prize) and nine from TH 13 (Stonehenge), were received for petrological examination. Representative thin-sections were prepared and examined in transmitted and oblique incident light with their respective offcuts. Attached tabulated descriptions summarise the microscopic data, incorporate results of staining tests, and include interpretative comments.

Summary

The nine Stonehenge cores (TH 13) reflect a sequence of variably altered impure dolomite with intercalated impure chert. These rocks are more or less pervasively weakly carbonaceous and syngenetic-pyritic. Relatively unaltered zones (represented by 297.4 m and in part by 317.8 m samples) carry microcrystalline dolomite as the primary carbonate, there being no tangible evidence of a dolomitised limestone paragenesis. In this sense these rocks may be contrasted with the petrologically similar Gordon Limestone, where dolomite is strictly diagenetic and cherty facies are partly represented.

In common with previously described examples, these rocks exhibit a characteristic alteration pattern, with the primary dolomite replaced by variously ankeritic to sideritic carbonate. There is good evidence that ankeritic carbonation predates siderite, but individual rocks may exhibit subtle variations in replacive carbonate mineralogy. Thus, magnesitic carbonate is developed locally. Further, replacive carbonates, in general, are manganiferous, as confirmed by chemical tests.

A few rocks exhibit stress effects or tectonic brecciation, and these permit definition of ankeritic assemblages as pre-deformational and siderite as developing broadly contemporaneously with deformation.

Dolomites, and their altered variants carry traces of pyrite. This accessory syngenetic sulp[illegible]component is supplemented at 413.3 m by carbonate vein-hosted disseminations [illegible]lena, pyrite and traces of sphalerite. This vein-carbonate is a mangansid[illegible] contrasting optically with unmineralised siderite veins and replacements d[illegible]ed elsewhere. As previously (CMS 84/5/22), this mineralisation exhibits Zeeha[illegible] characteristics. There are no specific assemblages which would bear analogy wi[illegible] Renison situation, with silica-metasomatism notably absent.

D. Cowan, B. Sc.

Sample No.	Classification - Composition	Fabric	Accessories	CENTRAL MINERALOGICAL SERVICES Comments
TH 13 151.8	Impure Dolomite. Granular to sparry ankeritic dolomite with interspersed irregular zones of chert. Minor veinlets, vugs of fine-grained quartz. Sporadic late veinlets, dolomite-replacive aggregates of sideritic carbonate.	Fine- to medium-grained dolomite marble with irregular zones of chert.	inated cassiterite. Sporadic clots, discontinuous films of carbonaceous matter with thinly disseminated fine-grained (primary) pyrite.	Impure (cherty, weakly carbonaceous, pyritic) dolomite with affinities to the Renison Mine Sequence dolomites. Exhibits mild vein and replacive siderite alteration.
154.4	Dolomitic Chert. Cherty microcrystalline quartz with interspersed zones of sparry dolomite-ankerite, irregular sub- to fine millimetric vugs of fine "crystal" quartz. Disseminated spherulites, sporadic veinlets, replacements of sideritic carbonate.	Irregularly vuggy chert in corrosive contact with 151.8 m-like dolomite. Cross-cutting siderite veinlets.	Weakly stylolitic films of carbonaceous matter, minor traces pyrite in dolomite.	Relatively cherty-silicified impure dolomite; recrystallized, with late veinlets, spherulitic impregnations siderite. Pyrite is recrystallized primary.
158.2	Impure Dolomite. Sparry dolomite-ankerite, partly siderite-pseudomorphed, with interspersed zones of chert impregnated with irregular spongy aggregates of sparry to crudely spherulitic, magnesitic carbonate.	Analogous to 154.4 m, but relatively "dolomitic", and mildly sheared.	Sparse carbonaceous, pyritic, weakly argillaceous stylolites. Minor vugs of fine-grained quartz in cherty zones.	Close affinities with 154.4 m, but relatively massive-dolomitic in comparison. Late replacive magnesitic carbonate, texturally similar to the siderite at 154.4 m, similarly concentrated in cherty zones
162.9	Impure Dolomite Breccia. Zones of sparry to weakly "oolitic", medium-grained dolomite, with interspersed lenses, contorted bands of microcrystalline dolomite, minor films, semi-massive bands of chert. Semi-pervasive sideritic carbonate.	Soft-pebble conglomerate-like with crudely ovoid massive dolomite clasts. Sparse impure dolomite matrix.	Traces sericitic clays, detrital silt-sized quartz in matrix. Traces carbonaceous matter, fine to ultrafine pyrite.	Weakly slump-brecciated interlamination of massive and impure (argillaceous, silty, carbonaceous, pyritic dolomite. Exhibits subtle but semi-pervasive sideritisation.
190.7	Sideritised Impure Dolomite. Fine- to medium-grained sideritic carbonate with patchy corroded relics of fine sparry dolomite. Semi-pervasive cherty quartz, carbonaceous matter. Sporadic irregular sparry siderite veins.	Finely laminated, low-angle discordantly sheared, with unstressed medium-grained discordant veins.	Minor traces of fine-grained (recrystallized primary) pyrite.	Primarily a finely laminated intercalation of impure (carbonaceous) dolomite and (subordinate) carbonaceous chert. Relatively sheared and extensively sideritised, but unmineralised.
275.6	Brecciated Chert. Clasts of massive to brecciated carbonaceous/weakly-variably sideritised dolomitic chert. Matrix, discontinuous veinlets of fine- to medium-grained sideritic carbonate.	Angular millimetric- to centimetric-scale clasts, unstressed siderite matrix.	Minor clasts of sideritised dolomite. Traces sericite, pyrite, sporadic cherty quartz veinlets in clasts.	Reflects intraformational and subsequent siderite-healed tectonic brecciation.

CENTRAL MINERALOGICAL SERVICES

Sample No.	Classification - Composition	Fabric	Accessori	Comments
TH 13 297.4	Impure Dolomite. Microcrystalline dolomite with semi-pervasive films of carbonaceous matter; thinly disseminated silt-sized detrital quartz grains, muscovite flakes. Sporadic lenses of dolomitic chert.	Microlaminated, locally incipiently graded; elsewhere vaguely (recrystallized) pelle Weakly concordantly sheared.	Relatively conspicuous ultrafine "syngenetic" pyrite. Minor discont- tal. inuous (recrystal- lized) dolomite veinlet	Finely laminated impure dolomite wit intercalated impure (carbonaceous, dolomitic) chert lenses. Weakly recrystallized, but unaltered. s.
317.8	Impure Dolomite. Fine sparry dolomite and cherty microcrystalline quartz with inter- spersed bands of massive carbonaceous dolomite. Irregular replacive aggregates, sporadic veinlets, vugs of sideritic carbonate and fine-grained quartz.	Obscured by secondary siderite-quartz aggregates; variously banded to breccia-like.	Traces fine to ultra- fine primary pyrite.	Primarily an intraformational brecci composite of impure dolomite and dolomitic chert. Extensively sider- itised/silicified, but unmineralised
413.3 (T.S. 50060)	Veined Dolomite. Sparry ankeritic dolomite with frequent medium-grained dolomite vein- lets. Crosscutting millimetric veinlets, marginal replacements of siderite, galena and pyrite.	Homogeneous ("massive") host rock with dis- continuous "diagenetic" dolomite veinlets/dis- placive siderite veins.	Minor traces carbon- aceous matter, fine primary pyrite (host rock), sphalerite (intergranular to vein	"Ankeritised" dolomite with late siderite vein-hosted galena-pyrite (-sphalerite) disseminations. galena).

APPENDIX 5

Stonehenge Grid Ground Magnetics - raw data

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GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY

PAGE NO: 1

LOCATION: 1 NE 2000E STONEHENGE GRID

DATE: 13/10/83

MAGNETOMETER:

OPERATOR: P.K.

BASE STATION LOCATION: 200 E 150 S (62460)

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
725 S	4:48	62885	-13	62842	
		840	-13	827	Shaft 6m W
750 S		818	-13	805	2603 shaft
762.5 S		815	-13	802	
775 S	4:54	818	-14	804	
787.5 S		800	-15	785	minor metal
8[illegible] S	4:56	806	-15	791	
812.5 S		800	-15	785	
825 S	4:58	791	-15	776	
838 S		784	-15	769	Recent excavation.
851 S	5:00	776	-14	762	
862.5 S		768	-14	754	
875 S	5:03	762	-14	748	
887.5 S		755	-14	741	
900 S	5:05	751	-15	736	
912.5 S		742	-16	726	
925 S	5:07	737	-16	721	
937.5 S		731	-17	714	old house site?
9[illegible] S	5:10	726	-19	707	buried rubbish?
963 S		721	-20	701	
976 S	5:13	714	-21	693	
990 S		707	-22	685	
1001 S	5:16	701	-22	679	
1012.5 S		695	-23	672	
1025 S	5:18	688	-23	665	washed debris from Swamp Mine
1037.5 S		682	-24	658	
1050 S	5:20	677	-24	653	
1062.5 S		671	-24	647	
1075 S	5:22	666	-24	642	
1087.5 S		660	-25	635	
1100 S	5:24	654	-25	629	
1112.5 S		650	-25	625	
1125 S	5:26	645	-25	620	
1137 S		640	-25	615	

1C

GOLD FIELDS EXPLORATION PTY. LIMITED

249121

GROUND MAGNETOMETER SURVEY

LOCATION: STONEHENGE GRID LINE 2000E DATE: 13/10/83

MAGNETOMETER: PROTON OPERATOR: P. K.

BASE STATION LOCATION: 200E, 1505
62460

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
1150 S	5.28	62635	-25	62610	
1162.5 S		632	-25	607	TOP OF HILL
1175	5.31	627	-25	662	TRAVERSE 180°
1187.5		620	-25	595	
1201.1	5.35	616	-25	591	
1212.5		611	-25	586	
1225		603	-25	578	1230 - 1233 McLEANS CREEK
	5.46	603	-24	579	
1250	5.47	598	-24	576	
		591	-22	569	minor creek
1275	5.48	588	-23	565	
		584	-22	562	
1300	5.50	582	-22	560	
		579	-22	557	
1325	5.52	578	-23	555	
1340		589	-23	566	
1350	5.54	578	-24	554	
		576	-24	552	
1375	5.56	569	-24	545	
		570	-24	546	
1400	5.57	572	-24	548	
		573	-24	549	
1425	5.59	572	-24	548	
1438		573	-25	548	
1450		594	-26	568	
	6.05	606	-27	579	
1475		617	-27	590	
		643	-28	615	
1500	6.09	621	-28	593	
		620	-28	592	
1525	6.10	615	-29	586	FLAT TOP OF HILL

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GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY

LOCATION: STONEHENGE GRID 2000E

DATE: 13/10/87

MAGNETOMETER: PROTON

OPERATOR: P.K.

BASE STATION LOCATION: 200E, 150S (62460)

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
450N	12.46	62811	+5	62816	
500N	12.48	785	+6	791	
550N	.51	755	+7	762	
600N	.54	730	+8	738	
650N	.56	706	+8	714	
675N	.59	703	+8	711	
[illegible]0N	1.01	684	+7	691	
	1.03	682	+7	689	
725N	1.04	676	+7	683	
	1.05	673	+7	680	
750N	1.06	670	+7	677	
761.6 N	1.12	667	+8	675	
771.5 N	1.18	665	+6	671	
781.5 N	1.23	661	+5	666	
794.1 N	1.28	660	+6	666	
809 N		661	+2	663	
821 N	1.36	657	0	657	
829.3 N	1.41	657	-2	655	E-W grid line
[illegible] N	1.47	656	-4	652	
855.2 N	1.50	652	-3	649	
863.6 N	1.55	650	-3	647	
872.7 N	1.57	646	-3	643	
883.3 N	2.00	643	-4	639	Grid line & Top of Hill [illegible] Magnetic
892.4 N	2.09	645	-3	642	
903.2 N	2.11	637	-3	634	
914.2 N	2.13	640	-3	637	
923.7 N	2.16	637	-3	634	Grid line
934.5 N	2.19	631	-4	627	
945.9 N	2.23	627	-3	624	
956.8 N	2.28	617	-2	615	946S TRENCH
967.7 N	2.31	620	-2	618	
976.3 N	2.35	614	-2	611	
989.3 N	2.37	604	-3	605	grid line
1003.5 N	2.43	612	-4	608	

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GOLD FIELDS EXPLORATION PTY. LIMITED

249123

GROUND MAGNETOMETER SURVEY

PAGE NO: 4

LOCATION: STONEHENGE GRID 2000E DATE: 14/10/83

MAGNETOMETER: PROTON OPERATOR: P.K

BASE STATION LOCATION: 200E, 150S (62460 gamma)

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
1392.5 N	10.12	62562	+23	62585	
1404.0 N	10.13	559	123	582	
1415.9 N	10.14	551	+23	574	1409 – 1415 g Comstock Tram.
1429.5 N	10.16	553	+24	577	1424 grid line
1442.3 N	10.17	543	+24	567	
1453.3 N	10.18	542	+24	566	
1[illegible]6.1 N	10.19	543	+24	567	
1477.9 N	10.20	543	+24	567	

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GOLD FIELDS EXPLORATION PTY. LIMITED

249124

GROUND MAGNETOMETER SURVEY

PAGE NO:

LOCATION: STONEHENGE GRID 2000E

DATE: 13, 14 /10/83

MAGNETOMETER: PROTON

OPERATOR: P.K.

BASE STATION LOCATION: 200E, 150S (62640)

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
1012.9N	2.46	62604	0	62604	
1022.6N	2.48	62611	-1	610	
1040.1N	2.55	62619	-8	611	E-W grid line
					Batteries died.
1040.1N	8.43	62578	+26	62604	
[illegible]2.3N	8.46	583	+26	609	
1063.9N	8.48	562	+26	588	
1075 N	8.50	555	+26	581	
1084.3N	8.52	545	+26	571	creek bed.
1096.1N	8.55	546	+26	572	E-W grid line
1110 N	8.59	557	+26	583	
1121.5N	9.02	565	+26	591	
1134.5N	9.05	551	+25	576	
1146.3N	9.09	546	+25	571	1150.1 grid line
1160.4N	9.12	566	+24	590	
1171.3N	9.16	584	+24	608	
1183.6N	9.20	566	+23	589	
[illegible]0.8N	9.25	563	+22	585	grid line
1209.3N	9.37	556	+22	578	
1221 N	9.40	557	+21	578	
1235.2N	9.44	556	+20	576	
1249 N	9.46	557	+19	576	
1260.7N	9.48	566	+20	586	grid line.
1271.1N	9.50	572	+22	594	
1284 N	9.52	562	+22	584	
1297.5N	9.56	560	+23	583	1303-1321 gossan? c/c
1310 N	10.00	562	+22	584	
1321.2N	10.02	602	+22	624	1316.2 grid line
1332.6N	10.04	572	+22	594	
1344.2N	10.06	567	+22	589	
1355.9N	10.08	563	+22	585	
1367.6N	10.09	562	+22	584	
1379.4N	10.11	559	+23	882	

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GOLD FIELDS EXPLORATION PTY. LIMITED

44-120

GROUND MAGNETOMETER SURVEY

PAGE NO: 2.

LOCATION: Stonehenge GRID

DATE: 30/5/81

MAGNETOMETER:

OPERATOR: POLLOCK.

BASE STATION LOCATION: 200E 150S

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
	11.00		6446		
	05		448		
	10		448		
	15		449		
	20		449		
	25		448		
	30		450		
	35		440		
	40		450		
	45		450		
	50		451		
	55		451		
	12.00		450		
	05		450		
	10		452		
	15		451		
	20		451		
	25		452		
	30		451		
	35		451		
	40		450		
	45		450		
	50		450		
	55		448		
	1.00		449		
	05		449		
	10		448		
	15		449		
	20		448		
	25		449		
	30		448		
	35		11.11		
	40		448		
	45		448		
	50		449		

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249126

GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY

PAGE NO: 3

LOCATION: Stonehenge Grid

DATE: 30/5/82

MAGNETOMETER:

OPERATOR: Pollock.

BASE STATION LOCATION: 200 E 150 S

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
	1.55		6244 9		
	2.00		450		
	.05		450		
	.10		450		
	.15		451		
	.20		452		
	.25		452		
	.30		454		
	.35		454		
	.40		455		
	.45		454		
	.50		457		
	.55		456		
	2.00		456		
	.05		457		
	.10		457		
	.15		458		
	.20		459		
	.25		459		
	.30		459		
	.35		460		
	.40		460		
	.45		459		
	.50		462		
	.55		464		
	3.00		463		
	.05		467		
	.10		469		
	.15		466		
	.20		465		
	.25		464		
	.30		463		
	.35		462		
	.40		462		
	.45		461		

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GOLD FIELDS EXPLORATION PTY. LIMITED

243127

GROUND MAGNETOMETER SURVEY

PAGE NO: 1

LOCATION: Stonehenge Grid

DATE: 30/5/81

MAGNETOMETER:

OPERATOR: Pollock

BASE STATION LOCATION: 200 E 150 S

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
	4.50		6262		
	.55		461		
	5.00		462		
	.05		463		
	.10		465		
	.15		468		
	.20		465		
	.25		465		

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GOLD FIELDS EXPLORATION PTY. LIMITED

249128

GROUND MAGNETOMETER SURVEY

PAGE NO:

LOCATION: Stonehenge GR.D

DATE: 21/5/91

MAGNETOMETER:

OPERATOR: POLTOCK

BASE STATION LOCATION: 200E 150S

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
BASE	10.40		62442		
			442		
	10.50		441		
			442		
	11.00		442		
			442		
	11.10		62443		
			441		
	11.20		442		
			441		
	11.30		62441		
			440		
	11.40		439		
			62439		
	11.50		439		
			62439		
	12.00		439		
	12.30		62441		
	.35		441		
	.40		440		
	.45		439		
	.50		438		
	.55		439		
	1.00		439		
	.05		439		
	.10		439		
	.15		446		
	.20		446		
	.25		441		
	.30		442		
	.35				
	.40				
	.45				

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GOLD FIELDS EXPLORATION PTY. LIMITED

249129

GROUND MAGNETOMETER SURVEY

PAGE NO: 1

LOCATION: SPL 129 STONEHENGE GRID

DATE: 31-5-84 THURS

MAGNETOMETER:

OPERATOR: POLTOCK

BASE STATION LOCATION: 200 E 150S

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
BASE	7.50		62440		
			438		
	8.00		438		
			438		
	8.10		438		
			438		
	8.20		438		
			62438		
	8.30		439		
			438		
	8.40		440		
			440		
	8.50		441		
			62441		
	9.00		442		
			441		
	9.10		443		
			444		
	9.20		62445		
			446		
	9.30		445		
			445		
	9.40		62444		
			444		
	9.50		444		
			444		
	10.00		62443		
			444		
	10.10		441		
			62440		
	10.20		441		
			440		
	10.30		440		
			440		

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GOLD FIELDS EXPLORATION PTY. LIMITED

249130

GROUND MAGNETOMETER SURVEY

PAGE NO:

LOCATION: SPL 129 Stonehenge GRID

DATE: 20/5/74

MAGNETOMETER:

OPERATOR: POLTOCK

BASE STATION LOCATION: 200E 150S

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
BASE 150S/200E	8.00		62445		
	8.15		446		
	8.20		444		
	.25		443		
	.30		443		
	.35		442		
	.40		441		
	.45		442		
	.50		441		
	.55		441		
	9.00		442		
	.05		442		
	.10		442		
	.15		442		
	.20		442		
	.25		442		
	.30		443		
	.35		443		
	.40		444		
	.45		443		
	.50		443		
	.55		442		
	10.00		441		
	.05		440		
	.10		440		
	.15		441		
	.20		441		
	.25		442		
	.30		442		
	.35		443		
	.40		443		
	.45		445		
	.50		446		
	.55		446		

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GOLD FIELDS EXPLORATION PTY. LIMITED

249131

GROUND MAGNETOMETER SURVEY

PAGE NO: 1

LOCATION: Stonehenge GRID

DATE: 30-5-84

MAGNETOMETER:

OPERATOR: POLTOCK

BASE STATION LOCATION: 200E 150S

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
Bline 00	8.15	62538	62446	62 552	
		533	[redacted]	547	
25E		535		549	
		527		543	
50E		525		541	
	8.20	527	444	543	
75E		529		545	
		531		546	
		534		550	
		530		546	
		530		547	
		539		556	
150E	8.25	533	443	550	
		533		550	
		538		555	
		539		556	
200E		541		558	
		541		558	
		544		561	
		541		558	
250E	8.30	541	443	558	
		543		560	
		548		565	
		545		562	
300E		553		571	
		552		570	
	8.35	549	442	567	
		558		576	
		564		582	
		570		588	
		570		588	
		583		602	
400E		584		603	
		589		608	

GOLD FIELDS EXPLORATION PTY. LIMITED

249132

GROUND MAGNETOMETER SURVEY

PAGE NO: 2

LOCATION: Stonehenge GRID

DATE: 30.5.'84

MAGNETOMETER:

OPERATOR: POLTOCK

BASE STATION LOCATION: 200E 150S

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
BLINE / 425E		62 593		62 612	
	8.40	605	62 441	624	
		610		629	
		622		641	
		620		639	
		635		654	CREEK.
● 500E		641	-	660	
		647		665	
		668		686	ROAD
		684		702	ROAD
550E	8.45	705	442	723	ROAD
		713		731	
		707		725	
		705		724	
	8.50	695	441	714	
		718		737	
		742		761	
		760		779	
● 650E		730		749	
		717		736	
675E		709		728	
		703		722	
675E	8.55.	704	441	723	
		707		726	
700E		708		727	
		727		746	
		731		749	
		753		771	
750E	9.00	767	442	785	
		786		804	
		818		836	
		844		862	
		861		879	
		894		912	

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GOLD FIELDS EXPLORATION PTY. LIMITED 24915

GROUND MAGNETOMETER SURVEY PAGE NO: 3

LOCATION: STONEHENGE GRID DATE: 30-5-84

MAGNETOMETER: OPERATOR: POLTOCK

BASE STATION LOCATION: 200 E 150 S

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
BL / 825E	9.05	62898	62442	62916	
		913		931	
		930		948	
		958		976	
		968		986	
		62987		63005	
900E	9.10	63006	442	63024	
		068		086	
25		093		111	
		134		152	
		158		176	
	9.15	158	442	176	
975E		142		160	
		136		154	
1000E		132		154	
		111		129	
		104		122	
		090		108	
1050E	9.20	081	442	099	
		089		107	
		085		103	
		085		103	
1100E		102		120	
	9.25	107	442	125	
		102		120	
		091		109	
10		077		095	
		057		075	CREEK
		040		057	
		035		052	
1200E	9.30	030	443	047	
		032		049	
		021		038	
		031		048	

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GOLD FIELDS EXPLORATION PTY. LIMITED

249134

GROUND MAGNETOMETER SURVEY

LOCATION: STONEHENGE GRID

DATE: 30-5-84

MAGNETOMETER:

OPERATOR: POLTOCK

BASE STATION LOCATION: 200E 150S

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
BL/1250E		63036		63053	CREEK
		038		055	
	9.35	031	62443	048	
		023		040	
		023		040	
		025		042	
		023		040	
		023		040	
1350E		013		030	
		012		028	
	9.40	003	444	019	
		63004		020	
1400E		62987		63003	
		977		62993	
		975		992	
		974		991	
	9.45	965	443	982	
		969		986	
		963		980	
		963		980	
1500E		960		977	
		958		975	
		960		977	
		967		974	
1550E		965		982	
		970		987	
	9.50	969	443	62988	
		987		63004	
1600		62988		63005	TRENCH
		63002		019	
		009		028	
		011		029	
	9.55	006	442	024	
		016		034	

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GOLD FIELDS EXPLORATION PTY. LIMITED

249135

GROUND MAGNETOMETER SURVEY

LOCATION: STONEHENGE GRID

DATE: 30-5-84

MAGNETOMETER:

OPERATOR: POLTOCK

BASE STATION LOCATION: 200E 150S

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
BL/1675E		63013		63031	
		013		031	
1700E		013		031	
		013		031	
		014		032	
		011		030	
		009		028	
		020		039	
		014		033	
		016		035	
1800E	10.00	016	62441	035	
		020		039	
		014		033	
		020		039	
1850E		024		043	
		020		040	
		021		041	
		028		048	
1900E	10.05	024	440	044	
		025		045	
		033		053	
		037		057	
1950		035		055	
		033		053	
		032		052	
		042		062	
2000E	10.10	042	440	062	
2000E	10.30	043	442	061	
		046		064	
		035		053	
		043		061	
2050E		035		053	
		036		054	
		036		054	

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GOLD FIELDS EXPLORATION PTY. LIMITED

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GROUND MAGNETOMETER SURVEY

PAGE NO: 6

LOCATION: STONEHENGE GRID

DATE: 30-5-84

MAGNETOMETER:

OPERATOR: POLTOCK

BASE STATION LOCATION: 200E 150S

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
BL/2088.	10.35	63030	62443	63047	
2100E		026		043	
		029		046	
		024		041	
		028		045	
		026		043	
		024		041	
		025		042	
		023		040	
2200E	10.40	018	443	035	
		015		032	
		011		028	
		001		018	
		63002		019	
		62998		015	
		62995		010	
		62995		010	
2300E		63003		018	
	10.45	001	445	016	
		003		018	
		007		63022	CREEK
		59876		* 59890	RAIL & IRON *
		63005		63019	
2375E	10.50	62993	446	63007	
		990		63004	
2400E		977		62991	
		971		985	
~~2400E~~	10.55	957	446	971	
		954		968	
		945		959	
		938		952	
		936		950	
		933		947	
2500E	11.00	914	446	928	

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GOLD FIELDS EXPLORATION PTY. LIMITED

249137

GROUND MAGNETOMETER SURVEY

PAGE NO: 7

LOCATION: STONEHENGE GRID

DATE: 30-5-84

MAGNETOMETER:

OPERATOR: POLTOCK

BASE STATION LOCATION: 200E 150S

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
BL/		62917		62931	
2525E		896		910	
		900		914	
		888		900	
		877		889	
		883		895	
	11.05	880	62448	892	
2600E		863		875	
		869		881	
		860		872	
		859		871	
	11.10	857	448	869	
		846		858	
		843		855	CREEK
		835		846	TRAM CUTTING
2700E		832		843	" "
		821		832	
	11.15	822	449	833	
	"	822		833	OLD HUT SITE
		793		804	
		785		796	
		779		790	
	11.20	767	449	778	
2800E		753		764	
		748		759	
		733		745	
		734		746	
2850E	11.25	738	448	750	
		726		738	TRENCH
		722		734	
		709		721	
2900E		717		729	
		700		712	
		696		706	

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GOLD FIELDS EXPLORATION PTY. LIMITED 249138

GROUND MAGNETOMETER SURVEY PAGE NO: 8

LOCATION: STONE HENGE GRID DATE: 30-5-84

MAGNETOMETER: OPERATOR: POLTOCK

BASE STATION LOCATION: 200 E 150 S

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
BL/		62687		62697	
2950E	11.30	682	62450	692	
		679		689	
		664		674	
		667		678	
3000E	11.33	671	449	682	

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GOLD FIELDS EXPLORATION PTY. LIMITED

249139

GROUND MAGNETOMETER SURVEY

PAGE NO: 9

LOCATION: STONEHENGE GRID

DATE: 30-5-84

MAGNETOMETER:

OPERATOR: POLTOCK

BASE STATION LOCATION: 200E 150S

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
2500E 000	11.53	62910	62451	62919	
		922		931	
	11.55	925	451	934	
		938		947	
50S		933		942	
		935		945	
●		957		967	
	12.00	943	450	953	
100S		951		961	TRAM CUTTING.
		959		969	
		978		988	CREEK
		981		991	
	12.05	962	450	972	
		957		967	
		954		964	
		953		963	
200S		954		962	
		951		959	
●	12.10	935	452	943	
		941		949	
		936		944	
		950		958	
		939		947	
		935		944	
300S		933		942	
		936		945	
	12.15	934	451	943	
		951		960	
		931		940	
		927		936	
		929		938	
		928		937	
400S	12.20	918	451	927	
		933		942	

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GOLD FIELDS EXPLORATION PTY. LIMITED

249140

GROUND MAGNETOMETER SURVEY

PAGE NO: 10

LOCATION: STONEHENGE GRID

DATE: 30-5-84

MAGNETOMETER:

OPERATOR: POLTOCK

BASE STATION LOCATION: 200E 150S

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
2500E 425S	12.25	62 920	62452	62928	
		925		933	
		917		925	CREEK
		915		924	
	12.30	913	451	922	
		893		902	
500S		895		904	
		892		901	
		892		901	
	12.35	895	451	904	
		873		882	
		881		890	
		864		874	
		853		863	
600S	12.40	858	450	868	
		862		872	
		868		878	
		849		859	
		851		861	
	12.45	841	450	851	
		840		850	
		846		856	
700S	12.50	816	450	826	
		797		807	
		797		807	
		767		779	
		764		776	
	12.55	753	448	765	
		757		769	
		738		750	
800S		742		754	
		714		726	
		702		714	
		690		702	

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GOLD FIELDS EXPLORATION PTY. LIMITED

249141

GROUND MAGNETOMETER SURVEY

PAGE NO: 11 A

LOCATION: STONEHENGE GRID

DATE: 30-5-84

MAGNETOMETER:

OPERATOR: POLTOCK

BASE STATION LOCATION: 200 E 150 S

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
2500E 850S		62715		62726	
	1·00	695	62449	706	
		694		705	
		680		791	
900S		675		686	
		676		687	RIDGE TOP
950S		671		682	
	1·05	655	449	666	
1000S	1·15	661	449	672	
		647		658	
1050S		636		647	
		639		650	
1000S		634		645	
		625		637	
		626		638	
	1·20	629	448	641	
		620		632	
		617		629	
		598		610	
		599		611	
1100S		602		614	
		596		608	
		582		584	
		585		597	
	1·25	580	448	592	WATER RACE
		588		600	
		580		592	
		572		584	
1200		572		584	CREEK
		576		588	
	1·30	579	448	591	
		577		589	
		571		583	
		575		587	

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GOLD FIELDS EXPLORATION PTY. LIMITED

249142

GROUND MAGNETOMETER SURVEY

PAGE NO: 11 15

LOCATION: STONEHENGE GRID

DATE: 30-5-84

MAGNETOMETER:

OPERATOR: POLTOCK

BASE STATION LOCATION: 200E 150S

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
2500E 1275S		62558		62569	
		571		582	
1300S	1·35	568	62449	579	
		557		568	
		557		568	
		551		562	
		565		576	
		547		559	
		554		566	
		544		556	
1400S	1·40	539	448	551	
		529		541	
		529		541	
		524		536	
		530		542	
		528		540	
1475	1·45	525	448	537	
1475	2·10	528	450	538	
		538		548	
1500S		513		523	
		518		528	
		522		532	
		533		543	
		512		522	
		528		537	
		512		521	
		512		521	
1600S	2·15	515	451	524	
		524		533	
		507		516	
		527		536	
1650S	2·18	514		523	

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GOLD FIELDS EXPLORATION PTY. LIMITED

249143

GROUND MAGNETOMETER SURVEY

LOCATION: STONEHENGE GRID

DATE: 30-5-84

MAGNETOMETER:

OPERATOR: POLTOCK

BASE STATION LOCATION: 200 E 150 S

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
1400E 1700S	2·23	62509	62452	62517	
		531		539	
		529		537	
	2·25	531	452	539	
		531		539	
		528		536	
		527		535	
		531		539	
1600S		527		533	
		529		535	
		540		546	*1575S 2400E Approx opposite 1650S 2500E
	2·30	532	454	538	
		530		536	
		521		527	
		521		527	
		544		550	
1500S		552		558	
		530		536	
		531		537	
		543		549	
	2·35	545	454	551	
		550		556	
		549		555	
		548		554	
1400S		554		560	
		556		562	
		546		552	
		552		557	
		552		557	
		560		565	
		557		562	
	2·40	571	455	576	
1300S		570		575	
		564		569	

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GOLD FIELDS EXPLORATION PTY. LIMITED

249144

GROUND MAGNETOMETER SURVEY

PAGE NO: 13

LOCATION: STONEHENGE GRID

DATE: 30-5-84

MAGNETOMETER:

OPERATOR: POLTOCK

BASE STATION LOCATION: 200E 150S

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
2400E 1275S		62 579		62 584	
		575		580	
		587		593	
		597		603	
		584		590	
		579		585	
1200S		581		587	
	2.45	577	62454	583	
		596		602	
		608		614	
		609		615	CREEK SS 1951.
		604		607	CREEK McLEANS
		587		590	
		599		602	
1100S	2.50	601	457	604	
		612		615	
		601		604	
		623		626	
		615		619	
		630		634	mine dump 15m E
	2.55	623	456	627	
		641		645	
1000S		626		630	
		642		646	
		641		645	
		648		652	
		658		662	
	3.00	663	456	667	
		667		671	
		680		684	
900S		694		698	
		680		684	
		675		678	
		694		697	

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GOLD FIELDS EXPLORATION PTY. LIMITED

249145

GROUND MAGNETOMETER SURVEY

PAGE NO: 14

LOCATION: STONEHENGE GRID

DATE: 30-5-84

MAGNETOMETER:

OPERATOR: POLTOCK

BASE STATION LOCATION: 200E 150S

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
200E 850S		62700		62703	
	3·05	714	62457	717	
		718		721	
		725		728	
800S		738		741	
		758		761	Hill top
		751		754	" "
		764		767	" "
		759		762	" "
		778		781	" "
		792		795	" "
	3·10	803	457	806	
700S		816		819	
		829		832	
		836		838	
		851		853	
	3·15	845	458	847	
		883		885	
		889		891	
		878		879	
600S	3·20	887	459	888	
		892		893	
		905		906	
		906		907	
		911		912	
		914		915	
		923		924	
		922		923	
500S	3·25	940	459	941	

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GOLD FIELDS EXPLORATION PTY. LIMITED

249146

GROUND MAGNETOMETER SURVEY

PAGE NO: 15

LOCATION: Stonehenge Grid

DATE: POLTOCK

MAGNETOMETER:

OPERATOR: 30-5-84

BASE STATION LOCATION: 200 E 150 S

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
2300E 475S.	3.35	62960	62460	62960	
		956		956	
500S		954		954	
		959		959	
		945		945	
		960		960	
		966		966	
	3.40	935	460	935	
		959		959	
		945		945	
600S		937		938	
		938		939	
	3.45	937	459	938	
		949		950	
		937		938	
		901		902	
		893		891	
		898		896	CREEK
700	3.50	889	462	887	
		872		870	
		859		857	
		835		833	
		810		806	
		806		802	
	3.55	784	464	780	
		773		769	
800S		777		773	
		766		762	
		763		759	
		758		754	
		733		729	
		750		747	
		715		712	
	4.00	727	463	724	

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GOLD FIELDS EXPLORATION PTY. LIMITED

249147

GROUND MAGNETOMETER SURVEY

PAGE NO: 16

LOCATION: Stonehenge Grid

DATE: 30-5-84

MAGNETOMETER:

OPERATOR: POLTOCK

BASE STATION LOCATION: 200E 150S

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
2300E 900S		62704		62701	
		703		700	
		706		703	
		699		696	
		693		686	
		667		660	
		674		667	
		667		660	
1000S	4.05	665	62467	658	
		648		641	
		643		636	
		659		652	
		645		638	
		637		629	
		636		627	Water Race
		646		637	
1100S		622		613	
		614		605	
	4.10	611	469	602	
		620		611	
		605		599	
	4.15	594	466	588	
		588		582	
		590		584	
1200S		579		573	
		594		589	
		582		577	
		579		574	
	4.20	576	465	571	
		591		586	
		582		577	
		564		559	
1300S		574		569	
		562		557	

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GOLD FIELDS EXPLORATION P.T. LIMITED 249148

GROUND MAGNETOMETER SURVEY PAGE NO: 17

LOCATION: Stonehenge Grid **DATE:** 30-5-84

MAGNETOMETER: **OPERATOR:** POLTOCK

BASE STATION LOCATION: 200E 150S

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
2300E 1325S		62562		62558	
		557		553	
		561		557	
		558		554	
		549		545	
	4·25	548	62464	544	
1400S		558		554	
		553		549	
		545		541	
		544		540	
		549		546	
		552		549	
		551		548	
	4·30	546	463	543	CREEK.
1500S		546		543	
		540		537	
		545		542	
		535		532	
		539		537	
		519		517	
	4·35	529	462	527	
		536		534	
1600S		538		536	
		535		533	
		536		534	
		529		527	
		528		526	
		532		530	
		528		526	
		526		524	
1700S	4·40	530	462	528	

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GOLD FIELDS EXPLORATION PTY. LIMITED

249149

GROUND MAGNETOMETER SURVEY

PAGE NO: 18

LOCATION: Stonehenge Grid

DATE: 30-5-84

MAGNETOMETER:

OPERATOR: POLTOCK

BASE STATION LOCATION: 200E 150S

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
200E 1700S	4:43	62550		62549	
		541		540	
		551		550	
		554		553	
	4:45	564	62461	563	
		555		554	
		573		572	
		573		572	
1600S		577		575	
	4:50	568	462	566	
		566		564	
		560		558	
		559		557	
		558		556	
		568		566	
		569		567	
1500S		578		576	
		603		601	
		560		558	
		569		567	
	5:00	569	462	567	
		587		585	
		576		574	
		575		573	
1400S		574		572	
		576		574	
		581		578	
		586		583	
		577		574	
	5:05	592	463	589	
		596		593	
		613		610	
1300S		603		600	
		606		603	

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GOLD FIELDS EXPLORATION PTY. LIMITED

249150

GROUND MAGNETOMETER SURVEY

PAGE NO: 19

LOCATION: Stonehenge Grid

DATE: 30-5-84
31-5-84

MAGNETOMETER:

OPERATOR: Tolstock

BASE STATION LOCATION: 200E 150S

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
2200E 1275S		62 600		62 597	
		607		604	
		612		609	
		615		607	McLean Ck
		618		610	
		630		622	
1200S		630		622	Road.
		634		626	
		631		623	
		639		631	
	5.15	639	62468	631	
		638		630	
		642		634	
		657		649	
1100S		654		646	
		667		662	
		664		659	
		666		661	
1050S	5.20	671	465	666	
	8.05	627	438	62649	31-5-84
1025S		634		656	
		639		661	
1000S		647		669	
		654		676	
		663		685	
		670		692	
		678		700	
		686		708	
		695		717	
		704		726	
900S	8.10	705	438	727	
		727		749	
		742		764	

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GOLD FIELDS EXPLORATION PTY. LIMITED

249151

GROUND MAGNETOMETER SURVEY

PAGE NO: 20

LOCATION: Stonehenge Grid

DATE: 31-5-84

MAGNETOMETER:

OPERATOR: POLTOCK

BASE STATION LOCATION: 200E 150S

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
		62767		62789	
1200E 850S		764		786	
		772		794	
		779		801	
	8·15	784	62438	806	
800S		803		825	
		821		843	
		831		853	
		851		873	
	8·20	873	438	895	
		894		916	
		917		939	
		934		956	
700S		948		970	
		952		974	
	8·25	964	438	986	
		961		983	
		960		982	
		959		981	
		957		978	
		953		974	
600S	8·30	950	439	971	
		945		966	
		942		963	

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GOLD FIELDS EXPLORATION PTY. LIMITED

249152

GROUND MAGNETOMETER SURVEY

PAGE NO: 21

LOCATION: Stonehenge Grid

DATE: 31-5-84

MAGNETOMETER:

OPERATOR: POLTOCK

BASE STATION LOCATION: 200 E 150 S

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
2100E 500S	8.35	62937	62438	62959	
525S		949		971	
		949		971	
		949		971	
		949		971	
		948		970	
		948		968	
600S		947		967	
		944		964	
		943		963	
		941		961	
	8.40	941	62440	961	
		928		948	
		913		933	
		893		913	
700S		882		902	
		861		881	
		850		870	
		834		854	
	8.45	824	62440	844	
		816		836	
		791		811	
		770		790	
800S		762		782	
		749		769	
		742		762	
		732		751	
		721		740	
		712		731	
		705		724	
		699		718	
900S	8.50	691	62441	710	
		680		699	

GOLD FIELDS EXPLORATION PTY. LIMITED

249153

GROUND MAGNETOMETER SURVEY

LOCATION: Stonehenge Grid

DATE: 31-5-84

MAGNETOMETER:

OPERATOR: POLTOCK

BASE STATION LOCATION: 200E 150S

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
2100E 925S		62 677		62 696	
		480		499	MINE DUMP.
		568		587	
		581		600	
		559		578	
		611		630	
1000S	8.55	619	62441	638	
		631		650	
		680		699	
		619		638	
		615		634	
		615		634	
		611		630	
		609		628	
1100S		602		620	
		601		619	
		596		614	
		591		609	
		589		607	
		581		599	
	9.00	576	442	594	
		570		588	
1200S		567		585	CREEK
		562		588	
		561		579	
		558		576	
		559		577	
		562		580	
		557		575	
		551		570	
1300S	9.05	548	441	567	
		541		560	
		541		560	
		537		556	

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GOLD FIELDS EXPLORATION PTY. LIMITED

249154

GROUND MAGNETOMETER SURVEY

LOCATION: Stonehenge Grid

DATE: 31-5-84

MAGNETOMETER:

OPERATOR: Pollock

BASE STATION LOCATION: 200E 150S

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
2100E 1350S		62 534		62553	
		529		548	
		526		543	
		523		540	
1400S		517		534	
		515		532	
		520		537	
		525		542	
	9.10	520	62443	537	
		518		535	
		513		530	
		518		535	
1500S		530		547	
		536		553	
		546		563	
		550		567	
		539		556	
		541		556	
		534		549	
		530		545	
1600		523		538	
		515		530	
		505		520	
		500		515	
	9.20	498	445	513	
		495		510	
		493		508	
		495		510	
1700		496		511	

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GOLD FIELDS EXPLORATION PTY. LIMITED

249155

GROUND MAGNETOMETER SURVEY

PAGE NO: 24

LOCATION: Stonehenge Grid

DATE: 31-5-84

MAGNETOMETER:

OPERATOR: Poltock

BASE STATION LOCATION: 200E 150S

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
200E 1750S	9.40	62489	62444	62505	
		491		507	
		491		507	
		496		512	
1700S		500		516	
		495		511	
		494		510	
		493		509	
	9.45	497	444	513	
		498		514	
		493		509	
		499		515	
1600S		498		514	
		497		513	
		511		527	
		507		523	
	9.55	514	444	530	
		511		527	
		529		545	
		539		555	
1500S		556		572	
		561		577	
		587		604	
		579		598	
		547		564	
		550		567	
	10.00	576	443	593	
		540		557	
1400S		530		547	
		531		548	
		533		550	
		534		551	
		538		555	
		541		558	

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GOLD FIELDS EXPLORATION PTY. LIMITED

249156

GROUND MAGNETOMETER SURVEY

PAGE NO: 25

LOCATION: Stonehenge Grid

DATE: 31-5-84

MAGNETOMETER:

OPERATOR: Pollock

BASE STATION LOCATION: 200E 150S

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
2000E		62544		62563	
		540		559	
1300S		547		566	
		545		564	
		548		567	
		549		568	
	10.10	550	62441	569	
		555		574	
		560		579	
		563		582	
1200S		573		592	
		574		594	
		581		601	
		590		610	
	10.15	596	440	616	
		594		614	
		602		622	
		604		624	
1100S		609		629	
		616		636	
		625		645	
		626		645	
		635		654	
		642		661	
		646		665	
		656		675	
1000S	10.20	661	441	680	
		671		690	
		673		692	
		684		703	
		688		707	
		696		715	
		710		729	
		712		731	

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GOLD FIELDS EXPLORATION PTY. LIMITED

249157

GROUND MAGNETOMETER SURVEY

PAGE NO: 26

LOCATION: Stonehenge Grid

DATE: 31-5-84

MAGNETOMETER:

OPERATOR: Pollock

BASE STATION LOCATION: 200 E 150 S

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
2000E 900S		62719		62739	
		723		743	
875S	10.25	734	62440	754	
		737		757	
		746		766	
		756		776	
		764		784	
		777		797	
800S		778		798	
		735		755	ROAD
		786		806	"
		801		821	
750S		793		813	

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GOLD FIELDS EXPLORATION PTY. LIMITED

249158

GROUND MAGNETOMETER SURVEY

PAGE NO: 27

LOCATION: Stonehenge Grid

DATE: 31-5-84

MAGNETOMETER:

OPERATOR: Pollock

BASE STATION LOCATION: 200E 150S

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
900E 550S	10.45	62910	62442	62928	
		905		923	
		893		911	
		882		900	
600S		878		896	
		871		889	
		857		876	
		959		978	
		918		937	MINE
		775		794	
	10.50	782	441	801	
		605		624	
700S		583		602	
		760		778	
		759		777	
		788		806	
	10.55	818	442	836	
		712		730	
		750		768	
		757		775	
800S		751		769	
		744		762	
		742		760	
		731		749	
		725		743	
		717		735	
		708		726	
		704		722	
900S	11.00	697	442	715	
		691		709	
		684		702	
		675		693	
		668		686	
		658		676	

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GOLD FIELDS EXPLORATION PTY. LIMITED

249159

GROUND MAGNETOMETER SURVEY

PAGE NO: 28

LOCATION: Stonehenge Grid

DATE: 31-5-84

MAGNETOMETER:

OPERATOR: Pollock

BASE STATION LOCATION: 200E 150S

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
900E 975S		62653		62671	
		647		665	
1000S		639		657	
		634		652	
		626		644	
		625		643	
	11.05	616	62442	634	
		612		630	
		607		625	
		602		620	
1100S		594		612	
		589		607	
		588		606	
		586		604	
		583		601	
		574		592	
		570		588	
		564		582	
1200S		558		575	
		554		571	
	11.10	557	443	574	
		542		559	
		542		559	
		537		556	
	11.15	537	441	556	
		530		549	
1300S		532		551	
		530		549	
		532		551	
		524		543	
		523		541	
		538		556	
		538		556	
		547		565	

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GOLD FIELDS EXPLORATION PTY. LIMITED

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GROUND MAGNETOMETER SURVEY

PAGE NO: 29.

LOCATION: Stonehenge Grid

DATE: 31-5-84

MAGNETOMETER:

OPERATOR: Pollock

BASE STATION LOCATION: 200E 150S

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
1900E 1400S	11.20	62547	62442	62565	
		540		558	
		582		600	
		658		676	
		550		568	
		557		575	
		548		567	
		513		532	
1500S		507		526	
		499		518	
	11.25	498	441	517	
		500		519	
		497		516	
		497		516	
		495		514	
		493		512	
1600S		484		503	
		498		517	
	11.30	488	441	507	
		486		505	
		489		508	
		482		502	
		489		509	
		489		509	
1700S	11.35	485	440	505	

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GOLD FIELDS EXPLORATION PTY. LIMITED

249161

GROUND MAGNETOMETER SURVEY

PAGE NO: 30

LOCATION: Stonehenge Grid

DATE: 31-5-84

MAGNETOMETER:

OPERATOR: Pollock

BASE STATION LOCATION: 200E 150S

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
1200E 1100N	12.40	62550	62440	62570	Shaft / stope.
		545		565	
		540		560	
		541		561	
		542		562	
		541		562	
		545		566	
		549		570	
1000N	12.45	552	439	573	
		557		578	
		560		581	
		564		585	
		569		591	
		570		592	
	12.50	579	438	601	mine dump
		606		628	" " + rails
900N		640		662	" "
		614		636	Adit
		588		610	
		592		614	
		594		615	
	12.55	598	439	619	
		601		622	open stope
		605		626	
800N		607		628	

APPENDIX 6

Stonehenge "Residual" Magnetic Analysis -
A report by Mitre Geophysics

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249163

STONEHENGE 'RESIDUAL' MAGNETIC ANALYSIS

Four lines across the (main) Stonehenge magnetic anomaly have been modelled (1800E, 2000E, 2200E & 2400E). The exercise was undertaken to see if there might be any magnetic body(s) on the flanks of the main source. Any such bodies would be investigated in the hope that they were cassiterite-pyrrhotite deposits.

A large body, representative of (for example) a basic intrusive accounted for most of the magnetic response on all four lines.

On 1800E, a good fit to the observed data was obtained using just this one body: no (significant) shallower sources are indicated (Figure 1).

On 2000E, a poorer fit was obtained (Figure 2) and several near surface bodies were required to obtain a good fit (Figure 5).

On 2200E, the data indicated a larger (than on 2000E) near-surface source. Figure 3 shows that one (large) near surface source plus the main body with a more irregular surface provides a good fit to the data.

2400E has a profile shape similar to 2200E. Figure 4 shows a poorer fit (than 2200E) to the data using two shallower bodies. (This fit could be slightly improved by using a shorter strike length for the main body -2400E is close to the eastern end of the body).

The residuals (ie observed field - modelled field) are given in Figures 6, 7, 8 & 9 for profiles 1800E, 2000E, 2200E & 2400E respectively. (The residual for 2000E is for the one body only - Figure 2). Significant residual anomalies occur on 2000E (which have been modelled) and on 2400E. A further body, on the flank of the main source on line 2400E, is shown in Figure 10. (This has been fitted to interpolated data*).

If the main source is a basic or ultrabasic intrusive (the latter would probably have a larger magnetic susceptibility than .003cgs and would thus be smaller than the models used), then shallower sources directly above it are probably not prospective (since they are likely to be shallower emanations of the main body). In which case, only the flanking sources on lines 2000E and 2400E are of interest. However, if the main source is due to

---

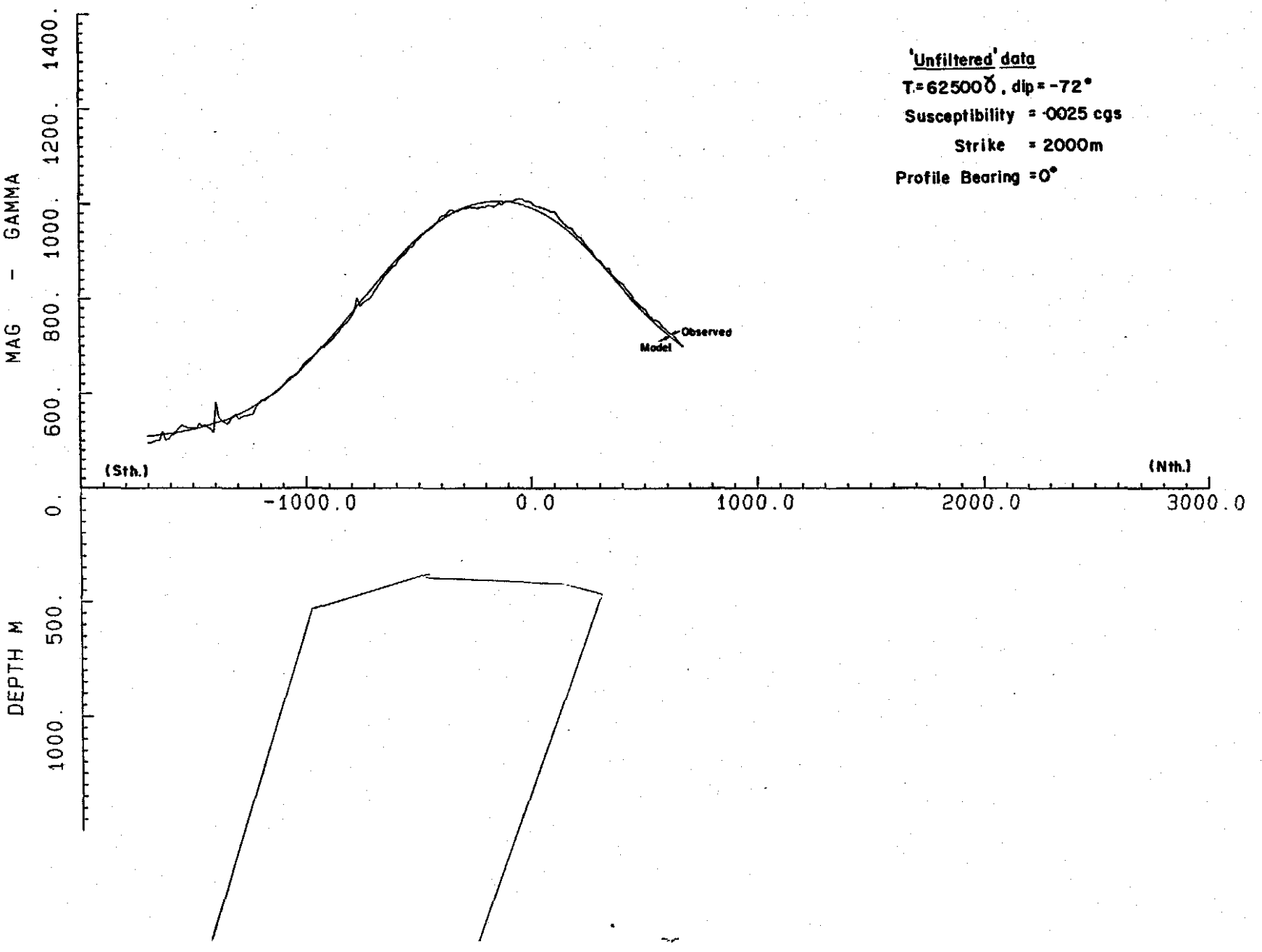
* The data for lines 2000E and 2400E were interpolated for a 15m station spacing to fit within the maximum allowed array of 200 data points (this compares closely with the actual station spacing of 12.5m). Lines 1800E and 2200E, which were less than 200 points, were fitted to the raw data. The interpolated data in Figure 10 (line 2400E) used a 50m station spacing. The interpolation may be thought of as a filtering process.

hornfelsing around a granitic cupola, then the shallower sources above the main source are also prospective.

Given the non-unique nature of magnetic modelling (many different models can provide equally good fits to the observed data), no great reliance should be placed on modelling of residual data - small changes to a model can produce large changes in a residual.

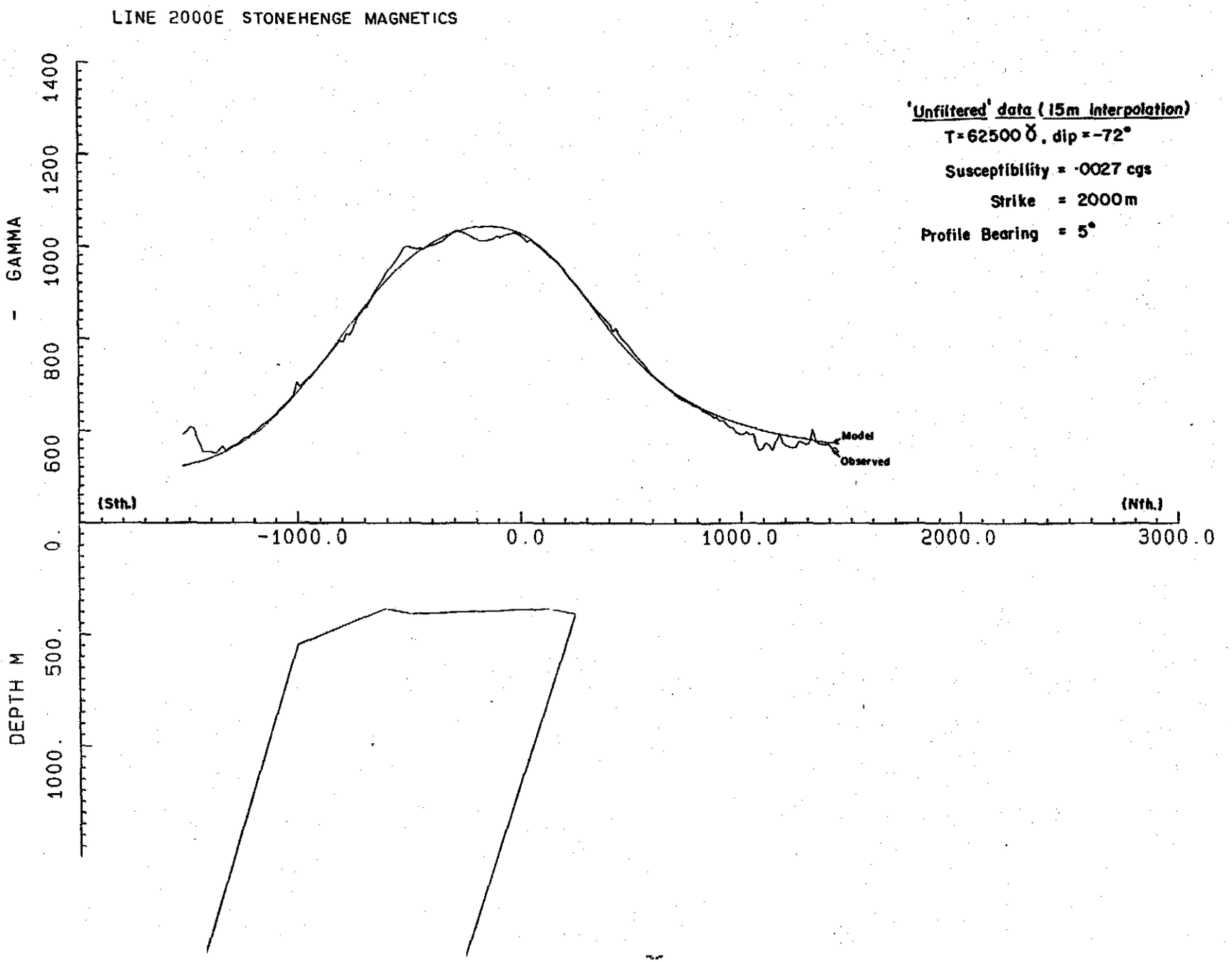
J.R. Bishop
August, 1984.

LINE 1800E STONEHENGE MAGNETIC SURVEY



249165

FIG. I



2491166

FIG. 2

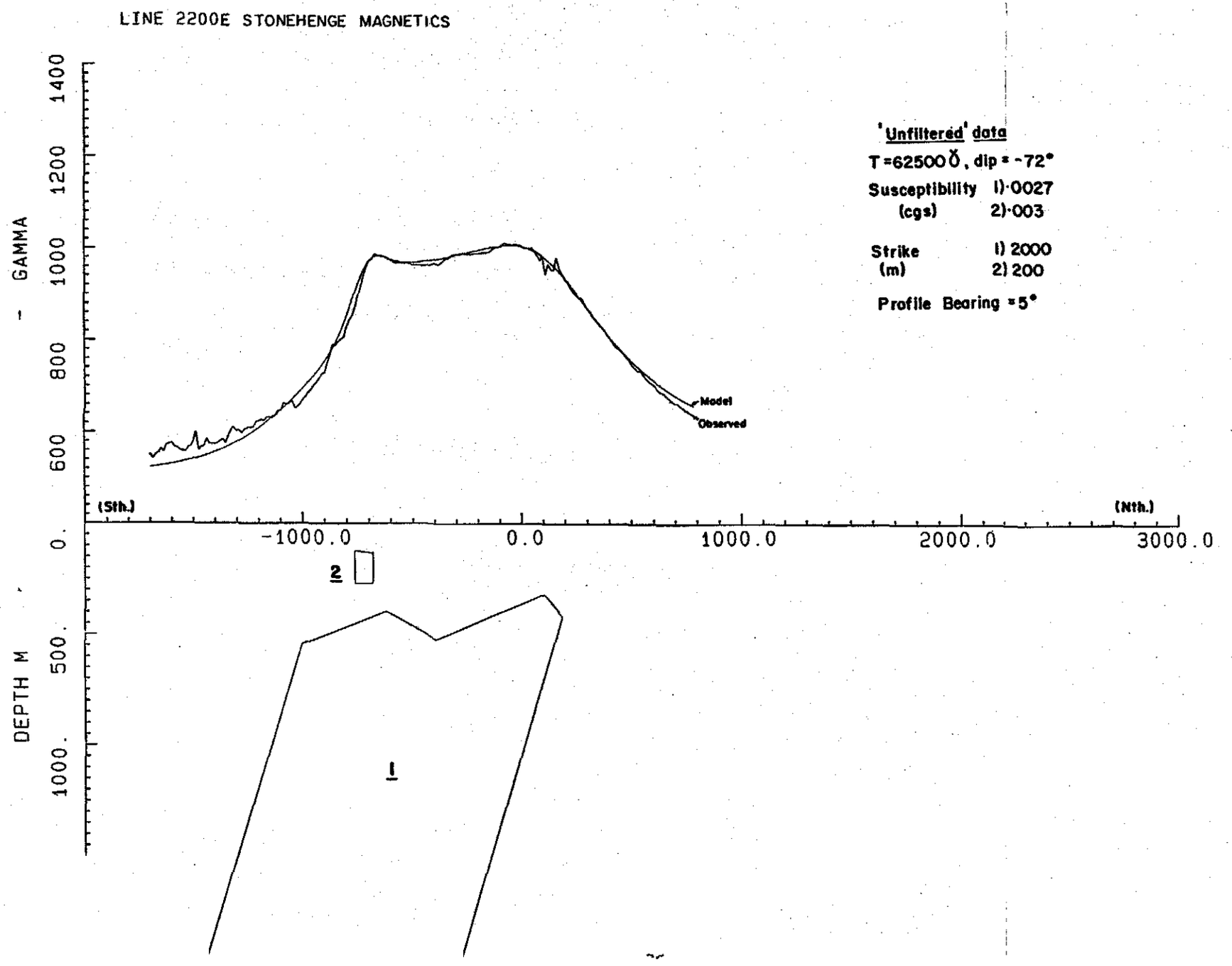
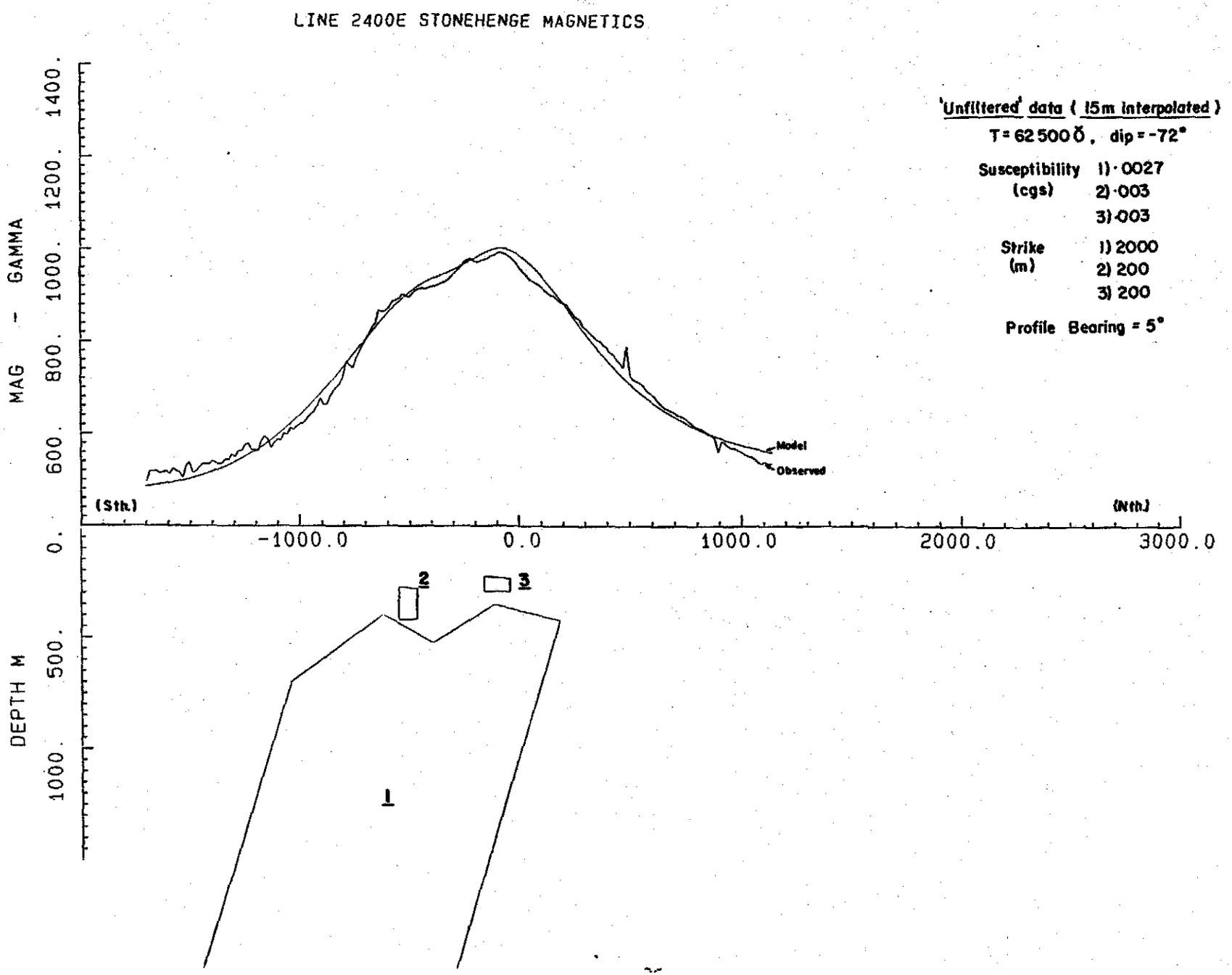


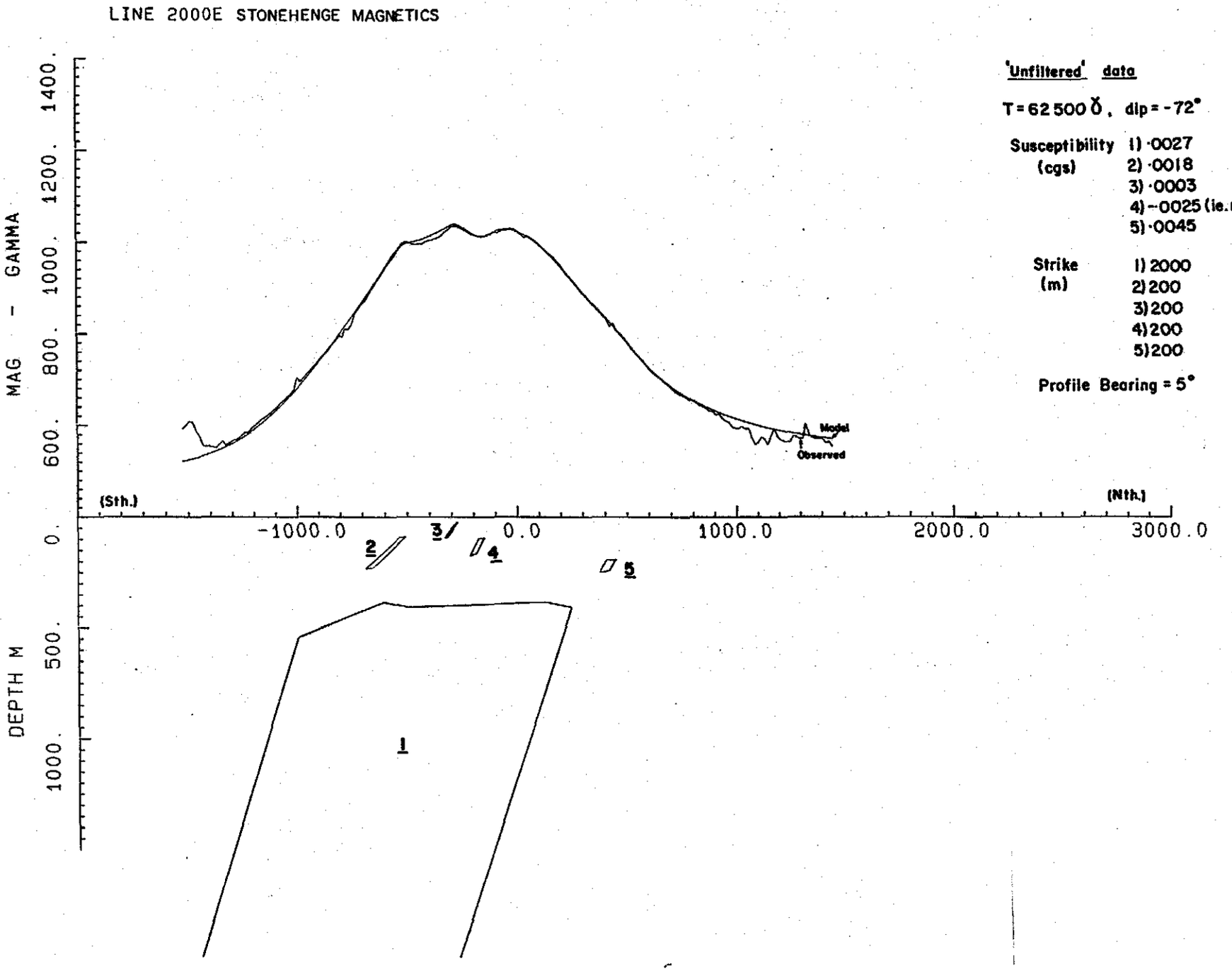
FIG. 3

2491697


LINE 2400E STONEHENGE MAGNETICS
'Unfiltered' data (15m interpolated)
T = 62 500 ϑ , dip = -72°
Susceptibility (cgs) 1) ·0027
2) ·003
3) ·003
Strike (m) 1) 2000
2) 200
3) 200
Profile Bearing = 5°
MAG - GAMMA
0. 600. 800. 1000. 1200. 1400.
Model
Observed
(Sth.)
(Nth.)
-1000.0 0.0 1000.0 2000.0 3000.0
DEPTH M
0. 500. 1000.
1
2
3

249168

FIG. 4



2491169

FIG. 5

NO NAME

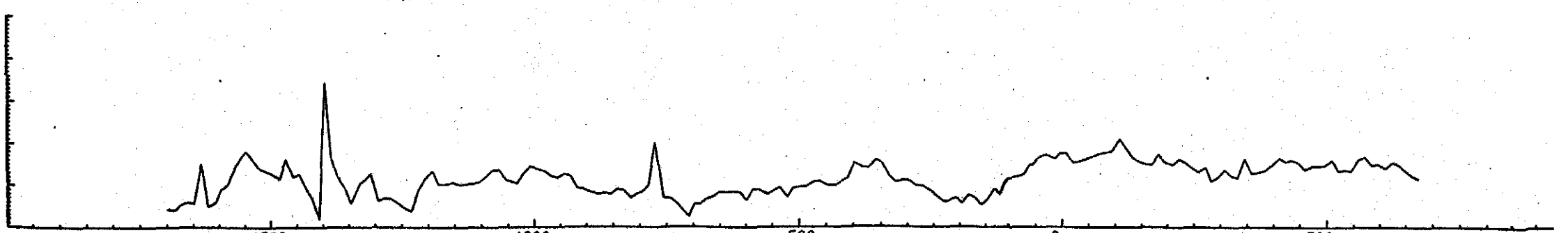
4 YES

- GEOSD GRAPHICS -

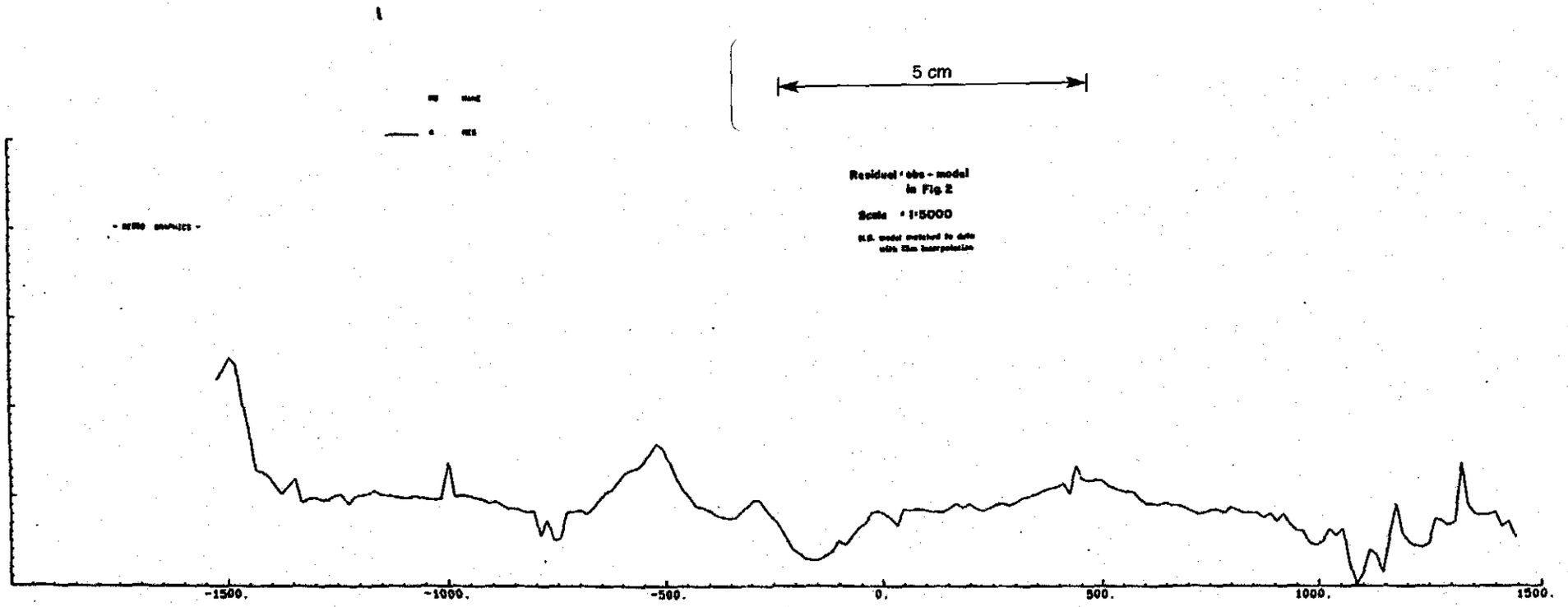
Residual : obs - model
in Fig.1

Scale : 1:5000

5 cm



LINE 1800E STONEHENGE MAGNETIC SURVEY

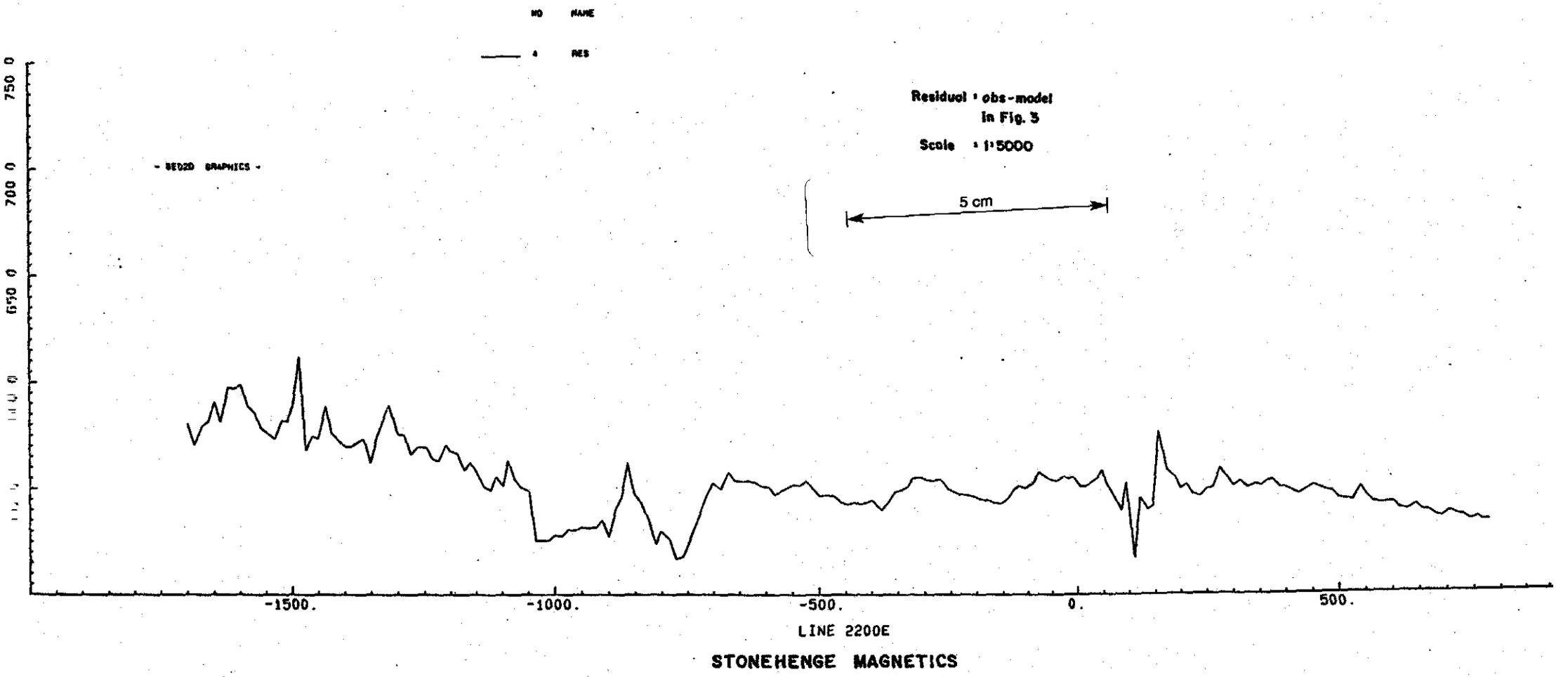


LINE 2000E

STONEHENGE MAGNETICS

FIG. 7

2401171


NO NAME
4 RES
Residual = obs-model
in Fig. 3
Scale = 1'5000
5 cm
- GEOID GRAPHICS -
750 0
700 0
650 0
-1500.
-1000.
-500.
0.
500.
LINE 2200E
STONEHENGE MAGNETICS

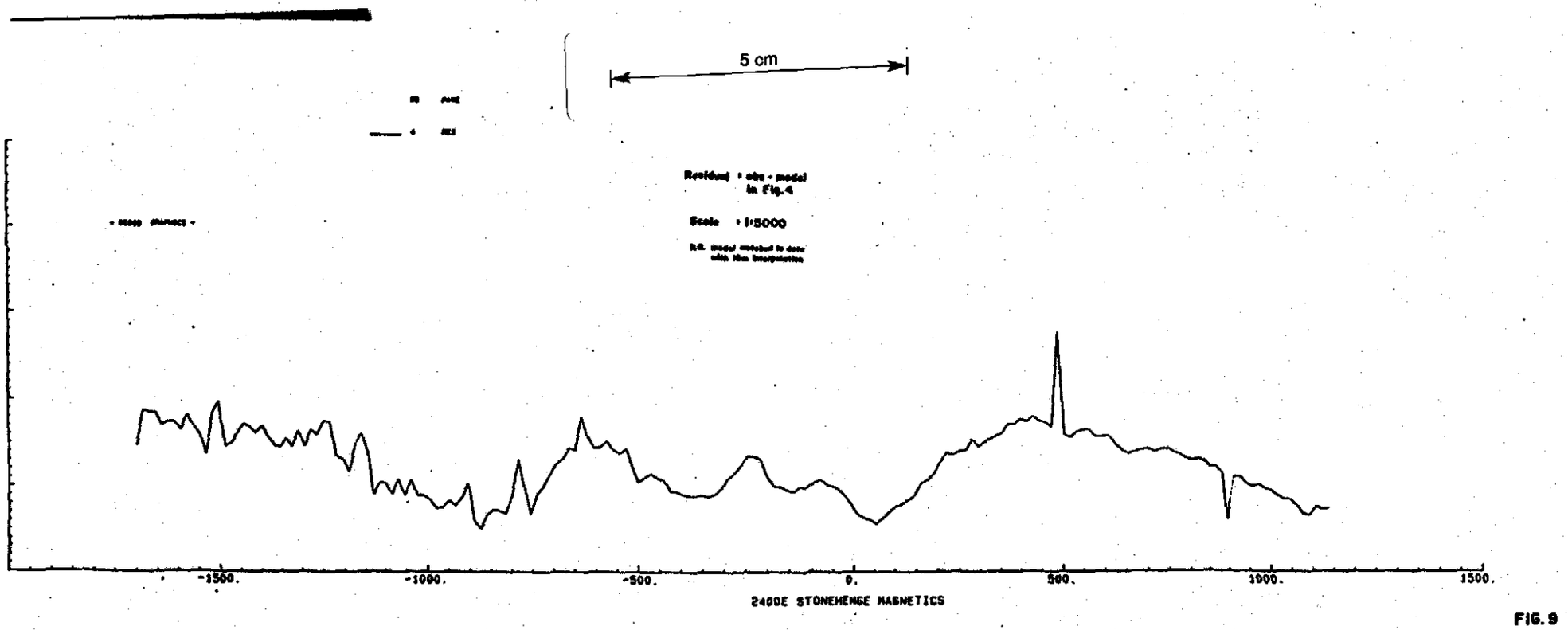

5 cm
Residual = obs - model
in Fig.4
Scale = 1:5000
-1500.
-1000.
-500.
0.
500.
1000.
1500.
2400E STONEHENGE MAGNETICS

FIG. 9

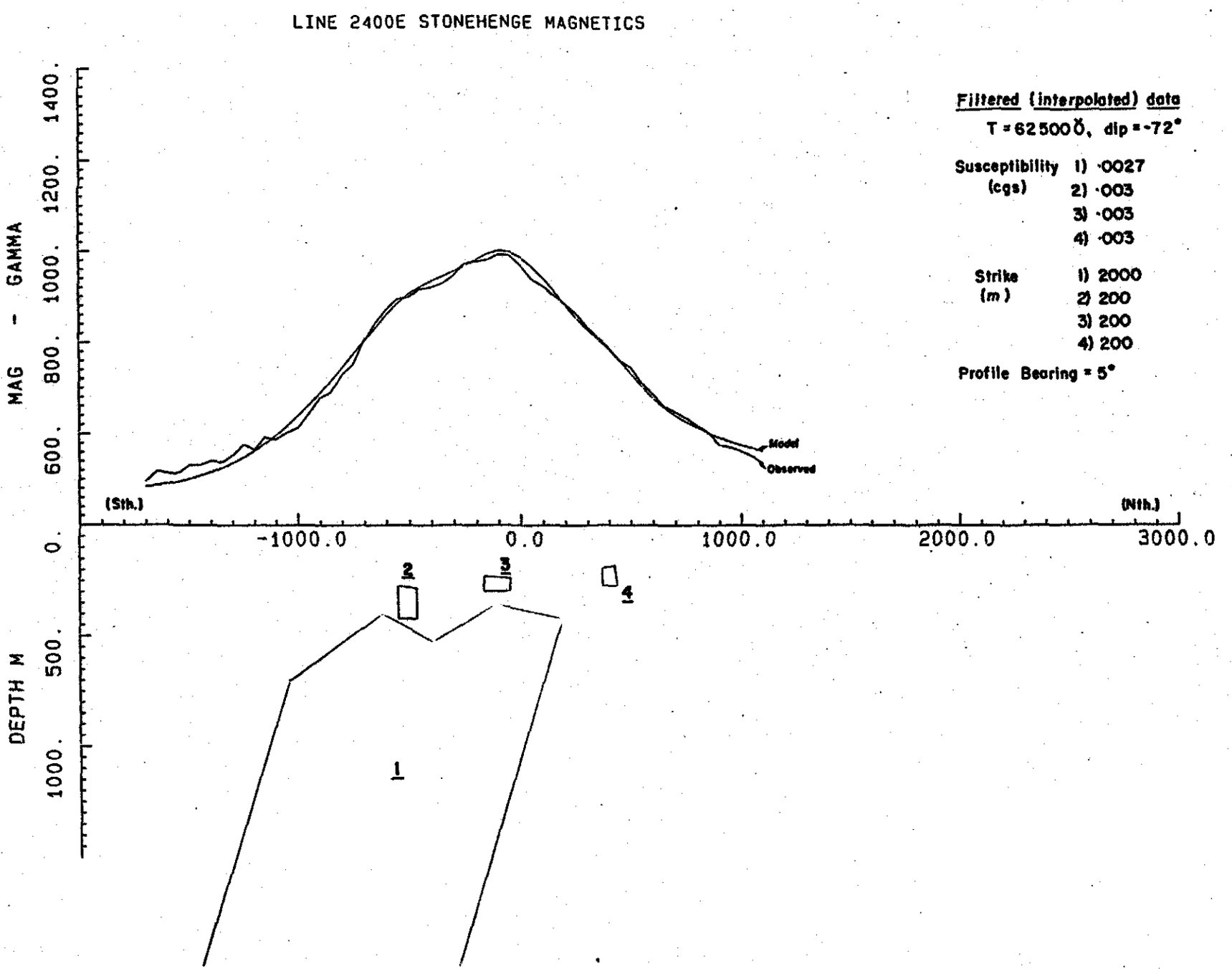


FIG. 10

2491741

APPENDIX 7

Diamond Drill Logs, TH13, TH14 and TH15

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HOLE NO: TH 13
STATE : TASMANIA

DLV. PRESS

GOLD FIELDS EXPLORATION PTY. LIMITED
DRILL CORE RECORD

PROJECT	TRIAL HARBOUR
DESIGNED BY	P. KOMYSHAN
LOGGED BY	P. KOMYSHAN
COMMENCED	5-3-84
COMPLETED	18-4-84

PURPOSE

To test beneath the southern extension on the Spray No. 3 Lode in the vicinity of the Colonel North Workings

LOG SUMMARY

0.0 - 10.0	Surface debris	-397.7	Black Shale
- 64.0	Poor Recovery Zone	-418.2	Dolomite
- 75.3	Mineralised Breccia	-421.0	Quartz dolomite vein
-165.5	Altered Dolomite	-431.2	Dolomite
-220.2	Dolomitic siltstone		
-272.8	Shale		
-389.4	Dolomite		

GENERAL COMMENTS

ASSAY SUMMARY

INTERVAL From	INTERVAL To	Sn	Sn(Sol)	As	WO_3	Cu	Pb	Zn	Ag	Sb			Recovery	COMMENTS
64.0	75.3	<0.01%	<100ppm	0.02%	<0.01%	<0.01%	0.13%	0.43%	6ppm	0.01%			38%	Mineralised Breccia.
87.0	148.0	<0.01%	<100ppm	0.01%	0.01%	<0.01%	0.90%	0.59%	29ppm	0.01%			33.6%	Altered Dolomite.
inc. 99.5	123.0	<0.01%	<100ppm	0.02%	0.01%	<0.01%	2.1%	1.12%	74ppm	0.01%			40.9%	Zone of disseminated and vein style mineralization.
411.0	415.0	<0.01%	<100ppm	0.01%	<0.01%	<0.01%	1.03%	0.02%	18ppm	<0.01%				Qtz dolomite & sulphide veins in unaltered dolomite.
418.2	422	<0.01%	<100ppm	<0.01%	<0.01%	<0.01%	0.01%	<0.01%	<1ppm	<0.01%				Massive quartz dolomite vein.

LOCATION

NORTHING	5,359,430.517
EASTING	360,149.387
R.L.	263.498
GRID	A.M.G.
LENGTH	431.2m

HOLE CONDITION

SIZE	
Hole Size	Depth
PQ	46.0m
HQ	76.0m
NQ	149.0m
BQ	431.2m

SIGNIFICANT CORE LOSS INTERVALS		
From	To	% Lost
0	10.0	93
10.0	64.0	68
64.0	148.0	61

POOR GROUND CONDITION ZONES		
From	To	Condition
0	148.0	Broken ground with numerous cavities.

HOLE CONDITIONS AFTER COMPLETION

Fracture used to free casing. Hole probably collapsed in first 40m.
Note that due to shifting ground and changing of the casing size, several intervals were redrilled i.e.
TH13 0-105.5 TH13 C 105.5-106.5
TH13A 99.5-109.5 TH13 D 106.0-E.O.H.
TH13B 105.5-106.5

SURVEY DATA (Note: Bearing type must be same as Project Grid Type)

SURVEY Depth	SURVEY Bearing	SURVEY Dip	INTERVAL From	INTERVAL To	INTERVAL Distance	VERTICAL D.Sin.Dip	VERTICAL R.L.	HORIZONTAL D.Cos.Dip	HORIZONTAL Prog.Total
0	021°	-46°	0	88.0	88.0	63.30	200.20	61.13	61.13
176	013.5°	-43°	88.0	191.0	103.0	70.25	129.95	75.33	136.46
206	014.5°	-42°	191.0	221.0	30.0	20.07	109.88	22.29	158.75
236	012°	-41°	221.0	251.0	30.0	19.68	90.19	22.64	181.40
266	012.5°	-40.5°	251.0	281.0	30.0	19.48	70.71	22.81	204.21
296	013.5°	-39°	281.0	311.0	30.0	18.88	51.83	23.31	227.52
326	013.5°	-38°	311.0	341.0	30.0	18.47	33.36	23.64	251.16
356	014°	-37°	341.0	392.0	51.0	30.69	2.67	40.73	291.89
428	015°	-35°	392.0	431.2	39.2	22.48	-19.81	32.11	324.0

SURVEY Depth	SURVEY Bearing	SURVEY Dip	INTERVAL From	INTERVAL To	INTERVAL Distance	VERTICAL D.Sin.Dip	VERTICAL R.L.	HORIZONTAL D.Cos.Dip	HORIZONTAL Prog.Total

HOLE NO. TH 13

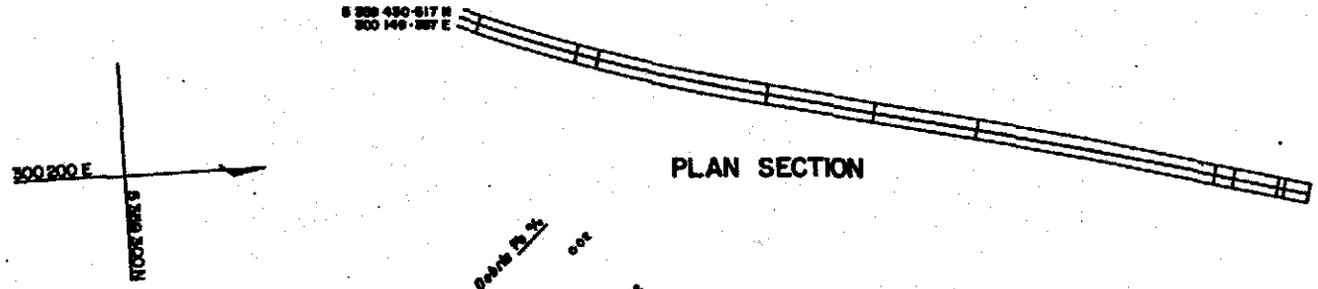
GOLD FIELDS EXPLORATION PTY. LIMITED

DIAMOND DRILL HOLE PLOT

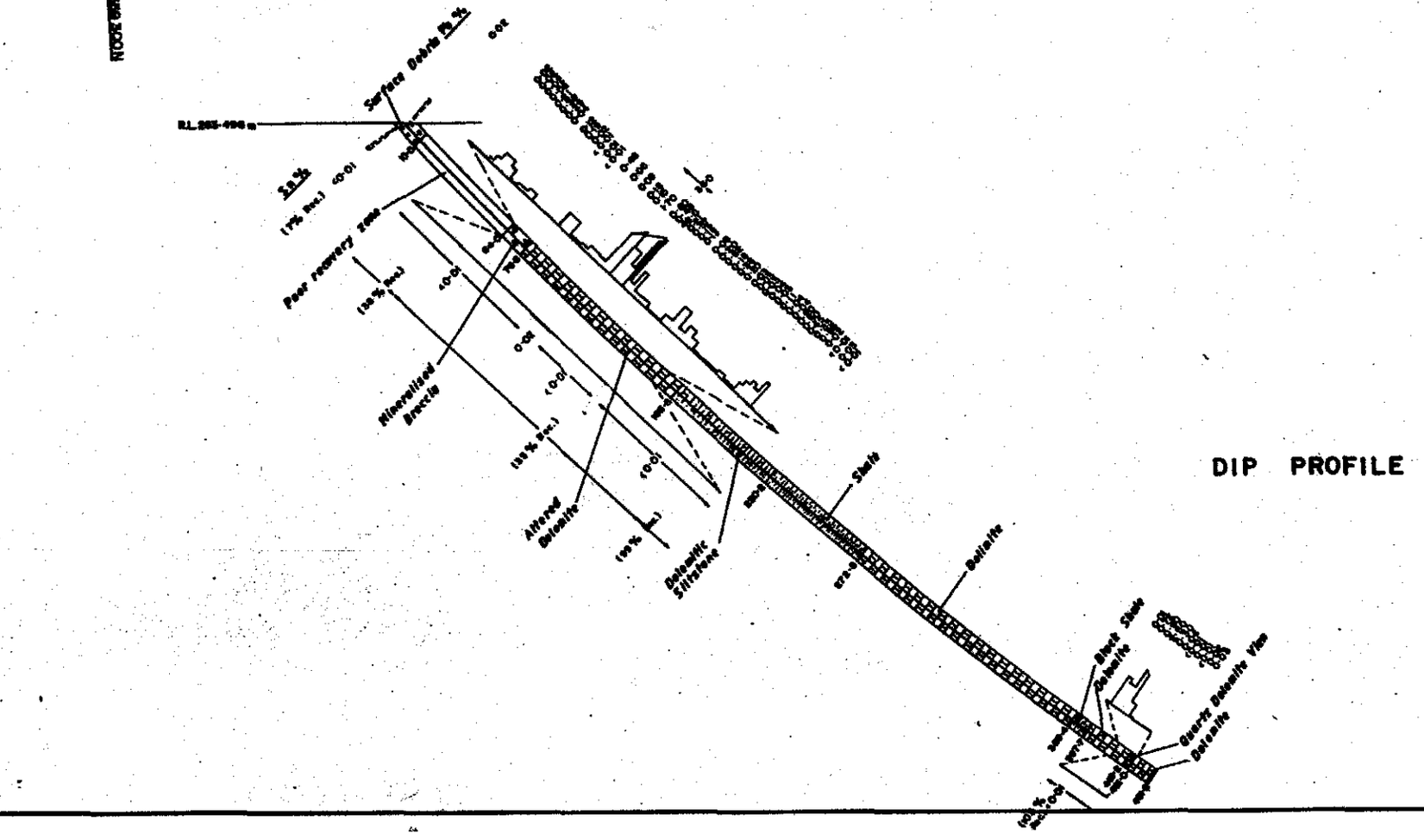
SCALE 1:2000

METRES

5 cm



PLAN SECTION



DIP PROFILE

249177

GOLD FIELDS EXPLORATION PTY. LIMITED

249178

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VLV. PRESS

PROJECT: TRIAL HARBOUR S.P.L. 129

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: T.H. 13 Page: 1.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION
0.0	10.0	0.7	7	WEATHERED SURFACE GRAVEL AND DEBRIS Recovered material consists of fragments of vein quartz, weathered grey micaceous siltstone, grey to white clay and .3m of brown Mn, limonite and sand rich breccia above 1.2m.
10.0	28.5	6.5	35	WEATHERED SILTSTONE Cream to grey, highly cleaved weathered, micaceous siltstone with clay zones, containing minor cream uniform grained sandstone beds (<10cms width). The siltstone occurs as angular clasts in a grey clay matrix. This together with the poor recovery indicates carbonate (now weathered to clay) may have been part of the matrix.
28.5	30.8	2.1	91	SANDSTONE Cream to grey, weathered, uniformly grained sandstone with minor milky quartz metamorphic veins. The unit is cut by well developed spaced cleavage.
30.8	64.0	8.55	25	POOR RECOVERY ZONE Includes 30.8-33.5m : Brecciated weathered cream grey siltstone and clay zone. 33.5-34.8m: Black to grey highly cleaved silstone Bleaching of the rock from black to grey occurs up to 2mm from prevalent micro fracture. 34.8-40.1m: Only grey sandstone (as for 28.5-30.8m) recovered. 40.1-56.6m: Very poor recovery zone with cream clay and weathered siltstone and minor sandstone. 56.6-58.07: No recovery other than 0.2m of vein quartz. 58.0-64.0m: Predominantly black highly cleaved siltstone/shale. Recovered core includes 40cm zone of black shale breccia in a grey clay matrix at 62.5-63.0m and contorte

ASSAY DATA Sample No.	From	To	Rec. %	Sn	Sn(Sol)	As	WO_3	Cu	Pb	Zn	Ag	Sb
11000	0.5	1.00	60	10	<100	<10	10	10	320	120	3	20

GOLD FIELDS EXPLORATION PTY. LIMITED

ULV. PRESS

PROJECT: TRIAL HARBOUR S.P.L. 129

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: TH 13

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	ASSAY DATA Sample No.	From	To	Rec. %	Sn	Sn(Sol)	As	WO_3	Cu	Pb	Zn	Ag	Sb	Au
				black silty sandstone part silicified at 63.7-64.0m.														
64.0	75.3	4.3	38	MINERALIZED BRECCIA	11001	64.0	65.0	47	<10	<100	1180	70	25	220	390	5	120	<0.05
				This zone consists initially of minor broken unmineralized black	11002		67.0	35	10	<100	60	30	10	200	320	3	30	
				sandstone in a massive well crystallized quartz pyrite vein with	11003		68.0	20	10	<100	100	70	25	200	2600	3	40	
				minor sphalerite. From 67.0m the zone consists of brecciated	11004		69.0	30	20	<100	260	90	50	770	8500	9	110	<0.05
				black shale and minor sandstone in a black clay matrix which	11005		70.5	60	10	<100	290	100	75	2140	6400	10	140	<0.05
				also contains very fine grained pyrite.	11006		72.0	60	10	<100	260	90	40	3810	5000	7	110	<0.05
				72.0-73.0?: Recovered 20cms consisting of massive vein quartz	11007		73.0	20	20	<100	30	20	30	2510	1230	5	60	
				(pitted from weathered out pyrite) and well	11008		75.3	25	30	<100	10	100	15	420	5800	9	70	
				formed quartz crystals growing into cavities														
				after carbonate (as evident by minor remnant														
				carbonate boxwork texture).														
				73.0-75.3m: Rounded and angular white (vein type?) quartz														
				fragments and clast (<10mm diameter) in a														
				predominate limonitic gossan matrix (50-60%).														
				Some cavities show evidence of boxwork development														
				(after carbonate?).														
75.3	148.0	25.3	35	ALTERED DOLOMITE														
				75.3-80.0?m: Cream massive dolomite with intergrown quartz	11009	75.3	78	20	50	<100	120	20	5	1190	990	2	20	
				with mineralization of disseminated pyrite (1-	11010		80	37	70	<100	480	90	45	1890	5000	2	50	<0.05
				3%) and veinlets of pyrite with minor sphalerite	11011		81	37	30	<100	10	10	15	150	870	<1	30	
				and galena.	11012		82.5	87	20	<100	10	40	5	60	600	1	40	
				This zone also includes a silcified altered breccia zone of	11013	82.5	84.0	87	10	<100	<10	20	<5	30	310	<1	10	
				0.8m (recovered) which exhibits textures akin to weathered gossan	11014		85.5	57	10	<100	<10	40	<5	170	314	1	20	
				at 73.0-75.3m. This blue grey breccia contains predominantly	11015		87.0	57	20	<100	<10	10	<5	50	235	<1	10	
				carbonate and quartz clasts of <10mm as well as large (>100mm)	11016		90.0	20	30	<100	<10	90	<5	4900	3310	10	10	
				angular fragments of a dolomite quartz vein. The clast boundaries	11017		93.0	43	20	<100	<10	10	<5	490	324	<1	<10	
				are sharp but appear to have reacted with the matrix in the	11018		95.0	65	20	<100	<10	40	10	900	590	1	<10	
				vicinity of sphalerite mineralization and later crosscutting	11019		98.0	3	20	<100	<10	40	10	1770	1440	4	<10	
				quartz veinlets. Extensive alteration of the breccia matrix	11020		99.5	20	20	<100	<10	50	10	1450	880	1	20	
				has occured by siderite. Weathering out of some of the siderite	11021		105.5	18	150	<100	2680	1110	420	31.0%	3740	1300	2800	
				has resulted in a boxwork texture.	11022	99.5	102.2	13	50	<100	50	120	35	1.1%	10,000	26	150	

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GOLD FIELDS EXPLORATION PTY. LIMITED

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PROJECT: TRIAL HARBOUR S.P.L. 129

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: TH 13

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION
				80.0-87.0m: Massive white to yellow brown dolomite with disseminated pyrite (1%). Some talcification has developed on the joints. Minor quartz stringers occur.
				87.0-148.3m: Massive cream/brown dolomite zone, veined extensively by quartz which postdates some massive carbonate veins. The unit contains disseminated pyrite (1-3%) as well as disseminated sphalerite and galena (1%) throughout. Pyrite also occurs as framboids, on stylolitic fractures and disseminated from fractures. Sphalerite rims some of the pyrite framboids. 105.0-105.5m: A massive galena 95%, carbonate 4%, sphalerite 1% vein occurs.
				106.0m: A vein indicates a succession of mineralization of
				a) quartz pyrite
				b) Sphalerite, galena, pyrite.
				c) carbonate, galena.
				d) successive carbonate (including siderite)
				e) quartz and sphalerite
				116-120m: Zone of strong fracture and replacement style mineralization within dolomite of initially pyrite. Then overprinted by sphalerite and galena.
				Cavities occur at : 90.0-91.0m, 95.0-98.0m, and 138.0-141.0m.
				Petrological Description 79.0m
				Classification - Composition
				Altered ?Dolomite. Fine- to medium-grained, sparry to granular sideritic carbonate with thinly disseminated pyrite euhedra, corroded quartz crystals/aggregates, locally conspicuous red sphalerite. Irregular weakly Fe-stained zones.
				Fabric
				Massive to vaguely relict limestone breccia-like. Sporadic siderite veinlets. Fe-stained zones are vuggy
				Accessories
				Minor traces secondary Mn-oxide in vuggy Fe-stained zones.

ASSAY DATA Sample No.	From	To	Rec. %	Sn	Sn(Sol)	As	WO_3	Cu	Pb	Zn	Ag	Sb	Au
11023*		104.0	13	20	<100	70	90	20	9000	8.000	24	90	
11024*		105.0	50	30	<100	30	90	20	4900	4.7%	13	70	
11025*		105.8	100	140	<100	3440	1535	585	48.0%	4410	1940	4.100	<0.01
11026		106.5	100	30	<100	<10	50	10	2090	2050	8	120	
11027		109.0	58	<10	<100	50	50	15	5300	4370	13	140	
11028		110.0	55	10	<100	<10	100	30	1230	12,000	1	<10	
11029		112.0	70	<10	<100	<10	30	<5	1250	2850	1	<10	
11030		116.0	18	<10	<100	<10	40	5	340	1850	<1	<10	
11031		117.0	60	10	<100	70	30	15	2010	8600	2	20	
11032		120.0	60	80	<100	120	440	45	6200	5.0%	13	30	
11033		121.5	37	10	<100	150	40	10	1760	3500	<1	<10	
11034		123.0	27	<3	<100	<10	40	5	3840	2000	<1	<10	
11035		124.5	40	<10	<100	<10	20	5	2060	490	<1	10	
11036		126.0	40	<10	<100	<10	10	<5	330	480	<1	10	
11037		127.5	53	<10	<100	<10	20	<5	230	390	<1	<10	
11038		129.0	53	<10	<100	<10	20	<5	270	480	<1	<10	
11039		130.5	33	<10	<100	<10	20	<5	350	800	<1	<10	
11040		132.0	33	<20	<100	<10	30	5	340	790	<1	10	
11041		133.5	27	<10	<100	<10	30	5	1100	940	<1	<10	
11042		135.0	27	<10	<100	<10	10	<5	430	430	<1	10	
11043		138.0	10	<10	<100	<10	30	5	400	530	<1	10	
11044	141.0	143.1	35	20	<100	<10	80	30	1970	15300	2	30	
11045		143.0	35	<10	<100	<10	90	<5	3020	4720	<1	<10	
11046		145.3	53	10	<100	10	60	<5	4440	9700	<1	<10	
11047		147	53	<10	<100	<10	100	10	3440	1.08%	<1	<100	
11048		148	92	20	<100	200	70	35	6500	9100	13	<100	<0.01

* N.B. Massive galena vein intersected more than once, two of these intersections assayed.

GOLD FIELDS EXPLORATION PTY. LIMITED

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PROJECT: TRIAL HARBOUR S.P.L. 129

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: TH 13

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION
				Comments
				Interpreted as a sideritised dolomite-or limestone breccia.
				Sphalerite as loosely clustered,colour-zoned sub-hedra (to 300 μ) partly degraded to limonitic cavitites.
				Petrological Description 79.8m
				Classification - Composition
				Altered Impure Dolomite. Variably kaolin-stained cherty micro-crystalline quartz with more or less pervasive carbonaceous matter. Semi-pervasive fine-grained sideritic carbonate extensively replaced by cloudy semi-porcellaneous siderite.
				Fabric
				Variable. Massive to laminated, more or less pervasively contorted to slump-breccia-like.
				Accessories
				Traces relict detrital silt-sized quartz, muscovite, "syngenetic" pyrite. Sporadic carbonate veinlets with rare sphalerite (<50 u).
				Comments
				Primarily a laminated impure dolomite/dolomitic chert. Alteration analogous to 79.0m, but complexed by late secondary porcellaneous siderite impregnations.
				Petrological Description 81.6m
				Classification - Composition
				Altered Dolomite. Fine- to medium-grained ankeritic carbonate with sporadic corroded relict patches of microcrystalline dolomite. Thinly disseminated pyrite, minor corroded quartz. Sporadic ankeritic carbonate (± quartz) veinlets.
				Fabric
				Vaguely relict limestone breccia-like(sim. 79.0m).Stressed,

ASSAY DATA Sample No.	From	To	Rec. %	Sn	Sn(Sol)	As	WO_3	Cu	Pb	Zn	Ag	Sb

GOLD FIELDS EXPLORATION PTY. LIMITED

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PROJECT: TRIAL HARBOUR S.P.L. 129

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: T.H. 13

INTERVAL From'	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION
				locally recrystallized/directed.
				Accessories
				Rare fine-grained red, weakly colour-zoned sphalerite. Minor
				crosscutting siderite-calcite veinlets.
				Comments
				"Ankeritised" dolomite-breccia with accessory "syngenetic"
				pyrite supplemented by traces of secondary sphalerite.
				Petrological Description 94.0
				Classification - Composition
				Breccia. Corroded clasts of porcellaneous dolomite in a matrix
				of medium- to coarse-grained ankeritic carbonate with minor
				vugs, films of euhedral quartz. Pervasive late crosscutting
				ankerite carbonate films.
				Fabric
				Angular to irregular, millimetric to centimetric corroded
				clasts, mildly stressed matrix.
				Accessories
				Thinly disseminated fine-grained pyrite in clasts.
				Comments
				Ankerite-healed tectonic breccia with porcellaneous dolostone
				represented as clasts. Pyrite is of weakly recrystallized
				syngenetic character.
				Petrological Description 105.4m
				Classification- Composition
				Massive Sulphides. Semi- to near-massive galena with subord-
				inate to minor intergrown quartz and sparry sideritic carbonate

ASSAY DATA Sample No.	From	To	Rec. %	Sn	Sn(Sol)	As	WO_3	Cu	Pb	Zn	Ag	Sb

GOLD FIELDS EXPLORATION PTY. LIMITED

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PROJECT: TRIAL HARBOUR S.P.L. 129 **DRILL CORE LOG AND ASSAY DATA** HOLE NUMBER: T.H. 13 Page: 6.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION
				Fabric
				Medium-grained essentially massive (unbanded); unstressed.
				Accessories
				Traces of sphalerite.
				Comments
				"Massive" galena with quartz-siderite gangue. The accessory
				sphalerite is red/pale brown colour-mottled to weakly zoned.
				Mineragraphic Notes CMS 84/5/22 (P.S. 49917)
				Exhibits a continuous aggregate of medium-grained (mean about 500
				u) galena with interspersed single grains and clusters of quartz
				and minor carbonate. Minor sphalerite occurs as an- to subhedral
				grains (<50-500 u) intergranular to galena and at galena-silicate
				contacts. Traces of tetrahedrite are present as micro-inclusions
				(<20 u) in galena, isolated relatively carse (to 200 u) equant
				galena-intergranular blebs, and as sporadic discontinuous micro-
				scopric films (to 40 u in width) along galena-sphalerite contacts
				or, composite with galena, transecting sphalerite grains.
				Rare microscopic (<20 u) blebs of a Pb-sulphosalt, probably
				boulangerite were observed as inclusions in galena grains hosting
				tetrahedrite inclusions. This phase is partly concentrated on
				galena-tetrahedrite contacts and is too fine-grained and rare
				for positive optical determination.
				Two extremely fine (<10 u) particles of native silver were observ-
				ed as micro-inclusions in a galena grain hosting tetrahedrite
				and ?boulangerite inclusions.
				Petrographic Description 116.5m
				Classification - Composition
				Sideritic Pyrite Rock. Granular to sparry sideritic carbonate
				with relatively minor single grains, discontinuous films,

ASSAY DATA Sample No.	From	To	Rec. %	Sn	Sn(Sol)	As	WO_3	Cu	Pb	Zn	Ag	Sb

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PROJECT: TRIAL HARBOUR SPL 129

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: T.H. 13

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	ASSAY DATA Sample No.	From	To	Rec. %	Sn	Sn(Sol)	As	WO_3	Cu	Pb	Zn	Ag	Sb
				clots of poikilitic pyrite; minor quartz euhedra with zonally arranged siderite micro-inclusions.													
				Fabric Medium-grained, with pyrite concentrated at vague fracture intersections. Unstressed.													
				Accessories Rare single grains, loose clusters of red sphalerite.													
				Comments Weakly sphalerite-mineralised pyritic siderite (-quartz) rock. Typical Zeehan-type characteristics. Apparently a vein in absence of metasomatic features.													
				Petrological Description 119.0m. Siderite-Sphalerite Rock. Microcrystalline to semi-porcellaneous siderite with frequent small vugs, veinlets of coarser-grained siderite, more or less pervasively disseminated to semi-massive colour-zoned red-brown sphalerite.													
				Fabric Crudely banded on coarse scale with marginal weakly sphalerite-mineralised zones; discordant veinlets.													
				Accessories Traces of siderite-stained quartz. Thinly disseminated to locally conspicuous fine pyrite, traces of galena.													
				Comments Apparently a metasomatically sideritised banded "dolomite". Sphalerite is even-grained (mean 350-400 u), concentrated with vuggy, medium-grained siderite.													

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DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: TH 13

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION
148.3	165.5	17.1	99	ALTERED DOLOMITE
				Grey to blue/grey part silicified dolomite showing prominent pyritic stylolites. The unit which is decreasing in alteration downhole and is generally devoid of primary textures, shows possible primary layering in the lower part of the unit with the presence of a black silt component within the carbonate. These silt impurities has enhanced cleavage development which also have the appearance of bedding. At 162.3-165.5m ovoid and lensoi cream brown carbonate is interbedded with a green brown fine grained silt (of tuffaceous origin?) The following types of alteration occur within this unit.
				1. Recrystallization of the dolomite to a sugar texture.
				2. Silicification of specific zones (not apparently related to fractures.)
				3. Spotty (<1mm) alteration by dolomite/sericite? over coarse carbonate and silicified areas.
				4. Recrystallization of dolomite to coarse blades (<10mm) within silicified areas. This alteration also occurs in the vicinity of fractures and radiating from them.
				5. Overprinting veins of siderite which contain minor pyrite crystals of 1-3mm diameter.
165.5	206.5	41.0	86	INTERBEDDED DOLOMITIC SILTSTONE AND DOLOMITE
				Pale to dark grey interbedded dolomitic black siltstone consisting of zones of:
				a) tectonically deformed, chaotically bedded zones of lenticula black shale and dolomitic siltstone with lenticular zones of recrystallised dolomite veined by quartz.
				b) granular carbonate and quartz in a silt-carbonate matrix (possibly associated with sedimentary brecciation).
				c) Well bedded dolomite/dirty dolomites often abruptly terminated against black cleavage/sub stylolitic veins.
				d) Rehealed dolomitic breccias.
				This unit is veined by quartz veinlets (with hazy outlines) which have been subsequently overprinted by later dolomite

ASSAY DATA

Sample No.	From	To	Rec. %	Sn	Sn(Sol)	As	WO_3	Cu	Pb	Zn	Ag	Sb
12917	148.0	149.0	93	<10	<100	<10	20	10	200	3600	<1	<10
12918		150.0	100	<10	<100	<10	30	5	20	40	<1	<10
12919		151.0	100	<10	< 100	< 10	10	5	30	60	<1	<10
12920		152.0	100	<10	< 100	< 10	20	5	10	30	<1	<10
12921		153.0	100	<10	< 100	< 10	<10	5	20	30	<1	<10
12922		154.0	100	<10	< 100	< 10	20	5	10	20	1	<10
12923		155.0	100	<10	< 100	< 10	20	5	250	70	<1	<10
12924		156.0	100	<10	< 100	< 10	30	10	10	20	<1	<10

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DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: TH 13

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	ASSAY DATA Sample No.	From	To	Rec. %	Sn	Sn(Sol)	As	WO_3	Cu	Pb	Zn	Ag	Sb
				veins.													
				Only minor pyrite mineralization associated with a black shale bed occurs at 191.4m.													
				BCA's for the unit which vary 0-20° are not considered accurate due to partial stylolitic development.													
206.5	220.25	13.25	100	DOLOMITIC SILTSTONE													
				Cream grey well bedded dolomitic siltstone (2-8mm) interbedded with grey green siltstone, minor chert and grey black shales. Beds are often discontinuous terminated by microfaulting associated with folding. Veins of quartz (1-10mm wide) occur throughout.													
				BCA's 206.0 - 215.6m : 0-10°													
				215.6 - 220.6m : 30° increasing to 45° downhole.													
220.25	243.7	22.2	95	GREY/BLACK SHALE													
				Grey/black, partly graphitic, interbedded with laminae (1-2mm) of grey silty sand which is partly dolomitic. The unit is highly cleaved and tightly folded in places. Quartz veins varying in width of 5-40mm occur throughout. Due to deformation these veins also occur as pods and lenses. Dolomite veinlets (< 3mm width) which overprint the metamorphic quartz veins also occur throughout. There is no mineralisation within this unit except for a 1cm band at 233.4m of "granular" pyrite within a black shale breccia.													
				BCA's 220.0-223.2m : 20-30°													
				-224.3m : 0-20°													
				-225.6m : 20-30°													
				-226.6m : contorted													
				-228.0m : 30°													
				-230.0m : contorted													
				-231.0m : 20°													
				-232.0m : contorted													
				-233.0m : 30-40°													
				-235.0m : contorted													

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DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: TH 13

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	ASSAY DATA Sample No.	From	To	Rec. %	Sn	Sn(Sol)	As	WO_3	Cu	Pb	Zn	Ag	Sb
				-237.0m : 30°													
				-239.6m : 40°													
				-242.0m : contorted													
				-242.6m : 50°													
				-243.0m : contorted													
				-243.7m : 40°													
243.7	272.8	29.0	98	BLACK GRAPHITIC SHALE Black graphitic shale containing 1-5% very fine grained disseminated pyrite, pyrite as distinct laminae <1mm thick, parallel to cleavage and syngenetic pyrite as lenses <10 mm thick. Original bedding within this unit has not been preserved. Occasional boudins, lenses and pods of grey greywacke which occur wholly within the black shale, are remnant fold limbs within this highly cleaved and deformed unit. Towards the base of the unit the shale contains zones of irregular shaped clasts of dolomite, dolomitic siltstone and dolomitic grit breccias with <10% black shale matrix. Large dolomitic clasts abutting each other have black stylolitic boundaries. Quartz veins are rare but where present are fractured and filled by dolomite tension veins which also contain occassional pyrite honey colour sphalerite and galena. Dolomite veins occur throughout.												
272.8	389.4	116.6	99.5	DOLOMITE 272.8-287.0m : Grey dolomitic conglomerate/breccia with grey and minor cream, chaotically assembled, angular to sub rounded, part recrystallised dolomite clasts. The matrix is partially silicified and stylolites containing disseminated pyrite occur throughout. Extensive veining by quartz and minor dolomite veinlets. 287.0-313.1m: Grey well bedded dolomitic siltstone, dolomitic grit and minor chert. The beds are laminar to lensoid and vary in thickness from 1mm to 10mm for the siltstone and grit horizons and up to 40 cms dolomitic breccia/conglomerate												

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DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: TH 13

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION
				horizons. Stylolites occur throughout with some parallel to bedding. Veins of quartz/dolomite throughout. Unmineralized except for minor pyrite within a cream brown dolomite vein at 309.0m.
				313.1-325.6m: Grey dolomitic breccia as described for 272.8-287.0m. The unit is extensively silicified with numerous quartz and dolomite quartz veins.
				325.6-335.2m : Bedded dolomite
				-336.7m : Dolomitic conglomerate
				-337.4m : Bedded dolomite
				-339.6m : Conglomerate
				-345.8m : Bedded dolomite with minor black shale.
				-382.2m : Dolomitic conglomerate grit, generally massive but variation in clast size (1-10mm) gives an occasional bedding surface. The unit is variably silicified with numerous stylolites which contain up to 5% pyrite.
				-386.6m : Interbedded dolomitic grits with black shales (5-10%). Dolomitic grit beds of up to 1m thick show cyclical variation in grain size. Stylolites vary from conformable to bedding to irregular shaped.
				-389.4m : Dolomitic grit. 1-5% pyrite occurs within stylolites, and pyrite also occurs as a 1cm thick lens at 389.0m
				BCA's at 287.0-313.1m: 30-40° 345.5-365.1m : 60°
				-326.5m: 40° -367.0m : 50°
				-327.3m: 20° -378.2m : 40°
				-330.2m: 30° 382.3 -384.0m : 40°
				-332.0m: 40° -385.8m: 40°
				-337.4m: 30°
				-340.0m: 30°
				-344.0m: 40°
				-345.0m: 20°
				-345.5m: 5-10°

ASSAY DATA Sample No.	From	To	Rec. %	Sn	Sn(Sol)	As	WO_3	Cu	Pb	Zn	Ag	Sb

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DRILL CORE LOG AND ASSAY DATA

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INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	ASSAY DATA Sample No.	From	To	Rec. %	Sn	Sn(Sol)	As	WO_3	Cu	Pb	Zn	Ag	Sb	Au
389.4	396.7	7.3	100	BLACK GRAPHITIC SHALE														
				As described for 243.7-272.8m with minor laminae of grey														
				dolomitic siltstone, dolomitic greywacke and dolomitic conglomerate.														
				Veins of quartz, dolomite with minor pyrite throughout.														
				BCA at 391.8m : 40° facing uphole (graded bedding).														
396.7	398.9	2.2	100	INTERBEDDED BLACK SHALE AND DOLOMITIC GRITS														
				As described for 382.2-386.6m. Stylolites parallel to bedding														
				show dissolution postdating some of the dolomite/quartz veins while														
				predating others.														
				BCA's at 396.2-399.0m: 30-40°														
398.9	418.2	19.3	100	DOLOMITE														
				398.9-399.7m : Dolomitic breccia with irregular shaped clasts	12925	410.0	411.0	100	<10	<100	<10	<10	20	130	20	<1	<10	
				of well bedded dolomitic siltstone, coarse crystalline (vein	12926		412.0	100	<10	<100	90	60	20	7300	220	14	20	
				type?) dolomite and dolomitic grits initially (uphole) in a	12927		413.0	100	<10	<100	90	20	70	6000	170	12	10	
				matrix of black shale then dolomite.	12928		414.0	100	<10	<100	350	90	5	2.5%	460	42	70	<0.01
				399.7-414.9m: Generally massive dolomite grit/sandstone with	12929		415.0	100	<10	<100	30	10	5	3920	40	2	<10	
				only minor variation in grainsize. Stylolites are not frequent.	12930		416.0	100	<10	<100	<10	40	5	350	50	<1	<10	
				Strongly veined by quartz (dolomite) veins. Intense quartz	12931		417.0	100	<10	<100	<10	30	<5	50	30	<1	<10	
				dolomite veining with associated veinlets of quartz, pyrite, galena,	12932		418.2	100	<10	<100	<10	20	10	100	30	<1	<10	
				chalcopyrite and minor sphalerite.														
				414.9-418.2m: Interbedded flaser bedded black shale and dolomitic														
				siltstone and grits. Bedding is lenticular. In places disrupted														
				grit zones contain lenticular clasts of black shale. Minor quartz														
				dolomite veinlets occur.														
				BCA's 415.2m: 40°														
				416.4-417.0m: 0-10°														
				-417.2m: 30°														
				-418.0m: 10°														
418.2	421.0	2.8	100	Quartz dolomite vein. Massive quartz dolomite vein with 10-	12933	418.2	419.0	100	40	<100	<10	20	10	20	20	<1	<10	
				20% fractured and veined dolomite stylolites are well developed	12934		420.0	100	<10	<100	<10	<10	25	150	50	<1	<10	
					12935		421.0	100	<10	<100	<10	30	15	280	50	<1	<10	

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DRILL CORE LOG AND ASSAY DATA

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INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	ASSAY DATA Sample No.	From	To	Rec. %	Sn	Sn(Sol)	As	WO_3	Cu	Pb	Zn	Ag	Sb
				throughout. No significant sulphide mineralization.	12936		422.0	100	<10	<100	<10	<10	15	130	20	<1	<10
421.0	431.2	11.2	100	DOLOMITE													
				421.0-424.6m : Massive dolomite as for 399.7-414.9m													
				424.6-431.2m: Bedded dolomite with minor lenticular chert horizons and stylolite development on bedding. Minor quartz dolomite veins.													
				BCA's 425-431.2m : 0-10m (buckle folding).													
				Magnetic Susceptibility ($x10^{-3}$ c.g.s. units)													
				0 - 73.0m 0.0 where measurable													
				73.0 - 75.0m 0.1													
				75.0 - 75.3m 0.2													
				75.3 - 82.5m 0.1													
				82.5 - 87.0m 0.0													
				87.0 - 90.0m 0.1													
				90.0 - 95.0m 0.0 with spotty 0.1													
				95.0 - 105.8m 0.0													
				105.8 - 109.3m 0.1													
				109.3 - 110.5m 0.0 with spotty 0.1													
				110.5 - 118.0m 0.0													
				118.0 - 119.3m 0.2													
				119.3 - 121.3m 0.1													
				121.3 - 128.0m 0.0													
				128.0 - 129.0m 0.1													
				129.0 - 131.5m 0.0													
				131.5 - 132.0m 0.1													
				132.0 - 133.3m 0.0													
				133.3 - 135.0m 0.1													
				141.9 - 148.2m 0.2													
				148.2 - 148.4m 0.3													
				148.4 - 155.3m 0.1													
				155.3 - 177.0m 0.0													
				177.0 - 177.2m 0.2													
				177.2 - 185.0m 0.0													

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PROJECT: TRIAL HARBOUR SPL 129

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: TH 13

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INTERVAL		RECOVERY		DESCRIPTION		ASSAY DATA															
From	To	m	%			Sample No.	From	To	Rec. %												
				185.0 - 187.8m	0.0 spotty 0.1																
				187.8 - 238.0m	0.0																
				238.0 - 239.0m	0.1																
				239.0 - 365.5m	0.0																
				365.5 - 369.5m	0.0 spotty 0.1																
				369.5 - 429.1m	0.0																
				429.1 - 431.2m	0.1																

D FIELDS EXPLORATION PTY LIMITED
DRILL CORE RECORD

249192

HOLE NO: TH 13
STATE : TAS.

REPORT CMS 84/5/38

Summary

The nine Stonehenge cores (TH 13) reflect a sequence of variably altered impure dolomite with intercalated impure chert. These rocks are more or less pervasively weakly carbonaceous and syngenetic-pyritic. Relatively unaltered zones (represented by 297.4 m and in part by 317.8 m samples) carry microcrystalline dolomite as the primary carbonate, there being no tangible evidence of a dolomitised limestone paragenesis. In this sense these rocks may be contrasted with the petrologically similar Gordon Limestone, where dolomite is strictly diagenetic and cherty facies are partly represented.

In common with previously described examples, these rocks exhibit a characteristic alteration pattern, with the primary dolomite replaced by variously ankeritic to sideritic carbonate. There is good evidence that ankeritic carbonation predates siderite, but individual rocks may exhibit subtle variations in replacive carbonate mineralogy. Thus, magnesitic carbonate is developed locally. Further, replacive carbonates, in general, are manganiferous, as confirmed by chemical tests.

A few rocks exhibit stress effects or tectonic brecciation, and these permit definition of ankeritic assemblages as pre-deformational and siderite as developing broadly contemporaneously with deformation.

Dolomites, and their altered variants carry traces of pyrite. This accessory syngenetic sulphide component is supplemented at 413.3 m by carbonate vein-hosted disseminations of galena, pyrite and traces of sphalerite. This vein-carbonate is a mangansiderite, contrasting optically with unmineralised siderite veins and replacements developed elsewhere. As previously (CMS 84/5/22), this mineralisation exhibits Zeehan-type characteristics. There are no specific assemblages which would bear analogy with the Renison situation, with silica-metasomatism notably absent.

D. Cowan, B. Sc.

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GOLD FIELDS EXPLORATION PTY. LIMITED
DRILL CORE RECORD

HOLE NO. : T.H. 14
STATE : TASMANIA

PROJECT	TRIAL HARBOUR
DESIGNED BY	P. KOMYSHAN
LOGGED BY	P. KOMYSHAN
COMMENCED	28/4/84
COMPLETED	2/5/84

PURPOSE

To test a strong combined Pb-Zn-Cu-As-WO_3 anomaly coincident with an outcrop of brecciated limonitic sandstone and a strong V.L.F. anomaly

LOG SUMMARY

0- 37.8m : Weathered siltstone and shale.
- 48.6m : Weathered fault zone.
- 55.1m : Black Shale.
- 58.7m : Fault Zone
- 67.35 : Dolomitic siltstones and shales
- 68.5m : Breccia
-125.7m : Silty Sandstone and Black Shale
-170.0m : Sandstone

GENERAL COMMENTS

ASSAY SUMMARY

INTERVAL From	INTERVAL To	Sn	Sn(Sol)	As	WO_3	Cu	Pb	Zn	Ag	Sb				COMMENTS
37.8	48.5	<0.01%	<100ppm	<0.01%	<0.01%	0.01%	0.12%	0.04%	2 ppm	<10 ppm				Fault Zone
55.1	58.7	<0.01%	<100ppm	<0.01%	<0.01%	<0.01%	0.02%	0.05%	1 ppm	<10 ppm				Fault Zone
143.1	147.0	<0.01%	<100ppm	0.03%	<0.01%	<0.01%	0.24%	0.01%	7 ppm	20 ppm				Veins within sandstone

LOCATION

NORTHING	5,359840.747
EASTING	359,317.854
R.L.	325.362m
GRID	A.M.G.
LENGTH	170.0m

HOLE CONDITION

SIZE Hole Size	SIZE Depth
HQ	8.0m
NQ	64.0m
BQ	170.0m

SIGNIFICANT CORE LOSS INTERVALS From	To	% Lost

POOR GROUND CONDITION ZONES From	To	Condition

HOLE CONDITIONS AFTER COMPLETION

OPEN

SURVEY DATA (Note: Bearing type must be same as Project Grid Type)

SURVEY Depth	Bearing	Dip	INTERVAL From	To	Distance	VERTICAL D.Sin.Dip	R.L.	HORIZONTAL D.Cos.Dip	Prog.Total	SURVEY Depth	Bearing	Dip	INTERVAL From	To	Distance	VERTICAL D.Sin.Dip	R.L.	HORIZONTAL D.Cos.Dip	Prog.Total
0	202°	-55°	0.0	34.5	34.5	28.26	297.10	19.79	19.79										
69	203°	-56°	34.5	84.0	49.5	41.04	256.06	27.68	47.47										
99	204°	-55.5°	84.0	118.5	34.5	28.43	227.63	19.54	67.01										
138	204°	-55.5°	118.5	153.0	34.5	28.43	199.20	19.54	86.55										
168	205°	-56°	153.0	170.0	17.0	14.09	185.10	9.51	96.06										

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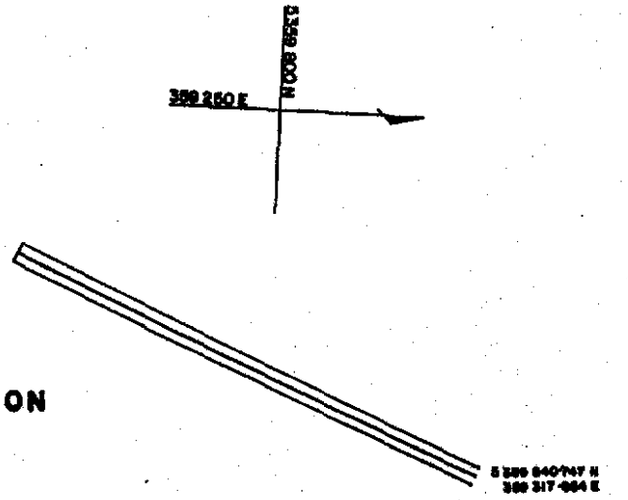
DIAMOND DRILL HOLE PLOT

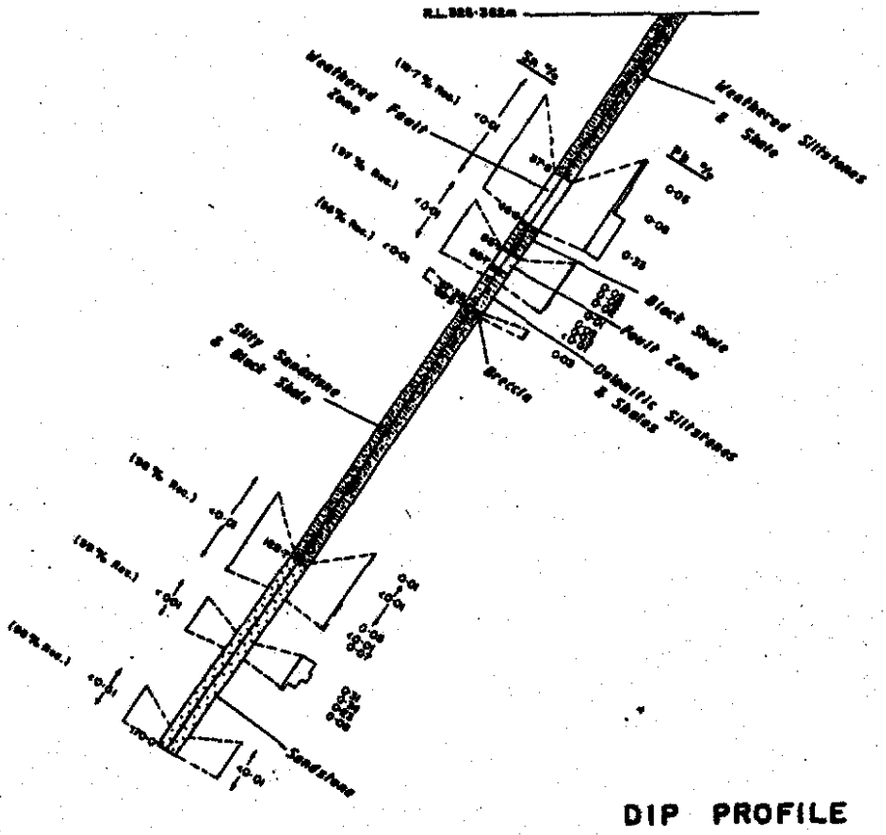
HOLE NO. TH 14

SCALE 1:1000

5 cm



PLAN SECTION



DIP PROFILE

GOLD FIELDS EXPLORATION PTY. LIMITED

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PROJECT: TRIAL HARBOUR

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: T.H. 14 Page: 1.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	ASSAY DATA Sample No.	From	To	Rec. %	Sn	Sn(sol)	As	WO_3	Cu	Pb	Zn	Ag	Sb
0	37.8	8.7	23	Weathered Siltstones and Shales Weathered grey to black, highly cleaved, laminated siltstones and shales containing zones of poor or no recovery (after carbonate?). Joints and fractures on the shale are limonite stained with some bleaching away from joints. Veins of massive milky quartz with hematite staining occur at 1.0m, 4.0-6.0m, 10.3-11.1m, 13.8-14.0m and 23.0-23.3m. Minor veinlets of quartz contain limonitic gossan?													
37.8	48.6	1.8	16.7	Weathered Fault or Mineralized Zone	12989	37.8	41.0	12.5	10	<100	10	50	110	530	350	2	10
				Includes													
				37.8-38.1m : Grey clay plug (after carbonate?) with disseminated pyrite	12990		44.0	20	10	<100	70	30	120	840	360	2	<10
				38.1-44.0m : Grey massive dolomite extensively fractured, pitted and limonite stained containing cross-cutting veinlets of limonitic gossan.	12991	41.0	48.5	53	<10	<100	90	130	25	3310	780	3	<10
				44.0-47.0m : Cavity.													
				47.0-48.0m : Milky quartz vein.													
				48.0-48.5m : Black shale interlaced with boxwork gossan veins.													
48.6	55.1	4.85	75	Black Shale Black graphitic, pyritic shale highly cleaved and in places tightly folded pods and lenses of pyrite throughout. The rock has been successively veined by: a) fine veinlets of quartz. b) pyritic quartz lenses parallel to and subparallel to bedding. c) quartz, pyrite, with minor carbonate veins of variable thicknesses. d) limonite gossan veinlets. B.C.A.'s at 52.0m : 60° 53.5m : 50°													

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GOLD FIELDS EXPLORATION PTY. LIMITED

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PROJECT: TRIAL HARBOUR

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: T.H. 14 Page: 2.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION
55.1	58.7	3.5	97	Fault Zone?
				55.1-55.8m : Pyritised, sericitised, chloritised breccia of sub-
				angular to subrounded clasts of siltstone, altered basic
				volcanics, carbonate (dolomite?) and minor syngenetic pyrite
				and sandstone in a chloritic, pyritic, dolomitic? matrix.
				Also includes two 10cm zones of dominantly dolomitic matrix
				which have been apparently replaced by pyrite and then subsequent-
				ly veined by calcite with minor chlorite. Minor zones of
				tourmalinisation 10-20%, disseminated pyrite throughout.
				Petrological Description 55.4m
				Classification - Composition
				Altered "Breccia". Sparry ankeritic carbonate, fine-grained
				quartz and sericite in varying proportions with a poorly
				defined framework of quartzose psammopelite, carbonaceous
				pelite clasts. Disseminated fine pyrite. Sporadic late
				veins, films of kaolin, barite.
				Fabric
				Obscured by alteration but essentially weakly banded sandy
				clastic with boudinaged shaley partings.
				Accessories
				Minor clasts of re-crystallized chert. Traces of fine to
				ultrafine metasomatic dravite, green schorl.
				Comments
				Weakly brecciated/thoroughly carbonate-quartz-sericite-
				altered lithic sandstone. Pyrite is recrystallized "syngenetic";
				predates alteration.
				Petrological Description 55.5m
				Classification - Composition
				Altered Breccia. Clasts of variably pyritic/weakly carbonaceous,
				ankeritic carbonate-stained to chloritic, tourmalinised

ASSAY DATA Sample No.	From	To	Rec. %	Sn	Sn(Sol)	As	WO_3	Cu	Pb	Zn	Ag	Sb
12892	55·1	55·8	97	20	<100	40	30	30	480	1090	1	<10
12893		56·2	97	<10	<100	20	40	35	160	370	<1	<10
12894		56·8	97	10	<100	<10	10	<5	180	470	1	<10
12895		58·1	97	10	<100	<10	30	5	120	280	1	<10

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PROJECT: TRIAL HARBOUR

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: T.H. 14

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	ASSAY DATA Sample No.	From	To	Rec. %	Sn	Sn(Sol)	As	WO_3	Cu	Pb	Zn	Ag	Sb
				and sericitic pelite. Fine-grained, schorl-stained chlorite-quartz matrix. Minor vugs, veinlets of barite.													
				Fabric Semi-mylonitic, breccia-like with random, semi-orientated clasts, featureless matrix.													
				Accessories Minor incipient Fe-oxide stainings in carbonate.													
				Comments Affinities with 55.4m, but distinctly brecciated in comparison. Deformation postdates tourmaline-sericite-chlorite (after ?phlogopite) alteration of pyritic pelite.													
				55.8-56.2m : Black graphitic shale with pods of quartz-carbonate.													
				56.2-56.8m : Green chloritised dolomitised breccia. Apparently layered with variably chloritized zones, spotty dolomitic alteration and disseminated pyrite (1-2%). Later veined by quartz.													
				Petrological Description 56.3m Classification - Composition Altered Breccia. Clasts, zone of chloritic/ankeritic carbonate-stined orthoquartzite interspersed with chloritised, weakly schorl-ankerite-stained shale and quartzose silty to fine sandy shale.													
				Fabric Throroughly stressed to sheared/semi-mylonitic intercalation of fine-medium sandstone, pelite.													

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GOLD FIELDS EXPLORATION PTY. LIMITED

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PROJECT: TRIAL HARBOUR

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: T.H. 14 Page: 4.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	ASSAY DATA Sample No.	From	To	Rec. %	Sn	Sn(Sol)	As	WO_3	Cu	Pb	Zn	Ag	Sb
				Accessories													
				Patchy, weakly hematite-stained secondary fine-grained quartz.													
				Comments													
				Chlorite-quartz (-schorl)-altered quartzose psammopelite; stressed to sheared/semi-brecciated and moderately carbonated/ silicified.													
				56.8-57.0m : Milky quartz and dolomite vein with minor chlorite and disseminated pyrite (1%).													
				57.0-58.7m : Grey quartzite with veinlets of quartz-chlorite with carbonate throughout and major veins of quartz, pyrite and chlorite at 58.1-58.2m and 58.6-58.7m.													
58.7	61.2	2.4	96	Weathered Dolomitic Siltstones	12896	58.7	59.1	96	20	<100	<10	30	5	470	630	<1	10
				Pale brown dolomitic siltstones subsequently veined by quartz	12897		59.3	96	<10	<100	20	30	10	270	280	1	<10
				chlorite veins with minor coarse grained pyrite and chlorite	12898		60.2	96	<10	<100	<10	50	<5	290	290	1	<10
				dolomite veinlets. This unit includes a dolomitic sandstone	12899		61.2	96	<10	<100	<10	40	5	80	140	<1	<10
				which contains a 1 cm wide lens of pyrite replacing the dolomite? at 60-5-60.6m.													
				59.1-59.3m : Dolomite, quartz, pyrite (2-5%), chlorite breccia zone.													
				61.1-61.2M : Dolomite chlorite vein.													
				B.C.A. at 60.5m - 45°													
61.2	67.35	6.1	99	Predominantly Black Shales													
				Initially 61.2-62.7m interbedded, laminated black shale and siltstone grading to a pyritic black shale with grpahitic horizons, highly cleaved with minor tight microfolds. Veinlets of chlorite-pyrite with minor carbonate trhoughout.													
				61.5-61.6m : Quartz, dolomite, chlorite and minor pyrite 1-2% vein.													

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GOLD FIELDS EXPLORATION PTY. LIMITED

DRILL CORE LOG AND ASSAY DATA

PROJECT: TRIAL HARBOUR HOLE NUMBER: T.H. 14 Page: 5.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	ASSAY DATA Sample No.	From	To	Rec. %	Sn	Sn(Sol)	As	WO_3	Cu	Pb	Zn	Ag	Sb
				62.5m : 5cm bed of green chloritsed spotty rock which was originally a basic tuff.													
				B.C.A'S at 62.2m : 60°													
				64.5m : 50°													
				67.0m : 60°													
67.35	68.5	1.1	96	Breccia.													
				Green chloritised, dolomitised rock consisting of altered layered zones of basic tuff?, sugar textured dolomite, chlorite, pyrite lenses and pyrite fraboids. This rock has been subsequently veined by quartz, dolomite, pyrite, chlorite veins.	12900	67.35	68.5	96	10	<100	20	30	5	330	650	1	<10
68.5	125.7	56.15	98	Silty Sandstone and Black Shale	12901	124.1	125.7	98	<10	<100	50	40	5	120	90	1	<10
				Grey silty sandstone and black shale occurring generally as laminated beds of (1mm-5mm) with thicker sandstone and shale beds of up to 2 metres occuring. Syngenetic pyrite occurs as lenses and fraboids within the black shale. At 77.0m - 79.5m dolomitic siltstone is interbedded with sandstone. Quartz, dolomite, pyrite with minor sphalerite veins occur throughout. These are postdated by chlorite and dolomite with occasional pyrite veins which are prominent up to 77.0m. At 76.9m and 77.7m 10 cms wide pyritic chloritsed breccia or conglomerate zones occur. Massive milky quartz veins occur at 86.1-86.3m, 88.7, 107.0-107.3m, 122.0m, 124.2m.												
				B.C.A.'S at 70.0m : 70° 89.5-91.2m : 80-90°													
				71.0-75.0m : 80° 91.2-93.3m : contorted													
				75.3-76.0m : 60° 93.3-94.5m : 70-80°													
				77.5-85.0m : 80° 94.5-95.0m : 60°													
				85.1-86.0m : 80° 95.0-97.5m : 80°													
				86.2-86.5m : 70° 101.7-102.0 : 45°													
				86.5-88.9m : 80° 102.0-105.0 : 60°													
				88.9-89.5m : 70° 105.0-108.0 : 60°													

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PROJECT: TRIAL HARBOUR

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: T.H. 14 Page: 6.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	ASSAY DATA Sample No.	From	To	Rec. %	Sn	Sn(Sol)	As	WO_3	Cu	Pb	Zn	Ag	Sb
				B.C.A.'S at 109.0-110.0m : 70-80°													
				110.0-114.0m : folded with axial cleavage													
				115.9-116.9m : 70°													
				116.9-119.9m : 20-30°													
				119.9-122.2m : folded.													
				122.2-122.6m : 10°													
				122.6-123.6m : 45°													
				123.6-124.9m : contorted.													
				124.9-125.7m : 40-60°													
				Petrological Description 106.0m													
				Classification - Composition													
				Siderite Rock. Granular to sparry siderite with an interspersed band of granular to euhedral quartz. Disseminated siderite- and quartz- intergranular colour-zoned red-brown sphalerite crystals.													
				Fabric													
				Medium- to coarse- grained banded; crustiform-textured													
				Accessories													
				Traces of galena, rare pyrite euhedra in carbonate.													
				Comments													
				Crustiform-banded vein-type characteristics. Sphalerite is intricately coloured-zoned with red (Fe-rich) core and submarginal zones.													
125.7	170.0	44.85	99.0	Sandstone	12902	125.7	126.8	100	<10	<100	40	10	<5	30	40	41	<10
				Predominantly grey sandstone with zones of interbedded black	12903		127.8	100	10	<100	10	90	5	10	30	1	<10
				shale and sandstone. The sandstone is grey with a uniform	12904		128.8	100	10	<100	230	10	10	20	30	1	<10
				grain size and contains minor wisps of black mica. Within	12905		130.0	100	<10	<100	30	30	5	10	100	1	<10
				the interbedded sandstone/shale horizons some graded bedding	12906		131.4	100	20	<100	40	40	<10	520	90	9	<10
				and minor role structures are observed. Metamorphic veinlets	12907		132.4	100	<10	<100	20	20	15	40	60	2	<10
				of milky quartz occur throughout the sandstone beds. Superimposed	12908		133.0	100	10	<100	1480	40	15*	710	160	2	20

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GOLD FIELDS EXPLORATION PTY. LIMITED

PROJECT: TRIAL HARBOUR

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: T.H. 14 Page: 7.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	ASSAY DATA Sample No.	From	To	Rec. %	Sn	Sn(Sol)	As	WO₃	Cu	Pb	Zn	Ag	Sb
				are veinlets of dolomite/chlorite containing occasional pyrite.													
				These veinlets appear to be more prevalent in the vicinity	12909	143.1	144.0	97	20	<100	600	20	125	3050	60	17	50
				of breccia zones and larger milky quartz veins. These dolomite	12910		145.0	97	20	<100	210	40	20	3470	390	4	20
				veins occur as pervasive veins, short fracture fill tension	12911		146.0	97	10	<100	230	20	15	2250	90	6	10
				veins and as minor spotty disseminated alteration.	12912		147.0	97	10	<100	70	40	5	900	30	1	<10
				Mineralization is confined to minor syngenetic pyrite within	12913	166.0	167.0	98	<10	<100	20	10	20	40	140	1	<10
				black shale and pyrite framboids in sandstone at 125.7-126.8m.	12914		168.0	95	<10	<100	10	30	15	<10	40	<1	10
				132.8-132.9m : Breccia zone with a pyrite galena, dolomite	12915		169.0	97	<10	<100	10	10	10	<10	10	<1	<10
				vein overprinting earlier but minor; pyrrhotite mineralization.	12916		170.0	95	10	<100	10	30	<5	<10	10	<1	<10
				132.4-132.5m : quartz (chlorite) vein.													
				143.1-143.2m : milky quartz vein.													
				143.2-143.4m : massive pyrite and quartz vein in contorted													
				black shale.													
				B.C.A.'s at													
				128.8m : 80° downhole facing (sole structures)													
				129.3m : 90°													
				130.5m : 80° downhole facing (graded bedding)													
				131.4m : 70-80°													
				131.7m : 60° downhole facing (graded bedding)													
				133.4m : 70° uphole? facing (graded bedding)													
				134.2m : 70°													
				141.9m : 60° downhole facing (graded bedding)													
				142.6m : 60°													
				143.2-143.4m : Breccia Zone													
				145.7m : 60°													
				147.8m : 70°													
				148.7m : 60°													
				152.8m : 60-70°													
				154.8m : 60° downhole facing (graded bedding, and flame structures)													
				155.5-155.8m : contorted													
				155.9m : 50°													
				156.7m : 60° uphole facing(graded bedding,sole structures)													
				157.9m : 60° uphole facing? (graded bedding)													

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PROJECT: TRIAL HARBOUR

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: T.H. 14 Page: 8.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	ASSAY DATA Sample No.	From	To	Rec. %
				159.3m : 60°				
				160.9-161.2m : folded				
				161.4m : 70°				
				162.8m : 60° uphole facing (graded bedding)				
				166.5m : 50°				
				167.8m : 10°				
				168.8m : 25°				
				Petrological Description 132.9m.				
				Classification - Composition				
				Breccia. Clasts of vein-quartz, variably carbonaceous/pyritic sericitic pelite, quartzose psammopelite veined with Fe-chlorite + siderite, minor sulphides. Matrix of sparry sideritic carbonate with sporadic vugs of chlorite.				
				Fabric				
				Random angular clasts, chlorite-siderite-veined, refractured and siderite (-chlorite)-matrixed.				
				Accessories				
				Traces of arsenopyrite, galena as fine-grained impregnations in chlorite aggregates, veinlets.				
				Comments				
				Reflects multistage brecciation and veining with a barren quartz/weakly mineralised chlorite-siderite/barren siderite-chlorite vein sequence.				
				Petrological Description 151.9m.				
				Classification - Composition				
				Veined Pelite. Weakly recrystallized silt sized quartz, semi-sericitic white mica in varying proportions with pervasive carbonaceous matter. Sporadic irregular veinlets of quartz, Fe-chlorite, siderite with films of marcasite.				

249203

GOLD FIELDS EXPLORATION PTY. LIMITED

ULV. PRESS

PROJECT: TRIAL HARBOUR

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: T.H. 14

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	ASSAY DATA Sample No.	From	To	Rec. %
				Fabric				
				Stressed, incipiently shale-parted siltstone with millimetric-scale shale interbeds; displacive veinlets.				
				Accessories				
				Minor late crosscutting displacive quartz veinlets. Traces of "syngenetic" pyrite.				
				Comments				
				Chloritic veins analogous to those at 132.9m, zoned with chloritic margins/carbonate core zones in vugs connected by films of quartz.				
				Summary Report CMS 84/5/22				
				*				
				Stonehenge cores reflect a sequence of altered carbonate- and carbonaceous psammopelitic sediments, reminiscent of the Renison Mine sequence, and complexed by variably mineralised sideritic carbonate veins and replacements, and elsewhere (TH 14) by chloritic breccia zones.				
				Alteration assemblages are dominated by sideritic to ankeritic carbonates with the ankeritic types concentrated in relatively weakly sulphide mineralised zones. Pelitic rocks are locally partly tourmalinised with the contact-metasomatic effects predating a brittle deformation phase and near-contemporaneous Fe-carbonation. Metasomatic and vein carbonate-hosted, disseminated to near-massive sulphides comprise a galena-sphalerite-rich assemblage with traces of tetrahedrite and Pb-sulphosalts. There are marked affinities with the Zeehan-type sideritic Pb-Zn-Ag association.				
				Magnetic susceptibility (x 10^{-3} c.g.s units)				
				0 - 170.0m 0.0 except for				
				132.8m 0.1				
				147.0- 147.5m 0.1				

GOLD FIELDS EXPLORATION PTY. LIMITED

DRILL CORE RECORD

249204

HOLE NO. : TH 15
STATE : TASMANIA

PROJECT	TRIAL HARBOUR
DESIGNED BY	P.A. ROBERTS
LOGGED BY	P. KOMYSHAN
COMMENCED	11/7/84
COMPLETED	21/8/84

PURPOSE

To test at depth, altered dolomites and Pb-Zn mineralization encountered in TH 13

LOG SUMMARY / GENERAL COMMENTS

0- 61.4m : Quartzite
-206.0m : Fault zone (Breccia & Clay)
-240.8m : Interbedded black shales & Dolomite
-305.7m : Black Shale & Siltstone
-369.2m : Interbedded black shale & dolomite
- 464.1m : Black Shale
-487.3m : Interbedded black shale & dolomite
-508.85 : Dolomite
-518.6m : Black Shale
-521.6m : Mineralized zone
-557.8m : Dolomite
-563.75m: Mineralized Fault Zone
-599.0m : Dolomite and minor black shale.

ASSAY SUMMARY

INTERVAL From	INTERVAL To	Sn	Sn(Sol)	As	WO_3	Cu	Pb	Zn	Ag	Sb				COMMENTS
61.4	74.0	<0.01%	<0.01%	0.02%	<0.01%	0.02%	0.37%	0.26%	9 ppm	0.01%		17.5% Recovery		Limonitic gossan
74.0	99.0	<0.01%	<0.01%	0.03%	<0.01%	<0.01%	0.26%	0.18%	6 ppm	0.01%		27% Recovery		Weathered Breccia
99.0	100.5	<0.01%	<0.01%	0.04%	<0.01%	<0.01%	0.41%	0.35%	1 ppm	0.25%		44% Recovery		Limonitic breccia
167.0	191.0	<0.01%	<0.01%	0.01%	<0.01%	<0.01%	0.27%	0.54%	<1 ppm	0.04%		29% Recovery		Clay and limonitic breccia
557.8	563.75	<0.01%	<0.01%	0.43%	0.01%	0.08%	0.22%	0.12%	35 ppm	0.05%		100% Recovery		Mineralized Fault Zone

LOCATION

NORTHING	5,359,695.0
EASTING	360,249.0
R.L.	2308.5
GRID	A.M.G.
LENGTH	599.0m

HOLE CONDITION

SIZE Hole Size	SIZE Depth
HQ	48.0
NQ	208.0
BQ	599.0

SIGNIFICANT CORE LOSS INTERVALS From	To	% Lost
0.8	61.4	50
61.4	124.5	68
147.0	167.0	98
167.0	178.5	57.5
178.5	200.6	91

POOR GROUND CONDITION ZONES From	To	Condition
61.4	200.6	Broken core and numerous cavities.

HOLE CONDITIONS AFTER COMPLETION

The hole was blasted at 180m, 150m, 125m and 108m to free NQ casing and may be partly collapsed in these areas. The first 60m are open.

SURVEY DATA (Note: Bearing type must be same as Project Grid Type)

SURVEY Depth	SURVEY Bearing	SURVEY Dip	INTERVAL From	INTERVAL To	INTERVAL Distance	VERTICAL D.Sin.Dip	VERTICAL R.L.	HORIZONTAL D.Cos.Dip	HORIZONTAL Prog.Total	SURVEY Depth	SURVEY Bearing	SURVEY Dip	INTERVAL From	INTERVAL To	INTERVAL Distance	VERTICAL D.Sin.Dip	VERTICAL R.L.	HORIZONTAL D.Cos.Dip	HORIZONTAL Prog.Total
0.0	201°	-59.6°	0.0	25.0	25.0	21.56	2286.94	12.65	12.65	509.0	190.5	-53.2°	462.0	552.0	90.0	72.07	1837.2	53.91	283.15
50.0	in casing	-60.8°	25.0	75.0	50.0	43.65	2243.29	24.39	37.04	595	188.5	-52.0°	552.0	599.0	47.0	37.04	1800.17	28.94	314.09
100.0	in casing	-62.0°	75.0	120.0	45.0	39.73	2203.56	21.13	58.17										
140.0	in casing	-62.1°	120.0	160.0	40.0	35.45	2168.21	18.72	76.89										
180.0	in casing	-62.0°	160.0	200.0	40.0	35.32	2132.99	18.78	95.66										
220.0	198.4°	-63.0°	200.0	240.0	40.0	35.64	2097.25	18.16	113.82										
260.0	194.4°	-60.9°	240.0	280.0	40.0	34.95	2062.30	19.45	133.28										
300.0	188.9°	-61.2°	280.0	318.5	38.5	33.74	2028.56	18.55	151.83										
337.0	187.4°	-61.2°	318.5	354.5	36.0	31.55	1997.02	17.34	169.17										
372.0	188.4°	-56.0°	354.5	393.5	39.0	32.33	1964.68	21.81	190.98										
415.0	189.4°	-54.0°	393.5	462.0	68.5	55.42	1909.27	40.26	231.24										

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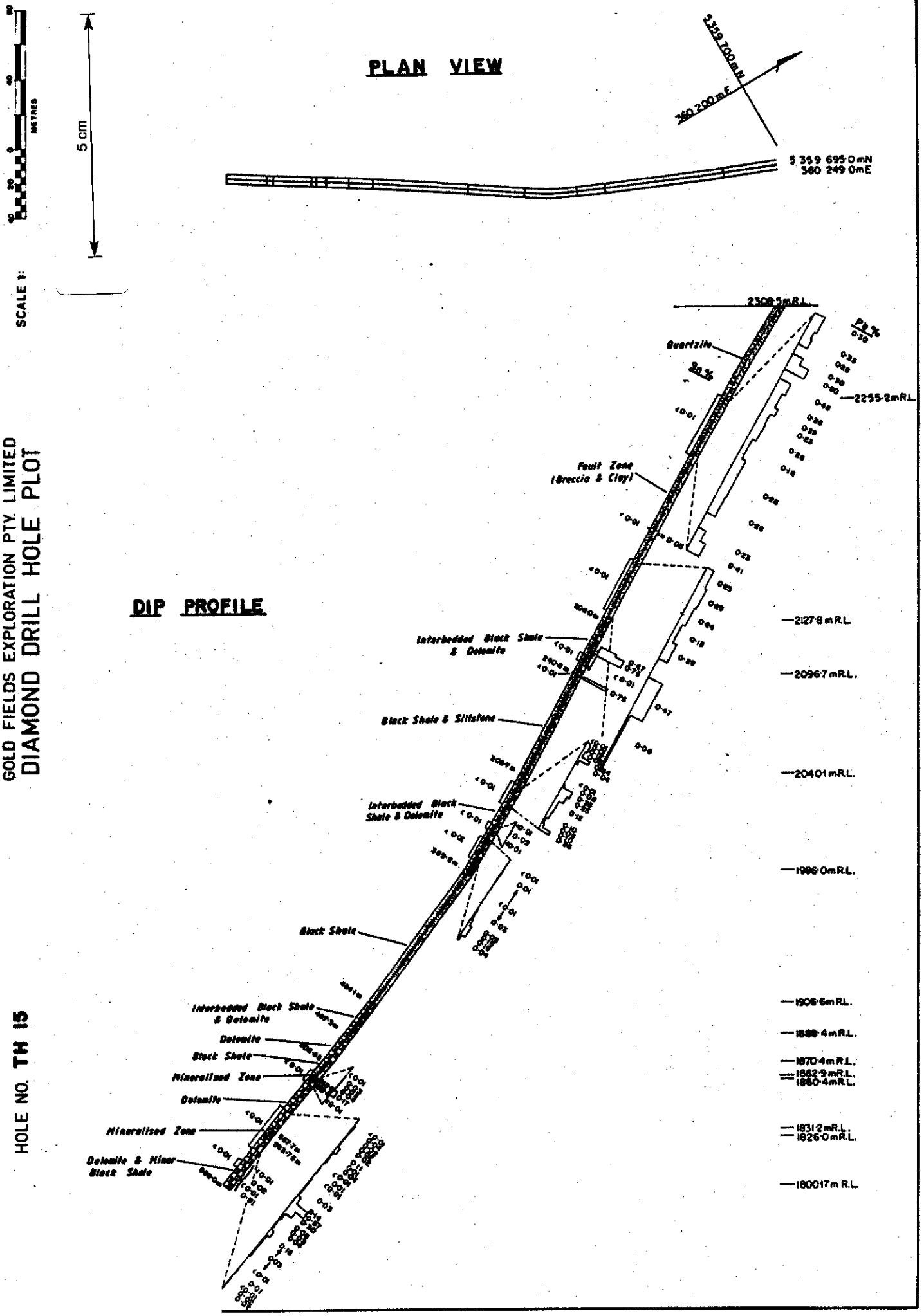

GOLD FIELDS EXPLORATION PTY. LIMITED
DIAMOND DRILL HOLE PLOT

HOLE NO. TH 15

GOLD FIELDS EXPLORATION PTY. LIMITED

ULV. PRESS

PROJECT: TRIAL HARBOUR E.L. 11/76

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: TH15

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	Sample No.	From	To	Rec. %	Sn	Sn(sol)	As	WO_3	Cu	Pb	Zn	Ag	Sb
									ASSAY DATA								
0	0.8	0.6	75	SURFACE DEBRIS													
				Surface debris consisting of massive milky vein quartz.													
0.8	61.4	30.4	50	QUARTZITE													
				Grey to blue grey massive medium grained quartzite with minor siltstone. The unit is extensively veined by milky white quartz veins which are limonite stained and contain cavities probably after carbonate. The vein boundaries with the quartzite are diffuse. Downhole minor very weathered sandy siltstone beds are interbedded with the quartzite. The massive nature of the quartzite, a well developed spaced cleavage, recrystalization and extensive veining prevents the determination of B.C.A.'s.												
61.4	74.0	2.2	17.5	LIMONITE GOSSAN	13249	61.4	64.0		<10	<100	170	<10	195	3100	2730	2	180
				Dark brown partly nodular limonite gossan with only partial boxwork development was the only rock type recovered. Downhole intersections indicates that clay is probably the non recovered portion of this unit.	13250		65.0		<10	<100	140	<10	210	2290	2490	2	80
					13251		66.4		<10	<100	180	<10	205	2810	3120	1	40
					13252	68.0	69.0		<10	<100	200	<10	345	3000	2940	<1	40
					13253		70.5		<10	<100	140	<10	320	6100	2340	7	40
					13254	72.2	74.0		<10	<100	150	<10	190	4800	2360	38	20
74.0	87.0	1.75	13.5	BRECCIA (WEATHERED)													
				The recovered rock consists of brecciated, cleaved, cream/brown, limonite stained siltstone occurring initially in a matrix of limonitic, gossanous veins and veinlets and then in a cream brown clay. The clay rich zones also contain angular clasts of limonite.	13255	74.0	76.4		<10	<100	130	<10	65	2590	2510	41	<10
					13256		77.2		<10	<100	90	<10	150	3900	4820	35	20
					13257		78.7		<10	<100	490	<10	35	2330	4600	3	20
					13258		81.0		<10	<100	1160	20	65	2800	5040	<1	70
					13259		84.0		<10	<100	220	20	85	1580	3300	<1	30
					13260		87.0		<10	<100	140	<10	45	1620	2040	1	60
87.0	124.5	16.0	44	WEATHERED BRECCIA													
				Weathered and cleaved siltstone and shale clasts in a clay matrix with only minor limonite. In detail:	13261	87.0	90.0		<10	<100	60	30	10	2960	370	1	<10
					13262		93.0		20	<100	230	30	60	2950	570	6	20
				87.0-99.0m: Grey to brown/purple breccia consisting of small (<3mm) angular clasts of brown to purple siltstone and vein quartz in a predominant clay matrix.	13263		96.0		<10	<100	60	20	10	2800	1140	1	50
					13264	98.0	99.0		<10	<100	50	<10	35	2330	1310	4	10
					13265		100.5		10	<100	290	20	45	4100	3500	1	2500
				99.0-100.5m: Brown breccia consisting of large (3-30mm) angular clasts of brown to purple siltstone within a dark black subordinate matrix of limonite.													

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GOLD FIELDS EXPLORATION PTY. LIMITED

PROJECT: TRIAL HARBOUR E.L. 11/76

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: TH15 Page: 2.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	ASSAY DATA Sample No.	From	To	Rec. %	Sn	Sn(sol)	As	WO3	Cu	Pb	Zn	Ag	Sb
				100.5-108.0m: Weathered breccia zone consisting of blue grey well cleaved siltstone as beds or clasts (<30 cms) inter-bedded with clay rich, angular siltstone clast dominant breccia zones.													
				108.0-109.0m: Highly cleaved and fragmented black graphitic shale.													
				109.0-111.0m: As for 100.5-108/0m.													
				111.0-113.0m: Black graphitic shale.													
				113.0-114.0m: As for 100.5-108.0m.													
				114.0-117.0m: Strongly brecciated black graphitic shale occurs in a black clay matrix.													
				117.0-124.5m: Grey and minor black highly cleaved sericitic brecciated siltstone with minor limonite stain on joints occurs in a grey clay matrix. Minor limonite veins occur in siltstone clasts.													
124.5	147.0	0	0	TRICONED-NO RECOVERY													
147.0	147.5	0.4	80	QUARTZ-DOLOMITE VEIN(?)													
				This massive quartz dolomite vein consists of clasts of angular to rounded coarsely crystalline dolomite in a predominant very fine grained siliceous matrix. This has been subsequently brecciated and then annealed with a coarse grained quartz and open spaced (after carbonate?) matrix.	13266	147.0	147.5	80	30	<100	<10	<10	5	470	8300	<1	20
147.5	167.0	0	0	NO RECOVERY													
				Cavities were noted by the driller.													
					13267	167.0	170.0	10	<10	<100	150	<10	10	2250	5100	<1	760
167.0	178.5	4.9	42.5	CLAY	13268		173.0	57	<10	<100	80	<10	10	8940	4450	1	220
				Yellow brown limonitic clay (60-70%) with small (<2mm) clasts of weathered siltstone(?) and minor limonite. This unit may be the weathered remnant of a carbonate.	13269		176.0	57	<10	<100	170	<10	15	2350	4580	<1	670
					13270		179.0	50	<10	<100	60	20	10	1490	3320	<1	490
					13271		182.0	6	<10	<100	60	10	45	2870	7400	<1	660
					13272	185.0	191.0	6	<10	<100	70	40	80	4670	9100	1	170
178.5	200.0	1.1	5	POOR RECOVERY ZONE													
				178.5-191.0m: Recovered material consists of a limonitic gossan.	13273	191.0	200.0	5	<10	<100	60	10	40	590	840	1	50
				191.0-200.0m: Recovered material consists of a breccia of weathered													

GOLD FIELDS EXPLORATION PTY. LIMITED

ULV. PRESS

PROJECT: TRIAL HARBOUR E.L. 11/76

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: TH15

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	ASSAY DATA Sample No.	From	To	Rec. %	Sn	Sn(sol)	As	Wg	Cu	Pb	Zn	Ag	Sb
				siltstone and a clay matrix, similar to 100.5-108.0m.													
200.0	206.0	0	0	NO RECOVERY													
206.0	228.85	20.95	91.5	BLACK PYRITIC GRAPHITIC SHALE Black, highly cleaved, graphitic shale which contains pyrite as very fine grained disseminations, laminated beds and lenses. Pyrite lenses are boudinaged with recrystallized coarse grained pyrite and carbonate occuring between the boudins. Minor veinlets and small (<10mm) tension gashes of quartz-carbonate occur throughout the unit. Milky quartz veins of <20mm in width occur at 224.3m, 224.7m, 225.2m. B.C.A.'s at 210.5m : 30° 212.6m : 10-30° 213.9m : 30° 215.9-217.0m : 10° 218.5-220.5m : 0-15° 220.8m : 20° 221.5-222.5m : 0-10° 223.2-223.5m : 0-10° 225.0m : 20° 227.2-227.5m : 80-90° 228.55m: 70°(?)													
228.85	229.0	0.15	100	MINERALIZED ZONE Massive fine to medium grained pyrite apparently selectively but partially replacing beds of grey altered calcareous rock. This has been later veined by honey coloured to pale yellow sphalerite (irregular shaped and sporadic) and minor galena. This has been later cut by a narrow (1-5mm) galena, sphalerite vein which extends downhole into the relatively unmineralized but altered dolomite.	13274	228.55	229.0	100	<10	<100	1090	190	50	4710	2.3%	23	70
229.0	229.9	0.9	100	PARTLY ALTERED DOLOMITE Irregular coarse grained recrystallized dolomite is interbedded	13275	229.0	229.9	100	<10	<100	70	60	80	7500	8500	23	40

GOLD FIELDS EXPLORATION PTY. LIMITED

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PROJECT: TRIAL HARBOUR E.L. 11/76

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: TH15.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	ASSAY DATA Sample No.	From	To	Rec. %	Sn	Sn (Acid)	As	WO3	Cu	Pb	Zn	Ag	Sb
				with (and part brecciated with) beds of grey dolomitic siltstones. Minor stylolite development and brecciation prevents the determination of bedding to core angles. Minor veinlets of sphalerite (galena) occur.													
229.9	240.8	10.9	100	INTERBEDDED DOLOMITE, DOLOMITIC SILTSTONE AND BLACK SHALE	13276	229.0	231.0	100	<10	<100	<10	<10	15	40	230	<1	10
				Includes:	13277		232.0	100	<10	<100	<10	<10	10	30	80	<1	10
				229.9-232.5m: Blue grey interbedded dolomite and dolomitic siltstone with extensive dolomite veins and stylolites	13278		232.5	100	<10	<100	<10	<10	30	10	50	<1	10
					13279	240.5	240.9	80	<10	<100	120	130	80	7200	18900	15	50
				232.5-232.6m: Black shale.													
				232.6-238.3m: Cream grey massive to well bedded dolomite? and dolomitic siltstone. Extensive dolomite veins. The unit is unaltered.													
				238.3-240.8m: Chaotically interbedded zone of black shale, dolomite and minor dolomitic siltstone. Extensive recrystallization of dolomite as veins, contained entirely within the dolomitic zones. Within the later part of this zone (240.3-240.8m) coarse grained honey coloured sphalerite and galena are associated with extensive dolomite veins.													
				B.C.A.'s 231.0m : 70°													
				231.5m : 50°													
				231.8m : 20°													
				231.8-232.2m : 0-5°													
				232.5m : 60°													
				233.0m : 20°													
				234.8m : 30°													
				235.3m : 40°													
				235.3-236.7m : 40°													
				236.7-237.3m : 30°													
				237.3-240.8m : Chaotic													
240.8	305.7	61.85	95	BLACK SHALE AND SILTSTONE Generally well bedded to laminated black shale interbedded with grey fine to coarse grained siltstone beds. (Beds ⩾5mm thick).													

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GOLD FIELDS EXPLORATION PTY. LIMITED

ULV. PRESS

PROJECT: TRIAL HARBOUR E.L. 11/76

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: T.H. 15

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION
				Occasional thicker beds of up to 1m of black graphitic shale occur. The shale is strongly cleaved and tightly folded in places. Well developed crenulation cleavage indicates more than one strong phase of folding. Syngenetic pyrite (1-2%) occurs as beds and disseminated along bedding planes.
				Irregular quartz (with minor dolomite) veins and veinlets occur throughout. Theses veins have been overprinted by less frequent sporadic creamy coarse grained dolomite veins.
				B.C.A.'s 241.7m : 10°
				242.0m : 10°
				243.0m : 10°
				243.2m : 10°
				243.2-244.2m : Tight folding
				244.3m : 0
				244.5m : 10°
				244.6-246.9m : 0-10°
				247.1m : 30°
				248.3m : 20-30°
				248.4-249.0m : 40°
				249.0-250.1m : strongly veined
				250.1-251.3m : 30-40° facing uphole (sole structures)
				251.6-253.3m : 30-50°
				253.8m : 60°
				253.85-255.9m : folded
				255.9-258.25m: 0-20°
				258.15-258.9m : 0°
				261.8m : folded approx. 20°
				261.8-264.8m : folded (minor isoclinal folding)
				265.1m : approx. 60°
				266.1-277.1m : Vary 0-70°, average 10-20°
				277.2m : 10°
				277.2-278.3m : folded
				278.7-281.5m : 0-10°
				281.5-286.7m : Highly cleaved, tightly folded.

ASSAY DATA Sample No.	From	To	Rec. %

GOLD FIELDS EXPLORATION PTY. LIMITED

ULV. PRESS

PROJECT: TRIAL HARBOUR E.L. 11/76

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: T.H. 15

INTERVAL		RECOVERY		DESCRIPTION	ASSAY DATA												
From	To	m	%		Sample No.	From	To	Rec. %	Sn	Sn(sol)	As	WO_3	Cu	Pb	Zn	Ag	Sb
				286.7-286.95m : quartz dolomite vein													
				286.95-288.3m : 0-20°													
				288.3-290.1m : 0-10°													
				290.1-292.7m : 20-30°													
				292.7-298.4m : 0-10° minor folding													
				298.4-300.2m : highly cleaved and folded.													
				300.2-302.7m : 0-10°													
				302.7-305.6m : Tightly folded and contorted.													
				305.6m : 60°													
				305.7m : 70°													
305.7	369.2	63.0	99	INTERBEDDED BLACK GRAPHITIC SHALES AND DOLOMITE	13280	312.65	312.85	100	<10	<100	<10	10	10	80	220	21	20
				The black, graphitic, pyritic shale is highly cleaved and folded	13281		313.3	100	<10	<100	150	40	60	1040	350	3	30
				contains contorted pyrite and carbonate laminae. Veins, veinlets	13282		313.95	100	<10	<100	70	<10	5	1190	250	<1	10
				and nodules of recrystalized carbonate and dolomite occur through-	13283		315.1	100	<10	<100	110	20	80	490	100	6	50
				out the shale.	13284		315.7	100	<10	<100	140	20	45	3390	2390	6	2350
				The dolomite generally occurs as beds 0.3-1.5m thick. A 11.05m	13285		316.1	100	<10	<100	50	<10	66	370	100	2	20
				down hole dolomite intersection at 348.95-360.0m is probably of	13286	318.8	319.15	95	<10	<100	<10	<10	10	50	40	1	20
				similar thickness as the B.C.A.'s of this intersection are 0-5°.	13287		319.8	95	<10	<100	110	10	35	590	160	4	50
				Most of the dolomite beds are partly recrystallized and silicified	13288		320.8	95	<10	<100	50	<10	85	3450	310	15	100
				and strongly veined by coarse grained cream coloured dolomite and	13289		321.9	95	<10	<100	340	20	185	2470	1790	10	810
				minor quartz and galena.	13290		323.6	97	<10	<100	140	20	95	1210	390	6	60
				In detail:	13291		323.8	100	<10	<100	50	<10	90	1240	240	3	110
				305.7-312.65m: Black shale.	13292		325.4	100	10	<100	170	20	120	990	400	14	70
				-312.85m: Dolomite (with stylolites)	13293		326.95	100	<10	<100	<10	<10	10	490	270	2	20
				-313.3m : Black graphitic shale.	13294		326.2	100	20	<100	290	20	170	470	320	21	80
				-313.95m: Dolomite with disseminated pyrite, dolomite	13295		327.0	100	40	<100	40	<10	45	1020	320	11	50
				vein with minor galena.	13296		327.65	100	<10	<100	70	<10	100	3610	320	13	120
				-315.1m : Black shale	13297	339.4	340.5	99	<10	<100	30	<10	26	110	20	<1	<10
				-315.45m: Dolomite, minor galena sphalerite veins	13298		341.0	100	<10	<100	<10	<10	25	80	20	1	10
				-315.7m : Black shale	13299		342.0	100	20	<100	80	10	80	160	120	6	40
				-316.1m : Dolomite with minor pyrite.	13300		343.0	100	<10	<100	<10	<10	15	50	20	1	10
				-318.8m : Black shale	13301		344.0	100	<10	<100	<10	<10	15	20	20	<1	10
				-319.15m: Dolomite	13302	348.95	350.0	100	<10	<100	10	10	15	50	260	1	20
				-319.8m : Black Shale	13303		351.0	100	<10	<100	30	<10	5	110	140	1	10
					13304		352.0	100	<10	<100	<10	<10	10	40	60	1	<10

GOLD FIELDS EXPLORATION PTY. LIMITED

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PROJECT: TRIAL HARBOUR E.L. 11/76

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: T.H. 15 Page: 7.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION
				319.8-321.9m : Dolomite (including beds of black shale of <10cms)
				-323.5m : : Black shale with beds of dolomite of <10cms.
				-323.8m : Silicified dolomite with minor pyrite.
				-325.4m : Black shale with pyrite.
				-325.95m: Dolomite.
				-326.2m : Black shale with pyrite lenses
				-327.65m: Dolomite with sphalerite and galena in dolomite
				veins.
				-339.4m : Black graphitic shale, including brecciated zones
				containing rounded clasts of quartz dolomite veins
				and pyrite.
				339.4-340.5m] Dolomitic conglomerate-breccia with pyrite occuring
				340.8-340.9m] a) as coarse spotty dissemination (1-10%),
				341.0-344.3m] b) rimming and apparently replacing carbonate clasts
				c) within quartz veins.
				340.5-340.8m]
				340.9-341.0m] Black graphitic shale
				344.3-348.95m: Black graphitic shale with minor dolomitic beds.
				-360.0m : Well bedded dolomitic siltstone which includes
				dolomitic conglomerate at 348.95-349.7m and 359.5-
				360.0m.
				-362.3m : Black graphitic shale - minor dolomite clasts,
				veins dolomite and pyrite.
				-363.6m : Dolomitic Breccia
				-369.2m : Black graphitic shale with irregular shaped
				lenses and elongate clasts of dolomite veined
				by quartz.
				B.C.A.'s
				312.65-312.85m: 0-20°
				-313.3m : 30°
				-313.95m: 60°
				-315.45m : approx 70-80°
				-315.7m : approx 40°
				-318.8m : approx 40°
				-319.15m: approx 50°

ASSAY DATA

Sample No.	From	To	Rec. %	Sn	Sn(sol)	As	WO_3	Cu	Pb	Zn	Ag	Sb
13305	352·0	353·0	100	<10	<100	<10	<10	20	60	50	<1	10
13306		354·0	99	<10	<100	<10	<10	5	30	40	<1	10
13307		355·0	98	<10	<100	<10	<10	5	40	40	<1	10
13308		356·0	98	<10	<100	<10	<10	10	30	40	<1	<10
13309		357·0	98	<10	<100	<10	<10	10	30	40	<1	<10
13310		358·0	98	<10	<100	<10	<10	20	280	40	<1	70
13311		359·0	100	<10	<100	<10	<10	40	290	60	1	20
13312		360·0	100	<10	<100	20	<10	45	510	150	1	20
13313		361·0	100	<10	<100	90	20	160	1510	300	9	30
13314		362·0	100	<10	<100	150	20	450	1570	500	38	150
13315		363·0	100	<10	<100	<10	<10	50	440	180	1	10

GOLD FIELDS EXPLORATION PTY. LIMITED

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PROJECT: TRIAL HARBOUR E.L. 11/76

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: T.H. 15 Page: 8.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	ASSAY DATA Sample No.	From	To	Rec. %
				319.15-319.8m : approx. 40°				
				-320.3m : 20-30°				
				-320.8m : 0-10°				
				-326.2m : approx. 45°				
				-327.65m: approx. 60°				
				-331.5m : 40°				
				-338.6m : 10°				
				-339.0m : 20°				
				-339.6m : 30°				
				-340.5m : 45°				
				-340.6m : 40°				
				-341.0m : 50°				
				-342.5m : 30°				
				-344.3m : 80°				
				-346.1m : 45°				
				-348.95m: 60°				
				-349.4m : 30°				
				350.0-359.5m : 0-5°				
				-361.0m : 20°				
369.2	464.1	91.0	96	BLACK GRAPHITIC SHALE				
				The black graphitic shale which has in part a carbonate rich matrix contained fine grained disseminated pyrite as well as beds of syngenetic pyrite. Irregular veinlets of carbonate occur throughout. Zones (1-8cms in width) generally parallel to bedding, of stronger carbonate veining also occur.				
				431.7-431.95m : Silicified block of dolomite strongly veined by carbonate.				
				445.0-445.1m : Quartz carbonate vein.				
				449.2-452.3m : Broken zone.				
				B.C.A.'s				
				427.4m : 50°				
				424.0m : 50°				
				429.5m : 50°				
				430.0m : 30°				

249214

GOLD FIELDS EXPLORATION PTY. LIMITED

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PROJECT: TRIAL HARBOUR E.L. 11/76 **DRILL CORE LOG AND ASSAY DATA** HOLE NUMBER: T.H. 15 Page: 9.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION
				432.5m : 30°
				432.5-434.8m : 0-5°
				436.8m : 55°
				437.6m : 40°
				438.0m : 20°
				438.4m : 10°
				438.8-439.8m : 45°
				445.2m : 50°
				446.5m : 80°
				447.4m : 60°
				448.2m : 20°-0-20°
				448.4-452.3m : Deformed and Broken zone
				454.0-454.6m : 60°
				454.6-455.0m : 0-20°
				456.3-457.3m : 30-40°
				457.4m : 50°
				457.4-458.9m : contourted
				459.2m : 40°
				460.2-462.7m : 30-40°
				462.7-464.0m : contourted
				464.1m : 40°
464.1	472.7	8.2	95	INTERBEDDED DOLOMITE AND BLACK SHALE The shale which is black and graphitic is decreasing in content down-hole. The dolomite zones are grey, massive, recrystallized and extensively criss-crossed by carbonate veins. Some angular and irregular shaped dolomitic clasts occur within the black shale. The dolomite which is unmineralized occurs at 461.1-461.4m, 464.5m, 464.8m, 465.3m-469.5m, 469.8-471.2m, 471.3-471.6m, 471.7-471.9m, 472.5-472.65m.
472.7	479.8	7.1	100	DOLOMITE Grey, generally well bedded dolomite with zones of intraformational breccias. The unit is unaltered except for initially numerous criss cross dolomite veins (472.7-474.3m), which decrease downhole

ASSAY DATA Sample No.	From	To	Rec. %

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GOLD FIELDS EXPLORATION PTY. LIMITED

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PROJECT: TRIAL HARBOUR E.L. 11/76

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: T.H. 15

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION
				Minor disseminated pyrite (< 1%) is associated with stylolites.
				475.15-475.45m : quartz dolomite vein.
				B.C.A.'s
				474.3-475.1m : 60-70°
				475.5-477.2m : 50°
				477.2-478.0m : Intraformational breccia.
				478.0-479.8m : Massive dolomite
				479.8m : 80°
479.8	487.3	7.5	88	BLACK SHALE
				Predominantly black graphitic shales with minor dolomite beds which are veined by carbonate. Calcite veining of the black shale does occur but not as extensively as previous black shale units. The dolomitic beds occur at : 479.9-480.0m, 480.2-480.3m, 480.45-480.5m, 480.65-480.9m, 487.1-487.2m.
				B.C.A.'s
				480.0-480.9m : 50°
				482.5m : 50°
				484.5-485.5m : Broken zone
				487.3-485.55m: 50°
487.3	508.85	21.5	99.8	DOLOMITE
				Grey well bedded dolomite is interbedded with minor siltstone and chert beds of <10mm. The unit is strongly kink folded in places and shows stylolite development on cleavage planes. Minor carbonate veins occur particularly within the cherty beds. A number of intraformational dolomitic conglomerates also occur.
				487.3-487.6m : Intraformational conglomerate
				488.1m : Quartz dolomite vein
				489.0m : Quartz dolomite vein
				496.5m ; Quartz pyrite chalcopyrite vein (1 cm wide)
				497.3-497.6m : Intraformational conglomerate
				499.1-500.4m : Zone of strong carbonate veining
				500.75-501.25m: Intraformational conglomerate
				502.7-503.1m : Intraformational dolomitic grit.

ASSAY DATA Sample No.	From	To	Rec. %

GOLD FIELDS EXPLORATION PTY. LIMITED

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PROJECT: TRIAL HARBOUR E.L. 11/76

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: T.H. 15 Page: 11.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	ASSAY DATA Sample No.	From	To	Rec. %	Sn	Sn(sol)	As	WO3	Cu	Pb	Zn	Ag	Sb
				503.45-504.55m : Massive dolomite.													
				504.55-503.35m : Intraformational conglomerate-breccia.													
				505.6-508.85m : Intraformational conglomerate-breccia.													
				B.C.A.'s													
				489.0-490.1m : 0-30° kink fold.													
				496.1-490.3m : 30°													
				490.3-491.2m : 0-30° kink fold													
				491.2-494.2m : 40°													
				494.2-496.0m : 0-40° kink fold													
				496.0-496.8m : 50°													
				498.6-499.1m : 80°													
				501.25m: 50°													
				501.25-502.7m: 50-60°													
				503.1-503.45m: 80°													
				505.35-505.6m: 50°													
508.85	518.6	9.75	100	BLACK SHALE													
				Black graphitic shale with minor beds sandstone, dolomite, thin	13329	516.6	517.6	100	10	<100	130	30	85	150	210	5	20
				beds of siltstone and numerous thin (<2mm) pyritic beds. Numerous	13330		518.6	100	<10	<100	100	30	100	150	200	7	30
				convoluted veinlets of carbonate occur. Disseminated pyrite is													
				also prevalent (1-5%)													
				B.C.A.'s													
				509.9m : 70°													
				511.0-512.5m : 50°													
518.6	521.6	3.0	100	MINERALIZED FAULT? ZONE	13331	518.6	519.6	100	30	<100	140	40	80	320	100	8	20
				This unit contains zones of brecciated	13332		520.6	100	10	<100	160	20	35	310	190	5	20
				a) silicified dolomite with disseminated pyrite	13333		521.6	100	30	<100	460	20	1800	390	210	23	90
				b) graphitic black shale with lustrous joint surfaces													
				c) dolomite with veins of siderite, carbonate disseminated pyrite													
				and minor galena and chalcopyrite.													
521.6	557.8	36.15	99.9	DOLOMITE	13334	521.6	522.6	100	10	100	80	360	1160	1660	450	10	40
				Interbedded grey dolomitic siltstone and grey blue dolomite with	13335		523.6	100	<10	100	<10	110	65	<10	30	1	<10
				intraformational breccias. The unit also contains minor shale and	13336	543.9	544.9	100	<10	<100	<10	<10	20	30	80	2	10

GOLD FIELDS EXPLORATION PTY. LIMITED

PROJECT: TRIAL HARBOUR E.L. 11/76

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: T.H. 15

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION
				chert beds of 1-15mm in width. In places the unit is strongly
				folded with well developed disecting cleavage. This cleavage is
				stylolitic in places. Veinlets (<5mm width) of siderite-carbonate
				occur throughout with their intensity downhole.
				521.6-523.6m : Minor veinlets of pyrite with disseminated pyrite
				surrounding veins.
				532.8m : 2mm galena vein
				543.6-546.9m : Increase in the intensity of coarse (>5mm) carbon-
				ate veining with brecciation of host rock within
				narrow zones.
				546.9-548.6m : Intense zone of siderite carbonate veinlets
				(<5mm width). Original bedding overprinted.
				548.9-549.1m : Siderite quartz pyrite vein.
				549.1-557.8m : Numerous veinlets siderite but less intense than
				543.6-546.9m. Some of these veinlets contain
				pyrite within the veins and disseminated around
				them.
				B.C.A.'s
				521.7-522.6m : 0-10°
				523.6-527.0m : folded
				527.5-528.0m : 30°
				530.0-533.0m : 0-10°
				533.0-535.0m : 10-30°
				535.2-538.0m : 30-40°
				538.0-542.0m : 40-50°
				542.0-544.0m : 30-40°
				545.0m : 60°
				546.0m : 60°
				549.6-549.9m : 50°
				550.5-550.9m : 40-50°
				551.5-553.0m : 50°
				-553.9m : 30°
				551.5-554.9m : 40°
				554.9-556.3m : 20-30°

ASSAY DATA Sample No.	From	To	Rec. %	Sn	Sn(sel)	As	WO_3	Cu	Pb	Zn	Ag	Sb
13337	544.9	546.9	100	40	<100	40	10	1010	460	820	52	150
13338		546.9	98	<10	<100	<10	<10	50	230	1220	4	20
13339		547.9	98	20	<100	40	<10	10	230	210	3	14
13340		548.9	98	10	<100	10	<10	15	170	70	2	<10
13341		549.9	100	20	<100	800	10	1090	1080	180	110	190
13342		550.9	100	<10	100	30	<10	520	130	80	14	80
13343		551.9	100	<10	100	110	20	20	430	70	2	10
13344		552.9	100	<10	100	10	<10	10	50	50	1	20
13345		553.9	100	<10	<100	<10	<10	<5	120	190	<1	20
13346		554.9	100	<10	<100	50	20	5	40	60	<1	<20
13347		555.9	100	<10	<100	20	<10	15	290	330	<1	<10
13348		556.9	100	<10	<100	30	<10	<5	320	110	<1	<20
13349		557.8	100	40	<100	70	<10	10	320	120	<1	<20

GOLD FIELDS EXPLORATION PTY. LIMITED

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PROJECT: TRIAL HARBOUR E.L. 11/76

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: T.H.15

Page: 13.

INTERVAL		RECOVERY		DESCRIPTION	ASSAY DATA												
From	To	m	%		Sample No.	From	To	Rec. %	Sn	Sn(sol)	As	WO_3	Cu	Pb	Zn	Ag	Sb
557.8	563.75	5.95	100	MINERALIZED FAULT ZONE	13350	557.8	558.8	100	<10	<100	4120	20	970	1410	2720	11	200
				Zone of siderite, quartz, pyrite, arsenopyrite mineralization. This	13351		559.8	100	10	<100	1850	20	460	5700	3340	30	930
				zone shows successive phases of brecciation followed with infill	13352		560.8	100	40	<100	4260	70	2440	2950	30	120	730
				mineralization. Only the last phase of quartz siderite veining,	13353		561.8	100	<10	<100	6900	170	940	720	230	42	430
				which crosscuts sulphide mineralisation is recognised. This	13354		562.05	100	<10	<100	10,645	180	10	270	100	2	2360
				quartz siderite veining extends from 563.75m into the dolomite	13355		562.85	100	<10	<100	990	<10	<5	370	400	2	40
				unit up to 564.6m.	13356		563.75	100	<10	<100	3580	<10	<5	1510	150	2	60
563.75	571.4	7.65	100	DOLOMITE	13357	563.75	564.6	100	20	<100	1520	<10	<5	330	210	<1	<20
				As for 521.6-557.8m and includes:	13358		565.6	100	10	<100	1480	<10	5	350	210	<1	20
				567.65-568.7m: : Intraformational conglomerate	13359		566.6	100	20	<100	30	<10	20	290	70	<1	<20
				569.4-569.8m : Dolomitic conglomerate	13360		567.6	100	10	<100	40	<10	20	260	120	<1	<20
				B.C.A.'s	13361		568.6	100	<10	<100	<10	<10	20	30	60	<1	<20
				546.1-567.7m : 0-10°	13362		569.6	100	<10	<100	<10	<10	10	80	40	<1	<20
				568.6-571.4m : 0-20°	13363		570.6	100	<10	<100	10	<10	15	30	60	2	<20
					13364		571.4	100	<10	<100	50	<10	15	80	90	1	<20
571.4	573.0	1.5	94	FAULT ZONE													
				Includes:	13365	571.4	572.8	93	<10	<100	1390	<10	25	110	80	4	20
				571.4-572.8m : Siderite, pyrite, quartz vein.	13366		573.0	100	<10	<100	70	<10	20	40	60	2	<20
				572.8-573.0m : This narrow zone consists of a black clay pug, and													
				fragments of a siderite quartz vein, black shale													
				and chert beds.													
573.0	582.6	8.5	99	INTERBEDDED BLACK SHALE AND SILTSTONES													
				Strongly folded black graphitic shale interbedded with grey grading	13367	573.0	574.1	93	<10	<100	30	10	20	170	130	1	<20
				to black siltstone similar to 240.8-305.7m:	13368		575.1	100	<10	<100	40	10	30	210	50	2	<20
				B.C.A.'s 573.0-580.3m : contorted													
				580.5-581.5m : 0-10°													
582.6	585.0	1.65	67	FAULT ZONE?	13369	582.6	583.0	98	<10	<100	30	20	20	50	40	2	<20
				Includes:	13370		584.0	65	<10	<100	60	20	580	170	130	28	140
				582.6-582.8m : Grey pyritic conglomerate (clasts sandstone), veined	13371		585.0	65	<10	<100	50	10	135	160	60	4	<20
				by quartz.													
				582.8-583.2m : Broken zone of black shale and vein quartz.													
				583.2-583.8m : Unbroken core of black graphitic pyritic shale with													

GOLD FIELDS EXPLORATION PTY. LIMITED

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PROJECT: TRIAL HARBOUR E.L. 11/76

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: T.H. 15

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	ASSAY DATA Sample No.	From	To	Rec. %	Sn	Sn sol	As	WO_3	Cu	Pb	Zn	Ag	Sb
				minor quartz siderite veins.													
				583.8-584.0m : Broken zone.													
				584.0-585.5m : Dolomite.													
				584.5-585.0m : Broken zone with black shale and vein quartz fragments.													
585.0	590.4	5.2	96	INTERBEDDED ZONE OF DOLOMITE; BLACK SHALE AND DOLOMITIC SANDSTONE	13372	585.0	586.0	96	<10	<100	<10	<10	45	80	40	3	<20
				Includes:	13373		586.8	96	<10	<100	20	10	90	50	50	4	20
				585.0-586.8m : Dolomite (as for 521.6-557.8m)	13374		587.2	96	<10	<100	60	10	255	130	100	4	<20
				-587.2m : Dolomite strongly veined by carbonate with pyrite.													
				-588.0m : Interbedded black graphitic shale and sandstone													
				-588.5m : Dolomitic sandstone													
				-589.2m : Quartz (pyrite) vein													
				-589.5m : Dolomitic sandstone													
				-590.4m : Interbedded black shale and sandstone													
590.4	599.0	8.1	94	DOLOMITE													
				Well bedded dolomite (as for 521.6-557.8m) with zones of dolomitic conglomerate.													
				i.e.: 593.25-593.35m, 593.9-594.85m, 596.5-597.6m, 597.8-599.0m.													
				Veined throughout by dolomite.													
				B.C.A.'s 590.7-591.7m : 50°													
				592.5-593.8m : 50-60°													
				595.0-596.5m : 60-70°													
				END OF HOLE													
				(Appendices following)													

GOLD FIELDS EXPLORATION PTY. LIMITED

DRILL CORE RECORD

HOLE NO: TH15
STATE :

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REPORT CMS 84/9/18

Summary

Drill core samples from DDH-TH15 in the Stonehenge area reflect a sequence of variously silicified and siderite-metasomatised carbonaceous pelites. Primary features are partly obscured, but it appears likely that these sediments were primarily limey or dolomitic in part. Silicification, yielding cherty interbeds, may be a strictly diagenetic phenomenon in part, but is elsewhere clearly metasomatic. Siderite veining and replacements postdate silicification. These rocks are variably mineralised with recrystallized and locally partly remobilised syngenetic pyrite assemblages, locally complexed by siderite vein-hosted, semi-massive, fine-grained arsenopyrite, pyrite, or locally minor disseminations of galena and sphalerite.

Mineragraphic examination of individual samples may be warranted on the basis of assay data. This broadly Zeehan-type alteration and veining pattern could support concentrations of silver.

249220

HOLE NO: TH 15
STATE :

GOLD FIELDS EXPLORATION PTY. LIMITED

DRILL CORE RECORD

CENTRAL MINERALOGICAL SERVICES

Sample No.	Classification - Composition	Fabric	Accessories	Comments
TH 15 315.5 (T.S. 51493)	Carbonated Breccia. Fine- to medium-grained sideritic carbonate with interspersed clasts, zones of siderite-stained cherty, carbonaceous pelite. Sporadic siderite veinlets, vugs with disseminated sphalerite,galena.Minor late quartz veinlets.	Breccia-like, with random contorted pelite, chert clasts, carbonate matrix.	Minor traces of pyrite.	Thoroughly sideritic-carbonated breccia composite of carbonaceous pelite, chert (silicified ?pelite) components with carbonate vein-, vug-hosted sulphide disseminations.
423.2	Carbonaceous Pelite. Fine-grained muscovite and fine to microcrystalline quartz with abundant carbonaceous matter, thinly disseminated to locally conspicuous very fine pyrite. Minor discontinuous quartz-siderite veinlets.	Weakly microlaminated, incipiently concordantly sheared silty shale.	Minor microcrenulated diagenetic quartz veinlets.	Weakly syngenetic-pyritic, strongly carbonaceous pelite. Weakly quartz-siderite-veined on a microscale.
521.6	Silicified Pelite. Fine to microcrystalline quartz with interspersed disseminations, stringers, semi-massive aggregates of fine-grained pyrite. Disseminated clots, films of carbonaceous matter.	Breccia-like, with ill-defined clasts of silicified pelite, pyritic quartz matrix. Mildly stressed.	Traces of sericite in silicified pelite zones.	Relict features consistent with a brecciated, thoroughly silicified/quartz-pyrite-matrixed carbonaceous pelite.
547.2	Carbonated Breccia. Veins, veinlets of sideritic carbonate with interspersed clasts, zones of cherty silicified/siderite-stained carbonaceous pelite. Semi-pervasive fine-grained pyrite disseminations.	Strongly veined to brecciated/siderite-healed.	Minor relics of sericite in altered pelite. Minor microscopic blebs of galena, sphalerite in vein-siderite.	Affinities with 526.6 m and particularly 315.5 m. Alteration pattern comprises silicification/fracturing siderite-veining. Pyrite is of recrystallized/partly remobilised syngenetic character.
562.1	Altered, Veined Pelite. Cherty-silicified carbonaceous pelite with sideritic-carbonated interbeds, disseminated pyrite. Discordant centimetric siderite vein with interspersed zones of semi-massive fine-grained arsenopyrite.	Laminated pelite with bedding-controlled silicification/carbonation. High-angle discordant vein.	Sporadic cherty quartz veinlets grading into quartz-siderite, late siderite veinlets in pelite.	Pelite alteration pattern closely analogous to 547.2 m. Vein is medium-grained unstressed, zoned, with massive siderite marginal-, fine arsenopyrite-quartz core zones.
563.1	Pyritic Siderite Vein. Massive siderite grading sharply into semi-massive fine-grained "siderite-gangued" pyrite aggregates.	Medium- to coarse-grained siderite-/fine-grained siderite-pyrite aggregates. Incipiently stressed.	Traces of quartz, rare extremely fine-grained arsenopyrite.	Affinities with 562.1 m vein. In contrast, the banding pattern is siderite(-quartz)/pyrite-siderite (-quartz) rather than siderite/arsenopyrite-quartz.
566.5	Altered Pelite. Fine- to medium-grained sideritic carbonate with semi-pervasive relics of carbonaceous matter. Interbands of variably siderite-veined/impregnated carbonaceous chert.	Banded on a sub- to millimetric scale. Frequent variously concordant to discordant siderite veinlets. Incipiently sheared.	Ultrafine pyrite, concentrated in relict carbonaceous partings.	Extensively sideritised, carbonaceous-pyritic pelite with siderite-veined cherty-silicified interbeds analogous to e.g. 562.1 m.
598.9	Impure Dolomite. Fine to microcrystalline ankeritic dolomite with more or less pervasive fine-grained corroded "authigenic" quartz, minor films, clots of cherty quartz. Minor carbonaceous matter. Sporadic dolomite veinlets.	Vague relict limestone breccia-like fabric. Incipiently sheared veinlets.	Minor traces of ultra-fine pyrite. Minor discontinuous quartz films as selvedges on dolomite veinlets.	Dolomitised limestone breccia with authigenic, minor cherty-replacive quartz, concentrated in ill-defined "matrix" (interclast) zones.

2409224

APPENDIX 1

249222

221

GOLD FIELDS EXPLORATION PTY. LIMITED

ULV. PRESS

PROJECT: TRIAL HARBOUR E.L. 11/76

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: T.H. 15

INTERVAL		RECOVERY		DESCRIPTION	ASSAY DATA			
From	To	m	%		Sample No.	From	To	Rec. %
				Magnetic Susceptibility Data (x10^{-3} cgs units)				
				0 -124.5m : 0.0 (where measurable)				
				147.0m-147.5m : 0.1				
				167.0m-228.9m : 0.0				
				at 228.9m : 0.1				
				229.0m-237.5m : 0.0				
				-237.8m : 0.1				
				-315.2m : 0.0				
				-315.5m : 0.1				
				-315.7m : 0.0				
				-316.1m : 0.1				
				-320.5m : 0.0				
				-320.8m : 0.1				
				-321.2m : 0.0				
				-321.9m : 0.1				
				-325.95m: 0.0				
				-340.5m : 0.1				
				-520.5m : 0.0				
				-520.6m : 0.1				
				-521.6m : 0.0				
				-530.0m : 0.1				
				-546.5m : 0.0				
				-548.9m : 0.1 Spots (0.2)				
				-557.0m : 0.0				
				-557.5m : 0.1				
				-558.0m : 0.0				
				-562.7m : 0.2				
				-564.5m : 0.1				
				-565.6m : 0.2				
				-569.6m : 0.1				
				-570.9m : 0.0				
				-511.5m : 0.1				
				-572.4m : 0.2				
				-572.8m : 0.1				
				-599.0m : 0.0				

APPENDIX 8

West Agnew Grid Geophysics - a report by Mitre Geophysics

Memorandum to: A. Cartwright, P. Roberts; Gold Fields Exploration

from: J. Bishop; Mitre Geophysics

date: 5th November, 1984.

Subject: WEST AGNEW GRADIENT ARRAY IP SURVEY

SURVEY DETAILS

A gradient array IP survey was carried out over the West Agnew grid in January, 1984 (Scintrex job no. Tas-115). A 25m station spacing was used on lines 100m apart. An IPR-8 receiver was used with a 3kw transmitter. The potential dipole was 25m and current dipoles were of the order of 2 to 2.5kms (four current dipoles were used to cover the 4.5km grid). The results have been contoured onto 1:5,000 scale plans (Figures 37 & 38 for the chargeability and Figures 39 & 40 for the resistivity: in Komyshan et al, 1984) and are also shown on the 1:2,000 scale composite profiles (Figures 41 to 68 of the same report).

EXPLORATION TARGET

Several styles of mineralisation have been recognised on the Heemskirk granite (summarised in Roberts, 1980). However, following their experience on the adjacent Federation and Agnew grids, Gold Fields believes that only the stanniferous poly-metallic sulphide deposits have any economic potential. These deposits occur within the 'red' granite and the best example is Sweeney's which lies near the north eastern corner of the West Agnew grid. This is an irregular pipe-shaped body with an average grade of 0.6% Sn, 1.9% Zn and 37g/t Ag. A gradient array IP survey over Sweeney's showed a well defined chargeability anomaly of 60+mv/v. The resistivity response was less pronounced but quite recognisable; a minimum of 200ohm-m in a background of 2,000 to 10,000ohm-m.

The West Agnew survey was undertaken to explore for further deposits of the Sweeney style and was therefore restricted to the red granite.

RESULTS

The results were disappointing. No anomalous areas were defined. The highest chargeabilities recorded were of the order of 30mv/v in the north west corner of the grid. (Excluding the high charge-abilities at the southern ends of the lines which been attributed to disseminated sulphides within the hornfelsed sediments of the granite aureole.) Together with minor soil geochemistry highs (but no tin), these broad responses indicate some sulphide within the granite, but not in any interesting quantity.

The West Agnew grid covered the remaining area of prospective ground in this region. Thus this survey effectively completes the IP coverage of the South Heemskirk Tin Field. (The Federation grid was surveyed in 1977, 1979 and 1980 (Bishop,

1981) and the Agnew grid was surveyed in 1981 (Bishop, 1982).)

The lack of any well-defined chargeability anomalies suggests that there are no more undiscovered sulphide deposits around the southern margin of the granite.

J.R. Bishop

REFERENCES

Bishop, J.R., 1981. An evaluation of geophysical surveys over the Federation grid. Mitre Geophysics report 81/10 for Renison Ltd.

Bishop, J.R., 1982. An evaluation of geophysical surveys over the Agnew grid. Mitre Geophysics report 82/03 for Renison Ltd.

Komyshan, K., Cartwright, A. and Roberts, P. A., 1984. Annual report on E.L. 11/76 (Trial Harbour).

Roberts, P.A., 1980. Notes on geophysical surveys of the Heemskirk Granite. In: Bishop (1982).

APPENDIX 9

West Agnew Grid, Soil Sample Descriptions and Assays

FOR THE FOLLOWING ASSAYS:

Sn is <10 ppm unless otherwise recorded
As is <10 ppm unless otherwise recorded
Pb is <10 ppm unless otherwise recorded
Zn is <10 ppm unless otherwise recorded
Cu is < 5 ppm unless otherwise recorded
NES is insufficient sample for analysis.

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET** COLLECTED BY: POLTOCK

PROJECT: PROSPECT: WEST AGNEW SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

1:250,000 SHEET: TYPE OF SAMPLE: SOIL SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DEPTH	DESCRIPTION HOR.	COLOUR.	ANALYSES Sn	As	Cu	Pb	Zn				
6401	00	000S.	.6M	A-B.	BLACK BROWN	30			10					
2		25	.7M	A. B.	/ /	20			10					
3		50	.5M	C-B	CREAMY BROWN	110			10					
4		75	.7M	A-B.	BLACK BROWN	80	10	25	40	20				
5		100	1M	B-C	CREAMY BROWN	10			10					
6		125	.9M	A-B	BLACK BROWN	10			10					
7		150	.4M	B-C	CREAMY BROWN	20			20					
8		175	.4M	B-C	/ /	30			10					
9		200	.6M	A-B	BLACK BROWN	10			10					
10		225	.7M	A	BLACK.				10					
11		250	.5M	B-C	CREAMY BROWN		10	10	20					
12		275	.5M	A-B	BLACK BROWN	20	10		10					
13		300	.4M	A-B	/ /	10			20					
14		325	.6M	A-B	/ /	10			10					
15		350	.7M	B-C	GREY BLACK.	10								
16		375	.8M	A-B	BLACK	10								
17		400	.6M	A-B	BLACK BROWN				10					
18		425	.4M	A-B	/ /					10				
19		450	.5M	A-B.	/ /				10					
20		475	.8M	A-B.	/ /	10								
21		500	.6M	A-B	/ /	10			10					

249229

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET** COLLECTED BY:

PROJECT: PROSPECT: WEST AZNEW SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

1:250,000 SHEET: TYPE OF SAMPLE: Soil SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DEPTH	DESCRIPTION HOR.	COLOUR	ANALYSES Sn	As	Cu	Pb	Zn				
6422	00	525 S.	.6	B	BLACK BROWN					10				
23		550	.5	B	REDDY BROWN				10					
24		575	.8	B-C	BROWN				20					
25		600	.8 CREEK.	A GRAVELS	BLACK	10			10	10				
26		625	.7	B	BROWN				10	10				
6427	100E	550 S	.7	B	Brown	10			10	10				
28		525 S	.4	B-C	"				10	10				
29		500 S	.8	B-C	"	10			10					
30		475 S	.6	B-C	"				10					
31		450 S	.7	B-C	Yellow brown				20	10				
32		425 S	.4	B-C	"	10			10	10				
33		400 S	.6	B-C	"	10			20					
34		375 S	.5	"	"	20			10					
35		350 S	.8	"	"	20		5	10	20				
36		325 S	.6	"	"	20			10					
37		300 S	.4	"	"	10			10	10				

249230

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET** COLLECTED BY:

PROJECT: PROSPECT: Web Grid SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

1:250.000 SHEET: TYPE OF SAMPLE: Soil SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		Depth	DESCRIPTION Horizon	Colour	ANALYSES Sn	As	Cu	Pb	Zn				
6438	100W	000	6	B-C	Yellow brn				10	10				
39		25 N	.5	" "	"	10			10					
40		50 N	.5	" "	"	20		5	30					
41		75 N	.6	" "	creamy brn	60			10					
42		100 N	.4	B-C	Yellow brn		10		10					
43		125 N	.6	" "	"	10			10					
44		150 N	.2	C	"				10	10				
45		175 N	.6	B	Dk brn	30			10					
46		200 N	.7	A	Blk	40			10	10				
47		225 N	.6	B	Dk brn	40			10					
48		250 N	.8	B-C	Yellow brn	90			10					
49		275 N	1.0	" "	"	30			20	10				
6450	200W	515 N	.8	A	Dk brn	130			20					
51		550 N	.6	A-B	Yellow brn	30			20	20				
52		525 N	.9	B	"	20			10					
53		500 N	.7	A-B	"	20			10					
54		475 N	.7	A-B	"	30			10					
55		450 N	.7	A	Dk brn	60			10	10				
56		425 N	.5	A-B	Yellow brn	80			10					
57		400 N	.9	A-B	"	20			10					

249231

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET** COLLECTED BY:

PROJECT: PROSPECT: West Agnew SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

1:250.000 SHEET: TYPE OF SAMPLE: Soil SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES								
						Sn	As	Cu	Pb	Zn				
6458	Agnew	375N	.7	A-B	Black Brn	10			10					
[illegible]	[illegible]	[illegible]	.9	B-C	ORANGE	10			10					
60		325N	1.0	B	Sandy Brn	60								
61		300N	.7	A-B	[illegible]	40			10					
62		275N	.4	A	BLACK	50			10					
63		250N	.7	B-C	BROWN	80			10					
64		225N	6	B	✓	40		10	10					
65		200N	6	B	BLACK BROWN	10			10	10				
66		175N	.7	B-C	ORANGE	10			10					
67		150N	8	B-C	ORG-BROWN	60			10	10				
68		125N	.5	B-C	LT ORG BROWN	20			10	10				
69		100N	.9	B-C	CREAM BROWN					10				
70		75N	.7	B	TEAM BLACK	80			10	10				
71		50N	.6	GULLY A	BLACK				30	10				
72		25N	4	B	BROWN				10					
73		00 E/L	4	B	ORANGE BROWN				10					
74		25S	6	B	✓ ✓			25	10	10				
75		50S	.5	B	BLACK BROWN	10			10					
76		75S	.5	B	CREAM ✓				20	10				
77		100S	.7	B	BLACK ✓	10			10	20				
78		125S	.7	B	CREAM BLACK	20			10	30				

249232

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET**

PROJECT: PROSPECT: W/E ST IGNEOUS - SAMPLE STORAGE REQ'D: LABORATORY: COLLECTED BY:

1:250.000 SHEET: TYPE OF SAMPLE: SOIL SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE DISPATCHED: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DEPTH	DESCRIPTION FOR.	COLOUR	ANALYSES Sn	As	Cu	Pb	Zn				
6479	200W	150S	.5	R-C	ORANGE BROWN				10	10				
80		175S	.9	E	BLACK ✓				10					
81		200S	.3	E	BLACK ✓				10	10				
82		225S	.8	E	BLACK ✓				10	10				
83		250S	.8	B-C	BROWN				20	10				
84		275S	.8	E	BLACK BROWN				50					
85		300S	.7	B	✓ ✓	50			10					
86		325S	.6	B	✓ ✓		10			10				
87		350S	.5	A	BLACK			5	40	20				
88		375S	.4	B-C	BROWN BLACK				10	10				
89		400S	.3	E-C	GREY BROWN				10					
90		425S	.3	ANGULAR QZ & QZITE GREY A-B	CREAM ✓									
91		450S	.2	ANGULAR QZ FRAGMENTS A	✓ ✓									
92		475S	.4	ANGULAR QZ B	✓ ✓									
				QZITE TOURALINE										
93		500S	.4	ANGULAR QZ B	✓ ✓									
94	100W	575S	.4	LARGE QZ & B	✓ ✓									
				QZITE TOURALINE FRAG.										
95		550S	.4	✓ ✓ B	✓ ✓									
96		525	.4	GRANITIC B-C	GREY BROWN									

5 cm

249233

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET** COLLECTED BY:

PROJECT: PROSPECT: WEST AGNEW SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

1:250,000 SHEET: TYPE OF SAMPLE: SOIL SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DEPTH	DESCRIPTION		ANALYSES Sn	As	Cu	Pb	Zn				
6497	100W	500S	.3	F-C	GREY									
98	100W	475S	.6	F-C	GREY BROWN				10	10				
99		450S	.7	F-C	✓ ✓				10					
6500		425S	.1	F-C	BROWN				10					
01		400S	.6	CREEK A	DK GREY SAND					20				
02		375S	.7	F-C	BROWN									
03		350S	.3	F-C	✓					10				
04		325S	.4	F-C	✓	10								
05		300S	.5	F-C	✓	20			20					
06		275S	.7	F-C	✓	20			20	10				
07		250S	.5	F	GREY BROWN	10			10					
08		225S	.4	F-C	✓ ✓									
09		200S	.5	F-C	✓ ✓	10								
10		175S	.6	F-C	BROWN									
11		150S	.4	F-C	LT GREY									
12		125S	1M	F	✓ ✓									
13		100S	.7	F-C	DK GREY	10								
14		75S	.4	F-C	GREY BROWN	230			10					
15		50S	.7	F-C	BROWN	20			10					
16		25S	.4	F-C	CREAM BROWN	10				10				

5 cm

249234

GOLD FIELDS EXPLORATION PTY. LTD. — **SAMPLE RECORD AND ANALYTICAL DATA SHEET**

PROJECT: PROSPECT: WEST HIGHLAND SAMPLE STORAGE REQ'D: LABORATORY: COLLECTED BY:

1:250.000 SHEET: TYPE OF SAMPLE: SOIL SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE DISPATCHED: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		LENGTH	DESCRIPTION		ANALYSES Sn	As	Cu	Pb	Zn				
6517	200 W.	COIL	1M.	B	BLACK BROWN				10	10				
18		25 N	.5	B-C	THIN BROWN									
19		50N	.5	B-C	GREY ✓									
20		75N	.6	B-C	BLACK ORG.	10			10					
21		100N	.6	B-C	BLACK BROWN	20								
22		125N	.6	B-C	✓ ORG	10			10	10				
23		150N	.9	B-C	✓ BROWN	50								
24		175N	.5	B	RED BLACK	80								
25		200N	.6	B	YELLOW CLAY	480	290							
26		225N	.7	B-C	THIN BROWN	30			10	10				
27		250N	.6	B	BLACK ✓	60			10					
28		275N	.9	B	DARK BLACK	30			10	10				
29		300N	1M CREEK GULLY	A	BLACK	80			10	10				
30		325N	1M GULLY	A	✓	NES.		5	20	20				
31		350 N	.6	B	✓ BROWN			5	70	10				
32		375N	.4	B-C	✓ ✓	20			20					
33		400N	.9	B	WET BROWN	50			20					
34		425N	.7	B	✓ ✓	60			50	10				
35		450N	.5	B-C	✓ ✓	10		5	30	10				
36		475N	.3	B	BLACK BROWN	80			20	10				
37		500N	.4	B-C	GREY ✓	30			10	20				

249235

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET**

PROJECT: PROSPECT: WEST HOWARD COLLECTED BY:

1:250,000 SHEET: TYPE OF SAMPLE: SOIL SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DEPTH	DESCRIPTION HOR		ANALYSES Sb	As	Cu	Pb	Zn				
6522	200W	500N	.6	B-C	GREY BROWN	40			20	10				
30		525N	.5	B	GREY	30			20	10				
40		575N	.3	B	✓	10				10				
41		600N	.5	B	✓	50				10				
		SOUTH												
6542		00S	.2	B-C	GREY BROWN									
42		50S	.7	B-C	✓					10				
44		75S	.4	B-C	✓					10				
45		100S	.4	B-C	✓ ✓					10				
46		125S	.3	B-C	✓									
47		150S	.4	PEAT	✓				80	50				
48		175S	.9	B-C	BLACK BROWN				20	10				
49		200S	.7	B-C	✓ ✓									
50		225S	.8	B	GREY BROWN	10				10				
51		250S	.5	B	✓ ✓				10	10				
52		275S	.4	B-C	CHANGE BROWN				10	10				
53		300S	.4	B-C	✓ ✓				10	10				
54		325S	.1	AB-C	VERY SHALLOW.			5		10				
55		350S	IN.	B	BLACK BROWN									
56		375S.	.5	B	CREAM BLACK									
57		400S.	.5	B.	DK. GREY SANDY.									

249236

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. — **SAMPLE RECORD AND ANALYTICAL DATA SHEET**

PROJECT: | PROSPECT: WEST AGNEW | SAMPLE STORAGE REQ'D: | LABORATORY: | COLLECTED BY:

1:250.000 SHEET: | TYPE OF SAMPLE: S.L. | SAMPLE PREP. REQ'D: | ANALYSIS REQ'D: | DATE DISPATCHED: | DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DEPTH	DESCRIPTION HOR.	COLOUR	ANALYSES Sn	As	Cu	Pb	Zn				
6558	300W.	425S	.3	Thin Gz. White Tourmaline B.	Cream.									
59		450S	.4	✓ ✓ B.	✓									
60		475S	.4	✓ ✓ B.	✓									
6561.	400W.	500S.	.8	B.	Cream Clay.									
62		475S	.2.	B-C	Thin White Gz. White Tourmaline.									
63		450S	.5	B	Cream Clay.				10					
64		425S	.4	B-C	Brown Black.									
65		400S	TM.	A-B	✓ ✓			10	10	10				
66		375S	.4	B	Cream Brown				20	10				
67		350S	.5	B	Brown Black.				10					
68		325S	.1	B-C	Cream Brown	10								
69		300S	.5	B-C	Grey Cream									
70		275S	.3	B-C	Cream Brown									
71		250S	.7	B-C	Black ✓									
72.		225S.	.6	A-B-C	Yellow. Black.									
73		200S	.6	B-C	Grey Brown									
74		175S	.2.	B-C	Brown.									
75		150S.	.4	B-C	✓				10					
76		125S	.6	B-C	✓					10				
77		100S	.4	B-C	✓	10			10	10				

5 cm

249237

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET** COLLECTED BY:

PROJECT: PROSPECT: WEST AGNEW · SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

1:250,000 SHEET: TYPE OF SAMPLE: SOIL. SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DEPTH.	DESCRIPTION	Colour.	ANALYSES Sn	As	Cu	Pb	Zn
6578.	400W.	75S.	.5	B-C.	CREAM BLACK	NES				10
79		50S	.5	B-C	GREY BROWN					10
80		25S	.4	B-C	✓ ✓					
81		Co B/L.	.4	B-C	✓	NES				
82.		25N.	.6	B-C	✓	10			10	
83		50N.	.5	B-C	CREAM BLACK.	NES				
84		75N.	.5	B-C	BLACK BROWN	10				
85		100N.	.7	SWAMP ALLUVIUM	GREY.	10				10
86		125N.	.6	B.	CREAM CLAY.			10	30	1,420
87		150N.	.5	B-C.	BROWN.	10				10
88		175N.	.6	B.	CREAM BROWN	30			10	70
89.		200N.	.8	B-C	✓ ✓	30	10		20	10
90		225N.	.7	B-C	BROWN.	10			10	10
91		250N.	.8	B.	GREY.	80			10	20
92.		275N.	.9	B.	GREY. CLAY.	130	80		90	
93.		300N.	.9	B.	DK. GREY.	10				
94		325N.	.7	B-C.	GREY.					
95		350N.	1M.	B-C.	YELLOW BROWN	10			50	10
96		375N.	1M.	B.	CREEK. GREY BROWN	70			20	10
97.		400N.	.4.	B.	BROWN GREY.	20			10	20
98.		425N.	1M.	B.	✓ ✓	60			30	10

249238

237

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET**

PROJECT: PROSPECT: WEST AGNEW. SAMPLE STORAGE REQ'D: LABORATORY: COLLECTED BY:

1:250,000 SHEET: TYPE OF SAMPLE: SOIL. SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE DISPATCHED: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DEPTH	DESCRIPTION	COLOUR	ANALYSES								
						Sn	As	Cu	Pb	Zn				
6599	400W.	450N.	.2.	B-C.	GREY WHITE.	10								
6600		475N.	.5	B-C.	YELLOW BROWN	10			20	20				
6601		500N.	1M.	B.	CREAM ✓	30	20		20	10				
02.		525N.	.4	A-B.	GREY BROWN	10			10					
03		550N.	.6.	B.	✓ ✓	20			10	10				
04		575N.	.7	A-B.	✓ BLACK.	80			10	20				
05		600N.	.5	B	✓ BROWN.	190		5	10	10				
6606	500W.	675N.	.3	B	CREAM.			5	10	10				
7		650N.	.3	B	✓				10					
8		625N.	.4	B	✓				10					
9		600N.	.7	B.	✓				20					
10		575N	.8	B-C	CREAM ORANGE	40			10					
11		550N.	1M.	B.	✓				10					
12.		525N.	.3.	B-C	✓ ORANGE	30			10	10				
13.		500N.	.6	B-C.	✓ ✓	10		5	20	20				
14.		475N.	.8	B.	✓ BROWN				10	10				
15		450N.	1M.	B.	✓ ✓				10	20				
16		425N.	.4	A-B.	✓ ✓									
17		400N.	.7	B.	✓									
18		375N.	.6	A.	✓				130					

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET**

PROJECT: PROSPECT: WEST AGNEW. SAMPLE STORAGE REQ'D: LABORATORY: COLLECTED BY:

1:250,000 SHEET: TYPE OF SAMPLE: SOIL. SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE DISPATCHED: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DEPTH	DESCRIPTION	COLOUR	ANALYSES Sn	As	Cu	Pb	Zn				
6614	50cW.	250N.	.5	ALLUVIUM	DK. RED.				20					
20		225N.	.6	A-B	BROWN.					10				
21		200N	.3	A-B.	BLACK			15	20	10				
22		275N	.8	B	✓					10				
23		250N	1M.	B	GREY.	10			10					
24		225N.	1M.	B	CREAM GREY.	10			30	20				
25		200N.	.6	B	BLACK BROWN				10	10				
26		175N.	.5	B	CREAM ✓	10			20	10				
27		150N	1M.	A CREEK.	GREY BLACK.	NES		5	10	20				
28		125N.	.6	B-C	BROWN BLACK				20					
29		100N.	.5	B	✓ ✓	10			10					
30		75N.	.7	B	✓ ✓									
31		50N.	.8	B-C.	ORANGE BLACK				10					
32		25N.	.7	B-C.	GREY WHITE									
33		CC.B/L	.7	B.	✓ BLACK.									
34		25S.	1M. CREEK	ALLUVIUM.	✓				10	20				
35		50S.	.7	B.	GREY BROWN									
36		75S.	2.	A-B-C.	✓ ✓	NES								
37		100S.	.1	A-B-C.	✓ BLACK.									
38.		125S.	.4	A-B-C.	✓ ✓	NES				10				
39		150S.	.5 CREEK	A.	BLACK.				30	40				

GULLY + ROAD CONTAMINATION.

249240

239

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET**

PROJECT: PROSPECT: NEW AGNEW SAMPLE STORAGE REQ'D: LABORATORY: COLLECTED BY:

1:250.000 SHEET: TYPE OF SAMPLE: SOIL. SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE DISPATCHED: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DEPTH	DESCRIPTION	COLOUR	ANALYSES Sb	As	Cu	Pb	Zn				
6640	500W	175S	4	FRESH ROAD CUTTING B	GREY BROWN				20	20				
41		200S	3	B-C	✓ ✓									
42		225S	4	B-C	BLACK BROWN				10					
43		250S	6	B-C	✓ ✓				10					
44		275S	7	B-C	GREY BROWN				10					
45		300S	5	CK GULLY B-C	BLACK ✓				20					
46		325S	3	B-C	CREAM ✓				20	10				
47		350S	3	B-C	BROWN				10					
48		375S	5	B-C	GREY WHITE					10				
49		400S	5	B-C	BLACK BROWN				10					
50		425S	5	B-C	✓ ✓				10					
51		450S	4	ANGULAR B-C	CREAM ✓				20					
				QZ MQZITE										
52		475S	3	✓ ✓ B	✓ ✓				10					
53		500S	4	✓ ✓ B	✓ ✓									
[redacted]														
6654	600W	500S	1	A-B-C	GREY BROWN				10					
55		475S	1	A-B-C	✓ ✓				10					
56		450S	3	B-C	CREAM BROWN CLAY				10					
57		425	2	B	✓ ✓									

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET** COLLECTED BY:

PROJECT: PROSPECT: WEST ACNEW · SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

1:250,000 SHEET: TYPE OF SAMPLE: SOIL · SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DEPTH	DESCRIPTION	COLOUR	ANALYSES Sn	As	Cu	Pb	Zn				
6658.	600W	400S.	.5	GRANITIC. B.	BLACK BROWN				10					
59		375S.	.2.	B-C	GREY ✓	NES				10				
60		350S	.2	B-C	✓ ✓				10	10				
61		325S.	.7	B-C	GREY DK.BROWN									
62		300S.	.5	B	✓ ✓ ✓				10					
63		275S	1M.	B	✓ ✓ ✓				10					
64		250S.	.6	B.	✓ ✓ ✓				10					
65		225S.	.5	B-C.	CREAM BROWN				10					
66		200S	.5	B-C	BLACK ✓				10					
67		175S.	.4	B-C.	✓ ✓					60				
68		150S	.8	B-C	CREAM.									
69		125S	.3	B-C	DK. BROWN					10				
70		100S	.2	B-C	✓ ✓				10					
71		75S	.3	B-C	✓ ✓				10					
72.		50S	.5	B-C	BROWN.	20			10	10				
73		25S.	.9	B.	✓			30	10					
74		00 B/L.	.6	B.	DK. BROWN.	10								
75		25N.	.4	B-C.	✓ ✓									
76		50N.	1M.	B-C.	✓ ✓	10			10					
77		75N.	1M.	B	BLACK.									
78		100N.	.8	B-C.	DK. BROWN.				10					

249242

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. — **SAMPLE RECORD AND ANALYTICAL DATA SHEET**

PROJECT: PROSPECT: NEST AGNEW. SAMPLE STORAGE REQ'D: LABORATORY: COLLECTED BY:

1:250.000 SHEET: TYPE OF SAMPLE: SOIL. SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE DISPATCHED: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DEPTH.	DESCRIPTION	COLOUR.	ANALYSES								
						Sn	As	Cu	Pb	Zn				
6679	600 W.	125 N.	1 M.	B.	BLACK.				10					
80		150 N.	.8	B	GREY BLACK.	10			10					
6681	700 W	125 N.	.6	B-C.	GREY BROWN									
82		100 N.	.5	B.	BLACK ✓									
83		75 N.	.6	B-C	BLACK CREAM									
84		50 N.	.4	B-C	GREY WHITE									
85		25 N.	.2	B-C	BLACK ORANGE									
86		00 B/L.	.4	B-C	✓ ✓	50			10					
87		25 S	.5	B	GREY WHITE									
88		50 S	.5	B	BLACK BROWN									
89		75 S	.5	B-C	✓ ✓									
90		100 S	.6	B.	✓ ✓				10					
91		125 S	.2	B-C	GREY BROWN	NES								
92.		150 S	.7	B.	✓ ✓					20				
93		175 S	.4	A-B-C.	BLACK.	NES			10	10				
94		200 S.	.5	B-C	BLACK BROWN				10	10				
95		225 S.	.7	B.	✓ ✓					10				
96		250 S.	.1	B-C.	CLAY ✓				10	10				
97		275 S	.4	B-C	BROWN					10				
98		300 S	.9	B.	GREY.									

249243

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET**

PROJECT: PROSPECT: West Agnew SAMPLE STORAGE REQ'D: LABORATORY: COLLECTED BY:

1:250.000 SHEET: TYPE OF SAMPLE: Soil. SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE DISPATCHED: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DEPTH	DESCRIPTION		COLOUR	ANALYSES								
							Sn	As	Cu	Pb	Zn				
6699	700W	325S.	1M.	ALLUVIUM	CREEK	BLACK									
6700		350S.	.4	B-C.		GREY BROWN	10								
01		375S	.3	B-C.		BROWN.	10				10				
02.		400S	.Y	B.		GREY BLACK.					10				
03		425S	.2	B-C		✓ ✓				10	10				
04		450S	.6	B.		BLACK BROWN									
05		475S.	.7	B.		RED BROWN CLAY.	10				10				
06		500S	.1	A-B.		SLATE GRAVEL FRAGMENTS									
6707	800W	600S	.5	B-C.		GRAVEL DK. GREY.									
08		575S	.7	B-C.		DK. BROWN				10					
09		550S.	.7	B.		BROWN.				10					
10		525S.	.3	B-C.		✓				10	10				
11		500S.	.1	A-B-C.		GREY BROWN				10	10				
12.		475S.	.9	B.		BLACK ✓				10	10				
13		450S	.3	Residual B-C		CHANGE ✓	10								
14		425S	.Y	B-C		BROWN	10								
15		400S	.2	B-C		✓					10				
16		375S	.6	B-C		✓									
17		350S.	1M.	CREEK GULLY		DK. BROWN.									
18		325S.	.5	B-C.		BROWN.									

249244

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET** COLLECTED BY:

PROJECT: PROSPECT: NEST AGNEW SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

1:250,000 SHEET: TYPE OF SAMPLE: SOIL SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DEPTH	DESCRIPTION HOR.	COLOUR	ANALYSES Sn	As	Cu	Pb	Zn				
6719	YOCN	50E	.3	B.	BLACK BROWN									
20		375.	.7	B-C.	✓ ✓									
21		250S	.4	B-C	✓ ✓				60	10				
22		225S	.7	B.	BROWN.					10				
23.		200S	.6	B	✓									
24		175S	1M.	A	BLACK HUMUS M.				10	10				
25		150S.	1M.	A	✓ ✓	NES			10	10				
26		125S	.4	B-C	DK. BROWN.				10	10				
27		100S.	.9	B	✓ ✓	30			[illegible]					
28		75S.	1M.	B	✓ ✓				10	10				
29		50S.	.2	B-C	BROWN.				[illegible]					
30		25S	.3	B-C	BROWN ORANGE				10	20				
31		CO B/L.	.4	B	BROWN.	10			10	10				
32		25N.	.6	B-C.	✓					10				
33		50N.	.4	B-C.	✓				10	10				
34		75N.	.5	B-C	BROWN ORANGE									
35		100N.	.6	B.	BLACK GREY				10					
36		125N.	.5	B.	BLACK BROWN.				10	10				
37		150N.	.7	B-C.	GREY BLACK.					10				
38		175N.	.9	B.	BLACK BROWN.									

5 cm

249245

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET** COLLECTED BY:

PROJECT: PROSPECT: WEST AGNEW SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

1:250,000 SHEET: TYPE OF SAMPLE: SOIL SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DEPTH	DESCRIPTION		COLOUR	ANALYSES								
				BOR.			Sn	As	Cu	Pb	Zn				
6780	400N.	250N.	.9	B.		GREY BLACK.				10	10				
40		225N.	1M.	B		✓ ✓					10				
41		200N	.7	A		BLACK.			5		10				
42		175N.	.8	B.		✓ BROWN	10			10	10				
43		150N.	.9	B.		GREY WHITE									
44		125N.	.7	B		BROWN.				30	10				
45		100N.	.8	B-C.		GREY BROWN									
46		75N.	.6	B-C.		BLACK BROWN									
47		50N.	.8	B-C		GREY ✓	10								
48		25N.	.4	B.		BLACK BROWN	10								
49		CO B/L.	.8	B.		✓ ✓									
50		25S	.8	B.		GREY ✓									
51		50S.	.8	B-C.		✓ ✓	10			10	10				
52		75S.	.6 SWAMP	A.		BLACK.	20			10					
53		100S.	.6	B.		GREY BROWN	20								
54		125S.	.5	B-C.		BROWN.									
55		150S.	.4	B.		BLACK BROWN				10					
56		175S.	1	B-C.		GREY ✓					10				
57		200S.	.6 ROAD CUTTING	B.		GREY.					10				
58		225S.	.8	B		BLACK BROWN			5	10	10				
59		250S.	.7	B.		DK BROWN GREY CLAY.	10								

249246

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET**

PROJECT: PROSPECT: WEST AGNEW SAMPLE STORAGE REQ'D: LABORATORY: COLLECTED BY:

1:250,000 SHEET: TYPE OF SAMPLE: SOIL SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE DISPATCHED: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DEPTH.	DESCRIPTION HOR.	COLOUR.	ANALYSES Sn	As	Cu	Pb	Zn				
6760	400N.	275S.	1.0	B.	LT. BROWN.			5	10	10				
61		300S.	.5	B-C	WHITE.									
62		325S	.1	A-C	LT. BROWN.	10								
63		350S.	.4	B.	" "					10				
64		375S	.8	B.	" "									
65		400S.	.7	B-C.	" "	30								
66		425S	1.0	A-B.	LT GREY BROWN									
67.		450S	.9	B-C	" " "	10			30	10				
68		475S.	.1	A-C	GREY.				10					
69		500S	.8	B-C	LT BROWN - CREAM GREY	10			10					
70		525S.	.3	B	BROWN.				10	10				
71		550S	.5	B.	"	10			10					
72		575S.	"	MED GRAINED TOURMALINE A-C	WHITE BROWN.									
73	100W.	600S.	.2.	" " A-C	" "									
74		575S.	.5	B.	BROWN									
75		550S.	.4	B-C.	WHITE.									
76		525S.	.3	B-C.	BROWN			5	10	10				
77		500S.	.8	B.	CREAM BROWN			105	80					
78		475S	.5	B-C	" "			5	20	10				
79		450S.	.7	B-C.	BROWN BLACK									
80		425S	.6	B-C	" "			5		10				

5 cm

249247

246

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET** COLLECTED BY:

PROJECT: PROSPECT: West Agnew SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

1:250.000 SHEET: TYPE OF SAMPLE: Soil. SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DEPTH.	DESCRIPTION	COLOUR	ANALYSES Sn	As	Cu	Pb	Zn				
6781.	100c W.	400 S.	.Y	B-C.	BROWN BLACK						Missing			
82.		375 S.	.4	B-C.	GREY BROWN									
83		350 S.	.4	B-C	✓ ✓				10	10				
84		325 S.	.5	B-C	✓ ✓									
85		300 S.	.Y	B.	BLACK BROWN									
86		275 S.	.4	B-C	GREY ✓									
87		250 S.	.5	B-C	BLACK ✓				10					
88		225 S.	.Y	B.	✓ ✓									
89		200 S.	.7	B-C	GREY ✓									
90		175 S	ROAD CUTTING B.		✓									
91		150 S	.3	B.	DK. BROWN.				10					
92.		125 S	1.0	A.	GREY.					10				
93		100 S.	.7	B-C.	✓ WHITE.									
94		75 S.	.6	B-C.	✓ ✓									
95		50 S.	.5	B.	GREY BROWN									
96.		25 S.	.6	B.	BLACK ✓									
97.		Ca 6/L	.6	B-C.	✓ ✓				10					
98		25 N.	.6	B-C	✓ ✓									
99.		50 N.	.9	B.	✓ ✓									
6800		75 N.	.7	B-C.	DK. PALE BROWN					30				
01		100 N.	.4	B-C.	✓ ✓ ✓	10								

247

249248

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET** COLLECTED BY:

PROJECT: PROSPECT: WEST AONEW. SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

1:250.000 SHEET: TYPE OF SAMPLE: Soil. SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DEPTH.	DESCRIPTION HAR	COLOUR	ANALYSES Sn	As	Cu	Pb	Zn				
6801	100oN.	125N.	.3.	B-C.	DK GREY.	NES								
02.		150N.	.2	B-C.	PALE BROWN				10	10				
04		175N.	1.0	CREEK A ALLUVIUM	BLACK.									
05		200N	.4	B-C	DK. BROWN									
06		225N.	.7	B-C	✓ ✓									
07		250N	.8	A-B	BLACK				10					
08		275N.	.9	B.	✓									
09		300N.	.9	B	DK. BROWN.									
10		325N.	.8	B-C.	✓ ✓				10	10				
11.		350N.	.6	B-C.	✓ ✓					10				
12.														
6812	100oW	425N.	.8	CR. GRAV. A.	BLACK.					10				
13.		400N.	.4.	B-C.	GREY BROWN					10				
14		375N.	.6	B-C.	✓ ✓				10	10				
15		350N	.6	B-C.	BROWN				10	10				
16.		325N.	.4	B-C.	GREY BROWN					10				
17		300N.	.5	B-C.	BROWN					10				
18		275N.	.6	B-C	GREY WHITE									
19		250N	1.0	B.	GREY BROWN				10	10				
20		225N.	.9	B.	✓ ✓					10				
21		200N.	.5	B.	✓ ✓									

249249

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET**

PROJECT: PROSPECT: NEAT BANOW. SAMPLE STORAGE REQ'D: LABORATORY: COLLECTED BY:

1:250.000 SHEET: TYPE OF SAMPLE: SOIL. SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED: DATE DISPATCHED:

SAMPLE NUMBER	LOCATION		DEPTH.	DESCRIPTION HOR.	COLOUR.	ANALYSES Sn	As	Cu	Pb	Zn				
6822.	100N.	175N.	.2.	B-C.	GREY BROWN									
23		150N.	.5	6.	✓ ✓									
24		125N.	.5	6.	✓ BLACK		NES			10				
25		100N.	.6	B-C.	BLACK BROWN									
26		75N.	.4	A-C.	GREY BLACK.					10				
27		50N.	.4	B-C.	BROWN					10				
28		25N.	.5	B-C.	BROWN ORANGE				10	10				
29.		CC BL.	.7	B-C.	GREY BROWN				10	20				
30		25S.	.5	A-C.	BLACK.		NES		10	10				
31		50S	6	B.	BLACK BROWN				10	10				
32.		75S.	.6	B.	BROWN.				10					
33.		100S.	.9	B.	BLACK BROWN				10	10				
34		125S.	.9	B.	✓ GREY.				10	10				
35		150S.	.4	B-C.	CREAM ORANGE	20			10					
36		175S.	.4	B-C.	✓ ✓	20			20					
37		200S.	.4	B-C	LT. BROWN.				10					
38		225S.	.7	B-C	✓ ✓				10					
39		250S.	.4	B-C.	WHITE					10				
40		275S.	.4	B-C.	CREAM ORANGE				10					
41		300S.	.8	B-C	WHITE									
42		325S	.7	B.	ORANGE BROWN				10	10				

249250

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET**

PROJECT: PROSPECT: WEST AGNEW. SAMPLE STORAGE REQ'D: LABORATORY: COLLECTED BY:

1:250,000 SHEET: TYPE OF SAMPLE: SOIL. SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE DISPATCHED: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DEPTH	DESCRIPTION FOR:	COLOUR.	ANALYSES Sn	As	Cu	Pb	Zn				
6843	1100N.	350S	.9	A.	CREEK BLACK MUD.					10				
44		375S.	.6	B-C.	WHITE									
45		400S.	.3	B-C.	DK BROWN.				10	10				
46		425S	.9	B.	BLACK.	10			10	10				
47		450S	.8	B-C.	DK ORANGE BROWN.				10					
48		475S.	.5	B.	DK BROWN.				10	10				
49		500S.	.4	B-C.	✓ ✓				10	10				
50		525S	.2	A-C.	✓ ✓				10	10				
51		550S	.8	B.	CREAM CLAY.				290	10				
52		575S.	.1	A.	LARGE SILICIFIED GRAVEL									
53		600S.	.7	A-B.	BLACK BROWN				10					
6854	1200N	600S	.8	B.	YELLOW GREY CLAY				10					
55		575S	.2	A-C.	BLACK.				10					
					LARGE SILICIFIED GRAVEL									
56		550S.	.7	B.	CREAM CLAY.				60	10				
57		525S	.7	B.	CREAM BROWN	10			10					
58		500S	.4	B.	BROWN.	30								
59		475S	.3	B-C	GRAY BROWN									
60		450S	.2	B-C	CREAM ✓	20								
61		425S.	.5	B-C	GREY BROWN	10			10	20				

5 cm

24925

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET**

PROJECT: PROSPECT: WEST AGNEW SAMPLE STORAGE REQ'D: LABORATORY: COLLECTED BY:

1:250.000 SHEET: TYPE OF SAMPLE: SOIL SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED: DATE DISPATCHED:

SAMPLE NUMBER	LOCATION		DEPTH	DESCRIPTION		ANALYSES								
					Colour	Sn	As	Cu	Pb	Zn				
6862	1200 W.	400 S.	-5	B-C.	BLACK BROWN				10	10				
63		375 S.	.8	B	GREY BLACK				10	10				
64		350 S	.7	B-C.	GREY WHITE									
65		325 S	.6	B-C	GREY BROWN									
66		300 S	.4	B-C.	✓ ✓				10	10				
67		275 S	.6	B	Black - grey				10	10				
68		250 S	.5	B	Brn "				10					
69		225 S	.7	B-C	Grey - white									
70		200 S	.8	B-C	" - black									
71		175 S	.5	B	Brn				10					
72		150 S	.3	B	Lt brn				20	10				
73		125 S	.7	B-C	Grey - brn	10			10					
74		100 S	.8	B	" "									
75		75 S	.8	B	" "	NES			20	40				
76		50 S	.9	A-B	Black	NES			10	10				
77		25 S	.5	B-C	Brn	10			10	10				
78		000	.4	B-C	Black brn				10	10				
79		25 N	.4	"	" "				10					
80		50 N	.5	"	Grey - brn	10				10				
81		75 N	.5	B	" "					10				
82		100 N	.7	B	" "									

249252

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET** COLLECTED BY:

PROJECT: PROSPECT: West Ognew SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

1:250,000 SHEET: TYPE OF SAMPLE: SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES								
						Sn	As	Cu	Pb	Zn				
6883	1200 W	125N	.5	B-C	Grey-brn									
84		150N	.4	"	Brn				10	10				
85		175N	.2	"	Grey brn				10					
86		200N	.2	"	"				10					
87		225N	.2	A-B-C	Black-grey					10				
88		250N	.7	B-C	Grey brn									
89		275N	.2	B-C	Brn				10					
90		300N	.3	A-C	Grey-brn				10	10				
91		325N	.2	B	"				10					
92		350N	.4	B-C	"				10	10				
93		375N	.4	B	"				10					
94		400N	.7	B	"					10				
95		425N	.7	B	"					10				
96		450N	.5	B-C	Brn	10			10	10				
97		475N	.4	"	Grey brn									
6898	1300W	550N	1.0	B	Grey					10				
99		525N	.5	B-C	" -white									
6900		500N	.9	B	Grey	10								
01		475N	Creek	A-B	Black-brn				10	10				
02		450N	0.8	B	"				10	10				
03		425N	0.5	B-C	White					10				

5 cm

249253

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET** COLLECTED BY:

PROJECT: PROSPECT: W.A. Agnew SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

1:250.000 SHEET: TYPE OF SAMPLE: SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES								
						Sn	As	Cu	Pb	Zn				
6904	1300W	400N	.5	B	Brn					10				
05		375N	1.0	B	cream brn clay	10			10	10				
06		350N	1.0	A-B	Black - grey					10				
07		325N	1.0	B	Grey brn	10				10				
08		300N	1.0	B	Pale "				10	10				
09		275N	0.5	B-C	" "				10	10				
10		250N	0.3	B-C						10				
11		225N	.4	"	DK "				10	10				
12		200N	.7	B	" "				10					
13		175N	.2	A-B	Grey "				10	20				
14		150N	.2	B-C	"				10	10				
15		125N	.8	B	DK "				10					
16		100N	.8	B	" "				10					
17		75N	1.0	"	Brn - black				10					
18		50N	.5	B-C	Grey - brn				10					
19		25N	.6	B-C	" "									
20		000	.6	B	Black									
21		25S	.7	B	DK brn				10					
22		50S	.7	B	Brn clay				10					
23		75S	.9	B-C	white		10		10					
24		100S	.5	B	Brn		10			10				

249254

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET** COLLECTED BY:

PROJECT: PROSPECT: West Spinifex SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

1:250,000 SHEET: TYPE OF SAMPLE: S:L SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES								
						Sn	As	Cu	Pb	Zn				
6925	1800W	125S	.2	B-C	White									
26		150S	.2	"	Brn		10		10					
27		175S	.5	B	"		10		10					
28		200S	.1	A-C	Black	NES			10	10				
29		225S	.2	B-C	DK brn				10					
30		250S	.7	B	Grey - black				20					
31		275S	.6	B-C	Lt brn				10					
32		300S	.6	B	Grey "				10					
33		325S	.8	B	Black "				10	10				
34		350S	.2	B-C	Brn		10		10	10				
35		375S	.4	B	Grey brn		10							
36		400S	.5	B-C	" "	10			10	10				
37		425S	.6	" "	" "	10			40	20				
38		450S	.3	" "	" "				10	10				
39		475S	.3	" "	" "	NES			10	10				
40		500S	.4	" "	" "				10					
41		525S	.1	A	Aphanitic platy flags				10					
6942	1400W	500S	1.0	A-B	" " "				10					
43		475S	0.1	"	" " "									
44		450S	0.2	"	" "				10					

5 cm

249255

254

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET** COLLECTED BY:

PROJECT: PROSPECT: West Arnew SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

1:250,000 SHEET: TYPE OF SAMPLE: Soil SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES Sn	As	Cu	Pb	Zn				
6845	1400W	425S	.3	B-C	Grey Brn		10		10	10				
46		400S	.6	"	"			5	20	10				
47		375S	.7	B	"	MES			20	10				
48		350S	.5	B-C	Grey - white		10							
49		325S	.3	A-C	" - Brn		10		10					
50		300S	.2	A-C	" - Black		10		10	10				
51		275S	.8	B	" - white		20							
52		250S	.3	B-C	" - Brn		10			10				
53		225S	.3	B-C	" "	20	20		20					
54		200S	.8	B	" "	10	10		10					
55		175S	1.0	A-B	Grey - black		10		10					
56		150S	1.0	B-C	" - white		10							
57		125S	.8	" "	Yellow - orange	10	20		10	20				
58		100S	.8	B	Grey brn				10					
59		75S	.6	B	" "		10		10					
60		50S	.9	B	" "				20					
61		25S	.9	B	" "		20		10					
62		00	.6	B-C	" - white				10					
63		25N	.7	B	" Brn				10	10				
64		50N	.5	B	" "				10	10				
65		75N	.3	B-C	" "				10	10				

249256

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET** COLLECTED BY:

PROJECT: PROSPECT: Wav Afnew SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

1:250.000 SHEET: TYPE OF SAMPLE: Soils SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES								
						Sn	As	Cu	Pb	Zn				
6966	1400W	100N	.4	B-C	Grey - brn					10				
67		125N	.4	"	"									
68		150N	.9	A	Black (gully)				10	10				
69		175N	.6	B-C	Grey - brn				10	20				
70		200N	.5	"	" - white		10							
71		225N	.5	"	" - brn									
72		250N	.3	"	"		10		10	10				
73		275N	.5	"	"									
74		300N	.4	"	"	10	10							
75		325N	.3	B	"					10				
76		350N	1.0	A	Black (gully)		10			10				
77		375N	.4	B-C	Grey - brn					10				
78		400N	.4	"	" - orange		10		10	10				
79		425N	.7	"	" - brn				30	20				
80		450N	1.0	"	"				10	10				
81		475N	.7	"	Black - "					10				
82		500N	.7	A	Black (gully)				10	10				
83		525N	.8	B	Grey - black	10	10		10	10				
84		550N	.9	B	"	10			10					
85		575N	.5	"	"				10	10				
86		600N	.5	"	" brn	10								

5 cm

249257 256

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET** COLLECTED BY:

PROJECT: PROSPECT: New Queen SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

1:250.000 SHEET: TYPE OF SAMPLE: Soil SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES								
						Sn	As	Cu	Pb	Zn				
6987	1500W	675N	.6	B	Brn clayey				30					
88		650N	.8	B-C	Brn	10			10	10				
89		625N	.2	A-C	Dk grey					10				
90		600N	.6	B-C	Grey-white	10			10					
91		575N	.7	B	" - black		10							
92		550N	.8	B	Black									
93		525N	.7	B-C	Dk brn		10							
94		500N	.4	" "	Brn		10		10	10				
95		475N	.2	A-C	Grey		10			10				
96		450N	.9	B	" - dk brn									
97		425N	.8	B-C	White	[illegible]								
98		400N	.1	A-C	Black	NES		5	20	20				
99		375N	.1	"	"	NES			10	10				
7000		350N	.9	B	Grey-dk brn									
01		325N	.8	B-C	Dk brn					20				
02		300N	.1	" "	"	NES				10				
03		275N	1.0	B	" "	NES			10	10				
04		250N	.7	B	cream - brn									
05		225N	1.0	A	grey				10					
06		200N	.8	B-C	Brn	10	10		10					
07		175N	.3	B	orange brn	10				10				

5 cm

249258

257

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET**

PROJECT: PROSPECT: Nick Reef SAMPLE STORAGE REQ'D: LABORATORY: COLLECTED BY:

1:250,000 SHEET: TYPE OF SAMPLE: Soil SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE DISPATCHED: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES								
						Sn	As	Cu	Pb	Zn				
7008	150W	150N	.6	B	Grey - black				10					
09		125N	.8	B	Cream brn				10	10				
10		100N	.7	B	DK brn									
11		75N	.4	B-C	Grey	NES								
12		50N	1.0	A	Black (gully)									
13		25N	.5	B	White									
14		00	.8	B	Black		10			10				
15		25S	.4	B-C	DK brn				10	10				
16		50S	.3	"	Brn		10		30	20				
17		75S	.3	"	"	10	"		10					
18		100S	.4	A-C	Grey		10		10	10				
19		125S	.8	B	Grey - black				10					
20		150S	.4	B	" "		20		10	10				
21		175S	.3	B	" "					10				
22		200S	.3	B	" "		20		30	10				
23		225S	.2	B-C	Grey - brn				10					
24		250S	.2	B-C	" "				10					
25		275S	.6	B	" black				20					
26		300S	.4	"	" brn		10							
27		325S	.4	B	" black				10	10				
28		350S	.7	B	" "				20	10				

5 cm

249259

GOLD FIELDS EXPLORATION PTY. LTD. — **SAMPLE RECORD AND ANALYTICAL DATA SHEET** — COLLECTED BY:

PROJECT: — PROSPECT: Wak Rjnew — SAMPLE STORAGE REQ'D: — LABORATORY: — DATE DISPATCHED:

1:250.000 SHEET: — TYPE OF SAMPLE: Soil — SAMPLE PREP. REQ'D: — ANALYSIS REQ'D: — DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES Sn	As	Cu	Pb	Zn				
7029	1500W	3755	.8	B	Grey - black				20	10				
30		4005	.7	B	" "		10		10					
31		4255	.2	A-C	" "									
32		4505	.4	" "	Qtz. te frags.	10	10							
7033	1600W	5005	.1	A	Sh shale									
34		4755	.3	A	" "		10		10	10				
35		4505	.1	A-B	" "				10					
36		4255	.3	"	" "		10							
37		4005	.9	B-C.	GREY - BLACK				10					
38		3755	.3	B-C.	BROWN	10	20		20	10				
39		3505	.4	B-C	✓	10			20	10				
40		3255	1.3	B-C.	BLACK BROWN	20		5	70	30				
41		3005	.4	B-C.	GREY ✓			5	20	10				
42.		2755.	.3	B-C	✓ ✓	10	10		10	10				
43.		2505	.8	B-C	BLACK BROWN	10	10		10	10				
44		2255	.5	B-C	GREY LT. BROWN		10			10				
45		2005	.4	A-B	✓ ✓ ✓									
46		1755	.5	B-C	GREY WHITE		10							
47		1505	.5	B-C	✓ ✓									
48		1255	.5	B-C	BLACK BROWN		30	5	20	10				
49		1005	.3	B-C	GREY ✓		10		20	10				

5 cm

249260

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET**

PROJECT: PROSPECT: West Agnew. SAMPLE STORAGE REQ'D: LABORATORY: COLLECTED BY:

1:250,000 SHEET: TYPE OF SAMPLE: Soil SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES								
						Sn	As	Cu	Pb	Zn				
7050	1600W.	75S.	.5	B-C.	CREAM BROWN		20		10					
51		50S	.6	B-C	BROWN ORANGE	10	10			20				
52		25S	.5	B-C	✓ ✓	20	20		10	20				
53		00 B/L.	1.0	B.	GREY BROWN	10			10	10				
54		25N.	1.3	B-C	GREY CREAM.				10	10				
55		50N.	.5	B-C	GREY BROWN					20				
56		75N.	.7	B-C	ORANGE ✓		10		10	10				
57		100N.	.2	B-C	CREAM ✓		20		20	10				
58		125N.	.6	B.	BLACK ✓	10	10		20	10				
59		150N.	.3	B-C	BROWN.		10			20				
60		175N.	.1	A-C	✓		10		10	10				
61		200N.	.2	A-C	✓					10				
62		225N	.7	B-C	GREY BROWN	10	10		20					
63		250N	.9	B-C	GREY CREAM.				10	10				
64		275N.	.7	B.	GREY WHITE.				10					
65		300N.	.4	B	GREY BROWN.		10		20					
66		325N.	.4	B.	BROWN				20	10				
67		350N.	1.2	B-C	GREY CREAM BROWN				10	10				
68		375N	.9	B.	GREY.				10					
69		400N.	.8	B.	✓					10				
70		425N	.8	B.	✓ BROWN									

24926

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. — **SAMPLE RECORD AND ANALYTICAL DATA SHEET**

PROJECT: | PROSPECT: WEST ARNEW | SAMPLE STORAGE REQ'D: | LABORATORY: | COLLECTED BY:

1:250,000 SHEET: | TYPE OF SAMPLE: Soil | SAMPLE PREP. REQ'D: | ANALYSIS REQ'D: | DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION				ANALYSES Sn	As	Cu	Pb	Zn				
7071.	1600N.	450N.	.4		B-C.	GREY ORANGE		10		10	10				
72		475N.	.2.		B-C	YELLOW ✓					20				
73.		500N.	.3		B-C	✓	10	10		10	10				
74		525N.	1.3		B-C	GREY WHITE	10			10	10				
75		550N.	1.0	GULLY	A	✓ BLACK.				10	10				
76		575N	.6		B.	DK. GREY.	10				[illegible]				
77		600N	.7		B.	GREY WHITE									
78		625N	.6		B.	✓ BROWN	10	10		10					
79		650N	.7		B.	✓ ✓	20	10		10					
80		675N.	.6		B.	BLACK ✓					10				
81		700N.	1.0	GULLY	B.	✓ ✓	10	10		10	10				
82		725N.	.7		B.	✓ ✓				10					
83		750N.	.8	GULLY.	ALLUVIUM.	BLACK.				30	10				
84		775N.	1.5		B.	GREY BLACK.				20	10				
[illegible]															
7085	1700W.	850N.	.3.		B-C.	GREY BROWN	10	10		20	170				
86.		825N.	1.3.		A.	ALLUVIUM.	140	10	45	20	20				
87		800N.	1.3.		A-B.	✓	30	10		20					
88		775N.	.8.		A-B.	✓	30	20		10	10				
89		750N.	.4.		A-B.	✓	70	10		70	20				
90		725N.	.4		A-C.	GREY.	10	10		10	20				

249262

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. — **SAMPLE RECORD AND ANALYTICAL DATA SHEET**

PROJECT: PROSPECT: WEST AGNEW — SAMPLE STORAGE REQ'D: LABORATORY: — COLLECTED BY:

1:250.000 SHEET: TYPE OF SAMPLE: SOIL. — SAMPLE PREP. REQ'D: ANALYSIS REQ'D: — DATE DISPATCHED: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES Au	As	Cu	Pb	Zn				
7091.	1700W.	700N.	0.7	B.	GREY BROWN	10			10					
92.		675N.	.6	B.	✓ ✓				10	10				
93.		650N.	1.2.	A-B.	ALLUVIUM.	50			30					
94.		625N.	.7	B.	DK. BROWN.		10		10					
95		600N.	.7	B.	BROWN ORANGE-BROWN				20					
96.		575N.	.9	B.	BROWN.				30					
97.		550N.	.1	A-C.	✓				20					
98.		525N.	.4	A-C.	GREY BROWN		10		10					
99		500N.	.3.	B-C.	BROWN.		10							
7100		475N.	.2.	B-C	✓									
01		450N.	.1	B-C.	CREAM.				10					
02.		425N.	.3	B-C.	DK. BROWN									
03.		400N	.5	B-C.	PALE BROWN		10							
04.		375N	.1	B-C	WHITE									
05		350N.	.5	B-C.	PALE BROWN.	10			10	10				
06		325N	.8	B-C.	DK BROWN	10				10				
07		300N.	.6	B-C	BROWN				10	10				
08		275N.	.1	A-C	BLACK									
09		250N	.9	B.	DK. BROWN	10	10		10	20				
10		225N	.3.	B-C	BROWN					10				
11		200N.	.4	B-C	✓					20				

249263

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET**

PROJECT: PROSPECT: NEST AGNEW. SAMPLE STORAGE REQ'D: LABORATORY: COLLECTED BY:

1:250,000 SHEET: TYPE OF SAMPLE: SOIL. SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED: DATE DISPATCHED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES Sn	As	Cu	Pb	Zn				
7612.	1700 W.	175 200N.	.4.	B-C.	BROWN.	10			10	20				
13.		150N.	.4	B-C	✓	10	10		10	30				
14		125N	.5	B-C	✓	10			10	10				
15		100N	.8	B-C	✓		10		20	10				
16		75N	.6	B-C	WHITE.				10	10				
17		50N	.3	B-C	GREY BROWN									
18		25N	.8	B.	BROWN.				10	10				
19		00 B/L.	.5	A	ALLUVIUM BLACK.					10				
20		25S.	1.3	B-C.	GREY BLACK.					10				
21		50S	.5	B.	DK. BROWN				10	20				
22.		75S	.4	B-C	GREY BROWN					10				
23		100S	.2.	B.	DK. . ✓				10	10				
24		125S	.7	B.	BLACK.				10					
25		150S	1.0	B	DK BROWN				20	10				
26		175S.	1.1	B-C	GREY ✓			5	10	40				
27		200S.	.4	A-C	✓ CREAM					10				
28		225S.	.2.	A-C.	✓ BROWN				10	10				
29		250S	.1	A-C	✓ ✓	NSS				10				
30		275S	.8	B-C	GREY WHITE									
31		300S	.7	B-C	✓ BROWN									
32		325S	.4	A-C	✓ ✓					10				

249264

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET**

COLLECTED BY:

PROJECT: PROSPECT: WEST AGNEW. SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

1:250.000 SHEET: TYPE OF SAMPLE: SOIL. SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION				ANALYSES Sn	As	Cu	Pb	Zn				
7033	1700N.	350S.	.5	B-C.	GREY BROWN						10				
34		375S	.3	B	GREY LT. BROWN										
35		400S	.6	GULLY.	ALLUVIUM	BLACK.					10				
36		425	.6	✓	✓	✓									
37		450S	.4	CREEK.	A-C	GREY BLACK				NES.					
38		475S	.2		A-C	✓ BROWN									
				QZ & QZITE FRAGS ITOUR											
39		500S.	.2		A-B.	GREY BROWN									
				QZ & QZITE FRAG.											
7140	1800N.	500S.	.1		A-C.	GREY BROWN									
				QZ & QZITE FRAGS.											
41		475S	.6		B.	CREAM BROWN					10				
42		450S	.3		B-C	GREY ✓									
43		425S	.5		B-C	✓ ✓									
44		400S	1.2	GULLY.	B.	BLACK ✓				10					
45		375S	.4		B.	GREY ✓									
46		350S	.6		B-C	GREY ✓									
47		325S	.7		B.	GREY BROWN BLACK.					10				
48		300S	1.0		B-C	ORANGE ✓				10	10				
49		275S	.4		B-C	CREAM ✓									
50		250S	.2		B-C	GREY ✓				10	10				

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. — **SAMPLE RECORD AND ANALYTICAL DATA SHEET**

PROJECT: | PROSPECT: NEAT AGNEW. | SAMPLE STORAGE REQ'D: | LABORATORY: | COLLECTED BY:

1:250.000 SHEET: | TYPE OF SAMPLE: SOIL. | SAMPLE PREP. REQ'D: | ANALYSIS REQ'D: | DATE DISPATCHED: | DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES Sn	As	Cu	Pb	Zn
7151	1800N.	225S	.6 GULLY.	A-C	BLACK.	NGS				10
52		200S	1.0	B-C	BROWN					10
53		175S	1.0	B.	BLACK.				10	
54		150S	.1	B-C	CREAM BROWN			10	430	40
55		125S	.2	B-C	✓ ✓					10
56		100S	.5	B.	BROWN BLACK				10	10
57		75S	.2	B-C	GREY BROWN					20
58		50S	.2.	B-C	CREAMY ✓				10	20
59		25S	.5	B	DK. GREY					10
60		00 B/L.	.6	B-C	CREAM BLACK.					10
61		25N	.7	B-C	✓ ✓				20	10
62		50N.	.3.	B-C	✓ BROWN					10
63		75N	.4	B-C	GREY.				10	
64		100N	1.1	B.	BLACK.					10
65		125N	.7	B-C	GREY BROWN					
66		150N	.5	B-C	BROWN					20
67		175N	.9	B-C	CREAM BROWN					10
68		200N	.8	B.	BROWN BLACK					
69		225N	1.2	B.	GREY WHITE					
70		250N	1.0	B-C	✓ ✓					
71		275N	.7	B-C	ORANGE BROWN.				10	10

249266

265

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET**

PROJECT: PROSPECT: West Agnew SAMPLE STORAGE REQ'D: LABORATORY: COLLECTED BY:

1:250.000 SHEET: TYPE OF SAMPLE: Soil. SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE DISPATCHED: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION				ANALYSES								
							Sn	As	Cu	Pb	Zn				
7172.	1800W.	300N.	.4	B-C	Yellow Orange					10	10				
73		325N	.3	B-C	Orange Brown		10				20				
74		350N.	.4	B-C	✓ Grey.		10				20				
75		375N	.8	B-C	Brown					20	10				
76		400N	1.9	B.	Grey.						10				
77		425N	5	B.	Creamy Brown					10	10				
78		450N	1.0	B-C	✓ ✓					10	10				
79		475N.	.6 Road.	B-C	Orange Black					10	30				
80		500N	1.0	B.	Brown		30			10	20				
81		525N	.5 Creek	A-C	Grey Black		30				20				
82.		550N	.6	B-C	Brown ✓		10				10				
83.		575N	.8	B-C	Grey.		20				10				
84		600N	.6	B-C	Orange Brown		30			10	10				
85		625N	.2	B-C	Orange						20				
86		650N	.8	B-C	Grey ✓		20				10				
87		675N	.5 Gully	B	Black.		10				10				
88		700N.	.8	B.	Grey		10				20				
89		725N	1.2.	B.	Dk Grey.		20								
90		750N.	.7	B-C	Grey.		10			10	10				
91		775N	.6	B-C	Orange Brown		10				40				
92.		800N	.5 Road	B	Dk. ✓		10		5	10	10				

5 cm

249267

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET** COLLECTED BY:

PROJECT: PROSPECT: WEST AGNEW SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

1:250.000 SHEET: TYPE OF SAMPLE: Soil. SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION				ANALYSES								
							Sn	As	Cu	Pb	Zn				
7193	800N.	825N	.5	Gully	A-C	BR - BL	NES		5	10	20				
94		850N	.6	✓	A-C	✓ ✓	130		5		30				
95		875N	.4		A-C.	✓ ✓	150		5	10	20				
7196	1900W.	900N.	1.0		B-C	GREY BROWN	10								
97		975N	.7		B-C	✓ ✓									
98		950N.	1.0		B.	GREY CLAY.	50		10	30	10				
99		925N	.4		B-C	BROWN				10	10				
7200		900N.	.4		B-C	GREY WHITE									
01		775N	.4		B-C	CREAM BROWN									
02		750N.	1.0		B-C	BLACK ✓				10	20				
03		725N	.8		B-C	GREY ✓									
04		700N	.6		B	YELLOW CLAY.				10	20				
05		675N	.5		B-C	BLACK BROWN	10								
06		650N	1.3		B.	GREY.	20								
07		625N	.7		B-C	✓ ✓	10				20				
08		600N	.8		B-C	✓ BLACK.	10				10				
09		575N	.7		B-C	BROWN	10				10				
10		550N	.6		B-C	CREAM ✓	10				10				
11		525N	1.3	Gully	B.	GREY BROWN	10			20	10				
12		500N.	.7		B-C	BROWN.	10								

5 cm

249268

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET**

COLLECTED BY:

PROJECT: PROSPECT: West Agnew SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

1:250,000 SHEET: TYPE OF SAMPLE: Soil SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES								
						Sn	As	Cu	Pb	Zn				
7213	1900W.	475N.	.5	B-C	BROWN	10			10					
214		450N	.7	B-C	GREY BROWN									
215		425N	.7	B-C	BROWN				10					
216		400N	.6	B-C	CREAM BROWN				10					
17		375N	.3	A-C	BLACK	10				10				
18		350N	.6	B.	✓ BROWN	10								
19		325N	1.2	B-C	CREAM ✓	10								
20		300N	1.2	B-C	✓ ✓				10					
21		275N	.5	B-C	✓ ✓	10	10							
22		250N	.3	B-C	ORANGE ✓				10	40				
23		225N.	.7	B-C	CREAM BLACK					30				
24		200N	.4	B-C	✓ GREY	10				10				
25		175N	.5	B-C	✓ BROWN					10				
26		150N	.4	B-C	GREY ✓									
27		125N	.5	B-C	GREY BROWN					10				
28		100N.	.3	B-C	GREY.									
29		75N.	.9	B.	WHITE GREY.									
30		50N	.5	B-C	GREY BROWN									
31		25N.	1.0	B-C	✓ BLACK.									
32		00 B/L	.6	B-C	CREAM ✓					10				
33		25S	.5	B-C	GREY BROWN	10				40				

249269

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET**

PROJECT: PROSPECT: West Agnew. SAMPLE STORAGE REQ'D: LABORATORY: COLLECTED BY:

1:250,000 SHEET: TYPE OF SAMPLE: Soil SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE DISPATCHED: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION				ANALYSES								
							Sn	As	Cu	Pb	Zn				
7234	1900W	50S	.4	B-C	GREY	BROWN					30				
35		75S	1.4	B-C	GREEN	✓					10				
36		100S	1.0	B-C	✓	✓		20		10	20				
37		125S	.4	B-C	GREY	✓	10				70				
38		150S	.2	B-C	✓	✓					20				
39		175S	.4	B-C	✓	✓									
40		200S	.4	B-C	GREEN	BROWN	10	30		10					
41		225S	.6	B-C	GREY	✓	10				90				
42		250S	1.0	B-C	GREY.		[illegible]								
43		275S	.2 GULLY.	A-C	✓	BLACK.	NES				20				
44		300S	.4	B-C	GREY	BROWN	[illegible]				30				
45		325S	.5	B-C	✓	✓	30	10		10					
46		350S	.3	B-C	✓	WHITE.					50				
47		375S	.4	B-C	✓	✓	[illegible]	[illegible]							
48		400S	.5	B-C	BROWN.		10	10			10				
49		425S	.9	B-C	GREY	WHITE	[illegible]	[illegible]		20					
50		450S	1.1	B-C	✓	✓									
51		475S	1.0	B-C	✓	✓		10							
52		500S	.4	B-C	✓	✓									

249270

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. — **SAMPLE RECORD AND ANALYTICAL DATA SHEET**

PROJECT: | PROSPECT: West Agnew | SAMPLE STORAGE REQ'D: | LABORATORY: | COLLECTED BY: J

1:250,000 SHEET: | TYPE OF SAMPLE: Soil. | SAMPLE PREP. REQ'D: | ANALYSIS REQ'D: | DATE DISPATCHED: | DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES Sn	As	Cu	Pb	Zn
7753	3000N.	550 S.	.6	A-C.	Cream Brown					
54		525 S	1.3	B-C	Grey White	NSMS				
55		500 S	1.1	B-C	✓ Brown					
56		475 S	.2	A-C	✓ ✓	NSA				
~~57~~			LGE Qz & Qzite Rnes.							
57		450 S	.4	B-C	Dk. Brown	20			20	
58		425 S	.4 Gully	B.	✓ ✓				10	10
59		400 S	1.0	B.	Yellow Clay	20			10	10
60		375 S	.8	B-C	Cream Brown	10		N.S.		
61		350 S	1.0 Ck. Gully	B.	Black.	10				
62		325 S	4	B-C	Grey Brown	10			10	10
63		300 S	.7	B-C	✓ ✓					20
64		275 S	.7	B-C	✓ Black.				10	
65		250 S	1.0	B.	Yellow Clay.	290			10	10
66		225 S	.7	B-C	Orange Brown	10	30		20	
67		200 S	.6	B	Grey Black	10				10
68		175 S	1.0	B	✓ ✓	10				
69		150 S	.6	B-C	✓ Brown	10				
70		125 S	.1	A-C	✓ ✓	NES				
71		100 S	.4	B-C	✓ ✓	10				
72		75 S	.1	A-C	✓ ✓					10

249271 270

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET** COLLECTED BY:

PROJECT PROSPECT: WEST AGNEW SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

1:250.000 SHEET: TYPE OF SAMPLE: SOIL SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES								
						Sn	As	Cu	Pb	Zn				
72B.	200W.	50S.	1.0	B-C	BROWN.	10								
74		25S	1.0	B-C	GREY WHITE									
75		00 B/L.	.3	B-C	✓ ✓	10								
76		25N.	.4	B-C	✓ BROWN	10				10				
77		50N	1.1	B-C	✓ ✓	10			10	10				
78		75N	.7	B-C	✓ ✓									
79		100N	.3	B-C	GREY GREEN BROWN	20	10			10				
80		125N	.7	B-C	GREY.	NES				10				
81		150N	.5	B-C	GREY GREEN	10	10			10				
82		175N	.5	B-C	GREEN BROWN	10	10			10				
83		200N	1.1 CREEK	B.	GREY ✓	150			20	10				
84		225N	.5	B.	YELLOW CLAY.	10		5	10					
85		250N	.9	B-C	GREEN BROWN					10				
86		275N	1.0	B-C	BLACK ✓	10			10	10				
87		300N.	1.0	B-C	GREY ✓					10				
88		325N.	.8	B-C	✓ ✓					10				
89		350N	.5	B-C	✓ BLACK	10				10				
90		375N.	.7	B-C	✓ BROWN.	10								
91		400N	.9	B-C	GREY.									
92		425N	.2	A-C	GREEN BROWN	NES				10				
93		450N	.8	B.	✓ ✓	10	20		10					

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET**

PROJECT: PROSPECT: NEST AGNEW SAMPLE STORAGE REQ'D: LABORATORY: COLLECTED BY:

1:250,000 SHEET: TYPE OF SAMPLE: SOIL SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE DISPATCHED: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION				ANALYSES Sn	As	Cu	Pb	Zn
7294	2000W.	475N	.4	B-C	BROWN		10				20
95		500N	.6	B-C	GREY BROWN			20			20
96		525N	.6	B-C	/	/	30				
97		550N	.5	B-C	/	WHITE					
98		575N	.8	B-C	CREAM	BLACK	10				
99		600N.	.4	B-C	/	BROWN	20				10
7300		625N.	.6	B-C	/	/		NES			10
301		650N	.8	B.	GREY	BROWN	10				10
02		675N	.5	B-C	GREY.						
03		700N	.6	B-C	/	BLACK	50			20	
04		725N	1.0	B-C	CREAM	BROWN					20
05		750N	1.0	B-C	GREY.		10				
06		775N	.6	B-C	CREAM	GREY	20				
07		800N	.6	B-C	/	BROWN	10				
08		825N	1.3	ROAD CONTAMINATION B.		BLACK GREY	20		5	170	30
09		850N	.6	B.		/ /		NES	5	180	390
10		875N	.4	B-C	ORANGE	BROWN					10
11		900N	.8	B-C	WHITE	GREY.					
12	2100W	900N	1.4	B.	GREY.		20			10	20
13		875N	.6	B-C	GREY	BLACK	30				10
14		850N	.7	ROAD B-C	/	BROWN				10	10

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. — **SAMPLE RECORD AND ANALYTICAL DATA SHEET** — COLLECTED BY:

PROJECT: — PROSPECT: WEST AGNEW — SAMPLE STORAGE REQ'D: — LABORATORY: — DATE DISPATCHED:

1:250,000 SHEET: — TYPE OF SAMPLE: SOIL — SAMPLE PREP. REQ'D: — ANALYSIS REQ'D: — DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES Sn	As	Cu	Pb	Zn
7315	2100 N.	825 N	.4	B-C	CREAM BROWN	20				10
16		800 N	.6	B-C	GREY WHITE	20				10
17		775 N	.4	B-C	CREAM CLAY.	30				10
18		750 N	.3	B-C	✓ BROWN	10				10
19		725 N	.5	B-C	GREY BLACK	10				
20		700 N	.3	B-C	✓ ✓	NES				10
21		675 N	.9	B-C	CREAM BROWN	10			20	50
22		650 N	.2	B-C	✓ GREY	10				20
23		625 N	1.0	B-C	✓ BROWN	20				
24		600 N.	.3	B-C	BROWN		10			10
25		575 N	.5	B-C	GREY WHITE	10				
26		550 N	.6	B-C	CREAM BROWN	20			10	
27		525 N	1.0	B-C	✓ ✓	20		10	10	20
28		500 N.	.2	B-C	GREY ✓	10	10			40
29		475 N.	.5	B-C	YELLOW CLAY.	20	20			20
30		450 N.	.3	B-C	GREY WHITE	10				
31		425 N	.7	B-C	BLACK BROWN	20				
32		400 N.	GULLY	ALLUVIUM	BLACK.	10				10
33		375 N	.5	B-C	GREY BROWN		10		10	20
34		350 N.	.5	B-C	CREAM ✓		20			30
35		325 N	.1	A-C	GREY ✓	NES				10

272

2492273

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET**

PROJECT: PROSPECT: WEST ACNEW SAMPLE STORAGE REQ'D: LABORATORY: COLLECTED BY:

1:250,000 SHEET: TYPE OF SAMPLE: SOIL SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE DISPATCHED: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION				ANALYSES								
							Sn	As	Cu	Pb	Zn				
7336	2100W.	300N.	.4	B-C	GREY	BROWN		10		10	20				
37		275N	.3	B-C	✓	✓		20			30				
38		250N.	1.0	B-C	✓	WHITE									
39		225N	.7	B-C	✓	✓	10								
40		200N.	.6	B-C	✓	BROWN	10								
41		175N.	.2	A-C	✓	✓	NES								
42		150N	.2	A-C	✓	✓		10			10				
43		125N	.3	B-C	GREY	WHITE	10								
44		100N	.6	B-C	✓	✓									
45		75N	.7	B-C	BLACK	BROWN	10				10				
46		50N	.3	B-C	LT.	BROWN	40	10			50				
47		25N	.3	A-C	GREY	✓	10				50				
48		00 B/L	.6 GULLY	ALLUVIUM	BLACK.		100	10	5	80	30				
49		25S	.7	B-C	BROWN	BLACK	10	10			10				
50		50S	.3	B-C	GREY	CREAM		10		10	30				
51		075S	.3	B-C	✓	✓		10	5	10	40				
52		100S	.3	B-C	✓	✓					20				
53		125S	.8 GULLY	ALLUVIUM	BLACK.		50			10	30				
54		150S	.4	B-C	GREY	BROWN	10								
55		175S	.8	B-C	✓	BLACK	50			20	20				
56		200S	.5	B-C	BROWN	GREY.	10	10		10					

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET** COLLECTED BY:

PROJECT: PROSPECT: SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

1:250,000 SHEET: TYPE OF SAMPLE: SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES								
						Sn	As	Cu	Pb	Zn				
7357	2100W	225S	.2	B-C	GREY BLACK	NES		10		70				
58		250S	.7	B-C	YELLOW CLAY.	10			20	10				
59		275S	.5	B-C	WHITE GREY.	40			10					
60		300S	.3	B-C	✓ ✓									
61		325S	.3	A-C	GREY									
62		350S	.3	B-C	CREAM BROWN	20	10							
63		375S	1.0	B-C	GREY WHITE				20					
64		400S	1.1	B-C	✓ ✓									
65		425S	.7	B-C	✓ BROWN									
66		450S	.5	B-C	✓ WHITE	30	10		10					
67		475S	.4	B-C	YELLOW CLAY	20		5	50	10				
68		500S	1.1	B	✓ ✓	30			10					
69		525S	1.0	B	GREY BROWN	20	10		30					
70		550S	1.0	B	✓ ✓	10			20					
7371	2200W	525S	.5	B-C	GREY BROWN	10			20					
72		500S	.7	B-C	✓ ✓	10			30					
73		475S	.6	B-C	ORANGE ✓	10			30	10				
74		450S	1.0	B-C	DK. BROWN	20			10					
75		425S	1.0	B-C	✓ ✓	10			20	10				
76		400S	1.0	B-C	GREY ✓				10	10				

24927

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET** COLLECTED BY:

PROJECT: PROSPECT: SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

1:250,000 SHEET: TYPE OF SAMPLE: SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES Sn	As	Cu	Pb	Zn				
7377.	22ooW.	375S.	.2	A-C	GREY BROWN	80			20	20				
78		350S	.3	B-C	CREAM ✓	10			10					
79		325S	.5	B-C	GREY WHITE	10								
80		300S	1.1	B GULLY.	✓ BLACK	NES								
81		275S	.4	B-C	CREAM BROWN	20	30		30	20				
82		250S	.6	B-C	BROWN BLACK	10	10		20	10				
83		225S	.9	B GULLY	BLACK.				10	10				
84		200S	1.3	B	GREY BROWN	60								
85		175S	.4	B-C	CREAM GREY.					10				
86		150S	.3	B-C	GREY BROWN				10					
87		125S	1.3	B	BLACK ✓	10								
88		100S	.5	B-C	BROWN	10			20					
89		75S	.3	B-C	CREAM GREY.									
90		50S	.4	B-C	GREY	10								
91		25S	.4	B-C	✓ CREAM	10	10			20				
92		00 B/L	.8	B GULLY	BLACK GREY.					30				
93		25N.	.8	B-C	GREY BROWN	10	10			20				
94		50N.	.5	B-C	✓ ✓	10	10							
95		75N	.3	A-C	✓ ✓	NES				30				
96		100N.	.4	A-C	✓ ✓	10				10				
97		125N	.5	B-C	✓ ✓					20				

249376

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET** COLLECTED BY:

PROJECT: PROSPECT: SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

1:250,000 SHEET: TYPE OF SAMPLE: SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION				ANALYSES								
							Sn	As	Cu	Pb	Zn				
7398	2200N.	150 N.	.9	B-C	GREY	BROWN					10				
99		175N.	.4	B-C	✓	✓					10				
7400		200N.	.7	B-C	✓	BLACK					10				
01		225N	.9	B-C	✓	WHITE									
02		250N	.3	B-C	✓	✓									
03		275N	.3	B-C	✓	BROWN	10				40				
04		300N.	.8	B-C	✓	✓					10				
05		325N	.2	A-C	✓	✓									
06		350N.	.5	B-C	CREAM	✓	20								
07		375N.	.8	B-C	✓	✓		20		10	10				
08		400N	.8	B-C	GREY	WHITE									
09		425N	.8	B-C	✓	BLACK.									
10		450N	.4	B-C	✓	✓	10				20				
11		475N	.9	B-C	CREAM	BROWN	30			10					
12		500N	1.0	B-C	GREY	✓	10			10					
13		525N	.8	B-C	✓	✓					10				
14		550N	1.0	GULLY B-C	CREAM	BLACK.	10			10					
15		575 N.	1.0	✓ A-B.	GREY	✓	10				10				
16		600 N.	.6	B-C	CREAM	BROWN	20								
17		625N.	.6	B-C	BLACK	✓	NES			10					

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET**

PROJECT: PROSPECT: WEST ACNEW SAMPLE STORAGE REQ'D: LABORATORY: COLLECTED BY:

1:250,000 SHEET: TYPE OF SAMPLE: Soil. SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE DISPATCHED: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES Sn	As	Cu	Pb	Zn				
7418	2200W	650N.	1.0	B.	YELLOW CLAY	20								
19		675N	1.0	B-C	BROWN BLACK	20								
20		700N.	.4	B-C	GREY WHITE	10				10				
21		725N	.8	B.	YELLOW CLAY.	10	10			20				
22		750N	1.0	B.	GREY.	10			10	20				
				LG. QZ & QZITE FRAGS.										
23		775N.	6	B	GREY BLACK	20				20				
24		800N	.8	B-C	BLACK.	30			10					
25		825N	1.3	B-C	CREAM ORANGE									
26		850N	.8 ROAD	B-C	BROWN ✓	20	10		30	10				
27		875N	1.0	B-C	GREY WHITE	20								
28		900N	.6	B-C	✓ ✓	20								
7429	2300W	900N	.8	B-C	GREY BROWN									
30		875N	1.3	B-C	CREAM ✓	10			10	10				
31		850N	.7	B-C	✓ GREY	10			10					
32		825N	1.1	B-C	✓ BROWN	10								
33		800N	1.1	B-C	WHITE	10								
34		775N	.6	B-C	GREY WHITE	10								
35		750N	1.0	B-C	BROWN	20				10				
36		725N	.5	B-C	GREY BROWN	10								

S12242

5 cm

249279

GOLD FIELDS EXPLORATION PTY. LTD. — **SAMPLE RECORD AND ANALYTICAL DATA SHEET**

PROJECT: | PROSPECT: WEST AGNEW | SAMPLE STORAGE REQ'D: | LABORATORY: | COLLECTED BY:

1:250,000 SHEET: | TYPE OF SAMPLE: Soil | SAMPLE PREP. REQ'D: | ANALYSIS REQ'D: | DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES Sn	As	Cu	Pb	Zn
7437	2300W	700N.	.6	B-C	GREY BROWN	10				
38		675N	.6	B-C	CREAM ✓	10			10	
39		650N	.6	B-C	GREY BLACK	20				
40		625N	.9	B	✓ BROWN					
				LG. Qz FRAGS.						
41		600N.	.8	B-C	CREAM BROWN					
42.		575N	1.0	GULLY. BLACK ORGANIC.			NES	5	60	50
43		550N	1.0	B-C	ORANGE BLACK			5	10	20
44		525N	1.0	B-C	✓ ✓	10			10	10
45		500N.	1.1	B-C	CREAM BROWN					
46		475N	.5	B-C	GREY ✓					
47		450N	.3	B-C	CREAM ✓	10	10		10	40
48		425N	.8	B-C	✓ ✓					
49		400N	.6	B-C	✓ ✓	10	10			20
50		375N	.7	B-C	✓ ✓					
51		350N	.8	B-C	GREY WHITE				10	10
52		325N	.6	B-C	CREAM BROWN					10
53		300N	.7	B-C	✓ ✓					
54		275N	.2	A-C	✓ BLACK		NES			
55		250N	.6	B-C	CREAM BROWN					20
56		225N	.7	B-C	✓ ✓	20			10	

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET**

PROJECT: PROSPECT: WEST AGNEW SAMPLE STORAGE REQ'D: LABORATORY: COLLECTED BY:

1:250,000 SHEET: TYPE OF SAMPLE: SOIL SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE DISPATCHED: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION				ANALYSES							
							Sn	As	Cu	Pb	Zn			
7457	2300N	200N.	7	B-C	GREY BROWN									
58		175N	.4	A-C	✓	BLACK								
59		150N	.4	B-C	✓	BROWN	NES							
60		125N	.4	B-C	✓	✓	NES							
61		100N	.9	B-C	✓	WHITE								
62		75N	.7	B-C	✓	BROWN								
63		50N	.4	B-C	✓	✓		10			30			
64		25N	.5	B-C	BLACK	✓	10			10	40			
65		CO B/L	.7 GULLY	B.	GREY	✓								
66		25S	1.0 GULLY	A-B.	✓	BLACK					10			
67		50S	1.0	B-C	CREAM	✓	20			10				
68		75S	.3	B-C	✓	BROWN	40	10		10	10			
69		100S	.3	B-C	GREY	✓								
70		125S	.4	B-C	✓	✓		10						
71		150S	.7	B-C	GREY	BLACK								
72		175S	1.3 GULLY	B.	✓	✓	NES				20			
73		200S	.3	B-C	ORANGE	BROWN	40	10		10				
74		225S	.7	B-C	GREY	WHITE	20							
75		250S	.8	B-C	BROWN	BLACK	10			20	10			
76		275S	.6	B-C	BROWN		NES				20			
77		300S	.5	B-C	GREY	WHITE	10							

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET** COLLECTED BY:

PROJECT: PROSPECT: West Agnew SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

1:250.000 SHEET: TYPE OF SAMPLE: Soil SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION				ANALYSES								
							Sn	As	Cu	Pb	Zn				
7479	2300W	3255	.4		B-C	GRET WHITE	10								
79		3505	.6		B-C	✓ ✓	20								
80		3755	1.0		B-C	✓ ✓	20								
81		4005	1.0		B-C	✓	10								
82		4255	.7		B-C	✓	10								
83		4505	.7	GULLY	B	✓	20								
84		4755	.6		B-C	✓ BROWN	20								
7485	2400W	4755	.6		B-C	GREY BLACK	10								
86		4505	1.3		B-C	✓ ✓	10								
87		4255	1.2		B-C	✓ BROWN	20								
88		4005	1.0		B-C	DARK GREY	10				20				
89		3755	.4		B-C	GREY BROWN	10								
90		3505	.4		B-C	CREAM ✓	10	10		70	10				
91		3255	.6		B-C	GREY ✓									
92		3005	1.2	GULLY	A-B	✓ BLACK				10					
93		2755	.3		B-C	✓ BROWN									
94		2505	.3		B-C	CREAM ✓	20								
95		2255	.4		B-C	✓ ✓	10				10				
96		2005	.5		B-C	DK BROWN				10					
97		1755	.5		B-C	CREAM ✓				10					

2492281

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. — **SAMPLE RECORD AND ANALYTICAL DATA SHEET**

COLLECTED BY:

PROJECT: PROSPECT: WEST AGNEW. SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

1:250,000 SHEET: TYPE OF SAMPLE: SOIL. SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION				ANALYSES Sn	As	Cu	Pb	Zn				
7498	2400N.	150S	.1	B-C	CREAM BROWN		20		10	30	20				
99		125S	.8	B-C	✓ ✓		10			10	10				
7500		100S	1.2 GULLY	B.	GREY BLACK										
501		75S	.5	B-C	CREAM BROWN		30			10	10				
502		50S	.8	B-C	GREY ✓		10								
503		25S	.1	B-C	CREAM BLACK		20	10			30				
504		00 B/L	.5	B-C	GREY WHITE										
505		25N	.2	A-C	✓ BROWN						10				
506		50N	1.0	B-C	GREY										
507		75N	.3	A-C	✓ BLACK										
508		100N	.5	B-C	✓ WHITE						10				
509		125N	1.0	B-C	✓ BLACK		10				10				
510		150N	1.0	B-C	✓ WHITE		10								
7511		175N	.7	B-C	CREAM BROWN		10				10				
0005		200N	.8	B-C	GREY BLACK										
006		225N	.7	B-C	GREY		10								
007		250N	.3	B-C	✓ BROWN		10	40							
008		275N	.2	A-C	CREAM GREY		NES				20				
009		300N	.6	B-C	✓ BROWN		40			10	10				
010		325N	.7	B-C	GREY WHITE										
011		350N	.7	B-C	✓ ✓						20				

24923

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET** COLLECTED BY:

PROJECT: PROSPECT: WEST AGNEW SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

1:250,000 SHEET: TYPE OF SAMPLE: SOIL SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES								
						Sn	As	Cu	Pb	Zn				
10012	2400N.	375 N.	.6	B-C	GREY BROWN	10								
013		400N	.2	A-C.	CREAM GREY		10							
014		425N	.7	B-C	✓ BROWN		10			20				
015		450N	.7	B-C	✓ ✓		NES							
016		475N	.7 CREEK WORKINGS.	B-C	✓ ✓	10	10							
017		500N	.4	B-C	✓ ✓	190				10				
018		525N	.5	B-C	✓ ✓	100								
019		550N	.8	B.	GREY	10				10				
020		575N	.8	B LG QZ. FRAGS. ✓		10				30				
021		600N	1.3 GULLY	B.	GREY BLACK	40			30	30				
022		625N	.5	B-C	CREAM BROWN	1040								
023		650N	.4	B.	✓ ✓	20				50				
024		675N	.6	B-C	GREY DK ✓	30								
025		700N.	.5	B-C	✓ WHITE	20								
026		725N	.5 ROAD	B.	GREY WHITE	30								
027		750 N	.3	B-C	✓ ✓	30								
028		775N	.4	B-C	✓ BROWN	20				20				
029		800N	.7	B-C	CREAM ✓	10								
030		825N	.6	B-C	GREY ✓					10				
10, 031		850N.	1.1 GULLY	B	✓ BLACK	10			10	40				

2492283

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET**

PROJECT: PROSPECT: West Agnew SAMPLE STORAGE REQ'D: LABORATORY: COLLECTED BY:

1:250,000 SHEET: TYPE OF SAMPLE: Soil. SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED: DATE DISPATCHED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES								
						Sn	As	Cu	Pb	Zn				
10032	2500W	850N.	1.3 Gully	B.	Grey	40								
033		825N	.8	B-C	✓ Brown	40				10				
034		800N	.9	B-C	✓ White	20								
035		775N	.8	B-C	Black Brown	20			10					
036		750N	.3	B-C	Yellow Clay	NES				30				
037		725N	.2	A-C	Grey Black					10				
038		700N	.7	B.	Lg. Qz Flaky Brown									
039		675N	.7	B-C	Cream ✓									
040		650N	.7	B-C	✓ ✓	160								
041		625N	.4	B-C	Grey Black									
042		600N.	1.2	B-C	✓ Brown					30				
043		575N	.2	A-C	Cream ✓	10	20		10	20				
044		550N	.5	B-C	✓ ✓		10		20	10				
045		525N	.8	B-C	Grey White									
046		500N	.9	B-C	Black Brown				10					
047		475N	1.0	B-C	Grey Black				10	10				
048		450N	.5	B-C	✓ Brown									
049		425N	1.3 Creek Workings.	B-C	Cream Black			5	20	30				
050		400N	.8	B-C	Grey ✓		10		10					
051		375N	.2	A-C	✓ White									
052		350N	.1	A-C	Cream Grey				20	20				

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET** COLLECTED BY:

PROJECT: PROSPECT: NEST AGNEW SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

1:250.000 SHEET: TYPE OF SAMPLE: Soil. SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES								
						Sn	As	Cu	Pb	Zn				
10053	2500N.	325N	.3	B-C	GREY.									
054		300N	.5	B-C	CREAM BROWN				10					
055		275N	.6	B-C	GREY	10								
056		250N	.5	B-C	✓ BROWN	10			10					
057		225N	.4	B-C	GREY									
058		200N	.5	B-C	✓ BROWN	10								
059		175N	.6	B-C	CREAM ✓	30			10					
060		150N	7	B-C	GREY									
061		125N	.7	B-C	✓ WHITE									
062		100N	.3	B-C	CREAM GREY									
063		75N	.1	A-C	GREY.	10								
064		50N	.3	B-C	DK GREY.	10			10	10				
065		25N	1.4 GRIT	B.	✓ ✓	100								
066		00 B/L	1.0	B-C	CREAM GREY.	30			30					
067		25S	1.0	B.	GREY BLACK									
068		50S	.3	B-C	CREAM BROWN	10								
069		75S	.3	B-C	✓ ✓	20	10							
070		100S	.8	B-C	GREY BLACK	10								
071		125S	.1	B-C	CREAM BROWN	20		5	50	30				
072		150S	.6	B-C	GREY ✓	10								
073		175S	.5	B-C	✓ WHITE									

24923

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. — **SAMPLE RECORD AND ANALYTICAL DATA SHEET** — COLLECTED BY: POLTOCK

PROJECT: — PROSPECT: MT HONEW — SAMPLE STORAGE REQ'D: — LABORATORY: — DATE DISPATCHED:

1:250.000 SHEET: — TYPE OF SAMPLE: SOIL — SAMPLE PREP. REQ'D: — ANALYSIS REQ'D: — DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES Sb	As	Cu	Pb	Zn				
10074	2500N.	200S.	1.0	B-C	GREY BLACK	10								
075		225S	1.0	B-C	CREAM BROWN	20			20					
076		250S	.8	B-C	/ /	10			30	20				
077		275S	.4	B-C	/ GREY	10			10					
078		300S	.5	B-C	/ BROWN	40			10	10				
079		325S	.4	B-C	ORANGE /	10	10		20	10				
080		350S	1.0	B-C	CREAM /	10			20					
081		375S	1.2	B-C	GREY /									
082		400S	1.1	B-C	/ /	20								
083		425S	.5	B-C	CREAM BLACK	20			10					
084		450S	1.0	B-C	GREY BROWN	10								
10085	2600W	425S	.5	B-C	Grey brn	20	10	5	40	30				
086		400S	1.0	" "	" "	10			20	10				
087		375S	.9	" "	Yel brn	20	30		30	20				
088		350S	.8	" "	Grey black	20			20	20				
089		325S	.7	" "	" "	20								
090		300S	.2	" "	Yel clay	20			10	10				
091		275S	.8	" "	Grey black	20								
092		250S	.4	" "	" brn	30			10					
093		225S	1.0	" "	Grey black	220			10					

249286

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. — **SAMPLE RECORD AND ANALYTICAL DATA SHEET** — COLLECTED BY: PolTock

PROJECT: — PROSPECT: West Alpha — SAMPLE STORAGE REQ'D: — LABORATORY: — DATE DISPATCHED:

1:250,000 SHEET: — TYPE OF SAMPLE: Soil — SAMPLE PREP. REQ'D: — ANALYSIS REQ'D: — DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES								
						Sn	As	Cu	Pb	Zn				
10094	2600W	200S	1.0	B-C	Grey black	60								
095		175S	.2	A-C	" "	NES								
096		150S	.6	B-C	" "	20								
097		125S	.3	" "	" "	10	10			20				
098		100S	.4	" "	" white	10								
099		75S	.7	" "	" brn	20								
10100		50S	.5	" "	" "	20				10				
101		25S	1.0	" "	Black brn	10			20	20				
102		000	1.0	" "	" "					20				
103	2600W	25N	.6	" "	Grey "	10								
104		50N	1.0	" "	" "	10								
105		75N	.7	" "	" "	30	10		10					
106		100N	.4	" "	" "	10	10							
107		125N	.6	" "	" "	10	10		10	10				
108		150N		" "	" "	10	10		30	10				
109		175N	1.0 m	" "	" "	10				20				
110		200N	1.4	B	Black grey	20			60	20				
111		225N	1.2	B	" "	10				10				
112		250N	.7	B-C	Grey brn	20								
113		275N	.7	" "	" "				10					
10114		300N	.5	" "	" "	10	10		20					

249281

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET** COLLECTED BY: PoLTock

PROJECT: PROSPECT: West Arnhem SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

1:250,000 SHEET: TYPE OF SAMPLE: Soil SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES Sn	As	Cu	Pb	Zn
10115	2600W	325 N	.5	B-C	Grey brn	10				10
116		350 N	1.0	"	" "	10			10	10
117		375 N	1.0	"	" "	20				30
118		400 N	.6	"	" "	30				
119		425 N	.6	"	" "	20				
120		450 N	.6	"	" "	20				
121		475 N	.4	"	Brn black	10			20	
122		500 N	.7	"	" "	20				
123		525 N	.5	"	Light brn	20				
124		550 N	.8	"	" "	20				
125		575 N	.8	"	Grey	10			10	10
126		600 N	.8	"	Black brn	80				10
127		625 N	.5	"	Grey - white	130			10	
128		650 N	.4	"	" brn	NES			10	20
129		675 N	.9	"	" "	10				30
130		700 N	.6	"	" "	10	30			
131		725 N	.7	"	" "	20				20
132		750 N	.9	"	" "	10				10
133		775 N	1.1	"	" "	20		10	30	30
134		800 N		"	Grey	20			10	20
135		825 N	.7	"	" brn	40				10
10136		850 N	.7	"	Black "	20			10	10

2419288

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET** COLLECTED BY: POLTOCK

PROJECT: PROSPECT: NEW Agnew SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

1:250.000 SHEET: TYPE OF SAMPLE: Soil SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES Sn	As	Cu	Pb	Zn				
10137	2700W	950N	.2	A-C	Grey brn	20				20				
138		925N	.4	B-C	" "	10				10				
139		900N	1.2	" "	" white	80								
140		875N	.6	" "	" "	30			10					
141		850N	.8	" "	Grey	40		55	40	20				
142		825N	.5	" "	Grey brn, pits	160		5	30	10				
143		800N	.6	" "	Grey brn	70			10	10				
144		775N	.5	" "	" "	10			10					
145		750N	.8	" "	" "	10								
146		725N	.6	" "	" "	30								
147		700N	.1	A-C	" "	10			10	10				
148		675N	1.0	B-C	" "	20			10	10				
149		650N	.5	" "	" "	10	10		10	10				
10 150		625N	.5	" "	Brn	10								
151		600N	.5	" "	Grey brn	20								
152		575N	.8	Pit " "	Grey.	10				10				
153		550N	.7	" "	Pink Green	60		5	30	30				
154		525N	.7	" "	Brn				10					
155		500N	1.0	" "	Grey brn	20								
156		475N	.2	A-C	Grey	10			10	20				
157		450N	.2	" "	" brn	NSS			20	30				

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. — **SAMPLE RECORD AND ANALYTICAL DATA SHEET** — COLLECTED BY: POLTOCK

PROJECT: — PROSPECT: W Agnew — SAMPLE STORAGE REQ'D: — LABORATORY: — DATE DISPATCHED:

1:250.000 SHEET: — TYPE OF SAMPLE: Soil — SAMPLE PREP. REQ'D: — ANALYSIS REQ'D: — DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES Sn	As	Cu	Pb	Zn				
10158	2700W	425N	.8	B-C	Grey black				20					
159		400N	.7	B	Grey	80								
160		375N	.3	A-C	" brn	80			10	10				
161		350N	.5	B-C	" "	40								
162		325N	.4	" "	" white	170								
163		300N	.5	B	Grey	130								
164		275N	.4	B-C	" brn	40	272		20	30				
165		250N	1.0	PIT A-C	Black	20			10	30				
166		225N	.2	B-C	Grey clay	10				30				
167		200N	.8	" "	" brn	10				20				
168		175N	.6	" "	" "	10				20				
169		150N	.4	" "	" "				10	20				
170		125N	.7	" "	White					10				
171		100N	.4	" "	"					10				
172		75N	.9	" "	Grey brn	10			10	10				
173		50N	.7	" "	" black					10				
174		25N	.6	" "	" "	NES				20				
175		00	.7	" "	" "	20			10	10				
176		25S	.3	" "	" brn	.				20				
177		50S	.9	" "	" "	10			10	10				
10178		75S	.5	" "	Grey white	10				20				

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. — **SAMPLE RECORD AND ANALYTICAL DATA SHEET** — COLLECTED BY: PaTack

PROJECT: — PROSPECT: W Agnew — SAMPLE STORAGE REQ'D: — LABORATORY: — DATE DISPATCHED:

1:250.000 SHEET: — TYPE OF SAMPLE: Soil — SAMPLE PREP. REQ'D: — ANALYSIS REQ'D: — DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES Sn	As	Cu	Pb	Zn				
10179	2700W	100S	.4	B-C	Dk brn	10			10	20				
10180		125S	.5	" "	Grey white				10	10				
10181		150S	.6	" "	" brn	20			10					
10182		175S	.9	" "	" black	10			10	10				
10183		200S	1.4	" "	" white									
10184		225S	.6	" "	" "									
10185		250S	.3	" "	" black	10	10		20	10				
10186		275S	.3	" "	" "									
10187		300S	.8	" "	" "	20			10	10				
10188		325S	1.0	" "	" brn	10								
10189		350S	.8	" "	" "				10					
10190		375S	1.0	" "	" white									
10191		400S	.8	" "	" brn	10			20					
10192		425S	.5	" "	Black grey									
10193		450S	.7	" "	Grey white	10								
~~10194~~		~~475S~~												
10194	2800W	450S	.6	B-C	Grey bl	10				10				
10195		425S	.6	" "	" white									
10196		400S	.4	" "	Grey	10			10	10				
10197		375S	1.0	B	Black	10								
10198		350S	.2	A-C	Grey brn	20								

249291

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET** COLLECTED BY: Pollock

PROJECT: PROSPECT: W Agnes SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

1:250,000 SHEET: TYPE OF SAMPLE: Soil SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES								
						Sn	As	Cu	Pb	Zn				
10199	2800N	325S	1·1	B-C	Grey	10			10					
10200		300S	·9	" "	" white	10								
201		275S	·5	" "	" "	10								
202		250S	·2	A-C	" "									
203		225S	·5	B-C	Grey brn	20								
204		200S	·6	" "	" "	30			10					
205		175S	·8	" "	Black "	20			10					
206		150S	1·1	" "	" "	20			20					
207		125S	1·4	" "	" grey				40					
208		100S	·7	" "	Grey brn	10				10				
209		75S	1·2	" "	" "				10					
210		50S	·5	" "	" white		10							
211		25S	·3	" "	" "	10								
212		00	·2	" "	" "	10								
213		25N	·6	" "	Grey brn	20								
214		50N	·7	" "	" white	10								
215		75N	·4	" "	" brn	10								
216		100N	·2	A-C	" "	10				10				
217		125N	·2	A-C	" "					10				
218		150N	·8	B-C	" "	10			10	10				
10219		175N	·8	" "	" "	10				10				

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. — **SAMPLE RECORD AND ANALYTICAL DATA SHEET** — COLLECTED BY: POLTOCK

PROJECT: — PROSPECT: W Agnew — SAMPLE STORAGE REQ'D: — LABORATORY: — DATE DISPATCHED:

1:250.000 SHEET: — TYPE OF SAMPLE: Soil — SAMPLE PREP. REQ'D: — ANALYSIS REQ'D: — DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES Sn	As	Cu	Pb	Zn				
10220	2800W	200N	.4	B-C	Grey brn	NES			10					
221		225N	.8	" "	"	10								
222		250N	.6	" "	" "	10				10				
223		275N	.8	" "	" White	30								
224		300N	.8	" "	" "	30								
225		325N	.5	" "	Grey clay	40	10			10				
226		350N	.4	" "	" "	40			20					
227		375N	.2	" "	" "	20				10				
228		400N	.9	" "	Brn	10								
229		425N	.6	" "	Grey brn			35	20					
230		450N	.5	" "	" "	60								
10231		475N	0.1	A-C	" "	60		[illegible]	10	10				
232		500N	.4	B-C	" "	40	10		10					
233		525N	1.0	" "	" "	20	20		40					
234	2900W	500N	.9	B	Grey Bl	110			30	10				
235		475N	.1	A-C	" "	NES								
236		450N	.5	B-C		10			10					
237		425N	.5	B-C	Grey White	20								
238		400N	.3	" "	" "	20								
10239		375N	.3	" "	Yellow clay	40	50							

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET** COLLECTED BY: POLTOCK

PROJECT: PROSPECT: W Agnew SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

1:250.000 SHEET: TYPE OF SAMPLE: Soil SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES Sn	As	Cu	Pb	Zn				
10240	2500W	350N	.5	B-C	Grey Wht.	30								
241		325N	.5	" "	" brn	30								
242		300N	.3	" "	" "	10	20		10					
243		275N	.3	" "	" "	20	30							
244		250N	1.2	" "	Bl brn	30								
245		225N	1.0	" "	Grey Bl	10								
246		200N	.7	" "	" white	10								
247		175N	.8	" "	" "	20								
248		150N	.7	" "	Grey	20								
249		125N	.6	" "	" brn	10				10				
250		100N	.3	A-C	" Bl	20				10				
251		75N	.2	A-C	" "	20								
252		50N	.6	B-C	Grey brn	20	10			10				
253		25N	.5	B-C	"	30	10							
254		00	.7	" "	" "	20			10	20				
255		25S	.2	A-C	" "	350								
256		50S	.7	B-C	Brn - Bl	20			10					
10257		75S	.8	" "	Grey Wh	10								
258		100S	1.1	B	Bl grey									
259		125S	.7	B-C	" "	20								
10260		150	.7	" "	Grey Brn	50								

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. — **SAMPLE RECORD AND ANALYTICAL DATA SHEET** — COLLECTED BY: POLTOCK

PROJECT: — PROSPECT: W Agnew — SAMPLE STORAGE REQ'D: — LABORATORY: — DATE DISPATCHED:

1:250.000 SHEET: — TYPE OF SAMPLE: Soil — SAMPLE PREP. REQ'D: — ANALYSIS REQ'D: — DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES Sn	As	Cu	Pb	Zn
10261	2900W	175S	1·1	B-C	Grey bl	10				
262		200S	·3	" "	Pale brn	10				
263		225S	·7	" "	Yel - wht	10				
264		250S	·8	" "	Grey brn	20			10	
265		275S	·4	" "	Grey "	20				
266		300S	1·0	" "	" wht	10				10
267		325S	·6	" "	" brn					
268		350S	·6	" "	Grey	10				
269		375S	1·0	" "	Bl brn					20
270		400S	·7	" "	Grey brn	10				
271	3000W	300S	·4	B	Qtz Rfl brn					
272		275S	1·2	B	brn clay	10				
273		250S	·9	B-C	Grey brn	20			10	10
274		225S	·8	B-C	" "	20			10	
275		200S	·5	" "	Bl brn	20			10	
276		175S	·9	" "	Brn					
277		150S	·2	" "	Gry Wh					
278		125S	·6	" "	Brn clay	20				
279		100S	·3	" "	Grey - orange	10				
280		75S	·7	" "	" bl	NES				10
10281		50S	·5	" "	" brn	10	10			

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET** COLLECTED BY: POLTOCK

PROJECT: PROSPECT: W Agnew SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

1:250.000 SHEET: TYPE OF SAMPLE: Soil SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES Sn	As	Cu	Pb	Zn				
10282	3000W	25S	.5	B-C	Orange brn	20	10							
283		00	.8	" "	Yel clay	10			10					
284		25N	.7	" "	Grey brn	20								
285		50N	.9	" "	" orange	10	10							
286		75N	.3	" "	" Wh	10								
287		100N	.5	" "	" brn	30								
288		125N	.5	" "	" "	10								
289		150N	.6	" "	Grey	10								
290		175N	.6	" "	Bl-brn									
291		200N	.7	Pebbles " "	" "	10								
292		225N	.7	" "	" "	10								
293		250N	.6	" "	" "					10				
294		275N	.3	" "	DK brn	10								
295		300N	.3	" "	" "	10	10		50	10				
296		325N	.4	" "	" "	10								
297		350N	.8	" "	Wh	10								
298		375N	1.5	B	cream clay	10								
299		400N	1.5	B-C	" brn	20			20	10				
10300		425N	.6	" "	DK brn	20	10			10				
301		450N	.5	" "	" "	20								

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET** COLLECTED BY: POLTOCK

PROJECT: PROSPECT: W Agnew SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

1:250.000 SHEET: TYPE OF SAMPLE: Soil SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES Sn	As	Cu	Pb	Zn
10302	3100W	450N	.4	A-C		NGS				
303		425N	1.0	B	brn clay				10	20
304		400N	.4	B	brn yel	10	20		10	20
305		375N	.3	B	orange brn		10		10	10
306		350N	.1	B-C	" "	20			10	10
307		325N	.4	" "	brn	10				
308		300N	.8	" "	Wh					
309		275N	.8	" "	brn	10				10
310		250N	1.5	B	"	10				10
311		225N	.5	B-C	"	20			10	
312		200N	.3	" "	Yel clay	20	10		10	20
313		175N	1.0	" "	Grey brn					
314		150N	1.2	" "	"	10				
315		125N	.3	" "	DK brn	10		5		30
316		100N	.7	" "	" "	20				10
317		75N	.7	" "	Brn			5		10
318		50N	.6	B	"			5	10	10
319		25N	.3	B-C	"	30		10		20
320		00	.3	" "	Wh	20		5		
321		25S	1.1	" "	"	10				
10322		50S	.3	" "	brn orange	20		10	10	20

249291

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. — **SAMPLE RECORD AND ANALYTICAL DATA SHEET** — COLLECTED BY: POLTOCK

PROJECT: — PROSPECT: WAgnew — SAMPLE STORAGE REQ'D: — LABORATORY: — DATE DISPATCHED:

1:250,000 SHEET: — TYPE OF SAMPLE: Soil — SAMPLE PREP. REQ'D: — ANALYSIS REQ'D: — DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES Sn	As	Cu	Pb	Zn				
10323	3100W	75S	·8	B	Wh									
324		100S	1·0	B-C	"									
325		125S	1·0	"	"			10						
326		150S	1·0	B	brn clay	30		10		120				
327		175S	1·0	B-C	Wh	10				10				
328		200S	1·2	"	DK-pale brn	30			20					
329		225S	·5	"	DK brn	20		30						
330		250S	·4	"	"	20		5		10				
10331		275S	·5	B	grey - qvz frg			5						
10332	3200W	275S	1·0	B-C	DK brn	10		5	10	10				
333		250S	·4	"	"	30		5						
334		225S	1·0	"	Grey brn	10								
335		200S	·7	"	"	10		10		10				
336		175S	·2	"	Orange-yel	10	10		10	20				
337		150S	·4	"	Grey brn	20		5	10	20				
338		125S	·2	"	" Yellow	10		20	10	20				
339		100S	·2	"	"	20								
340		75S	1·2	"	Or-brn	30		10						
341		50S	·6	"	Grey Wh	20								
342		25S	·6	B	" brn	30		5						

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET** COLLECTED BY: POLTOCK

PROJECT: PROSPECT: W Agnew SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

1:250.000 SHEET: TYPE OF SAMPLE: Soil SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES Sn	As	Cu	Pb	Zn				
10343	3200W	00	-3	B-C	Grey brw	20		10		10				
344		25N	.5	" "	Brn bl	10								
345		50N	.5	" "	Grey brw	20				10				
346		75N	.7	" "	" "	10								
347		100N	.3	" "	" "	10				10				
348		125N	(from East pits) .5	B	pale brw	20				20				
349		150N	pits .6	B	alluvium	60			20					
350		175N	" 1.0	B-C	Grey - DK grey	20				10				
351		200N	.3	" "	" brw	20								
352		225N	.3	" "	Grey brw	30		5		50				
353		250N	.2	" "	" "	10		5		10				
354		275N	.2	" "	Yel clay	30	50		20	110				
355		300N	.4	" "	Grey brn	10		5		30				
356		325N	.7	" "	" bl	20				20				
357		350N	.3	" "	" brn	10		5						
358		375N	.6	" "	" "					10				
359		400N	.5	" "	" "	10		5	20	10				
360		425N	.3	" "	" "	20								
361		450N	.2	" "	Orange brw	20	310	5	10	20				
362		475N	.4	" "	Yellow-Or	10	290	10	10	20				
10363		500N	.5, pits	" "	Grey	20	40	10	40	10				

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET** COLLECTED BY: PoLTock

PROJECT: PROSPECT: W' Agnew SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

1:250,000 SHEET: TYPE OF SAMPLE: Soil SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES								
						Sb	As	Cu	Pb	Zn				
10364	32N ~~3550N~~	525N	.5	B	Grey brn	60		5		·				
365		550N	.4	B-C	" "	50				10				
366	3300W	625N	.2	" "	" "	30		5	10	20				
367		600N	.3	B	Grey	70								
368		575N	.5	B	"	10								
369		550N	1.0	B-C	Grey-Wh	20								
370		525N	.3	" "	Brn	10				20				
371		500N	.3	" "	DK brn	20		5	10	20				
372		475N	.3	" "	Grey brn	10		5	10					
373		450N	.3	" "	" "	10		10		10				
374		425N	.5	" "	Yel Clay	10	20		20	20				
375		400N	.3	" "	Brn	10								
376		375N	1.0	B-C	Wh									
377		350N	0.1	" "	Or brn	10			10	20				
378		325N	0.7	" "	" "	20				10				
379		300N	0.6	" "	DK brn	10				10				
380		275N	1.4	B	Or "	20			30	20				
381		250N	0.5	B-C	Brn	30			20	20				
382		225N	0.8	" "	" Or	20			10	30				
383		200N	1.0	" "	Wh									
10384		175N	0.4	" "	"									

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET** COLLECTED BY: POLTOCK

PROJECT: PROSPECT: W Agnew SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

1:250.000 SHEET: TYPE OF SAMPLE: Soil SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES								
						Sn	As	Cu	Pb	Zn				
b385	3300W	150N	0·6	B	brn	20								
386		125N	1·2	B	Pale "	10								
387		100N	1·0	B-C	Wh	10								
388		75N	1·0	B	-									
389		50N	·3	A-C	Black	10								
390		25N	1·1	B-C	DK brn	10				10				
391		00	1·3	B	-	20								
392		25S	0·8	B-C	Pale brn	20		5						
393		50S	0·6	B	DK brn	20				10				
394		75S	0·3	B-C	Brn	10								
395		100S	0·6	"	DK brn	20								
396		125S	0·4	"	" "	20								
397		150S	0·2	"	Pale brn	30		20	10					
398		175S	0·2	"	Or brn	20			10	10				
399		200S	0·4	"	Cream/brn clay	20			20					
10400		225S	0·6	"	DK brn	20								
10401		250S	·5	"	Bl-grey	10								
402	3400W	250S	·2	B-C	Brn	10				10				
403		225S	·3	B	Grey Bl	20								
404		200S	·5	B-C	" Brn	20								
10405		175S	·5	B-C	Gry DK Brn	20								

249301

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET** COLLECTED BY: POLTOCK

PROJECT: PROSPECT: W Agnew SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

1:250,000 SHEET: TYPE OF SAMPLE: Soil SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES								
						Sr	As	Cu	Pb	Zn				
10406	3400W	150S	.3	B-C	Grey White	10								
407		125S	.4	"	"	10		10						
408		100S	.4	"	DK brn	40		10						
409		75S	.5	"	"	30			10					
410		50S	.4	"	Grey brn	30								
411		25S	.7	"	Pale brn	40		5	20	30				
412		00	.3	A-C	Black	10								
413		25N	.4	B-C	Grey White									
414		50N	.4	"	" brn	20								
415		75N	.5	A-C	Black	10		5		10				
416		100N	.7	B-C	Grey White									
417		125N	.1	A-C	Grey	10								
418		150N	.5	B	Brn	10								
419		175N	1.1	B	DK brn									
420		200N	1.0	B-C	White	12								
421		225N	0.3	"	"			5						
422		250N	.7	"	Grey black	10								
423		275N	.4	"	" White	10								
424		300N	.5	"	"	20								
425		325N	.6	"	"	10								
10426		350N	.4	"	" Brn	20		5						

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. — **SAMPLE RECORD AND ANALYTICAL DATA SHEET** — COLLECTED BY: POLTOCK

PROJECT: — PROSPECT: W Agnew — SAMPLE STORAGE REQ'D: — LABORATORY: — DATE DISPATCHED:

1:250.000 SHEET: — TYPE OF SAMPLE: Soil — SAMPLE PREP. REQ'D: — ANALYSIS REQ'D: — DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES Sn	As	Cu	Pb	Zn				
10427	3400W	375N	.3	B-C	Grey brn	10								
428		400N	.3	" "	" "									
429		425N	.3	" "	" "	10								
430		450N	.3	" "	" "	10								
431		475N	.3	" "	DK brn	10			10	10				
432		500N	1.2	" "	Clay	20			60	10				
433		525N	1.0	B	DK brn	10								
434		550N	.4	B-C	White	20								
435		575N	.3	" "	Pebble "	30								
436		600N	.4	" "	"	20								
437		625N	1.0	B	DK brn	20								
438		650N	0.3	B-C	" "	20								
10439		675N	0.2	" "	Orange brn	50			30	10				
10440	3500W	700N	0.3	B-C	DK brn	60				20				
441		675N	0.2	" "	" "	10			10					
442		650N	1.0	A-C	Black	30	10		20					
443		625N	1.3	B	"	30								
444		600N	0.3	"	DK brn	20			20	20				
445		575N	0.3	"	" "	20		5		10				
10446		550N	0.7	B-C	Pale brn	20								

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET** COLLECTED BY: POLTOCK

PROJECT: PROSPECT: W Agnew SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

1:250.000 SHEET: TYPE OF SAMPLE: Soil SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES								
						Sn	As	Cu	Pb	Zn				
10447	3500N	525N	0.7	B.C	DK brn	20	20		40					
448		500N	1.0	A.C	Grey	10	10		40	10				
449		475N	.3	B-C	DK brn	10			20					
450		450N	.5	"	White	10	10		30					
451		425N	.6	"	"	10		5						
452		400N	.3	"	DK Grey									
453		375N	.5	"	Brn	10			30					
454		350N	1.0	B	Cream clay	20			20	10				
455		325N	0.3	B-C	Cream brn	10			20					
456		300N	1.0	B	DK brn		30		20					
457		275N	0.2	B-C	"		20		20					
458		250N	0.5	"	pale brn		20							
459		225N	.3	"	"		20							
460		200N	.2	"	"	10	10		20	10				
461		175N	.2	"	Cream									
462		150N	.3	"	"		10		20					
463		125N	.7	"	"		10		40					
464		100N	.8	"	Black brn	20			10					
465		75N	.6	"	Cream	10								
466		50N	.6	"	grey	10								
10467		25N	.4	"	"	30	20		30					

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET** COLLECTED BY: POLTOCK

PROJECT: PROSPECT: W Agnew SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

1:250.000 SHEET: TYPE OF SAMPLE: Soil SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES								
						Sn	As	Cu	Pb	Zn				
10468	3500N	000	.4	B-C	Cream	20								
469		25S	.3	Pebbles A-B	Grey	10								
470		50S	.7	B-C	Grey - black	10			30					
471		75S	.3	" "	" white	20			10					
472		100S	.3	" "	" "		10		60					
473		125S	.4	" "	" brn	10								
474		150S	.8	" "	" white		10		10					
475		175S	.8	" "	DK grey	20		5						
476		200S	.5	" "	Grey - DK brn	20								
477		225S	.8	" "	Pale brn	40	10		30					
478		250S	.1	A-C	Grey	10	10		20					
479		275S	1.3	B-C	Black - brn		30		50					
480	3600N	275S	.4	B	Grey	10	20		20	10				
481		250S	.4	B-C	"	10								
482		225S	1.3	" "	" black	30	20		40	10				
483		200S	.3	" "	" brn	10	10		10					
484		175S	.7	" "	Bl - brn	30			10	10				
485		150S	.4	" "	Brn	30			20	10				
486		125S	.6	" "	Grey brn	20	50		80	10				
487		100S	.3	" "	" "	20	20		40					
10488		75S	.6	" "	Pebble Grey white		10		20					

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET** COLLECTED BY: ROLTOCK

PROJECT: PROSPECT: W Agnew SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

1:250.000 SHEET: TYPE OF SAMPLE: Soil SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES Sn	As	Cu	Pb	Zn				
10489	3600W	50S	.3	B-C	Pebble Grey brn		20		40	10				
490		25S	.4	"	" "	*			20					
491		00	.8	"	DK brn	20			20					
492		25N	.8	"	White	10	10		30					
493		50N	.3	"	Brn		10		10					
494		75N	.3	"	" Pebble "									
495		100N	.6	"	White	10	10		20					
496		125N	.1	"	Pale brn	10	10		20					
497		150N	.3	"	" "	20	30		70					
498		175N	.7	"	" "	20			10					
10499		200N	1.0	"	" "	60	20		40	10				
10600		225N	.2	"	" "	10	10		20					
601		250N	.2	"	" "	10	10		40					
602		275N	.2	A-C	Grey	10	30		40	10				
603		300N	1.0	B-C	DK-orange brn		10		30					
604		325N	1.0	"	White	10								
605		350N	.4	"	Yel brn clay	20				20				
606		375N	1.0	"	White	10	20		30					
607		400N	.2	"	Pale brn "	10	30		40					
608		425N	.2	"	" "	10	10		10					
609		450N	.3	"	" "									

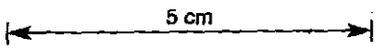
5 cm

GOLD FIELDS EXPLORATION PTY. LTD. — **SAMPLE RECORD AND ANALYTICAL DATA SHEET** — COLLECTED BY: PoLTock

PROJECT: — PROSPECT: W Agnew — SAMPLE STORAGE REQ'D: — LABORATORY: — DATE DISPATCHED:

1:250.000 SHEET: — TYPE OF SAMPLE: Soil — SAMPLE PREP. REQ'D: — ANALYSIS REQ'D: — DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES								
						Sn	As	Cu	Pb	Zn				
10610	3600W	475N	.3	B-C	Pale brn - Wht	10	10		20					
611		500N	.2	"	Brn									
612		525N	.4	"	DK - orange brn	10	30		80					
613		550N	.2	"	DK brn	20	20		50					
614		575N	.4	"	Pebbly " - orange	10			10	10				
615		600N	.4	"	DK brn	10	10		20					
616		625N	1.5	B	"	20	10		30	10				
617		650N	.2	B-C	Brn - White	10								
618		675N	.3	"	Brn	30	20		20					
619		700N	.7	B-C	Yel brn	140	20	5	80	80				
620		725N	.7	C	" "	20	20	5	20	10				
621	3700W	775N	.8	C	yel brn	20	40		50	10				
622		750N	.8	A-C	L' grey " "	50			20					
623		725N	.3	A-C	" "	20	10		20					
624		700N	.3	A-C	grey brn	40	20		20					
625		675 N	.3	B-C	DK brn	30				10				
626		650N	.2	"	Or - yel brn	20	20		20	50				
627		625N	.6	"	Grey - White	20	10							
628		600 N	1.0	B	" "	30	20	5	20					
629		575 N	.3	B-C	" "	20	20		10					
10630		550 N	.2	"	Pale brn		20		20					



GOLD FIELDS EXPLORATION PTY. LTD. **SAMPLE RECORD AND ANALYTICAL DATA SHEET** COLLECTED BY: PULTUCK

PROJECT: PROSPECT: W Agnew SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

1:250.000 SHEET: TYPE OF SAMPLE: Soil SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES								
						Sn	As	Cu	Ag	Zn				
10631	3700W	525 N	.6	B-C	Grey - Wh	10	20		10					
632		500 N	.7	"	" - Brn	20	10		10					
633		475 N	.7	A-C	" "	20	20		50	10				
634		450N	.4	B-C	Pale Brn		20		30					
635		425N	.3	"	Brn - Black	10	30		30					
636		400N	.2	"	Pale Brn		40		30					
637		375N	.4	"	Grey - White	10	10		10					
638		350N	.6	"	Brn	10	10		30					
639		325N	.6	"	Pale Brn		20		20					
640		300N	.7	"	"	10								
641		275N	1.2	"	DK Brn									
642		250N	.2	"	Light "		20		20					
643		225N	.3	"	" "	10								
644		200N	.6	"	" "									
645		175N	.6	"	" "	10								
646		150N	.1	"	" "									
647		125N	.2	"	" "									
648		100N	.2	"	Orange Brn	20			[illegible]	10				
649		75N	.4	"	Grey Brn									
650		50N	.4	"	" "	10								
10651		25N	.8	"	" White	10								

5 cm

308

GOLD FIELDS EXPLORATION PTY. LTD. — **SAMPLE RECORD AND ANALYTICAL DATA SHEET** — COLLECTED BY: Pol Tock

PROJECT: — PROSPECT: West Agnew — SAMPLE STORAGE REQ'D: — LABORATORY: — DATE DISPATCHED:

1:250.000 SHEET: — TYPE OF SAMPLE: Soil — SAMPLE PREP. REQ'D: — ANALYSIS REQ'D: — DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES Sn	As	Cu	Pb	Zn				
10652	3700W	00	.4	B-C	Grey Wh	20								
653		25S	.4	" "	Dk brn	20								
654		50S	.6	" "	" "	10								
655		75S	1.0	" "	" "	10								
656		100S	.5	" "	" "	10								
657		125S	.4	" "	Grey - White									
658		150S	1.5	B	" brn	30								
659		175S	.4	B	Dk brn clay	20				10				
660		200S	.4	B	" " "	30								
661		225S	.1	A	L'brn/blk frags + pebbles	20				20				
662	3800W	175S	.2	B	" " "	10				20				
663		150S	.2	A-C	Grey	10								
664		125S	.3	B	Cream - brn	20								
665		100S	.5	B-C	" - White									
666		75S	.4	" "	" —	40								
667		50S	1.0	" "	" White									
668		25S	.3	" "	Dk brn	20			10					
669		00S	.6	" "	Wh - dk brn	10								
670		25N	.6	" "	" "	10								
671		50N	.5	" "	White									
10 6726		75N	.5	" "	"									

24930 09

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. — **SAMPLE RECORD AND ANALYTICAL DATA SHEET** — COLLECTED BY: Pantocke

PROJECT: — PROSPECT: W. Agnew — SAMPLE STORAGE REQ'D: — LABORATORY: — DATE DISPATCHED:

1:250,000 SHEET: — TYPE OF SAMPLE: Soil — SAMPLE PREP. REQ'D: — ANALYSIS REQ'D: — DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES Sn	As	Cu	Pb	Zn
10673	3800W	100 N	·3	B-C	(pebble float) White					
674		125 N	·2	"	"					
675		150 N	·4	"	"	10				
676		175 N	·5	"	(pebbles) pale brn-Wh					
677		200 N	·2	"	"					
678		225 N	·2	"	Pale brn					
679		250 N	·2	A-C	"					
680		275 N	·3	A-C	"	10				
681		300 N	·3	B-C	Wh	10				
682		325 N	1·2	"	Blk - DK brn				10	
683		350 N	·2	"	Pale brn					
684		375 N	·2	A-C	"					
685		400 N	·3	"	"	10				
686		425 N	1·2	B-C	yel brn clay					20
687		450 N	1·0	"	Wh	20				
688		475 N	·6	"	Wh - brn					
689		500 N	·7	"	Light brn	10				
690		525 N	1·0	"	DK brn	20				20
691		550 N	·7	"	Grey	10				
692		575 N	1·0	"	" -Wh	10				
10693		600 N	·7	A	Grey					

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. — **SAMPLE RECORD AND ANALYTICAL DATA SHEET** — COLLECTED BY: Pol Tock

PROJECT: — PROSPECT: N Agnew — SAMPLE STORAGE REQ'D: — LABORATORY: — DATE DISPATCHED:

1:250.000 SHEET: — TYPE OF SAMPLE: Soil — SAMPLE PREP. REQ'D: — ANALYSIS REQ'D: — DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES Sn	As	Cu	Pb	Zn				
10694	3800W	625N	.4	A	Grey	30								
10695		650N	.2	A-C	Gry-brn	20			10					
696		675N	.1	A-C	" "	20								
697		700N	.8	B-C	Orje-brn	90								
698		725N	.2	A-C	Grey	30								
10699		750N	.4	A-C	"	10								
10700	3900W	700N	.4	A	Gry-Brn	150								
701		675N	.2	A	" "	100								
702		650N	1.5	A	Black	60								
703		625N	1.0	A-C	"	50								
704		600N	.1	A-C	Grey	40								
705		575N	.7	A-C	Black	50								
706		550N	.3	B-C	Orange brn	90				10				
707		525N	.8	" "	WW	50								
708		500N	1.0	" "	Cream brn	10			10	20				
709		475N	.5	" "	" " clay	10				10				
710		450N	.3	" "	pale brn	20								
711		425N	.3	" "	WW									
712		400N	.4	" "	"									
10713		375N	.3	" "	DK brn	20								

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. — **SAMPLE RECORD AND ANALYTICAL DATA SHEET** — COLLECTED BY: PolTock

PROJECT: — PROSPECT: W Agnew — SAMPLE STORAGE REQ'D: — LABORATORY: — DATE DISPATCHED:

1:250.000 SHEET: — TYPE OF SAMPLE: Soil — SAMPLE PREP. REQ'D: — ANALYSIS REQ'D: — DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES Sn	As	Cu	Pb	Zn				
10714	3900W	350N	·3	A-C	Grey	20								
715		325N	·7	B-C	Cream - wh	10								
716		300N	·4	B-C	Grey - "									
717		275N	·4	" "	" - brn	10								
718		250N	·4	" "	" "									
719		225N	·3	" "	Grey									
720		200N	·5	" "	" - White	10								
721		175N	1·3	" "	" "	10								
722		150N	1·5m	" "	" "	20								
723		125N	1·2m	" "	" "									
724		100N	1·2	" "	" "	20								
725		75N	1·1	" "	Orange-Brn	20				20				
726		50N	1·2	" "	White-Orange	10								
727		25N	1·2	B	DK brn					10				
728		00	1·2	B-C	" "									
729		25S	1·5	B	" "	20								
10730		50S	1·3	B-C	" "	10			10					
731		75S	·4	" "	DK grey	10								
732		100S	·2	" "	Grey	10								
733		125S	·4	" "	" brn	20								
10734		150S	·2	" "	Light brn	40				80				

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. — **SAMPLE RECORD AND ANALYTICAL DATA SHEET** — COLLECTED BY: Pollock

PROJECT: PROSPECT: W Agnew — SAMPLE STORAGE REQ'D: — LABORATORY: — DATE DISPATCHED:

1:250.000 SHEET: TYPE OF SAMPLE: Soil — SAMPLE PREP. REQ'D: — ANALYSIS REQ'D: — DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES Sn	As	Cu	Pb	Zn				
	~~2800W~~	~~175S~~												
10808	4000W	150S	·2	A-B	grey sandy	20			10	10				
809		125S	·2	A-C	" "	20			20	20				
10735		100S	·3	B-C	Grey	10								
736		75S	·3	B-C	"	10								
737		50S	1·1	" "	Dk brn	10								
738		25S	·8	A-C	" grey	10								
739		00	·5	" "	Grey brn	10								
740		25N	1·3	B-C	Brn - Black									
741		50N	·8	" "	Grey - Wh									
742		75N	1·1	" "	" brn	10								
743		100N	1·0	" "	White (pebbles)	60								
744		125N	1·2	" "	Brn - grey	20								
745		150N	·2	A-C	Grey - brn									
746		175N	·3	B-C	" "									
747		200N	·3	" "	" "	10								MS
748		225N	·4	" "	" "	20								
749		250N	·3	" "	Pale brn	10								
750		275N	1·3	B	pebbles " " - white	20								
751		300N	·4	B	" clay	10								
10752		325N	·8	B-C	Grey - brn	20								

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. — **SAMPLE RECORD AND ANALYTICAL DATA SHEET** — COLLECTED BY: POLTOCK

PROJECT: — PROSPECT: N Agnew — SAMPLE STORAGE REQ'D: — LABORATORY: — DATE DISPATCHED:

1:250,000 SHEET: — TYPE OF SAMPLE: Soil — SAMPLE PREP. REQ'D: — ANALYSIS REQ'D: — DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES Sn	As	Cu	Pb	Zn				
10753	4000W	350N	1·2	A	Grey	10								
754		375 N	1·5	B-C	Grey - brn	10								
755		400N	·7	"	" —	20				10				
756		425N	·7	A	Grey	80								
757		450N	·8	A	"	10		5	40					
758		475 N	·7	B-C	Grey - wh	90								
759		500 N	·4	"	Grey - brn	30			25					
760		525 N	·3	A	DK brn	110								
761		550 N	·4	B-C	" "	80				10				
762		575 N	·2	A-C	" "	50				10				
10763		600 N	·7	B	Grey sandy LI RG	30								
10764	4100W	600 N	·4	A	DK grey	80								
765		575N	·3	A-C	" "	80								
766		550N	·6	A	" " L' grav	30								
767		525N	·4	A	Grey brn	70								
768		500N	·3	B-C	DK brn	60				60				
769		475N	·3	"	White	50								
770		450N	1·2	"	Black	40								
771		425N	·8	"	"	20								
10772		400N	·5	"	Pale brn	10								

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. — **SAMPLE RECORD AND ANALYTICAL DATA SHEET** — COLLECTED BY: POL TOCK

PROJECT: — PROSPECT: W Agnew — SAMPLE STORAGE REQ'D: — LABORATORY: — DATE DISPATCHED:

1:250.000 SHEET: — TYPE OF SAMPLE: Soil — SAMPLE PREP. REQ'D: — ANALYSIS REQ'D: — DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES Sn	As	Cu	Pb	Zn				
10773	4100W	375N	.3	B-C	Pale brn	10								
774		350N	.4	"	"									
775		325N	1.2	"	Black	10								
776		300N	.3	"	Dk brn									
779		275N	.3	"	"	10								
778		250N	.8	"	"	20				10				
779		225N	1.0	B	Brn	20								
780		200N	.8	"	Pale grey	10								
781		175N	.8	"	" brn	20								
782		150N	.6	B-C	White	10								
10783		125N	1.2	"	"	20								
784		100N	.4	"	"	10								
785		75N	.3	A-C	Black	20								
786		50N	.7	B-C	White	20								
787		25N	1.0	"	Black	20								
788		00N	1.0	B	Brn clay + pebbles	10			20					
789		25S	1.0	A-C	Brn					10				
790		50S	1.2	B	"	10				20				
791		75S	.2	A-C	Dk grey sandy	10								
792		100S	.3	"	"	20								
10793		125S	.6	"	"	20								

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. — **SAMPLE RECORD AND ANALYTICAL DATA SHEET** — COLLECTED BY: POL TOCK

PROJECT: — PROSPECT: W Agnew — SAMPLE STORAGE REQ'D: — LABORATORY: — DATE DISPATCHED:

1:250,000 SHEET: — TYPE OF SAMPLE: Soil — SAMPLE PREP. REQ'D: — ANALYSIS REQ'D: — DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES Sn	As	Cu	Pb	Zn				
10794	4100W	150S	.2	A-C	Pale grey sandy	40								
10795		175S	1.0	B	White sand	60								
796		200S	.5	B	" "	60				10				
797		225S	1.0	B	Dk grey sand	20								
798		250S	1.0	"	" "	220				10				
10799		275S	1.0	"	" "	330			10	20				
10800	4200W	175S	1.2m	B	Grey sand	50								
801	4	150S	.4	A-C	" "	30								
802		125S	.4	A	" "	30								
803		100S	.3	A	Dk grey	20								
804		75S	.5	A	"	20								
805		50S	.6	B	" "	10								
10806		25S	.3	B-C	Cream - Wh									
10809		000	1.2	B	Wh - brn	10								
810		25N	.2	A-C	Grey									
811		50N	.3	B-C	" / brn	20								
812		75N	1.3	B	Dk brn	20								
813		100N	.4	B-C	Grey brn	20								
814		125N	1.5	B	Grey brn (pale grey)	40								
815		150N	1.0	B	Dk grey	10								
10816		175N	1.0	B-C	Wh - dk brn									

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. — **SAMPLE RECORD AND ANALYTICAL DATA SHEET** — COLLECTED BY: Polstock

PROJECT: — PROSPECT: N Agnew — SAMPLE STORAGE REQ'D: — LABORATORY: — DATE DISPATCHED:

1:250,000 SHEET: — TYPE OF SAMPLE: Soil — SAMPLE PREP. REQ'D: — ANALYSIS REQ'D: — DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES Sn	As	Cu	Pb	Zn				
10817	4200W	200N	·8	B-C	Wh - Dk brn	20								
818		225N	·4	"	Dk brn	20								
819		250N	1·0	B	" "	10								
820		275N	1·2	B	Dk brn (pebbly)	20								
821		300N	·8	B-C	Brn clay	10				20				
822		325N	1·4	B	Grey	20								
823		350N	·4	A-C	Pale brn - Wh	20								
824		375N	·7	B-C	Dk brn	10								
825		400N	1·2	" "	Brn	20								
826		425N	1·2	B	Pale brn	20								
827		450N	·6	B-C	Dk brn									
828		475N	1·2	B-C	" "	40								
829		500N	·2	A	Grey sandy + L' stods	100								
10830		525N	·4	A-C	Grey + brn	115				30				
831		550N	·2	A	Dk grey - L' blds	200								
832		575N	·6	B-C	Dk brn	40			40	70				
833	4300W	500N	1·0	A	Dk grey	360			10					
834		475N	1·0	B	" brn	40		40	70	20				
835		450N	·3	A-C	Grey brn	30				20				
836		425N	·2	A-C	Dk brn	30								
10837		400N	·2	A	Grey L' Rf	150								

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. — **SAMPLE RECORD AND ANALYTICAL DATA SHEET** — COLLECTED BY: Pol Tock

PROJECT: — PROSPECT: W Agnew — SAMPLE STORAGE REQ'D: — LABORATORY: — DATE DISPATCHED:

1:250,000 SHEET: — TYPE OF SAMPLE: Soil — SAMPLE PREP. REQ'D: — ANALYSIS REQ'D: — DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES Sn	As	Cu	Pb	Zn				
10838	4300W	375N	.5	B-C	Black	20								
839		350N	.8	" "	DK- creambr	20				20				
840		325N	1.4	A-B	Grey brn	30								
841		300N	1.0	B	DK brn	20			20	20				
842		275N	.6	B-C	" "	10								
10843		250N	.5	" "	" "	10								
844		225N	1.6	B-C	Cream sandy	20								
845		200N	1.3	" "	Grey - Wh	10								
846		175N	1.0	" "	Black	10								
847		150N	1.3	" "	"	20								
848		125N	1.6	" "	"	10								
849		100N	.3	" "	Grey brn									
850		75N	.5	" "	" "									
851		50N	1.2	" "	" "	10								
852		25N	1.0	" "	" "	10								
853		00	.8	" "	" Sandy	10								
854		25S	.4	" "	Grey brn	20			20	20				
855		50S	.2	A-C	" sand	20								
856	4400W	125N	.4	B-C	Grey sand	10								
857		150N	.6	B-C	" "	10								
10858		175N	.7	" "	" brn	20								

5 cm

GOLD FIELDS EXPLORATION PTY. LTD. — **SAMPLE RECORD AND ANALYTICAL DATA SHEET** — COLLECTED BY: POLTOCK

PROJECT: — PROSPECT: N Agnew — SAMPLE STORAGE REQ'D: — LABORATORY: — DATE DISPATCHED:

1:250,000 SHEET: — TYPE OF SAMPLE: Soil — SAMPLE PREP. REQ'D: — ANALYSIS REQ'D: — DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES Sn	As	Cu	Pb	Zn				
10859	4400W	200N	1·3	B-C	Grey brn	20								
860		225N	1·2	"	"	10								
861		250N	·5	"	Brown	20								
862		275N	1·0	"	Light brn	30								
863		300N	1·2	"	Grey-Wh	30								
864		325N	1·2	"	" brn	20								
865		350N	1·2	"	Orange brn	60	10			10				
866		375N	1·0	"	Light brn	190								
867		400N	·5	B	Black pebbly	120								
868		425N	1·0	B	"	190								
869		450N	·8	B-C	Grey-cream	90				20				
870		475N	·5	B	Grey sandy	250								
10871		500N	·5	B-C	Bl-cream	110								

E.L. 11/76

E.L. 47/77

E.L. 4/78

BALSTRUP FAULT

TENTH LEGION FAULT

ABANDONED

STONEHENGE

STONEHENGE GRID

SILVER DUKE

SOUTH COMSTOCK

BRITANNIA

SUNSHINE

SOUTH FOAM

VICTORIA

NORTH TASMANIAN

TASMANIAN

LODE TREND

LOWANNA

Unconformable Bdy

Thrust fault

Swamp obscuring €d2 or €d3?

Greywacke - conglomerate with carbonate matrix

Oz (Sandstone)

Uppermost prospect Dolomitized basic volcanic ?

DOLOMITIZED CONGLOMERATE

HORNFELSED

TOURMALINIZATION

MT ZEEHAN

5 360 000E

5 358 000N

GEOLOGY

Quaternary
- Qrg — Recent Alluvium

Tertiary
- Limestone Quarrying Terrace including Magnesite, Limonite, Ferruginous Mud, Gossan
- Iron Rich Soils, Ironstone Scree
- Lateritic Development

Cambrian
- Dundas Group: €d1 Black Siltstone, Greywacke, Siltstone, Slatewacke, Dolerite, Carbonate; €d2 Siltstone, Greywacke, Conglomerate
- Dundas Group: €d3 Siltstone, Grit - Conglomerate, Conglomerate; €d4 Chert; €d5 Basic Volcanics
- Jamison Cross Formation: €c Undifferentiated

Precambrian
- Upper Formation: Puo Undifferentiated; Puo1 Predominantly Dolerites & Fine grained Siltstone; Puo2 Predominantly Black Shales, Siltstones with minor Sandstone; Puo3 Predominantly Spilites; Puo4 Predominantly Sandstones with minor Siltstone; Puo5 Predominantly Siltstones & Shales

IGNEOUS ROCKS
- Dg — Devonian Granite and Adamellite
- Cg — Cambrian Gabbro
- Cum — Ultra - mafic

SYMBOLS

- Geological boundary
- Geological boundary, unconformable and/or fault
- Limit of hornfelsing
- Fault and linear negative topographic features
- Lode, open shape
- Dip and strike of bedding
- Dip and strike of bedding overturned
- Dip and strike of foliation
- Anticline, syncline axis
- Trend bedding
- Rock sample location
- Mine workings Adit
- Shaft
- Dump

INDEX TO SHEETS

ZEEHAN DI/1 | ZEEHAN DI/2 | ZEEHAN DI/3 | ZEEHAN DI/4

249320

GOLD FIELDS EXPLORATION PTY. LIMITED

STONEHENGE GRID 002

INTERPRETATIVE GEOLOGY

85-235 vol 1/4

DRAWN BY: P.K./RP

DRAFTSMAN: S.F.

DATE: Nov. 84

REVISIONS:
P.K. July. 83
P.K. Nov. 84

FILE NO.

SCALE 1:5000 — METRES

FIG. 2.

S.P.L. 129 LEASE BOUNDARY

SPRAY MINE AREA

PC

T.L.E.

STONEHENGE

C

NORTH TASMANIAN

COL. NORTH

VICTORIA ZEEHAN

SUNSHINE

NUBEENA

TASMANIAN

GRUBB'S

SOUTH NUBEENA

SWANSEA

249321

5 cm

NOTE: STRUCTURE & STRATIGRAPHY IS CONCEPTUAL ONLY & DOES NOT IMPLY ANY PARTICULAR MARKER BEDS

003

KEY

- Unconformity
- Faults
- Carbonates, Siltstones
- Black Shales, Siltstones & Minor Sandstones
- Spilite
- Sandstones
- Fine Grained Sandstones & Siltstones

GOLD FIELDS EXPLORATION PTY. LIMITED

STONEHENGE

INTERPRETATIVE GEOLOGY

(VICINITY MAGNETIC ANOMALY)

85-2315 Vol 1/4

SCALE 1: 10000 100 0 200 Metres

DRAWN BY : P.K.
DRAFTSMAN: S.F.
DATE : Nov.'84
REVISIONS :

FILE NO.

FIG. 3

356 000 E
358 000 E
360 000 E
362 000 E
364 000 E
5 362 000 E
5 360 000 E
5 358 000 N
5 356 000 N
Oonah Hill
McIvor Hill
ZEEHAN
Creek
River
Highway
Zeehan
Arm Strip
Austral
Trial Harbour
Stonehenge
Gardners
Medeon
Pyramid
Little
Henty
STONEHENGE GRID
E.L. 11/76
Mt. Zeehan
5 cm
Samples
Panned Concentrate
Stream Sediment
Rock Chip
ZEEHAN B/3
ZEEHAN B/2
ZEEHAN D/1
ZEEHAN D/2
249322 RENISON LIMITED
ZEEHAN D/1 004
85-235 vol II
STREAM SEDIMENT GEOCHEMISTRY
TIN IN P.P.M.
SCALE. 1:10,000 METRES
200 0 200 400 600
DRAWN P.K.
TRACED S.F.
DATE Sep., 84
SCALE 1-10,000
DRAWING No.
FIG. 4

356 000 E
358 000 E
360 000 E
362 000 E
364 000 E
5 362 000 E
5 360 000 E
5 358 000 N
5 356 000 N
5 362 000N
5 360 000N
5 358 000N
5 356 000 N

Oonah Hill
McIvor Hill
Mt Zeehan
ZEEHAN
STONEHENGE GRID
E.L. 11/76
Trial Harbour
Stonehenge
Gallows
Madigan
Hellyar
Creek
River
Henty
Little
Zeehan Highway
Airstrip
Pyramid
Austral

Samples
- Panned Concentrate
- Stream Sediment
- Rock Chip

ZEEHAN B/3	ZEEHAN B/4
ZEEHAN D/1	ZEEHAN D/2

5 cm

249323 RENISON LIMITED

ZEEHAN D/1

(Sc-2.315 vol 1)

STREAM SEDIMENT GEOCHEMISTRY

ARSENIC IN P.P.M 005

SCALE. 1:10,000 METRES

200 0 200 400 600

DRAWN	P.K.
TRACED	S.F.
DATE	Sep.84
SCALE	1:10,000
DRAWING No.	

FIG. 5

ZEEHAN

STONEHENGE GRID

E.L. 11/76

Donah Hill

McIvor Hill

Mt. Zeehan

Trial Harbour

Stonehenge

Madison

Austral

Zeehan Highway

Air Strip

Creek

River

Little Henty

356 000 E

358 000 E

360 000 E

362 000 E

364 000 E

5 362 000 N

5 360 000 N

5 358 000 N

5 356 000 N

5 cm

Samples
- Panned Concentrate
- Stream Sediment
- Rock Chip

ZEEHAN B/3	ZEEHAN B/4
ZEEHAN D/1	ZEEHAN D/2

249324 RENISON LIMITED

ZEEHAN D/1

85-235 Vol III

STREAM SEDIMENT GEOCHEMISTRY

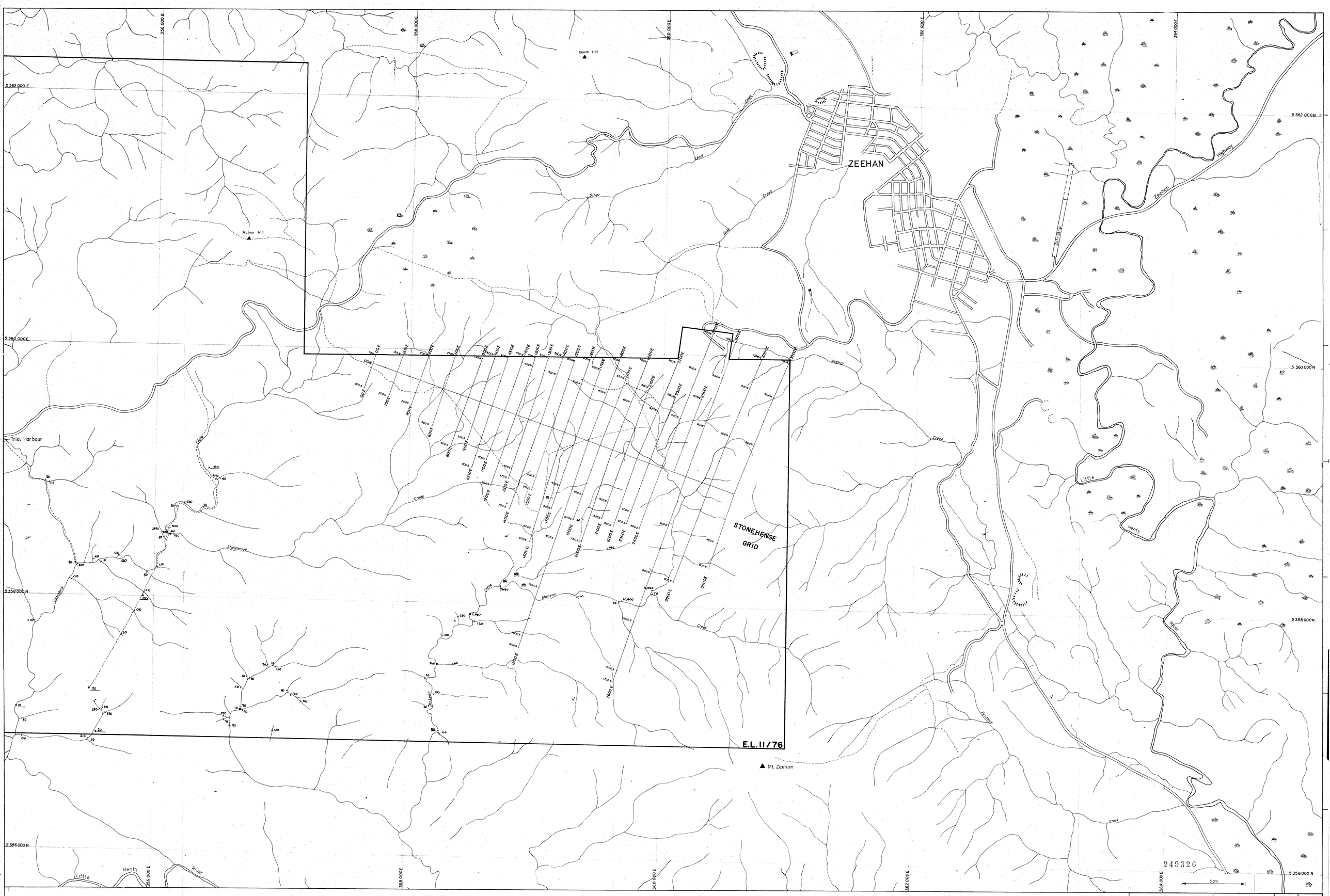
TUNGSTUN IN P.P.M. 006

SCALE. 1:10,000 METRES 0 200 400 600 200

DRAWN	P.K.
TRACED	S.F.
DATE	Sep. 84
SCALE	1:10,000
DRAWING No.	

FIG. 6

356 000 E
358 000E
360 000 E
362 000 E
364 000E
5 362 000 E
5 360 000E
5 362 000N
5 360 000N
5 358 000N
5 356 000 N
Oonah Hill
McIvor Hill
ZEEHAN
Silver Creek
Lead Creek
Zeehan Highway
Air Strip
Trial Harbour
Creek
Stonehenge
Gardners
Madeon Creek
Henty River
Little Henty River
Pyramid Creek
STONEHENGE GRID
E.L. 11/76
▲ Mt. Zeehan
Samples
Panned Concentrate
Stream Sediment
Rock Chip
ZEEHAN B/3
ZEEHAN B/4
ZEEHAN D/1
ZEEHAN D/2
5 cm
249325 RENISON LIMITED
ZEEHAN D/1
STREAM SEDIMENT GEOCHEMISTRY
COPPER IN P.P.M. 007
SCALE 1:10,000 METRES
200 0 200 400 600
DRAWN P.K.
TRACED S.F.
DATE Sep., 84
SCALE 1:10,000
DRAWING No.
FIG. 7



Samples
- Panned Concentrate
- Stream Sediment
- Rock Chip

ZEEHAN B/3	ZEEHAN B/4
ZEEHAN D/1	ZEEHAN D/2

RENISON LIMITED

ZEEHAN D/1

83-2315 (01) 2/4

STREAM SEDIMENT GEOCHEMISTRY

LEAD IN P.P.M. 008

SCALE. 1:10,000 METRES

200 0 200 400 600

DRAWN	P.K.
TRACED	S.F.
DATE	Sep.,84
SCALE	1:10,000
DRAWING No.	

FIG. 8

356 000 E
358 000E
360 000 E
362 000 E
364 000E
5 362 000 E
5 362 000N
5 360 000E
5 360 000N
5 358 000N
5 358 000 N
5 356 000 N
Oonah Hill
McIvor Hill
Trial Harbour
Creek
Stonehenge
Gormleys
Lead
Silver
Hill
Creek
ZEEHAN
Highway
Zeehan
Airstrip
Austral
Creek
Little
Henty
River
Creek
Moulson
Creek
Bryants
Creek
Mt Zeehan
STONEHENGE GRID
E.L. 11/76
249327
5 cm

Samples
- Panned Concentrate
- Stream Sediment
- Rock Chip

ZEEHAN B/3	ZEEHAN B/4
ZEEHAN D/1	ZEEHAN D/2

RENISON LIMITED

ZEEHAN D/1

SS - 365 Vol 37

STREAM SEDIMENT GEOCHEMISTRY

ZINC IN P.P.M. 003

SCALE 1:10,000 METRES

200 0 200 400 600

DRAWN	P.K.
TRACED	S.F.
DATE	Sep. 84
SCALE	1:10,000
DRAWING No.	

FIG. 9

E.L. 11776

Mt Agnew

Lake Cumberland

Trial Harbour Road

Trial Harbour

Remine

SOUTHERN OCEAN

Mid-cosene granite, feldspars + sericitised MnO, join fine and in quartz tourm vein

Granite Hornfels Float

Granite Tourmaline Hornfels Float 0.765%(0.969%) Li

Granite / Hornfels Contact

Hornfels Float

Granite Hornfels Float

Hornfels Tourmalinised Fine Granite

Granite Hornfels Magnetite Float

Samples
- Panned Concentrate
- Stream Sediment
- Rock Chip

ZEEHAN A/4	ZEEHAN B/3
ZEEHAN C/3	ZEEHAN D/1

5 cm

RENISON LIMITED

ZEEHAN C/2

STREAM SEDIMENT GEOCHEMISTRY

Tin in p.p.m., Gold in p.p.m.

SCALE 1:10,000 METRES 200 0 200 400 600

DRAWN	P.K.
TRACED	S.F.
DATE	Sep. 84
SCALE	1:10,000
DRAWING No.	10

249328

E.L. 11776

Mt. Agnew

Lake Cumberland

Trial Harbour Road

Trial Harbour

Remine

Mt. Henty

Little Henty River

SOUTHERN OCEAN

Med-coarse granite feldspars + sericitised Mafics, joint faces and N-S(?) tourm. vein

Granite Hornfels Float

Granite Hornfels Magnetite Float

Granite Tourmaline Hornfels Float

Granite/Hornfels Contact

Hornfels Float

Granite Hornfels Float

Hornfels Tourmalinised Fine Granite

Samples
- Panned Concentrate
- Stream Sediment
- Rock Chip

5 cm

ZEEHAN A/4	ZEEHAN B/3
ZEEHAN C/2	ZEEHAN D/1

RENISON LIMITED

ZEEHAN C/2

STREAM SEDIMENT GEOCHEMISTRY

Arsenic in p.p.m.

SCALE. 1:10,000 METRES

200 0 200 400 600

DRAWN	P.K.
TRACED	S.F
DATE	Sep.84
SCALE.	1:10,000
DRAWING No.	11

249329

E.L. 11/76

Mt Agnew

Lake Cumberland

Trial Harbour Road

Remine

Trial Harbour

SOUTHERN OCEAN

Mod-coarse granite feldspars ± sericitized Mafic joint face and in quartz tourm vein

Granite Hornfels Float

Granite Hornfels Magnetite Float

Granite Tourmaline Hornfels Float

Granite / Hornfels Contact

Hornfels Float

Granite Hornfels Float

Hornfels Tourmalinized Fine Granite

To Henty

Little River

346 000 E | 348 000 E | 350 000 E | 352 000 E | 354 000 E

5 362 000 N | 5 360 000 N | 5 358 000 N | 5 356 000 N

Samples
- Panned Concentrate
- Stream Sediment
- Rock Chip

ZEEHAN A/4	ZEEHAN B/3
ZEEHAN C/2	ZEEHAN D/1

5 cm

RENISON LIMITED

ZEEHAN C/2

STREAM SEDIMENT GEOCHEMISTRY

Tungstun in p.p.m.

SCALE. 1:10,000 METRES

200 0 200 400 600

DRAWN	P.K.
TRACED	S.F.
DATE	Sep.84
SCALE	1:10,000
DRAWING No.	

12

249330

012

E.L. 11/76

Mt. Agnew

Lake Cumberland

Trial Harbour Road

Trial Harbour

Remine

Mt Hardy

SOUTHERN OCEAN

346 000 E
348 000 E
350 000 E
352 000 E
354 000 E

5 362 000 N
5 360 000 N
5 358 000 N
5 356 000 N

Med-coarse granite feldspars + sericitized Mdg joint face and in quartz - tourm veins

Granite Hornfels Float

Granite Hornfels Magnetite Float

Granite Tourmaline Hornfels Float

Granite/Hornfels Contact

Hornfels Float

Granite Hornfels Float

Hornfels Tourmalinized Fine Grained

Samples
- Panned Concentrate
- Stream Sediment
- Rock Chip

5 cm

ZEEHAN A/4	ZEEHAN B/3
ZEEHAN C/2	ZEEHAN D/1

249331

RENISON LIMITED

ZEEHAN C/2

STREAM SEDIMENT GEOCHEMISTRY

Copper in p.p.m.

SCALE. 1:10,000 METRES

200 0 200 400 600

DRAWN	P.K.
TRACED	S.F.
DATE	Sep. 84
SCALE	1:10,000
DRAWING No.	

13 013

E.L. 11776

Mt. Agnew

Lake Cumberland

Trial Harbour

Remine

Trial Harbour Road

Herty River

Little

SOUTHERN OCEAN

346 000 E
348 000 E
350 000 E
352 000 E
354 000 E

5 362 000 N
5 360 000 N
5 358 000 N
5 356 000 N

Mod-coarse granite feldspars + sericitized MoS_2 print lobe and fl. quartz tourm vein

Granite Hornfels Float
Granite Hornfels Magnetite Float
Granite Tourmaline Hornfels Float
Granite / Hornfels Contact
Hornfels Float
Granite Hornfels Float
Hornfels Tourmalinized Fine Breccia

Samples
- Panned Concentrate
- Stream Sediment
- Rock Chip

ZEEHAN A/4	ZEEHAN B/3
ZEEHAN C/3	ZEEHAN D/1

5 cm

RENISON LIMITED

ZEEHAN C/2

STREAM SEDIMENT GEOCHEMISTRY

Lead in p.p.m.

SCALE. 1:10,000 METRES

200 0 200 400 600

DRAWN	P.K.
TRACED	S.F.
DATE	Sep.84
SCALE	1:10,000
DRAWING No.	014
	14

249332

346 000 E
348 000E
350 000E
352 000 E
354 000 E
5 362 000 N
5 360 000N
5 358 000N
5 356 000 N
840
835
830
825
Mt Agnew
Lake Cumberland
SOUTHERN
OCEAN
Trial Harbour
Remine
Trial Harbour Road
Harty River
Little
Granite Hornfels Float
Granite Tourmaline Hornfels Float
Granite / Hornfels Contact
Hornfels Float
Granite Hornfels Float
Hornfels Tourmalinized Fine Granite
Mod coarse granite feldspars + sericitized Mostly pink face and in Gosts tourm vein
Samples
Panned Concentrate
Stream Sediment
Rock Chip
5 cm
ZEEHAN A/4
ZEEHAN B/3
ZEEHAN C/2
ZEEHAN D/1
249333
RENISON LIMITED
ZEEHAN C/2
85-2215 Vol 2,4
STREAM SEDIMENT GEOCHEMISTRY
Zinc in p.p.m.
SCALE. 1:10,000 METRES
200 0 200 400 600
DRAWN P.K.
TRACED S.F.
DATE Sep.,84
SCALE 1:10,000
DRAWING No.
015
15

STONEHENGE GRID

E.L. 47/71

E.L. 4/78

E.L. 11/76

E.L. 4/78

STONEHENGE GRID

STONEHENGE GRID

5 359 000N

5 358 000N

5 359 000 N

5 358 000 N

358 000 E

359 000 E

COMSTOCK WORKINGS

3800 N

3400 N

3000 N

Comstock

E.Z. Co. 123 N 259 E L7

Pt. 129

TH 4

TH 12

TH 13

TH 15

TH 16

TH 17

TH 18

TH 19

TH 20

TH 21

TH 22

TH 23

TH 24

TH 25

TH 26

TH 27

TH 28

TH 29

TH 30

TH 31

TH 32

TH 33

TH 34

TH

Geochemistry (P.P.M.)

Pb 160ppm

Zn 2100ppm

V.L.F.-E.M.

DIP ANGLE (——)

SMOOTHED DERIVATIVE (——)

I.P. DATA
Dipole-Dipole

Gradient Array I.P.

CHARGEABILITY IN MILLIVOLTS/VOLT (——)

RESISTIVITY IN OHM METRES (- - -)

N.R.

A=25 A=50

Total Magnetic Field (γ)

Creek

Topography & Geology
HEIGHT ABOVE SEA LEVEL - (Metres)

DDH TH 14

Miocaous

grey sandy gravels

Black

DONAH FORMATION

Interpreted Carbonate-bearing Sequence

Interpreted Silty Sandstone Sequence

Sandstone

Silty Sandstone & Black Shale

Interpreted Carbonate Bearing Sequence

00 100N 200N 300N 400N 500N 550N

GOLD FIELDS EXPLORATION PTY LIMITED

85-235 vol 2/4

S.P.L. 129 - STONEHENGE GRID

LINE 1500 E

LOOKING N.W.

SCALE 1:2000 METRES

DRAWN	P.K.
TRACED	S.F.
DATE	Feb.,85
SCALE	1:2000
FIG. NO	
	017
	17

I.P. DATA

A = DIPOLE DISTANCE

N.R. = NO READING

MAGNETICS

5 cm

GEOCHEMISTRY

Sn, Cu, Pb, Zn, As, W03, Mo

GEOLOGY

Donah Formation - Precambrian: Shale, Siltstone, Sandstone

Cambrian - Dundas Group ?: Basic Lavas, Grits, Shale, Siltstone

Gossan

Bedding

Cleavage

All Bearings Magnetic

017

Geochemistry (PPM) Cu Pb Zn

V.L.F.-E.M. DIP ANGLE (——) SMOOTHED DERIVATIVE (——)

G17/1

I.11/2 10m E

I.P. DATA Dipole – Dipole

Gradient Array I.P. CHARGEABILITY IN MILLIVOLTS/VOLT (——) RESISTIVITY IN OHM METRES (- - -)

N.R.

Total Magnetic Field (δ)

Mine

Trom

Topography & Geology HEIGHT ABOVE SEA LEVEL - (Metres)

Fold axis

Creek

Shaft 10m E.

Grass Tree

CONAH FORMATION

249336

GOLD FIELDS EXPLORATION PTY. LIMITED

85-2315 vol 2/4

S.P.L. 129 - STONEHENGE GRID

LINE 1900E

LOOKING N.W.

SCALE 1:2000 METRES

DRAWN	P.K.
TRACED	S.F.
DATE	Feb.,83
SCALE	1:2000
FIG. NO	016
	18

I.P. DATA

N.R.= NO READING

MAGNETICS

5 cm

V.L.F.-E.M.

I.11/2 10mE — Dighem No./Dighem Grade; Position

GEOCHEMISTRY

Sn. Cu Pb Zn As Wo3 Mo

GEOLOGY

Conah Formation – Precambrian: Shale, Siltstone, Sandstone

Cambrian – Dundas Group ?: Basic Lavas, Grits, Shale, Siltstone

Gossan

100/70 Bedding

Cleavage

All Bearings Magnetic

810

Geochemistry (P.P.M.)

PB/ZN RATIO

V.L.F.-E.M.

DIP ANGLE (——)

SMOOTHED DERIVATIVE (——)

M4/3 25mW

I.P. DATA Dipole-Dipole

Gradient Array I.P.

CHARGEABILITY IN MILLIVOLTS/VOLT (——)

RESISTIVITY IN OHM METRES (- - -)

N.R.

A/25m A/50m

Total Magnetic Field (δ)

Mine

Topography & Geology

HEIGHT ABOVE SEA LEVEL - (Metres)

Shaft Sealed

grey brown clay

V with chert

gravels

CAMBRIAN SEDIMENTS & VOLCANICS

OONAH FORMATION

micaceous

gravel

Creek

grey brown

grey

quartz vein

dark grey

grey clay

brown clay

Gundabluie Tram

gossan float

black

sandstone scree

249337

GOLD FIELDS EXPLORATION PTY. LIMITED	DRAWN: P.K.
85-2315 Vol 2/4	TRACED: S.F.
S.P.L. 129 - STONEHENGE GRID	DATE: Feb.83
LINE 2000E (1200S-750N)	SCALE: 1:2000
LOOKING N.W.	FIG. NO: 019
SCALE 1:2000 METRES	19

I.P. DATA

A = DIPOLE DISTANCE

N.R.= NO READING

MAGNETICS

5 cm

V.L.F.-E.M.

M4/3 25mW — Dighem No./Dighem Grade Position

GEOCHEMISTRY

Sn, Cu, Pb, Zn, As, Mo3

N.S. = No Sample

GEOLOGY

Oonah Formation - Precambrian: Shale, Siltstone, Sandstone

Cambrian - Dundas Group ?: Basic Lavas, Grits, Shale, Siltstone

Gossan

Bedding

Cleavage

All Bearings Magnetic

610

Geochemistry (P.P.M.)

V.L.F.-E.M.

DIP ANGLE (——)

SMOOTHED DERIVATIVE (——)

G18/3
35m W

T 12/4
10m E

I.P. DATA
Dipole – Dipole

Gradient Array I.P.

CHARGEABILITY IN MILLIVOLTS/VOLT (——)

RESISTIVITY IN OHM METRES(- - -)

N.R.

approx.

A = 50m

A = 25m

Total Magnetic Field (Ō)

Creek

Mine

Topography & Geology
HEIGHT ABOVE SEA LEVEL - (Metres)

TH 12

Water Race

Grab's Trom

Bog

Gravels

Clay

Gossan

Black Shale

Mineralised Fault Breccia

Interbedded Carbonate, Siltstone & Sandstone

Fault Breccia

Block Shale & Sandstone with Disseminated Pyrite

Interbedded Black Shale & Sandstone

Spirits

Fault Breccia

Spirits
40 ft Sc

pale brown weathered rock

brown weathered rock

blk. clay & gravels

brown clay

qtz. vein & ss float

block

FAULT

FAULT ?

249338

GOLD FIELDS EXPLORATION PTY. LIMITED

S.P.L. 129 – STONEHENGE GRID

LINE 2100 E (900S - 550N)

LOOKING N.W.

SCALE 1:2000 METRES

DRAWN	P.K.
TRACED	S.F.
DATE	Feb. 83
SCALE	1:2000
FIG. NO	020 - 20

85-231S vol 2/4

I.P. DATA

A = DIPOLE DISTANCE

N.R. = NO READING

V.L.F.-E.M.

G18/3 — Dighem No./Dighem Grade
35m W — Position

MAGNETICS

5 cm

GEOCHEMISTRY

Sn
Cu
Pb
Zn
As
Wo3
Mo

GEOLOGY

Qonah Formation – Precambrian

Shale
Siltstone
Sandstone

Cambrian – Dundas Group ?

Basic Lavas
Grits
Shale
Siltstone

Gossan

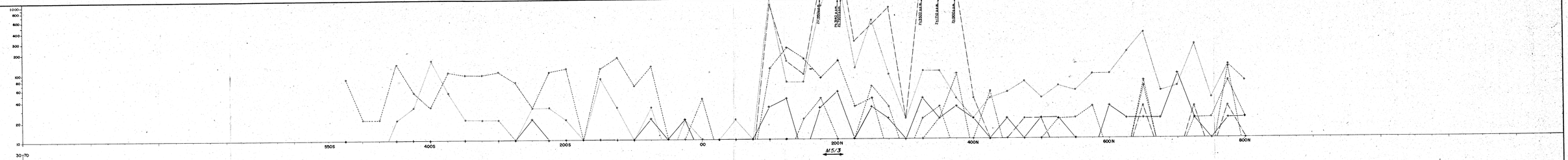
100/70 Bedding

105/80 Cleavage

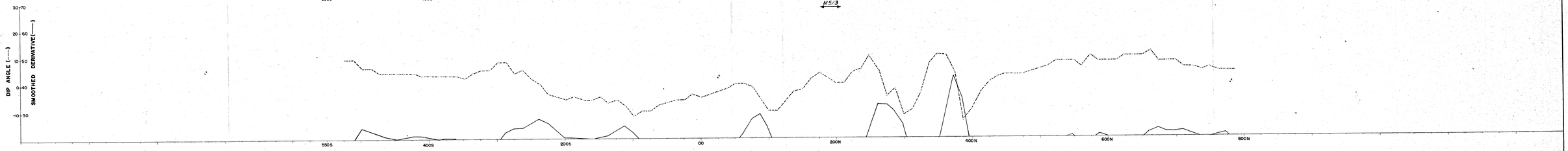
All Bearings Magnetic

020

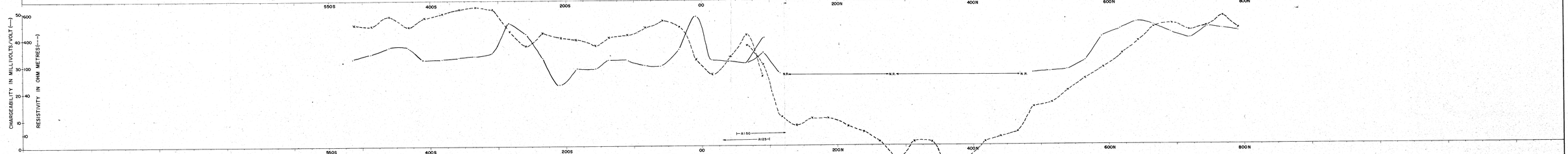
Geochemistry (P.P.M.)



V.L.F.-E.M.

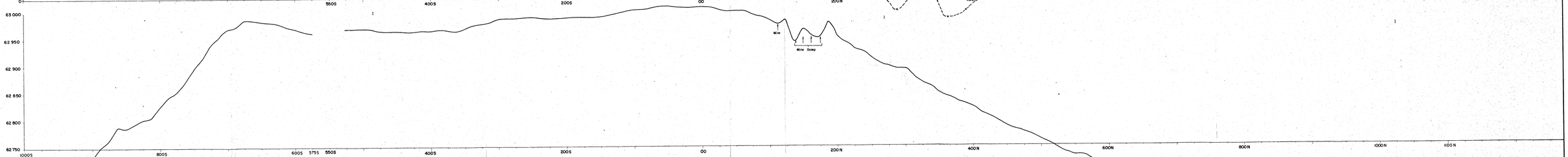


I.P. DATA
Dipole-Dipole

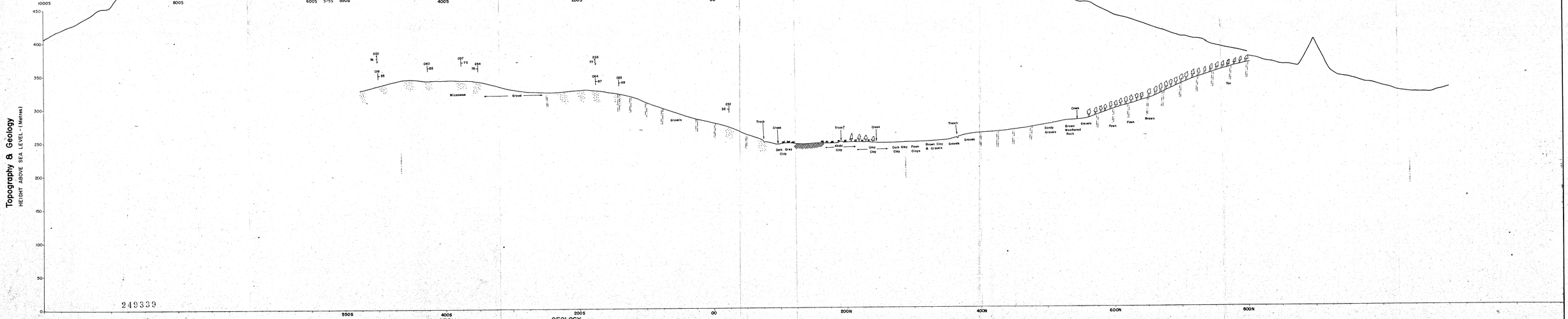


Gradient Array I.P.

Total Magnetic Field (Ō)



Topography & Geology
HEIGHT ABOVE SEA LEVEL - (Metres)



249339

I.P. DATA
N.R.= NO READING
A = DIPOLE DISTANCE

MAGNETICS
5 cm

V.L.F.-E.M.
M5/3 Dighem No./Dighem Grade
Position

GEOCHEMISTRY
Sn
Cu
Pb
Zn
As
Wo3
Mo

GEOLOGY
Conah Formation - Precambrian
Shale
Siltstone
Sandstone
Cambrian - Dundas Group ?
Basic Lavas
Grits
Shale
Siltstone
Gosson
Bedding
Cleavage
All Bearings Magnetic

GOLD FIELDS EXPLORATION PTY. LIMITED	
S.P.L. 129 - STONEHENGE GRID	
LINE 2200 E (000S-1100N)	
LOOKING N.W.	
SCALE 1:2000 METRES	

85-2315 vol 2/4

DRAWN	P.K.
TRACED	S.F.
DATE	Feb. 83
SCALE	1:2000
FIG. NO.	21 021

021

Geochemistry (PPM)

Zn1450.0 A.E.
Zn1650.0 A.E.
Zn1700 A.E.
Zn1200.0 A.E.
Pb1250.0 A.E.
Pb1300.0 A.E.

500S 400S 200S 00 200N 400N 500N

T13/3
40mE

V.L.F-E.M

DIP ANGLE (—)
SMOOTHED DERIVATIVE (—)

500S 400S 200S 00 200N 400N 500N

I.P. DATA
Dipole-Dipole

500S 400S 200S 00 200N 400N 500N

Gradient Array I.P.

CHARGEABILITY IN MILLIVOLTS/VOLT (—)
RESISTIVITY IN OHM METRES (---)

N.R.
approx.
N.R.
N.R.

A=25 A=50

Creek Weld Mine Dump

400S 200S 00 200N 400N 500N

Total Magnetic Field (δ)

Track Cutting

1000S 800S 600S 400S 200S 00 200N 400N 500N

Topography & Geology
HEIGHT ABOVE SEA LEVEL - (Metres)

030 Creek 250 Creek 088 270 Track Creek Creek Track Creek Track Cutting Creek

Mine Dump — grey clay — grey clay — grey clay & gravels — gravels — Brown Clay — Orange brown Clay

CONAN FORMATION

249340

500S 400S 200S 00 200N 400N 500N

GOLD FIELDS EXPLORATION PTY. LIMITED

ES-2315 Vol 2/4

S.P.L. 129 - STONEHENGE GRID

LINE 2300E (1100S-550N)

LOOKING N.W.

SCALE 1:2000 METRES

DRAWN	P.K.
TRACED	S.F.
DATE	Feb.83
SCALE	1:2000
FIG. NO	022
	22

I.P. DATA
A = DIPOLE DISTANCE
NR = NO READING

MAGNETICS
5 cm
V.L.F-E.M
T13/3 40mE Dighem No./Grade Position

GEOCHEMISTRY
Se
Cu
Pb
Zn
As
We3 Mo

GEOLOGY
Conah Formation - Precambrian
Shale
Siltstone
Sandstone
Cambrian - Dundas Group ?
Basic Lavas
Grits
Shale
Siltstone
Gossan
Bedding
Cleavage
All Bearings Magnetic

022

Geochemistry (PPM)

V.L.F.-E.M.

DIP ANGLE (——)

SMOOTHED DERIVATIVE (——)

I.P. DATA

Dipole-Dipole

Gradient Array I.P.

CHARGEABILITY IN MILLIVOLTS/VOLT (——)

RESISTIVITY IN OHM METRES (- - -)

Total Magnetic Field (γ)

Topography & Geology

HEIGHT ABOVE SEA LEVEL - (Metres)

GOLD FIELDS EXPLORATION PTY. LIMITED

S.P.L. 129 - STONEHENGE GRID

LINE 2400E

LOOKING N.E.

SCALE 1:2000 METRES

DRAWN	P.K.
TRACED	S.F.
DATE	Feb.85
SCALE	1:2000
FIG. NO	023
	23

24934

I.P. DATA

A= DIPOLE DISTANCE

N.R.= NO READING

MAGNETICS

5 cm

V.L.F.-E.M.

Ms// 30m Hz

Dighem No./Dighem Grade

Position

GEOCHEMISTRY

Sn

Cu

Pb

Zn

As

Mo3

Mo

GEOLOGY

Xposn Formation - Piccaninnie

Shale

Siltstone

Sandstone

Cambrian - Dundas Group ?

Basic Lavas

Grits

Shale

Siltstone

DDH TH15

DDH TH 13

Fault Zone

(at low angle to section; includes blocks of altered carbonate)

Predominantly Black shales and Sandstones

Dolomites and dolomitic Siltstones

Black shales and siltstones minor carbonates.

Interbedded Black shale and Dolomite

Black shale and siltstone

Interbedded Black Shale

Black graphitic shale

Predominantly Dolomite with some Black Shale

Fault Breccia Zone

SPRAY NO. 1 LODE (extrapolated extension to south)

SPRAY NO. 3 LODE (extrapolated extension to south)

Out of line Stope

Out of line Stope

Base of Sand & Gravels

Base of Clay

Base of Sand

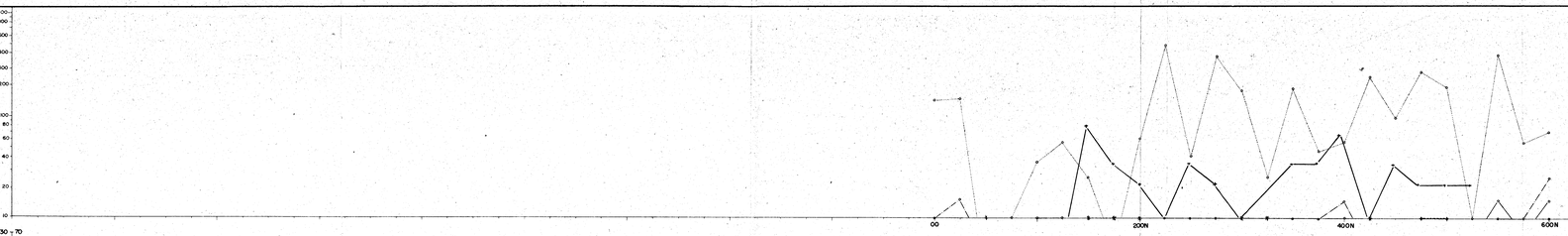
Base of Clay

Base of Sand

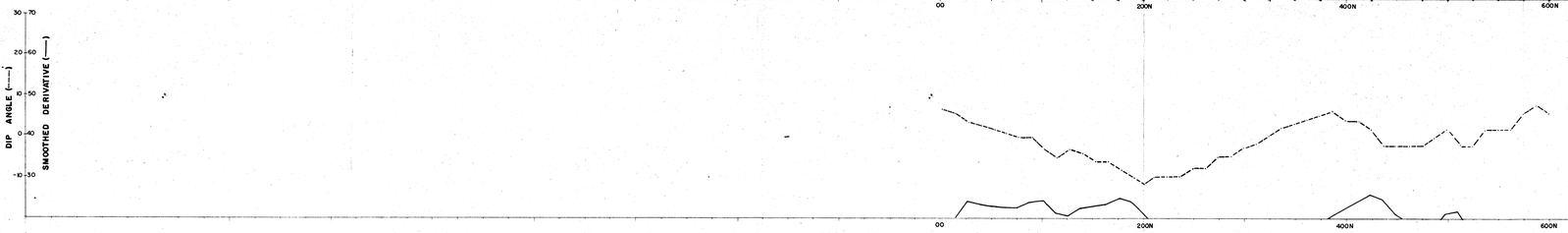
Base of Clay

Base of Sand

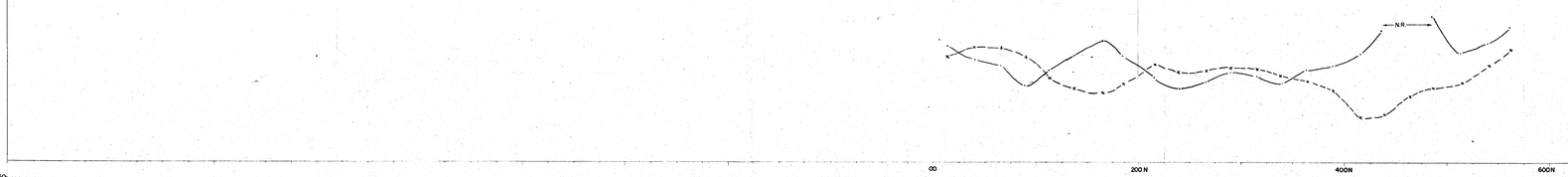
Geochemistry (P.P.M.)



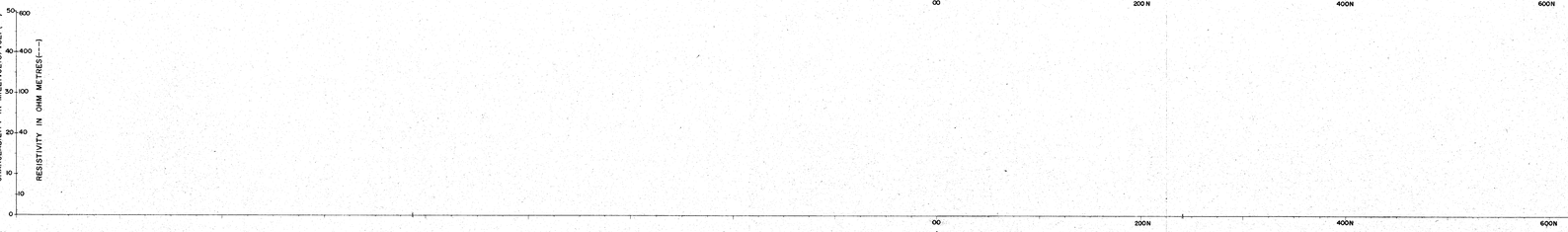
V.L.F.-E.M.



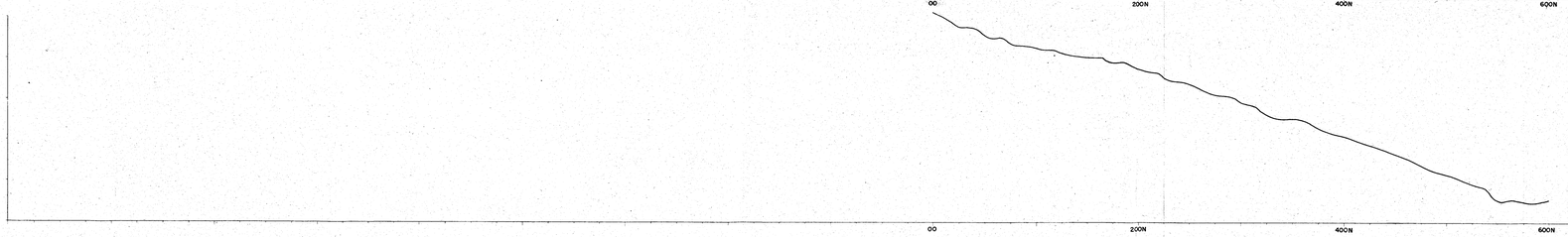
I.P. DATA
Dipole-Dipole



Gradient Array I.P.

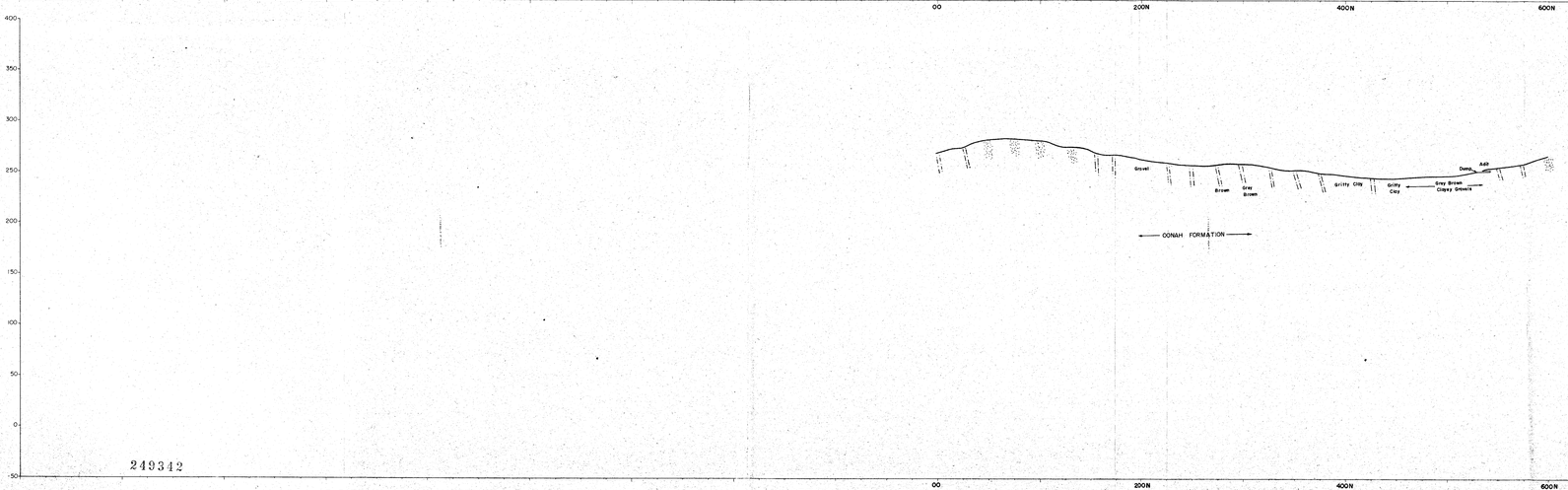


Total Magnetic Field (Ō)



Topography & Geology

HEIGHT ABOVE SEA LEVEL - (Metres)



249342

GOLD FIELDS EXPLORATION PTY. LIMITED	
85-2315 vol 2/4	
S.P.L. 129 - STONEHENGE GRID	
LINE 2500 E	
LOOKING N.W.	
SCALE 1:2000 METRES	
DRAWN	P.K.
TRACED	S.F.
DATE	Feb.,83
SCALE	1:2000
FIG. NO	024 24

I.P DATA

N.R. = NO READING

MAGNETICS

5 cm

GEOCHEMISTRY

Sn
Cu
Pb
Zn
As
Wo3 Mo

GEOLOGY

Conah Formation - Precambrian

Shale
Siltstone
Sandstone

Cambrian - Dundas Group ?

Basic Lavas
Grits
Shale
Siltstone

Gossan

Bedding
Cleavage

All Bearings Magnetic

024

249343

DDH TH 13

DDH TH 5

2300m R.L.

(30m E. of TH13 profile)

Surface Debris

Poor Recovery Zone

Mineralised Breccia

massive galena vein

64·0-76·3m : (0·01% Sn, 0·2% As, (0·01% Cu, 0·13% Pb, 0·43% Zn, 6ppm Ag

Altered Dolomite (& Breccia Textures)

87·0-148·0m: (0·01% Sn, 0·01% As, 0·01% WO_3, (0·01% Cu, 0·90% Pb, 0·59% Zn, 0·01% Sb, 29ppm Ag

Fault Zone (at low angle to profile)

Dolomitic siltstones and Dolomites

Dolomitic siltstones

Grey Black Shales

Black graphitic shales

Interbedded dolomite and black shale

Black shale and siltstone

Dolomite

Interbedded black shale and dolomite

(18m E. of TH13 profile)

Black graphitic shale

Massive Quartz dolomite vein

Dolomite

E.O.H. 431·2m

Quartzite

Limonite gossan

Weathered Breccia

Extrapolated Extension (south) of the Spray No. 3 Lode

Triconed Quartz dolomite vein

No recovery (with cavities)

Clay (limonitic)

(15m E. of TH13 profile)

Poor recovery zone

Black graphitic shale

2200mRL.

2100mRL

2000mRL.

1900mRL

1800mRL

Inter-bedded dolomite and black shale

Dolomite

Black Shale

(38m E. of TH13 profile)

Dolomite

Black shale

Pyritic mineralisation

Dolomite

Pyritic mineralisation

Dolomite

Fault

Black Shale

Fault

Interbedded black shale and dolomite

Dolomite

E.O.H. 599·0m

5 cm

Note: TH 15 at least 15m E. of this section.

GOLD FIELDS EXPLORATION PTY. LIMITED

Down Dip Profile

DDH TH 13 025

85-2315 vol 2/4

DRAWN BY : PK

DRAFTSMAN: TGDS

DATE : Oct. '84

REVISIONS :

FILE NO.

SCALE 1:2000 20 0 20 40 Metres

FIG. 25

249344

DDH TH 15

2300m RL

DDH TH 13

(85m E of TH15 profile)

Poor Recovery

Poor Recovery Zone

Mineralised Breccia

51·4 - 74·0m :
<0·01% Sn, 0·02% As, 0·02% Cu
0·37% Pb, 0·26% Zn, 9ppm Ag

Quartzite

Limonite gossan

74·0 - 99·0m :
<0·01% Sn, 0·03% As, <0·01% Cu
0·26% Pb, 0·18% Zn, 6ppm Ag

Weathered breccia

Fault Zone at low angle to profile.

2200m RL

Triconed (no recovery)

Quartz dolomite vein

No recovery (with cavities)

(15m W. of TH15 profile)

167·0 - 191·0m:
<0·01% Sn, 0·01% As,
<0·01% Cu, 0·27% Pb,
0·64% Zn, 0·04% Sb,
< 1ppm Ag

Altered Dolomite

Clay (limonitic)

Limonite gossan

Poor recovery Zone

Interbedded dolomitic siltstones and dolomite

Black graphitic shale

Interbedded dolomite and black shale

2100m RL

Dolomitic siltstones

Grey black shales

Black graphitic shale

(15m W. of TH15 profile)

Black shale and siltstone

Dolomite

Interbedded black shale and dolomite

(30m W. of TH15 profile)

Black graphitic shale

2000m RL

Dolomite

Qtz dolomite vein

Dolomite

E.O.H 431·2m

Black graphitic shale

Interbedded dolomite and black shale

1900m RL

Dolomite

Black sh

518·6 - 521·6m : <0·01% Sn, 0·03% As,
<0·01% Cu, 0·06% Pb, 0·03% Zn,
12 ppm Ag

Dolomite

Black Shale
Pyritic Mineralisation

557·9 - 563·75m :
<0·01% Sn, 0·45% As, 0·08% Cu,
0·22% Pb, 0·12% Zn, 35ppm Ag

Dolomite

Pyritic Mineralisation

Dolomite

Faul

Black shale

Fault

Interbedded black shale and Dolomite

E.O.H. 599·0m

Dolomite

1800m RL

Note: TH 13 at least 15m W. of this section.

5 cm

GOLD FIELDS EXPLORATION PTY. LIMITED

Down Dip Profile

DDH TH 15

026

85-2315 Vol 2/4

DRAWN BY : PJK

DRAFTSMAN: TGDS

DATE : Oct '84

REVISIONS :

FILE NO

SCALE 1:2000 20 0 20 40 Metres

FIG. 26

SOUTHERN

OCEAN

TRIAL HARBOUR

Remine

WEST AGNEW GRID

E.L. 11/76
SPL 129

365 500 E

5 358 000 N

5 356 000 N

249345

KEY

>500	
200 - 500	
100 - 200	
50 - 100	

5 cm

ZEEHAN C2/3 | ZEEHAN C2/2 | ZEEHAN D1/1
ZEEHAN C2/4 | ZEEHAN D1/3

RENISON LIMITED

ZEEHAN C2/3 027

~~BS 2.35 Vol 2~~

SOIL GEOCHEMISTRY

TIN IN P.P.M.

SCALE 1: 5000 METRES

100 0 100 200 300

DRAWN	A.C.
TRACED	S.F.
DATE	Sep. 84
SCALE	1:5000
DRAWING No.	
	27

FEDERATION GRID BASELINE

EAST HEEMSKIRK GRID

KENNEW GRID BASE LINE

E.L. 11/76
SPL 129

OLD E.Z. GRID BASELINE

BASELINE TRIAL HARBOUR GRID

Coleman's

Cumberland Lake

Sweeney's Mine

Grant Mine

K. McDermott 90 M/72 40

F. J. Griffiths 4M/73 40

Cumberland Creek

Little Henty River

Bridge

5 359 000 N

5 356 000 N

5 265 000 E

350 000 E

249346

KEY

- >500
- 200 - 500
- 100 - 200
- 50 - 100

LEGEND

- Cut grid lines.
- Walking track.
- Cut grid lines, not located accurately.

5 cm

ZEEHAN C2/2	ZEEHAN D1/1
ZEEHAN C2/4	ZEEHAN D1/3

RENISON LIMITED

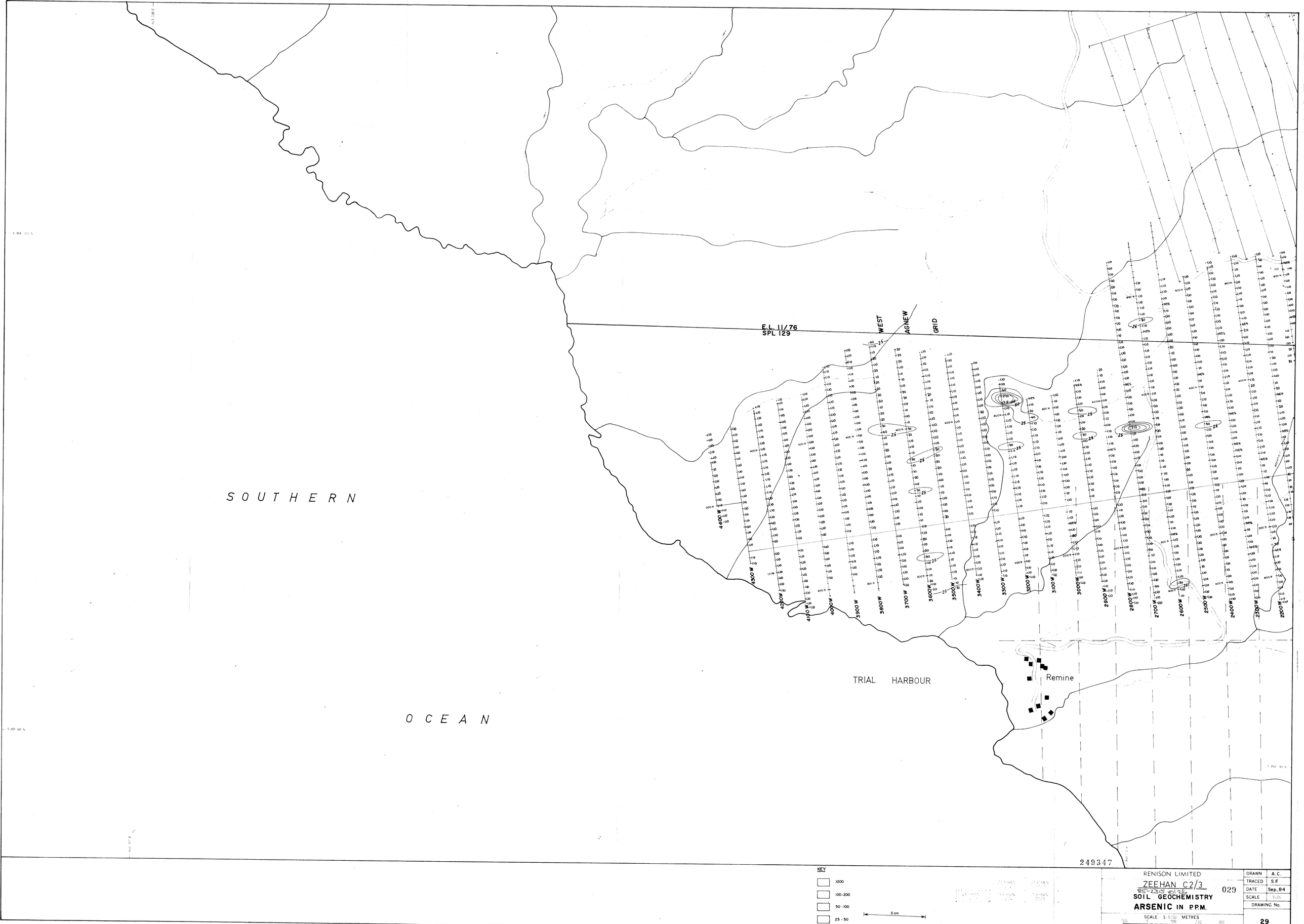
ZEEHAN C2/4.
(RS-238(S) VOL 2/)

SOIL GEOCHEMISTRY (-180µm)

TIN IN P.P.M.

SCALE. 1:5,000 METRES
100 0 100 200 300

DRAWN	P.R./A.C.
TRACED	T.G.D.S.
DATE	JUNE, 81 SEP.84
SCALE	1:5,000
DRAWING No.	028
	28



KEY

- 1200
- 100-200
- 50-100
- 25-50

5 cm

RENISON LIMITED

ZEEHAN C2/3

85-235 Vol 7A

029

SOIL GEOCHEMISTRY

ARSENIC IN P.P.M.

SCALE 1:5000 METRES

DRAWN	A.C.
TRACED	S.F.
DATE	Sep.84
SCALE	1:5000
DRAWING No.	29

FEDERATION GRID BASELINE

AGNEW GRID BASE LINE

EAST HEEMSKIRK GRID

E.L. 11/76
SPL 129

OLD E.Z. GRID BASELINE

BASELINE TRIAL HARBOUR GRID

Cumberland Lake

Sweeney's Mine

Orient Mine

K. McDermid 90 M/72 40

F.J. Griffiths 4M/73 40

Cumberland Creek

Henty River

Little Henty River

Collingwood

Ellington Creek

5 359 000 N

5 356 000 N

250 000 E

254 000 E

249348

KEY

	>200
	100-200
	50-100
	25-50

LEGEND

- Cut grid lines
- Walking track
- Cut grid lines, not located accurately.

5 cm

ZEEHAN C2/2	ZEEHAN D1/1
ZEEHAN C2/4	ZEEHAN D1/3

RENISON LIMITED

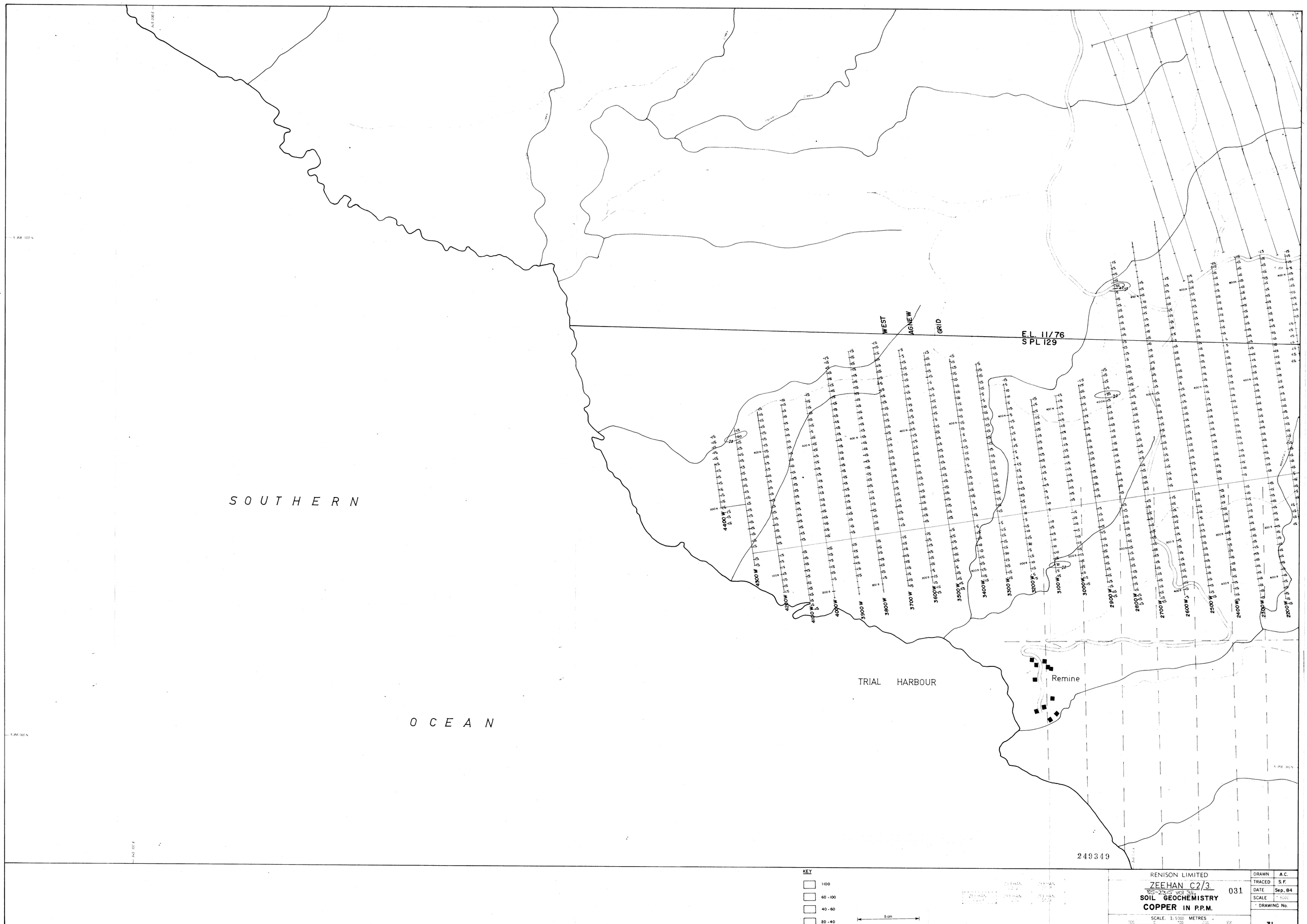
ZEEHAN C2/4. 030
85-235 Vol 3/4

SOIL GEOCHEMISTRY (-180μm)

ARSENIC IN P.P.M.

SCALE 1:5000 METRES
100 0 100 200 300

DRAWN	P.R. / A.C.
TRACED	T.G.D.S.
DATE	JUNE, 81 SEP. 84
SCALE	1:5,000
DRAWING No.	30



KEY

- >100
- 60 - 100
- 40 - 60
- 20 - 40

5 cm

RENISON LIMITED

ZEEHAN C2/3

SOIL GEOCHEMISTRY

COPPER IN P.P.M.

031

SCALE, 1: 5000 METRES

DRAWN	A.C.
TRACED	S.F.
DATE	Sep. 84
SCALE	1:5000
DRAWING No.	31

Colemans

Cumberland Lake

FEDERATION GRID BASELINE

AGNEW GRID BASE LINE

EAST HEEMSKIRK GRID

Sweeney's Mine

E.L. 11/76

S.P.L. 129

OLD E.Z. GRID BASELINE

Orient Mine

K. McDermott 50 M72 40

F.J. Griffiths 4M/73

Cumberland Creek

Henty River

Little Henty River

Bridge

Creek

5 359 000 N

5 356 000 N

350 000 E

355 000 E

249350

KEY

- >100
- 60 - 100
- 40 - 60
- 20 - 40

LEGEND

- Cut grid lines
- Walking track.
- Cut grid lines, not located accurately.

ZEEHAN C2/2	ZEEHAN D1/1
ZEEHAN C2/4	ZEEHAN D1/3

RENISON LIMITED

ZEEHAN C2/4. 032

SS 23 IS VOL 34

SOIL GEOCHEMISTRY (-180 µm)

COPPER IN P.P.M.

SCALE. 1:5,000 METRES

100 0 100 200 300

DRAWN	P.R./A.C.
TRACED	T.G.D.S.
DATE	JUNE,81 SEP,84
SCALE	1:5,000
DRAWING No.	32

E.L. 11/76
SPL 129

WEST AGNEW GRID

SOUTHERN

OCEAN

TRIAL HARBOUR

Remine

249351

KEY

- >100
- 60 - 100
- 40 - 60
- 20 - 40

RENISON LIMITED

ZEEHAN C2/3 033

SOIL GEOCHEMISTRY

LEAD IN P.P.M.

SCALE 1:5,000 METRES

DRAWN	A.C.
TRACED	S.F.
DATE	Sep. 84
SCALE	1:5000
DRAWING No.	33

FEDERATION GRID BASELINE

AGNEW GRID BASE LINE

EAST HEEMSKIRK GRID

BASELINE TRIAL HARBOUR GRID

OLD E.Z. GRID BASELINE

E.L. 11/76
S.P.L. 129

Cumberland Lake

Sweeney's Mine

Orient Mine

K.McDermott 90 M/72 40

E.J.Griffiths 4 M/73 40

Cumberland Creek

Henty River

Little

Colemans

Creek

5 359 000 N

5 356 000 N

350 000 E

249352

KEY

- >100
- 60 - 100
- 40 - 60
- 20 - 40

LEGEND

- Cut grid lines
- Walking track
- Cut grid lines, not located accurately

5 cm

ZEEHAN C2/2	ZEEHAN D1/1
ZEEHAN C2/4	ZEEHAN D1/3

RENISON LIMITED

ZEEHAN C2/4 034
~~35-235 Vol 3/4~~

SOIL GEOCHEMISTRY (-180µm)

LEAD IN PPM.

SCALE. 1:5,000 METRES
100 0 100 200 300

DRAWN	P.R./A.C.
TRACED	T.G.D.S.
DATE	JUNE,81 SEP,84
SCALE	1:5,000
DRAWING No.	34

KEY

- >200
- 100-200
- 50-100
- 25-50

5 cm

ZEEHAN C2/3 | ZEEHAN C2/2 | ZEEHAN D1/1 | ZEEHAN C2/4 | ZEEHAN D1/3

RENISON LIMITED

ZEEHAN C2/3 035

85-2315 Vol IV

SOIL GEOCHEMISTRY

ZINC IN P.P.M.

SCALE. 1:5000 METRES

100 0 200 300

DRAWN	A.C.
TRACED	S.F.
DATE	Sep. 84
SCALE	1:5000
DRAWING No.	35

5 359 000 N

Colemans

Cumberland Lake

FEDERATION GRID BASELINE

Sweeney's Mine

E.L. 11/76
SPL 129

GRID BASE LINE

EAST HEEMSKIRK GRID

Orient Mine

K McDermott 90 M/73

F.J. Griffiths 4M/73

Cumberland Creek

Little Harty River

Bridge Creek

BASELINE TRIAL HARBOUR

OLD E.Z. GRID BASELINE

5 356 000 N

350 000 E

355 000 E

249354

KEY

	>200
	100 - 200
	50 - 100
	25 - 50

LEGEND

- Cut grid lines
- Walking track
- Cut grid lines, not located accurately

5 cm

ZEEHAN C2/2	ZEEHAN D1/1
ZEEHAN C2/4	ZEEHAN D1/3

RENISON LIMITED

ZEEHAN C2/4. 036

83-23 (S vol 3)

SOIL GEOCHEMISTRY (-180 µm)

ZINC IN P.P.M.

SCALE. 1: 5,000 METRES

100 0 100 200 300

DRAWN	P.R./A.C.
TRACED	T.G.D.S.
DATE	JUNE, 81 SEP, 84
SCALE	1:5,000
DRAWING No.	36

E.L. 11/76

WEST AGNEW GRID

SOUTHERN OCEAN

TRIAL HARBOUR

Remine

245 000 E

5 356 000 N

ZEEHAN C2/2	ZEEHAN D1/1		
ZEEHAN C2/3	ZEEHAN C2/4	ZEEHAN D1/3	

5 cm

RENISON LIMITED

ZEEHAN C2/3. 037

SS-235 VOL 8/4

GRADIENT ARRAY EIP SURVEY

CHARGEABILITY CONTOURS

SCALE. 1: 5000 METRES

100 0 100 200 300

DRAWN	A.C.
TRACED	S.F
DATE	Oct.,84
SCALE	1:5000
DRAWING No.	

FIG. 37

249355

5 359 000 N

350 000 E

Cumberland Lake

Sweeney's Mine

WEST AGNEW GRID

AGNEW GRID

Gradient block boundary

Gradient block boundary

Coleman's Creek

Bridge Creek

Cumberland Creek

HENTY RIVER

LITTLE HENTY RIVER

5 356 000 N

354 000 E

E.L. 11/76

E.L. 4/78

249336

LEGEND

CUT GRID LINES

WALKING TRACK

ZEEHAN C 2/2	ZEEHAN D 1/1
ZEEHAN C 2/4	ZEEHAN D 1/3

AGNEW GRID - Surveyed & Compiled by Scintrex Jan., 81 Job No. Tas.-081-D

5 cm

RENISON LIMITED

ZEEHAN C 2/4 038

GRADIENT ARRAY EIP SURVEY

CHARGEABILITY CONTOURS

85-2315 Vol 3/4

GEOLOGIST	A.C.
DRAUGHTSMAN	S.F.
DATE	Oct., 84
REVISIONS	Lines at Sweeney's plotted Dec. '84

SCALE 1:5000 METRES

0 100 200 300

DRAWING No.

FIG. 38

038

E.L. 11776

SOUTHERN

OCEAN

WEST AGNEW GRID

TRIAL HARBOUR

Remine

5 358 000 N

5 356 000 N

249357

RENISON LIMITED

ZEEHAN C2/3 039

GRADIENT ARRAY EIP SURVEY

RESISTIVITY CONTOURS

SCALE. 1:5000 METRES

DRAWN	A.C.
TRACED	S.F.
DATE	Oct., 84
SCALE	1:5000
DRAWING No.	FIG.39

5 359 000 N

350 000E

Cumberland Lake

Sweeney's Mine

WEST AGNEW GRID

E.L. 11/76

S.P.L. 129

AGNEW GRID

Creek

Bridge

Creek

Cumberland

HENTY

RIVER

LITTLE

5 356 000N

350 000E

354 000E

E.L. 11/76

E.L. 4/78

249358

LEGEND

CUT GRID LINES

WALKING TRACK

5 cm

ZEEHAN C 2/2	ZEEHAN D 1/1
ZEEHAN C 2/4	ZEEHAN D 1/3

AGNEW GRID - Surveyed & Compiled by Scintrex Jan., 81 Job No. Tas.-081-D

RENISON LIMITED

ZEEHAN C 2/4 040

GRADIENT ARRAY EIP SURVEY

RESISTIVITY CONTOURS

83-235 VOL 3/4

GEOLOGIST	A.C.	SCALE 1:5,000 METRES
DRAUGHTSMAN	S.F.	0 100 200 300
DATE	Oct, 84	
REVISIONS	Lines at Sweeney's plotted Dec.'84	DRAWING No. 40

040

Geochemistry
P.P.M.

600
300
100
50
10

I.P. Data

CHARGEABILITY IN MILLIVOLTS/VOLT (——)

50
40
30
20
10
0

RESISTIVITY IN Ohm-METRES (- - - -)

5000
4000
3000
2000
1000
600

600S 400S 200S 00 200N 600S 400S 200S 00 400S

Total Magnetic Field (Z)

Topography & Geology
HEIGHT ABOVE SEA LEVEL - (metres)

600
550
500
450
400
350
300
250
200
150
100
50
00

LINE 100W

Ck.
Road
Ck.

LINE 00

Ck.
Road
Puo

LINE 100E

Puo

249359

400S 200S 00 200N 600S 400S 200S 00 400S

I.P. DATA
CHARGEABILITY & RESISTIVITY
——— Gradient Array
S- Anomaly letter number

MAGNETICS
5 cm

GEOCHEMISTRY
Sn
Cu
Pb
Zn
As
W

ALTERATION
Quartz and topaz and/or tourmaline
Total tourmalinization, occasionally with hematite
Hydrothermal
Collapse
Breccias
White Alteration Cycles?
Argillic alteration
"Green" alteration (bleached granite) generally with hematite ± pyrite
Quartz - meca greisen
Area of tourmaline nodules

LEGEND
ROCK TYPES
Puo Ozoah Formation ; quartzite, siltstone, minor carbonate
Aplite or microgranite
Fine grained
Medium grained
White granite
Porphyritic granite
Medium grained
Coarse grained
Red granite
Major lineament
F —— F Fault
Definite
Approximate
? Inferred
Geological boundaries

RENISON LIMITED	
WEST AGNEW GRID E.L. 11/76 & S.P.L. 129	
LINE 00,100E, 100W	
SECTION LOOKING WEST	
SCALE. 1: 2000 METRES	
0 20 40 60 80 100	

DRAWN	A.C.
TRACED	S.F.
DATE	Aug.,84
SCALE	1:2000
DRAWING No.	041
	41

041

Geochemistry
P.P.M.

I.P. Data
CHARGEABILITY IN MILLIVOLTS/VOLT (——)
RESISTIVITY IN OHM-METRES (- - -)

400S 200S 00 200N 400N 400S 200S 00 200N 400N

Total Magnetic Field (γ)

Topography & Geology
HEIGHT ABOVE SEA LEVEL - (metres)

LINE 200W

LINE 300W

Road Ck. Puo

249360

400S 200S MAGNETICS 00 200N 400N 400S 200S 00 200N 400N 600N

RENISON LIMITED
WEST AGNEW GRID E.L. 11/76 & S.P.L. 129
LINE 200W, 300W
SECTION LOOKING WEST
SCALE. 1: 2000 METRES

DRAWN	A.C.
TRACED	S.F.
DATE	Aug. 84
SCALE	1: 2000
DRAWING No.	042

042

I.P. DATA
CHARGEABILITY & RESISTIVITY
Gradient Array
S - Anomaly letter number
5 cm

GEOCHEMISTRY
Sn
Cu
Pb
Zn
As
W

ALTERATION
Quartz and topaz and/or tourmaline
Total tourmalinization, occasionally with hematite
Hydrothermal
Breccias
Collapse
White Alteration Types
Argillic alteration
"Green" alteration (sericitized granite) generally with hematite or pyrite
Quartz - mica greisen
Area of tourmaline nodules

LEGEND
ROCK TYPES
Puo Conah Formation; quartzite, siltstone, minor carbonate
Aplite or micrograniteFine grained / Medium grained — White granite
Porphyritic granite
Medium grained / Coarse grained — Red granite
Major lineament
Fault — Definite / Approximate / Inferred — Geological boundaries

042

Geochemistry
- P.P.M.

I.P. Data

CHARGEABILITY IN MILLIVOLTS/VOLT (——)

RESISTIVITY IN Ωm - METRES (- - - -)

400S 200S 00 200N 400N 600N

Total Magnetic Field (γ)

Topography & Geology
HEIGHT ABOVE SEA LEVEL - (metres)

LINE 400W

LINE 500W

Puo

Ck.

Walking Track

Road

249361

400S 200S 00 200N 400N 600N

RENISON LIMITED

WEST AGNEW GRID E.L. 11/76 & S.P.L. 129 (SS-2-3S, Vol 3A)

LINE 400W, 500W

SECTION LOOKING WEST

SCALE. 1: 2000 METRES

DRAWN	A.C.
TRACED	S.F.
DATE	Aug.-84
SCALE	1: 2000
DRAWING No.	043 43

I.P. DATA

CHARGEABILITY & RESISTIVITY

——— Gradient Array

S - Anomaly letter number

5 cm

MAGNETICS

GEOCHEMISTRY

Sn
Cu
Pb
Zn
As
W

ALTERATION

Quartz and topaz and / or tourmaline

Total tourmalination, occasionally with hematite

Hydrothermal

Collapse

Breccias

White alteration Dykes

Argillic alteration

"Green" silteration (sericitized granite) generally with hematite or pyrite

Quartz - mica greisen

Area of tourmaline nodules

LEGEND

ROCK TYPES

Puo Oonah Formation ; quartzite, siltstone, minor carbonate

Aplite or metagranite

Fine grained

Medium grained

White granite

Porphyritic granite

Medium grained

Coarse grained

Red granite

Major lineament

F —— F Fault

Definite

Approximate

Inferred

Geological boundaries

043

Geochemistry
p.p.m.

I.P. Data

CHARGEABILITY IN MILLIVOLTS/VOLT (——)

RESISTIVITY IN Ohm-METRES (- - - -)

Total Magnetic Field (γ)

Topography & Geology
HEIGHT ABOVE SEA LEVEL - (metres)

600 W

700 W

800 W

Walking Track

Road

Ck.

Puo

249362

RENISON LIMITED

WEST AGNEW GRID E.L. 11/76 & S.P.L. 129

LINE 600W, 700W, 800W

SECTION LOOKING WEST

SCALE, 1: 2000 METRES

DRAWN	A.C.
TRACED	S.F.
DATE	Aug., 84
SCALE	1: 2000
DRAWING No.	044
	44

I.P. DATA — CHARGEABILITY & RESISTIVITY

Gradient Array

S - Anomaly letter number

MAGNETICS

5 cm

GEOCHEMISTRY

Sn, Cu, Pb, Zn, As, W

ALTERATION

Quartz and topaz and/or tourmaline

Total tourmalinization, occasionally with hematite

Hydrothermal Breccias

Collapse

White Alteration Dykes

Argillic alteration

"Green" alteration (sericitized granite) generally with hematite or pyrite

Quartz - mica greisen

Area of tourmaline nodules

LEGEND

ROCK TYPES

Puo Oonah Formation; quartzite, siltstone, minor carbonate

Aplite or microgranite

Fine grained

Medium grained

White granite

Porphyritic granite

Medium grained

Coarse grained

Red granite

Major lineament

F — F Fault

Definite

Approximate

Inferred

Geological boundaries

044

Geochemistry
P.P.M.

600
300
100
50
10

I.P. Data

CHARGEABILITY IN MILLIVOLTS/VOLT (——)

50
40
30
20
10
0

RESISTIVITY IN Ohm-METRES (- - - -)

5000
4000
3000
2000
1000
600

400 S 200 S 00 200 N 400 S 200 S 00 200 N

Total Magnetic Field (γ)

Topography & Geology
HEIGHT ABOVE SEA LEVEL - (metres)

600
550
500
450
400
350
300
250
200
150
100
50
00

LINE 900W

Ck. Road Ck. Ck.
Puo

LINE 1000W

Ck. Road
Puo

249363

400S 200S 00 200N 600S 400S 200S 00 200N

RENISON LIMITED

WEST AGNEW GRID

85-231S, 101.3E

E.L. 11/76 & S.P.L. 129

LINE 900W, 1000W

SECTION LOOKING WEST

SCALE. 1: 2000 METRES

40 0 40 80 120

DRAWN	A.C.
TRACED	S.F.
DATE	Aug. 84
SCALE	1: 2000
DRAWING No.	
	45

045

I.P. DATA
CHARGEABILITY & RESISTIVITY
—— Gradient Array
S - Anomaly letter number

5 cm

MAGNETICS

GEOCHEMISTRY
Sn
Cu
Pb
Zn
As
W

ALTERATION
Quartz and topaz and / or tourmaline
Total tourmalinization, occasionally with hematite
Hydrothermal
Collapse
White Alteration Dykes
Breccias
Argillic alteration
'Green' alteration (sericitized granite) generally with hematite or pyrite
Quartz - mica greisen
Area of tourmaline nodules

LEGEND
ROCK TYPES
Puo Oonah Formation, quartzite, siltstone, minor carbonate
Aplite or microgranite
Fine grained
Medium grained
White granite
Porphyritic granite
Medium grained
Coarse grained
Red granite
Major lineament
F Fault
Definite
Approximate
Inferred
Geological boundaries

045

Geochemistry P.P.M.

600
300
100
50
10

I.P. Data

CHARGEABILITY IN MILLIVOLTS/VOLT (——)

50
40
30
20
10
0

RESISTIVITY IN Ωm = METRES (- - - -)

5000
4000
3000
2000
1000
600

600S 400S 200S 00 200N 400N

Total Magnetic Field (γ)

Topography & Geology

HEIGHT ABOVE SEA LEVEL - (metres)

600
550
500
450
400
350
300
250
200
150
100
50
00

LINE 1100W

Ck. Ck. Ck. Road Ck.

Puo

LINE 1200W

Ck. Road Ck. Ck. Ck. Ck.

Puo

249364

600S 400S 200S 00 200N 400N

RENISON LIMITED	
WEST AGNEW GRID E.L. 11/76 & S.P.L. 129 (85-231 vol 3/4)	
LINE 1100W, 1200W	
SECTION LOOKING WEST	
SCALE 1:2000 METRES	
DRAWN	A.C.
TRACED	S.F.
DATE	Aug.84
SCALE	1:2000
DRAWING No.	46

CHARGEABILITY & RESISTIVITY
Gradient Array
S Anomaly letter number

I.P. DATA MAGNETICS GEOCHEMISTRY

5cm

Sn Cu Pb Zn As W

ALTERATION

Quartz and topaz and/or tourmaline
Total tourmalinization, occasionally with hematite
Hydrothermal
Collapse
Breccias
White Alteration Dykes

Argillic alteration
"Green" alteration (sericitized granite) generally with hematite or pyrite
Quartz - mica greisen
Area of tourmaline nodules

LEGEND

ROCK TYPES

Puo Oonah Formation ; quartzite, siltstone, minor carbonate

Aplite or microgranite
Fine grained
Medium grained
White granite

Porphyritic granite
Medium grained
Coarse grained
Red granite

Major lineament
F Fault
Definite
Approximate
Inferred
Geological boundaries

046

46

Geochemistry P.P.M.

I.P. Data

CHARGEABILITY IN MILLIVOLTS/VOLT (——)

RESISTIVITY IN Ohm-METRES (- - - -)

Total Magnetic Field (γ)

Topography & Geology

HEIGHT ABOVE SEA LEVEL - (metres)

LINE 1300W

LINE 1400W

400S 200S 00 200N 400N 600N

Ck. Road Puo Walking Track

249365

I.P. DATA — CHARGEABILITY & RESISTIVITY

——— Gradient Array

S : Anomaly letter number

5 cm

MAGNETICS

GEOCHEMISTRY

Sn Cu Pb Zn As W

ALTERATION

Quartz and topaz and/or tourmaline

Total tourmalinization, occasionally with hematite

Hydrothermal Breccias

Collapse

White Alteration Dykes

Argillic alteration

"Green" alteration (sericitized granite) generally with hematite or pyrite

Quartz - mica greisen

Area of tourmaline nodules

LEGEND

ROCK TYPES

Puo Oonah Formation; quartzite, siltstone, minor carbonate

Aplite or micrograniteFine grained Medium grained White granite

Porphyritic granite

Medium grained Coarse grained Red granite

Major lineament

F —— F Fault

Definite Approximate Inferred Geological boundaries

RENISON LIMITED	
WEST AGNEW GRID E.L. 11/76 & S.P.L. 129	
LINE 1300W, 1400W	
SECTION LOOKING WEST	
SCALE: 1: 2000 METRES	
DRAWN	A.C.
TRACED	S.F.
DATE	Aug.84
SCALE	1:2000
DRAWING No.	047
	47

047

Geochemistry P.P.M.

600
300
100
50
10

I.P. Data

CHARGEABILITY IN MILLIVOLTS/VOLT (——)

50
40
30
20
10
0

RESISTIVITY IN Ohm-METRES (- - - -)

5000
4000
3000
2000
1000
600

400S 200S 00 200N 400N 600N

Total Magnetic Field (δ)

Topography & Geology

HEIGHT ABOVE SEA LEVEL - (metres)

600
550
500
450
400
350
300
250
200
150
100
50
00

Puo Ck. Walking Track Road Ck. Ck.

400S 200S 00 200N 400N 600N

249366

RENISON LIMITED

WEST AGNEW GRID

SS-23/S VOL3(a)

E.L. 11/76 & S.P.L. 129

LINE 1500 W

SECTION LOOKING WEST

SCALE 1: 2000 METRES

0 40 80 120

DRAWN	A.C.
TRACED	S.F.
DATE	Aug. 84
SCALE	1: 2000
DRAWING No.	048

048

48

I.P. DATA

CHARGEABILITY & RESISTIVITY

——— Gradient Array

S Anomaly letter number

5 cm

MAGNETICS

GEOCHEMISTRY

Sn
Cu
Pb
Zn
As
W

ALTERATION

Quartz and topaz and/or tourmaline
Total tourmalinisation, occasionally with hematite
Hydrothermal
Collapse
Breccias
White alteration Dykes

Argillic alteration
"Green" alteration (serichized granite) generally with hematite or pyrite
Quartz - mica greisen
Area of tourmaline nodules

LEGEND

ROCK TYPES

Puo Conah Formation; quartzite, siltstone, minor carbonate.

Aplite or microgranite
Fine grained
Medium grained
White granite

Porphyritic granite
Medium grained
Coarse grained
Red granite

Major lineament
F — F Fault
Definite
Approximate
? Inferred
Geological boundaries

Geochemistry
P.P.M.

600
300
100
50
10

I.P. Data

CHARGEABILITY IN MILLIVOLTS/VOLT (——)

50
40
30
20
10
0

RESISTIVITY IN Ohm-METRES (- - - -)

5000
4000
3000
2000
1000
600

400S 200S 00 200N 400N 600N

Total Magnetic Field (γ)

Topography & Geology
HEIGHT ABOVE SEA LEVEL - (metres)

600
550
500
450
400
350
300
250
200
150
100
50
00

Puo
Ck.
Ck.
Walking Track
Rd.
Ck.

249367

400S 200S 00 200N 400N 600N

RENISON LIMITED

WEST AGNEW GRID
SS-2315 vol 314
E.L. 11/76 & S.P.L. 129

LINE 1600W

SECTION LOOKING WEST

SCALE. 1: 2000 METRES
60 0 20 40 80 120

DRAWN	A.C.
TRACED	S.F.
DATE	Aug.84
SCALE	1: 2000
DRAWING No.	049 / 49

I.P. DATA
CHARGEABILITY & RESISTIVITY
——— Gradient Array
S Anomaly letter number
5 cm

MAGNETICS

GEOCHEMISTRY
Sn
Cu
Pb
Zn
As
W

ALTERATION
Quartz and topaz and/or tourmaline
Total tourmalinization, occasionally with hematite
Hydrothermal
Collapse
Breccias
White Alteration Dykes
Argillic alteration
'Green' alteration (sericitized granite) generally with hematite or pyrite
Quartz - mica greisen
Area of tourmaline nodules

LEGEND
ROCK TYPES
Puo Oonah Formation; quartzite, siltstone, minor carbonate

Aplite or metagranite
Fine grained
Medium grained
White granite
Porphyritic granite
Medium grained
Coarse grained
Red granite

Major unconformity
F Fault
Definite
Approximate
Interred
Geological boundaries

049

Geochemistry
P.P.M.

600
300
100
50
10

I.P. Data

CHARGEABILITY IN MILLIVOLTS/VOLT (——)

50
40
30
20
10
0

RESISTIVITY IN Ohm-METRES (- - - -)

5000
4000
3000
2000
1000
600

4005 200S 00 200N 400N 600N 800N

Total Magnetic Field (γ)

Topography & Geology
HEIGHT ABOVE SEA LEVEL - (metres)

600
550
500
450
400
350
300
250
200
150
100
50
00

Ck. Ck. Walking Track Bridge Ck. Ck. Ck.
Puo

249368

400S 200S 00 200N 400N 600N 800N

RENISON LIMITED	
WEST AGNEW GRID E.L. 11/76 & S.P.L. 129 (85-231S Vol 3/4)	
LINE 1700 W	
SECTION LOOKING WEST	
SCALE: 1: 2000 METRES (60 0 40 80 100)	

DRAWN	A.C.
TRACED	S.F.
DATE	Aug., 84
SCALE	1: 2000
DRAWING No.	050 / 50

I P DATA
CHARGEABILITY & RESISTIVITY
—— Gradient Array
S Anomaly letter number
5cm

MAGNETICS

GEOCHEMISTRY
Sn
Cu
Pb
Zn
As
W

ALTERATION
Quartz and topaz and/or tourmaline
Total tourmalinization, occasionally with hematite
Hydrothermal
Breccias
Collapse
White Alteration Dykes
Argillic alteration
"Green" alteration (sericitized granite) generally with hematite or pyrite
Quartz - mica greisen
Area of tourmaline nodules

LEGEND
ROCK TYPES
Puo Oonah Formation, quartzite, siltstone, minor carbonate
Aplite or metagranite
Fine grained
Medium grained
White granite
Porphyritic granite
Medium grained
Coarse grained
Red granite
Major lineament
F Fault
Definite
Approximate
Interred
Geological boundaries

050

Geochemistry
P.P.M.

600
300
100
50
10

I.P. Data

CHARGEABILITY IN MILLIVOLTS/VOLT (——)

50
40
30
20
10
0

RESISTIVITY IN Ohm-METRES (----)

5000
4000
3000
2000
1000
600

400S 200S 00 200N 400N 600N 800N

Total Magnetic Field (γ)

Topography & Geology

HEIGHT ABOVE SEA LEVEL - (metres)

600
550
500
450
400
350
300
250
200
150
100
50
00

Walking Tracks
Ck.
Road
Road
Ck.
Road
Puo

249369

I.P. DATA

CHARGEABILITY & RESISTIVITY

——— Gradient Array

S Anomaly letter number

5 cm

MAGNETICS

GEOCHEMISTRY

Sn
Cu
Pb
Zn
As
W

ALTERATION

Quartz and topaz and/or tourmaline
Total tourmalinization, occasionally with hematite
Hydrothermal
Breccias
Collapse
White Alteration Dykes
Argillic alteration
Green alteration (sericitized granite) generally with hematite or pyrite
Quartz - mica greisen
Area of tourmaline nodules

LEGEND

ROCK TYPES

Puo Donah Formation; quartzite, siltstone, minor carbonate

Aplite or micrograniteFine grained
Medium grained
White granite
Porphyritic granite
Medium grained
Coarse grained
Red granite
Major lineament
F Fault
Definite
Approximate
Inferred
Geological boundaries

RENISON LIMITED

WEST AGNEW GRID

85-231S VOL 3/4
E.L. 11/76 & S.P.L. 129

LINE 1800W

SECTION LOOKING WEST

SCALE 1: 2000 METRES

60 0 60 80 120

DRAWN	A.C.
TRACED	S.F.
DATE	Aug. 84
SCALE	1: 2000
DRAWING No.	051
	51

051

Geochemistry P.P.M.

600
300
100
50
10

I.P. Data

CHARGEABILITY IN MILLIVOLTS/VOLT (——)

50
40
30
20
10
0

RESISTIVITY IN Ohm-METRES (----)

5000
4000
3000
2000
1000
600

4005 2005 00 200N 400N 600N 800N

Total Magnetic Field (δ)

Topography & Geology

HEIGHT ABOVE SEA LEVEL - (metres)

600 550 500 450 400 350 300 250 200 150 100 50 00

Ck. Walking Track Ck. Rd.

249370

I.P. DATA

CHARGEABILITY & RESISTIVITY

——— Gradient Array

S Anomaly letter number

MAGNETICS

5 cm

GEOCHEMISTRY

Sn
Cu
Pb
Zn
As
W

4005 2005 00 200N 400N 600N 800N

ALTERATION

Quartz and vapor and/or tourmaline
Total tourmalinization, occasionally with hematite
Hydrothermal
Collapse
breccias
White Alteration Dykes

Argillic alteration
"Green" alteration (sericitized granite) generally with hematite or pyrite
Quartz - mica greisen
Area of tourmaline nodules

LEGEND

ROCK TYPES

Aplite or metagranite
Fine grained
Medium grained
White granite

Porphyritic granite
Medium grained
Coarse grained
Red granite

Major lineament
F Fault
Definite
Approximate
Inferred
Geological boundaries

RENISON LIMITED	
WEST AGNEW GRID E.L. 11/76 & S.P.L. 129	
LINE 1900 W	
SECTION LOOKING WEST	
SCALE, 1: 2000 METRES	
0 20 40 60 80 100	

DRAWN	A.C.
TRACED	S.F.
DATE	Aug., 84
SCALE	1: 2000
DRAWING No.	
052	52

052

Geochemistry
p.p.m.

600
300
100
50
10

I.P. Data

CHARGEABILITY IN MILLIVOLTS/VOLT (——)

50
40
30
20
10
0

RESISTIVITY IN Ohm-METRES (- - - -)

5000
4000
3000
2000
1000
600

400S 200S 00 200N 400N 600N 800N

Total Magnetic Field (γ)

Topography & Geology
HEIGHT ABOVE SEA LEVEL - (metres)

600
550
500
450
400
350
300
250
200
150
100
50
00

Ck. Ck. Ck. Ck. Walking Tracks Ck. Road

400S 200S 00 200N 400N 600N 800N 1000N

249371

RENISON LIMITED

WEST AGNEW GRID EL 11/76 & SPL 129

LINE 2000 W

SECTION LOOKING WEST

SCALE. 1: 2000 METRES

40 0 40 80 120

053

DRAWN	A.C.
TRACED	S.F.
DATE	Aug.84
SCALE	1:2000
DRAWING No.	53

I.P DATA

CHARGEABILITY & RESISTIVITY

——— Gradient Array

S Anomaly letter number

5 cm

MAGNETICS

GEOCHEMISTRY

Sn
Cu
Pb
Zn
As
W

LEGEND

ALTERATION

Quartz and topaz and / or tourmaline
Total tourmalinisation occasionally with hematite
Hydrothermal
Collapse
Breccias
White alteration Dykes
Argillic alteration
"Green" alteration (sericitized granite) generally with hematite or pyrite
Quartz - mica greisen
Area of tourmaline nodules

ROCK TYPES

Aplite or microgranite
Fine grained
Medium grained
White granite
Porphyritic granite
Medium grained
Coarse grained
Red granite

Major lineament
F Fault
Definite
Approximate
Inferred
Geological boundaries

053

Geochemistry
P.P.M.

I.P. Data
CHARGEABILITY IN MILLIVOLTS/VOLT (——)
RESISTIVITY IN Ohm-METRES (- - - -)

Total Magnetic Field (γ)

Topography & Geology
HEIGHT ABOVE SEA LEVEL - (metres)

400S 200S 00 200N 400N 600N 800N

Puo
Ck.
Walking Track
Ck.
Ck.
Road

249372

RENISON LIMITED

WEST AGNEW GRID	E.L. 11/76 & S.P.L. 129
LINE 2100W	
SECTION LOOKING WEST	
SCALE. 1: 2000 METRES	
DRAWN	A.C.
TRACED	S.F.
DATE	Aug., 84
SCALE	1: 2000
DRAWING No.	54

I.P. DATA
CHARGEABILITY & RESISTIVITY
——— Gradient Array
S : Anomaly letter number

MAGNETICS
5 cm

GEOCHEMISTRY
Sn
Cu
Pb
Zn
As
W

ALTERATION
Quartz and topaz and/or tourmaline
Total tourmalinization, occasionally with hematite
White Alteration types
Hydrothermal
Collapse
Breccias
Argillic alteration
'Green' alteration (sericitized granite) generally with hematite & pyrite
Quartz - mica greisen
Area of tourmaline nodules

LEGEND
ROCK TYPES
Puo Oonah Formation; quartzite, siltstone, minor carbonate
Aplite or micrograniteFine grained / Medium grained — White granite
Porphyritic granite
Medium grained / Coarse grained — Red granite
Major lineament
Fault
Definite / Approximate / Inferred — Geological boundaries

054

Geochemistry. P.P.M.

600
300
100
50
10

I.P. Data

CHARGEABILITY IN MILLIVOLTS/VOLT (——)

50
40
30
20
10
0

RESISTIVITY IN Ohm-METRES (- - - -)

5000
4000
3000
2000
1000
600

400S 200S 00 200N 400N 600N 800N

Total Magnetic Field (γ)

Topography & Geology

HEIGHT ABOVE SEA LEVEL - (metres)

600
550
500
450
400
350
300
250
200
150
100
50
00

Walking Track
Ck.
Ck.
Ck.
Ck.
Road
Puo

249373

400S 200S 00 200N 400N 600N 800N

RENISON LIMITED	
WEST AGNEW GRID 85-203S Vol 4/44 E.L. 11/76 & S.P.L. 129	
LINE 2200 W	
SECTION LOOKING WEST	
SCALE. 1: 2000 METRES (40 0 40 80 120)	

DRAWN	A.C.
TRACED	S.F
DATE	Aug. 84
SCALE	1: 2000
DRAWING No.	055 55

I.P. DATA
CHARGEABILITY & RESISTIVITY
——— Gradient Array
S Anomaly letter number
5 cm

MAGNETICS

GEOCHEMISTRY
Sn
Cu
Pb
Zn
As
W

ALTERATION
Quartz and topaz and/or tourmaline
Total tourmalinization, occasionally with hematite
Hydrothermal
Collapse
} Breccias
} White alteration zones
Argillic alteration
'Green' alteration (sericitized granite) generally with hematite or pyrite
Quartz - mica greisen
Area of tourmaline nodules

LEGEND
HOCK TYPES
Puo Conah Formation ; quartzite, siltstone, minor carbonate
Aplite or microgranite
Fine grained
Medium grained
} White granite
Porphyritic granite
Medium grained
Coarse grained
} Red granite
Major lineament
Fault
Definite
Approximate
Interred
} Geological boundaries

055

Geochemistry
P.P.M.
600
300
100
50
10

I.P. Data
CHARGEABILITY IN MILLIVOLTS/VOLT (——)
50
40
30
20
10
0
RESISTIVITY IN Ohm - METRES (- - - -)
5000
4000
3000
2000
1000
600

400S 200S 00 200N 400N 600N 800N

Total Magnetic Field (γ)
600

Topography & Geology
HEIGHT ABOVE SEA LEVEL - (metres)
600
550
500
450
400
350
300
250
200
150
100
50
00

Walking Tracks
Ck.
Ck.
Road
Puo

249374

400S 200S 00 200N 400N 600N 800N

RENISON LIMITED	
WEST AGNEW GRID E.L. 11/76 & S.P.L. 129 (R-2315 volume)	
LINE 2300 W	
SECTION LOOKING WEST	
SCALE. 1: 2000 METRES (0 20 40 60 80 100)	

DRAWN	A.C.
TRACED	S.F.
DATE	Aug.84
SCALE	1:2000
DRAWING No.	056 56

I.P. DATA
CHARGEABILITY & RESISTIVITY
—— Gradient Array
S Anomaly letter number
5 cm

MAGNETICS

GEOCHEMISTRY
Sn
Cu
Pb
Zn
As
W

ALTERATION
Quartz and topaz and/or tourmaline
Total tourmalinization, occasionally with hematite
Hydrothermal
Collapse
Breccias
White Alteration Dykes
Argillic alteration
"Green" alteration (sericitized granite) generally with hematite or pyrite
Quartz - mica greisen
Area of tourmaline nodules

LEGEND
ROCK TYPES
Puo Oonah Formation; quartzite, siltstone, minor carbonate
Aplite or microgranite
Fine grained
Medium grained
White granite
Porphyritic granite
Medium grained
Coarse grained
Red granite
Major lineament
F Fault
Definite
Approximate
? Inferred
Geological boundaries

056

Geochemistry P.P.M.

600
300
100
50
10

I.P. Data

CHARGEABILITY IN MILLIVOLTS/VOLT (——)

50
40
30
20
10
0

RESISTIVITY IN Ohm-METRES (- - - -)

5000
4000
3000
2000
1000
600

400S 200S 00 200N 400N 600N 800N

Total Magnetic Field (γ)

Topography & Geology

HEIGHT ABOVE SEA LEVEL - (metres)

600
550
500
450
400
350
300
250
200
150
100
50
00

Puo
Ck.
Walking Tracks
Ck.
Ck.
Ck.
Road

249375

400S 200S 00 200N 400N 600S 800S

RENISON LIMITED

WEST AGNEW GRID 85-2915 Vol 11a E.L. 11/76 & S.P.L. 129

LINE 2400W

SECTION LOOKING WEST

SCALE. 1: 2000 METRES

60 0 40 80 120

DRAWN	A.C.
TRACED	S.F.
DATE	Aug.84
SCALE	1:2000
DRAWING No.	057 57

I.P. DATA

CHARGEABILITY & RESISTIVITY

——— Gradient Array

S Anomaly letter number

MAGNETICS

5cm

GEOCHEMISTRY

Sn
Cu
Pb
Zn
As
W

ALTERATION

Quartz and topaz and/or tourmaline
Total tourmalinization, occasionally with hematite
Hydrothermal
Collapse
Breccias
White Alteration Dykes
Argillic alteration
"Green alteration (sericitized granite) generally with hematite or pyrite
Quartz - mica greisen
Areas of tourmaline nodules

LEGEND

ROCK TYPES

Puo Oonah Formation ; quartzite, siltstone, minor carbonate

Aplite or metagranite
Fine grained
Medium grained
White granite
Porphyritic granite
Medium grained
Coarse grained
Red granite

Major lineament
Fault
Definite
Approximate
Inferred
Geological boundaries

057

150

Geochemistry
PPM
600
300
100
50
10

I.P. Data
CHARGEABILITY IN MILLIVOLTS/VOLT (——)
50
40
30
20
10
0

RESISTIVITY IN Ohm-METRES (----)
5000
4000
3000
2000
1000
600

400S 200S 0 200N 400N 600N 800N

Total Magnetic Field (γ)

Topography & Geology
HEIGHT ABOVE SEA LEVEL - (metres)
600
550
500
450
400
350
300
250
200
150
100
50
00

Walking Tracks
Ck.
Ck.
Ck.
Ck.
Ck.
Road
Road
Puo

249376

400 S 200 S 0 200 N 400 N 600 N 800 N

RENISON LIMITED

WEST AGNEW GRID E.L. 11/76 & S.P.L. 129

LINE 2500 W

SECTION LOOKING WEST

SCALE. 1: 2000 METRES

0 40 80 120

DRAWN	A.C.
TRACED	S.F.
DATE	Aug., 84
SCALE	1:2000
DRAWING No.	58

554

I.P. DATA
CHARGEABILITY & RESISTIVITY
——— Gradient Array
S Anomaly letter number
5 cm

MAGNETICS

GEOCHEMISTRY
Sn
Cu
Pb
Zn
As
W

ALTERATION
Quartz and topaz and / or tourmaline
Total tourmalinisation, accessorily with hematite
Hydrothermal
Collapse
Breccias
White alteration dykes
Argillic alteration
"Green" alteration (enriched granite) generally with tentative of pyrite
Quartz - mica greisen
Area of tourmaline nodules

LEGEND
ROCK TYPES
Puo Oonah Formation; quartzite, siltstone, minor carbonate
Aplite or meregranite
Fine grained
Medium grained
White granite
Porphyritic granite
Medium grained
Coarse grained
Red granite
Major lineament
F Fault
Definite
Approximate
Inferred
Geological boundaries

058

Geochemistry
P.P.M.
600
300
100
50
10

I.P. Data
CHARGEABILITY IN MILLIVOLTS/VOLT (——)
50
40
30
20
10
0
RESISTIVITY IN Ohm - METRES (- - - -)
5000
4000
3000
2000
1000
500

400S 200S 00 200N 400N 600N 800N

Total Magnetic Field (γ)

Topography & Geology
HEIGHT ABOVE SEA LEVEL - (metres)
600
550
500
450
400
350
300
250
200
150
100
50
00

Road
Ck.
Ck.
Walking Track
Ck.
Road
Road
Road
Ck.
Road

249377

400 S 200 S 00 200N 400N 600N 800N

RENISON LIMITED
WEST AGNEW GRID
E.L. 11/76 & S.P.L. 129
LINE 2600 W
SECTION LOOKING WEST
SCALE. 1: 2000 METRES
0 20 40 60 80 100

DRAWN	A.C.
TRACED	S.F.
DATE	Aug. 84
SCALE	1: 2000
DRAWING No.	059 59

I.P. DATA
CHARGEABILITY & RESISTIVITY
——— Gradient Array
S - Anomaly letter number

MAGNETICS
5 cm

GEOCHEMISTRY
Sn
Cu
Pb
Zn
As
W

ALTERATION
Quartz and topaz and / or tourmaline
Total tourmalinization, occasionally with hematite
Hydrothermal
Collapse
Breccias
White Alteration Dykes
Argillic alteration
"Green" alteration (sericitized granite) generally with hematite or pyrite
Quartz - mica greisen
Aggregates of tourmaline nodules

LEGEND
ROCK TYPES
Aplite or microgranite
Fine grained
Medium grained
White granite
Porphyritic granite
Medium grained
Coarse grained
Red granite

Major lineament
F —— F Fault
Definite
Approximate
?— Interred
Geological boundaries

650

Geochemistry
PPM
600
300
100
50
15

I.P. Data
CHARGEABILITY IN MILLIVOLTS/VOLT (——)
50
40
30
20
10
0
RESISTIVITY IN Ohm-METRES (----)
5000
4000
3000
2000
1000
600

400S 200S 00 200N 400N 600N 800N

Total Magnetic Field (δ)

Topography & Geology
HEIGHT ABOVE SEA LEVEL - (metres)
600
550
500
450
400
350
300
250
200
150
100
50
00

Ck.
Walking Track
Ck.
Ck.
Road
Ck.
Puo

400S 200S 00 200N 400N 600N 800N

249378

RENISON LIMITED	
WEST AGNEW GRID	E.L. 11/76 & S.P.L. 129
LINE 2700 W	
SECTION LOOKING WEST	
SCALE. 1: 2000 METRES	
DRAWN	A.C.
TRACED	S.F.
DATE	Aug., 84
SCALE	1:2000
DRAWING No.	60

I P DATA
CHARGEABILITY & RESISTIVITY
——— Gradient Array
S Anomaly letter number

MAGNETICS
5 cm

GEOCHEMISTRY
Sn
Cu
Pb
Zn
As
W

ALTERATION
Quartz and topaz and / or tourmaline
Total tourmalinization, occasionally with hematite
Hydrothermal
Collapse
Breccias
White Alteration Dykes
Argillic alteration
"Green" alteration (sericitized granite) generally with hematite ± pyrite
Quartz - mica greisen
Area of tourmaline nodules

LEGEND
ROCK TYPES
Puo Oonah Formation; quartzite, siltstone, minor carbonate
Aplite or metagranite
Fine grained
Medium grained
White granite
Porphyritic granite
Medium grained
Coarse grained
Red granite
Major lineament
F —— F Fault
Definite
Approximate
Inferred
Geological boundaries

060

Geochemistry
P.P.M

600
300
100
50
10

I.P. Data

CHARGEABILITY IN MILLIVOLTS/VOLT (——)

50
40
30
20
10
0

RESISTIVITY IN Ohm-METRES (- - - -)

5000
4000
3000
2000
1000
600

200S 00 200N 400N 400S 200S 00 200N 400N

Total Magnetic Field (γ)

Topography & Geology
HEIGHT ABOVE SEA LEVEL - (metres)

600
550
500
450
400
350
300
250
200
150
100
50
00

LINE 2800W

Walking Track
Ck.
Ck.
Ck.
Puo

LINE 2900W

Ck.
Ck.
Puo

249379

400S 200S 00 200N 400N 400S 200S 00 200N 400N

RENISON LIMITED	
WEST AGNEW GRID E.L. 11/76 & S.P.L. 129	
LINE 2800W, 2900W	
SECTION LOOKING WEST	
SCALE 1: 2000 METRES	

DRAWN	A.C.
TRACED	S.F.
DATE	Aug.83
SCALE	1: 2000
DRAWING No.	061
	61

I.P. DATA

CHARGEABILITY & RESISTIVITY

——— Gradient Array

S : Anomaly letter number

5 cm

MAGNETICS

GEOCHEMISTRY

Sn
Cu
Pb
Zn
As
W

ALTERATION

Quartz and topaz and/or tourmaline
Total tourmalinization, accessorially with hematite
Hydrothermal
Collapse
Breccias
White Alteration Dykes
Argillic alteration
"Green" alteration (sericitized granite) generally with hematite or pyrite
Quartz - mica greisen
Area of tourmaline nodules

LEGEND

ROCK TYPES

Puo Oonah Formation; quartzite, siltstone, minor carbonate

Aplite or microgranite
Fine grained
Medium grained
White granite
Porphyritic granite
Medium grained
Coarse grained
Red granite

Major lineament
F Fault
Definite
Approximate
Inferred
Geological boundaries

190

Geochemistry
P.P.M.

600
300
100
50
10

I.P. Data
CHARGEABILITY IN MILLIVOLTS/VOLT (——)

50
40
30
20
10
0

400S 200S 00 200 N 400 N 200S 00 200N 400 N

RESISTIVITY IN Ohm-METRES (----)

5000
4000
3000
2000
1000
600

Total Magnetic Field (γ)

Topography & Geology
HEIGHT ABOVE SEA LEVEL - (metres)

600
550
500
450
400
350
300
250
200
150
100
50
00

LINE 3000 W

LINE 3100 W

Ck. Ck. Ck.

249380

200S 00 200 N 400 N 200S 00 200N 400 N

I.P. DATA
CHARGEABILITY & RESISTIVITY
——— Gradient Array
S - Anomaly letter number
5 cm

MAGNETICS

00 GEOCHEMISTRY
Sn
Cu
Pb
Zn
As
W

ALTERATION
Quartz and topaz and/or tourmaline
Total tourmalinization, occasionally with hematite
Hydrothermal
Collapse
Breccias
White Alteration Dykes

Argillic alteration
"Green" alteration (sericitized granite) generally with hematite or pyrite
Quartz - mica greisen
Area of tourmaline nodules

LEGEND
ROCK TYPES
Aplite or microgranite
Fine grained
Medium grained
White granite
Porphyritic granite
Medium grained
Coarse grained
Red granite

Major lineament
F Fault
Definite
Approximate
Inferred
Geological boundaries

RENISON LIMITED
WEST AGNEW GRID E.L. 11/76 & S.P.L. 129
LINE 3000W, 3100W
SECTION LOOKING WEST
SCALE, 1: 2000 METRES
0 20 40 60 80 100

DRAWN	A.C.
TRACED	S.F.
DATE	Aug., 84
SCALE	1: 2000
DRAWING No.	062
	62

062

Geochemistry P.P.M.

I.P. Data

CHARGEABILITY IN MILLIVOLTS/VOLT (——)

RESISTIVITY IN Ohm-METRES (- - - -)

Total Magnetic Field (γ)

Topography & Geology

HEIGHT ABOVE SEA LEVEL - (metres)

LINE 3200W

LINE 3300W

Puo

Ck.

249381

200S 00 200N 400N 600N

I.P. DATA

CHARGEABILITY & RESISTIVITY

Gradient Array

S Anomaly letter number

5 cm

MAGNETICS

GEOCHEMISTRY

Sn Cu Pb Zn As W

ALTERATION

Quartz and topaz and/or tourmaline

Total tourmalinization, occasionally with hematite

White Alteration Dykes

Hydrothermal

Collapse

Breccias

pArgillic alteration

"Green" alteration (sericitized granite) generally with hematite or pyrite

Quartz - mica greisen

Area of tourmaline nodules

LEGEND

ROCK TYPES

Puo Donah Formation ; quartzite, siltstone, minor carbonate

Aplite or metagranite

Fine grained

Medium grained

White granite

Porphyritic granite

Medium grained

Coarse grained

Red granite

Major lineament

F Fault

Definite

Approximate

Inferred

Geological boundaries

RENISON LIMITED

WEST AGNEW GRID 85-231S Vol 4 E.L. 11/76 & S.P.L. 129

LINE 3200W,3300W

SECTION LOOKING WEST

SCALE 1: 2000 METRES

DRAWN	A.C.
TRACED	S.F.
DATE	Aug.,83
SCALE	1: 2000
DRAWING No.	063 63

063

Geochemistry P.P.M.

I.P. Data

CHARGEABILITY IN MILLIVOLTS/VOLT (——)

RESISTIVITY IN Ohm-METRES (- - -)

Total Magnetic Field (γ)

Topography & Geology HEIGHT ABOVE SEA LEVEL - (metres)

LINE 3400W

LINE 3500W

Crk.

Ck.

Puo

200S 00 200N 400N 600N

I.P. DATA:

CHARGEABILITY & RESISTIVITY

—— Gradient Array

S Anomaly letter number

5 cm

MAGNETICS

GEOCHEMISTRY

Sn Cu Pb Zn As W

ALTERATION

Quartz and topaz and/or tourmaline

Total tourmalinization, occasionally with hematite — White Alteration Types

Hydrothermal

Collapse — Breccias

Argillic alteration

"Green" alteration (serecitized granite) generally with hematite or pyrite

Quartz - mica greisen

Area of tourmaline nodules

LEGEND

ROCK TYPES

Puo Danish Formation ; quartzite, siltstone, minor carbonate

Aplite or microgranite

Fine grained — White granite

Medium grained

Porphyritic granite

Medium grained — Red granite

Coarse grained

Major lineament

F —— F Fault

—— Definite

- - - Approximate — Geological boundaries

—?— Interred

RENISON LIMITED

WEST AGNEW GRID E.L. 11/76 & S.P.L. 129

LINE 3400W, 3500W

SECTION LOOKING WEST

SCALE: 1: 2000 METRES

DRAWN	A.C.
TRACED	S.F.
DATE	Aug.,84
SCALE	1:2000
DRAWING No.	064
	64

249382

064

Geochemistry P.P.M.

I.P. Data

CHARGEABILITY IN MILLIVOLTS/VOLT (——)

RESISTIVITY IN Ohm-METRES (- - - -)

200S 00 200N 400N 600N 200S 00 200N 400N 600N

Total Magnetic Field (γ)

Topography & Geology HEIGHT ABOVE SEA LEVEL - (metres)

LINE 3600 W

LINE 3700W

Ck. Ck. Puo 249383

200S 00 200N 400N 600N 200S 00 200N 400N 600N

I.P. DATA
CHARGEABILITY & RESISTIVITY
Gradient Array
S Anomaly letter number
5 cm

MAGNETICS

GEOCHEMISTRY
Sn
Cu
Pb
Zn
As
W

ALTERATION
Quartz and topaz and / or tourmaline
Total tourmalinization, occasionally with hematite
Hydrothermal
Collapse
Breccias
White Alteration Dykes
Argillic alteration
"Green" alteration (sericitized granite) generally with hematite or pyrite
Quartz - mica greisen
Area of tourmaline nodules

LEGEND
ROCK TYPES
Puo Oonah Formation; quartzite, siltstone, minor carbonate
Aplite or metagranite
Fine grained
Medium grained
White granite
Porphyritic granite
Medium grained
Coarse grained
Red granite
Major lineament
F Fault
Definite
Approximate
Inferred
Geological boundaries

RENISON LIMITED	
WEST AGNEW GRID 85 - 20SW/5 Vol. 5 Misc. E.L. 11/76 & S.P.L. 129	
LINE 3600W, 3700W	
SECTION LOOKING WEST	
SCALE. 1: 2000 METRES 0 40 80 120	
DRAWN	A.C.
TRACED	S.F.
DATE	Aug. 84
SCALE	1:2000
DRAWING No.	065 65

990

Geochemistry P.P.M

I.P. Data

CHARGEABILITY IN MILLIVOLTS/VOLT (——)

RESISTIVITY IN Ohm--METRES (----)

Total Magnetic Field (γ)

Topography & Geology

HEIGHT ABOVE SEA LEVEL - (metres)

LINE 3800W

LINE 3900W

00 200N 400N 600N

Ck.

249384

I.P. DATA

CHARGEABILITY & RESISTIVITY

Gradient Array

S Anomaly letter number

MAGNETICS

5 cm

GEOCHEMISTRY

Sn Cu Pb Zn As W

ALTERATION

Quartz and topaz and / or tourmaline

Total tourmalinization, accasionally with hematite

Hydrothermal

Collapse

Breccias

White alteration Dykes

Argillic alteration

"Green" alteration (sericitized granite) generally with hematite or pyrite

Quartz - mica greisen

Area of tourmaline nodules

LEGEND

ROCK TYPES

Aplite or microgranite

Fine grained

Medium grained

White granite

Porphyritic granite

Medium grained

Coarse grained

Red granite

Major lineament

F Fault

Definite

Approximate

Inferred

Geological boundaries

RENISON LIMITED

WEST AGNEW GRID 85-231 Volume E.L. 11/76 & S.P.L. 129

LINE 3800W, 3900W

SECTION LOOKING WEST

SCALE, 1: 2000 METRES

0 40 80 120

DRAWN	A.C.
TRACED	S.F.
DATE	Aug., 84
SCALE	1:2000
DRAWING No.	066 66

980

Geochemistry
P.P.M.

I.P. Data
CHARGEABILITY IN MILLIVOLTS/VOLT (——)
RESISTIVITY IN Ohm-METRES (- - - -)

Total Magnetic Field (γ)

Topography & Geology
HEIGHT ABOVE SEA LEVEL - (metres)

LINE 4000W

LINE 4100W

249385

RENISON LIMITED	
WEST AGNEW GRID E.L. 11/76 & S.P.L. 129 (SS-231S Vol 1 fld)	
LINE 4000W, 4100W	
SECTION LOOKING WEST	
SCALE. 1: 2000 METRES	
DRAWN	A.C.
TRACED	S.F.
DATE	Aug.84
SCALE	1:2000
DRAWING No.	

I.P. DATA
CHARGEABILITY & RESISTIVITY
Gradient Array
S. Anomaly letter number
5 cm

MAGNETICS

GEOCHEMISTRY
Sn
Cu
Pb
Zn
As
W

ALTERATION
Quartz and Vapour and / or tourmaline
Total tourmalinization, occasionally with hematite
Hydrothermal
Collapse
Breccias
White Alteration Cycles
Argillic alteration
Green alteration (sericitized granite) generally with hematite or pyrite
Quartz - mela gneiss
Area of tourmaline nodules

LEGEND
ROCK TYPES
Aplite or micrograniteFine grained
Medium grained
White granite
Porphyritic granite
Medium grained
Coarse grained
Red granite
Major lineament
F Fault
Definite
Approximate
?- Inferred
Geological boundaries

67

190

Geochemistry
p.p.m.

600
300
100
50
10

I.P. Data
CHARGEABILITY IN MILLIVOLTS/VOLT (——)

50
40
30
20
10
0

RESISTIVITY IN Ohm-METRES (----)

5000
4000
3000
2000
1000
600

00 200N 400N 00 200N 400N 200N 400N

Total Magnetic Field (γ)

Topography & Geology
HEIGHT ABOVE SEA LEVEL - (metres)

600
550
500
450
400
350
300
250
200
150
100
50
00

LINE 4200W

LINE 4300W

LINE 4400W

Ck.

249386

00 200N 400N 00 200N 400N 200N 400N 600N

I.P. DATA
CHARGEABILITY & RESISTIVITY
——— Gradient Array
S Anomaly letter number
5 cm

MAGNETICS

GEOCHEMISTRY
Sn
Cu
Pb
Zn
As
W

ALTERATION
Quartz and topaz and / or tourmaline
Total tourmalinization, occasionally with hematite
Hydrothermal
Collapse
Breccias
White Alteration Dykes
Argillic alteration
"Green" alteration (sericitized granite) generally with hematite or pyrite
Quartz - mica gneiss
Area of tourmaline nodules

LEGEND
ROCK TYPES
Aplite or microgranite
Fine grained
Medium grained
White granite
Porphyritic granite
Medium grained
Coarse grained
Red granite
Major lineament
F —— F Fault
Definite
Approximate
Inferred
Geological boundaries

RENISON LIMITED	
WEST AGNEW GRID E.L. 11/76 & S.P.L. 129	DRAWN
	TRACED
	DATE
LINE 4200W, 4300W, 4400W	SCALE 1:2000
SECTION LOOKING WEST	DRAWING No. 068 68
SCALE, 1: 2000 METRES 40 0 40 80 120	

068

SOUTHERN

OCEAN

TRIAL HARBOUR

WEST AGNEW GRID

E.L. 11/76
S.P.L. 129

OLD FZ GRID BASELINE

FEDERATION ROAD

Remine

Dgw-f
Dgw-m
Dgr-c
Puo
Cc
Cs
Qra

5 356 000 N
5 355 000 N
243 000 E

LEGEND

QUATERNARY
- Qra — Alluvium

CAMBRIAN
- Cc — Crimson Creek Formation; siltstone, conglomerate, chert

PROTEROZOIC
- Puo — Oonah Formation; quartzite, siltstone, minor carbonate

IGNEOUS ROCKS
- Dgw-f — Fine grained White granite (av. grain size <2mm)
- Dgw-m — Medium grained White granite (av. grain size 2-5mm)
- Dgr-c — Medium-coarse grained Red-white granite (av. grain size >5mm)
- Cs — Cambrian - Serpentinites, pyroxenites

KEY

—— —— Cut grid line, not located accurately

ZEEHAN C2/3	ZEEHAN C2/2	ZEEHAN D1/1
	ZEEHAN C2/4	ZEEHAN D1/3

5 cm

RENISON LIMITED

ZEEHAN C2/3

WEST AGNEW GRID

GEOLOGY INTERPRETATION

SCALE. 1: 5000 METRES.

DRAWN	T.G.D.S.
TRACED	T.G.D.S.
DATE	Dec. 1984
SCALE	1:5000
DRAWING No.	069 69

243387

FEDERATION GRID BASELINE

AGNEW GRID BASELINE

EAST HEEMSKIRK GRID

BASELINE AREA B GRID

OLD E-W GRID BASELINE

WEST AGNEW GRID

EL 11/76
SPL 129

Dgr-c

Puo

Sweeney's Mine

Orient Mine

K. McDermott 90 M/72 40

F. Griffin 4M/73 90

RELICT

HEATH

249388

LEGEND

QUATERNARY

Qra — Alluvium

CAMBRIAN

€c — Crimson Creek Formation; siltstone, conglomerate, chert

PROTEROZOIC

Puo — Gonah Formation; quartzite, siltstone, minor carbonate

IGNEOUS ROCKS

Dgw-f — Fine grained White granite (av. grain size <2mm)

Dgw-m — Medium grained White granite (av. grain size 2-5mm)

Dgr-c — Medium-coarse grained Red-white granite (av. grain size >5mm.)

€s — Cambrian-Serpentinites, pyroxenites

KEY

Cut grid lines

Walking track

Cut grid lines, not located accurately

5 cm

ZEEHAN C2/2	ZEEHAN D1/1
ZEEHAN C2/4	ZEEHAN D1/3

RENISON LIMITED

ZEEHAN C2/4

WEST AGNEW GRID

85-2315 vol 4/4

GEOLOGY INTERPRETATION

SCALE. 1: 5000 METRES

DRAWN	T.G.D.S.
TRACED	T.G.D.S.
DATE	Dec. 1984
SCALE	1:5000
DRAWING No.	070

70

E.L. 11/76

ZEEHAN

STONEHENGE GRID

Mt. ZEEHAN

Oonah Hill

Mc Ivor Hill

Puo

Puo?

€c

€cg

€cd

€cd?

€cd/Puo ?

€cum

€cum?

Oz

Oz(Sandstone)

SIM/75 I.E.M.I. P/L 1 ha

SIM/75 INDUSTRIAL & MINING INVESTIGATIONS P/L 56 ha

SIM/75 I.E.M.I. P/L 16 ha

SIM/75 KYNANCE P/L 6 ha

SIM/75 I.E.M.I. P/L 16 ha

SIM/75 I.E.M.I. P/L 5 ha

ELECTROLYTIC ZINC OF ASIA LTD 145 ha

CONSOLIDATED LEASE S.M./81 10 ha SWANSEA MINING CO. P/L

Tenth Legion

Ballstrup Fault

Britannia

Queen

Hercules

Hercules Extended

Hercules West Extended

Hercules Deep

Hercules Deep Extended

Hercules Deep West Extended

Hercules Deep West

Hercules Deep West Extended

Hercules Deep West Extended

Hercules Deep West Extended

356 000 E
358 000 E
360 000 E
362 000 E
364 000 E
5 362 000 E
5 360 000 E
5 358 000 N
5 356 000 N

Oonah Hill
McIvor Hill
Mt. Zeehan

ZEEHAN

Zeehan Highway
Air Strip
Spray
Lead
Silver
Creek
Neil
Sentinel
Jukes
Creek
Mackon
Creek
Stonehenge
Creek
Trial Harbour
Creek
Little Henty River
Pyramid
Creek

SPRAY MINE
- Possible Drilling

STONEHENGE AREA
- Ground E.M. Surveys

SOUTH STONENGE AREA
- Geological Mapping
- Ground Magnetics Traverses
- Possible Gridding with Bedrock Geochemistry & Ground Magnetics Survey

NUBEENA AREA
- Gridding
- Ground Magnetics
- Bedrock Geochemistry

STONEHENGE GRID

E.L. 11/76

249390

RENISON LIMITED

ZEEHAN D/1

E.L. 11/76 - TRIAL HARBOUR

WORK PROPOSALS

1984-85 55235 vol 4/4 072

DRAWN	P.K.
TRACED	S.F.
DATE	DEC.,84
SCALE	1:10,000
DRAWING No.	72

ZEEHAN D/3 | ZEEHAN D/4 | ZEEHAN D/1 | ZEEHAN D/2

8 cm

SCALE. 1:10,000 METRES
200 0 200 400 600