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DISC 205
PROJECT A-84-109

AMOCO MINERALS AUSTRALIA COMPANY

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PROGRESS REPORT

JANUARY TO JUNE 1984

OPEN FILE

AMOCO/CSR JOINT VENTURE

PART EXPLORATION LICENCE 15/76

DUNDAS, TASMANIA

G.L. KARY

JUNE 1984

REPORT 396

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SUMMARY AND CONCLUSIONS

The exploration target for the area is a large Irish style carbonate hosted lead-zinc-silver orebody.

Exploration Licence 15/76 was granted to CSR for the period of six months from August 1976 with further 12 month renewals subject to Mines Department approval. Amoco negotiated a joint venture with CSR to farm into a 58 square kilometer portion of EL 15/76 embracing the prospective Gordon Limestone sequence to the east of Amoco's adjoining EL 4/78. The tenement embraces potential shale or carbonate hosted basemetal prospects.

Precambrian basement sediments are overlain by Cambrian sediments and volcanics which are localized within graben structures. These are in turn overlain by Lower Ordovician conglomerate. Transgressive upon these units are Ordovician to Devonian basinal

units including sandstones, siltstones, shales, dolomites and limestones.

During the period work included the following:

Infill gridding at 100 meters over the Professor grid and establishment of a grid over limestone north of the Farrel Rivulet.

Bombardier mounted Jackro auger sampling at Professor grid and Westerway Creek.

A total of 1530 meters of costeans were excavated at the Black Jacks, Mariposa, Bannockburn and Professor grids. Encouraging results were obtained from most trenches. Best results for the four prospects are as follows:

Black Jacks	61050N	- 26 meters of	1.56% Pb,	0.91% Zn,	8.15 g/t Ag
Mariposa	59150N	- 12 meters of	0.99% Pb,	2.72% Zn,	73 g/t Ag
Bannockburn	57647N	- 12 meters of	3.15% Pb,	1.66% Zn,	22 g/t Ag
Professor			Assays pending		

Two lines were surveyed with IP at the Mariposa grid.

VLF surveys over areas of limestone at the Mariposa grid were completed and commenced on the Black Jacks and Bannockburn grids. Good correlation exist between bedrock geochemistry and VLF anomalies.

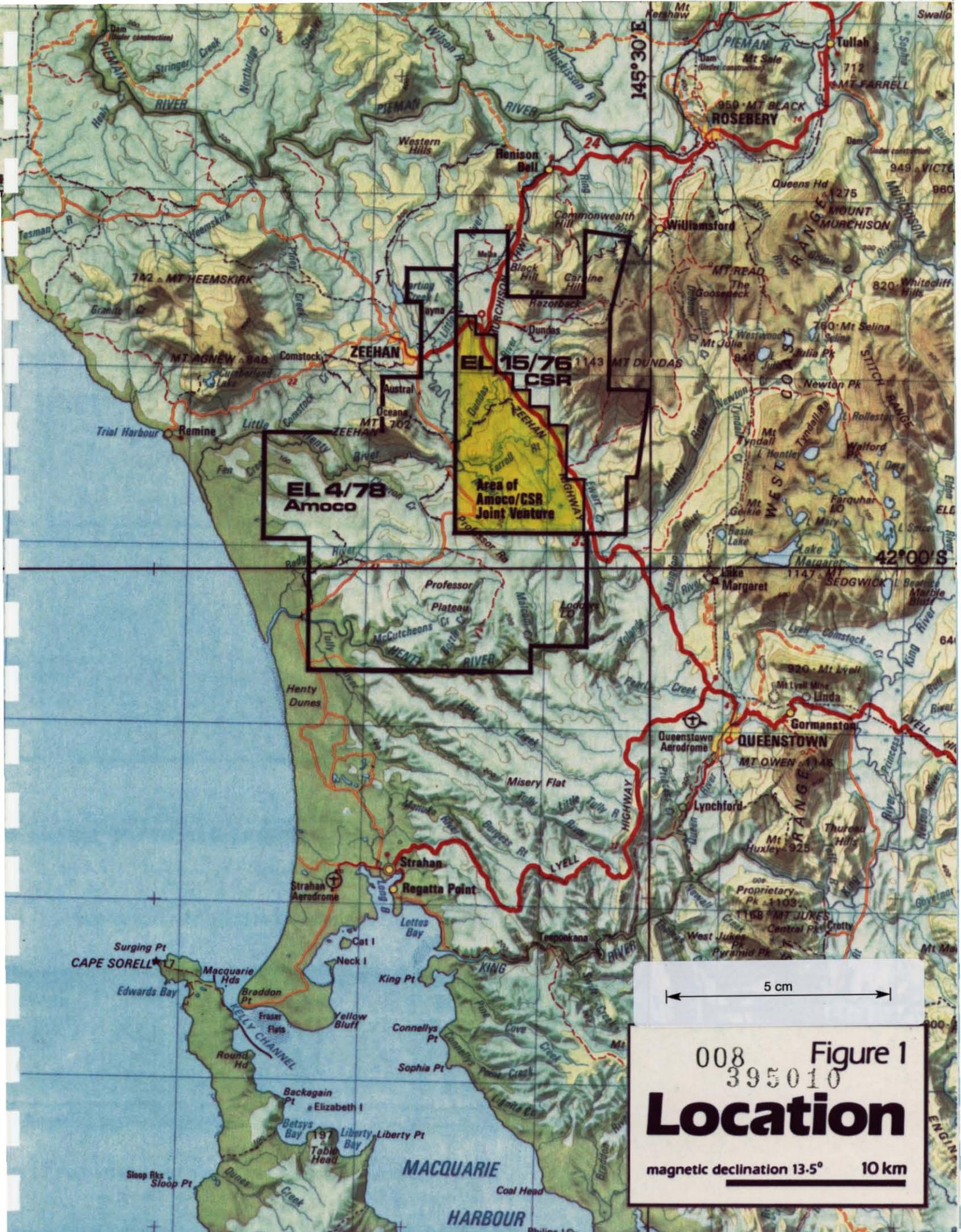
One hole, DTM-84-1 of the 2000 meter diamond drillhole program has been completed.

INTRODUCTION

This report details work conducted under joint venture between CSR Pty Limited and Amoco Minerals Australia Company on part EL 15/76. Amoco negotiated a joint venture with CSR to farm-in to a 58 square kilometer portion of EL 15/76 (Figure 1) to earn a 50% interest.

Details of all work conducted prior to July 1984 were submitted previously by CSR in their October 1981 to February 1982, January to June 1982, July to December 1982, January to June 1983 and July to December 1983 six monthly reports to the Mines Department.

The joint venture area is considered to have excellent potential for a Irish style carbonate hosted lead-silver deposit or a shale hosted lead-zinc deposit.



EL 15/76 CSR

Area of Amoco/CSR Joint Venture

EL 4/78 Amoco

008 Figure 1
395010

Location

magnetic declination 13.5° 10 km

LOCATION AND ACCESS

Exploration Licence 15/76 abuts Amoco's tenement EL 4/78 (Figure 1) three kilometers east of the town of Zeehan (population approximately 5000). The Emu Bay Railway and a sealed road connect Zeehan with the port of Burnie located 140 kilometers to the north. Access within the tenement is relatively good for Western Tasmania as a number of logging tracks and a sealed highway traverse the prospective dolomite-limestone horizons which form topographic lows. Bombadier access is necessary on some grids to conduct the exploration programs.

Zeehan is the service town for the Renison Tin Mine and no difficulties would be anticipated with respect to power, water, labor and transport should a mine be developed. The area has an annual rainfall of 250 centimeters.

DESCRIPTION OF THE PROPERTY AND OWNERSHIP

Amoco Minerals Australia Company negotiated a joint venture with CSR Pty Ltd to farm in to a 58 square kilometer portion of EL 15/76 embracing of the prospective Gordon Limestone sequence to the east and southeast of Amoco EL 4/78 (Figure 1). Exploration Licence 15/76 was granted to CSR for the period of six months from August 1976. Renewal of the tenement for further periods of twelve months is subject to Mines Department approval of previous exploration and proposed programs.

Exploration Licence 15/76 will be due for reduction on August 2 1984.

HISTORY AND EXPLORATION TO DATE

A detailed description of the mining history and exploration carried out within the joint venture area has been summarized in five previous Amoco progress reports on the CSR Joint Venture, Dundas Tasmania:-

October 1981 to February 1982	Amoco Report 287
January 1982 to June 1982	Amoco Report 311
July 1982 to December 1982	Amoco Report 339
January 1983 to June 1983	Amoco Report 358
July 1983 to December 1983	Amoco Report 376

REGIONAL GEOLOGY

Large blocks of Pre-Cambrian sediments form the basement complexes of both northwest and central Tasmania. These are overlain by Cambrian volcanics and marine sediments which host the Rosebery-Hercules, Mt Lyell and MacIntosh (Que River) orebodies.

Overlying these rocks is a sequence of Cambrian to Devonian basinal sediments. This sequence hosts the Renison and Cleveland orebodies.

The above units were intruded by granites during the Devonian and Carboniferous times which introduced the tin mineralization. During the Jurassic and Tertiary periods the sequence was blanketed by basic volcanics. Recent fluvial and Pleistocene glacial erosion have produced the present topography.

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Major folding and block faulting are particularly evident in the Zeehan region. Uplift and folding accompanied accumulation of thick piles of sediment and volcanic material in various troughs during the Cambrian period. The Ordovician was marked by the onset of terrestrial and shallow marine sedimentation (the Owen Conglomerate, Moina Sandstone, and Gordon Limestone). The major deformation accompanied the Paleozoic Tabberaberan orogeny and large northwest trending fold structures were formed.

LOCAL GEOLOGY

Minor Pre-Cambrian Oonah Formation basement rocks comprised of schists, quartzites, siltstones, shales, spillitic lavas and pyroclastics form an infaulted block within the Cambrian Dundas Group in the central eastern portion of the project area.

Cambrian sedimentation appears confined to fault bounded blocks or graben structures abutting the Pre-Cambrian Tyennan Block to the east. The rocks are predominantly rapidly deposited, shallow water sediments including argillites, grits, conglomerates, greywackes and shales with minor cyclical volcanic sedimentation (agglomerates, tuffs and tuffaceous cherts and shales).

The Ordovician to Devonian strata of the Zeehan Basin occur within a series of synclinal structures with north-west axial trends. Mount Zeehan Conglomerate at Mt Misery was deposited

within a graben structure during the upper Cambrian to Lower Ordovician period and is transgressively overlain by micaceous sandstones, siltstones, minor grits, quartzites and shales. These transgressive units are time equivalents of the Moina Sandstone. The Moina Sandstone on a number of the mapped grids, underlies the Ordovician Gordon Limestone with a marked angular unconformity. This is in stark contrast to that observed in detailed mapping of the sequence occurring on the western limit of the basin. The Gordon Limestone is comprised of interbedded limestones and dolomites with numerous debris flow breccia horizons and zones of clastic sedimentation including fossiliferous calc-arenites, siltstones and shales. Siluro-Devonian sediments within the basin are rhythmically interbedded fossiliferous shallow marine quartzites (minor siltstones and shales) and dolomitic to pyritic shales and siltstones.

The Zeehan area has been intensely disturbed by the Paleozoic Tabberaberan orogeny which caused major north-west folding and faulting. Some east and north-west trending fault systems are considered growth faults. These give rise to rapid increases in thickness of the carbonate lithologies on the downthrown side of the fault zones and may also act as conduits for mineralizing fluids. North, northeast striking faults are thought to have developed in post Permian times.

MINERALIZATION

Model

Exploration within the prospective Gordon Limestone has been modelled on the Irish type carbonate hosted sedimentary exhalative lead-zinc-silver deposits. Mineralization, lithological and structurally controlled, occurs as both epigenetic and stratiform bodies within carbonate hostrocks. The deposits are found in close proximity to the locus of major basement sutures (growth faults) and similar intersecting extension faults or dilation faults which act as feeder zones for the mineralizing fluids. Coarse and fine grained galena and sphalerite occur with a carbonate matrix.

The stratiform deposits occur as lenses associated with sedimentary shake breccias which have slumped into sub-basinal depressions formed on the down thrown side of the extension

017

faults and major growth faults. The epigenetic mineralization however is generally found in close proximity to major structures and occurs as veins, veinlets, coarse grained disseminations and small massive sulfide bodies.

Joint Venture Area

Details of the type and extent of mineralization within the joint venture area indicate the major parameters (lithologic, structural and mineralization) fit the Irish model.

Two distinct horizons on the Mariposa prospect (Enclosure 1) containing galena and sphalerite-cerussite and anglesite from the oxidised (ironstone) zone with a pyrite minor siderite matrix lie concordant to bedding. The western zone (assaying up to 10 meters of 11.1% lead, 1.2% zinc and 74 g/t silver) occurs within a down faulted block of limestone and shale breccias which appears to be connected through high angle extension faults to the major northwest trending structure, the Balstrup Fault. The Balstrup Fault cuts the Zeehan basin to the north of the Oceana and is thought to have been an active feeder zone for mineralizing fluids. The eastern mineralized zone (assaying up to 6 meters of 6.2% lead, 5.5% zinc and 257 g/t silver) attains its maximum thickness and values adjacent to the above mentioned extension faults which are regarded as feeder zones and are occasionally manifest by silicification.

Shale breccias and minor clastic units within the Gordon Limestone have been observed during the recent trenching program on the Bannockburn prospect (Enclosure 2). Two separate zones of mineralization occur in a similar stratigraphic level as the western zone on the Mariposa prospect. Values for the southern most zone returned moderate values assaying to 16 meters of 2.4% lead, 1.2% zinc and 13 g/t silver however the north-western zone returned highly anomalous values with 22 meters assaying 3.1% lead, 3.9% zinc and 34 g/t silver. Within this anomaly 6 meters assayed 5.4% lead, 9.7% zinc and 74 g/t silver from a zone of

018

fine grained galena sphalerite interbedded with fissile shaley dolomites and minor breccias. Both zones of mineralization lie in close proximity to major structures which may have acted as conduits for mineralizing fluids.

Breccias have also been observed on the Black Jacks prospect (Enclosure 3) associated with predominantly zinc rich (assaying up to 4 meters of 0.4% lead, 5.0% zinc and 8 g/t silver) mineralization which occurs within a structurally bound block of limestone. A number of major east-west and north-west trending structures cut the prospect with limestone thicknesses invariably thickening on the down thrown side indicating possible growth faulting. Dolomites in the zinc rich area contain laminar syngenetic pyrite interbeds averaging approximately 10% but varying up to 40% over narrow widths.

Similarities in setting and observed mineralization between the joint venture area and the Irish deposits indicate the potential for finding a large tonnage syngenetic sedimentary lead-zinc-silver orebody, or alternatively a number of moderate tonnage orebodies.

WORK CONDUCTED BY AMOCO

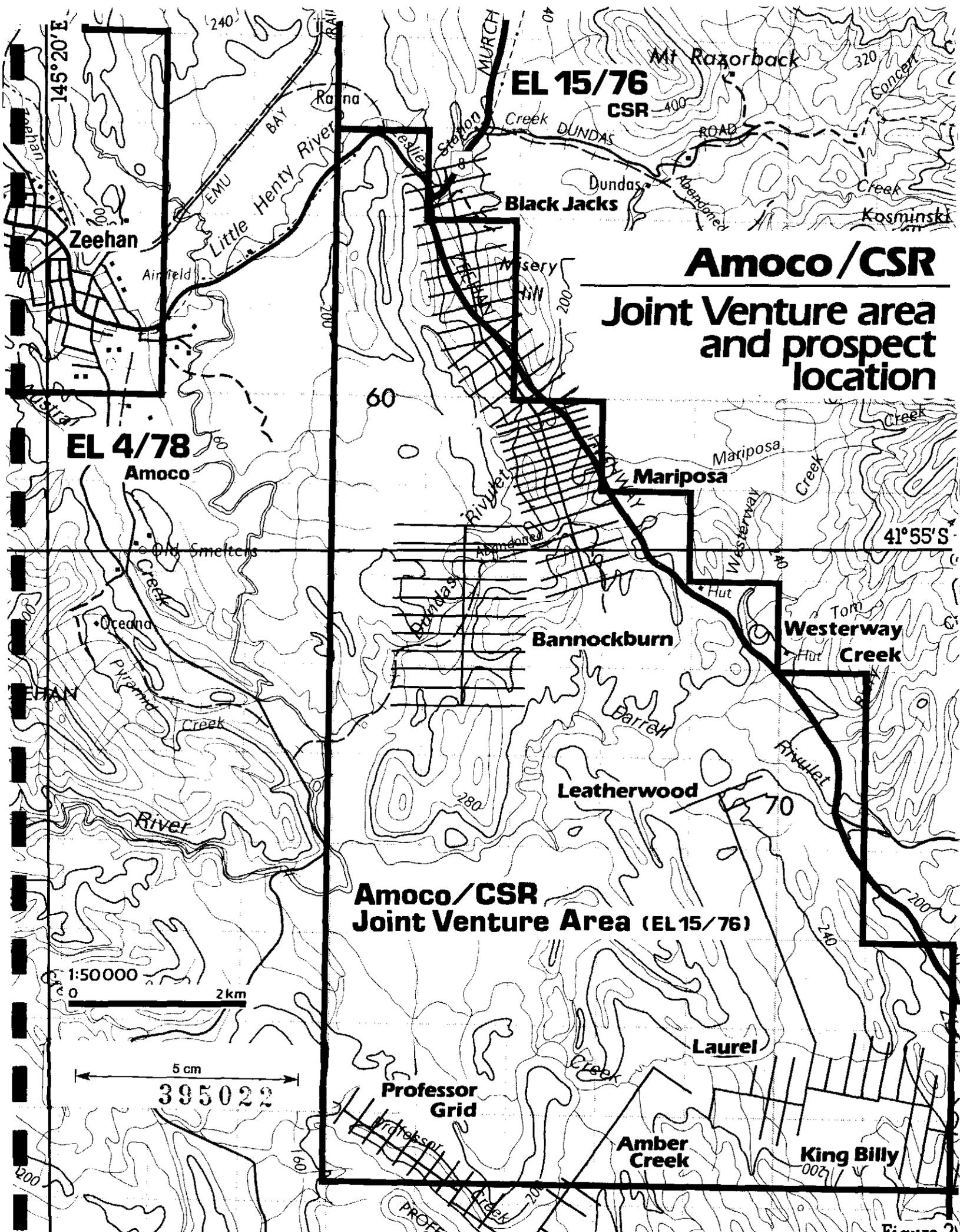
Work during the period entailed gridding, bedrock soil sampling, trenching, geophysical surveying and commencement of a 2000 meter diamond drill program. Figure 2 shows the location of prospects within the joint venture area.

Access

Four kilometers of tracks were graded by bulldozer to provide access to proposed drill sites. Drill pads were formed on all three grids.

Gridding

Three thousand meters of infill gridding at 100 meter spacings were staked on the Professor grid following receipt of anomalous results from the 200 meter spaced bedrock soil sampling program. A total of 4150 meters of grid lines were cut at the Farrel grid to test an area defined by the regional air photo interpretation survey.



Amoco / CSR

**Joint Venture area
and prospect
location**

**Amoco / CSR
Joint Venture Area (EL 15/76)**

Geochemistry

Bedrock Geochemistry:

Bombardier mounted Jackro hydraulic auger sampling has been completed on 200 meter spaced lines to all accessible areas of the Professor grid. Seven short reconnaissance lines were sampled by the Jackro auger at Westerway Creek.

At Professor a 800 by 75 meter zone of anomalous lead/zinc geochemistry (>1000 ppm lead, >1000 ppm zinc) was defined. It lies conformably within the Gordon Limestone in a similar stratigraphic position to mineralization at the Black Jacks, Mariposa and Bannockburn grids (ie near the Gordon Limestone Crotty Quartzite contact). Assays range up to 1.3% lead and 0.73% zinc (Figures 3 to 5).

At Westerway Creek reconnaissance lines were run across a structurally favorable zone in the Gordon Limestone sequence. Access was very limited, lengths of lines varied from 50 to 325 meters. Thick gravels in several areas prevented complete sampling of bedrock. Where penetrated, bedrock assays range up to 3100 ppm zinc and 930 ppm lead (Figures 6 to 8).

Several unsuccessful attempts were made to cross the flooded Little Henty River to sample the Farrel grid. Sampling will commence when access and personnel availability allows.

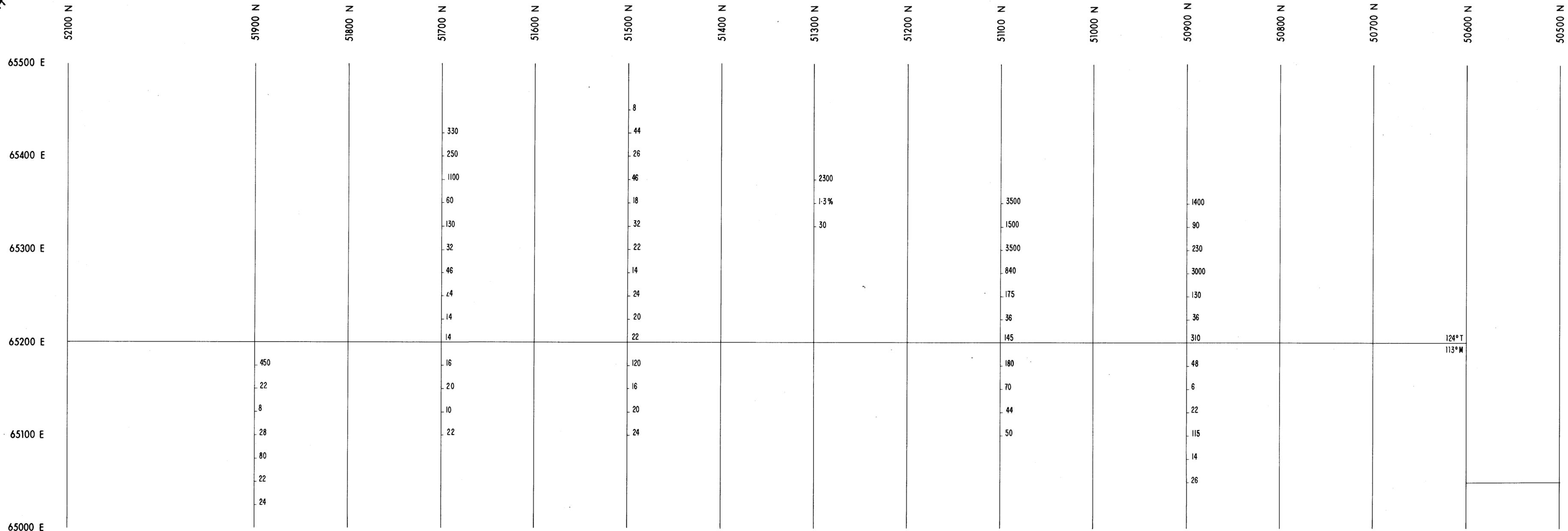
Previously unreported Jackro and hand auger assays at Mariposa grid are included in this report (Enclosures 4 to 8).

Costeaning

Twenty two costeans totalling 1530 meters were excavated on the joint venture area by Groves Contracting of Renison Bell. Five trenches totalling 484 meters on the Black Jacks grid (Enclosure 9), five trenches totalling 294 meters on Mariposa grid (Enclosure 10), eight trenches totalling 444 meters on Bannockburn grid (Enclosure 11) and four trenches totalling 308

021A

021B
395024



M84-2239

5 cm

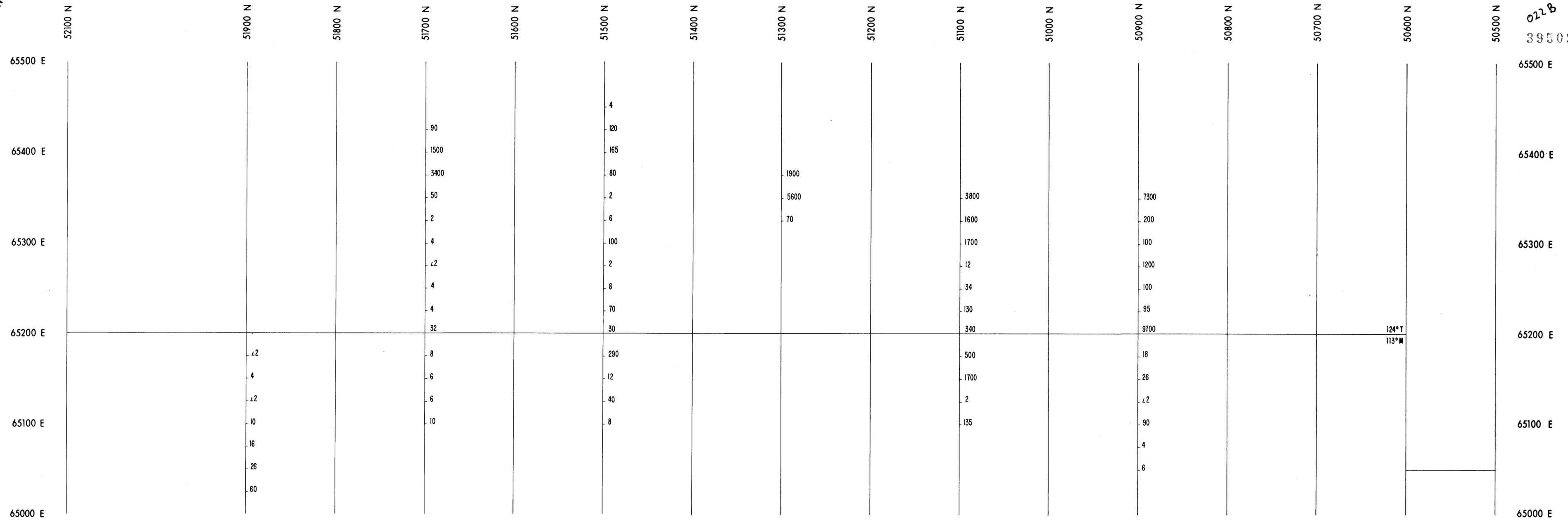
values in ppm scale 1:25000

Professor Grid
BEDROCK GEOCHEMISTRY
LEAD

Figure 3

0228

0228
395025



124°T
113°W

5 cm

values in ppm scale 1:25000

Professor Grid
BEDROCK GEOCHEMISTRY
ZINC

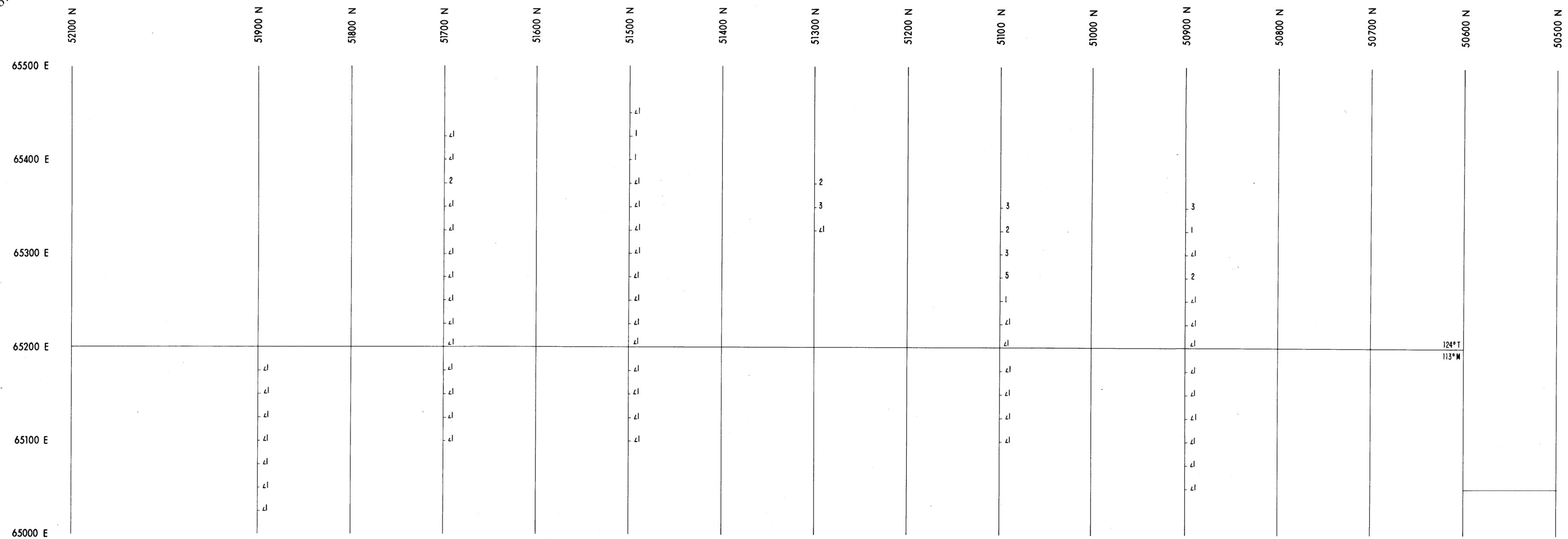
M84-2240

Figure 4

023B

023B

395026



M84-2241

5 cm

values in ppm scale 1:25000

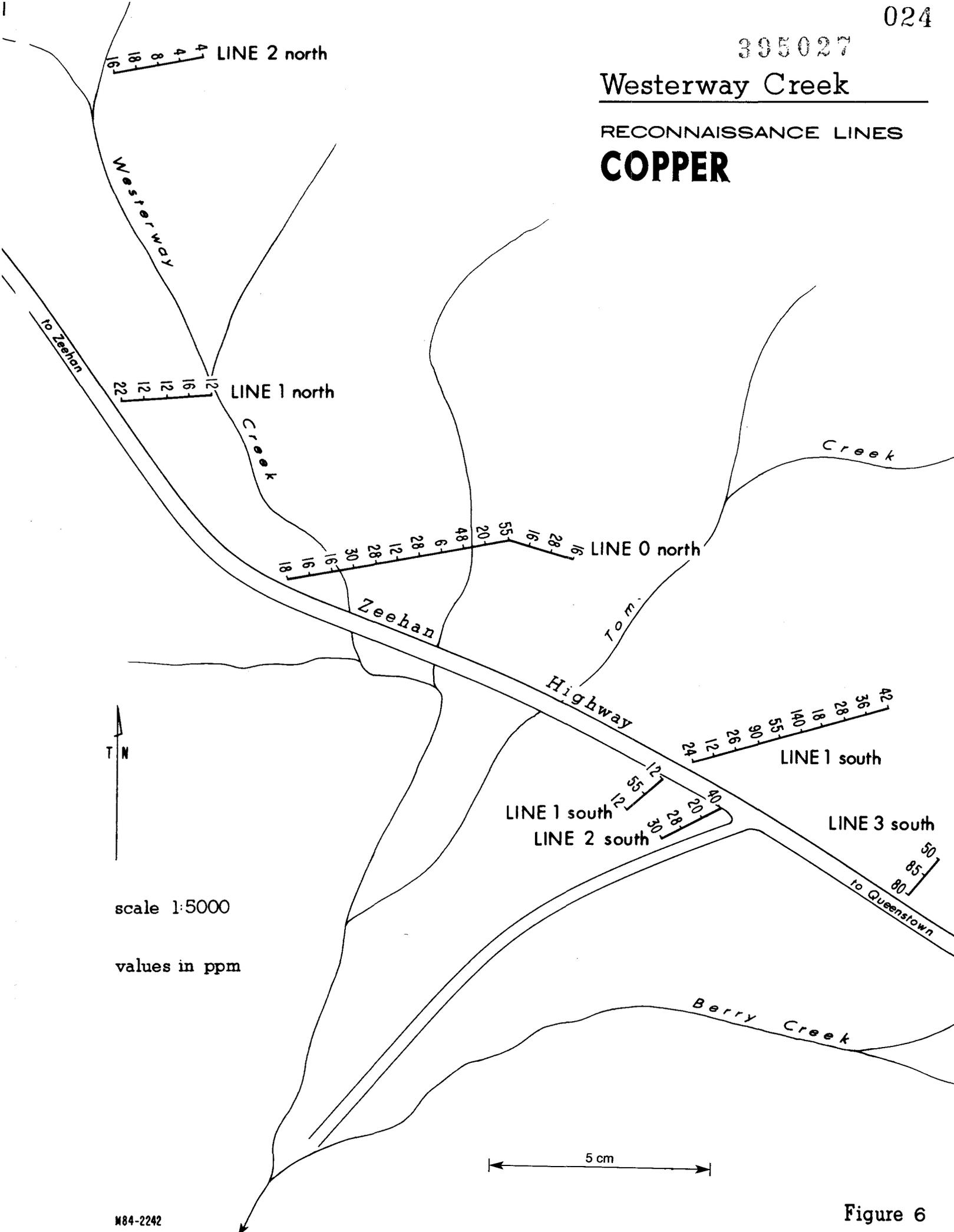
Professor Grid
 BEDROCK GEOCHEMISTRY
SILVER

Figure 5

Westerway Creek

RECONNAISSANCE LINES

COPPER



scale 1:5000

values in ppm

5 cm

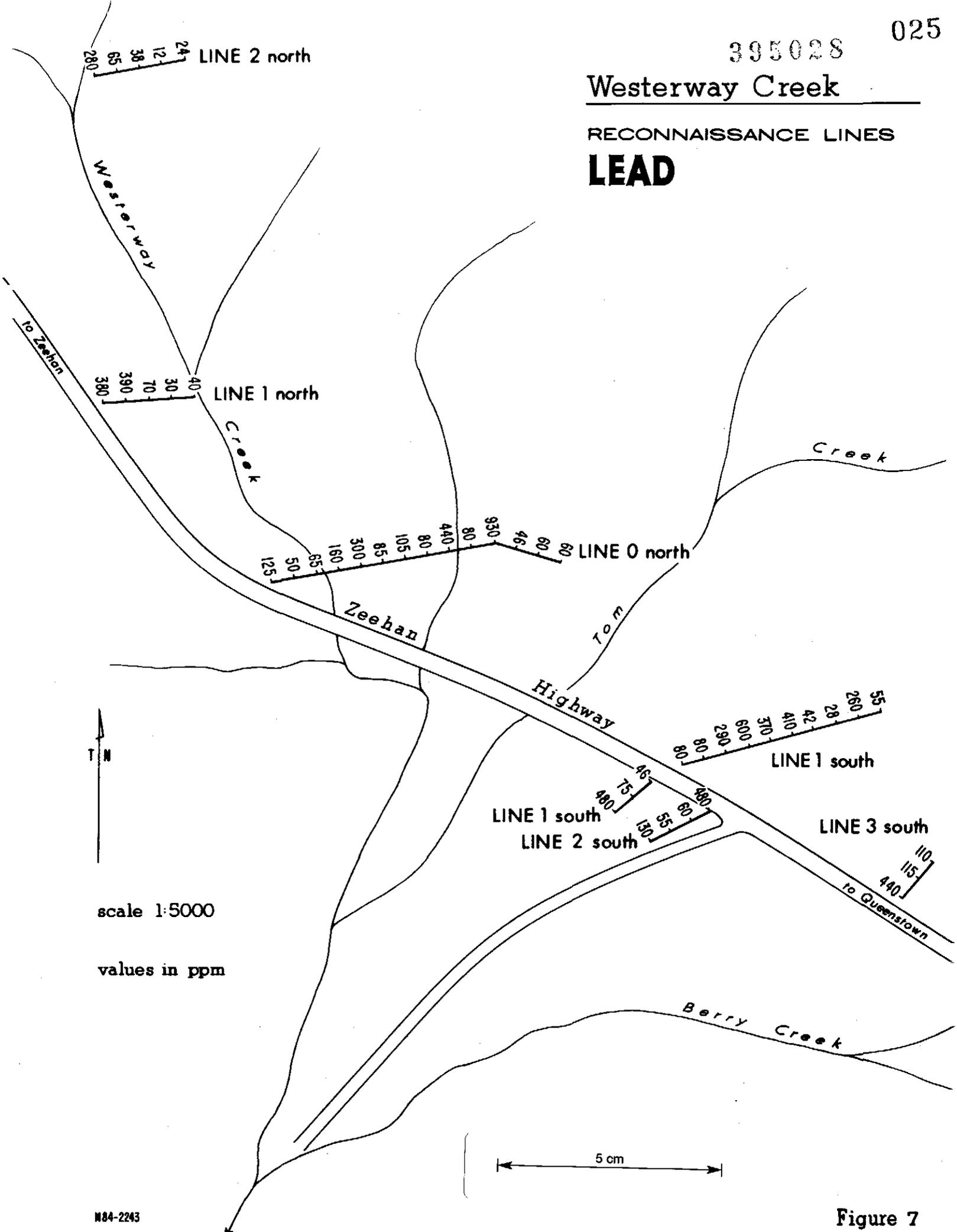
Figure 6

395028

Westerway Creek

RECONNAISSANCE LINES

LEAD



scale 1:5000
 values in ppm



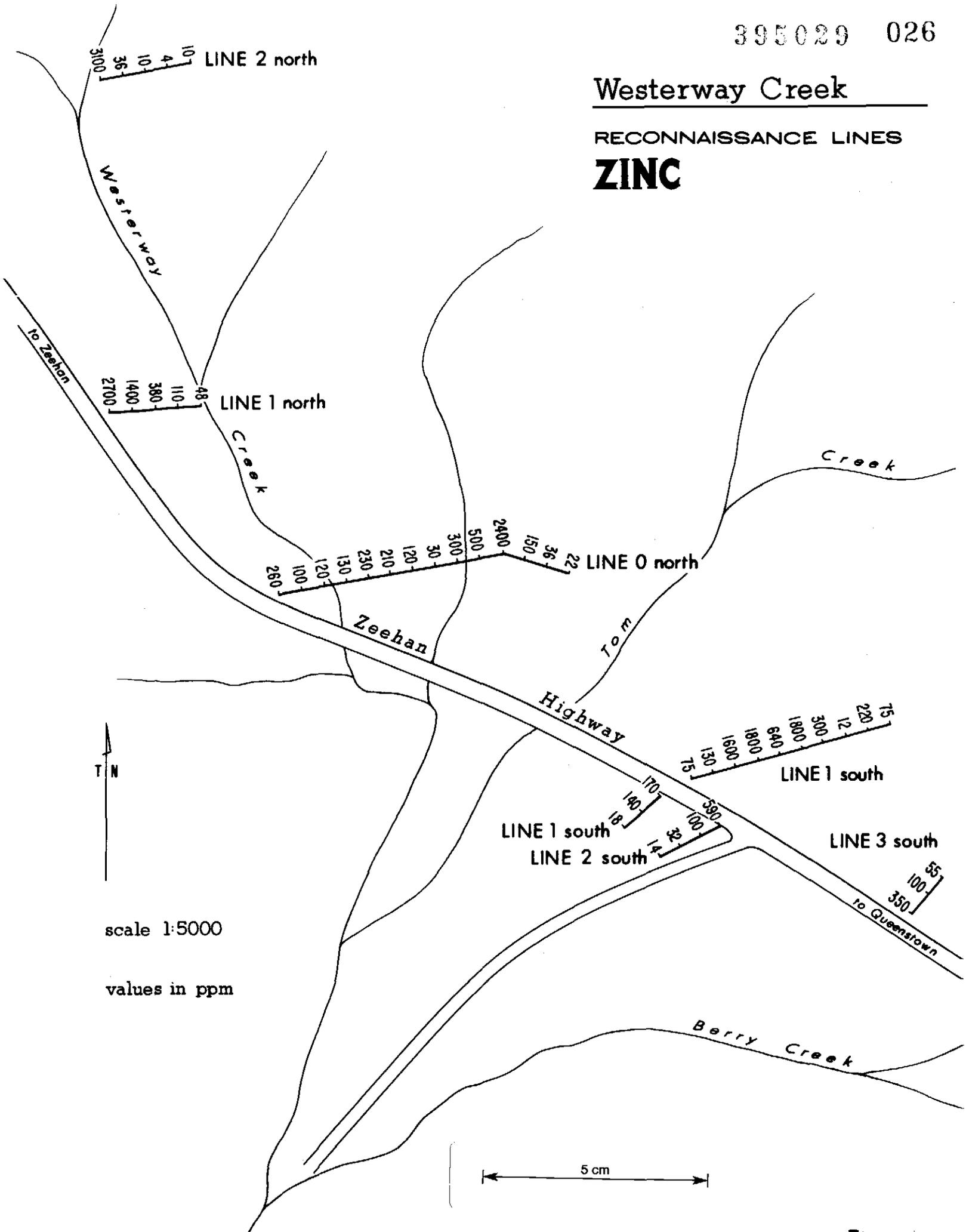
5 cm

Figure 7

Westerway Creek

RECONNAISSANCE LINES

ZINC



scale 1:5000

values in ppm

5 cm

027

meters on the Professor grid were sampled. Costean profiles are included as Appendix 1. Assays are awaited for the Professor costeans and profiles will be included in the next report.

At Black Jacks the trenches were designed to test for extensions to the north and south of previously defined mineralization and determine the source of anomalous bedrock geochemistry on lines 60700N and 60600N. The best results are from line 61050N where 26 meters of 1.56% lead, 0.91% zinc, 8.15 g/t silver were intersected 50 meters north of a previously defined 22 meter lead, zinc, silver zone. Mineralization appears to be increasing to the north towards a major cross cutting fault. Additional trenching to the north is not possible as mineralization trends under the Lyell Highway. Scattered mineralization was also intersected near the Crotty Quartzite/Gordon Limestone on lines 60650N and 60700N.

Following recommendation by CSR double sampling of a number of two meter intervals was completed. One sample was taken as a channel sample from both walls inside the costean. The second sample was from a bulk sample removed by the excavator. Each sample represents a two meter interval (Table 1).

TABLE 1 - SAMPLE PROCEDURE COMPARISON

Sample	Lead		Zinc		Silver	
	A	B	A	B	A	B
103517	370	0.97%	0.185%	0.97%	1.5	44
103518	0.39%	660	0.79 %	0.285%	118	3.0
103519	905	0.34%	0.38 %	0.75%	4.0	13.0
103520	0.27%	0.59%	0.69 %	1.20%	5.0	19
103522	0.415%	970	0.39 %	0.385%	1.0	2.5
103523	1.49%	1.11%	2.79 %	1.73%	104	33
103524	0.97%	0.44%	2.03 %	1.17%	37	9
103525	535	425	0.275%	0.22%	1.5	1.5
103526	580	195	0.285%	0.135%	0.5	2.0
TOTAL	3.774%	3.675%	7.815%	6.845%	272.5	127.0

ppm unless indicated

A = 2 meters bulk excavator sample

B = 2 meters channel sample (both walls)

Initial comparison of the two sample techniques indicates the excavator sample will produce slightly more anomalous results especially for zinc and silver. Where possible double sampling will be undertaken in future costeans to enlarge our data base.

At Mariposa infill lines at 50 meter spacings were trenched to better define mineralization encountered to date. All trenches intersected anomalous mineralization. Best results were associated with the eastern fault zone. Line 59150N assayed 12 meters of 0.99% lead, 2.72% zinc, 73 g/t silver. This is 50 meters south of previously trenched line 59200N which assayed eight meters of 3.3% lead, 6.2% zinc, 395 g/t silver. On the western mineralized zone line 59250N intersected 10 meters of 0.79% lead, 0.38% zinc, 11 g/t silver 50 meters north of a previously defined 22 meters of 1.0% lead, 0.2% zinc, 63.6 g/t silver on line 59200N. Line 59550N assayed 14 meters of 1.00% lead, 2.38% zinc, 9 g/t silver which is 50 meters south of previously trenched line 59600N which assayed 14 meters of 1.36%

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lead, 3.05% zinc, 16.6 g/t silver.

At Bannockburn seven trenches were excavated in the Sunny Corner area and one partial trench directly over the old Bannockburn workings. Trenching at Sunny Corner was designed to test the continuation of intersected mineralization around a mapped anticline. Minor ironstone outcrop and small workings occur at the same stratigraphic position around the anticline. Trenching now provides coverage at 50 to 100 meter spacings across the prospective horizon. There is minor mineralization in all trenches near the Crotty Quartzite/Gordon Limestone contact. Fourteen meters of 0.60% lead, 1.25% zinc, 9 g/t silver were intersected 50 meters west of a previously trenched 22 meters of 3.1% lead, 3.9% zinc, 34.3 g/t silver. A six meter interval of 3.64% Pb, 0.46% zinc, 6 g/t silver is associated with abundant ironstone on the northern limb of the anticline.

The costean over the old Bannockburn workings was not completed due to boggy ground. Trenching was stopped short of the inferred trend of mineralization.

At Professor mineralization was observed over an approximate 10 meter width and strike length of 400 meters (still open along strike). As at the Black Jacks, Mariposa and Bannockburn grids mineralization occurs within limestone near the Gordon Limestone/Crotty Quartzite contact. Extensive dolomite is the present footwall to observed mineralization. Assays results are pending.

Geophysics

Induced Polarization:

A dipole-dipole IP survey was conducted at Mariposa on lines 59200N and 59400N using dipole spacings of 50 and 100 meters (Appendix 2). Results showed strong correlation with known geology and indicate the Gordon Limestone is a highly chargeable (well mineralized) rock unit in the area. Minor correlation

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exists between costeans and chargeability/resistivity anomalies.

VLF:

All of the Mariposa grid and costeanned portions of the Black Jacks grid were surveyed using Amoco's Crone VLF meter. Northwest Cape was used as a source signal. Good correlation exists between VLF anomalies and soil sampling/trenching results. John Bishop (Mitre Geophysics) was contracted to plot and interpret results (Appendix 3).

It is intended to survey all other grids using VLF as good correlation exists between anomalies and known mineralization. Following recommendation by John Bishop some test lines will be run at Mariposa using Japan as a source signal.

Drilling

A 2000 meter diamond drill program has been proposed to test indicated mineralization at the Black Jacks, Mariposa and Bannockburn grids. A summary of all proposed holes is tabled below.

TABLE 2 - DRILLHOLE PROPOSALS

Black Jacks Prospect

Location	Azimuth/Dip	Target	Target Depth
67100N:76155E	75°:-60°	Source of 20m of 1.7% Pb, 1.2% Zn, 6.6g/t Ag costean result	42-84m
60830N:67200E	75°:-50°	Source of 16m of 0.2% Pb, 1.9% Zn, 4.3g/t Ag costean result	82-92m

Mariposa Prospect

Location	Azimuth/Dip	Target	Target Depth
59200N:67250E	72°T:-47°	Source of 8m of 3.3% Pb, 6.2% Zn, 395g/t Ag costean result. Test VLF anomaly	74-104m
59161N:67040E	42°T:-50°	Source of 22m of 1.0% Pb, 0.2% Zn, 63.6g/t Ag costean result	90-120m
58950N:67000E	72°T:-60°	Test under old Mariposa workings. Source of 10m of 11.1% Pb, 1.2% Zn, 74.5g/t Ag costean result	80-125m
58800N:67250E	72°T:-52°	Source of 22m of indicated mineralization (including 6m of 6.2% Pb, 5.5% Zn, 257g/t Ag	60-100m

Bannockburn Prospect

Location	Azimuth/Dip	Target	Target Depth
57800N:65870E	91°T:-45°	Test under old workings on L 57800N. Source of anomalous soil geochemistry	5-20m and 70-90m
57710N:65315E	60°T:-45°	Source of 22m of 3.1% Pb, 3.9% Zn, 34.3g/t Ag costean result	85-130m
57000N:65712E	91°T:-52°	Source of 35m of 0.5% Pb, 0.7% Zn, 2.6g/t Ag costean results. Testing under old Bannockburn workings	90-125m
56900N:65700E	91°T:-50°	Source of 26m of 1.8% Pb, 0.8% Zn, 10.8g/t Ag costean results. Testing under old Bannockburn workings	70-115m

Completed Holes

Mariposa Prospect:

Hole	Location	Remarks
DTM-84-1	58800N:67250E	Final depth 126 meters in
	0 - 113.4	Gordon Limestone. Trace galena at 60.4m. Minor sphalerite at 82.7-82.8m Caving and weathered limestone at 64-113m
	113.4 - 126.0	Dundas Group Sediment (Assay results included as Appendix 4).

EXPLORATION POTENTIAL

The tenement is considered to have excellent potential for the location of Irish style carbonate hosted lead-zinc orebodies.

PROPOSED PROGRAM

Infill auger and costean sampling on the Professor grid.

Auger sampling of the Farrel grid.

Run several lines at Mariposa using a Marlow Flow Through Sampling Unit to test its effectiveness where thick gravels preclude using the Jackro.

Follow up of anomalous stream samples is to be carried out during the coming summer field season.

VLF surveying over airborne EM and Turam responses delineated from Mitre Geophysics compilation survey plus additional reconnaissance lines across airborne magnetic anomalies.

SIGNED: ... *G.L. Kary* ...

G.L. KARY

035

AMOCO MINERALS AUSTRALIA COMPANY

EXPENDITURE FOR THE PERIOD NOVEMBER 1, 1983 TO JUNE 30, 1984

EXPLORATION LICENCE NO 15/76

Salaries and Wages	29,620.91
Supplies	383.99
Cookery	5,461.33
Field Office Rent	1,636.90
Field Supplies	11,543.38
Freight	1,371.03
Travel	980.48
Communications	3,361.79
Consultants/Contractors	26,678.52
Drilling	55,000.30
Assays	9,529.47
Equipment Operation & Maintenance	15,688.18
Outside Services	<u>2,214.24</u>
	163,470.52
Overhead	<u>16,347.04</u>
	<u>179,817.56</u>

T.J. CONQUEST
ACCOUNTANT

036

395039

APPENDIX 1

COSTEAN PROFILES - BLACK JACKS, MARIPOSA, BANNOCKBURN



costean profile

Project C.S.R. J.V.	NO A84-109	Commenced MAY 15 1984
Prospect Blackjacks		Completed MAY 16 1984
Coordinates:	Line 60650N 67220E to 67364E	Logged by G. Kary
Total length	144 m	Sample length 2m
		Scale 1cm = 2m 1:200

Assays <small>X = Below Detection Limit</small>				Graphic geology <small>5m</small>	Meter-age	Geologic description <small>py - pyrite gn - galena sp - sphalerite</small>
Cu	Pb	Zn	Ag			
25	365	2050	0.5			
25	170	3350	X		←	LIMESTONE - Grey, minor calcite veins, mixed with dark greenish grey mud.
25	360	1200	0.5		←	LIMESTONE - Weathered to dark grey sloppy clay. Minor carbonate veining
30	150	1500	X			
30	150	1450	X		←	SANDSTONE? - Dark grey very sandy clay. Quite hard in places. Up to 1% py
25	195	1250	X			
20	295	2300	X		←	LIMESTONE? - Black moderately bedded clay. Minor silicified coral fragments. Trace py. Bedding?? 010/50W
50	440	750	X			
30	255	445	X		←	SILTY LIMESTONE? Dark grey clay, (slightly greenish) slightly silty. Variably ferruginous overburden Trace py
40	290	650	X			
60	80	470	X		←	SILTY LIMESTONE? Dark grey clay, (slightly greenish) slightly silty. Variably ferruginous overburden Trace py
150	310	450	X			
55	110	325	X			
35	95	380	X			
30	140	645	X			
25	50	590	X			
20	35	460	X		←	SILTSTONE - Dark grey, micaceous. Minor shell casts/moulds. Minor quartz veining
20	30	490	X			
20	30	295	X			
15	115	655	X		←	BRECCIA? - Black fragments in a khaki matrix. Trace py
20	125	430	X			
20	130	1250	X		←	SILTY LIMESTONE? - Dark green-grey, slightly silty clay.
20	270	1400	X		←	LIMESTONE? - Dark grey clay, slightly silty. Minor silicified coral and/or bryozoa fragments
25	95	500	X			
20	45	330	X			
25	55	240	X			
20	70	295	X			
15	40	515	X		←	LIMESTONE? - Grey clay. Minor py
25	120	940	X			
20	405	1650	X		←	SILTY LIMESTONE? - Dark grey, slightly silty clay. Minor py. Large silicified coral (specimen at Zeehan office)
25	190	1750	X			
20	95	910	X		←	LIMESTONE? - Grey poorly bedded, minor sandy horizons
20	100	525	X			
20	45	640	X			
20	80	695	X			
20	625	1350	0.5		←	LIMESTONE? - Black, moderately carbonaceous clay. Minor py. Up to 1% gn, sp
30	1495	2225	31		←	LIMESTONE? - Dark grey to grey. Minor remnant carbonate veins. Trace py. Variably fissile
15	1200	2750	13.5			
15	495	1400	1.5		←	DOLOMITE - Black, finely crystalline, minor calcite veins. Minor vuggy patches. Trace LIMESTONE.
15	90	515	X			
10	205	1500	X			
10	190	1150	X			
15	335	1000	X			
15	415	2050	1.0			
25	115	1250	X		←	SHALE - ? - Grey finely bedded clay. Moderately fissile
20	1235	0755	24		←	SILTSTONE? - Dark grey, blocky, quite hard clay. Moderately bedded. Minor coral/bryozoa frags.
20	2150	4950	0.5			
20	2950	4400	X			
15	1150	2700	0.5			
15	915	2600	0.5			
20	520	1450	1.5		←	LIMESTONE? - Black to dark grey, moderately bedded, clay, 1-2% py, minor gn/sp
25	0595	1815	26		←	SANDY LIMESTONE? - Dark grey moderately bedded sandy clay. Variably carbonaceous. Minor py. Up to 2% gn, sp
20	1055	0735	17			
20	115	3000	0.5			
20	205	5200	1.0			
20	355	1850	1.0		←	LIMESTONE? - Dark grey clay. Minor fossils. Trace gn. Up to 1% py
20	270	1500	1.0			
50	1650	3450	1.5			
30	725	3900	2.0		←	LIMESTONE? - Black poorly bedded clay. Moderately carbonaceous. Up to 5% py parallel to bedding. Trace quartz vein fragments. Minor possible ex-carbonate spots.
50	735	5400	2.5			
40	910	1500	1.0			
50	0825	1408	11		←	SANDY LIMESTONE? - Dark grey slightly sandy clay. Variably carbonaceous. Up to 10% py. Minor BRECCIA
55	0425	2148	8			
30	605	1700	1.8			
20	405	1100	0.5		←	LIMESTONE? - Dark grey to black clay. Up to 1% py. Up to 1% gn, sp as small vein? at 015°/60°W
30	615	5050	2.5			
40	550	8150	1.0			
30	915	3750	1.0			
35	450	3800	1.5			
45	1300	2200	2.5			
35	575	2700	4.5			
110	1550	890	2.0			



costean profile

Project C.S.R. J.V. NPA 84-109	Commenced MAY 12 1984
Prospect Blackjacks	Completed MAY 14 1984
Coordinates: Line 60700N 67228E to 67360E	Logged by G.Kary
Total length - 132 m	Sample length 2 m
	Scale 1cm = 2m 1:200

Assays X = Below DETECTION LIMIT				Graphic geology 5m	Meter-age	Geologic description py - pyrite gn - galena sp - sphalerite
Cu	Pb	Zn	Ag			
20	555	2950	1.5			LIMESTONE? - Grey and black clay, minor root and other organic material. Trace py
15	165	500	0.5			
15	210	580	0.5			LIMESTONE? Dark grey clay. Hydrocarbon odour
15	145	570	X		py	Minor py
20	225	1200	X		67350E	
25	290	3900	0.5			SILTSTONE - Weathered to khaki to grey silty micaceous clay. Minor quartz vein fragments. Minor bedding 000/90° (poor quality measurement)
20	415	1450	0.5			
25	360	1550	1.0			
65	325	1100	1.5			
15	465	2950	0.5		67340E	
20	425	3600	X			CALCAREOUS SHALE? Black fissile clay. Minor silicified coral stems
20	85	1150	X			LIMESTONE? - Black clay, minor silicified coral stems
25	70	1200	X			
15	55	340	X			
20	70	445	X		67330E	SANDY LIMESTONE? - Grey slightly sandy clay. Poorly bedded. Minor black SILTSTONE fragments with rare cast/moulds of trilobites
20	85	650	X			
15	165	1300	0.5			CALCAREOUS SHALE? - Grey finely laminated fissile clay. Strong H ₂ S odour. Possible slickensides
15	105	640	X			
20	105	655	X			
20	145	1300	X		67320E	SILTY LIMESTONE? - Dark grey silty calcareous clay
15	225	1750	0.5			
15	165	1450	0.5			LIMESTONE? - Mottled dark grey to black clay. Minor py
20	110	1200	X			LIMESTONE? - Grey finely laminated clay. Minor gritty horizons
20	330	3150	1.5			
20	950	2600	3.0		py 67310E	LIMESTONE? - Black clay, abundant quartz fragments. Minor silicified coral fragments. Up to 5% py
20	245	1000	0.5			
20	40	360	X		py gn sp	LIMESTONE? - Grey well bedded clay. Minor pods of black pyritic clay. Trace gn/sp in black
30	70	770	X			
20	320	240	X			SILTSTONE - Black, vuggy, vugs after partially weathered out coral fragments. Possible FOSSIL BRECCIA.
40	365	105	X		67300E	
35	260	105	X			
20	160	100	1.0			
25	240	85	X			SANDSTONE - Pale green and orange. Fine grained. Well bedded. Slightly folded. Axial plane 000/80° E. Fold axis 23°/125°
25	145	250	X			SANDSTONE - Black, fine grained, intense limonitic staining. Well bedding. Bedding 155°/70° W
30	1150	2950	X		67290E	
15	305	965	X			LIMESTONE - Black, partially weathered to grey calcareous clay
15	445	1600	X			
25	145	3100	X		py	LIMESTONE? - Dark grey to black clay, poorly bedded. Strong hydrocarbon odour. 1% py, rare gn
30	425	2450	1.5		py gn	
20	190	1350	X		67280E	LIMESTONE? - Grey poorly bedded clay, rare silicified coral fragments
20	125	825	X			
25	2200	4250	2.5		sp	LIMESTONE? - Dark grey to black well bedded clay.
25	525	2350	1.0		sp py	Trace py. Slightly silty. Up to 1% sp, trace gn
25	935	9750	2.0		sp py gn	
25	525	4050	1.5		py 67270E	
25	1400	8950	2.0			LIMESTONE? - Bedded dark grey and grey clay
25	120	2250	X			
30	1400	6300	3.0		py sp	BRECCIA? - Black clay fragments in a dark grey clay matrix. Rare sp, minor py
30	650	6950	2.0			
20	255	3150	0.5		67260E	LIMESTONE? - Grey clay, finely bedded. Abundant carbonaceous plates
25	580	2950	0.5			
20	535	2150	1.5		py	LIMESTONE? - Dark grey clay, poorly bedded. Up to 2% gn/sp. Minor py
30	0.97%	2.03%	37		gn sp	
165	1.47%	2.72%	104		gn sp	
20	4150	3900	1.0		67250E	SILTY LIMESTONE? - Dark grey to dark khaki silty clay
20	5100	3900	2.0			LIMESTONE? - Dark grey clay poorly bedded. Moderate quartz vein fragments. Minor gn/sp in vein at 135°/85° E
30	2700	6900	5.0		gn sp	
30	905	3900	4.0			LIMESTONE? - Grey finely laminated clay. Minor quartz veinlets
30	0.39%	0.74%	118		gn, sp, py	SANDY LIMESTONE? - Dark grey to khaki sandy clay. Abundant quartz veinlets. Minor gn, sp, py
25	370	1950	1.5		gn sp 67240E	
40	1100	1200	0.5			
30	1900	800	0.5			LIMESTONE? - Dark grey clay, abundant carbonaceous lamina (possible ex-stylolites). Trace py. Minor quartz
40	1800	720	0.5		py	
485	3950	765	4.0			SILTY LIMESTONE? - Dark grey to khaki slightly silty clay
1225	0.35%	0.14%	36		67230E	
30	520	1150	1.0		py	LIMESTONE? Grey to dark grey clay. Abundant carbonaceous plates
					67220E	



Project C.S.R. J.V. Nº A84-109	Commenced MAY 11 1984
Prospect Blackjacks	Completed MAY 12 1984
Coordinates: Line 60750N 67240 to 67354	Logged by G. Kary
Total length 114m	Sample length 2m
	Scale 1cm = 2m 1:200

Assays X = Below Detection Limit				Graphic geology 5m	Meter-age	Geologic description py - pyrite gn - galena sp - sphalerite
Cu	Pb	Zn	Ag			
25	45	345	X			
20	75	910	X		67350E	SILTSTONE? - Dark grey to khaki silty clay. Minor shaley horizons. Bedding 156°/80°W, 158°/85°W
20	85	1000	X			SILTSTONE - Weathered to a hard dark grey silty, slightly micaceous clay
20	70	900	X			Bedding 152°/85°E, 170°/75°W.
45	75	745	X			
15	140	900	X			SANDY LIMESTONE? - Black sandy clay, minor carbonaceous plates. Trace py along fractures
20	105	745	X		67340E	
25	100	650	X			SANDY LIMESTONE? - Black sandy clay. Minor BRECCIA (black well bedded clay in black sandy clay matrix)
20	215	1300	0.5			
15	275	220	0.5			BRECCIA? - Mottled grey and black clay. Grades into a fine grey sand. Trace gn as fragments
15	510	630	0.5			
25	865	1550	2.5		67330E	Minor py. Possible SANDSTONE pebbles. May be OVERBURDEN.
20	155	325	X			
20	135	670	X			
20	30	1800	X			SILTSTONE - Weathered to black silty, micaceous clay. Minor kinking of beds. Trace py
20	35	1900	X			
20	30	1500	X		67320E	
15	40	625	X			
15	50	620	X			
15	125	1300	0.5			LIMESTONE? - Grey well laminated clay, minor SHALE fragments
15	135	9750	X			SILTSTONE - Weathered to grey micaceous silty clay
20	155	3100	X		67310E	LIMESTONE? - Dark grey clay, minor pyrite
20	240	2000	0.5			SANDY LIMESTONE? - Grey well bedded sandy clay and black sandy clay. Minor py
25	270	1450	0.5			
20	95	255	X			
15	75	260	X			CALCAREOUS SHALE? - Grey, well bedded fissile clay
15	90	370	0.5		67300E	SANDY LIMESTONE? - Black slightly sandy clay
20	695	4100	2.5			LIMESTONE? - Grey well bedded clay, slightly carbonaceous
15	250	1800	0.5			LIMESTONE? - Black poorly bedded clay. Minor quartz rich horizons. Trace gn
20	310	1550	0.5			
15	95	345	X			LIMESTONE? - Grey slightly sandy clay. Trace py
15	100	535	X		67290E	BRECCIA? - Angular dark grey clay fragments in a grey clay matrix. 1% py
20	145	945	0.5			
25	270	1500	0.5			LIMESTONE? - Dark grey to black clay. Minor carbonaceous plates. Up to 1% py
20	230	1150	0.5			
15	125	600	0.5			
15	220	650	0.5		67280E	BRECCIA? - Grey clay containing fragments of black well bedded clay. Trace py
20	115	865	X			
15	165	1300	X			
15	235	1450	1.0			LIMESTONE? - Dark grey clay. Trace py
15	135	995	X			SANDY LIMESTONE? - Black sandy clay. Trace gn
15	80	625	0.5		67270E	LIMESTONE? - Dark grey to black clay. Slightly carbonaceous. Minor py
15	260	1350	0.5			
15	155	450	0.5			SANDY LIMESTONE? - Mottled grey sandy clay. Minor sp, trace gn. Minor py
35	3600	4300	3.5			
25	345	1650	0.5			BRECCIA? - Angular khaki clay fragments in a dark grey clay matrix. Rare gn.
20	345	1800	1.0		67260E	
15	165	1400	0.5			
15	125	1600	0.5			LIMESTONE? - Banded dark grey and khaki clay
15	270	1900	X			Trace gn, py
20	315	1900	X			LIMESTONE? - Dark grey poorly bedded clay. 1-2% py. Trace gn/sp
20	195	1400	X		67250E	SANDY LIMESTONE? - Black slightly sandy clay. Up to 5% py. Minor BRECCIA (black clay in dark grey clay matrix) Rare sp
20	330	1450	0.5			
25	950	4300	0.5			
15	940	2300	1.0			LIMESTONE? - Dark grey to black clay. Up to 5% py.
30	440	1800	0.5			
55	2200	4900	2.5		67240E	



Project C.S.R. J.U.	NO A84-109	Commenced MAY 10, 1984
Prospect Blackjacks		Completed MAY 11, 1984
Coordinates: Line 60800N	67198 E to 67250 E	Logged by G. Kary
Total length 52 m		Sample length 2m
		Scale 1cm = 2m
		1:200

Assays X= Below DETECTION LIMIT				Graphic geology	Meter-age	Geologic description	
Cu	Pb	Zn	Ag				
10	145	950	X			LIMESTONE - Grey, finely crystalline. Minor calcite veining. Partially weathered to grey clay.	
10	195	410	X				
15	255	835	X				
15	140	1950	X		← PY	LIMESTONE? - Dark grey clay. Minor py	
20	100	925	X			67240E	
15	70	1000	X				
15	60	1600	X		←	SILTSTONE? - Dark grey hard silty ^{clay} fragments. Mixed with black carbonaceous clay. Up to 1% py	
20	95	720	X			PY	
15	40	1600	X				
25	110	1600	X		←	67230E	LIMESTONE? - Black moderately bedded clay. Minor py
15	50	235	X		←		SANDY LIMESTONE? - Black sandy clay. Trace of fossils.
20	60	245	X				
20	180	790	0.5		←		SILTY LIMESTONE? - Dark grey to black, well bedded, slightly silty clay. Minor py. Trace of fossils
20	470	2050	2.0				
20	230	1650	0.5			PY 67220E	
20	305	1450	0.5		←		BRECCIA? - Dark grey clay fragments in a grey-green ^{clay} matrix. Minor quartz. Minor py. Trace sp
40	185	730	0.5		PY SP		
15	200	840	X				
20	110	365	X	← PY		LIMESTONE? - Dark grey clay, variably bedded 1-2% bedded py	
25	310	1450	0.5	← PY	67210E	LIMESTONE? - Dark grey clay ~1% py	
30	140	655	X		PY		
40	255	1400	0.5				
160	2700	2650	1.5			SANDSTONE - Brown to khaki, minor quartzite fragments. Minor black clay. Contact between Sc/Og unclear.	
200	3800	1650	2.5				
35	370	150	0.5		67200E		
20	835	1200	0.5				
					67190E		

Assays in ppm unless noted otherwise



Project C.S.R. J.V. N ^o A84-109	Commenced April 8, 1984
Prospect Mariposa	Completed April 8, 1984
Coordinates: Line 59150 N 67304E to 67360E	Logged by G. Kary
Total length 56m	Sample length 2m
	Scale 1cm = 2m 1:200

Assays X - below detection limit				Graphic geology	Meterage	Geologic description	py - pyrite sp - sphalerite gn - galena E _D = DUNDAS GROUP SEDIMENTS Og = GORDON LIMESTONE
Cu	Pb	Zn	Ag				
30	260	890	0.5			SHALE - Hematitic to green	E _D DUNDAS GROUP SEDIMENTS
315	635	125	1.5		SILTSTONE - weathered to pale green silty clay. Minor quartz veining		
10	20	30	1.0				
10	115	160	1.0			FAULT	
45	545	5250	1.0		67350E	LIMESTONE? - Greenish-black to dark grey clay	
125	445	4050	0.5			Trace py	
310	1.18%	0.98%	X			SILTY LIMESTONE? - Khaki, slightly silty clay	
275	0.66%	1.02%	X			Varcably bedded. Minor vuggy areas. Minor py	
680	0.84%	1.24%	1				
2750	1.67%	0.79%	25		67340E		
2150	0.22%	375	82			LIMESTONE - Weathered to light grey well bedded clay. Minor brecciation and quartz vein material. 2-3 cm wide vein of sphalerite	
2200	1.36%	12.23%	330				
55	120	380	X				
405	0.25%	0.61%	33				
70	1300	2850	0.5		67330E	LIMESTONE? - Black well bedded clay. Minor py	
30	115	205	X			LIMESTONE - Grey fine grained. Moderate stylolites	
25	90	160	X			Trace py	
35	695	580	X			LIMESTONE - Dark grey, carbonaceous, minor vuggy weathering. Minor to intense calcite veining	
30	1300	1450	X				
40	850	1700	0.5		67320E	DOLOMITE - Black, finely crystalline. Minor to intense calcite veining. Up to 1% gn, minor sp. Minor zones of grey fine grained limestone	
30	2850	8000	2.0				
20	315	480	X				
30	170	170	2.5				
85	0.25%	0.74%	38				
35	1150	1250	10.5		67310E		
/ / / / /						NOT SAMPLED - Smooth Limestone? under 0.5m of water and mud.	
15	50	105	X			LIMESTONE - Dark grey to black, rare calcite veining	
					67300E		

Assays in ppm unless noted otherwise



Project C.S.R. J.V.	Nº A84-109	Commenced April 9, 1984
Prospect Mariposa		Completed April 10, 1984
Coordinates: Line 59450N		Logged by G. Kari
67250E to 67350E		Sample length 2 m
Total length 100m		Scale 1cm = 2m 1:200

Assays X - Below DETECTION LIMIT				Graphic geology 5m	Meter-age	Geologic description
Cu	Pb	Zn	Ag			
5	30	20	X	ferruginous gravel overburden		SHALE - Pale green, minor hematitic patches. Bedding 160/65° E
5	40	15	X			SANDSTONE - Orange to pale green, Minor grct horizons. Minor qtz vein fragments
5	25	10	X			
5	15	5	X			
10	15	10	X			67340E
10	15	10	X			
10	30	15	X			SHALE - Pale green, slightly micaceous, minor hematitic patches. Minor SANDSTONE
5	35	15	X			Fault
10	25	20	X			Sharp contact with black CLAY
65	1200	725	2.0			67330E
45	1250	1150	0.5			
30	1000	560	0.5			
45	0.76%	0.81%	3			
40	1.13%	0.91%	2			LIMESTONE? - Black carbonaceous clay, moderately bedded. Moderate kinking of bedding. Minor quartz rich sand.
40	3800	3300	X		67320E	
40	2050	1950	X			
110	3100	1700	50			SILTY LIMESTONE? - Dark greenish black silty clay. Trace py
95	2350	2150	X			
60	1950	1000	X			LIMESTONE? - Black, finely bedded carbonaceous clay. Trace py
285	2000	2050	X		67310E	LIMESTONE? - Grey poorly bedded clay. Minor brecciation. 1% py
140	1.66%	1.21%	6			LIMESTONE? - Green to Black clay, poorly bedded. 1-2% py
110	0.59%	1.89%	6			045B Trace gn along bedding. Minor quartz vein fragments
75	2840	2900	1.5			CLAY - Mottled dark and light green. Minor py
50	360	350	X			LIMESTONE? - Black well bedded carbonaceous clay. Minor py
35	550	2400	X		67300E	- Dark green clay with minor cherty fragments. Trace py
NOT SAMPLED						- Excessive water in costean.
145	388%	290%	50			SILTY LIMESTONE? - Dark green to grey silty clay 1-2% py. Up to 1/2% gn
285	1.09%	1.47%	6			TILLITE - Mottled orange and brown clay and sandstone pebbles in a tan matrix
30	710	1650	1.5			LIMESTONE - Weathered to black moderately bedded calcareous clay. Trace py
65	5050	1100	2.5		67290E	LIMESTONE? - Black well bedded carbonaceous clay
65	1900	2750	X			OVERBURDEN - Grey quartz sand and mottled orange to black clay
25	1200	2150	X			LIMESTONE - Grey, partly weathered, minor calcite veins
75	965	1200	X			SILTY LIMESTONE? - Dark green to black silty clay. Rare py and gn
40	460	1500	X			
75	110	1550	X		67280E	SILTSTONE/SHALE - Grey, fine grained, interbedded.
40	710	1000	X			CLAY - Green to Brown, abundant bitumen material. Extreme caving 67276-67274E
40	495	1300	X			
20	830	840	X			
NOT SAMPLED						- Extreme caving, thick gravel overburden. Shifted to 67248E and digging East.
NOT SAMPLED						
65	260	715	X			CLAY - Brown to Black, probable overburden
40	185	545	X		67260E	
30	110	535	X			SHALE - Dark grey, moderately fissile. Rare fossils
25	115	590	X			
25	105	315	X			
30	120	360	X			SILTSTONE - Grey to Dark green, abundant coral and brachiopod fossils. Trace py
25	95	560	1.0		67250E	
35	400	1600	X			



Project C.S.R. J.V. Nº A84-109	Commenced April 10, 1984
Prospect Mariposa	Completed April 11, 1984
Coordinates: Line 59550N 67170E to 67300E	Logged by G. Kary
Total length 130m	Sample length 2m
	Scale 1cm = 2m 1:200

Assays X = below detection limit.				Graphic geology 5m	Meterage	Geologic description py-pyrcte gn-galena sp-sphalercte	
Cu	Pb	Zn	Ag				
40	1900	5600	65	gravel	← py	LIMESTONE? - Black clay, moderately bedded. Minor kinking of bedding. Very viscous clay. Trace py.	
35	220	1100	X				
35	155	865	X				
40	160	1000	X				
20	255	1150	X			67290E	
NOT SAMPLED							
IMPENETRABLE GRAVEL							
67252E to 67290E							
67260E							
75	870	775	X	gravel	← 67250E	SILTY LIMESTONE? - Dark green to black silty clay.	
70	1550	1000	X				
25	540	710	X				
70	2000	1460	35				
110	1850	760	5.5				
155	1700	635	35			67240E	
50	755	480	4.5				
95	1.26%	0.38%	4			← gn	SILTSTONE? / SILTY LIMESTONE? - Black to dark green silty clay. Up to 5% gn.
315	4.23%	2.03%	52			gn	
525	4.31%	1.41%	27			gn	
20	1450	4100	X		67230E		
25	830	3200	X				
25	315	2350	X			SILTSTONE - Dark green fragments mixed with dark green clay.	
25	300	2100	X			LIMESTONE? - Black clay, minor bitumen.	
NOT SAMPLED - Impenetrable gravel							
20	210	1900	X		67220E	SILTSTONE? - Khaki & black clay. Trace py. Minor grey SILTSTONE fragments.	
20	170	2200	X				
NOT SAMPLED							
IMPENETRABLE GRAVEL							
67210E						EXTREME CAVING 67196E to 67218E	
67200E							
30	1105	3450	20	gravel	←	LIMESTONE? - Black to Dark Green, minor py.	
30	865	3900	1.0			py	
45	2450	9050	3.0			← py gn	LIMESTONE? - Dark grey to khaki clay. Trace silicified coral fragments. Minor gn. Trace py.
70	2000	5100	3.5			py, gn	
130	0.77%	1.63%	6			← py, gn	LIMESTONE - Grey intensely veined limestone, variably weathered to Black and khaki clay. Up to 5% py, 3% gn, and 1% sp. Mixed with minor sandstone and overburden material.
75	1.51%	1.66%	10				
95	0.55%	1.08%	5			py gn	
155	1.06%	7.14%	9			py gn sp	
120	2.27%	3.14%	22			67180E	
90	3250	4350	4.0			py gn sp	
155	0.50%	1.60%	6			py	
55	2250	6350	2.5			← py	LIMESTONE? - Black clay, minor py.
55	3700	4300	3.0			← py	LIMESTONE? - Mottled black, grey, and tan clay. Minor quartz crystals. Minor py.
						67170E	



Project C.S.R. J.V. Nº A84-109	Commenced April 13, 1984
Prospect Bannockburn (Sunny Corner)	Completed April 14, 1984
Coordinates: * 2 m peg LS at 38m @ 005°T from LS8000N, 65350E Digging @ 217°T	Logged by G. Kary
Line 1 0 m to 80 m	← 5 cm →
Total length 80 m	Sample length 2 m
	Scale 1 cm = 2 m 1:200

Assays X = Below detection limit.				Graphic geology	Meterage	Geologic description
Cu	Pb	Zn	Ag			
20	1050	25	0.5			SANDSTONE - Brown, poorly bedded, medium grained
145	150	270	3.5			CLAY - Orange to rusty brown
25	1.84%	0.38%	2		← Py gn	LIMESTONE - Weathered to black clay, containing minor
105	7.35%	0.91%	12		Py gn	DOLomite and SILICEOUS fragments. Up
25	1.74%	1175	4		10m	to 10% gn, 5% py
45	8500	905	X			
50	4050	855	X		←	BRECCIA? - Grey clay containing fragments of black and tan clay. Minor orange clay
35	1950	835	X		←	IRONSTONE - Orange clay, abundant hard limonitic nodules
25	1450	240	X			
50	3250	415	0.5		← Py 20m	CLAY - Black, minor py. Old workings following black clay
50	1900	965	X			IRONSTONE - Hard and dense limonitic and goethitic. Manganiferous. Minor orange clay. IRONSTONE coloured orange → red → black. Minor zones of black clay overlying IRONSTONE
65	3350	1050	X			
35	3100	1600	X			
50	2900	1600	X			
40	2600	1300	X		30m	
35	2450	1250	X			
35	105%	3150	X			
40	5700	1950	X			
25	3600	1250	0.5			
15	2100	1150	X		40m	
15	860	1950	X			
25	955	1100	X			
20	705	1150	X			
15	590	790	X			
10	525	895	X	50m		
25	2100	1000	X	← Py	Ironstone plunging under brown to grey clay	
20	1300	555	X	← Py	CLAY - Mottled brown and grey. Minor IRONSTONE nodules. Minor black clay. Trace py	
20	740	890	X			
20	800	1550	X			
20	1000	2350	X	60m		
20	1300	3400	X			
25	1300	2350	0.5	←	CLAY - Dark grey to black clay. Minor green patches	
25	700	7050	0.5	← Py	SILTY LIMESTONE? - Black silty clay. Very blocky and angular fragments. Minor py, trace sp. Minor carbonaceous lamina.	
15	1100	5200	1.0	Py		
20	1200	6250	1.0	Py SP 70m		
15	595	3400	2.0			
30	2400	0.92%	X	←	LIMESTONE? - Dark green to black clay	
25	1100	4950	X			
30	1350	5250	X	←	CLAY - mottled dark green to yellow clay. Minor brown IRONSTONE fragments. Probable OVERBURDEN	
25	1200	4400	X	80m		

Assays in ppm unless noted otherwise



costean profile

Project C.S.R. J.V. № A 84-109	Commenced MAY 2 1984
Prospect Bannock burn (Sunny Corner)	Completed MAY 3 1984
Coordinates: Line 2 0m is at 24m @ 124° T from 65200E/L 58000N Digging @ 100° T	Logged by G. Kary
Total length 50m	Sample length 2m ← 5 cm →
	Scale 1cm = 2m 1:200

Assays <small>X = Below detection limit</small>					Graphic geology	Meterage	Geologic description
Cu	Pb	Zn	Ag				
30	1300	3200	X				LIMESTONE? - Khaki to black clay, poorly bedded. Up to 1% py
40	2550	3000	2.5			py	
30	1350	5600	X			py	
20	825	1102	2				
15	430	1000	X			py 40m	
15	90	530	X			py	LIMESTONE? - Black clay, poorly bedded. Minor carbonaceous to graphitic lamina. Up to 1% py.
15	100	650	X				
15	95	375	X				
20	55	870	X				
15	100	430	X			py 30m	
15	155	190	X			py	
15	665	725	X			py	
40	1850	425	X			py	LIMESTONE? Black to greenish black clay. Trace py
5	90	20	0.5				
5	100	40	1.5			20m	
10	125	25	2.0				SANDSTONE - Cream to orange. partly weathered to orange sandy clay. Moderate coral and brachiopod casts/moulds. Variably micaceous. Bedding 160°/60° w
10	175	20	1.0				
25	265	70	0.5				
10	325	70	1.0				
30	715	770	X		10m	SILTSTONE - weathered to grey and dark grey slightly micaceous clay. May represent a silty limestone. Trace py	
35	645	630	X		py		
35	725	780	X				
40	1250	1350	X			SILTY LIMESTONE? - Black clay, slightly micaceous	
50	2200	475	2.5				
170	2000	450	4.0		0m	SANDSTONE? - Light grey to cream sandy clay. Minor ferruginous (orange) staining	

Assays in ppm unless noted otherwise



costean profile

Project C.S.R. J.U. No A84-109	Commenced MAY 4 1984
Prospect Bannockburn (Sunny Corner)	Completed MAY 5 1984
Coordinates: Om = 57775N/65371E Digging @ 000°T	Logged by G. Kary
Line 4 0 to 62 m	Sample length 2 m
Total length 62 m	Scale 1cm = 2m 1:200

Assays <small>X = Below detection limit</small>				Graphic geology	Meterage	Geologic description
Cu	Pb	Zn	Ag			
						py - pyrite gn - galena Sc - Crotty Quartzite Og - Gordon Limestone
						05013
30	100%	10%	1.0		py 60m	DOLOMITE - weathered to dark grey sandy clay. Minor dolomite veins. Trace py
15	2450	3650	0.5			
60	1450	1700	1.0			DOLOMITE? - Dark grey, very viscous clay
40	0.7%	0.9%	2.5		py gn	LIMESTONE? - Dark green to rusty brown clay. Minor gn, 1-5% py
35	0.5%	1.3%	5.5		py gn	BRECCIA? - Black angular clay fragments in a dark grey to greenish-black clay matrix. Trace gn
35	0.2%	1.4%	2.0		50m	
30	0.3%	1.2%	4.5		py	1-2% py
40	0.4%	1.5%	7.0		py	LIMESTONE? - Dark grey to greenish black clay. Moderately bedded. Up to 1% gn
90	1.4%	1.5%	27		gn	
50	0.7%	1.0%	11.5		py	LIMESTONE? - Dark greenish-black clay. No obvious bedding. Trace py
35	1550	5650	1.5		40m	
15	280	2950	0.3			
20	285	6650	1.0			
25	305	2450	1.0		py	LIMESTONE? - Black to greenish black clay, variably bedded. Trace py
25	135	1650	0.5			
20	280	3350	0.5		30m	
20	225	2450	0.5		py	
35	930	3250	1.5		py	LIMESTONE? - Black clay, well bedded. Minor py
20	230	5750	X		py	
20	55	1250	0.5		py	
30	390	445	X		py 20m	LIMESTONE - weathered to black bedded clay. Minor shell/foral fossils
20	440	855	0.5			LIMESTONE? - Black clay, poorly bedded, minor BRECCIA.
15	800	710	0.5		py	Minor py. Minor fine quartz crystals.
15	1650	1250	0.5		py	
15	3375	815	0.5		py	LIMESTONE? - Black clay, minor bedding. Up to 1% py.
20	115	250	1.5		Og 10m	
5	15	10	1.0			
5	5	10	0.5			SANDSTONE - Pale green fine grained quartz rich. Minor shell casts/moulds. Minor ferruginous staining near Og/Sc contact. Possible Bedding 130°/40°W
5	10	10	0.5			
5	15	10	0.5			
5	20	30	1.0		0m	

Assays in ppm unless noted otherwise



Project C.S.R. J.V.	№ A84-109	Commenced MAY 5 1984
Prospect Bannockburn (Sunny corner)		Completed MAY 6 1984
Coordinates: 0 m = 58004N/65509E Digging @ 210°T	Line 5 0 to 80m	Logged by G. Kary
Total length 80m		Sample length 2m ← 5cm →
		Scale 1cm = 2m 1:200

Assays X = Below Detection Limit					Graphic geology	Meter-age	Geologic description
Cu	Pb	Zn	Ag				
15	2050	70	2.5				SANDSTONE - Cream to grey, well bedded. Bedding 160°/50°E
65	1.14%	0.19%	8.0			gn	LIMESTONE? - Dark green to khaki clay. Minor fragments
35	1.22%	0.26%	1.5			gn py	or pods of gn. Minor py
30	6250	1000	0.5				
30	3400	1200	1.0			gn py 10m	
35	3150	1800	1.0				
60	0.88%	0.45%	6.0			gn py	LIMESTONE? - Dark green sandy clay. Minor gn, py
30	9250	1750	1.5			gn sp	
30	2850	2000	0.5				LIMESTONE? - Green to khaki clay. Minor sandy
40	2400	2150	0.5			py 20m	lens with associated gn. Minor
40	6500	6050	2.0			gn	gn in quartz veins which dip in
30	540	3550	0.5			py	opposite direction to bedding.
25	445	2100	0.5				Attitude of veins is 170°/60°W
35	460	1300	0.5				Minor py
30	205	1150	0.5			30m	
25	190	755	1.0		py	LIMESTONE? - as above. Plus possible BRECCIA	
25	205	1050	1.0			texture. Minor py. Possible trace	
20	380	1400	X		sp	sp. Rare gn. Minor quartz veinlets.	
25	395	1600	1.0				
20	1050	2150	2.0		gn 40m		
25	4200	3400	3.0		gn py	LIMESTONE? - Khaki to green clay. Slightly bedded	
25	1950	3125	5.0		gn sp	Minor py, Trace gn, sp	
25	270	725	0.5		py	LIMESTONE? - Khaki clay. Very non-descript. Trace	
30	150	625	0.5		py	py, rare sp	
25	1100	650	1.0		sp py 50m		
20	9050	2400	1.5		gn py	LIMESTONE? - Dark greenish grey clay. Minor quartz	
20	1.08%	0.45%	1.0		gn	veins plus silicified LIMESTONE fragments	
95	1.08%	0.24%	1.0		gn	Minor gn py - Possible FAULT ZONE	
80	8000	1350	0.5			OVERBURDEN? - Dark green to brown clay. Slightly	
90	0.78%	0.43%	23		60m	sandy. Abundant bitumen along fractures	
170	6500	1600	3.0		py gn	LIMESTONE? - Banded khaki and grey-green clay. Minor py. Trace gn	
25	890	2800	1.0			LIMESTONE? - Dark grey slightly sandy clay. Poorly	
20	255	1300	1.0		py	bedded. Up to 1% py	
25	525	1600	1.0		py		
20	2700	5100	1.0		py 70m	LIMESTONE? - Dark grey clay, very blocky/angular	
20	305	1150	0.5		py	fragments. Minor breccia. Trace gn	
25	950	2000	1.0		py gn	minor py	
20	3000	2250	1.0		gn	LIMESTONE? - Dark grey clay. Minor bedding at 000°/10°E	
25	5450	4000	1.0			Trace gn	
25	1.37%	0.52%	0.5		80m	LIMESTONE? - Dark green to khaki clay. Trace py.	

Assays in ppm unless noted otherwise



Project C.S.R. J.V. Nº A84-109	Commenced MAY 6 1984
Prospect Bannockburn	Completed MAY 7 1984
Coordinates: Line 56950N 65744 to 65786E	Logged by G. Kary
Total length 42 m	Sample length 2m ← 5 cm →
	Scale 1cm = 2m 1:200

Assays X= Baow D					Graphic geology 5m	Meterage	Geologic description
Cu	Pb	Zn	Ag				
							Old Workings trend perpendicular to costean
15	465	1350	X				DOLOMITE - weathered to dark grey to black clay Minor
30	4100	3950	0.5				Fresh DOLOMITE fragments. Finely crystalline
25	1150	2100	X			65780E	
25	1650	2100	X			py	DOLOMITE? - Dark grey to black clay Minor py
20	640	730	X			py	
30	2800	2350	0.5			py	DOLOMITE? - Grey sandy clay, abundant quartz
75	1.31%	0.56%	60			py	fragments. Up to 2% py
165	2.91%	1.81%	15			65770E	
30	755	2800	X				DOLOMITE? - Dark grey to black clay. Minor
20	520	1950	X				possible BRECCIA. Minor py
25	2000	2200	X				
100	625	600	1.5			py	
100	2200	345	0.5			65760E	fragments of intensely veined DOLOMITE in DOLOMITE - Brown to black clay
70	1550	370	X				CLAY - Orange to cream clay Moderate IRONSTONE
30	985	155	X				fragments Quite viscous
30	105	555	X			py	
20	55	245	X			py	DOLOMITE? - Dark grey to black clay. Minor py.
25	50	1850	X			65750E	Grades into IRONSTONE material
25	110	450	0.5			gn	
40	105	380	X			py	
5	55	30	0.5				SANDSTONE - Tan to sandy clay. Minor SANDSTONE
							fragments. Trace gn, py.
						65740E	



Project C.S.R. J.U. N9A84-109	Commenced MAY 9 1984
Prospect Bannockburn	Completed MAY 9 1984
Coordinates: Line 5755N 65676 to 65716E	Logged by G. Kary
Total length 40m	Sample length 2m
	Scale 1cm = 2m 1:200

Assays				Graphic geology 5m	Meterage	Geologic description
Cu	Pb	Zn	Ag			
110	4900	2200	3.0			LIMESTONE? - Black clay contaminated by river gravel
120	6750	5500	4.0			
50	3100	1100	1.5		gn sp 65710E	
35	2150	2300	2.0			DOLOMITE - partially weathered to grey sandy clay Grey finely crystalline when fresh Variable dolomite veining. Trace gn, sp.
30	1500	1450	1.5			
70	0.58%	0.44%	5.5			
90	1.18%	1.84%	10.0		sp	Minor contamination by river gravel.
/	/	/	/		65700E	NOT SAMPLED - Impenetrable gravel
85	1650	560	2.5			DOLOMITE? - Dark grey sandy clay
45	2900	1600	2.0			
25	1250	2600	2.0			
25	610	2200	1.5			
/	/	/	/		65690E	NOT SAMPLED - IMPENETRABLE SANDSTONE SLAB AT 1.5m
35	1400	2250	2.0			DOLOMITE? - Dark grey sandy clay
65	3400	4500	2.5			CLAY - Black, very viscous clay. Minor organic material
30	1650	4950	2.0			CLAY - Banded grey and white clay. 1-5% py along bedding planes.
35	1950	4950	5.0			
45	3650	3150	7.0			65680E SANDSTONE - Brown to green sandy clay, minor SANDSTONE fragments
20	710	490	1.0			
15	280	120	2.0			
					65670E	

055

395058

APPENDIX 2

INDUCED POLARIZATION PROFILES AND INTERPRETATION - MARIPOSA

178
AMOCO MINERALS AUSTRALIA COMPANY

Date: February 1, 1984
To: Mr. P. Jones c.c. Mr. B. Roxburgh
From: S. Collins
Subject: MARIPOSA DIPOLE-DIPOLE IP RESULTS

Dipole-dipole IP results from lines 59200N and 59400N at the Mariposa grid have been examined to determine the relationship between the anomalous chargeability and geology and/or mineralization at the prospect.

Chargeability results show a strong correlation with the mapped geology with the Crotty Quartzite unit having an intrinsic chargeability of approximately ten milliseconds, the Gordon Limestone an intrinsic value of greater than 30 milliseconds (equivalent to approximately 3% sulfide minerals) and the Dundas Group rocks having less than 10 milliseconds response. The contact between the Crotty Quartzite and Gordon Limestone is particularly clear on line 59200N at 67100E and appears to be shallowly dipping to the west on line 59400N at approximately 67175E. The contact between the Gordon Limestone and Dundas Group is less defined and appears at approximately 67350E/59200N and 67300E/59400N. The IP chargeability data are in clear agreement with the mapped geology.

The resistivity profiles are not so clear cut. The contact between the Crotty Quartzite and the Gordon Limestone is clearly defined, the quartzite having four to five times the resistivity of the other units. On line 59400N the Gordon Limestone and Dundas Group rocks show a simple horizontally layered signature probably reflecting a simple weathering profile. Line 59200N is more complicated showing a near surface resistive unit and possibly a weak conductor at depth (approximately 50 meters, or along strike) at 67300E. Lack of more data along strike prevents a closer examination of this zone though it is possibly related to an EM37 anomaly at 67250E. Geophysically this is not a particularly attractive zone, however, the presence of a strong geochemical anomaly and sulfide mineralization in a costean suggest further work should be done here. Drilling is probably the simplest alternative.

The IP results have shown a strong correlation with known geology and indicate that the Gordon Limestone is a highly chargeable (well mineralized) rock unit in this area. A complex resistivity signature at 67300E on line 59200N may be related to the EM37 anomaly, mineralization and/or the major fault which is the contact between the Gordon Limestone and the Dundas Group.

S. COLLINS

058



SCINTREX PTY. LTD.

INDUCED POLARIZATION AND RESISTIVITY SURVEY
DIPOLE - DIPOLE ARRAY

DATE 11-01-83

PLOTTED BY R.P.

PULSE 2 SEC

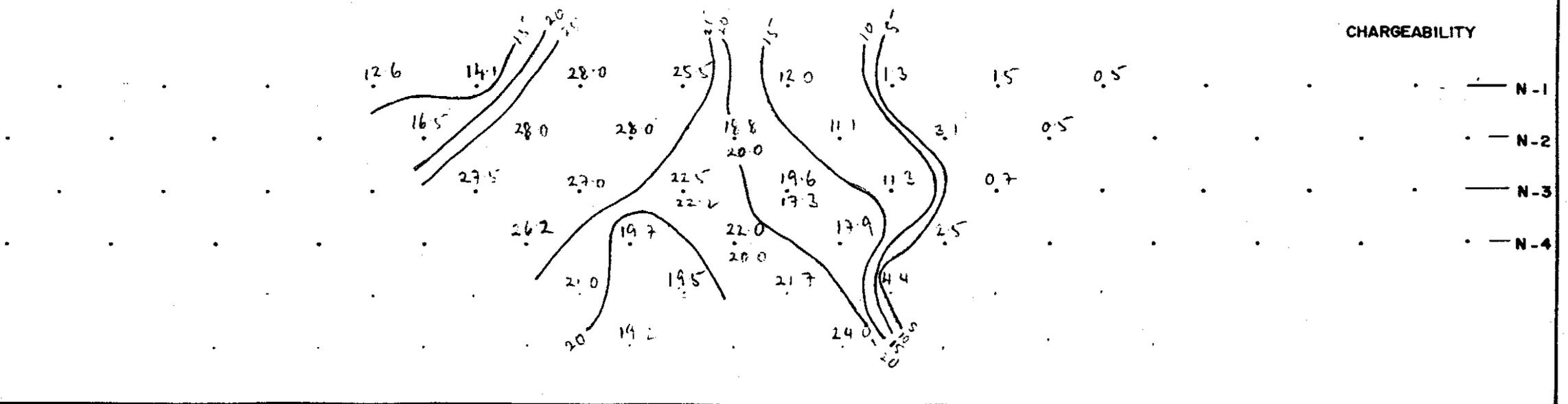
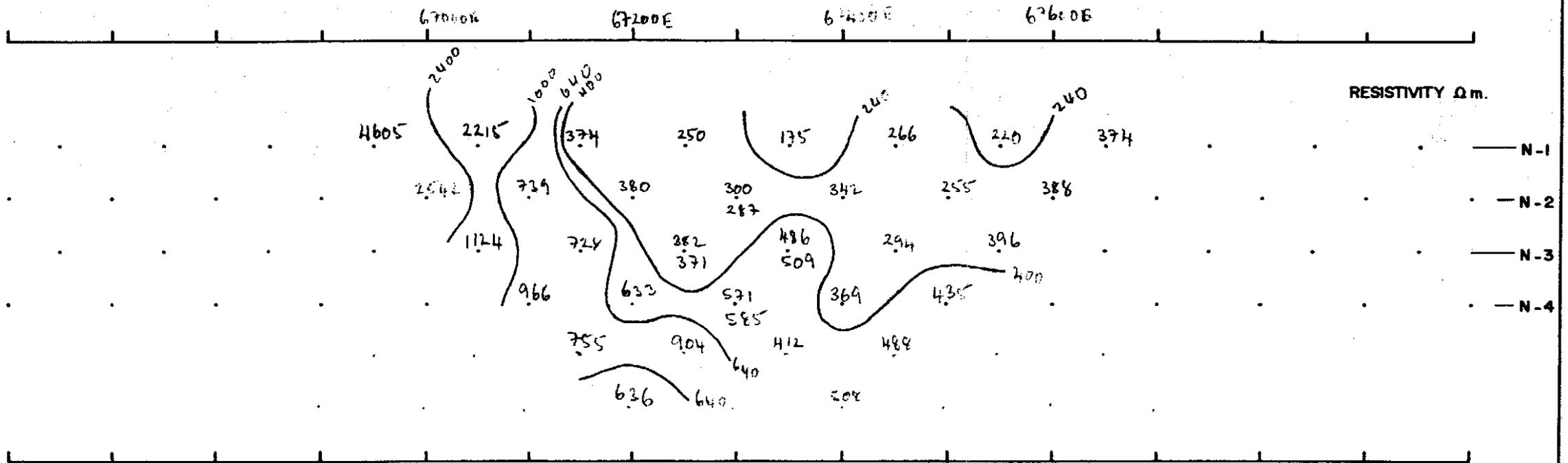
RX. 2 SEC
39042+3

DIPOLE SPACING 100 m

LINE No. 564000

PROSPECT MARIPOSA

JOB No. TAS III



059



SCINTREX PTY. LTD.

INDUCED POLARIZATION AND RESISTIVITY SURVEY
DIPOLE - DIPOLE ARRAY

DATE 11-01-83

PLOTTED BY RP

PULSE 2 SEC

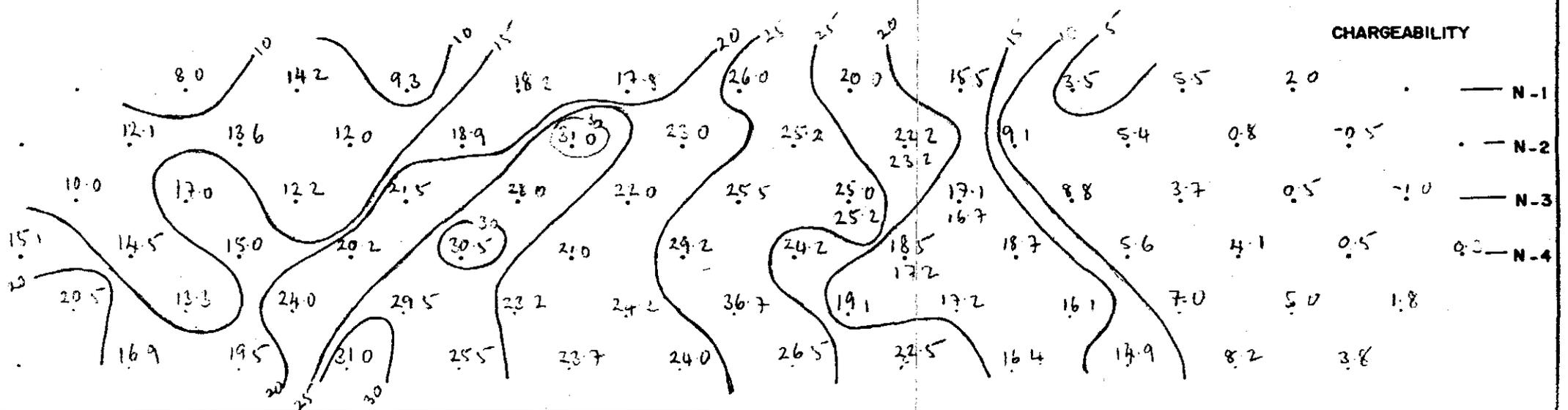
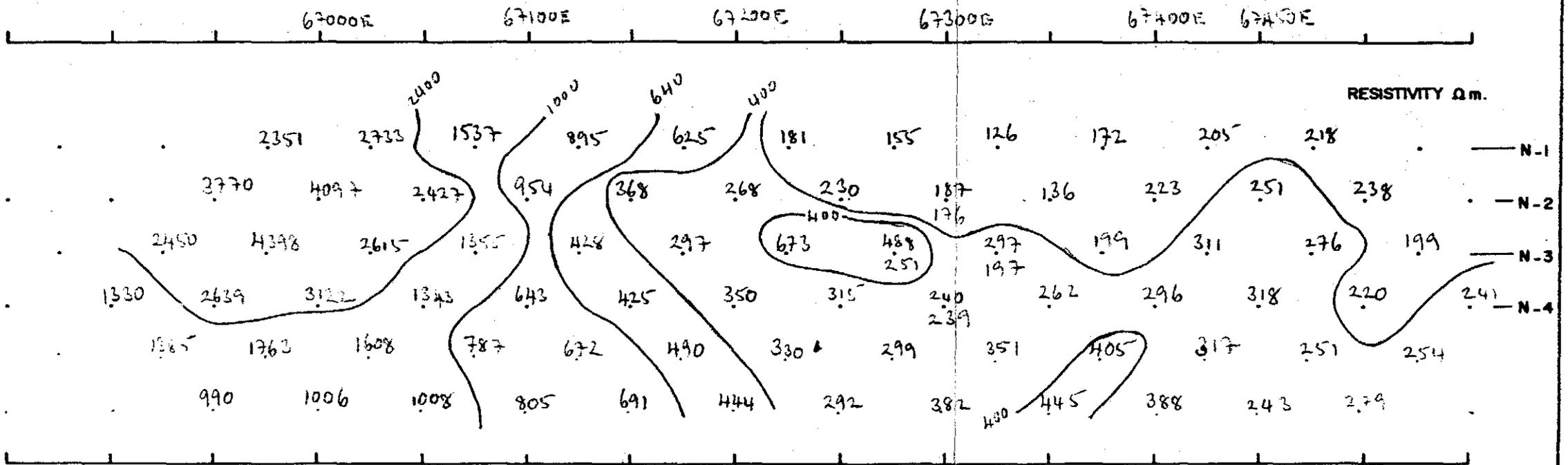
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DIPOLE SPACING 50m

LINE No. S920011

PROSPECT MARIPOSA

JOB No. TAB III



060

395063

APPENDIX 3

CRONE VLF PLOTS by Mitre Geophysics

NOTE: Plots appended separately

LOCATION: Ager enclosures

APPENDIX 4

ANALYTICAL RESULT SHEETS - DTM-84-1

062

395065



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ANALYTICAL REPORT

JOB COM841077

O/R : F 12070 Respatch No.4911

DTM-84-1

Results in ppm

<u>Interval</u>	SAMPLE	Cu	Pb	Zn	As	Mn	Pa	<u>Length</u>
DTM-84-1								
78-79m	103794	80	65	165	1	2100	50	1m
79-80m	103795	14	390	490	2	3000	75	1m
80-83m	103796	38	2300	6500	10	1.10%	220	3m
83-84m	103797	26	480	5600	3	1.30%	120	1m
84-85m	103798	16	220	230	2	860	140	1m
85-86m	103799	46	790	1000	4	540	160	1m
86-87m	103800	34	200	680	2	4000	155	1m
87-89m	103801	30	170	320	2	1400	85	2m
89-90m	103802	18	1500	1000	3	880	180	1m
90-91m	103803	12	800	700	2	1100	45	1m
91-92m	103804	18	60	230	1	2050	55	1m
92-93m	103805	14	70	285	<1	690	60	1m
93-94m	103806	16	32	75	1	7300	85	1m
94-95m	103807	12	46	240	2	2300	70	1m
95-96m	103808	16	85	650	2	3550	80	1m
96-97m	103809	8	22	160	1	940	50	1m
97-98m	103810	12	310	1300	5	1600	75	1m
98-99m	103811	8	20	180	3	2850	65	1m
99-100m	103812	12	40	340	1	1550	85	1m
100-101m	103813	22	460	2550	4	900	135	1m
101-102m	103814	18	290	2650	3	8000	110	1m
102-103m	103815	38	910	3300	7	4500	70	1m
103-104m	103816	10	85	630	2	880	50	1m
104-105m	103817	8	28	240	2	700	65	1m
105-106m	103818	8	22	210	<1	1500	35	1m

063

395066



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- 2 -



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ANALYTICAL REPORT

DTM-84-1

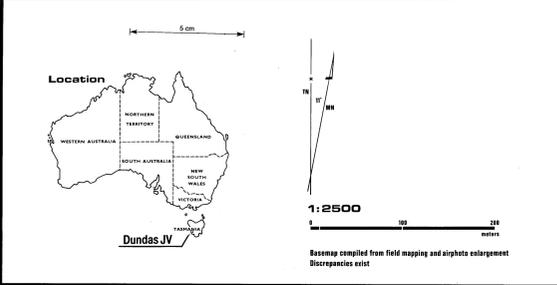
JOB COM841072

O/N : F 12070

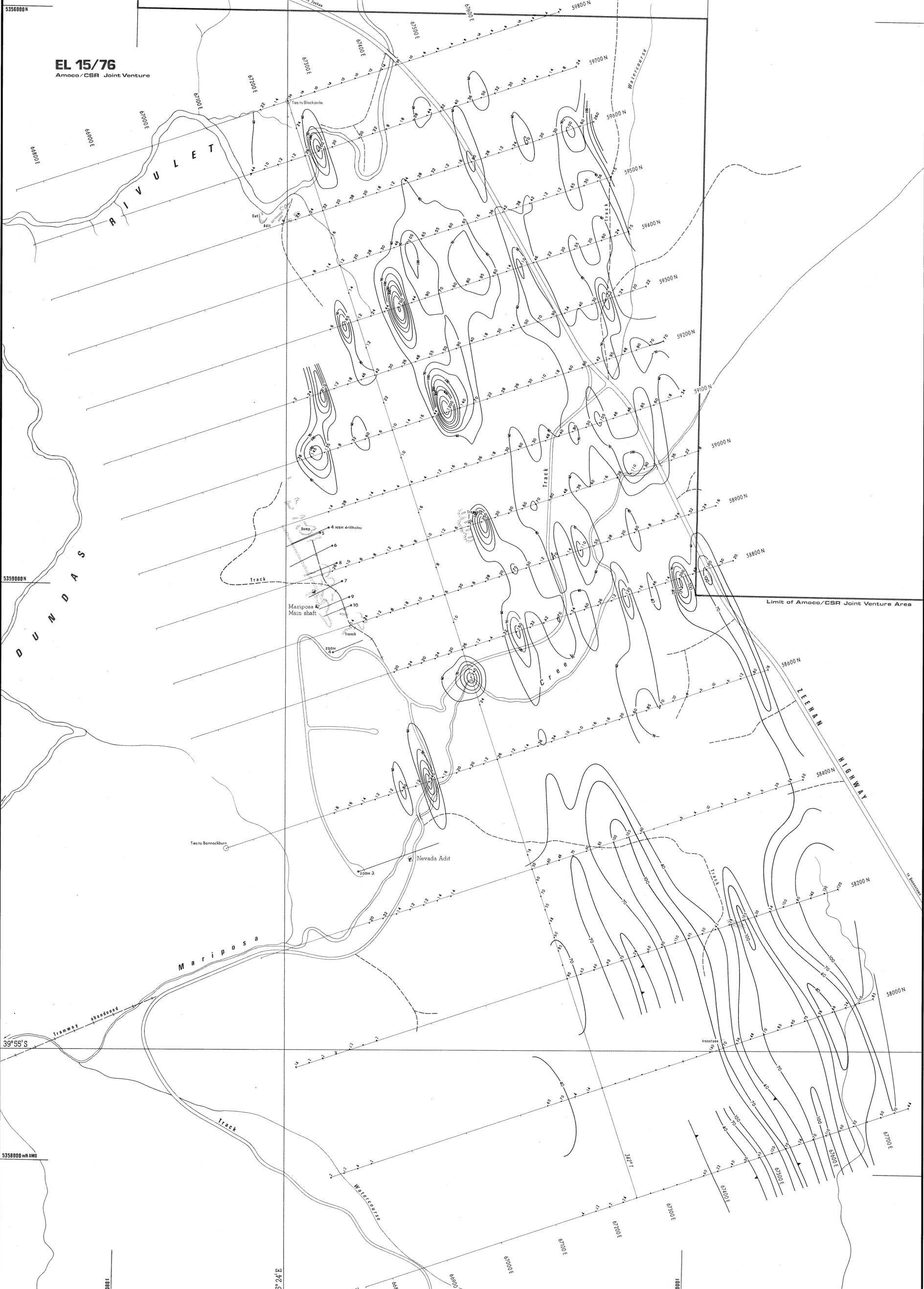
Results in ppm

<u>Interval</u> SAMPLE	Cu	Pb	Zn	Ap	Mn	Ba	<u>Length</u>
106-107m 103819	10	44	300	2	4400	30	1m
107-108m 103820	8	26	180	2	8400	45	1m
108-110m 103821	12	250	830	2	850	45	2m
110-112m 103822	18	160	2800	4	720	90	2m
112-113m 103823	14	150	1250	8	1.95%	210	1m
113-114m 103824	220	4000	3400	1	1300	310	1m
114-115m 103825	6	3100	1000	<1	600	310	1m
59-60m 103826	10	32	38	<1	310	40	1m
60-61m 103827	16	260	210	<1	1000	35	1m
61-62m 103828	18	100	80	<1	270	30	1m

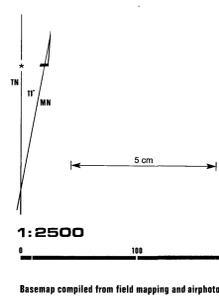
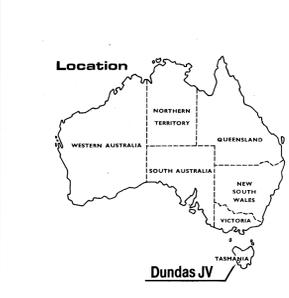
Method of Analysis : Cu Pb Zn : AAS1
Mn : AAS2
Ap : AAS3
Ba : YRF1



PALEOZOIC	
DEVONIAN Eldon Group	
Florence Quartzite	Df 13
SILURIAN Eldon Group	
Austral Creek Siltstone	Sac 1
Keel Quartzite	Sk 11
Amber Slate	Sa 14
Crofty Quartzite	Sc 1
Siltstone member	Sc1 1
ORDOVICIAN Junea Group	
Gordon Limestone	Og 13
Maino Sandstone	Om 14
CAMBRIAN Dundas Group	
Misery Conglomerate	Em 15
	Em1 15
	Em2 15
	Em3 15
	Em4 15
	Em5 15
	Em6 15
	Em7 15
	Em8 15
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	Em10 15
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	Em470 15



EL 15/76
Amoco/CSR Joint Venture



Contour Intervals

Values in ppm

100	1
200	2
300	3
400	4

Notes

Computer graphics by CEA, North Sydney

See geological map for amended culture

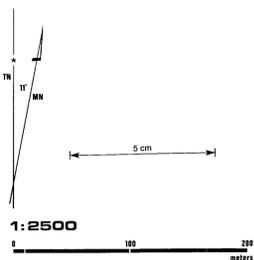
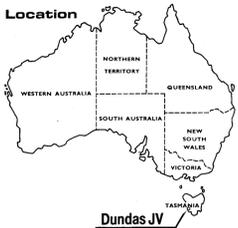
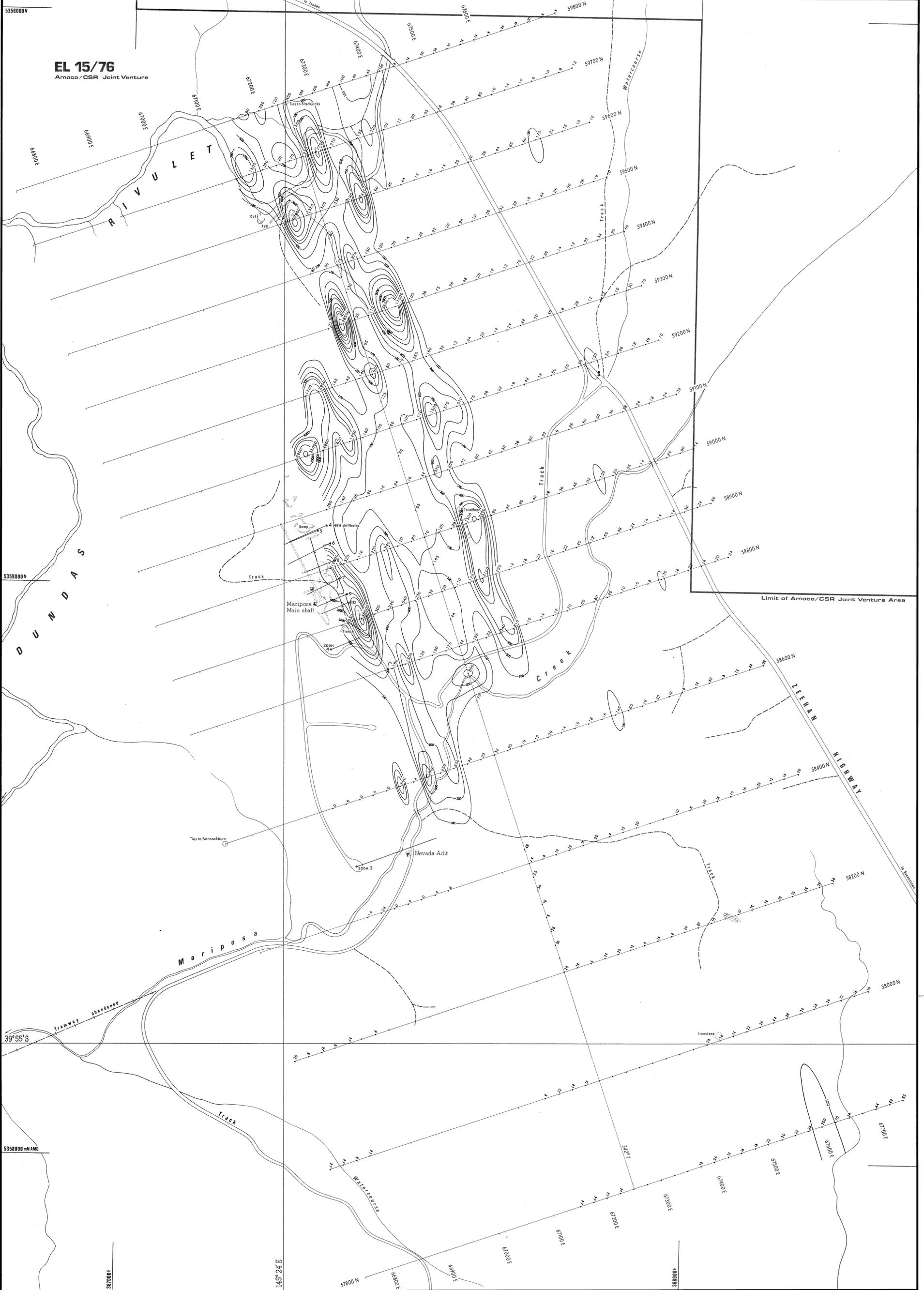


Amoco Minerals Australia Company

395070
004

Project	GORDON RIVER		No	A-80-82
Project Partner	CSR			
Dundas JV		Mariposa		
BEDROCK GEOCHEMISTRY				
COPPER				
Map Ref.	ANG	K-55-S	Latitude	39° 55' S
			Longitude	145° 25' E
Surveyed	P. J., J. S.		Date	1984
Drawn	R. S.-K., S. E.		Date	1984
Report	396		Drawing No	M83-1953

EL 15/76
Amoco/CSR Joint Venture



Contour Intervals

Values in ppm

200	34
700	34
2000	35
7000	35

Notes

Computer graphics by CEA, North Sydney

See geological map for amended culture



Amoco Minerals Australia Company

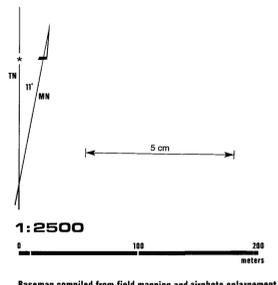
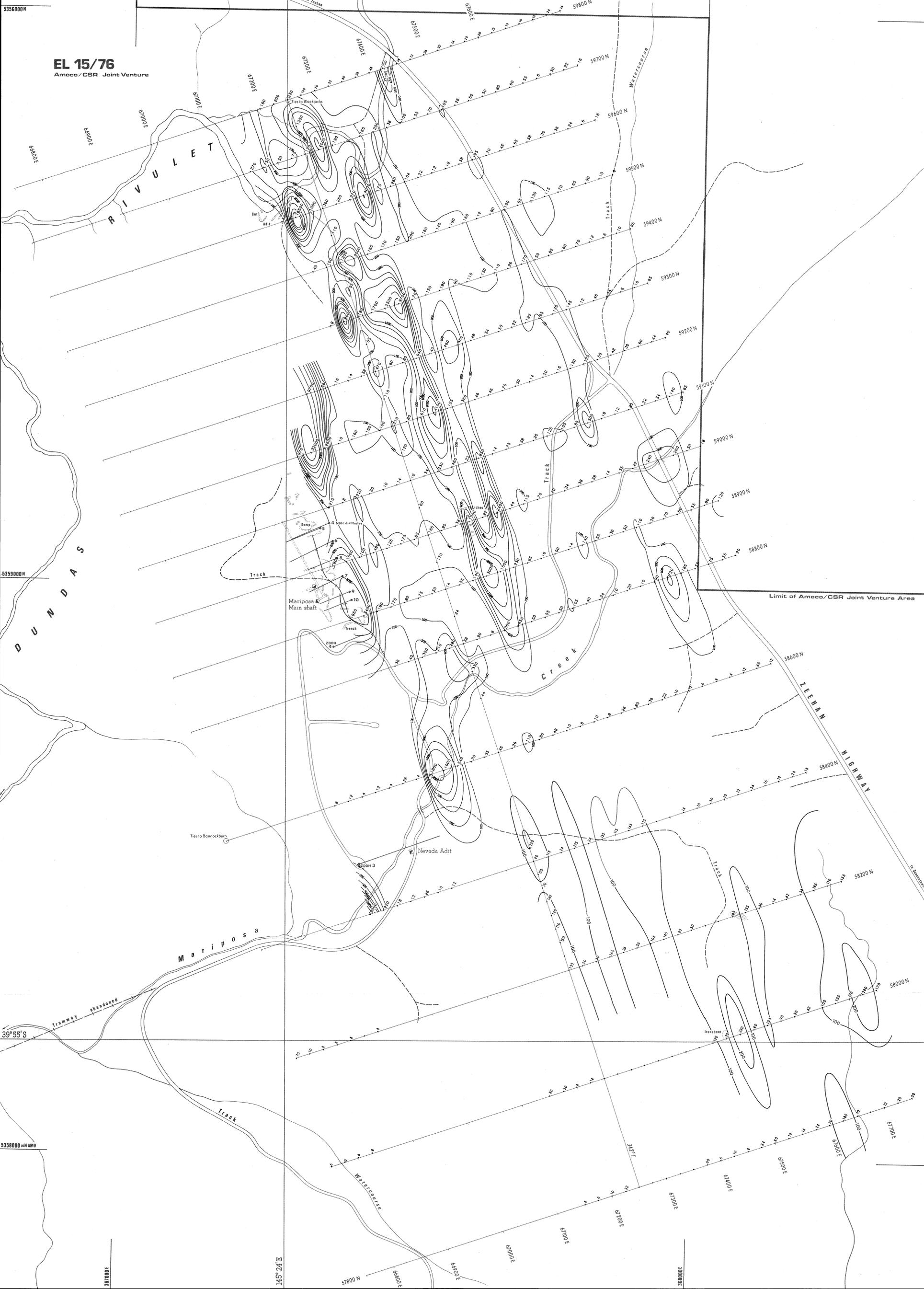
395071
005

Project	GORDON RIVER			N° A-80-82		
Project Partner	CSR					
Dundas JV		Mariposa				
BEDROCK GEOCHEMISTRY						
LEAD						
Map Ref.	ANG	K-55-5	Latitude	39° 55' S	Longitude	145° 25' E
Surveyed	P.J., J.S. Date		1984	Scale	1:2500	
Drawn	R.S.K., S.E. Date		1984	Drawing N°	M83-1954	
Report	396					

5356000N

EL 15/76

Amoco/CSR Joint Venture



Contour Intervals

Values in ppm

200	45
700	45
2000	45
7000	45

Notes

Computer graphics by CEA, North Sydney

See geological map for amended culture

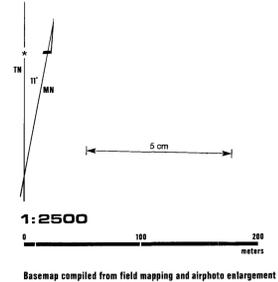
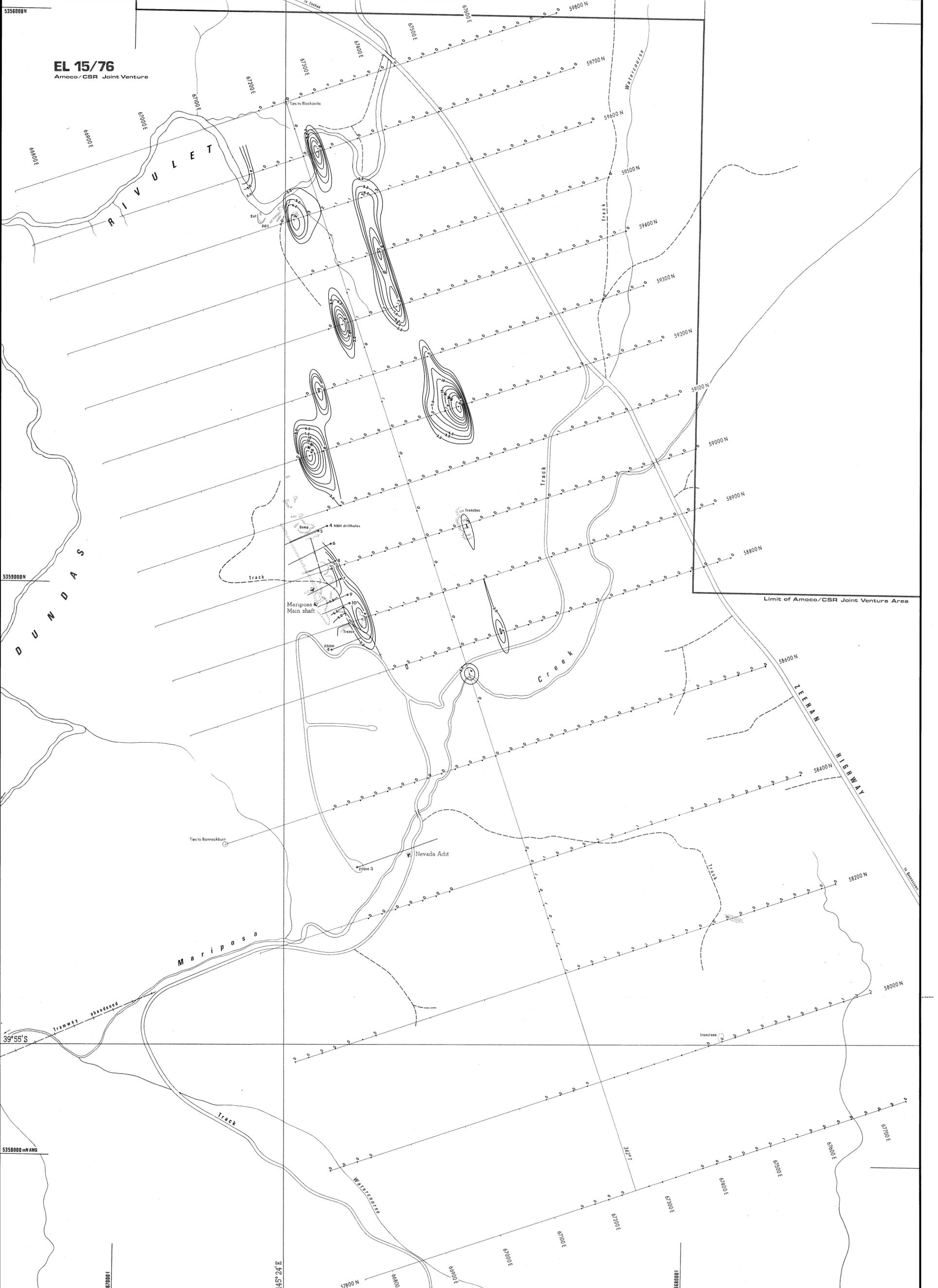


Amoco Minerals Australia Company

395075

006

Project	GORDON RIVER No A-80-82				
Project Partner	CSR				
Dundas JV	Mariposa				
BEDROCK GEOCHEMISTRY					
ZINC					
84-2162 vol 1/2					
Map Ref. ANG	K-55-5	Latitude	39° 55' S	Longitude	145° 25' E
Surveyed	P.J. J.S.	Date	1984	Scale	1:2500
Drawn	R.S.K., S.E.	Date	1984	Drawing No	M83-1955
Report	396				



Contour Intervals

Values in ppm

4	71
10	69
20	66
40	62

Notes

Computer graphics by CEA, North Sydney

See geological map for amended culture



395073

Amoco Minerals Australia Company

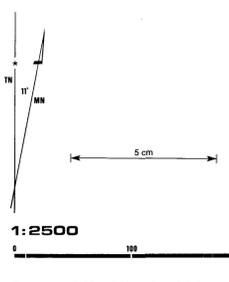
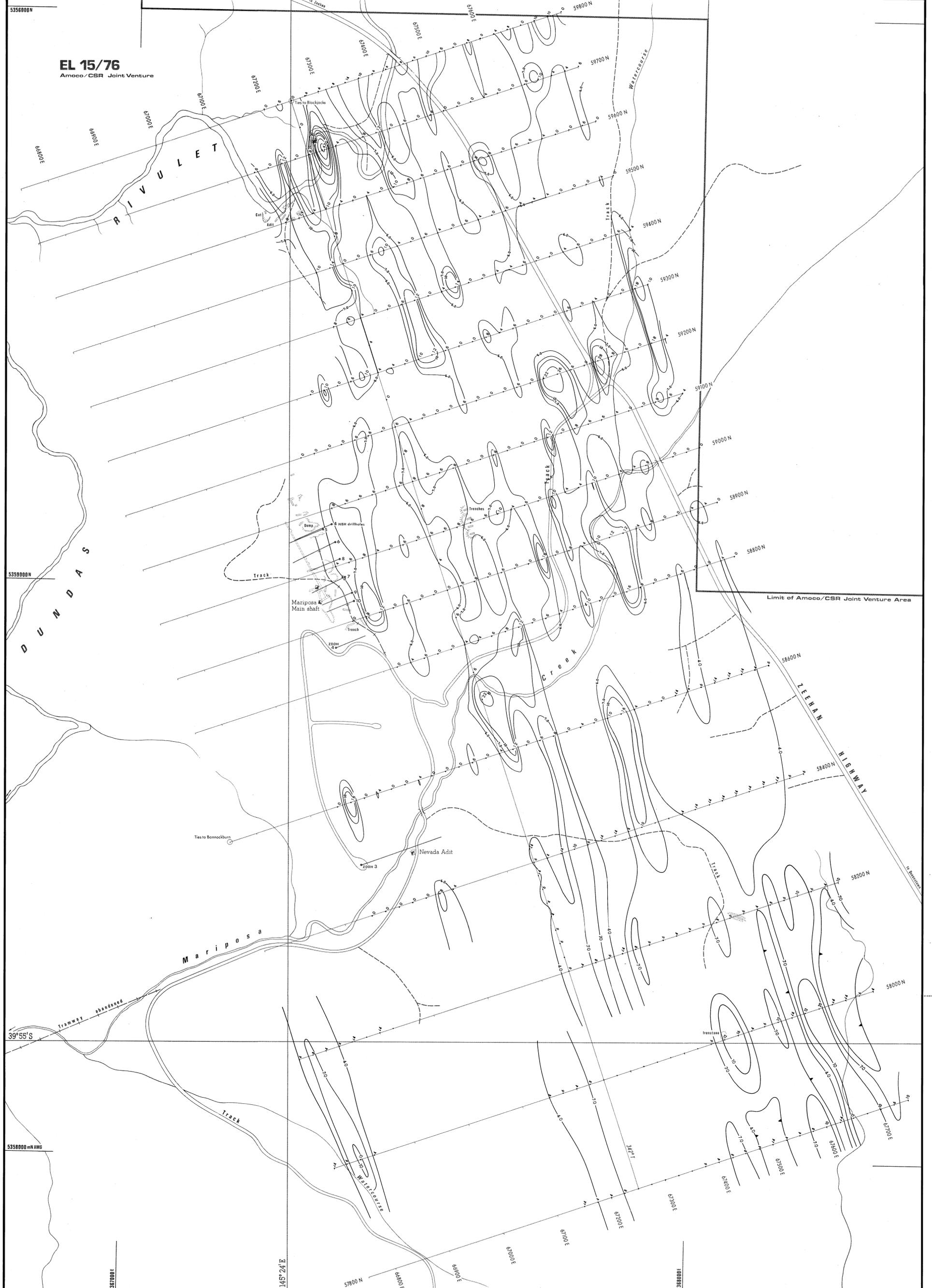
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Project	GORDON RIVER	Nº A-80-82
Project Partner	CSR	
Dundas JV	Mariposa	
BEDROCK GEOCHEMISTRY		
SILVER		
Map Ref. ANG	K-55-5	Latitude 39° 55' S Longitude 145° 25' E
Surveyed	P.J., J.S.	Date 1984 Scale 1:2500
Drawn	R.S.K., S.F.	Date 1984 Drawing Nº M83-1957

Report 396

Basemap compiled from field mapping and airphoto enlargement
Discrepancies exist

EL 15/76
Amoco/CSR Joint Venture



Contour Intervals

Values in ppm

7	58
10	60
40	65
100	65
	65

Notes

Computer graphics by CEA, North Sydney

See geological map for amended culture

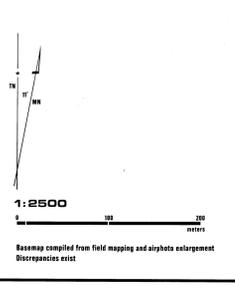
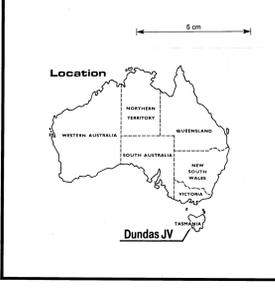
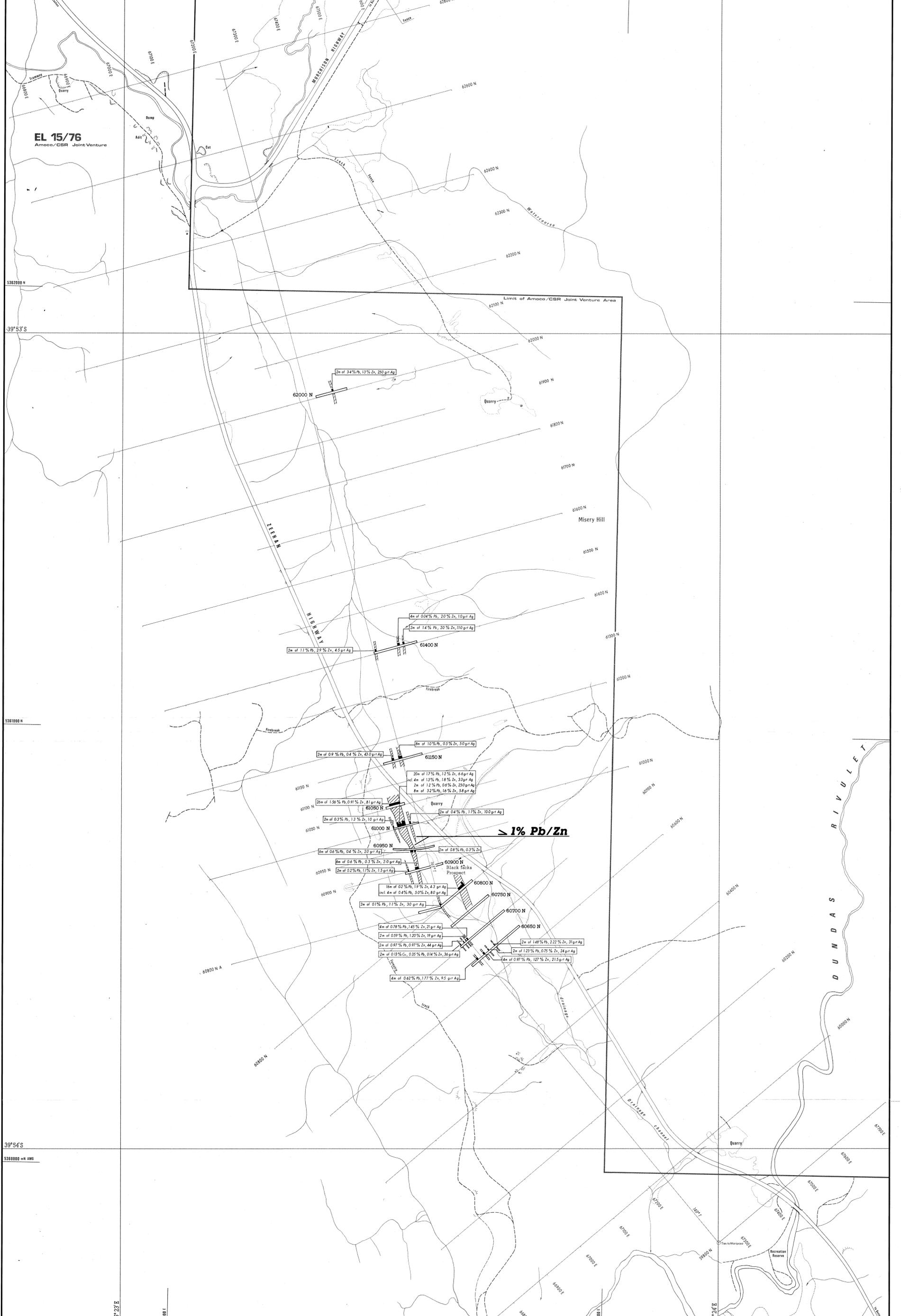


Amoco Minerals Australia Company

395074

008

Project	GORDON RIVER N° A-80-82		
Project Partner	CSR		
Dundas JV	Mariposa		
BEDROCK GEOCHEMISTRY			
TIN			
Map Ref. ANG	K-55-5	Latitude	39° 55' S Longitude 145° 25' E
Surveyed	P.J., J.S.	Date	1984 Scale 1:2500
Drawn	R.S.K., S.F.	Date	1984 Drawing N° M83-1958
Report	396		



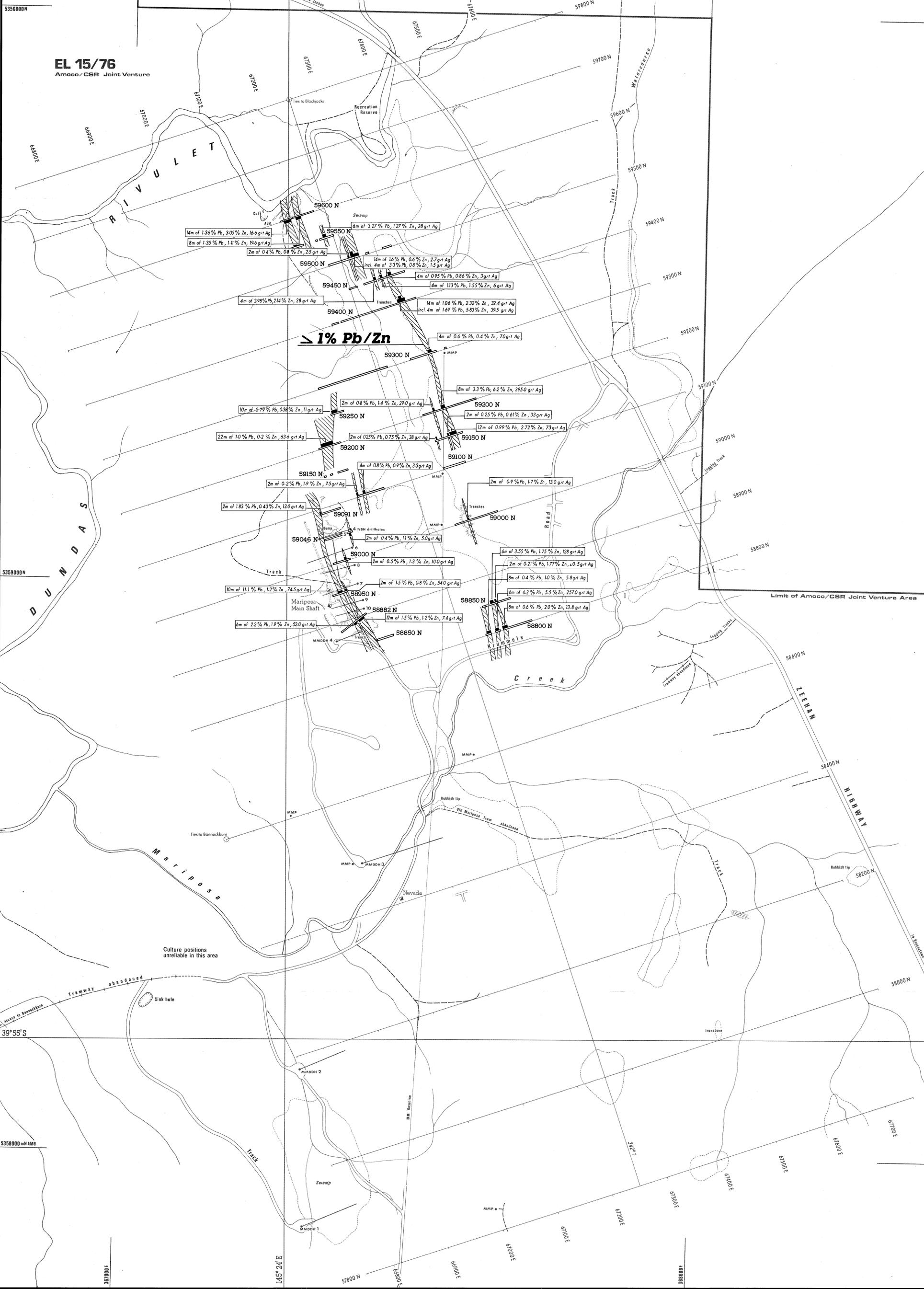
Note

See Appendix 1 of Report 376 and 396 for detailed costean plans

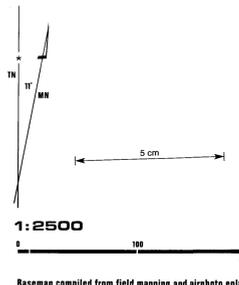
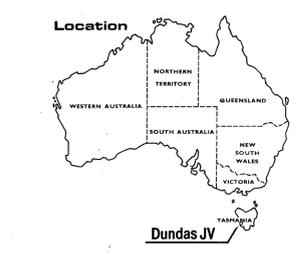
395075 009

Amoco Minerals Australia Company

Project	GORDON RIVER	Nº A-80-B2
Project Partner	CSR	
Dundas JV	Black Jacks	
COSTEANS	LOCATION AND MINERALIZATION	
Map Ref. ANG	K-55-5	Latitude 39° 53' S Longitude 145° 25' E
Surveyed	F.J., G.K.	Date 1984 Scale 1:2500
Drawn	R.S.K., S.E.	Date 1984 Drawing Nº M83-2184
Report 396		



EL 15/76
Amoco/CSR Joint Venture



Note
See Appendix 1 of Report 376 and 396 for detailed costean plans

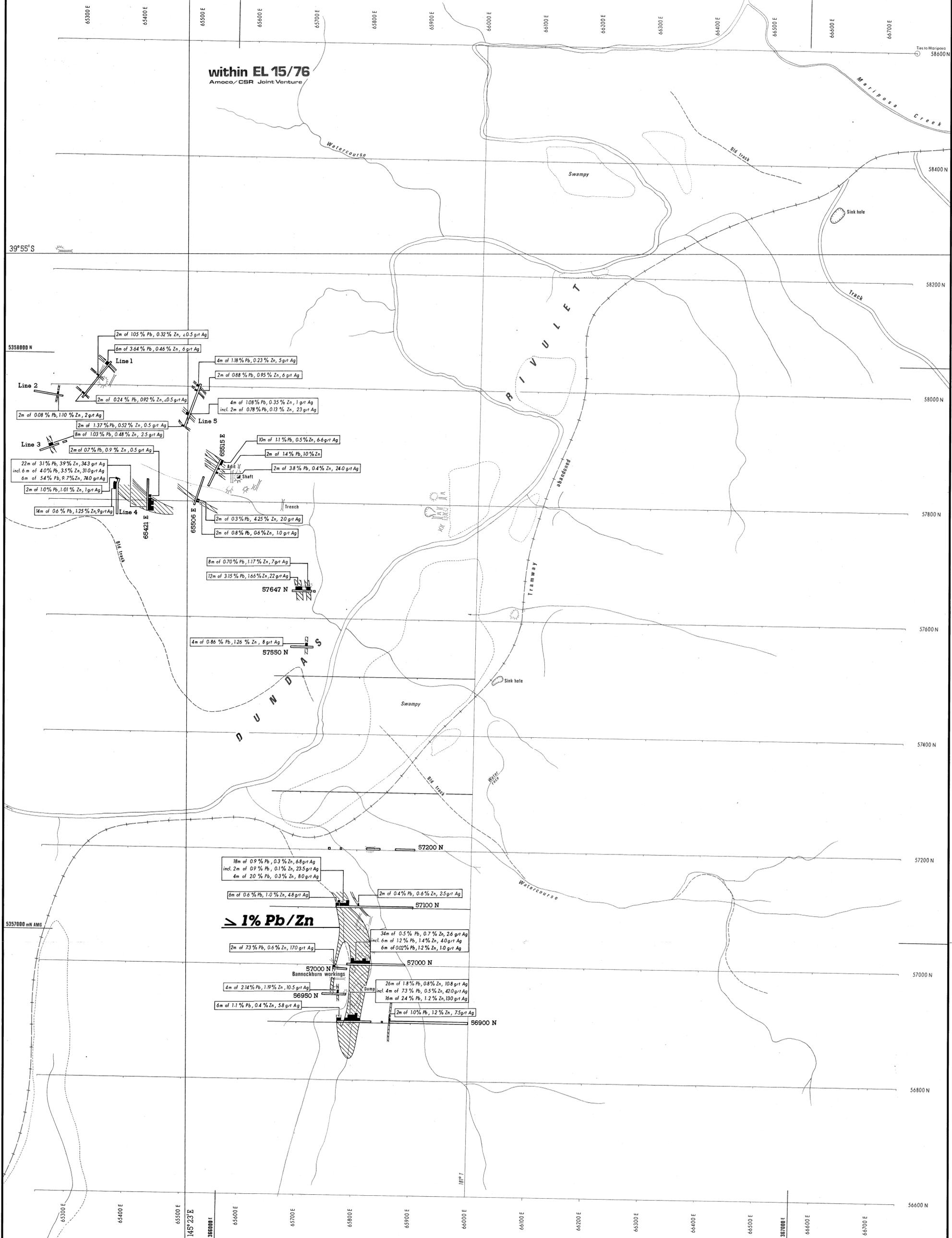


Amoco Minerals Australia Company

395076

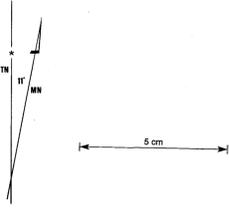
010

Project	GORDON RIVER N° A-80-82		
Project Partner	CSR		
Dundas JV	Mariposa		
COSTEANS	34-2162 vol 1/2		
LOCATION AND MINERALIZATION			
Map Ref. ANG	K-55-S	Latitude	39° 55' S Longitude 145° 25' E
Surveyed	PJ, GK	Date	1984 Scale 1:2500
Drawn	R. S-K, S.E.	Date	1984 Drawing N° M83-2133
Report	396		



within EL 15/76
Amoco/CSR Joint Venture

> 1% Pb/Zn



Basemap compiled from field mapping and airphoto enlargement
Discrepancies exist

Note

See Appendix 1 of Report 376 and 396
for detailed costean plans



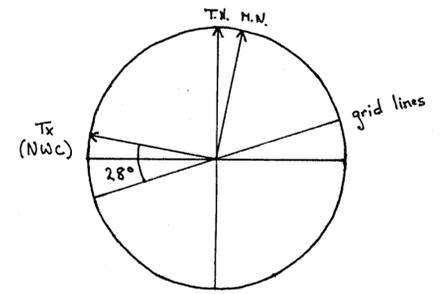
Amoco Minerals Australia Company

395077

011

Project	GORDON RIVER N° A-80-82		
Project Partner	CSR		
Dundas JV	Bannockburn		
LOCATIONS		84-2162 vol 1/2	
MINERALIZATION			
Map Ref. ANG	K-55-S	Latitude	39° 55' S
		Longitude	145° 25' E
Surveyed	P. J. G. K.	Date	1984
Scale	1:2500		
Drawn	R. S. K., S. E.	Date	1984
Report 396	Drawing N° M83-2135		

MARIPOSA GRID



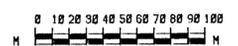
Filter algorithm

$$\theta_n = (2/3 \theta_{n-2} + 4/3 \theta_{n-1}) - (1/3 \theta_{n+1} + 2/3 \theta_{n+2})$$

Contour interval: 2, 5, 10, 20, 30

5 cm

SCALE
1: 2500



MITRE GEOPHYSICS PTY LTD

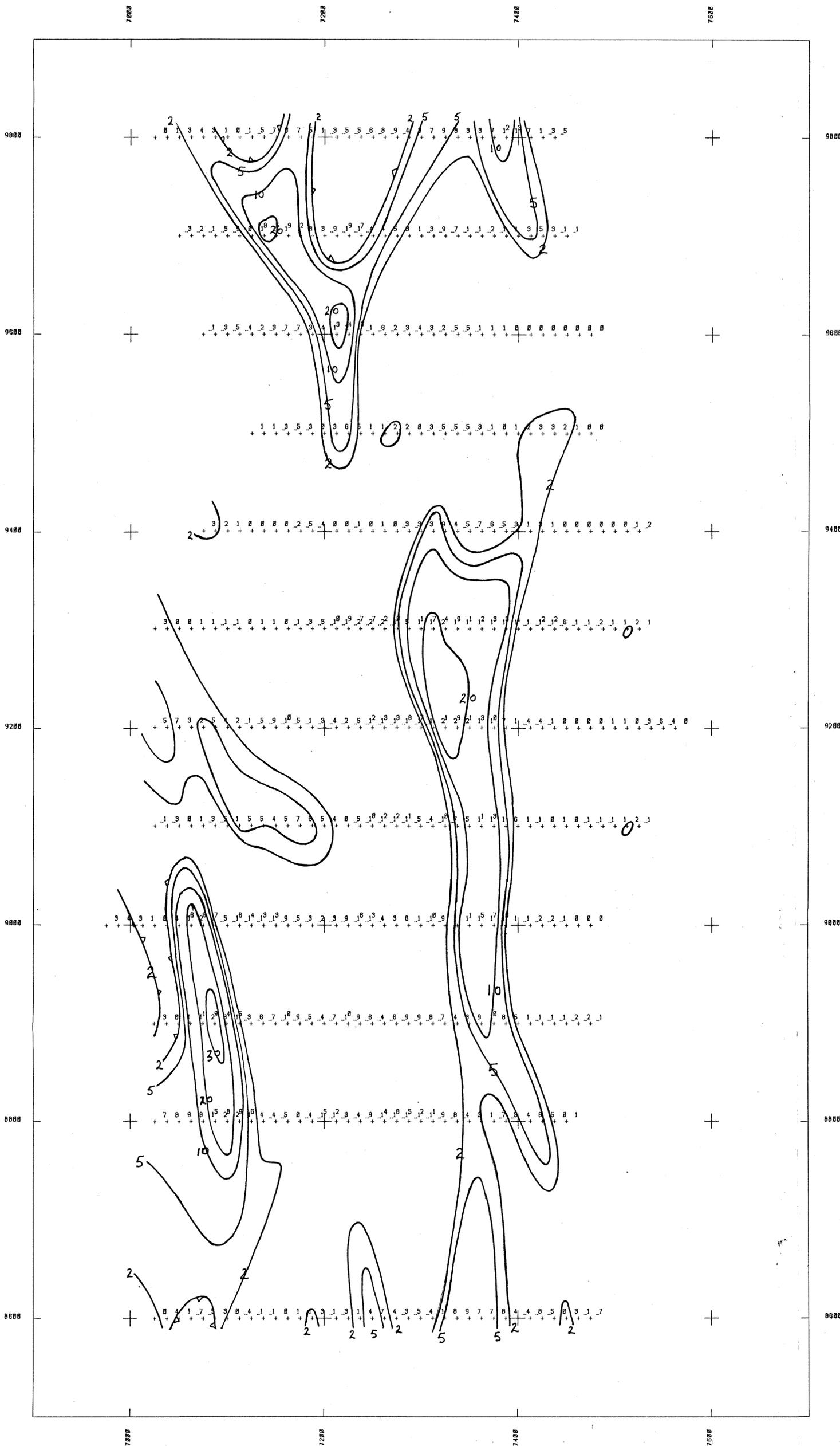
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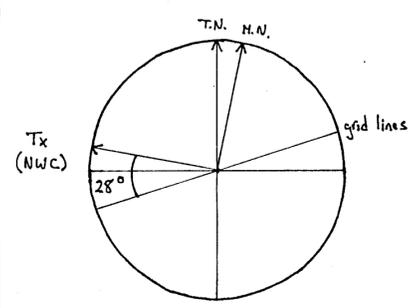
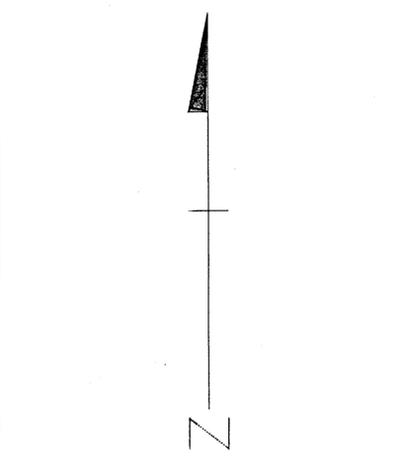
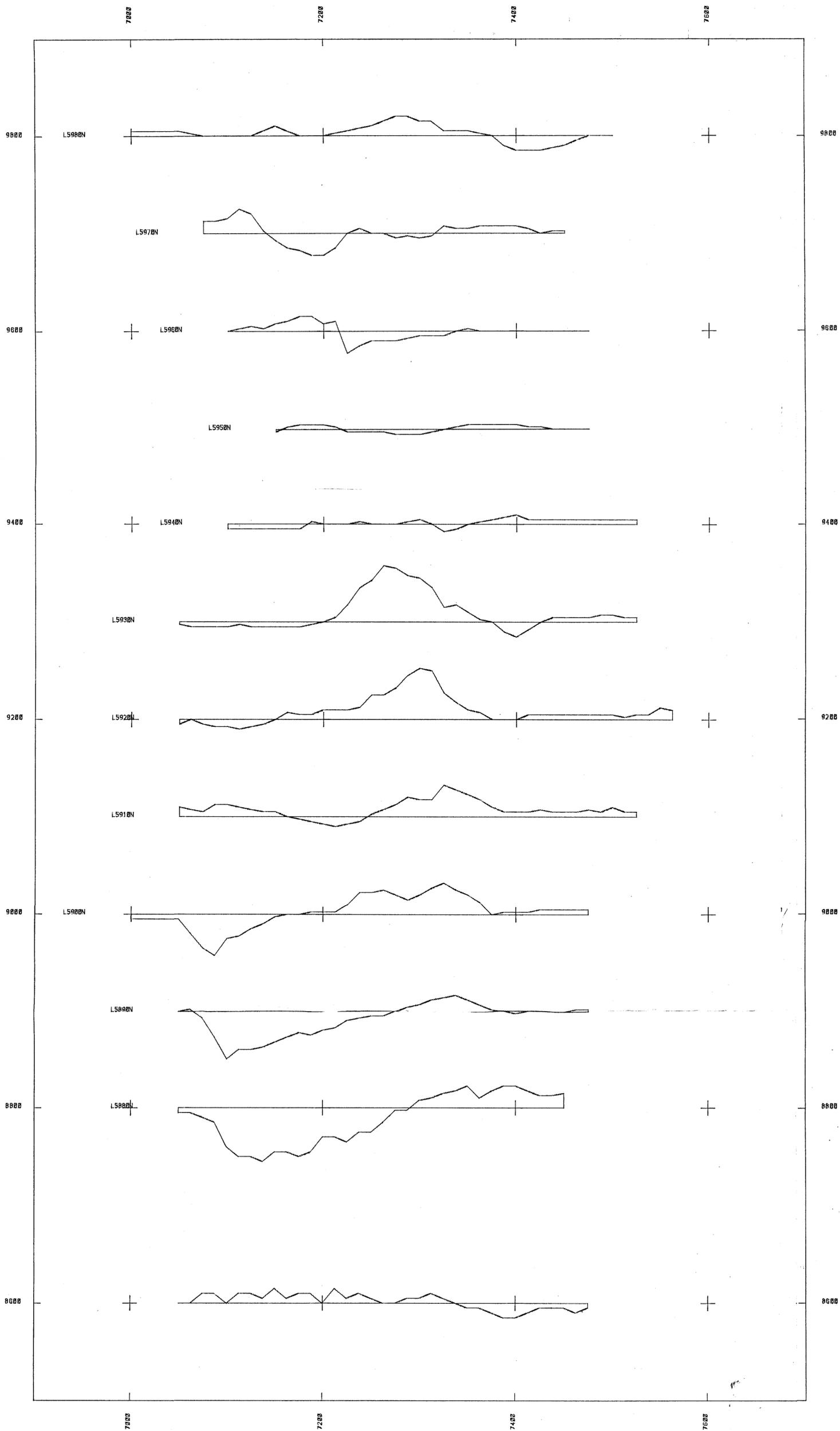
POINT POSTING

012

PROJECT: AMOCO/CSR

DATE: 30/1/84





5 cm

LEGEND
VERTICAL SCALE = 10 DEG/CM

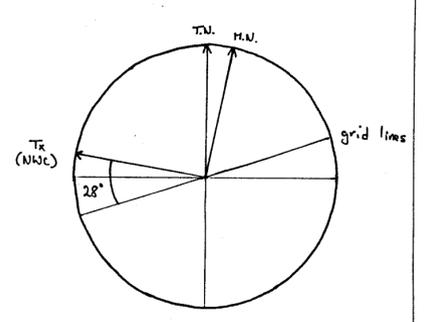
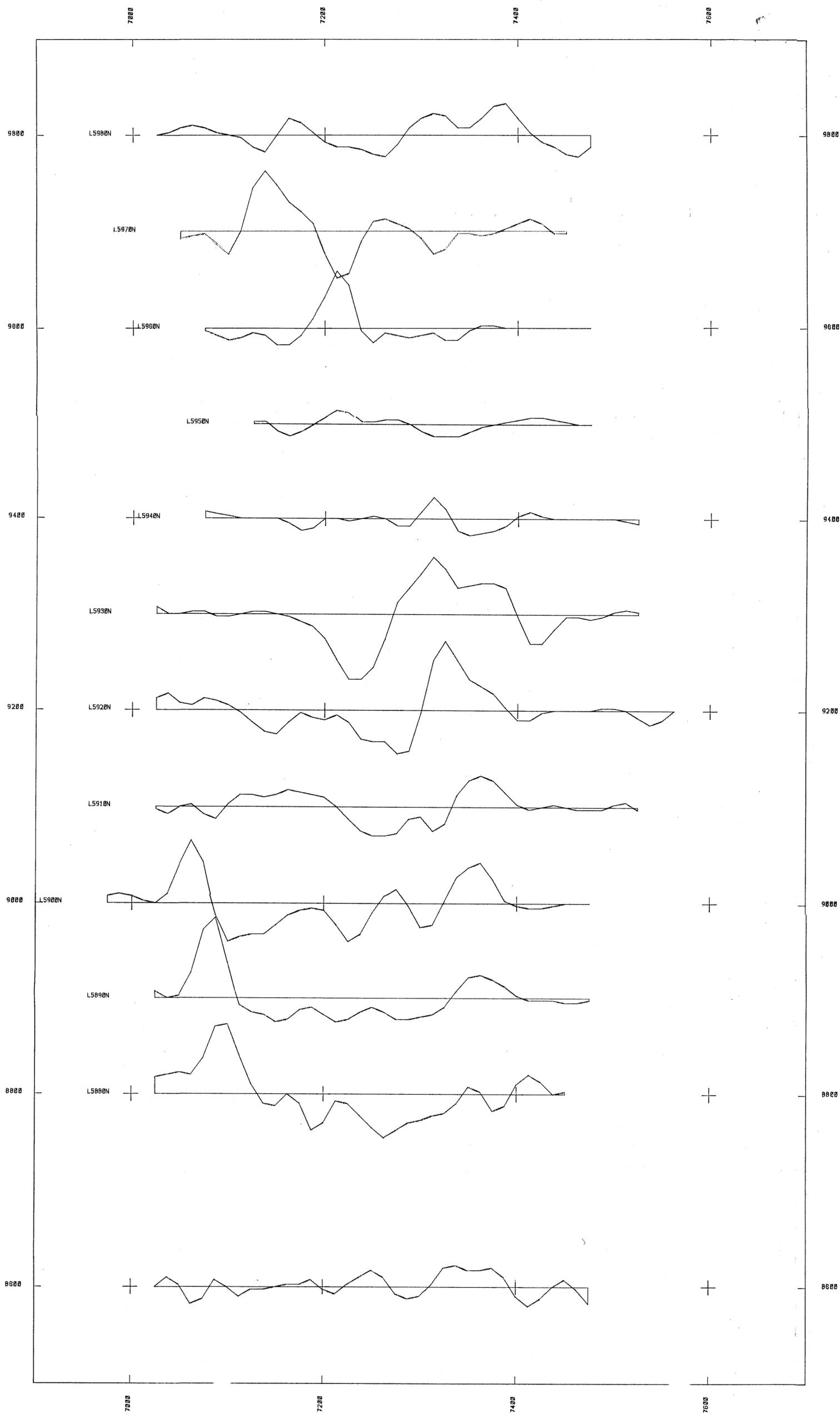
SCALE
1: 2500
0 10 20 30 40 50 60 70 80 90 100
M

395079

MITRE GEOPHYSICS PTY LTD

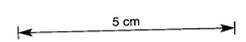
VLF DIP ANGLE DATA
013
STACKED PROFILE MAP

PROJECT: MARIPOSA DATE: 30/4/84

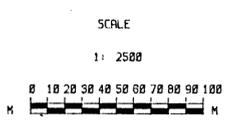


Filter algorithm

$$\theta_n = (2/3 \theta_{n-2} + 4/3 \theta_{n-1}) - (1/3 \theta_{n+1} + 2/3 \theta_{n+2})$$



LEGEND
 VERTICAL SCALE = 10 DEG/CM



MITRE GEOPHYSICS PTY LTD
 395080
 VLF FILTERED DERIVATIVE
 STACKED PROFILE MAP 014
 PROJECT: MARIPOSA DATE: 30/4/84