MIM EXPLORATION PTY LTD

TECHNICAL REPORT

No. 1966

TITLE	**EXPLORATION LICENCE 7736 "YALCO CREEK" NORTHERN TERRITORY FIRST ANNUAL REPORT YEAR ENDED 20TH JULY 1993**
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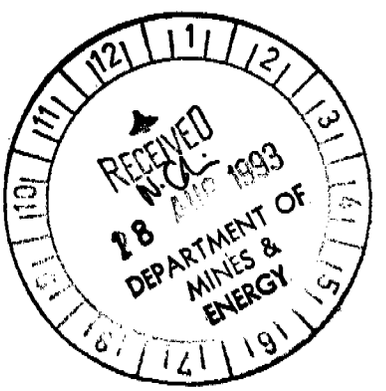

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EXPLORATION LICENCE No.7736
"YALCO CREEK"

NORTHERN TERRITORY

FIRST ANNUAL REPORT :
YEAR ENDED 20th JULY, 1993

1. INTRODUCTION AND SUMMARY

Exploration Licence No.7736 "Yalco Creek" is located approximately 950km SE of Darwin, in the McArthur Basin. The Licence covers approximately 370km^2. "Yalco Creek" was granted for six years on July 20th 1992.

This tenement covers geology of the Tawallah and McArthur Groups which are postulated to be separated by an unconformity which passes through the western part of the Licence area.

A sequence of fault repeated McArthur Group units suggests that "Yalco Creek" has base metal potential.

During 1992, MIM Exploration Pty Ltd carried out an extensive helicopter assisted stream sediment sample program which defined a number of low order anomalies in Cu, Pb, Zn and Au. The majority of the anomalies lie within the Tawallah Group.

Rock chip sampling carried out in conjunction with the stream sediment program produced three samples with moderately high Cu values and another with a moderately high Zn value. The Cu bearing rocks are from the Tawallah Group, and the Zn bearing rock is a recessive siltstone phase of the Masterton Sandstone at the base of the McArthur Group.

Structural analysis by air photo interpretation has defined two major lineament directions in the southern part of the tenement: north-northwest to south-southeast and northeast to southwest.

Airborne electromagnetics has defined numerous small, irregular conductive zones scattered within generally resistive environment.

Aeromagnetics has defined a broad arching structure transgressed by subtle lineaments. Also the magnetic relief suggests a thin, weakly magnetic, easterly dipping horizon probably related to the Tawallah Group volcanics.

2. LOCATION AND ACCESS

The Licence lies on the Tawallah Range (6066) and Batten (6065) 1:100 000 topographic maps, approximately 80km NW from Borroloola and 950km SE of Darwin, Northern Territory. The tenement is bounded by latitude 15°50'S and 16°09'S and longitudes 135°47'E and 135°55'E (Fig. 1).

Access to EL7736 is by the Stuart Highway from Darwin to Daly Waters, the Carpentaria Highway to 30km south of Borroloola, the Old Roper River Road for about 20km and a dirt road following both station and previous explorers tracks to the boundary of the Licence.

Within the area there are numerous sand tracks allowing four-wheel drive vehicle access to most parts of the Licence. Cross-country traverses are difficult due to the low and thick nature of the scrub. The terrain is mostly sandy with occasional black soil and Paper Bark swamps. Topographically the majority of the tenement is flat lying. A small ridge is prominent in the south of the tenement.

3. TENURE

Exploration Licence No.7736 was applied for on 18th February 1992 and granted to Mount Isa Mines Limited on 20th July 1992 for a term of six years. The area comprises 115 one-minute graticular blocks, which equals 370km^2. The NTDME expenditure commitment for the first year was $25 000. There are no unusual conditions or requirements attached to the Licence.

4. REGIONAL GEOLOGY

EL7736 "Yalco Creek" is located within Carpentarain rocks of Lower-Middle Proterozoic age. It lies on the Mt Young and Bauhinia Downs 1:250 000 (SD53-15 and SE53-3 respectively) and the McArthur River Region and Tawallah Range 1:100 000 (6065 & 6165 and 6066 respectively) geological sheet areas.

The sequence of interest is the McArthur Group - a stratigraphic equivalent of the ore-bearing sequences in the Mount Isa District. Many base metal deposits within the North Australian Craton are hosted by the McArthur Group (HYC deposit) or its equivalents. This makes EL7736 prospective.

The McArthur Basin contains a thick platform-cover sequence overlying the eastern edge of the Northern Australian Craton which consists of Lower Proterozoic basement rocks (Jackson et al 1987) and has a stratigraphic succession similar to the Lawn Hill Platform and Mount Isa Orogen. The basin contains four rock groups: Roper (youngest), Nathan, McArthur and Tawallah (oldest). Only the McArthur and Tawallah Groups will be briefly discussed below as they bear direct significance to the Exploration Licence.

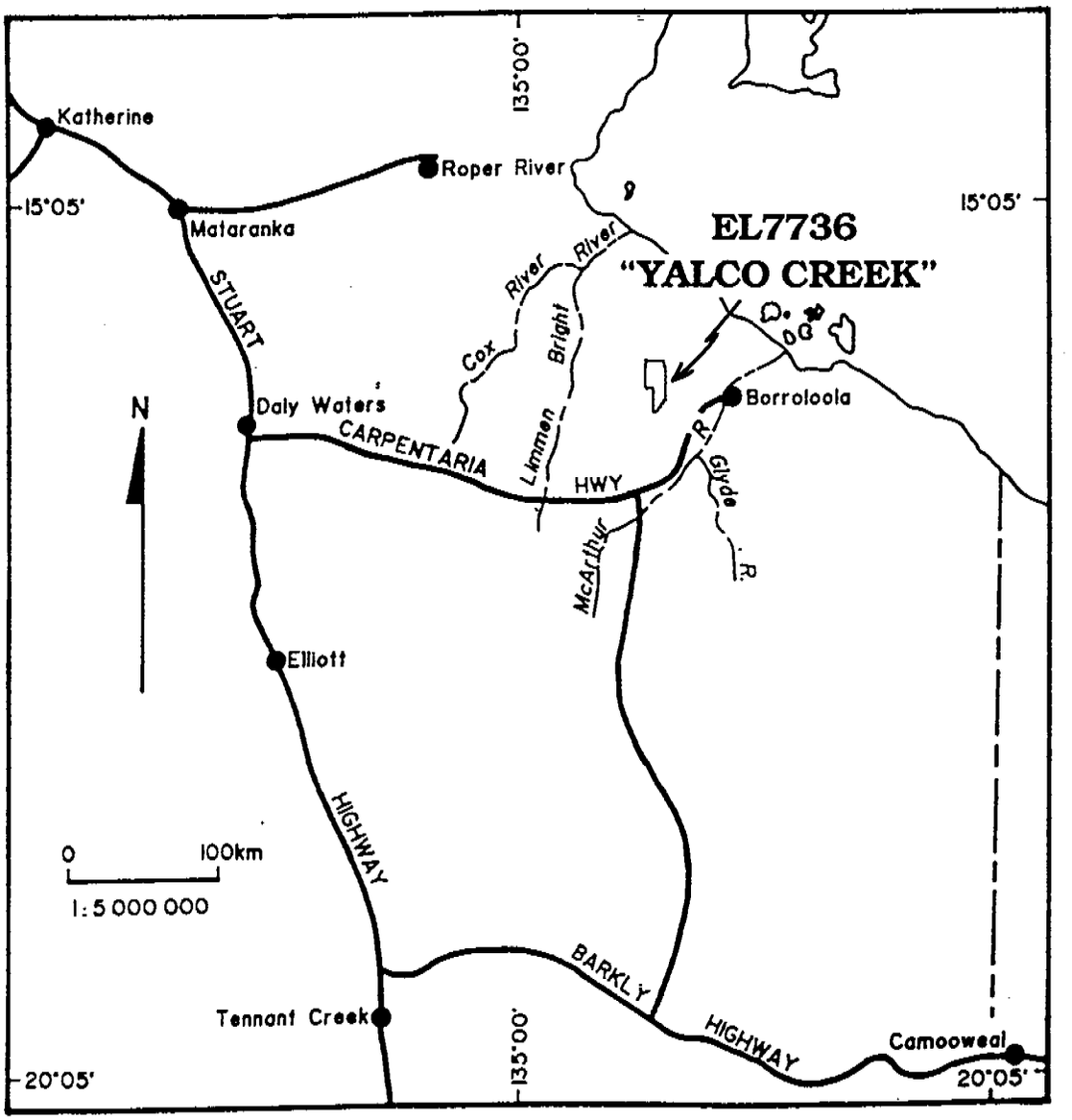

Fig. 1.

LOCATION MAP

4.1 Tawallah Group

The Tawallah Group is the oldest group in the McArthur Basin consisting mainly of thick sequences of ridge-forming sandstones alternating with units of recessive volcanics and fine grained clastics (Pietsch et al, 1991). It is unconformable on the Scrutton Volcanics, and has a maximum thickness from 4500 and 5200m.

4.2 McArthur Group

The McArthur Group comprising a sequence of interbedded carbonates and lutites with subordinate sandstones unconformably overlies the Tawallah Group (Jackson et al, 1987). The group is divided into the older Umbolooga Sub-group and younger Batten Sub-group. The Sub-groups are thought to be separated by a regional palaeoregolith. This conformable contact is only disrupted by major fault zones and is 4200m thick.

4.3 Phanerozoic Rocks

Cretaceous sequences occur throughout the more topographically flat-lying regions of the Licence especially in the north. There are two distinct sequences; a lower unit comprising conglomerate and sandstone and an upper unit comprising siltstone and mudstone. The lower unit crops out extensively while the upper unit is restricted to small low ridges, mesas and plateaux around stream gullies and the foothills of the Tawallah Range in the west and south of the tenement.

4.4 Structure

The McArthur Basin is dominated structurally by the Batten Fault Zone, a north-trending zone 50-70km wide and flanked by the Wearyan Shelf to the east and the Bauhinia shelf to the west. This zone is thought to represent the site of a former syndepositional graben or half graben. Deformation of the Basin has mainly been in response to block-faulting along the Batten and Wapunga Fault zones causing the reversal of the graben structure into a horst or anticlinorium. This has resulted in the exposure of the Scrutton Volcanics in the middle of the Batten Fault Zone (Jackson et al, 1987).

Broad folds and warping, drag folds, steep tilting, shearing, brecciation, veining and solution alteration effects can all be attributed to faulting. The faults have considerable strike-dip displacement as well as strike-slip with tension gashes in the Emu Fault Zone indicating right-lateral displacement of unknown magnitude (Jackson et al, 1987).

5. PREVIOUS EXPLORATION

In the late 1950's and 60's Mount Isa Mines Limited held various portions of EL7736 "Yalco Creek" under A to P's 510 and 1748 (Table 1). A McArthur style deposit was sought. No work was done in the "Yalco Creek " area as base metal potential was considered to be low.

A to P2169 held by U.S. Steel Inc. (1971) covered much of the present tenement. Reconnaissance geological mapping and stream sediment, rock chip and soil samples were collected. Samples were assayed for Cu, Pb, Zn, Fe, Mg, U and Ag. No significant results were achieved and the Licence was relinquished.

Buka Larab (No. 8) held the western and southern portions of EL7736 under A to P's 2554 and 2555 in 1970. Exploration for base metals was carried out by Raytheon Company using Side Looking Airborne Radar (SLAR). A number of large structural zones and lineaments were interpreted, but field inspection failed to define any mineralisation. The A to P was surrendered in 1974.

The northwestern portion of "Yalco Creek" was held, as EL1372, by Carpentaria Exploration Company Pty Ltd from 1976-78. Extensive field work was carried out with little success in the present area, and accordingly this portion of EL1372 was relinquished in 1977.

Western Mining from 1978 held EL1710 and focused on the contacts between a number of Tawallah Group units and the possibility of copper mineralisation being present. Extensive geological mapping, geophysics (airborne INPUT EM, dipole-dipole IP and TEM), geochemistry (soil and rock chip sampling) and drilling (percussion and diamond) was completed. A number of anomalies were defined in the south of the present tenement. These all proved to be isoloated and to small too be of economic worth. The area was relinquished in 1984.

Nord Resources held much of the present tenement in 1978 under EL1744. Reconnaissance for manganese was carried out leading to drilling to the west of the Tawallah Range. No significant results were achieved and the tenement was relinquished in 1981.

AFMECO was granted EL2177 in 1980 to search for uranium. This Licence covered the same area as EL1372. Exploration included airphoto interpretation, reconnaissance mapping and compilation of existing airborne radiometrics. This was followed by rock chip sampling of specific targets. No zone of uranium enrichment was found and the Licence was surrendered.

The western portion of EL7736 was held under EL2827 by Key Resources from 1982. Base metals, uranium and diamonds were explored for by re-interpreting previous explorers work. All anomalies proved to small in extent to be economic. The tenement was surrendered in 1984.

TABLE 1

OPEN FILE COMPANY REPORTS COVERING EL7736 ""YALCO CREEK""

TENEMENT No.	GRANTED	COMPANY	CR NUMBER
AP510	21-05-56	M.I.M. Holdings Ltd.	CR57/007 CR57/008 CR57/009
AP1748	1968	M.I.M. Holdings Ltd.	CR69/012A-B
AP2169	14-10-71	U.S. Steel Int.	CR70/075
AP2554	1970	Buka Larab (No. 8) Pty. Ltd.	CR71/044A-B CR72/054
AP2555	1970	Buka Larab (No. 8) Pty. Ltd.	CR71/044A-B CR71/045 CR71/119 CR72/054 CR72/043
EL1372	30-11-76	C.E.C. Pty. Ltd.	CR78/022 CR79/040A-C CR80/046 CR81/077 CR82/098 CR82/388
EL1710	1-07-78	Western Mining Co. Ltd.	CR79/108 CR80/153 CR81/161A-B CR82/216 CR83/111
EL1744	18-04-78	Nord Resources Pty. Ltd.	CR79/058
EL2177	1979	AFMECO Pty. Ltd.	CR81/079
EL2827	15-06-82	Key Resources Pty. Ltd.	CR82/373 CR84/012A-B
EL4083	23-12-82	CRA Exploration Pty. Ltd.	CR84/024A-C CR85/054A-B CR86/049A-B
EL6236	17-11-88	Quilpie Pty. Ltd.	CR92/061

CRA Exploration held the northern portion of the present tenement in 1982 under EL4083. Selective gravel stream sediment samples were taken in the search for diamonds. Airborne magnetics and radiometrics were also flown. A single magnetic feature was defined in the current Licence area. A shallow magnetic source was interpreted. No kimberlite indicators were found and the Licence was surrended in 1985.

In 1991 Quilpie relinquished part of EL6236, which now forms EL7736. Base metals and gold were sought by compiling and re-interpreting the available geophysics, generating landsat thematic images and compilation of published and unublished geological maps. Field reconnaissance was used to check minor anomalies generated by the above work. No significant results were achieved.

6. WORK BY MIM EXPLORATION PTY LTD

Figure 2 illustrates work carried out in 1992 by MIM Exploration Pty Ltd.

6.1 Stream Sediment Geochemistry

An extensive helicopter assisted stream sediment sampling program was conducted over areas of Tawallah and McArthur Group rock outcrops throughout the Licence. The helicopter was operated by Helimuster. A total of 140 samples were collected in three days and assayed for Cu, Pb, Zn, Ag, As, Bi, Cd, Co, Cr, Fe, Mn, Ni, Sb, U and V from the 180µm (minus 80# mesh) sample and Au from a 75µm (minus 200# mesh) sub-sample. A stream sediment sample location map appears as Drawing No. 41008. Assay techniques used are listed below. All sample assay results appear in Appendix 1.

ELEMENTS	LAB	METHOD	UNIT
Au	AMDEL (Darwin)	AAS9L	ppb
Cu, Pb, Zn, Ag, As, Bi, Cd, Co, Cr, Fe, Mn, Ni, Sb, U, V	AMDEL (Perth)	ICP2	ppm

In an attempt to ascertain workable background levels for the Cu, Pb, Zn and Au assay results were plotted on cumulative frequency distribution graphs (Appendix 2). The backgrounds calculated by this exercise can only be treated subjectively because the assays cover a wide and diverse range of lithological types and ages. It is possible dilution of the sample has occurred mostly by the Cretaceous cover.

There is a large gap between the peak Cu and Zn values and the next assays below them (Appendix 2). This represented a cumulative increment difference of 56ppm for Cu (41ppm to

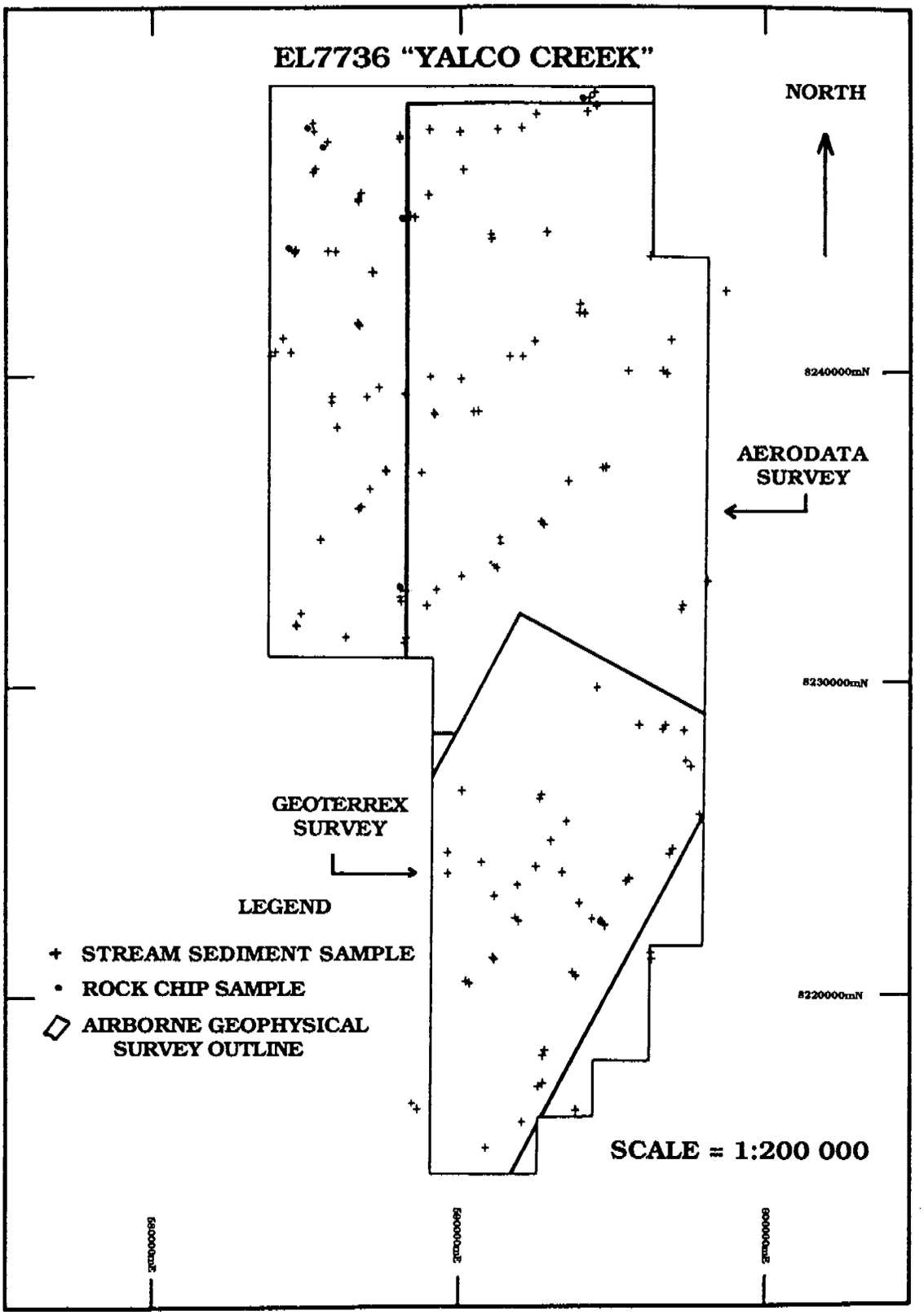

Fig. 2: EXPLORATION CARRIED OUT BY MIM - EL7736 "YALCO CREEK", 1992.

97ppm) and 80ppm for Zn (31ppm to 111ppm). When the assay results were plotted on distribution graphs an appreciable difference in the slopes between the whole ('uncut') and selected ('cut') data for the Cu and Zn values was observed. For the purpose of defining rough background levels for these two elements the 'cut' versions of the graphs will be used (Appendix 2).

The following backgrounds were determined for the Cu, Pb, Zn and Au assay results:

Cu = 20ppm
Pb = 18ppm
Zn = 15ppm
Au = 1ppb

These results delineated the twenty copper, seven lead, thirteen zinc and nine gold anomalous sample sites depicted on Drawing No. 41009.

Correlation co-efficient analysis of the Cu, Pb, Zn, Au, Fe and Mn results are listed in Table 2. Both the 'uncut' and 'cut' data sets are given for the Cu and Zn results to illustrate the large difference a single high value can make to statistical calculations.

Based on 'cut' data for Cu and Zn, there are moderate affinities for Cu-Zn and Pb-Zn. Also Fe and Mn strong relationships with Cu and a moderate relationships with Zn.

6.2 Rock Chip Geochemistry

A total of eight rock chip samples were collected from EL7736 during the helicopter stream sediment sample program (Drawing No. 41010). Rock chip samples QP85654 and QP85655 are from the McArthur Group while the remainder are from the Tawallah Group. Assays for Au, Cu, Pb, Zn, Fe, Mn, As, Co and Ni were done by Amdel (Darwin) using AAS7. Only Cu and Zn returned anomalous results (Drawing No. 41010).

ANOMALOUS ROCK CHIP SAMPLES

SAMPLE NO.	LITHOLOGY	Cu(ppm)	Pb(ppm)	Zn(ppm)
QP85636	Warramana Sandstone	180	99	82
QP85640	Wollogorang Formation/ Settlement Creek Volcanics	490	8	3
QP85653	Wununmantyala Sandstone	240	<4	120
QP85655	Masterton Sandstone (recessive phase)	21	62	580

TABLE 2

CORRELATION CO-EFFICIENTS FOR STREAM SEDIMENT SAMPLE DATA

ELEMENT PAIRS	'UNCUT'	'CUT'
Cu - Pb	0.0336	0.0455
Cu - Zn	0.1676	0.4169
Cu - Au	0.1884	0.0415
Pb - Zn	0.2359	0.4393
Pb - Au	0.0635	
Zn - Au	0.0927	0.0927
Fe - Cu	0.5708	0.7167
Fe - Pb	- 0.0606	
Fe - Zn	0.1874	0.4564
Fe - Mn	0.5100	
Fe - Au	0.1057	
Mn - Cu	0.4821	0.6463
Mn - Pb	0.1504	
Mn - Zn	0.2081	0.4062
Mn - Au	0.2381	

Assay results and full rock descriptions are contained in Appendix 1.

6.3 Aerial Photo Structural Lineament Map

A structural lineament map is being compiled from aerial photo interpretation. A number of north-northwest - south-southeast and northeast - southwest lineaments have been defined would represent the major structural faults in this region.

6.4 Geophysics

Geophysical exploration in EL7736 "Yalco Creek" during 1992-93 comprised two separate airborne geophysical surveys flown in June 1992 (GEOTEM) and October 1992 (QUESTEM).

All geophysical sections and interpretations have been supplied by T V Harvey of T V Harvey & Associates, Adelaide.

6.4.1 Airborne GEOTEM and Magnetic Survey

The 1992 Yalco 1 airborne geophysical survey comprised a detailed GEOTEM electromagnetic and magnetic survey of the southern section of EL7736 "Yalco Creek". Field work was carried out by Geoterrex on 30th June 1992 and the final data received in September 1992.

Survey details and specifications are given in Table 3.

The aims of this survey were to obtain systematic information on the structure and electrical properties of rock types in the southern section of the tenement and to search for sulphide mineralisation.

6.4.1.1 Final Data Presentation

Data considered for this interpretation comprised 1:25 000 GEOTEM composite profiles for all lines, 1:50 000 scale flight path maps, 1:100 000 MIMEX pseudocolour Channel 1 image and 1:100 000 scale published geological maps.

6.4.1.2 Results and Interpretation

The results of the 1992 Geoterrex Yalco 1 GEOTEM survey show a dominant broad, strongly resistive zone in the centre-east of the survey area, with many small, irregular conductive zones scattered within the generally resistive environment elsewhere. The extent of the Geoterrex survey is shown on Drawing No. 41015 and a Channel 1 pseudocolour image on Drawing No. 41016.

TABLE 3

GEOTERREX 1992 YALCO 1 AIRBORNE GEOTEM AND MAGNETIC SURVEY DETAILS

Survey Specifications:

Total lines flown	:	301-336 = 36
Flight line direction	:	1200 - 3000
Flight line spacing	:	500m
Tie line direction	:	none flown
Date flown	:	June 1992
Nominal aircraft terrain clearance	:	105m
Nominal aircraft speed	:	60 metres per second

GEOTEM Instrument Specifications:

Nominal Geometry:

Transmitter (aircraft) terrain clearance	:	105m
Receiver (towed bird) terrain clearance	:	54m
Transmitter-receiver separation	:	115m horizontal
	:	51m vertical

Transmitter:

Configuration	:	3 turn, vertical axis loop of 231m^2 area
Output	:	600 amperes peak current
	:	415000 ampere square metres dipole moment
Wave form	:	half sine wave pulses of alternate polarity
Pulse Length	:	0.001020 seconds
Off Time	:	0.005646 seconds
Cycling Rate	:	75 Hz (126 bipolar pulses per second)

Receiver:

Configuration	:	multi-turn coil with horizontal axis in flight direction
Sampling rate	:	8 pulses stacked for each reading
Reading rate	:	readings per second; ie reading every 9 metres approximately
Reading sample	:	128 reading windows amalgamated to form 16 channels

Channel times expressed as elapsed time after transmitter switch off:

Channel number	Channel centre
Tx switch off	0.000000 seconds
1	0.000335 seconds
2	0.000434 seconds
3	0.000541 seconds
4	0.000647 seconds
5	0.000775 seconds
6	0.000931 seconds
7	0.001116 seconds
8	0.001322 seconds
9	0.001585 seconds
10	0.001869 seconds
11	0.002231 seconds
12	0.002650 seconds
13	0.003249 seconds
14	0.003874 seconds
15	0.004499 seconds
16	0.005176 seconds
Tx switch on	0.005646 seconds

Magnetometer Specifications:

Instrument	:	Scintrex Cs vapour optical absorption
Configuration	:	mounted in tail stinger
Sensitivity	:	0.1 nanoteslas
Sample time	:	0.140 seconds during special GEOTEM switch off
Sampling rate	:	1 per second; ie reading every 60 metres approx.

The uncorrected magnetic results show a zone of minor magnetic relief coincident with the southern section of the main resistive zone, superimposed over the generally featureless gradient, decreasing to the north, which traverses the survey area. The uncorrected magnetic results are illustrated in the pseudocolour image Drawing No. 41017.

6.4.1.3 GEOTEM Anomaly Evaluation

Interpretation of the 1992 GEOTEM data was carried out using both flight profiles and images, with data grouped on an anomaly basis. Locations for the 11 anomalies identified are included on Drawing No. 41016 and summary listings for each anomaly are contained in Appendix 3.

Anomalous responses detected in the 1992 Yalco 1 GEOTEM survey may be conveniently subdivided into four categories:

1: Masterton Sandstone Resistive Zone,
2: Masterton Sandstone Bounding (MSB) Fault Zone - mainly Tawallah Group weathered stratigraphy,
3: Eastern Conductors - Lower McArthur Group weathered stratigraphy,
4: Western Conductors - Middle McArthur Group (weathered?) stratigraphy.

The Masterton Sandstone Resistive Zone is the dominant feature in the GEOTEM data, comprising a 1.5-2km wide, north-northeast striking zone of distinctly resistive response, coincident in position and extent with the extensive area of flatly-east-dipping Masterton Sandstone outcrop.

The MSB Fault Zone responses (anomalies YC4, YC7 and YC11 (west)) represent small, localised enhancements of otherwise weakly anomalous trends, apparently coincident with, or closely proximal to, the main MSB Fault, along the western margin of the Masterton Sandstone Resistive Zone. Possible fault-related sources for the apparent locally-enhanced conductivity at these anomaly sites include increased porosity and (less likely) sulfide mineralisation; some `edge effect' contribution is also expected. The respective conductive source material for these anomalies is interpreted to be :

YC4 and YC7 : weathered Gold Creek Volcanics, (with magnetic response),
YC11 (west) : weathered clastic Mallapunyah Formation/Amelia Dolomite.

The Eastern Conductors (anomalies YC5, YC6, YC10 and YC11) represent small, localised enhancements of a series of weakly anomalous trends which parallel the stratigraphy to the east of the Masterton Sandstone Resistive Zone. The source material for these weakly anomalous trends is interpreted to be non-outcropping, weathered, east-dipping, more-clastic(?) stratigraphic horizons within the Lower McArthur Group between the Masterton Sandstone and Mara Dolomite; most anomalies are better developed on the eastly flown lines. Apparent locally-enhanced conductivity at the anomaly sites themselves is variously interpreted to be due to thicker, more conductive surficial alluvial cover, increased structurally-related porosity, strike direction variation, and increased layer thickness.

The Western Conductors (anomalies YC8(?), YC9C-D, YC12 and YC13) represent localised enhancements of what could be a single anomalous fault-disrupted trend which approximately parallels the stratigraphy to the west of the Masterton Sandstone Resistive Zone. The main source material for this trend is interpreted to be non-outcropping, weathered, east-dipping shales of the Barney Creek Formation. Apparent locally-enhanced conductivity at the anomaly sites themselves may variously be due to thicker, more conductive surficial alluvial cover, increased structurally-related porosity, and strike direction variations. However, the character and strength of many responses (notably the YC9C-D anomalies suggest a contribution from increased shale thickness and/or conductivity (sulphides?).

6.4.1.4 Magnetic Interpretation

The pseudocolour image of the uncorrected magnetic data (see Drawing No. 41017) shows a zone of minor magnetic relief coincident with the southern section of the Masterton Sandstone Resistive Zone, superimposed over the generally featureless gradient, decreasing to the north, which traverses the survey area. Interpretation of these data suggests that this magnetic relief reflects a thin, persistent, east-dipping horizon of weakly magnetic volcanics immediately beneath the southern section of Masterton Sandstone. Anomalous surficial conductivity, the expected response of weathered volcanics, is present along much of the western boundary, and minor Gold Creek Volcanics have been mapped between the MSB Fault and the Masterton Sandstone in the northern section of the magnetic anomaly.

There is no magnetic evidence for shallow magnetic volcanics beneath the northern section of Masterton Sandstone, but subtle magnetic lineaments do suggest a northern continuation of the MSB Fault.

The regional gradient across the survey area, decreasing from south to north, is attributed to normal variation in the Earth's magnetic field, which has not been subtracted from these data.

6.4.1.5 Summary

The 1992 Yalco 1 GEOTEM survey has shown that much of the upper Tawallah Group and lower-middle McArthur Group stratigraphy within the survey area is electrically resistive, most notably the strongly-outcropping Masterton Sandstone. Weakly conductive trends within this environment typically relate to the surficial section of non-outcropping weathered clastic interbeds. The exception to this pattern is the Barney Creek Formation which is anomalously conductive. Most mapped disruptive structural features are not anomalous, although there may be some anomaly enhancement adjacent to the main MSB Fault.

6.4.2 Airborne QUESTEM and Magnetic Survey

The 1992 Yalco 2 airborne geophysical survey comprised a detailed QUESTEM electromagnetic and magnetic survey covering the northern section of EL7736 "Yalco Creek" and adjacent Perilya Mines tenements under joint venture with MIM. Field work was carried out by Aerodata on 14th, 15th and 16th October, 1992, and the final data received later in 1992.

Survey details and specifications are given in Table 4.

The aims of this survey were to obtain systematic information on the structure and electrical properties of rock types in the northern section of the tenement, and to search for sulphide mineralisation.

6.4.2.1 Final Data Presentation

Data considered for this interpretation comprised 1:25 000 QUESTEM composite profiles for all east-west lines (except line 30740), 1:50 000 scale flight path maps, 1:100 000 MIMEX pseudocolour images, and 1:100 000 scale published geological maps.

6.4.2.2 Results and Interpretation

The results of the 1992 Aerodata Yalco 2 QUESTEM survey show a response pattern comprising irregular conductive zones within a generally resistive environment. The extent of the Aerodata survey is shown on Drawing No. 41015 and QUESTEM results are illustrated in the Channel 1 pseudocolour image Drawing No. 41016.

Table 4

AERODATA 1992 YALCO 2 AIRBORNE QUESTEM AND MAGNETIC SURVEY DETAILS

Survey Specifications:

Total lines flown	:	30010-30420 = 42
Flight line direction	:	east-west
Flight line spacing	:	500m
Tie line direction	:	north-south
Tie line spacing	:	9km
Dates flown	:	14th October 1992
Nominal aircraft terrain clearance	:	120m
Nominal aircraft speed	:	52 metres per second

QUESTEM Instrument Specifications:

Nominal Geometry:

Transmitter (aircraft) terrain clearance	:	120m
Receiver (towed bird) terrain clearance	:	45m
Transmitter-receiver separation	:	not stated

Transmitter:

Configuration	:	6 turn, vertical axis loop of 186m^2 area
Output	:	200 amperes peak current
	:	223000 ampere square metres dipole moment
Waveform	:	half sine wave pulses of alternate polarity
Pulse Length	:	0.002 seconds
Off Time	:	0.00467 seconds
Cycling Rate	:	75 Hz

Receiver:

Configuration	:	multi-turn coil with horizontal axis in flight direction
Sampling rate	:	128 digital samples per transmitter on + off time
Sample size	:	0.00005208 seconds
Reading rate	:	4 readings per sec.; ie reading every 13m approximately

Channel times expressed as elapsed time after transmitter switch off:

Channel No.	Channel start	Channel centre	Channel end
Tx switch off	0.000000 seconds		
1	0.000168 seconds	0.000247 seconds	0.000324 seconds
2	0.000273 seconds	0.000351 seconds	0.000429 seconds
3	0.000377 seconds	0.000455 seconds	0,000533 seconds
4	0.000481 seconds	0.000559 seconds	0.000637 seconds
5	0.000584 seconds	0.000715 seconds	0.000845 seconds
6	0.000793 seconds	0.000924 seconds	0.001054 seconds
7	0.001001 seconds	0.001131 seconds	0.001262 seconds
8	0.001210 seconds	0.001393 seconds	0.001574 seconds
9	0.001418 seconds	0.001601 seconds	0.001782 seconds
10	0.001626 seconds	0.001861 seconds	0.002095 seconds
11	0.001939 seconds	0.002174 seconds	0.002408 seconds
12	0.002355 seconds	0.002643 seconds	0.002929 seconds
13	0.002876 seconds	0.003163 seconds	0.003450 seconds
14	0.003398 seconds	0.003684 seconds	0.003971 seconds
15	0.003918 seconds	0.004205 seconds	0.004490 seconds
Tx switch on	0.004670 seconds		

Magnetometer Specifications:

Instrument	:	Cs vapour optical absorption
Configuration	:	mounted in stinger
Resolution	:	0.1 nanoteslas
Sample time	:	0.001 seconds
Sampling rate	:	2 per second; ie reading every 26m

The magnetic results show a pattern of anomalies apparently outlining a broad arch, transgressed by subtle magnetic lineaments oriented northwest, northeast and north-south, in the north of the survey area. The corrected magnetic results are illustrated in the pseudocolour image Drawing No. 41017.

6.4.2.3 QUESTEM Anomaly Evaluation

Interpretation of the 1992 QUESTEM data was carried out using both flight profiles and images, with data grouped on an anomaly basis. Locations for the eight anomalies identified are included on Drawing No. 41016 and summary listings for each anomaly are contained in Appendix 4.

Anomalous responses detected in the 1992 Yalco 2 QUESTEM survey are most conveniently subdivided with reference to their interpreted stratigraphic position:

1: Tawallah Group Responses,
2: Lower McArthur Group Responses,
3: Barney Creek Formation Responses,
4: Upper McArthur Group Responses.

The Tawallah Group Responses (anomalies YN1, YN2, YN8, YN9(?) and YN13 (west)) represent areas of weak and moderate strength anomalies distributed through the otherwise resistive environment in the north and centre of the survey area. The probable source materials for these anomalies are interpreted to be mainly the near-surface, non-outcropping, weathered sections of fault-bounded blocks of Gold Creek Volcanics (with associated magnetic anomalies) and Wollogorang Formation.

The Lower McArthur Group Responses (anomalies YN9(?), YN13 (east) and YN15) represent areas of weak and moderate strength anomalies in the west and southeastern sections of the survey area. The source materials for these anomalies are interpreted to be the near-surface, non-outcropping, weathered sections of clastic(?) stratigraphic horizons within the Lower McArthur Group, probably within the Mallapunyah Formation and Amelia Dolomite. Apparent locally-enhanced conductivity at some anomaly sites may variously reflect thicker, more conductive surficial alluvial cover, increased structurally-related porosity, strike direction variation, and increased layer thickness.

The Barney Creek Formation Response (anomaly YN14) represents an area of moderate strength response in the southern section of the survey area. The source material for this anomaly is interpreted to be non-outcropping, weathered shales of the Barney Creek Formation, with a possible contribution from sulphides. Anomaly YN14 occurs in an area of overlap between the two airborne surveys and is equivalent to GEOTEM anomaly YC13.

The Upper McArthur Group Response (anomaly YN10) represents an area of moderate strength anomalies in the centre-north of the survey area. The source material for this anomaly is interpreted to be a fault-bounded block of mainly non-outcropping, weathered clastics within the Lynott Formation.

6.4.2.4 Magnetic Interpretation

The pseudocolour image of the corrected magnetic data (see Drawing No. 41017) shows anomaly patterns apparently outlining a broad arch transgressed by subtle magnetic lineaments in the north of the survey area.
Interpretation of these data suggests that this magnetic relief reflects a thin, persistent fault-disrupted horizon of upper Tawallah Group weakly magnetic volcanics, perhaps within a broad, south plunging syncline. Intensity of fault disruption increases to the north and the blurring of the eastern `limb' can be attributed to an increase in thickness of surficial cover material to the northeast. Some associated anomalous surficial conductivity, the expected response of weathered volcanics, is present along the western limb, and minor Gold Creek Volcanics have been mapped in the equivalent stratigraphic position to the south.

Analysis of subtle magnetic lineaments present in the data, mainly in the north of the survey area, indicate disruptive structural directions of 1300-1450, 0200-0350 and 1600-1800.

6.4.2.5 Summary

The 1992 Yalco 2 QUESTEM survey has investigated the near-surface electrical properties of substantial areas of Tawallah Group and McArthur Group stratigraphy. Discrete areas of weak and moderately anomalous responses occur scattered through the survey area, in an otherwise quite resistive environment. These anomalies have usually been attributed to non-outcropping weathered Tawallah Group volcanics or McArthur Group clastic(?) interbeds. One anomaly (YN14) has been attributed to conductive, possibly sulphidic shales of the Barney Creek Formation. The extent of mapped outcrop diminishes towards the northeast, but there is no evidence that the surficial cover materials (Cainozoic alluvium and Mesozoic (Early Cretaceous) deposits) are strongly conductive. Most disruptive structural features are not anomalous, and only become evident in their effect on stratigraphy-related responses.

7. CONCLUSIONS

A number of low order Cu, Pb, Zn and Au anomalies were outlined from the stream sediment sampling, these anomalies seem to have been diluted by the Cretaceous cover.

Rock chip samples from units within the Tawallah Group assayed moderately high Cu and Zn anomalies.

Air photo interpretation has defined a number of major lineaments in the south of the tenement.

Airborne EM has defined numerous small, irregular conductive zones scattered within generally resistive environment.

Aeromagnetics has defined a broad arching structure transgressed by subtle lineaments. Also the magnetic relief suggests a thin persistent easterly dipping horizon weakly magnetic probably related to the Tawallah Group volcanics.

8. FUTURE WORK

1: Further stream sediment and rock chip sampling of specific target lithologies in the McArthur Group.

2: Further interpretation of the airborne geophysics and ground follow-up of anomalies.

3: Geological mapping and completion of structural analysis of the tenement.

4: Drilling of any suitable targets generated by this work.

Derrick C. Kettlewell

9. REFERENCES

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Anomaly YC4

Moderate strength anomaly present on line 308, with probable extensions to north and south.

strike extent: single line; possible extensions of 2.5 kilometres
strike direction: north-northeast
peak response: line 308 (west-flying); 16 channels, 350 ADI

The anomaly occurs in a Cz covered area, adjacent to the west of the extensive area of resistive Pms outcrop: a weak assymetric magnetic anomaly (minor western high, principal eastern low), part of a persistent trend, is approximately coincident.

The anomaly source is interpreted to be non-outcropping, weathered Tawallah Group volcanics abutting the main MSB Fault and underlying the flatly-east-dipping Pms; Ptg has been mapped along strike to the north.

The anomaly has structural potential, but can be adequately explained as a surficial-style weathered volcanics response.

Lesser anomalous responses to the west can be interpreted to relate to weathered clastic material within Nathan Group Pnz, mapped to the west of the main MSB Fault.

Anomaly YC5

Moderate strength anomaly enhancement, present on line 309, of a weakly anomalous trend along the eastern margin of the main Masterton Sandstone Resistive Zone.

strike extent: single line
strike direction: north-northeast
peak response: line 309 (east-flying); 13 channels, 300 ADI

The anomaly occurs in a Cz covered area, between the extensive area of resistive east-dipping Pms outcrop to the west and Pml outcrops to the east. The line 309 anomaly enhancement coincides with a flexure in the stratigraphic trend.

The anomaly source is interpreted to be non-outcropping, weathered clastic stratigraphy within the McArthur Group Pml, locally enhanced by effects relating to structural folding or faulting.

No real potential for this anomaly which probably relates to localised structural enhancement of a surficial-style weathered clastic stratigraphy response.

Other parallel weakly-anomalous trends to the east can be interpreted to relate to non-outcropping weathered clastic stratigraphy within the Pml and/or Pma.

Anomaly YC6

Area of moderately anomalous responses in two zones, best developed on lines 313 to 316 inclusive, to the east of the main Masterton Sandstone Resistive Zone.

strike extent:	western zone - 2 kilometres eastern zone - >1 kilometre (open to south beyond survey coverage)
strike direction:	north-northeast
peak response:	western zone - line 315 ; 15 channels, 590 ADI eastern zone - line 315 ; 13 channels, 320 ADI

The anomalies occur in Cz covered areas, within the east-dipping stratigraphic sequence Pms to Pmd.

The anomaly sources are interpreted to be non-outcropping, weathered clastic stratigraphy within the McArthur Group Pml and Pma, possibly locally enhanced by effects relating to cross-faulting.

No real potential for these anomalies which are adequately explained as surficial-style weathered clastic stratigraphy responses, perhaps with local structural enhancement.

Anomaly YC7

Limited extent weak-moderately anomalous response on the western margin of the Masterton Sandstone Resistive Zone, present on lines 315 and 316,

strike extent:	western zone - 1 kilometre
strike direction:	north-northeast
peak response:	line 315 (east-flying); 14 channels, 410 ADI line 316 (west-flying); 15 channels, 240 ADI

The anomaly occurs in a Cz covered area, adjacent to the north of Pto_2 outcrop: a minor bipolar magnetic anomaly is adjacent to the east.

The anomaly source is interpreted to be weathered and crushed Tawallah Group Pto_2 and perhaps Ptg (as indicated by the magnetic anomaly) abutting the main MSB Fault, with a possible contribution from non-outcropping weathered Nathan Group Pnz to the west of the fault.

The anomaly has structural potential, but can be adequately explained as a surficial-style weathered responses.

A similar, weakly anomalous response along strike to the north-northeast on line 318 may represent similar source material.

Anomaly YC8

Moderate strength anomaly trend, within a broader somewhat conductive zone divergent to other `stratigraphic' trends, present on lines 317 to 320.

strike extent: 2 kilometres
strike direction: east-northeast
peak response: line 319 (east-flying); 15 channels, 440 ADI

The anomaly occurs in an area of Kl and Cz cover, coincident in its northern section with creek-bed Qa; Pnz outcrops to the east.

The anomaly source is interpreted to be non-outcropping, weathered material, of stratigraphic or structural origin, with possible enhancement from surficial source material.

No real potential for this anomaly which probably reflects a structural or stratigraphically controlled surficial-style conductor.

Anomaly YC9C

A strongly anomalous zone present on lines 321 to 323 inclusive, probably extending through lower response zones eastwards(?) to YC9D.

strike extent: >1 kilometre
strike direction: north-northeast
peak response: line 322 (west-flying); 16 channels, 970 ADI
line 323 (east-flying); 16 channels, 1260 ADI

The anomaly correlates with an area of Cz cover within more extensive Kl cover.

The anomaly source is interpreted to be non-outcropping, weathered conductive Pmq.

The potential for this anomaly relates to its interpreted relationship with Pmq target stratigraphy and indicated conductivity.

Anomaly YC9D

An isolated strongly anomalous two-peaked zone within a somewhat conductive area, present on line 324, probably traceable through lower response zones westwards to YC9C.

strike extent: < 1 kilometre
strike direction: not obvious
peak response: line 324 (west-flying); 11 channels, 1170 ADI
; 16 channels, >1300 ADI

The anomaly occurs in an area of Cz cover, adjacent to the northwest of a fault-bounded area of Pmnc and Pmnh outcrop.

The anomaly source is interpreted to be non-outcropping, weathered conductive Pmq, based on similarities to anomalies YC9A, YC9B and YC9C.

The potential for this anomaly relates to its interpreted relationship with Pmq target stratigraphy and indicated conductivity.

Anomaly YC10

Localised enhancement, present on line 325, of a weakly anomalous trend to the east of the main Masterton Sandstone Resistive Zone.

strike extent: single line
strike direction: section of north-northeast trend
peak response: line 325 (east-flying); 9 channels, 180 ADI

The anomaly occurs adjacent to Pma outcrops in a Cz covered area, approximately coincident with one of the many mapped cross-faults.

The anomaly source is interpreted to be a local structurally-related enhancement of non-outcropping, weathered clastic stratigraphy within the McArthur Group Pml or Pma.

No real potential for this anomaly which probably relates to localised structural enhancement of a surficial-style weathered clastic stratigraphy response.

Anomaly YC11

Area of weak-moderately anomalous enhancements of anomaly trends, present on lines 334 and 335, to the north and east of the main Masterton Sandstone Resistive Zone.

strike extent: single line anomalies
strike direction: sections of north trends
peak response: line 334 (w-flying); 12 & 13 channels, 170 & 260 ADI
line 335 (east-flying); 12 channels, 280 ADI

The anomalies occur in an area of Cz cover to the northeast of the extensive outcrop area of Pms.

The anomaly sources are interpreted to be non-outcropping, weathered clastic stratigraphy, probably within the McArthur Group Pml and Pma. The presence of these anomalies north of the Pms outcrop suggests that Pms is not present immediately sub-Cz in this area.

No real potential for these anomalies which probably relate to surficial-style weathered clastic stratigraphy responses.

Anomaly YC12

Isolated moderate strength anomaly flanked by resistive material, present on line 327.

strike extent: single line
strike direction: north(?)
peak response: line 327 (east-flying); 14 channels, 150 ADI

The anomaly occurs at the boundary between mapped Cz and Kl cover.

The source of this minor feature is tentatively interpreted to be a localised enhancement of non-outcropping, weathered clastic stratigraphy within the McArthur Group, possibly even Pmq.

Minor potential for this anomaly which may indicate the northerly continuation of Pmq stratigraphy.

Anomaly YC13 - see also Anomaly YN14

Trend of weak-moderate strength anomalies in a resistive environment, present on lines 332 to 334 inclusive, and possibly extending north and south.

strike extent: 1 kilometre
strike direction: north
peak response: line 332 (west-flying); 14 channels, 340 ADI

The anomaly occurs in an extensive area of Cz cover.

The source of this minor feature is interpreted to be enhancement of non-outcropping, weathered clastic stratigraphy within the McArthur Group, possibly Pmq.

Some potential for this anomaly which may indicate the northerly continuation of Pmq stratigraphy beneath Cz cover.

Anomaly YN1

Weakly anomalous, triple-peaked feature, partly associated with weakly anomalous magnetics, present on lines 30010 - 30030 inclusive.

strike extent: >1 kilometre (open to north beyond survey coverage)
strike direction: approximately north
peak response: line 30020 (west-flying); 10 channels, 0.35 tau

Anomaly occurs in Cz covered area, probably a fault-bounded block, flanked by outcrops of resistive Ptm to the west, east and south; small outcrops of Pto occur adjacent to the north.

Source is interpreted to be non-outcropping, weathered Tawallah Group possibly volcanic, material. No evidence of anomaly enhancement by creek-bed Qa to the south is evident.

No real potential for this weak, surficial-style anomaly, which is adequately explained as a weathered rock-type response.

Anomaly YN2

Area of weak and moderately anomalous responses in an otherwise resistive environment, present on lines 30020 - 30080 inclusive.

strike extent: >2 kilometres (open to northwest beyond survey coverage)
strike direction: none obvious, but sections of eastern margin strike north-northeast and north-northwest
peak response: line 30050 (west-flying); 15 channels, 0.5 tau (anomalies are sharper on west-flying lines)

Anomaly occurs in Cz and Kl covered area, probably a fault-bounded block, flanked by outcrops of resistive Ptm to the northeast and southeast; small outcrop of flatly-south-dipping Pto occurs adjacent to the northwest. Creek-bed Qa coincides with southeastern boundary.

Source is interpreted to be mainly non-outcropping, weathered Tawallah Group possibly Pto, material. Creek-bed Qa coincident with resistive boundary may be fault-controlled.

No real potential for this weak-moderate anomaly, which is adequately explained as a mainly weathered rock-type response.

Anomaly YN8

Irregular area of weak and moderately anomalous trends present on lines 30060 - 30120 inclusive, possibly extending north to line 30040.

strike extent: up to 3 kilometres
strike direction: north, swinging to north-northeast in south(?)
peak response: line 30070 (west-flying); 15 channels, 0.4 tau

Anomaly occurs in Cz covered area, with outcrops of resistive, fault-disrupted Ptm to the northwest.

Source is interpreted to be non-outcropping, weathered Tawallah Group or lower McArthur Group material; sharp anomaly enhancement on line 30070 may be related to structural effects, but no evidence is present in the mapping.

No real potential for the anomaly, although the localised (structure-related?) enhancement may be worthy of further consideration.

Anomaly YN9

Discrete zone of weak and moderately anomalous responses present on lines 30110 - 30150 inclusive, possibly extending further north and south.

strike extent: >1 kilometre
strike direction: northeast, possibly swinging to north in the north(?)
peak response: line 30130 (west-flying); 11 channels, 0.35 tau
line 30140 (east-flying); 9 channels, 0.3 tau

Anomaly occurs in Cz covered area, along strike to the north-northeast of east-dipping Pml outcrops.

Source is interpreted to be non-outcropping, weathered Tawallah Group or lower McArthur Group (eg Pml) material; no evidence for source of anomaly enhancement in the mapping. Anomaly may truncate in south at north-south alignment of weak magnetic anomalies.

No real potential for the anomaly, which is adequately explained as an alluvium and weathered rock-type response.

Anomaly YN10

Relatively well-defined, weak-moderately anomalous double-peaked trend present on lines 30130 - 30180 inclusive, possibly extending to the northwest to connect with anomaly YN8.

strike extent: >2 kilometres
strike direction: north-northwest
peak response: lines 30140-30160
line 30160 (east-flying); 11 channels, 0.25 tau

Anomaly occurs in Cz covered area in north, with outcrops of Pml in south where anomaly is better developed; creek-bed Qa crosses area.

Source is interpreted to be non-outcropping, weathered clastic stratigraphy, probably flatly-east-dipping Pml; anomaly enhancement appears to relate to areas of lesser Cz cover.

No real potential for the anomaly, which is adequately explained as a weathered rock-type response.

Anomaly YN13

A sharply-defined, weak-moderately anomalous double-peaked arcuate trend, present on lines 30230 - 30340 inclusive, with a possible extension to the north. An alignment of weak (3-35 nT) positive magnetic anomalies coincides with the western trend.

strike extent: 5 kilometres
strike direction: arcuate, north average
peak response: western trend - line 30240 : 13 channels, 0.45 tau
eastern trend - line 30310 : 13 channels, 0.3 tau

Anomaly trends occur in area of arcuate north-striking, flatly-east-dipping sequence of upper Tawallah Group and lower McArthur Group units.

Source of the western trend, associated with the aeromagnetic anomalies, is interpreted to be non-outcropping, weathered Tawallah Group volcanics (Ptg), between outcropping Pto and Pms. Source of the eastern trend is interpreted to be non-outcropping, weathered McArthur Group clastic stratigraphy (Pml). The north-northeast trending section of the anomaly north of line 30230 probably relates to Pml only, as no magnetic anomaly is associated with this section.

No real potential for these anomaly trends, which are adequately explained as weathered stratigraphy-dependent responses.

Anomaly YN14 - see also Anomaly YC13

A relatively well-defined, weak-moderately anomalous feature in a generally resistive environment, present on lines 30340 - 30420 inclusive.

strike extent: >3 kilometres (open to south beyond survey coverage)
strike direction: approximately north
peak response: line 30370 (west-flying); 11 channels, 0.4 tau

Anomaly trends occur in area of Cz cover, with north-striking Tawallah Group 4 kilometres to the west.

Source of the anomaly is interpreted to be non-outcropping, weathered Pmq, being the northern extension of conductive Pmq interpreted from the 1992 "Yalco Creek" GEOTEM survey results.

Anomaly may indicate stratigraphy of potential interest, but anomaly strength is inferior to that associated with the target stratigraphy elsewhere; in part, anomaly suppression may be attributable to effects from Cz cover.

Anomaly YN15

An area of weak and moderately anomalous trends, present on lines 30360 - 30410 inclusive, with possible subdued continuation to the north and south.

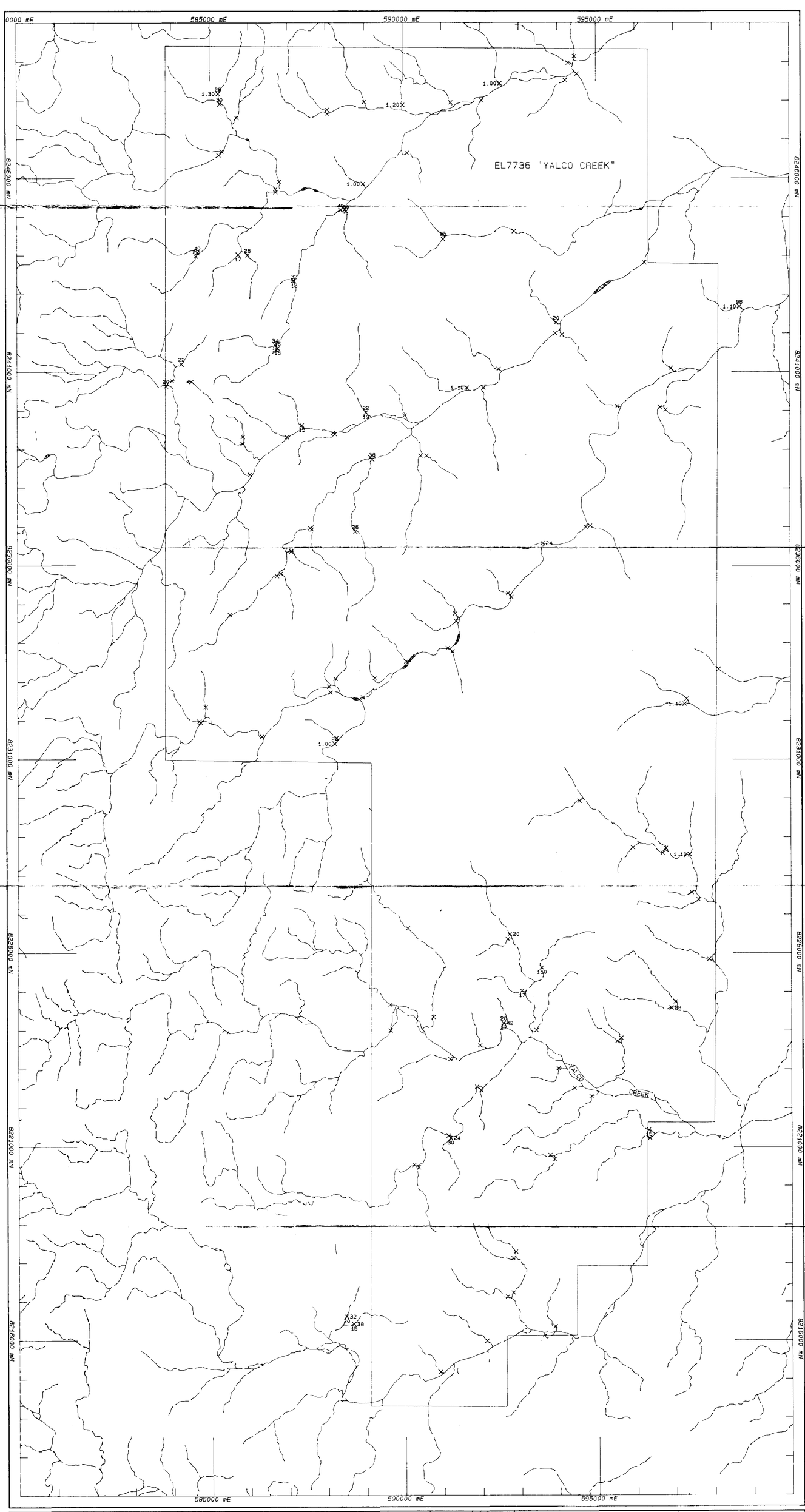
strike extent: >2 kilometres
strike direction: north-northeast
peak response: line 30370 - western trend; 13 channels, 0.35 tau
- eastern trend; 11 channels, 0.35 tau

Anomaly trends occur in area of Cz cover, with north-striking Pmnh to the east and Pmd to the southeast.

Source of the anomaly is interpreted to be non-outcropping, weathered lower McArthur Group clastic material, probably Pml and Pma, but possibly Pmq.

Anomaly could indicate stratigraphy of potential interest, but anomaly strength is inferior to that associated with the target stratigraphy elsewhere; in part, anomaly suppression may be attributable to effects from Cz cover.

DRAWINGS



NOTES :

Anomalous values are placed around the sample location in the following order:

Au = Left Value
Cu = Top Value
Pb = Right Value
Zn = Bottom Value

All assays are in ppm

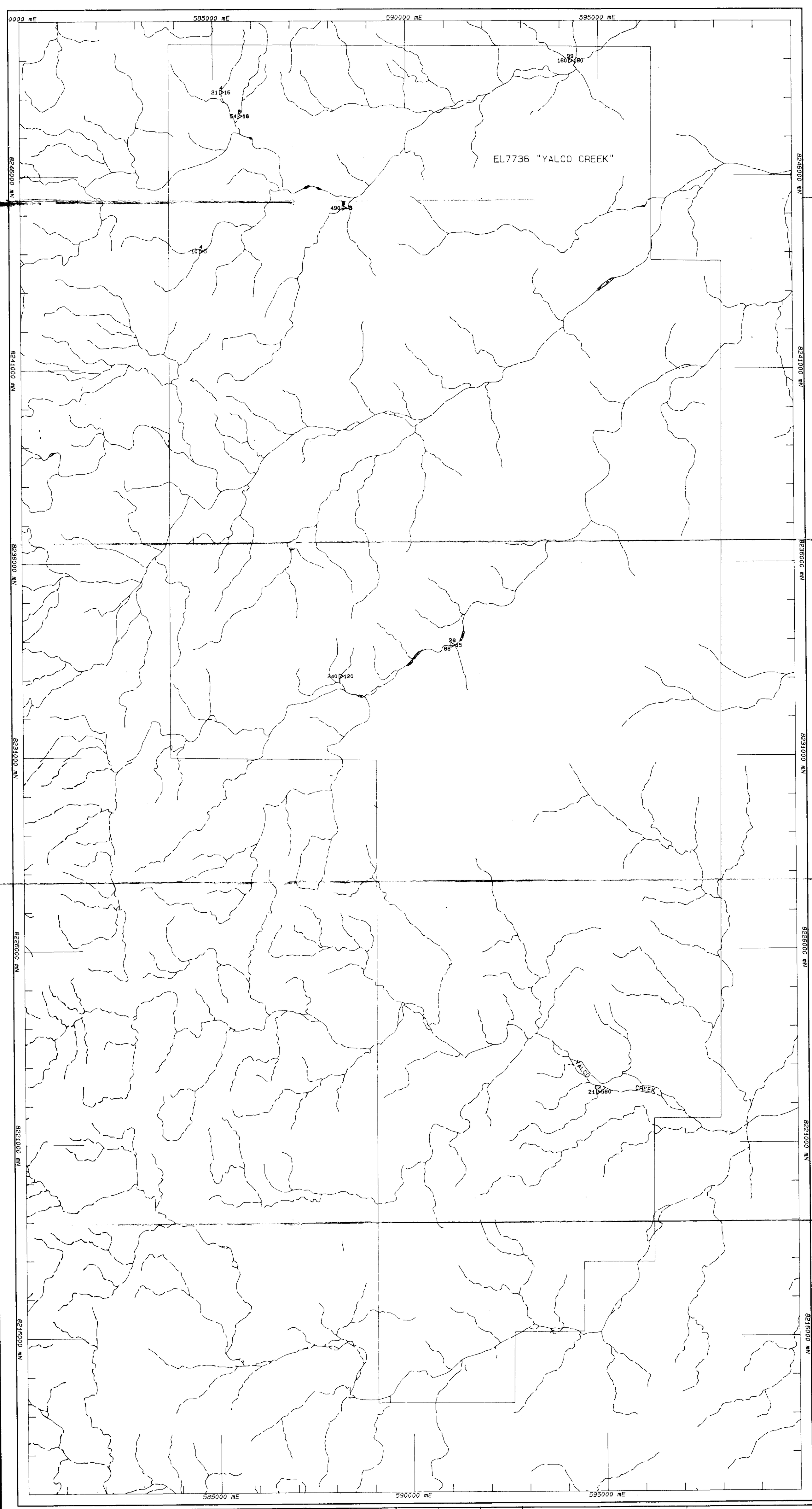
SCALE	DATE	SHEET
1:50000	01/07/93	1 of 1
	REF No.	
	41009	

0 2500m

EL7736 "YALCO CREEK"

ANOMALOUS STREAM SEDIMENT SAMPLE MAP

M.I.M. EXPLORATION PTY. LTD.
NORTHERN TERRITORY



NOTES :

Anomalous values are placed around the sample location in the following order:

Cu = Left Value
Pb = Top Value
Zn = Right Value

All assays are in ppm

SCALE	DATE	SHEET
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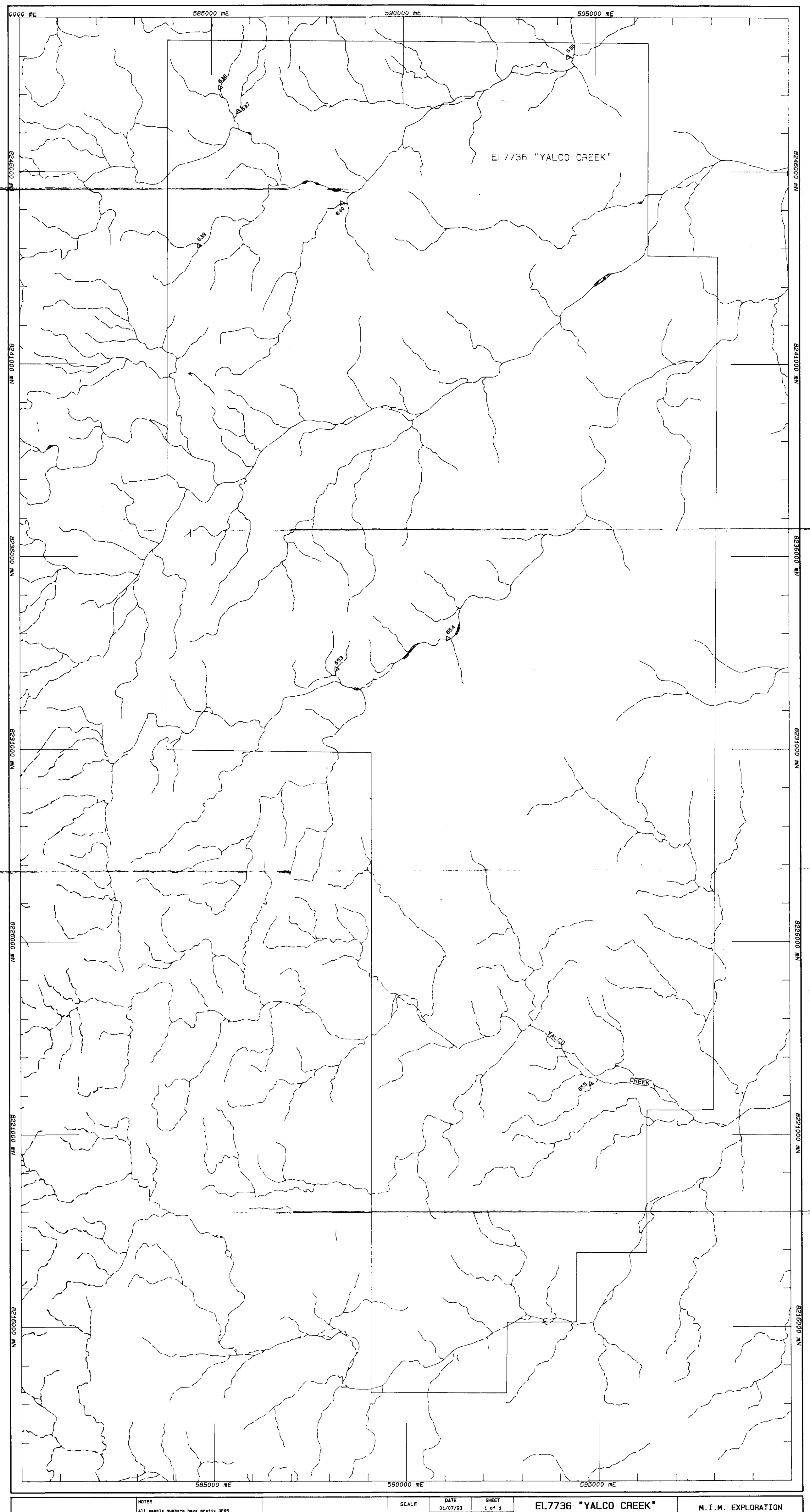
	REF No.	
	41011	

0 2500m

EL7736 "YALCO CREEK"

ANOMALOUS ROCK CHIP SAMPLE MAP

M.I.M. EXPLORATION PTY. LTD.
NORTHERN TERRITORY



NOTES :
All sample numbers have prefix GP85___

SCALE	DATE	SHEET
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	REF No. 41010	

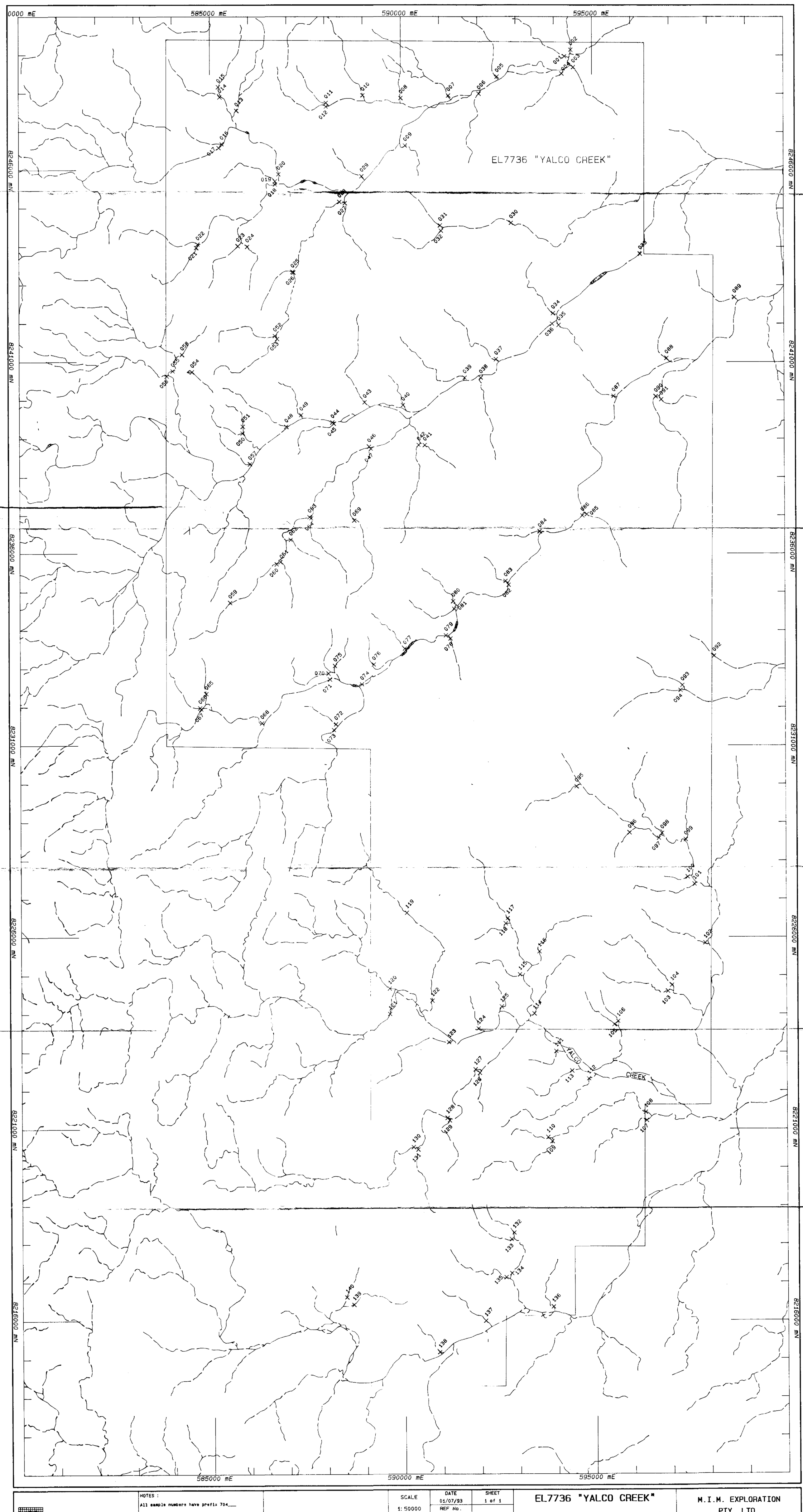
0 2500m

EL7736 "YALCO CREEK"

ROCK CHIP SAMPLE LOCATION MAP

M.I.M. EXPLORATION PTY. LTD. NORTHERN TERRITORY

CR93/491



NOTES :
All sample numbers have prefix 704___

SCALE	DATE	SHEET
1:50000	01/07/93	1 of 1
	REF No. 41008	

0 2500m

EL7736 "YALCO CREEK"

STREAM SEDIMENT SAMPLE SITE LOCATION MAP

M.I.M. EXPLORATION PTY. LTD.
NORTHERN TERRITORY

CR93/491

~~EL7736 "YALCO CREEK"~~

AERODATA SURVEY

GEOTERREX SURVEY

NORTH

SCALE = 1:50 000

AIRBORNE ELECTROMAGNETIC SURVEY, 1992.

MIM EXPLORATION PTY LTD
DRAWING NO. : 41015

AIRBORNE SURVEY SPECIFICATIONS

AIRCRAFT	BRITTEN NORMAN TRISLANDER
MAGNETOMETER	SPLIT BEAM CESIUM SCINTREX VIRIS
	RESOLUTION 0.01 nanoTesla
	CYCLE RATE : 0.5 seconds
	SAMPLE INTERVAL : 30 metres
ELECTROMAGNETIC SYSTEM	QUESTEM Time domain EM
	TRANSMITTER BASE FREQUENCY : 75.0 Hz
	CYCLE RATE : 0.05 seconds
	SAMPLE INTERVAL : 10 metres
	RECEIVER horizontal coils and bi-filared EM-6
	MEAN WINDOW DELAY TIMES (msec)
	0.2497 0.3500 0.4904 0.6868 0.7924
	0.9230 1.1242 1.3585 1.6402 1.8052
	2.1730 2.6465 3.1954 3.8542 4.1000
	9 CHANNEL Real GEOSCAN CHART RECORDER
DATA ACQUISITION	PCM/DPS PDR6 1000 ACQUISITION SYSTEM
FLIGHT LINE SPACING	TRAVERSE LINES : 500 metres
	TIE LINES : 5000 metres
FLIGHT LINE DIRECTION	TRAVERSE LINES : 090 / 270 degrees
	TIE LINES : 000 / 180 degrees
SURVEY HEIGHT ABOVEGROUND	MEAN TERRAIN CLEARANCE 120 metres
	TRIMBLE 7 TRAK GPS satellite positioning

DATA PROCESSING

- 5 Hz filtered interval
- 40 Hz filtered interval

M.I.M. EXPLORATION Pty. Ltd.
YALCO NORTH - NORTHERN TERRITORY
AIRBORNE GEOPHYSICAL SURVEY
FLIGHT PATH

500 0 500 1000 1500 2000 2500 metres

AUSTRALIAN MAP GRID

Flown and compiled by AERODATA HOLDINGS LIMITED
October 1992
Job No. 12020

AERODATA

SHEET LAYOUT

AIRBORNE SURVEY SPECIFICATIONS

AIRCRAFT	BRITTEN NORMAN TRISLANDER
MAGNETOMETER	SPLIT BEAM CESIUM SCINTREX VIRIS
	RESOLUTION 0.01 nanoTesla
	CYCLE RATE : 0.5 seconds
	SAMPLE INTERVAL : 30 metres
ELECTROMAGNETIC SYSTEM	QUESTEM Time domain EM
	TRANSMITTER BASE FREQUENCY : 75.0 Hz
	CYCLE RATE : 0.05 seconds
	SAMPLE INTERVAL : 10 metres
	RECEIVER horizontal coils and bi-filared EM-6
	MEAN WINDOW DELAY TIMES (msec)
	0.2497 0.3500 0.4904 0.6868 0.7924
	0.9230 1.1242 1.3585 1.6402 1.8052
	2.1730 2.6465 3.1954 3.8542 4.1000
	9 CHANNEL Real GEOSCAN CHART RECORDER
DATA ACQUISITION	PCM/DPS PDR6 1000 ACQUISITION SYSTEM
FLIGHT LINE SPACING	TRAVERSE LINES : 500 metres
	TIE LINES : 5000 metres
FLIGHT LINE DIRECTION	TRAVERSE LINES : 090 / 270 degrees
	TIE LINES : 000 / 180 degrees
SURVEY HEIGHT ABOVEGROUND	MEAN TERRAIN CLEARANCE 120 metres
	TRIMBLE 7 TRAK GPS satellite positioning

DATA PROCESSING

- 5 Hz filtered interval
- 40 Hz filtered interval

M.I.M. EXPLORATION Pty. Ltd.
YALCO NORTH - NORTHERN TERRITORY
AIRBORNE GEOPHYSICAL SURVEY
FLIGHT PATH

500 0 500 1000 1500 2000 2500 metres

AUSTRALIAN MAP GRID

Flown and compiled by AERODATA HOLDINGS LIMITED
October 1992
Job No. 12020

AERODATA

SHEET LAYOUT

EL7736 "YALCO CREEK"

NORTH

8240000N

AERODATA
SURVEY

8230000N

0km 2
1 3

GEOTERREX
SURVEY

8220000N

590000E

SCALE = 1:100 000

AEROMAGNETIC SURVEY
(Data collected with airborne EM survey)

MIM EXPLORATION PTY LTD
DRAWING NO.: 41017

EL7736 "YALCO CREEK"

NORTH

8240000N

8230000N

8220000N

YN1

N2

YN9

YN10

YN13

YN15

YC13

YN14

YC11

YC12

YC9C

YC9D

YC10

YC8

YC7

YC6

YC5

YC4

0km 2

1 3

GEOTEM SURVEY AREA

590000E

SCALE = 1:100 000

GEOTEM/QUESTEM SURVEY

MIM EXPLORATION PTY LTD
DRAWING NO.: 41016

APPENDIX 1

GEOCHEMICAL ASSAY RESULTS

STREAM SEDIMENT ASSAY RESULTS

amdel

Job: 2DN0916
O/N: 704001

Final

ANALYTICAL REPORT

SAMPLE	Au	AuDp1
704001 -200 mesh	0.2	0.2
704002 -200 mesh	0.3	--
704003 -200 mesh	0.8	1.2
704004 -200 mesh	0.8	--
704005 -80 mesh	1.0	--
704006 -200 mesh	0.4	--
704007 -200 mesh	0.3	--
704008 -200 mesh	1.2	--
704009 -200 mesh	<0.2	--
704010 -200 mesh	0.2	--
704011 -200 mesh	0.3	--
704012 -80 mesh	0.3	--
704013 -200 mesh	0.7	--
704014 -200 mesh	0.2	0.6
704015 -200 mesh	1.3	--
704016 -200 mesh	0.4	--
704017 -80 mesh	0.2	--
704018 -80 mesh	0.2	--
704019 -200 mesh	0.2	--
704020 -200 mesh	<0.2	--
704021 -200 mesh	0.5	--
704022 -200 mesh	0.5	--
704023 -200 mesh	0.5	--
704024 -200 mesh	0.7	--
704025 -200 mesh	0.6	--
704026 -200 mesh	0.3	--
704027 -200 mesh	0.4	--
704028 -200 mesh	0.6	--
704029 -200 mesh	1.0	--
704030 -80 mesh	<0.2	--
704031 -200 mesh	<0.2	--
704032 -200 mesh	0.9	--
704033 -200 mesh	<0.2	--
704034 -200 mesh	<0.2	--
704035 -200 mesh	0.3	--
704036 -200 mesh	<0.2	--
704037 -200 mesh	<0.2	--
704038 -200 mesh	0.7	--
704039 -200 mesh	1.1	--
704040 -200 mesh	0.7	--
704041 -200 mesh	0.4	--
704042 -200 mesh	0.3	--
704043 -80 mesh	<0.2	--
704044 -80 mesh	0.2	--
704045 -200 mesh	<0.2	--
704046 -200 mesh	<0.2	--
704047 -200 mesh	<0.2	--
704048 -200 mesh	<0.2	<0.2
704049 -200 mesh	<0.2	--
704050 -200 mesh	0.3	--
UNITS	ppb	ppb
DET.LIM	0.2	0.2
SCHEME	AAS9L	AAS9L

amdel

Job: 2DN0916
O/N: 704001

Final

ANALYTICAL REPORT

SAMPLE	Au	AuDp1
704051 -200 mesh	0.2	--
704052 -200 mesh	0.2	--
704053 -200 mesh	<0.2	--
704054 -200 mesh	0.9	--
704055 -200 mesh	0.2	--
704056 -200 mesh	<0.2	--
704057 -200 mesh	<0.2	--
704058 -200 mesh	<0.2	--
704059 -200 mesh	<0.2	<0.2
704060 -200 mesh	<0.2	--
704061 -200 mesh	<0.2	--
704062 -200 mesh	<0.2	--
704063 -200 mesh	<0.2	--
704064 -200 mesh	<0.2	--
704065 -80 mesh	0.2	--
704066 -200 mesh	0.2	--
704067 -200 mesh	0.2	--
704068 -80 mesh	<0.2	--
704069 -200 mesh	0.5	--
704070 -200 mesh	<0.2	--
704071 -200 mesh	<0.2	--
704072 -80 mesh	0.2	--
704073 -200 mesh	1.0	--
704074 -80 mesh	<0.2	--
704075 -200 mesh	<0.2	--
704076 -200 mesh	0.2	--
704077 -200 mesh	<0.2	--
704078 -200 mesh	<0.2	--
704079 -200 mesh	<0.2	--
704080 -200 mesh	1.2	0.4
704081 -200 mesh	0.2	--
704082 -200 mesh	<0.2	--
704083 -80 mesh	0.3	--
704084 -200 mesh	0.2	--
704085 -200 mesh	0.2	--
704086 -80 mesh	<0.2	--
704087 -200 mesh	<0.2	--
704088 -200 mesh	<0.2	--
704089 -200 mesh	1.1	--
704090 -200 mesh	<0.2	--
704091 -80 mesh	<0.2	--
704092 -200 mesh	0.6	--
704093 -80 mesh	0.5	--
704094 -200 mesh	1.1	--
704095 -200 mesh	0.5	--
704096 -200 mesh	0.8	--
704097 -80 mesh	<0.2	--
704098 -200 mesh	<0.2	--
704099 -200 mesh	1.1	--
704100 -200 mesh	<0.2	--
UNITS	ppb	ppb
DET.LIM	0.2	0.2
SCHEME	AAS9L	AAS9L

amdel

Job: 2DN0916
O/N: 704001

Final

ANALYTICAL REPORT

SAMPLE	Au	AuDp1
704101 -200 mesh	<0.2	--
704102 -80 mesh	0.3	--
704103 -200 mesh	<0.2	--
704104 -80 mesh	0.3	--
704105 -200 mesh	0.5	--
704106 -200 mesh	<0.2	--
704107 -200 mesh	<0.2	--
704108 -200 mesh	0.9	--
704109 -200 mesh	<0.2	--
704110 -200 mesh	<0.2	--
704111 -200 mesh	<0.2	--
704112 -200 mesh	<0.2	--
704113 -80 mesh	<0.2	--
704114 -80 mesh	I.S.	--
704115 -200 mesh	<0.2	--
704116 -200 mesh	<0.2	--
704117 -200 mesh	<0.2	--
704118 -200 mesh	0.8	--
704119 -80 mesh	<0.2	--
704120 -200 mesh	<0.2	--
704121 -80 mesh	I.S.	--
704122 -200 mesh	0.7	--
704123 -200 mesh	<0.2	--
704124 -200 mesh	<0.2	--
704125 -200 mesh	<0.2	--
704126 -200 mesh	0.6	--
704127 -200 mesh	0.3	--
704128 -200 mesh	<0.2	--
704129 -80 mesh	I.S.	--
704130 -200 mesh	<0.2	--
704131 -200 mesh	<0.2	<0.2
704132 -200 mesh	<0.2	<0.2
704133 -200 mesh	<0.2	--
704134 -80 mesh	<0.2	--
704135 -80 mesh	<0.2	--
704136 -200 mesh	<0.2	<0.2
704137 -200 mesh	0.5	--
704138 -80 mesh	<0.2	--
704139 -200 mesh	0.6	--
704140 -200 mesh	<0.2	<0.2
UNITS	ppb	ppb
DET.LIM	0.2	0.2
SCHEME	AAS9L	AAS9L

Amdel
Perth W.A.

Job Number:2PE1344
O/N :2DN0916

ANALYTICAL REPORT

	SAMPLE	Cu	Pb	Zn	As	Ag	Ni	Co
704001	-200MESH	8	4	2	<1	<0.1	3	4
704002	-200MESH	4	4	5	<1	<0.1	2	2
704003	-200MESH	12	8	2	<1	<0.1	7	2
704004	-200MESH	6	<3	2	<1	<0.1	4	4
704005	-200MESH	7	<3	2	2	<0.1	3	4
704006	-200MESH	10	4	6	<1	<0.1	9	10
704007	-200MESH	16	8	2	1	<0.1	5	6
704008	-200MESH	8	6	6	3	<0.1	3	4
704009	-200MESH	12	6	5	2	<0.1	10	8
704010	-200MESH	18	8	4	<1	<0.1	6	6
704011	-200MESH	16	8	5	2	<0.1	9	12
704012	-200MESH	14	6	5	2	<0.1	9	10
704013	-200MESH	14	4	3	2	<0.1	4	6
704014	-200MESH	30	4	7	3	0.1	11	10
704015	-200MESH	28	6	11	5	<0.1	13	16
704016	-200MESH	19	8	5	1	<0.1	8	10
704017	-200MESH	12	4	11	1	<0.1	19	12
704018	-80MESH	4	<3	2	<1	<0.1	2	4
704019	-200MESH	10	4	4	1	<0.1	11	12
704020	-200MESH	15	4	8	2	<0.1	18	10
704021	-200MESH	22	6	14	6	0.1	24	30
704022	-200MESH	40	6	8	8	0.2	19	28
704023	-200MESH	16	6	17	2	<0.1	6	8
704024	-200MESH	26	4	11	4	<0.1	14	16
704025	-200MESH	14	4	3	3	<0.1	6	4
704026	-200MESH	32	10	18	5	<0.1	15	20
704027	-200MESH	20	6	3	3	<0.1	8	8
704028	-200MESH	40	10	8	6	<0.1	13	12
704029	-200MESH	15	8	13	2	<0.1	15	18
704030	-80MESH	2	<3	1	<1	<0.1	1	4
704031	-200MESH	7	6	2	1	<0.1	3	4
704032	-200MESH	40	12	12	8	<0.1	13	28
704033	-200MESH	12	4	7	1	<0.1	13	8
704034	-200MESH	20	4	11	<1	0.1	17	16
704035	-200MESH	17	4	7	<1	0.1	15	20
704036	-200MESH	15	6	12	3	<0.1	22	16
704037	-200MESH	12	6	5	<1	<0.1	10	12
704038	-200MESH	11	4	7	<1	<0.1	11	10
704039	-200MESH	9	4	4	<1	<0.1	8	6
704040	-200MESH	9	4	2	2	<0.1	5	8
	UNITS	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	DT.LIM	1	4	1	1	0.1	1	2
	SCHEME	IC2	IC2	IC2	IC2	IC2	IC2	IC2

ANALYTICAL REPORT

	SAMPLE	Cu	Pb	Zn	As	Ag	Ni	Co
704041	-200MESH	9	10	4	1	<0.1	6	10
704042	-200MESH	8	10	3	3	<0.1	4	4
704043	-200MESH	22	12	19	6	<0.1	8	10
704044	-80MESH	4	<3	3	<1	<0.1	3	<2
704045	-200MESH	9	6	4	<1	<0.1	7	6
704046	-200MESH	18	8	14	4	<0.1	9	10
704047	-200MESH	38	6	9	4	<0.1	9	16
704048	-200MESH	16	4	8	2	<0.1	11	8
704049	-200MESH	19	12	15	2	<0.1	9	10
704050	-200MESH	16	8	9	3	<0.1	7	6
704051	-200MESH	6	4	5	2	<0.1	3	4
704052	-200MESH	34	8	15	4	<0.1	11	12
704053	-200MESH	36	6	15	5	<0.1	16	22
704054	-200MESH	12	6	3	3	<0.1	4	4
704055	-200MESH	10	4	3	3	<0.1	5	4
704056	-200MESH	20	4	3	2	<0.1	8	6
704057	-200MESH	14	6	6	2	<0.1	10	6
704058	-200MESH	22	10	5	12	<0.1	10	10
704059	-200MESH	7	8	3	2	<0.1	3	2
704060	-200MESH	7	6	3	3	<0.1	3	2
704061	-200MESH	9	6	5	3	<0.1	3	4
704062	-200MESH	7	6	2	4	<0.1	4	<2
704063	-200MESH	8	6	8	1	<0.1	6	10
704064	-200MESH	9	8	7	3	<0.1	8	10
704065	-200MESH	3	4	1	<1	<0.1	2	4
704066	-200MESH	7	4	2	2	<0.1	6	6
704067	-200MESH	15	6	14	2	<0.1	14	8
704068	-80MESH	<1	<3	<1	8	<0.1	1	<2
704069	-200MESH	26	8	5	2	<0.1	7	8
704070	-200MESH	11	6	7	1	<0.1	8	4
704071	-200MESH	18	4	3	2	<0.1	5	4
704072	-200MESH	10	4	14	2	<0.1	5	10
704073	-200MESH	24	6	4	1	<0.1	4	2
704074	-80MESH	5	<3	2	1	<0.1	2	2
704075	-200MESH	10	4	3	2	<0.1	4	4
704076	-200MESH	17	6	4	1	<0.1	5	6
704077	-200MESH	2	<3	1	<1	<0.1	2	<2
704078	-200MESH	9	6	3	1	<0.1	5	6
704079	-200MESH	8	4	4	<1	<0.1	4	2
704080	-200MESH	6	10	3	1	<0.1	15	2
	UNITS	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	DT.LIM	1	4	1	1	0.1	1	2
	SCHEME	IC2	IC2	IC2	IC2	IC2	IC2	IC2

ANALYTICAL REPORT

	SAMPLE	Cu	Pb	Zn	As	Ag	Ni	Co
704081	-200MESH	5	6	2	2	<0.1	4	6
704082	-200MESH	10	6	4	<1	<0.1	6	8
704083	-80MESH	4	<3	3	<1	<0.1	3	2
704084	-200MESH	12	24	3	1	<0.1	4	2
704085	-200MESH	8	6	6	1	<0.1	4	4
704086	-80MESH	2	<3	3	<1	<0.1	2	<2
704087	-200MESH	<1	<3	<1	<1	<0.1	<1	<2
704088	-200MESH	17	8	14	4	<0.1	7	10
704089	-200MESH	96	8	8	5	<0.1	9	10
704090	-200MESH	17	6	8	1	<0.1	6	10
704091	-80MESH	13	6	8	4	<0.1	3	6
704092	-200MESH	6	8	5	2	<0.1	3	<2
704093	-200MESH	4	4	2	2	<0.1	3	2
704094	-200MESH	7	6	8	2	<0.1	4	8
704095	-200MESH	6	6	2	<1	<0.1	4	2
704096	-200MESH	6	8	2	4	<0.1	3	4
704097	-80MESH	4	6	5	2	<0.1	3	2
704098	-200MESH	10	8	11	3	<0.1	6	6
704099	-200MESH	8	6	8	1	<0.1	7	6
704100	-200MESH	6	4	11	<1	<0.1	5	6
704101	-200MESH	6	4	2	1	<0.1	4	4
704102	-80MESH	7	4	2	1	<0.1	4	4
704103	-200MESH	14	28	10	1	<0.1	10	10
704104	-200MESH	13	8	7	<1	<0.1	6	4
704105	-200MESH	6	4	2	<1	<0.1	3	2
704106	-200MESH	2	<3	1	<1	<0.1	1	<2
704107	-200MESH	6	6	14	1	<0.1	5	6
704108	-200MESH	9	10	15	4	<0.1	9	10
704109	-200MESH	4	6	2	<1	<0.1	2	2
704110	-200MESH	5	4	3	<1	<0.1	4	2
704111	-200MESH	5	4	2	1	<0.1	3	4
704112	-200MESH	7	4	4	1	<0.1	5	4
704113	-80MESH	<1	<3	<1	<1	<0.1	1	<2
704114	-80MESH	6	8	8	4	<0.1	6	8
704115	-200MESH	14	16	17	4	<0.1	9	10
704116	-200MESH	13	10	110	<1	<0.1	9	8
704117	-200MESH	9	20	4	2	<0.1	5	4
704118	-200MESH	9	12	6	4	<0.1	6	10
704119	-80MESH	1	<3	<1	<1	<0.1	1	<2
704120	-200MESH	5	4	9	<1	<0.1	2	<2
	UNITS	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	DT.LIM	1	4	1	1	0.1	1	2
	SCHEME	IC2	IC2	IC2	IC2	IC2	IC2	IC2

ANALYTICAL REPORT

	SAMPLE	Cu	Pb	Zn	As	Ag	Ni	Co
704121	-80MESH	6	4	14	2	<0.1	4	4
704122	-200MESH	5	12	3	2	<0.1	4	6
704123	-200MESH	6	6	2	<1	<0.1	3	2
704124	-200MESH	8	16	9	5	<0.1	5	4
704125	-200MESH	20	42	17	11	<0.1	10	8
704126	-200MESH	11	12	13	1	<0.1	5	4
704127	-200MESH	8	14	5	1	<0.1	4	2
704128	-200MESH	8	10	7	1	<0.1	5	6
704129	-200MESH	6	24	30	3	<0.1	7	6
704130	-200MESH	8	10	6	3	<0.1	7	10
704131	-200MESH	9	6	2	2	<0.1	3	2
704132	-200MESH	4	4	1	<1	<0.1	3	<2
704133	-200MESH	4	6	5	1	<0.1	5	2
704134	-80MESH	1	<3	2	<1	<0.1	1	<2
704135	-80MESH	1	<3	2	<1	<0.1	2	<2
704136	-200MESH	10	10	4	6	<0.1	7	6
704137	-200MESH	8	14	5	2	<0.1	6	4
704138	-80MESH	1	<3	1	1	<0.1	1	<2
704139	-200MESH	7	38	15	2	<0.1	4	6
704140	-200MESH	12	32	20	2	<0.1	6	6
	UNITS	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	DT.LIM	1	4	1	1	0.1	1	2
	SCHEME	IC2	IC2	IC2	IC2	IC2	IC2	IC2

ANALYTICAL REPORT

	SAMPLE	Cd	Mn	Fe	Bi	Sb	Cr	V
704001	-200MESH	<0.1	95	6200	<3	<5	8	15
704002	-200MESH	<0.1	50	6100	<3	<5	6	12
704003	-200MESH	<0.1	40	3600	<3	<5	18	12
704004	-200MESH	<0.1	45	5200	<3	<5	18	19
704005	-200MESH	<0.1	175	6500	<3	<5	8	13
704006	-200MESH	<0.1	310	1.30%	<3	<5	16	24
704007	-200MESH	<0.1	160	7600	<3	<5	14	16
704008	-200MESH	<0.1	210	1.63%	<3	<5	6	18
704009	-200MESH	<0.1	270	1.58%	<3	<5	16	26
704010	-200MESH	<0.1	120	8700	<3	<5	14	17
704011	-200MESH	<0.1	490	1.12%	<3	<5	10	18
704012	-200MESH	<0.1	470	1.88%	4	<5	12	24
704013	-200MESH	<0.1	200	1.47%	<3	<5	12	20
704014	-200MESH	<0.1	340	2.40%	<3	<5	18	38
704015	-200MESH	<0.1	1000	2.75%	<3	<5	16	34
704016	-200MESH	<0.1	260	1.36%	<3	<5	14	22
704017	-200MESH	<0.1	260	1.93%	<3	<5	34	38
704018	-80MESH	<0.1	85	6100	<3	<5	6	11
704019	-200MESH	<0.1	470	1.29%	<3	<5	16	22
704020	-200MESH	<0.1	250	1.90%	<3	<5	30	34
704021	-200MESH	<0.1	1040	4.05%	4	<5	22	50
704022	-200MESH	0.1	3250	3.80%	4	<5	16	38
704023	-200MESH	<0.1	240	1.88%	<3	<5	16	24
704024	-200MESH	<0.1	630	2.55%	<3	<5	18	36
704025	-200MESH	<0.1	85	1.67%	<3	<5	16	24
704026	-200MESH	<0.1	780	2.90%	<3	<5	18	46
704027	-200MESH	<0.1	410	1.37%	<3	<5	18	26
704028	-200MESH	<0.1	520	2.75%	<3	<5	18	44
704029	-200MESH	<0.1	450	1.96%	<3	<5	28	36
704030	-80MESH	<0.1	85	3900	<3	<5	4	12
704031	-200MESH	<0.1	105	1.11%	<3	<5	10	17
704032	-200MESH	<0.1	1620	2.60%	4	<5	20	46
704033	-200MESH	<0.1	110	1.52%	<3	<5	32	32
704034	-200MESH	<0.1	350	1.97%	4	<5	28	30
704035	-200MESH	<0.1	330	1.91%	4	<5	26	28
704036	-200MESH	<0.1	390	2.55%	<3	<5	36	40
704037	-200MESH	<0.1	540	1.18%	<3	<5	14	12
704038	-200MESH	<0.1	165	1.60%	<3	<5	26	26
704039	-200MESH	<0.1	140	9500	<3	<5	18	17
704040	-200MESH	<0.1	175	1.13%	<3	<5	14	22
	UNITS	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	DT.LIM	0.1	5	100	4	5	2	1
	SCHEME	IC2	IC2	IC2	IC2	IC2	IC2	IC2

ANALYTICAL REPORT

	SAMPLE	Cd	Mn	Fe	Bi	Sb	Cr	V
704041	-200MESH	<0.1	165	1.73%	<3	<5	20	38
704042	-200MESH	<0.1	90	1.86%	<3	<5	18	48
704043	-200MESH	<0.1	360	1.41%	<3	<5	14	26
704044	-80MESH	<0.1	20	3200	<3	<5	4	8
704045	-200MESH	<0.1	430	7900	<3	<5	8	8
704046	-200MESH	<0.1	430	2.10%	<3	<5	12	30
704047	-200MESH	<0.1	2500	1.59%	<3	<5	6	24
704048	-200MESH	<0.1	210	1.49%	<3	<5	16	26
704049	-200MESH	<0.1	330	1.22%	<3	<5	12	22
704050	-200MESH	<0.1	165	1.24%	<3	<5	8	18
704051	-200MESH	<0.1	115	9700	<3	<5	4	15
704052	-200MESH	<0.1	210	2.55%	<3	<5	20	52
704053	-200MESH	<0.1	540	3.60%	<3	<5	14	72
704054	-200MESH	<0.1	310	1.17%	<3	<5	6	14
704055	-200MESH	<0.1	270	6800	<3	<5	4	11
704056	-200MESH	<0.1	250	7700	<3	<5	4	11
704057	-200MESH	<0.1	150	1.46%	<3	<5	16	26
704058	-200MESH	<0.1	560	1.66%	<3	<5	6	16
704059	-200MESH	<0.1	40	1.40%	<3	<5	22	34
704060	-200MESH	<0.1	30	1.47%	<3	<5	18	40
704061	-200MESH	<0.1	150	1.79%	<3	<5	16	36
704062	-200MESH	<0.1	15	3950	<3	<5	26	40
704063	-200MESH	<0.1	390	1.58%	<3	<5	12	30
704064	-200MESH	<0.1	500	1.21%	<3	<5	6	22
704065	-200MESH	<0.1	65	4850	<3	<5	6	15
704066	-200MESH	<0.1	165	1.05%	<3	<5	10	19
704067	-200MESH	<0.1	260	1.25%	<3	<5	24	26
704068	-80MESH	<0.1	50	2100	<3	<5	<2	6
704069	-200MESH	<0.1	260	1.22%	<3	<5	12	26
704070	-200MESH	<0.1	55	8900	<3	<5	12	17
704071	-200MESH	<0.1	90	5800	<3	<5	6	11
704072	-200MESH	<0.1	370	1.13%	<3	<5	10	24
704073	-200MESH	<0.1	35	5400	<3	<5	12	17
704074	-80MESH	<0.1	100	4450	<3	<5	2	9
704075	-200MESH	<0.1	145	1.00%	<3	<5	6	12
704076	-200MESH	<0.1	195	1.21%	<3	<5	8	18
704077	-200MESH	<0.1	40	2750	<3	<5	4	9
704078	-200MESH	<0.1	195	1.29%	<3	<5	16	34
704079	-200MESH	<0.1	55	4850	<3	<5	10	18
704080	-200MESH	<0.1	45	1.56%	<3	<5	20	44
	UNITS	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	DT.LIM	0.1	5	100	4	5	2	1
	SCHEME	IC2	IC2	IC2	IC2	IC2	IC2	IC2

ANALYTICAL REPORT

	SAMPLE	Cd	Mn	Fe	Bi	Sb	Cr	V
704081	-200MESH	<0.1	195	8800	<3	<5	10	24
704082	-200MESH	<0.1	300	8400	<3	<5	12	24
704083	-80MESH	<0.1	90	5900	<3	<5	6	16
704084	-200MESH	<0.1	35	6500	<3	<5	18	26
704085	-200MESH	<0.1	125	8100	<3	<5	8	19
704086	-80MESH	<0.1	35	3600	<3	<5	4	10
704087	-200MESH	<0.1	<5	<100	<3	<5	<2	<1
704088	-200MESH	<0.1	580	1.60%	<3	<5	12	24
704089	-200MESH	<0.1	280	1.53%	<3	<5	10	22
704090	-200MESH	<0.1	680	6400	<3	<5	4	13
704091	-80MESH	<0.1	370	6600	<3	<5	10	18
704092	-200MESH	<0.1	40	1.16%	<3	<5	26	34
704093	-200MESH	<0.1	110	4100	<3	<5	2	11
704094	-200MESH	<0.1	360	5700	<3	<5	4	14
704095	-200MESH	<0.1	60	9900	<3	<5	10	28
704096	-200MESH	<0.1	135	1.57%	<3	<5	12	38
704097	-80MESH	<0.1	130	1.29%	<3	<5	14	32
704098	-200MESH	<0.1	370	1.43%	<3	<5	8	30
704099	-200MESH	<0.1	230	9000	<3	<5	8	14
704100	-200MESH	<0.1	170	7300	<3	<5	6	15
704101	-200MESH	<0.1	200	6800	<3	<5	4	14
704102	-80MESH	<0.1	75	6200	<3	<5	8	15
704103	-200MESH	<0.1	420	1.00%	<3	<5	4	13
704104	-200MESH	<0.1	85	6000	<3	<5	8	11
704105	-200MESH	<0.1	15	4350	<3	<5	6	14
704106	-200MESH	<0.1	40	2800	<3	<5	<2	10
704107	-200MESH	<0.1	330	6800	<3	<5	6	14
704108	-200MESH	<0.1	470	1.18%	<3	<5	8	15
704109	-200MESH	<0.1	30	5500	<3	<5	8	26
704110	-200MESH	<0.1	85	5000	<3	<5	6	10
704111	-200MESH	<0.1	80	6100	<3	<5	6	14
704112	-200MESH	<0.1	290	6200	<3	<5	4	12
704113	-80MESH	<0.1	25	2050	<3	<5	2	8
704114	-80MESH	<0.1	200	1.43%	<3	<5	6	17
704115	-200MESH	<0.1	480	1.08%	<3	<5	8	16
704116	-200MESH	0.3	300	8000	<3	<5	6	8
704117	-200MESH	<0.1	270	5000	<3	<5	10	12
704118	-200MESH	<0.1	740	1.05%	<3	<5	6	19
704119	-80MESH	<0.1	45	4250	<3	<5	4	14
704120	-200MESH	<0.1	15	2000	<3	<5	10	10
	UNITS	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	DT.LIM	0.1	5	100	4	5	2	1
	SCHEME	IC2	IC2	IC2	IC2	IC2	IC2	IC2

ANALYTICAL REPORT

	SAMPLE	Cd	Mn	Fe	Bi	Sb	Cr	V
704121	-80MESH	<0.1	130	7300	<3	<5	6	14
704122	-200MESH	<0.1	500	4300	<3	<5	<2	9
704123	-200MESH	<0.1	70	3700	<3	<5	6	13
704124	-200MESH	<0.1	320	5900	<3	<5	<2	9
704125	-200MESH	<0.1	740	1.04%	<3	<5	2	16
704126	-200MESH	<0.1	200	7500	<3	<5	8	15
704127	-200MESH	<0.1	115	4950	<3	<5	10	11
704128	-200MESH	<0.1	145	1.09%	<3	<5	8	19
704129	-200MESH	<0.1	250	1.60%	<3	<5	10	24
704130	-200MESH	<0.1	640	2.20%	<3	<5	14	32
704131	-200MESH	<0.1	45	8400	<3	<5	10	17
704132	-200MESH	<0.1	20	4150	<3	<5	4	13
704133	-200MESH	<0.1	75	6900	<3	<5	8	16
704134	-80MESH	<0.1	50	2200	<3	<5	<2	5
704135	-80MESH	<0.1	35	2450	<3	<5	<2	5
704136	-200MESH	<0.1	350	1.14%	<3	<5	8	18
704137	-200MESH	<0.1	95	8200	<3	<5	6	14
704138	-80MESH	<0.1	30	3750	<3	<5	<2	8
704139	-200MESH	<0.1	300	1.02%	<3	<5	8	16
704140	-200MESH	<0.1	350	6100	<3	<5	<2	11
	UNITS	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	DT.LIM	0.1	5	100	4	5	2	1
	SCHEME	IC2	IC2	IC2	IC2	IC2	IC2	IC2

ANALYTICAL REPORT

	SAMPLE	U
704001	-200MESH	8
704002	-200MESH	<4
704003	-200MESH	6
704004	-200MESH	4
704005	-200MESH	4
704006	-200MESH	<4
704007	-200MESH	<4
704008	-200MESH	<4
704009	-200MESH	<4
704010	-200MESH	6
704011	-200MESH	<4
704012	-200MESH	<4
704013	-200MESH	6
704014	-200MESH	<4
704015	-200MESH	8
704016	-200MESH	6
704017	-200MESH	<4
704018	-80MESH	<4
704019	-200MESH	6
704020	-200MESH	<4
704021	-200MESH	4
704022	-200MESH	<4
704023	-200MESH	4
704024	-200MESH	6
704025	-200MESH	4
704026	-200MESH	<4
704027	-200MESH	6
704028	-200MESH	8
704029	-200MESH	4
704030	-80MESH	<4
704031	-200MESH	6
704032	-200MESH	4
704033	-200MESH	<4
704034	-200MESH	<4
704035	-200MESH	6
704036	-200MESH	4
704037	-200MESH	4
704038	-200MESH	6
704039	-200MESH	<4
704040	-200MESH	6
	UNITS	ppm
	DT.LIM	4
	SCHEME	XRF1

ANALYTICAL REPORT

	SAMPLE	U
704041	-200MESH	6
704042	-200MESH	6
704043	-200MESH	<4
704044	-80MESH	<4
704045	-200MESH	<4
704046	-200MESH	<4
704047	-200MESH	4
704048	-200MESH	<4
704049	-200MESH	4
704050	-200MESH	6
704051	-200MESH	4
704052	-200MESH	4
704053	-200MESH	4
704054	-200MESH	6
704055	-200MESH	6
704056	-200MESH	6
704057	-200MESH	4
704058	-200MESH	4
704059	-200MESH	8
704060	-200MESH	<4
704061	-200MESH	<4
704062	-200MESH	4
704063	-200MESH	4
704064	-200MESH	6
704065	-200MESH	6
704066	-200MESH	6
704067	-200MESH	4
704068	-80MESH	4
704069	-200MESH	4
704070	-200MESH	4
704071	-200MESH	<4
704072	-200MESH	8
704073	-200MESH	10
704074	-80MESH	<4
704075	-200MESH	<4
704076	-200MESH	4
704077	-200MESH	<4
704078	-200MESH	<4
704079	-200MESH	6
704080	-200MESH	<4
	UNITS	ppm
	DT.LIM	4
	SCHEME	XRF1

ANALYTICAL REPORT

	SAMPLE	U
704081	-200MESH	<4
704082	-200MESH	<4
704083	-80MESH	<4
704084	-200MESH	<4
704085	-200MESH	4
704086	-80MESH	4
704087	-200MESH	<4
704088	-200MESH	6
704089	-200MESH	6
704090	-200MESH	4
704091	-80MESH	<4
704092	-200MESH	4
704093	-200MESH	6
704094	-200MESH	<4
704095	-200MESH	<4
704096	-200MESH	8
704097	-80MESH	<4
704098	-200MESH	<4
704099	-200MESH	4
704100	-200MESH	<4
704101	-200MESH	6
704102	-80MESH	<4
704103	-200MESH	<4
704104	-200MESH	4
704105	-200MESH	4
704106	-200MESH	8
704107	-200MESH	4
704108	-200MESH	<4
704109	-200MESH	4
704110	-200MESH	4
704111	-200MESH	<4
704112	-200MESH	<4
704113	-80MESH	<4
704114	-80MESH	<4
704115	-200MESH	<4
704116	-200MESH	<4
704117	-200MESH	8
704118	-200MESH	6
704119	-80MESH	4
704120	-200MESH	6
	UNITS	ppm
	DT.LIM	4
	SCHEME	XRF1

ANALYTICAL REPORT

	SAMPLE	U
704121	-80MESH	4
704122	-200MESH	4
704123	-200MESH	4
704124	-200MESH	<4
704125	-200MESH	6
704126	-200MESH	4
704127	-200MESH	<4
704128	-200MESH	4
704129	-200MESH	<4
704130	-200MESH	4
704131	-200MESH	4
704132	-200MESH	4
704133	-200MESH	8
704134	-80MESH	<4
704135	-80MESH	<4
704136	-200MESH	6
704137	-200MESH	<4
704138	-80MESH	<4
704139	-200MESH	4
704140	-200MESH	4
	UNITS	ppm
	DT.LIM	4
	SCHEME	XRF1

ROCK CHIP ASSAY RESULTS

Carpentaria Exploration Company Pty. Ltd.

SAMPLE LEDGER

SAMPLER'S INITIALS: SPH, HAR DATE: 12-8/92 to 19/8/92

SAMPLE No.	SAMPLE TYPE	LOCATION/DETAILS	STORE REF.
QP		Stream sediment and rock chip sampling as per below	

QP 85636	RK	float near SS 704001; limonitic dolomitic arenite.	
QP 85637		~40m E of 704013 dk grey silic algal dolosilt	EL 7736
QP 85638		float near SS 704015 vuggy ferruginous volc ± silicified Qtz vein.	"Yalco Creek"
QP 85639		float at SS 704022 · silicified? manganese breccia, central core of dolomite + calcite	
QP 85640	↓	float near SS 704028; dk grey silic? ± vuggy Qtz + limfrac + carb veins ± Py veining	
1			
2			EL 7736
QP 85653	RK	float near SS 704075; ferruginous sandstone	"Yalco Creek"
QP 85654	↓	float at 704099; dark grey silic ± Py, brecciation + green chl alt, vughs, Fe oxides fracs	
QP 85655		float at SS 704112 limonitic (yllw brn) dolosilt	
6			
7			
8			
9			
0			

SAMPLE TYPE CODE:
- DD = diamond drillcore
- PD = percussion/rotary cuttings
- RAB = rotary airblast cuttings
- = other drilling samples (specify)
- S = soil sample
- SS = stream sediment sample
- R = rock chip sample
- P = petrological sample
- = other (specify)

WHITE - REGIONAL BASE
YELLOW - BRISBANE
PINK - RETAIN

NOTE: PLEASE DESCRIBE SAMPLE LOCATION FULLY & CONCISELY

YALCO CREEK, N.T.

amdel

Job: 2DN0972
O/N: QP085636

Final

ANALYTICAL REPORT

SAMPLE	Au	AuDup1	Cu	Pb	Zn	As	Fe
QP085636	<0.02	--	180	99	82	25	21.0%
QP085637	<0.02	--	54	8	18	<5	1.83%
QP085638	<0.02	--	21	4	16	<5	2.58%
QP085639	<0.02	--	10	4	5	<5	1.12%
QP085640	<0.02	<0.02	490	8	3	25	1.45%
QP085653	<0.02	--	240	<4	120	<5	1.24%
QP085654	<0.02	--	88	28	15	<5	1.21%
QP085655	<0.02	--	21	62	580	<5	2.96%
UNITS	ppm	ppm	ppm	ppm	ppm	ppm	ppm
DET.LIM	0.02	0.02	2	4	2	5	5
SCHEME	AAS7	AAS7	AAS7	AAS7	AAS7	AAS7	AAS7
UPPER SCHEME							AAS7

amdel

Job: 2DN0972
O/N: QP085636

Final

ANALYTICAL REPORT

SAMPLE	Mn	Ni	Co
QP085636	1610	33	27
QP085637	1290	14	15
QP085638	470	15	12
QP085639	2210	6	<4
QP085640	1170	30	33
QP085653	57	7	<4
QP085654	150	12	6
QP085655	2190	48	45
UNITS	ppm	ppm	ppm
DET.LIM	4	4	4
SCHEME	AAS7	AAS7	AAS7

APPENDIX 2

DISTRIBUTION TABLES AND CUMULATIVE FREQUENCY DISTRIBUTION PLOTS FOR STREAM SEDIMENT DATA

DISTRIBUTION TABLES

CUMULATIVE FREQUENCY DISTRIBUTION TABLES FOR CUMULATIVE FREQUENCY PLOT:

GOLD

FROM	TO	NUMBER	FREQUENCY	MEAN	VARIANCE	STD. DEV
0.100	0.110	1	1.449	0.10	0.0000	0.0000
0.200	0.210	17	24.638	0.20	-0.0000	0.0000
0.300	0.310	12	17.391	0.30	0.0000	0.0001
0.400	0.410	5	7.246	0.40	0.0000	0.0001
0.500	0.510	8	11.594	0.50	0.0000	0.0000
0.600	0.610	5	7.246	0.60	0.0000	0.0001
0.700	0.710	5	7.246	0.70	0.0000	0.0001
0.800	0.810	4	5.797	0.80	-0.0000	0.0000
0.900	0.910	3	4.348	0.90	-0.0000	0.0000
1.000	1.010	3	4.348	1.00	0.0000	0.0000
1.100	1.110	4	5.797	1.10	-0.0000	0.0000
1.200	1.210	1	1.449	1.20	0.0000	0.0000
1.300	1.310	1	1.449	1.30	0.0000	0.0000
	CUMULATIVE	NUMBER	FREQUENCY	MEAN	VARIANCE	STD. DEV.
	0.110	1	1.449	0.10	0.0000	0.0000
	0.210	18	26.087	0.19	0.0006	0.0236
	0.310	30	43.478	0.24	0.0031	0.0556
	0.410	35	50.725	0.26	0.0060	0.0775
	0.510	43	62.319	0.30	0.0138	0.1174
	0.610	48	69.565	0.34	0.0206	0.1436
	0.710	53	76.812	0.37	0.0302	0.1739
	0.810	57	82.609	0.40	0.0404	0.2009
	0.910	60	86.957	0.43	0.0504	0.2245
	1.010	63	91.304	0.45	0.0632	0.2514
	1.110	67	97.101	0.49	0.0833	0.2885
	1.210	68	98.551	0.50	0.0894	0.2990
	1.310	69	100.000	0.51	0.0973	0.3120

CUMULATIVE FREQUENCY DISTRIBUTION TABLES FOR CUMULATIVE FREQUENCY PLOT:

COPPER ('uncut' data)

FROM	TO	NUMBER	FREQUENCY	MEAN	VARIANCE	STD. DEV
1.000	2.000	4	2.920	1	0.00	0.00
2.000	3.000	4	2.920	2	0.00	0.00
3.000	4.000	1	0.730	3	0.00	0.00
4.000	5.000	9	6.569	4	0.00	0.00
5.000	6.000	6	4.380	5	0.00	0.00
6.000	7.000	14	10.219	6	0.00	0.00
7.000	8.000	10	7.299	7	0.00	0.00
8.000	9.000	12	8.759	8	0.00	0.00
9.000	10.000	11	8.029	9	0.00	0.00
10.000	11.000	8	5.839	10	0.00	0.00
11.000	12.000	3	2.190	11	0.00	0.00
12.000	13.000	8	5.839	12	0.00	0.00
13.000	14.000	3	2.190	13	0.00	0.00
14.000	15.000	6	4.380	14	0.00	0.00
15.000	16.000	4	2.920	15	0.00	0.00
16.000	17.000	5	3.650	16	0.00	0.00
17.000	18.000	4	2.920	17	0.00	0.00
18.000	19.000	3	2.190	18	0.00	0.00
19.000	20.000	2	1.460	19	0.00	0.00
20.000	21.000	4	2.920	20	0.00	0.00
22.000	23.000	3	2.190	22	0.00	0.00
24.000	25.000	1	0.730	24	0.00	0.00
26.000	27.000	2	1.460	26	0.00	0.00
28.000	29.000	1	0.730	28	0.00	0.00
30.000	31.000	1	0.730	30	0.00	0.00
32.000	33.000	1	0.730	32	0.00	0.00
34.000	35.000	1	0.730	34	0.00	0.00
36.000	37.000	1	0.730	36	0.00	0.00
38.000	39.000	1	0.730	38	0.00	0.00
40.000	41.000	3	2.190	40	0.00	0.00
96.000	97.000	1	0.730	96	0.00	0.00

CUMULATIVE	NUMBER	FREQUENCY	MEAN	VARIANCE	STD. DEV.
2.000	4	2.920	1	0.00	0.00
3.000	8	5.839	2	0.29	0.53
4.000	9	6.569	2	0.50	0.71
5.000	18	13.139	3	1.68	1.29
6.000	24	17.518	3	2.16	1.47
7.000	38	27.737	4	2.99	1.73
8.000	48	35.036	5	3.54	1.88
9.000	60	43.796	6	4.39	2.10
10.000	71	51.825	6	5.31	2.30
11.000	79	57.664	6	6.20	2.49
12.000	82	59.854	7	6.71	2.59
13.000	90	65.693	7	8.47	2.91
14.000	93	67.883	7	9.30	3.05
15.000	99	72.263	8	11.32	3.36
16.000	103	75.182	8	12.88	3.59
17.000	108	78.832	8	15.15	3.89
18.000	112	81.752	9	17.20	4.15
19.000	115	83.942	9	18.98	4.36
20.000	117	85.401	9	20.38	4.51
21.000	121	88.321	9	23.55	4.85
23.000	124	90.511	10	26.73	5.17
25.000	125	91.241	10	28.14	5.30
27.000	127	92.701	10	31.77	5.64
29.000	128	93.431	10	34.02	5.83
31.000	129	94.161	10	36.77	6.06
33.000	130	94.891	11	40.08	6.33
35.000	131	95.620	11	43.96	6.63
37.000	132	96.350	11	48.45	6.96
39.000	133	97.080	11	53.59	7.32
41.000	136	99.270	12	70.50	8.40
97.000	137	100.000	12	121.76	11.03

CUMULATIVE FREQUENCY DISTRIBUTION TABLES FOR CUMULATIVE FREQUENCY PLOT:

COPPER ('cut' data)

FROM	TO	NUMBER	FREQUENCY	MEAN	VARIANCE	STD. DEV
1.000	2.000	4	2.941	1	0.00	0.00
2.000	3.000	4	2.941	2	0.00	0.00
3.000	4.000	1	0.735	3	0.00	0.00
4.000	5.000	9	6.618	4	0.00	0.00
5.000	6.000	6	4.412	5	0.00	0.00
6.000	7.000	14	10.294	6	0.00	0.00
7.000	8.000	10	7.353	7	0.00	0.00
8.000	9.000	12	8.824	8	0.00	0.00
9.000	10.000	11	8.088	9	0.00	0.00
10.000	11.000	8	5.882	10	0.00	0.00
11.000	12.000	3	2.206	11	0.00	0.00
12.000	13.000	8	5.882	12	0.00	0.00
13.000	14.000	3	2.206	13	0.00	0.00
14.000	15.000	6	4.412	14	0.00	0.00
15.000	16.000	4	2.941	15	0.00	0.00
16.000	17.000	5	3.676	16	0.00	0.00
17.000	18.000	4	2.941	17	0.00	0.00
18.000	19.000	3	2.206	18	0.00	0.00
19.000	20.000	2	1.471	19	0.00	0.00
20.000	21.000	4	2.941	20	0.00	0.00
22.000	23.000	3	2.206	22	0.00	0.00
24.000	25.000	1	0.735	24	0.00	0.00
26.000	27.000	2	1.471	26	0.00	0.00
28.000	29.000	1	0.735	28	0.00	0.00
30.000	31.000	1	0.735	30	0.00	0.00
32.000	33.000	1	0.735	32	0.00	0.00
34.000	35.000	1	0.735	34	0.00	0.00
36.000	37.000	1	0.735	36	0.00	0.00
38.000	39.000	1	0.735	38	0.00	0.00
40.000	41.000	3	2.206	40	0.00	0.00

CUMULATIVE	NUMBER	FREQUENCY	MEAN	VARIANCE	STD. DEV.
2.000	4	2.941	1	0.00	0.00
3.000	8	5.882	2	0.29	0.53
4.000	9	6.618	2	0.50	0.71
5.000	18	13.235	3	1.68	1.29
6.000	24	17.647	3	2.16	1.47
7.000	38	27.941	4	2.99	1.73
8.000	48	35.294	5	3.54	1.88
9.000	60	44.118	6	4.39	2.10
10.000	71	52.206	6	5.31	2.30
11.000	79	58.088	6	6.20	2.49
12.000	82	60.294	7	6.71	2.59
13.000	90	66.176	7	8.47	2.91
14.000	93	68.382	7	9.30	3.05
15.000	99	72.794	8	11.32	3.36
16.000	103	75.735	8	12.88	3.59
17.000	108	79.412	8	15.15	3.89
18.000	112	82.353	9	17.20	4.15
19.000	115	84.559	9	18.98	4.36
20.000	117	86.029	9	20.38	4.51
21.000	121	88.971	9	23.55	4.85
23.000	124	91.176	10	26.73	5.17
25.000	125	91.912	10	28.14	5.30
27.000	127	93.382	10	31.77	5.64
29.000	128	94.118	10	34.02	5.83
31.000	129	94.853	10	36.77	6.06
33.000	130	95.588	11	40.08	6.33
35.000	131	96.324	11	43.96	6.63
37.000	132	97.059	11	48.45	6.96
39.000	133	97.794	11	53.59	7.32
41.000	136	100.000	12	70.50	8.40

CUMULATIVE FREQUENCY DISTRIBUTION TABLES FOR CUMULATIVE FREQUENCY PLOT:

LEAD

FROM	TO	NUMBER	FREQUENCY	MEAN	VARIANCE	STD. DEV
4.000	5.000	37	30.081	4	0.00	0.00
6.000	7.000	39	31.707	6	0.00	0.00
8.000	9.000	19	15.447	8	0.00	0.00
10.000	11.000	11	8.943	10	0.00	0.00
12.000	13.000	6	4.878	12	0.00	0.00
14.000	15.000	2	1.626	14	0.00	0.00
16.000	17.000	2	1.626	16	0.00	0.00
20.000	21.000	1	0.813	20	0.00	0.00
24.000	25.000	2	1.626	24	0.00	0.00
28.000	29.000	1	0.813	28	0.00	0.00
32.000	33.000	1	0.813	32	0.00	0.00
38.000	39.000	1	0.813	38	0.00	0.00
42.000	43.000	1	0.813	42	0.00	0.00
	CUMULATIVE	NUMBER	FREQUENCY	MEAN	VARIANCE	STD. DEV.
	5.000	37	30.081	4	0.00	0.00
	7.000	76	61.789	5	1.01	1.01
	9.000	95	77.236	6	2.24	1.50
	11.000	106	86.179	6	3.80	1.95
	13.000	112	91.057	6	5.39	2.32
	15.000	114	92.683	7	6.30	2.51
	17.000	116	94.309	7	7.73	2.78
	21.000	117	95.122	7	9.18	3.03
	25.000	119	96.748	7	13.95	3.73
	29.000	120	97.561	7	17.47	4.18
	33.000	121	98.374	7	22.38	4.73
	39.000	122	99.187	8	29.84	5.46
	43.000	123	100.000	8	39.15	6.26

CUMULATIVE FREQUENCY DISTRIBUTION TABLES FOR CUMULATIVE FREQUENCY PLOT:

ZINC ('uncut' data)

FROM	TO	NUMBER	FREQUENCY	MEAN	VARIANCE	STD. DEV
1.000	2.000	6	4.412	1	0.00	0.00
2.000	3.000	24	17.647	2	0.00	0.00
3.000	4.000	19	13.971	3	0.00	0.00
4.000	5.000	12	8.824	4	0.00	0.00
5.000	6.000	15	11.029	5	0.00	0.00
6.000	7.000	6	4.412	6	0.00	0.00
7.000	8.000	8	5.882	7	0.00	0.00
8.000	9.000	11	8.088	8	0.00	0.00
9.000	10.000	4	2.941	9	0.00	0.00
10.000	11.000	1	0.735	10	0.00	0.00
11.000	12.000	6	4.412	11	0.00	0.00
12.000	13.000	2	1.471	12	0.00	0.00
13.000	14.000	2	1.471	13	0.00	0.00
14.000	15.000	7	5.147	14	0.00	0.00
15.000	16.000	5	3.676	15	0.00	0.00
17.000	18.000	3	2.206	17	0.00	0.00
18.000	19.000	1	0.735	18	0.00	0.00
19.000	20.000	1	0.735	19	0.00	0.00
20.000	21.000	1	0.735	20	0.00	0.00
30.000	31.000	1	0.735	30	0.00	0.00
110.000	111.000	1	0.735	110	0.00	0.00
	CUMULATIVE	NUMBER	FREQUENCY	MEAN	VARIANCE	STD. DEV.
	2.000	6	4.412	1	0.00	0.00
	3.000	30	22.059	2	0.17	0.41
	4.000	49	36.029	2	0.45	0.67
	5.000	61	44.853	3	0.84	0.92
	6.000	76	55.882	3	1.59	1.26
	7.000	82	60.294	3	2.06	1.44
	8.000	90	66.176	4	3.00	1.73
	9.000	101	74.265	4	4.55	2.13
	10.000	105	77.206	4	5.26	2.29
	11.000	106	77.941	4	5.52	2.35
	12.000	112	82.353	5	7.49	2.74
	13.000	114	83.824	5	8.29	2.88
	14.000	116	85.294	5	9.29	3.05
	15.000	123	90.441	5	13.17	3.63
	16.000	128	94.118	6	16.08	4.01
	18.000	131	96.324	6	18.51	4.30
	19.000	132	97.059	6	19.44	4.41
	20.000	133	97.794	6	20.53	4.53
	21.000	134	98.529	6	21.77	4.67
	31.000	135	99.265	7	25.74	5.07
	111.000	136	100.000	7	104.21	10.21

CUMULATIVE FREQUENCY DISTRIBUTION TABLES FOR CUMULATIVE FREQUENCY PLOT:

ZINC ('cut' data)

FROM	TO	NUMBER	FREQUENCY	MEAN	VARIANCE	STD. DEV
1.000	2.000	6	4.444	1	0.00	0.00
2.000	3.000	24	17.778	2	0.00	0.00
3.000	4.000	19	14.074	3	0.00	0.00
4.000	5.000	12	8.889	4	0.00	0.00
5.000	6.000	15	11.111	5	0.00	0.00
6.000	7.000	6	4.444	6	0.00	0.00
7.000	8.000	8	5.926	7	0.00	0.00
8.000	9.000	11	8.148	8	0.00	0.00
9.000	10.000	4	2.963	9	0.00	0.00
10.000	11.000	1	0.741	10	0.00	0.00
11.000	12.000	6	4.444	11	0.00	0.00
12.000	13.000	2	1.481	12	0.00	0.00
13.000	14.000	2	1.481	13	0.00	0.00
14.000	15.000	7	5.185	14	0.00	0.00
15.000	16.000	5	3.704	15	0.00	0.00
17.000	18.000	3	2.222	17	0.00	0.00
18.000	19.000	1	0.741	18	0.00	0.00
19.000	20.000	1	0.741	19	0.00	0.00
20.000	21.000	1	0.741	20	0.00	0.00
30.000	31.000	1	0.741	30	0.00	0.00
	CUMULATIVE	NUMBER	FREQUENCY	MEAN	VARIANCE	STD. DEV.
	2.000	6	4.444	1	0.00	0.00
	3.000	30	22.222	2	0.17	0.41
	4.000	49	36.296	2	0.45	0.67
	5.000	61	45.185	3	0.84	0.92
	6.000	76	56.296	3	1.59	1.26
	7.000	82	60.741	3	2.06	1.44
	8.000	90	66.667	4	3.00	1.73
	9.000	101	74.815	4	4.55	2.13
	10.000	105	77.778	4	5.26	2.29
	11.000	106	78.519	4	5.52	2.35
	12.000	112	82.963	5	7.49	2.74
	13.000	114	84.444	5	8.29	2.88
	14.000	116	85.926	5	9.29	3.05
	15.000	123	91.111	5	13.17	3.63
	16.000	128	94.815	6	16.08	4.01
	18.000	131	97.037	6	18.51	4.30
	19.000	132	97.778	6	19.44	4.41
	20.000	133	98.519	6	20.53	4.53
	21.000	134	99.259	6	21.77	4.67
	31.000	135	100.000	7	25.74	5.07

CUMULATIVE FREQUENCY DISTRIBUTION TABLES FOR CUMULATIVE FREQUENCY PLOT:

IRON

FROM	TO	NUMBER	FREQUENCY	MEAN	VARIANCE	STD. DEV
0.000	5000.000	23	16.547	3578	906777.20	952.25
5000.000	10000.000	43	30.935	7037	1766672.41	1329.16
10000.000	15000.000	37	26.619	12286	2198980.76	1482.90
15000.000	20000.000	23	16.547	17174	2482023.08	1575.44
20000.000	25000.000	3	2.158	22333	2333301.33	1527.51
25000.000	30000.000	7	5.036	26643	1892961.14	1375.85
35000.000	40000.000	2	1.439	37000	0.00	0.00
40000.000	45000.000	1	0.719	40500	0.00	0.00

CUMULATIVE	NUMBER	FREQUENCY	MEAN	VARIANCE	STD. DEV.
5000.000	23	16.547	3578	906777.20	952.25
10000.000	66	47.482	5832	4206659.90	2051.01
15000.000	103	74.101	8150	13140857.9	3625.03
20000.000	126	90.647	9798	23406719.9	4838.05
25000.000	129	92.806	10089	26491993.6	5147.04
30000.000	136	97.842	10941	38679854.9	6219.31
40000.000	138	99.281	11319	47899436.4	6920.94
45000.000	139	100.000	11529	53678521.8	7326.56

CUMULATIVE FREQUENCY DISTRIBUTION TABLES FOR CUMULATIVE FREQUENCY PLOT:

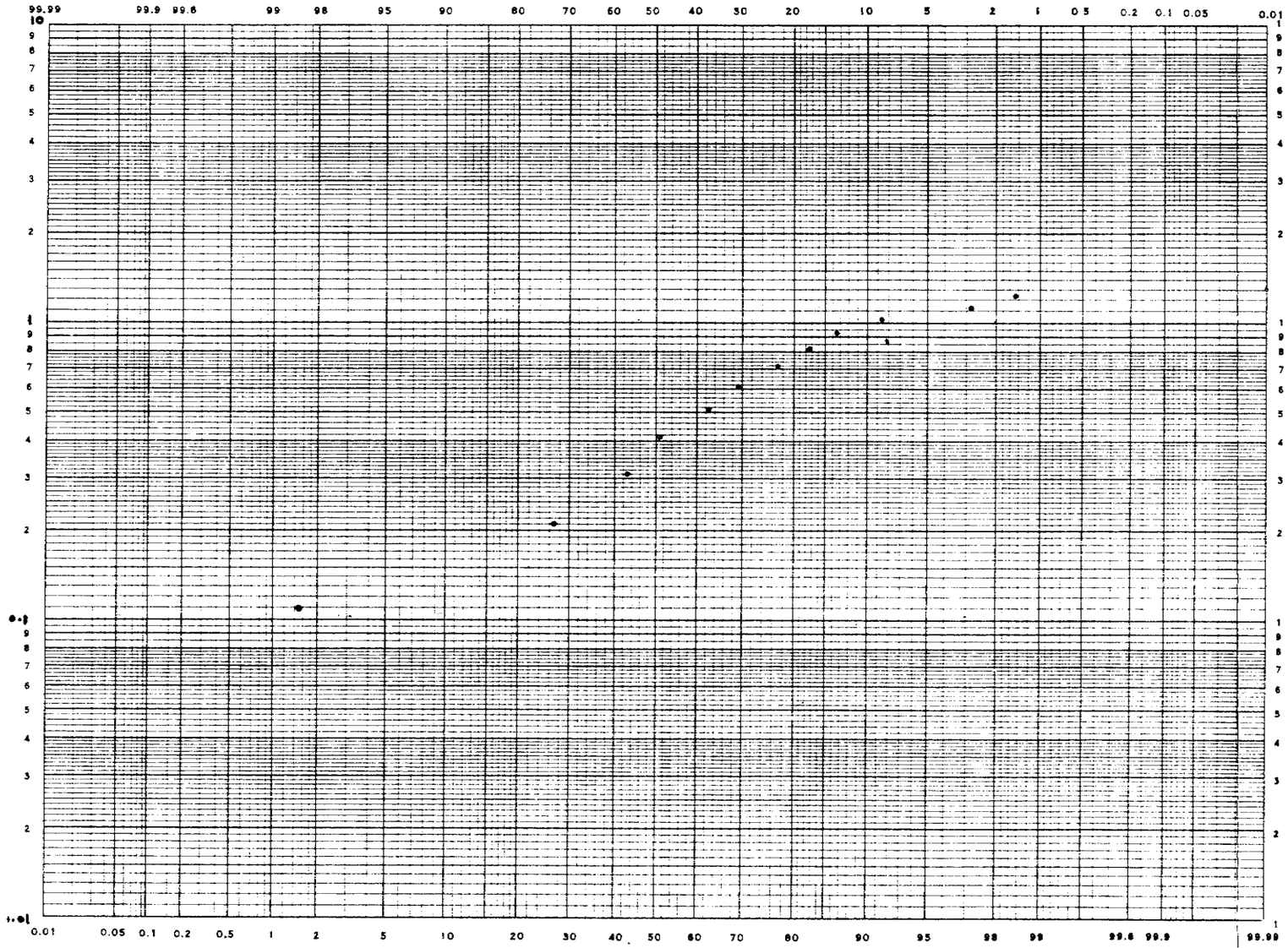
MANGANESE

FROM	TO	NUMBER	FREQUENCY	MEAN	VARIANCE	STD. DEV
0.000	25.000	5	3.623	17	7.50	2.74
25.000	50.000	17	12.319	37	37.87	6.15
50.000	75.000	8	5.797	57	56.70	7.53
75.000	100.000	13	9.420	86	41.03	6.41
100.000	125.000	7	5.072	111	45.24	6.73
125.000	150.000	7	5.072	136	61.90	7.87
150.000	175.000	8	5.797	161	55.36	7.44
175.000	200.000	5	3.623	187	120.00	10.95
200.000	225.000	7	5.072	204	28.57	5.35
225.000	250.000	2	1.449	235	0.00	0.00
250.000	275.000	10	7.246	260	66.67	8.16
275.000	300.000	2	1.449	285	0.00	0.00
300.000	325.000	6	4.348	307	66.67	8.16
325.000	350.000	4	2.899	333	25.00	5.00
350.000	375.000	8	5.797	360	85.71	9.26
375.000	400.000	2	1.449	390	0.00	0.00
400.000	425.000	2	1.449	415	0.00	0.00
425.000	450.000	2	1.449	430	0.00	0.00
450.000	475.000	4	2.899	465	100.00	10.00
475.000	500.000	2	1.449	485	0.00	0.00
500.000	525.000	3	2.174	507	133.33	11.55
525.000	550.000	2	1.449	540	0.00	0.00
550.000	575.000	1	0.725	560	0.00	0.00
575.000	600.000	1	0.725	580	0.00	0.00
625.000	650.000	2	1.449	635	0.00	0.00
675.000	700.000	1	0.725	680	0.00	0.00
725.000	750.000	2	1.449	740	0.00	0.00
775.000	800.000	1	0.725	780	0.00	0.00
1000.000	1025.000	1	0.725	1000	0.00	0.00
1025.000	1050.000	1	0.725	1040	0.00	0.00
1600.000	1625.000	1	0.725	1620	0.00	0.00
2500.000	2525.000	1	0.725	2500	0.00	0.00

CUMULATIVE	NUMBER	FREQUENCY	MEAN	VARIANCE	STD. DEV.
25.000	5	3.623	17	7.50	2.74
50.000	22	15.942	33	106.49	10.32
75.000	30	21.739	39	208.76	14.45
100.000	43	31.159	53	624.86	25.00
125.000	50	36.232	61	946.74	30.77
150.000	57	41.304	70	1442.21	37.98
175.000	65	47.101	82	2171.96	46.60
200.000	70	50.725	89	2768.82	52.62
225.000	77	55.797	100	3626.16	60.22
250.000	79	57.246	103	3991.93	63.18
275.000	89	64.493	121	6030.22	77.65
300.000	91	65.942	124	6483.65	80.52
325.000	97	70.290	136	8032.23	89.62
350.000	101	73.188	143	9201.55	95.92
375.000	109	78.986	159	11746.68	108.38
400.000	111	80.435	163	12483.63	111.73
425.000	113	81.884	168	13371.34	115.63
450.000	115	83.333	172	14321.21	119.67
475.000	119	86.232	182	16642.27	129.00
500.000	121	87.681	187	17867.50	133.67
525.000	124	89.855	195	19861.79	140.93
550.000	126	91.304	200	21418.17	146.35
575.000	127	92.029	203	22265.96	149.22
600.000	128	92.754	206	23199.21	152.31
650.000	130	94.203	213	25646.10	160.14
700.000	131	94.928	216	27114.72	164.67
750.000	133	96.377	224	30795.13	175.49
800.000	134	97.101	228	32868.20	181.30
1025.000	135	97.826	234	37032.66	192.44
1050.000	136	98.551	240	41533.33	203.80
1625.000	137	99.275	250	55127.18	234.79
2525.000	138	100.000	266	91404.82	302.33

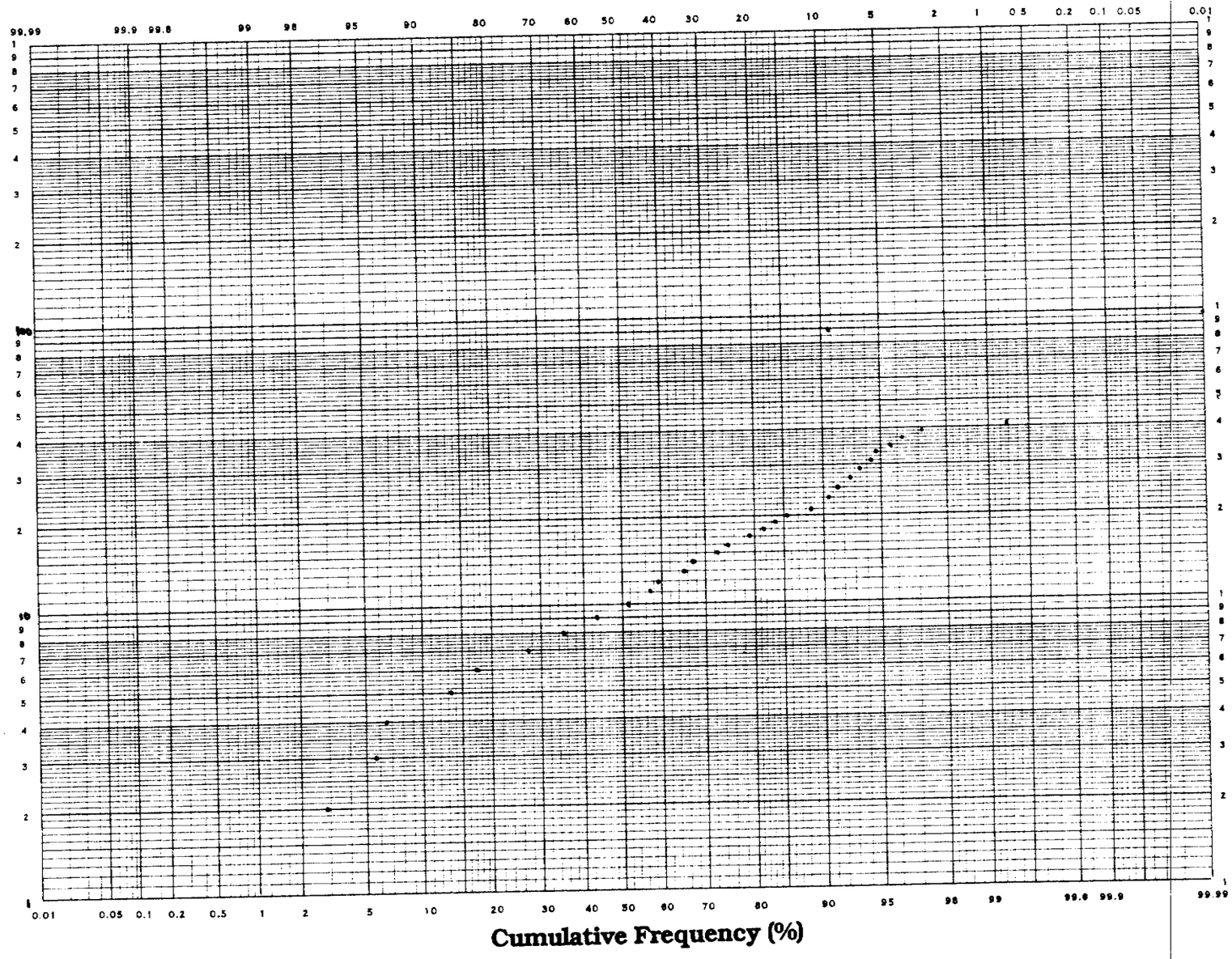
CUMULATIVE FREQUENCY DISTRIBUTION PLOTS

CUMULATIVE FREQUENCY GRAPH FOR STREAM SEDIMENT SAMPLES TAKEN OVER EL7736 "YALCO CREEK"



GRAPH 1

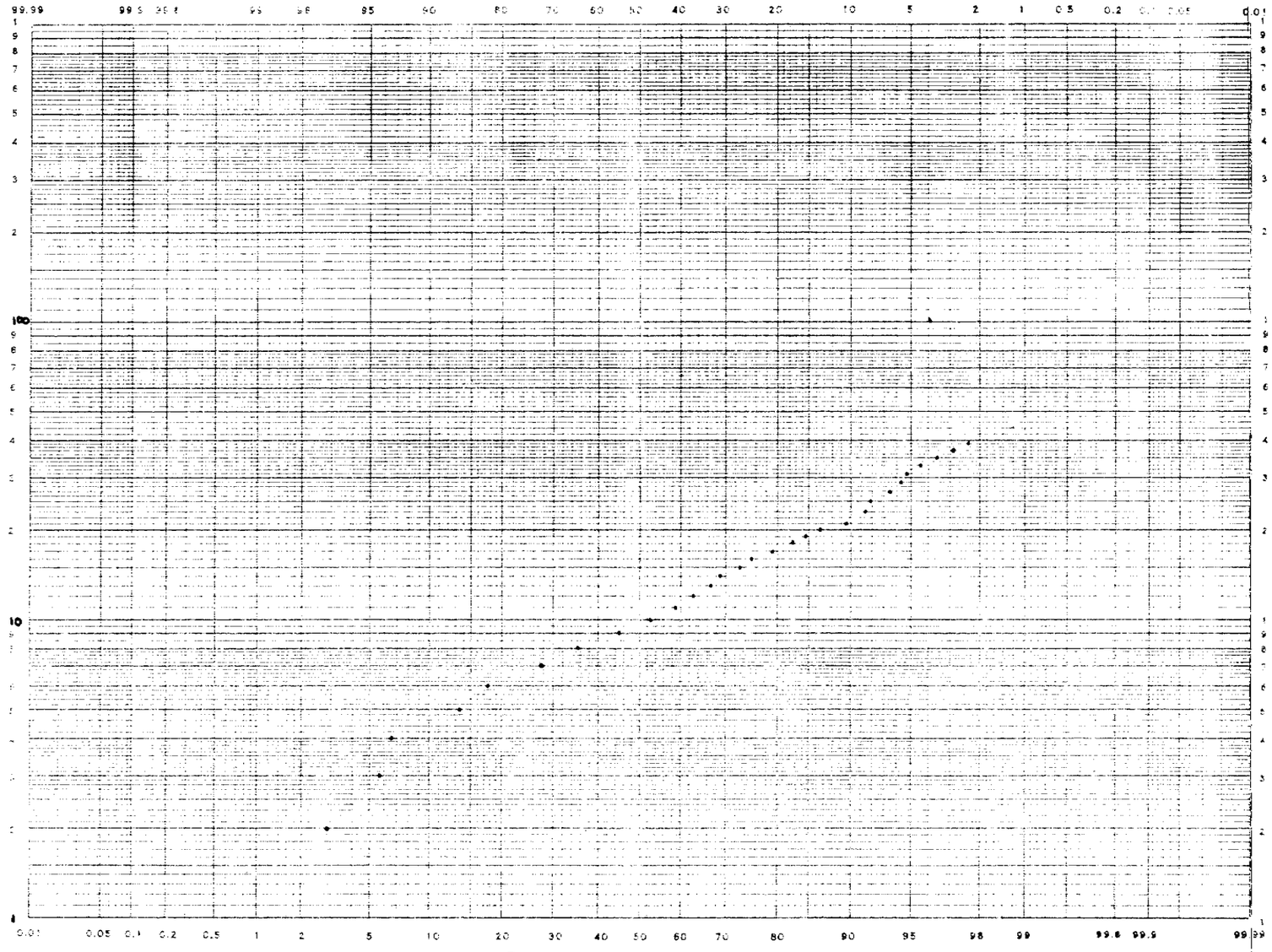
CUMULATIVE FREQUENCY GRAPH FOR STREAM SEDIMENT SAMPLES TAKEN OVER EL7736 "YALCO CREEK"



'Uncut Data'

GRAPH 2

CUMULATIVE FREQUENCY GRAPH FOR STREAM SEDIMENT SAMPLES TAKEN OVER EL7736 "YALCO CREEK"



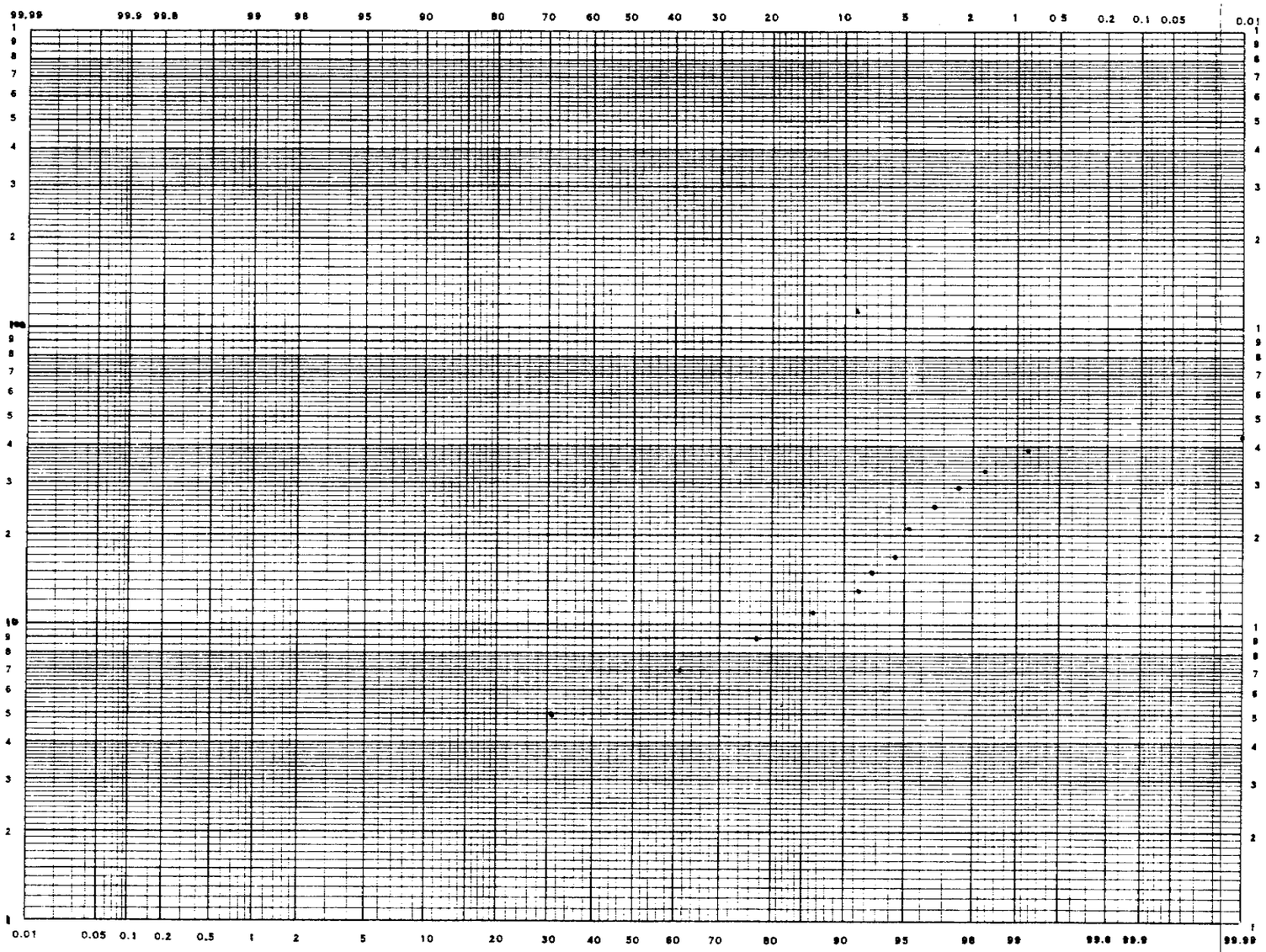
Copper (ppm)

Cumulative Frequency (%)

'Cut Data'

GRAPH 3

CUMULATIVE FREQUENCY GRAPH FOR STREAM SEDIMENT SAMPLES TAKEN OVER EL7736 "YALCO CREEK"

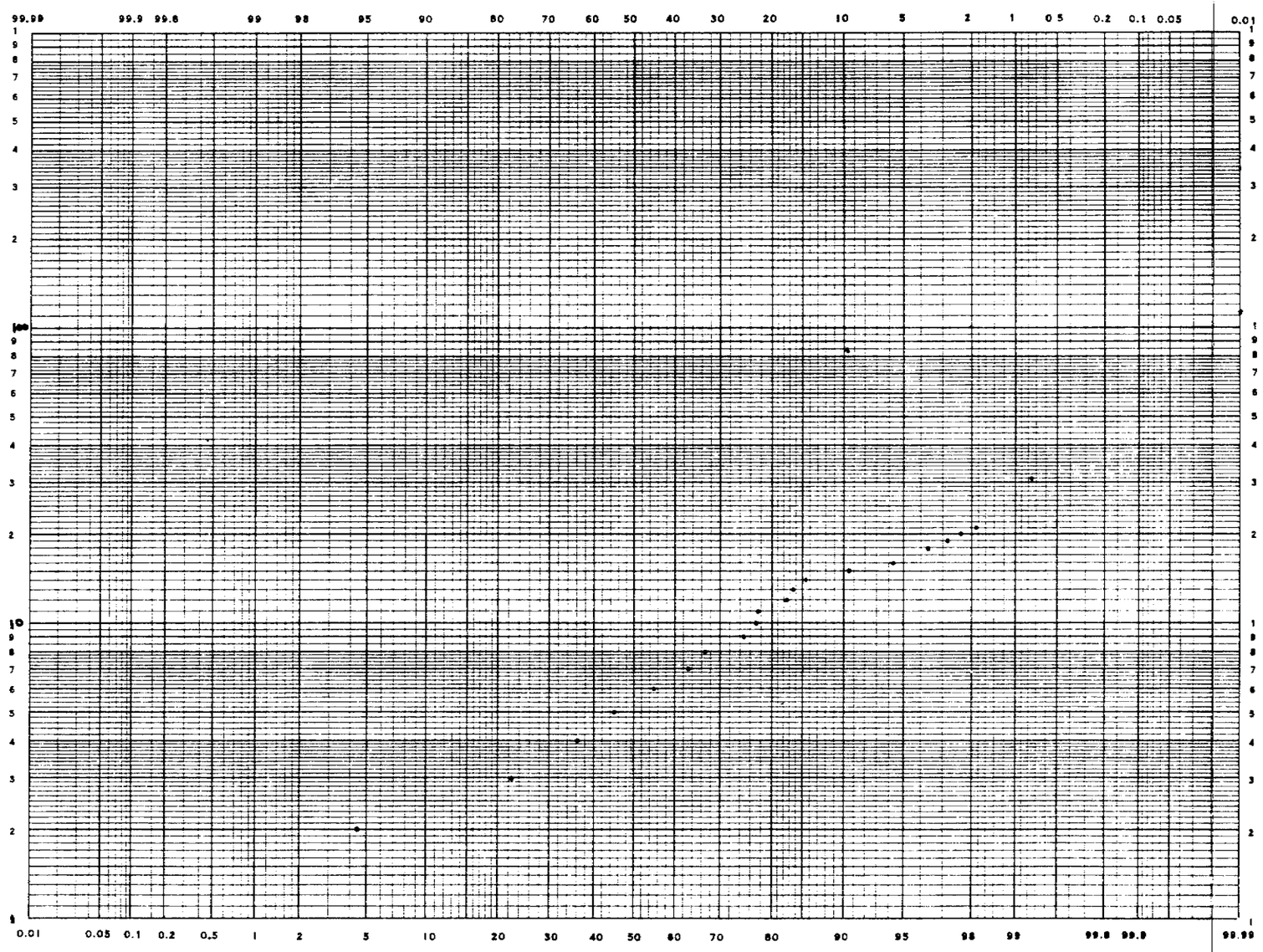


Lead (ppm)

Cumulative Frequency (%)

GRAPH 4

CUMULATIVE FREQUENCY GRAPH FOR STREAM SEDIMENT SAMPLES TAKEN OVER EL7736 "YALCO CREEK"



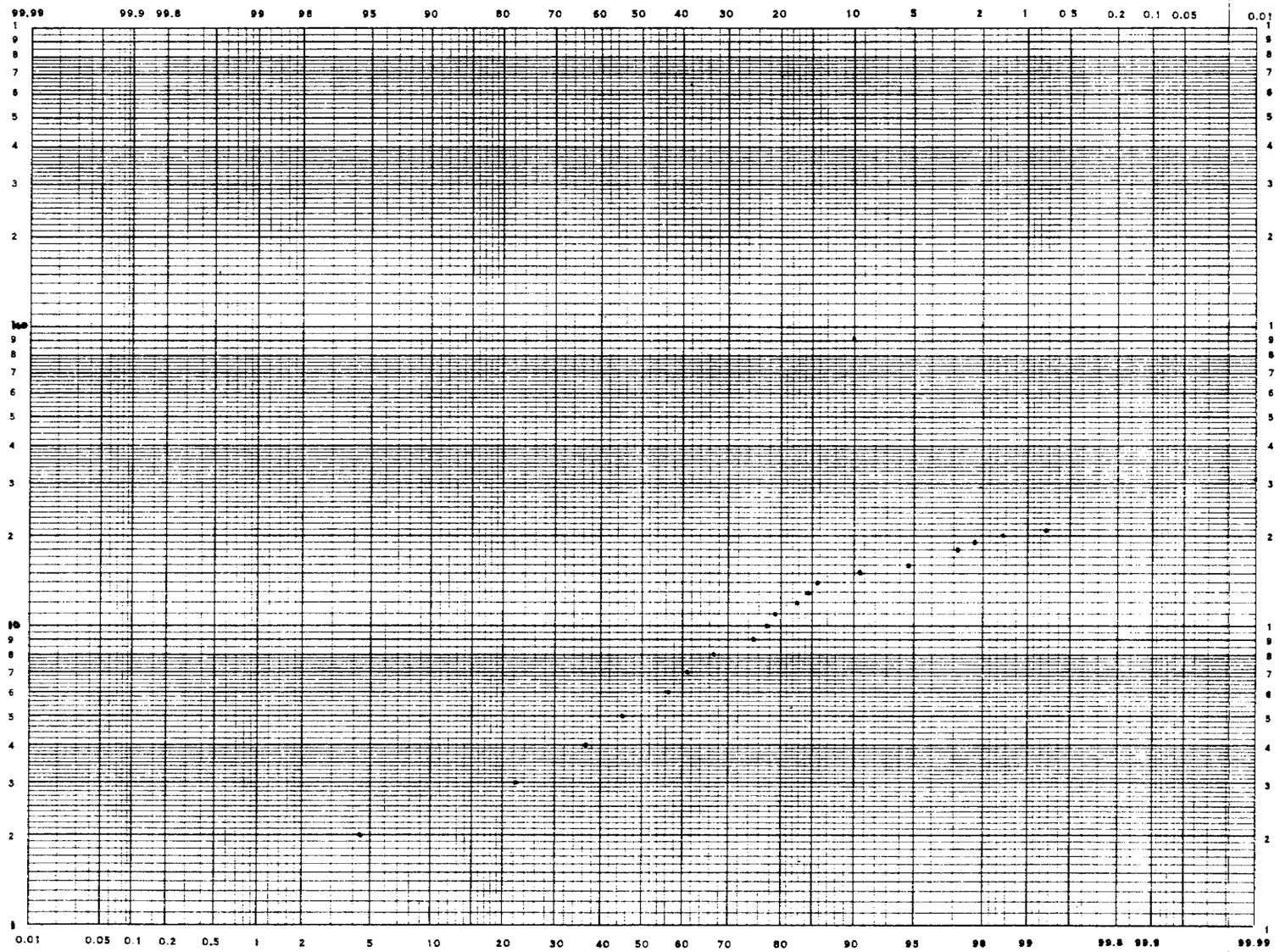
Zinc (ppm)

Cumulative Frequency (%)

'Uncut Data'

GRAPH 5

CUMULATIVE FREQUENCY GRAPH FOR STREAM SEDIMENT SAMPLES TAKEN OVER EL7736 "YALCO CREEK"



Zinc (ppm)

Cumulative Frequency (%)

'Cut Data'

GRAPH 6

APPENDIX 3

ANOMALY LISTING FOR GEOTERREX 1992 'YALCO CREEK' AIRBORNE GEOTEM & MAGNETIC SURVEY

Anomaly YC4

Moderate strength anomaly present on line 308, with probable extensions to north and south.

strike extent: single line; possible extensions of 2.5 kilometres
strike direction: north-northeast
peak response: line 308 (west-flying); 16 channels, 350 ADI

The anomaly occurs in a Cz covered area, adjacent to the west of the extensive area of resistive Pms outcrop: a weak assymetric magnetic anomaly (minor western high, principal eastern low), part of a persistent trend, is approximately coincident.

The anomaly source is interpreted to be non-outcropping, weathered Tawallah Group volcanics abutting the main MSB Fault and underlying the flatly-east-dipping Pms; Ptg has been mapped along strike to the north.

The anomaly has structural potential, but can be adequately explained as a surficial-style weathered volcanics response.

Lesser anomalous responses to the west can be interpreted to relate to weathered clastic material within Nathan Group Pnz, mapped to the west of the main MSB Fault.

Anomaly YC5

Moderate strength anomaly enhancement, present on line 309, of a weakly anomalous trend along the eastern margin of the main Masterton Sandstone Resistive Zone.

strike extent: single line
strike direction: north-northeast
peak response: line 309 (east-flying); 13 channels, 300 ADI

The anomaly occurs in a Cz covered area, between the extensive area of resistive east-dipping Pms outcrop to the west and Pml outcrops to the east. The line 309 anomaly enhancement coincides with a flexure in the stratigraphic trend.

The anomaly source is interpreted to be non-outcropping, weathered clastic stratigraphy within the McArthur Group Pml, locally enhanced by effects relating to structural folding or faulting.

No real potential for this anomaly which probably relates to localised structural enhancement of a surficial-style weathered clastic stratigraphy response.

Other parallel weakly-anomalous trends to the east can be interpreted to relate to non-outcropping weathered clastic stratigraphy within the Pml and/or Pma.

Anomaly YC6

Area of moderately anomalous responses in two zones, best developed on lines 313 to 316 inclusive, to the east of the main Masterton Sandstone Resistive Zone.

strike extent:	western zone - 2 kilometres eastern zone - >1 kilometre (open to south beyond survey coverage)
strike direction:	north-northeast
peak response:	western zone - line 315 ; 15 channels, 590 ADI eastern zone - line 315 ; 13 channels, 320 ADI

The anomalies occur in Cz covered areas, within the east-dipping stratigraphic sequence Pms to Pmd.

The anomaly sources are interpreted to be non-outcropping, weathered clastic stratigraphy within the McArthur Group Pml and Pma, possibly locally enhanced by effects relating to cross-faulting.

No real potential for these anomalies which are adequately explained as surficial-style weathered clastic stratigraphy responses, perhaps with local structural enhancement.

Anomaly YC7

Limited extent weak-moderately anomalous response on the western margin of the Masterton Sandstone Resistive Zone, present on lines 315 and 316,

strike extent:	western zone - 1 kilometre
strike direction:	north-northeast
peak response:	line 315 (east-flying); 14 channels, 410 ADI line 316 (west-flying); 15 channels, 240 ADI

The anomaly occurs in a Cz covered area, adjacent to the north of Pto_2 outcrop: a minor bipolar magnetic anomaly is adjacent to the east.

The anomaly source is interpreted to be weathered and crushed Tawallah Group Pto_2 and perhaps Ptg (as indicated by the magnetic anomaly) abutting the main MSB Fault, with a possible contribution from non-outcropping weathered Nathan Group Pnz to the west of the fault.

The anomaly has structural potential, but can be adequately explained as a surficial-style weathered responses.

A similar, weakly anomalous response along strike to the north-northeast on line 318 may represent similar source material.

Anomaly YC8

Moderate strength anomaly trend, within a broader somewhat conductive zone divergent to other `stratigraphic' trends, present on lines 317 to 320.

strike extent: 2 kilometres
strike direction: east-northeast
peak response: line 319 (east-flying); 15 channels, 440 ADI

The anomaly occurs in an area of Kl and Cz cover, coincident in its northern section with creek-bed Qa; Pnz outcrops to the east.

The anomaly source is interpreted to be non-outcropping, weathered material, of stratigraphic or structural origin, with possible enhancement from surficial source material.

No real potential for this anomaly which probably reflects a structural or stratigraphically controlled surficial-style conductor.

Anomaly YC9C

A strongly anomalous zone present on lines 321 to 323 inclusive, probably extending through lower response zones eastwards(?) to YC9D.

strike extent: >1 kilometre
strike direction: north-northeast
peak response: line 322 (west-flying); 16 channels, 970 ADI
line 323 (east-flying); 16 channels, 1260 ADI

The anomaly correlates with an area of Cz cover within more extensive Kl cover.

The anomaly source is interpreted to be non-outcropping, weathered conductive Pmq.

The potential for this anomaly relates to its interpreted relationship with Pmq target stratigraphy and indicated conductivity.

Anomaly YC9D

An isolated strongly anomalous two-peaked zone within a somewhat conductive area, present on line 324, probably traceable through lower response zones westwards to YC9C.

strike extent: < 1 kilometre
strike direction: not obvious
peak response: line 324 (west-flying); 11 channels, 1170 ADI
; 16 channels, >1300 ADI

The anomaly occurs in an area of Cz cover, adjacent to the northwest of a fault-bounded area of Pmnc and Pmnh outcrop.

The anomaly source is interpreted to be non-outcropping, weathered conductive Pmq, based on similarities to anomalies YC9A, YC9B and YC9C.

The potential for this anomaly relates to its interpreted relationship with Pmq target stratigraphy and indicated conductivity.

Anomaly YC10

Localised enhancement, present on line 325, of a weakly anomalous trend to the east of the main Masterton Sandstone Resistive Zone.

strike extent: single line
strike direction: section of north-northeast trend
peak response: line 325 (east-flying); 9 channels, 180 ADI

The anomaly occurs adjacent to Pma outcrops in a Cz covered area, approximately coincident with one of the many mapped cross-faults.

The anomaly source is interpreted to be a local structurally-related enhancement of non-outcropping, weathered clastic stratigraphy within the McArthur Group Pml or Pma.

No real potential for this anomaly which probably relates to localised structural enhancement of a surficial-style weathered clastic stratigraphy response.

Anomaly YC11

Area of weak-moderately anomalous enhancements of anomaly trends, present on lines 334 and 335, to the north and east of the main Masterton Sandstone Resistive Zone.

strike extent: single line anomalies
strike direction: sections of north trends
peak response: line 334 (w-flying); 12 & 13 channels, 170 & 260 ADI
line 335 (east-flying); 12 channels, 280 ADI

The anomalies occur in an area of Cz cover to the northeast of the extensive outcrop area of Pms.

The anomaly sources are interpreted to be non-outcropping, weathered clastic stratigraphy, probably within the McArthur Group Pml and Pma. The presence of these anomalies north of the Pms outcrop suggests that Pms is not present immediately sub-Cz in this area.

No real potential for these anomalies which probably relate to surficial-style weathered clastic stratigraphy responses.

Anomaly YC12

Isolated moderate strength anomaly flanked by resistive material, present on line 327.

strike extent: single line
strike direction: north(?)
peak response: line 327 (east-flying); 14 channels, 150 ADI

The anomaly occurs at the boundary between mapped Cz and Kl cover.

The source of this minor feature is tentatively interpreted to be a localised enhancement of non-outcropping, weathered clastic stratigraphy within the McArthur Group, possibly even Pmq.

Minor potential for this anomaly which may indicate the northerly continuation of Pmq stratigraphy.

Anomaly YC13 - see also Anomaly YN14

Trend of weak-moderate strength anomalies in a resistive environment, present on lines 332 to 334 inclusive, and possibly extending north and south.

strike extent: 1 kilometre
strike direction: north
peak response: line 332 (west-flying); 14 channels, 340 ADI

The anomaly occurs in an extensive area of Cz cover.

The source of this minor feature is interpreted to be enhancement of non-outcropping, weathered clastic stratigraphy within the McArthur Group, possibly Pmq.

Some potential for this anomaly which may indicate the northerly continuation of Pmq stratigraphy beneath Cz cover.

APPENDIX 4

ANOMALY LISTING FOR AERODATA 1992 'YALCO CREEK' AIRBORNE QUESTEM & MAGNETIC SURVEY

Anomaly YN1

Weakly anomalous, triple-peaked feature, partly associated with weakly anomalous magnetics, present on lines 30010 - 30030 inclusive.

strike extent: >1 kilometre (open to north beyond survey coverage)
strike direction: approximately north
peak response: line 30020 (west-flying); 10 channels, 0.35 tau

Anomaly occurs in Cz covered area, probably a fault-bounded block, flanked by outcrops of resistive Ptm to the west, east and south; small outcrops of Pto occur adjacent to the north.

Source is interpreted to be non-outcropping, weathered Tawallah Group possibly volcanic, material. No evidence of anomaly enhancement by creek-bed Qa to the south is evident.

No real potential for this weak, surficial-style anomaly, which is adequately explained as a weathered rock-type response.

Anomaly YN2

Area of weak and moderately anomalous responses in an otherwise resistive environment, present on lines 30020 - 30080 inclusive.

strike extent: >2 kilometres (open to northwest beyond survey coverage)
strike direction: none obvious, but sections of eastern margin strike north-northeast and north-northwest
peak response: line 30050 (west-flying); 15 channels, 0.5 tau (anomalies are sharper on west-flying lines)

Anomaly occurs in Cz and Kl covered area, probably a fault-bounded block, flanked by outcrops of resistive Ptm to the northeast and southeast; small outcrop of flatly-south-dipping Pto occurs adjacent to the northwest. Creek-bed Qa coincides with southeastern boundary.

Source is interpreted to be mainly non-outcropping, weathered Tawallah Group possibly Pto, material. Creek-bed Qa coincident with resistive boundary may be fault-controlled.

No real potential for this weak-moderate anomaly, which is adequately explained as a mainly weathered rock-type response.

Anomaly YN8

Irregular area of weak and moderately anomalous trends present on lines 30060 - 30120 inclusive, possibly extending north to line 30040.

strike extent: up to 3 kilometres
strike direction: north, swinging to north-northeast in south(?)
peak response: line 30070 (west-flying); 15 channels, 0.4 tau

Anomaly occurs in Cz covered area, with outcrops of resistive, fault-disrupted Ptm to the northwest.

Source is interpreted to be non-outcropping, weathered Tawallah Group or lower McArthur Group material; sharp anomaly enhancement on line 30070 may be related to structural effects, but no evidence is present in the mapping.

No real potential for the anomaly, although the localised (structure-related?) enhancement may be worthy of further consideration.

Anomaly YN9

Discrete zone of weak and moderately anomalous responses present on lines 30110 - 30150 inclusive, possibly extending further north and south.

strike extent: >1 kilometre
strike direction: northeast, possibly swinging to north in the north(?)
peak response: line 30130 (west-flying); 11 channels, 0.35 tau
line 30140 (east-flying); 9 channels, 0.3 tau

Anomaly occurs in Cz covered area, along strike to the north-northeast of east-dipping Pml outcrops.

Source is interpreted to be non-outcropping, weathered Tawallah Group or lower McArthur Group (eg Pml) material; no evidence for source of anomaly enhancement in the mapping. Anomaly may truncate in south at north-south alignment of weak magnetic anomalies.

No real potential for the anomaly, which is adequately explained as an alluvium and weathered rock-type response.

Anomaly YN10

Relatively well-defined, weak-moderately anomalous double-peaked trend present on lines 30130 - 30180 inclusive, possibly extending to the northwest to connect with anomaly YN8.

strike extent: >2 kilometres
strike direction: north-northwest
peak response: lines 30140-30160
line 30160 (east-flying); 11 channels, 0.25 tau

Anomaly occurs in Cz covered area in north, with outcrops of Pml in south where anomaly is better developed; creek-bed Qa crosses area.

Source is interpreted to be non-outcropping, weathered clastic stratigraphy, probably flatly-east-dipping Pml; anomaly enhancement appears to relate to areas of lesser Cz cover.

No real potential for the anomaly, which is adequately explained as a weathered rock-type response.

Anomaly YN13

A sharply-defined, weak-moderately anomalous double-peaked arcuate trend, present on lines 30230 - 30340 inclusive, with a possible extension to the north. An alignment of weak (3-35 nT) positive magnetic anomalies coincides with the western trend.

strike extent: 5 kilometres
strike direction: arcuate, north average
peak response: western trend - line 30240 : 13 channels, 0.45 tau
eastern trend - line 30310 : 13 channels, 0.3 tau

Anomaly trends occur in area of arcuate north-striking, flatly-east-dipping sequence of upper Tawallah Group and lower McArthur Group units.

Source of the western trend, associated with the aeromagnetic anomalies, is interpreted to be non-outcropping, weathered Tawallah Group volcanics (Ptg), between outcropping Pto and Pms. Source of the eastern trend is interpreted to be non-outcropping, weathered McArthur Group clastic stratigraphy (Pml). The north-northeast trending section of the anomaly north of line 30230 probably relates to Pml only, as no magnetic anomaly is associated with this section.

No real potential for these anomaly trends, which are adequately explained as weathered stratigraphy-dependent responses.

Anomaly YN14 - see also Anomaly YC13

A relatively well-defined, weak-moderately anomalous feature in a generally resistive environment, present on lines 30340 - 30420 inclusive.

strike extent: >3 kilometres (open to south beyond survey coverage)
strike direction: approximately north
peak response: line 30370 (west-flying); 11 channels, 0.4 tau

Anomaly trends occur in area of Cz cover, with north-striking Tawallah Group 4 kilometres to the west.

Source of the anomaly is interpreted to be non-outcropping, weathered Pmq, being the northern extension of conductive Pmq interpreted from the 1992 "Yalco Creek" GEOTEM survey results.

Anomaly may indicate stratigraphy of potential interest, but anomaly strength is inferior to that associated with the target stratigraphy elsewhere; in part, anomaly suppression may be attributable to effects from Cz cover.

Anomaly YN15

An area of weak and moderately anomalous trends, present on lines 30360 - 30410 inclusive, with possible subdued continuation to the north and south.

strike extent: >2 kilometres
strike direction: north-northeast
peak response: line 30370 - western trend; 13 channels, 0.35 tau
- eastern trend; 11 channels, 0.35 tau

Anomaly trends occur in area of Cz cover, with north-striking Pmnh to the east and Pmd to the southeast.

Source of the anomaly is interpreted to be non-outcropping, weathered lower McArthur Group clastic material, probably Pml and Pma, but possibly Pmq.

Anomaly could indicate stratigraphy of potential interest, but anomaly strength is inferior to that associated with the target stratigraphy elsewhere; in part, anomaly suppression may be attributable to effects from Cz cover.