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McINTYRE MINES (AUSTRALIA) PTY. LTD.

ANNUAL REPORT & STATEMENT OF EXPENDITURES

EXPLORATION LICENCE 17/68 & C.L. 105M/77

Period - November 4th 1982 - November 3rd 1983

**OPEN FILE**

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McINTYRE MINES (AUSTRALIA) PTY. LTD.

ANNUAL REPORT AND STATEMENT OF EXPENDITURE

EXPLORATION LICENCE 17/68 & C. L. 105M/77

PERIOD - NOVEMBER 4th 1982 TO NOVEMBER 3rd 1983.

C. H. WHITEHEAD,  
McIntyre Mines (Australia) Pty. Ltd.

November 4th 1983.

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McINTYRE MINES (AUSTRALIA) PTY. LTD.EXPLORATION LICENCE 17/68 AND ASSOCIATED MINING TENEMENTSANNUAL REPORT & STATEMENT OF EXPENDITURESPERIOD - NOVEMBER 4th 1982 TO NOVEMBER 3rd 1983.TABLE OF CONTENTS

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E. L. 17/68 & C. L. 105M/77

ANNUAL REPORT - NOVEMBER 4th 1982 TO NOVEMBER 3rd 1983.

LIST OF PLANS

- Plan No. 1 - E.L. 17/68 - Location Plan Showing Areas Worked.
- Plan No. 2 - Ground Magnetic Survey - Location L. 5 to Eastern Ridge  
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- Plan No. 8 - Kara No. 1 - N.-S. Longitudinal Section, Sec. Line 7320N.
- Plan No. 9 - Kara No. 1 - Bench Plan - 495 Level.

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McINTYRE MINES (AUSTRALIA) PTY. LTD.ANNUAL REPORT - E.L. 17/68 - PERIOD NOV. 4th 1982 - NOV. 3rd 1983INTRODUCTION & SUMMARY

This report summarises details of the completed work programme within E.L. 17/68 and associated mining tenements for the twelve month period ending November 3rd 1983.

Work has been continuous throughout the current term and a variety of programmes designed at further evaluating the overall economic potential of the exploration licence area have been completed.

An exploration diamond drill programme proved successful in partially defining a new zone of tungsten mineralisation within the central section of the E.L., ground magnetic surveys on a regional basis have assisted greatly in better defining buried potential magnetite skarn zones; geological-engineering studies have defined mineable reserves of tungsten ore at both Kara No. 1 and Kara North and potential mine plans have been designed for both deposits; and additional metallurgical investigations on tungsten skarn show more favourable gravity recovery values and have assisted in perfecting a future flow sheet design for the main Kara ore deposits. An in-house feasibility study is currently in progress.

A statement of exploration expenditures for the twelve month period to November 3rd 1983 is attached. A total of A\$215490 was expended during the period in question.

The present report supplements a report forwarded to the Department Of Mines on 29th September 1983, entitled "Preliminary Summary Report Of Completed Work Programme - Period 4th November 1982 - 15th September 1983", and is intended to support an application for the renewal of E.L. 17/68 for a further period of twelve months to November 3rd 1984.

## 1. DIAMOND DRILLING PROGRAMME

During the current year, an ongoing exploration diamond drill programme was continued at Location L. 5 . In total, twelve holes - DDH's 326 to 337 - were completed, with a total drilled metreage of 927.10m.

Location L. 5 is situated on the eastern bank of the Companion River in the central section of E.L. 17/68, some 1.4kms due north and along strike from the Eastern Ridge deposit.

The prospect itself was originally delineated as a localised ground magnetic anomaly (of approx. 400m strike length and 75m width) in a region entirely masked by Tertiary basalt - sediment cover. This anomaly was geologically interpreted as potential narrow buried subsurface magnetite skarn, possibly representing the northerly strike extension of the Eastern Ridge skarns.

Drilling completed to date at Location L. 5 is regarded as very encouraging, both in proving the presence of subsurface magnetite skarns, and in outlining new zones of scheelite bearing mineralisation.

The initial hole drilled at L.5 - DDH 326 - was essentially wildcat in nature, but proved successful in intersecting tungsteniferous skarns. The following three holes - DDH 327 - 329 - were again exploratory in nature and aimed at assessing the localised dip and strike attitudes of discovered mineralisation and host beds. The final eight holes - DDH's 330 - 337 - were drilled in an attempt to delineate the possible extent and geometry of ore lenses over a total strike distance of 130 metres.

Intersected mineralisation is hosted by the Ordovician Transitional Series which have been altered to a magnetite - actinolite skarn and a garnet-diopside facies. At Location L. 5, these host rocks strike almost north-south, dip to the west at angles between  $60^{\circ}$  and  $80^{\circ}$ , and are buried beneath a cover of younger Tertiary basalt and sediments of variable thickness (between 25m and 40m).

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Scheelite mineralisation is associated with two separate narrow skarns. Mineralised zones are lens or pod-like in nature, and along strike somewhat inconsistent in development. Where best developed, and from drill intersections to date, the two mineralised ore lenses would average 3.0m and 7.5m true width respectively.

The greatest proportion of mineralisation is scheelite bearing, of fresh unoxidised quality, coarsely crystalline, and with  $WO_3$  grades significantly higher than normal for the Kara Properties. The tungsten values range from a cut - off grade of 0.20%  $WO_3$  to 10.0%  $WO_3$ , but on the average, ore zones drilled to date indicate a grade of 1.5%  $WO_3$  to be normal.

Over the drilled strike distance of 130 metres at Location L. 5, ore blocks of fresh scheelite bearing material are estimated to total 97,840 tonnes of 1.50%  $WO_3$  grade. At this stage, these reserves can only be regarded as geological in the "possible-ore" category. In addition the interpreted disposition of the ore lenses would prohibit any open pit mining potential. and can only be regarded as ones of possible future underground development. However, the recognition of the L. 5 mineralised skarns - especially their high grade  $WO_3$  values and significant strike distance away from previously known areas of tungsten mineralisation - is one of encouragement and further enhances the future potential of other E.L. 17/68 subsurface skarns as yet uninvestigated.

The above drilling programme was suspended in February 1983, partially because of exploratory budget constraints, and partially to evaluate and better define the subsurface strike extensions of the buried L.5 skarns by more detailed ground magnetic surveys.

Table No. 1 overleaf summarises the drill statistics of completed drilling at Location L. 5.

E.L. 17/68 quarterly report for the three month period to May 3rd 1983 included the following drill sections and drill logs relevant to the above drill programme:-

- Drill sectional plans for Sec. Lines 7640N, 7680N, 7720N and 7770N.
- Lithological . drill logs, assay sheets and drill recovery sheets for DDH's No. 326 to 337 (inclusive).

DRILL STATISTICS - LOCATION L5 - DRILL HOLES COMPLETED

<u>HOLE NO.</u>	<u>SEC. LINE</u>	<u>COORDINATES</u>		<u>R.L.</u>	<u>INCLINATION</u>	<u>DEPTH</u>
		<u>NORTH</u>	<u>EAST</u>			<u>DRILLED</u>
						<u>(METRES)</u>
DDH 326	7680N	7674.4	7830.2	437.4	70°E	86.82
DDH 327	7680N	7677.4	7830.2	437.4	85°E	107.09
DDH 328	7640N	7640.9	7832.1	426.9	55°E	52.46
DDH 329	7640N	7641.4	7831.5	426.9	83°E	98.33
DDH 330	7720N	7718.7	7820.7	429.2	70°E	91.41
DDH 331	7720N	7718.7	7820.7	429.2	55°E	80.77
DDH 332	7720N	7720.6	7794.6	416.6	58°E	94.18
DDH 333	7770N	7767.4	7820.0	417.8	65°E	90.81
DDH 334	7770N	7767.4	7820.0	417.8	75°E	100.27
DDH 335	7770N	7767.4	7820.0	417.8	53°E	63.39
DDH 336	7810N	-	-	-	73°E	37.80
DDH 337	7640N	7640.9	7832.1	426.9	79°E	23.77
Total Metres						<u>927.10</u>

## 2. GROUND MAGNETIC SURVEYS

A number of detailed grid ground magnetic surveys have been completed over large regions within the exploration licence area during the year - please refer to Plan No. 1.

These surveys were planned in the effort of defining possible strike extensions of magnetite skarn zones buried beneath Tertiary Basalt cover at both the Location L. 5 region and the Hampshire Magnetite Skarn area.

The surveys covered quite large areas of ground, usually thickly forested and previously unsurveyed topographically, thereby necessitating initial line cutting and complementary surveying. Through past experiences over basalt covered terrain, it was decided to run E-W traverse lines at intervals of no more than 40 metres and preferentially at 20 metre intervals. Magnetic readings were taken at 5 m spacings along these lines with infill observations made in areas of reported anomalism.

The results of these magnetic surveys are as follows - please refer to accompanying plans No. 2, 3, 4 and 5.

### A - Location L. 5 to Eastern Ridge.

Magnetite skarns, beneath variable depths of Tertiary basalts and sediments, (25 to 70m) have been proved by drilling at these two locations. Magnetic surveys were carried out in the region between the two areas to delineate any possible strike continuation of these buried skarn zones.

The magnetic survey was confined to the area east of the Companion River between grid coordinates 6500N and 7600N (a N-S strike distance of 1100 metres). Initial reconnaissance E-W traverse grid lines were run at 80 metre spacing, then reduced to 40 metre intervals. Magnetic readings were recorded at 5 metre intervals. This survey tied in results with those of previously run magnetic surveys at Eastern Ridge, the Kara North Magnetite Anomaly and Location L. 5. The results of this work are shown on plan No. 2 - scale 1:1000.

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Magnetic readings ranged in value from 61000 to 64500 gammas, and from past results at L. 5 and Eastern Ridge, readings in excess of 63000 gammas are regarded as anomalous. As shown on the plan, a definite positive N - S magnetic anomaly is delineated through the region in question. This is separated from the Kara North Magnetite Anomaly to the west by a broad negative low.

The Eastern Ridge magnetic anomaly is definitely continuous north from 6500N for a distance of 300 metres. Other additional prominent anomalies along the trend to Location L. 5 are found between 6930N and 7150N (220 metre strike distance) and 7200N to 7360N (160 metre strike).

The above magnetic trend is interpreted as representing a buried magnetite skarn zone belonging to the eastern limb of the Kara synclinorium structure.

#### B - Location L. 5

As drilling progressed at this location, concurrent infill magnetic surveys were run in the region between grid coordinates 7500N and 8050N. Traverse lines were established at 10m intervals, magnetic readings taken at 5m spacing. The results of this work are shown on Plan No. 3 - scale 1:000.

The positive magnetic high, with readings from 63000 to 68000 gammas, occurs just east and over the Companion River, for a N - S strike distance of 550 metres and 150 metres E - W width. Highest readings coincide with an E - W transverse tributary of the Companion River and shallower cover of Tertiary basalt sediments.

#### C - Location L. 5 to Loudwater Creek

This survey covered a region of approximately 1200 metre strike distance from north of Location L. 5 to the Loudwater Creek/Companion River junction.

Results of the work are shown on Plan No. 4 - scale 1:1000. E - W traverse lines were cut at approx 40 metre intervals along the western side of the Companion River, with readings on 5m spacings. The results of an older reconnaissance survey run in 1981 on the eastern side of the Companion River (60 to 100 metre line spacing) are shown on Plan. No. 4.

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The recent survey shows that the northern limits of the Location L. 5 magnetic anomaly coincides with the 8050N grid coordinate. At 8200N magnetic results would indicate a disturbance and lateral shift of the interpreted N - S trending Transitional Series.

The region as a whole is completely masked by Tertiary basalt and alluvial cover, but a narrow (25 to 50m) subtle magnetic trend (63000 - 64000 gammas) can be followed striking N - S a short distance from the western bank of the Companion River. This trend broadens and increases slightly in intensity from grid coordinate 8800N to the Loudwater Creek and is interpreted as representing potential metamorphosed Transitional Series (magnetite skarns) buried beneath basalt.

#### D. West Of The Hampshire Granite Stock

A grid magnetic survey was completed from the Hampshire Magnetite Skarn around the W and N W margin of the Hampshire Granite Stock to the vicinity of the Hampshire Silver Mine. The region has been surveyed, but as yet not tied into the Kara grid - however Plan No. 5 shows survey results, scale 1:1000. The survey (E - W grid lines spaced at approx. 35m) were run between grid coordinates 9500N and 10600N, a 1100m strike distance.

The results were very informative and encouraging. The previously known Hampshire Magnetite Skarn Zone, S E of the Hampshire Railway Siding, was better delineated, and more significantly extended in strike distance over 450 metres. Magnetic readings are very pronounced - 63000 to 72000 gammas - and would indicate an on surface or near surface body of well developed magnetite skarn.

A second zone of magnetic anomalism also follows the north west margin of the Hampshire granite, and stands at a constant distance away from the granite margin.

#### E -

A grid survey has now been completed between the Loudwater Creek area and the Hampshire Silver Mine, but as yet, results have not been tabulated or plotted.

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### 3. PRE - DEVELOPMENT PROGRAMME

As part of the McIntyre Mines Pre - Development Programme (due for completion December 31st 1983), a number of specific projects have been completed during the current year at the Kara No. 1 and Kara North tungsten skarn deposits.

These projects have included the following:-

- A - A resurvey of the Kara No. 1 Eastern Zone was made both at January 31st 1983 and May 30th 1983. The results of the latter survey are shown on Plan No. 6 scale 1:500. After each survey, a reconciliation was completed of the ore reserves of fresh and partially weathered tungsten ore (cut off grade 0.20%  $WO_3$ ) and ore resources of weathered tungsten material.
- B - A compilation of composite bench plans (5 metre spacing) E - W cross sectional plans (40metre spacing) and N - S longitudinal sectional plans (10 metre spacing) was completed over the Kara No. 1 and Kara North deposits. Examples of these plans and sections are attached with this report. They are intended to show all designated rock and ore types delineated at Kara -
  - Plan No. 7 - E - W Cross Sectional Plan (Kara No. 1 Section Line 5820N)
  - Plan No. 8 - N - S Longitudinal Sectional Plan (Kara No. 1 Section Line 7320E).
  - Plan No. 9 - Bench Plan (Kara No. 1 - 495 Level)
- C - An in-house optimisation of the October - November 1982 Golder Associates proposed mine design for the Kara No. 1 deposit was completed. This included a compilation and tabulation of mineable reserves, geological reserves outside pit, overburden tonnages and tungsten weathered resources. These reserves were tabulated on a bench x bench and section x section basis.
- D - Bulk density determinations. Representative samples of all Kara ore and rock types (total number = 19) designated at the future proposed mine sites at Kara No. 1 and Kara North were collected. These were subjected to bulk density - specific gravity determinations.

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- E - Preliminary sampling of all the existing Tasminex N.L. tailings and slime dam material was completed. These samples have been chemically assayed for total  $WO_3$  values. Selected bulk samples of this material have now been submitted for metallurgical testwork to investigate possible recoverable scheelite values.
- F - Five bulk samples representative of fresh and partially weathered ore from the Kara No. 1 deposit were collected for test work to investigate fine scheelite gravity recoveries. Summary results have been obtained but formal report awaited.
- G - Metallurgical testwork was completed by Warman International Ltd., to determine the amount of scheelite recoverable from the minus 75um size fraction of a sample of table tailings obtained from the Tasminex mill operation. The tailings sample submitted contained 0.26%  $WO_3$ . Seven percent of the sample by weight was finer than 75um and contained 34% of  $WO_3$  values. By utilising a Mozley separator, 43% of the tungsten in the minus 75um fraction was recovered as a concentrate assaying 65.6%  $WO_3$ .
- H - The possible use of Kara No. 1 magnetite ore in the coal washing heavy media industry is being evaluated. Both magnetite tailings produced from the Tasminex N.L. mining operation, and representative drill core samples of magnetite skarn from the Kara No. 1 deposit have, or are, being investigated. Test work is being completed at the Tasmanian Mines Department Laboratories and Australian Coal Industries Laboratories (N.S.W.)
- I - Routine geologic mapping and ore-zone sampling of the areas affected by the Tasminex N.L. mine operation have been made throughout the year.

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#### 4. STUDY OF MAGNETITE RESERVES

As part of a programme to evaluate the magnetite potential of all skarn zones within E.L. 17/68, a detailed preliminary study of the magnetite content of both the Kara No. 1/West Limb deposit and the Kara North 266 Zone deposit have been completed.

The study was two fold in nature:-

- A - Evaluate from known drill data, the total geological reserves of magnetite skarn at the Kara No. 1 and West Limb deposit. The compilation was undertaken over 600 metres drilled strike distance of the two deposits between Section Lines 5620N and 6220N, and reserves were calculated on a 20 metre bench level basis. Reserves of magnetite skarn were limited to those containing an estimated plus 30%Fe content (based on McIntyre Mines geologists visual estimates). Total geological reserves of this material amounted to 8,036,000 tonnes, and a section x section, bench level x bench level breakdown is itemised on the Table No. 2 overleaf.
- B - Evaluate the total geological reserves and also mineable reserves of plus 30% Fe magnetite ore which could be mined in the future proposed tungsten mining operations at both Kara No. 1 and Kara North. These reserves were delineated separately into fresh and partially weathered magnetite skarn ore types, and calculated on a 2.5metre level basis within both deposits. A summary tabulation of these reserves is shown on Table No. 3.

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EXPLORATION LICENCE - KARA PROPERTIES.

MAGNETITE RESOURCES - KARA N° 1 - WESTERN LIMB.

BENCH LEVEL. →	520	500	480	460	440	420	400	380	TOTAL
	T	T	T	T	T	T	T	T	T
5620N	90240								90,240
5660N	88,000	56,000							144,000
5700N	63680	145,600							209,280
5740N		180,000	86,400						266,400
5780N		41,600	249,600	66,600					357,800
5820N		46,400	388,800	211,200	91,200				737,600
5860N			119,600	204,480	142,400	12,000			478,480
5900N			119,440	310,400	179,200	52,800			661,840
5940N			27,840	220,000	216,000	52,800			716,640
5980N				188,800	321,600	150,400			660,800
6020N			96,000	102,400	148,480	208,000	148,000		602,880
6060N				64,000	144,000	256,000	224,000		688,000
6100N				110,400	70,400	208,000	288,000		676,800
6140N				106,560	217,600	307,200	320,000	288,000	1,239,360
6180N				118,400	128,000	150,400	256,000		652,800
6220N				72,000	83,200	60,800	57,600		273,600
TOTALS.	241,920	469,600	947,680	1,682,880	1,742,880	1,487,400	1,193,600	288,000	8,023,160

TABLE NO. 3KARA NO. 1 DEPOSITGEOLOGICAL RESERVES OF + 30% Fe MAGNETITE SKARN:-

	<u>Tonnes</u>	<u>Est. Fe Grade</u>
1. Fresh Magnetite Skarn	604,959	67.0
2. Partially Weathered Magnetite Skarn	232,975	56.6

MINEABLE RESERVES OF + 30% Fe MAGNETITE SKARN

1. Fresh Magnetite Skarn	443,231	67.6
2. Partially Weathered Magnetite Skarn	213,238	57.2

KARA NORTH DEPOSIT

	<u>Tonnes</u>	<u>Est. Fe Grade</u>
<u>GEOLOGICAL RESERVES OF + 30% Fe MAGNETITE SKARN</u>		

1. Fresh Magnetite Skarn	305,575	57.5
2. Partially Weathered Magnetite Skarn	1,440	37.6

MINEABLE RESERVES OF + 30% Fe MAGNETITE SKARN

1. Fresh Magnetite Skarn	170,762	59.0
2. Partially Weathered Magnetite Skarn	1,485	38.7

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5. IN - HOUSE FEASIBILITY STUDY

During May 1983, an in house feasibility study of the Kara No. 1 and Kara North deposits, plus an overall appraisal of the economic potential of E.L. 17/68 was initiated. This work is being carried out in Tucson, Arizona by McIntyre Mines affiliated company, Superior Oil Minerals Division in cooperation with McIntyre Mines project personnel. The results of this study will provide the basis for a production decision to be made by McIntyre Mines prior to January 31st 1984.

The scope of the feasibility study can be subdivided into four sections:-

- A - Developing on computer, an ore reserve model for the Kara No. 1 and Kara North deposits.
- B - Developing an open pit mine design, mine plans and production schedule.
- C - Study of equipment and manpower requirements, capital and operating cost estimates.
- D - Final financial evaluation.

During September 1983, the above Sections A and B were completed - the remainder of the study is still in progress.

The mine plan study (Section A and B) called for the developemnt of an open pit plan based on a 500 tpd - 260 day per annum operation for the Kara No. 1 and the Kara North deposits. In order to develop the mine plan, computer ore models for both deposits were built using geologic sections and McIntyre Mines raw drill hole assay information, and data composited to 2.5m bench height intervals. The final pit limits were based on floating cone runs in the model, and annual mine plans for both deposits were designed to show the developemnt of the final pits. Waste dump and stockpile locations and annual truck haul profiles were also included in the study.

Results of this work, show that mineable ore reserves of fresh and partially weathered scheelite ore for Kara No. 1 and Kara North to be as follows:-

Kara No. 1	818,684 tonnes	0.814% WO <sub>3</sub>
Kara North	229,556 tonnes	0.916% WO <sub>3</sub>
Total	<u>1,048,240 tonnes</u>	<u>0.836% WO<sub>3</sub></u>

## 6. GENERAL

### A - McIntyre Mines Personnel

McIntyre Mines (Australia) Pty. Ltd., personnel employed during the twelve month period in question have included:-

- One Project Manager/Geologist - (12 Months)
- One Prospector - (12 Months)
- One Diamond Drill Operator - (3½ months)
- One drill helper - (3½ months)
- One field assistant - (casual basis)

Regional exploration office staff has included one typist and one draftsman employed on a part time basis.

Engineering, economic studies have been performed by consultants working in conjunction with McIntyre Mines staff, or an affiliated company of McIntyre Mines (Superior Oil Minerals Division).

Analytical and metallurgical studies have been undertaken by AMDEL, Warman International Laboratories, Bartles Ltd., Australian Coal Industry Research Laboratories, and the Tasmanian Mines Department Laboratories.

### B - Reporting

During the twelve month period ending November 3rd 1983, McIntyre Mines (Australia) Pty. Ltd., have submitted to the Director Of Mines, Tasmanian Mines Department, the following progress reports and statements of expenditure related to E.L. 17/68 and C.L. 105M/77.

- Quarterly Report for 3 month period, Nov. 4th 1982 to Feb. 3rd 1983. (submitted February 3rd 1983)
- Quarterly Report for 3 month period, Feb. 4th 1983 to May 3rd 1983 (submitted May 4th 1983)
- Quarterly Report for 3 month period May 4th 1983 to Aug. 3rd 1983. (submitted August 4th 1983)
- Preliminary Summary Report of Completed Work Programme E.L. 17/68 Period 3rd Nov. 1982 - 15th Sept. 1983. (submitted 29th September 1983)
- Proposed Work Programme and Application for Renewal of E.L. 17/68 for period 4th November 1983 to 3rd November 1984 (submitted 29th September 1983).

*C. H. Whitehead*  
C. H. Whitehead,

McIntyre Mines (Australia) Pty. Ltd.

4th November 1983.

7. STATEMENT OF EXPENDITURES

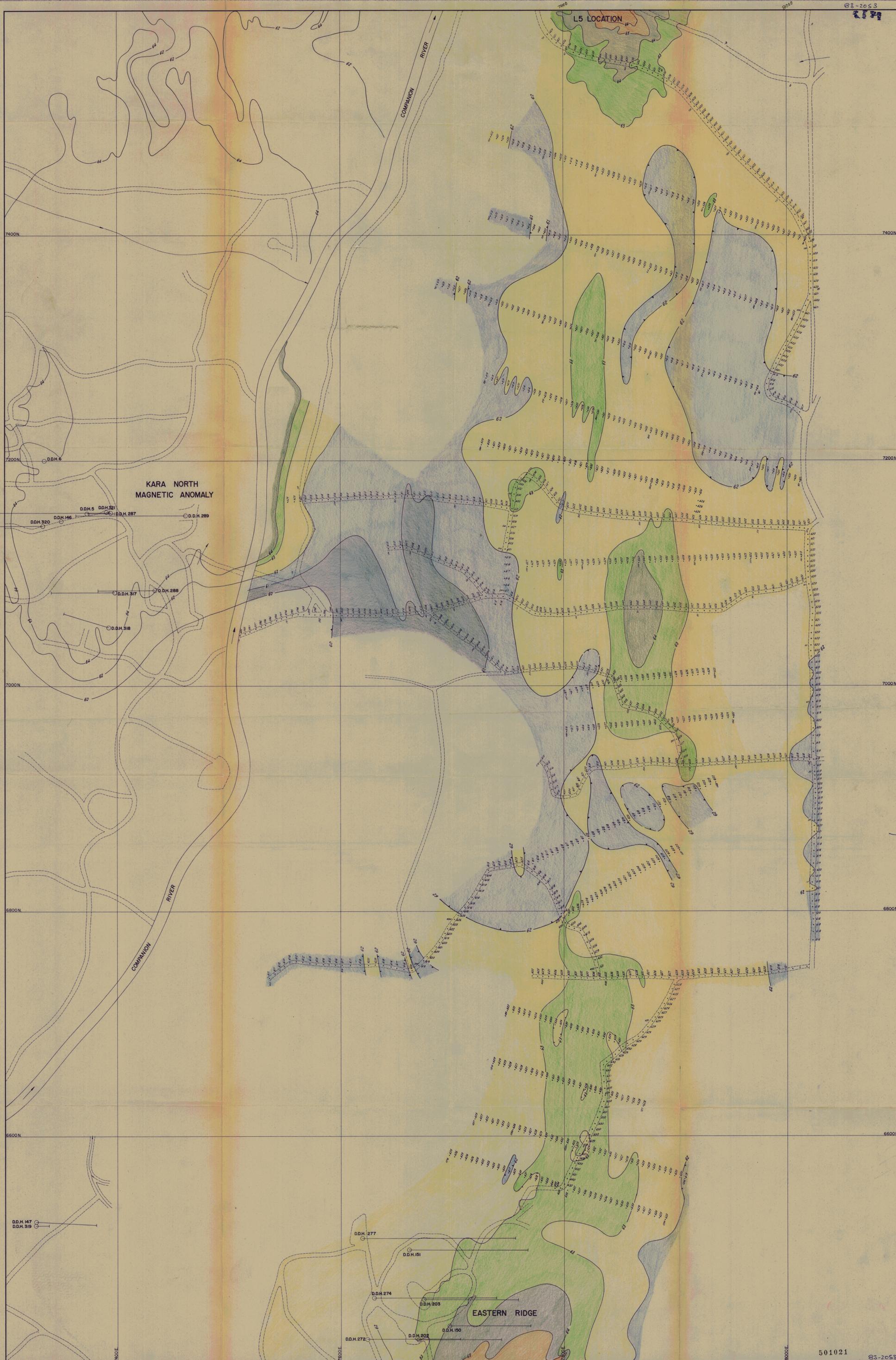
McIntyre Mines (Australia) Pty. Ltd., as manager of a joint venture with Tasminex N.L. incurred the following exploration expenditures on E.L. 17/68 and associated mining tenements during the twelve month period to November 3rd 1983.

	<u>E.L. 17/68</u> \$	<u>C.L.105M/77</u> \$	<u>TOTAL</u> \$
Office, rent, services	20,067	19,914	39,981
Camp, road, maintenance	-	297	297
Camp supplies, accommodation	165	515	680
Geology	22,742	7,284	30,026
Bulldozing	1,487	1,076	2,563
Ground Magnetometer	11,323	-	11,323
Metallurgy	-	1,080	1,080
Geochemistry	105	119	224
Assays	3,537	1,284	4,821
Transportation	12,307	2,299	14,606
Environmental	332	331	663
Engineering - Golders	-	5,483	5,438
Engineering McIntyre	-	2,595	2,595
Engineering - Mine Design	-	10,111	10,111
Diamond Drill	33,444	597	34,041
Geological Consulting	-	63	63
Superior Minerals Study	-	23,687	23,687
Superior Minerals - McIntyre	-	15,365	15,365
Assessment Work	537	12,936	13,473
Lease Expense	1,850	-	1,850
Insurance	1,279	1,279	2,558
	<hr/>		
<i>C. H. Whitehead</i> Totals	\$109,175	\$106,315	\$215,490
	<hr/>		

C. H. Whitehead,  
McIntyre Mines (Australia) Pty. Ltd.

4th November, 1983.





KARA NORTH  
MAGNETIC ANOMALY

EASTERN RIDGE

L5 LOCATION

COMPANION RIVER

COMPANION RIVER

LEGEND

	> 65000 Gamma		61 - 62
	64 - 65		60 - 61
	63 - 64		59 - 60
	62 - 63		< 59

5 cm

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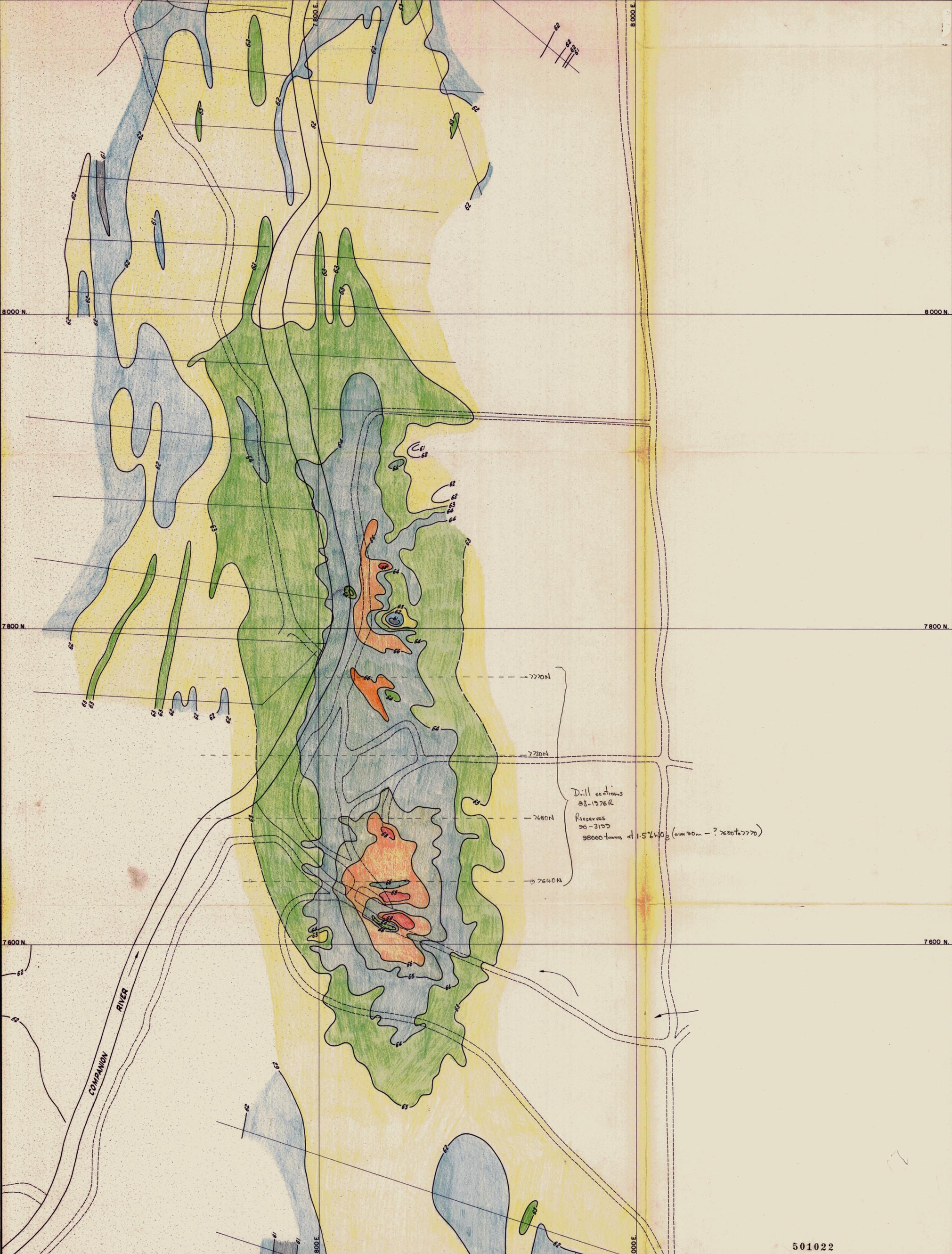
MCINTYRE MINES (AUST.) PTY. LTD.

KARA TUNGSTEN PROJECT, TASMANIA

GROUND MAGNETIC SURVEY

REGION SOUTH OF L5 LOCATION

DRAWN: CHW TRACED: TGS SCALE: 1:1000 DATE: Oct 83 PLAN: N° 2



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McINTYRE MINES (AUST.) PTY. LTD.

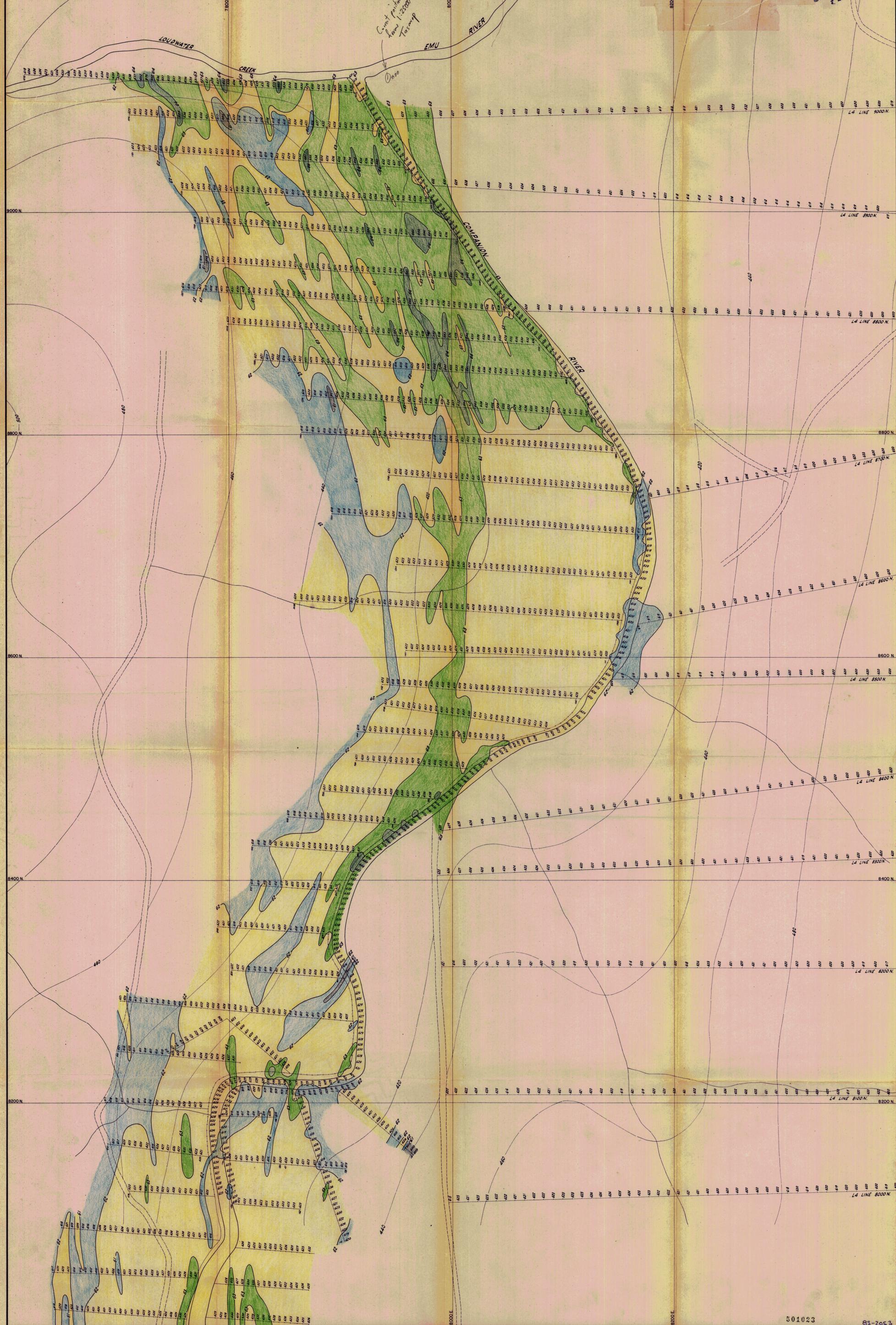
KARA TUNGSTEN PROJECT, TASMANIA  
GROUND MAGNETIC SURVEY  
LOCATION L5

LEGEND:

<span style="color: red;">■</span> > 68,000 Gammas	<span style="color: green;">■</span> 63 - 64
<span style="color: orange;">■</span> 66 - 68	<span style="color: yellow;">■</span> 62 - 63
<span style="color: blue;">■</span> 64 - 66	<span style="color: lightblue;">■</span> 61 - 62
<span style="color: grey;">■</span> < 61	

83-2053

5 cm



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83-2053

- LEGEND
- >6400 Gauss
  - 63-64
  - 62-63
  - 61-62
  - <61

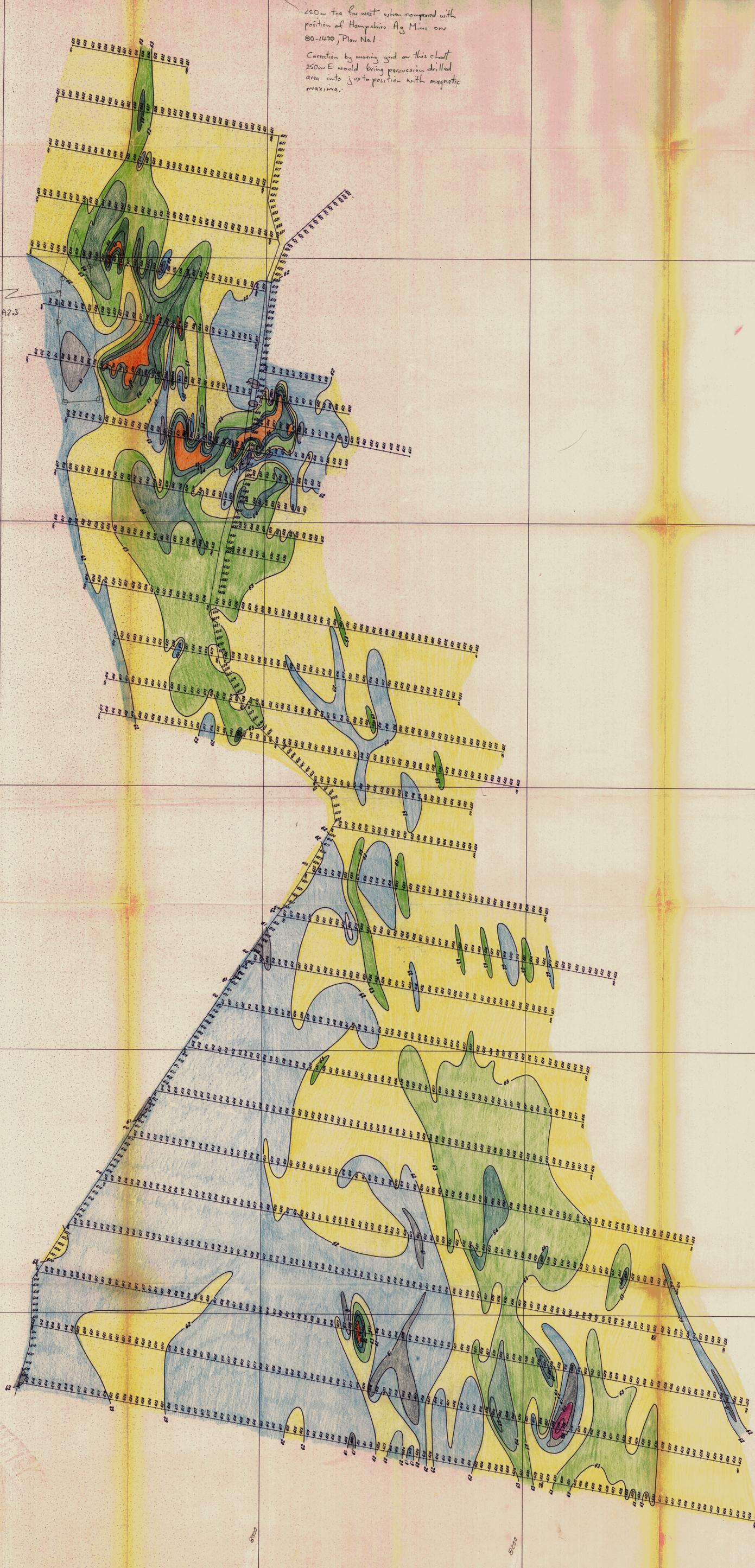
83-2053



MCINTYRE MINES (AUST.) PTY. LTD.  
 KARA TUNGSTEN PROJECT, TASMANIA  
 GROUND MAGNETIC SURVEY  
 LOCATION L5 TO LOUDWATER CREEK  
 DRAWN: C.H.W. TRACED: T.G.D.S. SCALE: 1:1000 DATE: Oct '83

250m too far west when compared with position of Hampshire Ag Mine on 80-1450, Plan No 1.  
Correction by moving grid on this chart 250m E would bring percussion drilled area into juxta position with magnetic maxima.

Area percussion drilled according to AMG co-ords in 80-3150, App. A2.3



Hampshire Sh Mine

EMU LINE

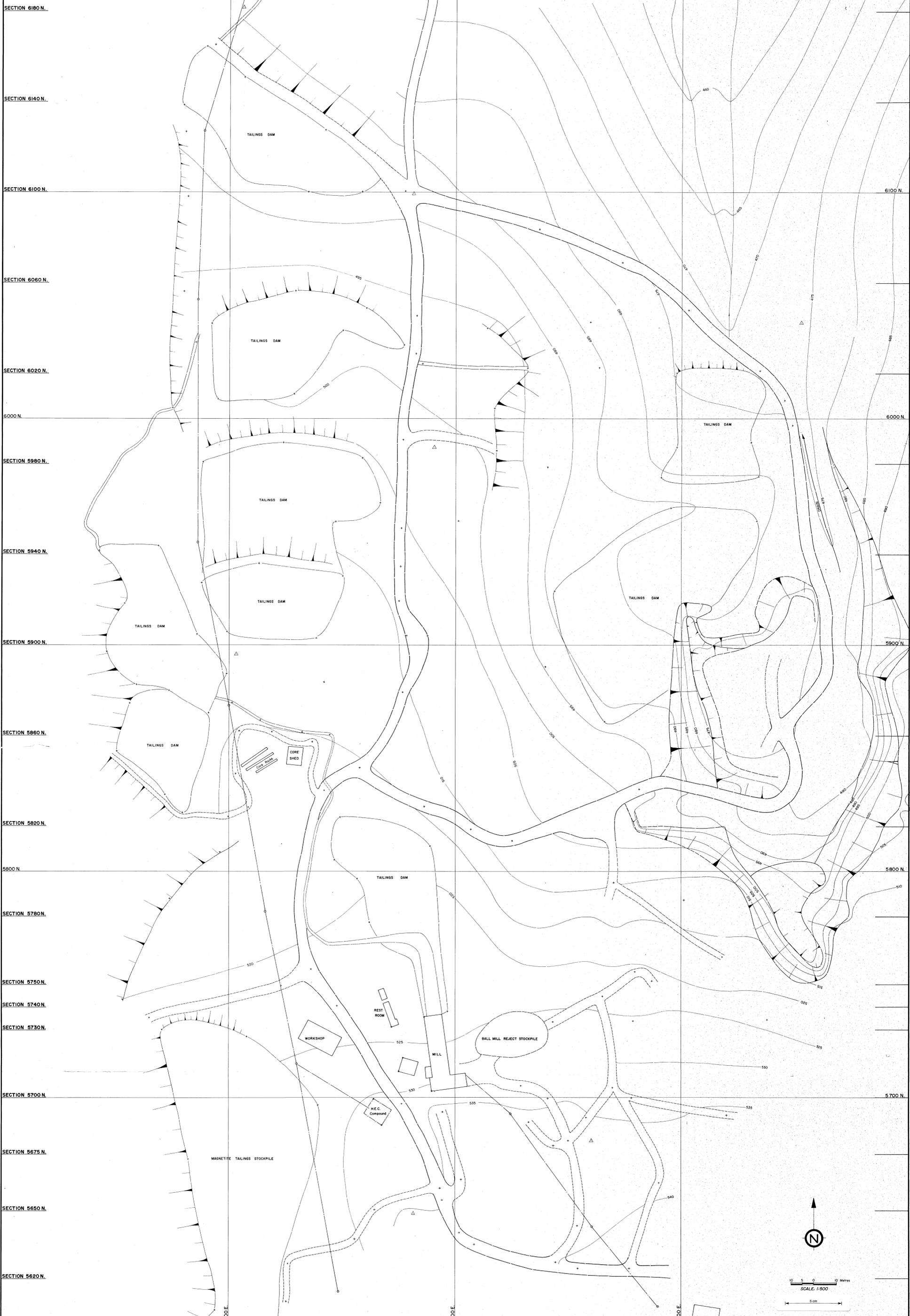
501024



LEGEND

<span style="color: red;">█</span> >66,000 Gammas	<span style="color: orange;">█</span> 62 - 63
<span style="color: yellow;">█</span> 65 - 66	<span style="color: purple;">█</span> 61 - 62
<span style="color: green;">█</span> 64 - 65	<span style="color: grey;">█</span> 60 - 61
<span style="color: lightgreen;">█</span> 63 - 64	<span style="color: pink;">█</span> < 60

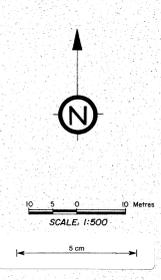
MCINTYRE MINES (AUST.) PTY. LTD.  
 KARA TUNGSTEN PROJECT, TASMANIA  
 82-2053  
 GROUND MAGNETIC SURVEY  
 HAMPSHIRE MAGNETITE SKARN  
 DRAWN: CHW | TRACED: TGD/S | SCALE: 1:1000 | DATE: Oct '83 | PLAN: No 5



SECTION 6180 N.  
SECTION 6140 N.  
SECTION 6100 N.  
SECTION 6060 N.  
SECTION 6020 N.  
6000 N.  
SECTION 5980 N.  
SECTION 5940 N.  
SECTION 5900 N.  
SECTION 5860 N.  
SECTION 5820 N.  
5800 N.  
SECTION 5780 N.  
SECTION 5750 N.  
SECTION 5740 N.  
SECTION 5730 N.  
SECTION 5700 N.  
SECTION 5675 N.  
SECTION 5650 N.  
SECTION 5620 N.

6100 N.  
6000 N.  
5900 N.  
5800 N.  
5700 N.

7200 E.  
7300 E.  
7400 E.



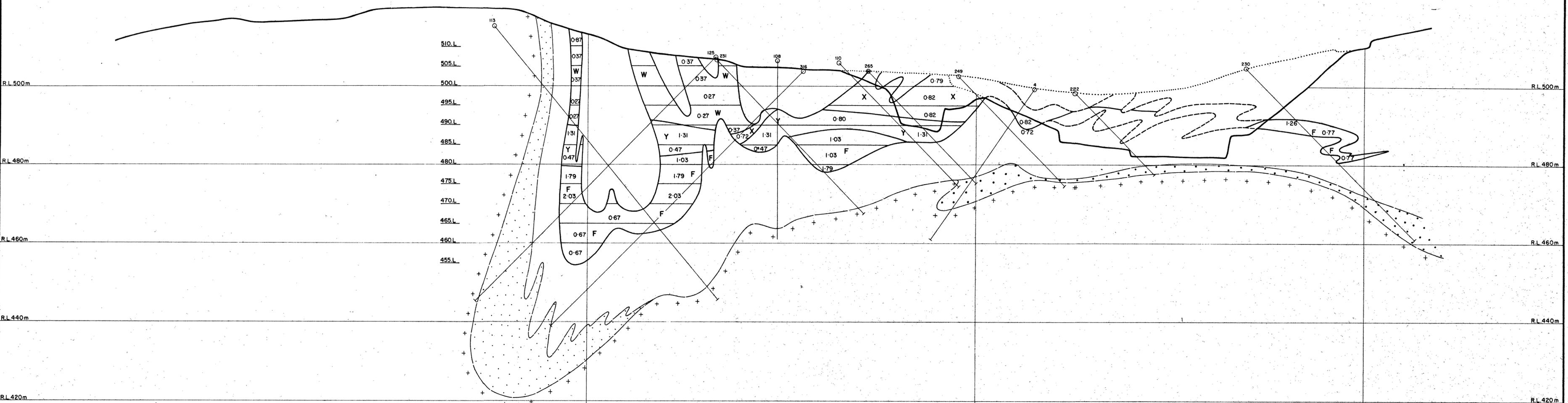
501025

McINTYRE MINES (AUST.) PTY. LTD.  
KARA TUNGSTEN PROJECT, TASMANIA  
8-2003  
KARA N°1 BASE PLAN  
DRAWN: C.W. TRACES: T.G.S. SCALE: 1:500 DATE: Sept 1988 PLAN: N° 6

WEST

SECTION - 5820 N.

EAST

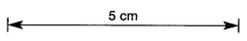


LEGEND:

- = BARREN SKARN
- = ARENACEOUS UNIT
- = QUARTZ EPIDOTE
- = GRANITE

- MEASURED GEOLOGICAL RESOURCES
- W = WEATHERED ORE (No Scheelite)
  - X = WEATHERED ORE (Some Scheelite)
- MEASURED GEOLOGICAL RESERVES
- Y = PARTIALLY WEATHERED ORE
  - F = FRESH ORE

501026



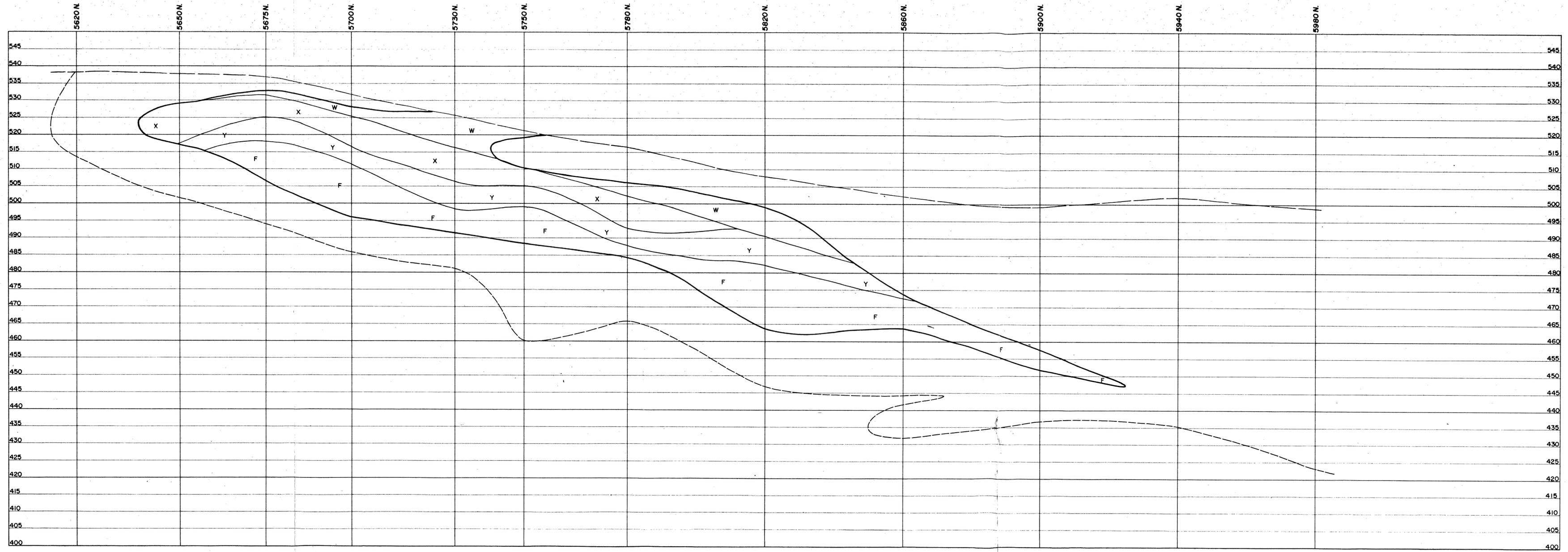
MCINTYRE MINES (AUST.) PTY. LTD. - KARA TUNGSTEN PROJECT

**KARA N°1 - SECTION LINE 5820 N.**  
**GEOLOGICAL ORE RESERVE BLOCKS**  
**AND**  
**GRADE DISTRIBUTION (WO<sub>3</sub>)**  
 83-2053

COMPILED BY: C.H.W.	DATE: MAY 1982	CHECKED BY:	PLAN. N°7
DRAWN BY: T.G.D.S.	SCALE: 1:500	REVISED:	

# LONGITUDINAL SECTION LINE 7320 E

SCALE: 1:500



### LEGEND

MEASURED GEOLOGICAL RESOURCES

- W - WEATHERED ORE (No Scheelite)
- X - WEATHERED ORE (Some Scheelite)

MEASURED GEOLOGICAL RESERVES

- Y - PARTIALLY WEATHERED ORE
- F - FRESH ORE

--- GRANITE CONTACT

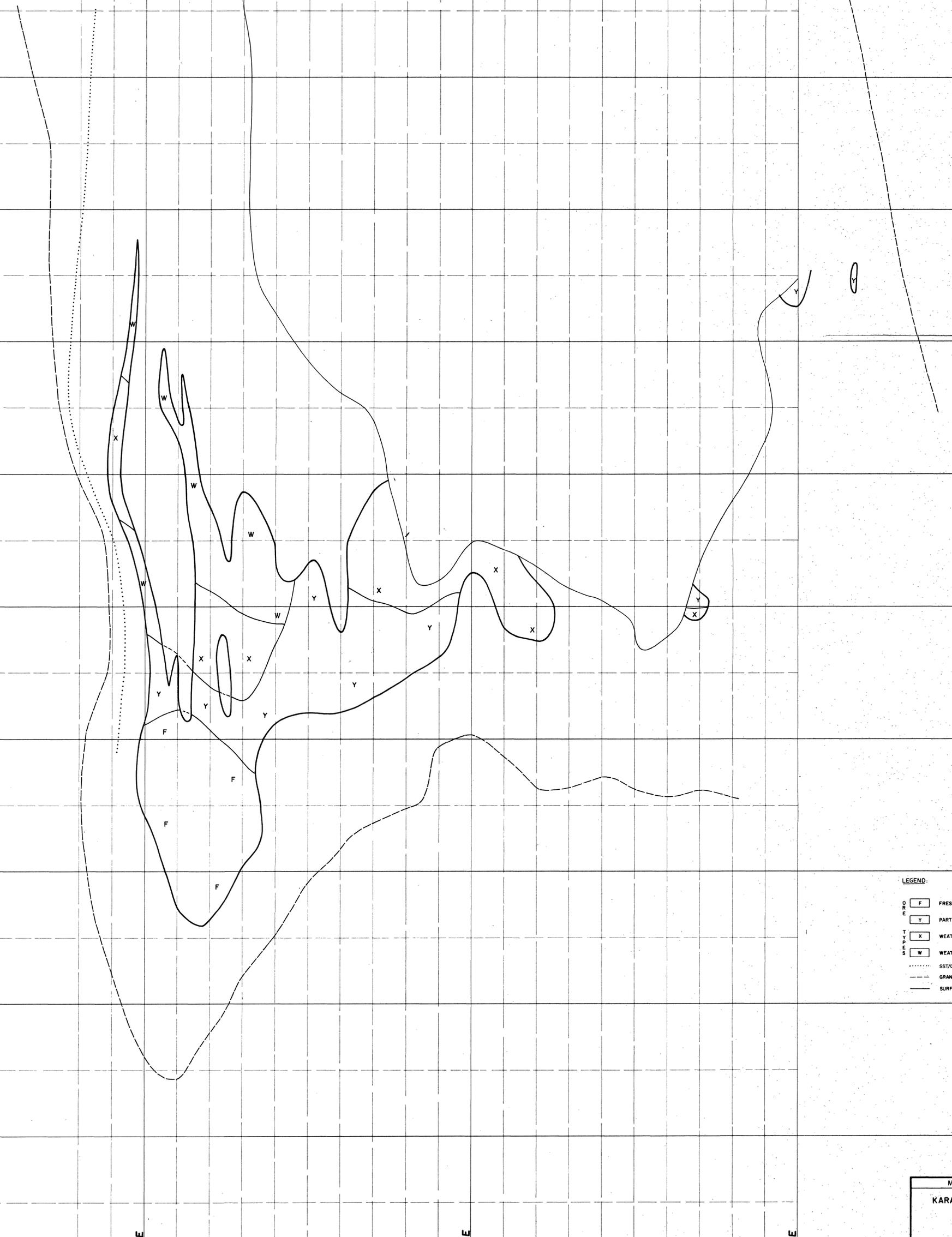
5 cm

8596  
7125

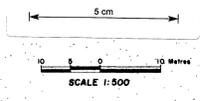
5980 N  
5940 N  
5900 N  
5860 N  
5820 N  
5780 N  
5740 N  
5700 N  
5660 N  
5620 N

7300 E  
7400 E  
7500 E

7280 E 7290 E 7300 E 7310 E 7320 E 7330 E 7340 E 7350 E 7360 E 7370 E 7380 E 7390 E 7400 E 7410 E 7420 E 7430 E 7440 E 7450 E 7460 E 7470 E 7480 E 7490 E 7500 E



- LEGEND:
- F FRESH
  - Y PARTIALLY WEATHERED
  - X WEATHERED WITH SCHEELITE
  - W WEATHERED - NO SCHEELITE
  - ..... SST/QZ CONTACT
  - GRANITE CONTACT
  - SURFACE PROFILE as of 1-6-83



501028  
83-2063

MCINTYRE MINES (AUST.) PTY. LTD.  
KARA TUNGSTEN PROJECT, TASMANIA  
KARA No 1 OPEN PIT  
495m BENCH LEVEL

DRAWN: C.H.W. TRACED: T.G.D.S. SCALE: 1:500 DATE: June '83 PLAN No 9