GOLD FIELDS EXPLORATION PTY. LIMITED

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E.L. 42/71 (SOUTH)

GRAND PRIZE AREA

ANNUAL REPORT FOR 1984/85

OPEN FILE

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Geologist

July 1985

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SUMMARY

The Grand Prize section of E.L. 42/71 is the southern part of the licence area, and lies south of the Renison Mine Lease.

Two diamond drill holes (totalling 835m) were completed in the Grand Prize Mine area during 1984/85. The holes, which were designed to test for northern and southern extensions to mineralisation on the Grand Prize Fault, did not intersect any significant mineralisation.

A review of the Grand Prize Mine area in the light of the recent drilling suggests that:

(1) The Grand Prize Fault is the most strongly mineralised structure on the prospect but mineralisation within it is limited to a strike length of about 1 km.

(2) The best mineralisation intersected on the Grand Prize Fault would not be economic to mine because it is too thin, low grade and deep.

(3) Potential remains for thicker and higher grade mineralisation on the prospect where the Grand Prize Fault and Red Lead Conglomerate are in contact with one another.

(4) It now appears that drill hole GP7 did not reach the Grand Prize Fault. Consequently about 700m of that structure's strike length between GP8 and GP10 has not been tested by drilling at depth. Although no recommendations are made for the prospect, it is suggested that GP7 could be extended about 100m to fill in that "gap" in the drill coverage.

Reconnaissance geological mapping, bedrock geochemistry and magnetic surveys were carried out along grid lines over

the ultrabasic-Melba Spilite contact north and north-east of the Grand Prize Mine. Some samples were assayed for gold in an attempt to determine the source of the alluvial gold at Melba Flats. This work showed that the area is unprospective for tin and gold mineralisation.

An E.M.37 survey over part of the Carbine Hill Grid delineated a zone of strong anomalies along a strike length of 1.2 km in the Great Northern Mine area. This zone corresponds to a broad magnetic anomaly. The area has strong potential for carbonate-replacement and fracture-controlled tin mineralisation.

Expenditure in the 11 months to the end of May, 1985 amounted to $152,000.

Work proposed for 1985/86 is confined to one, helicopter-supported, 500m long diamond drillhole to test the Great Northern Mine E.M. and magnetic anomaly, together with limited bedrock sampling on the western side of Pine Hill. This is expected to cost $69,000 to complete.

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6	"	Sn	"	"	"	
7	"	As	"	"	"	
8	"	Cu	Zeehan	B4/2	1:5,000	
9	"	Pb	"	"	"	
10	"	Zn	"	"	"	
11	"	Sn	"	"	"	
12	"	As	"	"	"	
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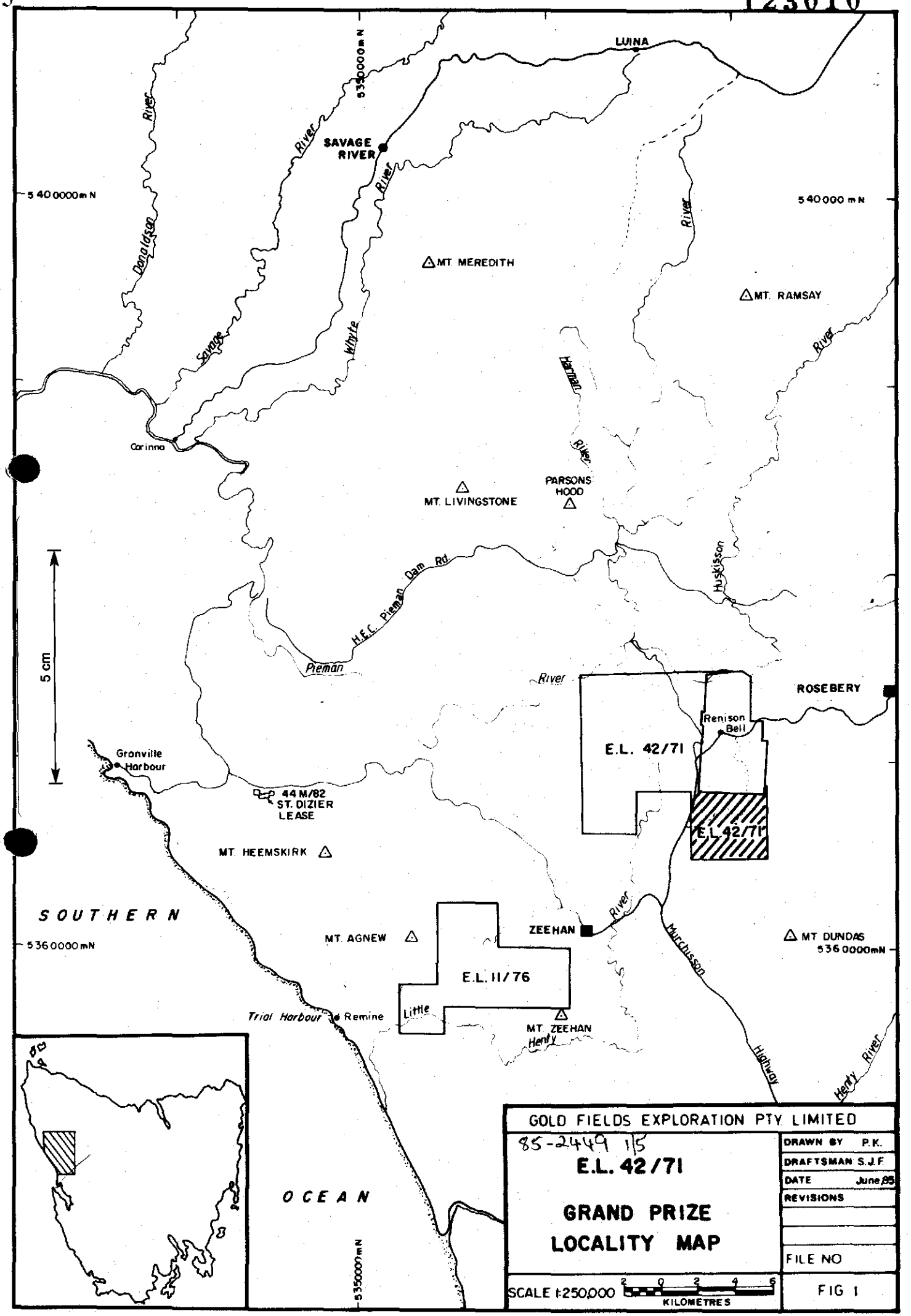
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E.L. 42/71

GRAND PRIZE

LOCALITY MAP

DRAWN BY	P.K.
DRAFTSMAN	S.J.F.
DATE	June, 85
REVISIONS	
FILE NO	
FIG 1	

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

1. INTRODUCTION

E.L. 42/71 covers an area of 53 sq.km west and south of the Renison Mine Lease (Figure 1). The area west of the R.M.L. is known as the Argent area. The part of the E.L. south of the R.M.L. is designated the Grand Prize area and is the subject of this report.

Geologically, the Grand Prize area is underlain by strongly faulted and folded sediments of the Cambrian Dundas Group together with several ultrabasic masses. Known mineralization within the area includes the stanniferous gossan at the Grand Prize Mine and minor lead-zinc mineralized veins elsewhere. The Grand Prize area has potential for hydrothermal carbonate replacement and fracture controlled tin deposits.

This report describes the 1984/85 exploration program on the Grand Prize area. The work included: a reconnaissance program of geological and geochemical surveys along a cut grid at Serpentine Hill, a follow-up geophysical survey on the Carbine Hill Grid and a two hole diamond drilling program in the vicinity of the Grand Prize Mine which totalled 835m.

2. EXPENDITURE

Expenditure on the Grand Prize Area in the 11 months to the end of May 1985 amounted to $151,846 (Appendix 1).

Work proposed for 1985/86 is expected to cost $68,900 (Appendix 1).

3. LAND TENURE

E.L. 42/71 is held solely by Renison Ltd. Until recently, three mining leases (29M/51, 23 M52 and 102M/66) were held by Minops Pty. Ltd. over the Grand Prize Mine workings and were the subject of an Option Agreement between Minops and Renison. Minops has now relinquished the leases;

the vacant ground which resulted from this action is currently being incorporated into E.L. 42/71.

4. PREVIOUS WORK

Prior to 1954, work in the Grand Prize area was limited to individual prospects. These prospects included the Grand Prize Mine (cassiterite), Melba Mine (galena, sphalerite, jamesonite), Kapi Mine (galena, sphalerite), Great Northern Creek or Carbine Mine (galena, sphalerite, tetrahedrite, bismuthinite), alluvial tin workings on detritus derived from Pine Hill and minor alluvial gold and tin workings in the Melba Flats area.

1941-1959 Mining at the Grand Prize Mine. Production was 1,548 tons of ore with an average grade of 0.8% Sn.

1954 Geological Mapping by J. Elliston.

1956-57 Airborne E.M. survey (probably a Hunting System) by Rio Tinto. Survey details are not available but anomalies located on Pine Hill and just south of E.L. 42/71 within the serpentinite are shown on Figure 73.

1958 Two diamond drill holes, K1 and K2, were drilled by the Mines Department beneath the Kapi Mine but no significant sulphide mineralization was intersected. Another diamond drill hole drilled west beneath the Melba Mine intersected minor galena, pyrite and magnetite, (but was not assayed for tin). Exact collar locations for these three drill holes are not known.

1958-1960 Grand Prize, Intermediate and Dundas Grids were cut between the Razorback Mine and Grand Prize Mines by the B.M.R. These grids were then covered by Turam, self potential and magnetic surveys.

Within E.L. 42/71 a linear 5000 gamma magnetic anomaly "associated in part with a distinct Turam indicator" extended south of the Grand Prize Mine and, at the western end of the Intermediate Grid, a Turam anomaly was indicated within Dundas Group sediments. Blissett and Gulline (1961) mapped the grid and surrounding areas.

1962 Mines Department drilled two holes (MD1 and MD2) on the magnetic anomaly south of the Grand Prize Mine and intersected serpentine in the target area. A third drill hole (MD3) was drilled into the Grand Prize Fault but only traces of tin were obtained (Figure 82).

1964-1966 Placer Prospecting Pty.Ltd. drilled two diamond drill holes (G1 and G2) on the Grand Prize Fault Structure. Recovery was only 10% and only a trace of tin was recorded in the Grand Prize Fault by G1. No information is available on G2. Craze's and No. 4 adits were extended. An overall grade of 0.32% Sn was reported from bulk sampling of cross cuts in No. 4 adit. Chip samples and soil samples taken on the Grand Prize Grid, south of the Grand Prize Mine gave assays of up to 1% Sn. However contamination of these and adit samples as well as the use of dubious analytical techniques at the Placer Laboratory in Zeehan is suspected.

1967 Rubenach completed an Honours Thesis on the Serpentine Hill complex and later published a paper summarizing his work.

1967-1970 Renison established the North Dundas Grid and carried out soil geochemistry, magnetic and mapping surveys. Areas anomalous in tin were delineated to the east of E.L. 42/71.

1968-1969 Renison Ltd. cut the Commonwealth Hill Grid and the Razorback Grid. Regional soil geochemistry, magnetic and mapping surveys were carried out. On the Razorback Grid, two zones anomalous in tin (within E.L. 42/71) were located. These anomalies occur south of the Grand Prize Mine and immediately south of the Black Hill summit. On the Commonwealth Hill Grid, tin anomalies which are not associated with the Pine Hill Granite are probably due to alluvial tin. Subsequent soil sampling during 1983-84 has suggested that laboratory contamination was a problem in earlier surveys, and anomalies located by them may not be reliable.

1969-1970 I.P. surveys were carried out over the serpentinites of the Razorback and Commonwealth Hill Grids to test nickel anomalies.

1969-1970 Renison Ltd. cut the Kapi Fault Grid. However, no results from any subsequent work are available.

1971 Gippsland Minerals N.L. carried out detailed mapping and chip sampling of the Grand Prize Workings. Two diamond drill holes, GP1 and 2, were drilled on the Grand Prize Fault with collars located in the vicinity of the MD3 collar. Low tin values and poor recoveries were recorded in GP1 (6m at 0.07% tin). Only traces of tin were recorded in GP2 (Figure 82).

1972 P. Brophy (Renison) reported on the asbestos potential of the Razorback and Serpentine Hill Complexes.

1976-1977 Renison Ltd. established the Kapi Grid over the interpreted N-S trending Kapi Fault. Mapping, soil geochemistry, magnetic and E.I.P. and M.I.P. surveys were carried out. Anomalous chargeability and resistivity responses are shown on Figure 73.

1977-1978 Diamond drill hole S453 was drilled (by Renison) west on line 1900N of the Kapi grid, beneath the Kapi Mine. No significant mineralization was intersected.

1978-1979 Diamond drill hole S554 was drilled (by Renison) west on line 2300N of the Kapi grid. No significant mineralization was intersected.

1979-1980 Renison drilled 4 diamond drill holes (S652, S653, S658, S677) on the Grand Prize Fault structure. Assays are shown on Figure 82.

1980-1981 Renison drilled 2 diamond drill holes (S764, S862) on the Grand Prize Fault. Assays are shown on Figure 82. A mapping program in the Grand Prize Area delineated hornfelsing near the summit of Black Hill.

A Dighem survey was flown over and just south of the Renison Mining Lease by B.H.P. Anomalies located within the Serpentine Hill Complex and along the serpentinite/Crimson Creek Formation boundary are shown on Figure 73.

The Mines Department conducted a semi-regional gravity survey over part of the mapped area and a reconnaissance aeromagnetic survey over much of the West Coast including all of E.L. 42/71.

1981-1982 Renison drilled 2 diamond drill holes (S947, S969 on the Grand Prize Fault. Assays are shown on Figure 82.

A Dighem survey was flown over the eastern portion of E.L. 42/71 by E.Z. Two significant anomalies were located on Carbine Hill in the S.E. corner of E.L. 42/71 and a grade 5 E.M. anomaly was located south of Pine Hill (Figure 73).

1982-1983 Gold Fields Exploration drilled one diamond drill hole (GP3A) on the Grand Prize Fault and two diamond drill holes, GP4 and GP5, on the Grand Reward Fault structure. Assays are shown on Figure 82.

Two overlapping grids (the Black Hill Grid and the Carbine Hill Grid) were established over virtually the entire outcrop area of Dundas Group sediments within E.L. 42/71. Minor mapping and stream sediment sampling were also carried out.

A Dighem survey flown over the Renison Mine Lease and in the vicinity of Pine Hill, by Comstaff, located a number of minor anomalies just south of Pine Hill.

1983-1984 Gold Fields Exploration drilled three diamond drill holes (GP6, GP7, GP8) on the Grand Prize Fault structure. Assays are shown on Figure 82.

Reconnaissance surveys comprising geological mapping, soil geochemistry, ground magnetics, and V.L.F.-E.M. were carried out over the Black Hill and Carbine Hill Grids.

5. WORK COMPLETED AND RESULTS 1984-85

5.1 Access

Grid lines totalling 11.2 km were extended north of the North East Dundas Tram from the existing Black Hill grid, at a 200m spacing, with a number of 100m spaced infill lines. Infill grid lines, totalling 8.1 km, were also established over anomalous areas of the Carbine Hill Grid.

5.2 Geology

5.2.1 Work Completed

Geological mapping was carried out on all new grid lines and infill grid lines of the Black Hill and Carbine Hill Grids. Emphasis during the mapping was placed on the location of carbonate horizons as possible carbonate replacement hosts. Interpretive geology is presented on a map (Figure 2) and line profiles (Figures 23-70).

Rock chip samples collected during mapping were assayed for Sn, As, WO_3, Cu, Pb and Zn. Assays and sample descriptions are presented in Appendix 2 and Figures 3 to 17. Petrological descriptions of some of these samples are presented in Appendix 3.

5.2.2 Stratigraphy

In simple terms, the stratigraphic geology of the area consists of sediments of the Eo-Cambrian Crimson Creek Formation (in the north), faulted against but probably older than ultramafic rocks of the Serpentine Hill Complex. The latter are overlain by basic igneous rocks and Cambrian Dundas Group sediments. The sequence is intruded by Devonian Granite in the vicinity of Pine Hill. Only the area of outcropping ultramafics and Dundas Group sediments south of the Serpentine Hill complex is covered by this report.

Ultrabasic and basic volcanics

The serpentinised pyroxenites and dunites, which outcrop at Serpentine Hill, Pine Hill and Razorback, are intruded by a number of gabbroic phases (A.V. Brown pers. comm.). At least one of these intrudes the sediments of the overlying Dundas Group (i.e. postdates basic volcanism of the Melba Spilites).

The presence of carbonate within the serpentinite, probably at the serpentinite/basic volcanic boundary, as a pre-Devonian pre-deformation unit has been speculated upon. Such a thick unit (up to 15m) of carbonates is reported to occur at the Razorback Mine within the ultrabasic, probably towards the upper part of the unit but adjacent to a fault or "lode" structure. It is not clear whether this carbonate was formed prior to the onset of Devonian hydrothermal activity along the fault structure or is derived from hydrothermal alteration of the serpentinite.

Carbonated serpentinite has been located in a number of drill hole intersections in the Grand Prize area. Most of these are clearly associated with faulting or as an alteration of serpentinite adjacent to a fault. No significant sulphides occur within these carbonates despite being adjacent (in some cases e.g. GP6) to a major feeder structure. Within the Melba Flat area it

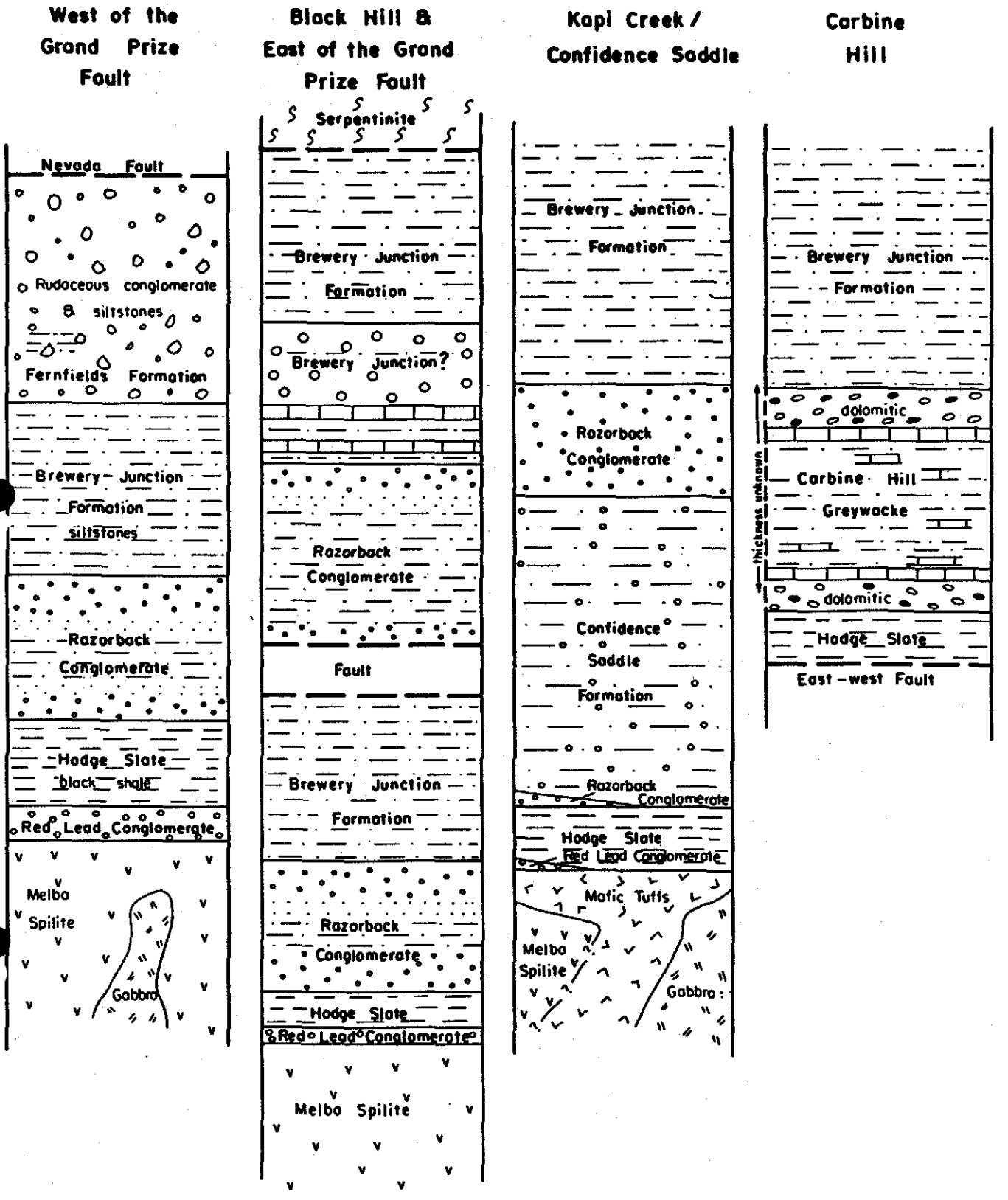
appears unlikely that a carbonate at the serpentinite/basic volcanic boundary will be located due to multiple gabbro intrusives disrupting the sequence.

The serpentinite is overlain by a sequence of basic volcanics (i.e. the Melba Spilite north of Black Hill and mafic tuffs within the Kapi Mine area. The mafic tuff unit includes not only mafic tuffs but reworked basic lavas, possible extrusive components of the ultramafic intrusion and minor shales. The relationship between the mafic tuffs and the spilitic lavas is not clear. These basic volcanics are overlain by Dundas Group sediments.

Dundas Group

The stratigraphy of the sediments within the lease area has previously been described by Komyshan et al (1984) and correlated with the stratigraphic table established by Blissett (1962). However, problems have arisen in correlating the stratigraphy from the area west of the Grand Prize Mine to areas east of there. This is partly because of the lithological variation along strike as well as the lack of outcrop and abundant faults.

Repetition of part of the stratigraphic sequence by an E-W fault (parallel to strike) is indicated just east of the Grand Prize Fault. New fossil evidence (Jago, in press) indicates carbonate-bearing greywackes), previously ascribed to the Comet Formation, to be of a Brewery Junction age (Figure 2). This



GOLD FIELDS EXPLORATION PTY. LIMITED

E.L. 42/71

DUNDAS GROUP

STRATIGRAPHY

DRAWN BY : P.K.
DRAFTSMAN: S.F.
DATE : July, 85
REVISIONS :

FILE NO.

VERTICAL SCALE 1:10,000 — 100 0 100 200 Metres

FIG. 75

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E-W fault, which is clearly evident in the Great Northern Creek area where the strike of the units is at a high angle to the fault, appears to separate two lithological regimes which are only broadly correlatable.

The stratigraphic nomenclature of Blisset (1962) has been retained, but two more units have been added (Confidence Saddle Formation, Carbine Hill greywackes) where lithological variation has prevented direct correlation. Time equivalence of units correlated within this report between the Grand Prize area and the Great Northern area cannot be assumed as unit correlation has been based on lithology with the exception of Jago's (in press) fossil evidence at Grand Prize and Barkers Creek.

A description of the units of the revised Dundas Group stratigraphy (in the licence area), according to the present understanding is described, from the oldest to the youngest units, as follows:-

Red Lead Conglomerate- Partly calcareous, polymict cobble conglomerate. This unit outcrops extensively in the Grand Prize Mine and Razorback Mine areas. Basic volcanics underlie the Red Lead Conglomerate in the Grand Prize Area but these volcanics thin to the south and the conglomerate overlies serpentinite at the Razorback Mine. The conglomerate also thins out to the east in the Kapi Creek area. In the Grand Prize and Razorback Mine areas, the Red Lead Conglomerate is extensively altered and contains some replacement tin e.g. diamond drill

hole S764 intersected 179m at 0.10% Sn with sporadic higher concentrations (up to 1m at 0.95% Sn).

Hodge Slate - Black to grey siltstone with lateral variations to a greywacke. Although generally lacking in carbonate in the Grand Prize Mine area, carbonate is present within the matrix of the unit in the intersection in diamond drill hole GP9. At the Razorback Mine, sulphide replacement mineralisation occurs within this unit. The unit appears to have an interdigitating relationship with the overlying Razorback Conglomerate.

Razorback Conglomerate - Sandstones, siliceous grit, pebble conglomerate and greywackes. In the northern part of the Grand Prize Mine area, the unit consists of a chert pebble-rich conglomerate ovrlain by a greywacke/grit sequence and again overlain by a chert pebble conglomerate. This chert pebble conglomerate which is generally siliceous appears to lens out to the east in the Kapi Creek area. South of the Grand Prize Mine, the Razorback Conglomerate unit, as intersected in diamond drill hole GP9, is a carbonate-rich greywacke and contains grit-sized carbonate clasts. A variable and poorly outcropping unit of silaceous conglomerates, greywackes, carbonate-bearing greywackes and chert pebble conglomerates, which outcrops on Black Hill, Barkers Creek and on

a ridge south of Kapi Creek was previously correlated with the Fernfields Formation (Komyshan et al, 1984). It is now tentatively correlated with the Razorback Conglomerate unit (see Figure 2). The Razorback Conglomerate unit is also correlated with the Carbine Hill greywacke and Confidence Saddle formation.

Confidence Saddle Formation - Grits, greywackes, siltstones and rudaceous conglomerates. This unit which outcrops east of Kapi Creek occurs stratigraphically between the lensing out chert pebble Razorback Conglomerate and the siliceous and tourmalinised, altered cobble conglomerate on Confidence Saddle. This poorly outcropping unit which extends to the east of Pine Hill has lithological similarities to the rocks of the Fernfields Formation outcropping in the Grand Prize Mine area. However its stratigraphic location between the Hodge Slate and green siltstones (a Brewery Junction equivalent?) indicates it is probably equivalent to the Razorback Conglomerate. The outcrop pattern of this suggests that it may contain carbonate.

Carbine Hill Greywacke - Grey to brown sandstone-rich greywacke, carbonate-bearing pelites and dolomitic conglomerates. This unit, which outcrops extensively within creeks in the vicinity of the Great Northern Mine, has affinities with the carbonate-bearing greywackes

within the middle part of the Razorback Conglomerate sequence observed in diamond drill hole GP9. The base of this sequence appears to be a dolomitic conglomerate which includes rounded clasts of quartzite, dolomite and elongated clasts of black shale. The Precambrian Oonah Formation which outcrops 1 km to the east may have been a source for the clastic and the carbonate component of this unit.

Brewery Junction Formation - Fine green to purple greywacke and siltstones outcropping in the Grand Prize Mine, Carbine Hill and Confidence Saddle areas. Coarse rudaceous grits and conglomerates, some of which contain magnetite, also occur within this unit. In the Confidence Saddle area the siltstone-dominant greywacke has an increasing rhyolitic tuff component towards the east. The unit, in this area, was previously called the Great Northern Siltstone by Komyshan et al (1984).

Fernfields Formation - Poorly sorted, rudaceous conglomerates, siltstones and grits. This unit is the youngest outcropping in the Grand Prize area.

5.2.3 Structure

The basic structure of the area appears to be relatively simple with a broad north-west trending, south-east plunging synclinal fold in the Grand Prize Mine area and a tight south-south-east plunging anticlinal fold in the Kapi Creek area. This fold may

be parasitic to a larger tighter syncline in the Ring River area. Plots of poles to bedding indicate an overprinting east-west fold system is evident in the Carbine Hill area (Komyshan et al, 1984).

Faulting within the licence area appears to be extensive and complex - the sequence of faulting is not clear and dips of the structures are unknown except in the Grand Prize Mine area. Faults can be separated into three groups:

a) N.E. trending. Apparent strike slip displacement of up to 900m (e.g. Razorback North). These faults appear to be more extensive towards the east and are associated there with Pb-Zn mineralization in the Godkin Ridge and Great Northern Mine areas. These structures probably occur in conjunction with, and are partly offset by, N.W. trending faults.

b) E-W trending. Apparent dip-slip displacements of 500m plus occur (e.g. serpentinite-Dundas Group boundary in the southern part of the licence area). The E-W and N.E. trending faults are sub-parallel to strike in the Grand Prize Mine area and difficult to recognize. N.E., or E-W trending faults have offset the anticlinal axis in the Kapi Creek Area.

c) N.W. trending. Locally mineralised (e.g. Grand Prize and Grand Reward Faults) with apparent strike slip displacements of up to 200m.

5.3 Geochemistry

5.3.1 Work Completed

Rock chips collected during mapping were crushed and assayed for Sn, As, WO_3 by X.R.F. and Cu, Pb, Zn by A.A.S. at the Renison Laboratory. Various samples containing high As values, collected both this year and the previous financial year, were also assayed for Au by Genalysis of W.A.

Bedrock samples were collected by contractor N.Poltock using a power auger every 25m on newly cut grid lines of the Black Hill Grid north of the North East Dundas Tram. Samples were dried, crushed whole and then assayed for Cu, Pb, Zn by A.A.S. and Sn, As by X.R.F. at the Renison Laboratory. Samples from approximately every second line (i.e. 400m spaced lines) were also assayed for Au by Genalysis. All assay results are shown on contoured plans (Figures 3-17, 71) and line profiles (Figures 23-70). Detailed sample descriptions and assays are given in Appendix 2.

5.3.2 Results

Background values were below detection limit (10 ppm) for Sn, As and Pb, 10-40 ppm for Cu and 20-60 ppm for Zn.

Sn and As anomalies are restricted to three areas, i.e.:

a) Spot Sn, As and base metal anomalies were recorded from mineralised rock chips collected in the Madame Melba Mine area. These hand-picked samples were takenfrom narrow mineralised veins.

As there is no apparent strike extent or alteration halo around the anomalies, the values are not considered significant.

b) Anomalous Sn and As values from bedrock on the northern 200m of lines 1400W and 1600W are probably part of the Sn-As aureole around the Pine Hill Granite recorded in Komyshan et al (1984). A significant value of 0.7% Sn was obtained from one rock chip of basalt with gossanous veins 20m west of 1400W, 275N indicating that this area may contain fracture-fill style mineralisation. The nature of Sn mineralisation in the Pine Hill Area will be discussed later.

c) Arsenic anomalies extend north from the multielement anomalous zone of the Grand Prize Fault. These anomalies are accompanied only by spot anomalous values of Sn.

Minor Pb anomalies on the northern extension of the Grand Prize Fault anomaly zone, at the Madame Melba Mine and south of Commonwealth Hill are probably derived from narrow, poorly mineralised structures which have a limited alteration halo.

An extensive area of Cu and Zn anomalies occurs within basalt on the northern extension of the Grand Prize Fault anomalous zone and north and north-west of the Madame Melba Mine. Although these anomalies may reflect

a high Cu and Zn background within these basic rocks, higher values (>500 ppm Zn, >200 ppm Cu) appear to delineate narrow mineralised structures.

Au values were all below detection limit (0.01 ppm) for bedrock samples and rocks collected from dumps adjacent to alluvial workings and mineralised samples from the Madame Melba Mine. Of the high arsenic mineralised samples assayed for Au, only eight samples had values greater than 0.05 g/t Au and only one of these samples was from the Melba Flat drainage area (sample 0197 - a brecciated basalt - 0.067 g/t Au). Three samples were from mineralised structures in the Kapi Creek area (i.e. sample 2250 - 0.55 g/t Au, sample 3083 - 0.05 g/t Au, sample 3089 - 0.075 g/t Au); a dump sample from mineralised sediments adjacent to a quartz feldspar porphyry (sample 3088) gave a value of 0.483 g/t Au. Two dump samples from the Great Northern Mine (samples 7907, 7928) both gave values of 0.067 g/t Au. The best Au value was obtained from a dump sample collected from Wallaces Prospect (7929 - 1.02 g/t), which occurs outside the licence area.

5.4 Geophysics

During 1984/85 ground magnetic surveys were carried out on all newly cut grid lines and infill grid lines by G.F.E.L. staff and contractor W. Alliston. Readings were taken at 12.5m intervals and diurnally corrected against a base station at 3000W, 2000S. Corrected data from the surveys is presented on line profiles (Figures 23-70), tabulated in Appendix 4 and contoured values are shown on Figure 72.

As a follow-up of an elongate magnetic anomaly north of Black Hill (see Komyshan et al, 1984), a number of rock outcrops and rock chips from that area were measured for magnetic susceptibility. Anomalous magnetic responses were obtained and are probably due to sedimentary magnetite within grits.

A ground electromagnetic EM37 survey was carried out by contractors Geoterrex on three parts of the Carbine Hill Grid using six loops. Line profiles of the 20 channel system at 1:5,000 scale are presented in Appendix 5. Line profiles of raw data from 4 selected channels and Fraser algorithms of these channels are shown on Figures 23-70.

A description of the EM37 survey and a discussion of all geophysical results by consultant Dr. J.R. Bishop is presented in a separate report (Bishop, 1985).

5.5. Drilling

5.5.1 Introduction

Two diamond drill holes were completed during 1984 for a total of 835.2m by Diamond Drilling (Tas.) using a Longyear 38 diamond drill rig for drill hole GP10 and a Longyear 44 diamond drill rig for drill hole GP9.

Drill hole GP9 was designed to test the possibility of a carbonate at the base of the Dundas Group sequence adjacent to the Grand Prize Fault at 1850 RL, 300m south of the GP6 Grand Prize Fault intersection. Drill hole GP10 was designed to test for a magnetic body modelled at 150m below the surface adjacent to the Grand Prize Fault 700m north of the GP8 Grand Prize Fault

intersection and 500m north of the un-named mineralized fault intersected in GP7.

Detailed drill logs are appended (Appendix 6) and results of the drill holes are illustrated in profiles (Figures 76, 77), on longitudinal projections (Figures 81-83) and structure contour plans (Figures 78-80).

This drill hole program was designed to test the northern and southern limits of the Grand Prize Fault mineralisation. Both drill holes intersected only negligible sulphides although the Grand Prize Fault structure was shown to persist both to the south and north. The mineralised extent of the Grand Prize Fault within the Grand Prize area is probably best illustrated at surface by the tin soil geochemistry anomaly (see Figures 6, 16) which has a strike length of one kilometre.

Sixteen diamond drill holes have been drilled by Renison Ltd. and Gold Fields Exploration in the Grand Prize Area during the period 1979-85. Some of these intersections have since been reinterpreted and additional assaying completed. A summary of all these drill logs and assay summaries of all these holes are presented in Appendix 7.

Details of drill holes from the current program follow:

5.5.2 Drill Hole GP9

Collar Coordinates (A.M.G.): 5,365,002N;
368,124E

Azimuth A.M.G.: 043°
Dip: -65°
Length: 491.5m
Timing: 14/1/85-20/2/85
Summary Log:

0 -	73.9m	Razorback Conglomerate
-	128.5m	Hodge Slate
-	161.5m	Red Lead Conglomerate
-170.9m		Fault (including carbonated serpentinite)
-	351.2m	Altered Serpentinite
-	411.6m	Grand Prize Fault
-	491.5m	Serpentinite

No significant sulphides were intersected.

Comments:

The Dundas Group sequence intersected by GP9 belongs to a fault block of sediments which extend south-east to the Razorback Mine. The sequence as intersected in the drill hole was faulted out a lot sooner than expected by the south-east trending, steeply dipping Crazes Fault (see Figure 76). It was hoped that the base of this sequence could be located adjacent to the Grand Prize Fault. However the combination of Crazes Fault, a north-east trending fault structure which offsets the sequence to the south-west and the south-westdip of the sedimentary sequence results in this fault block of sedimentary rocks abutting the Grand Prize Fault structure only in the Razorback Mine area and not within EL 42/71.

Significant mineralisation in the Grand Prize Fault clearly does not extend south beyond 13700N on the longitudinal (Figures 81 and 82). This is illustrated by low grades in the southern part of the mine

workings, lack of anomalous soil geochemistry extending south and negligible mineralisation within the S652, GP9, S862 and Mines Department No.3 Grand Prize Fault diamond drill hole intersections.

5.5.3 Drill Hole GP10

Collar coordinates (A.M.G.): 5,366,466N: 367,754E
Azimuth (A.M.G.) 068°
Dip: -56°
Length: 343.7m
Timing: 14/1/85-11/2/85
Summary Log:

0 -	6.0m	Surface debris
-	52.0m	Basalt
-	56.4m	Basalt Breccia
-	206.4m	Microgabbro and Basalt
-	220.1m	Breccia
-	225.5m	Carbonate Rock
-	232.0m	Altered Microgabbro
-	251.4m	Basalt? and Gabbro
-	282.3m	Gabbro
-	322.0m	Grand Prize Fault?
-	343.7m	Serpentinite and Pyroxenite

No significant sulphides were intersected.

Comment:

This drill hole, testing a magnetic anomaly and the Grand Prize structure, intersected rocks of high magnetic susceptibility (probably due to a high magnetite content). The geophysical aspects of this drill hole are dealt with by Bishop (1985).

Structural contour data including the GP10 Grand Prize Fault intersection indicates that GP7 was not drilled deep enough to intersect the Grand Prize Fault. This means there is a 700m strike length on the longitudinal not drilled between the GP10 and S969 Grand Prize Fault intersections.

The Grand Prize Fault intersection in GP10 was barren, however surface geochemistry indicates that the Grand Prize Fault is strongly mineralised to approximately 14800N on the longitudinal (300m south of GP10 and corresponding to the approximate southern edge of the magnetic anomaly).

It appears, therefore, that a 400m strike length, on the longitudinal, of the Grand Prize Fault (i.e. up to 400m N of the S969 intersection) which is possibly strongly mineralised has not been tested at any level by drilling.

6. DISCUSSION

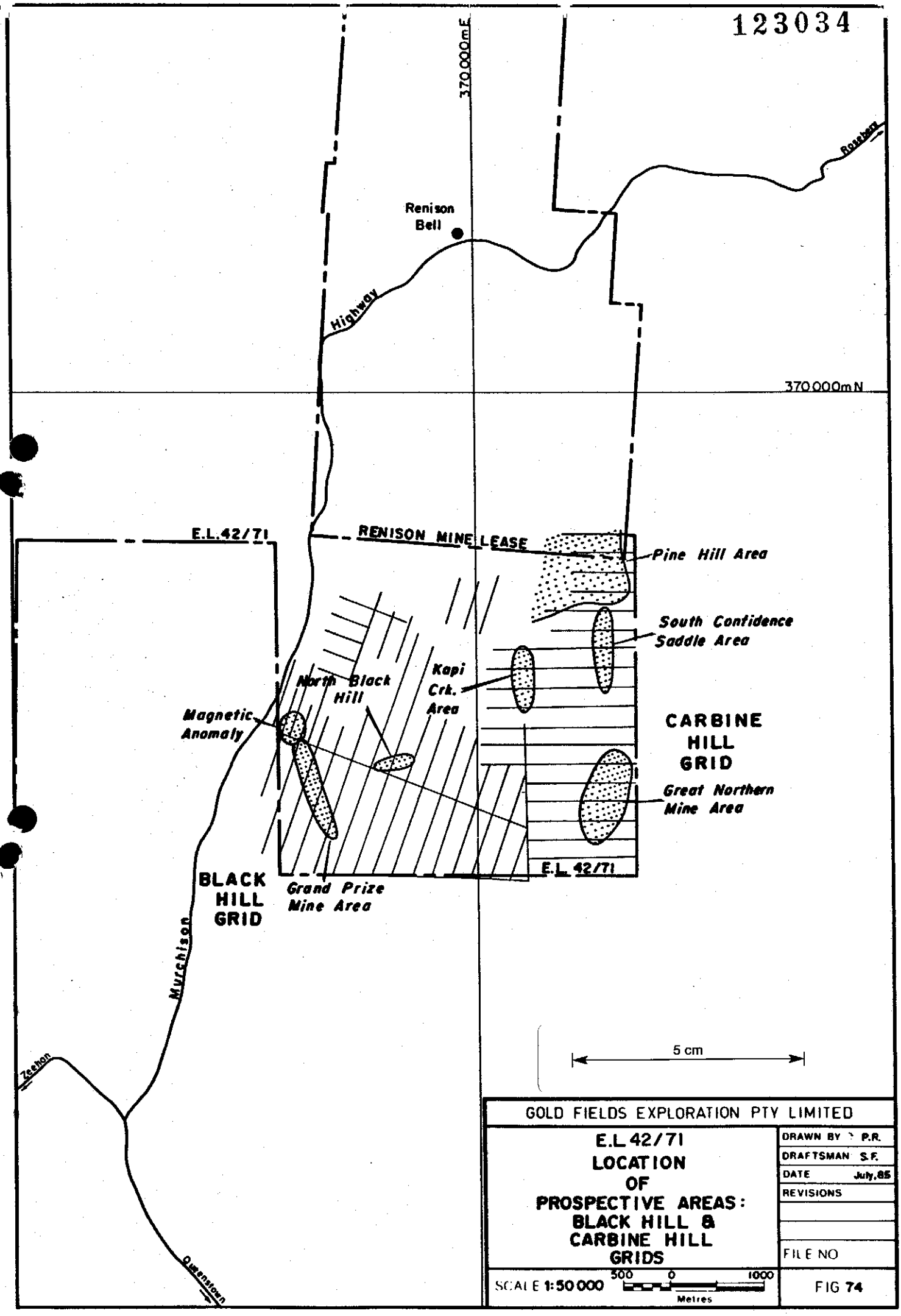
6.1 Introduction

The exploration program during 1984-5 on EL 42/71 consisted of follow-up work on areas of exploration interest delineated during 1983-84 (see Figure 74), exploration on the Serpentinite/Basic volcanic contact and search for Au in the Melba Flat area.

6.2 Grand Prize Mine Area

6.2.1 **Mineralised Faults**

Twenty drill holes have been drilled in the vicinity of the Grand Prize Fault structure,



GOLD FIELDS EXPLORATION PTY LIMITED	
E.L 42/71 LOCATION OF PROSPECTIVE AREAS: BLACK HILL & CARBINE HILL GRIDS	DRAWN BY P.R. DRAFTSMAN S.F. DATE July, 85 REVISIONS FILE NO
SCALE 1:50 000 500 0 1000 Metres	FIG 74

85 -2469 1/5

the log summaries and assay summaries of which appear in Appendix 7. From this drilling information and surface geochemistry it can be concluded that tin mineralisation occurs in a number of structures in the Grand Prize Mine area. Near-ore grade intersections (0.7% Sn, ⩾2m true width) have been obtained from the Grand Prize Fault, Grand Reward Fault, an unnamed structure intersected by GP3A 15m to the east of the Grand Prize Fault, and a fault intersected by GP7 to the west of the Grand Prize Fault. Each of these structures is discussed below:

Grand Reward Fault

The Grand Reward Fault is a narrow structure sub-parallel to the Grand Prize Fault, 100m to the east. Of the nine drill hole fault intersections to date only the S969 intersection (of 3m horizontal width at 5.21% Sn) had Sn assay values greater than 0.1%. Carbonate-bearing Red Lead Conglomerate occurs in the hanging wall and footwall of the S969 intersection of the Grand Reward Fault and may have had an influence in the precipitation of cassiterite in this zone. It is clear that the Grand Reward Fault is not of exploration significance except possibly adjacent to the Red Lead Conglomerate.

Faults in the Hanging Wall of the Grand Prize Fault

The mineralised fault structure intersected in diamond drill hole GP7 (2.8m horizontal

width at 0.65% Sn, <0.01 acid soluble Sn, 0.27% Cu), previously interpreted as a Grand Prize Fault intersection, may be an east dipping structure similar to the Grand Lottery Fault (see Komyshan et al, 1984). The Grand Lottery Fault although not strongly Sn mineralised (best assay 8m at 0.24% Sn, DDH S658) is probably part of a leakage halo on the hanging wall of the Grand Prize Fault. Similarly the fault-bound mineralisation in the GP7 drill hole intersection, which is narrow in width, may be part of this leakage halo. As indicated by bedrock geochemistry, this fault appears to be one of a number of mineralised faults associated with the northern end of the Grand Prize Fault. However most of these smaller faults are probably not of mineable grade or width.

Faults in the Footwall of the Grand Prize Fault

The mineralised fault intersected in drill hole GP3A on the footwall of the Grand Prize Fault and which assayed at 1.9m (horizontal width) of 0.94% Sn, 0.21% acid soluble Sn, and 0.87% Cu may be physically correlatable with other intersections of the Grand Prize Fault. This fault may either occur as a feeder to the Grand Prize structure or as a parallel "envelope".

Grand Prize Fault

The most important and best mineralised structure in the area is the Grand

Prize Fault. Although the structure appears to extend from the Melba Flat, south to the Razorback Mine, significant mineralisation only occurs within the Razorback and Grand Prize Mine areas. Bedrock geochemistry and diamond drilling indicate that, in the Grand Prize area, the strike extent of significant tin mineralisation is limited to one kilometre (possibly by east-west faulting?).

Extensive tin-copper mineralisation occurs relatively deep on the Grand Prize structure with grades increasing with depth.

The two deepest intersections are:

S947A (3.2m horizontal width)
0.82% Sn, (0.01% acid soluble)
0.80% Cu

GP6 (2.0m horizontal width)
0.87% Sn (0.01% acid soluble)
0.78% Cu.

Using these figures, as well as including the GP7 mineralised fault intersection and assuming the GP3A fault intersection of 1.9m (h.w.) of 0.94% Sn, 0.21% acid soluble Sn and 0.87% Cu is physically correlatable with other mineralised intersections, Komyshan et al (1984) made an approximate tonnage potential calculation of 0.9 million tonnes of approximately 0.8% Sn and 0.7% Cu for the Grand Prize Structure. This was based on the assumptions that grades and widths (mean horizontal width 2.5m) extend 50m north from GP7 to 50m south of GP6 (i.e. 700m length) over 150m

of vertical width, below 2050RL on the longitudinal projection, and that the mineralisation has an s.g. of 3.5.

An important assumption was that the mineralised GP7 drill hole intersection is part of the Grand Prize Fault. Recontouring the data indicates that GP7 intersected a smaller fault in the hanging wall of the Grand Prize Fault and was completed before intersecting the Grand Prize Fault. If this is correct, the tonnage potential calculation is not a valid one.

Drilling this year has downgraded exploration interest in the Grand Prize Fault by indicating that the strike extent (and therefore the tonnage potential of the Fault structure) is limited to a zone one kilometre or less in length. It would appear that the economic value of the identified resource is sub-marginal. The "ore" intersections are quite thin, about 2.2m true width, and are not high enough in grade to permit much dilution during mining. It should be noted, however, that all mineralised intersections of the Grand Prize Fault structure, with the possible exception of GP6, have been made above the carbonate-bearing Red Lead Conglomerate's contact with the footwall and hanging wall of the fault (Figures 81, 82).

The Red Lead Conglomerate exhibits extensive alteration and low grade

(bulked) tin replacement mineralisation. A calculation of the tonnage potential of the Red Lead Conglomerate in the footwall of the Grand Prize Fault between 2050 and 1900 RL, over a 100m strike length, a 60m horizontal width and using an s.g. of 3.0 gives a figure of 2.7 million tonnes with an average grade of perhaps 0.1% Sn (i.e. approximately 2,700 tonnes of Sn). Clearly this is not ore grade mineralisation but it does show that tin-bearing fluids have been prevented from continuing up the fault/feeder structures and have replaced carbonate-bearing rocks. It is therefore arguable that grades and thicknesses of mineralisation within the Grand Prize Fault structure could improve below the Red Lead Conglomerate (i.e. below the current depth of drilling).

6.2.2 Carbonate Replacement Possibilities

Several possibilities for carbonate-replacement mineralisation in association with the Grand Prize Fault have been examined (i.e. within the Dundas Group sediments and on the upper margin of the ultrabasic unit).

It is clear that the only potential for carbonate-replacement bodies in the Dundas Group sediments of the Grand Prize area lies in the Red Lead Conglomerate. Eight diamond drill hole intersections of this unit have been obtained. None of these intersections have been directly in contact with the Grand Prize Fault. Bulk grades of up to 60m (horizontal width) at 0.12%

Sn (DDH GP8) of replacement mineralisation occurs within the Red Lead Conglomerate. These grades are not of economic interest. However, within this conglomerate, a number of higher grade assays have been obtained which cannot be correlated with a structure, viz:

S764: 512.0-517.0m (5m) at 0.45% Sn, 0.18% Cu
including
513.0-514.0m (1m) at 0.95% Sn, 0.35% Cu

GP3A: 571.0-574.0m (3m) at 0.33% Sn, <0.01% Cu

GP8: 464.0-466.0m (2m) at 0.47% Sn, 0.22% Cu
483.0-485.0m (2m) at 0.73% Sn, 0.07% Cu

These assays indicate that replacement tin mineralisation within the Red Lead Conglomerate of almost ore grade is possible and even likely adjacent to a structure such as the Grand Prize Fault. A replaceable thickness of Red Lead Conglomerate at a possible grade of 0.8% Sn on a strike length of 600m and 50m width would enlarge the estimated tonnage potential of the area as well as making the Grand Prize Fault mineralisation a more attractive mineable width.

Carbonate-replacement mineralisation within the Red Lead Conglomerate immediately adjacent to the hanging wall of the Grand Prize Fault may also be a possibility. Within the Renison Mine, mineralisation does not occur in the hanging wall of the Federal structure. However, at Grand Prize, there are a number of mineralised fractures (e.g. Grand Lottery Fault) which intersect the Grand Prize Fault

on its hanging wall, indicating that Sn-bearing hydrothermal fluids have been active in the hanging wall of the Grand Prize Fault. Therefore carbonate-replacement mineralisation at the Grand Prize Fault hanging wall/Red Lead Conglomerate contact is a possibility.

Replacement of carbonate within the ultrabasic occurs at the Razorback Mine. Here carbonated ultrabasic (magnesite and dolomite with talc) more than 12 m wide occurs adjacent to a fault structure (Padmasiri, 1974). It is not clear whether this carbonate was formed prior to or after the onset of Devonian hydrothermal activity along the fault structure. Replacement mineralisation within the carbonate is patchy and of variable grade, although high grade intersections of up to 2.3% Sn over 6m are recorded (Blissett and Gulline, 1961).

Within the Grand Prize area a number of different types of carbonated serpentinite have been intersected none of which are significantly mineralised. Each type is described below:

a) The brecciated carbonated serpentinite intersection of GP9 occurs within a fault and represents a direct relationship between tectonic activity and carbonation of the serpentinite.

b) A 3m wide intersection of non-mineralised carbonated serpentinite adjacent to the mineralised Grand Prize Fault in diamond drill hole GP6 probably indicates an alteration of the serpentinite by

hydrothermal activity on the Grand Prize structure. Replacement of the carbonate, however, did not occur despite up to 1.8m horizontal width of 0.87% Sn in the Fault. This implies either the alteration was at a late stage or carbonation of the serpentinite was not sufficient for replacement.

c) Variably calcareous ultrabasic rocks of varying thicknesses have also been intersected in S969, S947A, GP3A and GP8 at some distance from the Grand Prize feeder structure. It is not clear whether these intersections are a result of alteration around narrow fault zones or semi-stratigraphic in occurrence. Diamond drill hole GP10 intersected a 5m down hole width of carbonate adjacent to a poorly mineralised fault.

In conclusion, the derivation and location of carbonates associated with the altered ultrabasic is problematical. Secondly the patchy nature of the replacement mineralisation in the carbonated serpentinite at the Razorback Mine indicates that this type of carbonate replacement may not be a viable economic target.

6.3 North Grand Prize

Reconnaissance work during 1984-85 looked at the possibility of carbonate replacement pyrrhotite orebodies beneath the Melba spilite at the margin of the serpentinite (cf Razorback).

A strong "reversed D" shaped, ground magnetic anomaly was delineated north of the Grand Prize Mine area on the Melba Flats. The eastern edge of the anomaly coincides with the interpreted extension of the Grand Prize Fault. The Grand Prize Fault south of the magnetic anomaly corresponds with Sn, As, Pb and Zn soil geochemistry anomalies. However, in the vicinity of the magnetic anomaly and the Grand Prize Fault's northern extension, Sn, As and Pb bedrock geochemical values are low and indicate the lack of stanniferous hydrothermal mineralisation. Anomalous Cu and Zn bedrock geochemistry values are probably derived from altered, but not significantly mineralised, basic rocks. Although diamond drill hole GP10 intersected a number of possible hydrothermal feeder structures, it contained no significant sulphide mineralisation and therefore downgraded the prospectivity of this magnetic anomaly. The magnetite content of the serpentinite and other basic rocks in the hole ranges up to 20% and probably explains the geophysical anomaly.

Elsewhere, across the serpentinite/spilite contact, no significant geochemical or magnetic anomalies occur with the exception of the nearest grid line to the Pine Hill Granite. This indicates the lack of significant hydrothermal activity at the serpentinite/spilite contact between the Grand Prize Fault and Pine Hill and that this zone is not prospective for a carbonate-replacement body.

Anomalous Sn and As bedrock geochemistry values, located on line 1400W (the nearest line to the Pine Hill Granite) are part of the western edge of a Sn-As aureole around the Pine Hill Granite. Stanniferous skarns in the Crimson Creek Formation are located within this geochemical halo. A carbonate body at the serpentinite/spilite contact in this area could also possibly act as a suitable replacement host.

Also, within the geochemical halo, strongly anomalous tin soil geochemistry values were located on the northern-most lines of the Kapi Grid on the western side of Pine Hill (in the vicinity of Cornish's alluvial workings). These values were ascribed to alluvial tin derived from the Pine Hill Granite greisen mineralisation (Stephenson, 1979). However, bedrock sampling from this program has indicated that at least some of the tin is derived from primary tin mineralisation in the basic volcanics.

A bedrock sampling program between line 1400W and the western side of the Pine Hill Granite over the serpentinite/spilite contact would clarify whether this alluvial tin was principally derived from local and possibly prospective replacement mineralisation (as either a Renison-style carbonate replacement or a skarn) or alluviallyderived from the granite greisen.

6.4 Eastern Pine Hill

Soil geochemistry has revealed strong Sn-As anomalies south-east of the Pine Hill Granite over the serpentinite and the adjacent Dundas Group sediments. Although some of the tin values may be alluvial in origin (derived from tourmalinized granite), the coincident arsenic anomalies and the nature of the topography in this area both suggest that a primary mineralized source is also present. Geophysical responses include strong magnetic, moderate V.L.F.-E.M. and minor E.M.37 anomalies near the sediment-ultrabasic contact.

Several styles of tin mineralization could be present in this area i.e.:

(a) Sulphide-rich carbonate replacement orebodies in the margin of the serpentinite.

(b) Magnetite skarns in the margins of the serpentinite associated with shallowly concealed granite.

(c) Fracture controlled mineralization.

(d) Greisenized quartz feldspar porphyry intrusives.

(e) Quartz tourmaline veins e.g. Curtain No.1 adit.

It appears from EM37 data that the occurrence of the first three (possibly economic) styles of tin mineralisation in the Pine Hill section of the Carbine Hill grid is unlikely. Other features which negate the possibility of carbonate-replacement or skarn-type economic tin mineralisation are:

1. Outcropping ultramafic rocks in this area are gabbros and are clearly unlikely to contain carbonates.

2. The outcropping Confidence Saddle Formation sedimentary sequence of the Dundas Group does not appear to include carbonate beds.

3. The magnetic responses in the area are strong, local and probably derived from near surface rocks containing magnetite. Magnetite-bearing skarns adjacent to the Pine Hill Granite within the Crimson Creek Formation have been recorded (Ross, 1976). However, as this area showed a poor response to the EM37 system and the rocks are unlikely to contain carbonate, it is concluded that these magnetic anomalies are due to magnetite within basic and ultrabasic rocks and not due to a skarn.

In conclusion, the most likely source of the Sn-As soil geochemistry anomalies south-east of the Pine

Hill Granite is probably either quartz-tourmaline veins or thin sulphide-mineralized veins or greisenised feldspar porphyry dykes. None of these mineralisation styles are considered to be of economic interest in this area.

6.5 South Confidence Saddle

A zoned mineralised system for this area was suggested by elevated As-Pb-Zn soil geochemical values together with weakly anomalous tin values. A further positive feature of the area is the tourmalinisation and hornfelsing of rudaceous conglomerate. However, the EM37 system has shown no significant anomalies and indicates there is little possibility of a massive pyrrhotite carbonate-replacement ore body in this area.

6.6 Great Northern Area

The exploration potential of this area is highlighted by the following positive features:

(a) Outcropping, fracture-controlled, base metal sulphide mineralisation containing traces of tin and strong As-Pb-Zn soil geochemical anomalies both suggesting that the upper portion of a zoned tin-mineralised system is present here.

(b) The area is underlain by dolomitic siltstones and dolomitic conglomerates of the Carbine Hill Sequence, possible hosts for carbonate replacement mineralisation.

(c) A strong, broad magnetic anomaly in this area may reflect one or more pyrrhotite orebodies at depth, possibly associated with a granite cupola with a hornfelsed magnetic margin.

(d) A zone of very strong EM37 anomalies which extend north-north-east from the southern boundary of EL42/71 over a strike length of 1.2 km, also corresponds to the magnetic anomaly and could reflect a strongly mineralised system.

(e) Similarly, V.L.F. E.M. anomalies in the vicinity of the magnetic anomaly may reflect a mineralised fault.

This area is yet untested by drilling and clearly has potential for sulphide-rich carbonate replacement tin orebodies.

6.7 North Black Hill

Ground magnetic and V.L.F. E.M. anomalies correspond to an area of hornfelsing without coincident soil geochemistry. Rock chip sampling in the anomalous area located grits containing sedimentary magnetite (see Appendix 3), and explain the magnetic anomaly. The area contains no soil geochemistry anomalies and is not considered prospective for tin mineralisation.

Similar corresponding V.L.F. E.M. and ground magnetic responses on the Carbine Hill Grid (2000N, 900E and 400N, 675E) are also probably due to magnetite within the sediments.

6.8 Gold at Melba Flats

Creeks in the Melba Flat area were extensively worked for alluvials at the turn of the century, in particular to the west of the Madame Melba Mine. The source of the alluvially derived Au was not located.

There is no indication that the gold was derived from a lode system (such as a quartz reef) as this would have been an obvious target for early prospectors.

The gold does not appear to be associated with known mineralisation. Mineralised rocks within the catchment area have been assayed for gold and generally have values below detection limit (0.01 g/t). Only one sample, of gossanous brecciated basalt, contained more than 0.05 g/t Au (0.067 g/t Au). Assays of bedrock samples showed no gold above the detection limit. Assays of indicator elements for hydrothermal mineralisation such as As and to a lesser degree Cu from soil and rock samples, show there is little likelihood of hydrothermal mineralisation away from known mineralised areas.

There are no records available as to the coarseness of the gold at Melba Flat, however no visible gold was panned during this work program. It is speculated that the gold occurs as fine grained disseminations at a low grade within tuffaceous sediments and basalts of the Melba Flat area. There are no indications that the area has potential for economic gold mineralisation.

6.9 Gold in Other Areas

Assaying of mineralised samples for gold obtained poor to occasionally moderate values in a number of areas. The best value of 1.02 g/t Au was obtained from a dump sample collected from Wallaces Prospect (outside the licence area). Gold assays of samples collected within EL 42/71 are not considered significant.

7. CONCLUSIONS AND RECOMMENDATIONS

7.1 Introduction

Work during 1984-85 has refined the prospective areas of the southern part of EL 42/71 to two areas of primary interest (Grand Prize Mine area and the Great Northern area) and one area of secondary interest (Western Pine Hill).

7.2 Grand Prize Mine Area

After 22 diamond drill holes in this area it can be concluded that:

1. There is extensive tin-copper mineralisation on a number of structures but the best grades occur on the Grand Prize Fault.

2. Drilling and bedrock geochemistry during 1984-85 have limited the mineralised strike extent of the Grand Prize Fault within EL 42/71 to 1 km.

3. The grade of the mineralisation on the Grand Prize Fault increases with depth.

4. Extending from 2050 RL to 1900 RL the Grand Prize Fault mineralisation has an indicated size of 0.9 million tons at an average grade of 0.8% Sn and 0.7% Cu (not an ore reserve figure) over a strike length of 700m, width 150m and true width of 2.5m.

5. There is little encouragement for a carbonate replacement style deposit within carbonated serpentinite.

6. The only carbonate-replacement mineralisation in the Dundas Group sedmiments occurs within

the Red Lead Conglomerate. Bulk grades of up to 60m (horizontal width) at 0.12% Sn (GP8) occur but are not economic. However a number of higher grade, local intersections in the Red Lead Conglomerate not correlatable with a structure indicate that ore grade mineralisation in the Red Lead Conglomerate may be possible, in particular adjacent to the Grand Prize Fault.

7. As yet no drill hole has intersected the Red Lead Conglomerate in contact with the Grand Prize Fault. The Grand Prize Fault has not been intersected below the Red Lead Conglomerate's contacts with the hangingwall or footwall of the Grand Prize Fault, with the possible exception of the GP6 intersection. The implications of this are that:

a) The grade of mineralisation in the Grand Prize Fault may improve below and within the Red Lead Conglomerate's intersection with the fault. A possible example of improved grade within the conglomerate/fault contact zone occurs in drill hole S969 where the Grand Reward Fault occurs adjacent to the Red Lead Conglomerate and grades at 3m horizontal width at 5.21% Sn. Elsewhere the Grand Reward Fault intersections all grade at less than 0.1% Sn.

b) If ore grade mineralisation occurs within the Red Lead Conglomerate of up to 10m width adjacent to the Grand Prize Fault then not only could the tonnage potential of the Grand Prize Fault double but it would also make the mineralised fault zone a more attractive mineable width. Without such increases in thickness or ore grade of the known mineralisation the economics of this mineralised body are marginal because it is both thin and deep (200m below plain level).

8. Calculations of the estimated tonnage potential were made on the basis that the mineralised fault intersection of drill hole GP7 was the Grand Prize Fault. Structural contours indicate that this drill hole did not intersect the Grand Prize Fault but intersected a mineralised structure on the hangingwall of the Grand Prize Fault and was completed in the hangingwall of the Grand Prize Fault.

To confirm and possibly improve the estimated tonnage potential of the Grand Prize Fault, it is suggested that drill hole GP7 be extended 100m to intersect the Grand Prize Fault. This intersection would also test a mineralised section of the Grand Prize Fault below the Red Lead Conglomerate. If improved grades are found within this intersection, the potential for improved mineable grades at depth, mineable widths (adjacent to the Red Lead Conglomerate) and an increase in the tonnage potential must be considered in future programs.

7.3 Great Northern Area

The potential for a sulphide-rich carbonate replacement tin orebody is highlighted by outcropping carbonate-bearing units and possibly zoned, fracture-controlled base metal sulphide mineralisation, together with a corresponding broad magnetic anomaly and EM37 anomalies.

One diamond drill hole 500m deep, together with down hole EM to test for "near misses", is proposed to test the combined magnetic-EM anomaly here. This hole should be drilled with helicopter support in January-February 1986.

7.4 Western Pine Hill

This area, characterised by Sn-As soil geochemical anomalies, is prospective for stanniferous fracture-controlled and carbonate-replacement pyrrhotite mineralisation as well as tin skarns. There is some doubt as to whether the soil anomalies in this area are from bedrock or alluvially-derived from greisenised granite. A program of limited bedrock sampling is recommended to clarify the source of the tin anomalies.

REFERENCES

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053

GOLD FIELDS EXPLORATION PTY. LIMITED

123054

APPENDIX 1

1984/85 Expenditure and 1985/86 Budget

054

GOLD FIELDS EXPLORATION PTY. LIMITED

123055

EXPENDITURE - 12 MONTHS TO END MAY, 1985

GRAND PRIZE

GEOLOGY -	Salaries	4,168	33,998
	Salary on-costs	312	2,394
	Transport	72	2,135
	Miscellaneous	25	160
	Outside contractors	680	4,102
	Travel	-	619
	Stores	51	1,697
		5,308	45,105
GEOPHYSICS -	Transport	-	288
	Outside Contractors	-	18,157
		-	18,445
GEOCHEMISTRY -	Assays	3,739	6,057
	Outside contractors	-	11,231
		3,739	17,288
DRILLING -	Transport	-	685
	Assays	-	1,052
	Outside contractors	-	47,757
	Stores	-	2,376
		-	51,870
LAND ACQUISITION -	Miscellaneous	51	51
	Outside contractors	30	30
		81	81
SITE PREPARATION -	Outside contractors	-	14,641
SURVEYING-	Outside contractors	-	562
LABORATORY COSTS		254	352
INDIRECT MOTOR VEHICLE EXPENSES		476	3,502
		9,858	151,846

05.

GOLD FIELDS EXPLORATION PTY. LIMITED

123056

GRAND PRIZE - BUDGET 1985/86

		$
1.	Salaries, wages and benefits	9,800
2.	Travel and Accommodation	500
3.	Consultants and contractors	20,000
4.	Sample preparation and analysis	1,000
5.	Diamond drilling	34,100
6.	Stores	300
7.	Depreciation on vehicles, plant	2,000
8.	Tenement costs	700
9.	Office costs	500
	TOTAL	$ 68,900

GOLD FIELDS EXPLORATION PTY. LIMITED

123057

APPENDIX 2

Rock Chip and Bedrock Sample Descriptions and Assays

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

COLLECTED BY: Nick. Paltock

PROJECT: EL 42/71 PROSPECT: Grand Prize SAMPLE STORAGE REQ'D: LABORATORY: Reniron DATE DISPATCHED: Oct 84

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

SAMPLE NUMBER	LOCATION		DESCRIPTION	ANALYSES								
			Depth(m)	Sn	As	Cu	Pb	Zn				
13521	8100W	1400S	4.8 greenish clays & brown r.f. fragments	<10	<10	50	20	160				
522		1425S	4.5 dark green clay w/rock	<10	<10	15	<10	60				
523		1450S	3.8 " " " " & ī brn sections	20	<10	15	<10	50				
524		1475S	3.8 " " " " " " "	10	<10	20	210	90				
525		1500S	4.4 light tan talc w/rock & dk green clays talc	10	<10	20	<10	30				
526		25	5.4 dark green & multi coloured w/rock	20	<10	20	<10	30				
527		50	5.6 green clays white to green clay w/rock	20	<10	15	<10	70				
528		75	6.2 dk grey/green w/rock & qtz veining	20	10	20	<10	330				
529		1600S	4.5 green & tan clayey w/rock	10	<10	5	<10	420				
3530		25	6.0 tan clay w/rock	20	<10	35	<10	410				
531		50	6.5 " " "	<10	<10	25	<10	300				
532		75	7.3 " " "	10	<10	80	<10	230				
533		1700 S	4.3 tan clays & off white to grey/brn w/rock	20	<10	85	20	170				
534		25	1.8 " " " w/rock	20	<10	30	10	160				
535		50	2.4 red brown clayey w/rock ī black light brn sections	<10	70	345	50	430				
536		75	4.8 red/brown clayey w/rock under biscuit green clays	20	20	160	<10	780				
537		1800 S	3.6 " " " " " tan clays	<10	90	90	20	200				
538		25	0.8 " " " " ī black sections	<10	<10	120	<10	110				
539		50	1.0 " " " " under tan clays	<10	<10	150	20	190				
3540		75	3.1 tan " "	50	<10	55	30	400				
541		1900 S	5.0 red/brn " under tan clays	<10	<10	110	<10	220				

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

COLLECTED BY: Nick Pollock

PROJECT: EL 42/71 PROSPECT: Grand Prize SAMPLE STORAGE REQ'D: LABORATORY: Ramsay DATE DISPATCHED: Oct 84

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

SAMPLE NUMBER	LOCATION		Depth (m)	DESCRIPTION	ANALYSES								
					Sn	As	Cu	Pb	Zn				
13542	3100 W	19255	2·6	Red/brown w/rock under tan clays	<10	<10	50	<10	470				
543		50	5·8	tan clay w/rock & tan clays	<10	<10	20	<10	790				
544		75	5·8	Mainly tan clays ē fragments red brown clays	<10	<10	100	10	220				
545		2000 S	6·4	tan/khaki w/rock	<10	40	180	<10	490				
546		25	1·1	red brn clay ē w/rock (S side road cut)	<10	90	10	<10	80				
547		50	0·4	" " " "	<10	<10	55	<10	70				
548		75	2·4	" tan " "	<10	80	80	<10	130				
549		2100 S	2·4	" "/brown clayey w/rock ē black sections	<10	<10	105	10	150				
13550		25	3·2	tan clayey/rock	<10	<10	70	<10	90				
551		50	6·0	red brown clayey w/rock ē black sections	<10	<10	120	10	100				
552		75	6·8	" " " " " "	<10	<10	100	15	140				
553		2200 S	3·5	red/tan " "	<10	<10	95	<10	90				
13554	3200 W	2000 S	5·1	Mainly tan clayey w/rock	<10	<10	105	10	90				
555		75	6·0	" " " ē black sections	<10	<10	150	<10	150				
556		50	4·6	tan slightly green hue slightly gritty, clayey w/rock	<10	<10	65	<10	290				
557		25	6·5	tan clayey w/rock ē red brown, brown & gray sections	<10	<10	65	<10	390				
558		1900 S	6·1	tan brown & khaki clay w/rock	<10	<10	85	<10	130				
559		75	6·0	" " " " "	<10	<10	120	<10	240				
13560		50	5·1	tan clays	<10	<10	135	<10	270				
561	SW 3200 W	18255	4·2	tan red brn clayey W rock	<10	<10	105	<10	390				

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

COLLECTED BY: Nick Poltock

PROJECT: EL 42/71 PROSPECT: Grand Prize SAMPLE STORAGE REQ'D: LABORATORY: Renison DATE DISPATCHED: Oct 84

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

SAMPLE NUMBER	LOCATION		Depth(m)	DESCRIPTION	ANALYSES Sn	As	Co	Pb	Zn				
13562	3200 W	1800 S	3·8	Mainly red/brown clayey w/rock	<10	<10	225	<10	420				
63		75	4·7	khaki r " " " "	<10	<10	95	<10	360				
64		50	4·0	" " " " " & black sections	<10	<10	380	<10	280				
65		25	5·2	tan/brown " "	<10	30	225	<10	430				
66		1700 S	6·7	tan clayey w/rock + maroon r/f	<10	10	345	<10	280				
67		75	0·5	" w/rock (in drain on E side of road)	<10	<10	45	<10	450				
68		50	2·6	tan clayey w/rock (on bank " " ")	<10	X 30	225	<10	220				
69		25	3·0	" " " "	<10	30	50	20	380				
13570		1600 S	2·7	tan khaki clayey w/rock	<10	120	15	10	760				
71		75	3·0	" " " " under green clays	<10	30	10	<10	520				
72		50	4·2	tan slightly talco-clayey w/rock under khaki grn clays	<10	<10	30	<10	230				
73		25	3·0	tan khaki clay w/rock + gravels	<10	<10	45	10	170				
74		1500 S	5·1	khaki green clayey w/rock	<10	<10	10	<10	150				
75		75	7·4	tan/grey gritty w/rock under tan green grey clays	<10	<10	60	<10	60				
76		50	7·4	green w/rock green clays	<10	<10	95	<10	90				
77		25	6·2	" clays & r/f	<10	<10	45	<10	50				
78		1400S	5·2	tan clayey w/rock	<10	<10	40	<10	100				
79		75	4·8	" " "	<10	<10	45	<10	170				
13580		50	6·4	" slightly gritty clayey w/rock	<10	<10	135	<10	140				
81		25	4·4	" " " " w/rock & blk greens fragments	<10	<10	130	<10	100				
82		1300 S	6·1	" " " " " " "	<10	<10	200	<10	150				

060

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

COLLECTED BY: Nick Pollock

PROJECT: EL 42/71 PROSPECT: Grand Prize SAMPLE STORAGE REQ'D: LABORATORY: Ramsay DATE DISPATCHED: Oct 84

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

SAMPLE NUMBER	LOCATION		Depth (m)	DESCRIPTION	ANALYSES Sn	As	Cu	Pb	Zn	Ag			
13583	3200W	1275S	7.0	tan clayey w/rock ~ green +/f	60	<10	85	10	170				
13584		1250S	4.7	" " " " ~ green & black sections	<10	<10	75	<10	110				
13585	2800W	1200S	1.7	tan clayey w/rock	<10	<10	10	<10	130	<0.01			
86		25	3.6	" " "	<10	<10	20	<10	90	<0.01			
87		50	4.7	" " "	<10	<10	25	<10	130	<0.01			
88		75	4.0	dark green " " under tan clays	<10	<10	30	<10	60	<0.01			
89		1300S	6.5	" " " " ~ white & grey sections	<10	<10	45	<10	160	<0.01			
13590		25	4.4	light gritty khaki green w/rock under dark gre clays	<10	<10	155	<10	70	<0.01			
91		50	5.0	" " " " " " " "	<10	<10	25	<10	60	<0.01			
92		75	4.6	grey slightly gritty clayey w/rock	<10	<10	<10	<10	40	<0.01			
93		1400S	4.5	tan clayey w/rock	<10	<10	70	<10	40	<0.01			
94		25	4.0	" " "	<10	<10	175	<10	40	<0.01			
95		50	4.6	" " " ~ brown light green sections	<10	<10	15	<10	30	<0.01			
96		75	3.8	" " " ~ many black veinlets	<10	<10	130	<10	60	<0.01			
97		1500S	5.3	" " " under maroon gritty clays	<10	<10	140	<10	80	<0.01			
98		25	5.0	" " "	<10	<10	35	<10	60	<0.01			
99		50	5.8	" & khaki banded clayey w/rock	<10	<10	80	20	180	<0.01			
13600		75	4.2	khaki green clayey w/rock	<10	<10	85	<10	40	<0.01			
01		1600S	4.6	tan clayey w/rock	<10	<10	75	<10	180	<0.01			

1230611

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

PROJECT: EL 42/71 PROSPECT: Grand Prize SAMPLE STORAGE REQ'D: LABORATORY: Renison COLLECTED BY: Nick. Poltock

1:250,000 SHEET: TYPE OF SAMPLE: Bedrock SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE DISPATCHED: Oct 84 DATE RECEIVED:

SAMPLE NUMBER	LOCATION		Depth	DESCRIPTION	ANALYSES Sn	As	Cu	Pb	Zn	Au			
13602	2700W	1600S	4.5	tan and green/khaki w/rock	<10	<10	20	20	220				
03		25	7.7	dark green clays & white & grey bands	<10	<10	10	<10	150				
04		50	7.4	tan clays	<10	<10	10	<10	140				
05		75	2.6	" " w/rock in base of sluiced area	<10	<10	20	<10	120				
06		1700S	4.1	tan/green & brown clayey w/rock	<10	<10	5	<10	60				
07		25	5.6	tan & brown clayey w/rock	<10	<10	10	<10	520				
08		50	2.4	red/tan clayey w/rock	<10	<10	5	<10	230				
09		75	1.6	" " " "	<10	<10	15	<10	80				
13610		1800S	2.4	tan " "	<10	<10	25	<10	210				
11		25	3.8	" " "	<10	<10	70	<10	120				
12		50	2.2	tan to red brown " "	<10	<10	70	<10	150				
13		75	1.2	red brown " "	<10	<10	105	20	210				
14		1900S	1.0	" " " "	<10	<10	195	10	250				
15		25	1.7	" " khaki " "	<10	<10	130	20	450				
16		50	0.8	tan khaki " " under tan clays	<10	<10	165	20	870				
17		75	2.6	" " " "	<10	<10	100	20	520				
13618		2000S	4.4	red/brown " "	<10	<10	150	10	1180				
13619	2800W	2000S	2.6	Maroon w/rock	<10	<10	160	50	240	<0.01			
13 20		1975S	0.4	" " "	390	40	720	290	500	<0.01			
13621		1950S	3.0	tan brown clayey w/rock	<10	<10	65	60	270	<0.01			

062

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

PROJECT: EL 42/71 PROSPECT: Grand Prize SAMPLE STORAGE REQ'D: LABORATORY: Ranison DATE DISPATCHED: Oct 84

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

SAMPLE NUMBER	LOCATION		Depth (m)	DESCRIPTION	ANALYSES								
					Sn	As	Co	Pb	Zn	Au			
13622	2800W	1925S	4·0	tan clayey w/rock	<10	290	150	70	320	<0·01			
23		1900S	3·2	" /light khaki gritty w/rock ??(added route)	50	50	175	50	350	<0·01			
24		75	7·4	" clayey w/rock	<10	20	520	20	340	<0·01			
25		50	4·5	" " "	<10	<10	110	10	210	<0·01			
26		25	6·1	red tan " "	<10	<10	50	<10	150	<0·01			
27		1800S	7·2	tan to light brown clayey w/rock	<10	<10	95	<10	270	<0·01			
28		75	8·0	" clayey w/rock ī khaki streaked	<10	<10	20	<10	500	<0·01			
29		50	4·8	khaki " "	<10	<10	15	<10	660	<0·01			
13630		25	5·7	tan " "	<10	<10	50	<10	170	<0·01			
31		1700S	8·6	" " " ī dark gray & dark brown sections	<10	20	100	20	660	<0·01			
32		75	6·8	" " "	<10	<10	160	30	750	<0·01			
33		50	3·8	" khaki clayey weathered rock	<10	<10	15	<10	350	<0·01			
13634		1625S	4·8	" clays ī green & brown r.f.	<10	<10	55	20	270	<0·01			
13635	2900W	1600S	4·2	tan & green slightly gritty clayey w/rock	<10	<10	25	<10	160				
36		25	6·2	tan brown gritty w/rock & green clays	<10	<10	<5	<10	260				
37		50	6·0	green clayey w/rock	<10	<10	45	<10	490				
38		75	7·0	maroon " "	<10	<10	60	40	330				
39		1700S	5·9	tan/khaki " "	<10	<10	30	<10	750				
13640		25	8·7	" " " "	<10	220	180	<10	250				
13641		1750S	9·2	" clays ī khaki & maroon w/rock	<10	40	205	<10	150				

123063

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

COLLECTED BY: Nick Podstock

PROJECT: EL 42/71 PROSPECT: Grand Prize SAMPLE STORAGE REQ'D: LABORATORY: Ramsay DATE DISPATCHED: Oct 84

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

SAMPLE NUMBER	LOCATION		Depth(m)	DESCRIPTION	ANALYSES Sn	As	Cu	Pb	Zn	Au			
13642	2900W	1775S	9.0	khaki clayey w/rock	<10	70	50	20	310				
43		1800S	5.6	tan/brown " "	<10	50	25	<10	190				
44		25	1.7	red " & black weathered rock under & tan clay	<10	<10	20	<10	100				
45		50	4.5	" " " " " " " "	<10	<10	40	<10	250				
46		75	1.6	maroon, cream & black w/rock	<10	<10	90	10	370				
47		1900S	3.7	tan clayey w/rock & some blk & maroon w/rock	<10	10	145	<10	360				
48		25	1.3	tan & maroon clayey w/rock	<10	20	215	70	850				
49		50	4.4	" " " "	<10	<10	165	10	510				
13650		75	1.9	" & red brown " "	<10	60	160	100	360				
13651		2000S	2.1	" clayey w/rock.	<10	<10	140	20	230				
13652	3000W	2000S	1.7	maroon clayey w/rock & black sections	<10	20	130	10	140	<0.01			
53		75	2.2	light khaki clayey " & tan clays & dark brown rock frag.	<10	1110	790	490	1470	<0.01			
54		50	2.4	tan clayey "	<10	20	120	<10	378	<0.01			
55		25	2.3	tan, red brown clayey w/rock	<10	<10	140	20	450	<0.01			
56		1900S	4.3	maroon, cream and tan clayey w/rock	120	<10	145	20	220	<0.01			
57		75	8.1	tan clayey w/rock	<10	130	150	60	440	<0.01			
58		50	1.2	maroon/tan w/rock ??	<10	430	300	100	480	<0.01			
59		25	4.4	tan & red brown clayey w/rock	<10	<10	95	120	510	<0.01			
13660		1800S	7.7	tan clayey w/rock	<10	<10	10	<10	970	<0.01			
13661		1775S	9.6	light tan/green slightly gritty clayey w/rock	<10	<10	5	<10	260	<0.01			

064

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

COLLECTED BY: Nick Poltock

PROJECT: EL 42/71 PROSPECT: Grand Prize SAMPLE STORAGE REQ'D: LABORATORY: Renison DATE DISPATCHED: Oct 84

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

SAMPLE NUMBER	LOCATION		Depth	DESCRIPTION	ANALYSES Sn	As	Cu	Pb	Zn	Ag			
13662	3000W	1750S	8·2	tan & black slightly gritty clayey w/rock	<10	<10	10	10	940	<0·01			
63		75	7·3	tan & red brown " " " "	<10	20	15	10	390	<0·01			
64		1700 S	4·2	" clayey w/rock & light green sections	20	60	10	210	1010	<0·01			
65		75	6·1	& light khaki slightly gritty clayey w/rock	<10	<10	65	80	200	<0·01			
66		50	5·2	" " " " " " "	<10	20	45	10	280	<0·01			
67		25	4·2	dark green clayey w/rock	<10	<10	5	10	520	<0·01			
68		1600 S	5·7	khaki green " "	<10	<10	15	<10	340	<0·01			
69		75	7·2	tan clayey w/rock & dark brown & light green sections	<10	<10	20	10	280	<0·01			
13670		50	5·1	" " " under khaki green clays	<10	<10	15	10	80	<0·01			
71		25	3·6	" & brown clayey w/rock under dark green clays	<10	<10	20	30	360	<0·01			
72		1500S	2·2	green clayey w/rock	<10	<10	20	<10	70	<0·01			
73		75	2·9	" " "	<10	<10	40	10	90	<0·01			
74		50	3·5	" " "	<10	<10	25	<10	40	<0·01			
75		25	2·6	khaki " " under green clays	<10	<10	35	<10	70	<0·01			
76		1400 S	3·8	green " "	<10	<10	75	<10	50	<0·01			
77		75	3·7	khaki green talc textured w/rock	<10	<10	50	<10	90	<001			
78		50	4·0	" " " " (less talcy)	<10	<10	65	<10	30	<0·01			
79		25	4·7	tan clayey w/rock	<10	<10	265	<10	150	<0·01			
13680		1300 S	6·4	tan khaki clayey w/rock	<10	<10	80	<10	60	<0·01			
81		75	5·9	" slightly gritty clayey w/rock	<10	<10	130	<10	50	<0·01			
13682		1250 S	4·7	" " " " "	<10	<10	60	<10	90	<0·01			

123065

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

COLLECTED BY: Nick Poltock

PROJECT: EL 42/71 PROSPECT: Grand Prize SAMPLE STORAGE REQ'D: LABORATORY: Ramsay DATE DISPATCHED:

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

SAMPLE NUMBER	LOCATION		Depth (m)	DESCRIPTION	ANALYSES Sn	As	Cu	Pb	Zn	Au
13683	3000W	1225 S	5·4	green to khaki clayey w/rock	<10	<10	40	10	130	<0·01
13684	3000W	1200 S	6·3	" " " "	<10	<10	15	<10	210	<0·01
14561	3050W	800 S	3·1	light + dark green w/rock	<10	<10	35	<10	50	
14562	25W	"	1·7	light grn w/rock + fragments	10	<10	<5	<10	40	
63	3000W	"	1·8	dark grey/green w/rock	<10	<10	<5	10	60	
64	2975W	"	5·2	green khaki w/rock under grn clays	<10	<10	<5	<10	50	
65	2950W	"	0·5	grn w/rock close to o/c	10	<10	40	<10	20	
66	2925W	"	0·8	" " " "	<10	10	<5	<10	20	
67	2900W	"	9·0	tan/green clayey w/rock + frag	10	<10	15	<10	30	
68	2875W	"	0·8	light grn w/rock under tan clays	<10	<10	<5	10	20	
69	2850W	"	1·5	red/brown clayey w/rock & blackstreaks	<10	<10	10	30	50	
14570	2825W	"	9·6	tan khaki clayey w/rock	<10	<10	45	20	90	
71	2800W	"	1·7	light tan khaki " under tan clays	<10	<10	<5	10	90	
72	2775W	"	2·0	tan clayey w/rock	10	<10	<5	20	60	
73	2750W	"	5·5	tan grn clayey w/rock under tan clays	<10	<10	<5	30	80	
74	2725W	"	4·9	red brown clayey w/rock	10	<10	<5	20	70	
75	2700W	"	1·4	red brown to khaki w/rock	<10	<10	25	80	70	
76	2675W	"	11·1	light tan clayey w/rock + dark tan flakes	<10	<10	<5	20	70	

066

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

COLLECTED BY: Poltock

PROJECT: EL 42/71 PROSPECT: Grand Prize SAMPLE STORAGE REQ'D: LABORATORY: Rendson DATE DISPATCHED: Jan 1985

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

SAMPLE NUMBER	LOCATION		DESCRIPTION	ANALYSES								
				Sn	As	Cu	Pb	Zn	Au			
14577	1000S	2700W	5.3 tan clayey w/rock	<10	<10	5	10	50	<0.01			
14578		2725W	4.4 " " "	<10	<10	10	60	40	<0.01			
79		2750W	7.8 light-dark grn frachey w/rock	10	<10	5	20	40	<0.01			
14580		2775W	6.1 fawn/tan clayey w/rock	<10	<10	10	50	60	<0.01			
81		2800W	4.9 tan brown clayey w/rock	<10	<10	10	10	70	<0.01			
82		2825W	5.8 " " " "	<10	<10	15	90	80	<0.01			
83		2850W	7.8 " " "	<10	<10	<5	<10	60	<0.01			
84		2875W	3.3 green w/rock under tan green clay	10	<10	<5	70	60	<0.01			
85		2900W	1.9 dark green clayey w/rock	<10	<10	<5	<10	40	<0.01			
86		2925W	1.4 green brown w/rock	10	<10	<5	20	50	<0.01			
87		2950W	0.3 green fresh rock	<10	<10	<5	<10	20	<0.01			
88		2975W	1.5 green/blue w/rock	<10	<10	<5	50	50	<0.01			
89		3000W	1.8 green w/rock under tan clays	<10	<10	<5	<10	30	<0.01			

123067

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

PROJECT: Grand Sky PROSPECT: EL 42/71 SAMPLE STORAGE REQ'D: LABORATORY: Amdel COLLECTED BY: Rock

1:250.000 SHEET TYPE OF SAMPLE: Auger SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE DISPATCHED: Mar 85 DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION	ANALYSES					
					Sn	As	Cu	Pb	Zn
15644	1875S	2600W	2.6 Cav clays - dark grey rock frags.		20	10	205	<10	240
15645	1850S	-	4.2 - as " " " "		<10	<10	200	<10	430
15646	1825S	-	8 Red/brown clayey w/rock in Cramsby.		<10	<10	110	<10	490
15647	1800S	-	6 " " " " " "		120	<10	45	20	480
15648	1775S	"	4.0 " " " " + dark brown sections.		<10	<10	35	<10	200
15649	1750S	-	2.0 " " " " " "		<10	<10	40	<10	390
15650	1725S	-	4.0 " " " " " "		<10	<10	65	<10	200
15651	1700S	-	2.7 Pink/tan/brown clayey w/rock + clays.		<10	<10	20	20	210
15652	1675S	-	4.9 tan clayey w/rock + brown streaks.		<10	<10	5	<10	100
15653	1650S	-	6.7 " " " " " gritty sections		<10	<10	10	<10	220
15654	~~1625S~~ 1600S	*	3.9 tan/grey clayey w/rock with grey gritty grock.		<10	<10	55	<10	190
15655	1600E	-	4.8 tan clayey w/rock + green streaks.		<10	<10	35	<10	70
15656	1575S	-	5.1 - green clayey w/rock.		<10	<10	20	<10	30
15657	1550S	-	6.2 tan clayey w/rock.		<10	<10	10	<10	130
15658	1525S	-	5.4 " " " "		<10	<10	<5	<10	140
15659	1500S	-	4.4 Blue/green " " "		<10	<10	5	<10	70
15660	1475S	-	7.9 tan clayey w/rock.		<10	<10	19	<10	90
15661	1450S	-	7.6 Khaki/olive " " "		10	<10	45	<10	160
15662	1425S	-	4.3 Brown fleecky clay " "		<10	<10	<5	<10	110
15663	1400S	-	4.4 mottled blue/green/white clayey rock		<10	<10	35	<10	40
15664	1375S	-	6.1 Brown clayey w/rock.		<10	<10	<5	<10	100

FILE COPY

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

PROJECT: Grant Vige PROSPECT: SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

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

SAMPLE NUMBER	LOCATION		DESCRIPTION	ANALYSES				
				Sn	As	Cu	Pb	Zn
15665	1350 S.	2600W	7-2 Mottled grey/grey clayey w/rock.	<10	<10	25	<10	30
15666	1325S	-	5-8 Orange clayey w/rock + black shreds	<10	<10	40	<10	180
15667	1300 S.	-	5-8 tan clayey w/rock	<10	<10	70	<10	160
15668	1275S	-	7-2 - - - -	<10	<10	60	<10	140
15669	1250S	-	4-1 - /brown - - -	<10	<10	55	<10	130
15670	1225S	-	5-5 Orange/tan - - -					
15671	1200S	-	7-7 - - - -					
15672	1175S	-	- - - -					
15670	2575W	1200S	5-5 Orange/tan clayey w/rock.	10	<10	125	<10	130
15671	2550W	-	7-7 - - - -	<10	<10	50	<10	130
15672	2525W	-	6-9 Orange - - - -	10	<10	60	<10	70
15673	2500W	-	7-5 tan/brown - - - -	<10	<10	100	<10	110
15674	2600W	1200S	3-8 tan gritty clayey w/rock.	<10	<10	35	<10	100
15675	2625W	-	7-6 light tan clayey w/rock with light + dark grey rocks.	<10	<10	90	<10	80
15676	2650W	-	7-8 - - - - - - - -	<10	<10	45	<10	70
15677	2675W	-	4-0 green cream flaky w/rock tan clays.	<10	<10	20	<10	50
15678	2700W	-	3-4 tan - - - - - -	<10	<10	<5	<10	70

123069

069

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

PROJECT Grand Ridge PROSPECT: SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

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

SAMPLE NUMBER	LOCATION		DESCRIPTION	ANALYSES							
				Sn	As	Co	Pb	Zn	Au		
15679	2725W	1200S	3.5 grey w/rock muds/clay/s	<10	<10	65	<10	110			
15680	2750W	"	1.8 clay w/rock with brown flecks	<10	<10	<5	<10	90			
15681	2775W	"	5.5 " gritty w/rock.	<10	<10	<5	<10	90			
15682	2800W	"	2.5 clay gritty/clay w/rock at base of workings	<10	<10	<5	<10	40			
15683	2850W	"	5.4 " " " + green r/frags	20	<10	<5	<10	60			
15684	2875W	"	5.9 " " " "	<10	<10	<5	<10	30			
15685	2900W	"	4.7 green " "	<10	<10	<5	<10	20			
15686	2925W	"	3.8 " " "	<10	<10	10	<10	70			
15687	2950W	"	5.7 clay " "	<10	<10	10	<10	170			
15688	2975W	"	5.8 clay c w/rock.	10	<10	20	10	220			
15689	11755	2600W	4.3 Brown clayy w/rock.	<10	<10	85	<10	130	<0.01		
15690	11505	"	5.3 Orange/clay " "	<10	<10	130	10	100	<0.01		
15691	11255	"	5.0 light green/grey " " + orange tinge.	10	<10	105	<10	110	<0.01		
15692	11005	"	3.0 Orange/buff mottled c. w/rock	10	<10	65	<10	80	<0.01		
15693	10755	"	2.1 " " " " "	<10	<10	10	<10	40	<0.01		
15694	10505	"	1.7 c/olive brown " " "	10	<10	<5	<10	170	<0.01		
15695	10255	"	3.2 " /clay " " "	<10	<10	30	<10	120	<0.01		
15696	10005		9.6 clay clayy w/rock.	<10	<10	65	<10	170	<0.01		

1230 70

070

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

PROJECT: Grant Hill PROSPECT: SAMPLE STORAGE REQ'D: LABORATORY: Perth DATE DISPATCHED: March 85

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

SAMPLE NUMBER	LOCATION		DESCRIPTION	ANALYSES						
										AU
15697	2625W.	10005	3.0 Cream clayey rock.		<10	<10	152	10	120	<0.01
15698	2650W	"	3.9 Orange/brown. " "		10	<10	185	<10	90	<0.01
15699	2675W	"	3.3 " /Cream " " " (in creek bed)		<10	<10	30	<10	80	<0.01
15700	9755	2600W	7.2 Orange/Cream clayey rock.		<10	<10	20	<10	60	<0.01
16151	9505	"	6.9 " brown " "		10	<10	45	<10	90	<0.01
16152	9255	"	3.6 " / " " " " + blasfrom fleaky frag.		10	<10	100	10	90	<0.01
16153	9005	"	7 Cream clayey rock - in creek bed.		20	<10	35	<10	120	<0.01
16154	8755	"	3.6 light Cream/olive clayey rock.		<10	<10	<5	<10	70	<0.01
16155	8505	"	3.5 Cream rock.		<10	<10	<5	<10	80	<0.01
16156	8255	"	1.7 Rusty brown clayey rock		10	<10	10	<10	90	<0.01
16157	8005		3.0 " " " "		<10	<10	5	<10	40	<0.01
16158	2625W	8005	2.0 Olive/brown clayey rock.		<10	<10	155	<10	40	
16159	2650W	"	.6 green/buff fleaky rock.		<10	<10	20	<10	50	
16160	7755	2600W	Rock chip in creek bed.		<10	<10	2010	<10	120	<0.01
16161	7505	"			<10	<10	190	20	60	<0.01

123071

071

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

PROJECT: Grand Style PROSPECT: SAMPLE STORAGE REQ'D: LABORATORY: Normanton DATE DISPATCHED: 10.01.85

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

SAMPLE NUMBER	LOCATION		DESCRIPTION		ANALYSES							
					Sn	As	Co	Pb	Zn	Au		
16162	7255	2600W	4.0 orange/tan clayey/ochrock.		<10	<10	300	<10	50	<0.01		
16163	7005	"	1.6 " /brown " " " .		<10	<10	35	<10	70	<0.01		
16164	6755	"	1.7 " " " " " .		<10	<10	261	<10	40	<0.01		
16165	6505	"	2.0 " " " " " .		<10	<10	22	<10	70	<0.01		
16166	6255	"	4.9 " " " " " .		<10	<10	50	<10	60	<0.01		
16167	6005	"	4.0 Dark green/grey " " " .		<10	<10	25	<10	60	<0.01		
16168	5755	"	3.2 Orange - Brown/clay " " " .		<10	<10	5	<10	70	<0.01		
16169	5505	"	1.6 " " " " " .		<10	<10	10	<10	70	<0.01		
16170	5255	"	3.3 " " clayey ochrock.		<10	<10	10	<10	90	<0.01		
16171	5005	"	1.8 " " " " " .		<10	<10	<5	<10	90	<0.01		
16172	2625W	600S	.6 Orange/Brown ochrock.		<10	<10	<5	<10	70	<0.01		
16173	2650W	"	.6 Dark blue/green/fragments of clay.		<10	<10	25	<10	50	<0.01		
16174	2675W	"	6.2 Orange/Brown ochrock.		20	<10	<5	<10	50	<0.01		
16175	2700W	"	3.7 Olive/brown clayey " " .		10	<10	<5	<10	60	<0.01		
16176	2725W	"	1.7 " " " " " .		<10	<10	<5	<10	100	<0.01		
16177	2750W	"	7.3 Brown " " " .		10	<10	<5	<10	30	<0.01		
16178	2775W	"	4.2 Pinkish/brown " " " .		<10	<10	5	<10	50	<0.01		
16179	2800W	"	5.7 Reddish/ " " " " .		10	<10	<5	<10	20	<0.01		
16180	2825W	"	3.2 Brick/red " " " " .		10	<10	<5	<10	30	<0.01		

123072

072

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

PROJECT: Grand Hoye PROSPECT: SAMPLE STORAGE REQ'D: LABORATORY: Amdel COLLECTED BY: Pollock

1:250.000 SHEET: TYPE OF SAMPLE: Wacker. SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED: DATE DISPATCHED: March 85

SAMPLE NUMBER	LOCATION		DESCRIPTION	ANALYSES							
				Sn	As	Cu	Pb	Zn	Au		
16181	2850W	600S	5.1 Brick red clayey w/rock.	10	<10	<5	<10	>40	<0.01		
16182	2875W	"	8.2 Olive grey/brown " "	10	<10	<5	<10	30	<0.01		
16183	2900W	"	5.0 Mottled green + buff " "	10	<10	<5	<10	30	<0.01		
16184	2925W	"	4.7 Khaki/brown clay " "	10	<10	15	<10	40	<0.01		
16185	2950W	"	4.0 Olive/brown " " "	10	<10	<5	<10	30	<0.01		
16186	2975W	"	2.8 - clayey w/rock + grenish tinge.	10	<10	55	<10	30	<0.01		
16187	3000W	"	.6 Dark grey/grey w/rock.	20	<10	<5	<10	30	<0.01		
16188	3025W	"	1.4 Olive/green clay " "	10	<10	<5	<10	30	<0.01		
16189	3050W		1.8 " " " "	10	<10	40	<10	50	<0.01		
16190	2825W	400S	1.5 Grenish w/rock.	<10	<10	<5	<10	60			
16191	2850W	"	Rock Chip.	10	<10	<5	<10	60			
16192	2875W	"	" "	N.ES →		<5	<10	60			
16193	2900W	"	" "	10	<10	10	<10	60			
16194	2925W	"	" "	10	<10	20	<10	60			
16195	2950W	"	" "	10	<10	<5	<10	50			
16196	2975W	"	" "	10	<10	5	<10	60			
16197	3000W	"	" "	10	<10	<5	<10	60			
16198	2800W	"	2.1 Orange/Brown c.w/rock.	10	<10	405	<10	70			
16199	2775W	"	4.8 Reddish Brown c.w. rock-Black staining	100	<10	35	20	150			

123073

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

PROJECT: Grand Prize PROSPECT: SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

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

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES Sn	As	Cu	Pb	Zn	Ag
~~16200~~	2750W	400S	2-1 Brick red clayey c/rock.			<10	<10	125	<10	30	
16001	2725W	"	2-3 Orange/brown " " " .			<10	<10	270	<10	70	
16002	2700W	"	1-6 Cream c/rock.			<10	<10	280	<10	70	
16003	2675W	"	1-8 Khaki clayey c/rock.			<10	<10	75	<10	90	
16004	2650W	"	2-0 Y + /Brown " " " .			<10	<10	20	<10	100	
16005	2625W	"	1-1 Cream/grey c/rock.			<10	<10	220	<10	40	
16006	2600W	"	1-8 Olive/brown " " .			<10	<10	25	<10	50	
			/ / / .								
16007	4255	2600W	1-5 Cream/grey c/rock.			<10	<10	10	<10	60	<0.01
16008	4505	"	1-9 Olive/brown " " .			<10	<10	165	10	60	<0.01
16009	4755	"	1-8 Burnt blue/green " " .			<10	<10	275	20	60	<0.01
			~ .								
16010	2005	"	1-2 Red/brown clayey c/rock.			<10	<10	100	20	120	<0.01
16011	2255	"	1-9 " " " " .			10	<10	45	60	190	<0.01
16012	2505	"	5-6 " " " " .			20	<10	40	<10	160	<0.01
~~16013~~ 16013	2755	"	8-9 Dark brown " " " .			20	<10	40	<10	120	<0.01
16014	3005	"	2-2 Grey gritty c.w. rock under olive/green clays.			<10	<10	195	<10	160	<0.01
16015	3255	"	2-1 " " " " " with dark brown streaks.			10	<10	30	<10	150	<0.01
16016	3505	"	5-3 Y + /Brown c.w. rock " " " " .			10	<10	75	<10	140	<0.01
~~16017~~ 16017	3755	"	4-3 " " " " " " " .			10	<10	<5	<10	60	<0.01

07

07.3

1230 74

074

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

PROJECT: Grant Vale PROSPECT: SAMPLE STORAGE REQ'D: LABORATORY: DATE DISPATCHED:

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

SAMPLE NUMBER	LOCATION		DESCRIPTION	ANALYSES							
						Sn	As	Cu	Pb	Zn	
16~~[illegible]~~018	2575W	400S	1.4 Cav clayy wstock.			<10	<10	65	<10	60	
16~~[illegible]~~019	2550W	-	1.2 - 1Khaki c.wstock, rust brown streaks			<10	<10	185	<10	90	
16~~[illegible]~~020	2525W	-	1.1 Cav gritty c.wstock.			<10	<10	10	10	150	
16~~[illegible]~~021	2500W	-	3.2 - - - - + dark brown streaks.			10	<10	100	<10	270	
16~~[illegible]~~022	2475W	-	5-0 Cav/cream flaky gritty clayy wstock.			<10	<10	15	<10	110	
16023	2450W	-	1-0 - Khaki c.wstock + Cav clays.			30	<10	170	100	390	
16024	2425W	-	-4 Cav gritty wstock			<10	<10	140	40	340	
16025	2400W	-	2-0 - Green gritty. -			<10	<10	55	<10	120	
~~16026~~	~~2375W~~										
16026	375S	2400W	2.0 Cav clayy wstock + dark brown streaks			<10	<10	50	<10	110	
16027	350S	-	1.5 - - - - -			<10	<10	75	<10	290	
16028	3255	-	7.5 Green wstock under Cav clayy wstock.			<10	<10	25	<10	140	
16029	300S	-	3.0 Cav/buff flaky clayy wstock.			<10	<10	30	<10	180	
16030	2375W	400S	3.2 Cav clayy wstock with brown streaks			<10	<10	80	<10	90	
16031	2350W	-	.7 light Cav/Khaki gritty clayy wstock - -			<10	<10	20	<10	100	
16032	2325W	-	1.0 Cav/brown gritty wstock.			<10	<10	35	20	200	
16033	2300W	-	1.1 - - - - + streaks			<10	<10	20	<10	90	

123075

075

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

PROJECT: Grand Hayle PROSPECT: SAMPLE STORAGE REQ'D: LABORATORY: Reminex COLLECTED BY: Pocock

1:250,000 SHEET: TYPE OF SAMPLE: Wacker SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED: DATE DISPATCHED: 1st March 83

SAMPLE NUMBER	LOCATION		DESCRIPTION	ANALYSES								
				Sn	As	Cu	Pb	Zn				
16034	4255	2400N	.8 grey w/rock mod Can/grey clays	<10	<10	25	<10	200				
16035	4505	"	.9 Can/brown gritty w/rock.	<10	<10	80	<10	170				
16036	4755	"	2.7 " " " " + brown streaks	<10	<10	50	<10	180				
16037	5005	"	3.9 " " " " "	<10	<10	25	<10	150				
16038	5255	"	1.4 Can clays + Khaki/grey floaters?	N.E.S	N.E.S.	75	10	160				
16039	5505	"	1.0 Brown C. w/rock + Brown streaks	<10	<10	465	10	230				
16040	5755	"	.8 - Khaki w/rock?	10	<10	150	<10	210				
16041	6005	"	.9 " " " ?	<10	<10	980	<10	140				
16042	6255	"	.6 Can/Khaki gritty w/rock.	<10	<10	255	<10	200				
16043	6505	"	1.4 - Brown w/rock.	<10	<10	175	<10	220				
16044	6755	"	1.5 Olive/grey w/rock under Can clays	<10	<10	135	<10	140				
16045	7005	"	2.9 Can/brown gritty C w/rock	<10	<10	160	<10	260				
16046	7255	"	1.0 " " " "	<10	<10	60	<10	170				
16047	7505	"	.7 light grey/grey w/rock mod Can clays	<10	<10	165	50	230				
16048	7755	"	4.8 Can/brown C. w/rock.	<10	<10	90	<10	340				
16049	8005	"	4.4 light grey/grey w/rock mod Can clays	30	<10	65	30	230				
16050	8255	"		<10	<10	25	<10	150				
16369	9005.	2400N	3.8 Grey w/rock under Can clays	<10	<10	265	<10	120				
16370	8755.	"	3.0 " " " "	<10	<10	165	10	170				
16371	8505.	"	1.4 Can w/rock.	<10	<10	140	10	160				

1230076

076

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

PROJECT: Grand Inga PROSPECT: SAMPLE STORAGE REQ'D: LABORATORY: Rennison DATE DISPATCHED: March 85

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

SAMPLE NUMBER	LOCATION		DESCRIPTION	ANALYSES						
				Sn	As	Co	Pb	Zn	Au	
16372	900S	2200W	2.6 Buff/Cáv clayey w/rock.	<10	<10	65	20	160	<0.01	
16373	875S	-	2.4 Khaki/brown w/rock & Cáv clays	<10	<10	80	20	160	<0.01	
16374	850S	-	2.6 Cáv w/rock	<10	<10	40	<10	150	<0.01	
16375	825S	-	1.2 " " "	<10	<10	245	<10	140	<0.01	
16376	800S	-	6.3 green r. fragments under Cáv clays	<10	<10	65	<10	170	<0.01	
16377	775S	-	2.8 - w/rock	<10	<10	15	<10	130	<0.01	
16378	750S	-	3.6 green r. fragms " " "	<10	<10	65	<10	140	<0.01	
16379	725S	-	4.0 Cáv w/rock with brown streaks under Cáv clays.	<10	<10	80	<10	210	<0.01	
16380	700S	-	3.4 " " — " " " "	<10	<10	85	<10	250	<0.01	
16381	675S	-	2.6 " " " " " "	<10	<10	405	<10	230	<0.01	
16382	1650S	-	4.3 Cáv clayey w/rock	<10	<10	90	<10	280	<0.01	
16383	625S	-	3.7 " " " " "	<10	<10	40	<10	220	<0.01	
16384	600S	-	1.3 Cáv/maroon " " "	<10	<10	115	<10	170	<0.01	
16385	575S	-	1.1 Cáv w/rock with brown/black pebbles.	<10	<10	75	<10	150	<0.01	
16386	550S	-	.9 - / brown w/rock.	<10	<10	80	<10	190	<0.01	
16387	525S	-	1.4 Cáv " " "	<10	<10	240	<10	140	<0.01	
16388	500S	-	2.5 - C. w/rock with green r. frags.	<10	<10	505	<10	210	<0.01	
16389	475S	-	.9 Maroon, black - Cáv w/rock	20	<10	45	<10	220	<0.01	
16390	450S	-	2.4 Brown, cream, black - Cáv w/rock.	<10	<10	10	<10	240	<0.01	
16391	425S	-	1.1 Cáv clayey w/rock	<10	40	65	<10	170	<0.01	
16392	400S		1.0 Green w/rock under Cáv clays.	<10	<10	35	<10	120	<0.01	

123077

077

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

PROJECT: Grand Vigo PROSPECT: E/42/71 SAMPLE STORAGE REQ'D: LABORATORY: Remison DATE DISPATCHED: March 85

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

SAMPLE NUMBER	LOCATION		DESCRIPTION	ANALYSES						
				Sn	As	Co	Pb	Zn	Au	
16393	375S	2200W	.9 Heroon clay c. wstock.	<30	<10	35	<10	160	<0.01	
16394	200S	2000W	3.0 clay c. wstock under clay clays	<10	<10	15	<10	230		
16395	225S	"	5.0 " " " "	<10	40	10	<10	280		
16396	250S	"	4.1 light grey/green wstock ? under clay clays.	<10	<10	60	<10	130		
16397	275S	"	5.4 clay, dark brown - cream flecky wstock.	<10	<10	15	<10	150		
16398	300S	"	3.9 " " " " " " - but darker.	30	<10	15	<10	90		
16399	325S	"	2.4 clay c. wstock with brown streaks	<10	<10	160	<10	480		
16400	350S	"	2.6 - Brown gritty wstock - brown fragments.	<10	<10	120	60	980		
16401	375S	"	3.4 Red/brown gritty wstock.	<10	<10	90	<10	100		
16402	~~400S~~	"	2.1 " " " " + dark brown clay.	<10	<10	45	<10	170		
16403	425S	"	8.6 Heroon/brown gritty clays + multi colour wstock.	<10	<10	100	<10	120		
16404	450S	"	8.6 clay c. wstock + dark brown streaks.	<10	<10	105	<10	230		
16405	475S	"	1.4 greenish c. wstock under clay gritty clays.	<10	<10	130	<10	160		
16406	500S	"	1.8 clay/brown clays - green r. fragments.	<10	<10	60	<10	180		
16407	525S	"	.7 light green Rhyolitic wstock.	<10	<10	65	<10	170		
16408	550S	"	1.6 as above under multi coloured clays	<10	<10	160	<10	150		
16409	575S	"	1.2 clay wstock under clay clays.	<10	<10	60	<10	440		
16410	600S	"	2.0 clay wstock under brown, yellows + clay clays.	<10	<10	270	<10	550		
16411	625S	"	1.8 " " " " " "	<10	<10	110	<10	310		

123078

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

PROJECT: Grant Hill PROSPECT: EL 42/71 SAMPLE STORAGE REQ'D: LABORATORY: Renison COLLECTED: Bostock
1:250,000 SHEET: TYPE OF SAMPLE: Backeu SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE DISPATCHED: DATE RECEIVED: March 85

SAMPLE NUMBER	LOCATION		DESCRIPTION	ANALYSES						
				Sn	As	Co	Pb	Zn	Au	
16412	650S	2000W	2 light tan ox rock - top side of Crest	<10	<10	55	100	180		
16413	675S	"	1.5 Tan ox rock with brown streaks.	<10	<10	155	<10	220		
16414	700S	"	6 green gritty ox rock under tan/brown clays	<10	<10	135	<10	250		
16415	400S	1800W	7.2 Tan clayey ox rock + darker ferr S.	<10	<10	65	20	510	<0.01	
16416	375S	"	2.6 " " " " "	<10	<10	170	<10	380	<0.01	
16417	350S	"	1.1 Tan ox rock in top select Tramway.	<10	<10	150	20	670	<0.01	
16418	325S	"	1.9 Tan brown-green ferr S under tan clays	<10	<10	270	40	320	<0.01	
16419	300S	"	.8 " " " " " "	<10	<10	50	<10	810	<0.01	
16420	275S	"	.5 Red/brown clayey ox rock.	<10	<10	95	<10	240	<0.01	
16421	250S	"	2.2 Tan " " "	<10	<10	25	<10	160	<0.01	
16422	215S	"	2.6 " gritty ox rock + clays	<10	<10	20	20	220	<0.01	
16423	200S	"	2.4 / Khaki c. w rock under tan clays.	<10	<10	10	300	240	<0.01	
16424	175S	"	2.6 as above — more Tan.	<10	<10	25	140	440	<0.01	
16425	150S	"	3.2 Tan/Khaki c. w. rock.	<10	<10	10	<10	410	<0.01	
16426	125S	"	4.2 " " " " "	<10	<10	<5	<10	60	<0.01	
16427	100S	"	3.1 light tan c.w. rock with Khaki tinge	<10	<10	10	<10	80	<0.01	
16428	075S	"	6.0 Tan-cream flecky c.w. rock under tan clays.	<10	<10	65	<10	120	<0.01	
16429	050S	"	.7 green ox rock.	<10	<10	10	<10	40	<0.01	
16430	025S	"	1.6 " " "	<10	<10	30	10	100	<0.01	

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

PROJECT: Grant Hill Q PROSPECT: EL 443/84 COLLECTED: Barrack.
1:250,000 SHEET TYPE OF SAMPLE: Wacker. SAMPLE STORAGE REQ'D: LABORATORY: Ranison DATE DISPATCHED:
SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED: March 85

SAMPLE NUMBER	LOCATION		DESCRIPTION	ANALYSES						
						Sn	As	Cu	Pb	Zn	Au
16431	000S	1800W.	1.4 Green w/rock.			<10	<10	10	10	110	<0.01
16432	025N	"	4.3 Buff/cream/tan w/rock.			<10	<10	10	<10	40	<0.01
16433	050N	"	7.2 light tan/brown + cream flaky w/rock.			<10	<10	<5	<10	220	<0.01
16434	075N	"	.5 Pale lime green rock.			<10	<10	10	60	70	<0.01
	NOTE: Started sampling at Southern end of 1800W line — the baseline. Working out off flags in order as we work up line. —— Same goes for 1600W line.										
16435	300S	1600W	2.3 Tan + maroon/brown c/rock + brown streaks.			<10	<10	90	30	160	
16436	275S	"	2.2 " " c.w/rock.			<10	<10	70	10	110	
16437	250S	"	4.2 Tan, brown + cream flaky clayy c/rock.			<10	<10	75	20	500	
16438	225S	"	3.8 Tan c.w/rock + green fragments.			<10	<10	185	30	310	
16439	200S	"	1.3 " " " " brown fragments.			<10	<10	60	10	210	
16440	175S	"	.8 Red/brown w/rock with black oxides			<10	<10	110	10	180	
16441	150S	"	.6 Tan c.w/rock - brown streaks. fragments			<10	<10	75	10	380	
16442	125S	"	1.9 Tan - brown streaky gritty w/rock.			<10	<10	95	<10	220	
16443	100S	"	1.5 Tan w/rock.			<10	<10	165	<10	130	
16444	075S	"	2.2 Biscuit coloured c/rock and tan clays			<10	<10	100	60	130	

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

PROJECT: Grand Ridge PROSPECT: EL 421-1 SAMPLE STORAGE REQ'D: LABORATORY: Renison COLLECTED BY: Rock

1:250,000 SHEET: TYPE OF SAMPLE: Rock SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE DISPATCHED: March 85

DATE RECEIVED:

SAMPLE NUMBER	LOCATION		DESCRIPTION	ANALYSES						
				Sn	As	Cu	Pb	Zn	Au	
16445	050S.	1600N	3.6 Cân c. wstock + brown streaks	10	<10	160	<10	170		
16446	025S	"	33 - light Khaki c wstock under Cân clays	<10	<10	40	<10	230		
16447	000S	"	3.0 Cân green wstock under Cân clays.	<10	<10	5	<10	140		
16448	025N	"	~~3.3~~ 2.6 green wstock.	<10	<10	150	<10	300		
16449	050N	"	2.2 light " " "	<10	<10	25	<10	90		
16450	075N	"	3.4 " " " white wstock.	<10	<10	10	120	340		
16451	100N	"	3.3 " " " with dark blue/green streaks.	30	50	<5	10	120		
16452	0125N	"	3.8 green wstock.	<10	<10	5	<10	80		
16453	150N	"	3.4 green + Cân banded wstock.	110	<10	135	10	150		
16454	175N	"	1.1 light green wstock.	<10	<10	30	<10	60		
16455	200N		1.0 green + Cân clayey wstock	120	<10	135	60	200		
16456	275N	1400N	.6 Cân Khaki wstock + Cân clays	80	<10	175	100	180	<0.01	
16457	250N	"	.6 brown Cân wstock " "	30	10	265	110	210	<0.01	
16458	225N	"	1.1 Cân wstock with brown veining + frags	<10	<10	50	<10	160	<0.01	
16459	200N	"	2.0 - light Khaki wstock.	60	100	115	260	290	<0.01	
16460	175N	"	.3 Cân/grey " " + clays	110	20	65	80	150	<0.01	
16461	150N	"	1.0 light green wstock under Cân brown clays	170	70	180	90	200	<0.01	
16462	125N	"	3.2 light green wstock.	160	30	60	10	80	<0.01	
16463	100N	"	1.5 " " " "	20	<10	55	50	90	<0.01	

1230081

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

COLLECTED BY: [illegible]

PROJECT: Grand Size PROSPECT: Eaglevale SAMPLE STORAGE REQ'D: LABORATORY: Renison. DATE DISPATCHED: March 85

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

SAMPLE NUMBER	LOCATION		DESCRIPTION			ANALYSES Sn	As	Cu	Pb	Zn	Au	
16464	075N	1400W.	30-2 green + tan wstock under tan clays			30	50	40	60	130	<0.01	
16465	050N	"	1-2 tan-cream flaky c. wstock.			10	<10	20	20	130	<0.01	
16466	025N	"	5 tan wstock under tan gritty clays			<10	<10	140	40	140	<0.01	
16467	000N	"	1-0 Blue/green wstock.			<10	<10	145	40	150	<0.01	
16468	025S	"	8 Maroon/grey wstock under tan clays			<10	<10	50	50	140	<0.01	
16469	050S	"	4 Khaki wstock " " "			<10	<10	20	40	80	<0.01	
16470	075S	"	1-8 Tan/brown c. wstock.			20	<10	100	30	140	<0.01	
16471	100S	"	2-0 " " " " "			<10	<10	70	<10	60	<0.01	
16472	125S	"	2-2 Red/brown " " "			<10	<10	120	10	180	<0.01	
16473	150S	"	2-7 light tan gritty wstock.			<10	<10	105	<10	70	<0.01	
16474	175S	"	2-3 Red/brown c. wstock + green clay.			<10	<10	340	20	130	<0.01	
16475	200S	"	1-7 Tan/maroon c. wstock under tan clays			10	<10	135	20	140	<0.01	
16476	225S	"	3 maroon & black wstock.			<10	<10	710	50	120	<0.01	
	RP cutting in top side of N.E. trench.											

GOLD FIELDS EXPLORATION PTY. LTD.

SAMPLE RECORD AND ANALYTICAL DATA SHEET

PROJECT: EL 42/81 PROSPECT: GRANO PAIGE SAMPLE STORAGE REQ'D: LABORATORY: RENISON COLLECTED BY: P. KOMYSHAN

1:250.000 SHEET: TYPE OF SAMPLE: ROCK SAMPLE PREP. REQ'D: ANALYSIS REQ'D: DATE RECEIVED: DATE DISPATCHED: Sept 84

SAMPLE NUMBER	LOCATION		DESCRIPTION	ANALYSES								
				Sn	As	WO_3	Cu	Pb	Zn	Au		
9992	200m N of N.E. DT		(f11) gossan (limonite) and veining in fg weathered basic rock	250	90	10	440	20	470			
9993	200m N of N.E.D.T.		(f1) ironstone gossan in fg weathered basic rock.	690	2840	50	2920	490	490			
9762	BLACK HILL 2000W	1960S	(f11) hematitic grit ± weathered ash tuff (Magsus 0.8)	<10	<10	10	10	10	150			
9763	2000W	1973S	(f11) hf'ld grit (Magsus. 0.5)	<10	<10	<10	20	10	200			
9764	2000W	1948S	(f11) " " + sandy slst (magsus 1.0)	<10	<10	10	75	10	170			
9765	1800N	1940S	30% o/c hf'ld ppk grn grit (Magsus 0.8)	<10	<10	<10	15	<10	170			
9766	1800W	1965S	o/c green ppk vcmg. (magsus 0.8)	<10	<20	10	10	<10	180			
9767	1850W East of Marsh Hwy	2120S	o/c brn-grn int. slst + grit (magsus 0.3-1.0)	<10	20	10	165	10	170			
9769			o/c sil'd gossan with quartz veins.	<10	30	10	55	60	470			
9770	25m W of 3100W	1775S	o/c chip sample 25-35 basalt ± Mn veins	<10	10	<10	210	10	280			
9771	35W "	"	o/c " " 35-45 " " "	<10	<10	<10	240	<10	250			
9772	45W "	"	o/c " " 45-55 " " "	<10	<10	<10	45	60	420			
9773	55W "	"	o/c " " 55-65 " " "	30	10	10	190	<10	280			
9774	65W "	"	o/c " " 65-72 " " "	20	40	<10	400	<10	270			
9775	20m NW "	"	o/c 4m wide gossanous + Mn rich zone	150	40	30	800	90	11900			
9776	Cornish Creek	300m E of 2000E	o/c qtz limonite dissem, 4-5m wide zone dipping W	170	480	<10	130	<10	80			
9794	" " BLACK HILL	East of Pine Hill	o/c Mn rich veins in altered gabbro + basalt	60	20	20	30	1920	240			
9795	2000W N.E. DT	600S	(dump) of sideritic carbonate ± sphalerite, barite, greisen?	100	120	<13	85	200	3.5%			
9796			o/c Mn rich veined basalt	25	25	<13	70	335	1300			
9797	300W 1900W CARBINE HILL	275N	subo/c basalt ± black Fe stone	7350	1600	<13	265	400	130	0.01		
9798	3500N	1315E	subo/c fg basalt flow breccia + tuff	35	55	<13	335	15	265			

1230083

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

PROJECT: EL 42/71 PROSPECT: Grand Prize SAMPLE STORAGE REQ'D: LABORATORY: ~~Genalysis~~ Genalysis DATE DISPATCHED:

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	Au		
9799	CARBINE HILL 3500N	1329E	~~%~~ chloritised basaltic tuff.	25	20	<13	35	25	545			
10503	"	1430 E	~~%~~ hornfelsed greywacke ± dis po in grit horizons (chlorite hornfels)	15	65	6	36	14	28	<0.01		
10504	900N	1285E	sub cp marble ± black sphs	<3	<5	<2	6	25	84	<0.01		
10505	"	1300E	~~%~~ wackestone ± qtz, black shale chips in dol matrix dis py	<3	<5	<2	14	9	29	<0.01		
				4								
10509	2400W	825 S	Dump samples - Alluvial working rejects: leached lag	<3	<5	4	17	10	88	<0.01		
10510	"	"	" " " " " hfld basalt	<3	<5	<2	66	9	94	<0.01		
10511	"	"	" " " " " " vein qtz in basaltic rocks	6	60	4	150	24	88	<0.01		
10512	"	"	" " " " " " wthrd brn basalt	<3	<5	2	100	16	135	<0.01		
10513	"	"	" " " " " " Mnst. hematitic qtzite	<3	<5	2	19	9	115	<0.01		
10514	"	"	" " " " " " weathered to ± lg. basalt	<3	<5	2	50	22	92	<0.01		
10515	"	"	" " " " " " basaltic tuff/sediment	<3	<5	<2	110	5	210	<0.01		
10516	"	"	" " " " " " hfld silfd mineralised basalt.	<3	<5	6	155	5	44	<0.01		
10517			redone rubble mine dump veins?	640	860	<13	905	466	5462	<0.01		
10518	2000W	625S	Pale green grey altered basalt? ± veins calcite? mineralised rock.	25	170	<13	15	45	2850			
10519	10000W WALLACES TRK	2575 S	soil.	4	5	<13	40	105	175			
15490			Dolerite dyke	50	600	140	70	980	13900			
15491			Dolomite ± garn py replacement	10	<10	30	80	<10	80			
15492			blue grey shale ± dis py + pods py	30	350	100	55	2120	8700			
10524			~~%~~ most dist breccia zone brown Nodular unit	30	180	40	40	390	1040			
10547			~~%~~ garnetous grit/breccia	40	<10	50	60	140	2280			

08

1230084

084

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

COLLECTED BY: P. K

PROJECT: EL 42/71 PROSPECT: Crane Prize SAMPLE STORAGE REQ'D: LABORATORY: REUNION DATE DISPATCHED: Sept 84

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

SAMPLE NUMBER	LOCATION		DESCRIPTION	ANALYSES							
				Sn	As	Co	Pb	Zn	WO_3	Au	
9994	2400 W	3151 S	C horizon. khaki brn clay & green siltstone frag.	80	<10	60	100	160			
9995	2400 W	3147 S	gravel - alluvium from gorech	2000	890	2390	1890	2220			
9996	2400 W	2900 S	B horizon - khaki brn clay (20 cm)	<10	<10	75	70	260			
9997	2400 W	2900 S	" " " " (30 cm) Reasonably prev. gbl	10	<10	5	50	140			
9998	2000 W	2100 S	B horizon khaki brn clay	10	<10	25	40	240			
9999	2000 W	2112.5 S	B. " " " "	40	<10	20	50	150			
9768	2800 W	2475 S	B/C " grey sandy soil over Reefback Leg.	390	<10	<5	30	50			
passed	concentrates										
10506	Melba Flats 2400 W	925 S		-	-	-	-	-	<3	0.5→1.0	
10507	"	"		-	-	-	-	-	<3	"	
10508	"	"		10	6000	700	840	230	<3	0.03	

123085

085

GOLD FIELDS EXPLORATION PTY. LIMITED

123086

APPENDIX 3

Petrological Descriptions

086

123087

Central Mineralogical Services

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

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

21st March, 1985

REPORT CMS 85/2/22
Part 1

YOUR REFERENCE:	Letter dated 27.2.1985
DATE RECEIVED:	28th February, 1985
SAMPLE NOS.:	20 Samples
SUBMITTED BY:	P.A. Roberts
WORK REQUESTED:	Petrology

for

H.W. Fander, M. Sc.

087

123088

REPORT CMS 85/2/22
Part 1

Sixteen drill core samples from drill hole GP 10 (Grand Prize) were received for petrological examination together with four rock chip samples. Representative thin-sections were prepared and examined together with the respective offcuts. Attached tabulated descriptions summarise the microscopic data and include interpretative comments.

Summary

The GP 10 drill cores comprise entirely altered and mildly sheared mafic to ultramafic igneous rocks. The sequence, as sampled, represents an alternation of orthodox gabbroic to hypersthene gabbroic and pyroxenitic to peridotitic and dunitic types, medium- to coarse-grained and variously gabbroic (to doleritic) and granular-textured. General features are consistent with a layered complex with affinities to Serpentine Hill and the conceivably contiguous Razorback complexes.

Alteration features are ubiquitous, with gabbroic rocks exhibiting uralitic assemblages overprinted to varying degrees by apparently stress-related "retrograde" chlorite-carbonate assemblages. A similar pattern is reflected in the ultramafics which are characterised by serpentinitic and/or talcose assemblages, partly secondary after uralitic tremolite, notably in altered pyroxenites. Strictly contact-metasomatic assemblages are conspicuous in their absence, and as such these rocks appear to represent limited potential for cassiterite-tin mineralisation. Individual samples may, however, warrant mineragraphic examination on the basis of assay data.

The four rock chip samples are relatively diverse, with a mildly sideritised dolomitic cherty argillite accompanied by a sericitised (marginally "greisened") tuffaceous arkose, a pneumatolytically altered pelite and a silicified-carbonated serpentinite. Associated Fe- and base metal sulphide mineralisation appears in association with sideritic carbonate veining and impregnations, and weakly anomalous tin values probably reflect associated stannite rather than cassiterite.

D. Cowan, B. Sc.

CENTRAL MINERALOGICAL SERVICES

Sample No.	Classification - Composition	Fabric	Accessories	Comments
210 221.3 (C.S. 2713)	Altered ?Pyroxenite. Vaguely silicate-pseudomorphous aggregates of fine-grained chlorite, pervasively stained with cloudy microcrystalline dolomite. Veinlets of quartz and kaolinised feldspar. Sporadic late calcite-quartz veinlets.	Fine-grained, irregularly veined. Faint relict banded, fine-to medium-grained ?pyroxene-derived textures.	Thinly disseminated Cr-magnetite. Minor relics of albite in altered veins, traces sphalerite in calcite-quartz veinlets.	Thoroughly altered ultramafic (banded ?pyroxenite) with chlorite-carbonate probably secondary after tremolitisation. Quartzofeldspathic vein strictly a thin "granophyric" dyke.
224.4	Altered Microgabbro. Cloudy ankeritic microcrystalline carbonate and fine-grained chlorite with relatively minor sericite, microcrystalline quartz, chloritic albite. Minor late irregular calcite-quartz veinlets.	Relict "doleritic" (medium, uneven-grained, subophitic) to weakly sheared/phyllitic.	Fine relict primary magnetite. Minor sheared chloritic carbonate veinlets, rare microscopic blebs of chalcopyrite.	Close affinities with 221.3 m in terms of alteration pattern, but with relict gabbroic rather than ultramafic characteristics. Shearing effects are non-penetrative.
229.2	Altered Microgabbro. Variably chloritised uralitic tremolite-actinolite aggregates and subordinate feldspar-pseudomorphous sericite aggregates. Semi-pervasive clots of cloudy microcrystalline ankeritic carbonate.	Uneven-grained, "doleritic" (sim. 224.4 m). Weakly sheared.	Disseminated relict primary magnetite. Sporadic irregular calcite-chlorite veinlets.	Uralitised microgabbro with close textural affinities to 224.4 m. In comparison, the carbonate-chlorite overprint is relatively weakly developed.
237.5	Altered Gabbro. Pyroxene-pseudomorphous talc and feldspar-pseudomorphous ankeritic carbonate aggregates with marginal films of chlorite.	Relict even-grained gabbroic. Weakly sheared.	Thinly disseminated leucoxenic semi-opaques. Minor late discontinuous calcite veinlets.	Thoroughly altered (steatitised, carbonated) gabbro, possibly a coarser-grained gabbroic-textured variant of 224.4 m, 229.2 m.
239.6	Altered Gabbro. Vaguely feldspar-pseudomorphous chlorite and pyroxene-pseudomorphous talc aggregates with interspersed clots, films of ankeritic carbonate.	Similar to 237.5 m, relatively sheared.	Thinly disseminated leucoxenic semi-opaques. Minor late discontinuous calcite veinlets.	Close affinities with 237.5 m; relatively chloritic and relatively sheared in comparison.
243.4	Altered Melagabbro. Fine-grained, near-isotropic chlorite with disseminated to semi-massive, variably carbonate-stained pyroxene-pseudomorphous chlorite-talc aggregates. Minor late calcite veinlets.	Relict coarsely porphyritic to medium-grained/granular. Coarsely banded; weakly sheared.	Thinly disseminated leucoxenic semi-opaques.	Thoroughly chloritised/carbonated mildly sheared banded mafic/trend ultramafic intrusive. Primary compositional detail obscured.
248.7	Chlorite Phyllite. Chlorite with subordinate to minor intergrown talc; spongy lenses, films of calcite, minor calcite veins.	Phyllitic to vaguely relict "doleritic", crudely banded.	Ultrafine leucoxenic semi-opaques.	Close affinities with 243.4 m, relatively sheared and primarily finer-grained in comparison.
259.65	Hypersthene Gabbro. Weakly actinolitised augite, albitised/weakly saussurite-stained plagioclase and tremolite-stained pyroxene-pseudomorphous chlorite aggregates with sporadic clots, films of prehnite.	Coarse-grained, gabbroic, weakly stressed.	Minor clots of ankeritic carbonate, chlorite-albite-carbonate veinlets. Fine primary magnetite.	Coarse-grained hypersthene gabbro with orthopyroxene selectively altered. Affinities with the relatively altered, finer-grained 243.4 m, 248.7 m gabbros.

Sample No.	Classification - Composition	Fabric	Accessories	Comments
276.6	Altered Pyroxenite. Uralitic tremolite aggregates with minor interstitial granular to weakly poikilitic augite. Disseminated fine-grained chromian magnetite.	Even-, medium-grained, granular, weakly sheared.	Minor clots, lenses, tremolite-replacive aggregates of chlorite.	Extensively uralitised orthopyroxenite with accessory unaltered clinopyroxene, patchy "retrograde" shear-induced chloritisation.
283.3	Serpentinite. Antigorite aggregates, foliae with interspersed spongy clusters, films of magnetite.	Semi-schistose, with patchy relics of olivine- and pyroxene-derived mesh-textures.	Minor microscale discontinuous films of brucite. Disseminated relict primary magnetite.	Serpentinised, sheared ultramafic. Relict textural features consistent with a medium-grained granular peridotite. Magnetite is partly primary, partly secondary.
286.8	Serpentinite. Antigorite aggregates with pervasive films of cross-fibre chrysotile; thinly disseminated coarse relict primary dark red chromite.	Mesh-textured, with coarse granular to poikilitic pyroxene- and olivine-derived structures. Weakly sheared.	Minor clots, films of secondary magnetite.	Serpentinised, weakly sheared peridotitic ultramafic. Primarily coarse-grained in comparison with 283.3 m.
294.6	Steatitised Pyroxenite. Pyroxene-pseudomorphous fine-grained talc aggregates with patchy corroded relics of enstatite. Minor interstitial clinopyroxene (augite). Disseminated fine primary ultrafine secondary magnetite.	Mesh-textured/relict uneven (medium to coarse) grained, granular.	Minor clots of chlorite, corroded relics of enstatite, replacive (uralitic) tremolite.	Tremolitic/extensively steatitised orthopyroxenite with affinities to 276.6 m; coarser-, uneven-grained in comparison.
301.5	Serpentinite. Antigorite and cross-fibre chrysotile with conspicuously disseminated dark red chromite, minor films of secondary magnetite.	Mesh-textured to weakly sheared/ phyllitic. Olivine-subordinate pyroxene-derived structures.	Sporadic late antigoritic micro-fractures.	Serpentinised, medium-grained, granular, peridotitic/trend dunitic ultramafic. Affinities with 283.3 m, 286.8 m.
315.1	Serpentinite. Cross-fibre chrysotile with subordinate antigorite, conspicuous chromite, semi-pervasively thinly dispersed films, minor veinlets of secondary magnetite.	Mesh-textured (medium-grained, granular, olivine-derived). Weakly sheared/ antigorite-veined.	None detected.	Thoroughly serpentinised medium-grained granular dunitic ultramafic. Relatively chromitic. Weakly stressed.
334.0	Altered Pyroxenite. Enstatite aggregates with more or less pervasive corrosive films, aggregates of talc. Interspersed aggregates of antigorite, chrysotile. Disseminated chromite.	Medium- to coarse-grained, granular; incipiently sheared.	Minor traces of ultrafine secondary magnetite. Rare fine-grained clinopyroxene.	Partly serpentinised/steatitised orthopyroxenite ("enstatolite") with close affinities to 294.6 m on the basis of relict features.
336.3	Serpentinite. Variably chlorite-stained antigorite aggregates with disseminated relict primary chromite. Minor spongy clots of talc, corroded relics of uralitic (pyroxene-pseudomorphous) tremolite.	Mesh-textured, with medium to coarse granular pyroxene-derived structures. Incipiently sheared.	Sporadic chlorite and late chrysotile veinlets. Traces of fine secondary magnetite.	Weakly talcose-tremolitic pyroxenite derived serpentinite; essentially an alteration variant of 334.0 m.

CENTRAL MINERALOGICAL SERVICES

Sample No.	Classification - Composition	Fabric	Accessories	Comments
10504	Dolomitic Argillite. Semi-sericitic white mica and closely intergrown microcrystalline quartz with disseminated variably siderite-pseudomorphed dolomite rhombs, thinly disseminated silt- to fine sand-sized quartz grains.	Massive (featureless) to incipiently banded; incipiently hornfelsic. Slightly silty (quartz grains, clay pellets).	Minor partly degraded (oxidised) discontinuous/ irregular siderite veinlets. Traces of carbonaceous matter.	Mildly siderite-veined/altered dolomitic cherty argillite, weakly quartzose silty clastic, weakly carbonaceous.
10505	Sericitic Arkose. Framework of angular to subangular quartz and sericitised feldspar grains, minor felsitic rhyolite and impure chert clasts. Weakly sericitic cherty quartz cement with minor carbonaceous matter.	Well-sorted, weakly bedded, mildly sheared, angular, fine to medium sandy clastic.	Minor clastic muscovite	Sericitised/mildly sheared, strongly acid-volcanomict arkosic sandstone, essentially a mildly reworked "crystal tuff". Marginal greisening alteration pattern.
10517	Quartz-Schorl-Carbonate Rock. Fine to microcrystalline quartz with interspersed millimetric bands of dark green schorl and siderit carbonate with varying proportions of sphalerite pyritised pyrrhotite. Sporadic lenses of seric	Crudely banded alternation of fine quartz, fine to medium schorl-te, carbonate-sulphide ite. aggregates.	Traces of galena, jamesonite (in siderite aggregates). Patchy limonite stainings (degraded siderite).	Thoroughly silicified/extensively schorl-carbonate-sulphide-veined sediment (dolomitic pelite?). Reflects late, partly siderite veinlet-controlled pyritisation.
0518 (T.S. 52732)	Altered, Veined Serpentinite. Fine to microcrystalline variably talc-stained quartz aggregates with interspersed films, veinlets, spongy aggregates of sideritic carbonate. Minor sphalerite, clots of chlorite.	Featureless to locally tremolite-pseudomorphous talcose quartz aggregates; irregularly siderite-veined.	Evenly disseminated fine relict primary chromite. Patchy Mn-oxide stainings.	Silicified talcose-tremolitic serpentinite characteristics. Carbonate veinlets crudely crustiform, zoned (sideritic to rhodocrositic) with pale red to colourless sphalerit

123091

APPENDIX 4

Ground Magnetic Data

092

GOLD FIELDS EXPLORATION PTY. LIMITED 123093

GROUND MAGNETOMETER SURVEY PAGE NO: (1)

LOCATION: CARBINE HILL - LINE 0100N DATE: 26/10

MAGNETOMETER: OPERATOR: W.M.A.

BASE STATION LOCATION:

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
1200 E	0856	62558	62144 -64	62494	
		62547	"	483	
1225	0852	62652	62143 -63	489	
		62645	"	482	
1250		62557	62144 -63	493	
		62545	"	481	
1275	0855	62509	"	445	
		62531	"	467	
1300		62523	"	459	
		62538	"	474	
1325	0900	62515	"	459	
		62532	"	468	
1350		62539	"	475	
		62516	"	452	
1375		62520	"	456	
		62527	"	463	
1400	0905	62504	"	440	
		62494	"	430	
1425	0906	62316	"	62252	
	0908	63013	"	949	
1450	0910	62682	62145 -65	617	
		62639	"	574	
1475		62621	"	556	
		62616	"	551	
1500	0912	62573	"	508	
		62538	"	473	
1525		62544	"	479	
		62547	"	482	
1550	0914	62540	"	475	
		62542	"	471	
1575		62584	"	519	
	0916	62553	"	488	
1600		62562	"	497	
		62535	"	62470	

09~

GOLD FIELDS EXPLORATION PTY. LIMITED

123094

GROUND MAGNETOMETER SURVEY

PAGE NO: (2)

LOCATION: CARBINE HILL - LINE 0100N

DATE:

MAGNETOMETER:

OPERATOR: U.M.A.

BASE STATION LOCATION:

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
1625 E	0918	62542	62145 -65	62477	
		62537	"	472	
1650		62560	"	495	
	0921	62554	62149 -69	485	
1675		62532	"	463	
		62542	"	473	
1700	0923	62546	"	477	
		62534	"	465	
1725	0925	62524	62146 -6	458	
		62563	"	497	
1750		62541	"	475	
		62535	"	469	
~~1800~~ 1775	0930	62527	"	62451	

094

GOLD FIELDS EXPLORATION PTY. LIMITED

123095

GROUND MAGNETOMETER SURVEY

PAGE NO: (1)

LOCATION: CARBINE HILL - LINE 0300N

DATE:

MAGNETOMETER:

OPERATOR: U.M.A.

BASE STATION LOCATION:

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
1200E	1020	62495	62168 -27	62407	
		62495	"	407	
1225		62491	62169 -59	402	
		62501	"	412	
1250	1018	62502	"	413	
		62475	"	386	
1275		62503	"	414	
		62504	"	415	
1300	1014	62494	62171 -7	403	
		62490	"	399	
1325		62500	"	409	
		62475	"	383	
1350		62464	"	373	
		62453	"	364	
1375	1009	62458	62156 -76	382	
		62527	"	451	
1400		62641	"	565	
	1006	62596	"	520	
1425		62554	62154 -76	480	
		62587	"	463	
1450		62530	"	456	
	1002	62528	"	454	
1475		62536	"	462	
		62551	"	477	
1500	1000	62583	"	509	
		62593	62156 -76	517	
1525		62573	"	493	Creek.
		62552	"	476	
1550	0957	62582	"	506	
		62574		498	
1575	0955	62585	"	509	
		62575	"	499	
1600		62563	"	487	
		62570	"	494	

095

GOLD FIELDS EXPLORATION PTY. LIMITED

123096

GROUND MAGNETOMETER SURVEY

PAGE NO: (2)

LOCATION: CARBINE HILL - LINE 0300N

DATE:

MAGNETOMETER:

OPERATOR: U.M.A.

BASE STATION LOCATION:

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
1625 E	0952	62568	62155 - 25	62 493	
		62612	"	537	
1650 E	0951	62622	"	547	Outcrop.
		62593	"	518	
1675	0949	62617	62156 - 16	541	Track.
		62594	"	518	
170		62615	"	539	
		62609	"	533	
1725		62576	"	500	
	0945	62550	"	474	
1750		62534	"	458	
		62559	"	473	
1775	0943	62582	62146 - 66	516	
		62549	"	483	
1800	0941	62533	62146 - 66	467	

096

GOLD FIELDS EXPLORATION PTY. LIMITED

123097

GROUND MAGNETOMETER SURVEY

PAGE NO: 1

LOCATION: CARBINE HILL LINE 0500N

DATE:

MAGNETOMETER:

OPERATOR:

BASE STATION LOCATION:

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
1200E	1041	62533	62164	62449	
		62533	"	62449	
1225		62508	"	424	
		62538	"	454	
1250		62532	"	448	
	1046	62523	"	439	
1275		62572	"	488	
	1047	62543	"	459	
1300		62570	"	486	
	1049	62521	"	437	
1325		62549	62160	469	
	1051	62585	"	505	
1350		62584	"	504	
	1053	62594	"	514	
1375		62579	"	499	
	1054	62549	"	469	
1400		62781	"	701	
	1056	62669	"	589	
1425		62654	"	574	
		62647	"	562	
1450	1059	62618	"	538	
	1100	62738	62159		METAL RAILS
1475		62674	"		"
		62628	"	62549	
1500	1102	62640	"	561	
		62657	"	578	
1525	1104	62726	"	647	
		62661	"	582	
1550	1107	62645	62161	564	
		62641	"	560	
1575	1110	62643	62156	567	
		62649	"	573	
1600	1112	62626	"	550	
		62637	"	561	

097

GOLD FIELDS EXPLORATION PTY. LIMITED

123098

GROUND MAGNETOMETER SURVEY

PAGE NO: (2)

LOCATION: CARBINE HILL - LINE 0500 N

DATE:

MAGNETOMETER:

OPERATOR:

BASE STATION LOCATION:

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
1625 E	1114	62626	62156	62550	
		62645	"	569	
1650	1116	62635	62155	560	
		62623	"	548	
1675		62613	"	538	
		62628	"	553	
170[redacted]	1120	62606	"	531	
		62613	"	538	
1725		62596	"	521	
	1123	62588	"	513	
1750		62581	"	506	
		62583	"	508	
1775		62581	"	519	
		62580	"	505	
1800		62536	"	461	

098

GOLD FIELDS EXPLORATION PTY. LIMITED

123099

GROUND MAGNETOMETER SURVEY

PAGE NO: (1)

LOCATION: CARBINE HILL -LINE 0700N

DATE:

MAGNETOMETER:

OPERATOR: WMA.

BASE STATION LOCATION:

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
1800E	1139	62653	62149	62584	
		62647	"	578	
1775	1141	62640	"	571	
		62630	"	561	
1750		62629	"	560	
	1143	62643	"	574	
1725		62631	"	562	
		62640	"	571	
1706		62655	62150	585	
	1147	62659	"	589	
1675		62689	"	619	
	1150	62632	62151	561	
1650		62673	"	602	
		62671	"	600	
1625	1153	62692	"	621	
		62686	"	615	
1600		62691	"	620	
	1155	62702	62152	630	Creek.
1575		62696	"	624	
		62697	"	625	
1550		62703	"	631	
		62704		633	
1525	1200	62664	62152	592	
		62688	"	616	
1500		62656	"	584	
		62638	"	566	
1475		62647	"	575	
	1205	62653	"	581	
1450		62611	"	549	
		62663	"	591	
1425	1206	62672	"	600	
		62681	"	609	
1400	1208	62673	"	601	
		62677	"	605	

099

GOLD FIELDS EXPLORATION PTY. LIMITED

123100

GROUND MAGNETOMETER SURVEY

LOCATION: CARBINE HILL - LINE 0700N

DATE:

MAGNETOMETER:

OPERATOR: UMA.

BASE STATION LOCATION:

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
1375	1210	62678	62152	62606	
		62796	"	724	
1350	1211	62644	"	572	
		62601	"	529	
1325	1213	62584	"	512	
		62564	"	492	
1300		62549	"	477	
		62555	"	483	
1275	1216	62539	62151	468	
		62533	"	462	
1250	1217	62534	"	463	
		62517	"	446	
1225		62508	"	437	TRAM WAY
		62495	"	424	
1200		62482	"	411	
		62497	"	426	TRAM WAY
1175		62463	"	392	
		62429	"	358	
1150	1222	62471	62150	408	
		62470	"	400	
1125	1223	62486	"	416	

123101

100

GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY

PAGE NO: 1

LOCATION: CARBINE HILL - LINE 0900N

DATE:

MAGNETOMETER:

OPERATOR: WMA.

BASE STATION LOCATION:

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
1155 E	1250	62490	62157	62413	
		62500	"	423	
1175		62500	"	423	
		62518	"	441	
1200	1251	62501	62157	424	
		62514	"	437	
122[illegible]	1253	62524	"	447	
		62514	"	437	
1250	1254	62521	"	444	
		62538	"	461	
1275		62520	"	443	
		62505	"	428	
1300	1257	62707	62152	635	
		62616	"	544	
1325	1258	62610	"	538	
		62629	"	557	
1350		62608	"	536	
		62621	"	549	
137[illegible]	1303	62659	62154	585	
		62658	"	584	
1400	1305	62662	62157	585	
		62658	"	581	
1425	1307	62695	"	628	
		62725	"	648	
1450		62742	"	665	
		62698	"	621	
1475	1311	62745	62159	666	
		62777	"	698	
1500		62786	"	705	
		62788	"	709	
1525	1314	62797	"	718	
		62808	"	729	
1550	1316	62818	62155	743	
		62808	"	733	

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GOLD FIELDS EXPLORATION PTY. LIMITED

123102

GROUND MAGNETOMETER SURVEY

PAGE NO: (2)

LOCATION: CARBINE HILL - LINE 0900N

DATE:

MAGNETOMETER:

OPERATOR: W.M.A

BASE STATION LOCATION:

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
1575E	1317	62790	62155	62713	
		62792	"	715	
1600	1319	62779	"	702	
		62781	"	704	
1625		62784	"	707	
		62752	62156	676	
1650	1321	62755	"	679	
		62743	"	667	
1675	1322	62738	"	662	
		62740	"	664	
1700	1323	62719	"	643	
		62719	"	643	
1725		62703	"	627	
		62706	"	630	
1750	1325	62686	62158	608	
		62711	"	633	
1775		62688	"	610	
		62677	"	599	
1800	1328	62682	"	604	

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GOLD FIELDS EXPLORATION PTY. LIMITED

123103

GROUND MAGNETOMETER SURVEY

PAGE NO: 1.

LOCATION: CARBINE HILL- LINE 1100 N

DATE: 25/10/84

MAGNETOMETER: Geometrico G816

OPERATOR: W.M.A.

BASE STATION LOCATION: 2800W 3350S

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
1800 E	1347	62667	62165	62502	
		62657	"	572	
1775	1348	62660	"	575	
		62676	"	591	
1750		62682	"	597	
		62725	"	640	
1725	1351	62676	62150	606	
		62691	"	621	
1700	1352	62709	"	639	
		62735	"	665	
1675	1354	62718	"	648	
		62767		697	
1650	1356	62788	62149	719	
		62779	"	710	
1625	1357	62821	"	752	
		62808	"	739	
1600	1403	62774	62159	695	
		62752	"	673	
1575	1404	62734	"	655	
		62730	"	651	
1550	1407	62699	62156	623	
		62696	"	614	
1525	1410	62690	"	614	
		62674	"	602	
1500		62659	"	583	
		62664	"	588	
1475	1413	62657	"	581	
		62629	"	553	
1450		62622	"	546	
		62624	"	548	
1425	1416	62628	"	62552	

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GOLD FIELDS EXPLORATION PTY. LIMITED

123104

GROUND MAGNETOMETER SURVEY

PAGE NO: 1

LOCATION: CARBINE HILL - LINE 1300N

DATE: 25/10/84

MAGNETOMETER: Geometrics G816

OPERATOR: W.M.A.

BASE STATION LOCATION: 2800W, 3350S

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
1750 E	1441	62658	62162 - 87	62576	
		62661	"	579	
1725	1443	62615	"	533	
		62652	"	570	
1700	1445	62651	62164 - 82	567	
		62648	"	564	
1675	1447	62641	"	557	
		62639	"	555	
1650	1449	62631	"	547	
		62636	"	552	
1625	1451	62627	62160 - 80	547	
		62627	"	547	
1600	1454	62621	"	541	
		62598	"	518	
1575	1455	62583	62159 - 74	504	
		62592	"	513	
1550	1456	62589	"	510	
		62584	"	505	
1525	1458	62578	"	499	
		62568	"	489	
1500	1501	62566	62158 - 73	488	
		62553	"	475	
1475	1502	62542	"	464	
		62538	"	460	
1450		62529	"	451	
	1506	62526	62163 - 87	443	
1425		62522	"	439	
		62524	"	441	
1400	1509	62520	"	437	
		62511	"	428	
1375	1510	62518	62163 - 87	435	TRAM WAY

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GOLD FIELDS EXPLORATION PTY. LIMITED

123105

GROUND MAGNETOMETER SURVEY

PAGE NO:

LOCATION: SOUTH CONFIDENCE SADDLE - LINE 1900N

DATE: 25/10/84

MAGNETOMETER: Geometrics G816

OPERATOR: W.M.A.

BASE STATION LOCATION: 2800W, 3350S

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
1475 E	1528	62360	62164	62276	TRAMWAY
		62362	"	278	
1450	1531	62378	62163	295	
		62373	"	290	
1425		62368	"	285	
		62370	"	287	
14[redacted]	1533	62358	"	275	
		62338	"	255	
1375		62303	"	220	
		62307	"	224	
1350	1535	62334	62164	250	
		62360	"	276	
1325	1536	62385	"	301	
		62367	"	283	
1300	1538	62367	"	283	
		62373	"	289	
1275		62350	"	266	
		62346	"	262	
12[redacted]	1539	62338	"	254	
		62326	"	242	
1225	1541	62333	62165	248	
		62322	"	237	
1200		62335	"	250	

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GOLD FIELDS EXPLORATION PTY. LIMITED

123106

GROUND MAGNETOMETER SURVEY

PAGE NO:

LOCATION: LINE 1900N

DATE: 25/10/84

MAGNETOMETER: Geometrics G816

OPERATOR: T.D.

BASE STATION LOCATION: 2800W 3350S

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
1600 E	1531	62385	62163	62302	
	32	62356	"	271	
1575	33	62391	"	308	
	34	62382	"	299	
1550		62383	"	300	
	35	62366	62164	282	
15[redacted]		62382	"	298	
	36	62378	"	294	
1500	37	62374	"	290	
	38	62390	"	306	
1475	39	63388	"	304	

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GOLD FIELDS EXPLORATION PTY. LIMITED

123107

GROUND MAGNETOMETER SURVEY

PAGE NO: 1

LOCATION: LINE 2100 N Carbine Hill Grid DATE: 25/10/84

MAGNETOMETER: Geometrics 816 G OPERATOR: T.D.

BASE STATION LOCATION: 2800W, 3350 S

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
1200 E	1431	62345	62160 - 70	62265	
	32	62384	"	304	
1225		62362	"	282	
	33	62368	"	288	
1250		62354	"	274	
	34	62364	"	284	
12[redacted]	1435	62369	62164 - [redacted]	285	
	36	62370	"	286	
1300		62377	"	293	
	37	62383	"	299	
1325		62409	"	325	
	38	62391	"	307	
1350	39	62457	"	373	
	1440	62362	62162 - [redacted]	280	
1375	41	62403	"	321	
	42	62308	"	226	
1400	43	62375	"	293	
	44	62363	"	281	
14[redacted]		62381	"	299	
	46	62388	62164 - [redacted]	304	
1450	47	62373	"	289	
	48	62391	"	307	
1475	49	62416	"	332	
	50	62429	62160 - 70	349	
1500	51	62396	"	316	
	52	62399	"	319	
1525	53	62372	"	292	
	54	62348	"	268	
1550	1455	62334	62159 - 79	255	
		62320	"	241	
1575	56	62306	"	227	
		62312	"	233	
1600	58	62279	"	200	
	59	62282	"	203	

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GOLD FIELDS EXPLORATION PTY. LIMITED

123108

GROUND MAGNETOMETER SURVEY

PAGE NO: 2

LOCATION: LINE 2100N Carbine Hill Grid

DATE: 25/10/84

MAGNETOMETER: Geometrics 816 G

OPERATOR: T.D.

BASE STATION LOCATION: 2800W, 3350S

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
1625 E	1500	62278	62158-75	62200	
	1	62257	"	179	
1650		62274	"	196	
	2	62270	"	192	
1675	3	62271	"	193	
		62262	"	184	
17[redacted]	4	62255	"	177	
		62262		184	
1725	1505	62259	62163-??	166	

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GOLD FIELDS EXPLORATION PTY. LIMITED

123109

GROUND MAGNETOMETER SURVEY

PAGE NO: 1

LOCATION: LINE 2300N Carbine Hill Grid **DATE:** 25/10/84

MAGNETOMETER: Geometrics 816G **OPERATOR:** T.D.

BASE STATION LOCATION: 2800W 3350S

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
1725 E	1329	62224	62158	62146	
	30	62212	62154	138	
1700	31	62220	"	146	
	32	62217	"	143	
1675		62212	"	138	
	33	62228	"	142	
1650		62239	"	155	
	34	62235	"	161	
1625		62232	"	158	
	1335	62159	62161	078	
1600	36	62264	"	183	
	37	62267	"	186	
1575	38	62271	"	190	
	39	62281	"	200	
1550		62265	"	184	
	1340	62276	62164	192	
525	41	62216	"	132	
	43	62280	"	196	
1500	44	62284	"	260	
	1345	62292	62165	207	
1475	46	62297	"	212	
	48	62299	"	214	
1450	49	62302	"	217	
	50	62289	62150	219	
1425	51	62176	"	106	
		62355	"	285	
1400	52	62376	"	306	
	56	62363	62149	296	
1375	57	62341	"	272	
		62353	"	284	
1350	59	62365	"	296	
		62359	"	290	
1325	1400	62353	62159	294	
	1	62371	"	292	

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GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY

LOCATION: LINE 2300N Carbine Hill Grid DATE: 25/10/84

MAGNETOMETER: Geometrics 816 G OPERATOR: T. D.

BASE STATION LOCATION: 2800W, 33505

123110

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
1300 E	1402	62376	62159	62297	
	3	62373	"	294	
1275		62356	"	277	
	4	62352	"	273	
1250		62342	"	263	
	1405	62344	62156	265	
12[redacted]		62353	"	277	
	6	62355	"	279	
1200	1406	62372	"	296	

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GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY

PAGE NO: 1

LOCATION: LINE 2500N

DATE: 25/10/84

MAGNETOMETER: Geometrics 816 G

OPERATOR: T.D.

BASE STATION LOCATION: 2800W 3350S

123111

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
1200 E	1203	62331	62153	62258	
		62336	"	263	
1225	4	62329	"	256	
	1205	62336	62152	264	
1250		62344	"	272	
	6	62337	"	265	
1275	7	62337	"	265	
		62332	"	260	
1300	8	62333	"	261	
		62331	"	259	
1325	9	62331	"	259	
		62337	"	265	
1350	1210	62347	"	275	
	11	62532	"	460	
1375	13	62328	"	256	
	14	62316	"	244	
1400	1215	62298	62151	227	
	16	62291	"	220	
1425	17	62288	"	217	
	17	62283	"	212	
1450	18	62292	"	221	
	1219	62330	"	259	
1475	20	62330	62150	260	
	21	62280	"	210	
1500	22	62296	"	226	
	23	62328	"	258	
1525	27	62396	62151	325	
	28	62481	"	410	
1550		65578		507	
	30	62480	62149	411	
1575		62412	"	343	
	31	62342	"	273	
1600	32	62293	"	224	
	1233	62266	"	197	

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GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY

PAGE NO: 2

LOCATION: LINE 2500N Carbine Hill Grid DATE: 25/10/84

MAGNETOMETER: Geometrics G 816 OPERATOR: T.D.

BASE STATION LOCATION: 2800 W 3350 S

123112

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
1625 E	1234	62235	62149-70	62166	
	35	62224	62152-72	152	
1650	36	62214	"	142	
	37	62208	"	136	
1675	38	62204	"	132	
		62200	"	128	
17[illegible]	39	62204	"	132	
	1240	62209	62153-[illegible]	136	
1725	41	62206	"	133	

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GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY

LOCATION: LINE 2700 N Carbine Hill Grid

DATE: 25/10/84

MAGNETOMETER: Geometrics G816

OPERATOR: T. D.

BASE STATION LOCATION: 2800W, 3350 S

123113

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
1300 E	1126	62317	62153	62244	
	27	62296	"	223	
1275	28	62262	"	189	
		62239	"	166	
1250	29	62299	"	226	
	1130	62220	62152	148	
1225	31	62231	"	159	
		62219	"	147	
1200	1132	62216	"	62144	

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GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY

PAGE NO:

LOCATION: LINE 2700 N Carbine Hill Grid

DATE: 25/10/84

MAGNETOMETER: Geometric G 816

OPERATOR: T.D.

BASE STATION LOCATION: 2800 W, 3350 S

123114

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
1725 E	1049	62222	62164 - 54	62138	Rain
	51	62210	62160 "	130	
1700	53	62224	"	144	
		62233	"	153	
1675	54	62232	"	152	
	56	62237	"	157	
1650	57	62233	"	153	
	58	62222	"	142	
1625	59	62230	"	150	
		62276	"	196	
1600	1100	62254	62159 "	175	
	2	62231	"	152	
1575		62233	"	154	
	3	62227	"	148	
1550	4	62209	"	130	
	5	62201	62161 - 5	120	
1525	6	62208	"	127	
	9	62236	"	155	
1500	11	62288	62156 - 50	212	
		62267	"	191	
1475	12	62343	"	267	
	14	62277	"	201	
1450	1115	62235	62155 - 45	160	
	16	62238	"	163	
1425	17	62275	"	200	
		62282	"	207	
1400	19	62269	"	194	
	1120	62270	"	195	
1375	21	62266	"	191	
	22	62250	"	175	
1350	23	62253	"	178	
	24	62274	"	199	
1325	1125	62259	62153 - 33	186	
	26	62278	"	205	

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GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY

LOCATION: PINE HILL - 3300N (Carbine Hill Grid)

DATE:

MAGNETOMETER:

OPERATOR: T.D.

BASE STATION LOCATION:

123115

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
1300 E	0957	62242	62156	62166	
	58	62028	"	61952	
1275	59	62120	"	62044	
	1000	61896	62154	61822	
1250	1	61818	"	734	
	2	61721	"	647	
1225	3	61782	"	708	
	4	61143	"	069	
1200	5	62835	62156	62759	
	6	66356	"	66280	Dark grey exposed rocks
1175	8	65524	"	65448	naked!
		65523	"	447	
1150	10	60601	62171	60510	
		61658	"	61567	
1125	11	62333	"	62242	
	12	63423	"	63332	
1100	13	62441	"	62350	
	14	61891	"	61800	
1075	15	61851	62169	762	
	16	61899	"	810	
1050		61916	"	827	
	1017	61938	"	849	
1025		61943	"	854	

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GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY

PAGE NO: 1

LOCATION: PINE HILL - LINE 3300 N (Catalina Hill Grid)

DATE:

MAGNETOMETER:

OPERATOR: T.D.

BASE STATION LOCATION:

123116

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
1725 E	0927	62093	62146 - 66	62027	
	28	62066	"	000	
1700	29	62075	"	009	
		62057	"	61991	
1675	30	62050	"	984	
	31	62042	"	976	
16[redacted]	32	62055	"	989	
	33	62059	"	993	
1625	34	62051	"	985	
	35	62058	62145 - 65	993	
1600	36	62062	"	997	
	37	62059	"	994	
1575		62058	"	993	
	38	62072	"	62007	
1550	39	62051	"	61986	
	40	62048	62146 - 66	982	
1525	41	62051	"	985	
		62041	"	975	
1500	42	62042	"	976	
[redacted]	43	62022	"	956	
1475	44	62009	"	943	
		62000	"	934	
1450	47	61992	62156 - 76	916	
	48	61985	"	909	
1425	49	61996		920	
	50	61995	62155 - 75	920	
1400	51	61990	"	915	
	51	61997	"	922	
1375	52	61985	"	910	
		61984	"	909	
1350	53	61998	"	923	
	54	61981	"	906	
1325	55	61995	62156 - 76	919	
	56	62355	"	62279	

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GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY

PAGE NO: 1.

LOCATION: PINE HILL - LINE 3500N (Carbine Hill Grid)

DATE:

MAGNETOMETER:

OPERATOR: T. D.

BASE STATION LOCATION:

123117

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
0865 E	0801	62256	62149 - 00	62187	
0875	0804	62152	"	083	
	0805	62115	62147 - 00	048	
0900	0806	62101	"	034	
	8	62034	"	61967	
0925	9	62033	"	966	
	10	62026	62149 - 00	957	
0950	11	61999	"	930	
		61980	"	911	
0975	12	61942	"	873	
	13	62026	"	957	
1000	14	61956	"	887	
	15	61882	"	813	
1025	16	61883	"	814	
	17	61849	"	780	
1050	17	61820	"	751	
	18	61813	"	744	
1075	19	61808	"	739	
	20	61803	62150 - 00	733	
1100	21	61793	"	723	
	21	61759	"	689	
1125	24	61770	"	700	
	25	61831	62148 - 00	763	
1150	26	61930	"	862	
		61810	"	742	
1175	27	61753	"	685	
	28	61728	"	650	
1200		61734	"	666	
	29	61744	"	676	
1225	30	61771	"	703	
	31	61794	"	726	
1250	33	61770	"	702	
	34	61790	"	722	
1275	35	61806	62145 - 00	741	
		61822	"	757	

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GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY

PAGE NO: 2.

LOCATION: PINE HILL - LINE 3500N (Carbine Hill Grid)

DATE:

MAGNETOMETER:

OPERATOR: T. D.

BASE STATION LOCATION:

123118

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
1300 E	0836	61839	62145	61764	
	37	61835	"	770	
1325	38	61873	"	808	
	39	61819	"	754	
1350	0840	62140	62141	62079	
	41	62115	"	054	
13[illegible]	42	62214	"	153	
	44	62338	"	277	
1400		62434	"	373	
	0845	62642	62143	579	
1425	46	62522	"	459	
	47	62423	"	360	
1450		62266	"	203	
	48	62161	"	098	
1475	49	61613	"	61550	
	50	62247	"	62184	
1500		62122	"	059	
	51	62058	"	61995	
1525	52	62062	"	999	
	53	62074	"	62011	
1550	54	62057	"	61994	
		62051	"	988	
1575	0855	62047	62144	983	
	56	62043	"	979	
1600	57	62061	"	997	
	58	62048	"	984	
1625	59	62064	"	62000	
		62066	"	002	
1650	0901	62045	"	61981	
	2	62064	"	62000	
1675	3	62050	"	61986	
	4	62053	"	989	
1700		62042	"	978	
	0905	62028	"	964	
1725	0906	62028	"	61964	

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GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY PAGE NO:

LOCATION: Montezuma Grid LINE 8 DATE: 11/12/84

MAGNETOMETER: Geometric 816 OPERATOR: P.K

BASE STATION LOCATION: ——

123119

Grid lines have a bearing of 060° magnetic

Station	Time	Magnetic Reading	Base Reading	Estimated Corrected Reading	Cultural Features
4720 E	3·08	62 507			
4700		503			
4680	3·06	506			
60		509			
40		508			
20	3·01	62511			
00	3·13	515			
00 E		516			
4580	3·17	517			
60		522			
40	3·14	529			
20		537			
00 E	3·20	539			
4480 E		540			
60	3·22	543			
40		546			
20	3·23	559			
00		563			
80 E	3·24	569			
60		574			
40	3·26	582			
20		590			
00	3·28	602			
4280 E		614			
60	3·30	616			
40		623			
20	3·31	635			
00		653			
4180 E	3·34	667		607	
60		687		627	
50		692			
40		697			
(1600N, 1700E)		62694	5	62 637	5m N of 4150E
4130 E		706			

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GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY PAGE NO:

LOCATION: Montezuma Grid LINE 8 DATE: 11/12/84

MAGNETOMETER: Geometrics 816 OPERATOR: P.K.

BASE STATION LOCATION: — 123120

Station	Time	Magnetic Reading	Base Reading	Estimated Corrected Reading	Cultural Features
4120 E	3:39	62 717	—	626 60	
		727		670	
4100 E	3:41	735		678	
4090		737		680	
80	3:42	741		684	
		746		689	
60	3:43	752		695	
		754		697	
40	3:44	755		698	
		761		704	
20		766		709	
		777		720	
4000 E	3:46	777		720	
		777		720	
80	3:47	785		728	
		785		728	
60	3:49	793		736	
		795		738	
40	3:50	795		738	Creek
		787		730	
20	3:58	759		702	estimated positions
		741		683	
3900 E	4:04	729		671	
1000N, 1425E	4:16	62 642	-59	62583	
1100N, 1425E	4:20	62602	-50	(62552)	

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GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY

PAGE NO:

LOCATION: Montezuma Grid LINE 9

DATE: 11/12/84

MAGNETOMETER: Geometric 816

OPERATOR: P.K

BASE STATION LOCATION: —

123121

Station	Time	Magnetic Reading	Base Reading	Estimated Corrected Reading	Cultural Features
3860 E	1.53	62657		62557	
		62658		5585	
3880 E		659		5685	
	1.55	660		590	2m S of 700N 1525E - Carbine Mt
(700N 1525E)		662	-70	62592	
3900 E	1.57	662		5[illegible]	
		667		59[illegible]	
3920 E		672		602	
		674		[illegible]	
3940 E	2.01	676		6[illegible]	
		680		[illegible]	
3960 E	2.04	682		6[illegible]	creek
		684		61[illegible]	
80	2.06	680		[illegible]	
		676		607	
4000 E	2.08	673		6[illegible]	
		669		[illegible]	
20	2.10	665	-[illegible]	597	
		663		595	
40 E	2.11	659		591	
60		649		581	
80		641		57[illegible]	creek
4100 E	2.15	632		-[illegible]11	o/c conglomerate
20		628		56[illegible]	
40	2.19	625		5[illegible]5	8m S of 800N, 1775E
(800N, 1775E)		627		55[illegible]	
4160 E		619		551	
80		617	-6[illegible]	550	
4200E		616		549	
20	2.26	615		548	
40		614		547	
60	2.28	613		546	
80		613		546	
4300 E	2.29	610		[illegible]	

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GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY

PAGE NO:

LOCATION: Montezuma Grid LINE 9

DATE: 11/12/84

MAGNETOMETER: Geometric 816

OPERATOR: P K.

BASE STATION LOCATION: —

123122

Grid line bearing 060° mag.

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
4320E		62610	-6	[illegible]	
40	2.31	606	-1	[illegible]	
60		601		[illegible]	
80		592		[illegible]	
4400 E		582		[illegible]	
20	2.34	575		[illegible]	
40		556		[illegible]	
60		558		[illegible]	
80		547		[illegible]	
4500 E		541		[illegible]	
20		532		[illegible]	
40	2.39	525		[illegible]	
60	2.41	523	-6	[illegible]	

12-

GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY

PAGE NO:

LOCATION: LINE 3200W Black Hill

DATE: 30/10/84

MAGNETOMETER:

OPERATOR: P K.

BASE STATION LOCATION: 3000W, 2000S (63048Y)

123123

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
1200S	3.52	62204			erratic readings Powerline
	3.54	230			" " " "
1225S		63104			" " " "
	3.56	62186			" " " "
1250S		653			" " " "
	3.59	465			" " " "
1275S		318			" " " "
	4.01	160			" " " "
1300S		463			" " " "
	4.03	211			" " " "
1325S	405	272			" " " "
		60860			" " " "
1350S	407	62159			" " " "
		62213			" " " "
1375S	409	62221			" " " "
		268			" " " "
1400S	410	233			" " " "
		62754	-58	62696	
1425S	412	799	"	62741	
		747	"	739	
1450S		859	"	801	
	4.14	776	"	718	
1475S		778	"	720	
		816	-58	758	
1500S	4.15	807	"	749	
		795	"	737	
1525S	4.17	799	"	741	
		828	"	770	
1550S	4.19	874	"	816	
		983	"	927	
1575S		907	-58	849	
	4.21	968	"	910	
1600S		925	"	867	
	4.22	914	"	856	

123

GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY PAGE NO:

LOCATION: LINE 3200W Black Hill DATE: 30/10/84

MAGNETOMETER: OPERATOR: P.K

BASE STATION LOCATION: 3000W, 2000S (63048 Y)

123124

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
1625 S		62901	-60	62841	
	4·24	911	-60	851	
1650 S		930	"	870	
	4·26	938	"	878	
1675 S		949	"	889	
	4·27	936	-60	876	
1700 S		999	-61	938	
	4·28	941	"	880	
1725 S		965	"	904	
		997	"	936	
1750 S	4·30	976	"	915	
		951	"	890	
1775 S	4·31	930	"	869	
		63022	"	961	
1800 S		046	"	985	
	4·33	052	"	991	
1825 S		62990	"	929	
		63086	"	63025	
1850 S	4·35	033	"	62972	
		037	"	976	
1875 S		006	"	945	
		-	"		Power line
1900 S		-	"		"
		-	"		"
1925 S		62206	-62		" erratic reading
		62874	"	62812	
1950 S	4·40	881	"	819	
		856	"	794	
1975 S	4·42	830	"	768	
		799	"	737	
2000 S	4·43	797	"	735	

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GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY

PAGE NO:

LOCATION: Grand Prize Line 3200W Black Hill DATE: 21/4/84

MAGNETOMETER: Geometrics 816 OPERATOR: P.K.

BASE STATION LOCATION: 3000W 2000S
(63048)

123125

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
1350 S	4:31	62787	-59	62728	
		770		711	
1375 S	4:33	901	-60	831	
5mW "	4:35	543		483	
Traverse from above on bearing 006					
12.5m		586	-62	524	
25	4:38	624		562	
32.5		564		507	
50	4:40	530		468	
62.5		821		759	
75	4:43	766	-63	703	
		608		545	
100	4:45	442		379	
		750		687	
125	4:46	610		547	
		595	-64	531	
150	4:48	511		447	
		456		392	
175	4:50	404		340	
		378		314	
200	4:51	62355		62291	15m E of Murchison Hwy
15m E of Murchison Hwy					

123

GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY

PAGE NO:

LOCATION: 3100W Black Hill

DATE: 30/10/84

MAGNETOMETER:

OPERATOR: P.K

BASE STATION LOCATION: 3000W, 2000S (63048)

123126

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
2200 S	2.52	62586	-52	62534	
		591	-53	538	
2175 S		615	"	562	
		623	"	570	
2150 S	2.55	643	"	590	
		636	"	133 * ✓	
2125 S	2.56	708	"	655	
		742	"	689	
2100 S	2.57	755	"	702	
		774	"	721	
2075 S		800	"	747	
	3.02	875	"	822	
2050 S	3.03	874	"	821	
		991	"	938	
2025 S	3.06	917	"	864	N.E. DUNDAS TRAM
		996	"	943	
2000 S	3.07	63021	"	968	
		033	-54	979	
1975 S	3.10	062	"	63003	
		102	"	048	
1950 S	3.12	314	"	260	
		143	"	089	
1925 S	3.13	177	"	123	
		181	"	127	
1900 S	3.14	168	"	114	
		175	"	121	
1875 S	3.15	174	"	120	
		160	"	106	
1850 S	3.16	161	"	107	
		146	"	092	
1825 S		098	"	034	
	3.17	199	"	145	
1800 S		171	"	117	
		172	"	118	

126

GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY PAGE NO:

LOCATION: 3100 W Black Hill DATE: 30/10/84

MAGNETOMETER: OPERATOR: P.K

BASE STATION LOCATION: 3000W, 2000S (63048 8)

123127

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
1775 S	3·21	63187	-54	63133	
		118	-54	064	
1750 S	3·23	128	-55	073	
		132	"	077	
1725 S		133	"	078	
	3·25	100	"	045	
1700 S	3·26	106	"	051	
		086	"	031	
1675 S		074	"	019	
	3·27	056	"	001	
1650 S		050	-56	62994	
		053	"	997	
1625 S	3·29	114	"	63058	
		126	"	070	
1600 S	3·30	138	"	082	
		270	"	214	
1575 S	3·31	272	"	216	
		298	"	242	
1550 S	3·33	238	-57	181	
		237	"	180	
1525 S	3·34	202	"	145	
		481	"	424	
1500 S	3·35	409	"	352	
		078	"	021	
1475 S		052	"	62995 *	
		153	"	63096	
1450 S		342	"	285 x	
	3·39	287	"	230	
1425 S		128	"	071 ✓	
	3·42	164	"	107	
1400 S		035	"	62978	
		62964	"	907	
1375 S		838	"	781	
		881	"	834	

12'

GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY PAGE NO:

LOCATION: 3000W Black Hill DATE: 30/10/84

MAGNETOMETER: OPERATOR: P.K

BASE STATION LOCATION: 3,000W, 2000S (63048)

123128

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
2000S				63048	
		63153	-62	091	
1975S	4:53	150	"	088	
	4:54	175	"	113	
1950S		183	"	121	
		201	"	139	
1925S	4:57	204	"	142	
		205	-61	144	
1900S	4:58	218	"	157	
		222	"	161	
1875S	4:59	225	"	164	
		226	"	165	
1850S	5:00	236	"	175	
		261	"	200	
1825S	5:01	336	"	275	
		310	-60	250	
1800S	5:03	264	"	204	
		234	"	174	
1775S	5:04	220	"	160	
		212	"	152	
1750S		213	"	153	
		250	"	190	
1725S	5:06	290	"	230	
		346	"	286	
1700S	5:07	294	"	234	
		302	-61	241	
1675S	5:09	260	"	199	
		231	"	170	
1650S	5:10	256	"	195	
		265	"	204	
1625S	5:11	239	"	178	
		190	"	129	
1600S	5:12	142	"	081	
		68		107	

126

GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY — PAGE NO:

LOCATION: 3000W Black Hill — DATE: 30/10/84

MAGNETOMETER: — OPERATOR: P.K 9WH

BASE STATION LOCATION: 3,000W, 2000S (63048 Y) — 123129

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
1575 S.	5.13	63146	-61	63085	
		095	-61	034	
1550 S	5.14	072	"	011	
		039	"	62978	
1525 S	5.15	012	"	951	
		007	"	946	
1500 S	5.16	62970	"	909	
		957	"	896	
1475 S	5.18	951	-60	891	
		910	"	850	
1450 S	5.20	857	"	797	
		806	"	746	
1425 S		757	"	697	
		742	"	682	
1400 S	5.22	713	"	653	
		674	-59	615	
1375 S	5.23	716	"	657	
		615	"	556	
1350 S	5.24	553	"	494	
		524	"	465	
1325 S	5.24	498	"	439	
		501	"	442	
1300 S	5.23.	523	"	464	
		517	-60	457	
1275 S	5.21	585	"	525	
		63005	"	945	
1250 S	5.18	62550	"	490	
		424	"	364	
1225 S	5.17	335	"	275	
		263	-61	202	
1200 S	5.15	242	"	181	

129

GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY PAGE NO:

LOCATION: 2900 W Blade Hill DATE: 30/10/84

MAGNETOMETER: OPERATOR: W.H

BASE STATION LOCATION: 3000W, 2000S

123130

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
2000S	2·42	63222	-51	63171 ✓	
		221		170 ✓	
1975S	2·45	245		194 ✓	
		233		182 ✓	
1950S	2·48	252	-52	200 ✓	
		211		169 ✓	
1925S	2·50	244		192 ✓	
		260		208 ✓	
1900S	2·52	257		205 ✓	
		259	-53	206 ✓	
1875S	2·54	232		279 ✓	
		346		293 ✓	
1850S	2·56	306		253 ✓	
		340		287 ✓	
1825S	2·58	349		296 ✓	
		283		230 ✓	
1800S	3·00	280		227 ✓	
		230		177 ✓	
1775S	3·04	208		155 ✓	
		177		124 ✓	
1750S	3·05	149		096 ✓	
		125		072 ✓	
1725S	3·07	098		045 ✓	
		084	-54	030 ✓	
1700S	3·08	084		030 ✓	
		071		017 ✓	
1675S	3·10	050		62996 ✓	
		034		980 ✓	
1650S	3·12	018		964 ✓	
		006		952 ✓	
1625S	3·14	62987		933 ✓	
		972		918 ✓	
1600S	3·16	943		890	

136

GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY

PAGE NO:

LOCATION: 2800W Black Hill

DATE: 30/10/84

MAGNETOMETER:

OPERATOR: W.H.

BASE STATION LOCATION: 3,000W, 2000S (63048 γ)

123131

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
2600S	4·20	63131	-58	63073	
		147		089	
2575 S	4·22	156		098	
		182	-60	122	
2550 S	4·24	225		165	
		264		204	
2525 S	4·26	250		190	
		228		168	
2500 S	4·27	194		134	
		185	-61	124	
2475 S	4·29	175		114	
		171		110	
2450 S	4·31	165		104	
		154		093	
2425 S	4·33	141		080	
		096		035	
1800S	4·35	072		011	
		033		62972	
1775 S	4·36	017		958	
		62984	-62	922	
1750S	4·38	959		897	
		930		868	
1725S	4·39	914		852	
		909		847	
1700S	4·41	891		829	
		842		780	
1675S	4·43	830		768	
		811		749	
1650S	441	796		734	
		783		721	
1625S	445	776		715	
		751		689	
1600S	447	726		664	
		705	-63	642	

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GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY PAGE NO:

LOCATION: 2800 W Black Hill DATE: 30/10/84

MAGNETOMETER: OPERATOR: W.H.

BASE STATION LOCATION: 3,000W, 2000S (63048)

123132

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
1575 S	4.44	62680	-63	62617	
		685	"	622	
1550 S	4.50	693	"	630	
		681	"	618	
1525 S	4.51	661	"	598	
		647	"	584	
1500 S	4.52	670	"	607	
		586	-62	524	
1475 S	4.53	584	"	522	
		585	"	523	
1450 S	456	587	"	525	
		610	-61	549	
1425 S	458	651	"	590	
		591	"	530	
1400 S	459	663	"	602	
		567	"	506	
1375 S	5.00	478	"	427	
		409	"	348	
1350 S	5.02	379	"	318	
		455	-60	395	
1325 S	5.03	474	"	414	
		451	"	391	
1300 S	5.04	451	"	391	
		430	"	370	
1275 S	5.06	387	"	327	
		326	"	266	
1250 S	5.07	301	"	241	
		334	-61	273	
1225 S	5.08	246	"	185	
		204	"	143	
1200 S	5.10	213	"	152	

GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY PAGE NO:

LOCATION: 2600W Black Hill Grid DATE: 21/11/84

MAGNETOMETER: Geometrics 816 OPERATOR: P.K

BASE STATION LOCATION: 3000W 2000S
63048 X

123133

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
200S	10.21	62528	-53	62475	
	10.22	550		497	
25	10.24	574	-52	522	
		610		568	
50	10.25	779		727	
		786		734	
75	10.27	63361		63309	
		62569	-51	62518	hollow
300S	10.29	770		719	"
		785		734	
25	1031	233		182	
		292		241	
50	10.33	384	-53	331	
		497		444	
75	10.35	552		499	
		525		472	
400	10.37	421		368	
		417	-52	365	
25	10.38	268		216	
		289		237	
50	10.39	234		182	
		222		170	
75	10.41	238		286	
		246		194	
500	10.42	277		225	
		283		231	
25	10.43	291		239	
		341		289	
50	10.45	283		231	
		178		126	
75	10.46	140		188	
		090		038	
600	10.47	115		063	
		164	-51	118	

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GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY PAGE NO:

LOCATION: 2600 W Black Hill Grid DATE: 21/11/84

MAGNETOMETER: Geometrics 816 OPERATOR: P.K.

BASE STATION LOCATION: 3000W 2000S 123134
63048 Y

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
625 S	10:49	62241	-51	62190	
		302		251	
50	10·50	233		182	
		61959		61908	
75	10·51	989		938	
		864		813	
600	10·53	919	-52	867	
		891		839	
25	10·55	940		888	
		898		836	
50	10·57	903		851	
		938	-53	885	
75	10·58	972		919	
		996		943	
800	11·00	978		925	
		996		943	
25		62125		62072	
		100		047	
50	11·02	024		61971	
		61924		871	
75	11·05	940		887	
		965		912	
900	11·07.	885		832	
		915		862	
25	11·08	981		928	
		985		932	
50	11·10	62033		980	
		083		62030	
75	11·11	078		025	
		100		047	
1000	11·12	110		057	
		141		088	
25	11·13	129		076	
		119		066	

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GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY

PAGE NO:

LOCATION: 2600W Black Hill Grid

DATE: 21/11/84

MAGNETOMETER: Geometrics 816

OPERATOR: P.K.

BASE STATION LOCATION: 3000W 2000S

123135

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
1050S	11.17	62103	-53	62050	
		087		034	
75	11.18	062		009	
		106		053	
1200S	11.16	061		008	
		032		61979	
25	11.18	070		62017	
		062		009	
50	11.19	054		001	
		062		009	
75	11.20	067		014	
		082		029	
1200	11.22	096		62043	

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GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY

PAGE NO:

LOCATION: Grand Prize Line 2600 W (Black Hill)

DATE: 8/3/85

MAGNETOMETER: Geometrics 816

OPERATOR: WH

BASE STATION LOCATION: 3000 W 2000 S (63048 Y)

123136

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
1425 S	9:37	62 159	-49	62110	
		168		119	
1400 S	9:38	144		095	
		139		090	
75	9:39	136		087	
		143		094	
50	9:40	147		098	
		153		104	
25	9:42	161		112	
		152	-50	102	
1300 S	9:43	141		091	
		136		086	
75	9:44	126		076	
		149		099	
50	9:45	146		096	
		142		092	
25	9:46	101		051	
		183		133	
1200 S	9:47	102		052	

136

GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY

PAGE NO:

LOCATION: Grand Prize 2600W Line (Black Hill)

DATE: 8/3/85

MAGNETOMETER: Geometrics 816

OPERATOR: WH

BASE STATION LOCATION: 3000W 2000S (63048 8)

123137

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
2600W 1850S	9:08	63003	-50	62953	
		63125		63075	
1825S	9:10	63074		024	
		62914		62864	
1800S	9:12	684		634	
		647	-49	598	
75	9:15	62563		514	
		553		504	
50	9:17	535		466	
		555	-51	504	
25	9:18	503		452	
		487		436	
1700S	9:20	464		413	
		463		412	
75	9:21	442		391	
		418	-52	366	
50	9:22	398		346	
		380		328	
25	9:24	359		307	
		333		281	
1600	9:26	306		254	
		287	-51	236	
75	9:28	274		223	
		298		247	
50	9:30	274		223	
		248		197	
25	9:31	246		195	
		215		164	
1500S	9:33	195		144	
		205		154	
75	9:35	206		155	
		190		139	
50	9:36	180		129	
		157		106	

137

GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY PAGE NO:

LOCATION: 2700 W & Black Hill Grid DATE: 30/10/84

MAGNETOMETER: OPERATOR: W.M

BASE STATION LOCATION: 3000W, 2000S (63048 8)

123138

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
1600S	3.41	62643	-57	62586	
		691	"	634	
1625 S	344	721	"	664	
		738	"	681	
1650 S	346	734	"	677	
		793	-58	735	
1675 S	348	754	"	696	
		779	"	721	
1700 S	3.52	680	"	622	
		775	-57	718	
1725 S	3.56	762	"	705	
		798	"	741	
1750 S	3.58	802	"	745	
		880	"	823	
1775 S	4.00	903	"	846	
		923	"	866	
1800S	4.02	911	"	854	
		905	-58	847	
1825 S	4.04	893	"	835	
		909	"	851	
1850 S	405	917	"	859	
		958	"	900	
1875S	4.06.	962	"	904	
		63020	"	962	
1900S	4.08	041	"	983	
		027	"	969	
1925 S	4.10	035	"	977	
		017	"	959	
1950 S	4.11	015	"	957	
		019	"	961	
1975 S	4.13	020	"	962	
		019	"	961	
2000S	4.15	011	"	953	

136

GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY PAGE NO:

LOCATION: 2400W BLACK HILL GRID DATE: 21/11/84

MAGNETOMETER: Geometrics 816 OPERATOR: P.K

BASE STATION LOCATION: 3000W, 2000S (63048 8)

123139

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
300S	2.54	62561	-52	62509	
		538		486	
25	2.55	506		454	
		463		411	
50	2.56	415		363	
		372		320	
75	2.57	340		288	
		325	-53	272	
400 S	2.59	292		239	
		266		213	
25	3.00	246		193	
		247		194	
50	3.01	245		192	
		206		153	
75	3.03	196	-54	142	
		154		100	
500	3.04	123		079	
		089		035	
25	3.06	127		073	
		163		109	
50	3.07	199		145	
		174		120	
75	3.10.	220		176	
		230		186	
600	3.12	055		001	
		102		058	
25	3.13	096		042	
		097		043	
50	3.15	696		042	
		174?		125	
75	3.17	137		083	
		056	-55	001	
700 S	3.19	051		61997	
		158		62104	

139

GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY PAGE NO:

LOCATION: 2400W BLACK HILL GRID DATE:

MAGNETOMETER: Geometrics 816 OPERATOR:

BASE STATION LOCATION: 3000W, 2000S 123140
63048

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
725 S	3:20	62093	-55	62038	
		166		111	
750	3:22	126		071	
		268	-53	215	
75	3:24	293		240	
		311		258	
800	3:27	382		329	
		387		334	
25	3:29	479		426	
		499		446	
50	3:32	328		275	
		166	-54	112	
75	3:34	280		226	
		393		339	
900 S	3:35	62422		62368	

140

GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY PAGE NO:

LOCATION: 2200W Black Hill Grid DATE: 21/11/84

MAGNETOMETER: Geometrics 816 OPERATOR: W.H

BASE STATION LOCATION: ~~3000W~~ 2000S (63048 ✓)

123141

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
315 S	3·00	62401	-53	62348	
3255	3·01	386		333	
		431	-54	377	
50	3·04	456		402	
		476		422	
75	3·06	476		421	
		455		401	
400	3·08	437		383	
		438		384	
25	3·09	474		420	
		422		368	
50	3·10	362		308	
		304		250	
75	3·12	263		209	
		284		230	
500	3·13	280		226	
		270		216	
25	3·15	225		171	
		234		180	
50	3·17	247		193	
		188	-55	133	
75	3·19	189		134	
		188		133	—
600	3·21	141		086	
		112		057	
25	3·23	066	-53	013	
		026		61973	
50	3·25	014		961	
		007		954	
75	3·27	001		948	
		61996		943	
700S	3·29	62001		948	
		62020		967	
725S	3·31	028		975	

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GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY PAGE NO:

LOCATION: 2200W BLACK HILL GRID DATE: 21/11/84

MAGNETOMETER: Geometric 816 OPERATOR: P.K.

BASE STATION LOCATION: 3000W, 2000S (63048 8)

123142

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
→675 S	3.00	62005	-55	61950	
		000		945	
700	3.59	003		948	
		016		961	
→725	3.57	028		973	
		033		978	
750	3.55	023		968	
		032		977	
775	3.52	61982	-54	948	
		950		896	
800	3.41	896		842	
		893		839	
825	3.49	936		882	
		969		915	
850	3.48	987		933	
	3.47	62031	-53	978	
875	3.47	127		62074	
		083		030	
900 S	3.42	045	-54	61991	

142

GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY

PAGE NO:

LOCATION: 2000W Black Hill Grid. DATE: 21/11/84

MAGNETOMETER: Geometrics 816 OPERATOR: W.H

BASE STATION LOCATION: 3000W 2000S (63048 8)

123143

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
200 S	1.54	62049	-54	61995	
		61973		919	
25	1.56	979		925	
		977		923	
50	1.58	950	-53	897	N E. DUNDAS TRAM
		908		855	
75	2.00	62763		62710	
		501		448	
300	2.02	568		515	
		196	-54	142	
25	2.04	217		163	
		249		195	
50	2.06	255		201	
		200		146	
75	2.08	182		128	
		163		109	
400	2.10	199		145	
		167		113	
25	2.12	183		129	
		160		106	
50	2.14	117		063	
		125		071	
75	2.15	153		099	
		143		089	
500	2.17	130		076	
		128	-51	077	
25	2.18	144		093	
		185		134	
50	2.20	110		059	
		065		014	
75	2.21	082		031	
		063		012	
600 S	2.23	064	-50	014	
		023		61973	

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GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY PAGE NO:

LOCATION: 2000W Black Hill Grid DATE: 21/11/84

MAGNETOMETER: Geometrics 816 OPERATOR: W.H

BASE STATION LOCATION: 3000W 2000S

63048

123144

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
625 S	2·25	62008	-50	61958	
		61989		939	MINE SHAFT
50	2·27	969		919	
		960	-53	907	
75	2·29	949		896	
		943		890	
00 S	2·31	928		61875	

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GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY

PAGE NO:

LOCATION: 1800W Black Hill Grid

DATE: 21/11/84

MAGNETOMETER: Geometrics 816

OPERATOR: W.H

BASE STATION LOCATION: 3000W 2000S (63048 8)

123145

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
400 S	12·37	61986	-52	61934	
		62113	-51	62062	
75	12·39	168		117	
		035	-50	61985	
50	12·44	61984		934	
		62060		62010	
25	12·46	009		61959	
		61927		877	
300	12·48	923		873	
		882		832	
75	12·51	60599		60549	
		61180		61130	
50	12·53	61845	-49	796	
		834		785	
25	12·55	865		796	
		594		545	
200	12·58	655	-50	605	
		437		387	
175	1·00	449		399	
		506		456	
50	1·02	475		425	
		387		337	
25	1·04	250		200	
		177		127	
100	1·06	121		071	
		108	-51	057	
75	1·08	379		328	
		963		912	
50	1·09	788		737	
		744		693	
025 S	1·11	853		802	
		62296		62245	
00	1·12	801		750	
		63912	-50	862	

145

GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY PAGE NO:

LOCATION: 1800W Black Hill Grid DATE: 21/11/84

MAGNETOMETER: Geometric 816 OPERATOR: W.H

BASE STATION LOCATION: 3000W 2000S (63048)

123146

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
025 N	1.14	63206	-50	63156	
		106		056	
50	1.16	575		525	
		481	-52	429	
75	1.19	65286		65234	
		961		909	
100 N	1.21	64804		64752	

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GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY PAGE NO:

LOCATION: 1600W Black Hill Grid DATE: 21/11/84

MAGNETOMETER: Geometrics 816 OPERATOR: W.H

BASE STATION LOCATION: 3000W 2000S (63048 8)

123147

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
275 S.	11.19	61934	-53	61881	
		876		823	
250	11.21	851		798	
		832		779	
25	11.23	814		761	
		815		762	
00	11.25	865		812	
		846		793	
75	11.27	852		799	
		867	-54	813	
50	11.29	814		760	
		785		731	
25	11.31	759		705	
		737		683	
100	11.32	730		676	
		697	-53	644	
75	11.34	689		636	
		682		629	
50	11.36	684		631	
		653		600	
25 S	11.37	628		575	
		751		698	
00	11.39.	897		844	
		680		627	
25 N	11.41	558		505	
		510		457	
50	11.43	485		432	
		462		409	
75	11.45	435		382	
		438		385	
100	11.49	441		388	
		419		366	
25	11.49	470		417	
		401		348	

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GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY PAGE NO:

LOCATION: 1600W Black Hill Grid DATE: 21/11/84

MAGNETOMETER: Geometrics 816 OPERATOR: W.H.

BASE STATION LOCATION: ~~3000~~W 2000S (63048 8)

123148

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
150 N.	11.51	61403	-53	61350	
		412		359	
75	11.53	421	-51	370	
		442		391	
200	11.54	61450		61399	

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GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY

PAGE NO:

LOCATION: 1400W (Black Hill Grid

DATE: 21/11/84

MAGNETOMETER: Geometrics 816

OPERATOR: W.H

BASE STATION LOCATION: 3000W, 2000S (63048)

123149

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
225 S	9.45	62093	-56	62037	
		104		048	
200	9.49	050		61994	
		058		62002	
175	9.51	070		014	
		071	-57	014	
150	9.54	61965		61908	
		935		878	
125 S	9.55	983		926	
		844		787	
100	9.57	827		770	
		797	-55	742	
75	9.59	794		739	
		772		717	
50 S	10.01	769		714	
		784		729	
25	10.03	775		720	
		749		694	
00	10.05	734		679	
		701		646	
25	10.07	742		687	
		804	-54	750	
50	10.09	786		732	
		939		875	
75 N	10.12	62261		62207	
		61960	-53	61907	
100N	10.14	647		594	
		689		636	
25	10.16	743		690	
		564		511	
50	10.18	586		533	
		712		659	
75 "	10.21	757		704	
		807		754	

149

GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY

PAGE NO:

LOCATION: 1400W Black Hill Grid

DATE: 21/11/84

MAGNETOMETER: Geometrics 516

OPERATOR: M H

BASE STATION LOCATION: 3000W, 2000S
63048

123150

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
200 N	10.23	61876	-52	61824	
		824		772	
25	10.26	845		793	
		914		862	
50	10.28	828	-51	777	
		822		771	
75	10.30	831		780	
		871	-53	818	
300	10.33	856		863	
		858		805	
25	10.36	846		793	
		993	-52	941	
50	10.39	952		900	
		934		882	
75	10.41	270		118	
		65835		65783	
400 N	10.43	62570		62518	

150

GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY PAGE NO:

LOCATION: 400 S Black Hill Grid DATE: 21/11/84

MAGNETOMETER: Geometrics 816 OPERATOR: P.K.

BASE STATION LOCATION: 3000W 2000S
(63048)

123151

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
2275 W	9.53	62339	-59	62282	
		391		334	
2300 W		387		330	
		380		323	
25	9.57	391		334	
		315	-55	260	
[redacted]0	9.59	309		254	
		291		236	
75	10.00	262		207	
		275		220	
2400 W	10.01	296		241	
		298		243	
25	10.03	327		272	
		289		234	
50	10.05	308		253	
		292		237	
75	10.06	266		211	
		259		204	
[redacted]00 W	10.08	239	-54	185	
		275		221	
25	10.09	293		239	
		318		264	
50	10.11	394		340	
		402		348	
75	10.13	372	-53	319	
	10.14	376	-53	323	
2600 W	1.58	424	-53	371	
		433		380	
25	2.00	400		347	
		419		366	
50	2.01	388		335	
		393		340	
75	2.03	388	-54	334	
		453		399	

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GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY

PAGE NO:

LOCATION: 400 S Black Hill Grid

DATE: 21/11/84

MAGNETOMETER: Glometrics 816

OPERATOR: P.K

BASE STATION LOCATION: 3000 W, 2000 S (63048 r)

123152

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
2700 W	2.05	62455	-54	62401	
		436		382	
25	2.06	496		442	
		575		521	
50	2.08	629		575	
		647		593	
75	2.09	721		667	
		894		840	
2800	2.11	63272		63218	
		836		782	
25		66363		66309	reading not repeatable
		63153		63099	
50	2.15	59206		59152	reading not repeatable
		65649		65595	" " "
75	2.17	67833		67779	" " "
		69022	-51	68971	" " "
2900	2.20	65927		65876	" " "
		65367		65316	" " "
25	2.22	67122		67071	" " "
		63423	-50	63373	" " "
50	2.25	70381		70331	" " "
		71159		71109	" " "
75	2.27	67244		67194	" " "
		72660	-53	72607	" " "
3000	2.29	63177		63124	" " "

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GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY PAGE NO:

LOCATION: 600 S Black Hill Grid DATE: 21/11/84

MAGNETOMETER: Geometrics 816 OPERATOR: P.K.

BASE STATION LOCATION: 3000W, 2000S (63048 8)

123153

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
3050W	1·17	61328	-50	61278	
		088	-52	036	Bulldozed area
25	1·20	087		035	" "
		60965		60913	" "
3000	1·21	61202		61150	
		338		286	
75	1·22	428		376	
		175		123	
50	1·24	269		217	
		456		404	
25	1·25	380		338	
		427		375	
2900	1·27	564		512	
		673	-53	620	
75	1·28	720		667	
		851		798	
50	1·30	923		870	
		62729		62176	
25	1·31	372		319	
		336		283	
2800	1·32	199		146	
		222	-54	178	
75	1·34	112		068	
		030		61976	
50	1·36	060		62006	
		078		024	
25	1·38	064		010	
		095		041	
2700	1·39	074		020	
		068		014	
75	1·40	049		61995	
		054		62000	
50	1·42	066		012	
		089	-55	034	

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GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY

PAGE NO:

LOCATION: 600 S Black Hill Grid

DATE: 21/11/84

MAGNETOMETER: Geometrics 816

OPERATOR: P.K

BASE STATION LOCATION: 3000 W, 2000 S (63048)

123154

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
2725W	1.43	62083	-55	62028	
		150		095	
2600W	1.45	62114		62059	

154

GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY PAGE NO:

LOCATION: 800 S Black Hill Grid DATE: 21/11/84

MAGNETOMETER: Geometrics 816 OPERATOR: P.K

BASE STATION LOCATION: 3000W, 2000S 123155

630488

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
2600W	12:42	61977	-51	61926	
		996	-50	946	
25	12:44	936		886	
		963		913	
50	12:46	931		881	
		884		834	
75	12:48	906		856	
		658		608	
2700	12:50	922		872	
		928		878	
25	12:51	967		917	
		892		842	
50	12:52	970		920	
		778	-49	729	
75	12:54	831		782	
		935		886	
2800	12:56	927		878	
		63031		62982	
25	12:57	62885		836	
		837	-50	787	
50	12:59	812		762	
		783		633	
75	1:00	720		670	
		658		608	
2900	1:02	688		638	
		770		720	
25	1:04	704		654	
		653		603	
50	1:05	573		523	
		751		701	
75	1:06	290		240	
		393		343	
3000	1:08	177	-51	126	readings not repeatable
		59695		59644	" " "

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GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY

PAGE NO:

LOCATION: 800S Black Hill Grid

DATE: 21/11/84

MAGNETOMETER: Geometrics 816

OPERATOR: P.K

BASE STATION LOCATION: 3000W, 2000S (630488)

123156

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
3025 W	1:11	62227	-51	62176	
		63519		63468	readings not repeatable
3050	1:13	62939	-50	62889	

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GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY

PAGE NO:

LOCATION: 1000S Black Hill Grid **DATE:** 21/11/84

MAGNETOMETER: Geometrics 816 **OPERATOR:** P.K.

BASE STATION LOCATION: 3000W, 2000S
630488

123157

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
3000W	12:02	62674	-52	62622	
		964		412	
75	12:03	63035	-53	982	
		62880		827	
50	12:04	910		857	
		876		823	
25	12:05	676		623	
		61076		61023	
2900	12:06	60083		60030	
		62431		62378	
75	12:07	508		455	
		61930		61877	
50	12:09	916		863	
		943		890	
25	12:10	956		903	
		935		882	
2800	12:11	943		890	
		960		917	
75	12:12	62000		947	
		61999		946	
50	12:13	967		914	
		967		914	
25	12:15	62003		950	
		025		972	
2700	12:16	013		960	
		017		964	
75	12:18	032	-52	980	
		021		969	
50	12:19	61970		918	
		996		944	
25	12:21	62045		993	
		084		62632	
2600	12:22	62119		067	

157

GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY PAGE NO:

LOCATION: 1200 S Black Hill Grid DATE: 21/11/84

MAGNETOMETER: Geometrics 816 OPERATOR: P.K

BASE STATION LOCATION: 3000 W 2000 S
(63048 gammas)

123158

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
2500W	11.24	62130	-53	62077	
		122	"	069	
25	11.25	098	"	045	
		112		059	
50	11.27	165		112	
		162	-54	108	
75	11.28	119		065	
		113		059	
2600W	11.29	098		044	
		088		034	
25	11.30	081		027	
		075		021	
50	11.32	072		018	
		072	-53	019	
75	11.33	082	"	029	
		095	"	042	
2700	11.34	119		066	
		153		100	
25	11.36	280		227	
		381		328	
50	11.37	387		334	
		379		326	
75	11.38	321		268	
		305		252	
2800	11.39	201		148	
		153		100	
25	11.41	174		121	
		158		105	
50	11.43	121		068	
		127		074	
75	11.44	128		075	
		126		073	
2900	11.45	158		105	
		334		281	

158

GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY

PAGE NO:

LOCATION: 1200 S Black Hill Grid

DATE: 21/11/84

MAGNETOMETER: Geometrics 816

OPERATOR: P.K.

BASE STATION LOCATION: 3000W 2000S (630488)

123159

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
2925 W	11:46	62691	-53	62638	
		754		701	
50	11:47	443		390	
		259		206	
75	11:48	222		169	
		260		207	
3[illegible]00	11:50	229		176	
		241		188	
25	11:51	238		185	

159

GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY

PAGE NO:

LOCATION: 2000 S Black Hill Grid?

DATE: 30/10/84

MAGNETOMETER:

OPERATOR: P.K

BASE STATION LOCATION: 3000W, 2000S (63048 8)

123160

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
3000 W				63048	
		63084	-51	63033	
3025 W	2·40	067	"	016	
		052	"	001	
3050 W		034	"	62987	
		017	"	966	
3075 W	2·43	62999	"	948	
		63023	"	972	
3100 W					
	4·48	63032	-63	62969	
3125 W	4·47	62978	-62	916	
		945	"	883	
3150 W		925	"	863	
		876	"	814	
3175 W	4·44	846	"	784	
		814	"	752	
3200 W	4·43	62797	"	735	

16

GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY

PAGE NO: 4

LOCATION: North Grand Prize - Grid

DATE: 29/11/84

MAGNETOMETER: Geometric 816

OPERATOR: P.K

BASE STATION LOCATION:

123161

Traverse West. Power line Track estimated

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
0			-60		3200W 1900S
					West to Hwy
25		62888		62828	
		862		802	
50		814		754	Edge of Highway
		808		748	East side Hwy
75		803		743	
	5.58	836		776	
100n.		772		712	
		723		663	
125		635		575	
		604		544	
150		681		621	
					Road crossed to West Side
		628		568	
175		590		530	
		677		617	
200		634		574	
		592		532	
225		535		475	
		581		521	
250		488		428	
		540		480	
275		457		397	
		476		416	
300		548		488	
		360		300	? off Re verge of
325	6.11	335		275	} the Hwy
					(Road to Melba Flats
					concentrates depot.

Used in road ballast + Erosion control material

161

GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY

PAGE NO: 1

LOCATION: North Ground Drive — Old Power line Track DATE: 21/4/87

MAGNETOMETER: Geometrics 816. OPERATOR: P.K

BASE STATION LOCATION: 123162

Traverse East. Estimated

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
0 m.		N R			3000W 1900S drastically broken pavement
		N R.			
25	4:30	63054	-55	62999	
		064		63009	
50		096		041	
	4:37	125		080	
75		157		102	
		159		104	
100	4:36	142		087	
		135	-55	080	123.6m 3162W 1825S (63097 corrected 63037)
125		097	-55	042	
		251		196	metallic items 5m S
150	4:39	206		151	
		214		159	
175		199		144	
		210		155	
200	4:42	234		179	
		289		234	
225		315		260	
		317		262	
250	4:44	359		304	
262.5		307		252	Line 3000W 1725S corrected 63230
269.5		295	-55		
275		247		192	
		243		188	
300		215		160	
		190		135	
325		180		125	
		160		105	
350		156		101	
		127		072	
375		101		047	
		066		011	
400		023		62968	
2058					Line 3000W 1630S

162

GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY

LOCATION: North Grand Prize - Old Power Line Track

DATE: 29/11/84

MAGNETOMETER: Geometrics 816

OPERATOR: P.K

BASE STATION LOCATION:

123163

Traverse East

Estimated

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
812.5m		62170	-60	62110	
825		62167		107	
		174		114	
850	5.21	192		132	
		201		141	
875		213		153	
		168		* 108	metal 2m SouR
900		222		162	
		188		128	
925		146		086	
		136		076	
950		102		042	
		056		61996	
975		101		62041	
		094		034	
1000	5.29	112		052	
2900W 1625S	5.40	62996		62933	
3000W 1725S	5.44	63304		63230	
3100W 1825S	5.47	63114		63145	high gradient area

163

GOLD FIELDS EXPLORATION PTY. LIMITED

GROUND MAGNETOMETER SURVEY

LOCATION: North Grand Prize - Old Power Line Track.

DATE: 29/11/84

MAGNETOMETER: Geometric 816

OPERATOR: P.K

BASE STATION LOCATION:

123164

Traverse East

Estimated

Station	Time	Magnetic Reading	Base Reading	Corrected Reading	Cultural Features
2900W 1625S		62988	-55	62933	corrected 62933
412.5m		62952		62897	
425		942		887	
		897		842	
450	4.58	857		802	
		828		773	
475		794		739	
		942		687	
500		715		660	
		62679		624	metalic items 5m S
25		669		614	
		653		598	
~~40~~		680	-60	620	LINE 2800W 1537 S
50		685		625	corrected approx 62608
		647		587	
75		677		617	
		668		608	
600		691		631	
		687		627	
25	5.09	638		578	
		612		552	
50		554		494	
		518		456	
75		515		455	
		498		438	
700	5.13	459		399	
		403		343	
25		301		241	
		259		199	
50	5.16	219		159	
		215		155	
75		191		131	
		175		115	
800	5.19	62166		106	

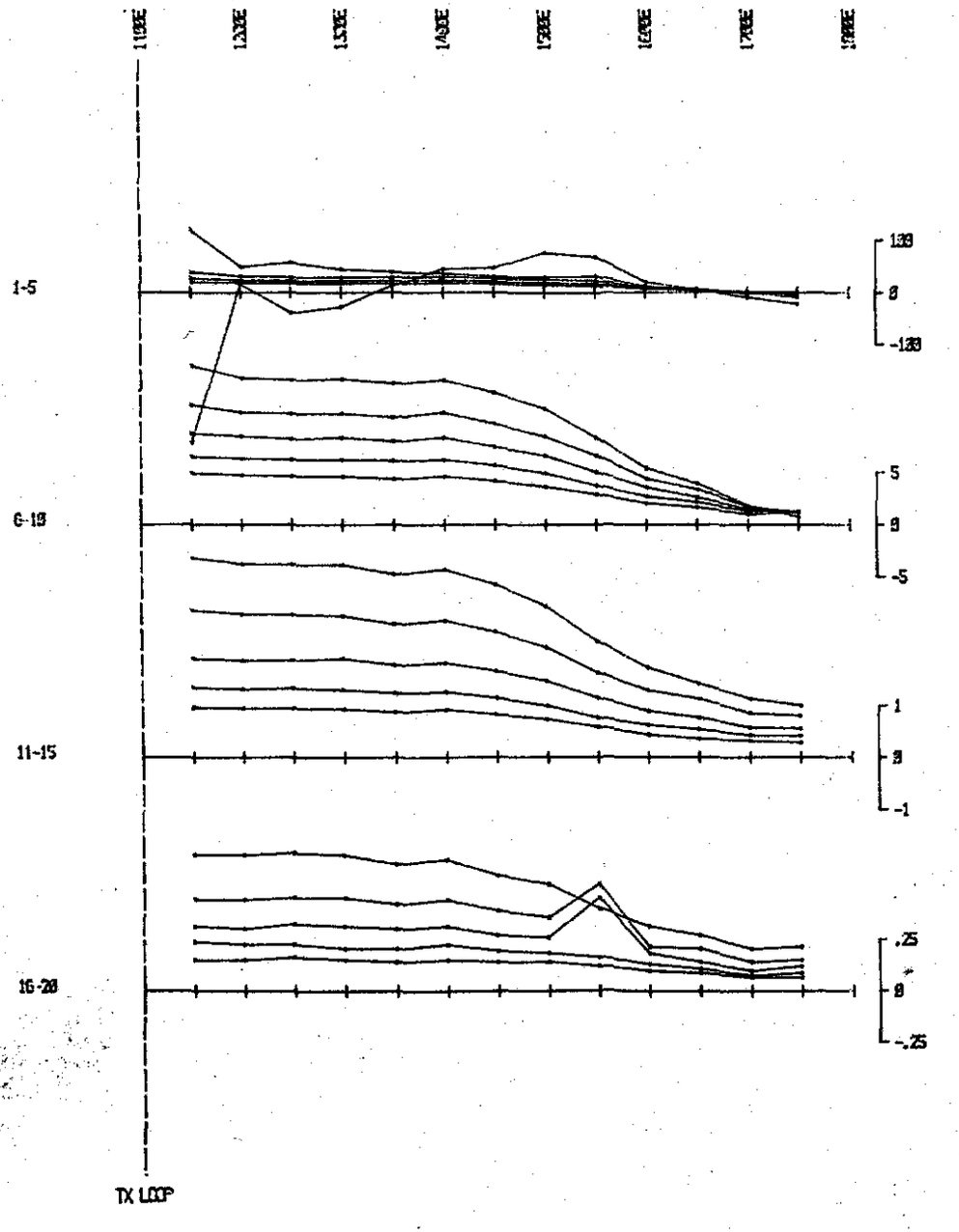
APPENDIX 5

E.M. 37 Data

WATANABE INSTRUMENTS CORP. CHART NO. PR-511

P.CHART NO. PR-511

VERTICAL COMPONENT $\dot{B}$ (Z)



nanovolts per amp metre squared

EM-37

FIXED TRANSMITTER SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (Ż)

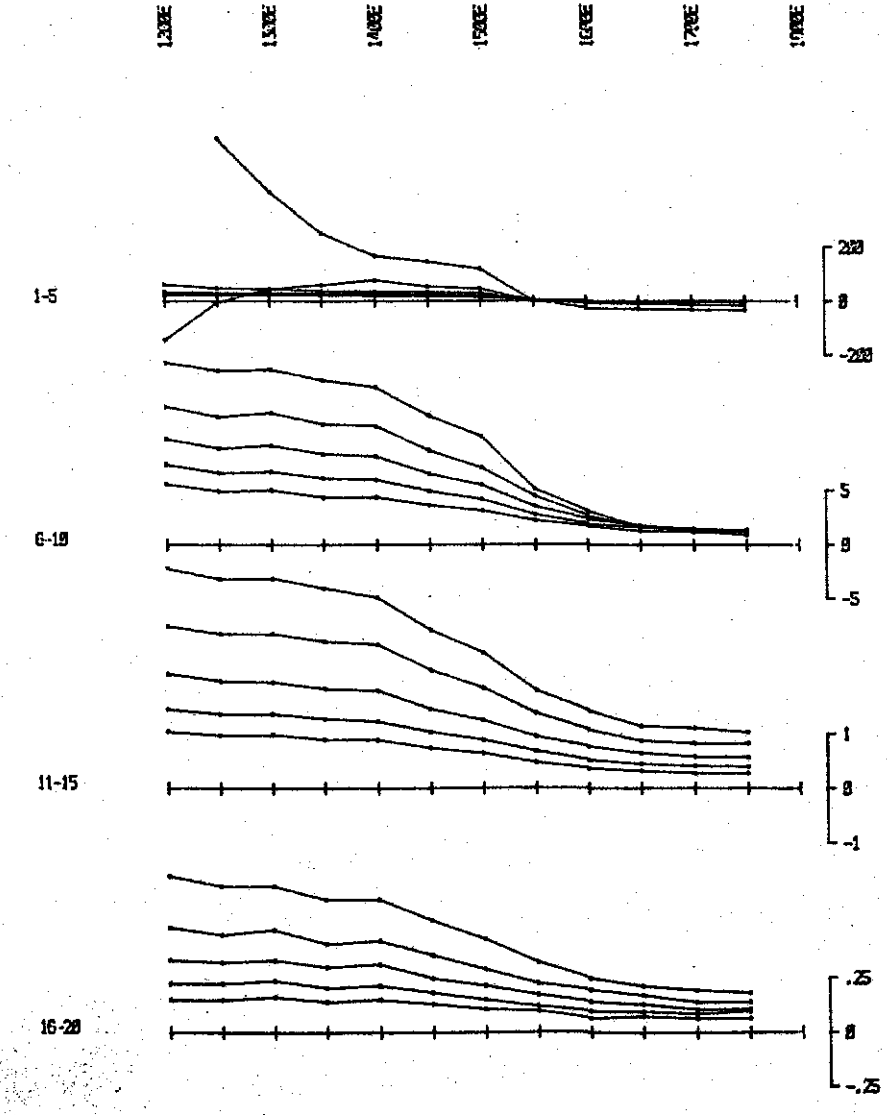
TX LOOP SIDES	:	8140N 01100E
	:	38730N 20300E
TX LOOP SIZE	:	700 m X 3.10 m
TX TURN OFF TIME	:	360 microsecs.
FIRST GATE TIME	:	53.5 microsecs.
CURRENT	:	14.0 amps
FREQUENCY	:	25 Hz.
INTEGRATION TIME	:	250 cycles
SYNC MODE	:	CRYSTAL
[redacted]		
SURVEYED BY	:	STSD
DATE	:	21/11/1994

SURVEYED AND COMPILED BY GEOTERREX PTY. LTD. | PROJECT NO. 95-1947

CLIENT : GOLD FIELDS EXP.
PROJECT : LARRIMAH HILL
AREA : GRAND PRIZE
LINE : 38900N E
TX LOOP : 1

1231166

MAGNAGE INSTRUMENTS CORP. CHART NO. PR-511



nanovolts per amp metre squared

EM-37

FIXED TRANSMITTER SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (Ż)

TX LOOP SIDES	: 8140N 01100E
	: 3070N 03300E
TX LOOP SIZE	: 700 m X 3300 m
TX TURN OFF TIME	: 360 microsecs.
FIRST GATE TIME	: 33.5 microsecs.
CURRENT	: 14.8 amp.
FREQUENCY	: 25 Hz.
INTEGRATION TIME	: 256 cycles
SYNC MODE	: CRYSTAL
~~HORIZONTAL SCALE 1:5000~~	
SURVEYED BY	: STSO
DATE	: 21/11/1984

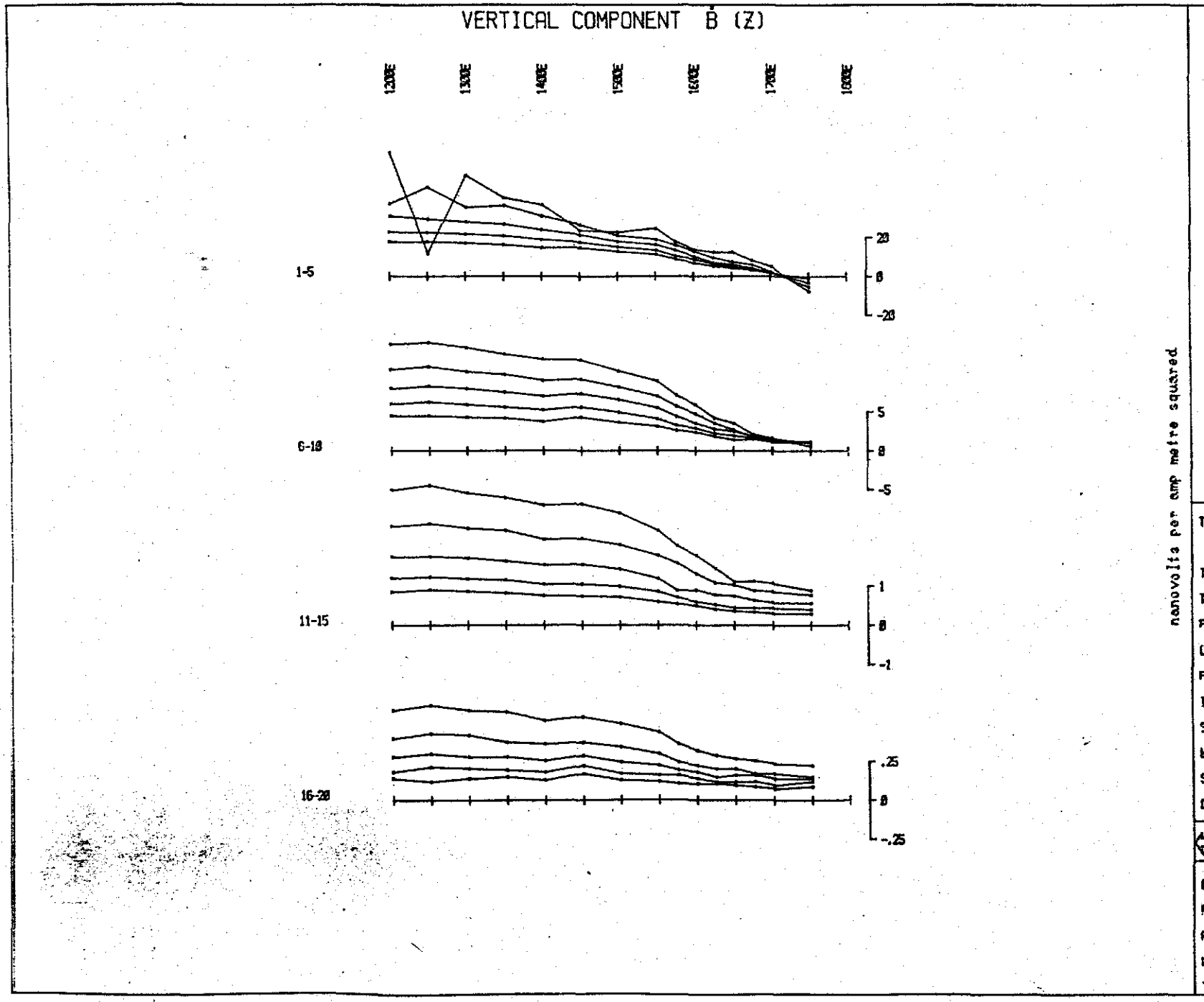
SURVEYED AND COMPILED BY GEOTERREX PTY. LTD.

PROJECT NO. 83-1947

CLIENT	: GOLD FIELDS EXP.
PROJECT	: CARBINE HILL
AREA	: GRAND PRIDE
LINE	: 3920N Ż
TX LOOP	: 1

123167

MINANABE INSTRUMENTS CORP. CHART NO. PR-511



EM-37

FIXED TRANSMITTER SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (B)

TX LOOP SIDES	: 01400N 01100E
	: 00700N 00300E
TX LOOP SIZE	: 700 m X 300 m
TX TURN OFF TIME	: 30.0 microsecs.
FIRST GATE TIME	: 99.5 microsecs.
CURRENT	: 14.8 amps
FREQUENCY	: 25 Hz.
INTEGRATION TIME	: 256 cycles
SYNC MODE	: CRYSTAL
~~HORIZONTAL SCALE = 1:5000~~	
SURVEYED BY	: STSO
DATE	: 21/11/1994

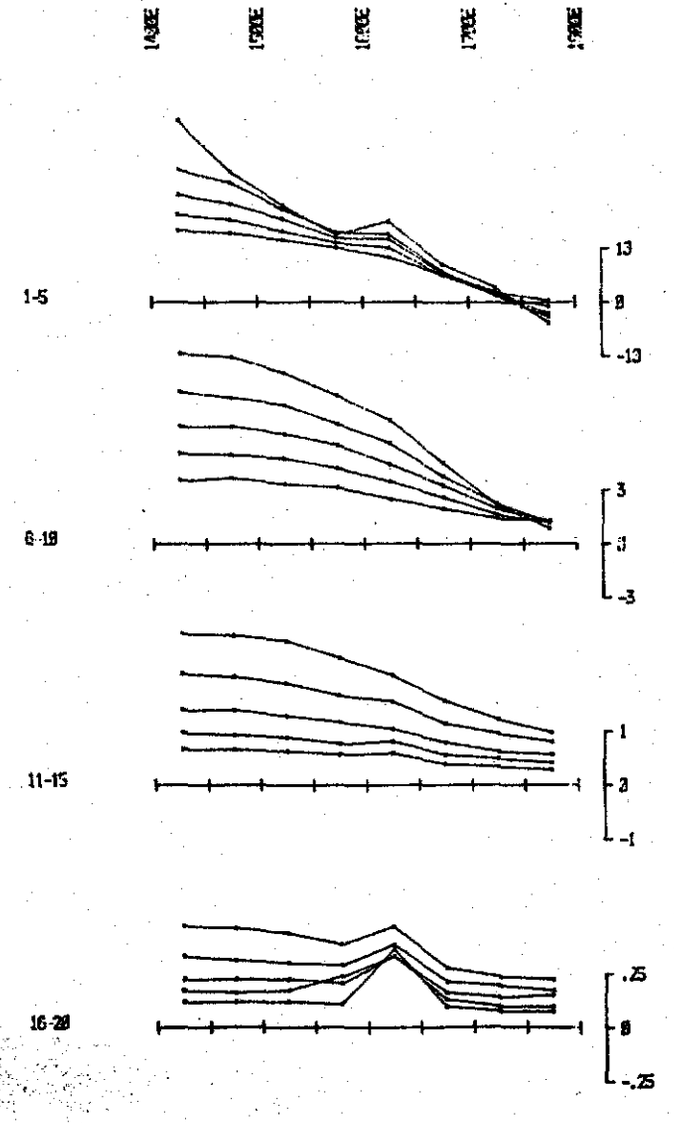
SURVEYED AND COMPILED BY GEOTERREX PTY. LTD. | PROJECT NO. 95-1847

CLIENT	: GOLD FIELDS EXP.
PROJECT	: CARBINE HILL
AREA	: GRAND PRIZE
LINE	: 01800N Z
TX LOOP	: 1

1231168

MATANABE INSTRUMENTS CORP. CHART NO. PR-511
MATANABE INSTRUMENTS CORP. CHART NO. PR-511

VERTICAL COMPONENT B (Z)



nanovolts per amp metre squared

EM-37

FIXED TRANSMITTER SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (Ż)

TX LOOP SIDES	:	01490N 01100E
	:	05720N 03300E
TX LOOP SIZE	:	700 m X 3.00 m
TX TURN OFF TIME	:	300 microsecs.
FIRST GATE TIME	:	33.5 microsecs.
CURRENT	:	14.0 amps
FREQUENCY	:	25 Hz.
INTEGRATION TIME	:	256 cycles
SYNC MODE	:	CRYSTAL
[redacted]		
SURVEYED BY	:	STSD
DATE	:	21/11/1984

SURVEYED AND COMPILED BY GEOTERREX PTY. LTD.

PROJECT NO. 95-1947

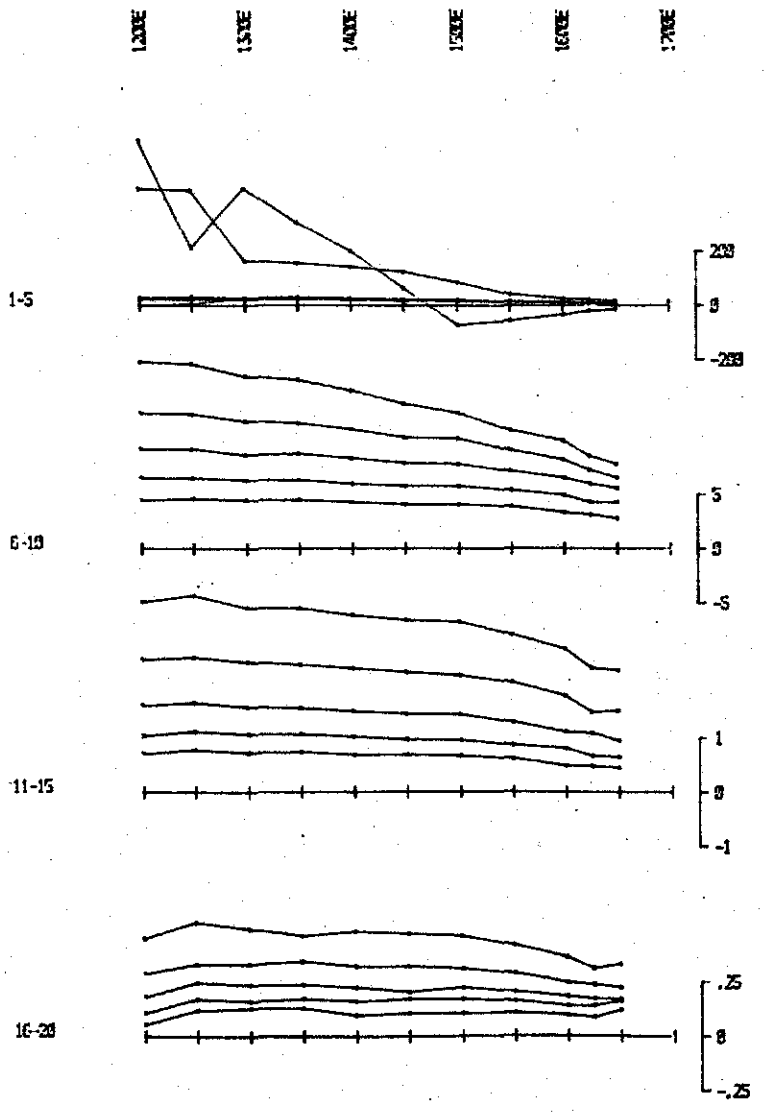
CLIENT : GOLD FIELDS EXP.
PROJECT : CARBINE HILL
AREA : GRAND PRIZE
LINE : 01130N E
TX LOOP : 1

MATANABE INSTRUMENTS CORP. CHART NO. PR-511

MATANABE INSTRUMENTS CORP. CHART NO. PR-511

169

VERTICAL COMPONENT B (Z)



nanovolts per amp metre squared

EM-37

FIXED TRANSMITTER SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (Z)

TX LOOP SIDES	: 01400N 01100E
	: 00700N 00300E
TX LOOP SIZE	: 700 m X 300 m
TX TURN OFF TIME	: 360 microsecs.
FIRST GATE TIME	: 99.5 microsecs.
CURRENT	: 14.0 amps
FREQUENCY	: 25 Hz.
INTEGRATION TIME	: 256 cycles
SYNC MODE	: CRYSTAL
[redacted]	
SURVEYED BY	: STSO
DATE	: 28/11/1994

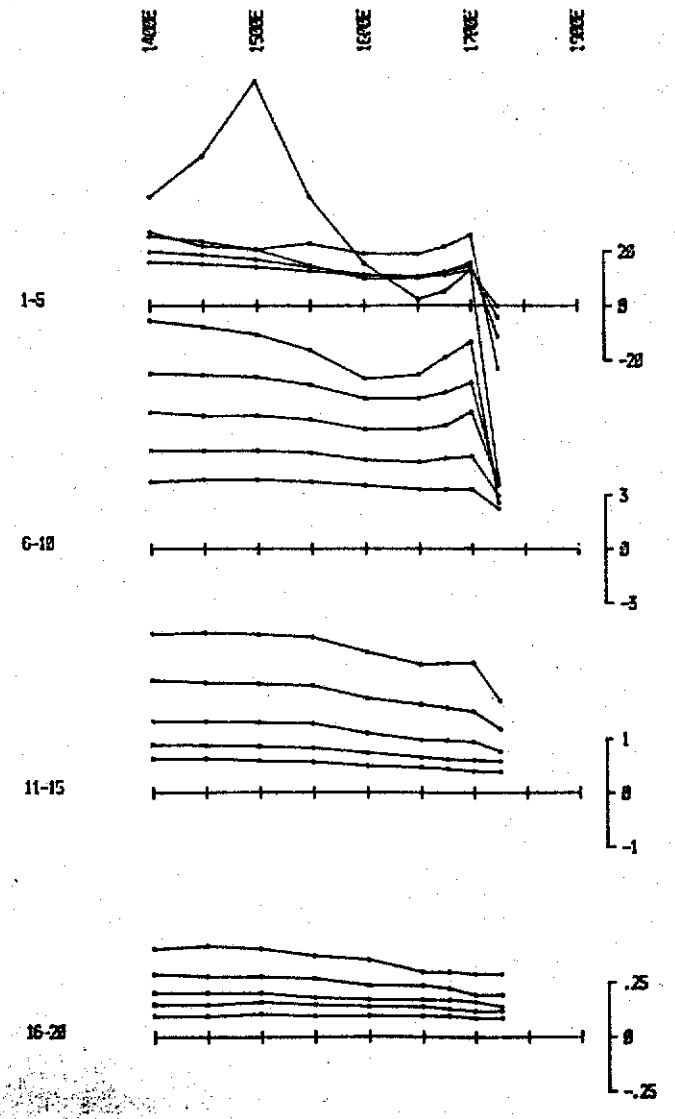
SURVEYED AND COMPILED BY GEOTERREX PTY. LTD. | PROJECT NO. 55-1947

CLIENT	: GOLD FIELDS EXP.
PROJECT	: CARBINE HILL
AREA	: GRAND PRIZE
LINE	: 01200N Z
TX LOOP	: 1

1231170

MATANABE INSTRUMENT | MATANABE INSTRUMENTS CORP. CHART NO. PR-511

VERTICAL COMPONENT B (Z)



nanovolts per amp metre squared

EM-37

FIXED TRANSMITTER SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (B)

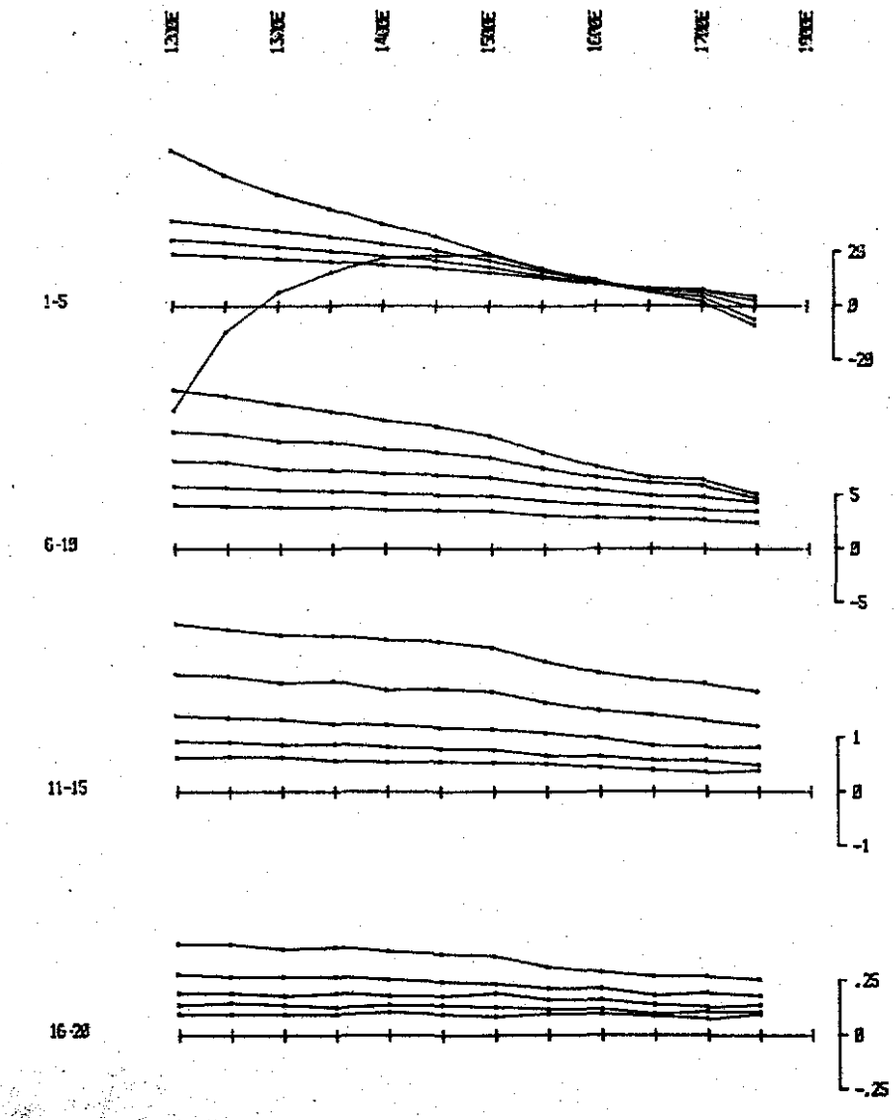
TX LOOP SIDES	: 81400N 81100E
	: 80700N 80300E
TX LOOP SIZE	: 700 m X 300 m
TX TURN OFF TIME	: 350 microsecs.
FIRST GATE TIME	: 93.5 microsecs.
CURRENT	: 14.8 amps
FREQUENCY	: 25 Hz.
INTEGRATION TIME	: 256 cycles
SYNC MODE	: CRYSTAL
~~HORIZONTAL SCALE : 1:5000~~	
SURVEYED BY	: STSD
DATE	: 20/11/1994

SURVEYED AND COMPILED BY GEOTERREX PTY. LTD. | PROJECT NO. 95-1947

CLIENT	: GOLD FIELDS EXP.
PROJECT	: CARBINE HILL
AREA	: CAIRD PRIDE
LINE	: 81539N Z
TX LOOP	: 1

123171

MAT ■ .BE INSTRUMENTS CORP. CHART NO. PR-511



EM-37

FIXED TRANSMITTER SURVEY

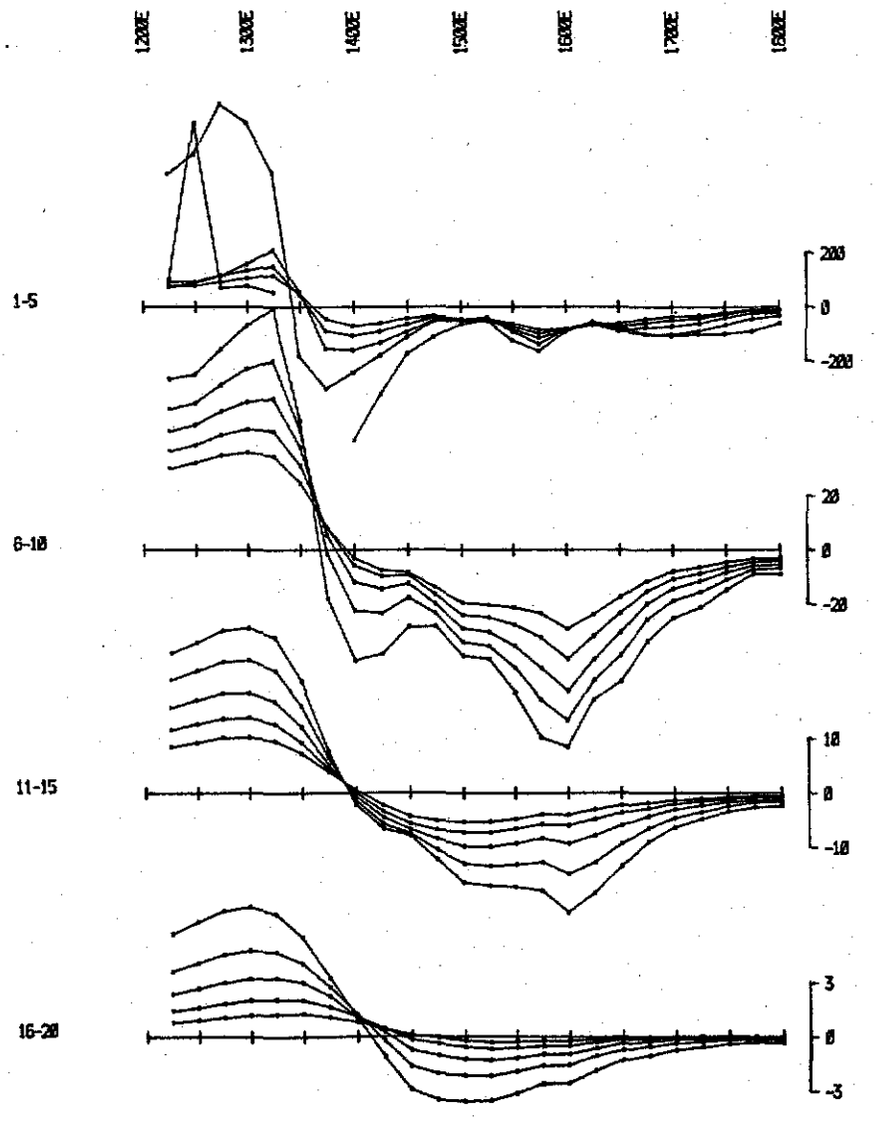
ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (Ḃ)

TX LOOP SIDES	:	81400N 81100E
	:	80700N 80300E
TX LOOP SIZE	:	700 m X 300 m
TX TURN OFF TIME	:	300 microsecs.
FIRST GATE TIME	:	93.5 microsecs.
CURRENT	:	14.0 amps
FREQUENCY	:	25 Hz.
INTEGRATION TIME	:	250 cycles
SYNC MODE	:	CRYSTAL
~~HORIZONTAL SCALE : 1:5000~~		
SURVEYED BY	:	STSD
DATE	:	28/11/1984

SURVEYED AND COMPILED BY GEOTERREX PTY. LTD. | PROJECT NO. 55-1947

CLIENT	:	GOLD FIELDS EXP.
PROJECT	:	CARBINE HILL
AREA	:	GRAND PRIZE
LINE	:	81400N 2
TX LOOP	:	1



nanovolts per amp metre squared

EM-37

FIXED TRANSMITTER SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (B)

TX LOOP SIDES	:	00700N 01100E
	:	00000N 00300E
TX LOOP SIZE	:	700 m X 300 m
TX TURN OFF TIME	:	300 microsecs.
FIRST GATE TIME	:	93.5 microsecs.
CURRENT	:	13.5 amps
FREQUENCY	:	25 Hz.
INTEGRATION TIME	:	256 cycles
SYNC MODE	:	CRYSTAL
~~HORIZONTAL SCALE 1:10000~~		
SURVEYED BY	:	STSD
DATE	:	23/11/1984

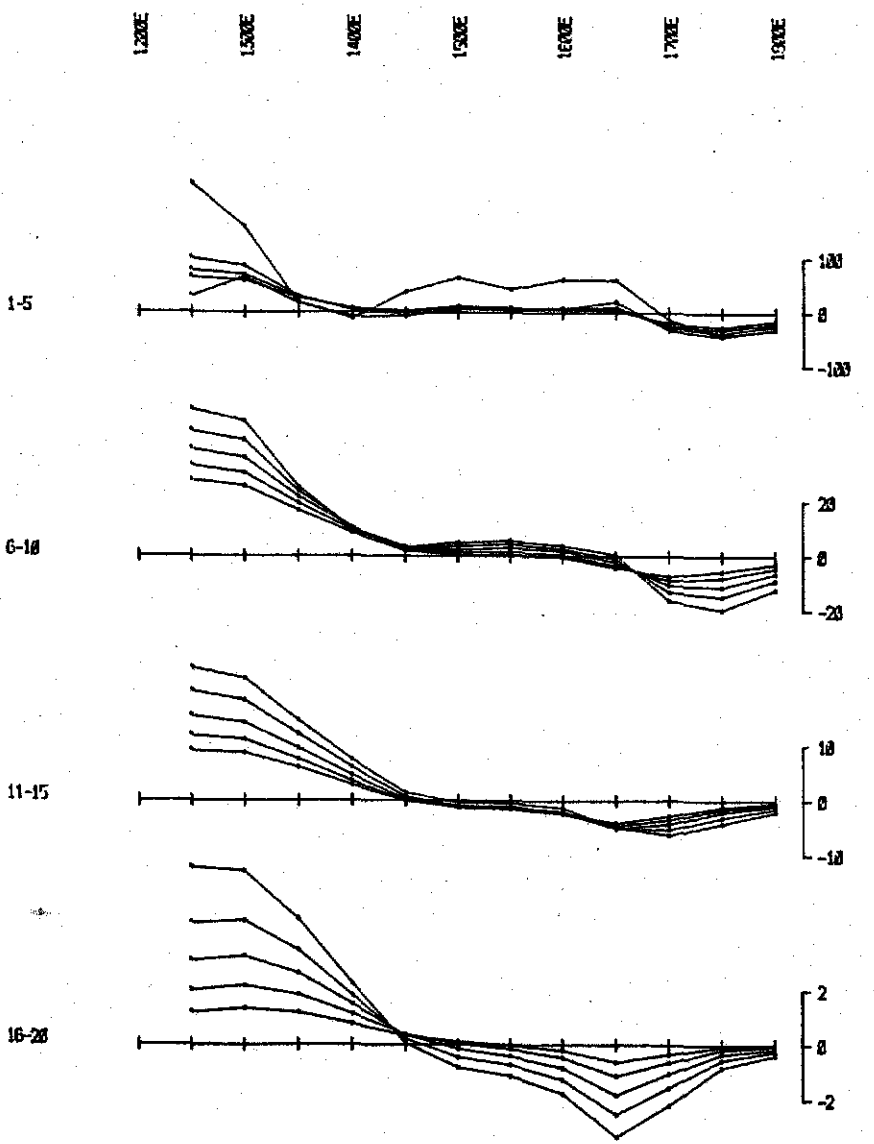
SURVEYED AND COMPILED BY GEOTERREX PTY. LTD.

PROJECT NO. 85-1847

CLIENT	:	GOLD FIELDS EXP.
PROJECT	:	CARBINE HILL
AREA	:	GRAND PRIZE
LINE	:	00000N Z
TX LOOP	:	2

WATANABE INSTRUMENTS CORP. CHART NO. PR-511

VERTICAL COMPONENT Ḃ (Z)



nanovolts per amp metre squared

EM-37

FIXED TRANSMITTER SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (Ḃ)

TX LOOP SIDES	:	00700N 01100E
	:	00000N 00900E
TX LOOP SIZE	:	700 m X 500 m
TX TURN OFF TIME	:	300 micro-secs.
FIRST GATE TIME	:	93.5 micro-secs.
CURRENT	:	13.5 amps
FREQUENCY	:	25 Hz.
INTEGRATION TIME	:	256 cycles
SYNC MODE	:	CRYSTAL
~~HORIZONTAL SCALE 1:5000~~		
SURVEYED BY	:	STSD
DATE	:	23/11/1994

SURVEYED AND COMPILED BY GEOTERREX PTY. LTD.

PROJECT NO. 95-1847

CLIENT : GOLD FIELDS EXP.

PROJECT : CARBINE HILL

AREA : GRAND PRIZE

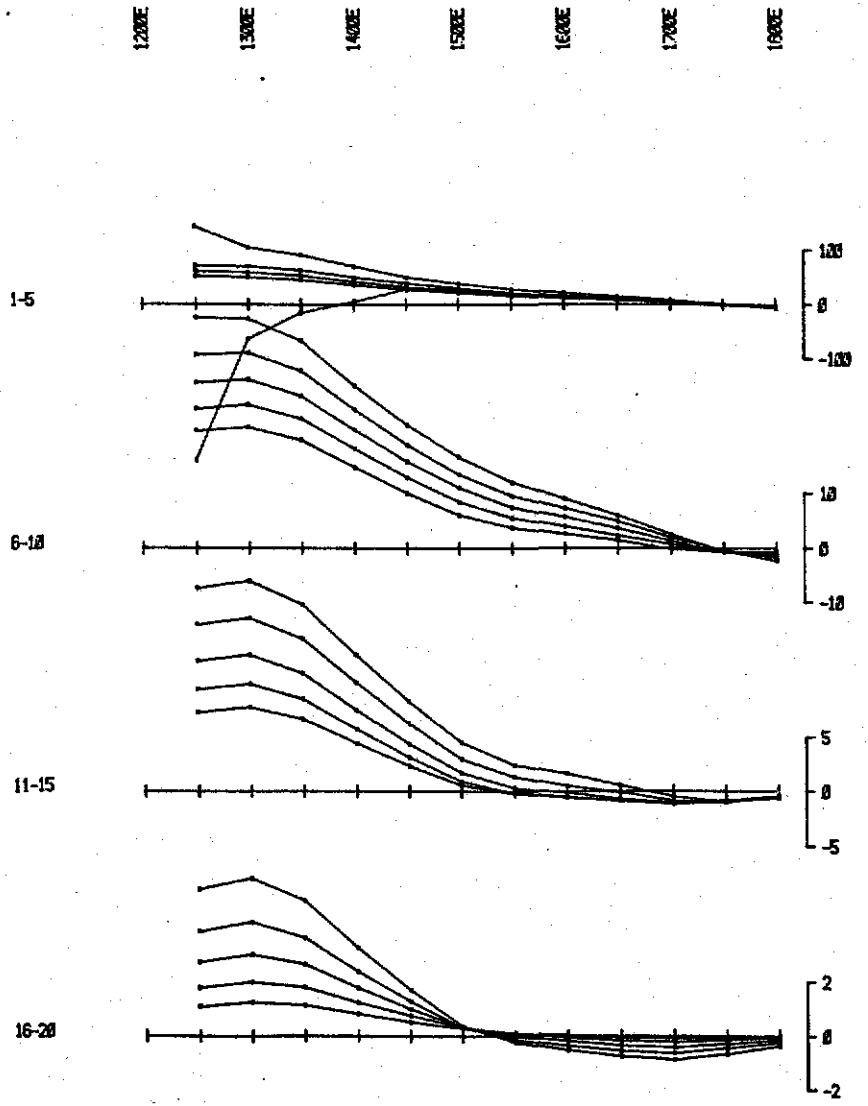
LINE : 00130N Z

WATANABE INSTRUMENTS CORP. CHART NO. PR-511

WATANABE INSTRUMENTS CORP. CHART NO. PR-511

174

VERTICAL COMPONENT B (Z)



nanovolts per amp metre squared

EM-37

FIXED TRANSMITTER SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (B)

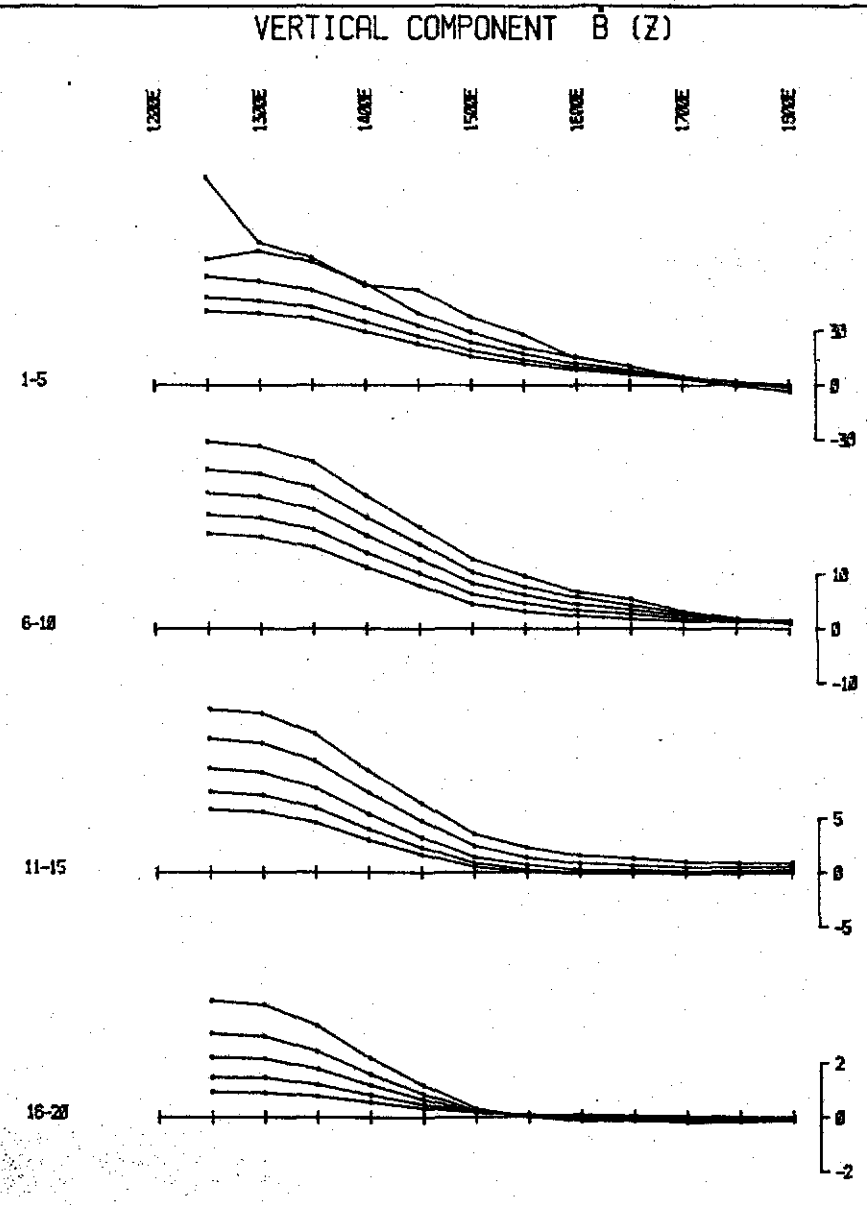
TX LOOP SIDES	:	00700N 01100E
	:	00000N 00900E
TX LOOP SIZE	:	700 m X 300 m
TX TURN OFF TIME	:	360 microsecs.
FIRST GATE TIME	:	93.5 microsecs.
CURRENT	:	13.5 amps
FREQUENCY	:	25 Hz.
INTEGRATION TIME	:	256 cycles
SYNC MODE	:	CRYSTAL
~~HORIZONTAL SCALE 1:5000~~		
SURVEYED BY	:	STSO
DATE	:	23/11/1984

SURVEYED AND COMPILED BY GEOTERREX PTY. LTD.

PROJECT NO. 85-1847

CLIENT	:	GOLD FIELDS EXP.
PROJECT	:	CARBINE HILL
AREA	:	GRAND PRIZE
LINE	:	00200N Z
TX LOOP	:	2

123175



EM-37

FIXED TRANSMITTER SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (B)

TX LOOP SIDES	: 00700N	01100E
	: 00300N	00900E
TX LOOP SIZE	: 700 m X 320 m	
TX TURN OFF TIME	: 308 microsecs.	
FIRST GATE TIME	: 93.5 microsecs.	
CURRENT	: 13.5 amps	
FREQUENCY	: 25 Hz.	
INTEGRATION TIME	: 250 cycles	
SYNC MODE	: CRYSTAL	
[redacted]		
SURVEYED BY	: STSO	
DATE	: 25/11/1994	

SURVEYED AND COMPILED BY GEOTERREX PTY. LTD.

PROJECT NO. 95-1947

CLIENT : GOLD FIELDS EXP.

PROJECT : CARBINE HILL

AREA : GRAND PRIZE

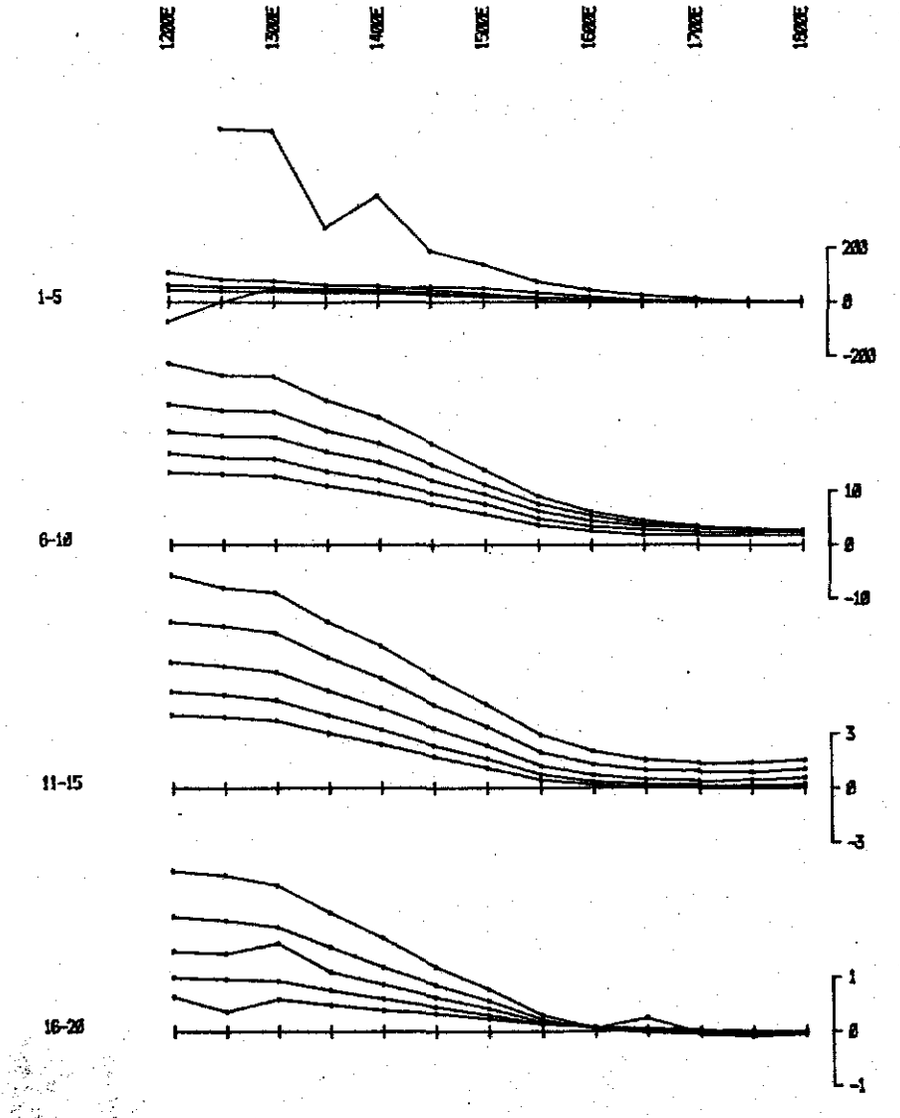
LINE : 00300N Z

TX LOOP : 2

WATANABE INSTRUMENTS CORP. CHART NO. PR-511

123176

WATANABE INSTRUMENTS CORP. CHART NO. PR-511



EM-37

FIXED TRANSMITTER SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (B)

TX LOOP SIDES	: 00700N 01100E
	: 00000N 00900E
TX LOOP SIZE	: 700 m X 300 m
TX TURN OFF TIME	: 300 microsecs.
FIRST GATE TIME	: 88.5 microsecs.
CURRENT	: 13.5 amps
FREQUENCY	: 25 Hz.
INTEGRATION TIME	: 256 cycles
SYNC MODE	: CRYSTAL
~~WAVEFORM SCALE : 2000~~	
SURVEYED BY	: STSD
DATE	: 22/11/1994

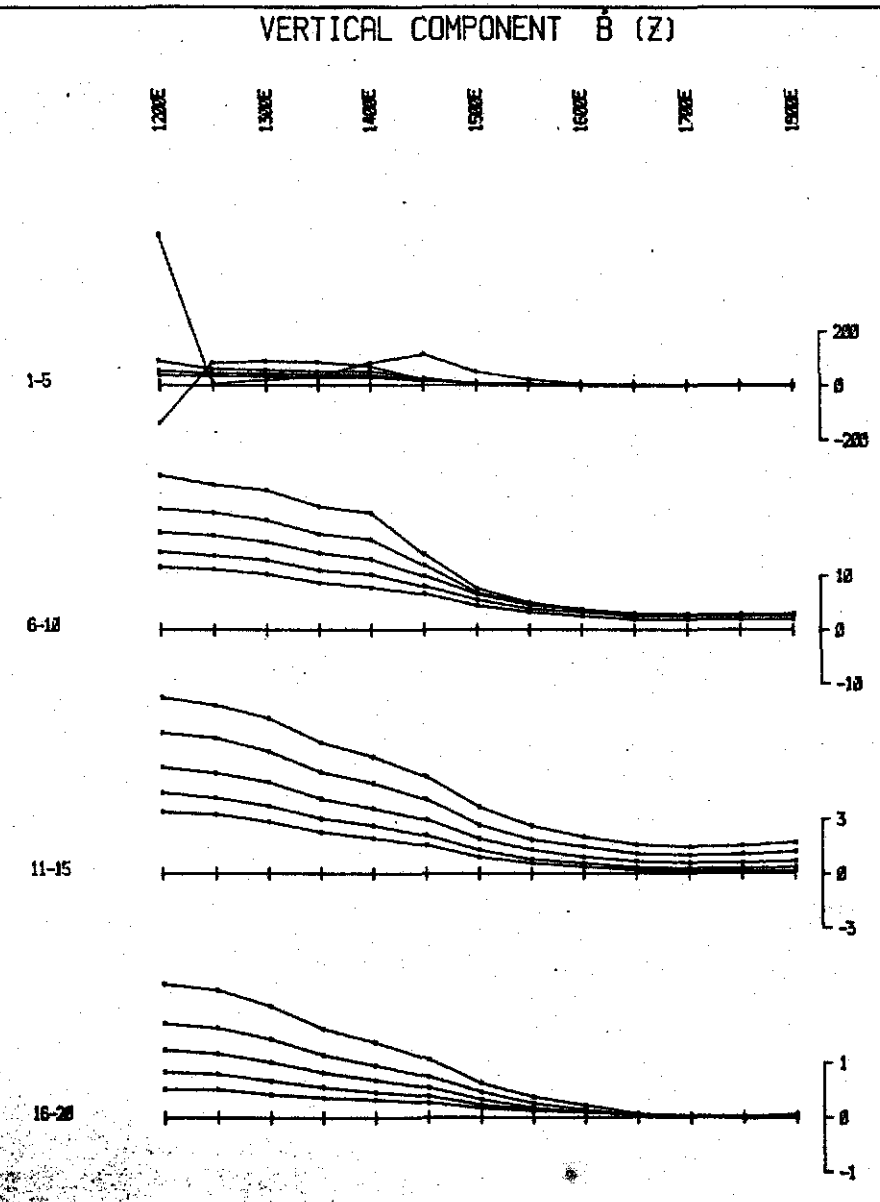
SURVEYED AND COMPILED BY GEOTERREX PTY. LTD. | PROJECT NO. 85-1847

CLIENT	: GOLD FIELDS EXP.
PROJECT	: CARBINE HILL
AREA	: GRAND PRIZE
LINE	: 00400N Z
TX LOOP	: 2

WATANABE INSTRUMENTS CORP. CHART NO. PR-511

12311

WATANABE INSTRUMENTS CORP. CHART NO. WR-511



EM-37

FIXED TRANSMITTER SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (B)

TX LOOP SIDES	:	00700N 01100E
	:	00000N 00900E
TX LOOP SIZE	:	700 m X 500 m
TX TURN OFF TIME	:	300 microsecs.
FIRST GATE TIME	:	99.5 microsecs.
CURRENT	:	13.5 amps
FREQUENCY	:	25 Hz.
INTEGRATION TIME	:	250 cycles
SYNC MODE	:	CRYSTAL
~~HORIZONTAL SCALE 1:5000~~		
SURVEYED BY	:	STSD
DATE	:	22/11/1994

SURVEYED AND COMPILED BY GEOTERREX PTY. LTD.

PROJECT NO. 95-1847

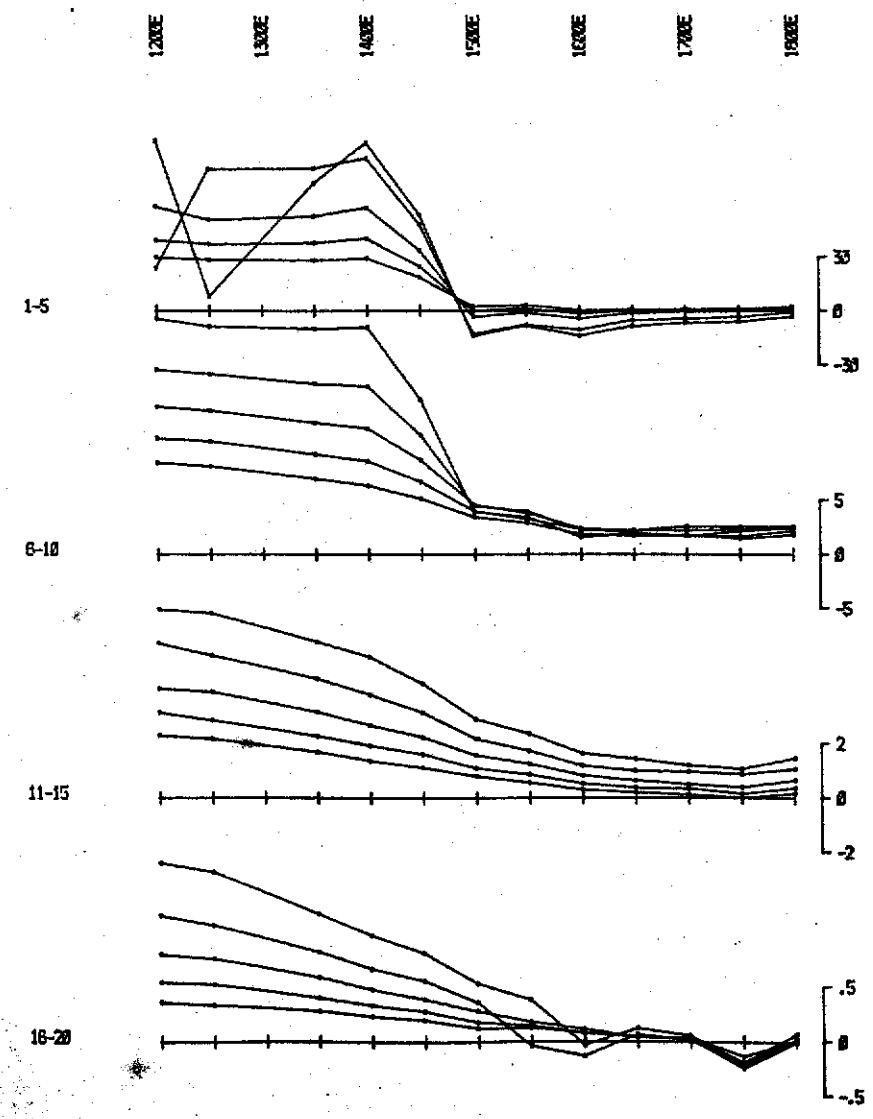
CLIENT	:	GOLD FIELDS EXP.
PROJECT	:	CARBINE HILL
AREA	:	GRAND PRIZE
LINE	:	00500N Z
TX LOOP	:	2

MATANABE INSTRUMENTS CORP. CHART NO. PR-511

CHART NO. PR-511

178

VERTICAL COMPONENT $\dot{B}$ (Z)



nanovolts per amp metre squared.

EM-37

FIXED TRANSMITTER SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (B)

TX LOOP SIDES	: 08000N 01100E
	: 08000N 00300E
TX LOOP SIZE	: 700 m X 300 m
TX TURN OFF TIME	: 300 microsecs.
FIRST GATE TIME	: 99.5 microsecs.
CURRENT	: 13.5 amps
FREQUENCY	: 25 Hz.
INTEGRATION TIME	: 256 cycles
SYNC MODE	: CRYSTAL
~~HORIZONTAL SCALE 1:5000~~	
SURVEYED BY	: STSD
DATE	: 22/11/1984

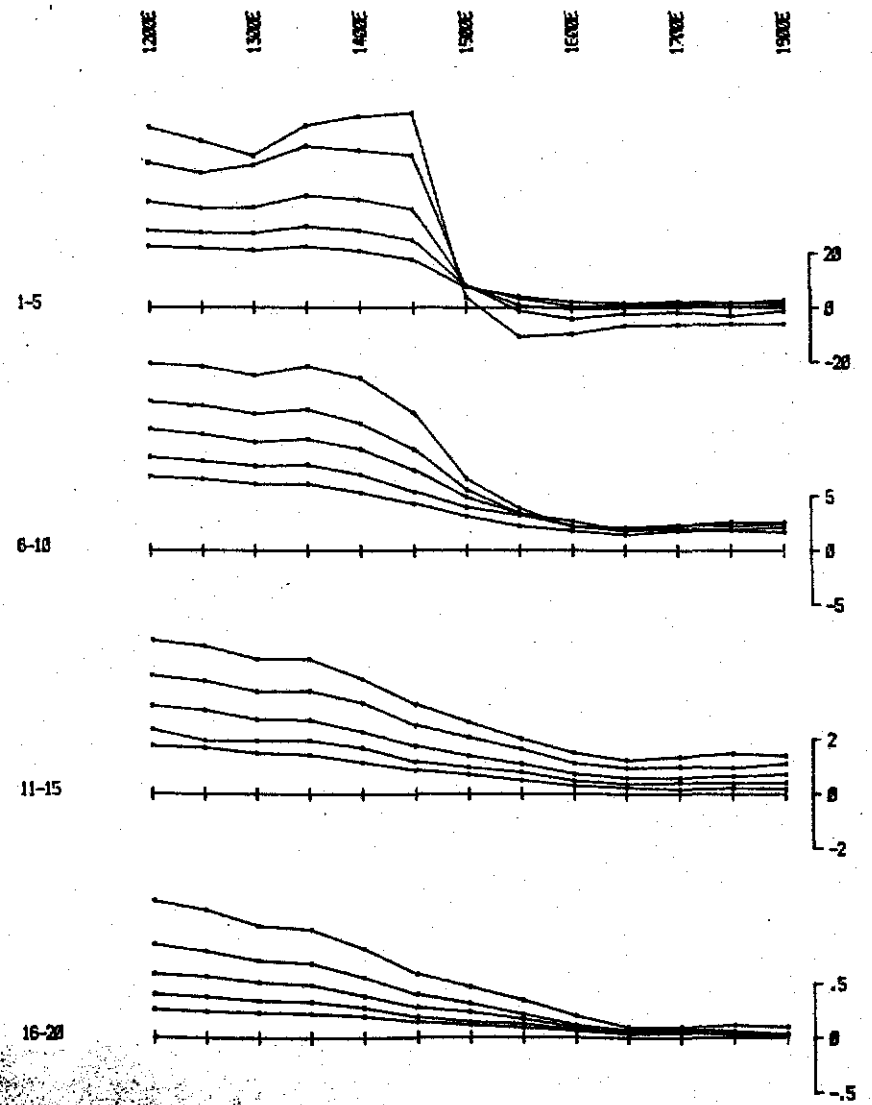
SURVEYED AND COMPILED BY GEOTERREX PTY. LTD.

PROJECT NO. 95-1847

CLIENT	: GOLD FIELDS EXP.
PROJECT	: CARBINE HILL
AREA	: GRAND PRIZE
LINE	: 08000N Z
TX LOOP	: 2

1231179

WATANABE INSTRUMENTS CORP. CHART NO. PR-511



nanovolts per amp metre squared

EM-37

FIXED TRANSMITTER SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (B)

TX LOOP SIDES	:	00700N 01100E
	:	00000N 00300E
TX LOOP SIZE	:	700 m X 300 m
TX TURN OFF TIME	:	308 microsecs.
FIRST GATE TIME	:	99.5 microsecs.
CURRENT	:	13.5 amps
FREQUENCY	:	25 Hz.
INTEGRATION TIME	:	256 cycles
SYNC MODE	:	CRYSTAL
~~HORIZONTAL SCALE 1:5000~~		
SURVEYED BY	:	STSO
DATE	:	22/11/1994

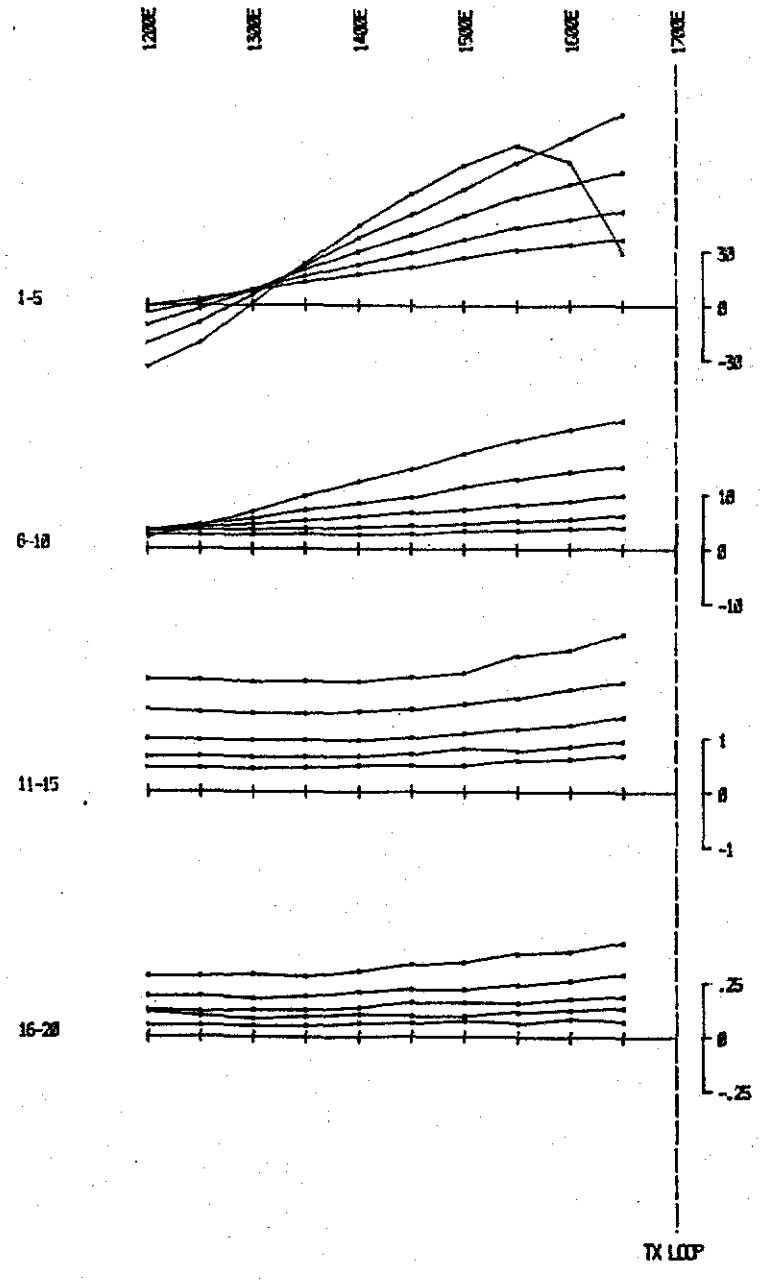
SURVEYED AND COMPILED BY GEOTERREX PTY. LTD.

PROJECT NO. 95-1947

CLIENT	:	GOLD FIELDS EXP.
PROJECT	:	CARBINE HILL
AREA	:	GRAND PRIZE
LINE	:	00700N Z
TX LOOP	:	2

123180

WATANABE INSTRUMENTS CORP.CH - NO. PR-511



nanovolts per amp metre squared

EM-37

FIXED TRANSMITTER SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (B)

TX LOOP SIDES	:	02400N 02000E
	:	01900N 01700E
TX LOOP SIZE	:	500 m X 300 m
TX TURN OFF TIME	:	200 microsecs.
FIRST GATE TIME	:	99.5 microsecs.
CURRENT	:	14.5 amps
FREQUENCY	:	25 Hz.
INTEGRATION TIME	:	256 cycles
SYNC MODE	:	CRYSTAL
~~HORIZONTAL SCALE = 1:5000~~		
SURVEYED BY	:	STSD
DATE	:	25/11/1994

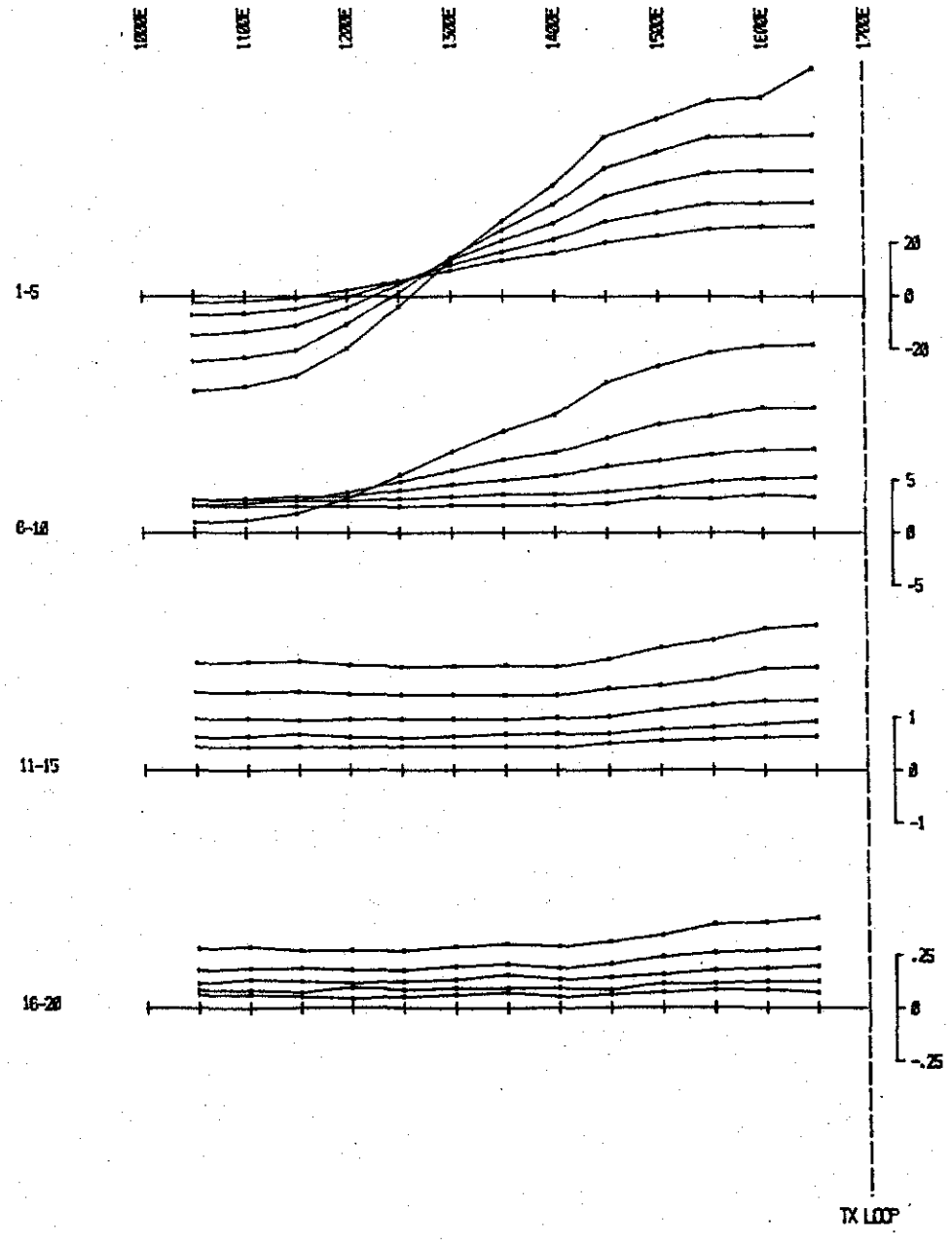
SURVEYED AND COMPILED BY GEOTERREX PTY. LTD.

PROJECT NO. 85-1847

CLIENT	:	GOLD FIELDS EXP.
PROJECT	:	CARBINE HILL
AREA	:	GRAND PRIZE
LINE	:	01900N Ż
TX LOOP	:	5

123181

WATANABE INSTRUMENTS CORP. ART NO. PR-511



EM-37

FIXED TRANSMITTER SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (B)

TX LOOP SIDES	:	02400N 02000E
	:	01900N 01700E
TX LOOP SIZE	:	500 m X 300 m
TX TURN OFF TIME	:	200 microsecs.
FIRST GATE TIME	:	99.5 microsecs.
CURRENT	:	14.5 amps
FREQUENCY	:	25 Hz.
INTEGRATION TIME	:	250 cycles
SYNC MODE	:	CRYSTAL
~~HORIZONTAL SCALE~~	:	~~1:5000~~
SURVEYED BY	:	STSG
DATE	:	25/11/1994

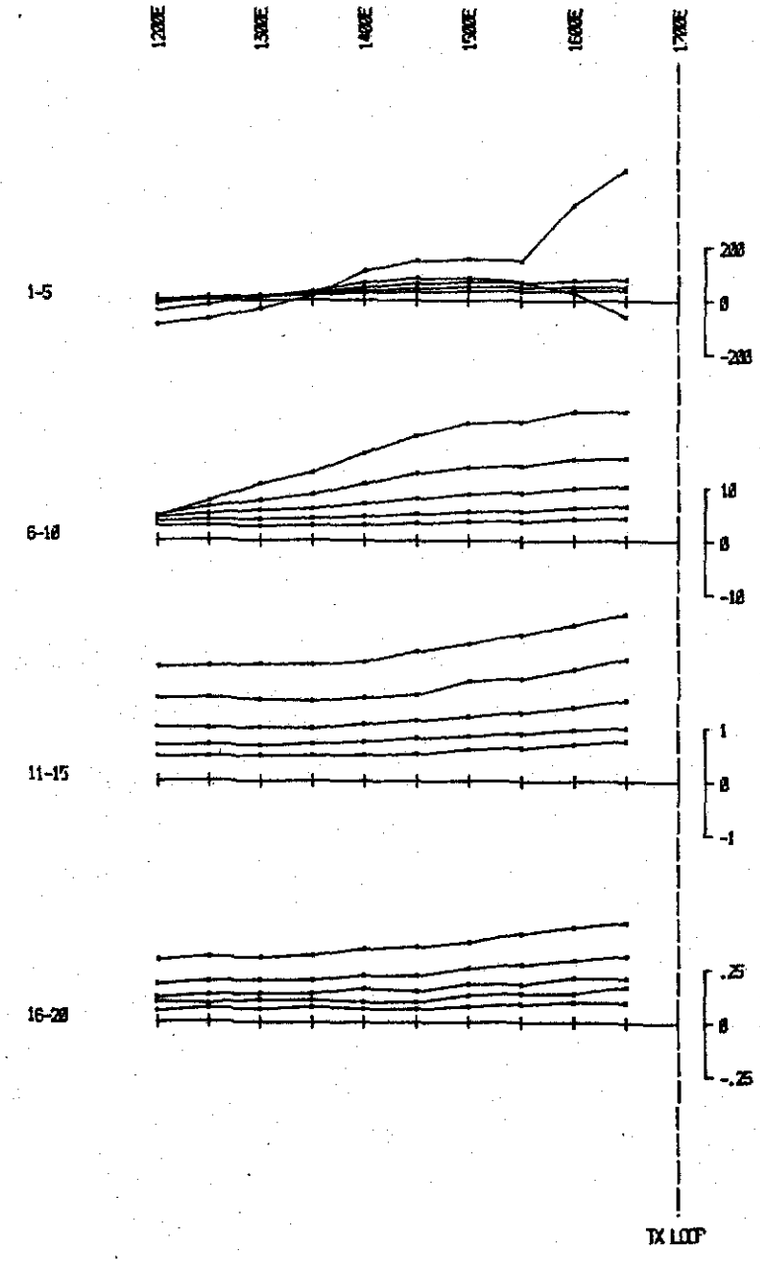
SURVEYED AND COMPILED BY GEOTERREX PTY. LTD.

PROJECT NO. 95-1947

CLIENT	:	GOLD FIELDS EXP.
PROJECT	:	CARBINE HILL
AREA	:	GRAND PRIZE
LINE	:	02000N Z
TX LOOP	:	3

1231182

WATANABE INSTRUMENTS CORP. CHART NO. PR-511



nanovolts per amp metre squared

EM-37

FIXED TRANSMITTER SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (B)

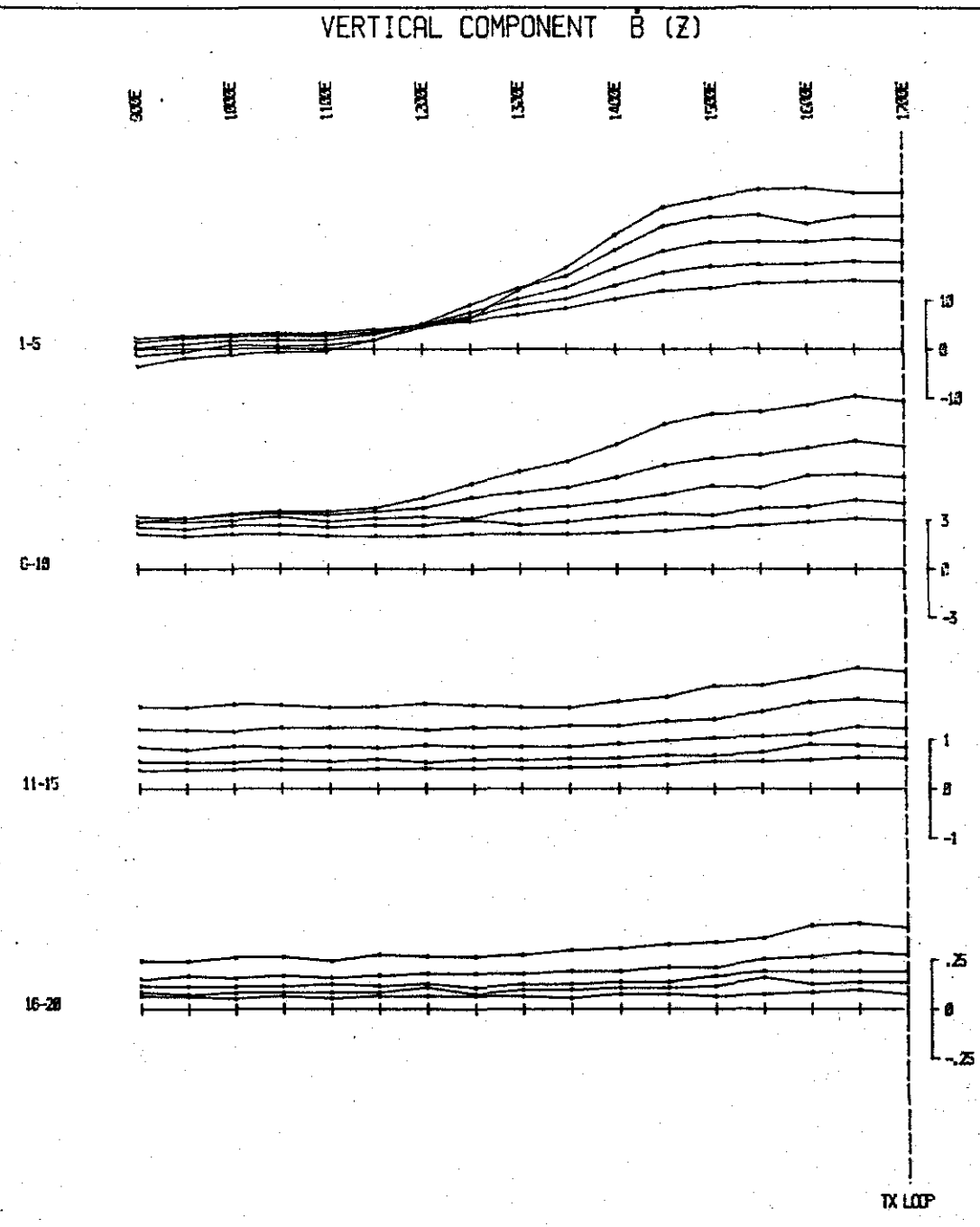
TX LOOP SIDES	:	02400N 02000E
	:	01900N 01700E
TX LOOP SIZE	:	500 m X 300 m
TX TURN OFF TIME	:	200 microsecs.
FIRST GATE TIME	:	88.5 microsecs.
CURRENT	:	14.5 amps
FREQUENCY	:	25 Hz.
INTEGRATION TIME	:	256 cycles
SYNC MODE	:	CRYSTAL
~~HORIZONTAL SCALE 1:5000~~		
SURVEYED BY	:	STSD
DATE	:	25/11/1994

SURVEYED AND COMPILED BY GEOTERREX PTY. LTD. | PROJECT NO. 85-1847

CLIENT	:	GOLD FIELDS EXP.
PROJECT	:	CARBINE HILL
AREA	:	GRAND PRIZE
LINE	:	02180N Z
TX LOOP	:	3

1231183

WATANABE INSTRUMENTS CORP. CHART NO. PR-511



nanovolts per amp metre squared

EM-37

FIXED TRANSMITTER SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (B)

TX LOOP SIDES	: 02400N 02000E
	: 01900N 01700E
TX LOOP SIZE	: 500 m X 300 m
TX TURN OFF TIME	: 238 microsecs.
FIRST GATE TIME	: 98.5 microsecs.
CURRENT	: 14.2 amps
FREQUENCY	: 25 Hz.
INTEGRATION TIME	: 256 cycles
SYNC MODE	: CRYSTAL
~~HORIZONTAL SCALE : 1:5000~~	
SURVEYED BY	: STSO
DATE	: 26/11/1984

SURVEYED AND COMPILED BY GEOTERREX PTY. LTD.	PROJECT NO. 85-1947

CLIENT	: GOLD FIELDS EXP.
PROJECT	: CARBINE HILL
AREA	: GRAND PRIZE
LINE	: 02200N Z
TX LOOP	: 5

12 3 1 8 4

MATANABE INSTRUMENTS CORP. CHART NO. PR-511

VERTICAL COMPONENT B (Z)

nanovolts per amp metre squared

EM-37

FIXED TRANSMITTER SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (B)

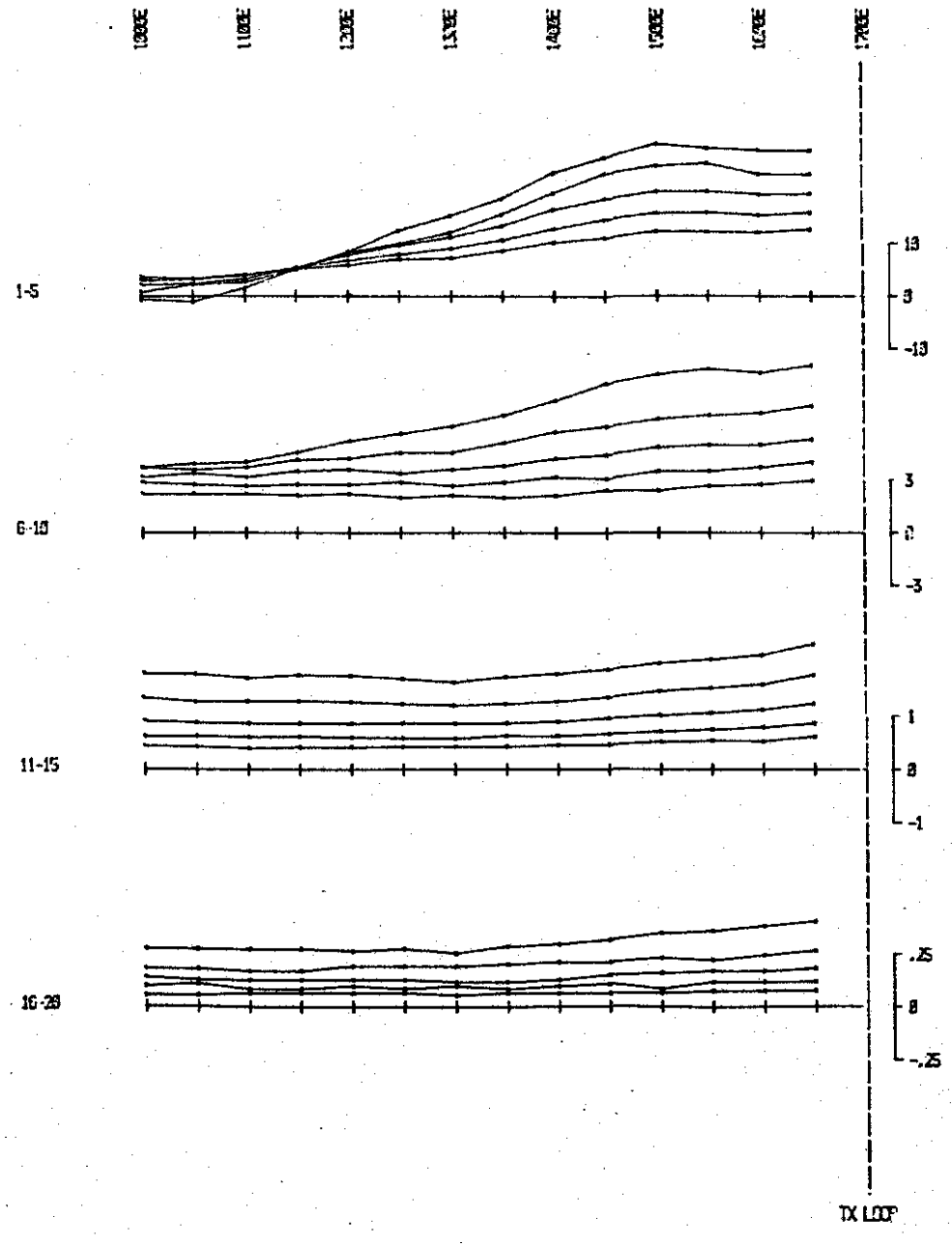
TX LOOP SIDES	: 02400N	02000E
	: 01800N	01200E
TX LOOP SIZE	: 300 m X 300 m	
TX TURN OFF TIME	: 250 microsecs.	
FIRST GATE TIME	: 93.5 microsecs.	
CURRENT	: 14.2 amps	
FREQUENCY	: 25 Hz.	
INTEGRATION TIME	: 256 cycles	
SYNC MODE	: CRYSTAL	
~~HORIZONTAL SCALE : 1:5000~~		
SURVEYED BY	: STSO	
DATE	: 26/11/1994	

SURVEYED AND COMPILED BY GEOTERREX PTY. LTD. | PROJECT NO. 95-1947

CLIENT : GOLD FIELDS EXP.
PROJECT : CARBINE HILL
AREA : GRAND PRIDE
LINE : 02300N Z
TX LOOP : 5

1231183

MATANABE INS. JMENTS CORP. CHART NO. PR-511



EM-37

FIXED TRANSMITTER SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (B)

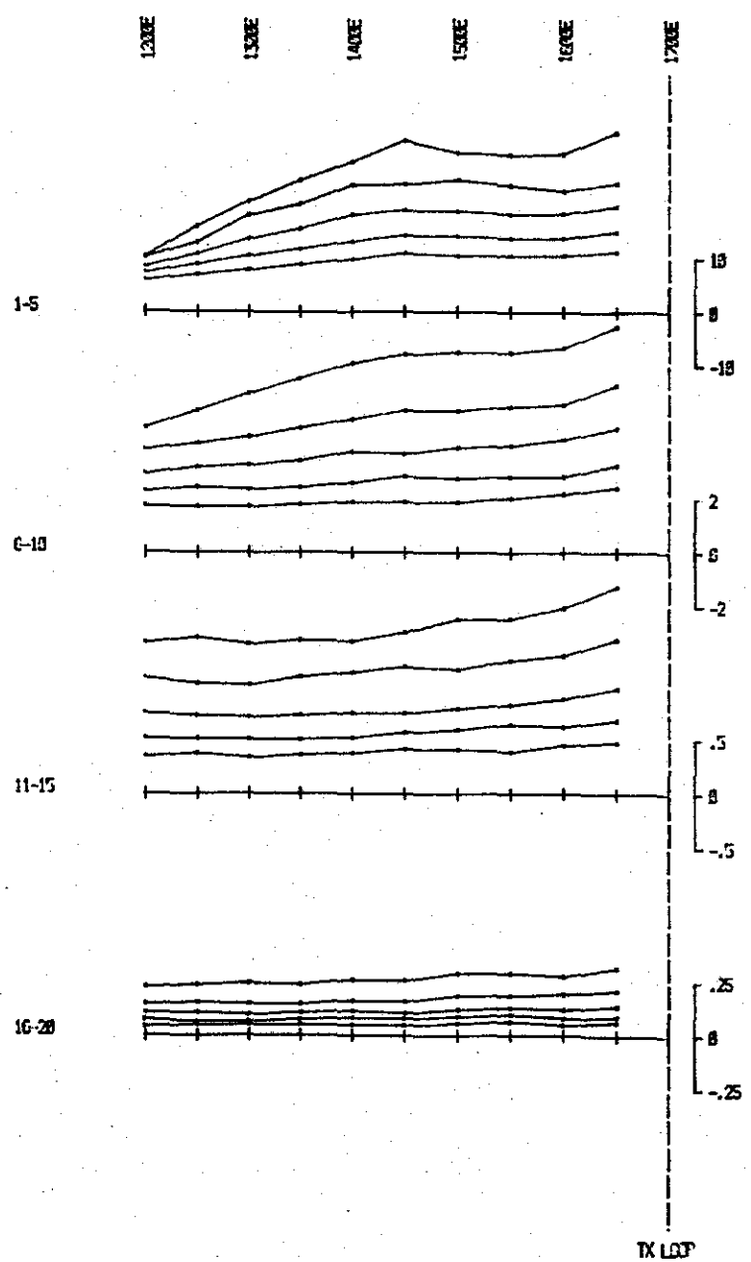
TX LOOP SIDES	:	8240N 8200E
	:	8190N 8170E
TX LOOP SIZE	:	500 m X 300 m
TX TURN OFF TIME	:	250 microsecs.
FIRST GATE TIME	:	33.5 microsecs.
CURRENT	:	14.2 amp.
FREQUENCY	:	25 Hz.
INTEGRATION TIME	:	256 cycles
SYNC MODE	:	CRYSTAL
~~HORIZONTAL SCALE~~	:	~~1:5000~~
SURVEYED BY	:	STSD
DATE	:	26/11/1994

SURVEYED AND COMPILED BY GEOTERREX PTY. LTD.

PROJECT NO. 95-1947

CLIENT : GOLD FIELDS EXP.
PROJECT : CARBINE HILL
AREA : CRAND PRIZE
LINE : 8240N Z
TX LOOP : 5

WATANABE INSTRUMENTS CO. CHART NO. PR-511
WATANABE



nanovolts per amp metre squared

EM-37

FIXED TRANSMITTER SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (B)

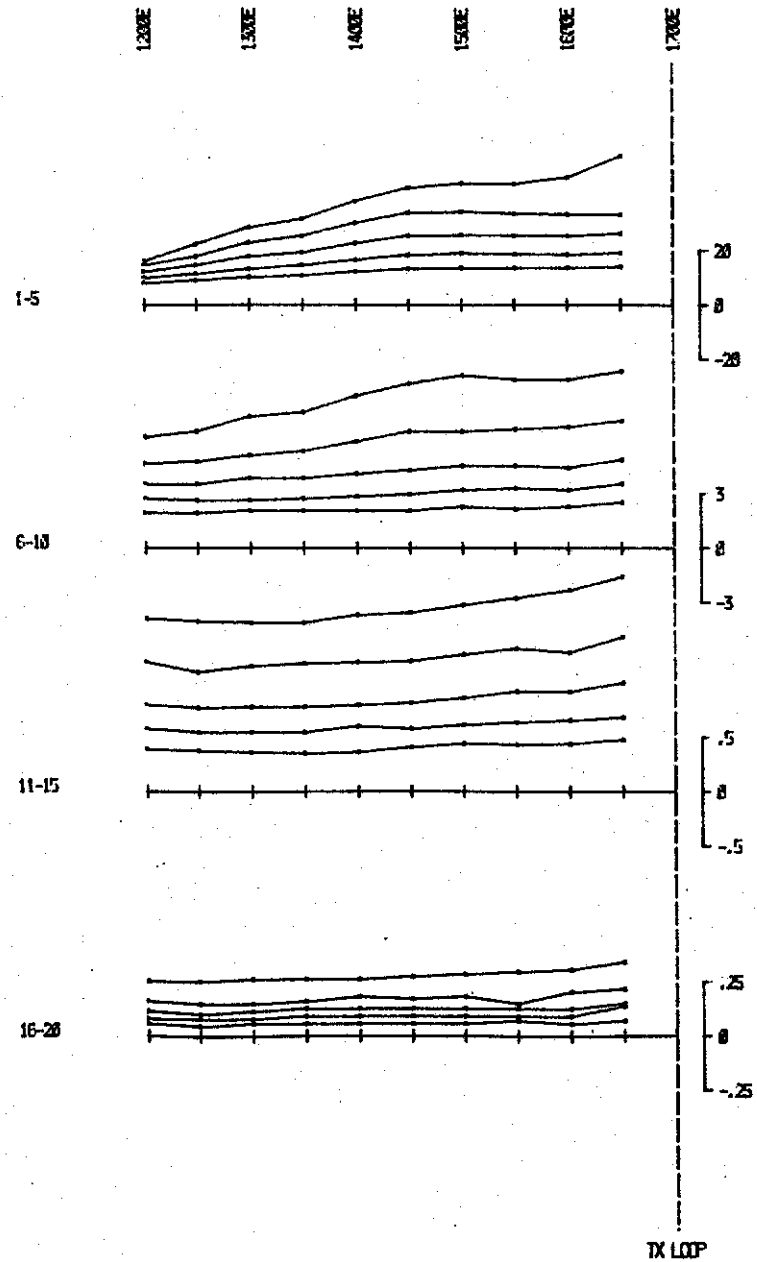
TX LOOP SIDES	:	8200N 8200E
	:	8240ON 8170E
TX LOOP SIZE	:	400 m X 300 m
TX TURN OFF TIME	:	330 microsecs.
FIRST GATE TIME	:	88.5 microsecs.
CURRENT	:	19.5 amps
FREQUENCY	:	25 Hz.
INTEGRATION TIME	:	256 cycles
SYNC MODE	:	CRYSTAL
~~HORIZONTAL SCALE~~	:	~~1:5000~~
SURVEYED BY	:	STSO
DATE	:	27/11/1994

SURVEYED AND COMPILED BY GEOTERREX PTY. LTD. | PROJECT NO. 95-1947

CLIENT	:	GOLD FIELDS EXP.
PROJECT	:	CARBINE HILL
AREA	:	GRAND PRIZE
LINE	:	8200N Z
TX LOOP	:	A

1231187

WATANABE INSTRUMENTS CORP. CHART NO. PR-511



EM-37

FIXED TRANSMITTER SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (Ḃ)

TX LOOP SIDES	: 02300N 02000E
	: 02400N 01700E
TX LOOP SIZE	: 400 m X 300 m
TX TURN OFF TIME	: 240 microsecs.
FIRST GATE TIME	: 99.5 microsecs.
CURRENT	: 13.2 amps
FREQUENCY	: 25 Hz.
INTEGRATION TIME	: 256 cycles
SYNC MODE	: CRYSTAL
~~HORIZONTAL SCALE : 1:5000~~	
SURVEYED BY	: STSD
DATE	: 29/11/1994

SURVEYED AND COMPILED BY GEOTERREX P/Y. LTD. | PROJECT NO. 85-1947

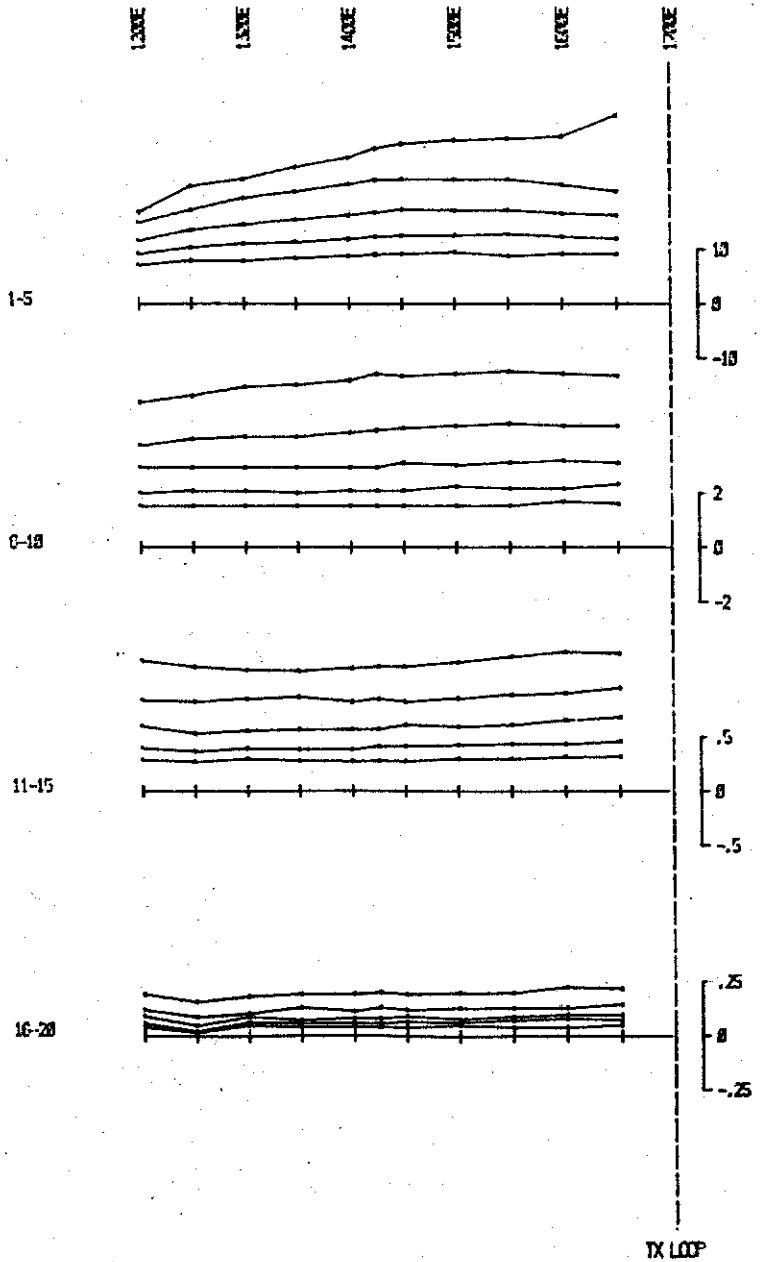
CLIENT	: GOLD FIELDS EXP.
PROJECT	: CARBINE HILL
AREA	: GRAND PRIZE
LINE	: 02600N Z
TX LOOP	: A

12311888

WATANABE INSTRUMENTS CORP. CHART NO. PR-511

CHART NO. PR-511

VERTICAL COMPONENT $\dot{B}$ (Z)



nanovolts per amp metre squared

EM-37

FIXED TRANSMITTER SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (Ż)

TX LOOP SIDES	:	02400N 02000E
	:	02400N 01700E
TX LOOP SIZE	:	400 m X 300 m
TX TURN OFF TIME	:	300 microsecs.
FIRST GATE TIME	:	93.5 microsecs.
CURRENT	:	19.3 amps
FREQUENCY	:	25 Hz.
INTEGRATION TIME	:	250 cycles
SYNC MODE	:	CRYSTAL
~~HORIZONTAL SCALE = 1:5000~~		
SURVEYED BY	:	STSO
DATE	:	29/11/1994

SURVEYED AND COMPILED BY GEOTERREX PTY. LTD. | PROJECT NO. 95-1947

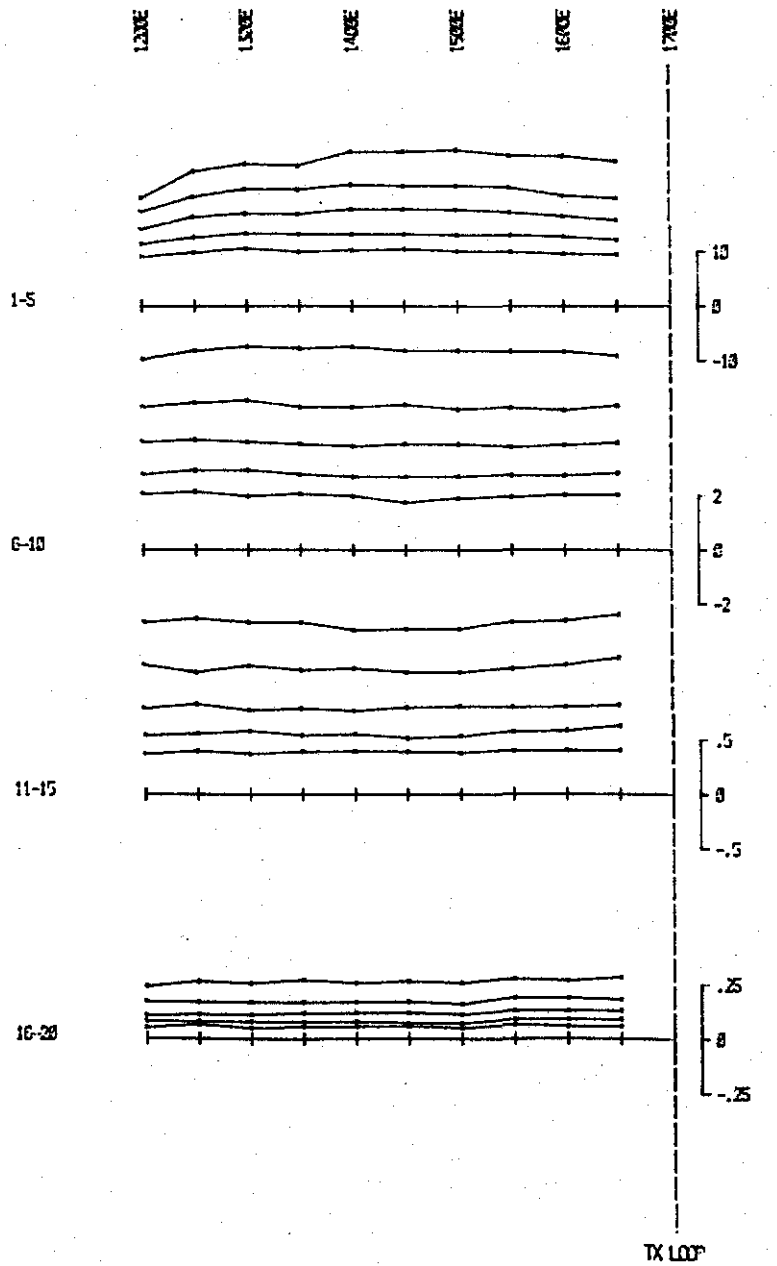
CLIENT : GOLD FIELDS EXP.
PROJECT : CARBINE HILL
AREA : GRAND PRIZE
LINE : 02400N Z
TX LOOP : A

12311189

MATANABE INSTRUMENTS CORP. CHART NO. PR-511

MATANABE INSTRUMENTS CORP.CH

VERTICAL COMPONENT $\dot{B}$ (Z)



nanovolts per amp metre squared

EM-37

FIXED TRANSMITTER SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY ($\dot{B}$)

TX LOOP SIDES	. 8240GN 92300E
	: 8240GN 81700E
TX LOOP SIZE	: 400 m X 300 m
TX TURN OFF TIME	: 320 microsecs.
FIRST GATE TIME	: 33.5 microsecs.
CURRENT	: 19.8 amps
FREQUENCY	: 25 Hz.
INTEGRATION TIME	: 256 cycles
SYNC MODE	: CRYSTAL
~~HORIZONTAL SCALE = 1:5000~~	
SURVEYED BY	: STSD
DATE	: 29/11/1994

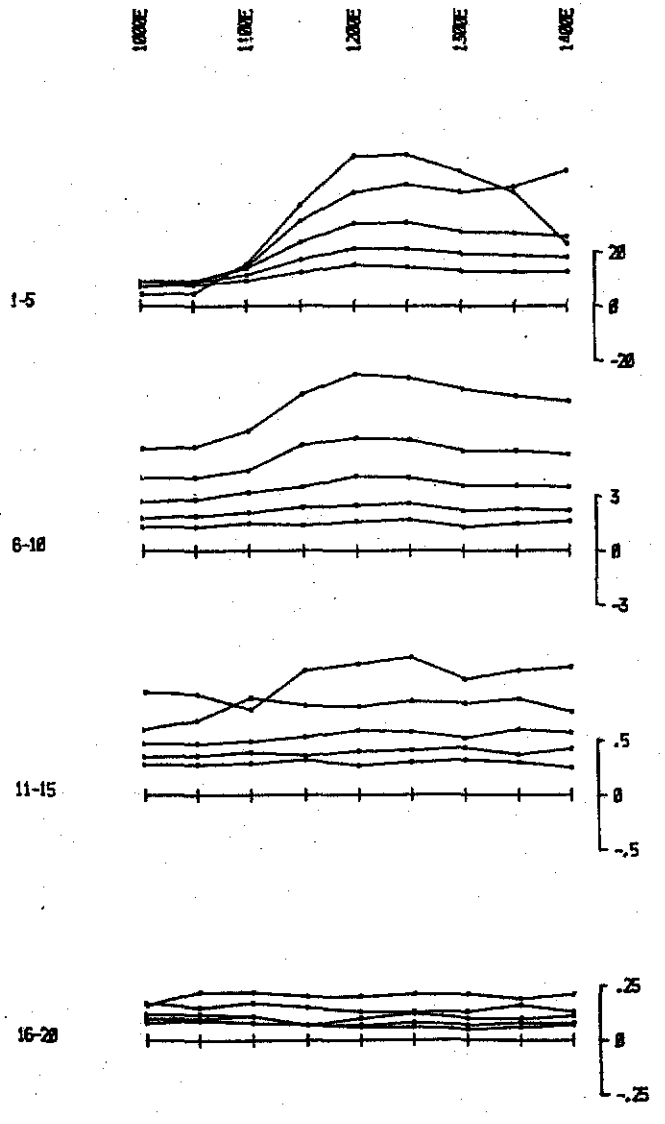
SURVEYED AND COMPILED BY GEOTERREX PTY. LTD.

PROJECT NO. 95-1947

CLIENT : GOLD FIELDS EXP.
PROJECT : CORBINE HILL
AREA : GRAND PRIZE
LINE : 8240GN Z
TX LOOP : A

123190

WATANABE INSTRUMENTS CORP. CHART NO. PR-511



nanovolts per amp metre squared

EM-37

FIXED TRANSMITTER SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (B)

TX LOOP SIDES	: 03600N 01925E
	: 05200N 01625E
TX LOOP SIZE	: 400 m X 300 m
TX TURN OFF TIME	: 260 microsecs.
FIRST GATE TIME	: 88.5 microsecs.
CURRENT	: 15.0 amps
FREQUENCY	: 25 Hz.
INTEGRATION TIME	: 256 cycles
SYNC MODE	: CRYSTAL
~~HORIZONTAL SCALE : 1:5000~~	
SURVEYED BY	: STSO
DATE	: 29/11/1984

SURVEYED AND COMPILED BY GEOTERREX PTY. LTD.

PROJECT NO. 85-1847

CLIENT. : GOLD FIELDS EXP.

PROJECT. : CARBINE HILL

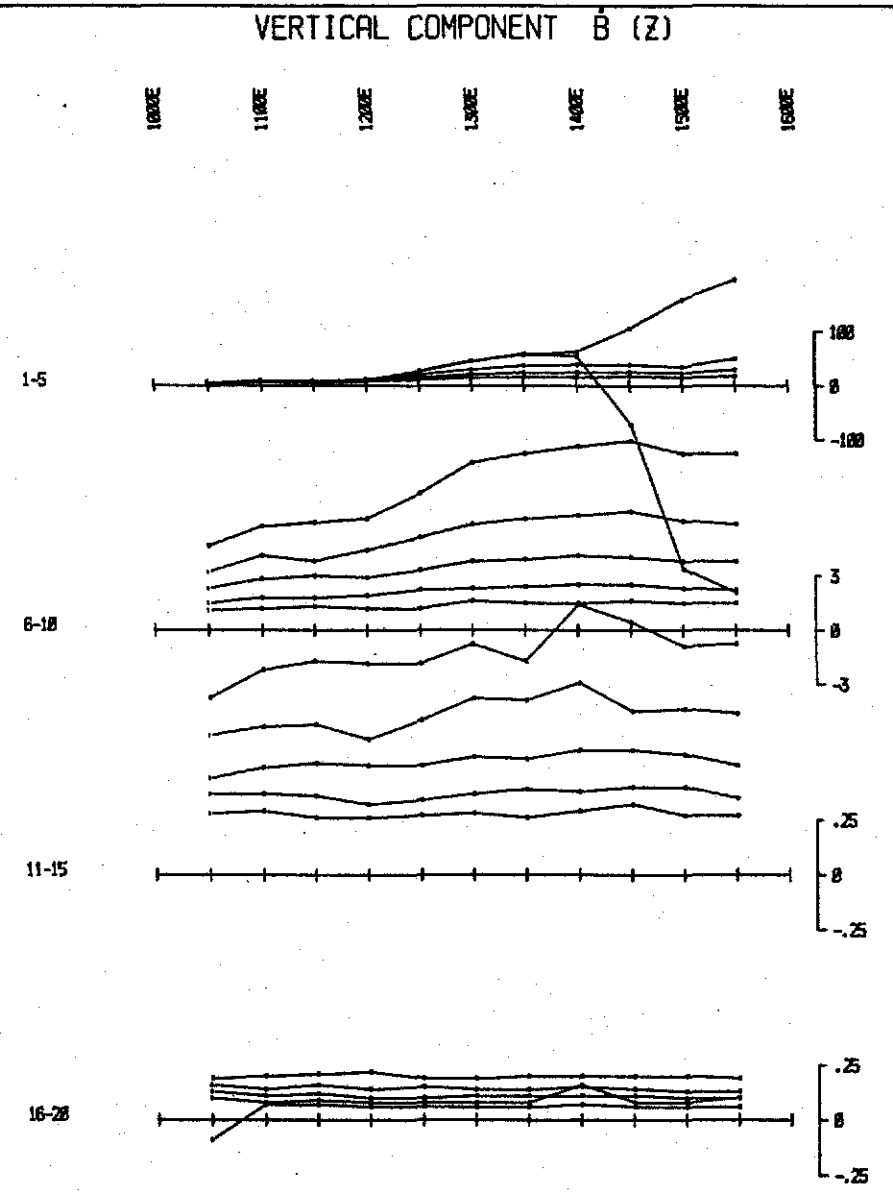
AREA. : GRAND PRIZE

LINE. : 05200N Z

TX LOOP : 5

123191

WATANABE INSTRUMENTS CORP. CHART NO. E 511



nanovolts per amp metre squared

EM-37

FIXED TRANSMITTER SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

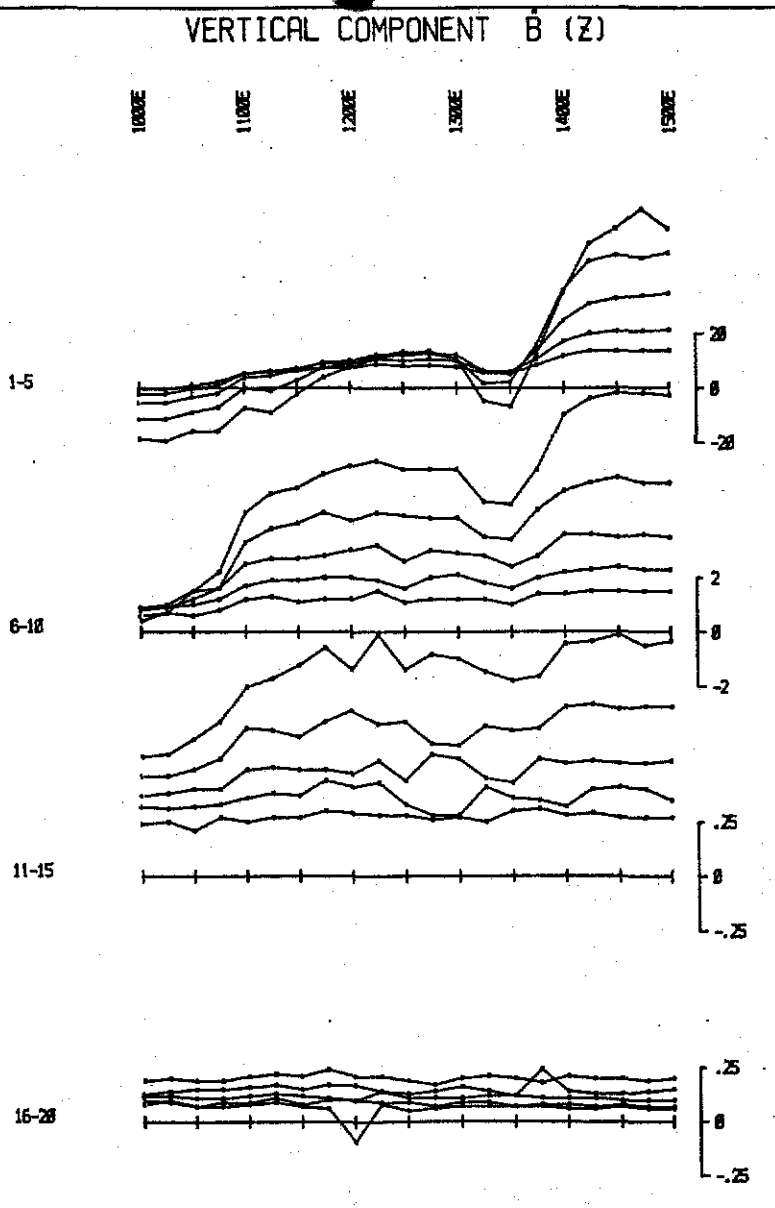
TIME DERIVATIVE OF FLUX DENSITY (B)

TX LOOP SIDES	: 03600N 01925E
	: 03200N 01625E
TX LOOP SIZE	: 400 m X 300 m
TX TURN OFF TIME	: 260 microsecs.
FIRST GATE TIME	: 88.5 microsecs.
CURRENT	: 15.0 amps
FREQUENCY	: 25 Hz.
INTEGRATION TIME	: 256 cycles
SYNC MODE	: CRYSTAL
~~HORIZONTAL SCALE~~	~~: 1:5000~~
SURVEYED BY	: STSD
DATE	: 29/11/1984

SURVEYED AND COMPILED BY GEOTERREX PTY. LTD.

PROJECT NO. 85-1847

CLIENT	: GOLD FIELDS EXP.
PROJECT	: CARBINE HILL
AREA	: GRAND PRIZE
LINE	: 03300N
TX LOOP	: 5



nanovolts per amp metre squared

EM-37

FIXED TRANSMITTER SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (B)

TX LOOP SIDES	:	03600N 0192SE
	:	03200N 0162SE
TX LOOP SIZE	:	400 m X 300 m
TX TURN OFF TIME	:	250 microsecs.
FIRST GATE TIME	:	88.5 microsecs.
CURRENT	:	15.0 amps
FREQUENCY	:	25 Hz.
INTEGRATION TIME	:	256 cycles
SYNC MODE	:	CRYSTAL
~~HORIZONTAL SCALE 1:5000~~		
SURVEYED BY	:	STSD
DATE	:	29/11/1984

SURVEYED AND COMPILED BY GEOTERREX PTY. LTD.

PROJECT NO. 85-1847

CLIENT	:	GOLD FIELDS EXP.
PROJECT	:	CARBINE HILL
AREA	:	GRAND PRIZE
LINE	:	03400N Z
TX LOOP	:	5

WATANABE INSTRUMENTS CORP CHART NO PR-511

NO. PR-511

VERTICAL COMPONENT Ḃ (Z)

800E 900E 1000E 1100E 1200E 1300E 1400E 1500E 1600E

1-5

100
0
-100

6-10

3
0
-3

11-15

.25
0
-.25

16-20

.25
0
-.25

nanovolts per amp metre squared

EM-37

FIXED TRANSMITTER SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (Ḃ)

TX LOOP SIDES	: 03600N 01925E
	: 05200N 01625E
TX LOOP SIZE	: 400 m X 300 m
TX TURN OFF TIME	: 250 microsecs.
FIRST GATE TIME	: 88.5 microsecs.
CURRENT	: 15.0 amps
FREQUENCY	: 25 Hz.
INTEGRATION TIME	: 256 cycles
SYNC MODE	: CRYSTAL
~~HORIZONTAL SCALE~~	~~: 1:5000~~
SURVEYED BY	: STSD
DATE	: 29/11/1984

SURVEYED AND COMPILED BY GEOTERREX PTY. LTD.

PROJECT NO. 85-1847

CLIENT : GOLD FIELDS EXP.

PROJECT : CARBINE HILL

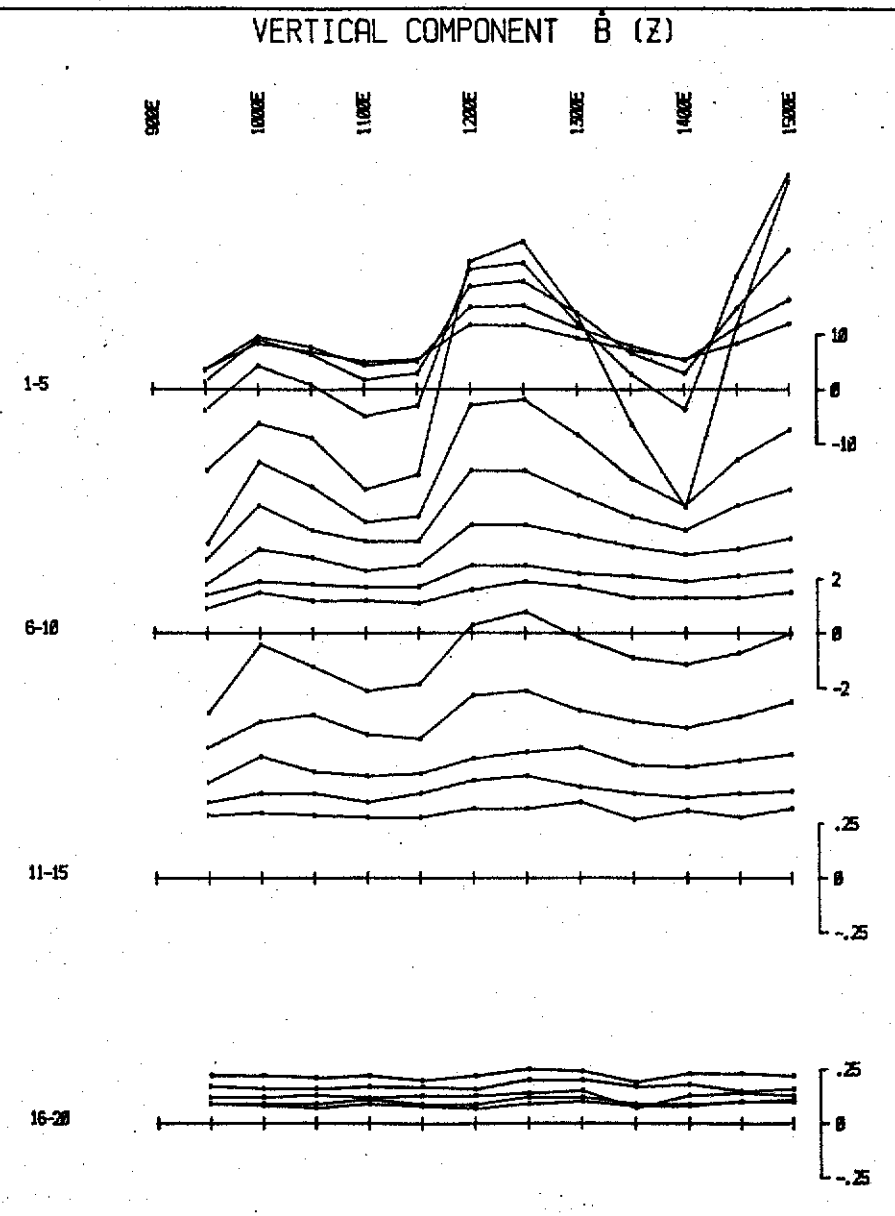
AREA : GRAND PRIZE

LINE : 05500N Z

TX LOOP : 5

12321694

WATANABE INSTRUMENTS CORP. CHART NO. PR-511



nanovolts per amp metre squared

EM-37

FIXED TRANSMITTER SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (Ḃ)

TX LOOP SIDES	: 05600N 01925E
	: 05200N 01625E
TX LOOP SIZE	: 400 m X 300 m
TX TURN OFF TIME	: 260 microsecs.
FIRST GATE TIME	: 88.5 microsecs.
CURRENT	: 15.0 amps
FREQUENCY	: 25 Hz.
INTEGRATION TIME	: 256 cycles
SYNC MODE	: CRYSTAL
~~HORIZONTAL SCALE : 1:5000~~	
SURVEYED BY	: STSD
DATE	: 29/11/1984

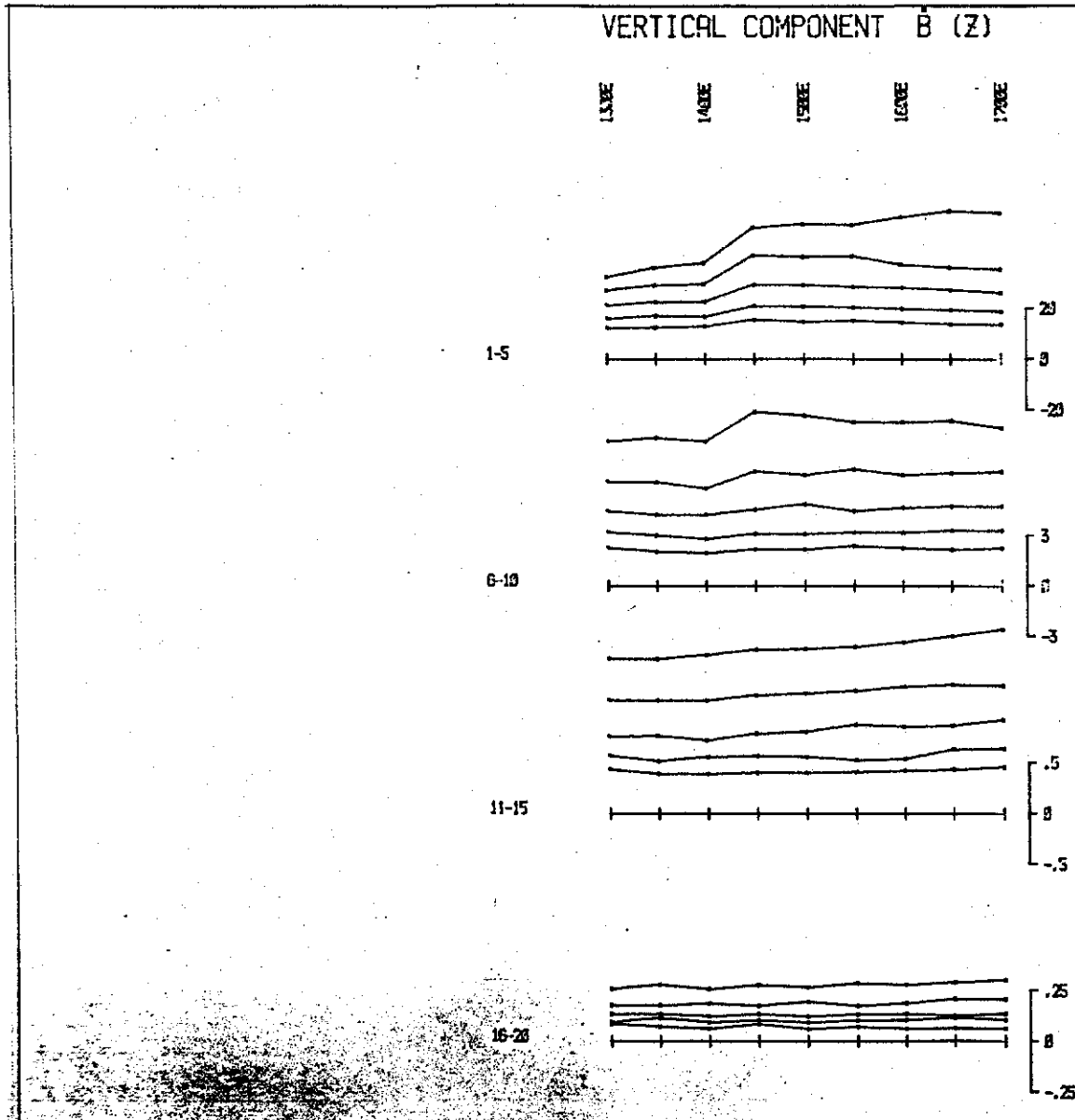
SURVEYED AND COMPILED BY GEOTERREX PTY. LTD.

PROJECT NO. 85-1847

CLIENT	: GOLD FIELDS EXP.
PROJECT	: CARBINE HILL
AREA	: GRAND PRIZE
LINE	: 05600N Z
TX LOOP	: 5

123195

MATANABE INSTRUMENTS CORP. CHART NO. PR-511



EM-37

FIXED TRANSMITTER SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (B)

TX LOOP SIDES	: J9000N 9212SE
	: J13200N 8192SE
TX LOOP SIZE	: 400 m X 300 m
TX TURN OFF TIME	: 220 microsecs.
FIRST GATE TIME	: 53.5 microsecs.
CURRENT	: 14.5 amps
FREQUENCY	: 25 Hz.
INTEGRATION TIME	: 256 cycles
SYNC MODE	: CRYSTAL
~~HORIZONTAL SCALE 1:5000~~	
SURVEYED BY	: SD
DATE	: 02/12/1984

SURVEYED AND COMPILED BY GEOTERREX PTY. LTD. | PROJECT NO. 85-1947

CLIENT : GOLD FIELDS EXP.
PROJECT : CARBINE HILL
AREA : GRAND PRIZE
LINE : J3200N E
TX LOOP C

MATANABE INSTRUMENTS CORP. CH

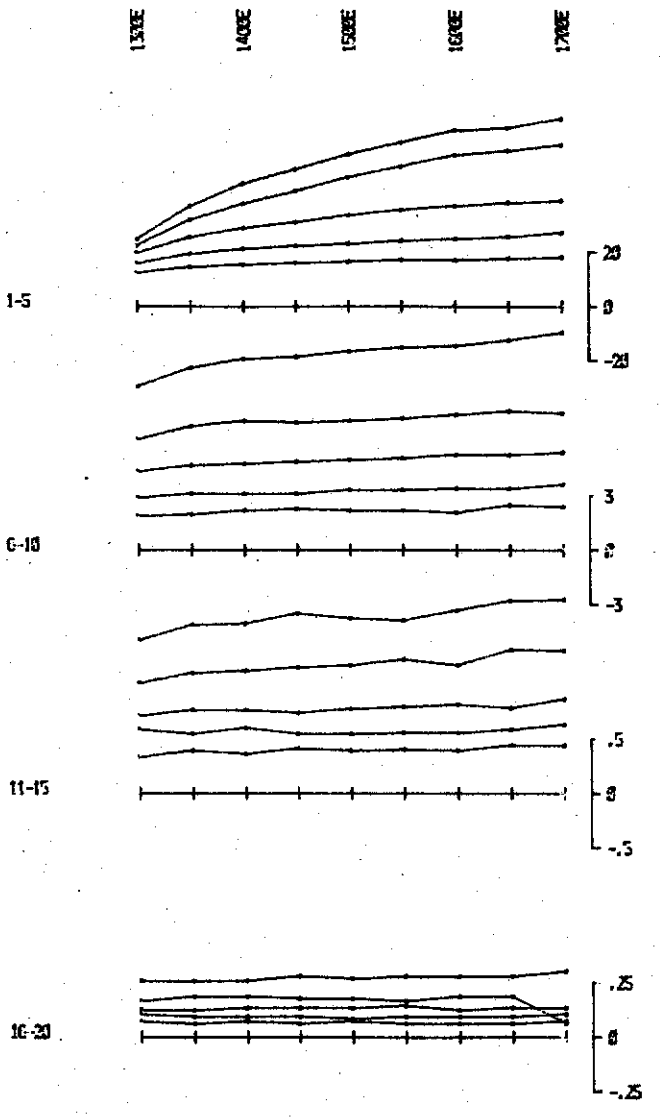
123196

MATANABE INSTRUMENTS COR | MTS CORP.CHART NO. PR-511 | MATANABE INSTRU

123197

196

VERTICAL COMPONENT $\dot{B}$ (Z)



nanovolts per amp metre squared

EM-37

FIXED TRANSMITTER SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (B)

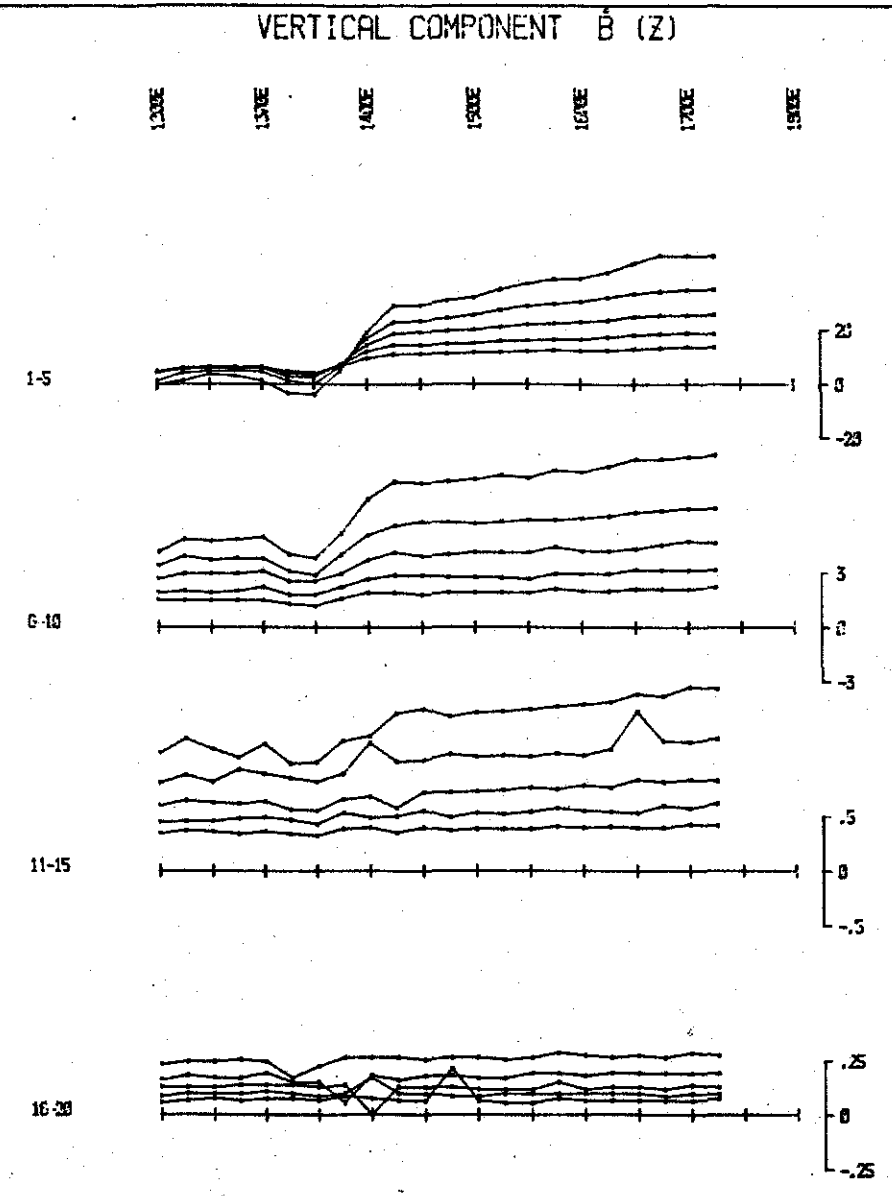
TX LOOP SIDES	: J3600N	8212SE
	: J3200N	8192SE
TX LOOP SIZE	: 400 m X 300 m	
TX TURN OFF TIME	: 250 microsecs.	
FIRST GATE TIME	: 93.5 microsecs.	
CURRENT	: 14.5 amps	
FREQUENCY	: 25 Hz.	
INTEGRATION TIME	: 256 cycles	
SYNC MODE	: CRYSTAL	
~~HORIZONTAL SCALE~~	~~: 1:5000~~	
SURVEYED BY	: STSO	
DATE	: 30/11/1994	

SURVEYED AND COMPILED BY GEOTERREX P/L. LTD.

PROJECT NO. 95-1947

CLIENT	: GOLD FIELDS EXP.
PROJECT	: CORRINE HILL
AREA	: GRID PRIZE
LINE	: J3330N Z
TX LOOP	: 6

WATANABE INSTRUMENTS CORP. CHART NO. PR-511



EM-37

FIXED TRANSMITTER SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (B)

TX LOOP SIDES	:	07600N 02125E
	:	07200N 01925E
TX LOOP SIZE	:	400 m X 300 m
TX TURN OFF TIME	:	250 microsecs.
FIRST GATE TIME	:	58.5 microsecs.
CURRENT	:	14.2 amps
FREQUENCY	:	25 Hz.
INTEGRATION TIME	:	256 cycles
SYNC MODE	:	CRYSTAL
~~HORIZONTAL SCALE : 1:5000~~		
SURVEYED BY	:	SD
DATE	:	03/12/1984

SURVEYED AND COMPILED BY GEOTERREX PTY. LTD.

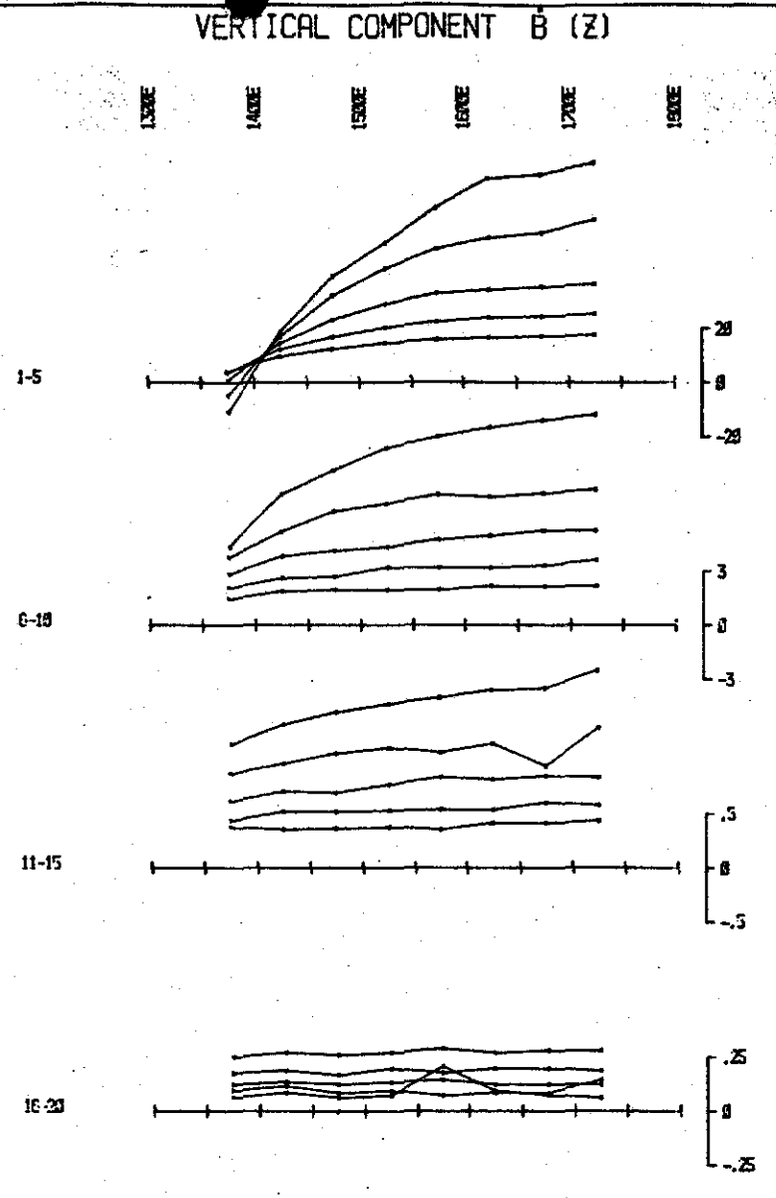
PROJECT NO. 55-1047

CLIENT : GOLD FIELDS EXP.
PROJECT : CARIBINE HILL
AREA : GRAND PRIZE
LINE : 07400N E
TX LOOP : 6

1231198

123199

19



nanovolts per amp metre squared

EM-37

FIXED TRANSMITTER SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (dB)

TX LOOP SIDES	:	03600N 02125E
	:	03200N 01925E
TX LOOP SIZE	:	400 m X 300 m
TX TURN OFF TIME	:	250 microsecs.
FIRST GATE TIME	:	93.5 microsecs.
CURRENT	:	14.5 amps
FREQUENCY	:	25 Hz.
INTEGRATION TIME	:	256 cycles
SYNC MODE	:	CRYSTAL
~~HORIZONTAL SCALE~~	:	~~1:5000~~
SURVEYED BY	:	ST30
DATE	:	30/11/1994

SURVEYED AND COMPILED BY GEOTERREX PTY. LTD.

PROJECT NO. 95-1947

CLIENT	:	GOLD FIELDS EXP.
PROJECT	:	CARBINE HILL
AREA	:	GRAND PRIZE
LINE	:	03500N Z
TX LOOP	:	6

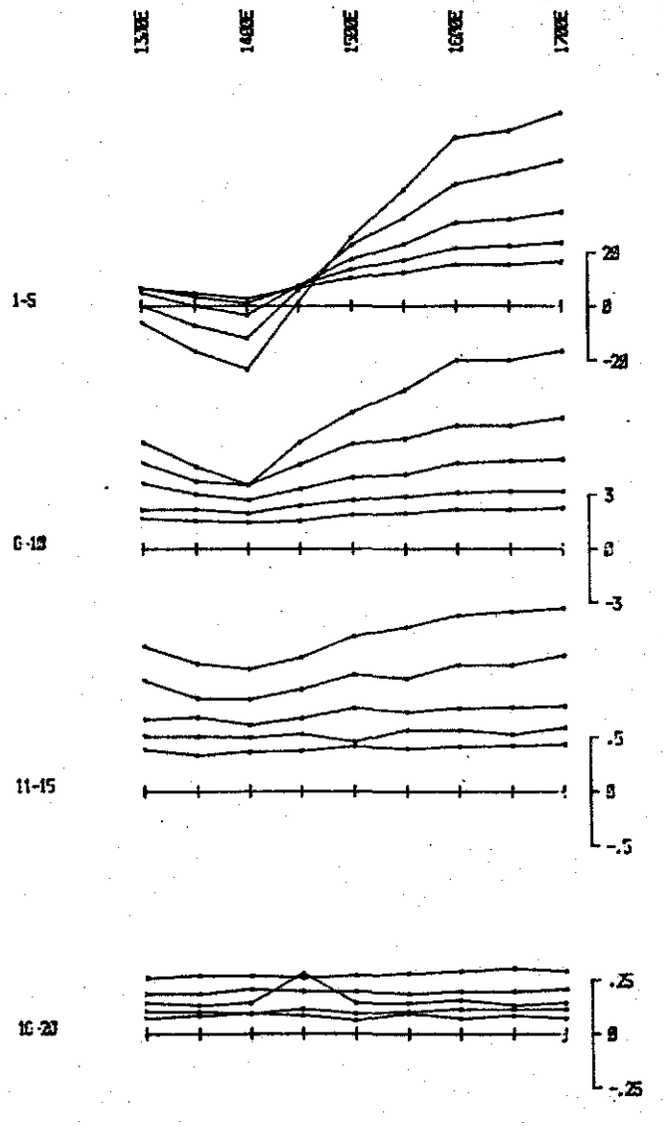
MADE INSTRUMENTS CO'S CHART NO. PR 511

123200

199

WATANABE IN UMENTS CORP.CHART NO PR-511

VERTICAL COMPONENT $\dot{B}$ (Z)



nanovolts per amp metre squared

EM-37

FIXED TRANSMITTER SURVEY

ELECTROMOTIVE FORCE INDUCED BY SECONDARY FIELD

TIME DERIVATIVE OF FLUX DENSITY (B)

TX LOOP SIDES	:	07600N 02125E
	:	07200N 01925E
TX LOOP SIZE	:	400 m X 300 m
TX TURN OFF TIME	:	250 microsecs.
FIRST GATE TIME	:	88.5 microsecs.
CURRENT	:	14.5 amps
FREQUENCY	:	25 Hz.
INTEGRATION TIME	:	250 cycles
SYNC MODE	:	CRYSTAL
~~MERIDIAN SCALE : 1:5000~~		
SURVEYED BY	:	ST3D
DATE	:	30/11/1994

SURVEYED AND COMPILED BY GEOTERREX PTY. LTD.

PROJECT NO. 95-1947

CLIENT	:	GOLD FIELDS EXP.
PROJECT	:	CARBINE HILL
AREA	:	GRAND PRIZE
LINE	:	07600N Z
TX LOOP	:	G

APPENDIX 6

Diamond Drill Logs 1984/85

201

123202

HOLE NO: G.P. 9
STATE : TASMANIA

GOLD FIELDS EXPLORATION PTY. LIMITED
DRILL CORE RECORD

ULV. PRESS

PROJECT	GRAND PRIZE EL 42/7
DESIGNED BY	P. KOMYSHAN
LOGGED BY	P. KOMYSHAN
COMMENCED	14/1/85
COMPLETED	20/2/85

PURPOSE

To test for a possible carbonate bearing horizon adjacent to the Grand Prize Fault at 1850 R.L.

LOG SUMMARY

0.0 - 73.9 : Razorback Conglomerate. 411.6-491.5 : Serpentinite.
73.9 - 128.5 : Hodge Slate.
128.5 - 161.5 : Red Lead Conglomerate
161.5 - 170.9 : Fault
170.9 - 351.2 : Altered Serpentinite
351.2 - 411.6 : Grand Prize Fault

GENERAL COMMENTS

No significant sulphide rich intersection.

ASSAY SUMMARY

INTERVAL From	INTERVAL To	Sn	Sn (sol)	As	WO3	Cu	Pb	Zn	Ag	Bi				COMMENTS
161.5	170.9	<0.01%	0.01%	<0.01%	<0.01%	<0.01%	0.01%	0.07%	<1ppm	<10 ppm				Fault
481.1	486.3	<0.01%	0.01%	<0.01%	<0.01%	<0.01%	0.01%	0.01%	<1ppm	<10ppm				Pyrrhotite mineralisation

LOCATION

NORTHING	5,365,002
EASTING	368,124.4
R.L.	2290.33
GRID	A.M.G.
LENGTH	491.5

HOLE CONDITION

SIZE Hole Size	Depth
HQ	257.0
NQ	491.5

SIGNIFICANT CORE LOSS INTERVALS From	To	% Lost

POOR GROUND CONDITION ZONES From	To	Condition

HOLE CONDITIONS AFTER COMPLETION

Hole is 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
0	043	-65	0.0	17.0	17.0	15.41	2274.92	7.18	7.18
34	046	-63.25	17.0	56.0	39.0	34.83	2240.10	17.55	24.73
78	046	-62	56.0	94.5	38.5	33.99	2206.10	18.07	42.81
111	047	-60	94.5	129.0	34.5	29.88	2176.23	17.25	60.06
147	048	-60	129.0	163.5	34.5	29.88	2146.35	17.25	77.31
180	054?	-60.75	163.5	194.5	31.0	27.05	2119.30	15.15	92.46
209	-	-60.75	194.5	229.5	35.0	30.54	2088.76	17.10	109.56
250	032?	-61	229.5	269.5	40.0	34.98	2053.78	19.39	128.95
289	020?	-61	269.5	311.5	42.0	36.73	2017.04	20.36	149.31
334	047	-61.5	311.5	356.0	44.5	39.10	1977.93	21.23	170.54
378	-	-61.5	356.0	409.0	53.0	46.58	1931.35	26.24	195.83
440	045	-61	409.0	461.5	52.3	43.92	1885.60	25.45	221.18
483	-	-60	461.5	491.5	30.0	25.98	1859.6	15.0	236.18

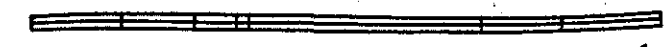
HOLE NO. GP 9

GOLD FIELDS EXPLORATION PTY. LIMITED
DIAMOND DRILL HOLE PLOT

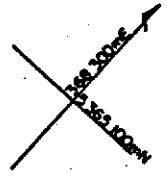
SCALE 1:2000



5 365 002 mN
368 124·4 mE

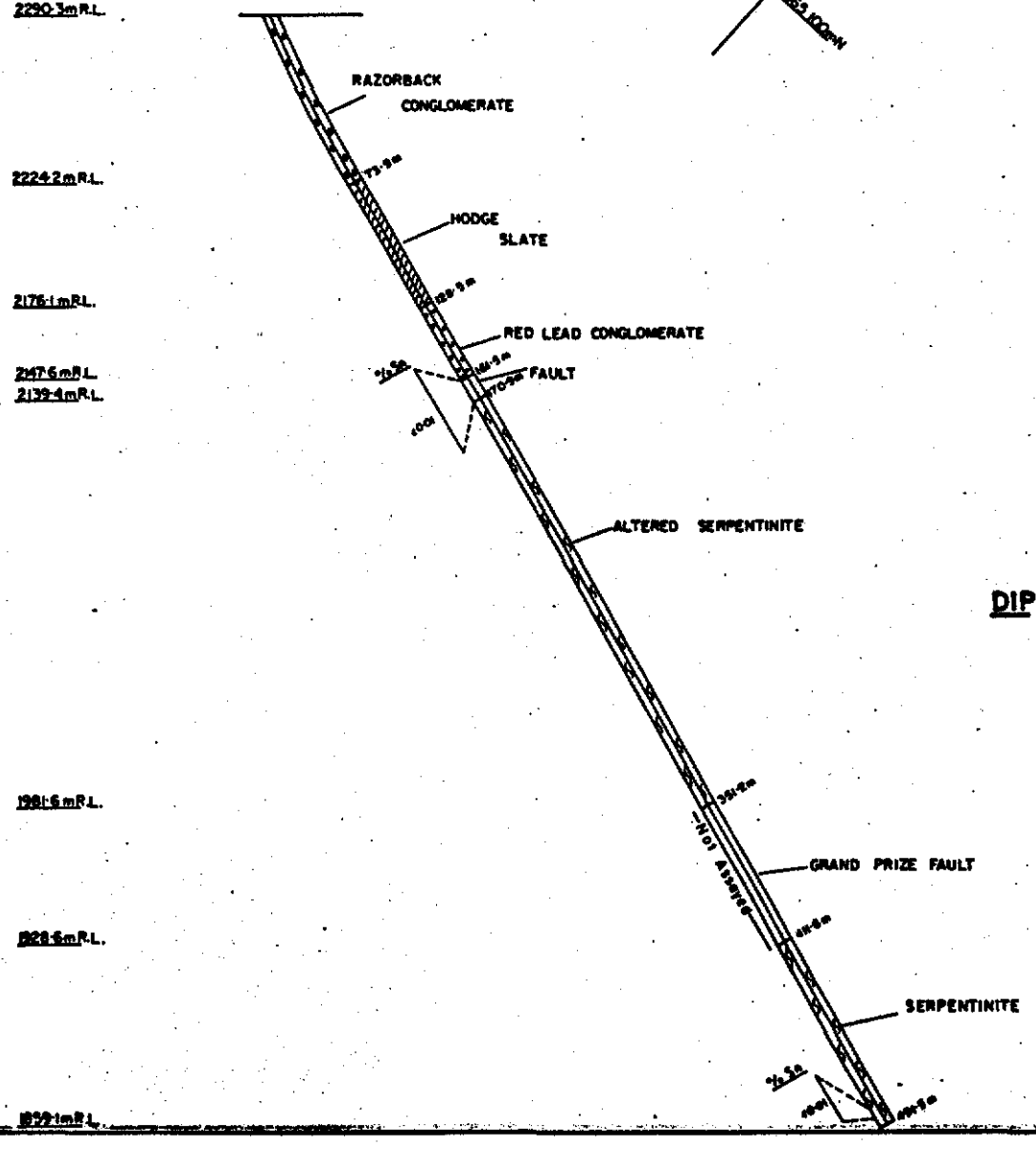


PLAN VIEW



5 cm

DIP PROFILE



GOLD FIELDS EXPLORATION PTY. LIMITED

123204

DEV. PRESS

PROJECT: GRAND PRIZE E.L. 42/71

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: G.P. 9

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION
0	3.0	0	0	Triconed.
3.0	61.55	56.75	92	Greywacke - (Razorback Conglomerate)
				Grey blue silt dominant (to approximately 28m), then sands dominant greywacke with lenticular bedding, scour and fill structures, flazer bedding and graded bedding. (Facing uphole). The sandy layers consist initially of white to grey quartz with minor rounded silt particles. However the carbonate content in the matrix of these sandy layers significantly increases downhole as do the number of clastic carbonate fragments and possible clastic fossil fragments (e.g. 26.3-26.4m). Minor nodular and disseminated pyrite (<2%) may be partially replacing some of these sandy carbonate rich beds.
				The unit shows little weathering except within minor limonite stained broken zones at 9.7-10.4m and 12.6-15.4m. Within these broken zones minor local brecciation and micro faulting occurs as well as elongate angular cavities probably after carbonate veining. Elsewhere within this unit tension gashes of carbonate (with only minor quartz) occur. Veining also occurs as carbonate (pyrite, sphalerite) veinlets (averaging 2mm in width) sub parallel to the core axis and minor micro faults. One such vein of calcite and minor pyrite of 3cm width (at 33.6-34.2m) shows two phase sequential veining
				R.C.A.'s
				0 - 16m : 70°
				- 20m : 70-75°
				- 28m : 75-80°
61.53	73.9	12.35	100	Conglomerate - (Razorback Conglomerate).
				Medium to coarse chert conglomerate with clasts consisting dominantly of angular to subangular white, pale green, grey chert and quartzite but also contains minor clasts of black

ASSAY DATA Sample No.	From	To	Rec. %

123205

GOLD FIELDS EXPLORATION PTY. LIMITED

PROJECT: GRAND PRIZE E.L. 42/71

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: G.P. 9 Page: 2.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	ASSAY DATA Sample No.	From	To	Rec. %
				shale, basalt and carbonate. These minor clast components are generally less than 5mm in diameter with the exception of one large 10cm diameter basalt clast. The conglomerate is interbedded with sand dominant carbonate rich greywacke as described for the previous unit.				
				At 64.5-65.1m contorted (soft sediment deformed) silt dominant greywacke is interbedded with the chert conglomerate. Rip up clasts of the greywacke occur within the conglomerate and two local unconformities are noted.				
				The unit is cut by thin (≤1mm) veinlets of calcite and minor quartz calcite veins. (5-10 mm width) in the coarser conglomerate and calcite veins (5-10mm width) within the finer grained layer. The base of the unit appears to show an unconformable relationship to the underlying black shale. However this boundary is complicated by micro faulting B.C.A.'s 70°				
73.9	128.3	54.35	100	Black Shale - (Hodge Slate).				
				The finely laminated black to grey shale with a carbonate rich matrix contains minor carbonate rich grit beds which show grading and sole structures. Pyrite is disseminated throughout and also occurs as lens, pods and thin beds. Irregular grey carbonate rich nodular beds occur towards the top of the sequence at 73.7-74.6m. At 74.8m a 8mm band of lenticular pyrrhotite is associated with minor pyrite.				
				Veins consisting of calcite, coarse grained pyrite (1-5%) and minor sphalerite of variable orientation occur as fine micro-fractures and coarse irregular shaped veins some of which are affected by later finemicro fractures. Veins are less than 1 cm in width except at 94.9-95.1m, 107.0m, 101.1m where grey and white carbonate with minor quartz and pyrite occur				

GOLD FIELDS EXPLORATION PTY. LIMITED

123206

ULV. PRESS

PROJECT: GRAND PRIZE E.L. 42/71

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: G.P. 9 Page: 3.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION
				as cavity fill after part brecciation.
				B.C.A.'s 75.0m : 60°
				79.6m : 70°
				79.6 - 106.6m : 60-70°
				115.7 - 123.0m : 70-80°
				123.0 - 128.5m : 40-50°
128.5	161.5	33.2	100	Polymict Conglomerate - (Red Lead Conglomerate)
				Pale green matrix poor, poorly sorted, polymict conglomerate consisting of rounded to subrounded angular clasts of grey dolomitic sandstones, dolomitic siltstones kaolinised volcaniclastic grits, gabbros and peridotite. The clasts are generally cemented by a sparce carbonate rich matrix, however local areas occur of coarse grained recrystalised calcite associated with local brecciation. This appears to increase downhole. Alteration of this unit consists of minor poddy pyrite mineralisation replacing dolomitic clasts and minor calcite axinite recrystalisation of carbonate rich clasts.
				160.7m : 30mm wide vein of coarse grained calcite with minor pyrite.
				C.M.S. Petrology 161.2m : Altered Conglomerate.
161.5	161.9	0.4	100	Fault?
				Vein? of fine grained grey calcite and fine grained pyrite overprinted by veins of coarse grained grey white calcite containing pods of coarse grained pyrite.
				Brecciation is indicated by angular nature of fragments between veins and brecciation of rounded clasts at the base of the polymict conglomerate.

ASSAY DATA Sample No.	From	To	Rec. %	Sn	Sn(sol)	As	WO_3	Cu	Pb	Zn	Ag	Bi
14071	159.0	160.5	100	<10	<100	20	30	10	30	280	<1	<10
14072	160.5	161.5	100	<10	100	<10	20	65	90	300	<1	<10
14073	161.5	161.9	100	<10	100	<10	40	95	200	1000	<1	<10

123207

GOLD FIELDS EXPLORATION PTY. LIMITED

ULV. PRESS

PROJECT: GRAND PRIZE E.L. 42/71

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: G.P. 9

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	Bi
161.9	164.6	2.7	100	Altered Gabbro?	14074	161.9	163.0	100	<10	100	<10	10	50	120	520	<1	10
					14075		164.6	100	<10	<100	20	20	65	110	1140	<1	<10
				Uniform medium to coarse grained carbonate, serpentinised gabbro													
				containing phenocrysts of feldspar with part hazy outlines													
				and carbonated rims and coarse grained serpentinised black/green													
				mafic minerals. Locally these mafic minerals are fractured													
				and contain calcite extension veins.													
				The whole rock is extensively brecciated by first stage very													
				fine grained pale grey carbonate veining which has been overprin-													
				ted by veins of coarse grained white calcite. Disseminated													
				pyrite/pyrrhotite (1-3%) throughout.													
				C.M.S. Petrology 162.8m : Altered Serpentinite.													
164.6	170.9	5.7	100	Carbonate Conglomerate/Breccia.	14076	164.6	166.0	100	<10	100	40	20	40	230	340	<1	<10
					14077		167.0	100	10	100	30	20	35	140	1690	<1	<10
				This pale grey carbonate rock contains rounded to angular clast	14078		168.0	100	<10	200	40	20	20	50	420	<1	<10
				(<2cms in diameter) of carbonate , pale carbonated mafics,	14079		169.0	100	<10	100	<10	20	25	90	210	<1	<10
				pale silicified mafics with spotty chromite as well as larger	14080		170.0	100	<10	100	<10	20	20	80	240	<1	<10
				zones of darker mafic clasts which are both angular and rounded.	14081		170.9	100	<10	200	60	30	30	10	410	<1	<10
				These clasts are further brecciated by later calcite veins.													
				Incipient shearing or strong cleavage delineates and alignment													
				of the more elongate clasts. Minor stylolitic development occurs													
				with pyrite. Mineralisation occurs as stringer bronze pyrite													
				(varying 1-5%) and disseminated sphalerite, locally (168.2m)													
				up to 20%.													
				164.6-164.9m : Boundary marked by white to grey coarse grained													
				vein of calcite.													
				170.2-170.4m . Zone of brecciated mafic rocks with coarse grained													
				calcite.													
				170.4-170.7m : Dark gine grained ultramafic extensively veined													
				by coarse grained calcite.													
				170.7-170.9m : Contact zone consisting predominatly of grey													
				to white spotty textured carbonate. The spotty													
				minerals are probably fine grained chromite													

123208

GOLD FIELDS EXPLORATION PTY. LIMITED

ULV. PRESS

PROJECT: GRAND PRIZE E.L. 42/71

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: G.P. 9 Page: 5.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION
				or chlorite. Stylolitic veinlets occur.
				The contact with the downhole serpentinite is relatively sharp but uneven with calcite veins transecting the contact. The textures within the carbonated rock bear little similarity with the serpentinite.
				The zone 161.5-170.9m may represent a carbonated fault zone.
				C.M.S. Petrology 167.9m : Altered Serpentinite.
				168.5m : Altered Serpentinite.
				170.2m : Altered Serpentinite.
170.9	351.2	180.3	98	Serpentinite
				In detail:
				170.9-189.9m : Very dark green serpentinite with intense regular spaced veining by hairlike white slip fibre asbestos. These veins are clearly crenulated by later hairlike veins. Over-printing these veins are minor coarse grained calcite veins and calcite quartz serpentinite veins with minor sphalerite. Minor zones of magnetite segregation occur at 180.5-181.0m. The boundary of this unit is marked by a colour change (dark green to pale olive green) and lack of veining down hole.
				189.9-212.8m
				Pale olive green seprentinite with patches of a darker green mafic rock. Randomly spaced asbestos veins occur. The paler serpentinite occurs as a halo around these veins and other joints. Some brecciation is associated with these veins. Minor quartz magnetite veins (5-80 mm wide) also occur.
				212.8-225.1m
				Pale green serpentinite with white spotty segregations and veinlets and veins of quartz and magnetite.

ASSAY DATA Sample No.	From	To	Rec. %

123209

GOLD FIELDS EXPLORATION PTY. LIMITED

PROJECT: GRAND PRIZE E.L. 42/71

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: G.P. 9 Page: 6.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	ASSAY DATA Sample No.	From	To	Rec. %
				225.1-237.8m : as for 189.9-212.8m.				
				237.8-241.0m : as for 212.8-225.1m.				
				241.0-351.2m: as for 189.9-212.8m. Local carbonate magnetite veins (>20mm in width) with a noted lack of alteration around veins except for 343.3-344.6m, a local zone of intense shearing and pale green slip fibre development.				
				C.M.S. Petrology 175.6m : Veined Serpentinite 195.6m : Serpentinite				
351.2	411.6	60.4	99	Brecciated Serpentinite - (Grand Prize Fault) In detail: 351.2-358.5m : Zone of dark green serpentinite (similar to *up hole serpentininte) cut by numerous slip fibre asbestos* veins. These occur in places as intense sub parallel veins and elsewhere as a network seperating angular fragments of serpentinite. In places intense talcification and veining has resulted in broken core. Minor veins of quartz magnetite occur.				
				358.5-361.9m : Pale olive green relatively uniform textured serpentinite cut by a network of slip fibre asbestos veins and minor dolomite? magnetite irregular shaped veins.				
				361.9-367.7m : Pale olive green to grey serpentinite clearly brecciated with variable sized subrounded to angular (5-30mm diameter) serpentinite fragments as well as stretched elongate fibrous serpentinite clasts supported by a matrix of serpentinite and dolomitic magnetite veins.				
				367.7-375.2m: Pale green to grey serpentinite relatively uniform textured but strongly veined by pale grey dolomite(?), serpentinite and magnetite veins. Minor breccia zones of 100mm in width occur				

GOLD FIELDS EXPLORATION PTY. LIMITED

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PROJECT: GRAND PRIZE E.L. 42/71

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: G.P. 9 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	Bi
				375.2-411.6m: Breccia as for 361.9-367.7m with disseminated pyrite (<1%).													
				C.M.S. Petrology 395.5m : Altered Serpentinite													
				366.3m : Altered Serpentinite													
				371.7m : Altered Serpentinite													
				401.7m : Breccia													
411.6	491.5	79.9	100	Serpentinite	14082	481.1	482.3	100	<10	100	<10	30	5	10	100	<1	<10
				In detail:	14083		483.3	100	30	100	<10	30	25	120	250	<1	<10
					14084		484.3	100	20	100	<10	20	5	20	40	<1	<10
				411.6-415.3m : Pale olive green uniform serpentinite veined	14085		485.3	100	<10	100	<10	30	10	10	20	<1	<10
				but unbrecciated with a gradual downhole increase to a darker	14086		486.3	100	<10	100	<10	30	15	110	120	<1	<10
				green serpentinite.													
				415.3-455.2m: Dark green serpentinite as for 241.0-351.2m with moderate serpentinite veining and minor spotty pale green alteration.													
				455.2-460.7m : Finer grained pale green serpentinite matrix supporting spotty segregations of olive green fine grained ultrabasic rock. The pale green matrix decreases downhole resulting in a gradational boundary with fine grained ultramafic. Some white serpentinite veining is present.													
				460.7-481.1m: Olive green fine grained uniform textured ultrabasic with wispy black veinlets of magnetite and associated pods of brown magnetite segregations. Minor white to pale green serpentinite veins and splotchy carbonate segregations occur. Within this zone at 465.2-465.8m a pale grey green banded zone of serpentinite containing segreations of magnetite is overprinted first by a pale green serpentinite vein (or extension filling at right angles to the first vein) and secondly by a pale green to white stylolitic serpentinite carbonate vein.													
				481.1-482.3m : Gradational downhole increase in alteration													

GOLD FIELDS EXPLORATION PTY. LIMITED

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PROJECT: GRAND PRIZE E.L. 42/71

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: G.P. 9

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	ASSAY DATA Sample No.	From	To	Rec. %
				from the above unit to a pale green spotty serpentinite at 481.4m to a grey fine grained dolomitic serpentinite at 482.3m. Veins of dark green serpentinite rimmed by white carbonated serpentinite and white serpentinite, carbonate, magnetite veins occur. Disseminated pyrite 1-2% also occurs.				
				482.3-484.3m : Grey to grey green well banded fine grained dolomitic serpentinite containing quartz serepentinite veins parallel the the banding indicates this unit is probably a vein. Black to brown magnetite segregation occurs throughout. Downhole there is an increase in overprinting by pink dendritic pyrrhotite (up to 15%).				
				484.3-486.3m : Gradational boundary from the above unit to olive green ultrabasic rock. This is the reverse gradation of 481.1-482.5m. The unit also contains spotty pink pyrrhotite of up to 10%.				
				486.3-491.5m : Olive green ultrabasic as for 460.2-481.1m.				
				Petrology CMS 465.3m : Altered Serpentinite 477.0m : Serpentinite 483.0m : Altered Serpentinite 484.0m : Altered Serpentinite				
				END OF HOLE				

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HOLE NO: G.P. 9
STATE : TASMANIA

GOLD FIELDS EXPLORATION PTY. LIMITED

DRILL CORE RECORD

REPORT CMS 85/4/12

A suite of eighteen drill core samples from GP 9, and a single sample from GP 10, was received for petrological examination, with emphasis on the origin of carbonate rocks. Representative thin-sections were prepared and examined together with the respective offcuts, with stain tests performed as warranted. Attached tabulated descriptions summarise the microscopic data and include interpretative comments.

Summary

The GP 9 sequence comprises an altered (carbonated) conglomerate overlying a thick sequence of similarly altered serpentinitic ultramafics. Shearing effects are more or less ubiquitous and complex the alteration assemblages in that the alteration-prone serpentinites reflect both shear-induced and primary or metasomatic phyllosilicate (notably talc, chlorite) assemblages.

The most conspicuous feature of the rocks is the essentially pervasive development of fine-grained sideritic carbonate grading from serpentinite mesh-texture-controlled veinlets to advanced replacements of the whole rock. This process is clearly metasomatic (in terms of Fe, CO_2) with associated partial depletion of Si and may represent a marginal granitic assemblage analogous to the ore-marginal sideritic carbonate facies at Renison.

Sideritic alteration is partly contemporaneous with talc and/or chlorite replacement of "serpentine" (antigorite), but is complexed by late shearing-induced talc and chlorite development. A few serpentinites exhibit minor magnesitic vein development, this phase postdating siderite, but similarly predating shearing. Marginal zones, including the overlying conglomerate, exhibit ferroan calcite development, apparently essentially contemporaneous with the magnesite. Consistent with the marginal granitic alteration interpretation is a marked absence of Ca-Mg-Fe silicate metasomatic alteration patterns.

Ultramafics are divisible into at least three major units (pyroxenitic, peridotitic to dunitic and dunitic), with conceivably some repetition in basal zones. These rocks carry more or less ubiquitous Fe-sulphide disseminations which appear hypogene in part, but are complexed by carbonation-associated sulphides including, locally, traces of sphalerite and galena.

The GP 10 sample represents an altered and veined breccia in a basic ("basalt") or basic-volcanomict conglomerate facies. The vein assemblage includes conspicuous amounts of epidote-clinozoisite which, in the Renison and associated environs, tends to define this zone as related to the Colebrook Hill alteration assemblage. Epidote is rarely developed in these areas in other than "Colebrook-style" veins and replacements.

D. Cowan, B. Sc.

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HOLE NO: G.P. 9
STATE : TASMANIA

GOLD FIELDS EXPLORATION PTY. LIMITED

DRILL CORE RECORD

CENTRAL MINERALOGICAL SERVICES

Sample No.	Classification - Composition	Fabric	Accessories	Comments
GP 9 161.2 (T.S. 53048)	Altered Conglomerate. Clasts of variably chloritic calcite rock and variably carbonate-stained chloritic pelite. Matrix of chlorite-carbonate-matrixed quartz sandstone. Sporadic carbonate veins, late chloritic fractures.	Sandstone-matrixed, conglomeratic. Irregularly veined, stressed, chloritic-fractured.	Disseminated partly pyritised pyrrhotite in clasts, matrix, carbonate veins. Traces of detrital chromite.	Quartz sandstone-matrixed conglomerate with "dolomite", dolomitic pelite clasts, extensively replaced by ferroan calcite (trend siderite). Late shearing, chloritisation.
161.8	Breccia. Aggregates of coarse sparry, pervasively pyrite-stained sideritic carbonate with interspersed clots, films of ferroan calcite. Interspersed zones of chloritised/carbonate-stained serpentinite.	Breccia-like composite of coarse vein-carbonate (stressed) and sheared/altered serpentinite.	Sporadic late chloritic fractures. Traces of fine galena, cloudy sphalerite in siderite veins, impregnations.	Breccia composite of siderite vein, altered serpentinite components. Fractured/Fe-calcite-veined, subsequently refractured/chlorite-veined.
162.8	Altered Serpentinite. Chlorite and microcrystalline quartz in varying proportions with pervasive fine-grained clots, films of sideritic carbonate. Minor films of Fe-calcite. Sporadic late discontinuous chlorite veinlets.	Phyllitic/chlorite-microfoliated. Vaguely relict mesh-textured, "serpentinitic".	Conspicuous relict primary chromian opaques. Minor fine-grained pyrrhotite, pyrite.	Thoroughly altered (silicified-chloritised/siderite-veined) serpentinite with secondary calcite- and chlorite veining analogous to 161.2 m, 161.8 m.
167.9	Altered Serpentinite. Fine sideritic carbonate with varying proportions of talc, Mg-chlorite, minor relics of antigorite. Disseminated fine-scale clots, films, spongy lenses of pyrrhotite.	Phyllitic, locally relict, weakly mesh-textured, serpentinitic.	Conspicuous relict primary chromite. Minor clots, films of Fe-calcite.	Partly steatitised, extensively sideritic-carbonated, sheared, weakly calcite-veined serpentinite. Talc apparently contemporaneous with quartz-chlorite at 162.8 m.
168.5	Altered Serpentinite. Fine talc with varying proportions of microcrystalline quartz, pervasive clots, films of sideritic carbonate; minor fine to ultrafine grains, films of pyrrhotite.	Phyllitic/vaguely relict mesh-textured, serpentinitic (similar to 162.8 m).	Relict primary chromite (similar to 162.8 m, 167.9 m).	Talc-quartz-altered/extensively siderite-impregnated, sheared serpentinite. Composite of 162.8 m and 167.9 m assemblages. Devoid of calcite veinlets.
170.2	Altered Serpentinite. Fine to microcrystalline sideritic carbonate with interspersed foliae, minor sideritic bands of talc and Mg-chlorite. Disseminated chromite. Minor relics of antigorite.	Phyllitic, locally sheared-relict mesh-textured, serpentinitic.	Minor traces of quartz. Traces of fine to ultrafine pyrrhotite in orientated blebs, microfilms.	Close affinities with 162.8 m, 168.5 m and particularly 167.9 m. Relatively sheared (post-sideritic carbonation).
175.6 (T.S. 53054)	Veined Serpentinite. Antigorite with interspersed veinlets, foliae of chrysotile and an irregular network of (sheared) sideritic carbonate veinlets. Minor clots of talc.	Sheared, coarsely mesh-textured, "serpentinitic" (?pyroxenite-derived)	Disseminated chromite. Traces of semi-fibrous secondary magnetite, fine (?nickel) sulphide.	Moderately siderite-veined, sheared serpentinite with carbonate veinlets partly controlled by pre-existing chrysotile veinlets.
195.6 (T.S. 53054A)	Serpentinite. Antigorite with sporadic irregular veins of chrysotile (± secondary magnetite). Disseminated relict primary magnetite, secondary clots, microscopic rhombs of sideritic carbonate.	Mildly sheared, mesh-textured, serpentinitic ("dunite"-derived).	Minor chromite (magnetite-selvedged). Minor traces extremely fine (?nickel) sulphide.	Relatively mildly siderite-impregnated serpentinite. Reflects incipient siderite veining, partly chrysotile vein-controlled.

HOLE NO: G.P. 9
STATE : TASMANIA

GOLD FIELDS EXPLORATION PTY. LIMITED

DRILL CORE RECORD

CENTRAL MINERALOGICAL SERVICES

Sample No.	Classification - Composition	Fabric	Accessories	Comments
GP 9 485.3	Altered Serpentinite. Antigorite with a pervasive network of microscale, cloudy, microcrystalline Fe-carbonate films. Sporadic subparallel to crosscutting siderite veinlets.	Closely analogous to 477.0 m; relatively sheared in comparison.	Conspicuous ultrafine secondary magnetite, traces of chromite, ?hypogene pyrrhotite.	Close affinities with 477.0 m on relict textural grounds. Alteration pattern, with mesh-texture controlled veinlets analogous to 359.5 m.
GP 10 98.6 (T.S. 53064)	Metasomatised, Veined Breccia. Clasts of actinolitised-chloritised basalt microgabbro with an epidote-actinolite-stained chlorite matrix. Interspersed zones of epidote rock grading into vein-type quartz-epidote-actinolite rock.	Chlorite-matrixed "breccia" (?conglomerate) with epidote-rich veins, impregnations.	Disseminated sphene, minor fine-grained pyrite, pyrrhotite, chalcopyrite. Minor late films of calcite.	Fabric consistent with brecciated/altered, veined basic, or volcanomict conglomerate. Detail obscured by irregular epidosic veins, impregnations.

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HOLE NO: G.P. 9
STATE : TASMANIA

GOLD FIELDS EXPLORATION PTY. LIMITED

DRILL CORE RECORD

CENTRAL MINERALOGICAL SERVICES

Sample No.	Classification - Composition	Fabric	Accessories	Comments
GP 9 359.5	Altered Serpentinite. Antigorite aggregates with a pervasive microscale network of microcrystalline sideritic carbonate films. Minor late discontinuous veinlets of magnesite displaced by chloritic fractures.	Mesh-textured, serpentinitic (pyroxenite-derived). Weakly sheared.	Relict primary chromite.	Extensively sideritic-carbonated serpentinite with alteration controlled by pyroxene cleavage-derived mesh-structures.
366.3	Altered Serpentinite. Extensively siderite-impregnated antigorite aggregates (sim. 359.5 m) with sporadic veins, films of sideritic carbonate, minor magnesite veinlets, pervasive talc-chlorite veinlets.	Analogous to 359.5 m; relatively sheared, with boudinaged siderite, magnesite veins.	Disseminated chromite; traces of fine to ultrafine (Ni?) sulphide.	Close affinities with 359.5 m, similarly/relatively sideritic-carbonated, mildly magnesite-veined; relatively sheared, with displacive talc-chlorite veinlets.
371.7	Altered Serpentinite. Antigorite aggregates with varying proportions of talc; extensively veined/impregnated with microcrystalline sideritic carbonate. Minor siderite veinlets, late displacive talc veinlets.	Analogous to 359.5 m. Relatively olivine-derived, mesh-textured in comparison.	Disseminated chromite, minor traces of ultrafine sulphide.	Close affinities with 366.3 m and particularly 359.5 m. Antigorite partly steatitised contemporaneous with late talcose fractures.
401.7	Breccia. Clasts of sideritic-carbonated serpentinite (sim. 359.5 m), subordinate clasts of similarly altered, slaggy-textured ultramafic, siderite vein. Matrix of antigorite with minor magnesite veinlets.	Random submillimetric- to centimetric-scale angular clasts, weakly sheared fine-grained matrix.	Disseminated chromite. Rare ultrafine sulphide particles.	Tectonic breccia composite of 359.5 m - 371.7 m, and similarly altered chilled marginal facies. Magnesite veining is post-siderite, pre- late stress.
465.3	Altered Serpentinite. Weakly talcose/moderately microcrystalline sideritic carbonate-impregnated antigorite serpentinite with minor chrysotile veinlets, minor clots, veinlets of magnesite, frequent late chloritic fractures.	Fine-grained dunite-derived serpentinite in contact with (serpentinised) finely banded ultramafic.	Coarse chromite, minor films, spongy clots of pyrrhotite (and Ni-sulphide?).	Exhibits sharp contact between fine "dunitic" and cryptically banded chilled marginal phase. Alteration pattern closely analogous to e.g. 359.5 m.
477.0	Serpentinite. Antigorite aggregates with pervasive ultrafine secondary, minor primary magnetite. Minor clots of sideritic carbonate, late discontinuous microscopic films of talc.	Mesh-textured (peridotite-derived), mildly sheared.	Thinly disseminated coarse chromite, traces of fine-grained sulphide.	Weakly siderite-impregnated, weakly sheared/steatitised, medium-grained peridotite-derived serpentinite.
483.0	Altered Serpentinite. Fine talc and fine to microcrystalline sideritic carbonate with minor interspersed boudinaged films of magnesite. Minor fine to ultrafine Fe-sulphide disseminations.	Analogous to 465.3 m; relatively sheared (phyllitic).	Disseminated chromite, minor traces ultrafine secondary ("exsolved") magnetite.	Close affinities with 465.3 m in terms of relict fabric. Relatively sheared and thoroughly steatitised in comparison.
484.0	Altered Serpentinite. Weakly talcose/extensively cryptocrystalline to microcrystalline carbonate-stained antigorite aggregates with minor siderite veinlets, sporadic crosscutting talc-selvedged Mg-chlorite veinlets.	Medium-grained, banded, dunite-derived, mesh-textured. Mildly sheared.	Disseminated chromite, ?hypogene pyrrhotite, traces secondary magnetite.	Extensively sideritic-carbonated, banded, dunite-derived serpentinite; typically mildly sheared with late chloritic fractures.

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GOLD FIELDS EXPLORATION PTY. LIMITED

DRILL CORE RECORD

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HOLE NO.: G.P. 10

STATE : TASMANIA

ULV. PRESS

PROJECT	EL 42/71 GRAND PRIZE
DESIGNED BY	P. KOMYSHAN
LOGGED BY	P. KOMYSHAN
COMMENCED	14/1/85
COMPLETED	11/2/85

PURPOSE

To test for a magnetic body modelled at 150m below the surface, adjacent to the Grand Prize Fault.

LOG SUMMARY

0.0- 6.0	Surface Debris	-232.0	Altered Microgabbro
- 52.0	Basalt	-251.4	Basalt? and Gabbro
- 56.4	Basalt Breccia	-282.3	Gabbro
-206.4	Microgabbro & Basalt	-343.7	Serpentinite & Pyroxenite
-220.1	Breccia		
-225.5	Carbonate Rock		

GENERAL COMMENTS

No significant sulphide intersection.

ASSAY SUMMARY

INTERVAL From	INTERVAL To	Sn	Sn(sol)	As	WO_3	Cu	Pb	Zn	Ag	Ni				COMMENTS
206.4	220.1 m	<0.01%	<0.01%	<0.01%	<0.01%	<0.01%	<0.01%	0.05%	<1 ppm	0.01%				Breccia
282.3	322.0 m	<0.01%	<0.01%	<0.01%	<0.01%	<0.01%	<0.01%	<0.01%	<1 ppm	0.10%				Grand Prize Fault?

LOCATION

NORTHING	5366466.3
EASTING	367753.9
R.L.	A.M.G.
GRID	343.7m
LENGTH	

HOLE CONDITION

SIZE Hole Size	SIZE Depth
HQ	107m
NQ	343.7m

SIGNIFICANT CORE LOSS INTERVALS From	To	% Lost
0	40m	90%

POOR GROUND CONDITION ZONES From	To	Condition

HOLE CONDITIONS AFTER COMPLETION

The hole is open and making water.

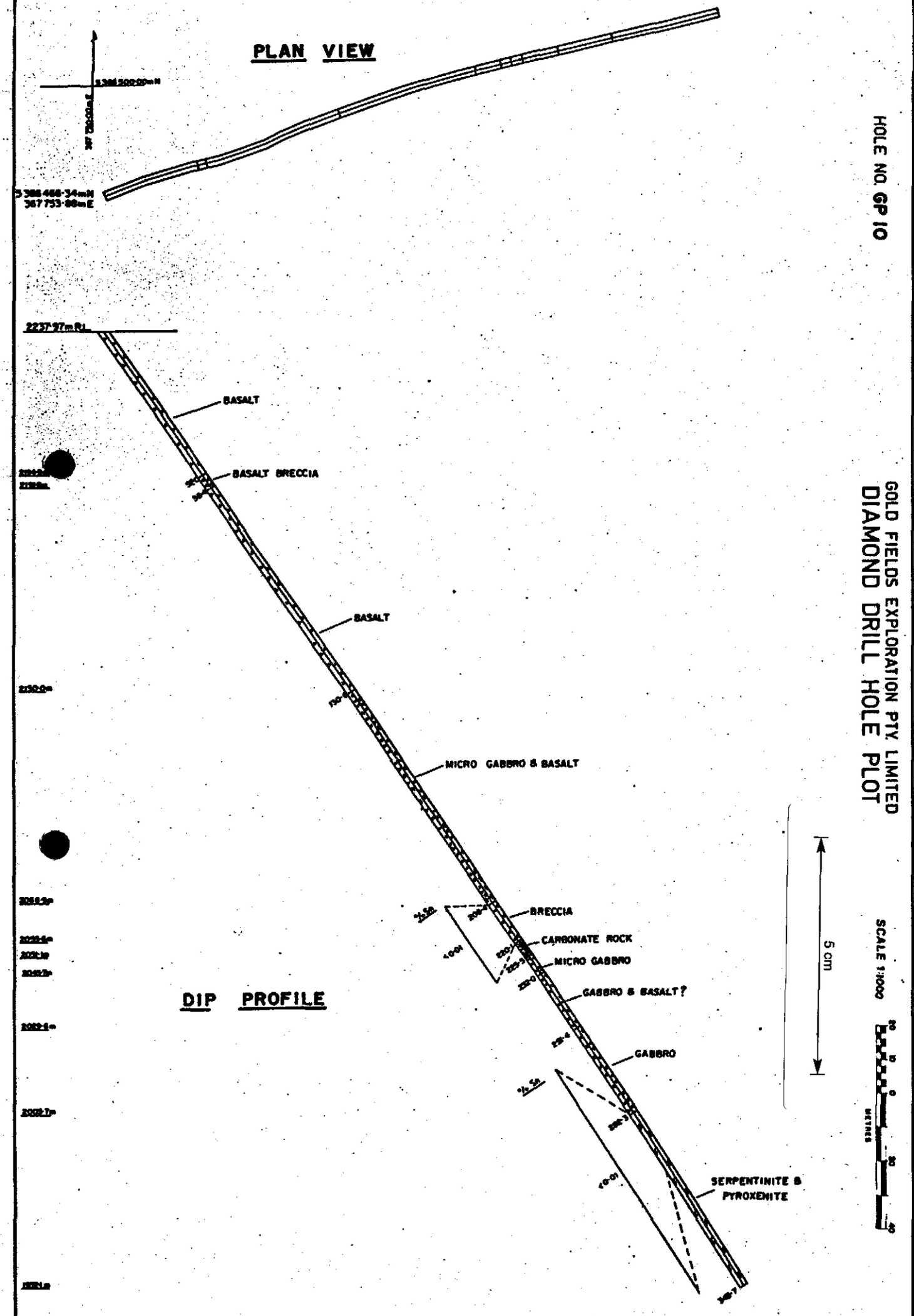
SURVEY DATA (Note: Bearing type must be same as Project Grid Type)

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.Tota
0	068	-56	0	24.0	24.0	19.90	2218.07	13.42	13.92										
48	074	-56	24.0	63.0	39.0	32.33	2185.74	21.81	35.23										
78	071	-56	63.0	92.5	29.5	24.46	2161.28	16.50	51.73										
107	068	-55.5	92.5	130.0	37.5	30.72	2130.57	21.24	72.97										
153	072	-56.5	130.0	174.5	44.5	37.11	2093.45	24.56	97.53										
196	076	-56.25	174.5	213.0	35.5	32.01	2061.45	21.39	118.92										
230	-	-56	213.0	243.0	30.0	24.87	2036.58	16.78	135.70										
256	076	-57	243.0	273.5	30.5	25.58	2011.00	16.61	152.30										
291	077	-57	273.5	306.5	33.0	27.68	1983.32	17.97	170.28										
322	-	-57	306.5	343.7	37.2	31.20	1952.12	20.26	190.54										

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GOLD FIELDS EXPLORATION PTY. LIMITED
DIAMOND DRILL HOLE PLOT

HOLE NO. GP 10



GOLD FIELDS EXPLORATION PTY. LIMITED

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PROJECT: GRAND PRIZE

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: G.P. 10. Page: 1.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	Sample No.	From	To	Rec. %	ASSAY DATA ppm Sn	Sn(Gel)	As	WO3	Cu	Pb	Zn	Ag	Bi	Ni
0	6.0	0.1	2	Surface debris and gravels.														
6.0	40.0	3.9	11	Basalt Very broken and very weathered to a tan brown clay. Original textures almost obliterated. Very poor recovery.														
40.0	52.0	10.0	83	Basalt Extensively weathered tan brown basalt with a medium to fine uniformly grained feldspar and hornblende (?) matrix. Minor coarser grained portions of the basalt are much more weathered and broken than the finer grained basalt. Weathering decreased downhole with the basalt at 50.5-52.0m being relatively unweathered.														
				The unit is extensively cut by manganese and limonite stained joints A part dendritic alteration eminates up to 5mm from these joints.														
52.0	56.4	4.35	99	Basalt Breccia This unit which is variably weathered consists of sub rounded to angular clasts of pale blue grey (in unweathered sections) to limonite stained brown (in weathered section), altered medium grained basalt. The clasts which vary from 5-50mm in diameter are contained in a fine grained chloritic matrix or seperated by a network of chlorite/axinite(?) and carbonate veins. The weathered portions of this unit are manganiferous and originally pyritic(?).	16924	52.0	53.0	99	10	<100	<10	20	285	<10	120	<1		90
					16925		54.0	99	20	<100	<10	20	25	<10	130	<1		110
					16926		55.0	99	40	<100	<10	30	55	<10	160	<1		110
56.4	100.3	39.6	90	Basalt Alternating weathered broken basalt and unweathered basalt showing variable alteration. The basalt is generally uniformly grained. In detail: 56.4-58.5m: Weathered and broken zone with only minor brecciation but cut by extensive limonitic manganiferous veins.	16760	79.7	80.7	100	<10	<100	<10	20	120	<10	210	<1	<10	150
					16761		81.6	100	10	<100	<10	10	60	<10	170	<1	<10	90
					16762		82.6	93	<10	<100	<10	10	140	<10	170	<1	<10	80
					16763		83.6	93	10	<100	<10	10	220	<10	180	<1	<10	80
					16764		84.6	93	<10	<100	<10	10	125	<10	190	<1	<10	90
					16765		85.5	100	<10	<100	<10	10	435	410	210	<1	<10	110

GOLD FIELDS EXPLORATION PTY. LIMITED

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DLV. PRESS

PROJECT: GRAND PRIZE

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: G.P. 10 Page: 2.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	ASSAY DATA ppm Sample No.	From	To	Rec. %	Sn	Sn 60	As	WO3	Cu	Pb	Zn	Ag	Bi	Mi
				58.5-59.6m: Relatively unweathered but containing cavities after carbonate veining.	16766	85.5	86.7	100	<10	<100	<10	<10	100	<10	830	<1	<10	Nil
					16767		87.2	100	10	<100	<10	10	170	<10	120	<1	<10	Nil
				59.6-60.2m: Strongly weathered to a brown colour.														
				60.2-62.0m: Weathering only on joints and relict carbonite veins.														
				62.0-65.0m: Unweathered basalt with relict cavities after carbonate veins. The basalt contains minor spotty hematite.														
				65.0-70.6m: Broken basalt, partly weathered adjacent to joints veins and fractures.														
				70.6-71.0m: Intensely weathered.														
				71.0-76.35m: Basalt contains irregular cavities with some limonite staining after weathered out carbonate as well as unweathered carbonate actinolite veins. Spotty areas of carbonate, quartz hematite vein also occur. The basalt contain minor pyrite (<1%).														
				76.35-79.7m: Unweathered basalt containing 10% pyrite with carbonate veins at low core angles and minor carbonate, quartz, hematite veins.														
				79.7-87.5m: Intensely weathered and broken basalt with vuggy textures after carbonate and sulphides? coated with brown to black manganiferous mineralisation. This zone includes at intensely weathered limonitic gossanous clay at 80.5-80.7m. Poddy quartz veins occur at 85.4-85.6m and 86.5-86.7m.													
				87.5-87.8m: Weathered limonitic carbonate quartz breccia and clay zone.														

GOLD FIELDS EXPLORATION PTY. LIMITED

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PROJECT: GRAND PRIZE

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: G.P. 10 Page: 3.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	ASSAY DATA ppm Sample No.	From	To	Rec. %	Sn	Sn&oil	As	WO_3	Cu	Pb	Zn	Ag	Bi	Ni
				87.8-99.1m: Relatively unweathered basalt with predominant irregular shaped calcite veins. Calcite is also associated with the intense microfractures. A pale green actinolite? alteration halo occurs in places around these fractures. Poddy quartz alteration appears to be related to local spotty pods of pyrite (1-5%) and chalcopyrite (1-2%) mineralisation. Minor pale green epidote is also associated with some of the pyrite mineralisation. A 30cm vein of epidote carbonate and minor pyrite occurs at 98.6m.													
				99.1-100.3m: Weathered broken zone with limonitic gossan.														
100.3	130.6	28.5	93	Basalt	16768	106.0	107.0	100	<10	<100	<10	<10	170	<10	120	<1	<10	70
				Basalt as for 56.4-100.3m but unweathered.	16769		108.0	65	10	<100	<10	10	185	<10	130	<1	<10	90
				Other details:	16770		109.0	65	<10	<100	<10	<10	145	<10	110	<1	<10	80
					16771		110.0	88	<10	<100	<10	<10	830	<10	130	<1	<10	80
				100.3-106.6m: Basalt intensely cut by carbonate bearing	16772		111.0	88	<10	<100	<10	<10	75	<10	120	1	10	90
				micro fractures and carbonate rich veins.	16773		112.0	88	<10	<100	<10	<10	180	<10	100	<1	<10	60
					16774		113.0	77	<10	<100	<10	<10	275	<10	150	<1	<10	160
				106.6-109.7m: Broken zone.	16775		114.0	77	<10	<100	<10	<10	1650	<10	120	1	10	190
					16776		115.0	77	<10	<100	<10	<10	25	<10	250	<1	<10	200
				109.7-110.6m: Unweathered basalt.	16777		115.4	100	<10	<100	40	<10	45	<10	270	<1	<10	200
				110.6-110.7m: Intense zone of carbonate siderite veining.														
				110.7-115.4m: Patchy dark green chlorite, carbonate alteration of the basalt. Brecciated basalt or tuffaceous horizons occur with carbonate chlorite veins. The brecciation appears to increase downhole to a weathered broken zone at 113.1-115.4. Disseminated pyrite 1-5% and minor chalcopyrite which occurs throughout appears to be associated with chlorite veinlets. The basalt also contains minor sideritic veins (<5 mm wide) and pods of carbonate with hematite.													
				115.4-121.3m: Fine grained basalt with patchy carbonate and														

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GOLD FIELDS EXPLORATION PTY. LIMITED

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INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	ASSAY DATA Sample No.	From	To	Rec. %
				chlorite alteration. Veins and veinlets of carbonate and minor quartz throughout. Partially brecciated with a carbonate matrix.				
				121.3-124.6m: Coarser basalt or basaltic tuff, extensively chloritised, weathered and broken.				
				124.6-130.6m: As for 115.4-121.3m (Fewer carbonate veins). Minor hematite is associated with carbonate veins.				
130.6	206.4	74.25	98	Microgabbro and minor Basalt. Variably chloritised gabbro with medium to coarse grained feldspars which have hazy outlines in a matrix of chloritised mafic minerals (hornblende?). Generally with a uniform texture except for minor variations to a fine grained basalt and minor tuffs(?). The boundaries between the basalt and gabbro variations are indistinct. Extensively veined by carbonate chlorite veins with minor occasional epidote. There are negligible sulphides present.				
				In detail:				
				130.6-135.6m: Weathered broken zone of micro gabbro. The unit is cut extensively by weathered out veins containing remnant quartz chlorite and manganiferous oxides.				
				135.6-140.2m: Grey green microgabbro. Minor veinlets of hematite, carbonate.				
				140.2-141.35m: Tuff? A coarse grained disrupted zone extensively altered with chlorite and partially weathered. Probably a disrupted carbonate rich tuffaceous zone.				
				141.35-143.5m: Micro gabbro as for 135.6-140.2 but stronger chlorite alteration and carbonate veining.				

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GOLD FIELDS EXPLORATION PTY. LIMITED

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INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	ASSAY DATA Sample No.	From	To	Rec. %
				143.5-145.4m: Tuff? as for 140.2-141.35m.				
				145.4-149.1m: Microgabbro as for 135.6-140.2m.				
				149.1-155.8m: Brecciated and extensively chloritised basalt. Partially weathered broken core with elongate cavities after carbonate veins containing remnant chlorite. Chlorite and minor limonite on joint faces.				
				155.8-161.7m: Medium to coarse grained gabbro.				
				161.7-168.7m: Partially weathered microgabbro with epidote and chlorite remnants in cavities after carbonate veins.				
				168.7-177.5m: Fine grained basalt.				
				177.5-204.7m: Microgabbro with two stages of calcite veining. The first stage veins have hazy boundaries and intense chloritisation and carbonation of mafic minerals well away from the veins. This has resulted in partial to total alteration of the original gabbro at zones of intense fracturing and veining (by 196.3-196.9m and 200.5-201.9m) to a fine grey green texture with kaolinised remnants. The second overprinting stage consists of coarse milky calcite veins which have sharp clear boundaries. An unusual grey carbonate rich zone at 198.8-198.9 which has one irregular hazy boundary and one sharp boundary does not fit into the two above categories and may either be a part altered original carbonate or carbonated mafic rock.				
				204.7-205.0m: Fine grained basalt.				
				205.0-205.25m: Medium grained basalt and tuffaceous unit.				
				205.25-206.4m: Fine grained basalt with numerous calcite epidote veins.				

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GOLD FIELDS EXPLORATION PTY. LIMITED

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DRILL CORE LOG AND ASSAY DATA

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INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	Sample No.	From	To	Rec. %	ASSAY DATA ppm Sn	Sn(sol)	As	WO_3	Co	Pb	Zn	Ag	Ni	Bi
206.4	220.1		97	Breccia	16927	206.4	208.0	100	<10	<100	<10	20	20	<10	40	<1	80	
				Zone of extensively but variably altered, variably brecciated and	16928		209.0	91	20	<100	<10	10	15	<10	270	<1	50	
				in places extensively carbonate veined basalt, microgabbro	16929		210.0	91	<10	<100	<10	20	5	10	450	<1	50	
				and ultra mafic. Alteration consists of chloritisation of	16930		211.0	100	<10	<100	<10	20	10	<10	650	<1	120	
				mafic minerals, particularly in micro gabbro, and in the	16931		212.0	100	10	<100	<10	30	10	20	770	<1	110	
				vicinity of larger coarse grained calcite veins. In places	16932		213.0	100	<10	<100	<10	30	10	80	630	<1	110	
				this alteration is associated with minor serpentinisation	16933		214.0	100	<10	<100	<10	30	10	10	700	<1	300	
				of mafic rocks to a dark green/black colour. Carbonation	16934		215.0	100	20	<100	<10	20	10	20	600	<1	170	
				of the rock to a pale grey green colour which is associated	16935		216.0	100	40	<100	<10	30	15	20	590	<1	150	
				with hazily outlined earlier carbonate veins, also occurs.	16936		217.0	91	10	<100	<10	30	20	20	840	<1	200	
				No sulphide minerals were observed except for minor pale	16937		218.0	91	10	<100	<10	30	10	20	470	<1	140	
				green pentlendite(?) at 220.0m.	16938		219.0	91	10	<100	<10	<10	10	20	520	<1	230	
					16939		220.1	91	10	<100	<10	30	10	20	630	<1	220	
				206.4-208.4m: Basaltic breccia consisting of rounded to subrounded														
				fine grained basalt fragments in a coarse grained chlorite														
				carbonate matrix subsequently brecciated occurs with zones														
				of brecciated microgabbro. Extensive fine (< 5mm) carbonate														
				veins and tension gashes form the matrix between brecciated														
				fragments.														
				208.4-210.0m: Massive coarse grained carbonate veins (400-														
				500mm width) which show partial zonation.														
				210.0-220.1m: Zone of mixed rock types variable alteration														
				and carbonate veining 5-100mm width. Minor siderite with														
				the carbonate veins at 213.4-214.0.														
220.1	225.5	4.9	91	Carbonate Rock														
				Grey green to grey fine grained altered carbonated mafic														
				volcanic showing patchy, variable alteration with variations														
				from a very fine grained pale grey green rock to a fine to	16508	222.4	223.6	85	<10	<100	<10	10	<5	20	160	<1	220	<5
				medium grained crystaline mafic volcanic with angular calcite	16509		224.1	85	10	<100	<10	10	<5	20	390	<1	370	<5
				phenocrysts. Pods and zones of medium grained microgabbro	16510		225.5	85	<10	<100	<10	10	5	20	130	<1	320	<5
				with phenocrysts of feldspar and chloritised mafic minerals														
				occur. This unit also contains pale bleached silicified? zones.														

GOLD FIELDS EXPLORATION PTY. LIMITED

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DRILL CORE LOG AND ASSAY DATA

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INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	Sample No.	From	To	Rec. %	Sn	Sn(sol)	As	WO3	Cu	Pb	Zn	Ag	Ni	Bi
									ASSAY DATA ppm									
				with spotty kaolinised feldspars, of up to 10mm in width around fractures. Disseminated pyrite (1-2%) occurs throughout the unit as well as irregular veinlets of calcite, minor calcite, chlorite, (sphalerite) veins and minor calcite pyrite veins.														
				220.3- Minor sideritic veinlets (<5mm diameter).														
				224.5, 224.8, 225.0m- Coarse crystaline calcite veins up to 40mm wide containing angular fragments of wall rock.														
				223.6-224.1m: Broken zone.														
				C.M.S. Petrology 221.3m- Altered ?Pyroxenite														
225.5	232.0	5.5	84	Altered Micro gabbro	16511	225.5	227.0	86	20	<100	<10	10	5	20	200	1	220	<10
				Zone of variably weathered medium grained chloritised, weakly	16512		228.6	88	20	<100	<10	<10	15	10	170	<1	190	20
				sericitised micro gabbro with phenocrysts of feldspars and	16513		230.5	84	20	<100	<10	20	<5	10	100	<1	120	20
				chloritised mafic mineralis.	16514		232.0	82	<10	<100	<10	10	<5	10	180	<1	130	<10
				Extensively veined by chlorite calcite vein and striger veins of sericite, calcite and minor calcite quartz veins. Minor pyrite on joint faces was observed.														
				C.M.S. Petrology 224.4, 229.2m - Altered Microgabbro.														
232.0	251.4	14	72	Basalt? and Gabbro	16515	232.0	233.4	82	<10	<100	<10	10	<5	<10	40	<1	130	<10
				Fine grained altered mafic volcanic alternating with altered	16516		234.4	91	<10	<100	<10	20	<5	<10	110	<1	140	30
				gabbros and breccia zones.	16517		236.0	74	<10	<100	<10	20	10	<10	160	<1	120	<10
				The fine grained rock is grey green in colour, part sericitised	16518		237.0	61	<10	<100	<10	20	<5	<10	50	<1	70	<10
				and part chloritised. This uniformly textured rock is possibly	16519		237.7	61	20	<100	<10	20	90	20	280	<1	120	<10
				a basalt.	16520		238.7	81	<10	<100	<10	20	<5	<10	180	<1	110	30
				The medium grained dark green gabbro with phenocrysts of	16521		239.9	94	<10	<100	<10	<10	<5	<10	1120	<1	240	20
				twinned feldspar and extensively chloritised mafic minerals,	16522		241.1	94	<10	<100	<10	20	<5	<10	340	<1	230	<10
				in places, appears to bear an intrusive relationship with	16523		242.1	98	<10	<100	<10	10	15	10	160	<1	350	<10
				the finer grained rock.	16524		243.1	91	<10	<100	<10	20	<5	10	340	<1	480	<10
					16525		244.1	98	<10	<100	<10	20	<5	10	710	<1	300	<10
					16526		247.5	10	<10	<100	<10	20	<5	<10	680	<1	260	<10

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GOLD FIELDS EXPLORATION PTY. LIMITED

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DRILL CORE LOG AND ASSAY DATA

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INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	ASSAY DATA ppm Sample No.	From	To	Rec. %	Sn	Sn hot	As	WO_3	Cu	Pb	Zn	Ag	Ni	
				In detail:	16527	247.5	248.5	92	<10	<100	<10	20	5	<10	160	<1	200	
					16528		249.6	89	<10	<100	<10	20	<5	10	990	<1	320	
				232.0-234.4m: Basalt with only minor calcite veins. A coarse	16529		250.4	89	10	<100	<10	20	5	20	580	<1	130	
				grained gabbro vein (30mm in width) cuts across the fine	16530		251.4	100	<10	<100	<10	20	10	30	280	<1	210	
				grained unit. The end of the unit is marked by a minor quartz vein.														
				234.4-238.7m: Gabbro. Note a zone of carbonation and sericitis-ation occurs at 237.0-237.7m around a 10cm coarse grained calcite vein. Within this zone feldspars are totally kaolinised. The gabbro contains minor calcite stringers and veinlets which appear to increase in number downhole.													
				238.7-239.9m: Breccia Zone. This zone contains quartz chlorite veins and limonitic veins (up to 30mm wide) as well as calcite veins of up to 60mm wide containing angular fragments of wall rock.														
				239.9-241.1m: Altered Gabbro with patchy black chorite alteration and stringer calcite veining.														
				241.1-242.2m: Fine grained basalt.														
				242.2-244.1m: Altered gabbro.														
				244.1-244.2m: Limonitic gossan containing stringers of quartz and pyrite.														
				244.2-247.5m: Broken Zone (Note possible driller marking up error and last depth should read 244.5 not 247.5m).														
				247.5-248.5m: Basalt.														
				248.5-249.6m: Basalt? which is chloritised and strongly veined with irregular stringers of calcite and siderite. The rock														

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PROJECT: GRAND PRIZE

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. %
				contains mixed coarse and fine grained textures with partial rounding of fragments similar to an agglomerate or a part worked basaltic sediment.				
				249.6-249.8m: Calcite vein and breccia.				
				249.8-251.1m: Mixed zone of altered gabbro and basalt with calcite veins.				
				251.1-251.4m: Calcite breccia zone with stringers of quartz at 251.4m				
				C.M.S. Petrology 237.5m: Altered Gabbro 239.6m: Altered Gabbro 243.4m: Altered Metagabbro 248.7m: Chlorite Phyllite				
251.4	282.3	30.0	100	Gabbro Medium to coarse grained gabbro with phenocrysts of white to pink (albitised) feldspars in a matrix of chloritised pyroxene matrix. Very minor calcite veinlets. Minor pale green very fine grained chloritic clots occur. Minor finer grained gabbro zones occur which have been part altered to a white micaceous mineral (sericite?) and have a granodioritic appearance. Towards 282.3m in the network of microfractures increases in number and the intensity of a pale green alteration around these joints.				
				C.M.S. Petrology 259.65m: Hypersthene Gabbro 276.6m: Altered Pyroxenite				
282.3	343.7	57.3	93	Serpentinite and Altered Pyroxenite. Variable serpentinisation of a pyroxenite resulted in an alternating sequence with gradational boundaries of serpentinite				

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DRILL CORE LOG AND ASSAY DATA

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HOLE NUMBER: G.P. 10

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	ASSAY DATA Sample No.	From	To	Rec. %	Sn	Sn (sol)	As	WO3	Cu	Pb	Zn	Ag	Ni	Bi
				and pyroxenite.	16702	282.3	283.15	98	10	<100	<10	20	20	<10	40	<1	820	
					16703		284.3	93	<10	<100	<10	10	25	<10	30	<1	570	
				In detail:	16704		285.7	93	10	<100	<10	10	10	<10	20	<1	830	
				282.3-283.15m: Brecciated serpentinite with disseminated pyrite	16705		287.0	62	10	<100	<10	20	15	<10	30	<1	1680	
				(1-3%) and minor disseminated pink magnetite.	16706		288.0	91	<10	<100	<10	10	5	<10	30	<1	1020	
					16707		289.0	91	<10	<100	<10	10	10	<10	20	<1	960	
				283.15-283.4m: Zone of intense pink magnetite stringer mineralis-	16708		290.0	91	10	<100	<10	10	10	<10	30	<1	950	
				ation (40-60%) within serpentinite. This magentite has the	16709		291.0	91	10	<100	<10	20	10	<10	40	<1	350	
				unusual pink colour of pyrrhotite when freshly cut. Minor	16710		292.0	96	<10	<100	<10	10	10	<10	40	<1	320	
				later veinlets of grey black magnetite and serpentinite over-	16711		293.0	100	<10	<100	<10	20	10	<10	30	<1	290	
				print the pink magnetite.	16712		294.0	100	10	<100	<10	10	10	<10	30	<1	280	
					16713		295.0	100	20	<100	<10	20	10	<10	30	<1	260	
				283.4-289.0m: Serpentinite with veins, stringers and pods	16714		296.0	100	20	<100	<10	10	10	<10	30	<1	320	
				(1-5mm) wide of pink magnetite. Broken ground with abundant	16715		297.0	100	<10	<100	<10	10	10	<10	30	<1	420	
				slickenside surfaces Minor cross fibre chrysotile veins	16716		298.0	100	<10	<100	<10	10	10	<10	30	<1	430	
				Base of the unit is marked by a 20cm zone of pale green to	16717		299.0	100	<10	<100	<10	20	10	<10	20	<1	780	
				white anastomosing serpentinite.	16718		299.7	78	10	<100	<10	30	10	<10	20	<1	870	
					16719		301.0	82	<10	<100	<10	20	5	10	60	<1	1280	
				289.0-298.1m: Pale green to black medium to coarse grained	16720		302.0	84	<10	<100	<10	30	5	10	40	<1	1360	
				pyroxenite Most of the unit is brecciated by interlocking	16721		303.0	83	10	<100	<10	20	20	10	40	<1	1410	
				veins up to 8mm wide and fine pale green veins. In places	16722		304.0	83	<10	<100	<10	20	5	10	50	<1	1380	
				the intensity of the fine veinlets to such that feldspar crystals	16723		305.0	88	<10	<100	<10	30	5	20	30	<1	1600	
				appear as phenocrysts in an interlocking lacework of veins.	16724		306.3	89	<10	<100	<10	20	<5	<10	30	<1	1160	
				The down hole boundary with the serpentinite is marked by	16725		307.0	89	<10	<100	<10	10	<5	<10	20	<1	590	
				larger black chlorite? veins and body magnetite mineralization.	16726		308.0	89	10	<100	<10	20	<5	<10	20	<1	510	
					16727		308.9	89	<10	<100	<10	10	<5	<10	20	<1	460	
				298.1-299.7m: Serpentinite with disseminated pink magnetite	16728		310.0	94	10	<100	<10	20	<5	<10	30	<1	1890	
				of 1-10%.	16729		311.0	100	<10	<100	<10	30	<5	<10	20	<1	1650	
					16730		312.0	73	<10	<100	<10	30	5	<10	40	<1	1760	
				299.7-306.3m: Serpentinite with disseminated and stringers	16731		313.0	31	<10	<100	<10	30	<5	<10	40	<1	1751	
				of pink magnetite (1-10%). Asbestos, carbonate veinlets (1-	16732		314.0	32	10	<100	<10	30	20	<10	120	<1	1956	
				4mm) throughout. Pods of red cromite.	16733		315.0	30	<10	<100	<10	30	5	<10	30	<1	1870	
					16734		316.0	26	<10	<100	<10	40	5	<10	70	<1	1600	
				306.3-308.9m: Altered pyroxenite.	16735		317.0	26	<10	<100	<10	20	10	<10	40	<1	1660	
					16736		318.0	26	20	<100	<10	30	10	<10	40	<1	1430	

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DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: G.P. 10 Page: 11.

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION
				308.9-322.0m: Serpentinite with veinlets and stringers of pink magnetite up to 10mm in width.
				322.0-322.5m: Altered pyroxenite.
				322.5-324.9m: Serpentinite with numerous 1-5mm crysotile cross fibre veins. Minor disseminated pink magnetite (1%).
				324.0-327.05m: Altered pyroxenite.
				327.05-333.9m: Serpentinite with pods of altered pyroxenite at 328.6m, 329.8m and 330.0m. Dissseminated pink magnetite (1-5%).
				333.9-334.7m: Altered pyroxenite.
				334.7-336.0m: Serpentinite
				336.0-337.7m: Altered pyroxenite
				337.7-343.7m: Serpentinite with numerous veinlets of crysotile cross fibre asbestos. The rock becomes more broken and contorted in texture from 340.0m to the end of the hole. Minor veinlets of pink pyrrhotite.
				C.M.S. Petrology 283.3m: Serpentinite
				286.8m: Serpentinite
				294.6m: Steatitised Pyroxenite.
				301.5m: Serpentinite
				315.1m: Serpentinite
				334.0m: Altered Pyroxenite
				336.3m: Serpentinite
				END OF HOLE

ASSAY DATA (ppm)

Sample No.	From	To	Rec. %	Sn	Sn (sol)	As	WO3	Cu	Pb	Zn	Ag	Ni	Bi
16737	318·0	319·0	86	<10	<100	<10	30	20	<10	40	<1	1300	<10
16738		320·0	100	<10	<100	<10	30	5	<10	90	<1	1700	<10
16739		321·0	100	<10	<100	<10	30	10	<10	30	<1	1330	<10
16740		322·0	100	<10	<100	<10	10	5	<10	30	<1	1180	10
16741		323·7	99	<10	<100	<10	10	<5	<10	30	<1	790	<10
16742		324·9	94	<10	<100	<10	10	<5	<10	30	<1	960	<10
16743		327.05	98	10	<100	<10	10	5	<10	30	<1	570	<10
16744		328·0	98	<10	<100	<10	10	5	<10	30	<1	1110	<10
16745		329·0	100	<10	<100	<10	20	10	<10	30	<1	1070	<10
16746		330·0	100	10	<100	<10	20	10	<10	40	<1	1110	<10
16747		331·0	100	<10	<100	<10	10	10	<10	40	<1	1120	<10
16748		332·0	100	<10	<100	<10	20	<5	<10	40	<1	1320	<10
16749		333·0	100	<10	<100	<10	20	<5	<10	40	<1	1330	<10
16750		333·9	100	<10	<100	<10	20	10	<10	40	<1	1150	<10
16751		334·7	100	<10	<100	<10	20	15	<10	30	<1	820	<10
16752		336·0	100	<10	<100	<10	20	<5	<10	20	<1	730	<10
16753		337·0	100	<10	<100	<10	30	<5	<10	30	<1	650	20
16754		337·7	100	10	<100	<10	10	<5	<10	30	<1	700	<10
16755		339·0	100	<10	<100	<10	20	<5	<10	50	<1	990	<10
16756		340·0	100	<10	<100	<10	20	<5	<10	50	<1	1090	<10
16757		341·0	100	<10	<100	<10	20	5	<10	50	<1	1100	<10
16758		342·0	100	<10	<100	<10	20	<5	<10	30	<1	1200	<10
16759		343·7	98	10	<100	<10	20	<5	<10	50	<1	1530	<10

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GOLD FIELDS EXPLORATION PTY. LIMITED

DRILL CORE RECORD

123229

HOLE NO.: G.P. 10
STATE : TASMANIA

LV. PRESS

MAGNETIC SUSCEPTIBILITY

Depth (m)	S.I. Units
53.0	30×10^{-5}
	89×10^{-5}
54.0	40×10^{-5}
	60×10^{-5}
55.0	15×10^{-5}
	45×10^{-5}
56.0	50×10^{-5}
	15×10^{-5}
57.0	15×10^{-5}
	30×10^{-5}
58.0	32×10^{-5}
	52×10^{-5}
59.0	95×10^{-5}
	90×10^{-5}
60.0	35×10^{-4}
	16×10^{-4}
61.0	14×10^{-4}
	93×10^{-4}
62.0	70×10^{-4}
	45×10^{-4}
63.0	58×10^{-4}
	30×10^{-4}
64.0	50×10^{-4}
	68×10^{-4}
65.0	11×10^{-4}
	30×10^{-4}
66.0	27×10^{-3}
	60×10^{-4}
67.0	45×10^{-4}
	70×10^{-5}
68.0	52×10^{-5}
	53×10^{-5}
69.0	43×10^{-5}
	65×10^{-5}
70.0	80×10^{-5}
	60×10^{-5}
71.0	65×10^{-5}
	25×10^{-4}

Depth (m)	S.I. Units
72.0	23×10^{-3}
	50×10^{-4}
73.0	50×10^{-3}
	71×10^{-3}
74.0	21×10^{-3}
	16×10^{-4}
75.0	34×10^{-4}
	20×10^{-3}
76.0	50×10^{-4}
	40×10^{-4}
77.0	30×10^{-3}
	21×10^{-4}
78.0	20×10^{-4}
	38×10^{-3}
79.0	28×10^{-4}
	34×10^{-3}
80.0	30×10^{-4}
	50×10^{-5}
81.0	85×10^{-4}
	30×10^{-3}
82.0	15×10^{-3}
	16×10^{-3}
83.0	19×10^{-4}
	65×10^{-3}
84.0	60×10^{-4}
	80×10^{-5}
85.0	30×10^{-3}
	20×10^{-3}
86.0	85×10^{-4}
	50×10^{-3}
87.0	25×10^{-5}
	19×10^{-5}
88.0	20×10^{-5}
	40×10^{-5}
89.0	25×10^{-3}
	15×10^{-2}
90.0	85×10^{-3}
	16×10^{-2}
91.0	32×10^{-3}
	35×10^{-3}
92.0	30×10^{-3}
	35×10^{-4}
93.0	90×10^{-5}
	13×10^{-3}
94.0	30×10^{-5}
	8×10^{-5}

Depth (m)	S.I. Units
95.0	75×10^{-5}
	72×10^{-5}
96.0	26×10^{-5}
	20×10^{-5}
97.0	20×10^{-5}
	21×10^{-5}
98.0	15×10^{-5}
	40×10^{-5}
99.0	25×10^{-5}
	10×10^{-5}
100.0	27×10^{-4}
	21×10^{-5}
101.0	15×10^{-5}
	22×10^{-5}
102.0	55×10^{-5}
	90×10^{-3}
103.0	48×10^{-3}
	65×10^{-3}
104.0	42×10^{-3}
	31×10^{-3}
105.0	30×10^{-3}
	37×10^{-3}
106.0	50×10^{-3}
	27×10^{-3}
107.0	62×10^{-4}
	1×10^{-4}
108.0	18×10^{-3}
	85×10^{-4}
109.0	20×10^{-4}
	20×10^{-5}
110.0	21×10^{-5}
	20×10^{-5}
111.0	36×10^{-5}
	28×10^{-4}
112.0	60×10^{-3}
	95×10^{-5}
113.0	25×10^{-5}
	14×10^{-3}
114.0	12×10^{-4}
	12×10^{-4}
115.0	45×10^{-5}
	60×10^{-5}
116.0	70×10^{-5}
	18×10^{-5}
117.0	18×10^{-4}
	35×10^{-4}

Depth (m)	S.I. Units
118.0	40×10^{-5}
	32×10^{-4}
119.0	25×10^{-4}
	60×10^{-5}
120.0	93×10^{-4}
	38×10^{-4}
121.0	72×10^{-5}
	82×10^{-5}
122.0	17×10^{-4}
	14×10^{-4}
123.0	40×10^{-5}
	14×10^{-4}
124.0	46×10^{-4}
	30×10^{-5}
125.0	46×10^{-4}
	75×10^{-4}
126.0	22×10^{-4}
	40×10^{-5}
127.0	55×10^{-5}
	60×10^{-5}
128.0	22×10^{-3}
	24×10^{-3}
129.0	20×10^{-3}
	11×10^{-3}
130.0	70×10^{-4}
	13×10^{-3}
131.0	20×10^{-5}
	50×10^{-5}
132.0	32×10^{-5}
	70×10^{-5}
133.0	21×10^{-4}
	60×10^{-5}
134.0	15×10^{-5}
	25×10^{-5}
135.0	24×10^{-5}
	35×10^{-5}
136.0	35×10^{-4}
	45×10^{-5}
137.0	17×10^{-3}
	50×10^{-3}
138.0	15×10^{-3}
	27×10^{-3}
139.0	40×10^{-3}
	75×10^{-4}
140.0	15×10^{-4}
	35×10^{-5}

Depth (m)	S.I. Units
141.0	45×10^{-5}
	30×10^{-5}
142.0	45×10^{-5}
	45×10^{-5}
143.0	35×10^{-5}
	25×10^{-5}
144.0	26×10^{-5}
	22×10^{-5}
145.0	85×10^{-5}
	13×10^{-3}
146.0	15×10^{-4}
	40×10^{-4}
147.0	61×10^{-5}
	30×10^{-4}
148.0	19×10^{-4}
	30×10^{-5}
149.0	45×10^{-5}
	60×10^{-4}
150.0	80×10^{-4}
	40×10^{-4}
151.0	36×10^{-5}
	45×10^{-5}
152.0	5×10^{-5}
	19×10^{-5}
153.0	6×10^{-5}
	11×10^{-5}
154.0	26×10^{-5}
	17×10^{-5}
155.0	6×10^{-5}
	16×10^{-4}
156.0	27×10^{-5}
	7×10^{-5}
157.0	5×10^{-5}
	21×10^{-5}
158.0	25×10^{-5}
	16×10^{-5}
159.0	19×10^{-5}
	17×10^{-5}
160.0	19×10^{-5}
	20×10^{-5}
161.0	20×10^{-5}
	20×10^{-5}
162.0	30×10^{-5}
	30×10^{-5}
163.0	21×10^{-5}
	29×10^{-5}

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GOLD FIELDS EXPLORATION PTY. LIMITED

DRILL CORE RECORD

123230

HOLE NO.: G.P. 10
STATE : TASMANIA

MAGNETIC SUSCEPTIBILITY

Depth (m)	S.I. Units	Depth (m)	S.I. Units	Depth (m)	S.I. Units	Depth (m)	S.I. Units	Depth (m)	S.I. Units	Depth	S.I. Units
164.0	20×10^{-5}	188.0	26×10^{-4}	212.0	35×10^{-5}	238.6	7×10^{-4}	294.0	9×10^{-3}	318.0	15×10^{-2}
	11×10^{-4}		55×10^{-5}		34×10^{-5}	239.0	2×10^{-4}		10×10^{-3}		87×10^{-3}
165.0	20×10^{-5}	189.0	21×10^{-5}	213.0	36×10^{-5}	239.8	8×10^{-4}	295.0	5×10^{-3}	319.0	12×10^{-2}
	26×10^{-5}		20×10^{-5}		36×10^{-5}	240.2	50×10^{-4}		20×10^{-3}		34×10^{-2}
166.0	70×10^{-5}	190.0	37×10^{-5}	214.0	45×10^{-5}	240.6	50×10^{-4}	296.0	16×10^{-3}	320.0	12×10^{-2}
	50×10^{-5}		21×10^{-5}		25×10^{-5}	241.2	15×10^{-4}		12×10^{-3}		22×10^{-2}
167.0	40×10^{-5}	191.0	35×10^{-5}	215.0	44×10^{-5}	241.7	50×10^{-4}	297.0	12×10^{-3}	321.0	12×10^{-2}
	30×10^{-5}		37×10^{-5}		49×10^{-5}	241.9	40×10^{-3}		22×10^{-3}		40×10^{-3}
168.0	24×10^{-4}	192.0	30×10^{-5}	216.0	59×10^{-5}	242.1	11×10^{-3}	298.0	16×10^{-3}	322.0	40×10^{-4}
	50×10^{-5}		66×10^{-5}		40×10^{-5}	242.5	14×10^{-4}		40×10^{-3}		70×10^{-4}
169.0	46×10^{-5}	193.0	29×10^{-5}	217.0	43×10^{-5}	242.8	50×10^{-4}	299.0	80×10^{-3}	323.0	30×10^{-5}
	58×10^{-4}		22×10^{-5}		45×10^{-5}	243.1	20×10^{-4}	299.4	20×10^{-3}		20×10^{-5}
170.0	40×10^{-4}	194.0	20×10^{-5}	218.0	40×10^{-5}	243.4	10×10^{-4}	300.0	65×10^{-3}	324.0	40×10^{-5}
	60×10^{-5}		25×10^{-5}		42×10^{-5}	244.1	15×10^{-4}		11×10^{-2}		17×10^{-4}
171.0	40×10^{-5}	195.0	26×10^{-5}	219.0	40×10^{-5}	244.2	15×10^{-4}	301.0	12×10^{-2}	325.0	11×10^{-3}
	25×10^{-5}		37×10^{-5}		36×10^{-5}	247.0	10×10^{-4}		16×10^{-2}		32×10^{-3}
172.0	45×10^{-5}	196.0	30×10^{-5}	220.0	29×10^{-5}	248.2	5×10^{-4}	302.0	13×10^{-2}	326.0	25×10^{-3}
	30×10^{-5}		31×10^{-5}	220.2	60×10^{-5}	248.7	5×10^{-4}		13×10^{-2}		40×10^{-3}
173.0	32×10^{-5}	197.0	22×10^{-5}	220.7	25×10^{-5}	249.2	35×10^{-4}	303.0	36×10^{-3}	327.0	33×10^{-4}
	25×10^{-5}		30×10^{-5}	221.3	30×10^{-5}	249.4	30×10^{-4}		20×10^{-3}		55×10^{-3}
174.0	25×10^{-5}	198.0	23×10^{-5}	221.8	40×10^{-5}	250.5	10×10^{-4}	304.0	21×10^{-4}	328.0	37×10^{-3}
	28×10^{-5}		40×10^{-5}	222.2	20×10^{-5}	251.0	5×10^{-4}		14×10^{-2}		75×10^{-3}
175.0	30×10^{-5}	199.0	25×10^{-5}	223.6	30×10^{-5}	251.5	5×10^{-4}	305.0	35×10^{-3}	329.0	12×10^{-2}
	35×10^{-5}		18×10^{-5}	224.1	50×10^{-5}	252.0-281.9	$20\text{-}30 \times 10^{-5}$		17×10^{-3}		25×10^{-2}
176.0	20×10^{-3}	200.0	23×10^{-5}	225.5	12×10^{-4}	282.4	60×10^{-5}	306.0	37×10^{-4}	330.0	36×10^{-3}
	12×10^{-3}		19×10^{-5}	226.0	5×10^{-4}	282.9	35×10^{-4}		73×10^{-4}		14×10^{-3}
177.0	50×10^{-4}	201.0	13×10^{-5}	227.0	11×10^{-4}	283.2	16×10^{-2}	307.0	31×10^{-3}	331.0	89×10^{-3}
	50×10^{-5}		15×10^{-5}	227.5	11×10^{-4}	283.3	60×10^{-2}		60×10^{-3}		41×10^{-3}
178.0	20×10^{-5}	202.0	15×10^{-5}	228.1	31×10^{-4}	283.4	100×10^{-2}	308.0	78×10^{-4}	332.0	19×10^{-2}
	72×10^{-5}		22×10^{-5}	228.6	20×10^{-4}	283.5	10×10^{-4}		46×10^{-3}		19×10^{-2}
179.0	30×10^{-5}	203.0	12×10^{-5}	229.0	15×10^{-4}	283.6	12×10^{-4}	309.0	30×10^{-4}	333	17×10^{-3}
	25×10^{-5}		40×10^{-5}	229.2	15×10^{-4}	284.7	10×10^{-4}		12×10^{-2}		80×10^{-3}
180.0	51×10^{-5}	204.0	20×10^{-5}	229.8	8×10^{-4}	285.5	10×10^{-3}	310.0	75×10^{-3}	334.0	52×10^{-3}
	30×10^{-5}		25×10^{-5}			285.8	15×10^{-2}		12×10^{-2}		38×10^{-3}
181.0	30×10^{-5}	205.0	45×10^{-5}	232.1	25×10^{-3}	285.9	12×10^{-2}	311.0	81×10^{-3}	335.0	18×10^{-4}
	29×10^{-5}		12×10^{-3}	232.4	25×10^{-4}	286.8	65×10^{-3}		12×10^{-2}		29×10^{-3}
182.0	22×10^{-5}	206.0	25×10^{-3}	232.5	5×10^{-4}	287.1	70×10^{-3}	312.0	11×10^{-2}	336.0	64×10^{-4}
	25×10^{-5}		29×10^{-4}	232.9	5×10^{-4}	287.5	15×10^{-2}		10×10^{-2}		35×10^{-3}
183.0	15×10^{-5}	207.0	54×10^{-4}	233.4	5×10^{-4}	288.5	30×10^{-4}	313.0	14×10^{-2}	337.0	86×10^{-3}
	90×10^{-5}		40×10^{-5}	233.9	3×10^{-4}	289.6	19×10^{-3}		15×10^{-2}		12×10^{-2}
184.0	40×10^{-5}	208.0	42×10^{-5}	234.4	6×10^{-4}	290.1	15×10^{-3}	314.0	15×10^{-2}	338.0	26×10^{-4}
	25×10^{-5}		55×10^{-5}	235.0	12×10^{-4}	290.6	80×10^{-4}		15×10^{-2}		11×10^{-4}
185.0	20×10^{-5}	209	82×10^{-5}	235.5	20×10^{-4}	291.0	11×10^{-3}	315.0	45×10^{-2}	339.0	35×10^{-3}
	28×10^{-5}		17×10^{-4}	236.1	30×10^{-4}		11×10^{-3}		15×10^{-2}		37×10^{-3}
186.0	24×10^{-5}	210	52×10^{-5}	236.8	30×10^{-4}	292.0	9×10^{-3}	316.0	26×10^{-2}	340.0	16×10^{-3}
	15×10^{-5}		49×10^{-5}	237.5	6×10^{-4}		18×10^{-3}		34×10^{-2}		20×10^{-3}
187.0	25×10^{-5}	211	78×10^{-5}	237.7	11×10^{-4}	293.0	15×10^{-3}	317.0	26×10^{-2}	341.0	40×10^{-4}
	23×10^{-5}		38×10^{-5}	238.1	4×10^{-4}		12×10^{-3}		14×10^{-2}		90×10^{-2}
										342.0	15×10^{-2}
											12×10^{-2}
										343.0	20×10^{-2}
											25×10^{-2}

APPENDIX 7

Diamond Drill Log - Summaries

Hole No.	Depth From	Depth To	R.L.	Unit	Assay Summary
G.P.1	0	50.9	2299.0	Fernfields Formation	
		54.6	2296.5	Grand Prize Fault	
		56.4	2293.8	Dundas Group Sediments	
G.P.2	0	74.1	2266.5	Fernfields Formation	
		89.3	2251.7	Grand Prize Fault	Trace Sn only
		116.3	2225.7	Dundas Group Sediments	
M.D.1	0	-21.6		Fernfields Formation	
		26.5		Fault	
		100.7		Serpentinite	
M.D.2	0	-61.3		Serpentinite	
M.D.3	0	82.3	2307.9	Fernfields Formation	
		84.7	2307.0	Grand Prize Fault	
		100.4	2301.7	Dundas Group Sediments	
S652	0	-158.0	2233.8	Fernfields Formation	
		-180.1	2219.6	Grand Prize Fault	165.4-170.0m: 4.6m at <0.01% Sn, 0.01% Cu, 0.01% Pb, 0.15% Zn
					174.9-178.1m: 3.2m at <0.01% Sn, 0.04% Cu, 0.04% Pb, 0.04% Zn
		-227.9	2189.0	Dundas Group (Unit?)	
		-231.0	2187.0	Mineralised Fault	3.1m at 0.09% Sn, 0.07% Cu, 0.07% Pb, 0.33% Zn
		-304.4	2145.9	Razorback Conglomerate equivalent?	
		-319.2	2139.2	Grand Reward Fault	304.4-318.8m:14.5m at <0.01% Sn, 0.16% Cu, <0.01% Pb, 0.02% Zn
		-391.5	2114.6	Razorback Conglomerate equivalent?	
S653	0	-175.0	2309.5	Brewery Junction Formation	
		-183.2	2303.3	Razorback Conglomerate	
		-186.0	2301.1	Fault	183.2-188.3m: 5.1m at 0.08% Sn, 0.29% Cu, 0.12% Pb, 0.2% Zn
		-214.0	2280.6	Razorback Conglomerate	
		-254.0	2251.4	Grand Prize Fault	214.0-254.0m: 39.3m at 0.08% Sn, 0.32% Cu, 0.02% Pb, 0.19% Zn
		-290.2	2225.4	Razorback Conglomerate	
		-293.5	2223.0	Grand Reward Fault	3.3m at 0.04% Sn, 0.09% Cu, <0.01% Pb, 0.04% Zn
		-299.6	2218.7	Razorback Conglomerate	
		-397.0	2153.5	Hodge Slate	

Hole No.	Depth From	Depth To	R.L.	Unit	Assay Summary
S658	0	-225.0	2220.8	Razorback Conglomerate	
		-231.6	2216.2	Grand Lottery Fault	6.6m at 0.24% Sn, 0.16% Cu, 0.05% Pb, 0.19% Zn
		-276.0	2186.9	Hodge Slate	
		-289.0	2178.4	Grand Prize Fault	
S677	0	-41.2	2374.2	Fernfields Formation	
		-202.7	2234.6	Brewery Junction Formation	
		-209.5	2228.8	Grand Prize Fault	208.6-209.5m: 0.9m at 0.1% Sn, 0.35% Cu, <0.01% Pb, 0.26% Zn
		-345.3	2121.5	Razorback Conglomerate	
		-347.6	2119.9	Grand Reward Fault	346.5-347.6m: 1.1m at <0.01% Sn, 0.04% Cu, <0.01% Pb, 1.67% Z
		-430.7	2077.1	Razorback Conglomerate	
S764	0	-31.1	2394.9	Brewery Junction Formation	
		-32.5	2393.7	Grand Lottery Fault	
		-148.8	2291.9	Brewery Junction Formation	
		-202.9	2244.3	Razorback Conglomerate	
		-207.1	2240.6	Fault	
		-331.3	2136.5	Razorback Conglomerate	
		-355.4	2116.3	Grand Prize Fault	331.3-345.4m: 14.1m at <0.01% Sn, 0.04% Cu, <0.01% Pb, 0.17% 345.4-355.4m: 10m at 0.21% Sn, 0.23% Cu, 0.2% Pb, 0.22% Zn
		-441.3	2045.5	Hodge Slate	
		-446.5	2041.4	Grand Reward Fault	5.2m at 0.05% Sn, 0.88% Cu, <0.01% Pb, 0.04% Zn
		-461.3	2029.7	Hodge Salte	
		-640.4	1900.3	Red Lead Conglomerate	179.1m at 0.10% Sn, 0.06% Cu, <0.01% Pb, 0.02% Zn including 512.0-517.0m: 5m at 0.45% Sn, 0.18% Cu, <0.01% Pb, 0.01% Zn
S862	0	-185.3	2190.5	Fernfields Formation	
		-217.4	2162.9	Grand Prize Fault	213.1-221.3m: 8.2m at <0.01% Sn, <0.01% Cu, <0.01% Pb, <0.01%
		-335.3	2060.7	Razorback Conglomerate equivalent?	
		-338.7	2057.8	Grand Reward Fault	3.4m at <0.01% Sn, 0.24% Cu, <0.01% Pb, 0.02% Zn
		-472.4	1949.4	Razorback Conglomerate equivalent?	
S947	0	-160.9	2270.8	Brewery Junction Formation	
		-176.8	2255.1	Grand Lottery Fault	15.9m at <0.01% Sn, 0.03% Cu, 0.18% Pb, 0.86% Zn
		-192.5	2239.6	Brewery Junction Formation	
		-364.5	2069.8	Razorback Conglomerate	
		-369.5	2064.9	Fault	5.0m at <0.01% Sn, 0.03% Cu, 0.05% Pb, 2.42% Zn
		-441.0	1994.3	Razorback Conglomerate	

Hole No.	Depth From	Depth To	R.L.	Unit	Assay Summary
S947	441.0	-448.2	1987.2	Fault	441.0-442.7m: 1.7m at <0.01% Sn, 0.02% Cu, 0.09% Pb, 0.63% Zn
		-451.5	1983.9	Razorback Conglomerate	
		-466.8	1968.8	Grand Prize Fault	452.2-466.8m: 14.6m at 0.28% Sn, 0.35% Cu, 0.04% Pb, 0.28% Zn including 452.2-453.6m: 4.4m at 0.82% Sn, 0.8% Cu, 0.07% Pb, 0.4% Zn
		-531.8	1904.7	Hodge Slate	
		-535.5	1901.0	Fault	3.7m at 0.12% Sn, 0.37% Cu, 0.18% Pb, 0.5% Zn
		-574.2	1862.8	Hodge Slate	
		-627.7	1810.1	Red Lead Conglomerate	53.5m at 0.01% Sn, 0.02% Cu, <0.01% Pb, 0.02% Zn
		-629.1	1808.7	Carbonated Ultrabasic	
		-649.5	1788.8	Serpentinite	
S969	0	-118.8	2296.4	Razorback Conglomerate	
		-130.8	2286.3	Grand Lottery Fault	12m at 0.01% Sn, 0.16% Cu, 0.01% Pb, 0.02% Zn
		-263.9	2172.8	Razorback Conglomerate	
		-293.1	2147.3	Grand Prize Fault	29.2m at 0.12% Sn, 0.06% Cu, 0.01% Pb, 0.02% Zn including 266.9-269.9m: 3m at 0.96% Sn, 0.33% Cu, 0.38% Pb, 0.23% Zn
		-313.7	2129.2	Hodge Slate	
		-322.3	2121.7	Fault	
		-372.1	2077.8	Hodge Slate	
		-406.8	2047.2	Red Lead Conglomerate	34.7m at 0.04% Sn, 0.05% Cu, <0.01% Pb, <0.02% Zn
		-409.8	2044.6	Grand Reward Fault	3.0m at 5.21% Sn, 0.23% Cu, 0.04% Pb, 0.1% Zn
		-447.4	2011.5	Red Lead Conglomerate	36.7m at 0.07% Sn, 0.02% Cu, <0.01% Pb, 0.01% Zn
		-502.0	1963.5	Basic Volcanics	
G.P.3	0	15.8	2369.2	Fernfields Formation	
		45.0	2347.5	Brewery Junction Formation	
G.P.3A	0	17.6	2366.6	Fernfields Formation	
		97.2	2302.4	Brewery Junction Formation	
		105.7	2295.5	Grand Lottery Fault	
		258.9	2168.9	Brewery Junction Formation	
		449.2	2012.3	Razorback Conglomerate	
		460.2	2003.3	Hodge Slate	
		481.7	1985.6	Grand Prize Fault	460.0-482.0m: 22m at <0.01% Sn, <0.01% Cu, 0.01% Pb, 0.20% Zn
		506.8	1964.8	Hodge Slate	
		510.7	1961.6	Fault	507.0-510.0m: 3m at 0.94% Sn, 0.82% Cu, <0.01% Pb, 0.19% Zn
		531.8	1943.9	Hodge Slate	

Hole No.	Depth From	Depth To	R.L.	Unit	Assay Summary
G.P.3A	531.8	578.1	1905.0	Red Lead Conglomerate	532.0-578.0m: 46m at 0.08% Sn, <0.01% Cu, <0.01% Pb, 0.02% Zn including 571.0-574.3m at 0.33% Sn, <0.01% Cu, <0.01% Pb, 0.02% Zn
		592.1	1843.2	Basic Volcanic	
		598.7	1887.6	Carbonate	
		624.3	1865.9	Serpentinite	
G.P.4	0	191.8	2227.2	Hodge Slate	
		196.0	2223.4	Grand Reward Fault	4.2m at <0.01% Sn, <0.01% Cu, 0.10% Pb, 0.3% Zn
		218.3	2203.4	Hodge Slate	
		309.5	2121.9	Red Lead Conglomerate	218.0-309.5m: 91.5m at <0.01% Sn, 0.04% Cu, 0.01% Pb, 0.09% Zn
		320.2	2112.2	Basic Volcanics	
G.P.5	0	-183.1	2242.9	Hodge Fault	
		185.7	2240.7	Fault	
		197.3	2230.7	Red Lead Conglomerate	11.6m at <0.01% Sn, 0.01% Cu, 0.02% Pb, 0.16% Zn
		220.3	2211.6	Basic Volcanics	
G.P.6	0	-186.0	2168.6	Fernfields Formation	
		446.2	1910.7	Brewery Junction Formation	
		450.8	1906.2	Grand Prize Fault	447.0-451.8m: 4.8m at 0.60% Sn, 0.53% Cu, <0.01% Pb, 0.02% Zn including 448.0-450.8m: 2.8m at 0.87% Sn, 0.78% Cu, <0.01% Pb, 0.03% Zn
		456.6	1900.4	Carbonate	
		505.7	1851.9	Serpentinite	
G.P.7	0	136.5	2265.5	Razorback Conglomerate	
		359.4	2054	Hodge Slate	
		387.0	2028.4	Red Lead Conglomerate	359.9-387.0m: 17.1m at <0.01% Sn, 0.01% Cu, <0.01% Pb, 0.04% Zr
		390.2	2025.4	Fault	3.2m at 0.49% Sn, 0.35% Cu, 0.82% Pb, 0.62% Zn including 388.0-390.2m: 2.2m at 0.65% Sn, 0.27% Cu, 1.15% Pb, 0.89% Zn
		435.5	1983.1	Basic Volcanics	

Hole No.	Depth From	Depth To	R.L.	Unit	Assay Summa.
G.P.8	0	-346.6	2100.7	Razorback Conglomerate	
		382.7	2067.9	Hodge Slate	
		395.0	2056.8	Grand Prize Fault	12.3m at 0.06% Sn, 0.04% Cu, 0.01% Pb, 0.21% Zn including 388.3-389.5m: 1.2m at 0.47% Sn, 0.21% Cu, 0.10% Pb, 0.46% Zn
		424.9	2029.6	Hodge Slate	
		491.5	1968.8	Red Lead Conglomerate	66.6m at 0.12% Sn, 0.04% Cu, <0.01% Pb, 0.03% Zn including 483.0-485.0m: 2m at 0.73% Sn, 0.07% Cu, <0.01% Pb, 0.01% Zn and 464-466.0m: 2m at 0.47% Sn, 0.22% Cu, 0.02% Pb, 0.16% Zn
		494.6	1965.9	Carbonate	
		556.3	1909.6	Ultrabasic	
G.P.9	0	73.9	2224.3	Razorback Conglomerate	
		128.5	2176.7	Hodge Slate	
		161.5	2148.1	Red Lead Conglomerate	
		170.9	2139.9	Fault	9.4m at <0.01% Sn, <0.01% Cu, 0.01% Pb, 0.07% Zn
		351.2	1982.2	Serpentinite	
		411.6	1929.1	Grand Prize Fault	
		481.1	1868.5	Serpentinite	
		486.3	1863.9	Grand Reward Fault?	5.2m at <0.01% Sn, <0.01% Cu, 0.01% Pb, 0.01% Zn
		491.5	1859.5	Serpentinite	
G.P.10	0	52.0	2194.9	Melba Spilite	
		56.4	2191.2	Fault	
		206.4	2066.7	Melba Spilite	
		220.1	2055.4	Fault	3.5m at <0.01% Sn, <0.01% Cu, <0.01% Pb, 0.05% Zn
		225.5	2050.9	Carbonate	
		282.3	2003.4	Basic Volcanics	
		322.0	1970.1	Grand Prize Fault	39.7m at <0.01% Sn, <0.01% Cu, <0.01% Pb, <0.01% Zn
		343.7	1957.9	Serpentinite	

001

001

E.L. 42/71

E.L. 42/71

COMMONWEALTH HILL

COMMONWEALTH HILL GRID

PINE HILL

PINE HILL GRID

CARBINE HILL GRID

NORTH DUNDAS GRID

BLACK HILL GRID

CARBINE HILL

GODKIN RIDGE

RAZORBACK RID

Qa Qg Qt Cus Cum Cut Cms Cmf Ch Cc Cg Cs Cb Cro Cro/Cb Cch Ccs Cfe Cri Jd Dg

5569000N 5569000N

5568 000 m N

5566000 m N

5566 000 m N

E.L. 15/76

001

SEDIMENTARY ROCKS

Quaternary

Qt — Talus

Qa — Alluvium

IGNEOUS ROCKS

Extrusives

€Cus — Mesba Sediments

€um — Ultra-mafic Rock (undifferentiated)

€cs — Sergeantville

€ct — Tremorite Rock

Upper Cambrian

€mf — Fernfields Formation (Limbunya Conglomerate)

€ch — Carbine Hill Greywacke (Greywacke, Carbonates, Siltstone incl. Conglomerates)

€cb — Cambadore Toadale Formation (Greywacke, Grits, Conglomerates)

€ro — Brewery Junction Formation (Greywacke, Siltstone, Conglomerates, Quartz, Feldspar, Crystal Tuffs)

€rc — Razorback Conglomerate (Cobble Grits & Greywacke)

€ri — Undifferentiated Brewery Junction Formation and Razorback Conglomerate (Greywacke, Grits, Conglomerate)

€fe — Hedge Tuffs (Rhyolite)

€rl — Red Lead Conglomerate (Conglomerates)

€mc — Mafic Comex (Mafic Pyroclastics or Weathered Lavas)

Lower Cambrian

€cc — Crimson Creek Formation

Pre-Cambrian

Puo — Donah Formation

Carbonate at the Razorback Mine

Intrusives

Jd — Jurassic Dolerite

Cm — Devonian Granite

€g — Cambrian Gabbro

SYMBOLS

Interpreted Geological Boundary

Fault (approximate position)

Vertical Bedding

Dip & Strike of Bedding

Dip & Strike of Foliation

Anticline, Synclinal Axis

Dip & Strike of Jointing

Direction of Plunge

Mine workings, Adit

Shaft

Trench

Bulldozer workings

SHEET REFERENCE

Zeehan 8641 | Zeehan 8642

Zeehan 8641/3 | Zeehan 8642/4

5 cm

123237

GOLD FIELDS EXPLORATION PTY LIMITED

E.L. 42/71 001

GRAND PRIZE AREA

INTERPRETATIVE GEOLOGY

SCALE 1:5000 (100 50 0 100 200 METRES)

DRAWN BY: P.K.

DRAFTSMAN: S.F.

DATE: JAN. 65

REVISIONS:

FILE NO.

FIG. 2

Renison Mine Lease
E.L. 42/71

Commonwealth Hill

Lead Blocks

Gene Winze

N. Cuni Shaft

S. Cuni Shaft

Duke of York

Serpentine Hill

Mt Mulgam Metbd

CUNI B.M.) GRID

E.Z. GRID

DALCOATH GRID

COMMONWEALTH HILL GRID

BLACK HILL GRID

KAPI GRID

SAMPLES

- Soil
- × Rock Chip

GEOCHEMICAL SAMPLING

Grand Prize Grid	Placer Prospecting Pty Ltd (1964-66)
North Dundas Grid	Renison Ltd (1967-70)
Commonwealth Hill Grid	Renison Ltd (1968-69)
Razorback Hill Grid	Renison Ltd (1968-69)
Kapi Grid	Renison Ltd (1976-77)
Black Hill & Carbine Hill Grids	G.F.E.L. (1983)

ZEEHAN B1 B1/4 | ZEEHAN B2 B2/3 B2/1 B2/2 | ZEEHAN B3 B3/3 | ZEEHAN B4 B4/3 B4/4

5 cm

123238

RENISON LIMITED

ZEEHAN B4/1 002

COPPER GEOCHEMISTRY IN P.P.M. 85-2449 1/5

GEOLOGIST	P.K.	SCALE 1:5000 METRES
DRAUGHTSMAN	P.K./S.F.	100 0 100 200
DATE	May. 84	
REVISIONS		DRAWING No. FIG. 3

Renison Mine
E.L. 42/71

Commonwealth Hill

Gene Winze

Lead Blocks

N. Cuni Shaft

S. Cuni Shaft

Duke of York

Serpentine Hill

Mission Malbo

CUNI B.M.I GRID

E.Z. GRID

DALCOATH GRID

COMMONWEALTH HILL GRID

BLACK HILL GRID

KAPI GRID

GEOCHEMICAL SAMPLING

Grand Prize Grid	:	Placer Prospecting Pty Ltd. (1964-66)
North Dundas Grid	:	Renison Ltd. (1967-70)
Commonwealth Hill Grid	:	Renison Ltd (1968-69)
Razorback Hill Grid	:	Renison Ltd. (1968-69)
Kapi Grid	:	Renison Ltd. (1976-77)
Block Hill & Carbine Hill Grids	:	G.F.E.L. (1983)

SAMPLES
- Soil
- Rock Chip

ZEEHAN B1 B1/4 | ZEEHAN B2 B2/3 B2/1 B2/2 | ZEEHAN B3 B3/2 | ZEEHAN B4 B4/3 B4/4

5 cm

123239

RENISON LIMITED

ZEEHAN B4/1 003

LEAD GEOCHEMISTRY IN P.P.M.

GEOLOGIST	P. K.	SCALE 1:5000 METRES
DRAUGHTSMAN	P.K./S.F.	100 0 100 200
DATE	May, 84	
REVISIONS		DRAWING No. FIG. 4

85-2469 1/5

Renison Mine Lease
E.L. 42/71

Commonwealth Hill

Gene Winze

N. Cuni Shaft

S. Cuni Shaft

Lead Blocks

Duke of York

Serpentine Hill

Malum Melius

E.Z. GRID

CUNI B.M.I GRID

DALCOATH GRID

COMMONWEALTH HILL GRID

BLACK HILL GRID

KAPI GRID

ZEEHAN B1 | ZEEHAN B2
B1/4 | B2/3
B3/2 | B4/1 | B4/2
ZEEHAN B3 | ZEEHAN B4
B4/3 | B4/4

5 cm

123240

GEOCHEMICAL SAMPLING

Grand Prize Grid	:	Placer Prospecting Pty Ltd. (1964-66)
North Dundas Grid	:	Renison Ltd. (1967-70)
Commonwealth Hill Grid	:	Renison Ltd.(1968-69)
Razorback Hill Grid	:	Renison Ltd.(1968-69)
Kapi Grid	:	Renison Ltd. (1976-77)
Black Hill & Carbine Hill Grids	:	G.F.E.L. (1983)

SAMPLES

- Soil
- × Rock Chip

RENISON LIMITED

ZEEHAN B4/1 004

ZINC GEOCHEMISTRY IN P.P.M.

GEOLOGIST	P.K.	SCALE 1:5000 METRES
DRAUGHTSMAN	P.K. / S.F.	100 0 100 200
DATE	May, 84	
REVISIONS		DRAWING No. FIG.5

85-2469 1/5

E.Z. GRID

CUNI B.M.1 GRID

DALCOATH GRID

COMMONWEALTH HILL GRID

BLACK HILL GRID

KAPI GRID

Renison Mine Lease
E.L. 42/71

Commonwealth Hill

Lead Blocks

N. Cuni Shaft

S. Cuni Shaft

Duke of York

Serpentine Hill

Western Valley

ZEEHAN B1 | ZEEHAN B2
B1/4 | B2/3
B3/2 | B4/1 | B4/2
ZEEHAN B3 | ZEEHAN B4
B4/3 | B4/4

5 cm

123241

GEOCHEMICAL SAMPLING

Grand Prize Grid	:	Placer Prospecting Pty Ltd. (1964-66)
North Dundas Grid	:	Renison Ltd. (1967-70)
Commonwealth Hill Grid	:	Renison Ltd. (1968-69)
Razorback Hill Grid	:	Renison Ltd. (1968-69)
Kapi Grid	:	Renison Ltd. (1976-77)
Black Hill & Corbine Hill Grids	:	G.F.E.L. (1983)

SAMPLES
- Soil
× Rock Chip

RENISON LIMITED

ZEEHAN B4/1 005

TIN GEOCHEMISTRY IN P.P.M.

35-2449 1/5

GEOLOGIST	P.K.	SCALE 1:5 000 METRES
DRAUGHTSMAN	P.K./ S.F.	100 0 100 200
DATE	May, 84	
REVISIONS		DRAWING No. FIG. 6

E.Z. GRID

CUNI B.M.I GRID

COMMONWEALTH HILL GRID

BLACK HILL GRID

DALCOATH GRID

KAPI GRID

Renison Mine Lease E.L. 42/71

Commonwealth Hill

Gene Winze

Lead Blocks

N. Cuni Shaft

S. Cuni Shaft

Duke of York

Serpentine Hill

Vulcan Mabel

SAMPLES

- Soil
- × Rock Chip

GEOCHEMICAL SAMPLING

Grand Prize Grid	Placer Prospecting Pty Ltd (1964-66)
North Dundas Grid	Renison Ltd (1967-70)
Commonwealth Hill Grid	Renison Ltd (1968-69)
Razorback Hill Grid	Renison Ltd (1968-69)
Kapi Grid	Renison Ltd (1976-77)
Black Hill & Carbine Hill Grids	G.F.E.L. (1983)

ZEEHAN B1 B1/4 B2/3 B2/2 B4/1 B4/2 ZEEHAN B3 B4/3 ZEEHAN B4 B4/4

5 cm

123242

RENISON LIMITED

ZEEHAN B4/1 006

ARSENIC GEOCHEMISTRY IN P.P.M.

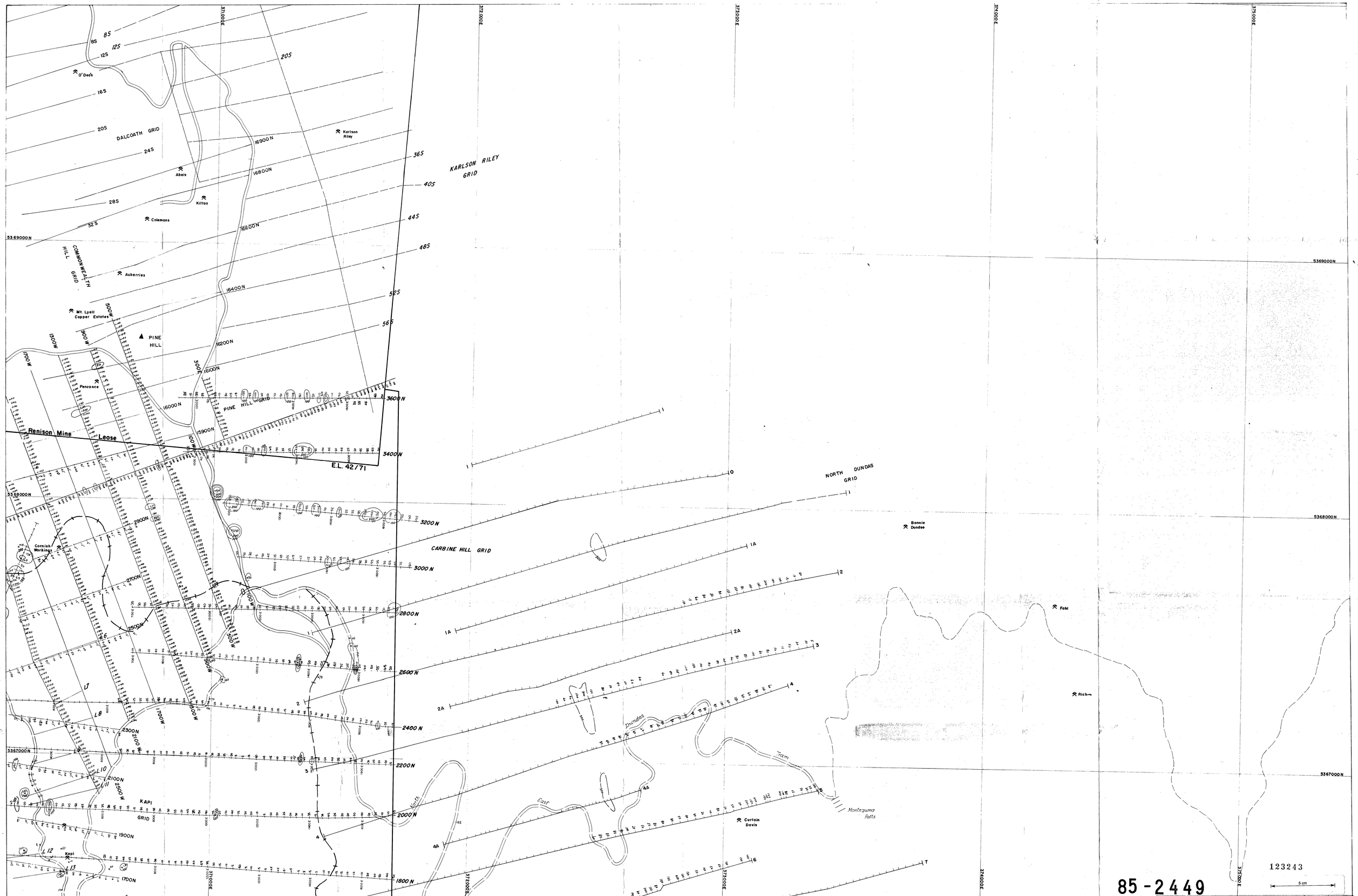
85-244 p16

GEOLOGIST	P.K.
DRAUGHTSMAN	P.K. / S.F.
DATE	May, 84
REVISIONS	

SCALE 1:5000 METRES

100 0 100 200

DRAWING No. FIG. 7



123243

85-2449

5 cm

GEOCHEMICAL SAMPLING

Grand Prize Grid	Placer Prospecting Pty Ltd (1964-66)
North Dundas Grid	Renison Ltd (1967-70)
Commonwealth Hill Grid	Renison Ltd (1968-69)
Razorback Hill Grid	Renison Ltd (1968-69)
Kapi Grid	Renison Ltd (1976-77)
Black Hill & Carbine Hill Grids	G.F.E.L. (1983)

SAMPLES

- Soil
- × Rock Chip

ZEEHAN B4/1 | ZEEHAN B4/2 | ZEEHAN B4/3 | ZEEHAN B4/4

RENISON LIMITED

ZEEHAN B4/2 007

COPPER GEOCHEMISTRY IN P.P.M. 85-2449 2/5

SCALE. 1:5000 METRES

100 0 100 200 300

DRAWN	P.K.
TRACED	P.K./S.F.
DATE	May. 84
SCALE	1:5000
DRAWING No.	FIG. 8

3700000E

3725000E

3750000E

3775000E

5369000N

5368000N

5367000N

O'Dea's

Karlson Riley

Abels

Killos

Colemans

Auberries

Mt. Lyell Copper Estates

PINE HILL

Penzance

Cornish Workings

Bonnie Dundee

Foht

Rich

Corbam Davis

Montezuma Falls

Dundas

Yam

North

East

DALCOATH GRID

KARLSON RILEY GRID

COMMONWEALTH HILL GRID

PINE HILL GRID

CARBINE HILL GRID

NORTH DUNDAS GRID

KAPI GRID

Renison Mine Lease

E.L. 42/71

16S 8S 12S 20S 24S 28S 32S 36S 40S 44S 48S 52S 56S 60S

16900N 16800N 16600N 16400N 16200N 16100N 16000N 15900N

3600N 3400N 3200N 3000N 2800N 2600N 2400N 2200N 2000N 1800N

2900N 2700N 2500N 2300N 2100N 1900N 1700N

0 1 1A 2 2A 3 4 4A 5 6 7

500W 1500W 1900W 1700W 3000W 1000W 500W 2000W 2200W

123244

5 cm

GEOCHEMICAL SAMPLING

Grand Prize Grid	Placer Prospecting Pty Ltd (1964-66)
North Dundas Grid	Renison Ltd (1967-70)
Commonwealth Hill Grid	Renison Ltd (1968-69)
Razorback Hill Grid	Renison Ltd (1968-69)
Kapi Grid	Renison Ltd (1976-77)
Black Hill & Carbine Hill Grids	G.F.E.L. (1983)

SAMPLES
- Soil
× Rock Chip

RENISON LIMITED

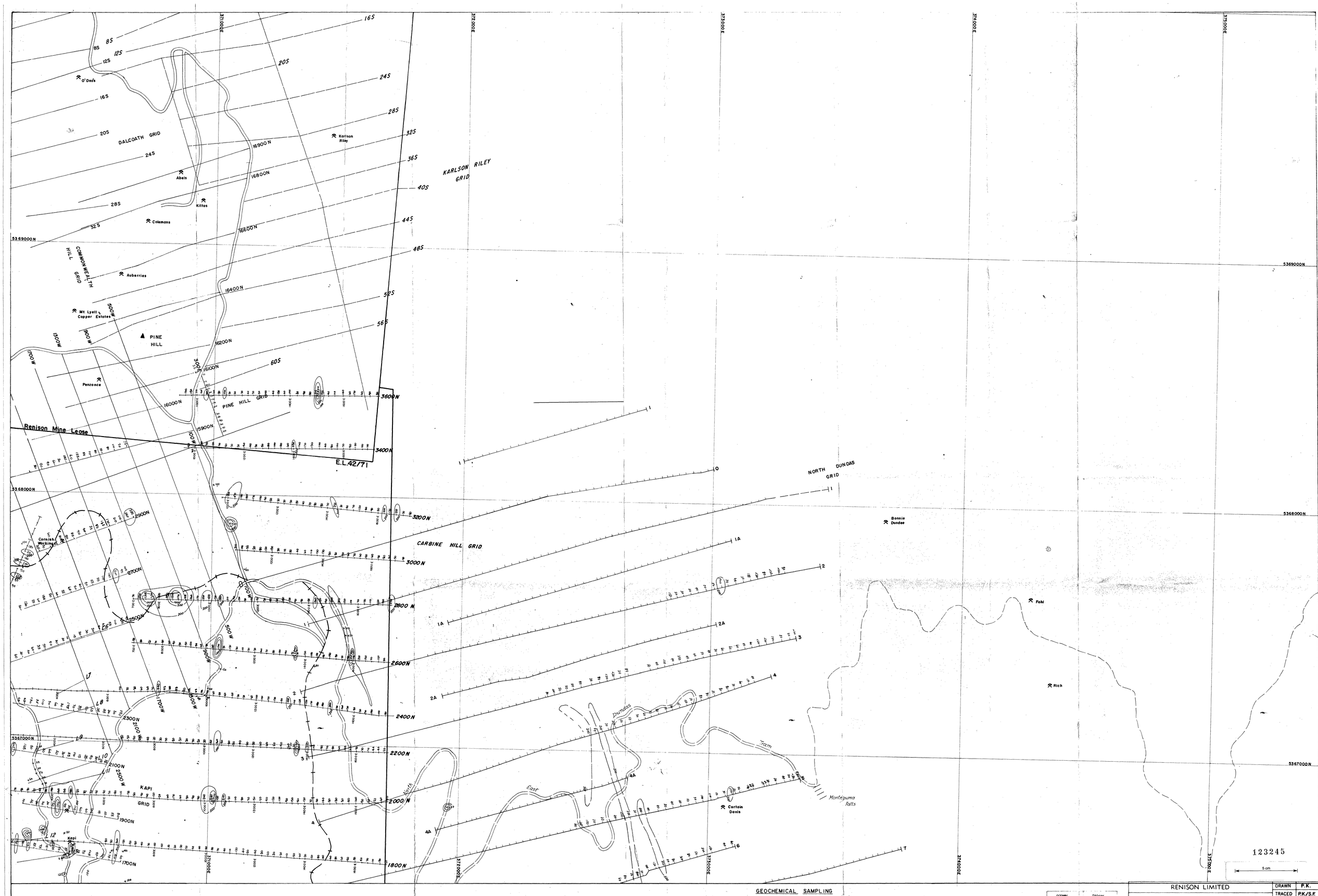
ZEEHAN B4/2 008

LEAD GEOCHEMISTRY IN P.P.M. 85-2449 2/5

SCALE 1:5000 METRES

100 0 100 200 300

DRAWN	P.K.
TRACED	P.K./S.F.
DATE	May, 84
SCALE	1:5000
DRAWING No.	FIG. 9



GEOCHEMICAL SAMPLING

Grand Prize Grid	Placer Prospecting Pty Ltd. (1964-66)
North Dundas Grid	Renison Ltd. (1967-70)
Commonwealth Hill Grid	Renison Ltd (1968-69)
Razorback Hill Grid	Renison Ltd. (1968-69)
Kapi Grid	Renison Ltd. (1976-77)
Black Hill & Carbine Hill Grids	G.F.E.L. (1983)

SAMPLES

- Soil
- Rock Chip

ZEEHAN B4/1 | ZEEHAN B4/2 | ZEEHAN B4/3 | ZEEHAN B4/4 | ZEEHAN B4/5 | ZEEHAN B4/6

RENISON LIMITED

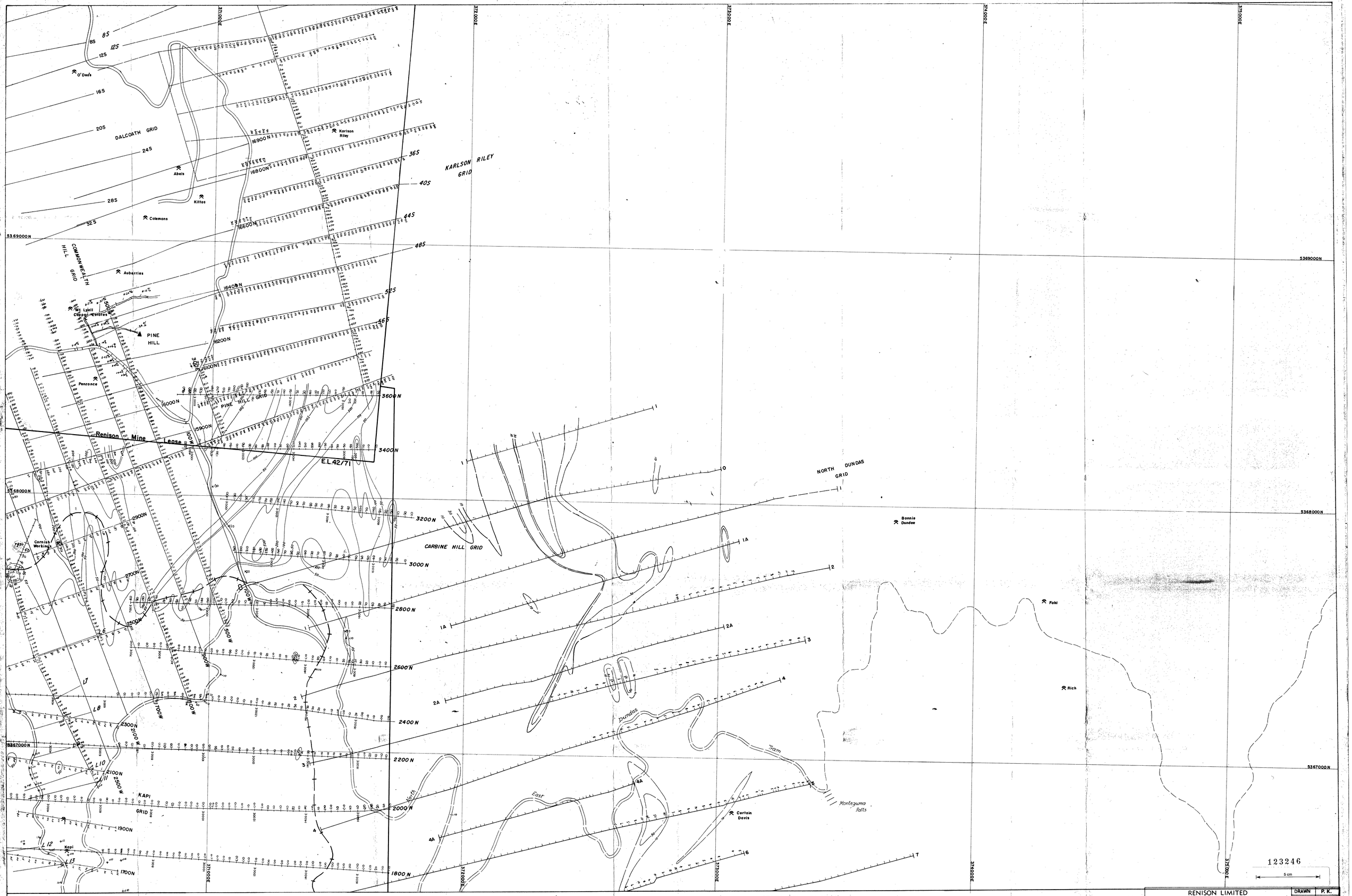
ZEEHAN B4/2. 009

ZINC GEOCHEMISTRY IN P.P.M. 85-2449 2/5

SCALE. 1:5000 METRES

100 0 100 200 300

DRAWN	P.K.
TRACED	PK/S.F.
DATE	May, 84
SCALE	1:5000
DRAWING No.	FIG. 10



GEOCHEMICAL SAMPLING

Grand Prize Grid	Placer Prospecting Pty Ltd. (1964-66)
North Dundas Grid	Renison Ltd. (1967-70)
Commonwealth Hill Grid	Renison Ltd. (1968-69)
Razorback Hill Grid	Renison Ltd. (1968-69)
Kapi Grid	Renison Ltd. (1976-77)
Black Hill & Carbine Hill Grids	G.F.E.L. (1983)

SAMPLES
- Soil
× Rock Chip

ZEEHAN B4/1 | ZEEHAN B4/2
ZEEHAN B4/3 | ZEEHAN B4/4

RENISON LIMITED

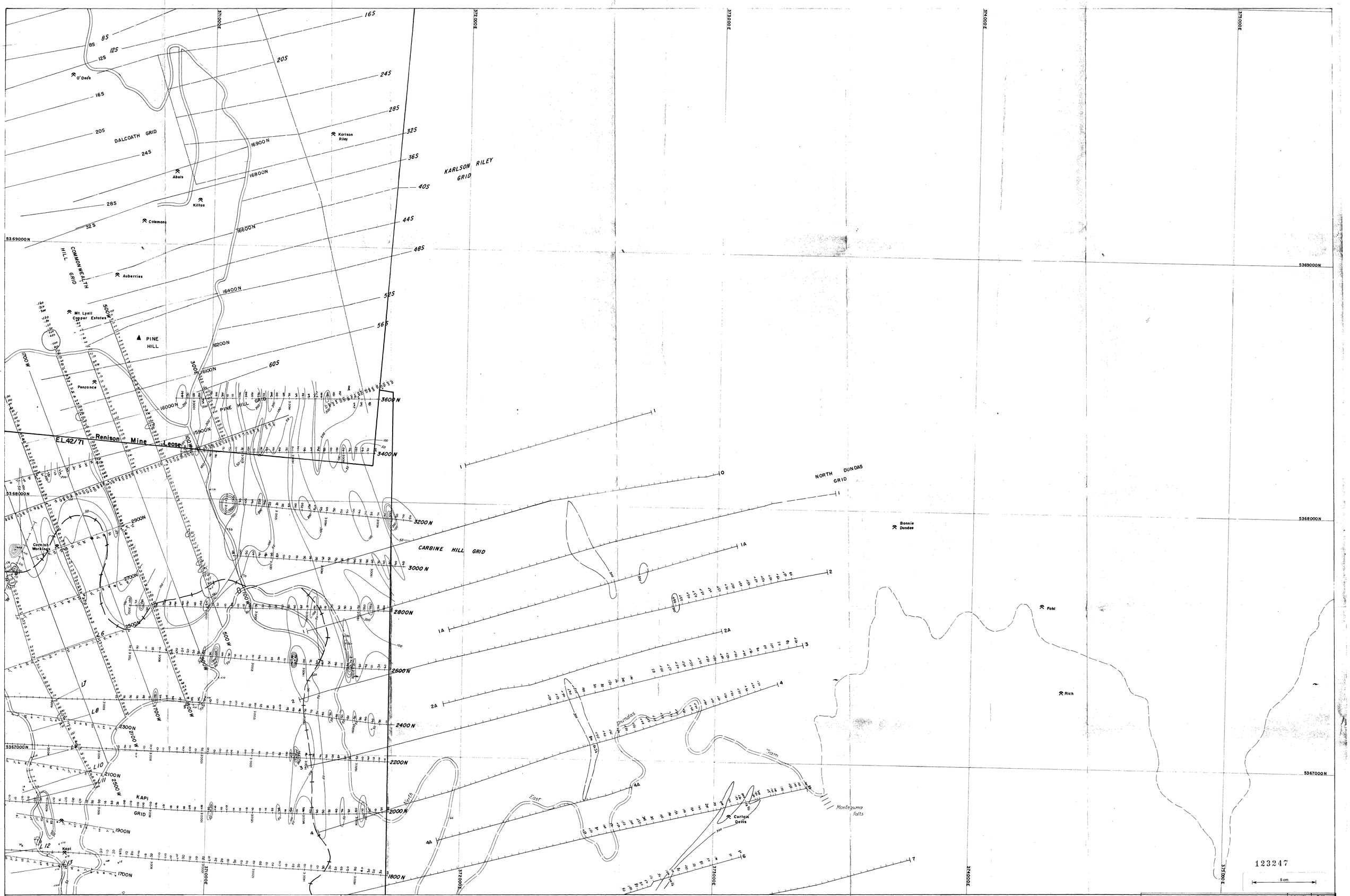
ZEEHAN B4/2 010

TIN GEOCHEMISTRY IN P.P.M. 85-2449 215

SCALE. 1:5000 METRES

100 0 100 200 300

DRAWN	P.K.
TRACED	P.K./S.F.
DATE	May, 84
SCALE	1:5000
DRAWING No.	FIG. 11



GEOCHEMICAL SAMPLING

Grand Prize Grid	:	Placer Prospecting Pty Ltd. (1964-66)
North Dundas Grid	:	Renison Ltd. (1967-70)
Commonwealth Hill Grid	:	Renison Ltd. (1968-69)
Razorback Hill Grid	:	Renison Ltd. (1968-69)
Kapi Grid	:	Renison Ltd. (1976-77)
Black Hill & Carbine Hill Grids	:	G.F.E.L. (1983)

SAMPLES
- Soil
- Rock Chip

ZEEHAN B4/1 | ZEEHAN B4/2 | ZEEHAN B4/3 | ZEEHAN B4/4

123247

5 cm

RENISON LIMITED

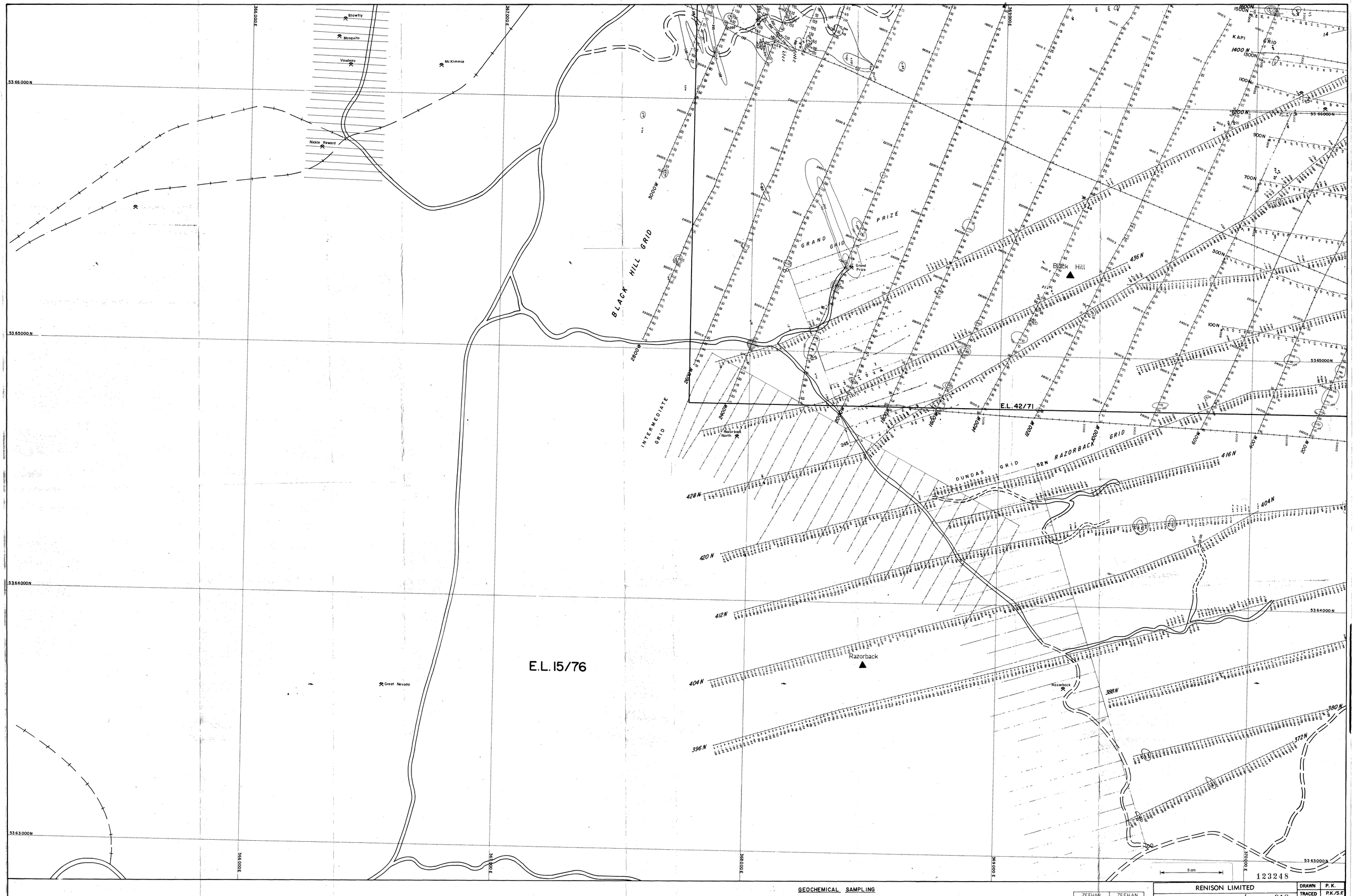
ZEEHAN B4/2 011

ARSENIC GEOCHEMISTRY IN P.P.M. 85-2449 2/5

SCALE. 1:5000 METRES

100 0 100 200 300

DRAWN	P.K.
TRACED	P.K./S.F.
DATE	May, 84
SCALE	1:5000
DRAWING No.	FIG. 12



GEOCHEMICAL SAMPLING

Grand Prize Grid	:	Placer Prospecting Pty Ltd. (1964-66)
North Dundas Grid	:	Renison Ltd. (1967-70)
Commonwealth Hill Grid	:	Renison Ltd (1968-69)
Razorback Hill Grid	:	Renison Ltd. (1968-69)
Kapi Grid	:	Renison Ltd. (1976-77)
Black Hill & Carbine Hill Grids	:	G.F.E.L. (1983)

SAMPLES

- Soil
- × Rock Chip

ZEEHAN B2/3	ZEEHAN B2/4
ZEEHAN B4/1	ZEEHAN B4/2
ZEEHAN B4/3	ZEEHAN B4/4

RENISON LIMITED

ZEEHAN B4/3 012

COPPER GEOCHEMISTRY IN P.P.M.

85-2449-25

SCALE. 1:5000 METRES 100 0 100 200 300

DRAWN	P. K.
TRACED	P.K./S.F.
DATE	May, 84
SCALE	1:5000
DRAWING No.	FIG. 13

Blowfly
Mosquito
Voudeau
Mc Kimmie
Nickle Reward
Great Nevada
Razorback North
Black Hill
Razorback
Grand Prize
Razorback

BLACK HILL GRID
GRAND PRIZE GRID
INTERMEDIATE GRID
KAPI GRID
DUNDAS GRID
52N RAZORBACK 1000N GRID

E.L. 15/76
E.L. 42/71

366 000E
367 000E
368 000E
369 000E
370 000E

53 66 000N
53 65000N
53 64000N
53 63000N

2800W
2600W
2400W
2200W
2000W
1800W
1600W
1400W
1200W
1000W
800W
600W
400W
200W

1800N
1500N
1400N
1300N
1100N
1200N
900N
700N
300N
100N
100

436N
428N
420N
416N
412N
404N
396N
388N
380N
372N

245

5 cm

123249

SAMPLES

- Soil
× Rock Chip

GEOCHEMICAL SAMPLING

Grand Prize Grid	:	Placer Prospecting Pty Ltd. (1964-66)
North Dundas Grid	:	Renison Ltd. (1967-70)
Commonwealth Hill Grid	:	Renison Ltd (1968-69)
Razorback Hill Grid	:	Renison Ltd. (1968-69)
Kapi Grid	:	Renison Ltd. (1976-77)
Block Hill & Carbine Hill Grids	:	G.F.E.L. (1983)

ZEEHAN B2/3	ZEEHAN B2/4
ZEEHAN B4/1	ZEEHAN B4/2
ZEEHAN B4/3	ZEEHAN B4/4

RENISON LIMITED

ZEEHAN B4/3 013

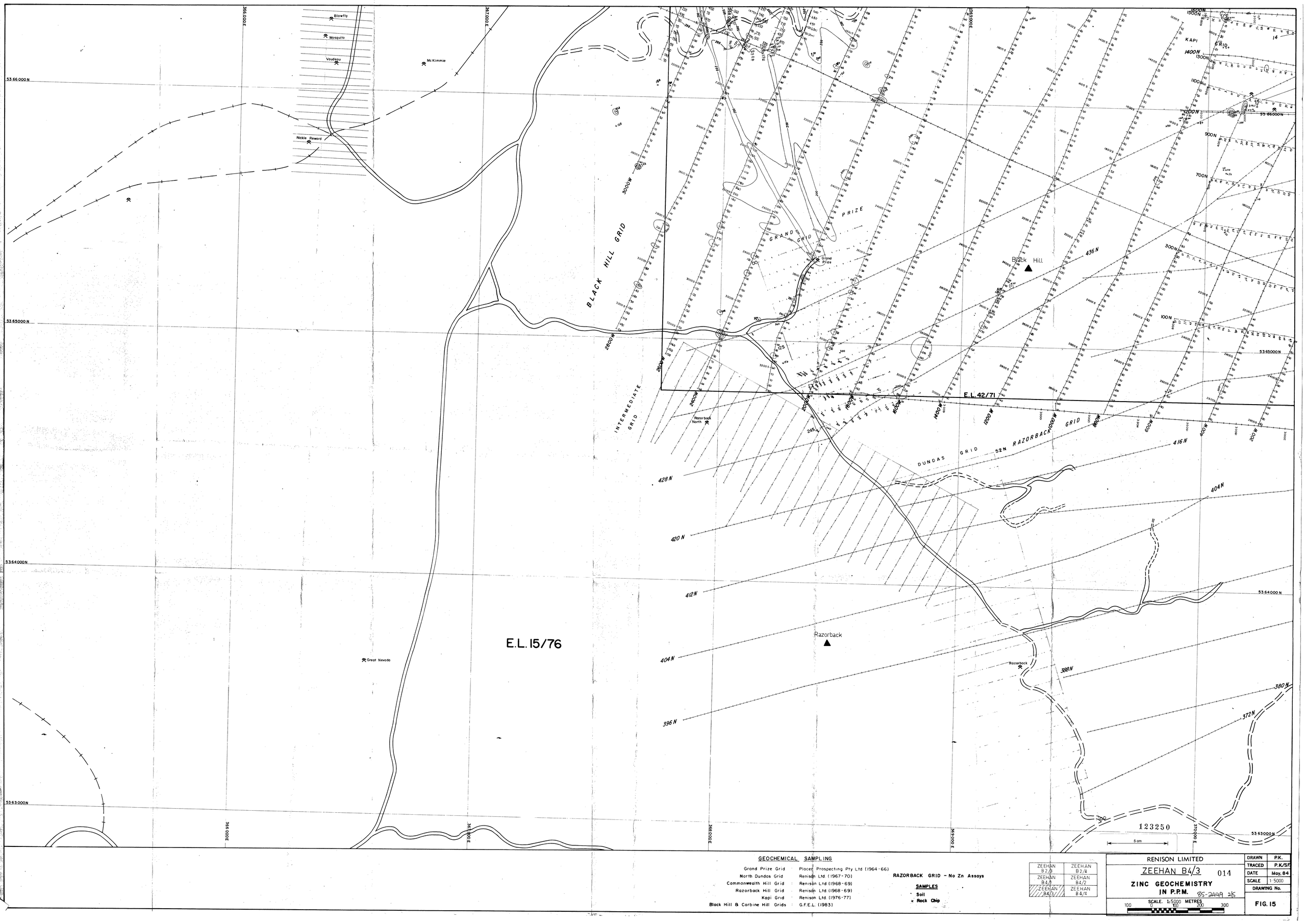
LEAD GEOCHEMISTRY IN P.P.M.

85-2449 215

SCALE. 1:5000 METRES 0 100 200 300

DRAWN	P.K.
TRACED	P.K./SF
DATE	May. 84
SCALE	1:5000
DRAWING No.	

FIG. 14



GEOCHEMICAL SAMPLING

Grand Prize Grid	Placer Prospecting Pty Ltd (1964-66)
North Dundas Grid	Renison Ltd. (1967-70)
Commonwealth Hill Grid	Renison Ltd (1968-69)
Razorback Hill Grid	Renison Ltd. (1968-69)
Kapi Grid	Renison Ltd. (1976-77)
Black Hill & Carbine Hill Grids	G.F.E.L. (1983)

RAZORBACK GRID - No Zn Assays

SAMPLES

· Soil
× Rock Chip

ZEEHAN B2/3	ZEEHAN B2/4
ZEEHAN B4/1	ZEEHAN B4/2
ZEEHAN B4/3	ZEEHAN B4/4

RENISON LIMITED

ZEEHAN B4/3 014

ZINC GEOCHEMISTRY

IN P.P.M. 85-2449 215

SCALE. 1:5000 METRES

100 0 100 200 300

DRAWN	P.K.
TRACED	P.K/S.F.
DATE	May, 84
SCALE	1:5000
DRAWING No.	FIG. 15

Blowfly
Mosquito
Voudeau
Mc Kimmie
Nickle Reward
Great Nevada
E.L. 15/76
BLACK HILL GRID
INTERMEDIATE GRID
DUNDAS GRID
RAZORBACK GRID
KAPI GRID
GRAND PRIZE
Grand Prize
Black Hill
Razorback
Razorback North
Razorback
E.L. 42/71
53 66000N
53 65000N
5364000N
53 63000N
3600E
3620E
3640E
3660E
3680E
3700E
3000W
2800W
2600W
2400W
2200W
2000W
1800W
1600W
1400W
1200W
1000W
800W
600W
400W
200W
1500N
1400N
1300N
1100N
1000N
900N
700N
500N
300N
100N
436N
428N
420N
416N
412N
404N
396N
388N
380N
372N
52N
245N
14
15
123251
5 cm

GEOCHEMICAL SAMPLING

Grand Prize Grid	Placer Prospecting Pty Ltd (1964-66)
North Dundas Grid	Renison Ltd. (1967-70)
Commonwealth Hill Grid	Renison Ltd (1968-69)
Razorback Hill Grid	Renison Ltd (1968-69)
Kapi Grid	Renison Ltd (1976-77)
Black Hill & Carbine Hill Grids	G.F.E.L (1983)

SAMPLES
- Soil
× Rock Chip

ZEEHAN B2/3	ZEEHAN B2/4
ZEEHAN B4/1	ZEEHAN B4/2
ZEEHAN B4/3	ZEEHAN B4/4

RENISON LIMITED

ZEEHAN B4/3 015

TIN GEOCHEMISTRY IN P.P.M.

85-2449.25

SCALE. 1:5000 METRES 0 100 200 300

DRAWN	P.K.
TRACED	P.K/S.F.
DATE	May, 84
SCALE	1:5000
DRAWING No.	FIG.16

Blowfly
Mosquito
Vaudeau
Mc Kimmie
Nickle Reward
Great Nevada
E.L. 15/76
BLACK HILL GRID
INTERMEDIATE GRID
GRAND PRIZE GRID
KAPI GRID
DUNDAS GRID
RAZORBACK GRID
Grand Prize
Black Hill
Razorback North
Razorback
E.L. 42/71
53 66 000 N
53 65000 N
53 64000 N
53 63000 N
356 000 E
357 000 E
358 000 E
359 000 E
360 000 E
369 000 E
370 000 E
2800W
2600W
2400W
2200W
2000W
1800W
1600W
1400W
1200W
1000W
800W
600W
400W
200W
1600N
1500N
1400N
1300N
1100N
1000N
900N
800N
700N
600N
500N
400N
300N
200N
100N
436N
428N
420N
416N
412N
404N
396N
388N
380N
372N
52N
285
123252
5 cm

SAMPLES
- Soil
- Rock Chip

GEOCHEMICAL SAMPLING

Grand Prize Grid	:	Placer Prospecting Pty Ltd. (1964-66)
North Dundas Grid	:	Renison Ltd. (1967-70)
Commonwealth Hill Grid	:	Renison Ltd (1968-69)
Razorback Hill Grid	:	Renison Ltd (1968-69)
Kapi Grid	:	Renison Ltd. (1976-77)
Black Hill & Carbine Hill Grids	:	G.F.E.L. (1983)

ZEEHAN B2/3	ZEEHAN B2/4
ZEEHAN B4/1	ZEEHAN B4/2
ZEEHAN B4/3	ZEEHAN B4/4

RENISON LIMITED

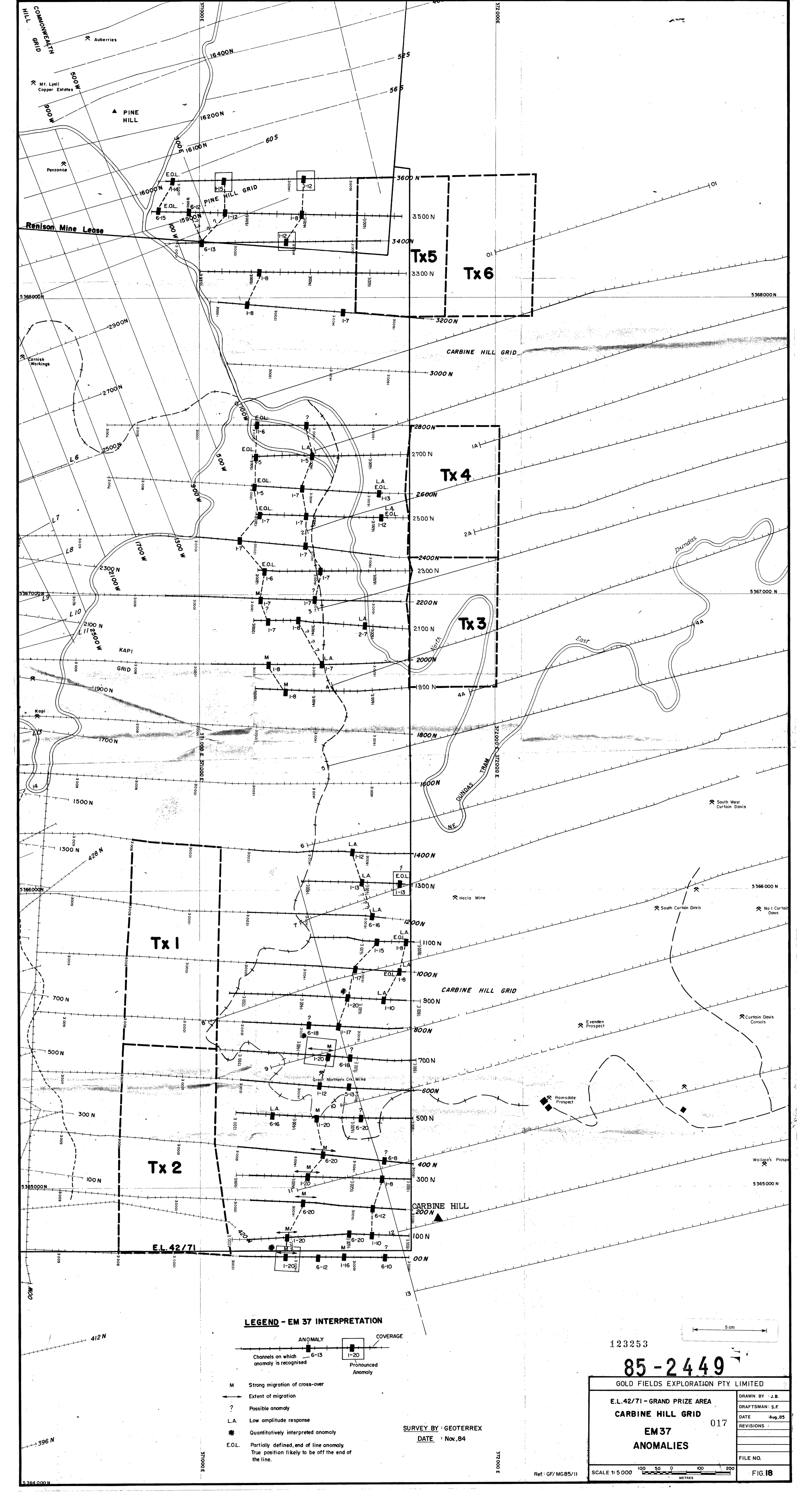
ZEEHAN B4/3 016

ARSENIC GEOCHEMISTRY

IN P.P.M. 85-2449 25

SCALE. 1:5000 METRES 100 0 100 200 300

DRAWN	P.K.
TRACED	P.K/S.F.
DATE	May, 84
SCALE	1:5000
DRAWING No:	FIG. 17



LEGEND - EM 37 INTERPRETATION

ANOMALY — COVERAGE

Channels on which anomaly is recognised — 6-13

1-20 Pronounced Anomaly

- M — Strong migration of cross-over
- ←→ — Extent of migration
- ? — Possible anomaly
- L.A. — Low amplitude response
- ✱ — Quantitatively interpreted anomaly
- E.O.L. — Partially defined, end of line anomaly. True position likely to be off the end of the line.

SURVEY BY : GEOTERREX

DATE : Nov.,84

Ref : GF/MG85/11

123253

85-2449

GOLD FIELDS EXPLORATION PTY. LIMITED

E.L.42/71 - GRAND PRIZE AREA

CARBINE HILL GRID

EM37

ANOMALIES

017

DRAWN BY : J.B.

DRAFTSMAN : S.F.

DATE : Aug.,85

REVISIONS :

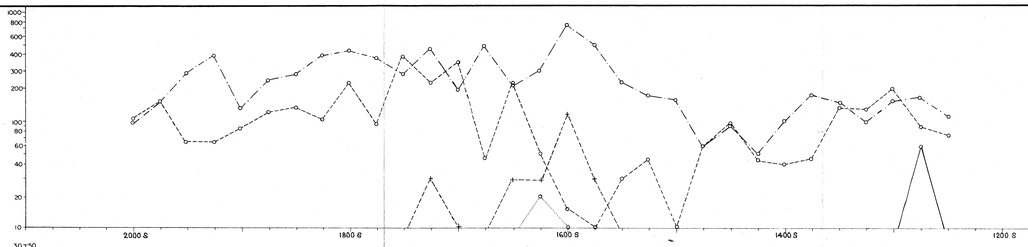
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SCALE 1:5000 — 100 50 0 100 200 METRES

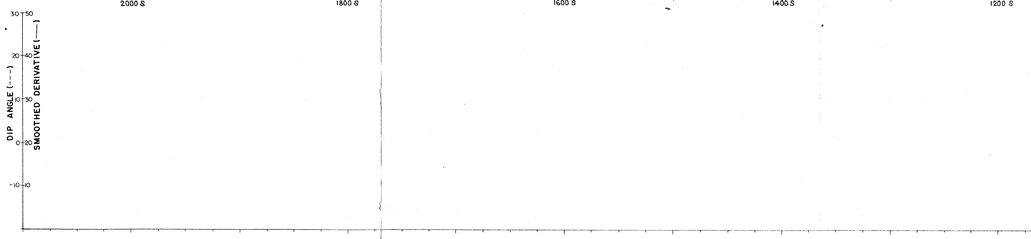
FIG. 18

018

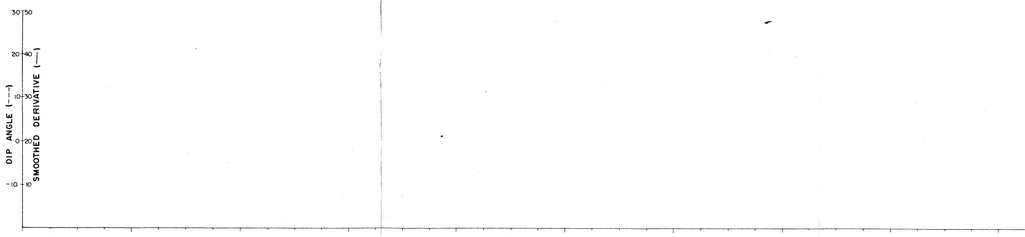
Geochemistry (P.P.M.)



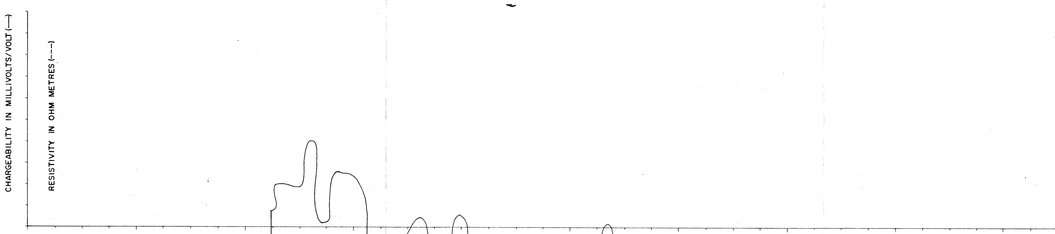
V.L.F. - E.M.
Tx = Jopon



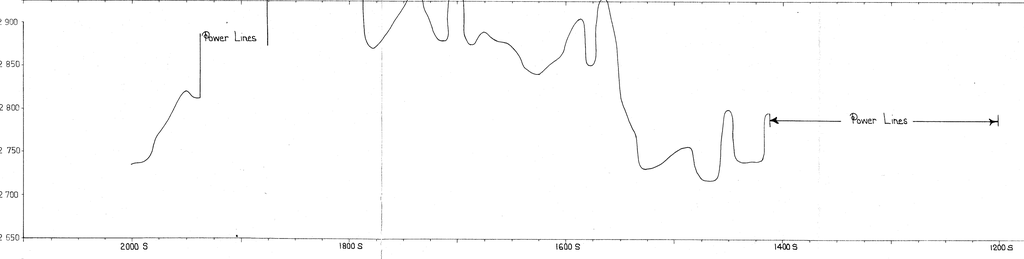
V.L.F. - E.M.
Tx = N.W. Cape



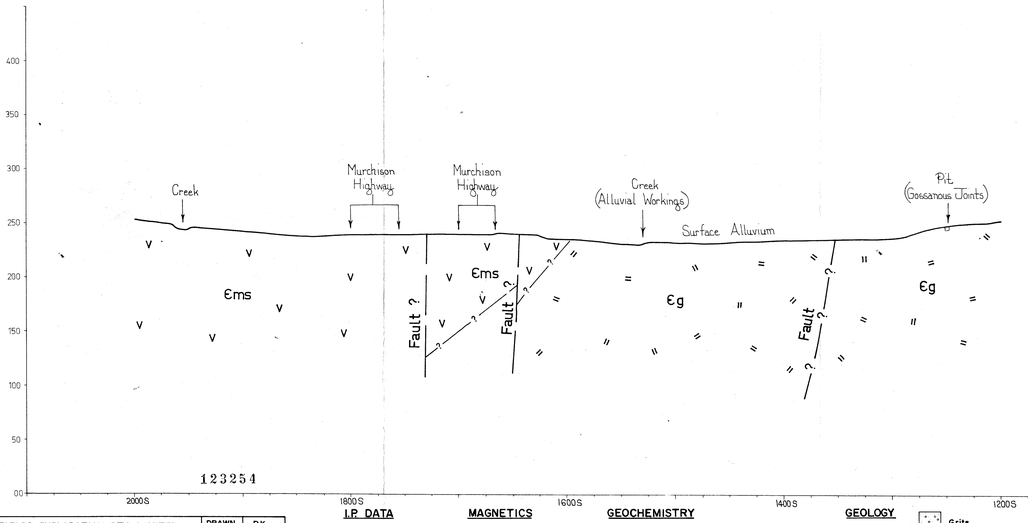
Gradient Array I.P.



Total Magnetic Field (Ō)



Topography & Geology
HEIGHT ABOVE SEA LEVEL - (Metres)



123254

GOLD FIELDS EXPLORATION PTY. LIMITED

E.L.42/71 — BLACK HILL GRID
LINE 3200 W. (2000S—1200S)
LOOKING N.W.
SCALE 1:2000 METRES

DRAWN	P.K.
TRACED	E.V.
DATE	April 1985
SCALE	1:2000
FIG. NO.	23

018

85-2449 2/5

I.P DATA

MAGNETICS
Base Station at : approx. 2800E 3350S
Designated :

GEOCHEMISTRY
Sn
Cu
Pb
Zn
As
Wo3

GEOLOGY

ROCK TYPE
- Shale
- Siltstone
- Sandstone
- Grits
- Conglomerate
- Rhyolitic tuffs
- Basic Tuffs

IGNEOUS - CAMBRIAN
- Melba Spilites (basic Lavas)
- Ultra-mafics
- Gabbro

DEVONIAN
- Granite
- Quartz porphyry

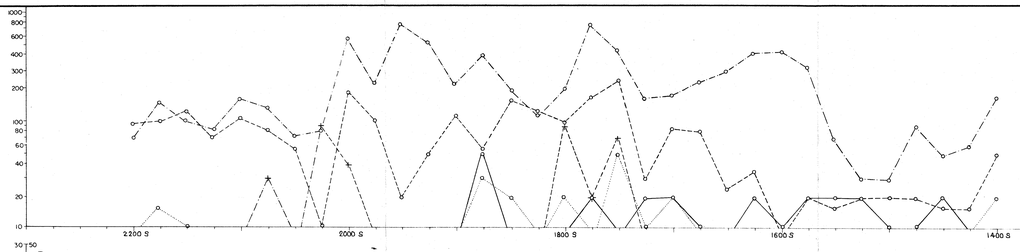
FORMATION
- Dundas Group (unasigned)
- Red Lead Conglomerate
- Brewery Junction
- Razorback
- Hodge Slate
- Fernfield
- Comet
- Fernflow

50 60 Bedding
50 80 Cleavage

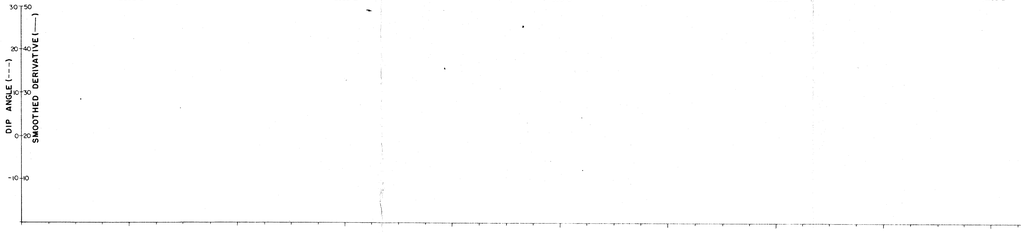
* All Bearings Magnetic

019

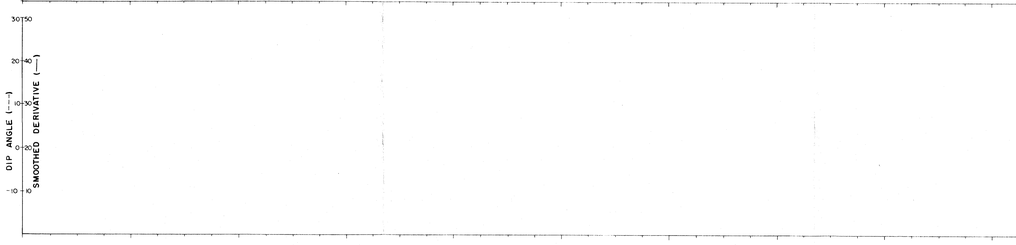
Geochemistry (PPM)



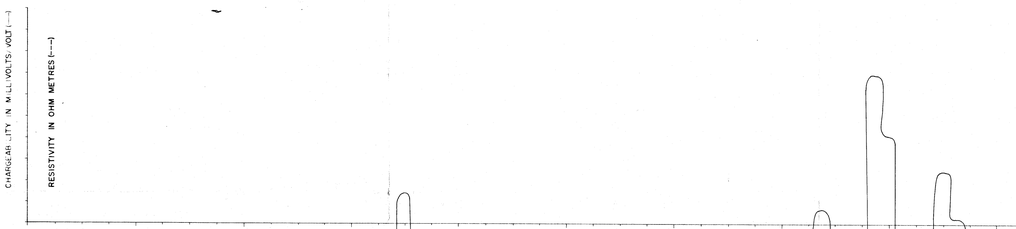
V.L.F. - E.M.
Tx = Japan



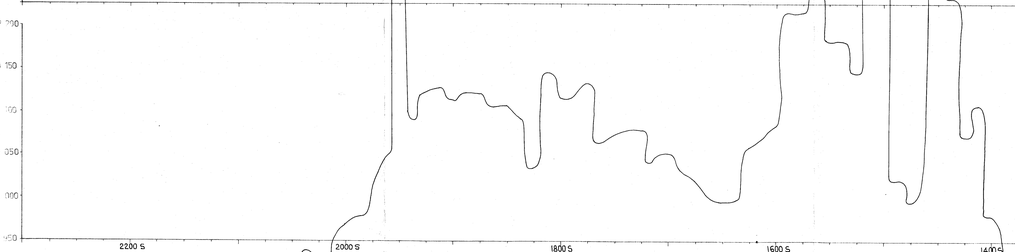
V.L.F. - E.M.
Tx = N.W. Cape



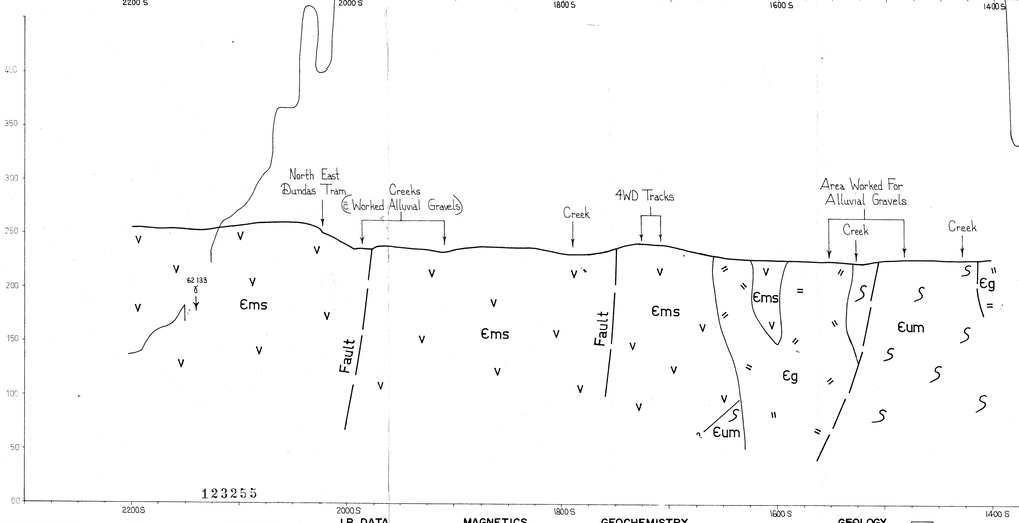
Gradient Array I.P.



Total Magnetic Field (γ)



Topography & Geology
HEIGHT ABOVE SEA LEVEL - (Metres)



GOLD FIELDS EXPLORATION PTY. LIMITED	
E.L.42/71 — BLACK HILL GRID	
LINE 3100 W. (2200S — 1400S)	
LOOKING N.W.	
SCALE 1:2000 METRES	

DRAWN	P.K.
TRACED	E.V.
DATE	April 1985
SCALE	1:2000
FIG. NO.	24

I.P. DATA

019

85-2449 p/s

MAGNETICS

Base Station at: approx. 2800E 3350S

Designated:

GEOCHEMISTRY

Sn
Cu
Pb
Zn
As
Wo3

GEOLOGY

ROCK TYPE
- Shale
- Siltstone
- Sandstone
- Grits
- Conglomerate
- Rhyolitic tuffs
- Basic Tuffs

IGNEOUS - CAMBRIAN
- Melba Spilites (basic Lavas)
- Ultra-mafics
- Gabbro

DEVONIAN
- Granite
- Quartz porphyry

FORMATION
- Cd Dundas Group (unasigned)
- Cdl Red Lead Conglomerate
- Cb Brewery Junction
- Cr Razorback
- Ch Hodge Slate
- Cfn Fernfield
- Cco Comet
- Cf Fernflow

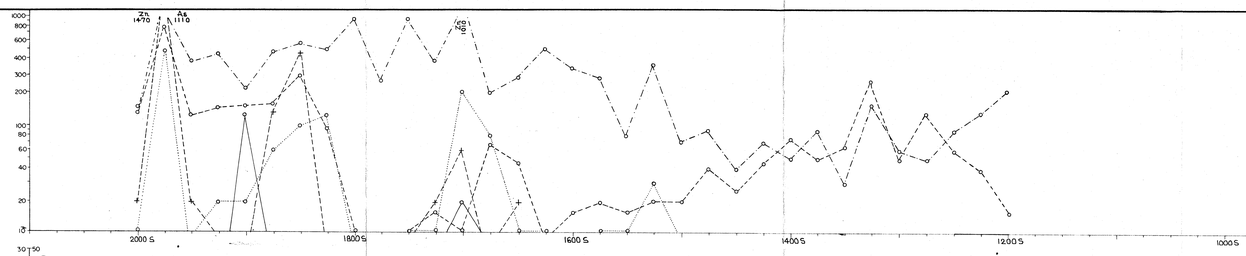
Bedding

Cleavage

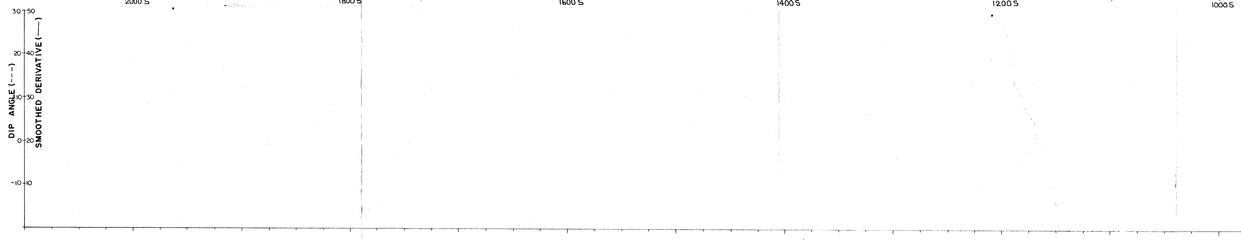
* All Bearings Magnetic

020

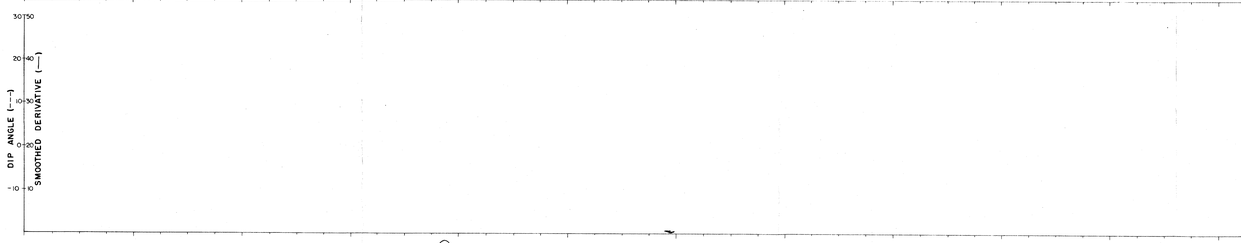
Geochemistry (P.P.M.)



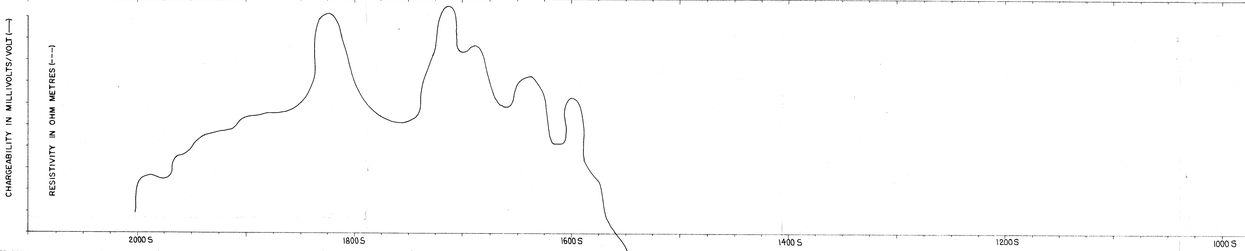
V.L.F. - E.M.
Tx = Japan



V.L.F. - E.M.
Tx = N.W. Cape

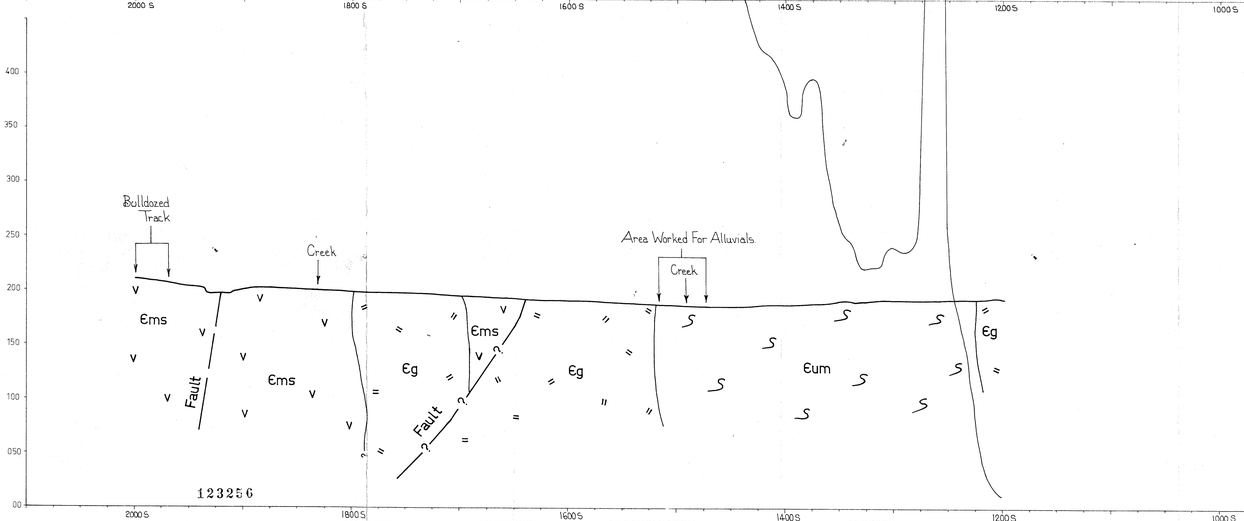


Gradient Array I.P.



Total Magnetic Field (Ø)

Topography & Geology
(HEIGHT ABOVE SEA LEVEL - 1 Metres)



GOLD FIELDS EXPLORATION PTY. LIMITED

E.L.42/71 — BLACK HILL GRID

LINE 3000 W. (2000S — 1200S)

LOOKING N.W

SCALE 1: 2000 METRES

DRAWN	P.K.
TRACED	E.V.
DATE	April 1985
SCALE	1:2000
FIG. NO.	25

020

85-21149 2/5

I.P DATA

MAGNETICS

Base Station at : approx. 2800E 3350S

Designated :

GEOCHEMISTRY

Sn
Cu
Pb
Zn
As
Wo3

GEOLOGY

ROCK TYPE

- Shale
- Siltstone
- Sandstone
- Grits
- Conglomerate
- Rhyolitic tuffs
- Basic Tuffs

IGNEOUS - CAMBRIAN

- Melba Spilites (basic Lavas)
- Ultra-mafics
- Gabbro

DEVONIAN

- Granite
- Quartz porphyry

FORMATION

- Dundas Group (unasigned)
- Red Lead Conglomerate
- Brewery Junction
- Razorback
- Hodge Slate
- Fernfield
- Comet
- Fernflow

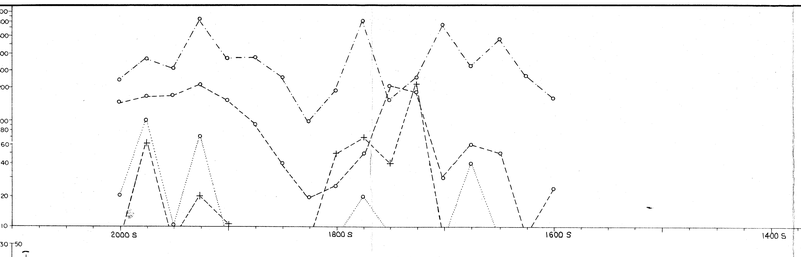
Bedding 30/60

Cleavage 50/80

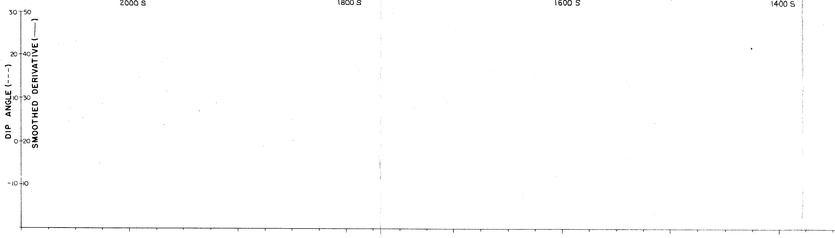
* All Bearings Magnetic

021

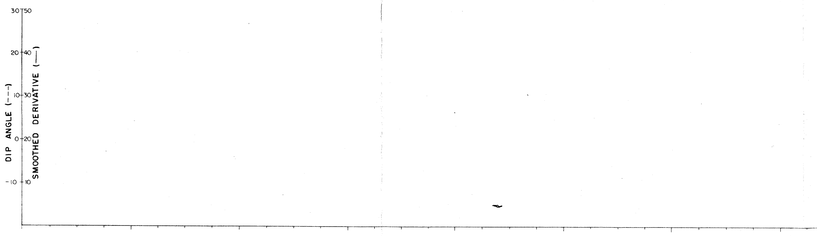
Geochemistry (PPM.)



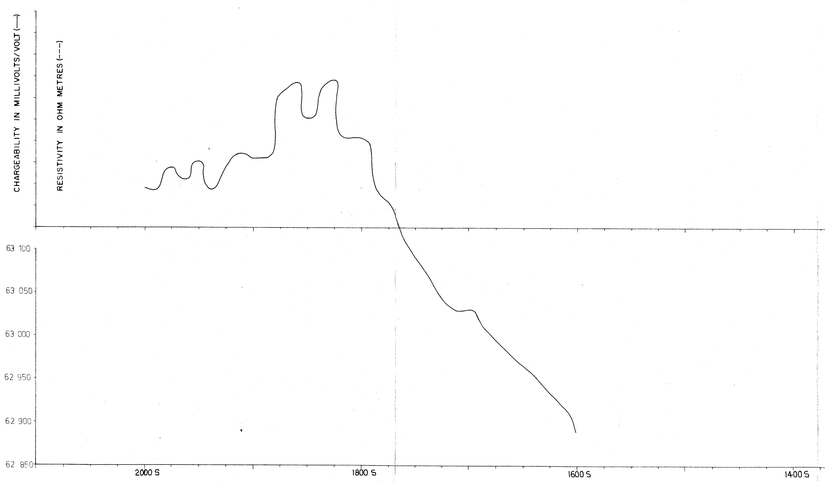
V.L.F. - E.M. Tx = Japan



V.L.F. - E.M. Tx = N.W. Cape

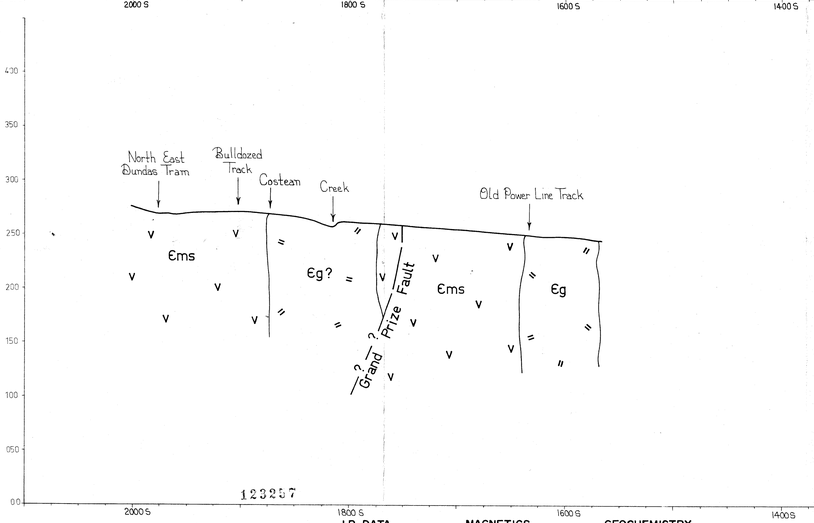


Gradient Array I.P.



Total Magnetic Field (δ)

Topography & Geology HEIGHT ABOVE SEA LEVEL - (Metres)



123257

GOLD FIELDS EXPLORATION PTY. LIMITED

E.L.42/71 — BLACK HILL GRID

LINE 2900 W. (2000S–1600S)

LOOKING N.W.

SCALE 1:2000 METRES

DRAWN	P.K.
TRACED	E.V.
DATE	April 1985
SCALE	1:2000
FIG. NO.	26

85-2449 215

021

I.P. DATA

MAGNETICS

Base Station at : approx. 2800E 3350S

Designated :

GEOCHEMISTRY

Sn
Cu
Pb
Zn
As
Wo3

GEOLOGY

ROCK TYPE

- Shale
- Siltstone
- Sandstone
- Grits
- Conglomerate
- Rhyolitic tuffs
- Basic Tuffs

IGNEOUS - CAMBRIAN

- Melba Spilites (basic Lavas)
- Ultra-mafics
- Gabbro

DEVONIAN

- Granite
- Quartz porphyry

FORMATION

- Dundas Group (unasigned)
- Red Lead Conglomerate
- Brewery Junction
- Razorback
- Hodge Slate
- Fernfield
- Comet
- Fernflow

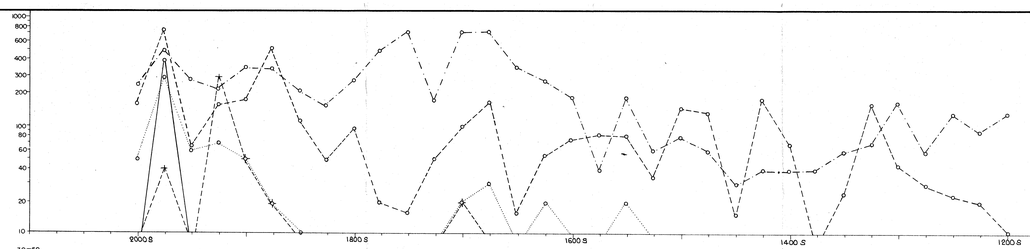
60/30 Bedding

80/50 Cleavage

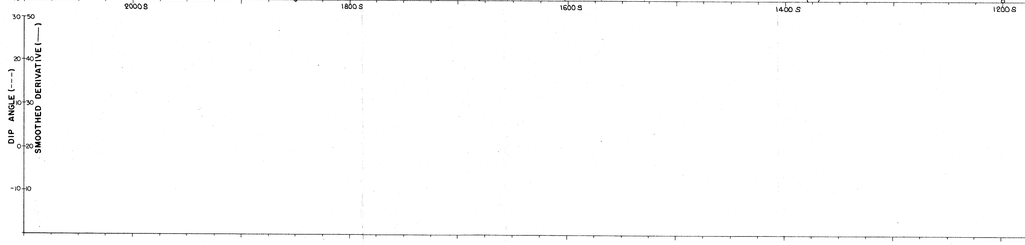
* All Bearings Magnetic

022

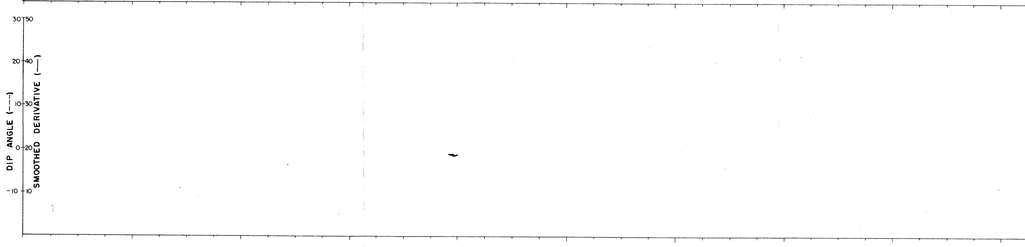
Geochemistry (P.P.M.)



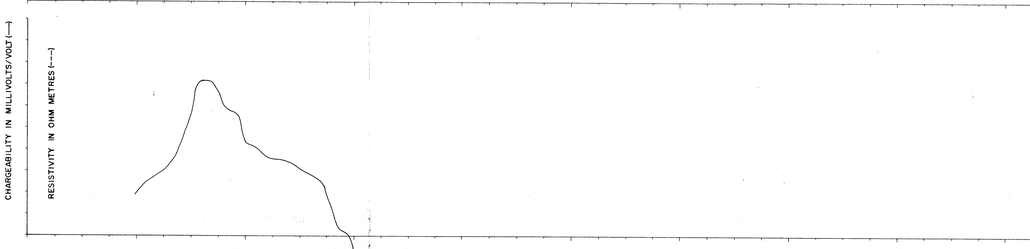
V.L.F. - E.M.
Tx = Japan



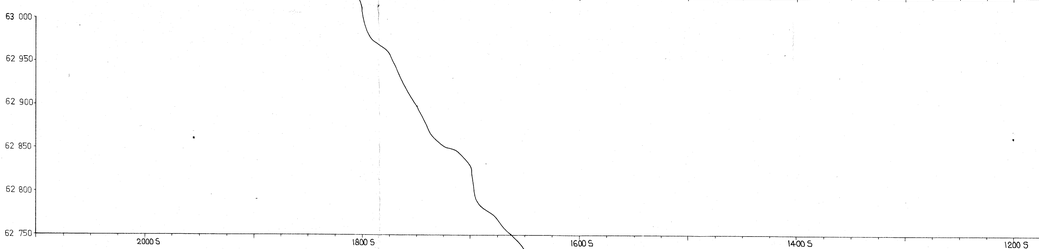
V.L.F. - E.M.
Tx = N.W. Cape



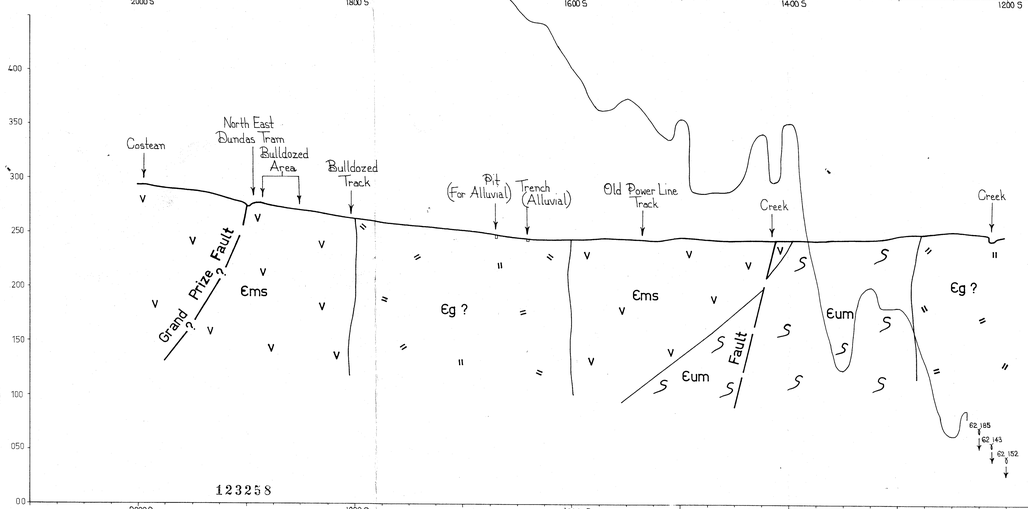
Gradient Array I.P.



Total Magnetic Field (Ø)



Topography & Geology
HEIGHT ABOVE SEA LEVEL - (Metres)



123258

85-2449 315

GOLD FIELDS EXPLORATION PTY. LIMITED	
DRAWN	P.K.
TRACED	E.V.
DATE	April 1985
SCALE	1:2000
FIG. NO.	27

E.L.42/71 — BLACK HILL GRID
LINE 2800 W. (2000 S — 1200 S)
LOOKING N.W
SCALE 1: 2000 METRES

022

I.P DATA

MAGNETICS
Base Station at : approx. 2800 E 3350 S
Designated :

GEOCHEMISTRY
Sn
Cu
Pb
Zn
As
Wo3

GEOLOGY

ROCK TYPE
- Shale
- Siltstone
- Sandstone
- Grits
- Conglomerate
- Rhyolitic tuffs
- Basic Tuffs

IGNEOUS - CAMBRIAN
- Melba Spilites (basic Lavas)
- Ultra - mafics
- Gabbro

DEVONIAN
- Granite
- Quartz porphyry

FORMATION
- Dundas Group (unasigned)
- Red Lead Conglomerate
- Brewery Junction
- Razorback
- Hodge Slate
- Fernfield
- Comet
- Fernflow

30/60 Bedding
50/80 Cleavage

* All Bearings Magnetic

023

Geochemistry (P.P.M.)

Zn 1180

2000 S 1800 S 1600 S

V.L.F. - E.M.

Tx = Japan

DIP ANGLE (---)

SMOOTHED DERIVATIVE (——)

V.L.F. - E.M.

Tx = N.W. Cove

DIP ANGLE (---)

SMOOTHED DERIVATIVE (——)

Gradient Array I.P.

CHARGEABILITY IN MILLIVOLTS/VOLT (——)

RESISTIVITY IN OHM METRES (- - -)

Total Magnetic Field (Ø)

62 900
62 850
62 800
62 750
62 700
62 650

2000 S 1800 S 1600 S 1400 S

Topography & Geology

HEIGHT ABOVE SEA LEVEL - (Metres)

400 350 300 250 200 150 100 050 00

5 cms

North East Dundas Tram

Drainages Worked For Alluvials

Creek Creek Trench

Cms

Eg ?

Eg ?

Fault

123259

2000 S 1800 S 1600 S 1400 S

GOLD FIELDS EXPLORATION PTY. LIMITED	DRAWN P.K.
	TRACED E.V.
E.L.42/71 — BLACK HILL GRID	DATE April 1985
LINE 2700 W. (2000S—1600S)	SCALE 1:2000
LOOKING N.W.	FIG. NO. 28
SCALE 1:2000 METRES 0 40 80 120	

I.P. DATA

023

85-2449

3/5

MAGNETICS

Base Station at : approx. 2800E 3350S

Designated :

GEOCHEMISTRY

Sn
Cu
Pb
Zn
As
Wo3

GEOLOGY

ROCK TYPE

- Shale
- Siltstone
- Sandstone
- Grits
- Conglomerate
- Rhyolitic tuffs
- Basic Tuffs

IGNEOUS - CAMBRIAN

- Melba Spilites (basic Lavas)
- Ultra-mafics
- Gabbro

DEVONIAN

- Granite
- Quartz porphyry

FORMATION

- Dundas Group (unasigned)
- Red Lead Conglomerate
- Brewery Junction
- Razorback
- Hodge Slate
- Fernfield
- Comet
- Fernflow

Bedding

Cleavage

*All Bearings Magnetic

024

Geochemistry (P.P.M.)

Cu 2010

1800 S 1600 S 1400 S 1200 S 1000 S 800 S 600 S 400 S 200 S

V.L.F. - E.M.
Tx = Japon

DIP ANGLE (---) SMOOTHED DERIVATIVE (——)

V.L.F. - E.M.
Tx = N.W. Cape

DIP ANGLE (---) SMOOTHED DERIVATIVE (——)

Gradient Array I.P.

CHARGEABILITY IN MILLIVOLTS/VOLT (——)

RESISTIVITY IN OHM METRES (---)

63 305 Ω

Total Magnetic Field (Ø)

62 500 — 62 500
62 400 — 62 450
62 300 — 62 400
62 200 — 62 350
62 100 — 62 300
62 000 — 62 250

2000 S 1800 S 1600 S 1400 S 1200 S 1000 S 800 S 600 S 400 S 200 S

Topography & Geology
HEIGHT ABOVE SEA LEVEL - (Metres)

500 450 400 350 300 250 200 150 100

5 cm

North East Bundas Tram
Old Track
Creek
Creek
Old Power Line Track
Creek
Creek (Alluvial Workings)
Bulldozed Track
Creek (Alluvial Workings)
Creek
Bulldozed Track
Bulldozed Track
Bulldozed Track
Fault ?

Ems
Eg ?
Ems
Ems
Ems

123260

1800 S 1600 S 1400 S 1200 S 1000 S 600 S 400 S 200 S

GOLD FIELDS EXPLORATION PTY. LIMITED	
E.L. 42/71 — BLACK HILL GRID	
LINE 2600 W. (1875S — 200S)	
LOOKING N.W.	
SCALE 1: 2000 METRES	

DRAWN	P.K.
TRACED	E.V.
DATE	April 1985
SCALE	1:2000
FIG. NO.	29

024

85-2449 35

I.P. DATA

MAGNETICS

Base Station at : approx. 2800E 3350S

Designated :

GEOCHEMISTRY

Sn
Cu
Pb
Zn
As
Wo3

GEOLOGY

ROCK TYPE

- Shale
- Siltstone
- Sandstone
- Grits
- Conglomerate
- Rhyolitic tuffs
- Basic Tuffs

IGNEOUS - CAMBRIAN

- Emx — Melba Spilites (basic Lavas)
- Eum — Ultra - mafics
- Eg — Gabbro

DEVONIAN

- Dg — Granite
- Dqp — Quartz porphyry

FORMATION

- Cd — Dundas Group (unasigned)
- Crl — Red Lead Conglomerate
- Cb — Brewery Junction
- Cro — Razorback
- Ch — Hodge Slate
- Cfe — Fernfield
- Cco — Comet
- Cf — Fernflow

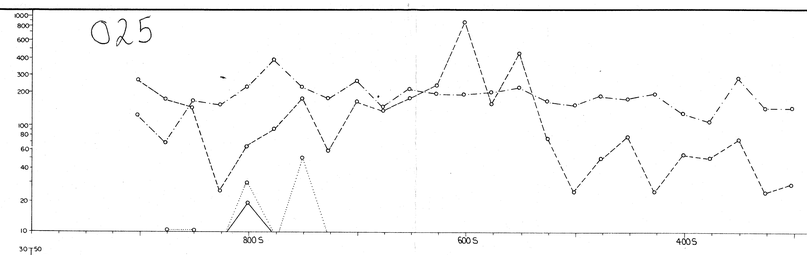
30/60 Bedding

50/60 Cleavage

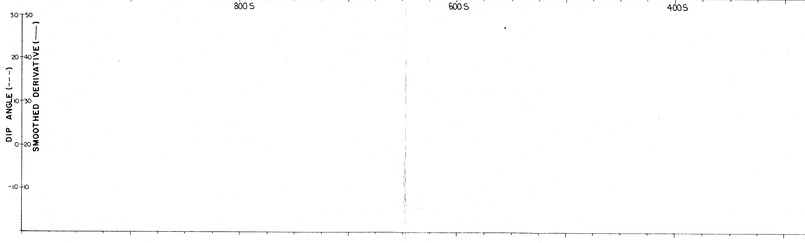
* All Bearings Magnetic

025

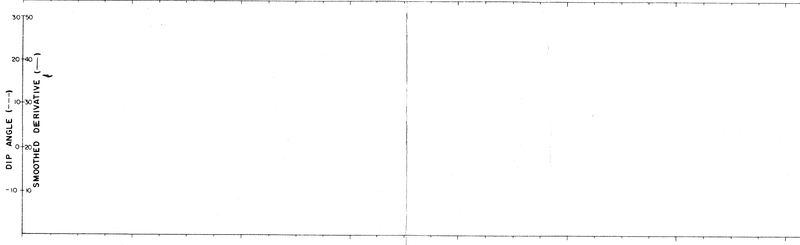
Geochemistry (P.P.M.)



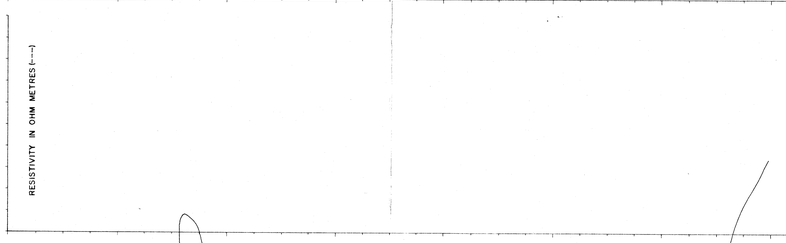
V.L.F. - E.M.
Tx = Japan



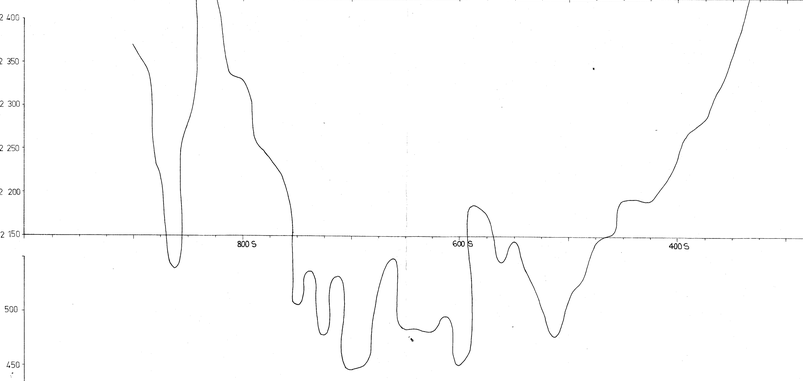
V.L.F. - E.M.
Tx = N.W. Cape



Gradient Array I.P.



Total Magnetic Field (Ỹ)



Topography & Geology
HEIGHT ABOVE SEA LEVEL - (Metres)

GOLD FIELDS EXPLORATION PTY. LIMITED	
E.L.42/71 — BLACK HILL GRID	
LINE 2400 W. (900S—300S)	
LOOKING N.W.	
SCALE 1:2000 METRES	

DRAWN	P.K.
TRACED	E.V.
DATE	April 1985
SCALE	1:2000
FIG. NO.	30

025

85-2449 35

I.P. DATA

MAGNETICS
Base Station at : approx. 2800E 3350S
Designated :

GEOCHEMISTRY
Sn
Cu
Pb
Zn
As
Wo3

GEOLOGY

ROCK TYPE
- Shale
- Siltstone
- Sandstone
- Grits
- Conglomerate
- Rhyolitic tuffs
- Basic Tuffs

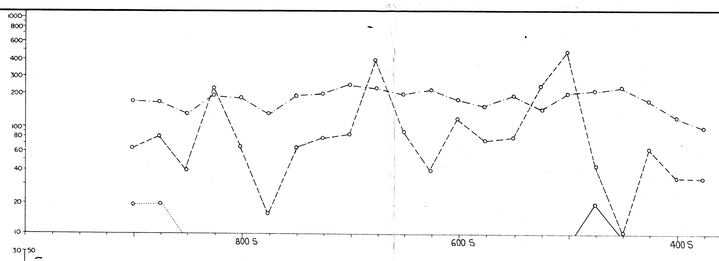
IGNEOUS - CAMBRIAN
- Cms — Melba Spilites (basic Lavas)
- Cum — Ultra-mafics
- Cg — Gabbro

DEVONIAN
- Dg — Granite
- Dqp — Quartz porphyry

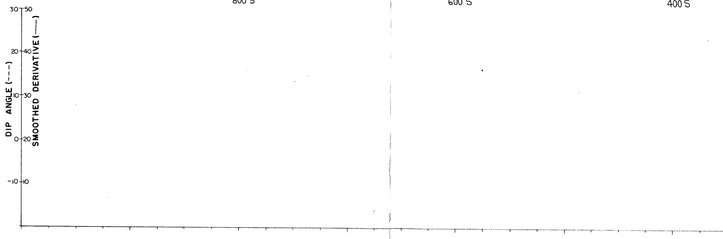
FORMATION
- Cd — Dundas Group (unasigned)
- Crl — Red Lead Conglomerate
- Cb — Brewery Junction
- Cr — Razorback
- Ch — Hodge Slate
- Cfn — Fernfield
- Cco — Comet
- Cf — Fernflow

30/60 Bedding
50/80 Cleavage
* All Bearings Magnetic

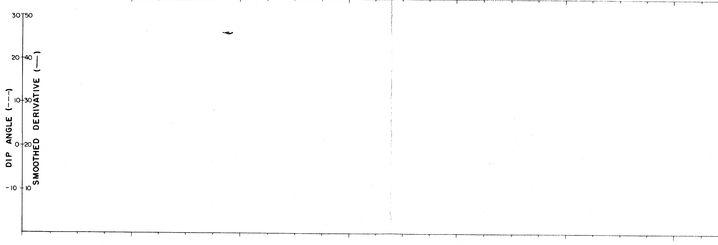
Geochemistry (P.P.M.)



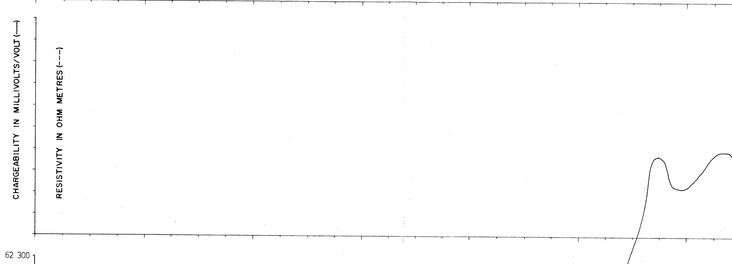
V.L.F. - E.M.
Tx = Japan



V.L.F. - E.M.
Tx = N.W. Cape

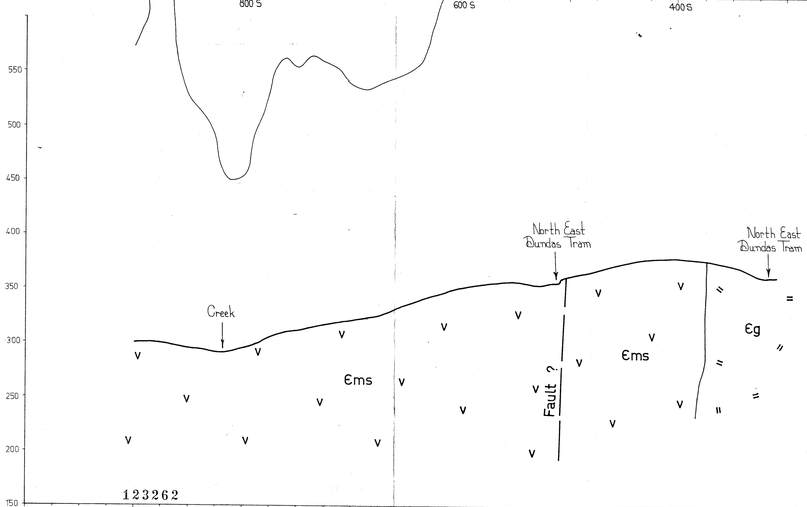


Gradient Array I.P.



Total Magnetic Field (δ)

Topography & Geology
HEIGHT ABOVE SEA LEVEL - (Metres)



123262

GOLD FIELDS EXPLORATION PTY. LIMITED	
E.L.42/71 — BLACK HILL GRID	
LINE 2200 W. (900S—375S)	
LOOKING N.W.	
SCALE 1: 2000 METRES	

DRAWN	P.K.
TRACED	E.V.
DATE	April 1985
SCALE	1:2000
FIG. NO.	31

026

85-2449 3/5

I.P. DATA

MAGNETICS
Base Station at approx. 2800E 3350S
Designated :

GEOCHEMISTRY
Sn
Cu
Pb
Zn
As
Wo3

GEOLOGY

ROCK TYPE
- Shale
- Siltstone
- Sandstone
- Grits
- Conglomerate
- Rhyolitic tuffs
- Basic Tuffs

IGNEOUS - CAMBRIAN
- Melba Spilites (basic Lavas)
- Ultra - mafics
- Gabbro

DEVONIAN
- Granite
- Quartz porphyry

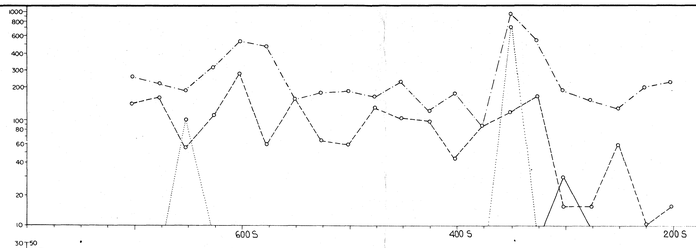
FORMATION
- Dundas Group (unassigned)
- Red Lead Conglomerate
- Brewery Junction
- Razorback
- Hodge Slate
- Fernfield
- Comet
- Fernflow

Bedding
Cleavage

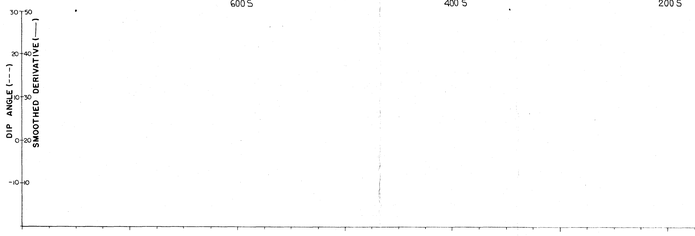
* All Bearings Magnetic

027

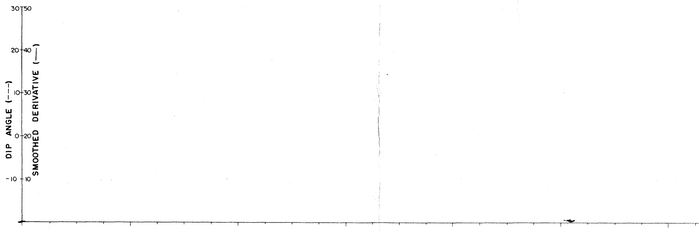
Geochemistry (P.P.M.)



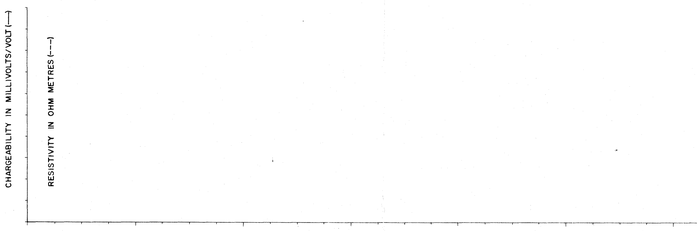
V.L.F. - E.M.
Tx = Jopon



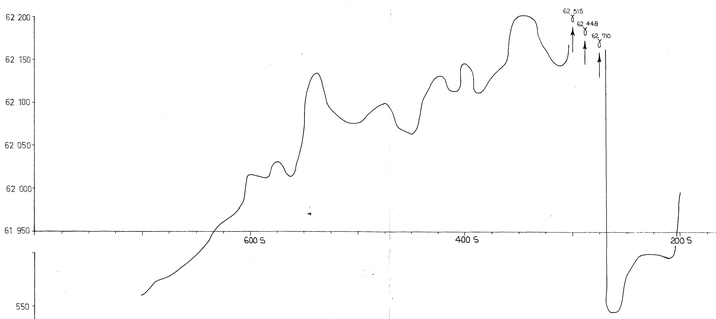
V.L.F. - E.M.
Tx = N.W. Cope



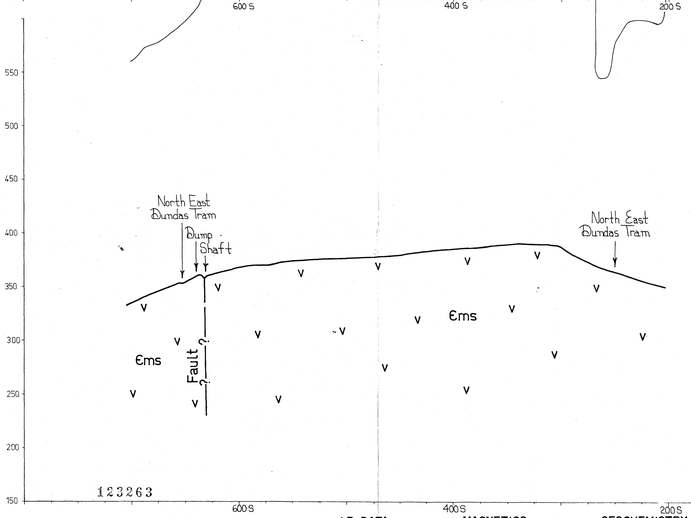
Gradient Array I.P.



Total Magnetic Field (Ỏ)



Topography & Geology
HEIGHT ABOVE SEA LEVEL - (Metres)



123263

GOLD FIELDS EXPLORATION PTY. LIMITED	DRAWN P.K.
	TRACED E.V.
E.L.42/71 — BLACK HILL GRID	DATE April 1985
LINE 2000 W. (700S—200S)	SCALE 1:2000
LOOKING N.W.	FIG. NO. 32
SCALE 1:2000 METRES	

027

85-2449 35

I.P. DATA

MAGNETICS
Base Station at : approx. 2800E 3350S
Designated :

GEOCHEMISTRY
Sn
Cu
Pb
Zn
As
Wo3

GEOLOGY

ROCK TYPE
- Shale
- Siltstone
- Sandstone
- Grits
- Conglomerate
- Rhyolitic tuffs
- Basic Tuffs

IGNEOUS - CAMBRIAN
- €ms' Melba Spilites (basic Lavas)
- €um Ultra-mafics
- €g Gabbro

DEVONIAN
- Dg Granite
- Dqp Quartz porphyry

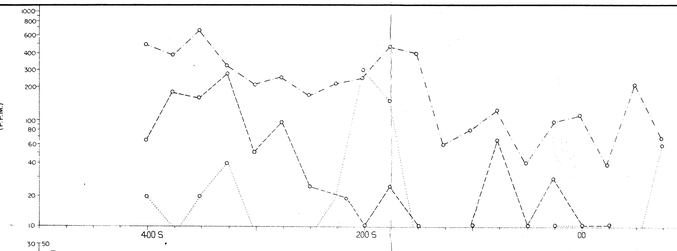
FORMATION
- €d Dundas Group (unasigned)
- €rl Red Lead Conglomerate
- €b Brewery Junction
- €ro Razorback
- €h Hodge Slate
- €fe Fernfield
- €co Comet
- €r Fernflow

60/30 Bedding
80/90 Cleavage

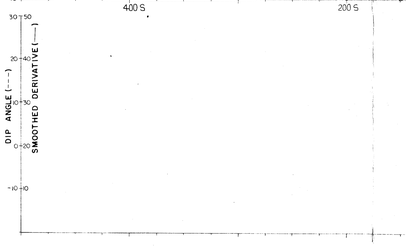
*All Bearings Magnetic

028

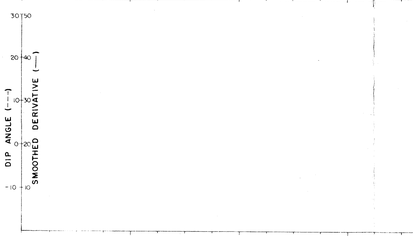
Geochemistry (P.P.M.)



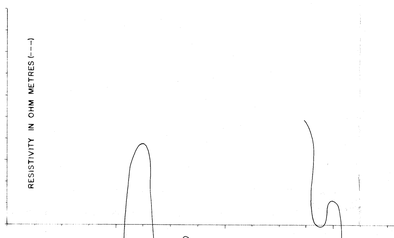
V.L.F. - E.M.
Tx = Jopon



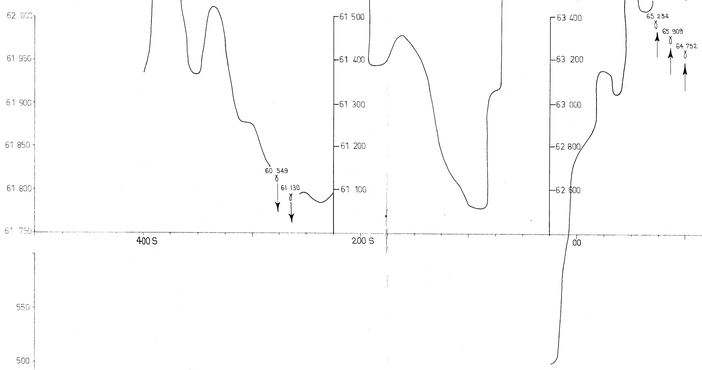
V.L.F. - E.M.
Tx = N.W. Cape



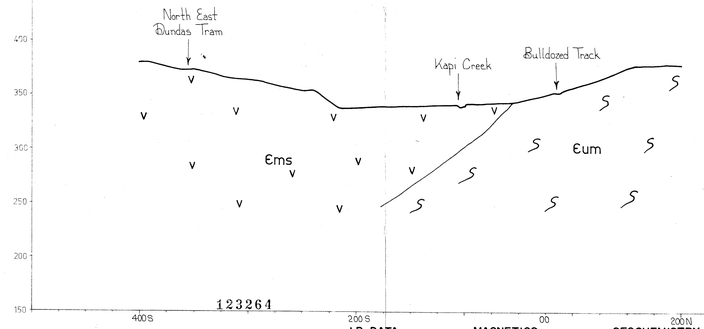
Gradient Array I.P.



Total Magnetic Field (δ)



Topography & Geology
HEIGHT ABOVE SEA LEVEL - (Metres)



123264

GOLD FIELDS EXPLORATION PTY. LIMITED	
DRAWN	P.K.
TRACED	E.V.
DATE	April 1985
SCALE	1:2000
FIG. NO.	33

E.L.42/71 — BLACK HILL GRID
LINE 1800 W. (400S – 7.5N)
LOOKING N.W.
SCALE 1:2000 METRES

028

85-2449 y/s

I.P. DATA

MAGNETICS
Base Station at: approx. 2800 E 3350 S
Designated:

GEOCHEMISTRY
Sn
Cu
Pb
Zn
As
Wo3

GEOLOGY

ROCK TYPE
- Shale
- Siltstone
- Sandstone
- Grits
- Conglomerate
- Rhyolitic tuffs
- Basic Tuffs

IGNEOUS - CAMBRIAN
- Cms — Melbo Spilites (basic Lavas)
- Cum — Ultra-mafics
- Cg — Gabbro

DEVONIAN
- Dg — Granite
- Dqp — Quartz porphyry

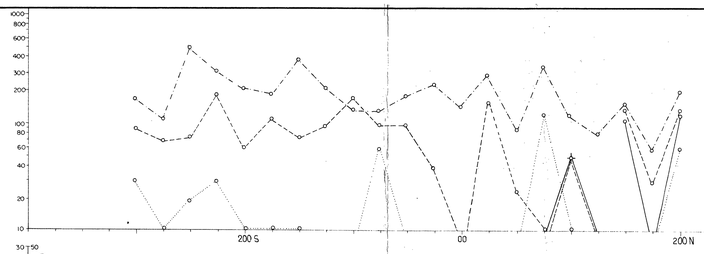
FORMATION
- Cd — Dundas Group (unasigned)
- Cfl — Red Lead Conglomerate
- Cb — Brewery Junction
- Cro — Razorback
- Ch — Hodge Slate
- Cfe — Fernfield
- Cco — Comet
- Cf — Fernflow

30/60 Bedding
50/80 Cleavage

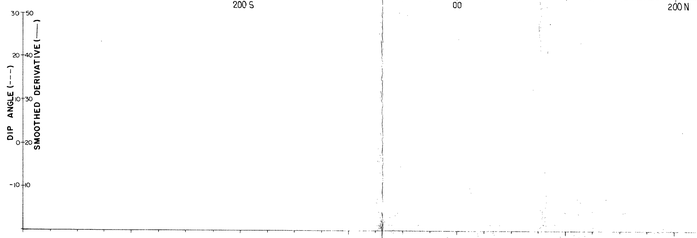
*All Bearings Magnetic

029

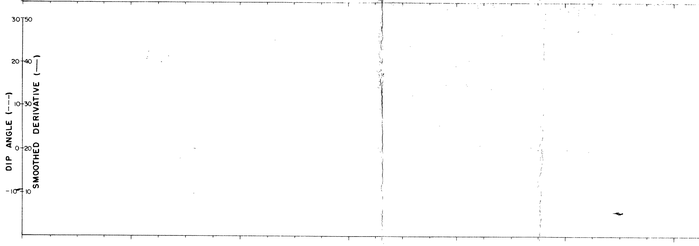
Geochemistry (PPM)



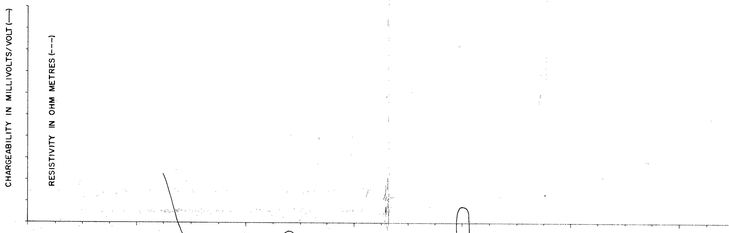
V.L.F. - E.M.
Tx = Japan



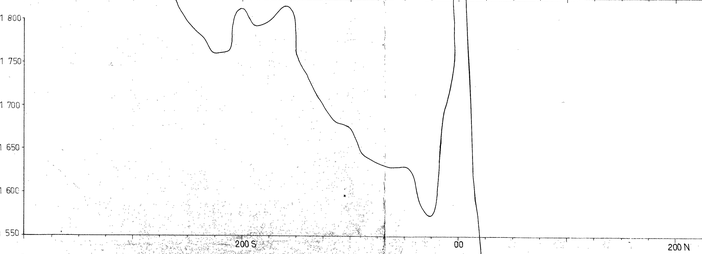
V.L.F. - E.M.
Tx = N.W. Cape



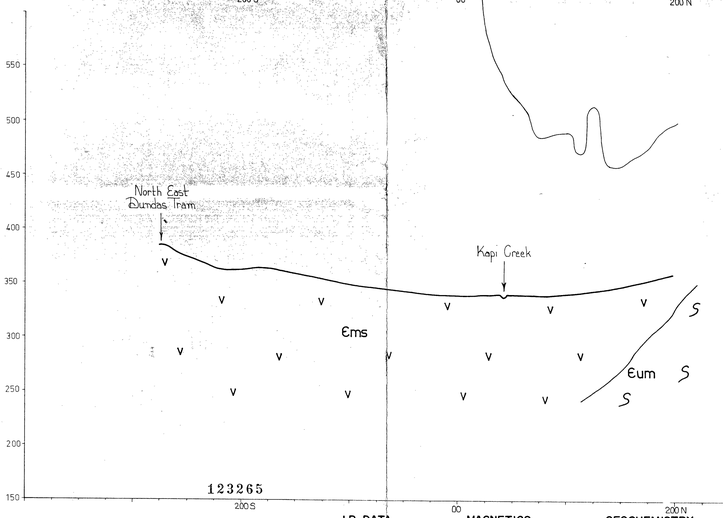
Gradient Array I.P.



Total Magnetic Field (Ø)



Topography & Geology
HEIGHT ABOVE SEA LEVEL - (Metres)



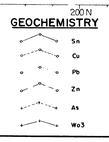
I.P. DATA

MAGNETICS

Base Station at approx. 2800E 3350S

Designated :

GEOCHEMISTRY



GEOLOGY

ROCK TYPE

- Shale
- Siltstone
- Sandstone
- Grits
- Conglomerate
- Rhyolitic tuffs
- Basic Tuffs

IGNEOUS - CAMBRIAN

- Melba Spilites (basic Lavas)
- Ultra-mafics
- Gabbro

DEVONIAN

- Granite
- Quartz porphyry

FORMATION

- Dundas Group (unasigned)
- Red Lead Conglomerate
- Brewery Junction
- Razorback
- Hodge Slate
- Fernfield
- Comet
- Fernflow

60/30 Bedding

80/50 Cleavage

* All Bearings Magnetic

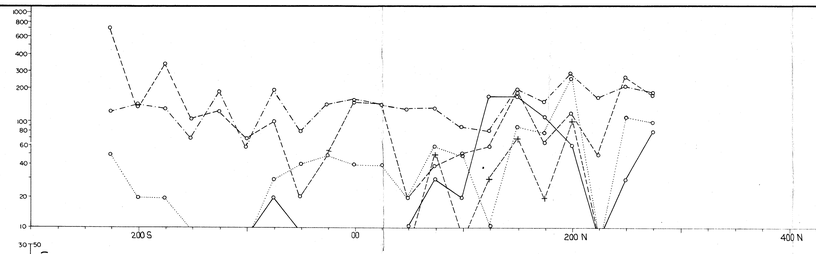
GOLD FIELDS EXPLORATION PTY. LIMITED	
E.L.42/71 — BLACK HILL GRID	
LINE 1600 W. (300S — 200N)	
LOOKING N.W.	
SCALE 1:2000 METRES	
DRAWN	P.K.
TRACED	E.V.
DATE	April 1985
SCALE	1:2000
FIG. NO.	34

029

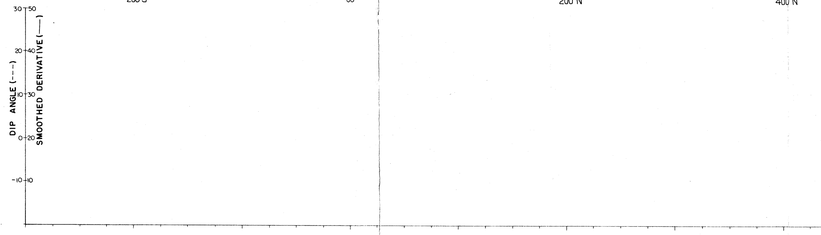
85-2479 ys

030

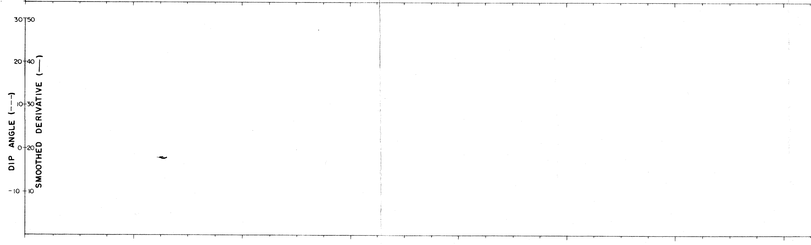
Geochemistry (P.P.M.)



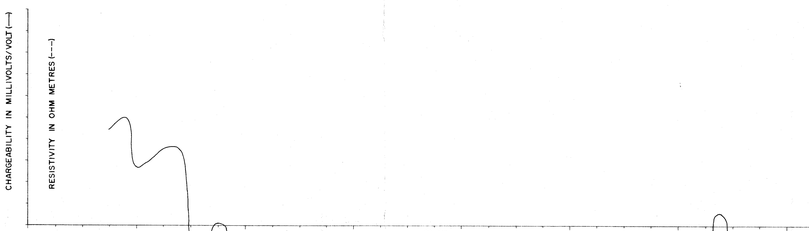
V.L.F. - E.M.
Tx = Japan



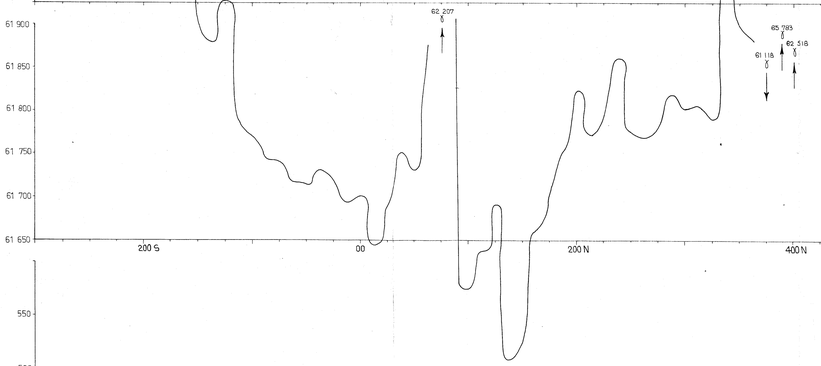
V.L.F. - E.M.
Tx = N.W. Cape



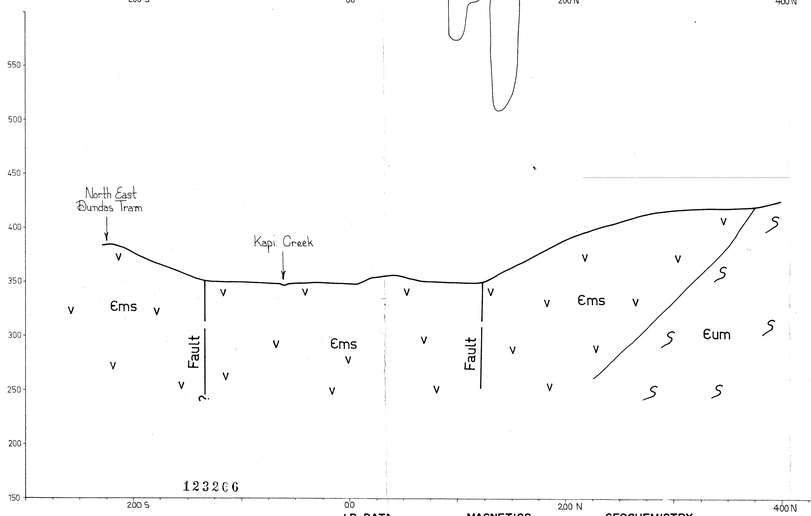
Gradient Array I.P.



Total Magnetic Field (Ø)



Topography & Geology
HEIGHT ABOVE SEA LEVEL - (Metres)



122266

GOLD FIELDS EXPLORATION PTY. LIMITED

E.L.42/71 — BLACK HILL GRID
LINE 1400 W. (225S—275N)
LOOKING N.W.

SCALE 1: 2000 METRES

DRAWN	P.K.
TRACED	E.V.
DATE	April, 1985
SCALE	1:2000
FIG. NO.	35

030

85-2449 ds

I.P. DATA

MAGNETICS
Base Station at : approx. 2800E 3350S
Designated :

GEOCHEMISTRY
Sn
Cu
Pb
Zn
As
Wo3

GEOLOGY

ROCK TYPE
- Shale
- Siltstone
- Sandstone
- Grits
- Conglomerate
- Rhyolitic tuffs
- Basic Tuffs

IGNEOUS - CAMBRIAN
- Melba Spilites (basic Lavas)
- Ultra-mafics
- Gabbro

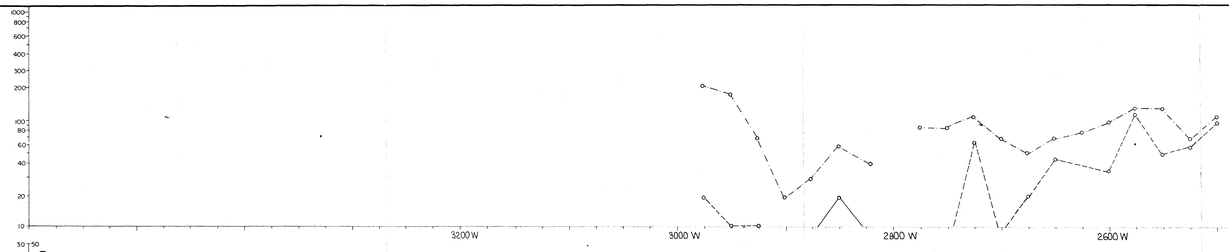
DEVONIAN
- Granite
- Quartz porphyry

FORMATION
- Dundas Group (unasigned)
- Red Lead Conglomerate
- Brewery Junction
- Razorback
- Hodge Slate
- Fernfield
- Comet
- Fernflow

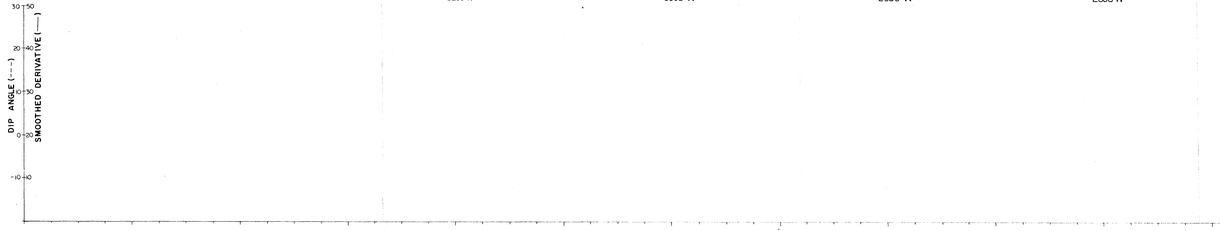
Bedding
Cleavage
* All Bearings Magnetic

031

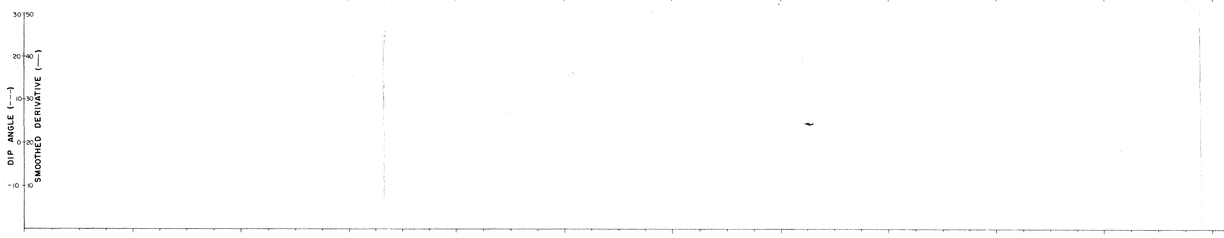
Geochemistry (PPM)



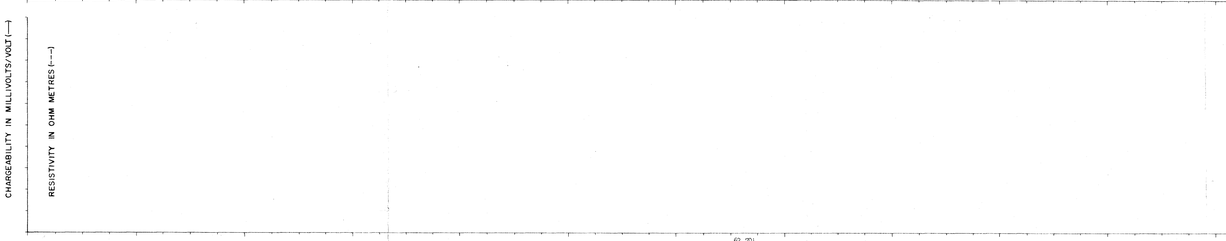
V.L.F. - E.M.
Tx = Japan



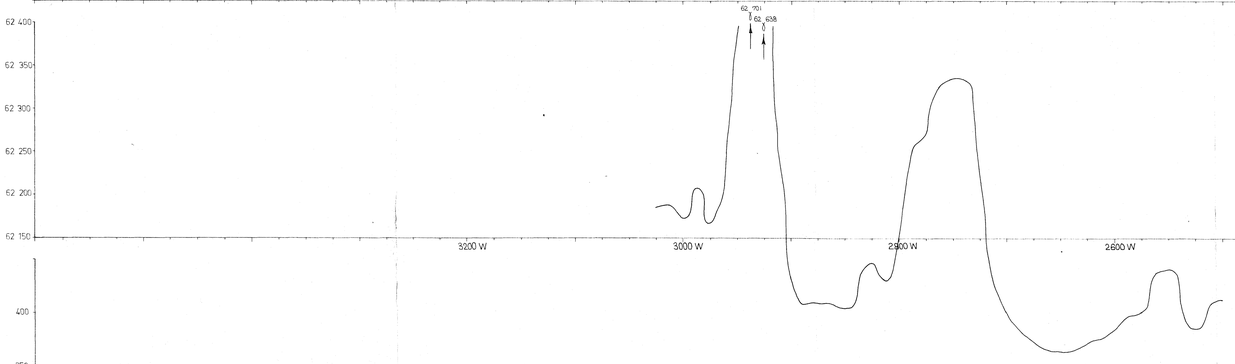
V.L.F. - E.M.
Tx = N.W. Cape



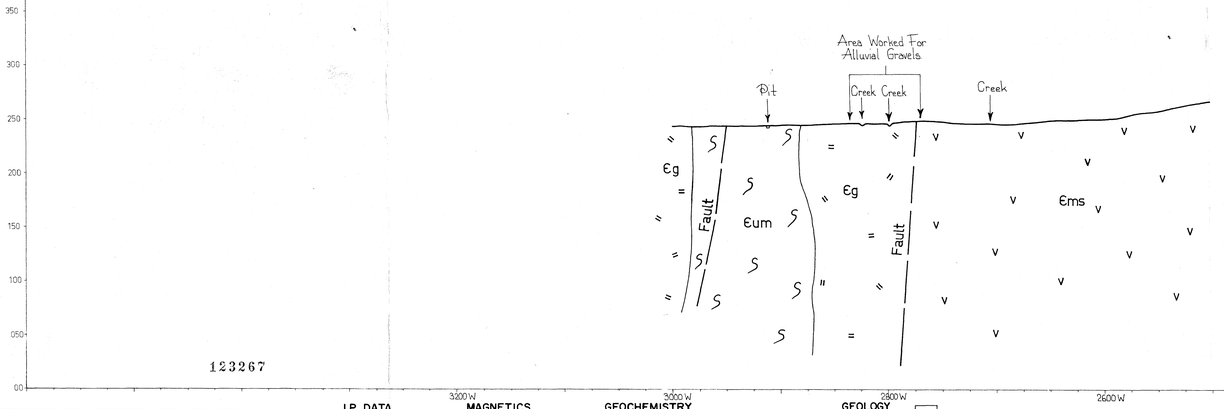
Gradient Array I.P.



Total Magnetic Field (Ō)



Topography & Geology
HEIGHT ABOVE SEA LEVEL - (Metres)



123267

GOLD FIELDS EXPLORATION PTY. LIMITED	
L.42/71 — BLACK HILL GRID	
LINE 1200 S. (2975 W — 2500 W)	
LOOKING N.	
SCALE 1: 2000 METRES	

DRAWN	P.K.
TRACED	E.V.
DATE	April 1985
SCALE	1:2000
FIG. NO.	36

031

85-2449 JK

I.P. DATA

MAGNETICS
Base Station at : approx. 2800E 3350S
Designated :

GEOCHEMISTRY
Sn
Cu
Pb
Zn
As
Wo3

GEOLOGY

ROCK TYPE
- Shale
- Siltstone
- Sandstone
- Grits
- Conglomerate
- Rhyolitic tuffs
- Basic Tuffs

IGNEOUS - CAMBRIAN
- Melba Spilites (basic Lavas)
- Ultra - mafics
- Gabbro

DEVONIAN
- Granite
- Quartz porphyry

FORMATION
- Dundas Group (unassigned)
- Red Lead Conglomerate
- Brewery Junction
- Razorback
- Hodge Slate
- Fernfield
- Comet
- Fernflow

60/50 Bedding
80/50 Cleavage

*All Bearings Magnetic

032

Geochemistry (PPM)

1000 800 600 400 300 200 100 80 60 40 20 10

3200 W 3000 W 2800 W 2600 W 2400 W

V.L.F. - E.M.
Tx = Japan

30 20 10 0 -10 | 50 40 30 20 10 0 -10

DIP ANGLE (---)
SMOOTHED DERIVATIVE (——)

V.L.F. - E.M.
Tx = N.W. Cape

30 20 10 0 -10 | 50 40 30 20 10 0 -10

DIP ANGLE (---)
SMOOTHED DERIVATIVE (——)

Gradient Array I.P.

CHARGEABILITY IN MILLIVOLTS/VOLT (——)

RESISTIVITY IN OHM METRES (---)

62,982

3200 W 3000 W 2800 W 2600 W

61,023 60,080

Total Magnetic Field (δ)

62 500 62 400 62 300 62 200 62 100 62 000

3200 W 3000 W 2800 W 2600 W

Topography & Geology
HEIGHT ABOVE SEA LEVEL - (Metres)

450 400 350 300 250 200 150 100 050

5 cm

Area Trenched And Worked For Alluvial Gravels.

Creek Creek Creek

S S S V V V

S Eum S Fault V V Ems V V

S V V V V

3200 W 3000 W 2800 W 2600 W

123268

GOLD FIELDS EXPLORATION PTY. LIMITED	DRAWN	P.K.	
	TRACED	E.V.	
E.L.42/71 — BLACK HILL GRID	DATE	April 1985	
LINE 1000 S. (3000W — 2600W)	SCALE	1:2000	
LOOKING N.	FIG. NO.	032	
SCALE 1:2000 METRES		37	

85-2449 35

I.P DATA

MAGNETICS

Base Station at : approx. 2800E 3350S

Designated :

GEOCHEMISTRY

Sn Cu Pb Zn As Wo3

GEOLOGY

ROCK TYPE

- Shale
- Siltstone
- Sandstone
- Grits
- Conglomerate
- Rhyolitic tuffs
- Basic Tuffs

IGNEOUS - CAMBRIAN

- Melba Spilites (basic Lavas)
- Ultra-mafics
- Gabbro

DEVONIAN

- Granite
- Quartz porphyry

FORMATION

- Dundas Group (unasigned)
- Red Lead Conglomerate
- Brewery Junction
- Razorback
- Hodge Slate
- Fernfield
- Comet
- Fernflow

Bedding

Cleavage

* All Bearings Magnetic

033

Geochemistry (P.P.M.)

1000 800 600 400 300 200 100 80 60 40 20 10

3200 W 3000 W 2800 W 2600 W

V.L.F. - E.M. Tx = Jopon

DIP ANGLE (----) SMOOTHED DERIVATIVE (——)

30 20 10 0 -10 50 40 30 20 10 0 -10

V.L.F. - E.M. Tx = N.W. Cape

DIP ANGLE (----) SMOOTHED DERIVATIVE (——)

30 20 10 0 -10 50 40 30 20 10 0 -10

Gradient Array I.P.

CHARGEABILITY IN MILLIVOLTS/VOLT (——)

RESISTIVITY IN OHM METRES (----)

63 468

Total Magnetic Field (δ)

62 800 62 700 62 600 62 500 62 400

61 900 61 850 61 800 61 750 61 700

3200 W 3000 W 2800 W 2600 W

59 844

Readings not repeatable.

Topography & Geology

HEIGHT ABOVE SEA LEVEL - (Metres)

550 500 450 400 350 300 250 200 150

Bulldozed Track · Creek · Creek (Worked For Alluvials) · Bulldozed Track · Creek

Eum · Fault · Eum · Ems

3200 W 3000 W 2800 W 2600 W

5 cm

123269

GOLD FIELDS EXPLORATION PTY. LIMITED	DRAWN P.K.
	TRACED E.V.
E.L.42/71 — BLACK HILL GRID	DATE April 1985
LINE 800S. (3050W – 2600W)	SCALE 1:2000
LOOKING N.	FIG. NO. 033
SCALE 1:2000 METRES 40 0 40 80 120	38

85-2449 3/6

I.P. DATA

MAGNETICS

Base Station at : approx. 2800E 3350S

Designated :

GEOCHEMISTRY

Sn Cu Pb Zn As Wo3

GEOLOGY

ROCK TYPE

Shale · Siltstone · Sandstone · Grits · Conglomerate · Rhyolitic tuffs · Basic Taffs

IGNEOUS - CAMBRIAN

Melba Spilites (basic Lavas) · Ultra-mafics · Gabbro

DEVONIAN

Granite · Quartz porphyry

FORMATION

Dundas Group (unasigned) · Red Lead Conglomerate · Brewery Junction · Razorback · Hodge Slate · Fernfield · Comet · Fernflow

Bedding · Cleavage

* All Bearings Magnetic

034

Geochemistry (P.P.M.)

1000 800 600 400 300 200 100 80 60 40 20 10

3200 W 3000 W 2800 W 2600 W 2400 W

V.L.F. - E.M.
Tx = Japan

DIP ANGLE (---) SMOOTHED DERIVATIVE (——)

30 20 10 0 -10 50 40 30 20 10 0

V.L.F. - E.M.
Tx = N.W. Cape

DIP ANGLE (---) SMOOTHED DERIVATIVE (——)

30 20 10 0 -10 50 40 30 20 10 0

Gradient Array I.P.

CHARGEABILITY IN MILLIVOLTS/VOLT (——)

RESISTIVITY IN OHM METRES (- - -)

62 315
62 283

Total Magnetic Field (Ø)

61 500 61 400 61 300 61 200 61 100

62 100 62 050 62 000 61 950 61 900

3200 W 3000 W 2800 W 2600 W 2400 W

Topography & Geology
HEIGHT ABOVE SEA LEVEL - (Metres)

550 500 450 400 350 300 250 200 150

5 cms

Bulldozed Track
Bulldozed Track
Fault
Fault
Eum
Eum
Ems

3200 W 3000 W 2800 W 2600 W

123270

GOLD FIELDS EXPLORATION PTY. LIMITED

E.L.42/71 — BLACK HILL GRID
LINE 600 S. (3050W—2600W)
LOOKING N.

SCALE 1: 2000 METRES

DRAWN	P.K.
TRACED	E.V.
DATE	April 1985
SCALE	1:2000
FIG. NO.	39

034

85-2449 35

I.P. DATA

MAGNETICS
Base Station at : approx. 2800E 3350S
Designated :

GEOCHEMISTRY
Sn
Cu
Pb
Zn
As
Wo3

GEOLOGY

ROCK TYPE
- Shale
- Siltstone
- Sandstone
- Grits
- Conglomerate
- Rhyolitic tuffs
- Basic Tuffs

IGNEOUS - CAMBRIAN
- Melba Spilites (basic Lavas)
- Ultra-mafics
- Gabbro

DEVONIAN
- Granite
- Quartz porphyry

FORMATION
- Dundas Group (unasigned)
- Red Lead Conglomerate
- Brewery Junction
- Razorback
- Hodge Slate
- Fernfield
- Comet
- Fernflow

Bedding
Cleavage

*All Bearings Magnetic

035

Geochemistry (P.P.M.)

1000 800 600 400 300 200 100 80 60 40 20 10

3200 W 3000 W 2800 W 2600 W 2400 W 2200 W

V.L.F. – E.M.
Tx = Japan

DIP ANGLE (---) SMOOTHED DERIVATIVE (——)

30 20 10 0 -10 | 50 40 30 20 10 0

V.L.F. – E.M.
Tx = N.W. Cape

DIP ANGLE (---) SMOOTHED DERIVATIVE (——)

30 20 10 0 -10 | 50 40 30 20 10 0

Gradient Array I.P.

CHARGEABILITY IN MILLIVOLTS/VOLT (——)

RESISTIVITY IN OHM METRES (- - -)

Total Magnetic Field (Ø)

62 400 62 350 62 300 62 250 62 200 62 150

63,124 67,194 70,331 67,071 63,976 67,779 59,152 64,305 65,219 63,667 62,575
72,627 71,108 63,370 65,316 68,971 65,355 63,088 63,782 63,840 63,853 63,521

Readings not repeatable.

3200 W 3000 W 2800 W 2600 W 2400 W 2200 W

Topography & Geology
HEIGHT ABOVE SEA LEVEL (Metres)

550 500 450 400 350 300 250 200 150

North East Dundas Tram.

Cum Cms Cg

5 cm

123271

3200 W 3000 W 2800 W 2600 W 2400 W 2200 W

GOLD FIELDS EXPLORATION PTY. LIMITED	DRAWN	P.K.
	TRACED	E.V
E.L.42/71 — BLACK HILL GRID	DATE	April 1985
LINE 400 S. (3000W – 2300W)	SCALE	1:2000
LOOKING N.	FIG. NO.	40
SCALE 1:2000 METRES		

I.P. DATA

035

85-2449 3/5

MAGNETICS

Base Station at approx. 2800E 3350S

Designated :

GEOCHEMISTRY

Sn Cu Pb Zn As Wo3

GEOLOGY

ROCK TYPE

- Shale
- Siltstone
- Sandstone
- Grits
- Conglomerate
- Rhyolitic tuffs
- Basic Tuffs

IGNEOUS - CAMBRIAN

- Cms — Melba Spilites (basic Lavas)
- Cum — Ultra-mafics
- Cg — Gabbro

DEVONIAN

- Dg — Granite
- Dqp — Quartz porphyry

FORMATION

- Cd — Dundas Group (unasigned)
- Crlg — Red Lead Conglomerate
- Cb — Brewery Junction
- Crz — Razorback
- Ch — Hodge Slate
- Cfn — Fernfield
- Cco — Comet
- Cf — Fernflow

Bedding

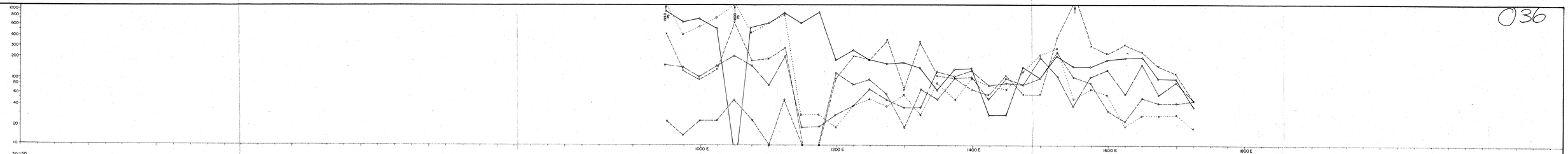
Cleavage

* All Bearings Magnetic

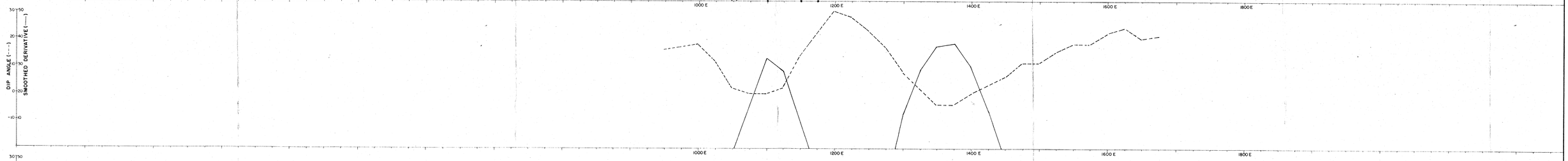
036

EM 37 INTERPRETATION
J.R.BISHOP AUG.85

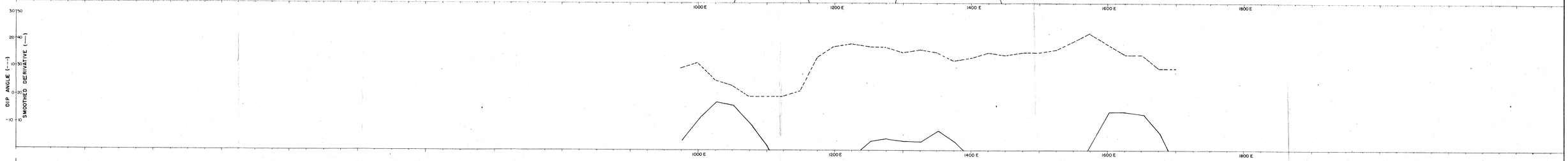
Geochemistry (P.P.M.)

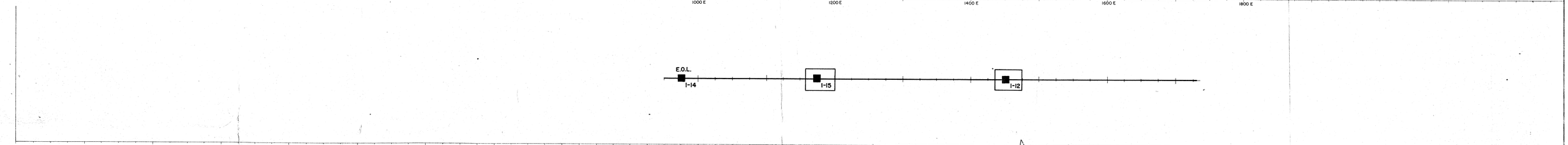


V.L.F. - E.M.
Tx = Japan

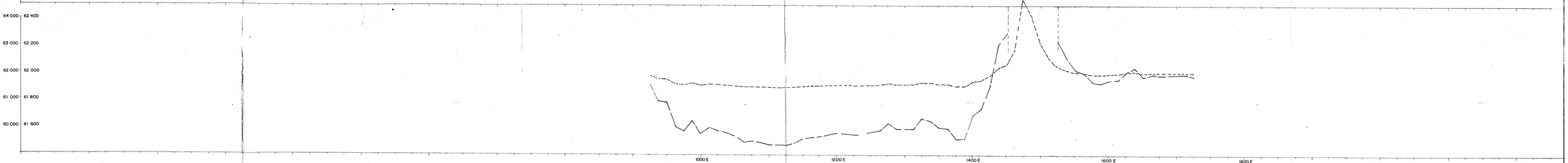


V.L.F. - E.M.
Tx = N.W. Cape

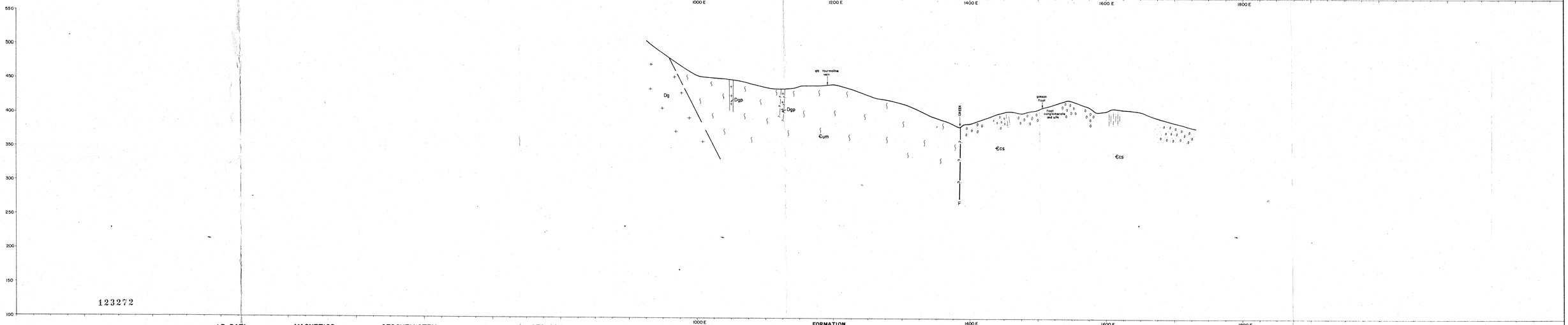




Total Magnetic Field (Ỏ)



Topography & Geology
HEIGHT ABOVE SEA LEVEL - (Metres)



123272

I.P. DATA

MAGNETICS
Base Station at : approx. 2800E 3350S
Designated :

GEOCHEMISTRY
Sn
Cu
Pb
Zn
As
Wo3

GEOLOGY
ROCK TYPE
Shale
Siltstone
Sandstone
Grits
Conglomerate
Rhyolitic tuffs
Basic Tuffs
IGNEOUS - CAMBRIAN
Melbo Spilites (basic Lavas)
Ultra-mafics
Gabbro
DEVONIAN
Granite
Quartz porphyry

FORMATION
Dundas Group (unassigned)
Red Lead Conglomerate
Brewery Junction
Razorback
Hodge Slate
Fernfield
Confidence Saddle
Carbine Hill
Jurassic Dyke
Bedding
Cleavage
* All Bearings Magnetic

LEGEND - EM 37 INTERPRETATION
ANOMALY — Channels on which anomaly is recognised — 6-13
COVERAGE — I-20 — Pronounced Anomaly
M — Strong migration of cross-over
Extent of migration
? — Possible anomaly
L.A. — Low amplitude response
Quantitatively interpreted anomaly
E.O.L. — Partially defined, end of line anomaly. True position likely to be off the end of the line

GOLD FIELDS EXPLORATION PTY. LIMITED

DRAWN	P.K.
TRACED	S.F.
DATE	May 1985
SCALE	1:2000
FIG. NO.	41

E.L.42/71 – CARBINE HILL GRID
LINE 3600 N
LOOKING N.
SCALE 1:2000 METRES

036

85-2449

037

Geochemistry (P.P.M.)

1000 800 600 400 300 200 100 80 60 40 20 10

V.L.F. - E.M. Tx = Japan

DIP ANGLE (---) SMOOTHED DERIVATIVE (——)

30 20 10 0 -10 | 50 40 30 20 10 0 -10

V.L.F. - E.M. Tx = N.W. Cape

DIP ANGLE (---) SMOOTHED DERIVATIVE (——)

30 20 10 0 -10 | 50 40 30 20 10 0 -10

Gradient Array I.P.

CHARGEABILITY IN MILLIVOLTS/VOLT (——)

RESISTIVITY IN OHM METRES (---)

E.O.L 6-15 | 6-12 | 1-12 | 1-8

Total Magnetic Field (γ)

62 100 62 050 62 000 61 950 61 900 61 850

62 153 62 373 62 655 62 205 62 184 62 277 62 579 62 360

800 E 1000 E 1200 E 1400 E 1600 E 1800 E

61 530

Topography & Geology HEIGHT ABOVE SEA LEVEL - (Metres)

600 550 500 450 400 350 300 250 200

Bulldozed Track

Creek

Fault

Fault

Dg Dgp Dg Jd

Eg Eg Eg Eg

Ems

Ecs Ecs

5 cm

123273

800 E 1000 E 1200 E 1400 E 1600 E 1800 E

I.P. DATA

MAGNETICS

Base Station at : approx. 2800E 3350S

Designated :

GEOCHEMISTRY

Sn Cu Pb Zn As Wo3

GEOLOGY

ROCK TYPE

Shale
Siltstone
Sandstone
Grits
Conglomerate
Rhyolitic tuffs
Basic Tuffs

IGNEOUS - CAMBRIAN

Melba Spilites (basic Lavas)
Ultra-mafics
Gabbro

DEVONIAN

Granite
Quartz porphyry

FORMATION

Dundas Group (unasigned)
Red Lead Conglomerate
Brewery Junction
Razorback
Hodge Slate
Fernfield
Confidence Saddle
Carbine Hill

Bedding
Cleavage
All Bearings Magnetic

Jurassic Dyke

LEGEND - EM 37 INTERPRETATION

ANOMALY — Channels on which anomaly is recognised 6-15 — Pronounced Anomaly 1-20 — COVERAGE

M Strong migration of cross-over
Extent of migration
? Possible anomaly
L.A. Low amplitude response
Quantitatively interpreted anomaly
E.O.L. Partialy defined, end of line anomaly. True position likely to be off the end of the line

GOLD FIELDS EXPLORATION PTY. LIMITED	DRAWN	P.K.
	TRACED	E.V.
E.L.42/71 — CARBINE HILL GRID	DATE	May 1985
LINE 3500 N. (865E–1725E)	SCALE	1:2000
LOOKING N.	FIG. NO.	42

SCALE 1: 2000 METRES 40 80 120

037

85 - 2449 3/s

038

EM 37 INTERPRETATION

J.R. BISHOP AUG. 85

Geochemistry (P.P.M.)

V.L.F. - E.M. Tx = Japon

DIP ANGLE (---) SMOOTHED DERIVATIVE (——)

V.L.F. - E.M. Tx = N.W. Cape

DIP ANGLE (---) SMOOTHED DERIVATIVE (——)

Total Magnetic Field (Ô)

Topography & Geology HEIGHT ABOVE SEA LEVEL - (Metres)

6-13 1-12

1000 E 1200 E 1400 E 1600 E 1800 E

Cum Dgp Cum Cms Ccs Ccs

F

123274

GOLD FIELDS EXPLORATION PTY. LIMITED	DRAWN P.K.
E.L.42/71 – CARBINE HILL GRID	TRACED S.F.
LINE 3400 N	DATE May 1985
LOOKING N.	SCALE 1:2000
SCALE 1:2000 METRES	FIG. NO. 43

038

I.P. DATA

MAGNETICS

Base Station at : approx. 2800E 3350S

Designated :

GEOCHEMISTRY

Sn, Cu, Pb, Zn, As, Wo3

GEOLOGY

ROCK TYPE

Shale, Siltstone, Sandstone, Grits, Conglomerate, Rhyolitic tuffs, Basic Tuffs

IGNEOUS - CAMBRIAN

Melba Spilites (basic Lavas), Ultra-mafics, Gabbro

DEVONIAN

Granite, Quartz porphyry

FORMATION

Dundas Group (unassigned), Red Lead Conglomerate, Brewery Junction, Razorback, Hodge Slate, Fernfield, Confidence Saddle, Carbine Hill, Jurassic Dyke

Bedding, Cleavage

All Bearings Magnetic

LEGEND - EM 37 INTERPRETATION

ANOMALY — Channels on which anomaly is recognised 6-13 — Pronounced Anomaly 1-20 — COVERAGE

M Strong migration of cross-over

Extent of migration

? Possible anomaly

L.A. Low amplitude response

Quantitatively interpreted anomaly

E.O.L. Partially defined, end of line anomaly. True position likely to be off the end of the line

83-2449 3/5

85-2449 s/c

039

Geochemistry (PPM)

V.L.F. - E.M. Tx = Japan

DIP ANGLE (---) SMOOTHED DERIVATIVE (——)

V.L.F. - E.M. Tx = N.W. Cape

DIP ANGLE (---) SMOOTHED DERIVATIVE (——)

EM 37 INTERPRETATION
J.R. BISHOP AUG. 85

1-8

Total Magnetic Field (γ)

62 350 62 242 63 532 65 447 66 380 65 448 62 759

1000 E 1200 E 1400 E 1600 E 1800 E 2000 E

61 587 60 510 61 069

Topography & Geology
HEIGHT ABOVE SEA LEVEL - (Metres)

Pegging Error Marked 1475E

Fault Fault

Dgp

123275

5 cm

1000 E 1200 E 1400 E 1600 E 1800 E 2000 E

GOLD FIELDS EXPLORATION PTY. LIMITED

E.L. 42/71 — CARBINE HILL GRID

LINE 3300 N. (1025E-1725E)
LOOKING N.

SCALE 1:2000 METRES

DRAWN	P.K.
TRACED	E.V.
DATE	May 1985
SCALE	1:2000
FIG. NO.	44

039

I.P. DATA

MAGNETICS
Base Station at approx. 2800E 3350S
Designated :

GEOCHEMISTRY
Sn
Cu
Pb
Zn
As
Wo3

GEOLOGY

ROCK TYPE
- Shale
- Siltstone
- Sandstone
- Grits
- Conglomerate
- Rhyolitic tuffs
- Basic Tuffs

IGNEOUS - CAMBRIAN
- Melba Spilites (basic Lavas)
- Ultra-mafics
- Gabbro

DEVONIAN
- Granite
- Quartz porphyry

FORMATION
- Dundas Group (unasigned)
- Red Lead Conglomerate
- Brewery Junction
- Razorback
- Hodge Slate
- Fernfield
- Confidence Saddle
- Carbine Hill
- Bedding
- Cleavage
- Jurassic Dyke

* All Bearings Magnetic

LEGEND - EM 37 INTERPRETATION

ANOMALY — COVERAGE
Channels on which anomaly is recognised 6-15 1-20
Pronounced Anomaly

M Strong migration of cross-over
Extent of migration
? Possible anomaly
L.A. Low amplitude response
Quantitatively interpreted anomaly
E.O.L. Partially defined, end of line anomaly True position likely to be off the end of the line

85-2449 s/s

040

Geochemistry (P.P.M.)

1000 800 600 400 300 200 100 80 60 40 30 20 10

1200 Pb
1200 Zn

1000 E 1200 E 1400 E 1600 E

V.L.F. - E.M.
Tx = Japan

DIP ANGLE (---)
SMOOTHED DERIVATIVE (——)

30 20 10 0 -10 50 40 30 20 10 0 -10

1000 E 1200 E 1400 E 1600 E

V.L.F. - E.M.
Tx = N.W. Cape

DIP ANGLE (---)
SMOOTHED DERIVATIVE (—)

30 20 10 0 -10 50 40 30 20 10 0 -10

1000 E 1200 E 1400 E 1600 E

EM 37 INTERPRETATION
J.R. BISHOP AUG.85

I-8 I-7

Total Magnetic Field (δ)

62 040
62 000
61 960
61 920
61 880

1000 E 1200 E 1400 E 1600 E

Topography & Geology
HEIGHT ABOVE SEA LEVEL - (Metres)

550 500 450 400 350 300 250 200 150 100

5 cm

Bearing of Strong Magnetic Anomaly

cream brn clay
brn clay
brn clay
brn clay
brn clay

Dgp

€um
€ms
€cs
€cs
€b

CREEK

F

123276

1000 E 1200 E 1400 E 1600 E

GOLD FIELDS EXPLORATION PTY. LIMITED	DRAWN P.K.
	TRACED S.F.
E.L.42/71 - CARBINE HILL GRID	DATE May 1985
LINE 3200 N.	SCALE 1:2000
LOOKING N.	FIG. NO.
SCALE 1:2000 METRES	45

I.P. DATA

040

MAGNETICS

Base Station at: approx. 2800E 3350S

Designated:

GEOCHEMISTRY

Sn
Cu
Pb
Zn
As
Wo3

GEOLOGY

ROCK TYPE

- Shale
- Siltstone
- Sandstone
- Grits
- Conglomerate
- Rhyolitic tuffs
- Basic Tuffs

IGNEOUS - CAMBRIAN

- €mbs Melba Spilites (basic Lavas)
- €um Ultra-mafics
- €g Gabbro

DEVONIAN

- Dg Granite
- Dqp Quartz porphyry

FORMATION

- Cd Dundas Group (unassigned)
- €rl Red Lead Conglomerate
- €b Brewery Junction
- €rz Razorback
- Hodge Slate
- Fernfield
- Confidence Saddle
- €ch Carbine Hill
- Jurassic Dyke
- 60/30 Bedding
- 80/50 Cleavage

*All Bearings Magnetic

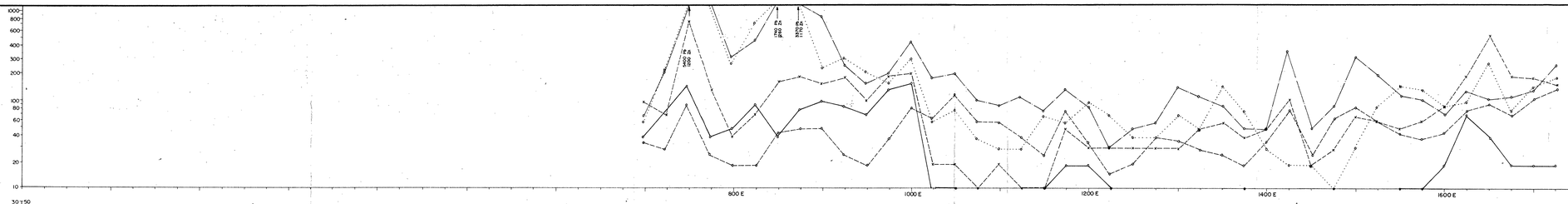
LEGEND - EM 37 INTERPRETATION

ANOMALY — COVERAGE
Channels on which anomaly is recognised — 6-13 — I-20 — Pronounced Anomaly

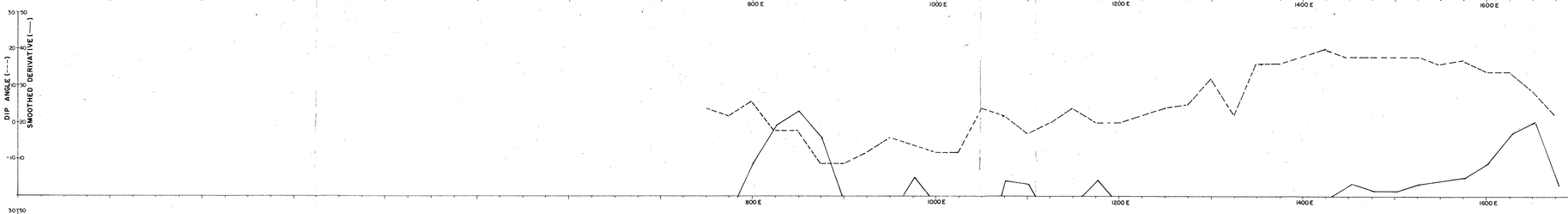
- M Strong migration of cross-over
- ←→ Extent of migration
- ? Possible anomaly
- L.A. Low amplitude response
- Quantitatively interpreted anomaly
- E.O.L. Partially defined, end of line anomaly. True position likely to be off the end of the line

041

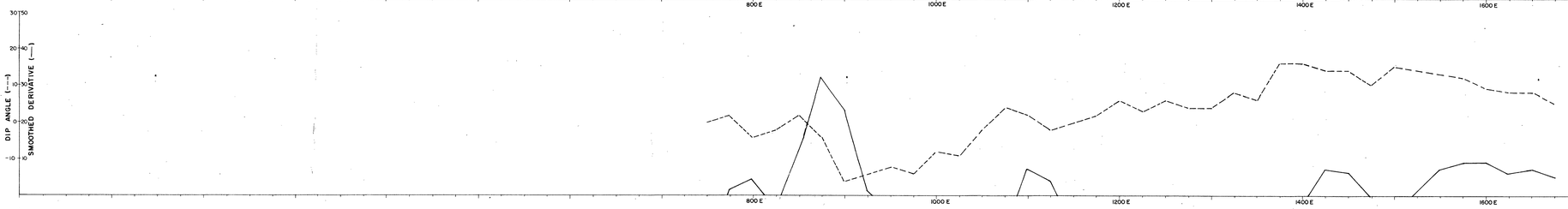
Geochemistry (P.P.M.)



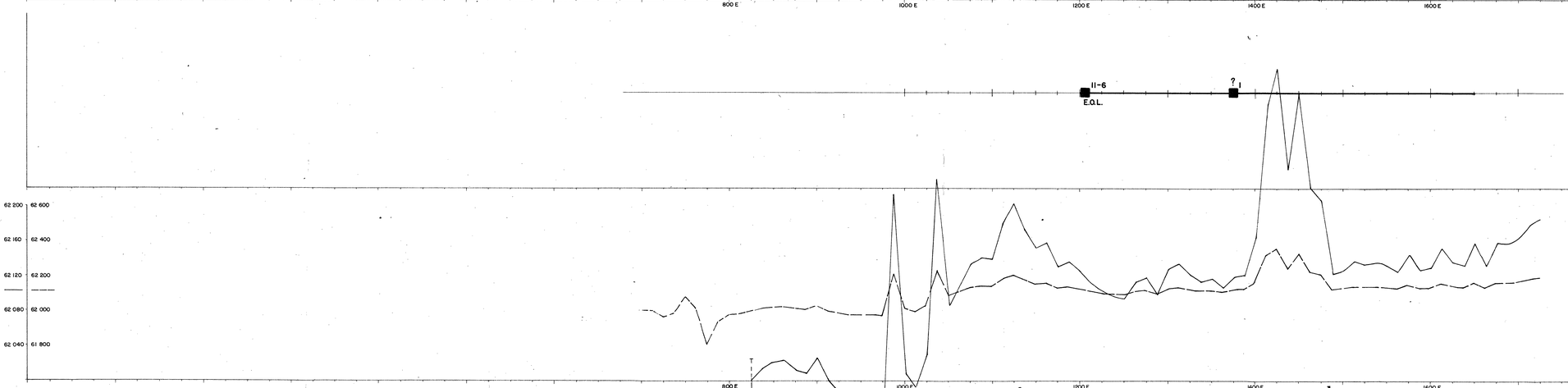
V.L.F. - E.M.
Tx = Japan



V.L.F. - E.M.
Tx = N.W. Cape

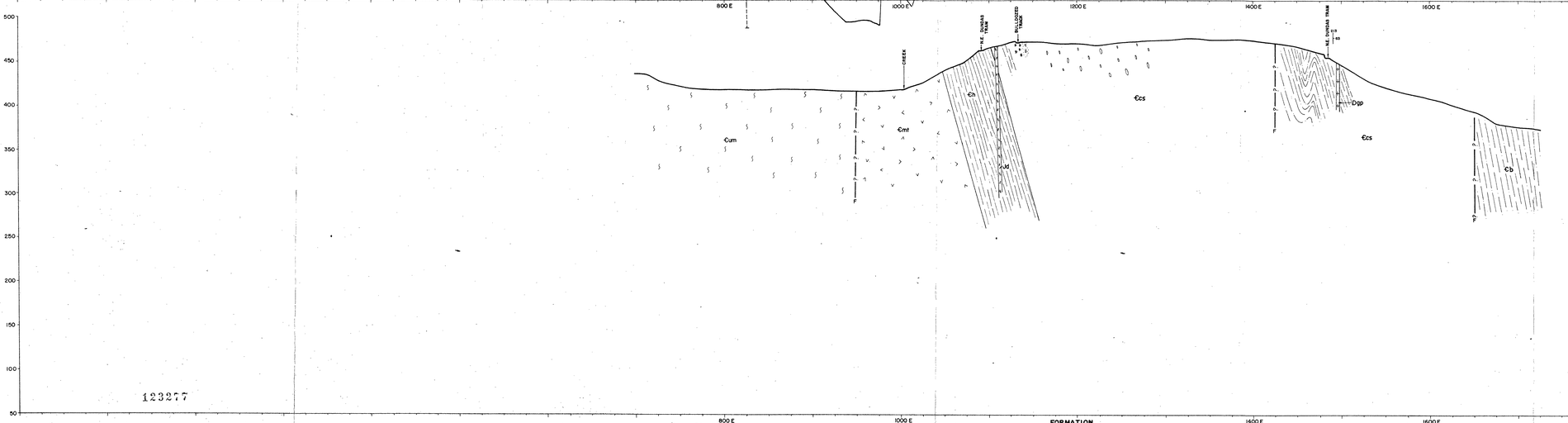


EM 37 INTERPRETATION
J.R. BISHOP AUG.85



Total Magnetic Field (Ø)

Topography & Geology
HEIGHT ABOVE SEA LEVEL - (Metres)



123277

GOLD FIELDS EXPLORATION PTY. LIMITED	
E.L.42/71 - CARBINE HILL GRID	
LINE 2800 N.	
LOOKING N.	
SCALE 1:2000 METRES (0 20 40 60 80 100 120)	

DRAWN	P.K.
TRACED	S.F.
DATE	May 1985
SCALE	1:2000
FIG. NO.	46

041

I.P. DATA

MAGNETICS
Base Station at: approx. 2800 E 3350 S
Designated:

GEOCHEMISTRY
Sn
Cu
Pb
Zn
As
Wo3

GEOLOGY

ROCK TYPE
- Shale
- Siltstone
- Sandstone
- Grits
- Conglomerate
- Rhyolitic tuffs
- Basic Tuffs

IGNEOUS - CAMBRIAN
- Melba Spilites (basic Lavas)
- Ultra-mafics
- Gabbro

DEVONIAN
- Granite
- Quartz porphyry

FORMATION
- Dundas Group (unasigned)
- Red Lead Conglomerate
- Brewery Junction
- Razorback
- Hodge Slate
- Fernfield
- Confidence Saddle
- Carbine Hill
- Jurassic Dyke
- Bedding
- Cleavage

*All Bearings Magnetic

LEGEND - EM 37 INTERPRETATION

ANOMALY — Channels on which anomaly is recognised: 6-13
COVERAGE — 1-20 Pronounced Anomaly

M — Strong migration of cross-over
→ — Extent of migration
? — Possible anomaly
L.A. — Low amplitude response
※ — Quantitatively interpreted anomaly
E.O.L. — Partially defined, end of line anomaly. True position likely to be off the end of the line

05-2449

042

E.M. 37 INTERPRETATION

J.R.BISHOP AUG.85

Geochemistry (P.P.M.)

1000 800 600 400 300 200 100 80 60 40 20 10

V.L.F. - E.M.
Tx = Japan

DIP ANGLE (----)
SMOOTHED DERIVATIVE (——)

30 20 10 0 -10
50 40 30 20 10

V.L.F. - E.M.
Tx = N.W. Cape

DIP ANGLE (----)
SMOOTHED DERIVATIVE (——)

30 20 10 0 -10
50 40 30 20 10

I-5 E.O.L.
I-5 L.A.

Total Magnetic Field (γ)

62 300 62 250 62 200 62 150 62 100 62 050

1200 E 1400 E 1600 E 1800 E 2000 E

Topography & Geology
HEIGHT ABOVE SEA LEVEL - (Metres)

700 650 600 550 500 450 400 350 300

Bulldozed Track To Wallaces Tram.
North East Dundas Tram.
Ecs
Fault
Ecs
Fault
Era ?
Era ?
Dgp
Eb
5 cm
123278

1200 E 1400 E 1600 E 1800 E 2000 E

GOLD FIELDS EXPLORATION PTY. LIMITED	DRAWN P.K.
	TRACED E.V.
E.L.42/71—CARBINE HILL GRID	DATE May 1985
LINE 2700 N. (1200E–1725 E)	SCALE 1:2000
LOOKING N.	FIG. NO.
SCALE 1:2000 METRES 0 20 40 60 80 100	47

042

I.P. DATA

MAGNETICS
Base Station at : approx. 2800 E 3350 S
Designated :

GEOCHEMISTRY
Sn Cu Pb Zn As Wo3

GEOLOGY

ROCK TYPE
- Shale
- Siltstone
- Sandstone
- Grits
- Conglomerate
- Rhyolitic tuffs
- Basic Tuffs

IGNEOUS - CAMBRIAN
- Melba Spilites (basic Lavas)
- Ultra - mafics
- Gabbro

DEVONIAN
- Granite
- Quartz porphyry

FORMATION
- Dundas Group (unassigned)
- Red Lead Conglomerate
- Brewery Junction
- Razorback
- Hodge Slate
- Fernfield
- Confidence Saddle
- Carbine Hill
- Bedding
- Cleavage
- Jurassic Dyke

All Bearings Magnetic

LEGEND - EM 37 INTERPRETATION

ANOMALY — COVERAGE
Channels on which anomaly is recognised — 6-13 — 20 — Pronounced Anomaly

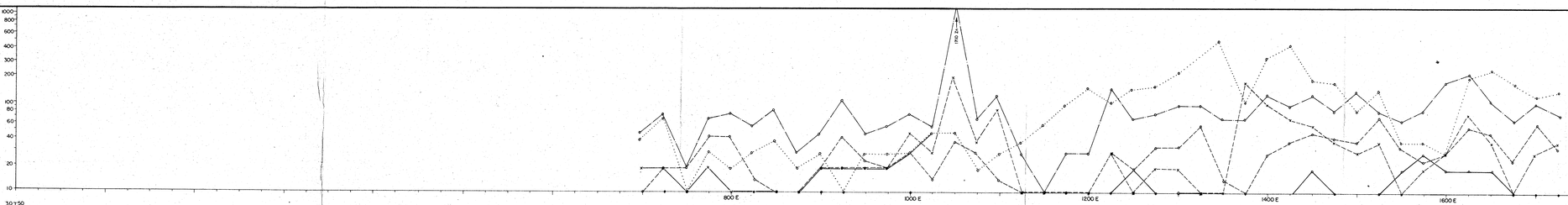
M Strong migration of cross-over
Extent of migration
? Possible anomaly
L.A. Low amplitude response
Quantitatively interpreted anomaly
P.D.L. Partially defined, end of line anomaly. True position likely to be off the end of the line

85-2449 3/5

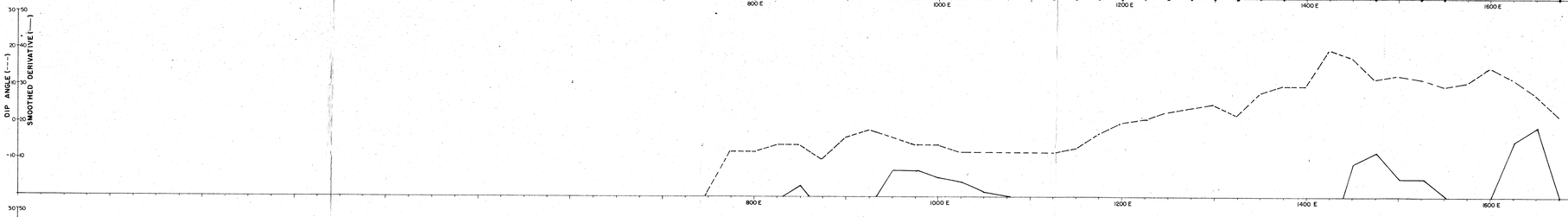
85-2449 h/s

043

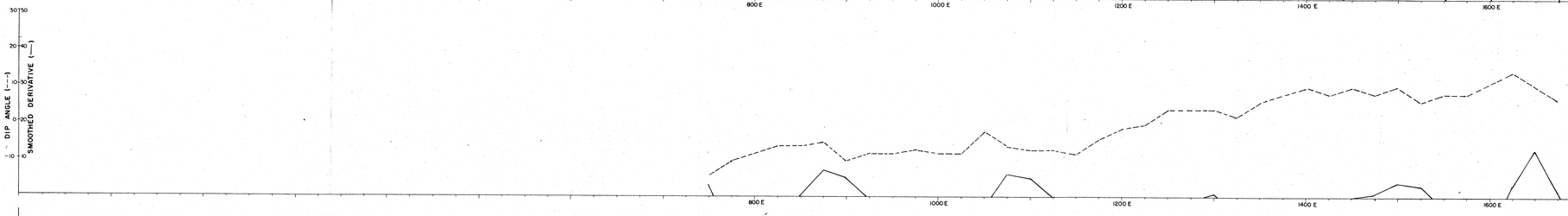
Geochemistry (P.P.M.)



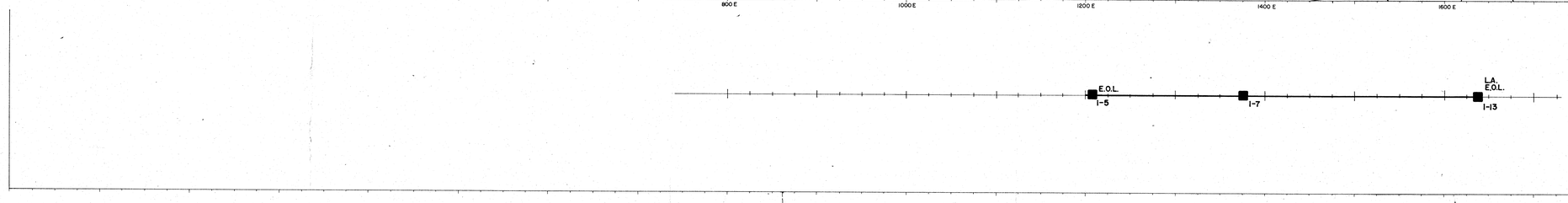
V.L.F. - E.M.
Tx = Japan



V.L.F. - E.M.
Tx = N.W. Cape

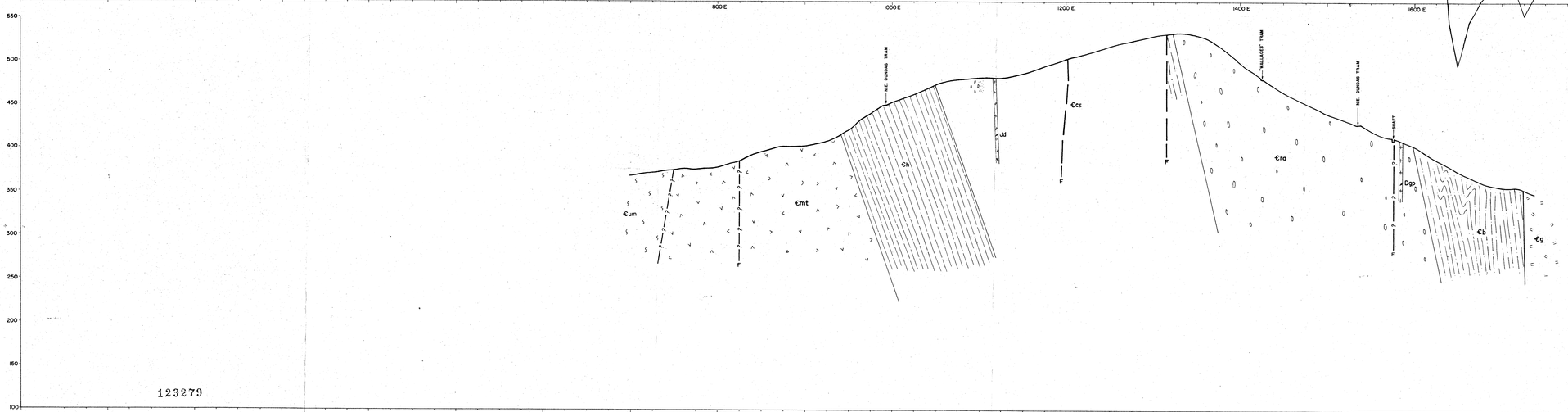


EM 37 INTERPRETATION
J.R.BISHOP AUG.85



Total Magnetic Field (γ)

Topography & Geology
HEIGHT ABOVE SEA LEVEL - (Metres)



123279

GOLD FIELDS EXPLORATION PTY. LIMITED	
E.L.42/71 - CARBINE HILL GRID	
LINE 2600 N	
LOOKING N.	
SCALE 1:2000 METRES	

DRAWN	P.K.
TRACED	S.F.
DATE	May 1985
SCALE	1:2000
FIG. NO.	48

043

I.P. DATA

MAGNETICS

Base Station at approx. 2800E 3350S

Designated :

GEOCHEMISTRY

Sn
Cu
Pb
Zn
As
Wo3

GEOLOGY

ROCK TYPE

- Shale
- Siltstone
- Sandstone
- Grits
- Conglomerate
- Rhyolitic tuffs
- Basic Tuffs

IGNEOUS - CAMBRIAN

- Melba Spilites (basic Lavas)
- Ultra-mafics
- Gabbro

DEVONIAN

- Granite
- Quartz porphyry

FORMATION

- Dundas Group (unasigned)
- Red Lead Conglomerate
- Brewery Junction
- Razorback
- Hodge Slate
- Fernfield
- Confidence Saddle
- Carbine Hill
- Bedding
- Cleavage
- Jurassic Dyke

* All Bearings Magnetic

LEGEND - EM 37 INTERPRETATION

ANOMALY 6-13 — Channels on which anomaly is recognised

COVERAGE 1-20 — Pronounced Anomaly

M. Strong migration of cross-over

Extent of migration

? Possible anomaly

L.A. Low amplitude response

Quantitatively interpreted anomaly

E.O.L. Partially defined, end of line anomaly. True position likely to be off the end of the line

82-2449 415

044

Geochemistry (PPM)

1000 800 600 400 300 200 100 80 60 40 20 10

V.L.F. - E.M.
Tx = Jigoon

DIP ANGLE (---)
SMOOTHED DERIVATIVE (—)

30 20 10 0 -10 50 40 30 20 10 0 -10

V.L.F. - E.M.
Tx = N.W. Cape

DIP ANGLE (---)
SMOOTHED DERIVATIVE (—)

30 20 10 0 -10 50 40 30 20 10 0 -10

EM 37 INTERPRETATION
J.R.BISHOP AUG.85

E.O.L. I-7 — I-7 — L.A. E.O.L. I-12

Total Magnetic Field (δ)

62 400
62 350
62 300
62 250
62 200
62 150

1200 E 1400 E 1600 E 1800 E 2000 E

Topography & Geology
HEIGHT ABOVE SEA LEVEL - (Metres)

650 600 550 500 450 400 350 300 250

5 cm

Wallaces Tram.
North East Dundas Tram.
Rock Track
Ecs
Fault
Ecs
Era ?
Eb
Eg

122280

1200 E 1400 E 1600 E 1800 E 2000 E

I.P DATA

MAGNETICS
Base Station at : approx. 2800 E 3350 S
Designated :

GEOCHEMISTRY
Sn
Cu
Pb
Zn
As
Wo3

GEOLOGY

ROCK TYPE
- Shale
- Siltstone
- Sandstone
- Grits
- Conglomerate
- Rhyolitic tuffs
- Basic Tuffs

IGNEOUS - CAMBRIAN
- Melba Spilites (basic Lavas)
- Ultra-mafics
- Gabbro

DEVONIAN
- Granite
- Quartz porphyry

FORMATION
- Dundas Group (unasigned)
- Red Lead Conglomerate
- Brewery Junction
- Razorback
- Hodge Slate
- Fernfield
- Confidence Saddle
- Carbine Hill
- Jurassic Dyke
- Bedding
- Cleavage

All Bearings Magnetic

LEGEND - EM 37 INTERPRETATION

ANOMALY — COVERAGE
Channels on which anomaly is recognised — 6-13 — 1-20 — Pronounced Anomaly

M. Strong migration of cross-over
Extent of migration
? Possible anomaly
L.A. Low amplitude response
Quantitatively interpreted anomaly
E.O.L. Partially defined, end of line anomaly True position likely to be off the end of the line.

GOLD FIELDS EXPLORATION PTY. LIMITED	
E.L.42/71 — CARBINE HILL GRID	
LINE 2500 N. (1200E–1725E)	
LOOKING N.	
SCALE 1:2000 METRES	
DRAWN	P.K.
TRACED	E.V.
DATE	May 1985
SCALE	1:2000
FIG. NO.	49

044

045

Geochemistry (P.P.M.)

1000 800 600 400 300 200 100 80 60 40 30 20 10

1200 PPM

NS NS NS NS NS

600 E 800 E 1000 E 1200 E 1400 E 1600 E

V.L.F. - E.M.
Tx = Japan

DIP ANGLE (---) SMOOTHED DERIVATIVE (——)

30 20 10 0 10 50 40 30 20 10 0 10

200 E 400 E 600 E 800 E 1000 E 1200 E 1400 E 1600 E

V.L.F. - E.M.
Tx = N.W. Cape

DIP ANGLE (---) SMOOTHED DERIVATIVE (——)

30 20 10 0 10 50 40 30 20 10 0 10

200 E 400 E 600 E 800 E 1000 E 1200 E 1400 E 1600 E

EM 37 INTERPRETATION
J.R.BISHOP AUG,85

I-7 I-7

Total Magnetic Field (γ)

62 320 62 280 62 240 62 200 62 160
62 800 62 600 62 400 62 200 62 000

200 E 400 E 600 E 800 E 1000 E 1200 E 1400 E 1600 E

Topography & Geology
HEIGHT ABOVE SEA LEVEL - (Metres)

550 500 450 400 350 300 250 200 150 100

N.E. DUNDAS TRAM — KAPI CREEK — WELLINGS TRAM

Cms Cmt Cmt/Ch ? Cmt Ch Ccs Jd Ccs Cra Cb Cg

5 cm

123281

200 E 400 E 600 E 800 E 1000 E 1200 E 1400 E 1600 E

GOLD FIELDS EXPLORATION PTY. LIMITED	
E.L.42/71 - CARBINE HILL GRID	
LINE 2400N. LOOKING N.	
SCALE 1:2000 METRES	

DRAWN	P.K.
TRACED	S.F.
DATE	May 1985
SCALE	1:2000
FIG. NO.	50

045

I.P. DATA

MAGNETICS
Base Station at : approx. 2800E 3350S
Designated :

GEOCHEMISTRY
Sn Cu Pb Zn As Mo3

GEOLOGY

ROCK TYPE
- Shale
- Siltstone
- Sandstone
- Grits
- Conglomerate
- Rhyolitic tuffs
- Basic Tuffs

IGNEOUS - CAMBRIAN
- Melba Spilites (basic Lavas)
- Ultra-mafics
- Gabbro

DEVONIAN
- Granite
- Quartz porphyry

FORMATION
- Cd Dundas Group (unasigned)
- Red Lead Conglomerate
- Brewery Junction
- Razorback
- Hodge Slate
- Fernfield
- Confidence Saddle
- Carbine Hill
- Jd Jurassic Dyke

60/30 Bedding
50/50 Cleavage

*All Bearings Magnetic

LEGEND - EM 37 INTERPRETATION

ANOMALY — COVERAGE
Channels on which anomaly is recognised 6-13 — 1-20 Pronounced Anomaly

M Strong migration of cross-over
Extent of migration
? Possible anomaly
L.A. Low amplitude response
Quantitatively interpreted anomaly
E.O.L. Partially defined, end of line anomaly. True position likely to be off the end of the line.

85-2449 4/5

046

Geochemistry (P.P.M.)

1000 800 600 400 300 200 80 60 40 20 10

V.L.F. - E.M.
Tx = Japan

30 20 10 0 -10 DIP ANGLE (- - -)
50 40 30 20 10 0 SMOOTHED DERIVATIVE (——)

V.L.F. - E.M.
Tx = N.W. Cape

30 20 10 0 -10 DIP ANGLE (- - -)
50 40 30 20 10 0 SMOOTHED DERIVATIVE (——)

EM 37 INTERPRETATION
J.R.BISHOP AUG.85

E.O.L. I-6 I-7

Total Magnetic Field (γ)

62 300 62 250 62 200 62 150 62 100 62 050

1200 E 1400 E 1600 E 1800 E 2000 E

Topography & Geology
HEIGHT ABOVE SEA LEVEL - (Metres)

650 600 550 500 450 400 350 300 250

Wallaces Tram
North East Dundas Tram
Fault
Ecs
Era ?
Era ?
Eb
Eg
5cm

123282

1200 E 1400 E 1600 E 1800 E 2000 E

GOLD FIELDS EXPLORATION PTY. LIMITED	DRAWN P.K.
	TRACED E.V.
E.L.42/71 — CARBINE HILL GRID	DATE May 1985
LINE 2300 N. (1200E–1725E.) LOOKING N.	SCALE 1:2000
SCALE 1:2000 METRES	FIG. NO. 51

I.P. DATA
046

MAGNETICS
Base Station at : approx. 2800 E 3350 S
Designated :

GEOCHEMISTRY
Sn Cu Pb Zn As Wo3

GEOLOGY

ROCK TYPE
- Shale
- Siltstone
- Sandstone
- Grits
- Conglomerate
- Rhyolitic tuffs
- Basic Tuffs

IGNEOUS - CAMBRIAN
- Melba Spilites (basic Lavas)
- Ultra - mafics
- Gabbro

DEVONIAN
- Granite
- Quartz porphyry

FORMATION
- Dundas Group (unasigned)
- Red Lead Conglomerate
- Brewery Junction
- Razorback
- Hodge Slate
- Fernfield
- Confidence Saddle
- Carbine Hill
- Bedding
- Cleavage
- Jurassic Dyke

* All Bearings Magnetic

LEGEND - EM 37 INTERPRETATION

ANOMALY — COVERAGE
Channels on which anomaly is recognised. 6-13. I-20. Pronounced Anomaly.

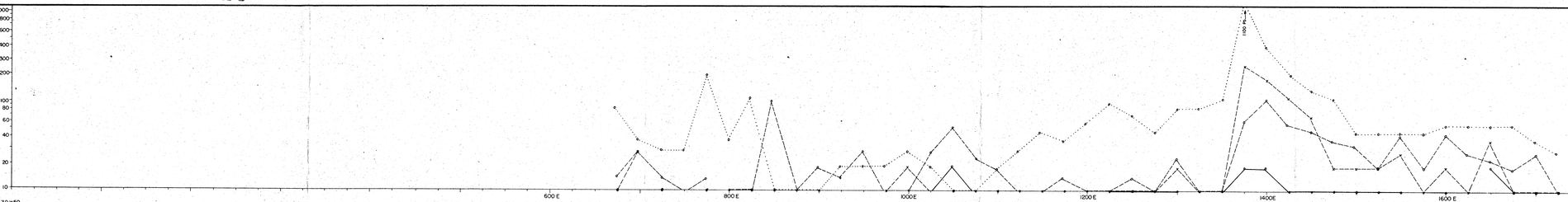
M Strong migration of cross-over
Extent of migration
? Possible anomaly
L.A. Low amplitude response
* Quantitatively interpreted anomaly
E.O.L. Partially defined, end of line anomaly. True position likely to be off the end of the line

85-2449 4/5

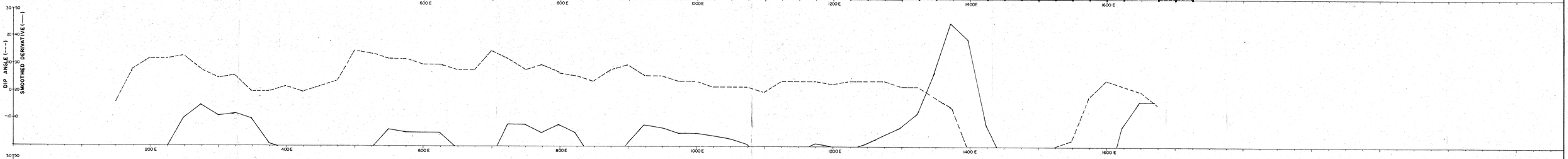
85-2449 W

047

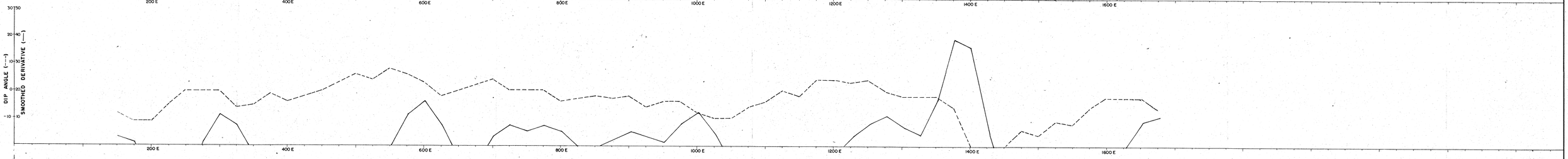
Geochemistry (P.P.M.)



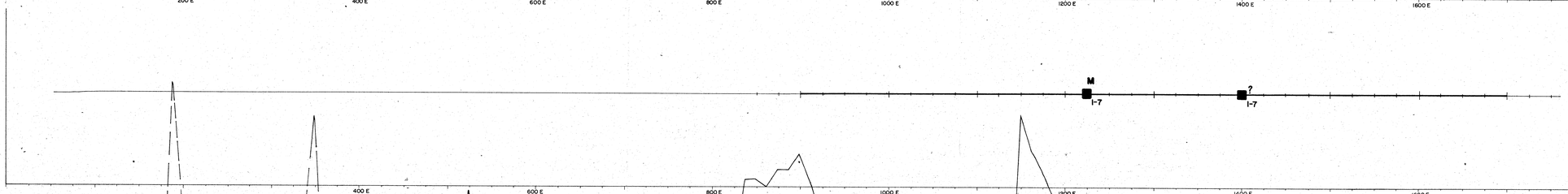
V.L.F. - E.M.
Tx = Japan.



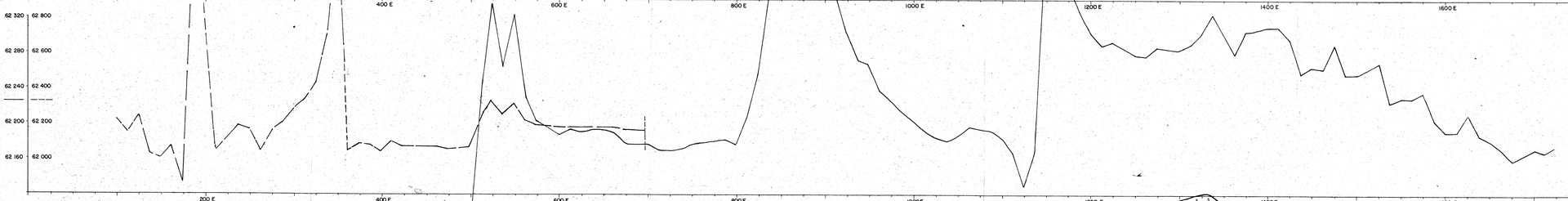
V.L.F. - E.M.
Tx = N.W. Cape



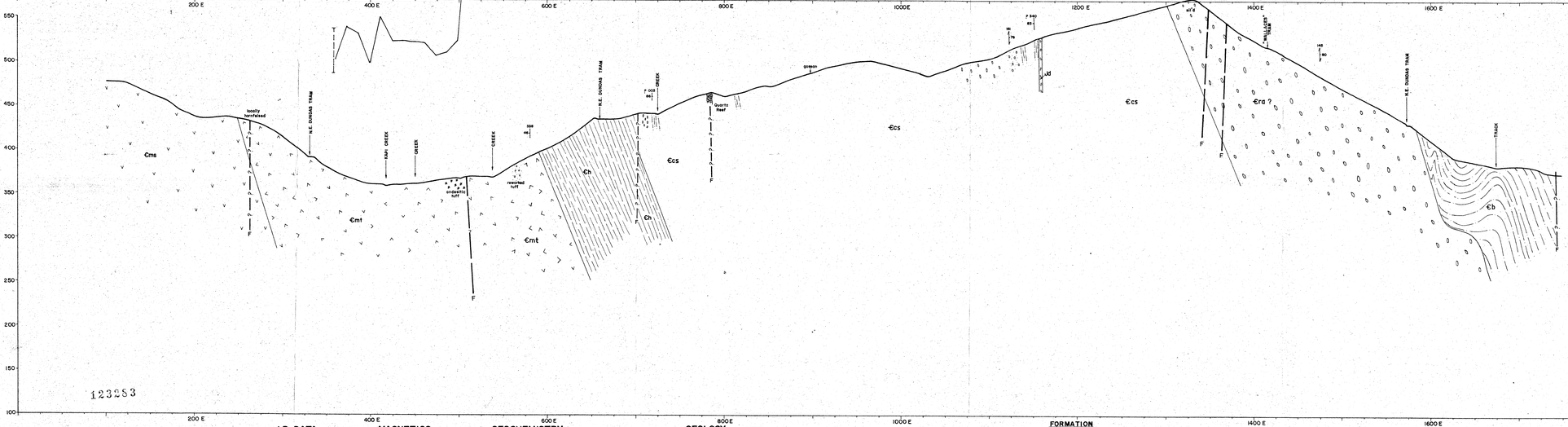
EM 37 INTERPRETATION
J.R. BISHOP Aug.85



Total Magnetic Field (δ)



Topography & Geology
HEIGHT ABOVE SEA LEVEL - (Metres)



LP DATA

047

MAGNETICS

Base Station at : approx. 2800E 3350S

Designated :

GEOCHEMISTRY

Sn
Cu
Pb
Zn
As
We3

GEOLOGY

ROCK TYPE

- Shale
- Siltstone
- Sandstone
- Grits
- Conglomerate
- Rhyolitic tuffs
- Basic Tuffs

IGNEOUS - CAMBRIAN

- Melba Spilites (basic Lavas)
- Ultra-mafics
- Gabbro

DEVONIAN

- Granite
- Quartz porphyry

FORMATION

- Dundas Group (unasigned)
- Red Lead Conglomerate
- Brewery Junction
- Razorback
- Hodge Slate
- Fernfield
- Confidence Saddle
- Carbine Hill
- Bedding
- Cleavage
- Jurassic Dyke

*All Bearings Magnetic

LEGEND - EM 37 INTERPRETATION

ANOMALY — COVERAGE

Channels on which anomaly is recognised: 6-13

1-20 Pronounced Anomaly

M — Strong migration of cross-over

Extent of migration

? — Possible anomaly

L.A. — Low amplitude response

Quantitatively interpreted anomaly

E.O.L. — Partially defined, end of line anomaly. True position likely to be off the end of the line

GOLD FIELDS EXPLORATION PTY. LIMITED	
E.L.42/71 – CARBINE HILL GRID	
LINE 2200 N	
LOOKING N.	
SCALE 1:2000 METRES	

DRAWN	P.K.
TRACED	S.F.
DATE	May 1985
SCALE	1:2000
FIG. NO.	52

85-2449 W/S

648

Geochemistry (P.P.M.)

1000 800 600 400 300 200 100 80 60 40 20 10

V.L.F. - E.M. Tx = Japan

DIP ANGLE (---) SMOOTHED DERIVATIVE (——)

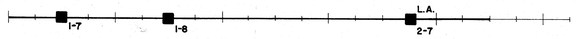
30 20 10 0 -10 50 40 30 20 10 0 -10

V.L.F. - E.M. Tx = N.W. Cape

DIP ANGLE (---) SMOOTHED DERIVATIVE (——)

30 20 10 0 -10 50 40 30 20 10 0 -10

EM 37 INTERPRETATION
J.R.BISHOP AUG. 85



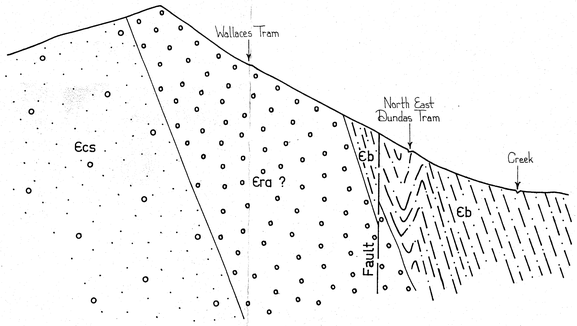
Total Magnetic Field (γ)

62 400 62 350 62 300 62 250 62 200 62 150

1200 E 1400 E 1600 E 1800 E 2000 E

Topography & Geology
HEIGHT ABOVE SEA LEVEL - (Metres)

650 600 550 500 450 400 350 300 250



123284

1200 E 1400 E 1600 E 1800 E 2000 E

GOLD FIELDS EXPLORATION PTY. LIMITED	DRAWN	P.K.
	TRACED	E.V.
E.L.42/71 — CARBINE HILL GRID	DATE	May 1985
LINE 2100 N. (1155E–1725E) LOOKING N.	SCALE	1:2000
SCALE 1:2000 METRES	FIG. NO.	53

048

I.P. DATA

MAGNETICS
Base Station at: approx. 2800E 3350S
Designated:

GEOCHEMISTRY
Sn Cu Pb Zn As Wo3

GEOLOGY

ROCK TYPE
- Shale
- Siltstone
- Sandstone
- Grits
- Conglomerate
- Rhyolitic tuffs
- Basic Tuffs

IGNEOUS - CAMBRIAN
- Melba Spilites (basic Lavas)
- Ultra-mafics
- Gabbro

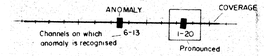
DEVONIAN
- Granite
- Quartz porphyry

FORMATION
- Dundas Group (unassigned)
- Red Lead Conglomerate
- Brewery Junction
- Razorback
- Hodge Slate
- Fernfield
- Confidence Saddle
- Carbine Hill
- Jurassic Dyke

Bedding
Cleavage

*All Bearings Magnetic

LEGEND - EM 37 INTERPRETATION



M Strong migration of cross-over
Extent of migration
? Possible anomaly
L.A. Low amplitude response
Quantitatively interpreted anomaly
E.O.L. Partially defined, end of line anomaly. True position likely to be off the end of the line.

85-2449 pk

049

Geochemistry (P.P.M.)

V.L.F. - E.M.
Tx = Japan
DIP ANGLE (---) SMOOTHED DERIVATIVE (——)

V.L.F. - E.M.
Tx = N.W. Cape
DIP ANGLE (---) SMOOTHED DERIVATIVE (——)

EM 37 INTERPRETATION
J.R. BISHOP Aug.85

M
I-8
L.A.
I-7

Total Magnetic Field (Ø)

Topography & Geology
HEIGHT ABOVE SEA LEVEL - (Metres)

5 cm

123285

200 E 400 E 600 E 800 E 1000 E 1200 E 1400 E 1600 E

GOLD FIELDS EXPLORATION PTY. LIMITED	
E.L.42/71 - CARBINE HILL GRID	
LINE 2000 N.	
LOOKING N.	
SCALE 1:2000 METRES	
DRAWN	P.K.
TRACED	S.F.
DATE	May 1985
SCALE	1:2000
FIG. NO.	54

049

I.P. DATA

MAGNETICS
Base Station at : approx. 2800 E 3350 S
Designated :

GEOCHEMISTRY
Sn
Cu
Pb
Zn
As
Wo3

GEOLOGY

ROCK TYPE
- Shale
- Siltstone
- Sandstone
- Grits
- Conglomerate
- Rhyolitic tuffs
- Basic Tuffs

IGNEOUS - CAMBRIAN
- Melba Spilites (basic Lavas)
- Ultra-mafics
- Gabbro

DEVONIAN
- Granite
- Quartz porphyry

FORMATION
- Dundas Group (unassigned)
- Red Lead Conglomerate
- Brewery Junction
- Razorback
- Hodge Slate
- Fernfield
- Confidence Saddle
- Carbine Hill
- Bedding
- Cleavage
- Jurassic Dyke

*All Bearings Magnetic

LEGEND - EM 37 INTERPRETATION

ANOMALY — Channels on which anomaly is recognised — 6-15

COVERAGE — 20 — Pronounced Anomaly

- M : Strong migration of cross-over
- Extent of migration
- ? : Possible anomaly
- L.A. : Low amplitude response
- Quantitatively interpreted anomaly
- E.O.L. : Partially defined, end of line anomaly. True position likely to be off the end of the line

85-2449 ws

050

EM 37 INTERPRETATION

J.R.BISHOP AUG.85

Geochemistry (PPM)

1000 800 600 400 300 200 100 80 60 40 20 10

V.L.F. - E.M.
Tx = Japan

30 20 10 0 -10 | 50 40 30 20 10

DIP ANGLE (—) SMOOTHED DERIVATIVE (—)

V.L.F. - E.M.
Tx = N.W. Cape

30 20 10 -10 | 50 40 30 20 10

DIP ANGLE (—) SMOOTHED DERIVATIVE (—)

M
1-8

Total Magnetic Field (γ)

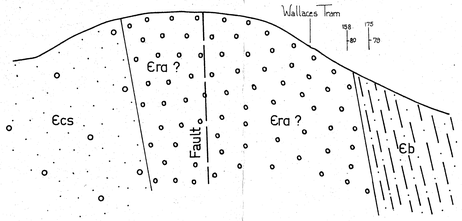
62 400
62 350
62 300
62 250
62 200
62 150

1200E 1400E 1600E 1800E 2000E

Topography & Geology
HEIGHT ABOVE SEA LEVEL - (Metres)

700 650 600 550 500 450 400 350 300

5cm



123286

1200E 1400E 1600E 1800E 2000E

GOLD FIELDS EXPLORATION PTY. LIMITED	DRAWN P.K.
E.L.42/71 — CARBINE HILL GRID	TRACED E.V.
LINE 1900 N. (1200E—1600E)	DATE May 1985
LOOKING N.	SCALE 1:2000
SCALE 1:2000 METRES	FIG. NO. 55

050

I.P. DATA

MAGNETICS

Base Station at : approx. 2800E 3350S

Designated :

GEOCHEMISTRY

Sn
Cu
Pb
Zn
As
We3

GEOLOGY

ROCK TYPE

- Shale
- Siltstone
- Sandstone
- Grits
- Conglomerate
- Rhyolitic tuffs
- Basic Tuffs

IGNEOUS - CAMBRIAN

- Melba Spilites (basic Lavas)
- Ultra-mafics
- Gabbro

DEVONIAN

- Granite
- Quartz porphyry

FORMATION

- Dundas Group (unassigned)
- Red Lead Conglomerate
- Brewery Junction
- Razorback
- Hodge Slate
- Fernfield
- Confidence Saddle
- Carbine Hill

50 60 Bedding

50 80 Cleavage

Jurassic Dyke

All Bearings Magnetic

LEGEND - EM 37 INTERPRETATION

ANOMALY COVERAGE

Channels on which anomaly is recognised 6-13 1-20

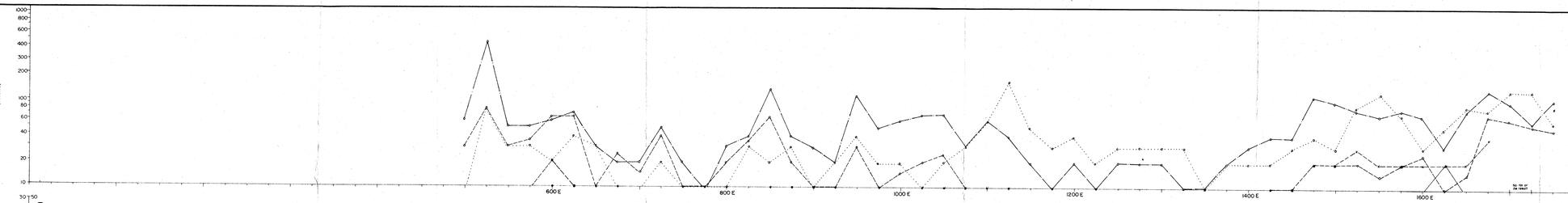
Pronounced Anomaly

- M Strong migration of cross-over
- Extent of migration
- ? Possible anomaly
- L.A. Low amplitude response
- Quantitatively interpreted anomaly
- E.O.L. Partially defined, end of line anomaly. True position likely to be off the end of the line

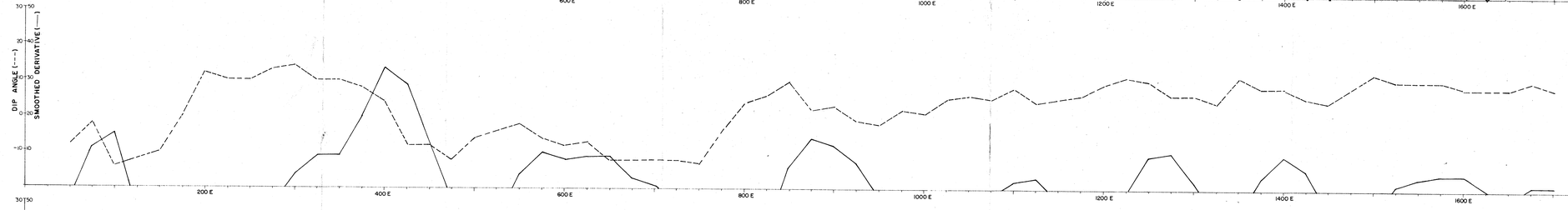
85-2449 gs

051

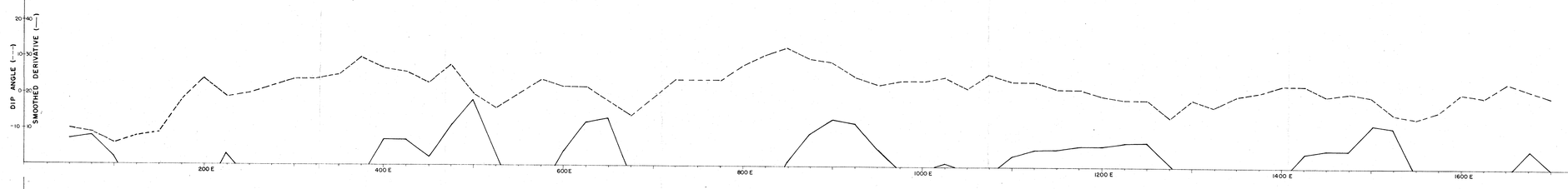
Geochemistry (P.P.M.)



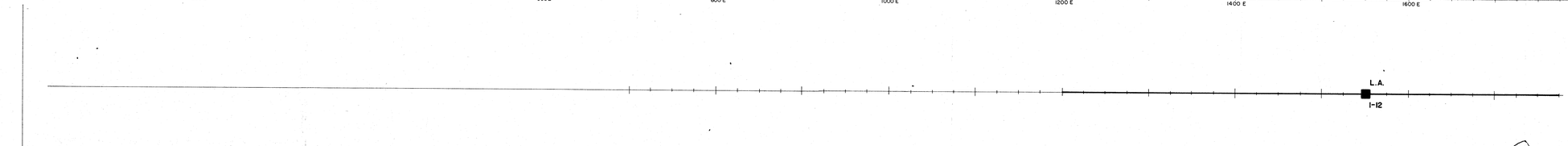
V.L.F. - E.M.
Tx = Jopon



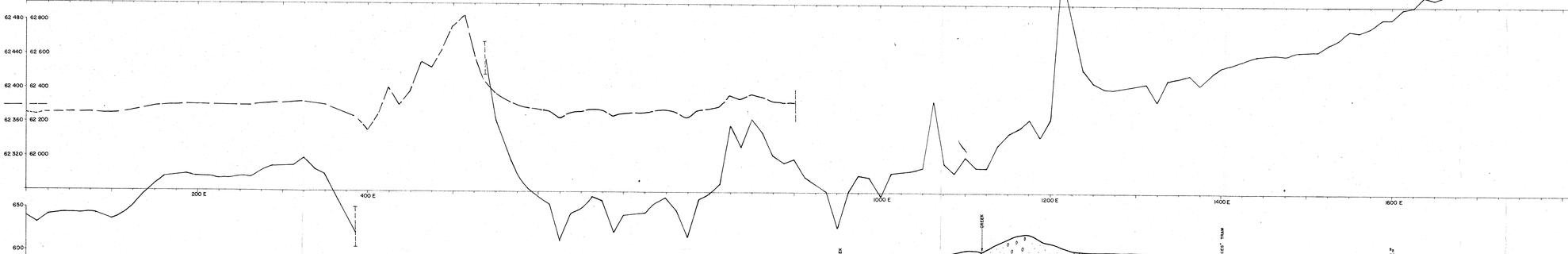
V.L.F. - E.M.
Tx = N.W. Cape



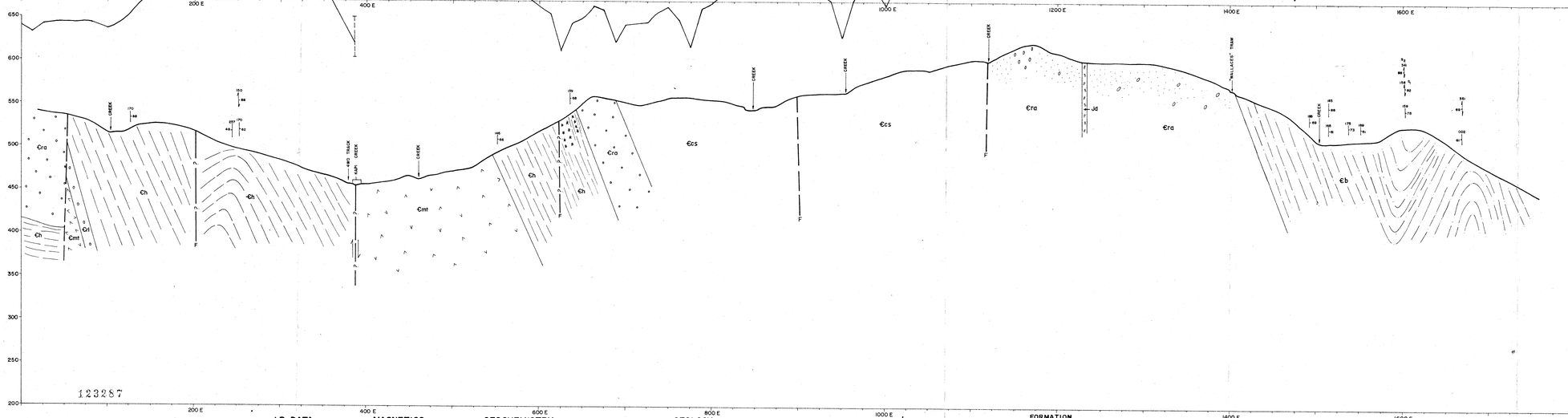
EM 37 INTERPRETATION
J.R.BISHOP Aug.85



Total Magnetic Field (Ó)



Topography & Geology
HEIGHT ABOVE SEA LEVEL (Metres)



123287

GOLD FIELDS EXPLORATION PTY. LIMITED	
E.L.42/71 – CARBINE HILL GRID	
LINE 1400 N. LOOKING N.	
SCALE 1:2000 METRES	
DRAWN	P.K.
TRACED	S.F.
DATE	May 1985
SCALE	1:2000
FIG. NO.	56

051

I.P DATA

MAGNETICS
Base Station at : approx. 2800 E 3350 S
Designated :

GEOCHEMISTRY
Sn
Cu
Pb
Zn
As
Wo3

GEOLOGY

ROCK TYPE
- Shale
- Siltstone
- Sandstone
- Grits
- Conglomerate
- Rhyolitic tuffs
- Basic Tuffs

IGNEOUS - CAMBRIAN
- Melba Spilites (basic Lavas)
- Ultra - mafics
- Gabbro

DEVONIAN
- Granite
- Quartz porphyry

FORMATION
- Dundas Group (unassigned)
- Red Lead Conglomerate
- Brewery Junction
- Razorback
- Hodge Slate
- Fernfield
- Confidence Saddle
- Carbine Hill
- Jurassic Dyke

Bedding
Cleavage

All Bearings Magnetic

LEGEND - EM 37 INTERPRETATION

ANOMALY — COVERAGE
Channels on which anomaly is recognised: 6-13
Pronounced Anomaly: 1-20

- M — Strong migration of cross-over
- Extent of migration
- ? — Possible anomaly
- L.A. — Low amplitude response
- Quantitatively interpreted anomaly
- E.O.L. — Partially defined, end of line anomaly. True position likely to be off the end of the line

35-2449 (4s)

052

Geochemistry (PPM)

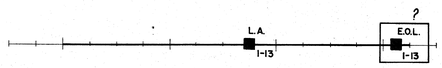
V.L.F. - E.M.
Tx. = Japan

DIP ANGLE (---)
SMOOTHED DERIVATIVE (——)

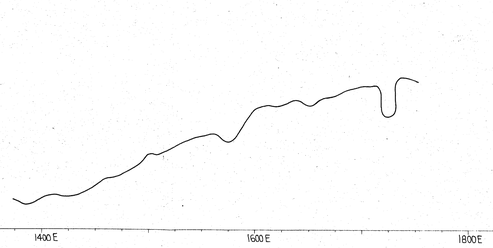
V.L.F. - E.M.
Tx. = N.W. Cape

DIP ANGLE (---)
SMOOTHED DERIVATIVE (——)

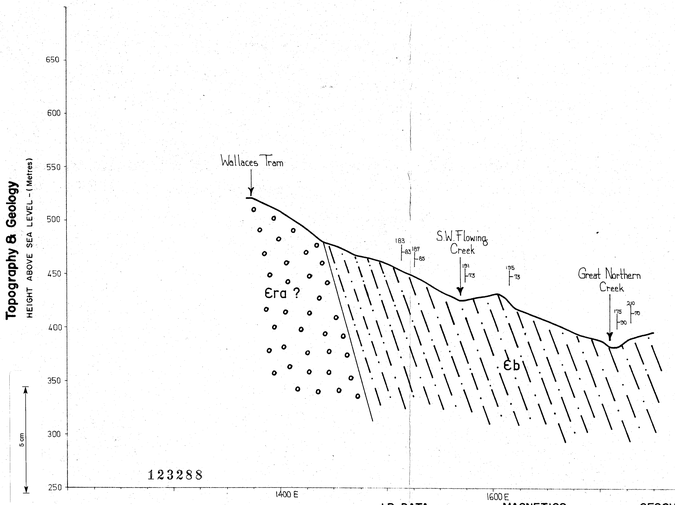
EM 37 INTERPRETATION
J.R.BISHOP AUG.85



Total Magnetic Field (Ŏ)



Topography & Geology
HEIGHT ABOVE SEA LEVEL - (Metres)



123288

GOLD FIELDS EXPLORATION PTY. LIMITED	
E.L.42/71 — CARBINE HILL GRID	
LINE 1300 N. (1375 - 1750 E)	
LOOKING N.	
SCALE 1:2000 METRES	

DRAWN	P.K.
TRACED	E.V.
DATE	May 1985
SCALE	1:2000
FIG. NO.	57

052

I.P. DATA

MAGNETICS

Base Station at: approx. 2800 E 3350 S

Designated:

GEOCHEMISTRY

Sn
Cu
Pb
Zn
As
Wo3

GEOLOGY

ROCK TYPE

- Shale
- Siltstone
- Sandstone
- Grits
- Conglomerate
- Rhyolitic tuffs
- Basic Tuffs

IGNEOUS - CAMBRIAN

- Melba Spilites (basic Lavas)
- Ultra-mafics
- Gabbro

DEVONIAN

- Granite
- Quartz porphyry

FORMATION

- Dundas Group (unassigned)
- Red Lead Conglomerate
- Brewery Junction
- Razorback
- Hodge Slate
- Fernfield
- Confidence Saddle
- Carbine Hill

Bedding

Cleavage

Jurassic Dyke

* All Bearings Magnetic

LEGEND - EM 37 INTERPRETATION

ANOMALY — Channels on which anomaly is recognised: 6-13

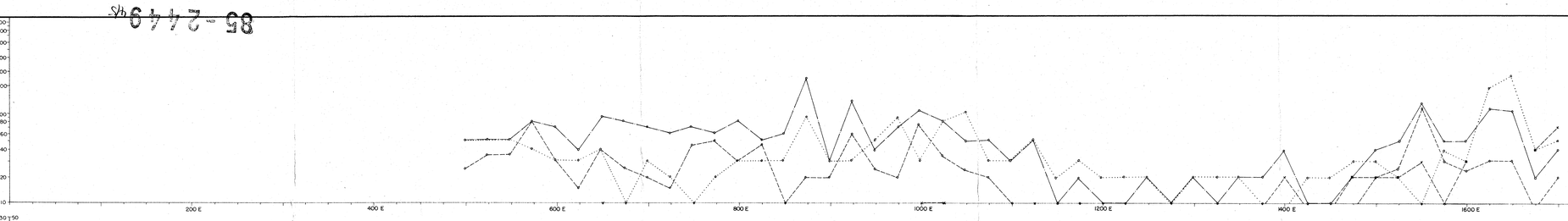
COVERAGE — I-20 — Pronounced Anomaly

- M. Strong migration of cross-over
- Extent of migration
- ? Possible anomaly
- L.A. Low amplitude response
- Quantitatively interpreted anomaly
- E.O.L. Partially defined end of line anomaly. True position likely to be off the end of the line

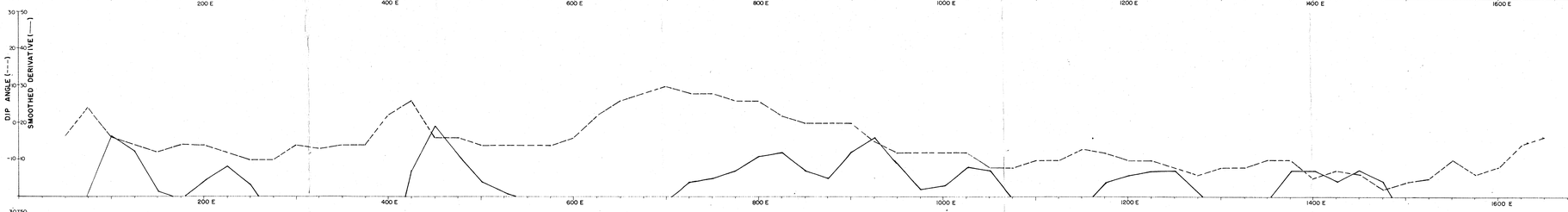
86-2449 VG

053

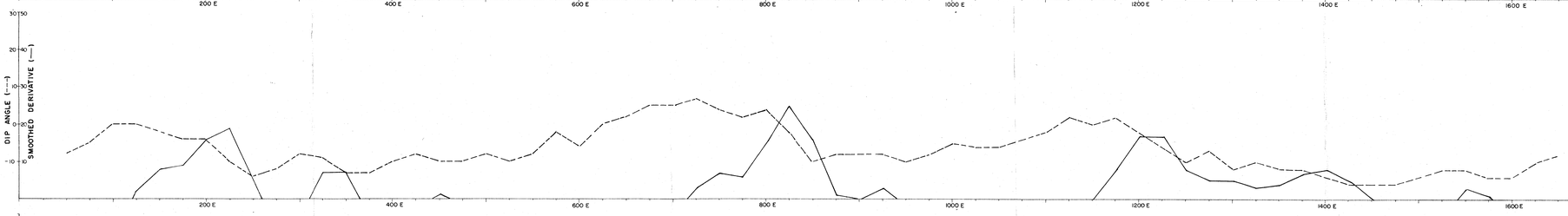
Geochemistry (P.P.M.)



V.L.F. - E.M.
Tx = Japan

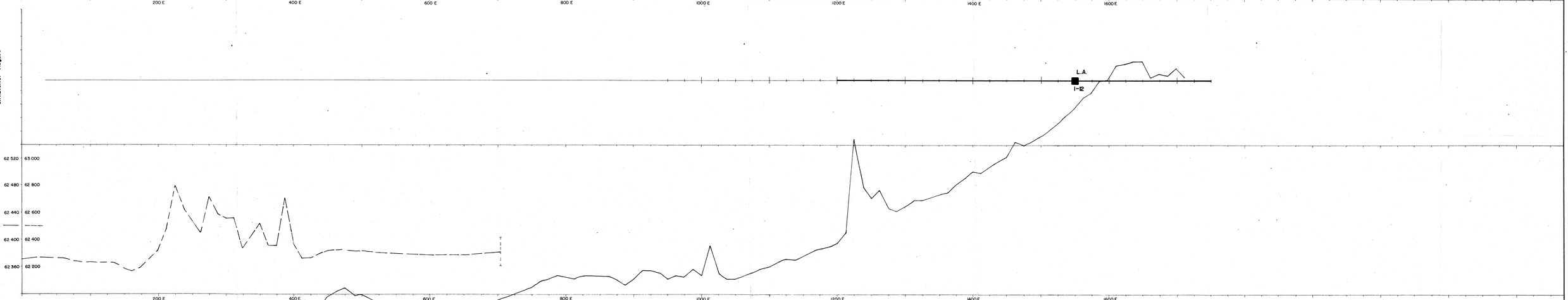


V.L.F. - E.M.
Tx = N.W. Cape

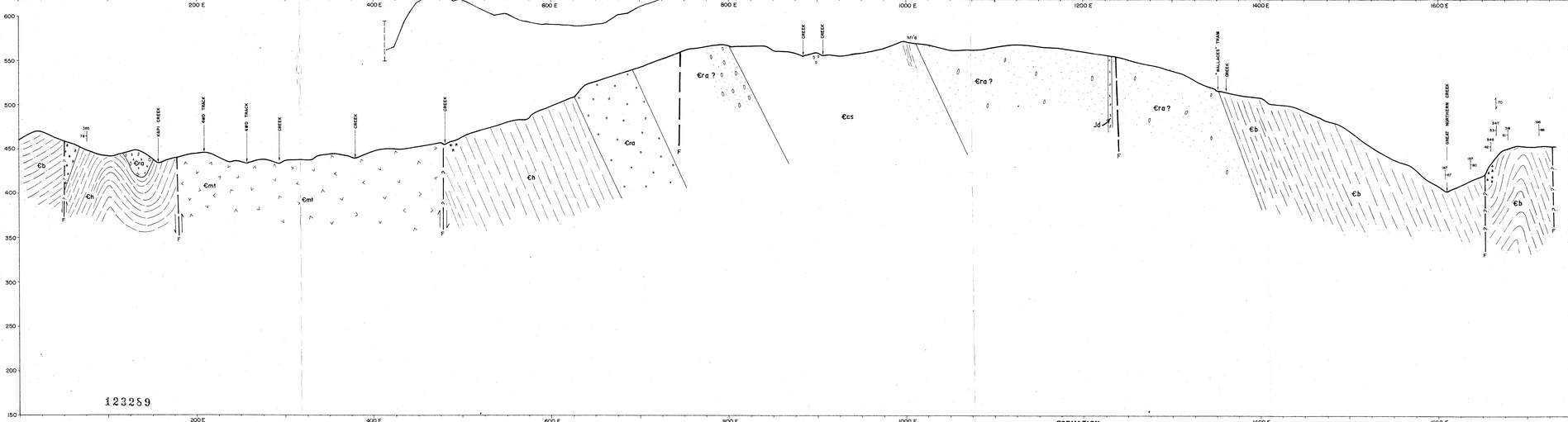


EM 37 INTERPRETATION
J.R.BISHOP Aug.85

Total Magnetic Field (γ)



Topography & Geology
HEIGHT ABOVE SEA LEVEL - (Metres)



123259

GOLD FIELDS EXPLORATION PTY. LIMITED	
E.L.42/71 - CARBINE HILL GRID	
LINE 1200 N.	
LOOKING N.	
SCALE 1: 2000 METRES	

DRAWN	P.K.
TRACED	S.F.
DATE	May 1985
SCALE	1:2000
FIG. NO.	58

053

I.P. DATA

MAGNETICS
Base Station at : approx. 2800E 3350S
Designated :

GEOCHEMISTRY
Sn
Cu
Pb
Zn
As
Wo3

GEOLOGY

ROCK TYPE
- Shale
- Siltstone
- Sandstone
- Grits
- Conglomerate
- Rhyolitic tuffs
- Basic Tuffs

IGNEOUS - CAMBRIAN
- Melba Spilites (basic Lavas)
- Ultra-mafics
- Gabbro

DEVONIAN
- Granite
- Quartz porphyry

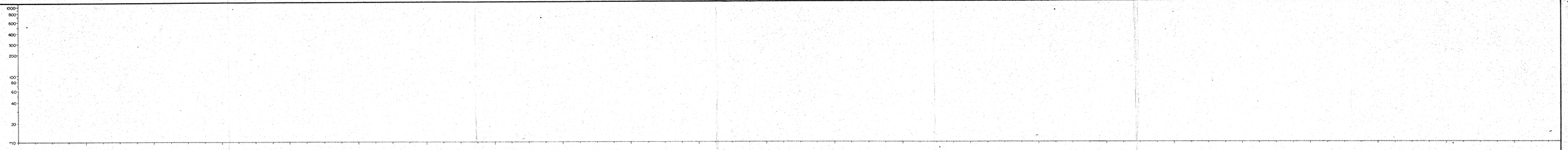
FORMATION
- Dundas Group (unasigned)
- Red Lead Conglomerate
- Brewery Junction
- Razorback
- Hodge Slate
- Fernfield
- Confidence Saddle
- Carbine Hill
- Jurassic Dyke
- Bedding
- Cleavage
- All Bearings Magnetic

LEGEND - EM 37 INTERPRETATION

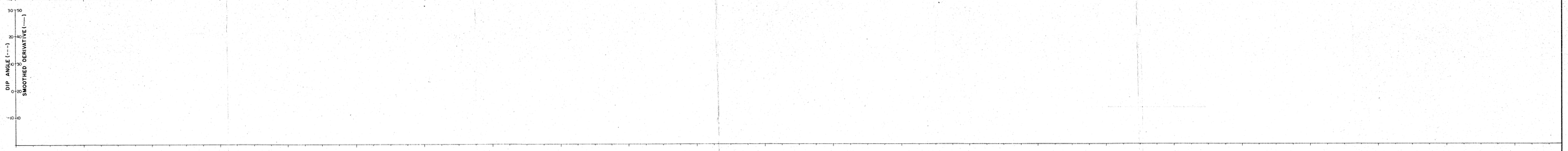
ANOMALY — COVERAGE
Channels on which anomaly is recognised — 6-13
Pronounced Anomaly — 1-20

- M. Strong migration of cross-over
- Extent of migration
- ? Possible anomaly
- L.A. Low amplitude response
- Quantitatively interpreted anomaly
- E.O.L. Partially defined end of line anomaly. True position likely to be off the end of the line

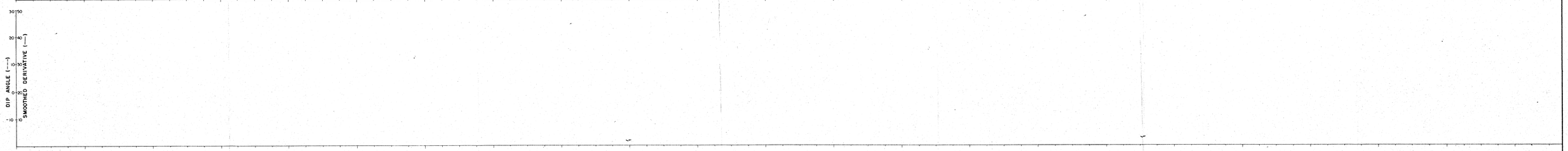
Geochemistry (P.P.M.)



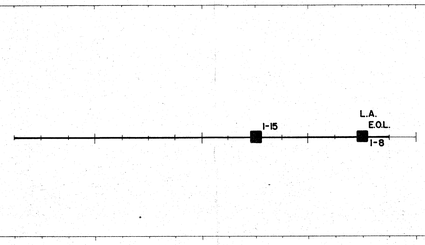
V.L.F. - E.M.
Tx = Jopon



V.L.F. - E.M.
Tx = N.W. Cape

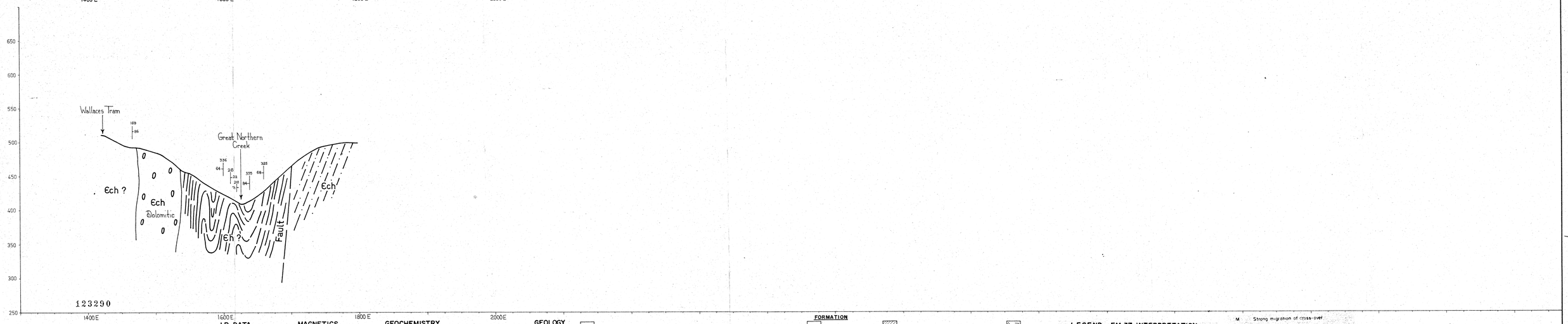


EM 37 INTERPRETATION
J.R. BISHOP AUG.85



Total Magnetic Field (δ)

Topography & Geology
HEIGHT ABOVE SEA LEVEL - (Metres)



GOLD FIELDS EXPLORATION PTY. LIMITED	
E.L.42/71 — CARBINE HILL GRID	
LINE 1100 N. (1425 E — 1800 E)	
LOOKING N.	
SCALE 1: 2000 METRES	

DRAWN	P.K.
TRACED	E.V.
DATE	May 1985
SCALE	1:2000
FIG. NO.	59

I.P. DATA

MAGNETICS
Base Station at: approx. 2800 E 33505
Designated:

GEOCHEMISTRY
Sn
Cu
Pb
Zn
As
Wo3

GEOLOGY

ROCK TYPE
- Shale
- Siltstone
- Sandstone
- Grits
- Conglomerate
- Rhyolitic tuffs
- Basic Tuffs

IGNEOUS - CAMBRIAN
- Melba Spilites (basic Lavas)
- Ultra-mafics
- Gabbro

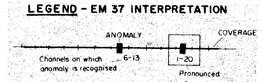
DEVONIAN
- Granite
- Quartz porphyry

FORMATION
- Dundas Group (unasigned)
- Red Lead Conglomerate
- Brewery Junction
- Razorback
- Hodge Slate
- Fernfield
- Confidence Saddle
- Carbine Hill
- Jurassic Dyke

60 Bedding
50 Cleavage

* All Bearings Magnetic

LEGEND - EM 37 INTERPRETATION



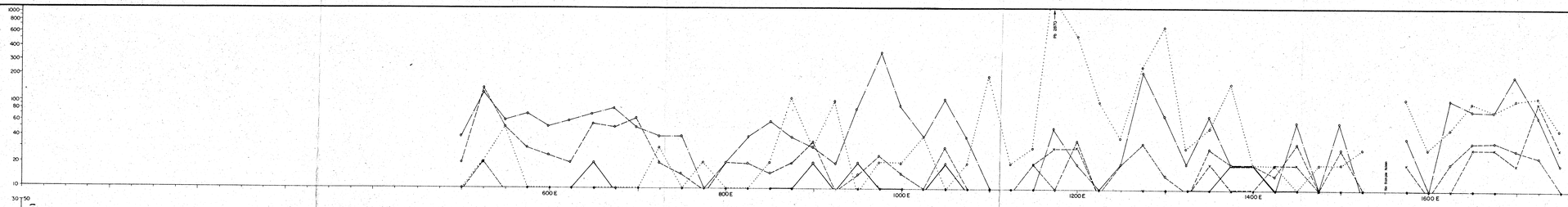
M — Strong migration of cross-over
← Extent of migration
? — Possible anomaly
L.A. — Low amplitude response
Quantitatively interpreted anomaly
E.O.L. — Partially defined, end of line anomaly. True position likely to be off the end of the line

85-2449 4/5

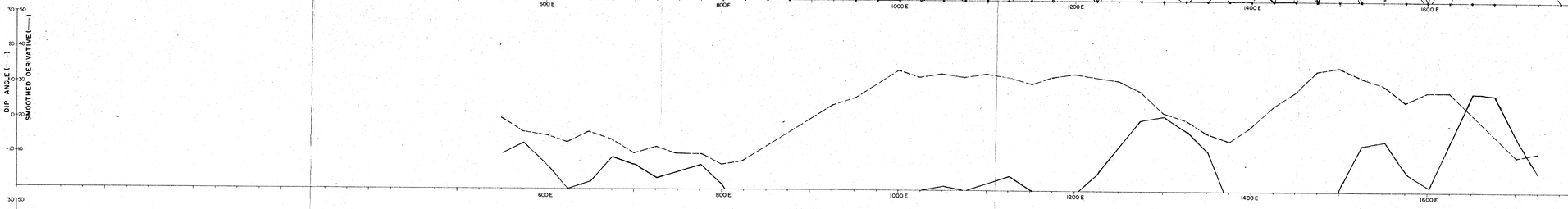
85-2449 4/5

055

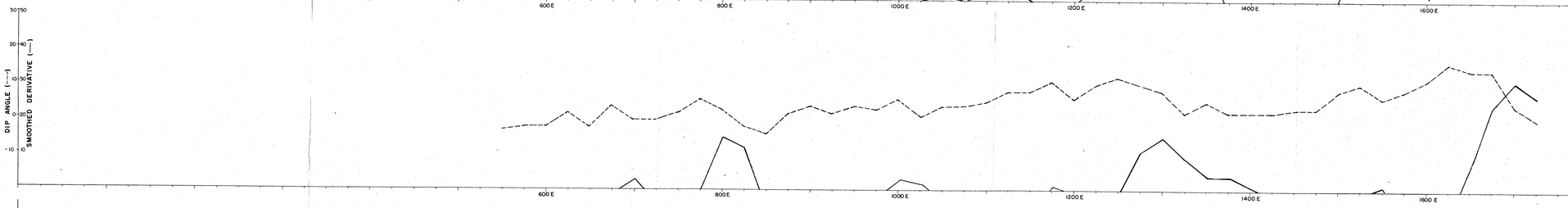
Geochemistry (P.P.M.)



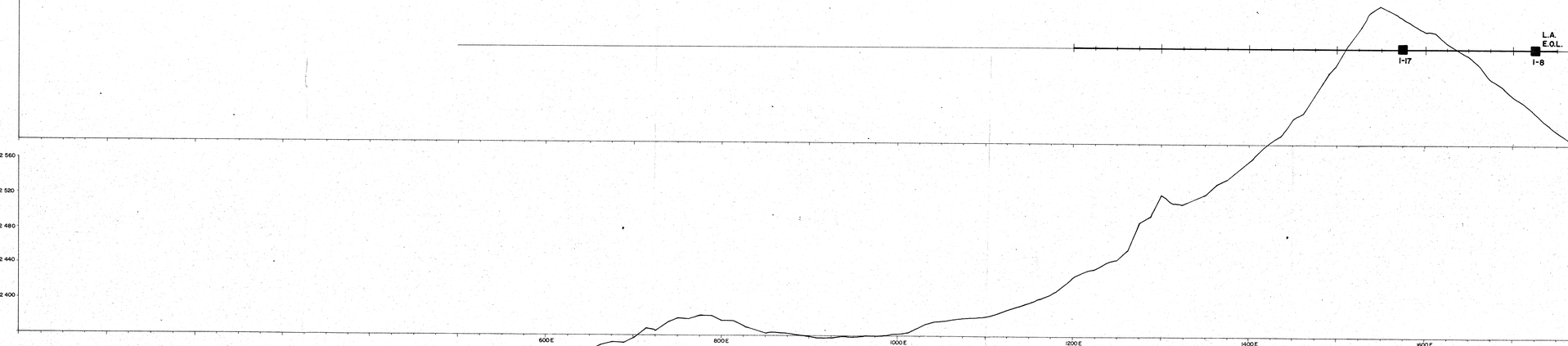
V.L.F. - E.M.
Tx = Jopan



V.L.F. - E.M.
Tx = N.W. Cape

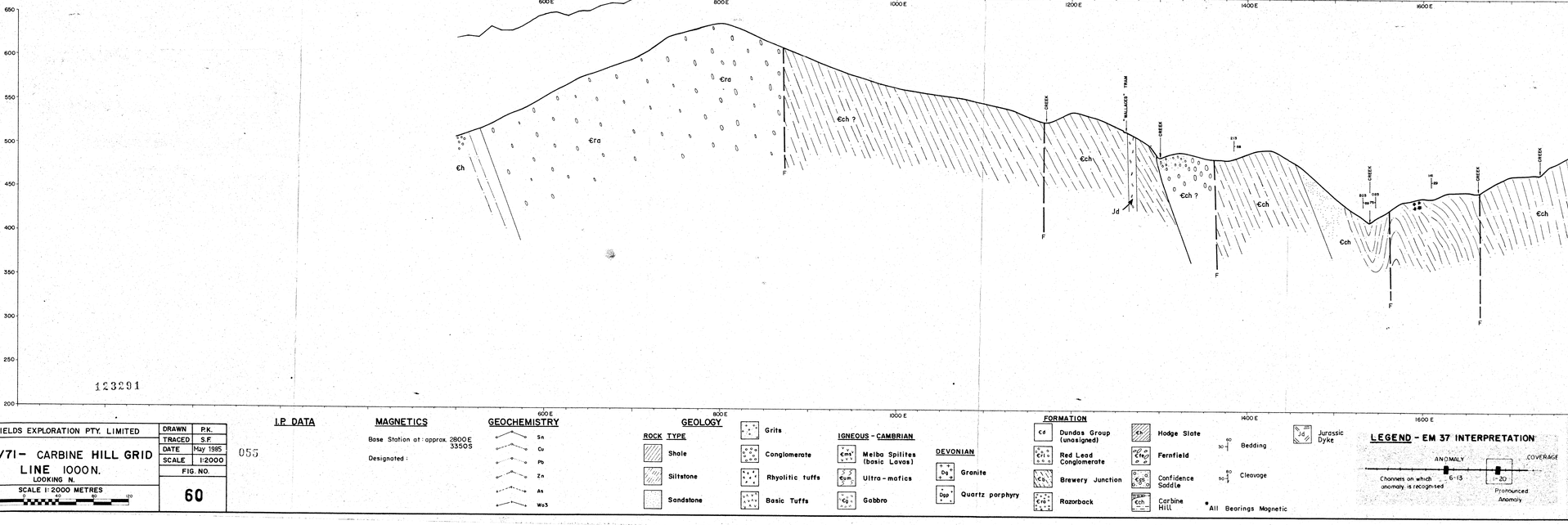


EM 37 INTERPRETATION
J.R. BISHOP Aug. 85



Total Magnetic Field (Ø)

Topography & Geology
HEIGHT ABOVE SEA LEVEL - (Metres)



123291

GOLD FIELDS EXPLORATION PTY. LIMITED	
E.L.42/71 – CARBINE HILL GRID	
LINE 1000N.	
LOOKING N.	
SCALE 1:2000 METRES	

DRAWN	P.K.
TRACED	S.F.
DATE	May 1985
SCALE	1:2000
FIG. NO.	60

055

I.P. DATA

MAGNETICS
Base Station at : approx. 2800E 3350S
Designated :

GEOCHEMISTRY
Sn
Cu
Pb
Zn
As
Wo3

GEOLOGY

ROCK TYPE
- Shale
- Siltstone
- Sandstone
- Grits
- Conglomerate
- Rhyolitic tuffs
- Basic Tuffs

IGNEOUS - CAMBRIAN
- Melba Spilites (basic Lavas)
- Ultra-mafics
- Gabbro

DEVONIAN
- Granite
- Quartz porphyry

FORMATION
- Dundas Group (unassigned)
- Red Lead Conglomerate
- Brewery Junction
- Razorback
- Hodge Slate
- Fernfield
- Confidence Saddle
- Carbine Hill
- Bedding
- Cleavage
- All Bearings Magnetic
- Jurassic Dyke

LEGEND - EM 37 INTERPRETATION

- M — Strong migration of cross-over
- Extent of migration
- ? — Possible anomaly
- L.A. — Low amplitude response
- Quantitatively interpreted anomaly
- E.O.L. — Partially defined, end of line anomaly. True position likely to be off the end of the line

056

EM 37 INTERPRETATION

J.R.BISHOP AUG.85

Geochemistry (P.P.M.)

V.L.F. - E.M.
Tx = Jopon

DIP ANGLE (---)
SMOOTHED DERIVATIVE (——)

V.L.F. - E.M.
Tx = N.W. Cape

DIP ANGLE (---)
SMOOTHED DERIVATIVE (——)

Total Magnetic Field (Ó)

62 700
62 650
62 600
62 550
62 500
62 450

1200 E 1400 E 1600 E 1800 E 2000 E

L.A.
I-10
I-20

Topography & Geology
HEIGHT ABOVE SEA LEVEL - (Metres)

650
600
550
500
450
400
350
300
250

5 cm

Wallaces Tram
Creek
Creek
Creek
Dolomitic Shales And Siltstones.
Calcareous Greywacks.
Fault
Fault
Fault
Jd
Ech
Ech?

123292

1200 E 1400 E 1600 E 1800 E 2000 E

I.P. DATA

MAGNETICS

Base Station at:- approx. 2800 E 3350 S

Designated :

GEOCHEMISTRY

Sn
Cu
Pb
Zn
As
Wo3

GEOLOGY

ROCK TYPE

Shale
Siltstone
Sandstone
Grits
Conglomerate
Rhyolitic tuffs
Basic Tuffs

IGNEOUS - CAMBRIAN

Melba Spilites (basic Lavas)
Ultra-mafics
Gabbro

DEVONIAN

Granite
Quartz porphyry

FORMATION

Dundas Group (unasigned)
Red Lead Conglomerate
Brewery Junction
Razorback
Hodge Slate
Fernfield
Confidence Saddle
Carbine Hill
Bedding
Cleavage
Jurassic Dyke

LEGEND - EM 37 INTERPRETATION

ANOMALY
COVERAGE
Channels on which anomaly is recognised
6-13
I-20
Pronounced Anomaly

M Strong migration of cross-over
Extent of migration
? Possible anomaly
L.A. Low amplitude response
Quantitatively interpreted anomaly
E.O.L. Partially defined, end of line anomaly. True position likely to be off the end of the line

*All Bearings Magnetic

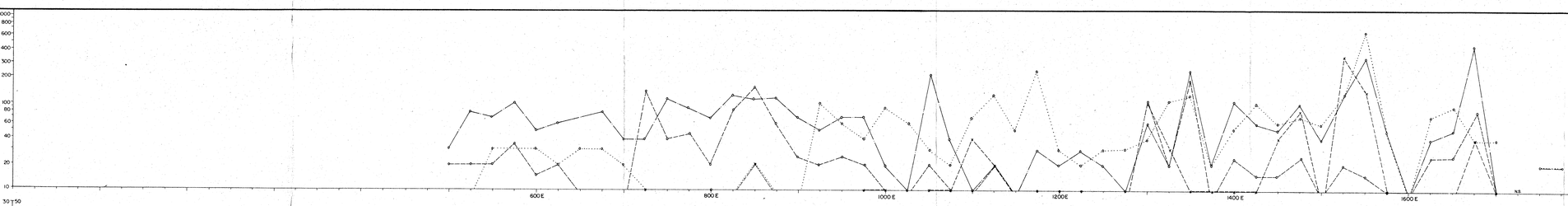
GOLD FIELDS EXPLORATION PTY. LIMITED	
E.L.42/71 — CARBINE HILL GRID	
LINE 900 N. (1155E-1800E)	
LOOKING N.	
SCALE 1:2000 METRES	

DRAWN	P.K.
TRACED	E.V.
DATE	May 1985
SCALE	1:2000
FIG. NO.	61

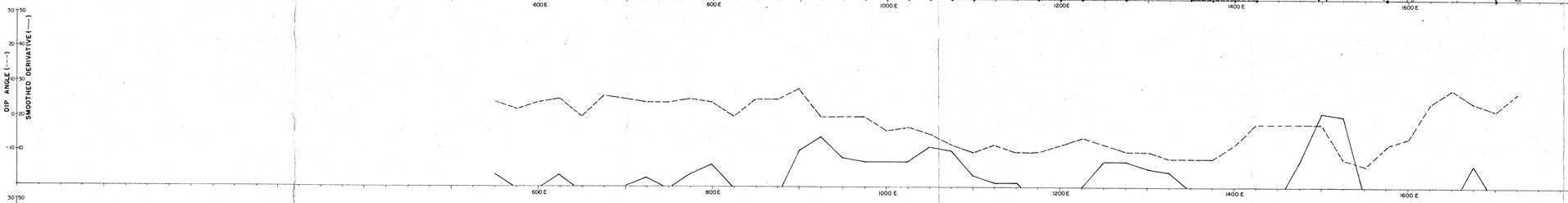
35-2449 45 056

057.

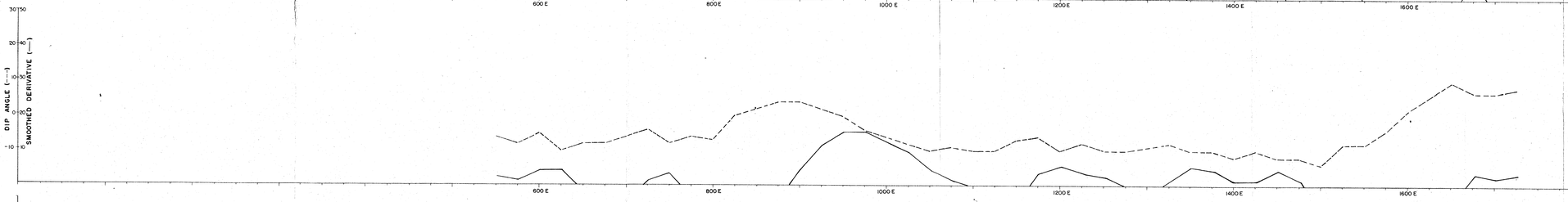
Geochemistry (P.P.M.)



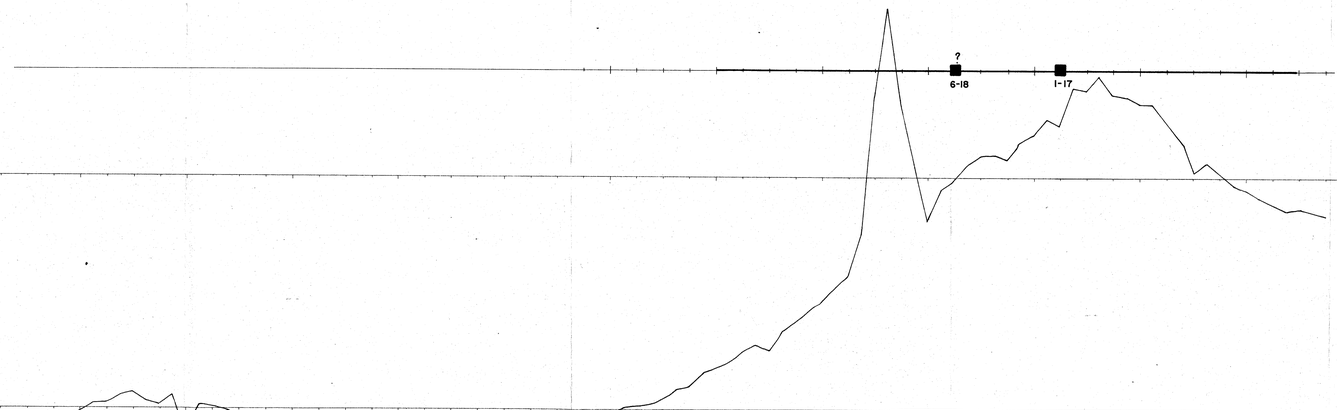
V.L.F. - E.M.
Tx = Japan



V.L.F. - E.M.
Tx = N.W. Cape

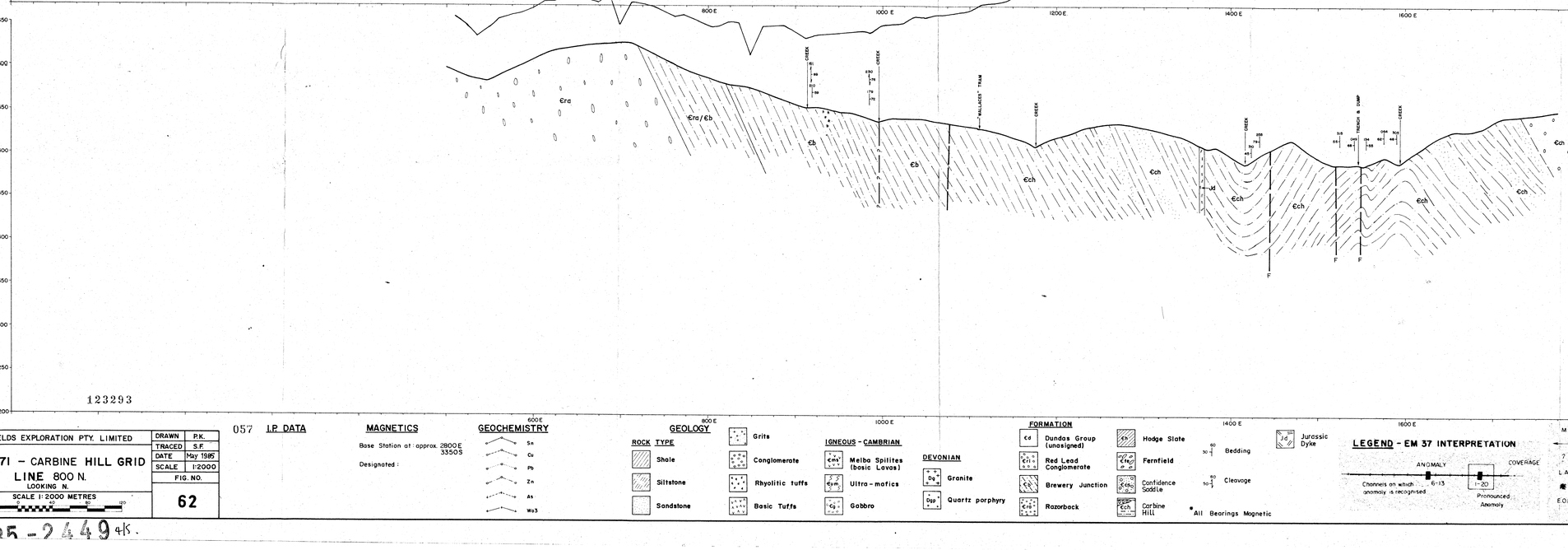


EM 37 INTERPRETATION
J.R. BISHOP Aug. 85



Total Magnetic Field (ϑ)

Topography & Geology
HEIGHT ABOVE SEA LEVEL (Metres)



123293

GOLD FIELDS EXPLORATION PTY. LIMITED	DRAWN	P.K.
	TRACED	S.F.
E.L.42/71 – CARBINE HILL GRID	DATE	May 1985
LINE 800 N. LOOKING N.	SCALE	1:2000
SCALE 1:2000 METRES	FIG. NO.	62

057 I.P. DATA

MAGNETICS
Base Station at : approx. 2800 E 3350 S
Designated :

GEOCHEMISTRY
Sn
Cu
Pb
Zn
As
Wo3

GEOLOGY

ROCK TYPE
- Shale
- Siltstone
- Sandstone
- Grits
- Conglomerate
- Rhyolitic tuffs
- Basic Tuffs

IGNEOUS - CAMBRIAN
- Melba Spilites (basic Lavas)
- Ultra - mafics
- Gabbro

DEVONIAN
- Granite
- Quartz porphyry

FORMATION
- Cd Dundas Group (unasigned)
- Cra Red Lead Conglomerate
- Cb Brewery Junction
- Cr Razorback
- Hodge Slate
- Fernfield
- Confidence Saddle
- Cch Carbine Hill
- Jd Jurassic Dyke
- 60/30 Bedding
- 50/50 Cleavage

* All Bearings Magnetic

LEGEND - EM 37 INTERPRETATION

ANOMALY — COVERAGE
Channels on which anomaly is recognised 6-13 — 1-20 Pronounced Anomaly

- M Strong migration of cross-over
- Extent of migration
- ? Possible anomaly
- L.A. Low amplitude response
- Quantitatively interpreted anomaly
- E.O.L. Partially defined, end of line anomaly. True position likely to be off the end of the line.

05-2449 4K.

058

EM37 INTERPRETATION

J.R. BISHOP AUG.85

Geochemistry (P.P.M.)

100
80
60
40
20
10

V.L.F. - E.M.
Tx = Japan

DIP ANGLE (---)
SMOOTHED DERIVATIVE (——)

30 20 10 0 −10
50 40 30 20 10 0

V.L.F. - E.M.
Tx = N.W. Cape

DIP ANGLE (---)
SMOOTHED DERIVATIVE (——)

30 20 10 0 −10
50 40 30 20 10 0

M
I-20
?
6-18

Total Magnetic Field (Ō)

62 700
62 650
62 600
62 550
62 500
62 450

1200 E
1400 E
1600 E
1800 E
2000 E

Topography & Geology
HEIGHT ABOVE SEA LEVEL - (Metres)

750
700
650
600
550
500
450
400
350

Wallaces Tram
Creek
349
356
Wallaces Tram
Wallaces Tram
Creek
Creek
98
74
Tightly 30 338 Folded.
Creek
Ech
Greywackes
Fault
Jd
Ech
Fault
Ech
Greywackes
Fault
Ech
Ech
Ech

5 cm

123294

1200E
1400 E
1600 E
1800 E
2000 E

GOLD FIELDS EXPLORATION PTY. LIMITED

E.L.42/71 — CARBINE HILL GRID
LINE 700 N. (1125E–1800E)
LOOKING N.
SCALE 1:2000 METRES
40 0 40 80 120

DRAWN	P.K.
TRACED	E.V.
DATE	May 1985
SCALE	1:2000
FIG. NO.	63

I.P. DATA

058

MAGNETICS

Base Station at : approx. 2800E 3350S

Designated :

GEOCHEMISTRY

Sn
Cu
Pb
Zn
As
Wo3

GEOLOGY

ROCK TYPE

- Shale
- Siltstone
- Sandstone
- Grits
- Conglomerate
- Rhyolitic tuffs
- Basic Tuffs

IGNEOUS - CAMBRIAN

- Melba Spilites (basic Lavas)
- Ultra-mafics
- Gabbro

DEVONIAN

- Granite
- Quartz porphyry

FORMATION

- Dundas Group (unasigned)
- Red Lead Conglomerate
- Brewery Junction
- Razorback
- Hodge Slate
- Fernfield
- Confidence Saddle
- Carbine Hill
- Bedding
- Cleavage
- Jurassic Dyke

* All Bearings Magnetic

LEGEND - EM 37 INTERPRETATION

ANOMALY — COVERAGE
Channels on which anomaly is recognised
6-13
I-20
Pronounced Anomaly

- M. Strong migration of cross-over
- Extent of migration
- ? Possible anomaly
- L.A. Low amplitude response
- Quantitatively interpreted anomaly
- E.O.L. Partially defined, end of line anomaly. True position likely to be off the end of the line

85-2440 4/5

059

Geochemistry (P.P.M.)

1000 800 600 400 300 200 100 80 60 40 20 10

600 E 800 E 1000 E 1200 E 1400 E 1600 E 1800 E

Ni Sn Ag Ni Sn Ag Ni Sn Ag Ni Sn Ag

V.L.F. - E.M.
Tx = Japan

DIP ANGLE (---) SMOOTHED DERIVATIVE (——)

30 20 10 0 -10 -20 50 40 30 20 10 0 -10

600 E 800 E 1000 E 1200 E 1400 E 1600 E 1800 E

V.L.F. - E.M.
Tx = N.W. Cape

DIP ANGLE (---) SMOOTHED DERIVATIVE (——)

30 20 10 0 -10 -20 50 40 30 20 10 0 -10

600 E 800 E 1000 E 1200 E 1400 E 1600 E 1800 E

EM 37 INTERPRETATION
J.R.BISHOP Aug.85

1-12 5-13

Total Magnetic Field (Ẋ)

62 600 62 560 62 520 62 480 62 440

600 E 800 E 1000 E 1200 E 1400 E 1600 E 1800 E

Topography & Geology
HEIGHT ABOVE SEA LEVEL - (Metres)

650 600 550 500 450 400 350 300 250 200

5 cm

600 E 800 E 1000 E 1400 E 1600 E

"WALLACE" Trig CREEK GREAT NORTHERN CREEK MINE CREEK

€ra €ra/€b €b €b €b €b €b Jd €ch €ch €ch €ch

123295

GOLD FIELDS EXPLORATION PTY. LIMITED	DRAWN P.K. / TRACED S.F. / DATE May 1985 / SCALE 1:2000
E.L.42/71 – CARBINE HILL GRID	FIG. NO. 64
LINE 600 N LOOKING N.	
SCALE 1:2000 METRES 0 20 40 60 80 100	

059

I.P. DATA

MAGNETICS
Base Station at approx. 2800 E 3350 S
Designated :

GEOCHEMISTRY
Sn Cu Pb Zn As Wo3

GEOLOGY

ROCK TYPE
- Shale
- Siltstone
- Sandstone
- Grits
- Conglomerate
- Rhyolitic tuffs
- Basic Tuffs

IGNEOUS - CAMBRIAN
- €ms² Melba Spilites (basic Lavas)
- €um Ultra-mafics
- €g Gabbro

DEVONIAN
- Dg Granite
- Dqp Quartz porphyry

FORMATION
- €d Dundas Group (unassigned)
- €rl Red Lead Conglomerate
- €rb Brewery Junction
- €ra Razorback
- Hodge Slate
- Fernfield
- Confidence Saddle
- €ch Carbine Hill
- Jd Jurassic Dyke

30 Bedding
50 Cleavage
* All Bearings Magnetic

LEGEND - EM 37 INTERPRETATION

ANOMALY COVERAGE
Channels on which anomaly is recognised 6-13 1-20 Pronounced Anomaly

M Strong migration of cross-over
Extent of migration
? Possible anomaly
L.A. Low amplitude response
Quantitatively interpreted anomaly
E.O.L. Partially defined end of line anomaly. True position likely to be off the end of the line

2449 85 - 2449 45

85-2449 Pts

060

Geochemistry (P.P.M.)

1000 800 600 400 300 200 100 80 60 40 30 20 10

V.L.F. - E.M.

Tx = Japan

DIP ANGLE (——) 50 40 30 20 10 0 -10 -20 -10

SMOOTHED DERIVATIVE (——)

V.L.F. - E.M.

Tx = N.W. Cape

DIP ANGLE (——) 50 40 30 20 10 0 -10 -20 -10

SMOOTHED DERIVATIVE (——)

EM37 INTERPRETATION

J.R. BISHOP AUG. 85

L.A. 6-16 | M 1-20 | ? 6-20

Total Magnetic Field (ϕ)

62 700 62 650 62 600 62 550 62 500 62 450

Metal rails

1200 E 1400 E 1600 E 1800 E 2000 E

Topography & Geology

HEIGHT ABOVE SEA LEVEL - (Metres)

750 700 650 600 550 500 450 400 350

Creek 240 S.E. | Creek | Creek | Wallaces Tram | Wallaces Tram | Creek | Creek 195 E.S. | Wallaces Tram | Creek 160 E.S.E. | Wallaces Tram

Fault | Fault ? | Fault | Jd | Eb | Ech | Ech | Ech | Ech

5 cm

1200 E 1400 E 1600 E 1800 E 2000 E

123256

GOLD FIELDS EXPLORATION PTY. LIMITED	DRAWN P.K.
	TRACED E.V.
E.L. 42/71 CARBINE HILL GRID	DATE May 1985
LINE 500 N. (1200E–1800E)	SCALE 1:2000
LOOKING N.	FIG. NO. 65
SCALE 1:2000 METRES	

060

I.P. DATA

MAGNETICS

Base Station at: approx. 2800E 3350S

Designated:

GEOCHEMISTRY

Sn Cu Pb Zn As Wo3

GEOLOGY

ROCK TYPE: Shale; Siltstone; Sandstone; Grits; Conglomerate; Rhyolitic tuffs; Basic Tuffs

IGNEOUS - CAMBRIAN: Melba Spilites (basic Lavas); Ultra-mafics; Gabbro

DEVONIAN: Granite; Quartz porphyry

FORMATION: Dundas Group (unasigned); Red Lead Conglomerate; Brewery Junction; Razorback; Hodge Slate; Fernfield; Confidence Saddle; Carbine Hill; Bedding; Cleavage; Jurassic Dyke

*All Bearings Magnetic

LEGEND - EM 37 INTERPRETATION

ANOMALY: Channels on which anomaly is recognised 6-15; COVERAGE 1-20 Pronounced Anomaly

M Strong migration of cross-over

Extent of migration

? Possible anomaly

L.A. Low amplitude response

Quantitatively interpreted anomaly

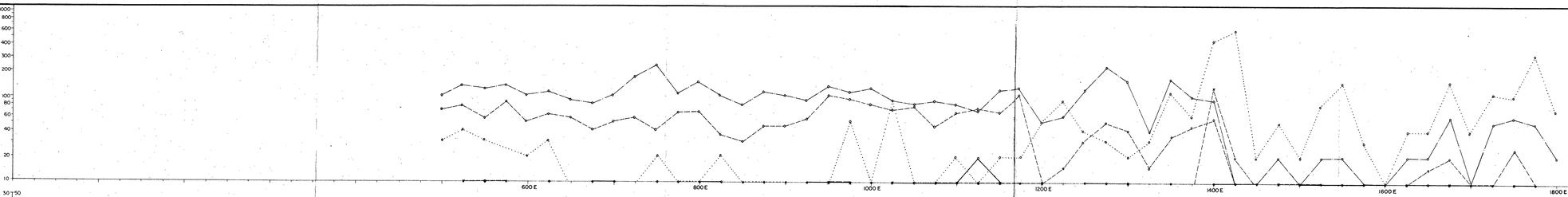
E.O.L. Partially defined, end of line anomaly. True position likely to be off the end of the line

85-2449 ✍

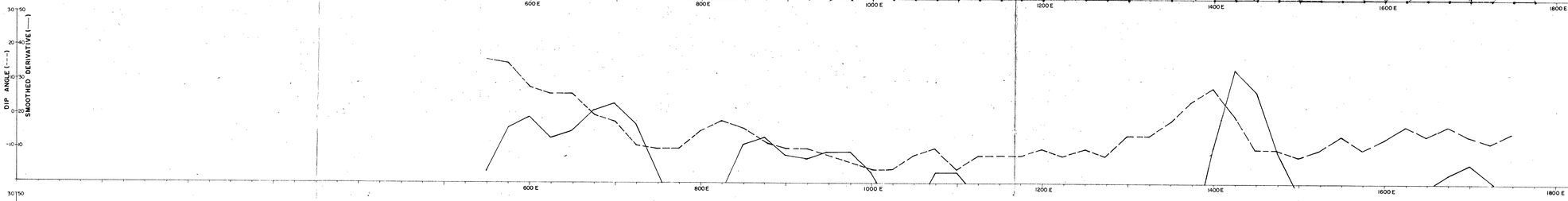
061

EM 37 INTERPRETATION
J.R. BISHOP Aug. 85

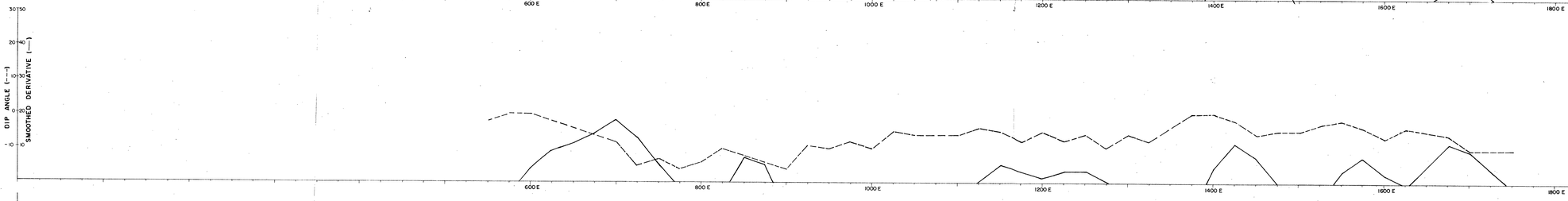
Geochemistry (P.P.M.)

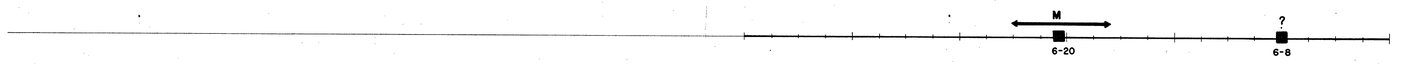


V.L.F. - E.M.
Tx = Jopon

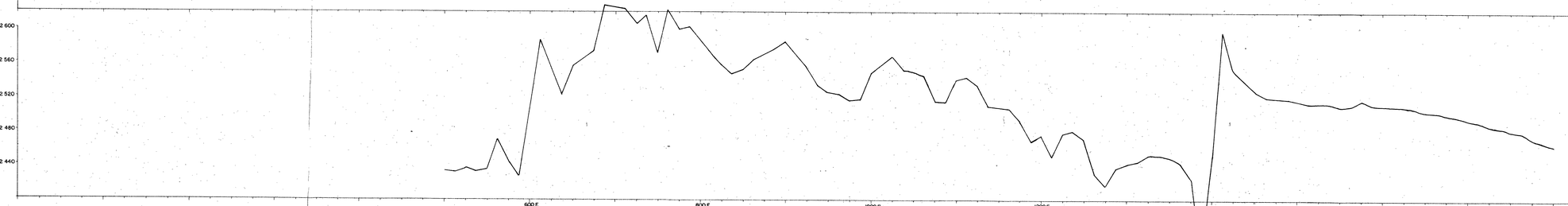


V.L.F. - E.M.
Tx = N.W. Cape

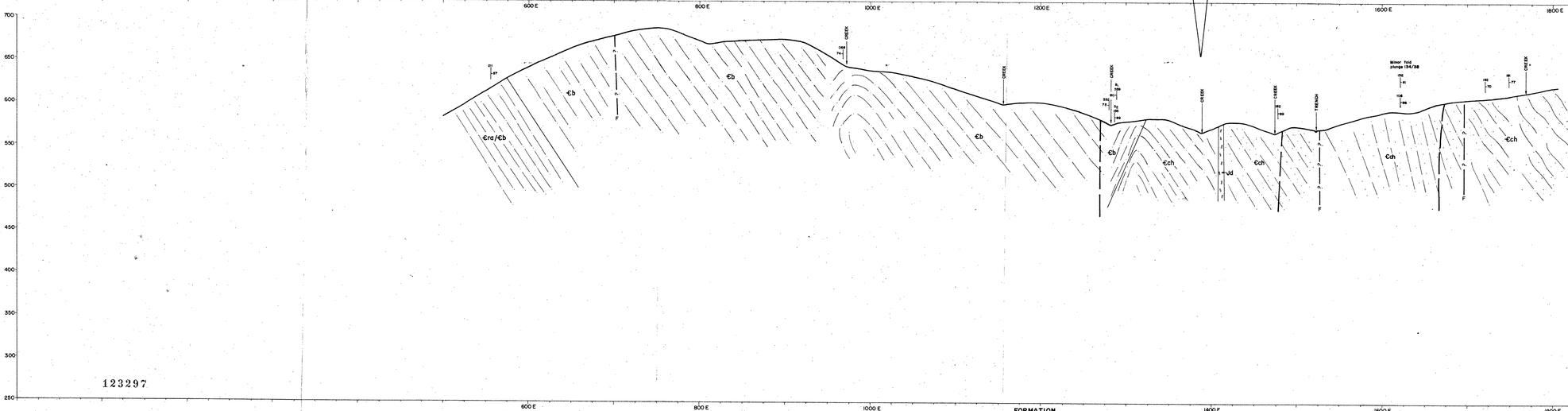




Total Magnetic Field (ϔ)



Topography & Geology
HEIGHT ABOVE SEA LEVEL - (Metres)



123297

GOLD FIELDS EXPLORATION PTY. LIMITED	
E.L. 42/71 — CARBINE HILL GRID	
LINE 400 N.	
LOOKING N.	
SCALE 1:2000 METRES	
DRAWN	P.K.
TRACED	S.F.
DATE	May 1985
SCALE	1:2000
FIG. NO.	66

061 I.P. DATA

MAGNETICS

Base Station at : approx. 2800 E 3350 S

Designated :

GEOCHEMISTRY

Sn
Cu
Pb
Zn
As
Wo3

GEOLOGY

ROCK TYPE
- Shale
- Siltstone
- Sandstone
- Grits
- Conglomerate
- Rhyolitic tuffs
- Basic Tuffs

IGNEOUS - CAMBRIAN
- Melbo Spilites (basic Lavas)
- Ultra-mafics
- Gabbro

DEVONIAN
- Granite
- Quartz porphyry

FORMATION
- Cd Dundas Group (unassigned)
- Red Lead Conglomerate
- Cb Brewery Junction
- Razorback
- Hodge Slate
- Fernfield
- Confidence Saddle
- Carbine Hill €ch
- Jurassic Dyke

50/30 Bedding
50/50 Cleavage

* All Bearings Magnetic

LEGEND - EM 37 INTERPRETATION

ANOMALY — COVERAGE
Channels on which anomaly is recognised — 6-13 — 1-20 — Pronounced Anomaly

M. Strong migration of cross-over
Extent of migration
? Possible anomaly
L.A. Low amplitude response
Quantitatively interpreted anomaly
E.O.L. Partially defined, end of line anomaly. True position likely to be off the end of the line

062

E.M.37 INTERPRETATION
J.R. BISHOP Aug.85

Geochemistry (P.P.M.)

100
80
60
40
20
10

V.L.F. - E.M.
Tx = Jopon

DIP ANGLE (----)
SMOOTHED DERIVATIVE (——)

30 20 10 0 10 20 30 40 50

V.L.F. - E.M.
Tx = N.W. Cape

DIP ANGLE (----)
SMOOTHED DERIVATIVE (——)

30 20 10 0 10 20 30 40 50

M
I-20
I-8

Total Magnetic Field (γ)

62 600
62 550
62 500
62 450
62 400
62 350

1200 E 1400 E 1600 E 1800 E 2000 E

Topography & Geology
HEIGHT ABOVE SEA LEVEL - (Metres)

800
750
700
650
600
550
500
450
400

5 cm

Creek
Creek
Creek
177
136
Creek
Creek
Creek
125
83
Creek
225
184
54
38
Carbine
Pack Track
240
33
0.5
0.5
Creek
Creek
Fault
Eb
Ech
Dolomitic Greywacke.
Fault
Jd
Fault
Ech
Dolomitic Greywacke.
Ech
Dolomitic Greywacke.

12329S

1200 E 1400 E 1600 E 1800 E 2000 E

GOLD FIELDS EXPLORATION PTY. LIMITED

E.L.42/71 — CARBINE HILL GRID
LINE 300 N. (1200E-1800E)
LOOKING N.

SCALE 1:2000 METRES
0 20 40 60 80 100 120

DRAWN	P.K.
TRACED	E.V.
DATE	May 1985
SCALE	1:2000
FIG. NO.	67

062

I.P. DATA

MAGNETICS
Base Station at: approx. 2800E 3350S
Designated:

GEOCHEMISTRY
Sn
Cu
Pb
Zn
As
Wo3

GEOLOGY

ROCK TYPE
Shale
Siltstone
Sandstone
Grits
Conglomerate
Rhyolitic tuffs
Basic Tuffs

IGNEOUS - CAMBRIAN
Melba Spilites (basic Lavas)
Ultra-mafics
Gabbro

DEVONIAN
Granite
Quartz porphyry

FORMATION
Dundas Group (unassigned)
Red Lead Conglomerate
Brewery Junction
Razorback
Hodge Slate
Fernfield
Confidence Saddle
Carbine Hill
Bedding
Cleavage
Jurassic Dyke

* All Bearings Magnetic

LEGEND - EM 37 INTERPRETATION

ANOMALY
COVERAGE
Channels on which anomaly is recognised
6-13
I-20
Pronounced Anomaly

M Strong migration of cross-over
Extent of migration
? Possible anomaly
L.A. Low amplitude response
Quantitatively interpreted anomaly
E.O.L. Partially defined, end of line anomaly. True position likely to be off the end of the line.

85-2119 S-2449 S/S

063

Geochemistry (P.P.M.)

1000
800
600
400
300
200
100
80
60
40
20
10

N.S.

600 E 800 E 1000 E 1200 E 1400 E 1600 E 1800 E

V.L.F. - E.M.
Tx = Japan

DIP ANGLE (—)
SMOOTHED DERIVATIVE (—)

30 20 10 0 -10
50 40 30 20 10 0

600 E 800 E 1000 E 1200 E 1400 E 1600 E 1800 E

V.L.F. - E.M.
Tx = N.W. Cape

DIP ANGLE (—)
SMOOTHED DERIVATIVE (—)

30 20 10 0 -10
50 40 30 20 10 0

600 E 800 E 1000 E 1200 E 1400 E 1600 E 1800 E

EM 37 INTERPRETATION
J.R. BISHOP Aug. 85

M
6-20
6-12

Total Magnetic Field (γ)

62 600
62 560
62 520
62 480
62 440

600 E 1000 E 1400 E 1600 E 1800 E

Topography & Geology
HEIGHT ABOVE SEA LEVEL - (Metres)

700 650 600 550 500 450 400 350 300 250

5 cm

600 E 800 E 1000 E 1200 E 1400 E 1600 E 1800 E

€b
€ch
Jd
CREEK
CARBINE TRACK

123299

GOLD FIELDS EXPLORATION PTY. LIMITED	DRAWN: P.K.
	TRACED: S.F.
E.L. 42/71 — CARBINE HILL GRID	DATE: May 1985
LINE 200 N.	SCALE: 1:2000
LOOKING N.	FIG. NO. 68
SCALE 1:2000 METRES	

I.P. DATA
063

MAGNETICS
Base Station at: approx. 2800 E 3350 S
Designated:

GEOCHEMISTRY
Sn
Cu
Pb
Zn
As
Wo3

GEOLOGY

ROCK TYPE
- Shale
- Siltstone
- Sandstone
- Grits
- Conglomerate
- Rhyolitic tuffs
- Basic Tuffs

IGNEOUS - CAMBRIAN
- Melba Spilites (basic Lavas)
- Ultra-mafics
- Gabbro

DEVONIAN
- Granite
- Quartz porphyry

FORMATION
- Dundas Group (unassigned)
- Red Lead Conglomerate
- Brewery Junction
- Razorback
- Hodge Slate
- Fernfield
- Confidence Saddle
- Carbine Hill
- Jurassic Dyke

50 Bedding
50 Cleavage

* All Bearings Magnetic

LEGEND - EM 37 INTERPRETATION

ANOMALY — COVERAGE
Channels on which anomaly is recognised: 6-13
1-20 Pronounced Anomaly

M Strong migration of cross-over
Extent of migration
? Possible anomaly
L.A. Low amplitude response
Quantitatively interpreted anomaly
E.O.L. Partially defined, end of line anomaly
True position likely to be off the end of the line.

35-2449 S/S

85-2449 S/K

064

EM-37 INTERPRETATION

J.R. BISHOP Aug.85

Geochemistry (P.P.M.)

1000 800 600 400 300 200 100 80 60 40 30 20 10

V.L.F. - E.M. Tx = Japan

DIP ANGLE (---) SMOOTHED DERIVATIVE (——)

30 20 10 0 -10 | 50 40 30 20 10 0

V.L.F. - E.M. Tx = N.W. Cape

DIP ANGLE (---) SMOOTHED DERIVATIVE (——)

30 20 10 -10 | 50 40 30 20 10 0

M
1-20 6-20 1-10

Total Magnetic Field (γ)

62 700 62 650 62 600 62 550 62 500 62 450

62 949γ

1200 E 1400 E 1600 E 1800 E 2000 E

Topography & Geology HEIGHT ABOVE SEA LEVEL - (Metres)

800 750 700 650 600 550 500 450 400

18 / 45

Carbine Pack Track

Creek Creek

Cb Siltstones

Fault

Ech Dolomitic Greywacke

Fault

Ech Dolomitic Greywacke

Jd

Fault ?

? Fault ?

Ech Dolomitic Greywacke

Ech Dolomitic Greywacke

Fault

Ech Dolomitic Greywacke

Fault

5 cm

123300

1200 E 1400 E 1600 E 1800 E 2000 E

GOLD FIELDS EXPLORATION PTY. LIMITED	DRAWN P.K.
E.L.42/71 — CARBINE HILL GRID	TRACED E.V.
LINE 100 N. (1200E–1775E) LOOKING N.	DATE May 1985
SCALE 1:2000 METRES	SCALE 1:2000
	FIG. NO. 69

064

I.P. DATA

MAGNETICS

Base Station at : approx. 2800E 3350S

Designated :

GEOCHEMISTRY

Sn Cu Pb Zn As Wo3

GEOLOGY

ROCK TYPE

- Shale
- Siltstone
- Sandstone
- Grits
- Conglomerate
- Rhyolitic tuffs
- Basic Tuffs

IGNEOUS - CAMBRIAN

- Melba Spilites (basic Lavas)
- Ultra-mafics
- Gabbro

DEVONIAN

- Granite
- Quartz porphyry

FORMATION

- Cd Dundas Group (unasigned)
- Red Lead Conglomerate
- Cb Brewery Junction
- Razorback
- Hodge Slate
- Fernfield
- Confidence Saddle
- Carbine Hill
- Jd Jurassic Dyke

40 Bedding

50 Cleavage

* All Bearings Magnetic

LEGEND - EM 37 INTERPRETATION

ANOMALY 6-15 1-20 COVERAGE

Channels on which anomaly is recognised

Pronounced Anomaly

M- Strong migration of cross-over

Extent of migration

? Possible anomaly

L.A. Low amplitude response

Quantitatively interpreted anomaly

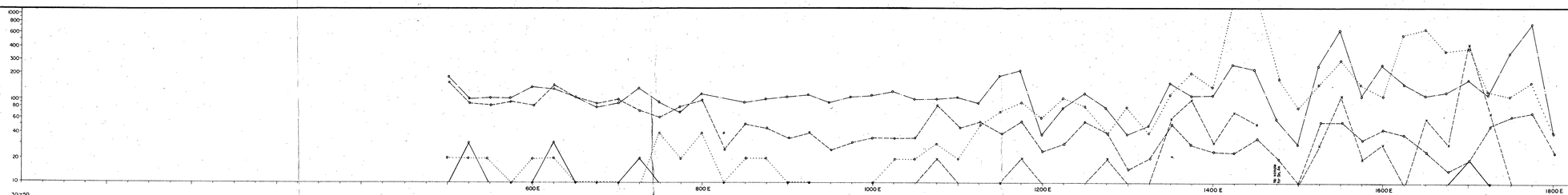
E.O.L. Partially defined, end of line anomaly. True position likely to be off the end of the line

065

EM 37 INTERPRETATION

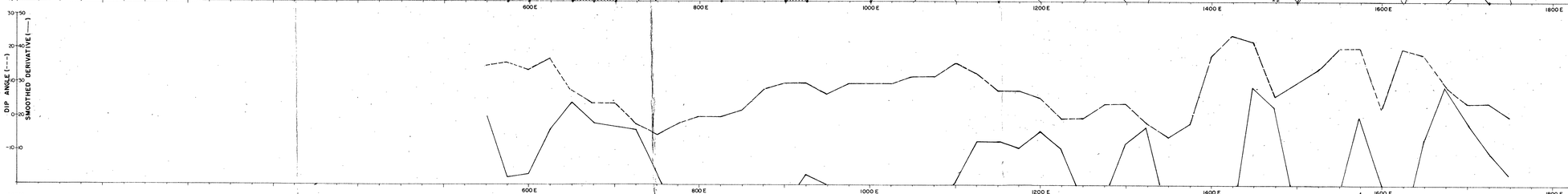
J.R. BISHOP Aug. 85

Geochemistry (P.P.M.)



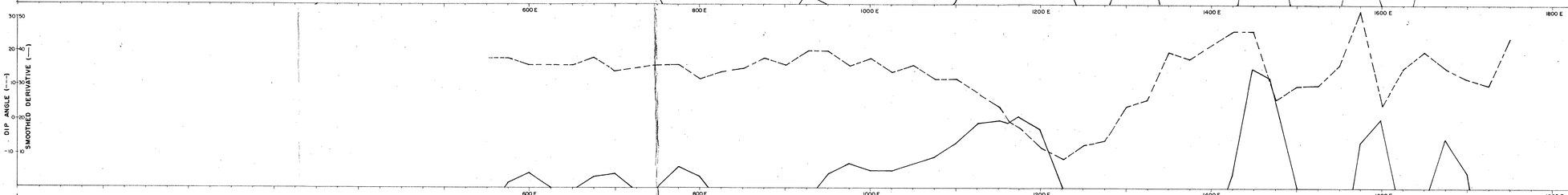
V.L.F. - E.M. Tx = Jopan

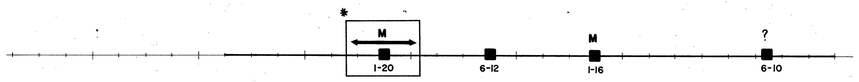
DIP ANGLE (---) SMOOTHED DERIVATIVE (——)



V.L.F. - E.M. Tx = N.W. Cape

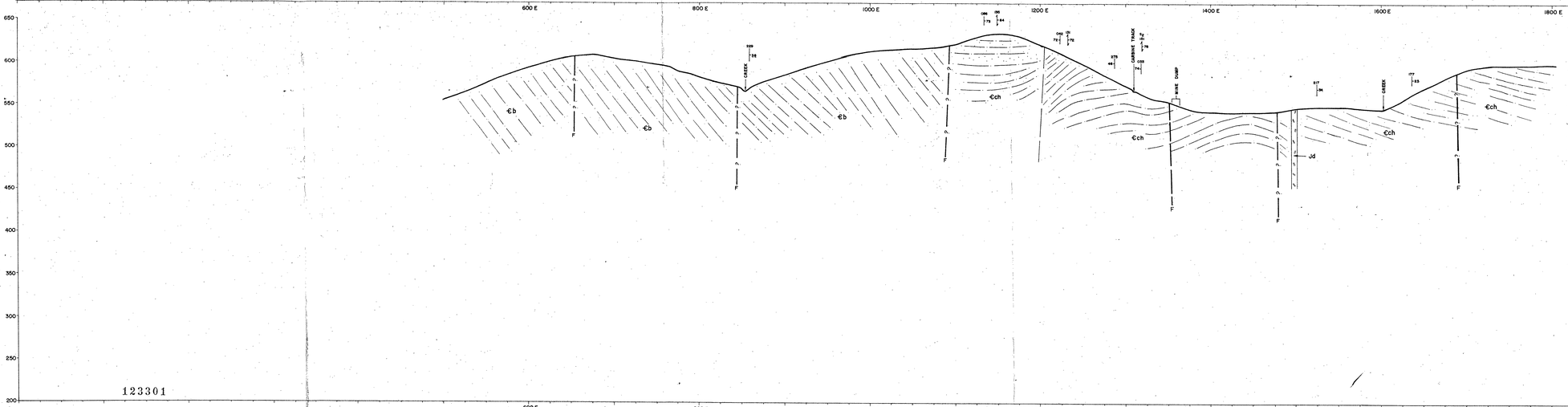
DIP ANGLE (---) SMOOTHED DERIVATIVE (——)





Total Magnetic Field (γ)

Topography & Geology HEIGHT ABOVE SEA LEVEL - (Metres)



123301

GOLD FIELDS EXPLORATION PTY. LIMITED	DRAWN	P.K.	
	TRACED	S.F.	
E.L.42/71 – CARBINE HILL GRID	DATE	May 1985	
LINE OON. LOOKING N.	SCALE	1:2000	
SCALE 1:2000 METRES	FIG. NO.	70	

065

I.P. DATA

MAGNETICS

Base Station at : approx. 2800 E 3350 S

Designated :

GEOCHEMISTRY

Sn
Cu
Pb
Zn
As
Wo3

GEOLOGY

ROCK TYPE

- Shale
- Siltstone
- Sandstone
- Grits
- Conglomerate
- Rhyolitic tuffs
- Basic Tuffs

IGNEOUS - CAMBRIAN

- Melba Spilites (basic Lavas)
- Ultra - mafics
- Gabbro

DEVONIAN

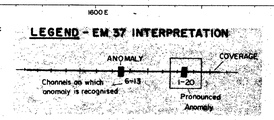
- Granite
- Quartz porphyry

FORMATION

- Dundas Group (unassigned)
- Red Lead Conglomerate
- Brewery Junction
- Razorback
- Hodge Slate
- Fernfield
- Confidence Hill
- Carbine Hill
- Bedding
- Cleavage
- Jurassic Dyke

* All Bearings Magnetic

LEGEND - EM 37 INTERPRETATION



- M — Strong migration of cross-over
- Extent of migration
- ? — Possible anomaly
- L.A. — Low amplitude response
- Quantitatively interpreted anomaly
- E.O.L. — Partially defined, end of line anomaly. True position likely to be off the end of the line.

85-2449 1 s/s

RENISON MINE LEASE E.L. 42/71

PINE HILL GRID

CARBINE HILL GRID

COMMONWEALTH HILL GRID

BLACK HILL GRID

KAPI GRID

GRAND PRIZE GRID

INTERMEDIATE GRID

RAZORBACK GRID

DUNDAS GRID

Penzance

Cornish Workings

Serpentine Hill

Madam Melba

Duke of York

Black Hill

Grand Prize

Razorback North

Hecla Mine

Great Northern Mine

Ironsides Prospect

Evenden Prospect

CARBINE HILL

RAILWAY

HIGHWAY

MURCHISSON

EMU BAY

DUNDAS TRAM

E.L. 42/71

123302

5 cm

INDEX TO SHEETS

ZEEHAN 84/1 | ZEEHAN 84/2 | ZEEHAN 84/3 | ZEEHAN 84/4

LEGEND

x ROCK CHIP SAMPLE

NORTHERN BLACK HILL GRID
– PORTABLE PERCUSSION BEDROCK SAMPLES

GOLD FIELDS EXPLORATION PTY. LIMITED

E.L.42/71 - GRAND PRIZE AREA

Au 066

GEOCHEMISTRY

(p.p.m.)

SCALE 1:5000 100 50 0 100 200 METRES

DRAWN BY : P.K.

DRAFTSMAN : S.F.

DATE : Sept.85

REVISIONS

FILE NO.

FIG. 71

85 - 2449 5/5

067

RENISON MINE LEASE

E.L. 42/71

E.L. 42/71

PINE HILL

CARBINE HILL GRID

BLACK HILL GRID

COMMONWEALTH HILL GRID

CARBINE HILL GRID

KAPI GRID

BLACK HILL GRID

GRAND PRIZE GRID

CARBINE HILL GRID

CARBINE HILL GRID

INTERMEDIATE GRID

DUNDAS GRID

52N RAZORBACK GRID

Zone of High Magnetic Gradient

Serpentine Hill

Medium Reflection

Grand Prize

Black Hill

Carbine Hill

Penzance

Cornish Workings

Duke of York

Razorback North

Hellyer Mine

Mt Lyell Mine

Comstock Prospect

Grand Northern Mine

MURCHISON HIGHWAY

EMU BAY RAILWAY

NE DUNDAS TRAM

DUNDAS TRAM

NE DUNDAS TRAM

INDEX TO SHEETS

ZEEHAN 84/1 | ZEEHAN 84/2 | ZEEHAN 84/3 | ZEEHAN 84/4

SURVEY INFORMATION

MAIN SURVEY : MAR.,84
INFILL LINES : OCT.,84
BASE STATIONS : 2800W, 3350S – 62 080 ϑ
3000W, 2000S – 63 048 ϑ

123303

5 cm

GOLD FIELDS EXPLORATION PTY. LIMITED

GRAND PRIZE AREA 067

GROUND MAGNETOMETER SURVEY

CR 2449 5/8

DRAWN BY : P.K.
DRAFTSMAN : S.F.
DATE : Sept.,85
REVISIONS : 1.

FILE NO.

SCALE 1: 5000 100 50 0 100 200 METRES

FIG. 72

RENISON MINE LEASE

E.L. 42/71

Commonwealth Hill

Pine Hill

Block Hill

Carbine Hill

Razorback

Moores Pimple

Melba Flats

Loop 1

Loop 2

Loop 3

Loop 4

Loop 5

Loop 6

CARBINE HILL GRID

€c

€cus

€d

Dg

GEOPHYSICAL ANOMALIES

- Dighem* Dec., 1980
- Dighem* Feb./March, 1983
- Dighem* Feb., 1982
- Hunting (HEM) Survey 1956/57

*Dighem anomaly Grades shown in centre of circles and signify the following:

	MHO Range
6	≥ 100
5	50 - 90
4	20 - 40
3	10 - 19
2	5 - 9
1	≤ 4
X	Possible Conductor

VLF Tx = Japan Fraser Algorithm >15

VLF Tx = NWC Fraser Algorithm >15

Ground Magnetic Anomaly

Airborne Magnetic Anomaly

GEOCHEMICAL ANOMALIES

- Lead >100 p.p.m.
- Arsenic >50 p.p.m.
- Tin >50 p.p.m.

EM-37 FRASER DERIVATIVE COVERAGE

Loop 1 — TRANSMITTER LOOPS EM 37 FRASER DERIVATIVE

GENERATOR LOCATIONS

KAPI & RAZORBACK GRIDS ONLY

- Chargeability > 50 mv/V
- Resistivity < 100 Ohm-m

EM-37 FRASER DERIVATIVE ANOMALIES

- Good Conductor
- Medium Conductor
- Poor Conductor

GEOLOGY

- Geological Boundaries
- €c Crimson Creek Formation
- €us Serpentinite
- €d Dundas Group (undifferentiated)
- Dg Devonian Granite

LEGEND

A.G.	ARGENT GRID	R.G.	RAZORBACK GRID
C.H.G.	COMMONWEALTH HILL GRID	RB.G.	RAZORBACK GRID (B.M.R.)
D.G.	DALCOATH GRID	R.M.L.G.	RENISON MINE LEASE GRID
D.F.G.	DUNKLEY FAULT GRID	S.R.B.H.G.	SOUTH RENISON BELL HILL GRID
E.Z.G.	E.Z. MELBA FLAT GRID		
G.P.G.	GRAND PRIZE GRID		
I.G.	INTERMEDIATE GRID		
K.G.	KAPI GRID		
K.R.G.	KARLSON-RILEY GRID		
M.L.C.E.G.	MT. LYELL COPPER ESTATES GRID		
N.D.G.	NORTH DUNDAS GRID		
P.H.G.	PINE HILL GRID		

ZEEHAN B/1 | ZEEHAN B/2 | ZEEHAN B/3 | ZEEHAN B/4

5 cm

123304

RENISON LIMITED

ZEEHAN B/4 068

E.L. 42/71

GEOPHYSICAL & GEOCHEMICAL ANOMALIES

GEOLOGIST	:	P.K.
DRAFTSMAN	:	T.G.D.S./S.F.
DATE	:	July, 84
REVISIONS	:	August, 85

SCALE: 1:10 000 Metres (200 0 200 400)

DRAWING No. 73

85-2449 S/2

2400m R.L.

2300m R.L.

2200m R.L.

2100m R.L.

2000m R.L.

1900m R.L.

1800m R.L.

GP 9
Bearing 040° AMG. Dip -65°
5 365 002 mN
368 124 mE

RAZORBACK CONGLOMERATE

HODGE SLATE

RED LEAD CONGLOMERATE

HODGE SLATE

100m

CONGLOMERATES & WEATHERED BROWN SILTSTONES

CONGLOMERATES & SILTSTONES

FAULT

9·4 m @ <0·01% Sn
<0·01% Cu

200m

SERPENTINITE

RED LEAD CONGLOMERATE

CRAZES

NEVADA FAULT

PRIZE FAULT

GRAND

300m

SERPENTINITE

BRECCIA

400m

RED LEAD CONGLOMERATE

SERPENTINITE

PYRRHOTITE STRINGER MINERALISATION
5·2 m @ <0·01% Sn
<0·01% Cu

491·5m

123365

5 cm

GOLD FIELDS EXPLORATION PTY. LIMITED

GRAND PRIZE

DOWN DIP PROJECTION

GP 9 069

SCALE 1:2000 20 0 20 40 Metres

DRAWN BY	P.K.
DRAFTSMAN	T.G.D.S
DATE	JUN.85
REVISIONS	
FILE NO	
FIG 76	

85-2449 SK

2250m R.L.

2250m R.L.

GP 10

Bearing 060° Mag., Dip −55°

367 756mE

5 366 463mN

BASALT

FAULT

2200m R.L.

2200m R.L.

BRECCIA

3m @ <0·01% Sn

<0·01% Cu

BASALT

100m

2150m R.L.

2150m R.L.

MICRO GABBRO

&

BASALT

FAULT

2100m R.L.

2100m R.L.

200m

BRECCIA

CARBONATE

13·7m @ <0·01% Sn

<0·01% Cu

2050m R.L.

2050m R.L.

MICRO GABBRO

GABBRO & BASALT ?

GABBRO

PRIZE

FAULT

?

GRAND

2000m R.L.

2000m R.L.

300m

SERPENTINITE

40·3m @ <0·01% Sn

0·01% Cu

343·7m

1950 m R.L.

1950 m R.L.

0 50m 100m 150m 200m 250m

Distance from D.D.H. collar on the surface

123306

5 cm

GOLD FIELDS EXPLORATION PTY. LIMITED

GRAND PRIZE

DOWN DIP PROJECTION

GP10 070

SCALE 1 1000 10 0 10 20 Metres

DRAWN BY P.K.

DRAFTSMAN S.F.

DATE June, 85

REVISIONS

FILE NO

FIG 77

85-2449 S/S

071

5 365 400N

367 800E

368 000E

368 200E

368 400E

368 600E

5 365 200N

5 365 000N

5 364 800N

NEVADA CREEK

GPF 1 1000

GPF 2 1000

GPF 4 1000

GP 01 1:2000

GP 11 1:2000

GP 12 1:2000

SHEET REFERENCE

0' 5 cm

123307

GOLD FIELDS EXPLORATION PTY. LIMITED

SHEET GPF-1

E.L. 42/71 - GRAND PRIZE FAULT AREA

DRILL HOLE LOCALITIES

STRUCTURAL CONTOURS

GRAND PRIZE FAULT (F.W.)

85 - 2449 5/5

DRAWN BY	P.K.
DRAFTSMAN	S.F.
DATE	May, 85
REVISIONS	
FILE NO.	

SCALE 1:1000 — 20 10 0 20 40 METRES

FIG. 78

072

5 368 200N

5 366 000N

5 363 800N

5 363 600N

367 800E

368 000E

368 200E

368 400E

368 600E

368 800E

N. E. DUNDAS TRAM

CREEK

NEVADA

GP 3 1984.5

GP 4 2102

GP 5 1978.7

GP 6 1900.6

GP 8 2007

GP 14 1865.9

GP 2 1967.5

GP 1 1984.6

GP 1 1988.5

GP 1 2003.3

GP 1 1988.5

GP 1 1988.5

GP 1 1988.5

073

5 367 000 N

367 800 E

368 000 E

368 200 E

368 400 E

368 600 E

5 366 800 N

5 366 600 N

5 366 400 N

5 366 200 N

HIGHWAY

NURCHISON

NORTH EAST DUNDAS TRAM

GPF 7

GP 10 1952 m

GPF 3 1:1000

GPF 2 1:1000

GPF 1 1:1000

GP 10 1:2000

GP 11 1:2000

GP 12 1:2000

SHEET REFERENCE

123209

5 cm

GOLD FIELDS EXPLORATION PTY LIMITED

SHEET GPF-3

E.L. 42/71-GRAND PRIZE FAULT AREA

DRILL HOLE LOCALITIES

STRUCTURAL CONTOURS

GRAND PRIZE FAULT (F.W.)

85-2449 073

SCALE 1:1000

METRES

DRAWN BY	R.K.
DRAFTSMAN	S.F.
DATE	May. 85
REVISIONS	
FILE NO.	
FIG. 80	

074

13700mN 13600mN 13500mN 13400mN 13300mN 13200mN 13100mN 13000mN 12900mN 12800mN 12700mN 12600mN

2400mRL

D U N D A S

G R O U P

S E D I M E N T S

CRAZES

ADIT

2300mRL

S E R P E N T I N I T E

FAULT

D U N D A S

G R O U P

S E D I M E N T S

2200mRL

S862
H.W. FAULT 1.0m at <0.01% Sn, 0.06% Cu

GPF
80% Recovery 48m at <0.01% Sn, <0.01% Cu

2100mRL

S E R P E N T I N I T E

SERPENTINITE

FAULT

2000mRL

GP 10

GPF
99% Recovery 60m Not Assayed

CRAZES

1900mRL

S E R P E N T I N I T E

1800mRL

13700mN 13600mN 13500mN 13400mN 13300mN 13200mN 13100mN 13000mN 12900mN 12800mN 12700mN 12600mN

123310

Legend

Footwall Geology

Hangingwall Geology

N.B. - Refer to Grand Prize Fault (F.W.) Structural Contour Plan for position of Longitudinal Projection Line

- Projected Horizontal Thicknesses Shown

INDEX TO SHEETS

GPF-3 | GPF-2 | GPF-1

5cm

GOLD FIELDS EXPLORATION PTY. LIMITED

SHEET GPF-1
LONGITUDINAL 074
GRAND PRIZE FAULT
SHOWING
BLOCK A (Hangingwall) & BLOCK C(Footwall)
GEOLOGY

SCALE 1:1000 -20 -10 0 20 40 METRES

DRAWN BY	P.K.
DRAFTSMAN	S.E
DATE	June.85
REVISIONS	
FILE NO.	
FIG 81	

85-2449 5/5

075

14600m N. 14500m N. 14400m N. 14300m N. 14200m N. 14100m N. 14000m N. 13900m N. 13800m N. 13700m N.

2400 m R.L. 2300 m R.L. 2200m R.L. 2100m R.L. 2000m R.L. 1900m R.L. 1800 m R.L.

2·5m at 0·5% Sn

H.W. FAULT ADIT 8 — 13m at 0·56% Sn; 13m at 1·26% Sn; 13m at 0·02% Sn; 13m at 0·15% Sn; 13m at 0·22% Sn

H.W. FAULT ADIT 7 — 13m at 0·07% Sn; 13m at 0·39% Sn; 13m at 0·10% Sn; 13m at 0·12% Sn; 13m at 0·24% Sn

H.W. FAULT ADIT 6 — 13m at 0·06% Sn; 13m at 0·40% Sn

2·1m at 1% Sn

ADIT 1 — 13m at 0·19% Sn; 7·0m at 0·35% Sn; 13m at 0·55% Sn; 52m at 0·9% Sn

ADIT 2 — 13m at 0·55% Sn; 13m at 0·07% Sn; 13m at 0·36% Sn; 13m at 0·21% Sn

ADIT 3 — 5m at 0·1% Sn; 2·6m at 0·06% Sn; 13m at 0·07% Sn; 13m at 0·07% Sn; 13m at 0·04% Sn; 13m at 0·05% Sn; 13m at 0·07% Sn

ADIT 4 — 13m at 0·15% Sn; 13m at 0·11% Sn; 13m at 0·28% Sn; 2·6m at 0·36% Sn; 2·6m at 0·12% Sn; 13m at 1·42% Sn; 13m at 0·07% Sn; 26m at 0·30% Sn; 13m at 0·06% Sn; 52m at 0·12% Sn; 13m at 0·10% Sn; 52m at 0·02% Sn; 13m at 0·07% Sn; 13m at 0·10% Sn

CRAZES ADIT — 6·5m at 0·03% Sn; 13m at 0·08% Sn; MD 3 FAULT 2·3m Not Assayed; GI GPF 1·0m at 0·07% Sn

GP 1 GPF 1·8m at 0·07% Sn, 0·30% Cu

GP 2 GPF 3·9m Trace Sn only

S 653 GPF 44% Recovery — 40m at 0·08% Sn, 0·32% Cu

S 677 GPF 73% Recovery — 1·2m at 0·14% Sn, 0·09% Cu; 2·8m at <0·01% Sn, <0·01% Cu; 1·0m at 0·01% Sn, 0·35% Cu

S 652 GPF 75% Recovery — 11·7m at <0·01% Sn, 0·01% Cu

S 969 GPF 40% Recovery — 3m at 0·05% Sn, 0·03% Cu; 3m at 0·96% Sn, 0·35% Cu, (0·03% acid soluble Sn); 22m at 0·06% Sn, 0·04% Cu

S 764 GPF 74% Recovery — 14m at <0·01% Sn, 0·04% Cu; 8m at 0·21% Sn, 0·23% Cu

GP 8 GPF 75% Recovery — 6m at 0·02% Sn, 0·01% Cu; 1·2m at 0·47% Sn, 0·21% Cu, (0·11% acid soluble Sn); 5m at 0·01% Sn, 0·02% Cu

GP 7 H.W. FAULT 78% Recovery — 1·2m at 0·16% Sn, 0·41% Cu; 2·8m at 0·65% Sn, 0·27% Cu, (0·01% acid soluble Sn)

GP 5 A GPF 80% Recovery — 24m at <0·01% Sn, <0·01% Cu

S 947 GPF 74% Recovery — 3·2m at 0·82% Sn, 0·80% Cu, (0·01% acid soluble Sn); 6m at 0·01% Sn, 0·10% Cu; 1m at 0·21% Sn, 0·43% Cu

F.W. FAULT 71% Recovery — 1·9m at 0·94% Sn, 0·87% Cu, (0·21% acid soluble Sn)

S 947 F.W. FAULT — 0·1m at 0·12% Sn, 0·37% Cu

GP 6 GPF 80% Recovery — 0·7m at 0·22% Sn, 0·22% Cu, (<0·01% acid soluble Sn); 2·0m at 0·87% Sn, 0·78% Cu, (<0·01% acid soluble Sn); 0·7m at 0·23% Sn, 0·05% Cu, (<0·01% acid soluble Sn)

S 862 H.W. FAULT — 1·0m at <0·01% Sn, 0·06% Cu

H.W. FAULT — 2·4m at 0·09% Sn, 0·07% Cu

GPF 80% Recovery — 4·8m at <0·01% Sn, <0·01% Cu

GP 10 GPF 99% Recovery — 60m Not Assayed

RAZORBACK CONGLOMERATE

RAZORBACK CONGLOMERATE

BREWERY FERNFIELDS JUNCTION

HODGE CONGLOMERATE

RED LEAD SPILITE

HODGE CONGLOMERATE

BREWERY SLATE

SLATE CONGLOMERATE

DUNDAS GROUP

DUNDAS GROUP SEDIMENTS

FORMATION SERPENTINITE

SERPENTINITE

?PRIZE FAULT INTERSECTION

FAULT/F.W. GRAND PRIZE FAULT INTERSECTION

?NEVADA FAULT / H.W. GRAND PRIZE FAULT INTERSECTION

Legend

Footwall Geology

Hangingwall Geology

N.B. – Refer to Grond Prize Fault (F.W.) Structural Contour Plan for position of Longitudinal Projection Line.

– Projected Horizontal Thicknesses Shown

INDEX TO SHEETS: GPF-3 | GPF-2 | GPF-1

50m

123311

GOLD FIELDS EXPLORATION PTY LIMITED

SHEET GPF-2

LONGITUDINAL 075

GRAND PRIZE FAULT

SHOWING

BLOCK A (Hangingwall) & BLOCK C (Footwall) GEOLOGY

DRAWN	P.K.
DRAFTSMAN	S.F.
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SCALE 1:1000 — 20 10 0 20 40 METRES

FIG. 82

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076

15600mN | 15500mN | 15400mN | 15300mN | 15200mN | 15100mN | 15000mN | 14950mN | 14800mN | 14700mN | 14600mN

2400mRL

2300mRL

HODGE SLATE

R. L. C.

2200mRL

HODGE SLATE

RED LEAD CONGLOMERATE

MELBA SPILITE

2100mRL

GP 10

GPF 93% RECOVERY

40m @ 0.01% Sn, 0.01% Cu

2000mRL

SERPENTINITE?

1900mRL

1800mRL

15600mN | 15500mN | 15400mN | 15300mN | 15200mN | 15100mN | 15000mN | 14950mN | 14800mN | 14700mN | 14600mN

123312

Legend

Footwall Geology

Hangingwall Geology

NB.- Refer to Grand Prize Fault (F.W.) Structural Contour Plan for position of Longitudinal Projection Line.

- Projected Horizontal Thicknesses Shown

INDEX TO SHEETS

GPF-3 | GPF-2 | GPF-1

5 cm

GOLD FIELDS EXPLORATION PTY. LIMITED

SHEET GPF-3

LONGITUDINAL 076

GRAND PRIZE FAULT

SHOWING

Block A(Hangingwall) & Block B(Footwall) Geology

SCALE 1:1000 — 20 10 0 20 40 METRES

DRAWN BY : P.K.

DRAFTSMAN: S.F

DATE June, 85

REVISIONS :

FILE NO.

FIG. 83

85-2449 SS

077

RENISON MINE LEASE

E.L. 42/71

Commonwealth Hill

Pine Hill

Black Hill

Carbine Hill

Razorback

Moores Pimple

Melba Flats

Nevada

Montezuma Falls

Fraser Falls

Cc

Cus

Cd

Dg

S.W. PINE HILL
- Limited Bedrock Sampling

GREAT NORTHERN AREA
- Diamond Drilling
- One hole; 500m long with helicopter support

(Abandoned)

123313

GEOLOGY

- Geological Boundaries
- Cc — Crimson Creek Formation
- Cus — Serpentinite
- Cd — Dundas Group (undifferentiated)
- Dg — Devonian Granite

LEGEND

A.G.	ARGENT GRID		R.G.	RAZORBACK GRID	
C.H.G.	COMMONWEALTH HILL GRID		Rb.G.	RAZORBACK GRID (B.M.R.)	
D.G.	DALCOATH GRID		R.M.L.G.	RENISON MINE LEASE GRID	
D.F.G.	DUNKLEY FAULT GRID		S.R.B.H.G.	SOUTH RENISON BELL HILL GRID	
E.Z.G.	E.Z. MELBA FLAT GRID				
G.P.G.	GRAND PRIZE GRID				
I.G.	INTERMEDIATE GRID				
K.G.	KAPI GRID				
K.R.G.	KARLSON-RILEY GRID				
M.L.C.E.G.	MT. LYELL COPPER ESTATES GRID				
N.D.G.	NORTH DUNDAS GRID				
P.H.G.	PINE HILL GRID				

ZEEHAN B/1 | ZEEHAN B/2 | ZEEHAN B/3 | ZEEHAN B/4

5 cm

RENISON LIMITED

ZEEHAN B/4 077

E.L. 42/71 - GRAND PRIZE AREA

WORK PROPOSALS

1985-86

85-2449 S/S

GEOLOGIST	P.R.
DRAFTSMAN	T.G.D.S./S.F.
DATE	July, 85
REVISIONS	

SCALE 1:10 000 Metres (200 0 200 400)

DRAWING No. 84