RECEIVED
23 SEP 1980
MINING
RECORDERS OFFICE
WHITEHORSE, Y.T.

MACMILLAN JOINT VENTURE

GEOPHYSICAL SURVEYS

MARCH TO MAY, 1980

SUE CLAIMS

WHITEHORSE MINING DISTRICT

N.T.S. 105L

135°00" W Longitude

62°00" N Latitude

47

Field Supervision by

George R. Kent

090659

Toronto, Ontario

July 7, 1980

George R. Kent P. Eng.

This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of

$ 119,088.00

R. Debicki for
Resident Geologist or
Resident Mining Engineer

Considered as representation work under Section 53 (4) Yukon Quartz Mining Act.

R Debicki for
Commissioner of Yukon Territory

Aug 5/81.

TRANSMITTAL FORM

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT

S.M.R. File No.

S.M.R. File No

Date Fwd.

FROM Mining Recorder at Whitehorse

TO Supervising Mining Recorder at Whitehorse, Y.T.

Office of the Supervising Mining Recorder
SEP 25 1980
WHITEHORSE
Yukon Territory

ENTERED TO GEOLOGY

FOR ACTION ARE:

- [ ] NEW APPL'N for PLACER LEASE to PROSPECT: Name:
- [ ] RENEWAL APPL'N PLACER LEASE to PROSPECT: Name:
- [ ] AFFIDAVIT of EXPENDITURE on PLACER LEASE. Name.
- [ ] ASSIGNMENT of PLACER LEASE No. .....
  From: To:
- [ ] GROUPING APPL'N UNDER SEC. 52(2) PLACER MINING ACT.
  Owner:
- [ ] DIAMOND DRILL LOGS:
  Claims: Claim sheet no:
- [x] QUARTZ ASSESSMENT REPORT:
  Claims: Claim sheet no. 105-L-14
  Type of report: Geophysical Survey
  Submitted by: Betty Canadian Metals Ltd
  Cls. work performed on: See Last page of Report.
  $ Req. for ren. application 119,088.00

Lease No.

Lease No.

23 Sept 80

Signature

REPLY ACTION.

Date Ret.

Signature

TABLE OF CONTENTS

	Page
SUMMARY	1
CONCLUSIONS AND RECOMMENDATIONS	2
INTRODUCTION	4
LOCATION AND ACCESS	6
Figure 1 - Location Map	8
GENERAL GEOLOGY	9
PREVIOUS WORK	11
DESCRIPTION OF METHODS AND EQUIPMENT	12
Electromagnetic Survey	12
Levelling	12
Gravity Survey	13
DISCUSSION OF THE RESULTS	15
Figure II - Grid locations	20
Figure III - Grid 5W	21
Figure IV - Grid 4W	22
Figure V - Grid 3W	23
Figure VI - Grid 1W	24
Figure VII - Grid C.L.W.	25
Figure VIII - Grid C.L.	26
Figure IX - Grid C.L.E.	27
Figure X - Grid 1E	28
Figure XI - Grid 5E	29

APPENDICES

APPENDIX I - GRAVITY METER SPECIFICATIONS

APPENDIX II - APEX MAXMIN II EM SYSTEM SPECIFICATIONS

APPENDIX III - PERSONNEL

APPENDIX IV - GEOPHYSICAL WORK

APPENDIX V - STATEMENT OF EXPENDITURES

APPENDIX VI - CALCULATION OF UNIT COST

APPENDIX VII - CERTIFICATE

APPENDIX VIII - MAPS (Separate Folder)

LIST OF MAPS IN FOLDER

GRID - CLEAR LAKE 5 WEST

Gravity Survey	1"=200'	Map No.	1
EM Survey 444Hz	1"=200'		2
EM Survey 1777Hz	1"=200'		3

GRID - 4W

Gravity Survey 0 - 48E	1"=200'		4
EM Survey 444Hz 0 - 48E	1"=200'		5
EM Survey 1777Hz 0 - 48E	1"=200'		6
Gravity Survey 56 - 104E	1"=200'		7
EM Survey 444Hz 56 - 104E	1"=200'		8
EM Survey 1777Hz56 - 104E	1"=200'		9

LIST OF MAPS IN FOLDER CON'T

GRID - 4W				
	Gravity Survey	112 - 160E	1"=200'	Map No. 10
	EM Survey 444Hz	112 - 160E		11
	EM Survey 1777Hz	112 - 160E		12
GRID - 3W				
	Gravity Survey	8 - 48W	1"=200'	13
GRID - 1W				
	Gravity Survey	0 - 24E	1"=200'	14
	Gravity Survey	40 - 48E	1"=200'	15
	Gravity Survey	72 - 104E	1"=200'	16
	Gravity Survey	112 - 152E	1"=200'	17
GRID CLEAR LAKE WEST				
	Gravity Survey	595 - 620E	1"=200'	18
GRID - CLEAR LAKE				
	Gravity Survey	582+50- 590W	1"=200'	19
GRID - CLEAR LAKE EAST				
	Gravity Survey	510 - 567+50W	1"=200'	20
	Gravity Survey	540 - 580W	1"=200'	21
	EM Survey 444Hz 1777Hz	540 - 580W	1"=200'	22
GRID - 1E				
	Gravity Survey	0 - 40E	1"=200'	23
GRID - 5E				
	Gravity Survey	8 - 16E	1"=100'	24
	EM Survey 444Hz 1777Hz	0 - 36E	1"=200'	25

SUMMARY

This report describes the results of gravity and electromagnetic surveys carried out by Getty Mines Limited during March, April and May of 1980. The work was carried out on selected airborne EM anomalies and on deemed favourable ground lying both east and west of a major massive sulphide deposit located and diamond drilled by Conwest Exploration Company Limited in 1978 and 1979. The "SUE" claims are located 145 miles due north of Whitehorse, Y.T.

The gravity survey has apparently succeeded in extending the causative sulphide anomaly an additional 500 feet to the east though at a much reduced amplitude. Several other interesting positive gravity anomalies measuring less than 1.0 mgal were recorded in the survey and their significance has yet to be resolved. Broad laterally extensive very low amplitude anomalies no doubt reflect variable lithology and/or variations in overburden thicknesses, however, more geological information is required before the recorded data can be reliably interpreted and correlated.

MaxMin II electromagnetic surveys were useful in determining the precise ground location and configuration of conductors located in an earlier airborne survey though a line spread of 800 feet is a bit excessive for the purpose. Gravity surveys were used to resolve the significance of EM conductors in regards their potential as possible sulphide deposits.

CONCLUSIONS AND RECOMMENDATIONS

The positive residual gravity anomalies defined by this survey in some cases appear to have detected what could be significant base metal sulphide assemblages of either massive or disseminated nature. The amplitudes of these anomalies do not, however, suggests the presence of major tonnages such as at Clear Lake and it is conceivable that the causative bodies could be due to higher than average (2.67 g/cc) rock densities alone or that the results may be distorted somewhat by variable overburden thickness.

The survey has been successful in outlining several positive residual anomalies which are as yet unexplained.

Further exploration is warranted.

Proton precession magnetometer surveys with a base station recorder allowing one gamma sensitivity could be very useful in extending and correlating lithological units and it is recommended that all existing hand cut grids be surveyed during the summer of 1980 while the pickets are erect and the numbers are still legible. Consideration should be given towards extending the Proton precession survey into the older Ordovician terrane north of Tintina fault particularly where there are unresolved gravity anomalies and for gaining a better understanding of the geology.

Huntec F.S. 12 (multiple geophones) Hammer seismic surveys, soil sampling and perhaps limited pitting or trenching should be carried out where practical on several of the higher magnitude gravity anomalies prior to possible diamond drilling.

Grid and air photo controlled geological mapping is required south of Tintina fault along with stream sediment sampling and and analyses for Zn, Pb mineralization.

Diamond drilling is recommended for the gravity anomaly extension of the Clear Lake sulphide horizon from a collar location about 562 W and 142 S. Further extensions easterly could be very difficult because of the steep terrane.

Elevations and gravity survey control information should be card punched and computer plotted to conform with earlier gravity surveys.

INTRODUCTION

During March, April and May 1980 gravity and ground electromagnetic surveys were carried out on part of the "SUE" claim group as a follow up to an airborne EM survey conducted in late 1978 and as a routine systematic coverage of deemed favourable areas lying both east and west of the Clear Lake sulphide zone. These claims are currently held by Getty Mines, Limited for the MacMillan Joint Venture consisting of Getty Mines, Limited and Essex Minerals Company. Most of the claims located south of the Tintina fault were located to cover geological formations believed to be similar to those located on the eastern side of the Selwyn basin as in the area of the Tom and Jason deposits.

A total of 76.5 miles of picket line including baselines and tielines were established on 8 separate grids. An Additional 3.64 miles on grid 1E were rechained. These grids were established and refurbished to permit the ground location of airborne EM conductors and to allow the systematic ground gravity coverage of deemed favourable ground lateral to the Clear Lake sulphide deposit. All of the nine grids are described in this report.

The MaxMin II electromagnetic survey described herin was conducted in the field by Mike McTaggert and Robert Burcher of Can Lake Explorations Ltd., Calgary, Alberta. The levelling (elevation) control and gravity surveying in the field was conducted and field supervised by Mike Wilson of Techterrex Limited, Toronto, Ontario. The writer and Mr. C.K. O'Connor of Conwest Exploration Company Limited laid out the programme.

Mr. John Betz, reviewed the EM map presentation. The writer evaluated the results based on the data presented herin and on discussions with John Betz, Mike Wilson, Mike McTaggart and others connected with the 1980 winter field programme. The writers knowledge of the geology and field conditions was gained from continuous summer and winter exploration programmes on the property since 1975.

LOCATION AND ACCESS

The "SUE" claim group lies near the confluence of the MacMillan and Pelly rivers, 145 miles due north of Whitehorse, Y.T. Topographic relief on the property is generally low but reaches a maximum of 500 feet immediately north of the Pelly.

There is no all-weather access road to the claims. A winter tractor road can be used for freighting supplies to the property from Pelly Crossing on the Klondike highway 156 miles north of Whitehorse though it is necessary to cross the Pelly river on ice or ice bridges in the dead of winter.

Fixed wing access is possible by float or ski equipped planes from bases in Whitehorse, Mayo, Carmacks or Ross River. A 3,000 foot airstrip 150 feet wide was constructed in 1979 with Yukon government assistance using a D-3 caterpillar tractor. Camp and exploration equipment including diamond drills can now be flown directly to the camp and drill site by D.C.3 (Dakota) or twin Otter aircraft.

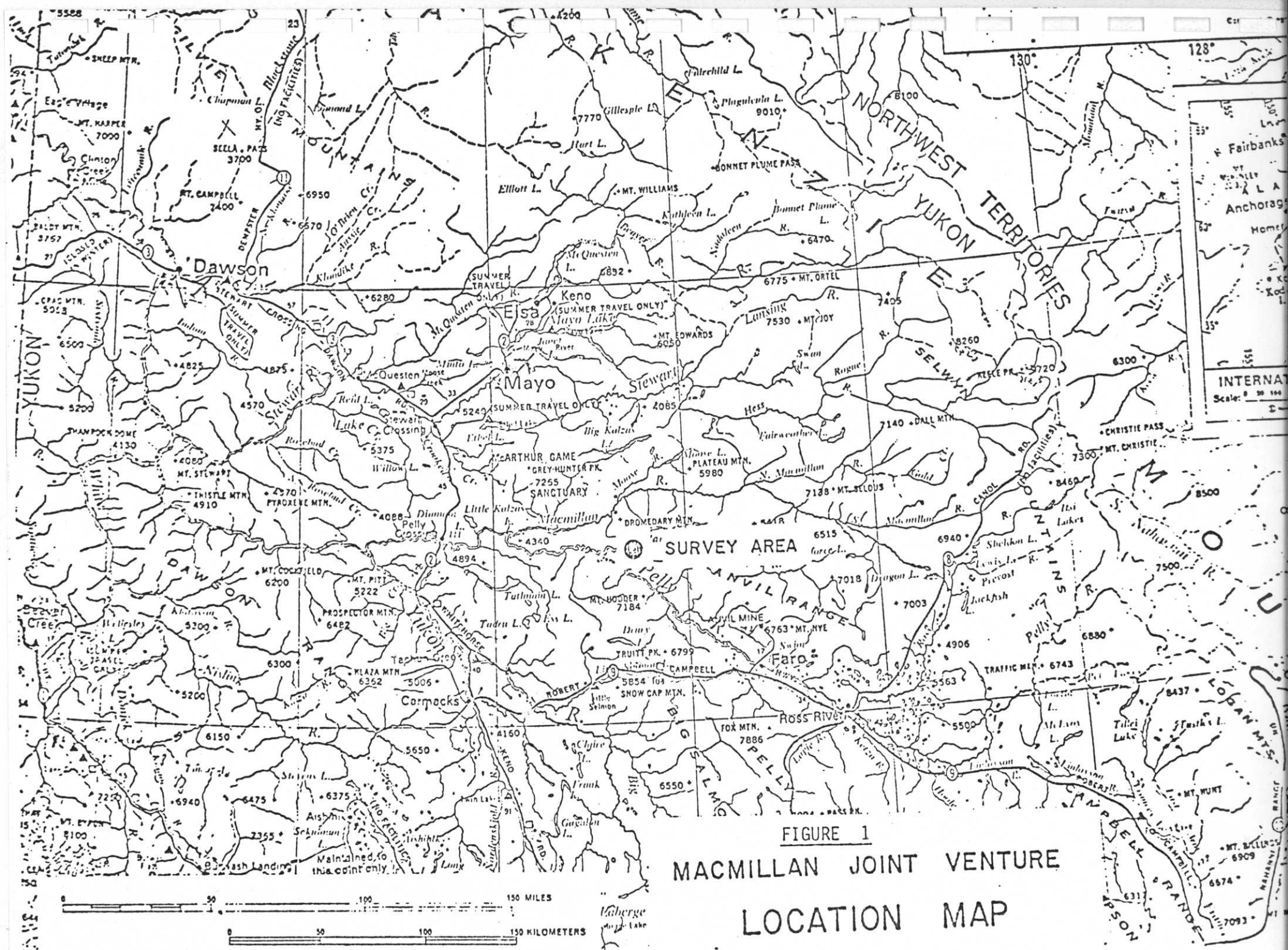
Helicopters chartered from Mayo or Carmacks provide the best local access over the large claim group. These towns and Faro are 65 miles equidistant from the airstrip. The town of Ross River, another service point, is 105 miles southeast or 40 miles farther. Faro was built in 1970 to support the large Anvil lead-zinc-silver mine and is connected by a new all-weather road to Carmacks on the Klondike highway.

A potential hydro-electric site exists at Granite Canyon on the Pelly River about 35 air miles downstream from the property. Flooding rights are reserved below the 2,000 foot contour level and certain restrictions have already been put into effect regarding exploration.

The claim group area is characterized by a gently undulating physiography which rises rather precipitously from 1,750 feet on the Pelly to 2,280 feet at the airstrip only one mile to the north. Local relief is mostly in the order of 300 feet of less. Hills and valleys are elongated westerly to northwesterly parallel to the direction of glaciation and regional strike respectively.

Sparse vegetation consisting of pine and spruce covers the property and is mostly new growth since 1970 when fire destroyed most of the property. Much dead timber is still standing, however, each high wind results in a new tangle of deadfall.

Duo Lake, locally known as Oz lake, is the largest lake on the property and is about the only one big enough to handle aircraft on floats. The lakes tend to be shallow, poorly drained, tea coloured and are mostly of neutral acidity. There are over 200 lakes on the property.


Dawson
Mayo
Keno
Elsa
Stewart Crossing
Pelly Crossing
Carmacks
Faro
Ross River
SURVEY AREA
YUKON TERRITORIES
NORTHWEST TERRITORIES
ALASKA
Fairbanks
Anchorage
Whitehorse
Mt. Sheldon
Mt. Haldane
Mt. Hundere
Mt. Pitt
Mt. Cockfield
Mt. Stewart
Mt. Nye
Mt. Ortel
Mt. Williams
Mt. Edwards
Mt. Joy
Mt. Christie
Mt. Selous
Mt. Hunt
Dall Mtn.
Plateau Mtn.
Grey Hunter Pk.
Arthur Game
Sanctuary
Dromedary Mtn.
Anvil Mine
Truitt Pk.
Campbell
Snow Cap Mtn.
Fox Mtn.
Prospector Mtn.
Klaza Mtn.
Thistle Mtn.
Ptyxeline Mtn.
Sheep Mtn.
Eagle Village
Chapman L.
Summit L.
Clinton Creek
Mt. Kasper
Sheela Pass
Mt. Campbell
Dempster
Klondike
Stewart Crossing
Mayo Lake
Keno (Summer Travel Only)
Elsa
Mcquesten
Lansing
Rogue
Swan
Hess
Fairweather
Big Kalzas
Little Kalzas
Macmillan
Pelly
Yukon
Stewart
Mcquesten
Indian
Klondike
Hart
Gillespie
Plaguelands L.
Bonnet Plume Pass
Bonnet Plume
Nadaleen
Kathleen L.
Elliott L.
Tatchun L.
Tutum L.
Frank L.
Gayadon L.
Dragon L.
Jackfish
Pierce
Sheldon L.
Lewis L.
Itsi Lakes
Tuchitua
Ross
Selwyn
Campbell Range
Logan Mts.
Pelly Mts.
Anvil Range
Big Salmon
Little Salmon
Robert Campbell
Dempster
Silver Trail
Canol
Keno
Mackenzie Mts.
Maintained to this point only
Auriferous Creek
Haggart Creek
Hootalinqua
Tantalus
Ethel L.
Willow L.
Reid L.
Reindeer
Moose
Rackla
Rose
Tay
Jo Brien Cr.
Jurassic
Quartz
Duncan
Dimma
Big Creek
Little Salmon
Ross River
Faro
Carmacks
Dawson
Mayo
Keno
Elsa
Stewart Crossing
Pelly Crossing
Whitehorse
Fairbanks
Anchorage
Homer
Yukon
Stewart
Pelly
Macmillan
Selwyn
Campbell
Logan Mts.
Mackenzie

GENERAL GEOLOGY

The Glen Lyon Map area (105L) was mapped by R.B. Campbell in 1949-1954 and the results of his work were published as G.S.C. Memoir 352 in 1967.

The Tay River map area (105K) adjoining Glenlyon to the south-east was mapped by Roddick and Green in 1958-1960 and was published as G.S.C. Map 13-1961. In 1967 and 1968 Templeman-Kluit undertook a more detailed study of the geology and mineral deposits of the Vangorda area, his results were published as G.S.C. Bulletin 208, 1972.

A belt of Paleozoic and possibly Mesozoic sediments and volcanics traverse the area of interest along and north of the Pelly River, whose valley generally demarcates the surface trace of the Tintina fault system a major crustal break with more than 450 kilometers right lateral displacement.

The Vangorda area is dominated locally by the Anvil Range batholith which has domed the stratigraphy. The granite is not exposed in the MacMillan area. The favourable horizon is a series of polydeformed Ordovician schists and phyllites which are locally strongly graphitic. These latter rocks have been observed north of Tintina fault on the Sue claim group both in outcrop and in drill core and they closely resemble the rocks at Anvil and Vangorda.

On the "SUE" claims south of a major strand of the Tintina fault, brecciated micritic limestone seems to be the only outcropping member of an otherwise completely recessive suite of dominately sedimentary, unmetamorphosed, pelitic rocks of probable Devono-Mississippian age. These rocks with minor variations are highly graphitic over a considerable intermittent thickness in the Clear Lake area and constitute the hanging wall of the major massive sulphide deposit. The stratigraphy, age, and structure are similar in many respects

to that which hosts the Tom and Jason deposits of eastern Selwyn Basin. Dolomite and quartzite are the principle folded members of a hill and cliff forming sequence of Silurian rocks which occupy and lie adjacent to the southern most "SUE" claim boundary.

PREVIOUS WORK

PREVIOUS WORK FILED WITH THE DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT BY CONWEST EXPLORATION COMPANY LIMITED ON "SUE" CLAIM GROUP

1. Progress Report Number 1 - On Geophysical Surveys - 1975
   C. K. O'Connor and D. B. Sutherland, Conwest Exploration Company Limited.

2. Gravity Survey and Interpretation - August 1976
   J.E. Wyder, Kenting Earth Sciences Limited.

3. Gravity Survey and Interpretation - April 29, 1977
   D. Dorval and T. R. Dundas, Kenting Earth Sciences Limited.

4. Diamond Drill Logs - August 1978
   G. R. Kent, Conwest Ecploration Company Limited.

5. Geophysical Surveys - March - April 1979
   C. K. O'Connor, Conwest Exploration Company Limited.

6. Geophysical Surveys - August - September 1979
   C. K. O'Connor, Conwest Exploration Company Limited.

7. Diamond Drill Logs - September 1979
   G. R. Kent, Conwest Exploration Company Limited.

DESCRIPTION OF METHODS AND EQUIPMENT

Electromagnetic Survey

The EM survey was completed using an Apex Parametrics Max-Min II horizontal loop EM system (instrument specifications in Appendix II). Coils were maintained at a 400 foot horizontal separation with the exception of Grid 5E where deeper overburden was anticipated and a spread of 600 feet was used. One hundred foot station readingswere taken at both 444 and 1777 Hz frequencies.

Levelling

A Noa-Wild self levelling level, Wild T-16 Teodolite and a Kern (EMD) electronic measuring device were variously used depending on the topography to precisely control elevations preparatory to the gravity survey. Survey loops averaged just over one mile each and normal closure errors were distributed to each benchmark in the loop. Flagged nails were put in trees for elevation benchmarks and in the ground to mark turning points.

Gravity Survey

A W. Sodin Limited W.S. 410 Series gravity meter with a scale constant of .10015 mgals/divisions (instrument specifications Appendix II) and a Scintrex gravity meter K .10163 mgals/divisions were used throughout the survey. Only minor problems due to higher than normal drift on the Scintrex instrument were encountered but were usually overcome by effecting less than two hour closures. Some difficulty was encountered with thawing and heaving lake ice. Gravity base stations were established periodically along each base or tie line and frequent tie-ins were maintained. No attempt was made to tie this survey into the Kenting survey although this could be accomplished by comparing areas of overlap along the north edge of grids 3W and 1W.

Collected data was manually reduced on a T-59 progammable computer and was hand plotted on plan-profile maps in the field. This procedure permitted some flexibility in planing and in some cases extending the work. All of the field information is recorded in hard covered field books.

The profile maps accompanying this report present only the Bouguer values computed with an average assumed density of 2.67 gms/cc. but without terrane correction. No attempt was made to present a residual plan map because of the problem in arriving at an appropriate polynomial order truly representative of the regional background. The main reason for this was the fact that two different instruments were used in the survey without a method of compensating for different background levels. However, in any situation the "human" selection of a regional background is often preferable to a computer handled regional separation and this can be readily accomplished using the plan profile maps enclosed with the

report. It is in this fashion that the anomalies described as follows were selected and it is well recognized that others of lesser importance may be enhanced by computer processing. In order to take maximum advantage of the measured field data and also to provide consistency with the earlier gravity surveys it is recommended that the 1980 data be computer card punched and integrated with the earlier work.

Massaging of the data as recommended above is not likely to yield any high magnitude undetected positive residual anomalies that could point to a greater than 20 million ton open pittable massive sulphide deposit like at Clear Lake. It could, however, enhance certain anomalies which might yet lead to significant sulphide deposits.

Field work was carried out from a tent camp located on the south side of the airstrip. Cuisine and some camp fascilities were provided under contract by Ketza Enterprizes, of Ross River. Local transportation was initially by snowmobile but because of melting conditions gave way to bulldozer and fly camps and finally to helicopter when the job completion prospects became in jeopardy.

Heavy snow particularly on the north slopes tunned to soft snow later necessitating the use of snowshoes and the hiring of extra personnel for trail breaking and for helping the gravity operators to perform at a reasonably acceptable pace. Difficult, steep topography also hindered progress on occasion.

DISCUSSION OF THE RESULTS

Large scale interpretations over the whole area are difficult without contoured plans of the Bouguer and residual gravity results. These difficulties are also compounded when the grid coverage is sporadic and the geophysical data is at hand before the geological and geochemical surveys are complete. Nevertheless it is apparent that laterally extensive anomalies manifest changing lithologies and that these, often subtle, features may be later enhanced by the application of terrane corrections and the unbiased computer subtraction of a uniform regional background.

The profile maps which accompany this report show both Bouguer and elevation results for each measured station. A hand fitted regional has been applied to prints of these maps in making the interpretation. Stacked profiles presented on 25 maps with this report (Appendix VIII) were also studied for this purpose and comments are made for the more important, possibly significant, positive residual anomalies.

The horizontal loop electromagnetic survey was carried out primarily to pinpoint the precise location of airborne naomalies on the ground and to control the amount of gravity surveying required. The absence of coincident gravity (residual) anomalies severely downgraded theri significance and little emphasis has been made in the text as to their presence. Maps at 444 and 1777 Hz frequencies are included.

ANOMALY	MAPS	LINE/STATION	AMPLITUDE	STRIKE LENGTH	EVALUATION	PRIORITY RATING
GG1 Grid 5W	1-3	8E 21-26N	.3 mgals	not defined	Topographically high. Supported by a one line partially coincident EM anomaly 17-26N which reaches 40 Mhos 17-18. Depth -25 ft.	second
GG2 Grid 5W	1-3	16E 2-7N	.3 mgals	not defined	Weak supporting narrow EM striking N40°W	third
GG3 Grid 5W	1-3	24E 24-30N	.7 mgals	not defined	Weak, less than 5 Mho EM 27-28N. Gravity not far enough N&S. Difficult topo and possible instrumental error.	second
GG4 Grid 4W	4-6	32E 14-21N 40E 20-24N 48E 19-24N 56E 18N	.35 mgals .45 " .15 " .35 "	2000'	Flat low ground, may be one contin. anomaly. No EM. May be dissem. sulphides in dol.	third
GG5 Grid 4W	4-6	0+00 15-20N	.20 mgals	+2400'	Very low amplitude and is prob. lithological. May be GG4 above. EM 19-21N is coincident on 0+00 only	third
GG6 Grid 4W	7-9	80E 6-9S	.20	-1200'	Low-med. conductivity is coincident on 80E & is adj.N on line 88E. Low density graphitic siltstone in contact with dol or quartzite could explain. Low magnitude.	third
GG7 Grid 4W	10-12	112E 4-9S	.45	-800'	Amplitude possibly emphasised by low density EM flanks. Dissem sulps? or lith. change	second

ANOMALY	MAPS	LINE/STATION		AMPLITUDE	STRIKE LENGTH	EVALUATION	PRIORITY RATING
GG8 Grid 4W	10-12	144E	12-16N	.25 mgals	1000'	Weak flanking EM suggests anomaly is lithological poss. in common with Ob thickening.	third
GG9		160E	1-6S	.40 mgals	not determined	As above. Still open to east.	third
GG10 Grid 3W	13	48W	13-18N	.30 mgals	+2000'	Probably lithological	third
			21-27N	.30 "			
		40W	16-19N	.30 "			
			23-26N	.30 "			
		32W	17-23N	.30 "			
		16W	17-23N	.30 "			
GG11 Grid 3W	13	48W	2-3N	.70 mgals	1200'	Open to west & not enough profile to S. Rapidly rising topography.	second
GG12 Grid 1W	16	80E	27-33S	.25 mgals	3600'	Continuous and still open to west. Some outcropping qtzite, dol. and barite. Dissem. gal & sp. N margin parallels 70° S fault.	first
		84E	24-32S	.55 "			
		88E	23-31S	.35 "			
		92E	22-24S	.20 "			
		96E	20-22S	.15 "			
		104E	23-24S	.20 "			
GG13 Grid 1W	16	72-104E	North	.30 mgals	±3200'	Trends N096°E & averages 700' wide. Probably lithological as is similar structure 1000' to N. Magnitude occcassionally emphasises by flanking gravity lows and drumlins.	third
GG14 Grid 1W	17	136E	21-27N	.50 mgals	1600'	Trends 136°. May be longer but profile distorted on 152E by drumlin. Good structural position re Clear Lake deposit	second
		144E	19-23N	.25			

ANOMALY	MAPS	LINE/STATION	AMPLITUDE	STRIKE/LENGTH	EVALUATION	PRIORITY RATING
GG15 Grid 1W	17	136E 19-23S 144E 19-23S 152E 20-24E	.25 mgals .25 " .30 "	+2000'	Open to east & may be continuous with GG12 and therefor litholog. 152E may be disprop. high bec. of hill immed.to north.	third
GG16 C.L.W.	18	620W 125-128S	.4 mgals	+1800'	Az 096°. Anomaly possibly enhanced by drumlin to north. Open to W. StrongEW anomaly under drumlin @ 121S. Good structural position.	second
GG17 C.L.E.	20	565W 146-147S 562W 146-147S 560W 147-148S	.20 mgals .20 " .10 "		Probably sulphides and or barite as encountered in footwall of DDH 79-27. The main gravity anomaly (sulphides) to N progressively diminishes to E but is still recog. at 560W .10 mgals & seems shallow.	second
GG18 C.L.E.	20	565W 150-169S	.50 mgals	+300'	Coincident with gabbro otc. Covered but recog. .10 mgals Ln 567+50. To E precip. slopes could not be surveyed.	third
GG19 C.L.E.	20	550W 141-148S	.40 mgals	+1400'	This anomaly may represent either gabbro or sulphides as it is on strike with both or it could be another high density rock relative to graphitic seds on either side as in DDH 78-16 & as indicated by the adjacent gravity low N on 540W.	first
GG20 C.L.E.	20	540W 153-157S	1.8 mgals	+1000'	High magnitude anomaly with suggest. dip S of sulps. Rapid drop off on adj. profiles & erratic readings indicate affect from adj, steep topography.	second

ANOMALY	MAPS	LINE/STATION	AMPLITUDE	STRIKE/LENGTH	EVALUATION	PRIORITY RATING
GG21 C.L.E.	20	567 to 540W +50 @700N	.40 mgals	+2700'	Low magnitude and topo. Possible lithological source. Varies from 500-1000' wide.	second
GG22	20	520W 150-153S 510W 139-144S	.65 mgals .85 "	+2200	Open to east. Near Pelly & readings possibly erratic, but must follow up.	third
GG23 C.L.1E	23	0+00 0-7S 8E 7S-7N 12E 6S-9N 16E 4S-12N 24E BL-13N 32E 3-15N 40E 5-14N	.3 mgals .4 " .4 " .5 " ,5 " .3 " .2 "	+4000'	Broad gravity anomaly is characterized by 2-3 positive anomalies on either side of a zero level anomaly which is narrow from 8-40E & coincident with an EM anomaly. Addit. low magnitude gravity anomaly across grid @ 10S. Gravity and regional magneticssuggest broad extensive burried basic or ub intrusive prob. with scoured surface or infolded keel remnant of graphitic low density rock. Drilled in 1966 near baseline at 10E.	third

3 W

1 W

1W

5W

4W

4W

C.L.W.

C.L.

C.L.E.

1E

5E

62°47'36"

62°47'36"

135°07'36"

135°15'48"

LOCATION
MAP
1"= 1000'

Fig. II

Fig.11

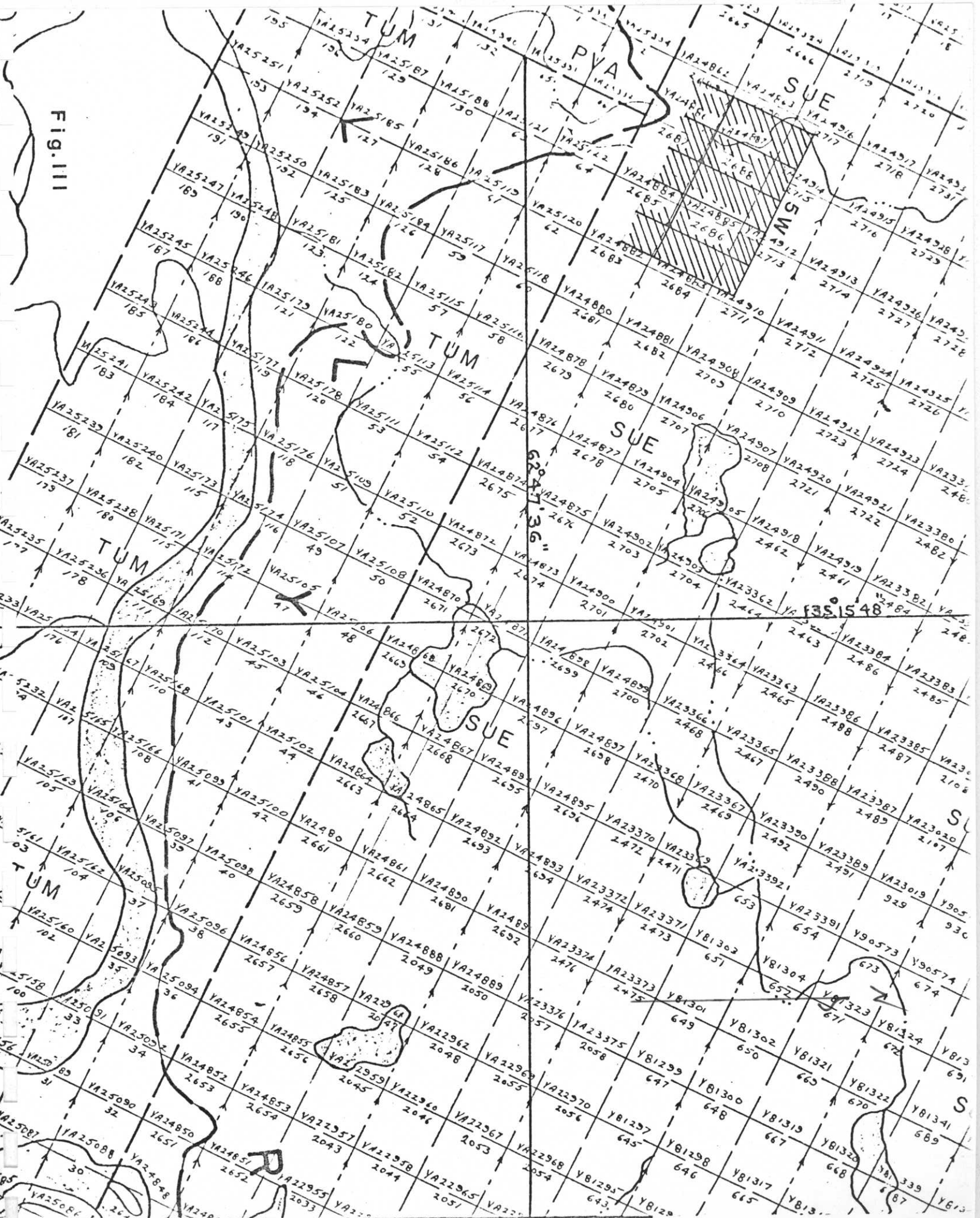
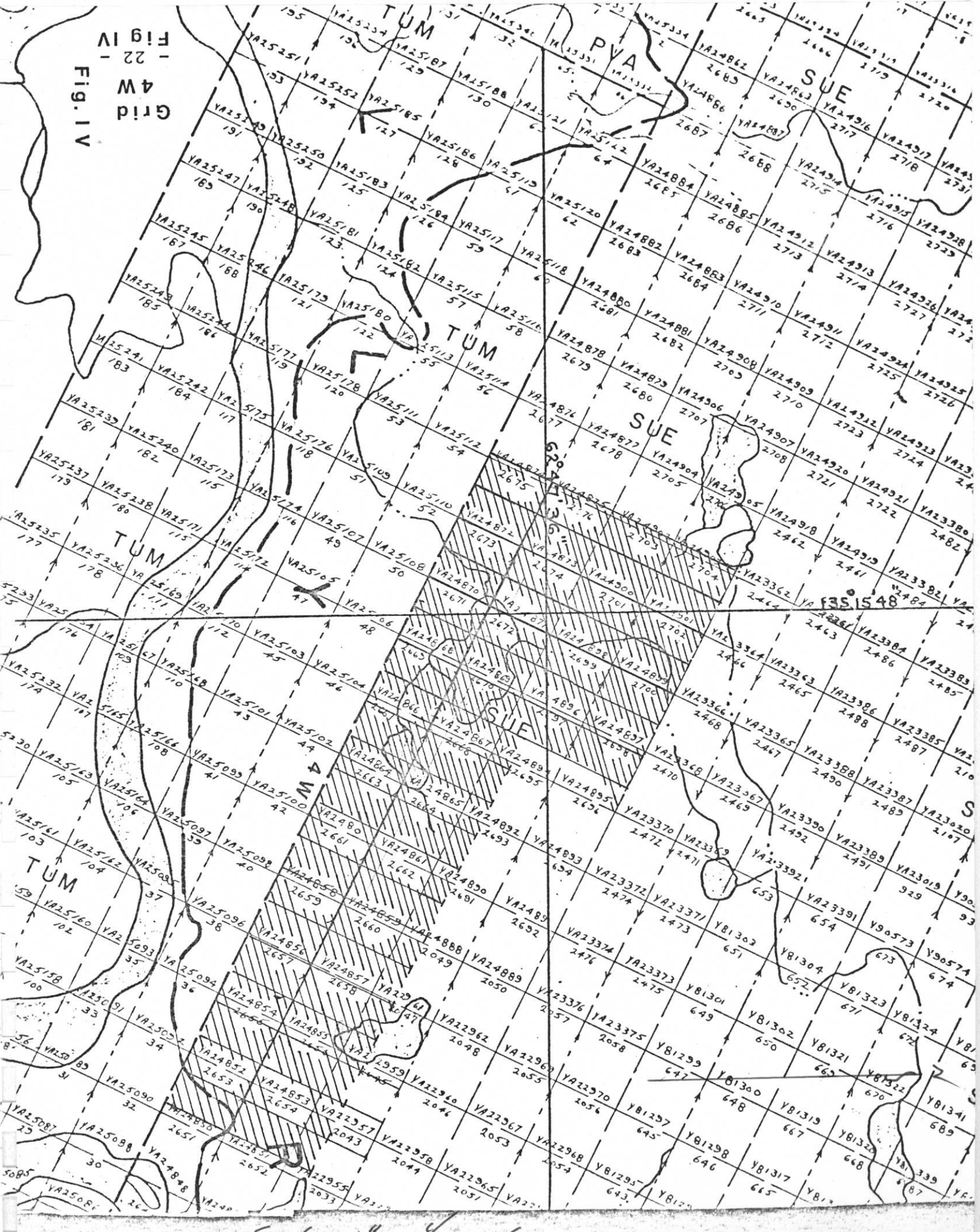


Fig. III
TUM
PVA
SUE
SUE
SUE
TUM
TUM
TUM
TUM
SW
SW
SW


Grid 4W
Fig. IV
- 22 -
Fig IV
TUM
PVA
SUE
TUM
SUE
TUM
SUE
TUM
4W
Scale 1" = 1/2 mile

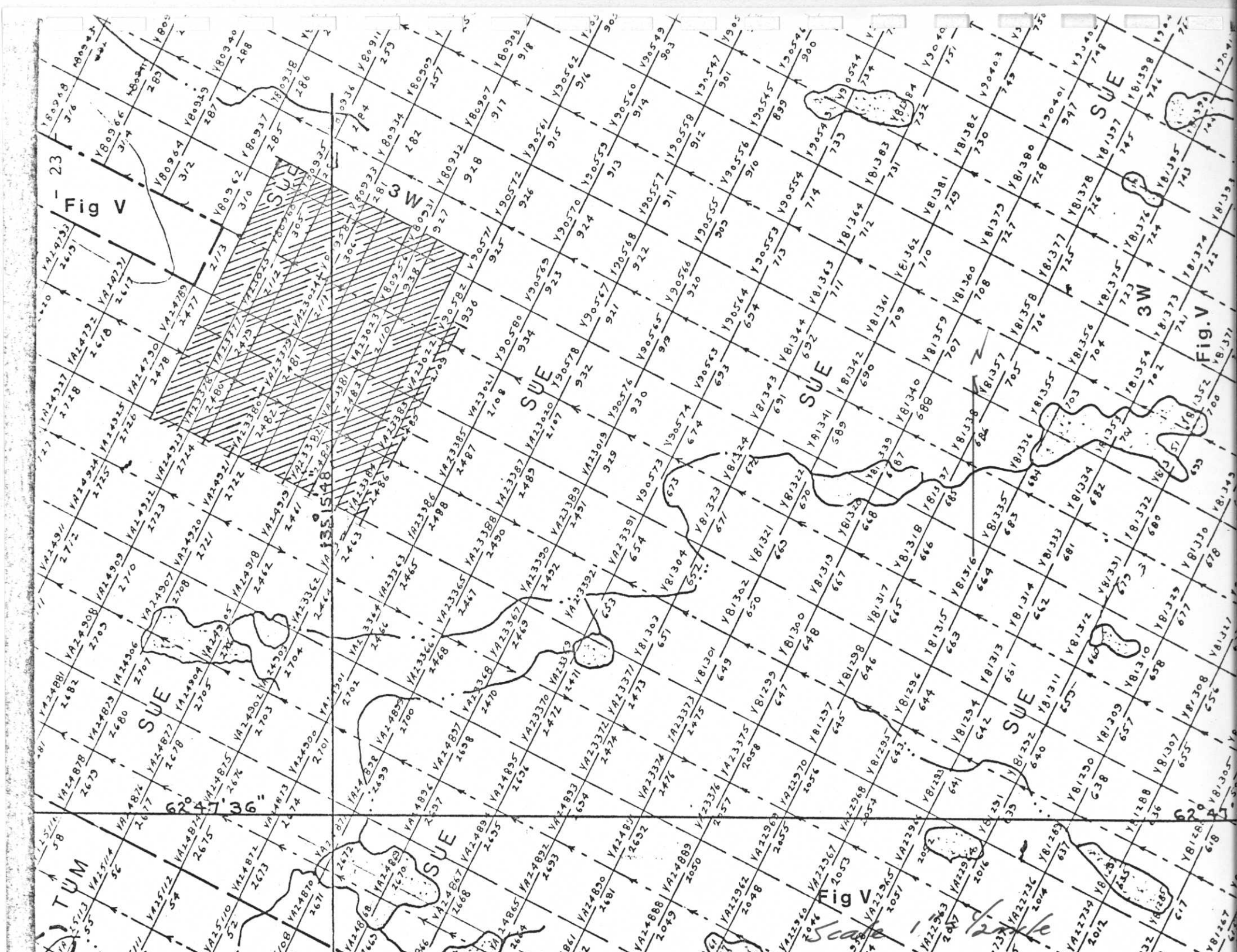
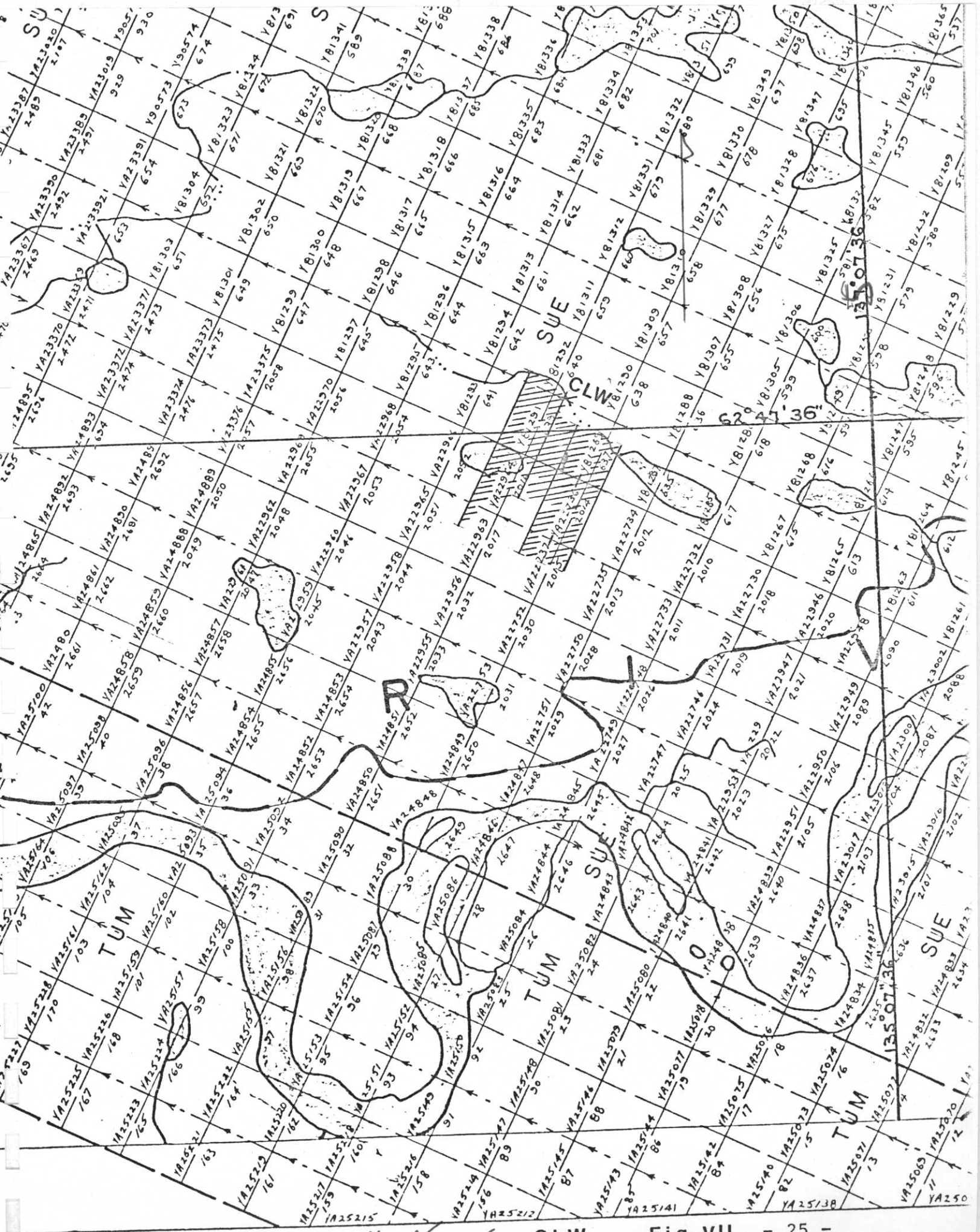


Fig V
SUE
3W
62° 47' 36"
135° 48'
Fig V
Scale 1" = 2000'
Fig. V

137°15'48"
137°07'36"
62°47'36"
SUE
MI
Fig VI
-24-
1W

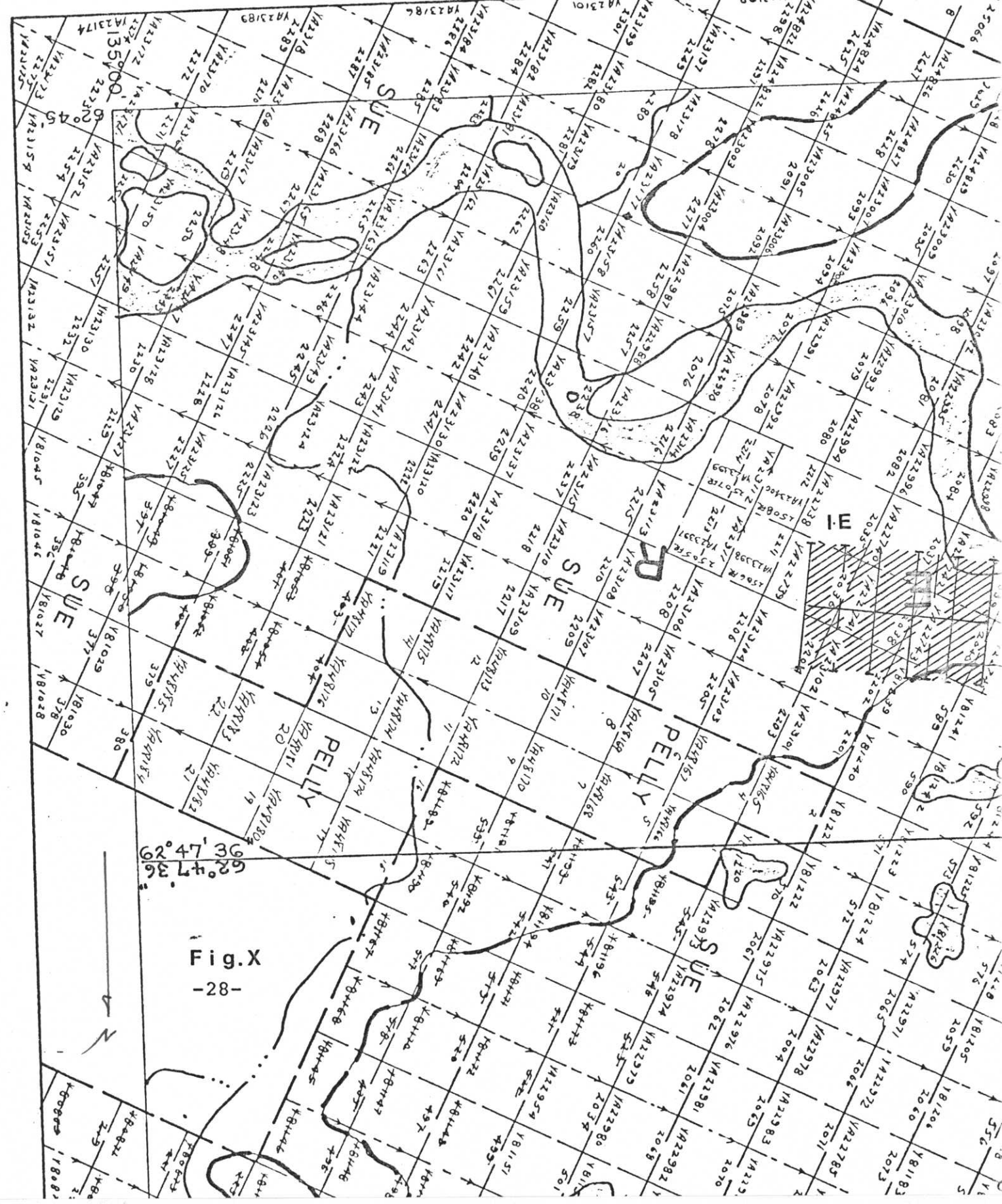


Scale: 1" = ½ mile CLW Fig. VII - 25 -

1-14

TUM
SUE
CL
135°07'36"
62°47'36"
Scale 1" = 1 mile
Fig. VIII 86 26-1

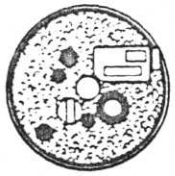
CLE
SUE
SUE
SU


62°47'36
Fig.X
-28-

Scale: 1" = ½ mile

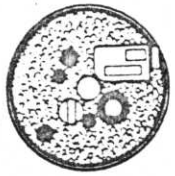
Fig. XI

APPENDIX I



* PROSPECTOR 410

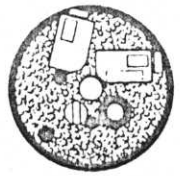
RANGE (Reset)	3500 - 6000 mgals*
FINE COUNTER RANGE	1000 div. x scale constant**
FINE COUNTER CONSTANT	0.09 - 0.11 mgal
FINE COUNTER LINEARITY	1 in 1000
ACCURACY	0.1 counter div.
DRIFT	less than 0.1 mgal/day
LEVEL SENSITIVITY	40 sec./mm
TEMPERATURE COEFFICIENT	less than 0.003 mgal/hr/°C external change



PROSPECTOR 420

RANGE (Reset)	3500 - 6000 mgals*
FINE COUNTER RANGE	2000 div. x scale constant***
FINE COUNTER CONSTANT	0.09 - 0.11 mgal
FINE COUNTER LINEARITY	1 in 1000
ACCURACY	less than 0.2 counter div.
DRIFT	less than 0.1 mgal/day
LEVEL SENSITIVITY	40 sec./mm
TEMPERATURE COEFFICIENT	less than 0.003 mgal/hr/°C external change

*** approx. 200 mgals



GEODETIC 410-G

RANGE	3500 - 6000 mgals*
FINE COUNTER RANGE	1000 div. x scale constant**
FINE COUNTER CONSTANT	0.09 - 0.11 mgal
FINE COUNTER LINEARITY	1 in 1000
COARSE COUNTER RANGE	1000 div. x constant
COARSE COUNTER CONSTANT	3.5 - 6.0 mgals
COARSE COUNTER LINEARITY	Curve accurate to 1 in 1000
ACCURACY	0.1 counter div.
DRIFT	less than 0.1 mgal/day
TEMPERATURE COEFFICIENT	less than 0.003 mgal/hr/°C external change

WEIGHT	4.5 kg. (10 lbs.)
HEIGHT	35.5 cm (14 in.)
WIDTH	14 cm (5½ in.)
SHIPPING WEIGHT	approx. 20 kg (45 lbs.)

* as requested
** approx. 100 mgals

WARRANTY

W. Sodin Ltd. Gravity Meters are guaranteed against all operating and mechanical defects in material and construction for one (1) year from date of shipment provided the instrument is properly handled and the vacuum chamber has not been altered or opened by anyone other than manufacturer's certified personnel.

APPENDIX II

APEX MAXMIN II EM SYSTEM SPECIFICATIONS

OPERATING FREQUENCIES:	222, 444, 888 and 1777Hz
COIL SEPARATIONS:	100, 200, 300, 400, 600 and 800 feet
MODES OF OPERATION:	(a) Tx coil plane and Rx coil plane horizontal (Horizontal loop mode). (b) Tx coil plane horizontal and Rx coil plane vertical (Minimum coupled mode).
PARAMETERS MEASURED:	In-Phase and Quadrature component of the secondary field.
READOUTS:	Automatic, direct readout on 3½" size meters.
SCALE RANGES:	In-Phase: ±20% normal, ±100% by switch. Quadrature: ±20% normal, ±100% by switch. Inclinometers: ±50% tilt.
READING REPEATABILITY:	±½% to ±1%
RX BANDWIDTH (-3dB):	0.2 Hz nominal
RX INTERNAL NOISE:	Negligible
TX DIPOLE MOMENTS:	150 Atm^2 @ 222 Hz, 150 Atm^2 @444 Hz, 75 Atm^2 @ 888 Hz, 50 Atm^2 @ 1777 Hz.
RX POWER SUPPLY:	Four 9V batteries (transistor radio type)
TX POWER SUPPLY:	Three 6 V alkaline lantern batteries in a separate battery pack. Optionally one 12V 8Ah rechargeable Gel Cell.
REFERENCE CABLE:	Light weight, low friction unshielded cable. Unit supplied with 200, 400 and 600 ft cables, other lengths optional.
WEIGHT OF RX UNIT:	13 lbs.
WEIGHT OF TX UNIT:	30 lbs.
OTHER MAIN FEATURES:	Built-in Intercom system for communication between receiver and transmitter unit. Signal and reference warning lights to indicate erraneous readings.

FOR MORE INFORMATION,
PHONE (416) 491-6388 OR WRITE TO:

APEX PARAMETRICS LTD.
255 YORKLAND BLVD., WILLOWDALE, ONTARIO, CANADA M2J 1S3

APPENDIX III

PERSONNEL

D. Blanchard	Surveyor	Kenting	Apr.16-May 5
K. Brumm	Rodman	Ketza Ent.	Mar.22-May 4
R. Burcher	Geoph. Op.	Can Lake	Apr.11-Apr27
D. Cherry	Rodman	Ketza Ent.	Mar.22-May 4
R. Cherry	Snow Packer	Ketza Ent.	Mar.22-May 4
M. Conant	Hel. Pilot	T.N.T.A.	April 20-May 3
G. Debruyn	Surveyor	Underhill& Underhill	Apr.27-May 4
R. Dipietro	Rodman	Ketza Ent.	Mar.20-Apr17
B. Goyetche	Surveyor	Nolan,White & Assoc.	Mar.17-Apr17
P. Hayduck	Catskinner	Whitehorse	Mar.11-Mar.22
G. Kent	Geologist	George R. Kent&Assoc.	Mar.18-26 Apr.18-19 Apr.24-27 Apr.30-May 5
J. Martin	Geoph. Op.	North Bay	Mar.17-May4
J. McEvoy	Surveyor	Nolan,White & Assoc.	Mar.17-Apr.29
M. McTaggart	Geoph. Op.	Can Lake	Apr.11-Apr27
D. Silversides	Geologist	Getty Mines	Apr.18-19
M. Wilson	Geoph. Op.	Techterrex	Mar.18-May5

APPENDIX lV

Table Showing Line Miles of Geophysical Work Conducted on SUE Claim Group During March-May 1980

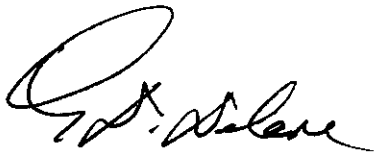
GRID	Line-Miles Gravity		Line-Miles E-M	
5W	1.42		4.73	
4W-1	7.95		7.95	
4W-2	4.64	16.85	5.09	17.30
4W-3	4.26		4.26	
3W	6.34			
lW-1	3.37			
lW-2	1.67			
lW-3	7.95			
lW-4	6.46	19.45		
CLW	3.45			
CL & CLE	1.14		1.90	
	10.32	14.66		
	3.20			
lE	3.90			
5E	1.33		4.55	
TOTALS	67.40		28.48	

G.D. Delane
Getty Mines, Ltd.
August 1980

A P P E N D I X V

Statement of Expenditures on Geophysical Surveys Conducted on Sue Claim Group During March - May, 1980.

1.	Geophysical & Survey Equipment Rentals	$ 6,253.95
2.	Contractors - Can Lake Explorations	5,891.92
	Ketza Enterprises	28,492.72
	Gravity Survey Crews	42,103.21
	George Kent - Consultant	13,200.00
3.	Fixed Wing Aircraft & Helicopter Support	17,228.30
4.	Camp Supplies and Expediting	4,810.64
5.	Maps & Reproductions	1,107.55
	TOTAL Geophysical Survey Expenditures	$119,088.29



G.D. Delane
Getty Mines, Limited
August 1980

APPENDIX VI

CALCULATION OF UNIT COSTS

FOR

GEOPHYSICAL SURVEYS

Total costs have been apportioned in the ratio of 90% to gravity and 10% to EM for the purpose of calculating unit costs. This is based strictly on a dollar assessment of the relative costs of gravity versus EM surveys. The unit cost calculation is as follows:

GRAVITY $\frac{90\% \text{ of } 118,115.58}{66.36} = \$1,779.92$ per line mile

or $33.71 per station

EM $\frac{10\% \text{ of } 118,115.58}{27.52} = \$429.20$ per line mile

or $8.25 per station

APPENDIX VII

CERTIFICATE

I George Robert Kent, hereby certify:

1. That I am a Professional Engineer and reside at 86 Catalina Drive, Scarborough, Ontario.

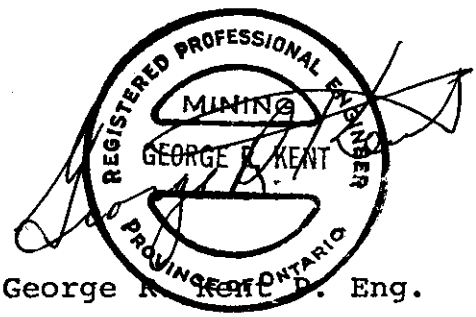
2. That I am a member (Mining Branch) of the Association of Professional Engineers of Ontario.

3. That I graduated from Saint Francis Xavier University Antigonish, Nova Scotia, in 1956 with the degree of Bachelor of Science in Geology and from Dalhousie University in 1962 with the degree of Master of Science in Geology.

4. That I have been engaged in geological work continuously for over 25 years.

5. That the foregoing report is based on a study of all the maps and pertinent technical data available for the grids in question and that I was personally present during much of the survey. I am the author of this report and directed the overall conduct of the programme.

6. I have been associated with exploration in this area since 1975 in my capacity as Chief Geologist for Conwest Exploration Company Ltd. and since January 1980 as an independent consultant and president of George R. Kent and Associates Ltd.



Toronto, Ontario
July 7, 1980

George R. Kent, P. Eng.

APPENDIX VIII

MAPS

(IN SEPARATE FOLDER)

List of Sue Claims Covered by Geophysical Surveys During Period March - May, 1980, (NTS 105 L-14)

CLAIM NO.

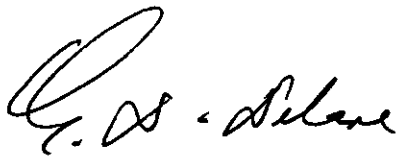
Sue # 2685-2690
2713
2715
2717

2653-2676
2043
2045
2047
2049
2691
2693
2695
2697-2704

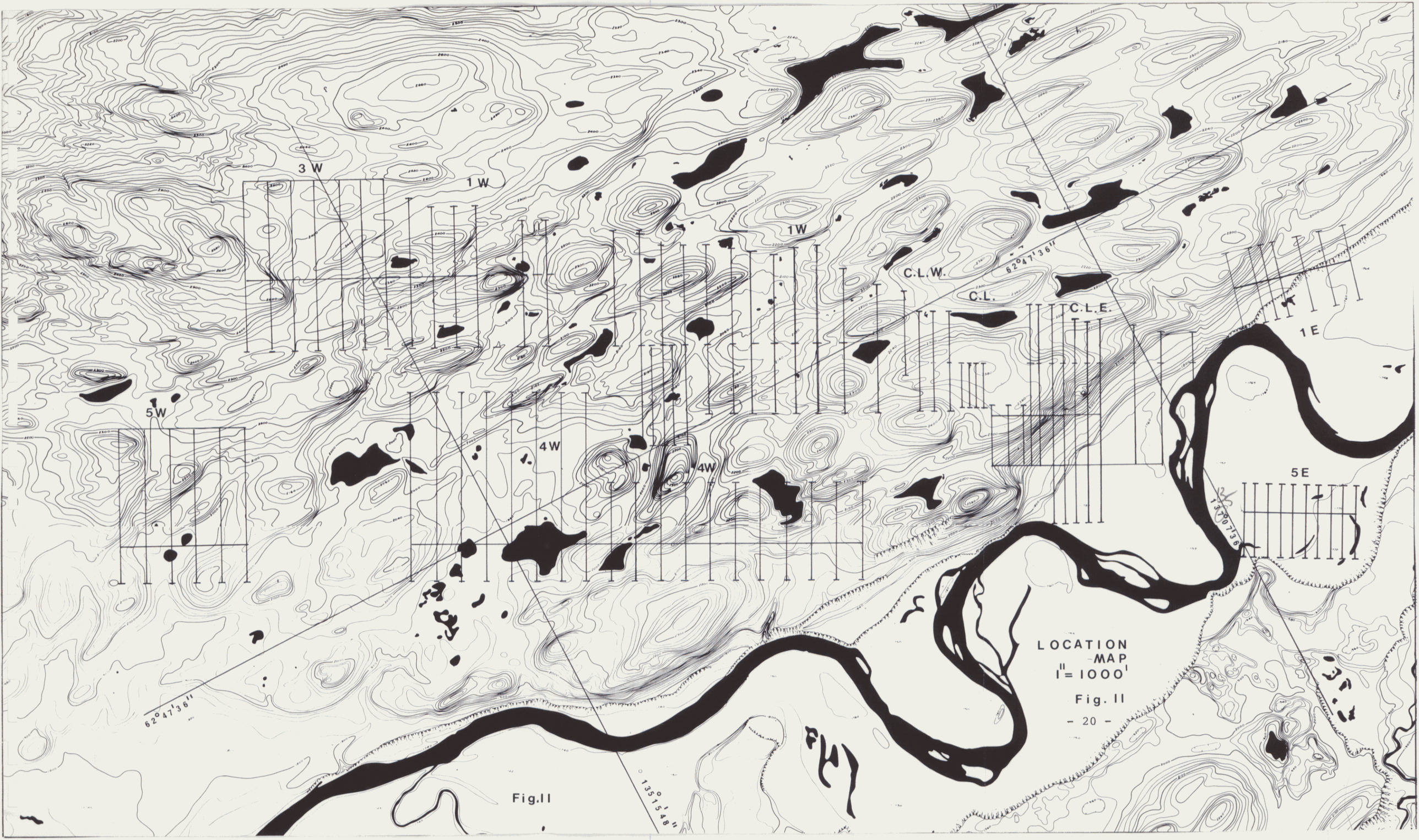
2632
2634
2636
2097
2099
2101

2035-2040
611
613
615
617
635
637
639
641
643-654
281
283
285
927
934
936
938
306
308
310
2107-2113
929
667
669
671
673
2010-2017
2018-2022
2024-2029
2106

2089-2090
2051-2058
2473-2492



G. D. Delane, P. Eng.
Getty Mines, Limited


3 W
1 W
1W
5W
4W
4W
C.L.W.
C.L.
C.L.E.
1E
5E
62°47'36"
135°15'48"
135°07'36"
Fig.II
LOCATION
MAP
1"= 1000'
Fig. II

T.L.

35 34 33 32 31 30 N 29 28 27 26 25 24 23 22 21 20 N 19 18 17 16 15 14 13 12 11 10 N 9 8 7 6 5 4 3 2 1 N

B.L.

296° Ast.

1 S 2 3 4 5 6 7 8 9 10 S 11 12 13 14 15 S

0+00

8E

16E

24E

32E

174 Mgal

5.43	2223.8'
5.51	13.2
5.52	08.5
5.46	16.5
5.31	37.5
5.16	52.1
4.94	44.3
4.92	27.0
4.86	2211.0'
4.93	2185.1'
4.91	79.0
4.91	74.3
4.86	68.1
4.63	67.1
4.69	28.9
4.38	2106.5'
4.30	2098.4'
4.30	93.1
4.27	87.5
4.23	79.9
4.22	71.1
4.21	69.4
4.25	69.7
4.17	68.1
4.22	57.3
4.23	2045.5'

174 Mgal

5.54	2165.4'
5.66	60.6
5.45	49.6
5.42	39.4
5.30	33.7
5.32	39.1
5.22	50.1
5.01	69.9
4.68	95.3
4.63	94.3
4.59	81.6
4.55	64.9
3.75	28.5
3.68	00.2
3.76	62.4
3.88	19.3
4.00	99.7
3.95	93.2
3.78	93.1
3.77	91.6
3.90	89.4
3.91	97.2
3.85	12.5
3.79	25.3
3.66	30.7
3.82	2009.2'

174 Mgal

3.98	1986.5'
3.88	79.2
3.64	77.3
3.61	76.3
3.61	75.2
3.82	73.1
3.81	76.4
3.83	82.6
3.80	74.3
3.80	60.6
3.69	51.7
3.44	49.0
3.32	50.2
3.29	47.7
3.21	41.6
3.21	37.8
3.20	40.0
3.16	39.5
3.16	37.6
3.19	38.0
3.28	40.5
3.25	42.8
3.33	1939.5'

24885

24883

Scale
1" = 200' Hor.
1" = 1 Mgal Vert.
Profile Elev. 2000'

MACMILLAN JOINT VENTURE
Getty Canadian Metals Ltd.
AND.
Essex Minerals Company

SUE CLAIMS
Yukon Territory
GRID 5W GRAVITY SURVEY

DRAWN BY [illegible] DATE May 80 CHECKED BY [illegible]

0 200 400 600 FEET

REGISTERED PROFESSIONAL ENGINEER MINING ONTARIO

Map No. 1

T L

B L

296° Ast

0+00

8E

16E

24E

Coil Separation 400'

Frequency 444Hz

In Phase

Out of Phase

444 Hz

20% 20%

1" = 200'

24885

24883

32

MACMILLAN JOINT VENTURE

Getty Canadian Metals Ltd.

AND

Essex Minerals Company

SUE CLAIMS

Yukon Territory

GRID 5W EM SURVEY

REGISTERED PROFESSIONAL ENGINEER MINING GEORGE R. KENT PROVINCE OF ONTARIO

DRAWN BY GRK DATE May '85 CHECKED BY GRK

0 200 400 600 Ft.

Map No. 2

T. L.

35 N
34
33
32
31
30 N
29
28
27
26
25
24
23
22
21
20 N
19
18
17
16
15
14
13
12
11
10 N
9
8
7
6
5
4
3
2
1 N
1 S
2
3
4
5
6
7
8
9
10 S
11
12
13
14
15 S

B L

296° Ast

0+00
8E
16E
24E
32E

24884
24882
24885
24883

Coil Separation 400 Ft

Frequency 1777 Hz

In Phase

Out of Phase

1777 Hz

20% 20%

1" = 200'

MACMILLAN JOINT VENTURE
Getty Canadian Metals Ltd.
AND
Essex Minerals Company

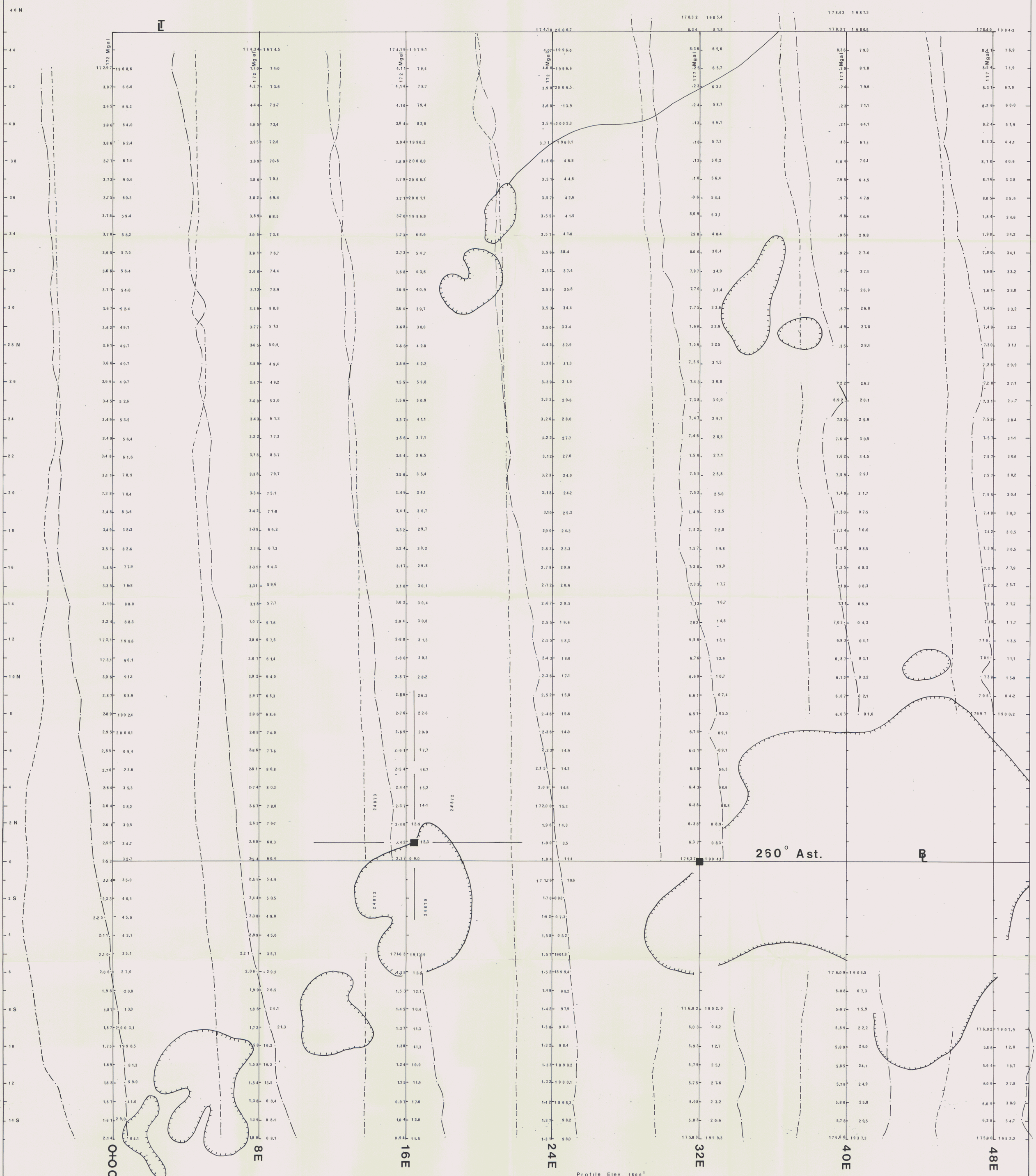
SUE CLAIMS
Yukon Territory
GRID 5W EM SURVEY

REGISTERED PROFESSIONAL ENGINEER
MINING
GEORGE R. KENT
PROVINCE OF ONTARIO

DRAWN BY GRK. DATE May/80 CHECKED BY GRK.

0 200 400 600 Ft.

Map No. 3



Profile Elev 1800'

Vertical Scale 1" = Mgal or 100' el

Horizontal Scale 1" = 200'

1 | 2 | 3

MACMILLAN JOINT VENTURE
Getty Canadian Metals Ltd.
AND
Essex Minerals Company

SUE CLAIMS
Yukon Territory
GRID 4 W GRAVITY SURVEY

DRAWN BY GHK DATE June/80 CHECKED BY

REGISTERED PROFESSIONAL ENGINEER YUKON TERRITORY GEORGE R. KENT PROFESSIONAL ENGINEER

0 200 400 600 FEET

Map No. 4

off scale

off scale

24873

24870

24872

24872

296° Ast.

0+00

8E

16E

24E

32E

40E

48E

Vertical Scale 1 = 20%

Horizontal " 1 = 200'

Coil Separation 400'

Frequency 444 Hz

I.P.

O.P.

444 Hz

1 2 3

MACMILLAN JOINT VENTURE

Getty Canadian Metals Ltd.

AND

Essex Minerals Company

SUE CLAIMS

Yukon Territory

GRID 4 W

EM SURVEY

DRAWN BY GDK. DATE June/80 CHECKED BY GDK.

0 200 400 600 FT.

Map No.5

REGISTERED PROFESSIONAL ENGINEER MINING PROVINCE OF ONTARIO GEORGE D. KENT

T.L.

45 N
40 N
30 N
20 N
10 N
1 S
10 S
15 S

24873
24870
24872
24872

B.L.

296° Ast.

0+00
8E
16E
24E
32E
40E
48E

Coil Separation 400 Ft.

Frequency 1777 Hz
In Phase
Out of Phase

1777 Hz

20% 20%

1" = 200'

1	2	3

MACMILLAN JOINT VENTURE
Getty Canadian Metals Ltd.
AND
Essex Minerals Company

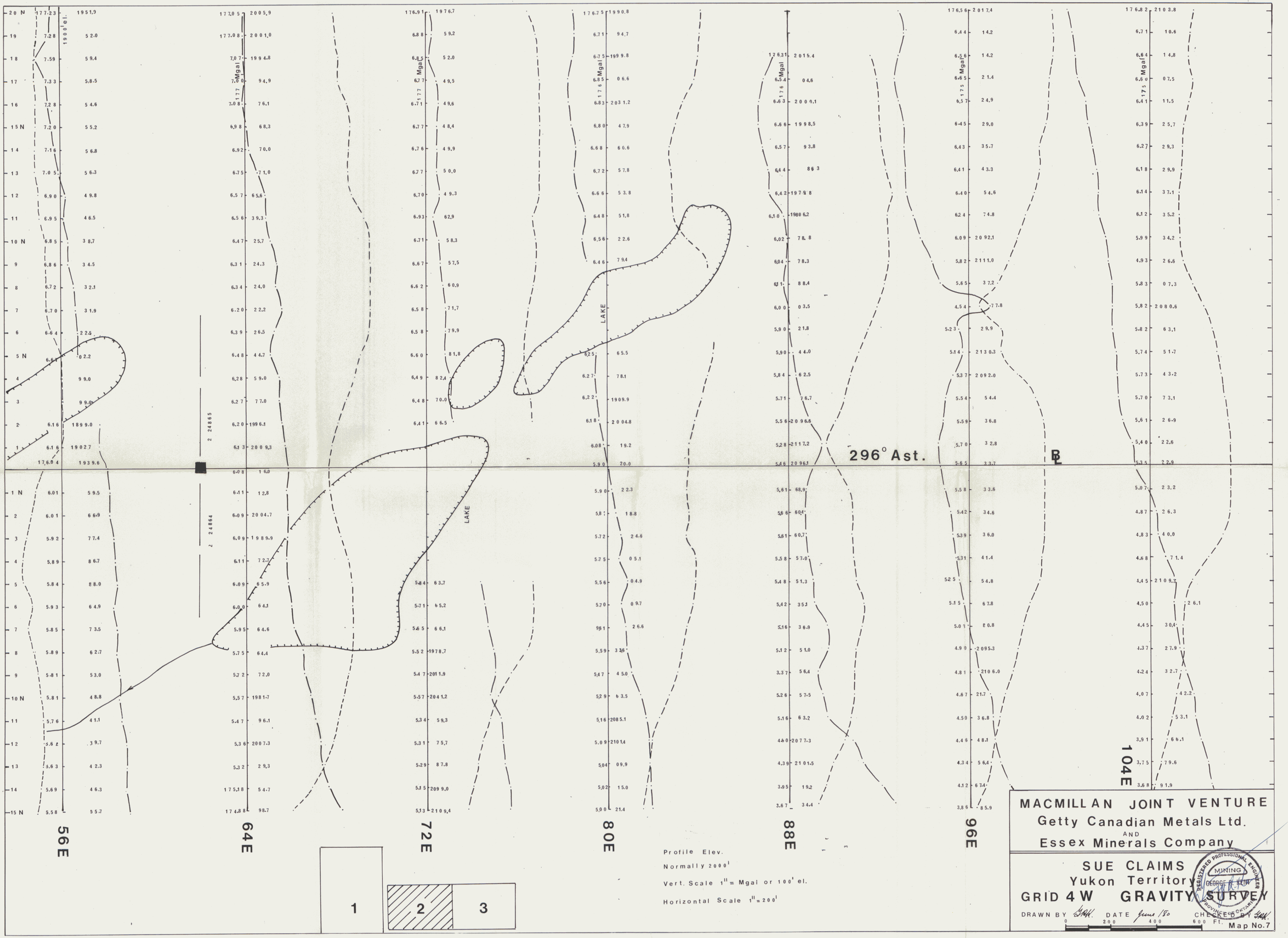
SUE CLAIMS
Yukon Territory
GRID 4W Max Min II SURVEY

REGISTERED PROFESSIONAL ENGINEER
MINING
GEORGE R. KENT
PROVINCE OF ONTARIO

DRAWN BY GRK DATE May/80 CHECKED BY GRK

0 200 400 600 Ft.

Map No.6



Profile Elev.
Normally 2000'
Vert. Scale 1" = Mgal or 100' el.
Horizontal Scale 1" = 200'

1 2 3

MACMILLAN JOINT VENTURE
Getty Canadian Metals Ltd.
AND
Essex Minerals Company

SUE CLAIMS
Yukon Territory
GRID 4W GRAVITY SURVEY

DRAWN BY GMK. DATE June 80 CHECKED BY GMK.

0 200 400 600 Ft.

Map No.7

REGISTERED PROFESSIONAL ENGINEER MINING GEORGE M. KLEIN PROVINCE OF ONTARIO

296° Ast.

56E 64E 72E 80E 88E 96E 104E

45 44 43 42 41 40N 39 38 37 36 35 34 33 32 31 30N 29 28 27 26 25 24 23 22 21 20N 19 18 17 16 15 14 13 12 11 10N 9 8 7 6 5 4 3 2 1 S 2 3 4 5 6 7 8 9 10S 11 12 13 14 15S

2 24865

2 24864

102N 130W

COMINCO GRID

1 2 3

Vertical Scale 1 = 20%

Horizontal " 1 = 200'

Coil Separation 400'

Frequency 444 Hz

I.P.

O.P.

444Hz

MACMILLAN JOINT VENTURE
Getty Canadian Metals Ltd.
AND
Essex Minerals Company

SUE CLAIMS
Yukon Territory
GRID 4W EM SURVEY

DRAWN BY GRA. DATE June/80 CHECKED BY GRK

0 100 200 400 FEET

Map No.8

REGISTERED PROFESSIONAL ENGINEER MINING GEORGE R. KENT PROVINCE OF BRITISH COLUMBIA

296° Ast.

Vertical Scale 1 = 20%
Horizontal " 1 = 200'

Coil Separation 400'
Frequency 1777 Hz
I.P.
O.P.

1777 Hz

56E 64E 72E 80E 88E 96E 104E

20 N 15 N 10 N 5 N 1 N 1 S 5 S 10 S 15 S

2 24865
2 24864

1 2 3

MACMILLAN JOINT VENTURE
Getty Canadian Metals Ltd.
AND
Essex Minerals Company

SUE CLAIMS
Yukon Territory
GRID 4 W EM SURVEY

DRAWN BY GKK. DATE June/80 CHECKED BY GKK.

0 200 400 600 Ft.

Map No.9

REGISTERED PROFESSIONAL ENGINEER
MINING
GEORGE R. KENT
PROVINCE OF ONTARIO

1" = 200'
Normal profile elevation 2000 Feet
" bouguer value 172 Mgal
1" = 1Mgal

296° Ast.

112E 120E 128E 136E 144E 152E 160E

Scale
1" = 200' Hor.
1" = 1Mgal Vert.
Profile Elev 2000'

1 2 3

MACMILLAN JOINT VENTURE
Getty Canadian Metals Ltd.
AND
Essex Minerals Company

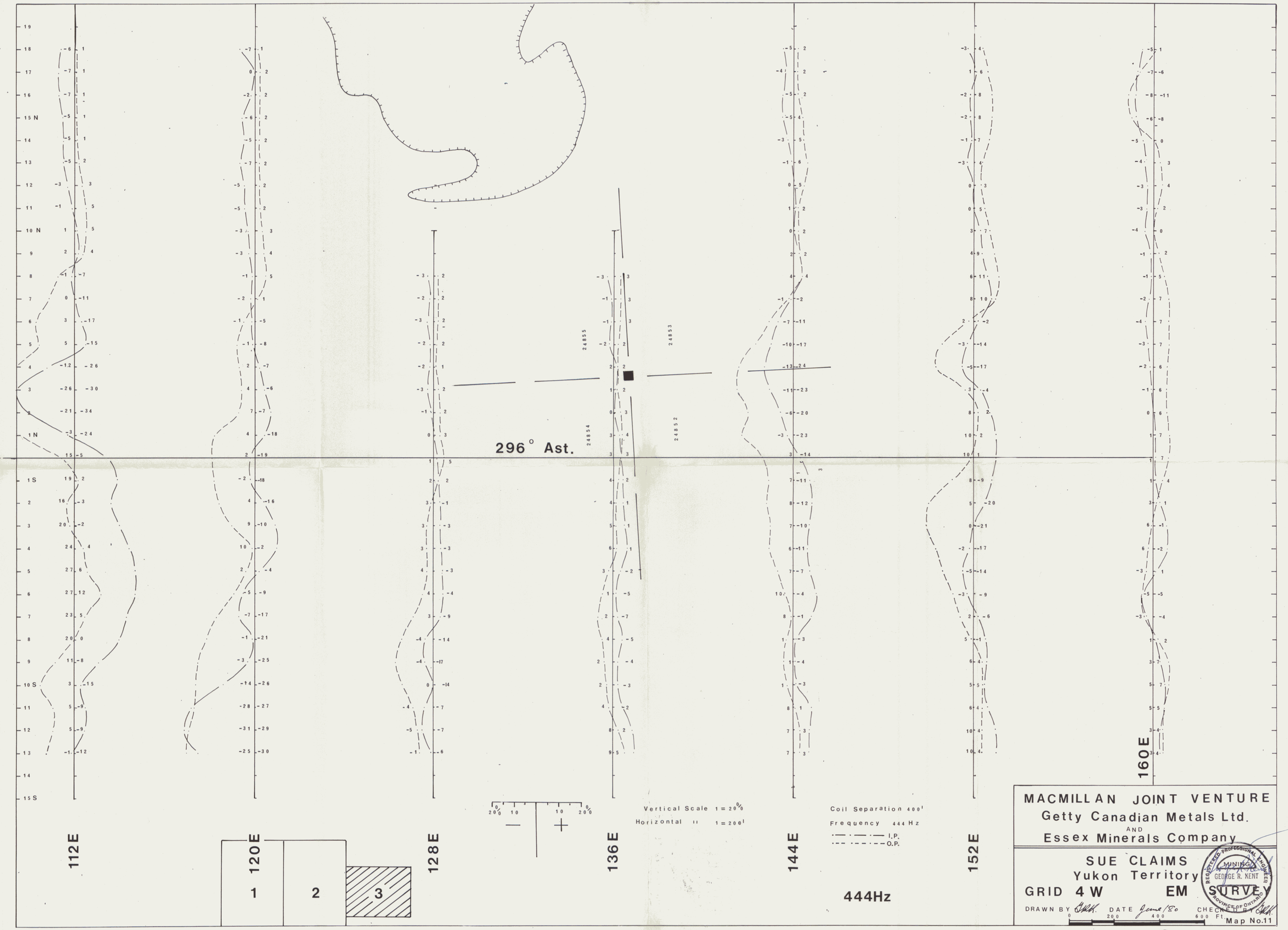
SUE CLAIMS
Yukon Territory
GRID 4W GRAVITY SURVEY

DRAWN BY GKK DATE June/80 CHECKED BY GKK

0 200 400 600 Ft.

Map No.10

REGISTERED PROFESSIONAL ENGINEER MINING GEORGE K. KENT PROVINCE OF ONTARIO



MACMILLAN JOINT VENTURE

Getty Canadian Metals Ltd.

AND

Essex Minerals Company

SUE CLAIMS

Yukon Territory

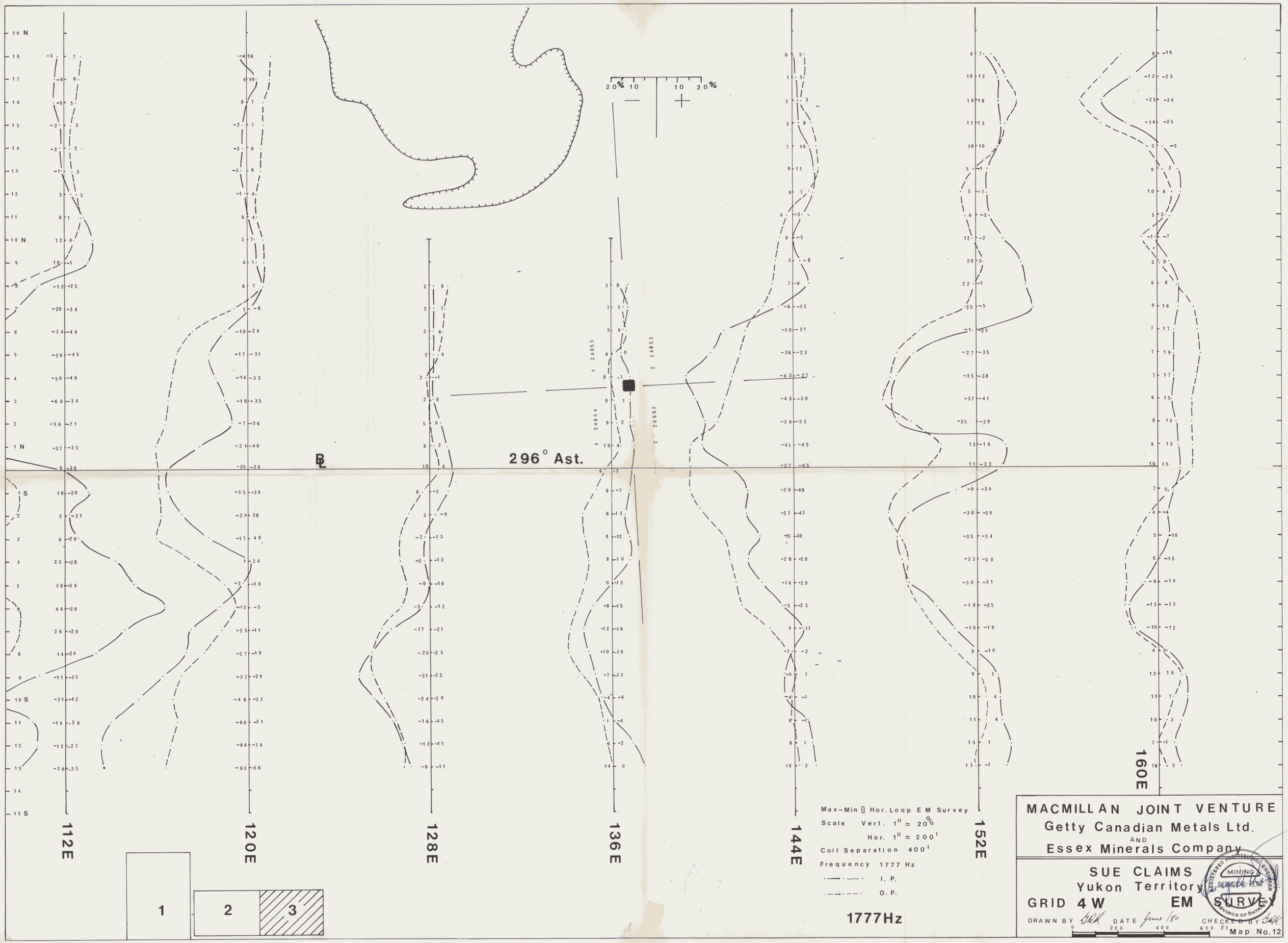
GRID 4 W EM SURVEY

DRAWN BY GRK DATE June/80 CHECKED BY GRK

0 200 400 600 Ft.

Map No.11

REGISTERED PROFESSIONAL ENGINEER PROVINCE OF ONTARIO MINING GEORGE R. KENT



Max-Min II Hor. Loop E M Survey
Scale Vert. 1" = 20%
Hor. 1" = 200'
Coil Separation 400'
Frequency 1777 Hz
I. P.
O. P.

1777Hz

MACMILLAN JOINT VENTURE
Getty Canadian Metals Ltd.
AND
Essex Minerals Company

SUE CLAIMS
Yukon Territory
GRID 4W EM SURVEY

DRAWN BY DATE June '80 CHECKED BY

0 200 400 600 Ft

Map No.12

REGISTERED PROFESSIONAL ENGINEER
MINING
GEORGE C. KENT
PROVINCE OF ONTARIO

296° Ast.

CL. NO. 2111

90581

90582

CL. NO. 2485

CL. NO. 2481

CL. NO. 2482

CL. NO. 2486

179 Mgal

178 Mgal

183 Mgal

48W

40W

32W

24W

16W

8W

Profile Elev. 2200'

Scale 1" = 200' Hor.

1" = 1Mgal Vert.

MACMILLAN JOINT VENTURE
Getty Canadian Metals Ltd.
AND
Essex Minerals Company

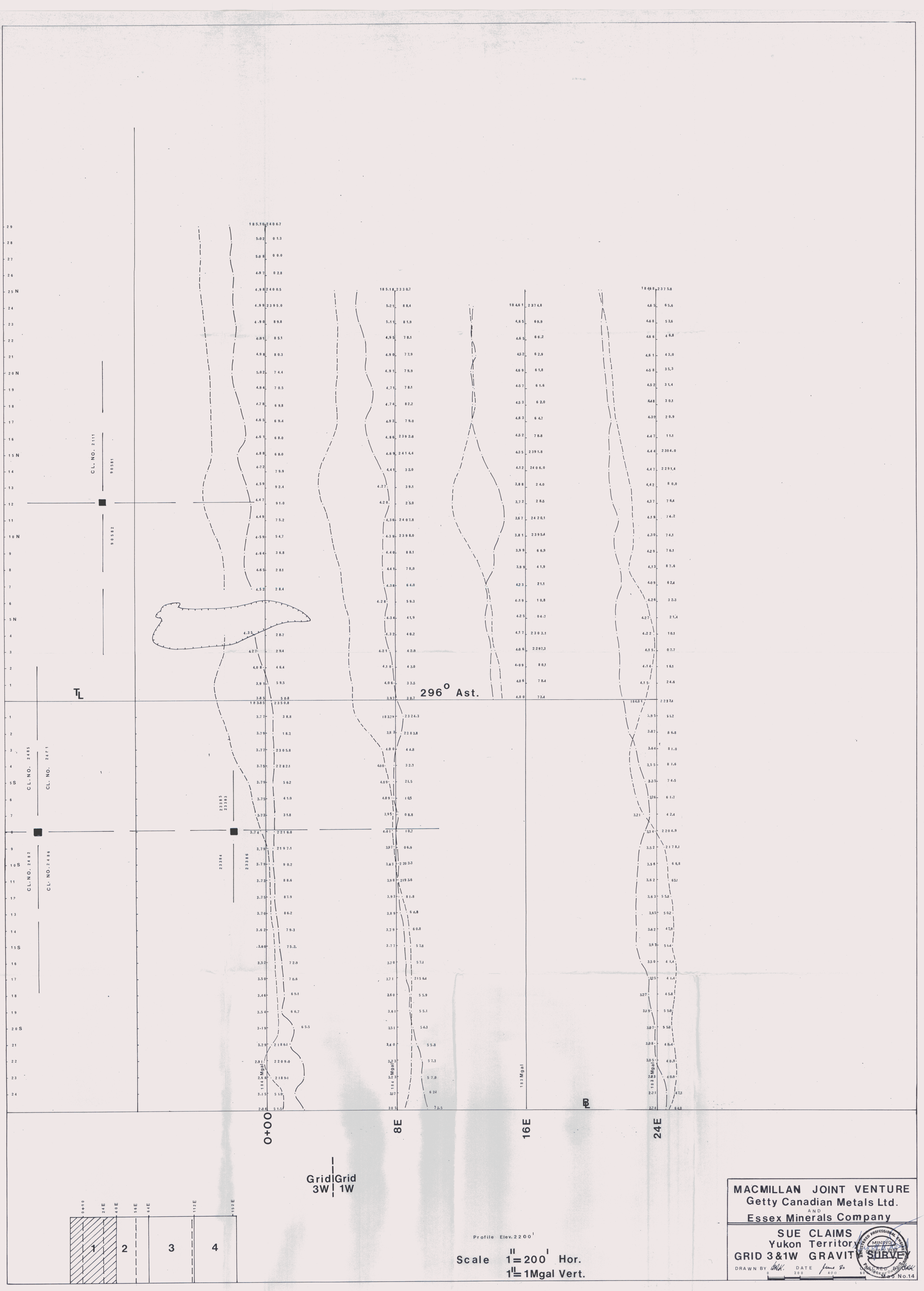
SUE CLAIMS
Yukon Territory
GRID 3W GRAVITY SURVEY

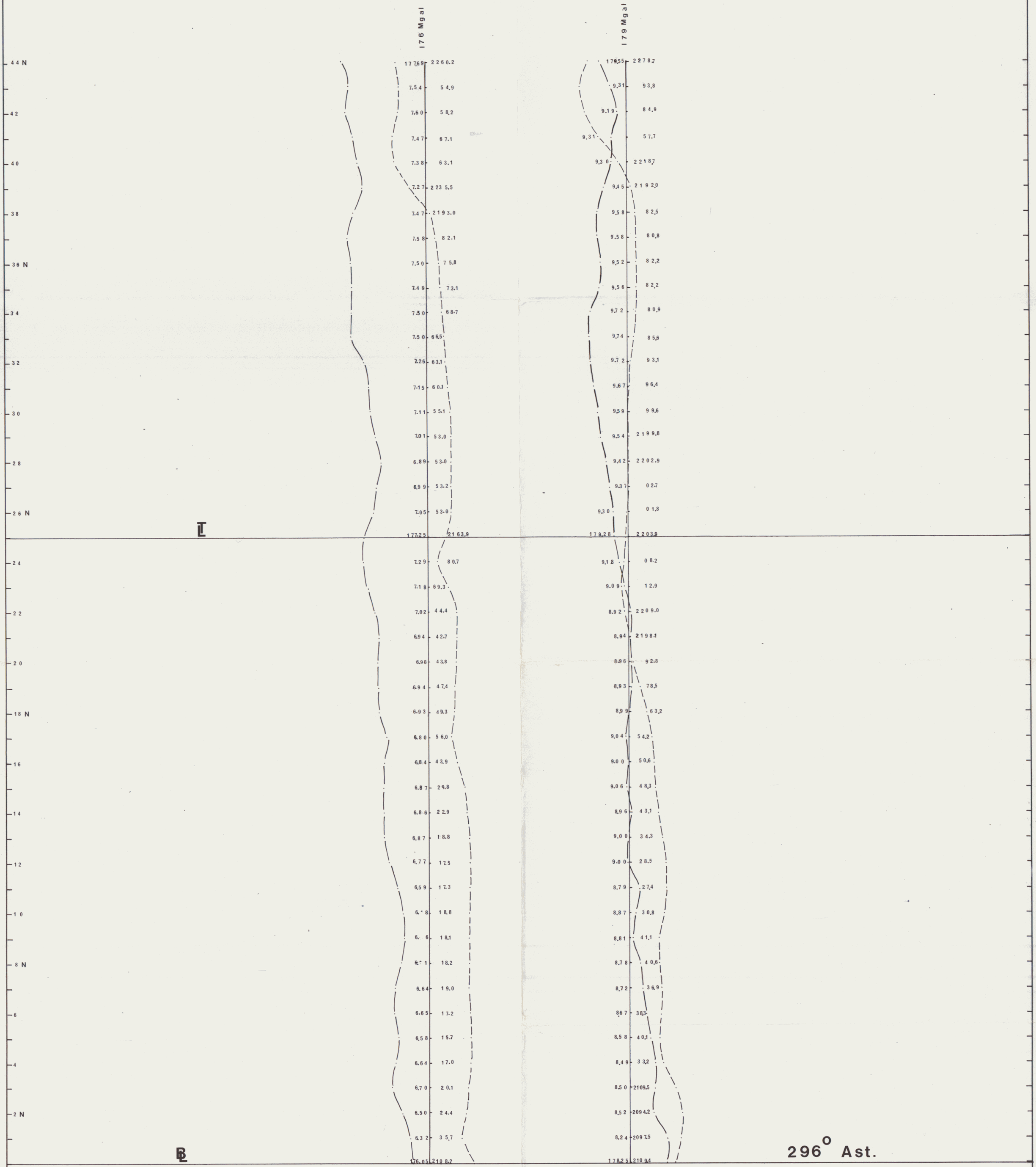
DRAWN BY GRK. DATE June 80 CHECKED BY GRK

0 200 400 600 ft.

Map No.13

REGISTERED PROFESSIONAL ENGINEER
MINING
GEORGE R. KENT
PROVINCE OF BRITISH COLUMBIA


CL. NO. 2111
90581
90582
TL
CL. NO. 2485
CL. NO. 2481
CL. NO. 2482
CL. NO. 2486
296° Ast.
0+00
8E
16E
24E
Grid 3W
Grid 1W
1
2
3
4
0+00
24E
40E
56E
64E
112E
152E
Profile Elev. 2200'
Scale 1"=200' Hor.
1"=1Mgal Vert.
MACMILLAN JOINT VENTURE
Getty Canadian Metals Ltd.
AND
Essex Minerals Company
SUE CLAIMS
Yukon Territory
GRID 3&1W GRAVITY SURVEY
DRAWN BY
DATE June 80
PROJECTED BY
Map No.14


176 Mgal
179 Mgal
44 N
42
40
38
36 N
34
32
30
28
26 N
24
22
20
18 N
16
14
12
10
8 N
6
4
2 N
40E
48E
296° Ast.
0+00
24 E
40 E
56 E
64 E
112 E
152 E
1
2
3
4
Scale 1" = 200' Hor.
1" = 1 Mgal Vert.
Profile Elev 2200'
MACMILLAN JOINT VENTURE
Getty Canadian Metals Ltd.
AND
Essex Minerals Company
SUE CLAIMS
Yukon Territory
GRID 1W GRAVITY SURVEY
DRAWN BY GKH DATE June 80 CHECKED BY
0 200 400 600
Map No.15
REGISTERED PROFESSIONAL ENGINEER
PROVINCE OF ONTARIO

40 N
39
38
37
36 N
35
34
33
32 N
31
30
29
28 N
27
26
25
24 N
23
22
21
20 N
19
18
17
16 N
15
14
13
12 N
11
10
9
8 N
7
6
5
4 N
3
2
1

TL

B

296° Ast.

72E

1 S
2
3
4
5 S
6
7
8
9
10 S
11
12
13
14
15
16
17
18
19
20 S
21
22
23
24
25

TL

26
27
28
29
30 S
31
32
33
34
35

0+00 24E 40E 56E 64E 112E 152E

1 2 3 4

Scale
1" = 200' Hor.
1" = 1Mgal Vert.
Profile Elev. 2000'

80E 84E 88E 92E 96E 100E 104E

MACMILLAN JOINT VENTURE
Getty Canadian Metals Ltd.
AND
Essex Minerals Company

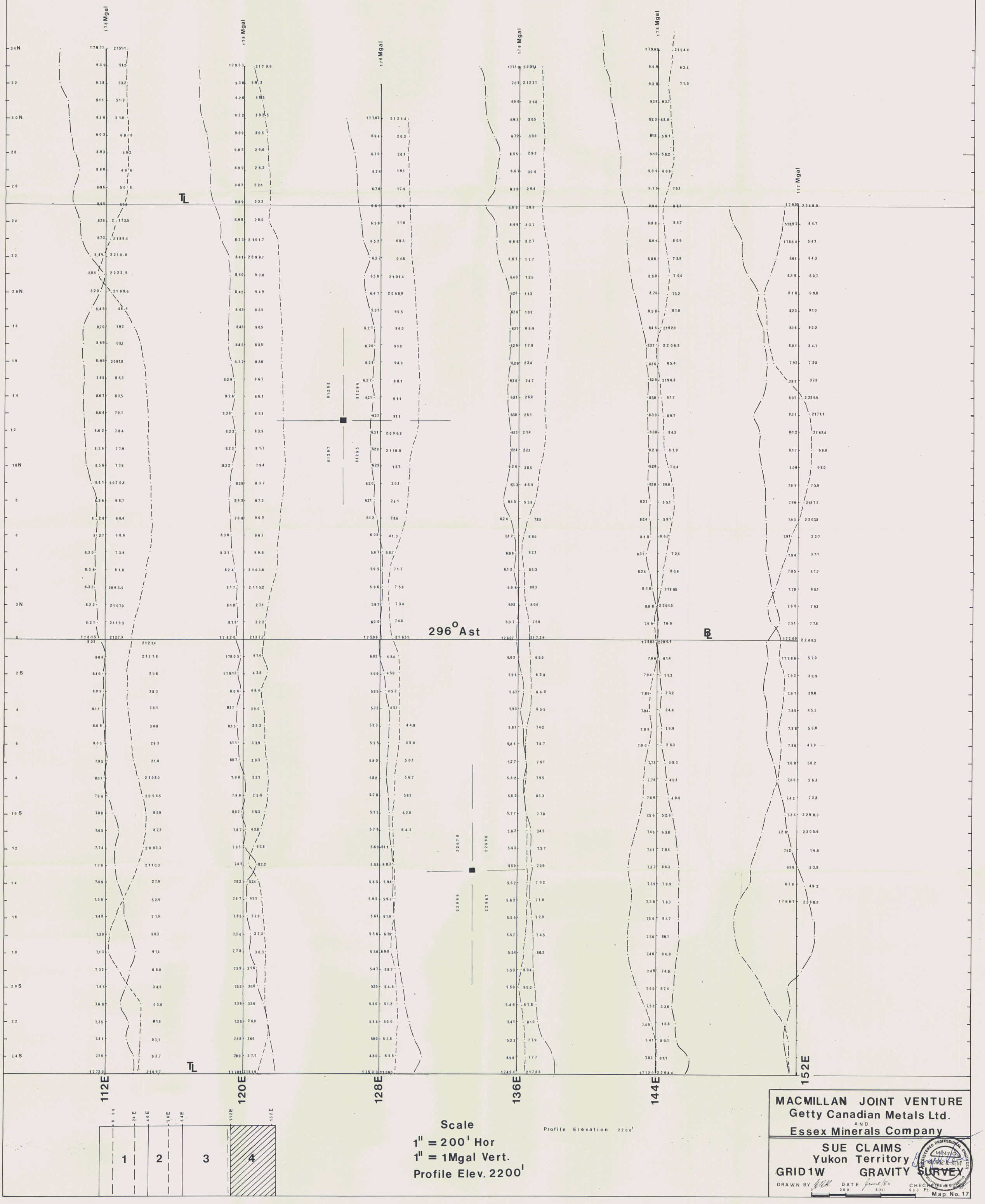
SUE CLAIMS
Yukon Territory
GRID 1W GRAVITY SURVEY

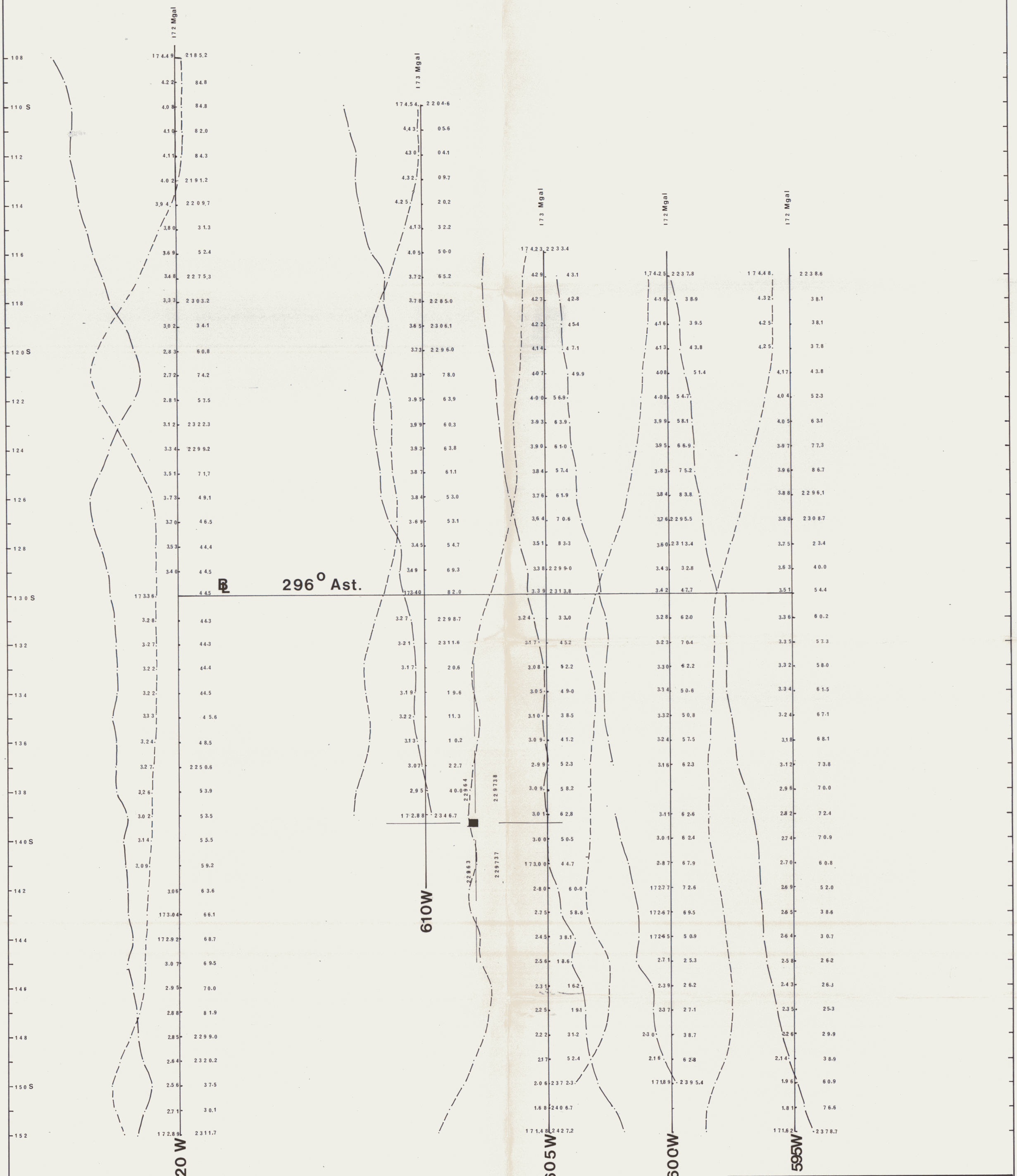
DRAWN BY [illegible] DATE June 80 CHECKED BY [illegible]

0 200 400 600 Ft.

Map No.16

REGISTERED PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA MINING GEORGE R. KENT


178 Mgal
178 Mgal
176 Mgal
176 Mgal
178 Mgal
177 Mgal
34N
32
30N
28
26
24
22
20N
18
16
14
12
10N
8
6
4
2N
0
2S
4
6
8
10S
12
14
16
18
20S
22
24S
TL
296° Ast
TL
81298
81296
81297
81295
22970
22968
22969
22967
112E
120E
128E
136E
144E
152E
0 00
24E
40E
56E
64E
112E
152E
1
2
3
4
Scale
1" = 200' Hor
1" = 1Mgal Vert.
Profile Elev. 2200'
Profile Elevation 2200'
MACMILLAN JOINT VENTURE
Getty Canadian Metals Ltd.
AND
Essex Minerals Company
SUE CLAIMS
Yukon Territory
GRID 1W GRAVITY SURVEY
DRAWN BY BRK DATE June/80 CHECKED BY
0 200 400 600 Ft.
Map No. 17
REGISTERED PROFESSIONAL ENGINEER
MINING
GEORGE R. KENT
PROVINCE OF BRITISH COLUMBIA



Scale

1" = 200' Hor.

1" = 1 Mgal Vert.

Profile Elev. 2000'

MACMILLAN JOINT VENTURE

Getty Canadian Metals Ltd.

AND

Essex Minerals Company

SUE CLAIMS

Yukon Territory

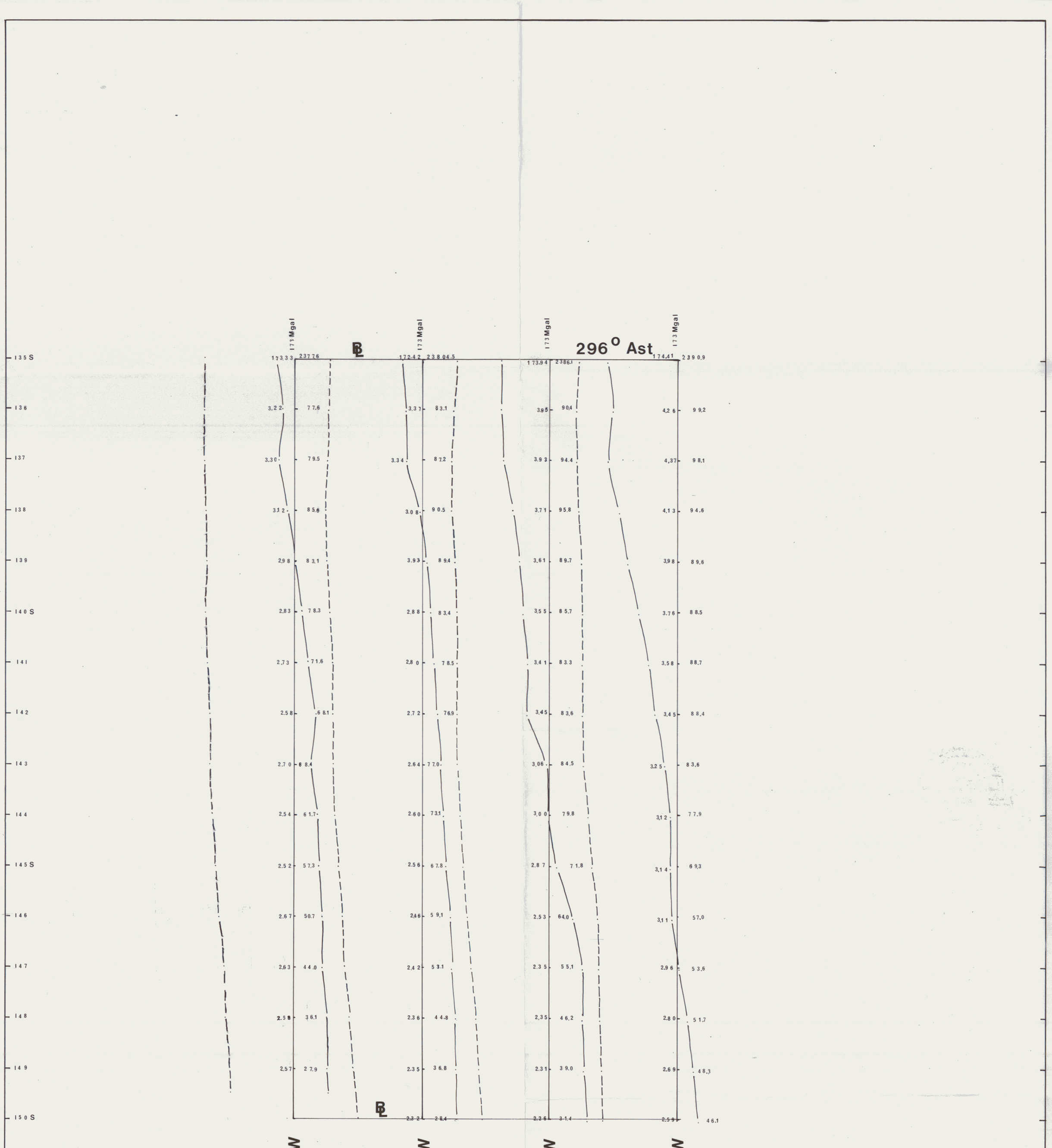
GRID C.L.W. GRAVITY SURVEY

DRAWN BY GRK. DATE June 80 CHECKED BY GRK.

0 200 400 600

Map No. 18

REGISTERED PROFESSIONAL ENGINEER MINING GEORGE R. KENT PROVINCE OF ONTARIO



Scale
1" = 100' Hor.
1" = 1Mgal Vert.
Profile Elev. 2200'

MACMILLAN JOINT VENTURE
Getty Canadian Metals Ltd.
AND
Essex Minerals Company

SUE CLAIMS
Yukon Territory
GRID C.L. GRAVITY SURVEY

DRAWN BY GRK. DATE June/80 CHECKED BY GRK.

REGISTERED PROFESSIONAL ENGINEER MINING GEORGE R. KENT PROVINCE OF ONTARIO

0 100 200 300 Ft.

Map No.19

296° Ast.

DDH 79 +25
-45°

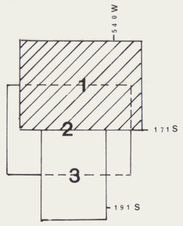
DDH 78-16
-52°

510

Pelly River

567+50 W | 565W | 562+50W | 560W | 555W | 550W | 545W | 540W | 530W | 520W

170 Mgal
2000' El



Profile Elevation Normally
2200' & 173 Mgals

Scale
1" = 200' Hor.
1" = 1 Mgal Vert.

MACMILLAN JOINT VENTURE
Getty Canadian Metals Ltd.
AND
Essex Minerals Company

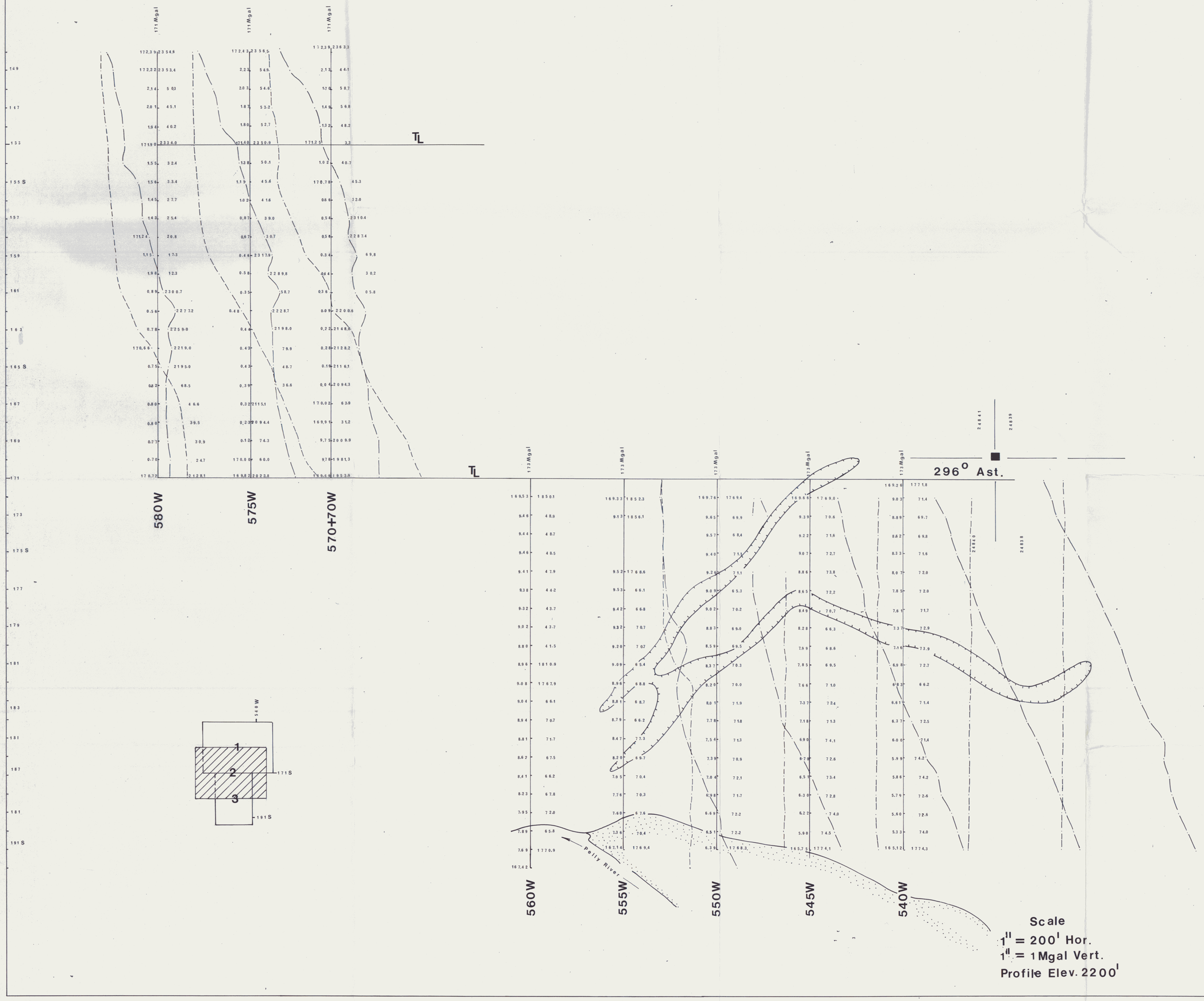
SUE CLAIMS
Yukon Territory
GRID C.L.E. GRAVITY SURVEY

DRAWN BY GKK DATE June 80 CHECKED

0 200 400 600 Ft.

Map No. 20

REGISTERED PROFESSIONAL ENGINEER
MINING
GEORGE K. KENT
PROVINCE OF ONTARIO



Scale
1" = 200' Hor.
1" = 1 Mgal Vert.
Profile Elev. 2200'

MACMILLAN JOINT VENTURE
Getty Canadian Metals Ltd.
AND
Essex Minerals Company

SUE CLAIMS
Yukon Territory
GRID C.L.E. GRAVITY SURVEY

DRAWN BY GHK DATE June 80 CHECKED BY GEORGE R. KENT

0 200 400 600

Map No. 21

296° Ast.

T.L.

1777 Hz

296° Ast.

T.L.

444 Hz

171 S
172
173
174
175
176
177
178
179
180 S
181
182
183
184
185
186
187
188
189
190 S
191

560 W
555 W
550 W
545 W
540 W

24841
24839
24840
24838

Pelly River

540 W

1
2
3

171 S
191 S

MAX MIN II EM SURVEY

Coil Separation 400'

In Phase

Out of II

MACMILLAN JOINT VENTURE
Getty Canadian Metals Ltd.
AND
Essex Minerals Company

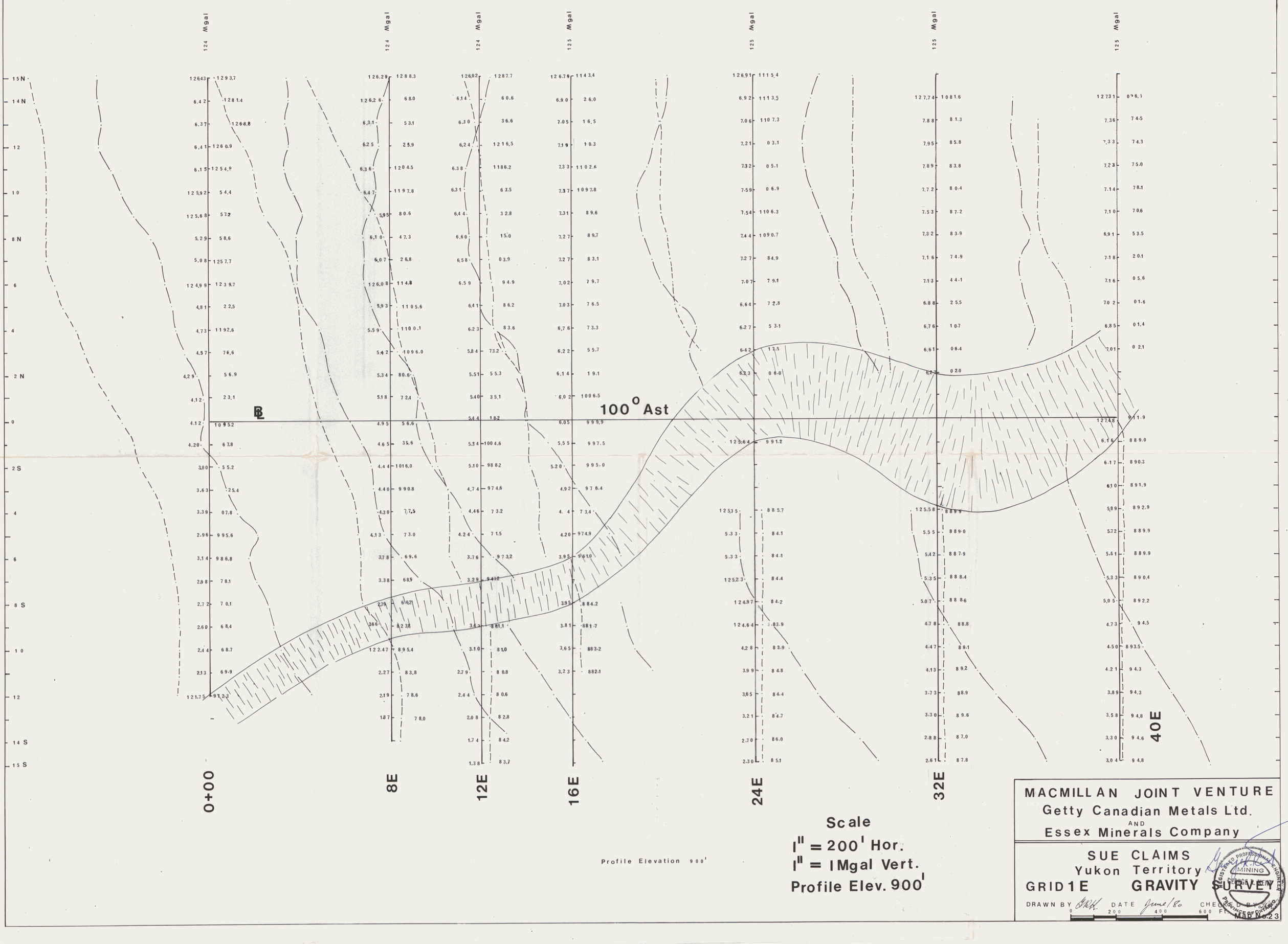
SUE CLAIMS
Yukon Territory
GRID C.L.E. E.M. SURVEY

DRAWN BY G.K.K. DATE June/80 CHECKED BY G.K.K.

REGISTERED PROFESSIONAL ENGINEER MINING GEORGE R. KENT PROVINCE OF ONTARIO

0 200 400 600 Ft.

Map No.22



Profile Elevation 900'

Scale
1" = 200' Hor.
1" = 1Mgal Vert.
Profile Elev. 900'

MACMILLAN JOINT VENTURE
Getty Canadian Metals Ltd.
AND
Essex Minerals Company

SUE CLAIMS
Yukon Territory
GRID 1E GRAVITY SURVEY

DRAWN BY GKK DATE June/80 CHECKED BY
0 200 400 600 FEET
MAP No. 23

REGISTERED PROFESSIONAL ENGINEER
PROVINCE OF ONTARIO
MINING
GEORGE KLEMY

MACMILLAN JOINT VENTURE

Getty Canadian Metals Ltd.

AND

Essex Minerals Company

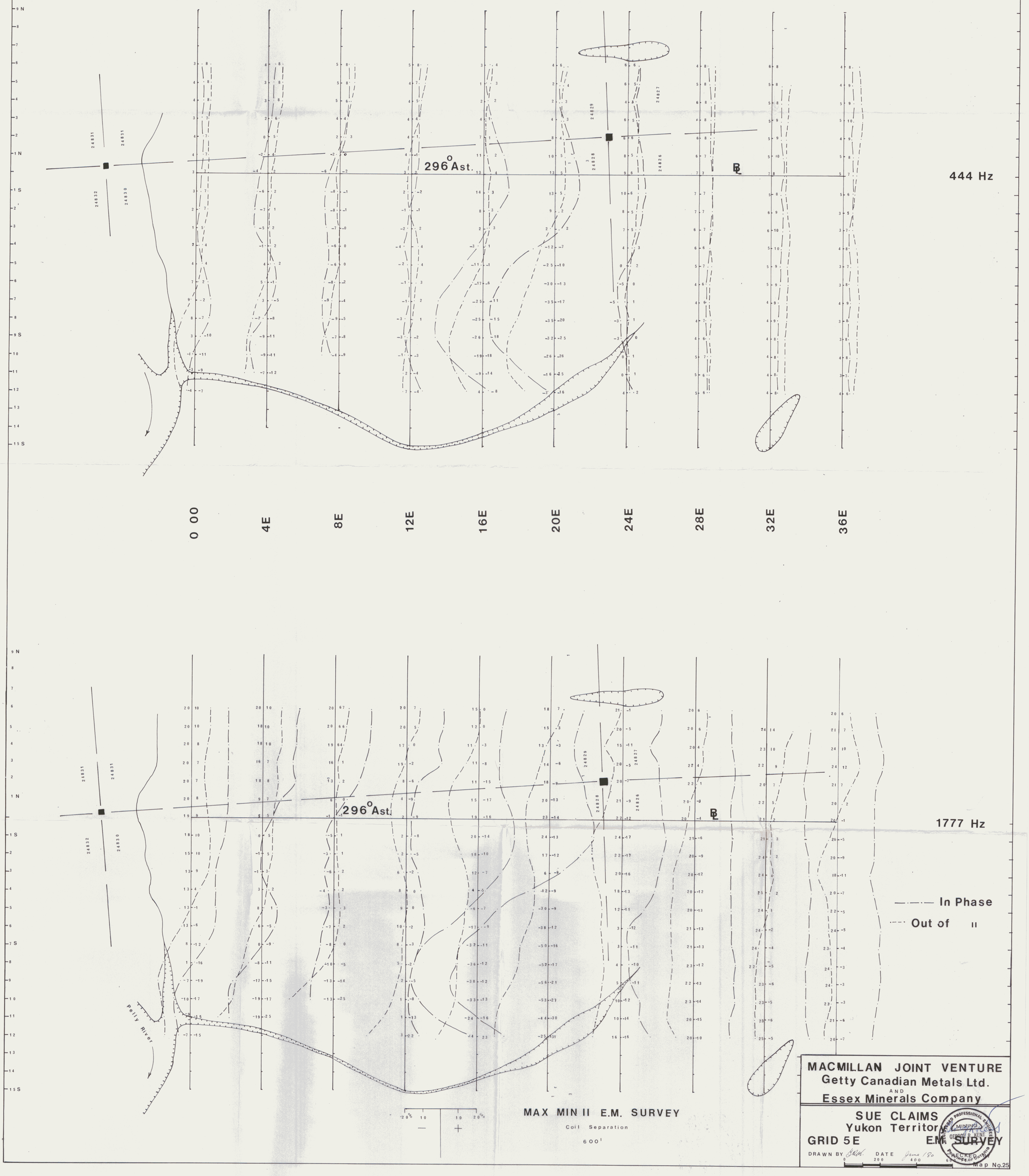
SUE CLAIMS
Yukon Territory
GRID 5E GRAVITY SURVEY

REGISTERED PROFESSIONAL ENGINEER — MINING — GEORGE R. KENT — PROVINCE OF ONTARIO

DRAWN BY GRK. DATE June 80 CHECKED BY GRK.

0 100 200 300 Ft.

Map No.24


0 00
4E
8E
12E
16E
20E
24E
28E
32E
36E
296° Ast.
B
444 Hz
1777 Hz
24831
24832
24830
24827
24829
24828
24826
Pelly River
In Phase
Out of
MAX MIN II E.M. SURVEY
Coil Separation
600'
MACMILLAN JOINT VENTURE
Getty Canadian Metals Ltd.
AND
Essex Minerals Company
SUE CLAIMS
Yukon Territory
GRID 5E
E.M. SURVEY
DRAWN BY
DATE June 180
Map No.25
REGISTERED PROFESSIONAL ENGINEER
MINING
GEORGE R. KENT
PROVINCE OF ONTARIO