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Cyprus Gold Australia Corporation

PART PROJECT A-84-111  
GEO408

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PROGRESS REPORT

TWELVE MONTHS TO SEPTEMBER 1988

SPERO RIVER

EXPLORATION LICENCE 37/83

TASMANIA

R POLTOCK

JUNE 1988

REPORT 585

**CYPRUS**

**DISTRIBUTION**

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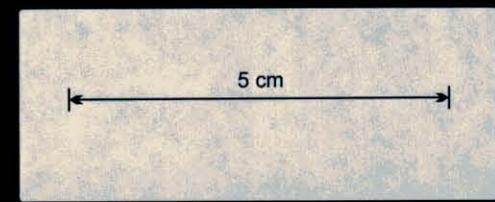
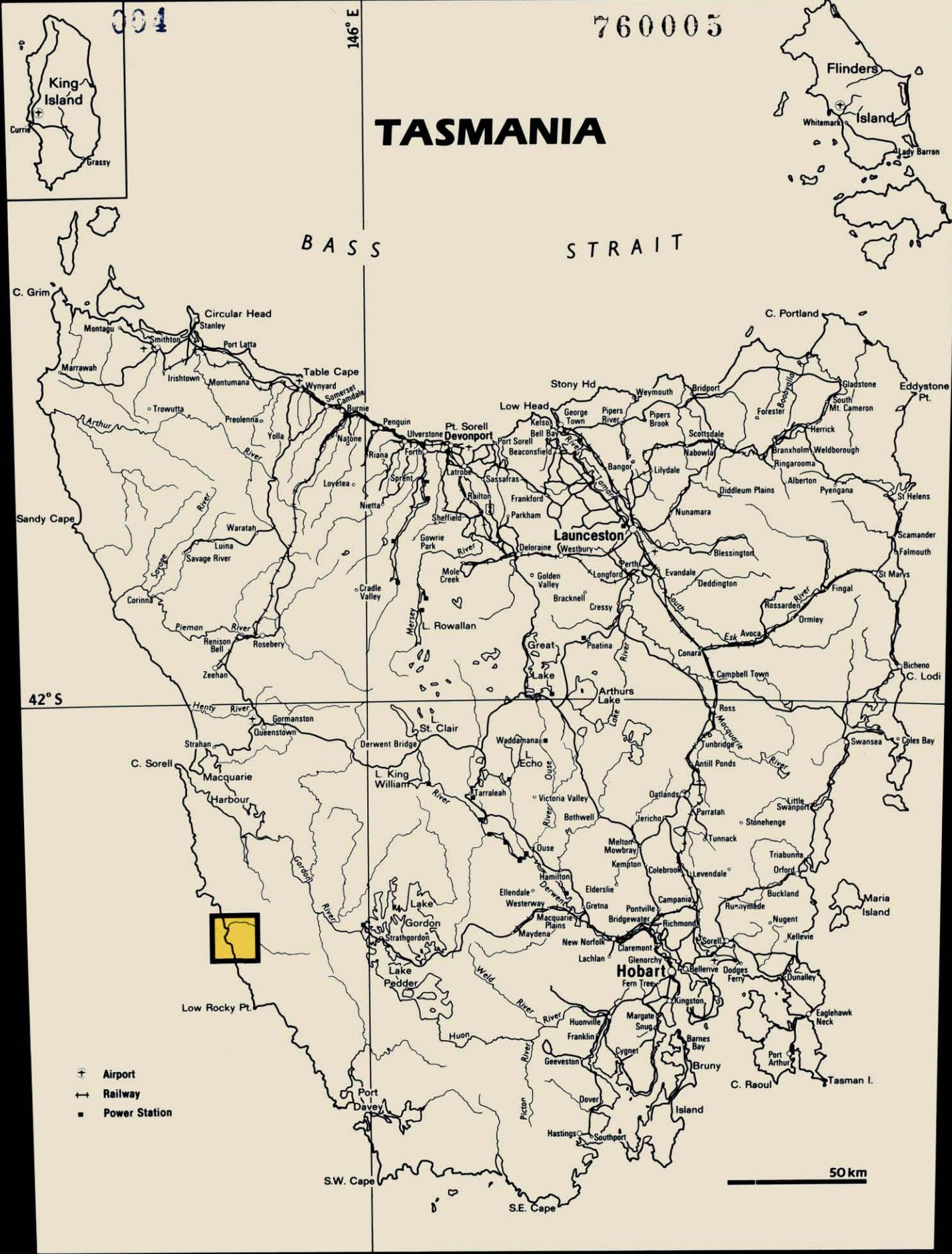

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1 <b>ANALYTICAL RESULT SHEETS</b>
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1 <b>EL 37/85</b>	● <b>REGIONAL GEOLOGY</b>	1:50000
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5	● <b>LINE 2.5</b>	1:5000
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# Project Location

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## TASMANIA

BASS STRAIT

42° S

146° E

- ✈ Airport
- 🚊 Railway
- ⬛ Power Station

50 km

#### SUMMARY AND CONCLUSIONS

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At Wanderer North detailed soil and rock geochemistry failed to locate significant gold or base metal mineralization.

Quartz veins exposed in the Wanderer River and containing anomalous gold (1986-87 season) were resampled but failed to return any significant assays.

The source of the coincident EM and magnetic anomaly on Line 1 at Wanderer North was not determined due to thicker and more consolidated gravel cover than expected. It is considered that the geophysical anomaly is due to a lithological unit in the Cambrian or overlying Tertiary gravels rather than a sulfide body.

No further work has been carried out on the platinum potential of the Spero River ultramafics.

**RECOMMENDATIONS**

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- . No further work should be conducted at Wanderer North
- . Assessment for platinumoids and gold should be undertaken in the Hibbs Point/Spero River area.

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## INTRODUCTION

Work on Exploration Licence 37/83 during the 1987/88 field season was restricted to a geological and geochemical assessment of the gold and base metal potential at Wanderer North in the south-eastern sector of the licence.

Field work was conducted during January from the Mines Department camp at Wart Hill, track cutting and sampling contractors established a fly camp at Wanderer North. Field crews were supported by a Bell 47 helicopter which was permanently based at Wart Hill.

Poseidon the joint venture partner in EL 37/83 withdrew during the year, Cyprus are currently seeking another partner for the area.

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#### EXPLORATION TARGETS

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The exploration licence protects a prospective section of Cambrian volcanics and volcano-sedimentary units and carbonates equivalent to the Dundas Group.

The main target for exploration is a polymetallic volcanogenic massive sulfide orebody with reserves of 15 million tonnes of 20% lead-zinc with gold plus silver credits similar to the Rosebery and Que River/Hellyer deposits 100 kilometers to the north.

Important secondary targets include intrusive related stockwork, breccia, vein and replacement/skarn gold mineralization and/or gold and platinoids associated with ultramafic rocks. The carbonate rich formations of the Cambrian Dundas Group are prospective for replacement type tin deposits similar to Renison (24 million tonnes of 1.1% tin). While this type of deposit is not a high priority target for the current exploration there are a number of localities within the tenements which could host such a deposit.

009

DESCRIPTION OF THE PROPERTY AND OWNERSHIP \_\_\_\_\_

Exploration Licence 37/83 comprises a total of 230 square kilometers and is held by Placer Development Company.

Poseidon withdrew from the joint venture during the year. The equity structure is now as follows:

Cyprus Gold	100%
Placer Development	5% net profit

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#### LOCATION AND ACCESS

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The tenement is located immediately south of the Sorell Peninsula on the southwest coast of Tasmania between Point Hibbs and The Shanks. The southern most part of the licence lies west of Wart Hill (Figure 1).

The area has a high annual rainfall (approximately 1750 millimeters) and the geologically prospective units are covered by dense myrtle rainforest and swampy bauera scrubland. Exploration is generally confined to the summer season from November to March.

Access is by helicopter from Queenstown with boat and barge support from Strahan. A limited network of tracks from previous exploration exists but are substantially overgrown. Extreme difficulty of access is experienced by ground crews particularly in bauera and ti-tree scrubland. Ground movement beneath the tall myrtle canopy is easier. Movement of ground crews is

011

380 000 E

5330 000 N

SOUTHERN

OCEAN

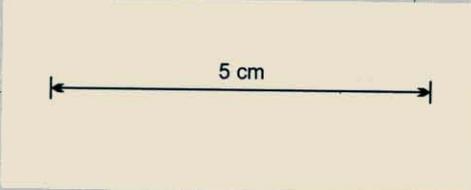
42° 30' S

EL 37/83

EL 36/83

EL 35/83

Figure 1  
**Location**  
 10 km



improved dramatically by the cutting of rough foot tracks and opening out of the smaller streams and gullies filled with horizontal scrub.

Most areas are only accessible by foot from short term camps located close to the target.

This season work was conducted from the Tasmanian Mines Department base camp at Wart Hill in conjunction with the Cyprus program at Elliott Bay. Crews were transported to and from work by helicopter.

The tenement is located within the Southwest Conservation Area and all mineral exploration and associated activity is regulated and monitored by a working committee chaired by the Department of Mines with representation from the Forestry Commission, Department of Environment and National Parks and Wildlife Service. Exploration programs and alterations must be approved by the committee prior to the granting or renewal of licences.

#### HISTORY AND PREVIOUS EXPLORATION

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In 1959 a joint venture between Mt Lyell and Electrolytic Zinc Company (Lyell EZ Explorations or LEE) was granted Exploration Licences 1/59 and 3/59. A subsequent airborne magnetic and electromagnetic survey of the tenements included the Cape Sorell area. Average line spacing was 500 to 700 meters and ground clearance averaged 160 meters. Recovery on photomosaics was poor.

Ground follow-up of airborne anomalies entailed geologic mapping, geochemistry and geophysical surveys (magnetometer, gravity, AFMAG and IP).

LEE's Hazel Hill EM anomaly was located a few hundred meters south of Cyprus's Wanderer North grid (Elms 1959). The only significant features located were a downthrown block of Gordon Limestone within the Cambrian sequence, minor galena and sphalerite associated with quartz veins and chloritic schists and a narrow amphibolite dike.

BHP conducted exploration in the mid to late 1960's under Exploration Licences 1/64 and 13/65 initially covering 10,000 square kilometers. Work was conducted over five field seasons between 1965 and 1969. Initially most activity was in the east outside the current licences with reconnaissance mapping and geochemical sampling along the west coast. By the end of the third field season (October 1966 to May 1967) this work had located an area of anomalous copper and zinc in streams between the Mainwaring and Urquhart Rivers (Cypress Creek).

The bulk of BHP exploration took place within the next two field seasons, 1967/68 and 1968/69 over the Mainwaring Belt. The main regional technique was stream sediment sampling at approximately 400 meter intervals. No assaying for gold or tin was undertaken.

#### Mainwaring Belt

Initial regional sampling along streams at 400 meter intervals returned higher values for copper, nickel and zinc than other areas. Most BHP activity was generated by high copper values particularly in the vicinity of Cypress Creek where detailed soil sampling, stream geochemistry, mapping and ground geophysical surveys conducted along bulldozed tracks in the area. Little work was achieved away from these tracks due to the dense undergrowth. A and B horizon soils were analyzed for copper, nickel and silver and initially for lead and zinc. A costean was bulldozed at GR727579 in an interbedded siltstone, conglomerate, tuff and andesite sequence. A massive pyrite horizon up to 10 centimeters thick and assaying 150 ppm copper, 300 ppm lead, 500 ppm zinc and 400 ppm nickel was located along the contact between this unit and greywacke/argillite to the west. This contact is approximately north-south of the present Cypress Creek helipad. The maximum copper assay in the costean was 1300 ppm and a recommendation was made to test this further at depth by drilling. The most significant nickel anomaly corresponds to the strike extent of a sheared gabbro unit passing through GR748575. A 'first class' airborne EM anomaly was reported along a zone north of the Mainwaring River although this was not tested.

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A limited airborne survey was conducted over Cypress Creek to infill a gap in the LEE survey of 1959. This small block formed a part of a much larger survey covering areas to the east. Ground clearance was 150 meters on lines spaced at 500 meter intervals.

In February 1968 an airborne scintillometer survey was conducted over selected areas mainly with the aim of testing Precambrian and Ordovician conglomerates for uranium. Only one first order anomaly was located (outside the current tenements) along with 14 second order anomalies. One of these occurred over the Deep Creek ironstone (Anomaly 129) and five others over the coast at Cypress Creek were attributed to ground water effects.

After the fifth field season ended in April 1969 exploration activity declined. A short ground survey was conducted in February/March 1971 over ultrabasic rocks at Spero River and Hibbs Lagoon mainly oriented towards asbestos mineralization but potential for base metal mineralization associated with the ultrabasics was considered.

Details of previous work by Cyprus (as Amoco Minerals) is included in Reports 401, 454 and 500 (Progress Reports for 12 months to September 1984, 1985 and 1986). No significant zones of mineralization were identified, however regional mapping enhanced geological knowledge of the area considerably.

## REGIONAL GEOLOGY AND MINERALIZATION

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The regional geological setting is related to Paleozoic volcanic and sedimentary processes in a linear trough (the Dundas Trough) along the western margin of the Precambrian Tyennan nucleus composed of metamorphosed siltstones and quartzites. Early Cambrian sedimentation includes sandstone, shale and carbonates (Success Creek Group) followed by mudstones, greywacke and basic volcanics (Crimson Creek Formation) and in the middle to late Cambrian mudstones conglomerate and minor volcanics of the Dundas Group. The associated calc-alkaline Mt Read Volcanics developed on the shallow water eastern margin of the trough sediments adjacent to the Precambrian nucleus. The volcanics interfinger with or are faulted against the Cambrian sediments (Upper Dundas Group) to the west and are composed of rhyolite, dacite, intermediate rocks and basalt in the form of lava flows, breccias, tuffs and plugs. Crustal processes during this latter period resulted in serpentized ophiolitic material being thrust into the sediments of the trough. Tectonic interpretations of

these ophiolitic mafic complexes are conjectural and include subduction and rifting.

Sedimentation continued in the late Cambrian to Ordovician with deposition of siliceous sands and gravels (Owen Conglomerate) then shallow water limestones and shales (Gordon Limestone). In the Silurian and Devonian sandstones and siltstones of the Eldon Group were deposited.

Folding and faulting of the above sequences and post tectonic granitoid intrusives occurred during the mid Devonian Tabberabberan Orogeny and the resulting sedimentary-intrusive complex is overlain by subhorizontal Carboniferous-Triassic successions intruded by Jurassic dolerite sills and dikes.

All known metal mines and prospects in the region occur in late Precambrian to late Devonian rocks. Base metal and gold production is dominated by the Mt Lyell, Rosebery and Que River mines (Table 1). These are volcanogenic massive sulfide deposits hosted by the central parts of the Cambrian Mt Read Volcanics, a sequence of felsic breccias, tuffs and lavas with minor siltstone. The deposits are characterized by large tonnage and area and are finely layered with generally high zinc-copper ratios. Typical mineral assemblage is pyrite, sphalerite, galena and chalcopyrite with silica and barite gangue minerals. They have extremely variable conductivity and chargeability properties. Airborne EM systems have been successfully used to detect massive sulfides, for example the Que River S lens, however the much larger Que River P lens is nonconductive and lacked an EM response but was strongly responsive to the induced polarization technique. Other favored ground techniques include stream sediment and soil geochemical sampling especially in areas where outcrop and access is poor. However stream sediment dispersion trains may be short (less than a few hundred meters) due to rapid dilution caused by high rainfall and the acid reducing environment caused by thick vegetation. In rapid flowing streams where there is an absence of -80 mesh silt, consideration should be given to cold extraction geochemistry to detect trace metals fixed by manganese and iron coatings on

018

gravels. This technique can enhance an anomaly to background contrasts and give longer dispersion trains around mineralization.

TABLE 1 \_\_\_\_\_ BASE METAL AND GOLD PRODUCTION - TASMANIAN WEST COAST

Mine	Gross Reserves (million tonnes)	Grade
Rosebery	18.4	5.6% Pb, 18.2% Sn, 0.7% Cu, 187 g/t Ag, 3.4 g/t Au
Mount Lyell	147	1.5% Cu, 8 g/t Ag, 0.4 g/t Au
Que River	3	7% Pb, 12.5% Zn, 171 g/t Ag, 3.5 g/t Au
Hellyer	15+	Similar grades to Que River
Renison	24	1.1% Sn
Mt Bishoff	18	0.8% Sn
Cleveland	6	0.8% Sn, 0.3% Cu
Queen Hill (Group)	7	0.7% Sn

Another important deposit type is sediment hosted replacement tin associated with granitoids. A major example is the world's largest underground tin orebody at Renison with smaller deposits at Mt Bishoff, Cleveland and Queen Hill. Host rocks are Cambrian dolomitic sediments intruded by Devonian to Carboniferous tin bearing granites which do not necessarily outcrop. The mineral assemblage is cassiterite-pyrrhotite and the most useful initial exploration technique is magnetic surveying.

Also associated with Devonian granitoid intrusives are the scheelite skarn deposits examples of which are mined at King Island and Kara.

Exploration and small scale mining indicate possibilities for discovery of economic deposits in a number of other environments notably stratabound lead-zinc mineralization in Gordon Limestone and nickel/platinum/asbestos mineralization in serpentinized ophiolitic masses. Gold bearing quartz vein deposits are of minor importance in Western Tasmania to date.

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## GEOLOGY AND MINERALIZATION OF THE PROPERTY \_\_\_\_\_

Geological control within the joint venture area is poor due to its remoteness and mapping is based on the work conducted by BHP in the mid to late 1960's (Enclosure 1).

Large blocks of Precambrian clastic sediments form the basement complex in the Cape Sorell area to the north of EL 37/83.

During the Cambrian period the basement was cut by a series of broad north to northeasterly trending graben structures into which volcanic derived sediments (greywackes, argillites and siltstones) intermediate volcanics and carbonates (dolomites - Mines Department XRF studies) were deposited. The carbonate - dolomite suites may be equivalents of the Success Creek and Crimson Creek Formations which are host to the major tin deposits in Western Tasmania. Upper Devonian granites are known to occur in the area principally on the northwestern tip of Cape Sorell and also to the south of Port Davey at South West Cape and Cox's Bight. Outcrops of microgranite to diorite have been located

north of the tenement within EL 36/83 in the Timbertops area just west of Birch's Inlet. The syenitic granite reported on the coast near Birthday Bay is now thought to be more lamprophyric in composition. Mines Department work suggests a Devonian granite occurs just off the coast near Sloop Point in the northwest corner of Exploration Licence 35/83. As mapping to date has been sketchy further possible tin bearing plutons may exist within the tenements. Others may also lie at depth and may be tapped by major linears similar to the Federal Bassett Fault at Renison.

The southern portion of the tenement is underlain by the uppermost predominantly intermediate to basic Mainwaring Volcanics suite of the Mount Read Volcanic (MRV) Arc. The Mainwaring Volcanics are thought to occur within a discreet vent area due to the abnormal amount of explosive volcanic rocks (agglomerate and breccias) interbedded with tuffaceous sediments compared to other suites of the same stratigraphic position further north. The basic to intermediate (with minor acid) sequence within the Mainwaring Formation has numerous recorded occurrences of native copper, chalcopyrite, bornite and malachite staining occasionally with massive 'stratiform' pyrite lenses up to ten centimeters in width.

A small Cambrian ultramafic complex is exposed on the coast at Spero Bay in the northwest sector of the tenement. The body consist of serpentized peridotite and pyroxenite, gabbros, pyroxenite dikes, basic to intermediate lavas and fine to medium grained volcanoclastics. These lithologies have been assessed on a reconnaissance basis for asbestos by BHP and platinoids and gold by Cyprus Gold. No significant mineralization has been located.

Reworked Permian tillite and siltstone occur at Point Hibbs and are faulted against Jurassic dolerite to the west.

No previous production from the area is recorded. A number of alluvial gold occurrences are noted in the southern tenement where rivers drain the predominantly basaltic to andesitic volcanics of the Mainwaring Group and acid rocks of the Lewis River Volcanics.

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WORK CONDUCTED BY CYPRUS

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Work conducted by Cyprus during the 12 months to September 1988 included:

- . Assessment of a coincident magnetic and Max-Min EM anomaly in an area of Tertiary gravels at Wanderer North
- . Follow-up of anomalous gold and base metal mineralization associated with quartz veining in proximity to a regional fault system at Wanderer North.

The work program entailed:

- . Cutting 2.0 kilometers of infill and line extensions
- . Collection of 80 B/C horizon soil samples
- . Collection of 16 rock samples

- . Drilling 31 Wacker percussion holes (a total of 207 meters), with an average hole depth of 6.7 meters. A bottom-of-hole sample was collected at each site
- . Geological mapping and logging of Wacker samples
- . All samples were assayed for copper, lead, zinc, arsenic and gold.

#### WANDERER NORTH.....

The prospect is located in the eastern most section of EL 37/83, 4 kilometers west of the Moores Valley airstrip on the steep eastern flanks of the Wanderer River.

The area is readily accessible by helicopter as ridge tops on the eastern end of the gridlines are only covered with sparse button grass. The gridding and sampling contractors established a 'fly camp' in this area.

Exploration programs have been previously conducted in the area by Lyell EZ Explorations in the late 1950's at the Hazell Hill area (Elms 1959) and by BHP in the mid 1960's.

#### Gridding

A total of 2 kilometers of grid line extensions and infills have been added to the existing Wanderer North grid. A baseline has not been cut but lines can be accessed along the button grass ridge from the east or the Wanderer North from the west central part of the grid.

#### Soil Geochemistry

All grid additions have been augered to B/C horizon at 25 meter intervals. The samples were dried, pulverized and assayed (Appendices 1 and 2 and Enclosures 2 to 6).

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The maximum gold value was 0.28 ppm at 325E on Line 2.5. Only three other samples assayed above the 0.008 ppm detection limit, the highest of these was 0.04 ppm gold. Nothing of geological interest was noted at any of these locations.

Maximum base metal values were located on Line 1.5 between 350 and 450E. These were 340 ppm lead and 650 ppm zinc. The anomaly probably continues south to Line 2 and is associated with limonitic and manganiferous crusts on outcrop.

#### Wacker Geochemistry

A coincident magnetic and EM anomaly was tested with 31 percussion holes which were drilled at 12.5 meter intervals on Line 1. The area is covered by Tertiary Gravel between 400E and 750E. Only the holes on the western edge of the gravel cover penetrated to bedrock.

The deepest hole was 18.4 meters at 612.5E which ended in impenetrable consolidated gravels. Variable penetration rates in drilling probably indicates an interlayered sequence of wet clays and consolidated gravels.

Magnetic or pyritic rock types were not located in the drill samples.

All samples assayed <0.008 ppm gold. Maximum base metal values are associated with bedrock samples between 475 to 500 E. These were 70 ppm copper, 315 ppm lead and 265 ppm zinc. Base metals in gravel samples were less than 100 ppm. Analytical result sheets are included in Appendix 1 and sample data sheets in Appendix 2.

#### Rock Geochemistry

Limonitic crusts on bedrock associated with the base metal soil anomaly on Line 1.5 and 2 were chip sampled. The best assays were 435 ppm copper, 5.67% lead, 1.25% zinc and <0.008 ppm gold. Underlying bedrock in the area consists of sericitized volcanics with no apparent sulfides.

Quartz veins containing anomalous gold located last season in the Wanderer North were sampled in more detail. All assays returned less than the 0.008 ppm gold detection limit. Analytical result sheets are included in Appendix 1 and sample data sheets in Appendix 2.

Anomalous soil gold anomalies were sampled on Line 1.5 at 160E and Line 3 at 325E, both sites assayed 0.23 ppm gold and several hundred ppm lead and zinc. Weakly sericitized and quartz veined rhyolitic volcanics outcrop at each site.

### Geology

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The Wanderer North grid covers a northeast trending and steeply dipping sequence of rhyolitic and basic volcanics and clastics, which are part of the Western Epiclastic Sequence. These Cambrian lithologies are bounded in the east by Owen type quartzite, conglomerates and siltstones.

Mica lamprophyre dikes are the only intrusives to be recorded in the area, LEE (1959) located a dike between 5 and 50 centimeters wide in the Wanderer River 350 meters south of Line 3/100E. The lamprophyre hosted narrow quartz galena veins.

The contact between the two volcanic sequences is interpreted to be a regional fault structure, the northern extension of the Copper Creek and Osmund Faults. A subparallel fault set was defined by LEE in 1959 at their Hazell Hill prospect which lies immediately south of Line 3. A downthrown block of limestone was mapped in the volcanic sequence, this was interpreted by LEE to be a correlate of the middle Ordovician Gordon Limestone. The faults bounding this block trend northeast and may be associated with the geophysical anomalies on Line 1.

Sulfide mineralization in the area is restricted to narrow quartz veins exposed in the Wanderer River and lenses of chloritic schist in the river south of Line 3. The quartz veins contain galena, pyrite and specular hematite, these were originally mapped by BHP and were sampled by Cyprus last season. Chloritic

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760026

65000mN.

3 78000mE.

79000mE.

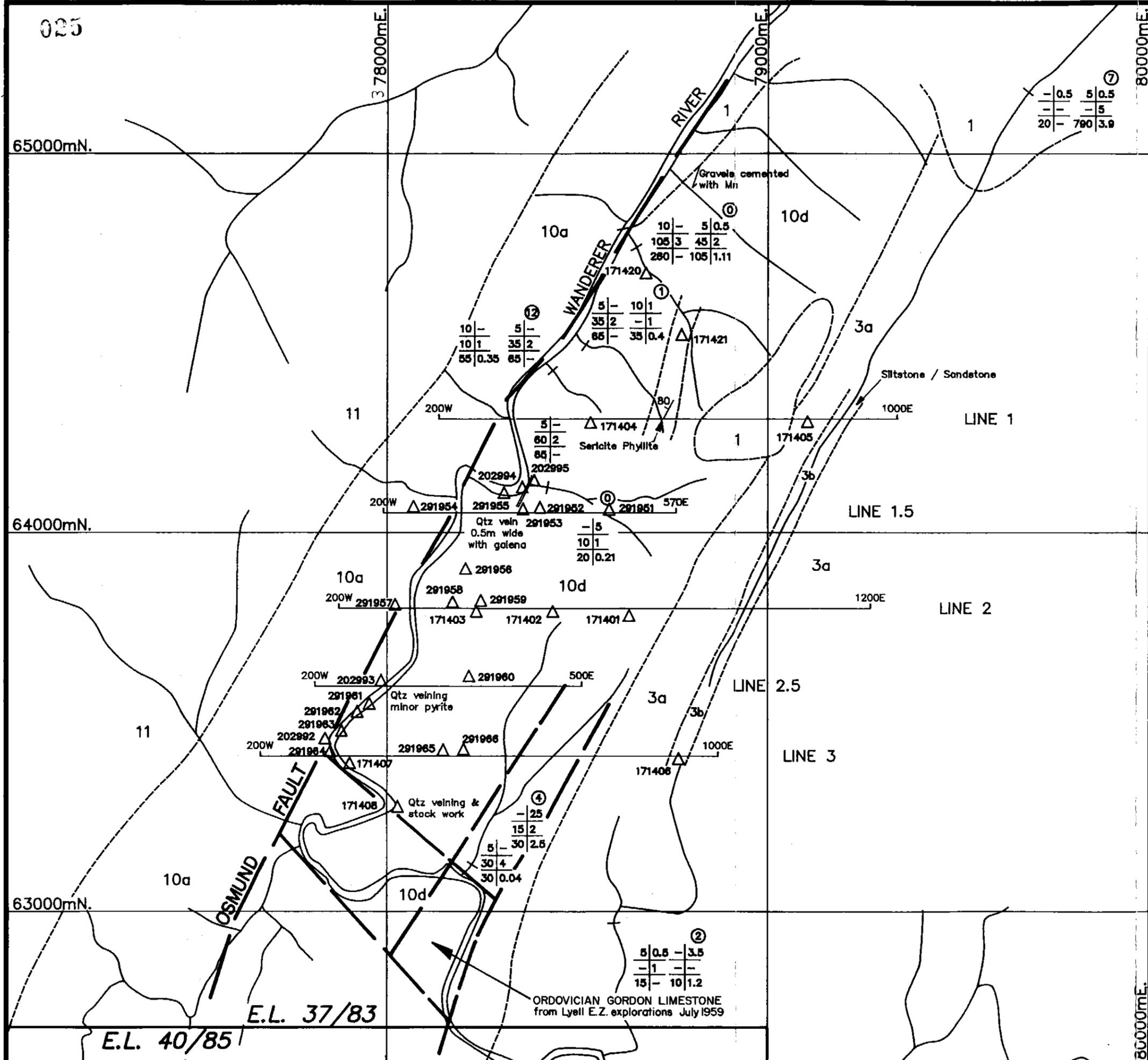
80000mE.

64000mN.

63000mN.

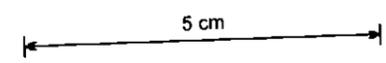
80000mE.

-	0.5	5	0.5
-	-	-	5
20	-	790	3.9



ROCK CHIP SAMPLES

No.	Cu	Pb	Zn	Ag	As	Au
171421	105	500	905	0.5	2	<0.005
202992	10	5	10	<0.5	3	0.370
202993	15	<5	25	<0.5	10	4.03
202994	1400	6.06%	3.65%	25	2	0.05
202995	15	610	770	<0.5	8	0.04
291951	40	3100	395		7	0.02
291952	10	>5	40		1	<0.008
291953	25	700	925		3	0.230
291954	110	5	80		<1	<0.008
291955	5	20	60		<1	<0.008
291956	10	45	80		<1	<0.008
291957	130	5	55		4	<0.008
291958	435	5.67%	1.25%	6	8	<0.008
291959	70	310	175		3	0.02
291960	<5	<5	20		<1	<0.008
291962	<5	<5	25		2	<0.008
291963	<5	<5	15		<1	<0.008
291964	<5	<5	20		1	<0.008
291965	<5	45	105		<1	<0.008
291966	35	435	285		<1	0.23



E.L. 37/83

E.L. 40/85

ORDOVICIAN GORDON LIMESTONE from Lyell E.Z. explorations July 1959

CYPRUS GOLD AUSTRALIA CORPORATION

SPERO RIVER - E.L. 37/83

WANDERER NORTH GEOLOGY

SCALE 1:10,000

FIG. 2

DRAWN BY:	R.P.
DRAFTSMAN:	T.G.D.S.
DATE:	June '87
REVISIONS:	June '88
FILE No.	

52

TERTIARY

1 Quartzose Gravel

JURASSIC

2 Dolerite

LATE CAMBRIAN - EARLY ORDOVICIAN

3 Owen Conglomerate - undifferentiated  
 3a - coarse quartzose sandstone  
 3b - siltstone

4 Waterloo Creek Group - undifferentiated  
 4a - hematitic volcanoclastic conglomerate  
 4b - tuffaceous coarse sandstone and grit  
 4c - black shale ± pyrite  
 4d - fine-med. grained rhyolitic volcanoclastic

CAMBRIAN - MT. READ VOLCANICS

5 Wart Hill and Hudson River Volcanics - undifferentiated  
 5a - fine to med. grained rhyolitic volcanoclastic  
 5b - rhyolitic quartz-feldspar porphyry (lavas and intrusives)  
 5c - dacitic porphyry  
 5d - coarse rhyolitic volcanoclastic  
 5e - siltstone  
 5f - siliceous conglomerate  
 5g - greywacke and siltstone

CAMBRIAN INTRUSIVES

6 Elliott Point Porphyry  
 7 Granite  
 8 Microgranite  
 9 Porphyritic Microgranite

CAMBRIAN - WESTERN EPICLASTICS

10 Western Epiclastics - undifferentiated  
 10a - andesitic - basaltic volcanics  
 10b - brown-grey tuffaceous siltstone and quartzose conglomerate  
 10c - black shale ± pyrite  
 10d - fine to medium grained rhyolitic volcanics  
 10e - gabbro  
 10f - coarse rhyolitic volcanoclastic sandstone

CAMBRIAN - MAINWARING GROUP

11 Mainwaring Group - undifferentiated  
 11a - gabbro  
 11b - andesite-basaltic volcanics  
 11c - dolomite  
 11d - black shale ± pyrite  
 11e - siltstone and sandstone

PRECAMBRIAN

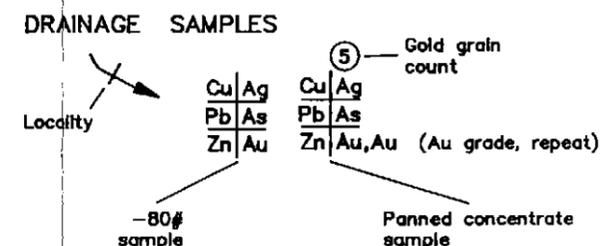
12 Metamorphics - quartzite, schist and phyllite

- Geological contact
- ~ Unconformity
- Fault
- 60° Strike and dip of schistosity
- 60° Strike and dip of bedding - facing indicated
- ↘ Plunging syncline
- ⚒ Old workings

ALTERATION - Pervasive and vein controlled

- Chlorite - magnetite
- Sericite
- Sericite - quartz
- Chlorite - pyrite
- Quartz - chlorite - pyrite - tourmaline
- Quartz - sericite - talc ± chlorite
- Quartz - chlorite
- Quartz vein
- Alteration boundary

GEOCHEMISTRY



ROCK CHIP SAMPLES

- Δ 202567 - Sample location and number
- Δ 202569 - Sample location number and assays
- Δ 202569 TS - Thin section sample
- ⊖ V33/1 - Diamond drill hole location

DETECTION LIMITS (ppm)

	Cu	Pb	Zn	Ag	As	Au
Rocks	5	5	5	0.5	1	0.005
-80# plus panned concentrates	5	5	5	0.5	1	0.008
Soils	5	5	5	0.5	1	0.01 (AAS) 0.008 (Fire assay)

-- Below limit of detection

CYPRUS MINERALS AUST. CO. & POSEIDON LTD.

ELLIOTT BAY - E.L. 40/85

**LEGEND**

SCALE 1:

FIG. 3

DRAWN BY: \_\_\_\_\_  
 DRAFTSMAN: T.G.D.S.  
 DATE: April '87  
 REVISIONS: \_\_\_\_\_  
 FILE No. \_\_\_\_\_

schist lenses 'a few inches wide' were located by LEE in 1959, these contain sphalerite, pyrite and galena. A LEE sample assayed 5.25% zinc and 0.64% lead.

Several styles of veining occur in the area, quartz sulfide as described above, laminated chalcedonic quartz and quartz chlorite carbonate. None of these vein types are anomalous in gold.

Soil base metal anomalies on Lines 1.5 and 2 are associated with limonitic and manganiferous gossan-like deposits. This material is interpreted to have leaked from a fracture system, no sulfides were located in the lithologies underlying the gossan.

028

#### EXPLORATION POTENTIAL

---

The primary exploration target is polymetallic massive sulfides hosted by basic to intermediate volcanics and sediments of the Mainwaring Group. This group has lithological similarities to the Dundas Group at Que River and Hellyer 130 kilometers to the north in the Mount Read Volcanics.

A secondary target is gold associated with Cambrian or Devonian granitoids either as sediment hosted replacement type or structurally controlled mineralization. The latter type is associated with the Henty Fault 90 kilometers to the north at Stirling Valley and may be associated with the Copper Creek Fault a few kilometers to the east of EL 37/83 in EL 40/85.

Further potential also exists for gold and platinoid mineralization associated with ultramafic rocks.

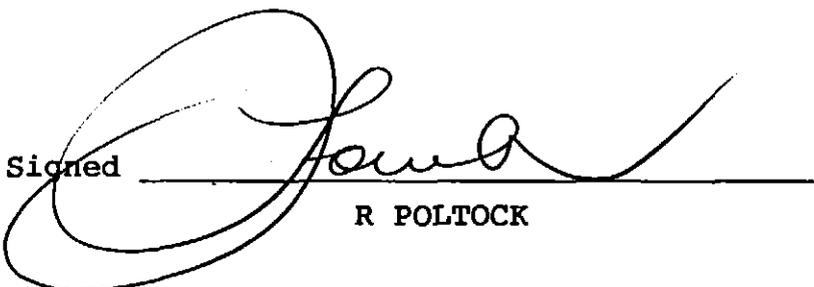
029

PROPOSED PROGRAM

---

More detailed assessment of gold and platinum potential in the Spero River/Hibbs Point area is required. This could be achieved by regional stream sediment and rockchip sampling programs.

Signed \_\_\_\_\_

  
R POLTOCK

**REFERENCES**

---

**Elms R, 1959**      Report on Hazell Hill Area, Lyell EZ Explorations, Report No. 101

**Torrey C and Poltock R, 1987**  
Progress Report, 12 Months to September 1987  
Sorell Peninsula, ELs 35/83, 36/83, 37/83,  
Report No. 533

## CYPRUS GOLD AUSTRALIA CORPORATION

EXPENDITURE FOR THE PERIOD SEPTEMBER 1, 1987 TO JUNE 30, 1988

SPERO RIVER EXPLORATION LICENCE 37/83

	\$
Salaries and Wages	717.34
Benefits	185.71
Drafting	414.00
Cookery	704.48
Field Supplies - General	132.00
Freight	249.35
Aircraft Charter	6,030.50
Communications	957.05
Other Contractors	7,071.00
Assays	1,864.76
Equipment Operation and Maintenance	213.72
Property Payments	9,750.00
Contract - Geological	974.94
	-----
	29,264.85
Overhead at 10%	2,926.49
	-----
Total	\$32,191.34
	=====



C WILLIAMS  
MANAGER - ACCOUNTING

APPENDIX 1

---

ANALYTICAL RESULT SHEETS

# ANALABS

A division of MacDonald Hamilton & Co. Pty. Ltd.

Phone (09) 458 7999

52 Murray Road, Welshpool, W.A. 6106  
FAX: 004 31 8890

Telex AA92560

**ANALYTICAL REPORT No.** 7.5.00.05065

THIS REPORT MUST BE READ IN CONJUNCTION WITH THE ACCOMPANYING ANALYTICAL DATA

R. Pollock  
Cyprus Minerals  
P.O. Box 230  
Zeehan  
Tasmania 7469

ORDER No.	PROJECT
760024	IN 5740 Elliot Bay
DATE RECEIVED	RESULTS REQUIRED
13/01/88	ASAP

No. OF PAGES OF RESULTS	DATE REPORTED	No. OF COPIES	TOTAL No. OF SAMPLES
5	20/01/88	1	111

STATE OF SAMPLES	REFER FLOW	SAMPLE NUMBERS	PRE-TREATMENT						ANALYSIS					
			DRY	CRUSH	SPLIT	PUL-VERISE	SIEVE	OTHER SEE REMARKS	NONE	REFER TO ANALYSIS SECTION	PREPARATION	METHOD		
		290001/111	50	Prep: 005	013,015							Co, Pb, Zn/101.Aa/114		
		290001/111	50									As, Au/Rep/309		

RESULTS

TO

B. Roxburgh  
Cyprus Minerals  
P.O. Box 493  
North Sydney  
N.S.W. 2060

RESULTS

TO

R. Pollock  
Cyprus Minerals  
P.O. Box 230  
Zeehan  
Tasmania 7469

REMARKS

WHACKER SAMPLES  
290 001 - 290031  
SOILS  
290032 - 290111

WANDERER NORTH  
WHACKER + SOILS

STATE OF SAMPLES	ANALYSIS — PREPARATION	ANALYSIS — METHOD
whole core	perchloric acid A1	atomic absorption CA
split core	hydrochloric acid A2	x-ray fluorescence SS
cutting	nitric acid A3	spectrophotometry Ma
rock	aqua regia A4	colorimetry AA
soil	nitric-perchloric A5	chromatography VO
pulp	HF mixture A6	titration IG
water	HF under pressure A7	other chemicals means PP
issue	fusion A8	miscellaneous GF
stream sediment		fluorescence
heavy mineral		inductively coupled plasma ICP

AUTHORISED OFFICER

# ANALABS

A Division of Macdonald Hamilton & Co. Pty. Ltd.

## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

7.5.08.05065

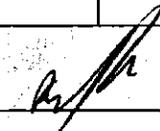
20/01/88

E00324 DN 5751 OF 5

TUBE No.	SAMPLE No.	Cu	Pb	Zn	As	Au	AuRpt			
1	290001	<5	10	130	<1	<0.008	<0.008			
2	290002	<5	<5	75	<1	<0.008	-			
3	290003	<5	15	30	<1	<0.008	-			
4	290004	5	10	65	<1	<0.008	-			
5	290005	10	<5	65	<1	<0.008	-			
6	290006	15	5	65	<1	<0.008	-			
7	290007	30	490	150	<1	<0.008	-			
8	290008	<5	10	40	<1	<0.008	-			
9	290009	20	145	110	<1	<0.008	-			
10	290010	70	315	265	<1	<0.008	-			
11	290011	35	20	90	<1	<0.008	-			
12	290012	90	<5	80	1	<0.008	-			
13	290013	65	<5	85	1	<0.008	-			
14	290014	60	<5	75	3	<0.008	-			
15	290015	65	<5	85	2	<0.008	-			
16	290016	35	<5	90	<1	<0.008	<0.008			
17	290017	35	5	85	<1	<0.008	-			
18	290018	35	<5	80	<1	<0.008	-			
19	290019	35	<5	100	<1	<0.008	-			
20	290020	25	<5	80	<1	<0.008	-			
21	290021	30	<5	45	<1	<0.008	-			
22	290022	20	15	65	<1	<0.008	-			
23	290023	5	5	40	<1	<0.008	-			
24	290024	30	<5	80	1	<0.008	-			
25	290025	10	<5	20	<1	<0.008	-			

Results in ppm unless otherwise specified  
 T = element present, but concentration too low to measure  
 X = element concentration is below detection limit  
 - = element not determined

AUTHORISED OFFICER



# ANALABS

A Division of Macdonald Hamilton & Co. Pty. Ltd.

## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

7.5.08.05065

20/01/88

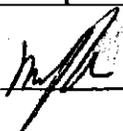
E00324 DN 5752

OF 5

TUBE No.	SAMPLE No.	Cu	Pb	Zn	As	Au	AuRpt			
1	290026	10	10	30	<1	<0.008	-			
2	290027	10	<5	85	4	<0.008	-			
3	290028	40	10	110	<1	<0.008	-			
4	290029	50	5	90	1	<0.008	-			
5	290030	50	10	95	1	<0.008	-			
6	290031	95	<5	75	<1	<0.008	-			
7	290032	5	5	40	<1	<0.008	-			
8	290033	5	5	45	<1	<0.008	-			
9	290034	<5	345	55	<1	<0.008	-			
10	290035	<5	5	40	<1	<0.008	-			
11	290036	20	650	195	5	0.040	-			
12	290037	<5	15	345	<1	<0.008	-			
13	290038	<5	10	90	<1	<0.008	-			
14	290039	<5	<5	25	<1	<0.008	-			
15	290040	<5	<5	40	<1	<0.008	-			
16	290041	<5	20	100	<1	<0.008	-			
17	290042	<5	10	50	<1	<0.008	-			
18	290043	<5	<5	60	<1	<0.008	-			
19	290044	5	155	65	10	0.010	-			
20	290045	45	360	385	17	0.010	-			
21	290046	<5	15	90	<1	<0.008	-			
22	290047	20	115	195	5	<0.008	<0.008			
23	290048	10	65	105	9	<0.008	-			
24	290049	10	25	105	6	<0.008	-			
25	290050	<5	15	40	1	<0.008	-			

Results in ppm unless otherwise specified  
 T = element present; but concentration too low to measure  
 X = element concentration is below detection limit  
 - = element not determined

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## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

7.5.08.05065

20/01/88

E00324 DN 5753

OF 5

TUBE No.	SAMPLE No.	Cu	Pb	Zn	As	Au	AuRpt			
1	290051	80	40	70	35	<0.008	-			
2	290052	100	30	90	30	<0.008	-			
3	290053	60	45	65	160	<0.008	-			
4	290054	100	40	90	21	<0.008	-			
5	290055	60	40	60	24	<0.008	-			
6	290056	160	40	95	18	<0.008	-			
7	290057	120	20	100	11	<0.008	<0.008			
8	290058	110	15	85	40	<0.008	-			
9	290059	150	10	95	83	<0.008	-			
10	290060	135	10	90	36	<0.008	-			
11	290061	150	10	80	12	<0.008	-			
12	290062	100	20	90	18	<0.008	-			
13	290063	140	10	65	32	<0.008	-			
14	290064	155	5	80	5	<0.008	-			
15	290065	85	15	90	11	<0.008	-			
16	290066	100	10	95	2	<0.008	-			
17	290067	80	25	65	8	<0.008	-			
18	290068	10	5	25	2	<0.008	-			
19	290069	10	20	45	4	<0.008	-			
20	290070	50	35	65	15	<0.008	-			
21	290071	5	10	30	4	<0.008	-			
22	290072	5	5	40	3	<0.008	-			
23	290073	5	<5	25	2	<0.008	<0.008			
24	290074	35	20	60	8	<0.008	-			
25	290075	5	10	40	3	<0.008	-			

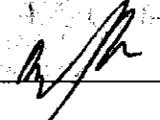
Results in ppm unless otherwise specified

T = Element present; but concentration too low to measure

X = Element concentration is below detection limit

- = Element not determined

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OFFICER



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A Division of Macdonald Hamilton &amp; Co. Pty. Ltd.

**ANALYTICAL DATA**

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

7.5.08.05065

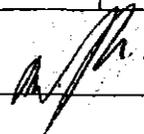
20/01/88

E00324 DN 5754

OF 5

TUBE No.	SAMPLE No.	Cu	Pb	Zn	As	Au	AuRpt			
1	290076	10	10	30	3	<0.008	-			
2	290077	5	15	50	4	<0.008	-			
3	290078	5	10	50	2	<0.008	-			
4	290079	10	30	150	4	<0.008	-			
5	290080	5	<5	20	2	<0.008	-			
6	290081	5	<5	35	3	<0.008	-			
7	290082	40	15	60	6	<0.008	-			
8	290083	55	30	70	16	<0.008	<0.008			
9	290084	<5	10	45	6	<0.008	-			
10	290085	5	20	60	7	<0.008	-			
11	290086	5	<5	25	3	<0.008	-			
12	290087	90	20	70	28	<0.008	-			
13	290088	10	15	195	4	<0.008	-			
14	290089	15	15	95	2	<0.008	-			
15	290090	10	10	75	3	<0.008	-			
16	290091	5	<5	40	3	<0.008	-			
17	290092	<5	<5	50	2	<0.008	-			
18	290093	5	10	75	3	<0.008	-			
19	290094	35	20	125	4	<0.008	-			
20	290095	20	25	140	4	<0.008	-			
21	290096	10	<5	80	3	<0.008	-			
22	290097	5	<5	40	3	<0.008	-			
23	290098	25	35	105	3	<0.008	-			
24	290099	5	5	25	2	<0.008	<0.008			
25	290100	<5	<5	15	2	<0.008	-			

Results in ppm unless otherwise specified  
 T = element present; but concentration too low to measure  
 X = element concentration is below detection limit  
 - = element not determined

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 OFFICER
 

# ANALABS

A Division of Macdonald Hamilton & Co. Pty. Ltd.

## ANALYTICAL DATA

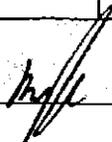
SAMPLE PREFIX      REPORT NUMBER      REPORT DATE      CLIENT ORDER No.      PAGE

7.5.08.05065      20/01/88      E00324 DN 5755      OF 5

TUBE No.	SAMPLE No.	Cu	Pb	Zn	As	Au	AuRpt			
1	290101	25	10	80	3	<0.008	-			
2	290102	20	35	50	7	<0.008	-			
3	290103	5	20	25	3	<0.008	-			
4	290104	5	45	60	3	0.280	-			
5	290105	<5	5	20	3	0.010	-			
6	290106	<5	10	25	3	<0.008	-			
7	290107	<5	5	40	3	<0.008	-			
8	290108	<5	25	55	1	<0.008	-			
9	290109	<5	<5	30	1	<0.008	<0.008			
10	290110	<5	<5	30	1	<0.008	-			
11	290111	<5	10	35	1	<0.008	-			
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23	DETECTION	5	5	5	1	0.008	0.008			
24	UNITS	PPM	PPM	PPM	PPM	PPM	PPM			
25	METHOD	101	101	101	114	309	309			

Results in ppm unless otherwise specified  
 - element present; but concentration too low to measure  
 - element concentration is below detection limit  
 - element not determined

AUTHORISED OFFICER



## ANALABS TASMANIA

A Division of Macdonald Hamilton &amp; Co. Pty. Ltd.

Phn: (004) 31 6837

14 Thirkell Street, Coee, Tasmania, 7320.

FAX: 004 31 8890

## PRELIMINARY ANALYTICAL REPORT No. 7.5.08.05080

## INVOICE TO:

R. Poltock  
Cyprus Minerals  
P.O. Box 230  
Zeehan  
Tasmania 7469

## ORDER No.

E00390 DN 575887/83 C. Sor

## PROJECT

## DATE RECEIVED

20/01/88

## RESULTS REQUIRED

ASAP

No. OF PAGES  
OF RESULTS

1

## DATE

REPORTED

27/01/88

## No.

OF COPIES

1

TOTAL No. OF SAMPLES

15

SAMPLE NUMBERS	SAMPLE DESCRIPTION & PREPARATION	ELEMENT/METHOD
291951/59,291961/66	RD Prep: 006,010,011,012,014,016	Cu,Pb,Zn/101,As/114
291951/59,291961/66	RD	Au/309
291951/59,291961/66	RD Prep: 006,010,011,012,014,016	Pb,Zn,Ag/104

## RESULTS TO:

S. Roxburgh  
Cyprus Minerals  
P.O. Box 493  
North Sydney  
N.S.W. 2060

## REMARKS:

R. Poltock  
Cyprus Minerals  
P.O. Box 230  
Zeehan  
Tasmania 7469

WANDERER NORTH  
ROCK SAMPLES

AUTHORISED OFFICER



ANALABS TASMANIA

PRELIMINARY ANALYTICAL DATA

SAMPLE	REPORT NUMBER		REPORT DATE			CLIENT ORDER No.		PAGE
	7.5.08.05080		27/01/88			E00390 DN		57581 OF 1
	Cu	Pb	Pb	Zn	Zn	As	Au	
291951	40	3100	-	395	-	7	0.020	
291952	10	<5	-	40	-	1	<0.008	
291953	25	700	-	925	-	3	0.230	
291954	110	5	-	80	-	<1	<0.008	
291955	5	20	-	60	-	<1	<0.008	
291956	10	45	-	80	-	<1	<0.008	
291957	130	5	-	55	-	4	<0.008	
291958	435	-	5.67	-	1.25	8	<0.008	6
291959	70	310	-	175	-	3	0.020	
291961	<5	<5	-	20	-	<1	<0.008	
291962	<5	<5	-	25	-	2	<0.008	
291963	<5	<5	-	15	-	<1	<0.008	
291964	<5	<5	-	20	-	1	<0.008	
291965	<5	45	-	105	-	<1	<0.008	
291966	35	435	-	285	-	<1	0.230	

*Dg*

**6**

DETECTION	5	5	0.05	5	0.05	1	0.008	2
UNITS	PPM	PPM	%	PPM	%	PPM	PPM	PPM
METHOD	101	101	104	101	104	114	309	

AUTHORISED OFFICER

*100*  
*[Signature]*

APPENDIX 2

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SAMPLE DATA SHEETS

## sample data sheet

Cyprus Minerals

Despatch No  
Requested byOrder No  
Date

Project EL 37/83 Cape Sorell. Prospect WANDERER NORTH Type WHACKER Soil/Rock

LINE 1

Sample Number	Coordinates, depth or location	Interval	Cu	Pb	Zn	As	Au		
290001	1/400E 1.4m Volc /clastic		<5	10	130	<1	<0.008		
290002	1/412SE 0.8m "		<5	<5	75	<1	<0.008		
290003	1/425E 0.7m "		<5	15	30	<1	<0.008		
290004	1/437SE 0.6m "		5	10	65	<1	<0.008		
290005	1/450E 0.8m "		10	<5	65	<1	<0.008		
290006	1/462SE 0.9m "		15	5	65	<1	<0.008		
290007	1/475E 0.9m "		30	490	150	<1	<0.008		
290008	1/487SE 2.5m "		<5	10	40	<1	<0.008		
290009	1/487SE 3.8m "		20	145	110	<1	<0.008		
290010	1/500E 1.8m "		70	315	265	<1	<0.008		
290011	1/512SE 3.0m "		35	20	90	<1	<0.008		
290012	1/525E 1.6m Tert' gravel		90	<5	80	1	<0.008		
290013	1/537SE 2.2m Gravel /volc?		65	<5	85	1	<0.008		
290014	1/537SE 8.4m " " ?		60	<5	75	3	<0.008		
290015	1/550E 11.2m Clay/gravel		65	<5	85	2	<0.008		
290016	1/562SE 16.3m " "		35	<5	90	<1	<0.008		
290017	1/575E 13.6m " "		35	5	85	<1	<0.008		
290018	1/587SE 15.2m " "		35	<5	80	<1	<0.008		
290019	1/600E 11.6m " "		35	<5	100	<1	<0.008		
290020	1/612SE 18.4m " "		25	<5	80	<1	<0.008		
290021	1/625E 11.5m " "		95	<5	75	<1	<0.008		
290030	1/637SE 15.8m " "		50	10	95	1	<0.008		
290029	1/650E 13.0m " "		50	5	90	1	<0.008		
290028	1/662SE 14.2m " "		40	10	110	<1	<0.008		
290027	1/675E 10.8m Clay/walls Volc?		10	<5	85	4	<0.008		

043

## sample data sheet

Cyprus Minerals

Despatch No  
Requested byOrder No  
Date

LINE 1

Project EL37/83 Cape Sorell Prospect WANDERER NORTH Type Soil/Rock

Sample Number	Coordinates, depth or location	Interval	Cu	Pb	Zn	As	Au		
1	290026 1/687 SE 28m Gravel		109	10	30	<1		<0.008	
2	290027 1/700 E 5.4m "		10	<5	20	<1	<0.008		
3	290024 1/72 SE, 10.2m Clay		30	<5	80	1	<0.008		
4	290023 1/72 SE, 3.4m, Ydc?		5	5	40	<1	<0.008		
5	290022 1/731 SE, 1.7m Gravel/belrock		20	15	65	<1	<0.008		
6	290021 1/750 E, 2.6m " "		30	<5	45	<1	<0.008		
7									
8	TO. 207.1 m.								
9	Si ldes								
10	X 6.7 m								
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21	LINE 1.5								
22	290100 1.5/575 E ; 1.2m		<5	<5	15	2	<0.008		
23	290099 1.5/550 E ; 0.3m		5	5	25	2	<0.008		
24	290098 1.5/525 E ; 0.8m		25	35	105	3	<0.008		
25	290097 1.5/500 E ; 0.6m		<5	<5	40	2	<0.008		

044

## sample data sheet

Cyprus Minerals

Despatch No  
Requested byOrder No  
Date

LINE 1.5

Project EL 37/83 Cape Sorell Prospect WANDERER NORTH Type Soil/Rock

Sample Number	Coordinates, depth or location	Interval	Cu	Pb	Zn	As	Au		
290032	1.5/47SE, 0.8m		5	5	40	<1	<0.008		
290033	1.5/450E, 0.6m		5	5	45	<1	<0.008		
290034	1.5/425E, 0.6m Soil/rock chip		<5	345	55	<1	<0.008		
290035	1.5/400E, 0.3m		<5	5	40	<1	<0.008		
290036	1.5/375E rock chip		20	650	195	5	0.040		
290037	1.5/350E, 0.6m		<5	15	345	<1	<0.008		
290038	1.5/325E		<5	10	90	<1	<0.008		
290039	1.5/300E 0.6m		<5	<5	25	<1	<0.008		
290040	1.5/275E 0.4m		<5	<5	40	<1	<0.008		
290041	1.5/250E 0.4m		<5	20	100	<1	<0.008		
290042	1.5/225E 0.8m		<5	10	50	<1	<0.008		
290043	1.5/200E 0.9m		<5	<5	60	<1	<0.008		
290044	1.5/175E 1.0m		5	155	65	10	0.010		
290045	1.5/150E 1.0m		45	360	385	17	0.010		
290046	1.5/125E		<5	15	90	<1	<0.008		
290047	1.5/100E 1.4m		20	115	195	5	<0.008		
290048	1.5/75E 1.0m		10	65	105	9	<0.008		
290049	1.5/50E		10	25	105	6	<0.008		
290050	1.5/25E rock chip		<5	15	40	1	<0.008		
	1.5/000								
	1.5/25W								
29005B	1.5/50W, 1.4m		110	15	85	40	<0.008		
290059	1.5/75W 1.5m		150	10	95	83	<0.008		
290060	1.5/100W 0.7m		135	10	90	36	<0.008		
290064	1.5/125W 1.4m		150	10	80	12	<0.008		

# sample data sheet

Cyprus Minerals

Despatch No  
Requested by

Order No  
Date

LINE 1.5

Project EL 37/83 Cape Sorell Prospect WANDERER NORTH Type Soil/Rock

Sample Number	Coordinates, depth or location	Interval	Cu	Pb	Zn	As	Au	
1	290026 1/687 SE 2.8m Gravel		104	10	130	<1	<del>60008</del> <0.008	
2	290027 1/700 E 5.4m "		10	<5	20	<1	<0.008	
3	290024 1/712 SE, 10.2m Clay		30	<5	80	1	<0.008	
4	290023 1/725 E, 3.4m, Vdc?		5	5	40	<1	<0.008	
5	290022 1/737 SE, 1.7m Gravel/bdrock?		20	15	65	<1	<0.008	
6	290021 1/750 E, 2.6m " "		30	<5	45	<1	<0.008	
7								
8	TOTAL 807.1 m.							
9	Si ldes							
10	X 6.7 m							
11								
12								
13								
14								
15								
16								
17								
18	LINE 1.5							
19	↓							
20								
21	LINE 1.5							
22	290100 1.5/575 E ; 1.2m		<5	<5	15	2	<0.008	
23	290099 1.5/550 E ; 0.3m		5	5	25	2	<0.008	
24	290098 1.5/525 E ; 0.8m		25	35	105	3	<0.008	
25	290097 1.5/500 E ; 0.6m		<5	<5	40	2	<0.008	

## sample data sheet

Cyprus Minerals

Despatch No  
Requested byOrder No  
Date

Project EL 37/83 Cape Sorell Prospect WANDERER NORTH Type Soil, Rock chip

Sample Number	Coordinates, depth or location	Interval	Cu	Pb	Zn	As	Au		
1	290052 <sup>2</sup> 1.5/150W 1.5m		100	20	90	18	<0.008		
2	290053 <sup>3</sup> 1.5/175W 1.4m		140	10	65	32	<0.008		
3	290064 1.5/200W 1.4m		155	5	80	5	<0.008		
4									
5	LINE. 1								
6	1/02SW								
7	290051 1/050W 1.3m		80	40	70	35	<0.008		
8	290052 1/075W 1.5m		100	30	90	30	<0.008		
9	290053 1/100W 0.7m		60	45	65	160	<0.008		
10	290054 1/125W 1.4m		100	40	90	21	<0.008		
11	290055 1/150W 1.5m		60	40	60	24	<0.008		
12	290056 1/175W 1.4m		160	40	95	18	<0.008		
13	290057 1/200W 1.3m		120	20	100	11	<0.008		
14									
15	LINE. 2								
16	290065 2/02SW 1.0m		85	15	90	11	<0.008		
17	290066 2/050W 1.2m		100	10	95	2	<0.008		
18	290067 2/075W 1.5m		80	25	65	8	<0.008		
19	290068 2/100W 0.7m		10	5	25	2	<0.008		
20	290069 2/125W 1.2m		10	20	45	4	<0.008		
21	290070 2/150W 1.5m		50	35	65	15	<0.008		
22	290071 2/175W 0.7m		5	10	30	4	<0.008		
23	290072 2/200W 0.6m		5	5	40	3	<0.008		
24									
25									

# sample data sheet

Cyprus Minerals

Despatch No

Order No

Requested by

Date

Project KW37/83 CAPK SORGL Prospect MANDERER NW Type SOIL / ROCK

Sample Number	Coordinates, depth or location	Interval	Cu	Pb	Zn	As	Au		
1	290073	hms3/crowd	5	<5	25	2	<0.008		
2	290074	3/25w rock chip	35	20	60	8	<0.008		
3	290075	3/50w 0.6m	5	10	40	3	<0.008		
4	290076	3/75w 0.7m	10	10	30	3	<0.008		
5	290077	3/100w 0.8m	5	5	50	4	<0.008		
6	290078	3/135w rock chip	5	10	50	2	<0.008		
7	hms 2.5		<del>10</del>	<del>35</del>	<del>150</del>	<del>4</del>	<del>&lt;0.008</del>		
8	290079	2.5/000	10	30	150	4	<0.008		
9	290080	2.5/25w 0.7m	5	<5	20	2	<0.008		
10	290081	2.5/50w 1.0m	5	<5	35	3	<0.008		
11	290082	2.5/75w 1.4m	40	15	60	6	<0.008		
12	290083	2.5/100w 0.9m	55	30	70	16	<0.008		
13	290084	2.5/125w 1.3m	<5	10	45	6	<0.008		
14	290085	2.5/150w 0.8m	5	20	60	7	<0.008		
15	290086	2.5/175w 0.5m	5	<5	25	3	<0.008		
16	290087	2.5/200w 1.5m	90	20	70	28	<0.008		
17	290088	2.5/025E Rock chip	10	15	195	4	<0.008		
18	290089	2.5/050E Rock chip	15	15	95	2	<0.008		
19	290090	2.5/075E 0.7m	10	10	75	3	<0.008		
20	290091	2.5/100E rock chip	5	<5	40	3	<0.008		
21	290092	2.5/125E 0.6m	<5	<5	50	2	<0.008		
22	290093	2.5/150E 0.9m	5	10	75	3	<0.008		
23	290094	2.5/175E 0.7m	35	20	125	4	<0.008		
24	290095	2.5/200E 0.6m	20	25	140	4	<0.008		
25	290096	2.5/225E 0.8m	10	<5	80	3	<0.008		

# sample data sheet

Cyprus Minerals

Despatch No

Order No

Requested by

Date

Project KL 37/83 Cape Sorell Prospect WANDERER NW Type SOIL / Rock

Sample Number	Coordinates, depth or location	Interval	Cu	Pb	Zn	As	Au		
1	<del>290101</del> line 2.5 250E 0.4m		25	10	80	3	<0.008		
2	290102 2.5/27SE 0.8m		20	35	50	7	<0.008		
3	290103 2.5/300E 0.6m		5	20	25	3	<0.008		
4	290104 2.5/32SE 0.3m		5	45	60	3	0.280		
5	290105 2.5/350E 0.4m		<5	5	20	3	0.010		
6	290106 2.5/37SE 0.3m		<5	10	25	3	<0.008		
7	290107 2.5/400E 0.5m		<5	5	40	3	<0.008		
8	290108 2.5/42SE 0.6m		<5	25	55	1	<0.008		
9	290109 2.5/450E 0.5m		<5	<5	30	1	<0.008		
10	290110 2.5/47SE 0.6m		<5	<5	30	1	<0.008		
11	290111 2.5/500E 0.4m		<5	10	35	1	<0.008		
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									

## sample data sheet

Cyprus Minerals

Despatch No

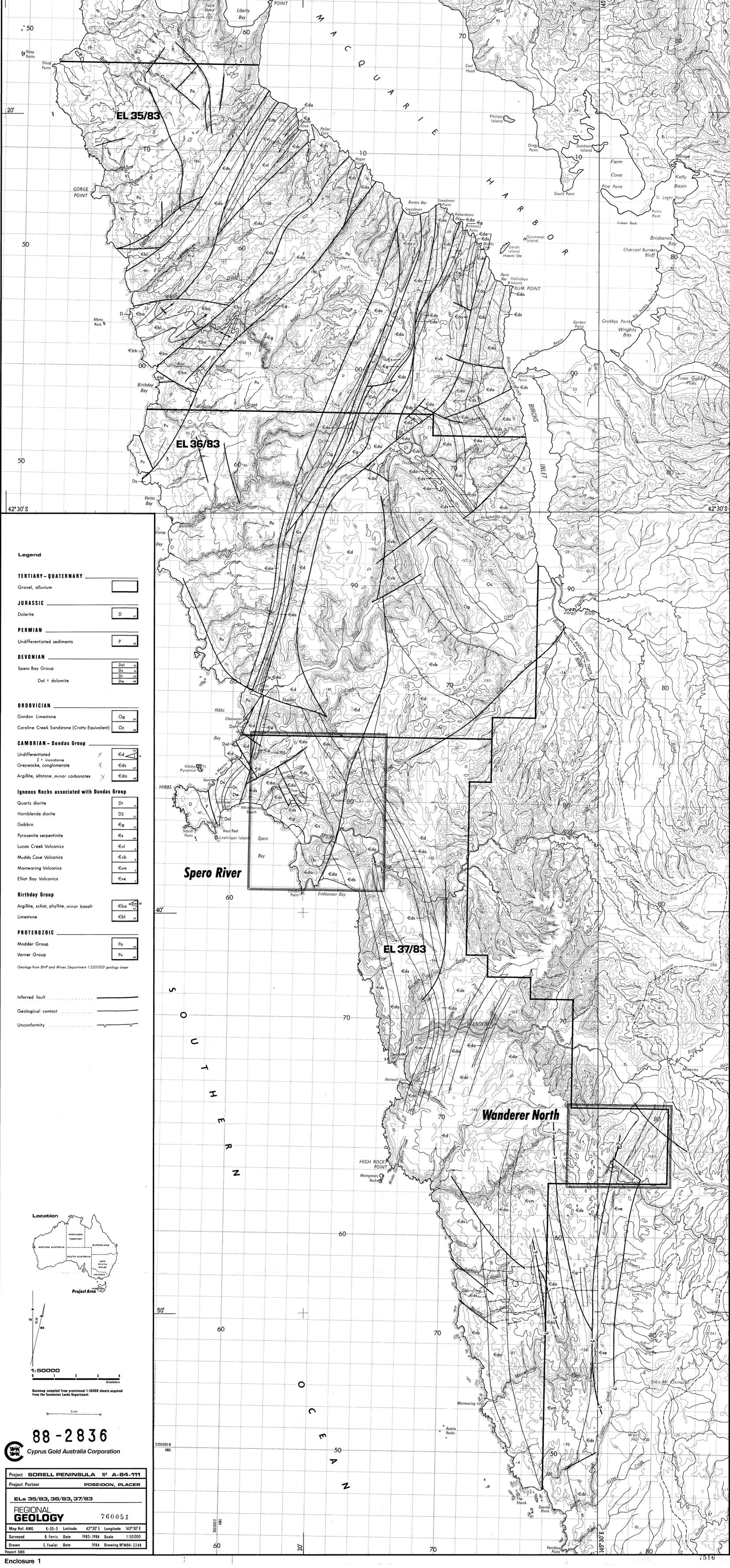
Order No

Requested by

Date

Project FL 37/83 Cape Sorell Prospect WANDERER NORTH Type Rock

Sample Number	Coordinates, depth or location	Interval	Co	Pb	Zn	Au	As	Ag
1	291951 15/37SE limonite crust of qtz vlc		40	3100	395	0.02	7.0	
2	291952 15/22.5E Qtz carb/albite veining w qtz vlc		10	<5	40	<0.008	1	
3								
4	291953 15/16E slightly brecciated veined volcanic		25	700	925	0.230	3.0	
5								
6	291954 15/12SN weathered basalt		110	5	80	<0.008	<1	
7	291955 WANDERER R. cut banks between 15/1-0		5	20	60	<0.008	<1	
8	Qtz alb vein + charred qtz veining							
9	291956 Cr access line between 15/2-0		10	45	80	<0.008	<1.0	
10	Qtz vein with limonite							
11	291957 2/50W Altered basalt with py/po?		130	5	55	<0.008	4.0	
12	291958 2/100E limonitic crust on qtz vt vlc		435	5.67%	1.25%	<0.008	8.0	6.0
13								
14	291959 2/150E Qtz vlc limonitic		70	310	175	0.02	3.0	
15	291960 2.5/200E Pebbly w/ plumb, falc s/s, silic							
16	291961 75m upstream from 25 WANDERER R.		<5	<5	20	<0.008	2.1	
17	Qtz albite veining							
18	291962 25m upstream from 291961		<5	<5	25	<0.008	2	
19	Qtz vein in qtz fld vt vlc							
20	291963 75m downstream from line 3 WANDERER		<5	<5	15	<0.008	<1	
21	Qtz vein with silicified wallrock							
22	291964 3/ west bank wanderer R.		<5	<5	20	<0.008	1	
23	Qtz veining w qtz vlc							
24	291965 3/27SE, qtz fld vt vlc dth 17375		<5	45	105	<0.008	<1	
25	291966 3/32SE " " " dth 17377		35	435	285	0.23	<1.0	



**Legend**

**TERTIARY-QUATERNARY**

Gravel, alluvium

**JURASSIC**

Dolerite

**PERMIAN**

Undifferentiated sediments

**DEVONIAN**

Spero Bay Group

Dol = dolomite

Dol 35  
 Ds 40  
 Dr 43  
 Dw 44

**ORDOVICIAN**

Gordon Limestone

Caroline Creek Sandstone (Crotty Equivalent)

**CAMBRIAN - Dundas Group**

Undifferentiated

I = ironstone

Greywacke, conglomerate

Argillite, siltstone, minor carbonates

**Igneous Rocks associated with Dundas Group**

Quartz diorite

Hornblende diorite

Gabbro

Pyroxenite serpentinite

Lucas Creek Volcanics

Muddy Cove Volcanics

Mainwaring Volcanics

Elliot Bay Volcanics

**Birthday Group**

Argillite, schist, phyllite, minor basalt

Limestone

**PROTEROZOIC**

Modder Group

Varner Group

Geology from BHP and Mines Department 1:250,000 geology sheet

Inferred fault

Geological contact

Unconformity



1:50000  
 Base map compiled from provisional 1:50000 sheets acquired from the Tasmania Lands Department

50m

**88-2836**  
 Cyprus Gold Australia Corporation

Project **SORELL PENINSULA** N° **A-84.111**

Project Partner **POSEIDON, PLACER**

**ELs 35/83, 36/83, 37/83**

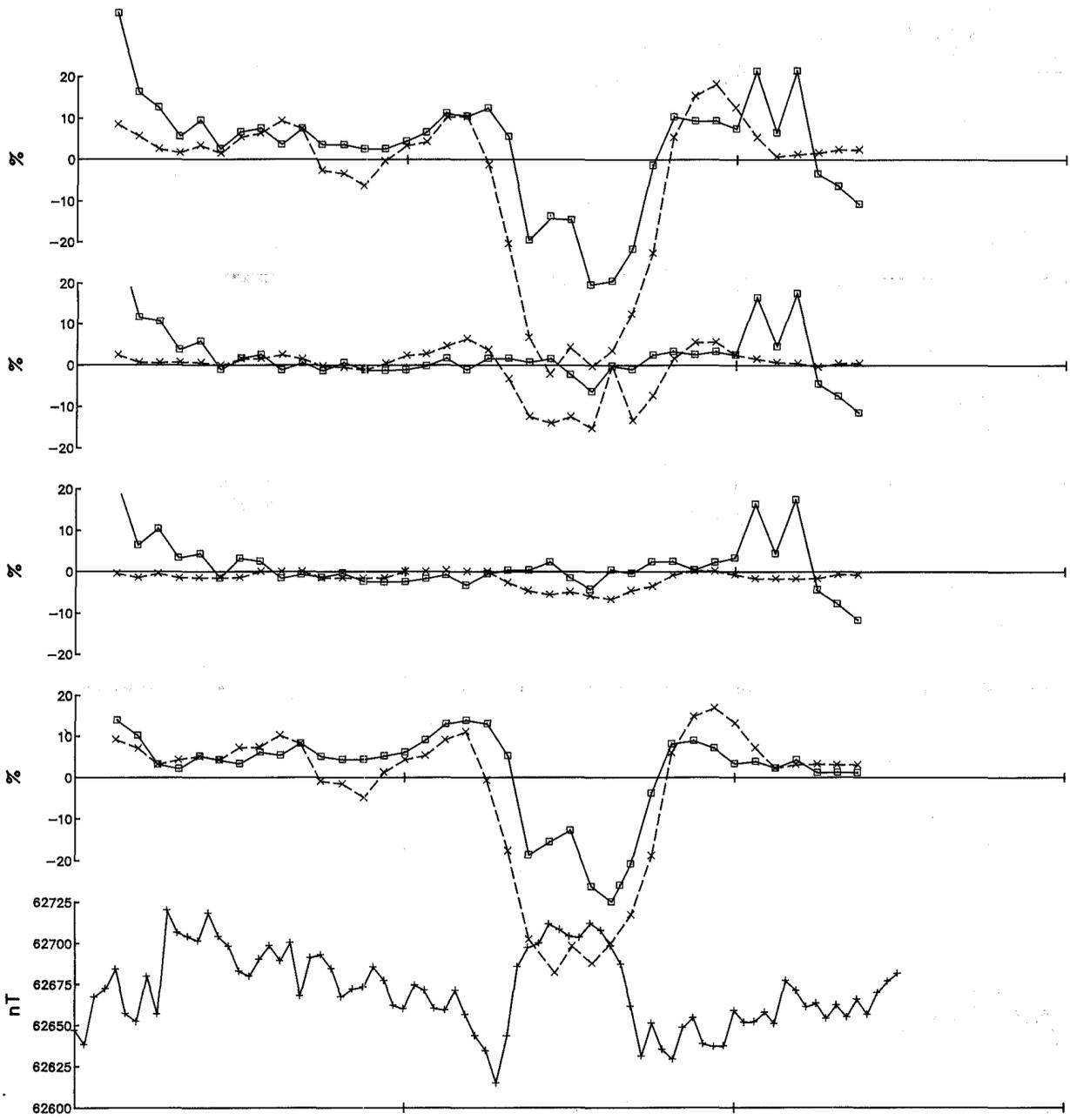
**REGIONAL GEOLOGY** 760051

Map Ref. ANG X-55-5 Latitude 42°30'S Longitude 145°30'E

Surveyed B. Ferris Date 1983-1984 Scale 1:50000

Drawn S. Fowler Date 1984 Drawing N°M84-2248

Report 585



3555 Hz

888 Hz

222 Hz

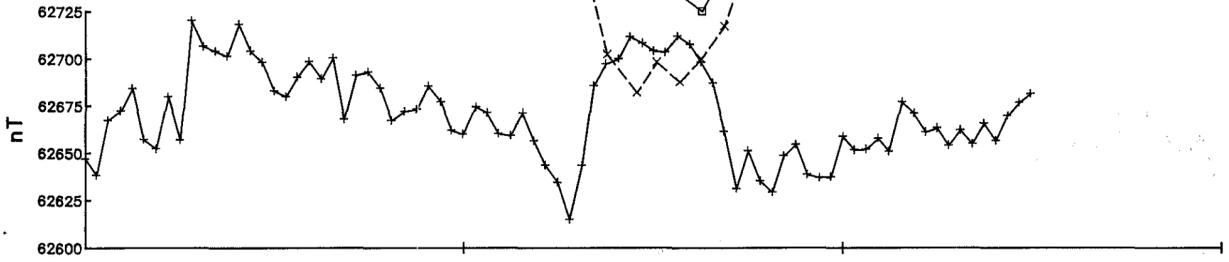
3555 Hz - 222 Hz

MAX - MIN

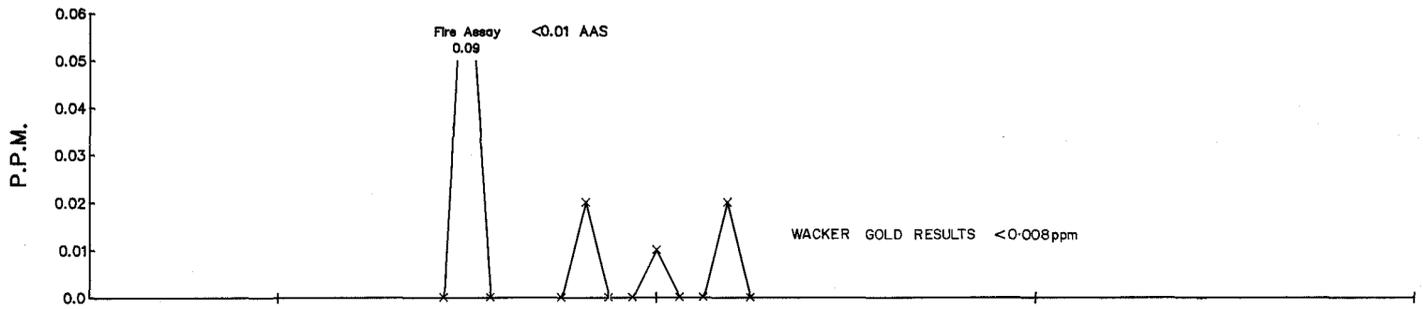
Tx → Rx = 100m

IN PHASE □—□

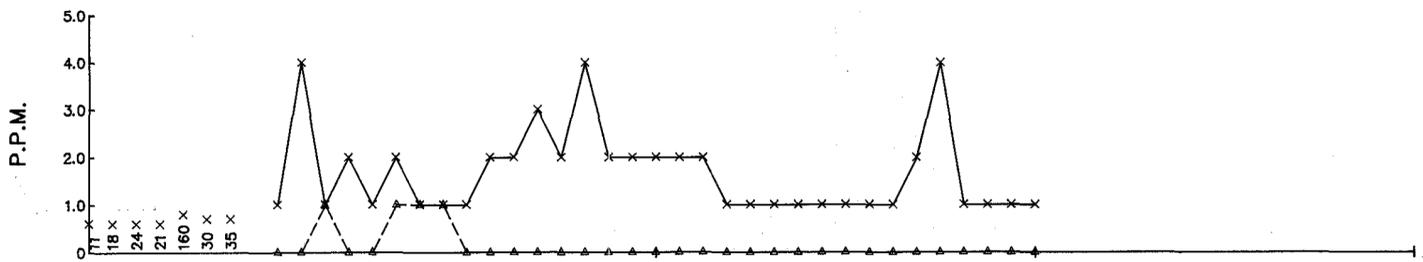
OUT OF PHASE x---x



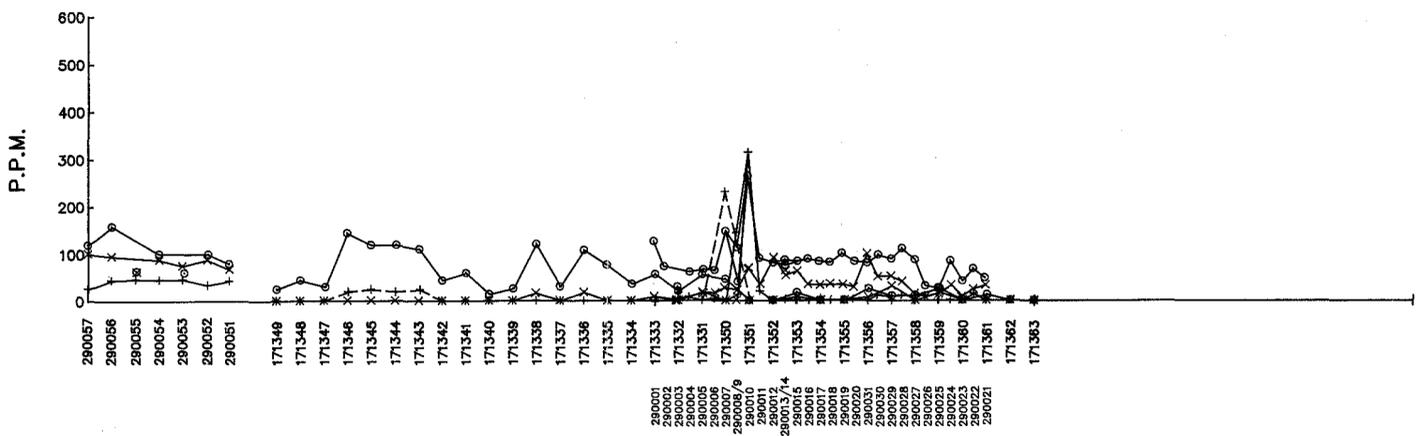
MAGNETICS



Au



As x  
Ag Δ



Cu x  
Pb +  
Zn o

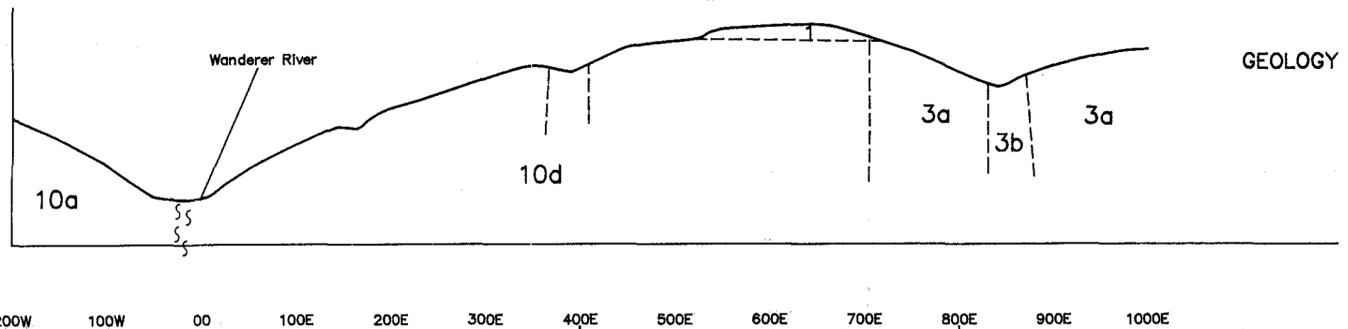
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5 cm

SOIL SAMPLE NUMBERS

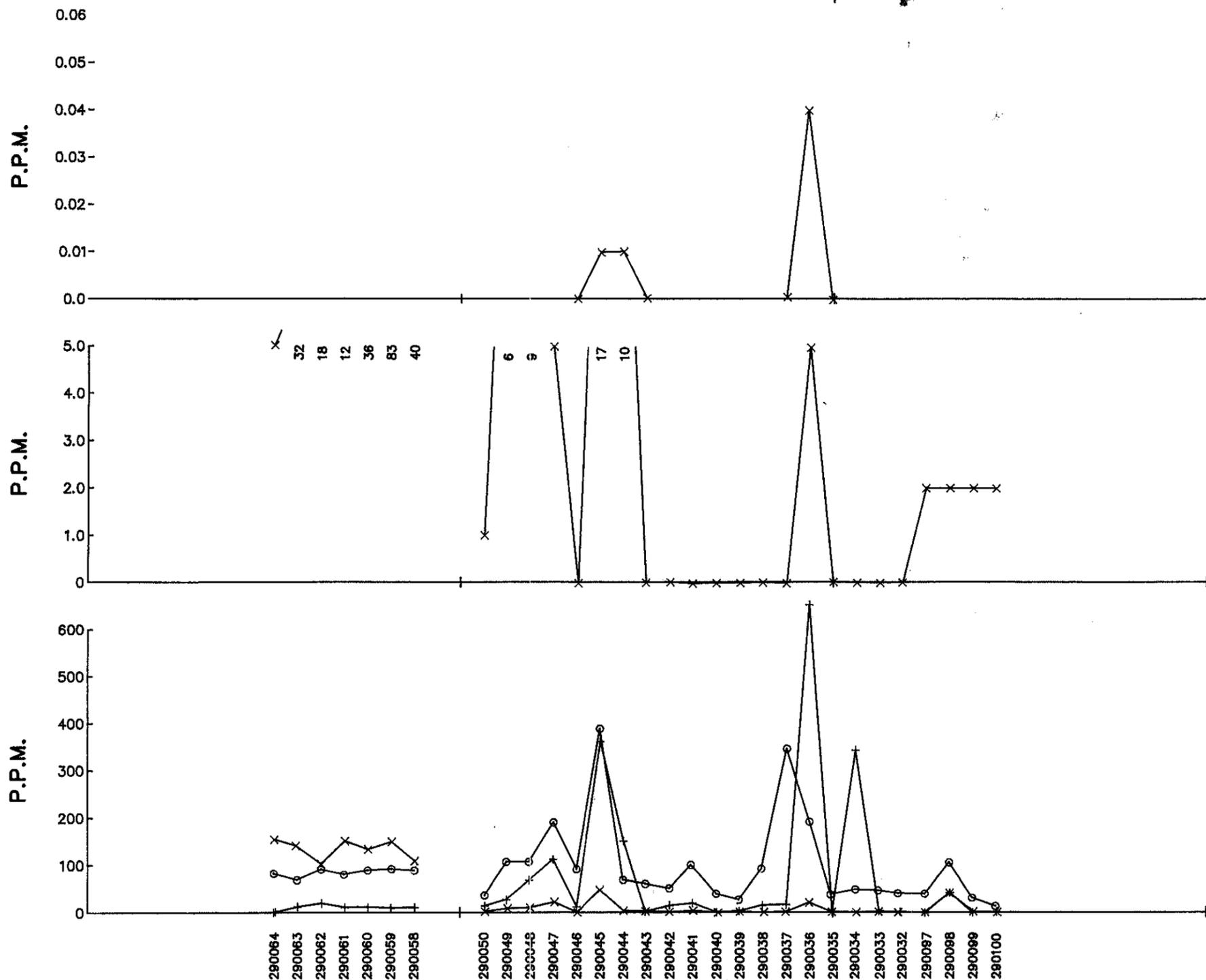
WACKER SAMPLE NUMBERS

88-2836 7517



GEOLOGY

CYPRUS GOLD AUSTRALIA CORPORATION	
SPERO RIVER - E.L. 37/83	DRAWN BY: R.P.
WANDERER NORTH LINE 1 PROFILES	DRAFTSMAN: T.G.D.S.
	DATE: April '87
	REVISIONS: April '88
	FILE No.
SCALE 1:5000	FIG.



Au

As x

Cu x  
Pb +  
Zn o

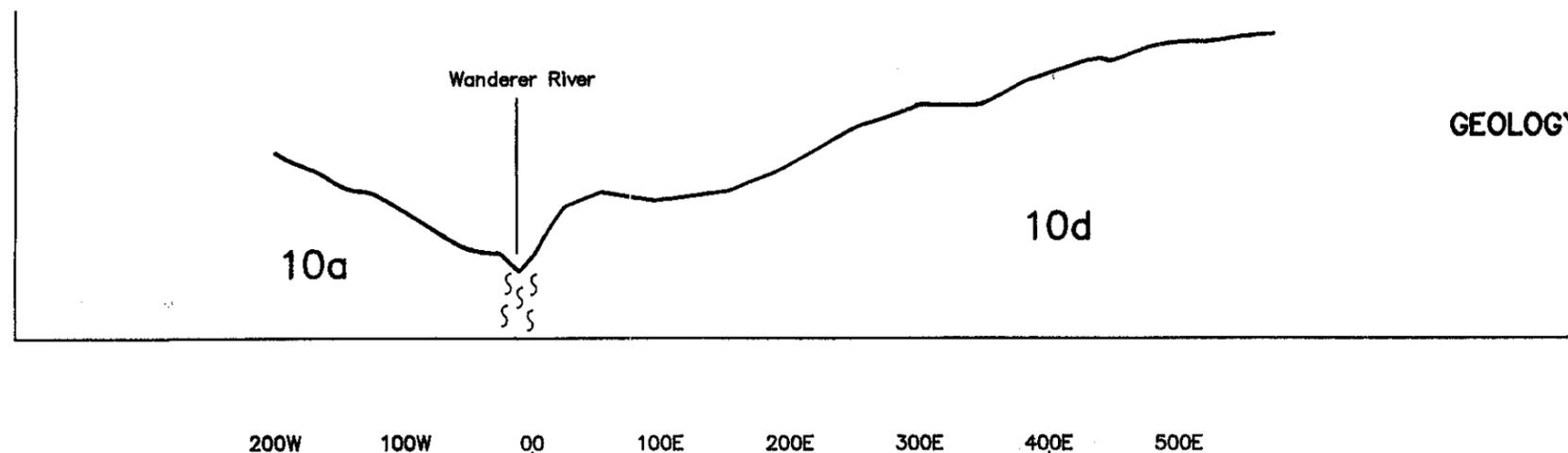
760053

5 cm

SOIL SAMPLE NUMBERS

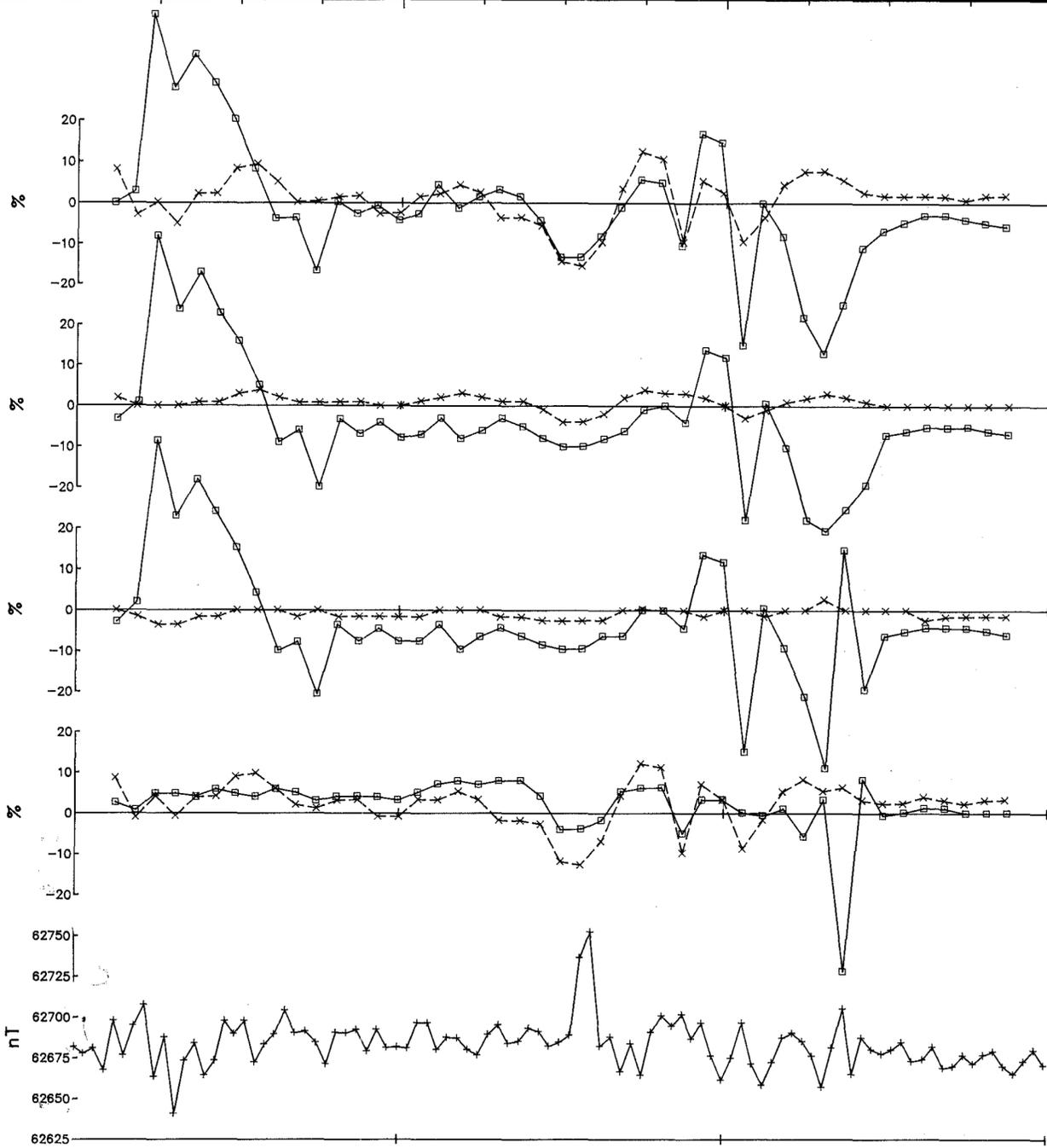
88-2836

7518



GEOLOGY

CYPRUS GOLD AUSTRALIA CORPORATION	
SPERO RIVER - E.L. 37/83	DRAWN BY : R.P.
WANDERER NORTH LINE 1.5 PROFILES	DRAFTSMAN : T.G.D.S.
	DATE : April '87
	REVISIONS : April '88
	FILE No.
SCALE 1 : 5000	FIG.



3555 Hz

888 Hz

222 Hz

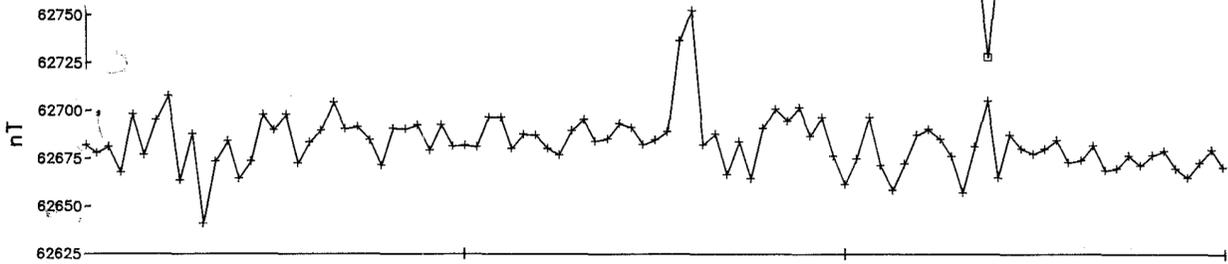
3555 Hz - 222 Hz

MAX - MIN

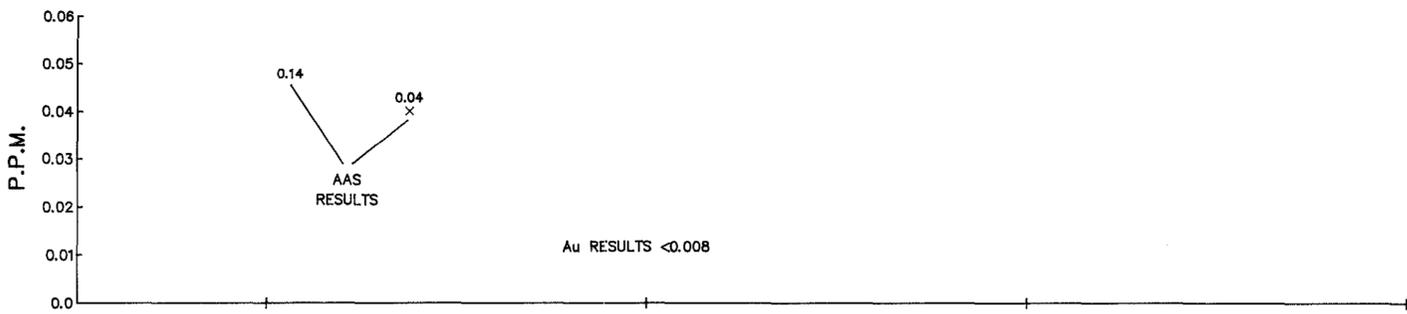
Tx → Rx = 100m

IN PHASE □—□

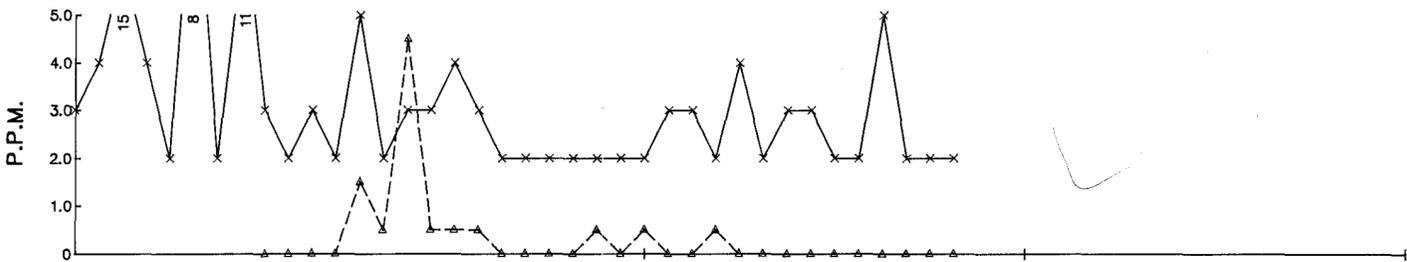
OUT OF PHASE x—x



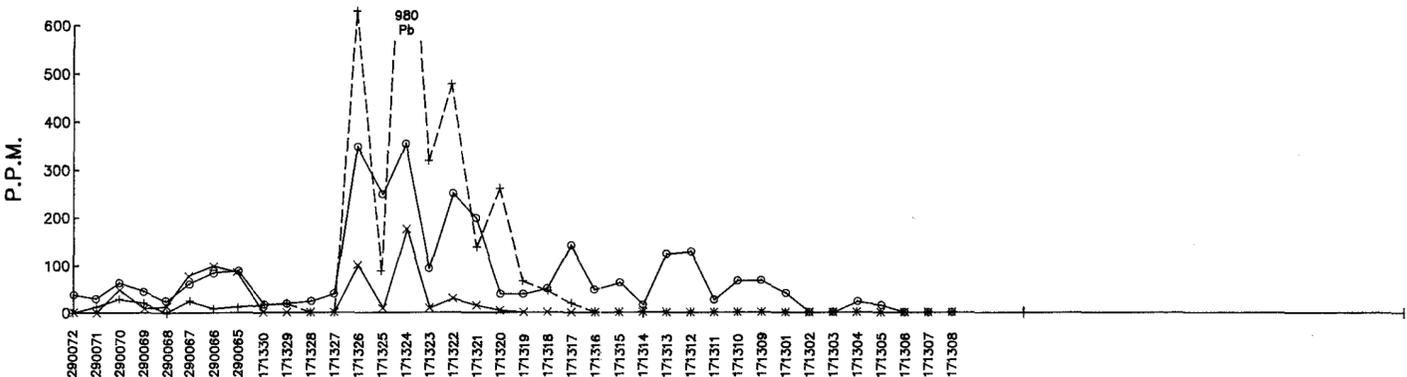
MAGNETICS



Au



As x  
Ag Δ



Cu x  
Pb +  
Zn o

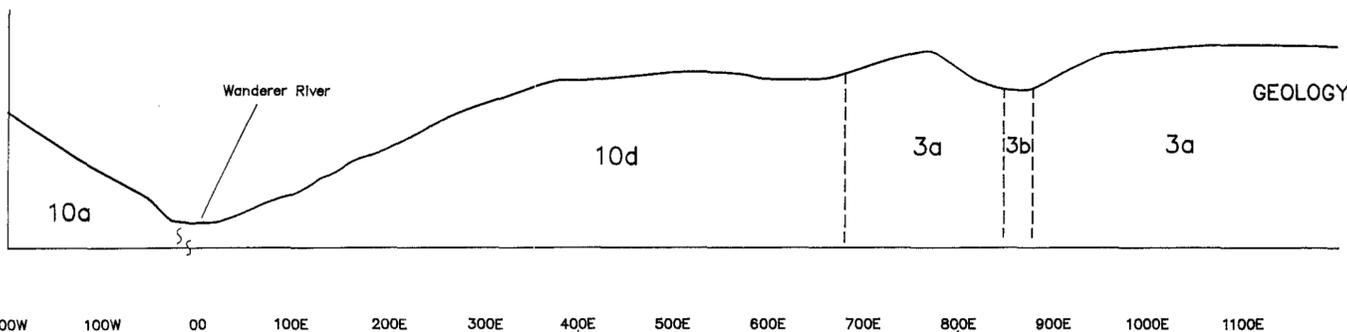
760054

SOIL SAMPLE NUMBERS

5 cm

88-2836

7519



GEOLOGY

CYPRUS GOLD AUSTRALIA CORPORATION	
SPERO RIVER - E.L. 37/83	
WANDERER NORTH LINE 2 PROFILES	
DRAWN BY: R.P.	FILE No.
DRAFTSMAN: T.G.D.S.	FIG.
DATE: April '87	
REVISIONS: April '88	

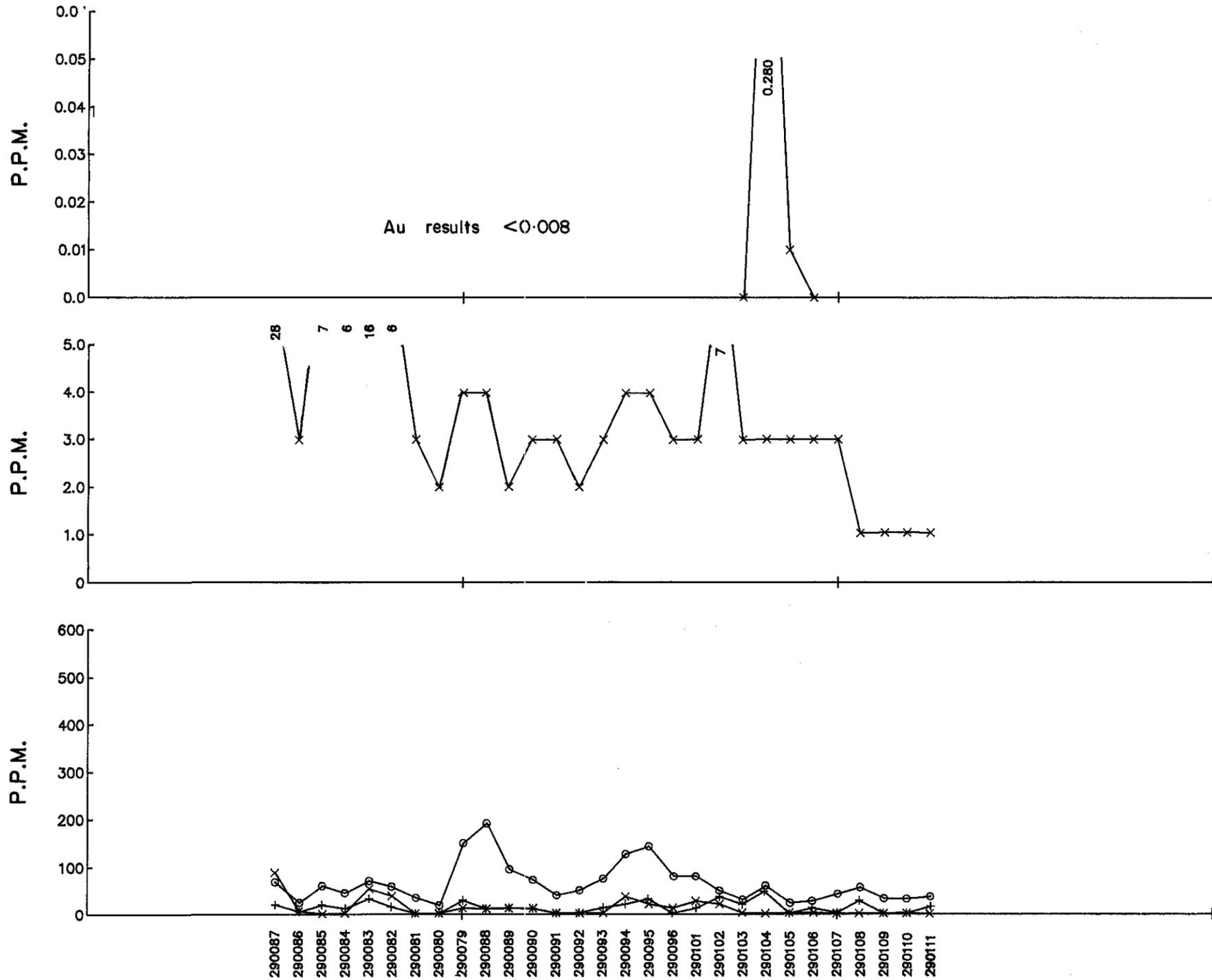
SCALE 1:5000



REPORT 585

ENCLOSURE 4

N.W. Corset Computer Aided Drafting Centre Phone (004) 3543151

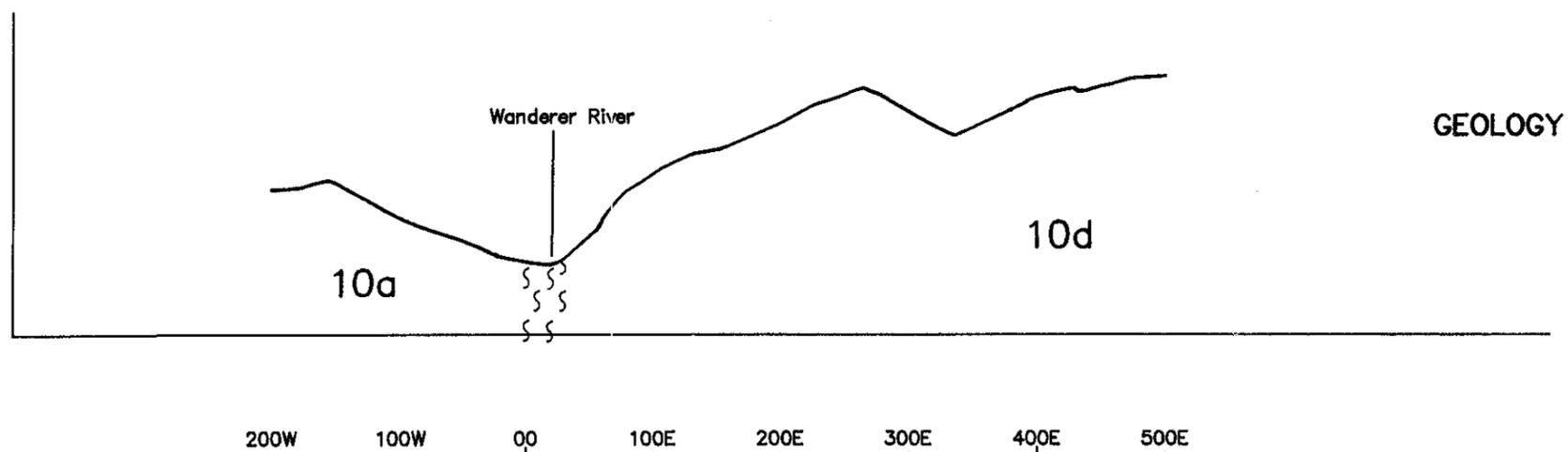


760055

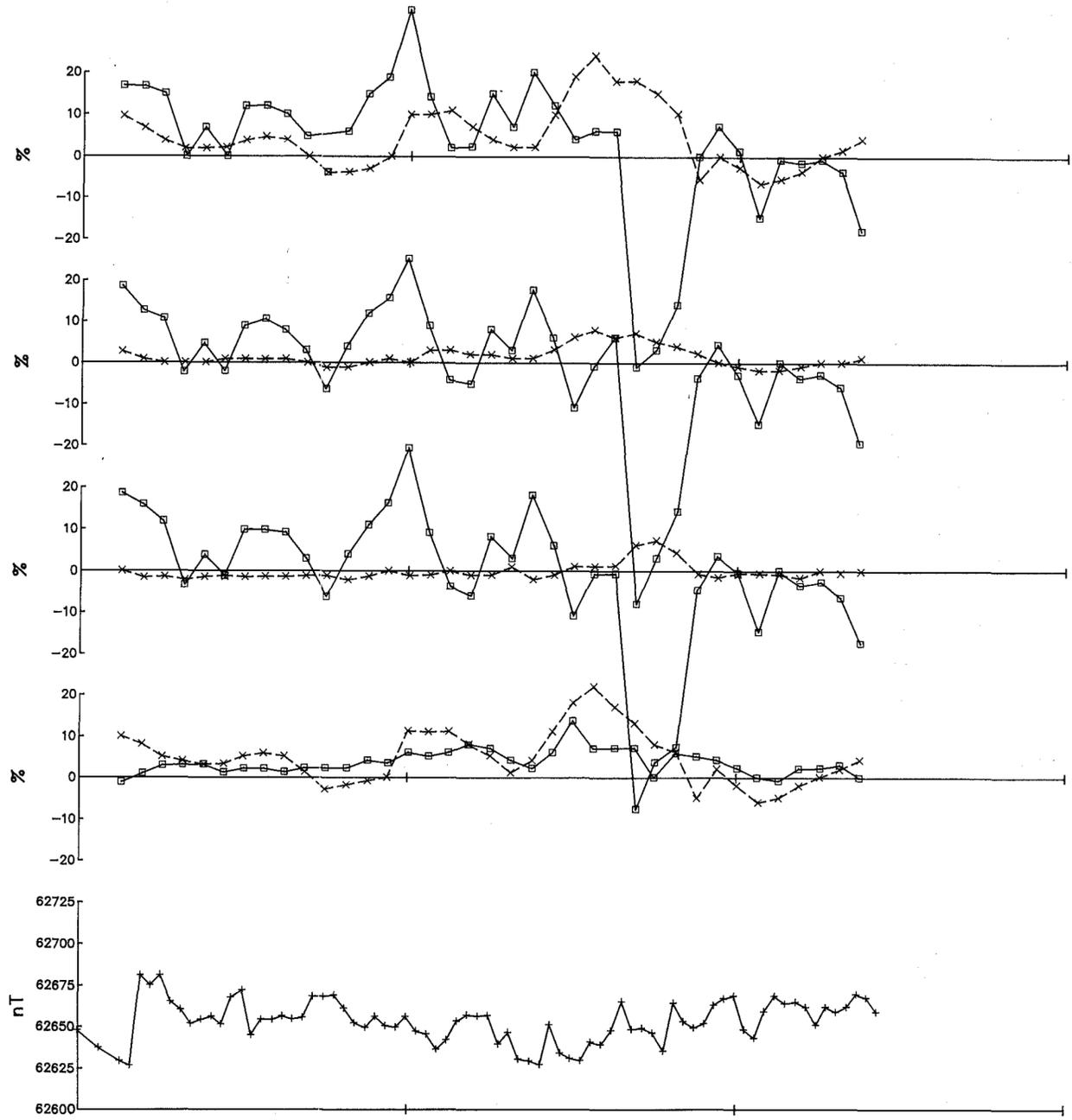
5 cm

**88-2836**

7520

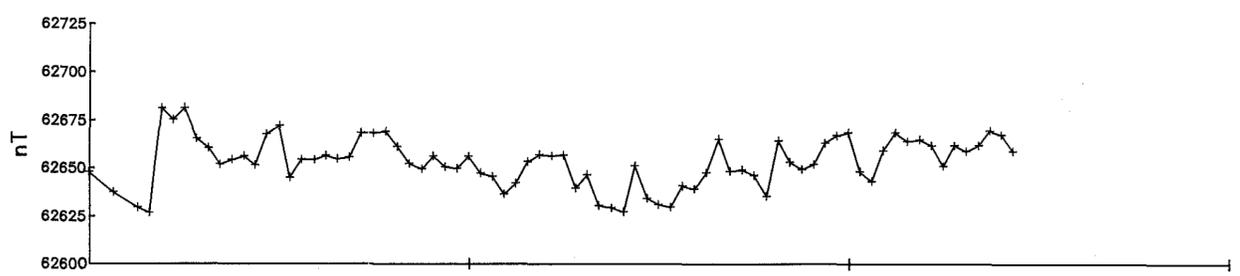


CYPRUS GOLD AUSTRALIA CORPORATION	
SPERO RIVER - E.L. 37/83	DRAWN BY : R.P.
WANDERER NORTH LINE 2.5 PROFILES	DRAFTSMAN : T.G.D.S.
	DATE : April '87
	REVISIONS : April '88
	FILE No.
SCALE 1 : 5000	FIG.

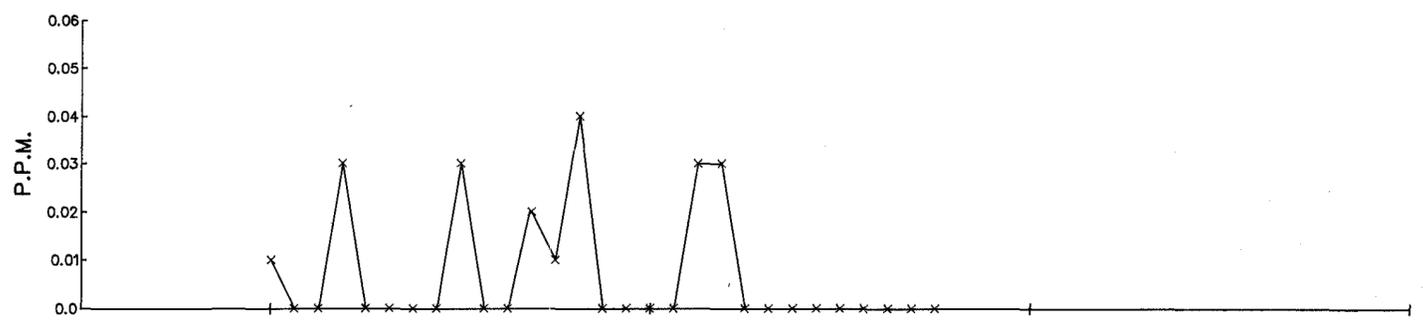


3555 Hz  
 888 Hz  
 222 Hz  
 3555 Hz - 222 Hz

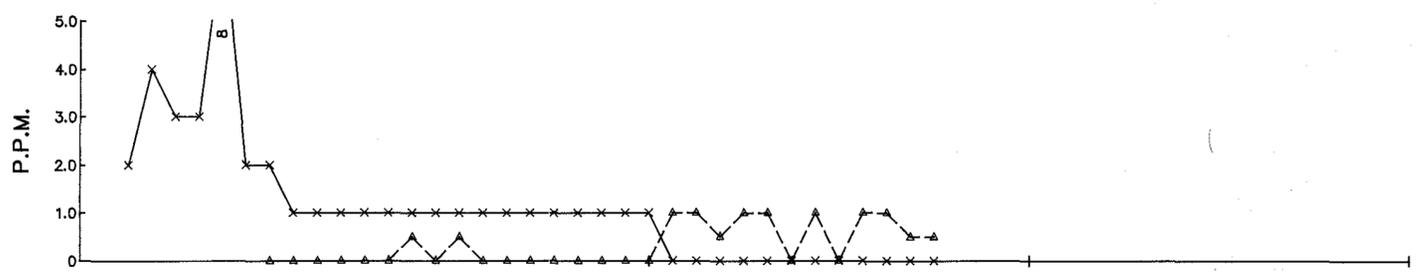
MAX - MIN  
 Tx → Rx = 100m  
 IN PHASE □—□  
 OUT OF PHASE ×—×



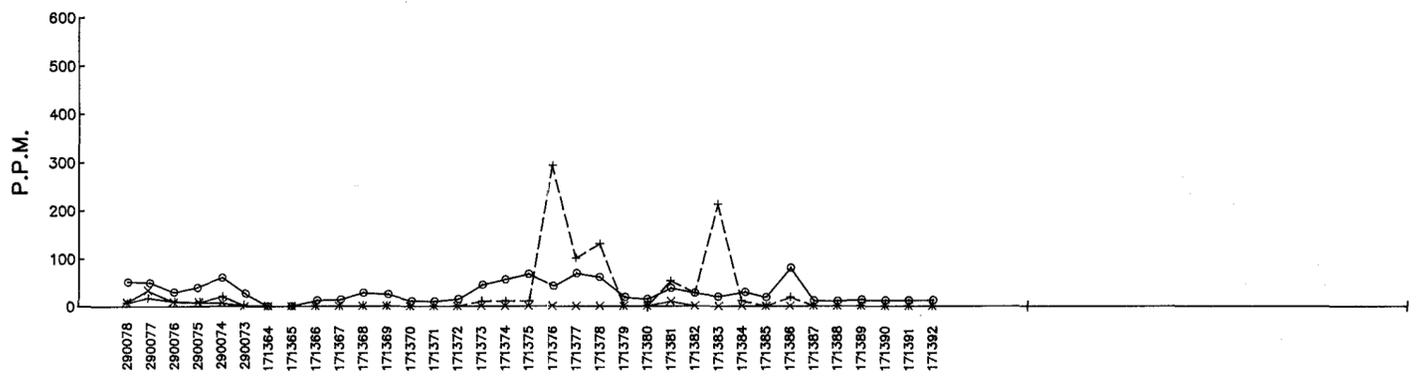
MAGNETICS



Au



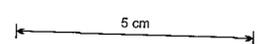
As ×  
 Ag △



Cu ×  
 Pb +  
 Zn ○

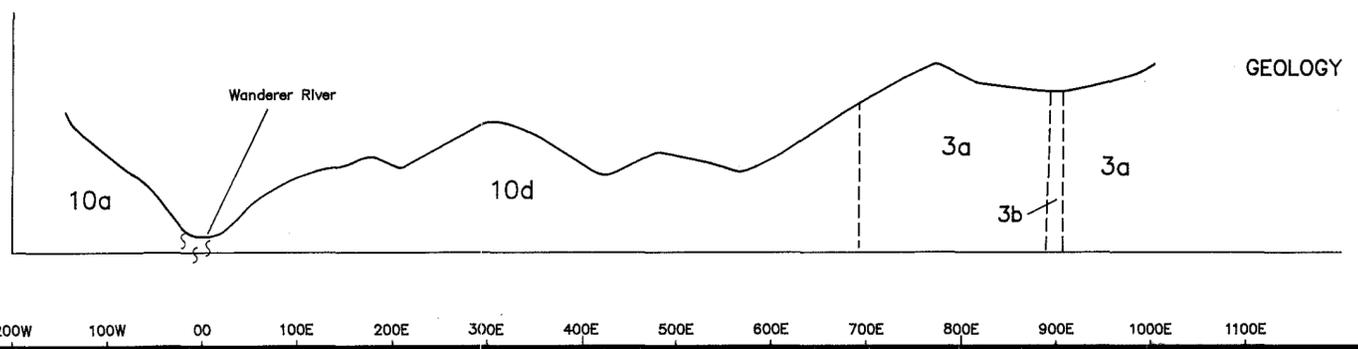
SOIL SAMPLE NUMBERS

760056



88-2836

7521



GEOLOGY

CYPRUS GOLD AUSTRALIA CORPORATION	
SPERO RIVER - E.L. 37/83	DRAWN BY : R.P.
WANDERER NORTH LINE 3 PROFILES	DRAFTSMAN : T.G.D.S.
	DATE : April '87
	REVISIONS : April '88
	FILE No.
SCALE 1 : 5000	FIG.