



REPORT ON THE  
SOIL AND STREAM SILT  
GEOCHEMICAL SURVEY  
SHERPA CLAIMS



WATSON LAKE MINING DIVISION

NTS 105 J 7            091000

Latitude: 130° 50'

Longitude: 62° 23'

June 19 to July 10 and August 14 to 22, 1981

Edward P. Dillon  
Gulf Minerals Canada Limited  
February 1982

091000



1971-1972

0 0 0 1 2 0

This report has been examined by  
the Controller of the Yukon Territory  
under Section 20 of the Yukon Quartz  
Mining Act and is certified as  
representing the true and correct amount  
of \$ 29,700 -.

*P. Watson*

*W* Regional Manager, Exploration and  
Geological Services for Commissioner  
of Yukon Territory.

0 0 0 1 2 0

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  - E Ba values in ppm
  - F V values in ppm



LIST OF CLAIMS

Claim Name	Claim Numbers	Tag Numbers	Recording Date
Sherpa	1 to 99	YA 57634-732	March 26, 1981



## 1.0 INTRODUCTION

The Sherpa claim group, totalling 99 claims, was staked to cover the source of stream silt geochemical anomalies located during a 1980 Reconnaissance Survey in the Ross River area.

During the 1981 field season a 4.1 km base line was cut and surveyed in, 50 km of cross lines were chained and flagged at 50 m stations, all streams draining the Sherpa property were silt sampled in detail and the entire property was soil sampled at 100 m stations on lines spaced approximately 450 m apart. One area of the property was resampled on a 50 m X 150 m grid late in the field season.

A total of 767 soil samples and 59 stream silt samples were collected during this property program.



## 2.0 LOCATION, ACCESS AND TOPOGRAPHY

The Sherpa property is located in the centre part of NTS 1:50,000 sheet 105 J/7 and is approximately 38 km southeast of the North Canol Road. Longitude 130° 50' and latitude 62° 23' marks the approximately centre of the property. (Plate I).

During the 1981 field season access to the Sherpa property was by helicopter from Gulf Mineral's base camp 38 km to the northwest.

The topography of the Sherpa property is moderate with a fairly steep south side and a relatively flat central part sloping gently to the north. Relief on the Sherpa property is approximately 500 m with elevations ranging from 1100 m on the shore of Raider Lake to 1600 m at the top.



### 3.0 REGIONAL GEOLOGY

Rock units exposed in the vicinity of the Sherpa property are cherts and shales of Ordovician to Silurian age.

The cherts occur in massive, blocky-weathered outcrops forming resistant ridges. On weathered surface they are light grey to buff white in colour. On fresh surface they appear dark grey to black with occasional fine white laminae. These rocks are very fine grained and show concoidal fracture.

The shales weather medium to dark grey with occasional rusty zones. On fresh surface they appear thinly bedded and dark grey to black in colour. Exposures of the shale units in the Sherpa area are restricted to thin interbeds within the massive chert sequence.



## 4.0 GEOCHEMICAL SURVEYS

### 4.1 Soil Geochemical Survey

A total of 767 soil geochemical samples were collected on the Sherpa property between June 19 and July 10 and between August 14 and August 22, 1981. The samples were collected from "B" to "C" horizon soils at 100 m intervals on lines spaced approximately 450 m apart. The lines were run E to W from the survey and cut, N-S baseline.

The soil samples were placed in pre-numbered, wet strength, kraft sample bags, air dried at the base camp and shipped by Air Express to Min-En Labs, 705 West 15th Street, North Vancouver, B.C.

In the lab the soil samples were oven dried at 90°C, sieved to -80 mesh, subjected to hot acid digestion and analyzed for Pb, Zn, Ag, Ba and V by atomic absorption spectroscopy.

The results of the 1981 soil geochemical survey are plotted on the accompanying 1:10,000 scale geochemical maps (Plates A-F) in ppm. The results of the detailed sampling are plotted, in ppm, on 1:5,000 scale maps appended to this report (Plates A-F).

Threshold values for each of the elements were calculated as mean + 2 standard deviations (Pb - 39 ppm, Zn - 294 ppm, Ag - 2.1 ppm and Ba - 2300 ppm).

The southwest part of the Sherpa property (lines 1N to 3N and west of the baseline) shows a large coincident Pb-Zn-Ag-Ba soil anomaly. Anomalous values occurring in this area are: Pb (40 to 130 ppm), Zn (300 to 1700 ppm), Ag (2.2 to 21.0 ppm) and Ba (2500 to 6000 ppm). No source has been located to explain this anomalous trend.



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#### 4.2 Stream Silt Geochemical Survey

A total of 59 stream silt geochemical samples were collected from all creeks draining the Sherpa property between June 21 and June 28, 1981. The silt samples were collected from the active part of the streams using a sample spacing of 300 to 500 m.

The stream silt samples were placed in pre-numbered, wet strength kraft sample bags, air dried at the camp and shipped via Air Express to Min En Labs, North Vancouver, B.C. The stream silt samples were treated and analyzed the same as the soil samples.

The results of the stream silt geochemical survey are presented on 1:50,000 scale figures listed in Appendix II of this report.

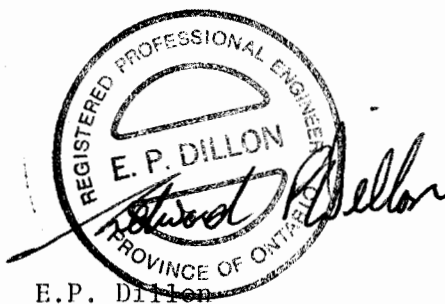
Samples taken from streams draining the southwest area of the property returned anomalous values in Zn (1000 to 3200 ppm), Ag (2.4 to 5.1 ppm), Ba (7500 to 10,000 ppm) and minor Pb (58 ppm). Threshold values (Mn + 2 Std. Dev.) for Pb, Zn, Ag and Ba are 25 ppm, 1000 ppm, 2.3 ppm and 7000 ppm respectively. These anomalous drainages frame the zone of anomalous soil values reported in section 4.1 of this report.



## 5.0 CONCLUSIONS AND RECOMMENDATIONS

The results of the detailed soil and stream silt geochemical program conducted on the Sherpa property shows a broad Pb-Zn-Ag-Ba soil anomaly in the southwest part of the property. The streams draining this part of the property show anomalous values in Zn, Ag, Ba and minor Pb.

The writer recommends a program of detailed soil sampling, geological mapping and prospecting over the anomalous zones in the southwest part of the Sherpa property.




E.P. Dillon  
Project Geologist

6.0 STATEMENT OF QUALIFICATIONS

I, Edward P. Dillon of Gulf Minerals Canada Limited, Suite 1400, 110 Yonge Street, Toronto, Ontario and residing in Mississauga, Ontario do hereby certify that:

1. I graduated from the University of Toronto in 1974 with a BaSc in Geological Engineering and in 1979 with an MSc in geology.
2. From 1978 to present I have been actively engaged as a Geologist in mineral exploration in Ontario, Manitoba, British Columbia and the Yukon and Northwest Territories.
3. I am a member of the Association of Professional Engineers of Ontario and the Canadian Institute of Mining and Metallurgy.
4. I personally participated in and supervised the field work conducted on the Sherpa claims and interpreted all data resulting from this work.



The seal is circular with the text "REGISTERED PROFESSIONAL ENGINEER" around the top and "PROVINCE OF ONTARIO" around the bottom. In the center, it says "E. P. DILLON". A handwritten signature "Edward P. Dillon" is written across the seal.

Edward P. Dillon, P. Eng.



APPENDIX IA

Summary of Expenditures



Gulf Minerals Canada Limited

SUMMARY OF EXPENDITURES

SHERPA PROPERTY 1981

Salaries	115 man days	\$ 8,627.00
Contract Costs	(Line cutting cost plus)	7,177.00
Accommodation & Food	115 man days @ \$50.00/day	5,750.00
Analytical Costs	767 soils @ \$12.90	9,894.00
	59 silts @ \$12.90	761.10
Helicopter Costs	33.1 hours @ \$360.00/hour	11,916.00
Helicopter Fuel	26 gph X 33.1 hours X 2.10/gal	1,807.26
Casual Air Charter		583.68
Misc. Equipment		972.80
Report Writing & Drafting		<u>1,800.00</u>
TOTAL		<u><u>\$49,289.14</u></u>



APPENDIX IB

Summary of Personnel



# Gulf Minerals Canada Limited

## SUMMARY OF PERSONNEL

### SALARIES

#### SHERPA PROPERTY

Name	Position	Daily Salary	# Days	Total
E. Dillon	Project Geologist	132.00	4	\$ 528.00
D. Webb	Senior Asst.	90.00	28	2,520.00
P. Matysek	Senior Asst.	85.00	21	1,785.00
S. Riddell	Senior Asst.	85.00	9	765.00
R. Boland	Junior Asst.	60.00	26	1,560.00
J. Grant	Junior Asst.	50.00	16	800.00
L. Deering	Junior Asst.	42.00	2	84.00
V. Morelli	Junior Asst.	65.00	2	130.00
N. Gilbert	Junior Asst.	65.00	<u>7</u>	<u>455.00</u>
TOTAL			<u>115</u>	<u>\$8,627.00</u>



APPENDIX IC

Addresses of Personnel



ADDRESSES OF PERSONS LISTED IN SUMMARY OF PERSONNEL

Edward P. Dillon  
2507 Hornsgate Drive  
Mississauga, Ontario  
L5K 1P3

Mr. R.A. Boland  
104 Edwards Hall  
McMaster University  
Hamilton, Ontario

Mr. D.R. Webb  
Apt. 1610  
260 Wellesley Street E.  
Toronto, Ontario  
M4X 1G6

Mr. L.S. Deering  
18 Robintide Court  
Agincourt, Ontario  
MIT 1V1

Mr. P.F. Matysek  
Ste. 206  
1045 Burnaby Street  
Vancouver, B.C.  
V6E 1N9

Mr. D.S. Riddell  
2041 Highview Drive  
Burlington, Ontario  
L7R 3X4

Mr. V.D. Morelli  
77 Fountainbleaur Drive  
Toronto, Ontario  
M2M 1P1

Mr. N.T. Gilbert  
261 Henkel Place  
Windsor, Ontario  
N8Y 2E8

Mr. J.W. Grant  
R.R. #3  
5th Line  
Georgetown, Ontario  
L7G 4S6



APPENDIX II

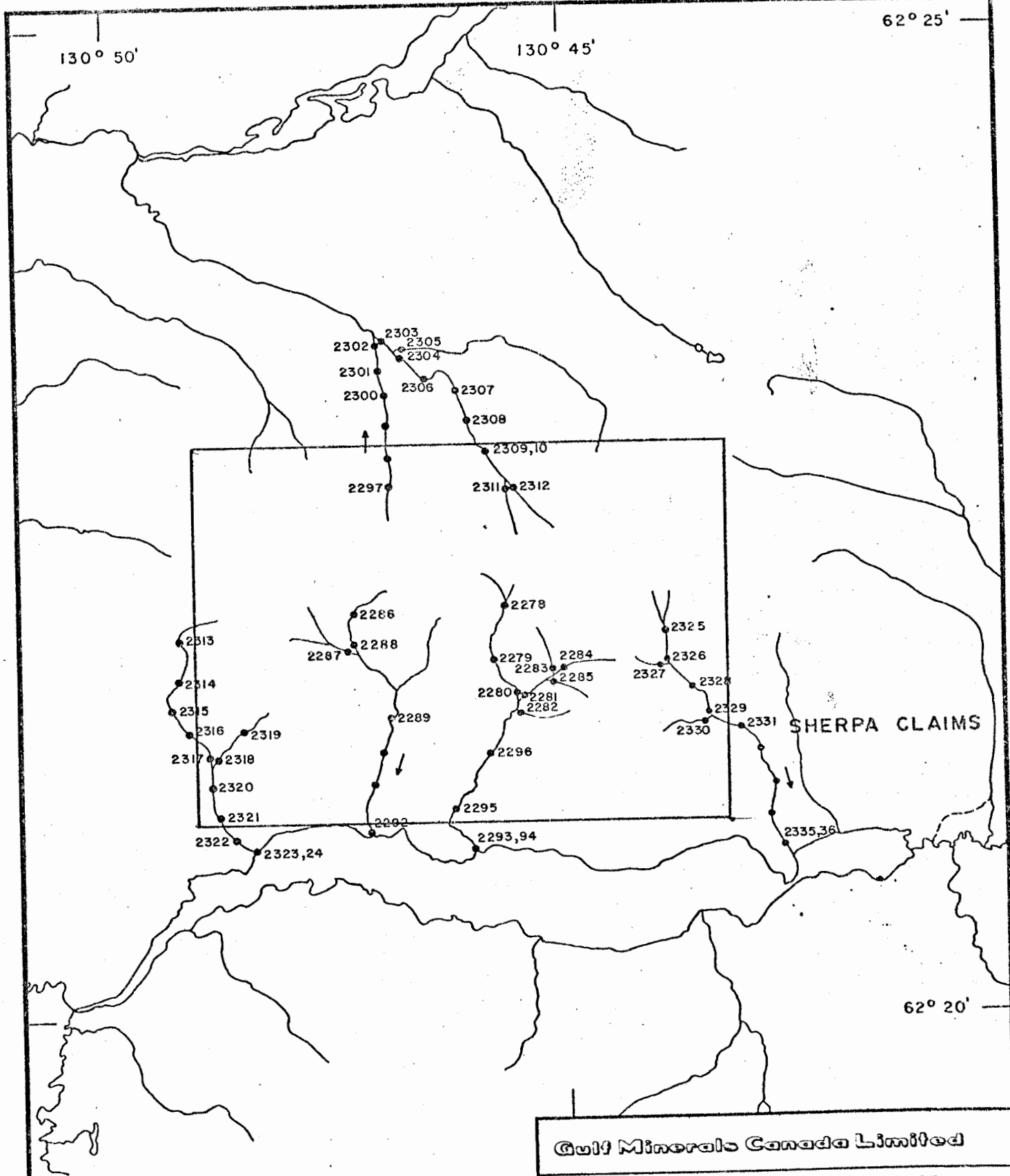
Stream Silt Geochem Maps



62° 25'

130° 50'

130° 45'



62° 20'

SHERPA CLAIMS

**LEGEND**

- Stream sediment sample location and number.  
(Prefix by CS-81-XB.)

**Gulf Minerals Canada Limited**

CORDILLERAN SEDIMENTS PROJECT  
**GEOCHEMICAL SURVEY**  
 SAMPLE NUMBERS - AREA "B"

YUKON TERRITORY

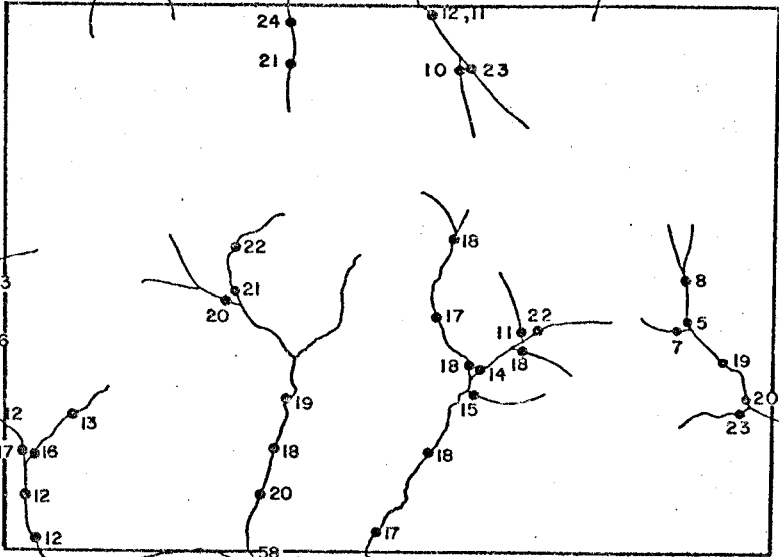
DATE:	SCALE:	DRAWN BY:	N.T.S.
SEPT. 1981	1:50,000	S. NORRIS	105J/7 PT.

Figure 1-1

130° 50'

130° 45'

62° 25'



SHERPA CLAIMS

62° 20'

Gulf Minerals Canada Limited

CORDILLERAN SEDIMENTS PROJECT

GEOCHEMICAL SURVEY  
LEAD VALUES - AREA "B"

YUKON TERRITORY

DATE:

SCALE:

DRAWN BY:

N.T.S.

SEPT. 1981

1:50,000

S. NORRIS

105J/7 PT.

LEGEND

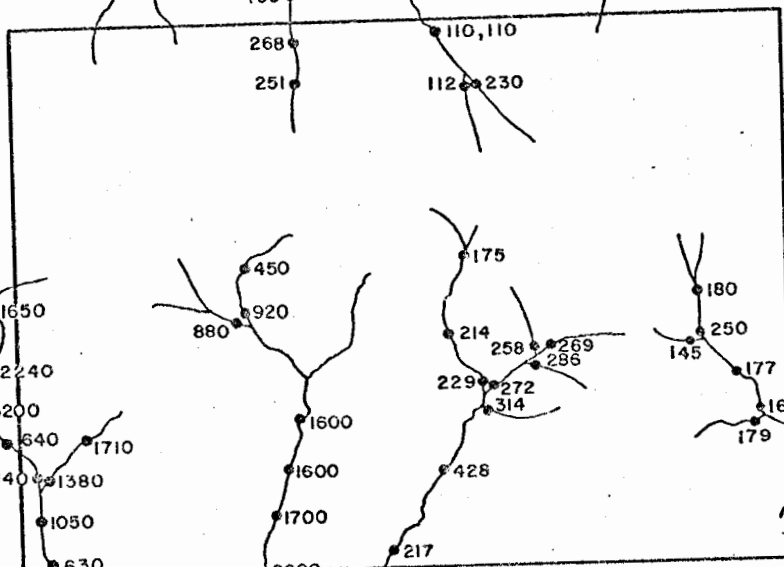
- 22 Stream sediment sample location and value in ppm.

Figure 1.2

62° 25'

130° 50'

130° 45'



SHERPA CLAIMS

62° 20'

**LEGEND**

● 920 Stream sediment sample location and value in ppm.

**Gulf Minerals Canada Limited**

CORDILLERAN SEDIMENTS PROJECT

**GEOCHEMICAL SURVEY**  
**ZINC VALUES - AREA "B"**

YUKON TERRITORY

DATE:

SEPT. 1981

SCALE:

1:50,000

DRAWN BY:

S. NORRIS

N.T.S.

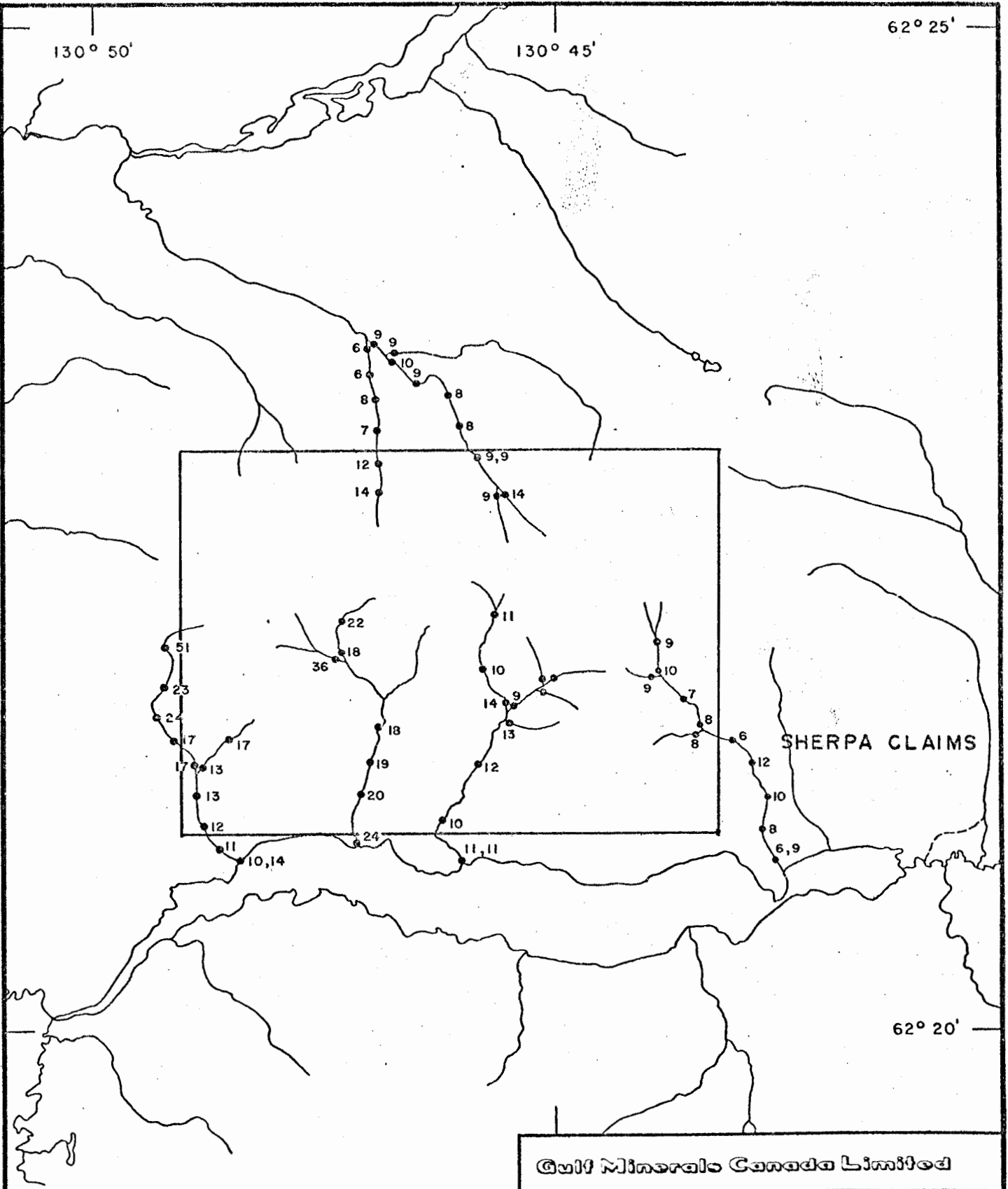
105J/7 PT.

Figure 1-3

130° 50'

130° 45'

62° 25'



**LEGEND**

- 10 Stream sediment sample location and value in ppm x 10.

**Gulf Minerals Canada Limited**

CORDILLERAN SEDIMENTS PROJECT

**GEOCHEMICAL SURVEY**

**SILVER VALUES - AREA "B"**

YUKON TERRITORY

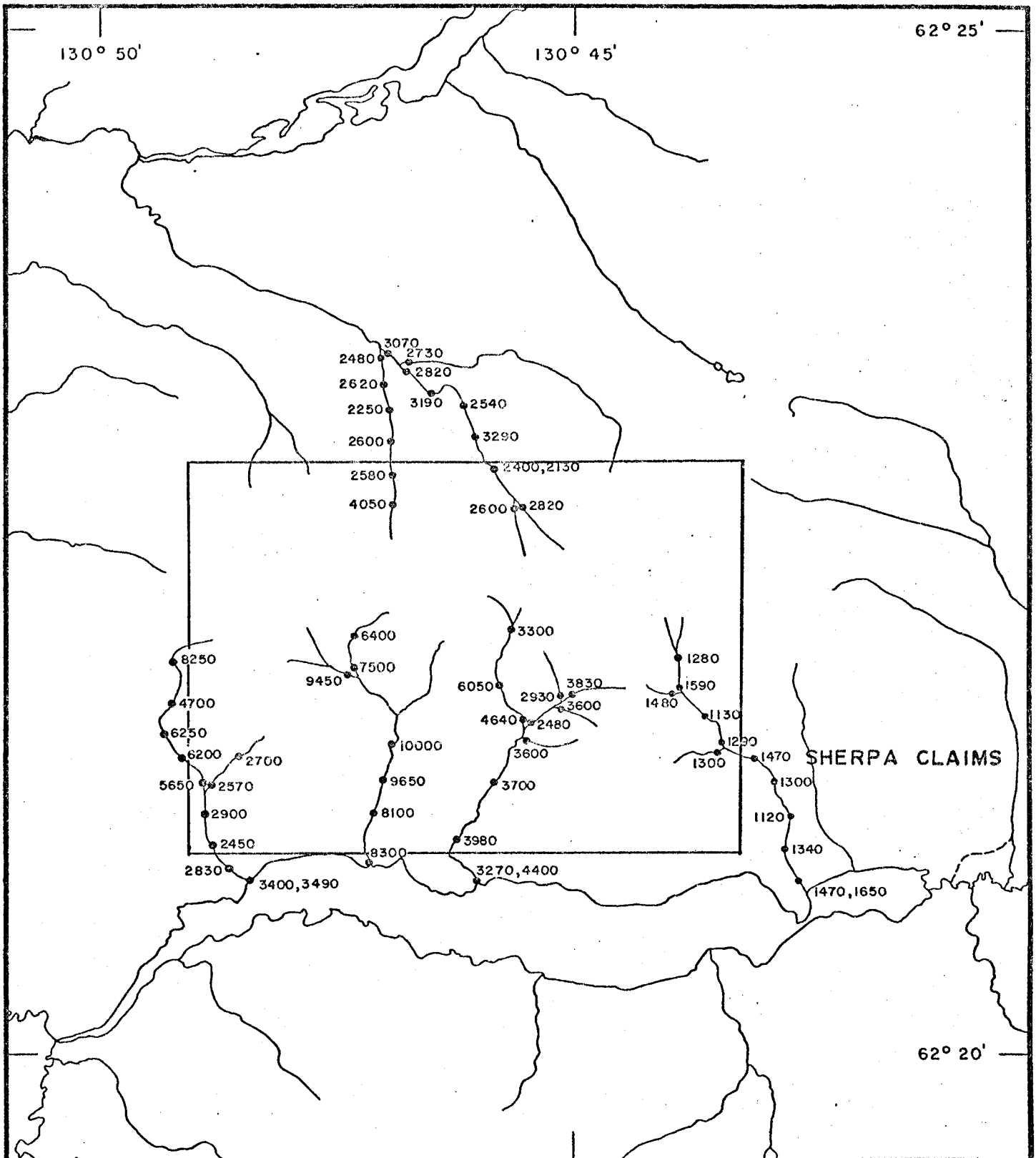
DATE:	SCALE:	DRAWN BY:	N.T.S.
SEPT. 1981	1:50,000	S.NORRIS	105J/7 PT.

Figure 1-4

62° 25'

130° 50'

130° 45'



**LEGEND**

● 3400 Stream sediment sample location and value in ppm.

**Gulf Minerals Canada Limited**

CORDILLERAN SEDIMENTS PROJECT

**GEOCHEMICAL SURVEY  
BARIUM VALUES - AREA "B"**

YUKON TERRITORY

DATE:

SEPT. 1981

SCALE:

1: 50,000

DRAWN BY:

S. NORRIS

N.T.S.

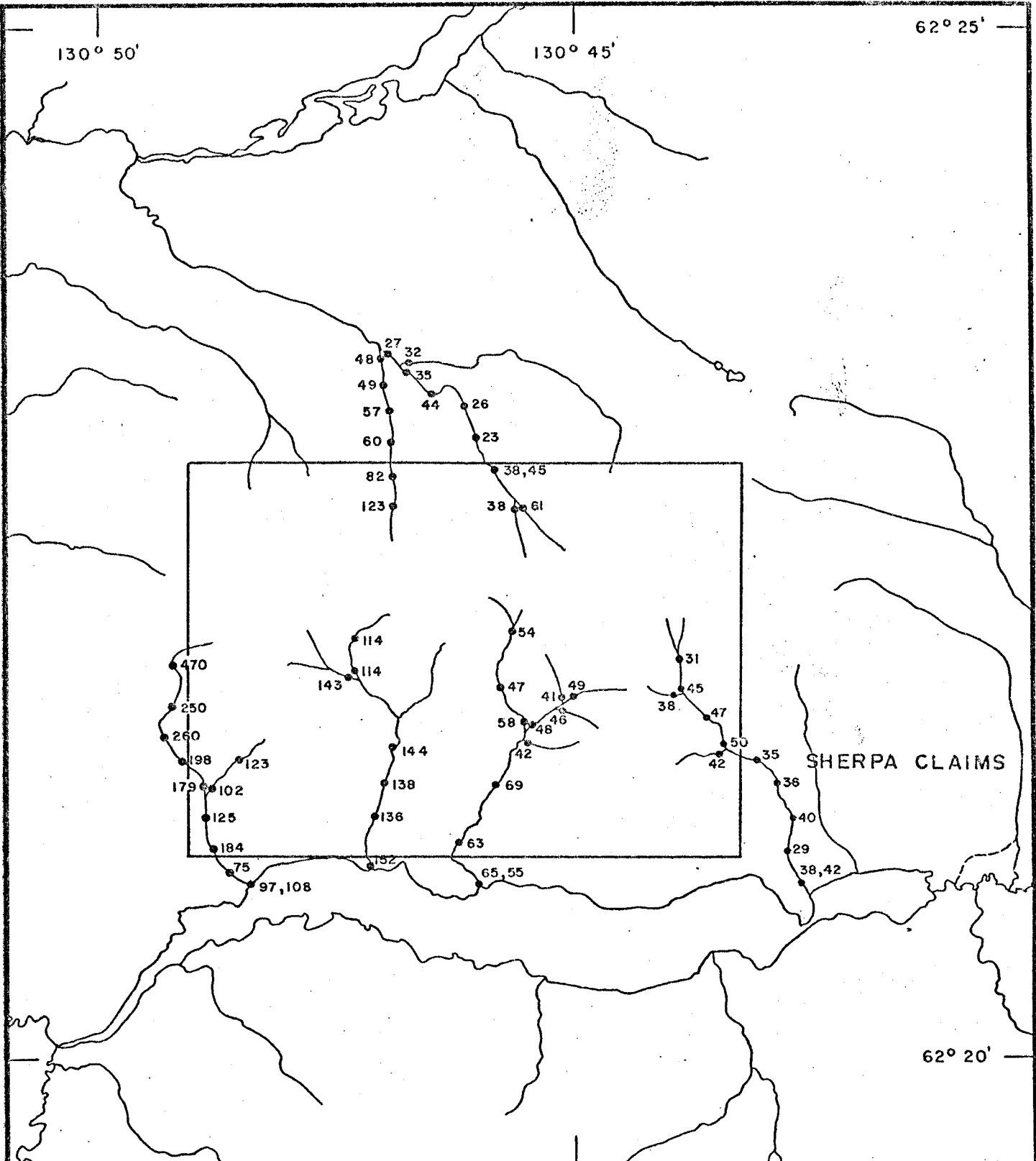
105J/7 PT.

Figure 1-5

62° 25'

130° 50'

130° 45'



62° 20'

**LEGEND**

● 97 Stream sediment sample location and value in ppm.

**Gulf Minerals Canada Limited**

CORDILLERAN SEDIMENTS PROJECT

**GEOCHEMICAL SURVEY  
VANADIUM VALUES - AREA "B"**

YUKON TERRITORY

DATE:	SCALE:	DRAWN BY:	N.T.S.
SEPT. 1981	1:50,000	S. NORRIS	105J/7 PT.

Figure 16

APPENDIX III

List of Data



GEOCHEMICAL ANALYSIS DATA SHEET

10. 1-5/79

PROJECT No.: AFE 1414 FAC 08353

MIN - EN Laboratories Ltd.

DATE: July 17

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
PHONE (604) 930-5814

1981.

ATTENTION: E. P. Dillon

6	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80
Sample Number	X <sup>o</sup> ppm	X <sup>o</sup> ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb	V ppm	Ba ppm	
81	86	90	100	105	110	115	120	125	130	135	140	145	150	155	160
RR-PA-81-0385			23	98		8	08			14			66	670	
		86	22	110		12	09			17			56	860	
		87	21	108		12	10			6			48	740	
		88	32	102		7	07			12			43	610	
		89	24	81		6	08			21			74	430	
		90	23	108		7	09			25			54	850	
		91	60	72		5	09			8			76	420	
		92	23	123		10	09			23			110	410	
		93	16	93		9	09			25			64	700	
		94	23	133		15	08			24			47	520	
		95	16	93		10	08			28			54	760	
		96	19	64		6	06			20			58	570	
		97	13	50		6	06			18			45	940	
		98	21	65		7	07			20			57	700	
		0399	15	24		3	06			26			35	500	
		0435	17	94		11	08			10			52	680	
		36	13	31		9	08			11			44	590	
		37	6	37		5	07			6			23	410	
		38	19	50		6	09			18			35	500	
		39	16	49		6	07			23			34	560	
		40	11	32		5	09			18			54	650	
		41	12	57		6	09			17			88	540	
		42	11	62		5	06			30			73	600	
		43	11	52		4	07			17			85	500	
		44	24	1820		10	08			25			78	360	
		45	21	81		10	10			22			63	490	
		46	19	57		9	06			29			58	470	
		47	27	97		11	08			20			73	610	
		48	20	111		13	10			25			72	560	
RR-PA-81-0449			17	35		7	07			10			72	240	

Handwritten signature and initials.

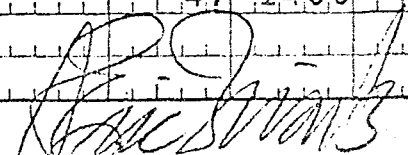
PROJECT No.: AFE 1414 FAC 08353

MIN - EN Laboratories Ltd.

DATE: July 17ATTENTION: E. P. Dillon705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
PHONE (604) 980-5814

1981.

Sample Number	6 % 86	10 % 90	15 % 95	20 Pb ppm 100	25 Zn ppm 105	30 Ni ppm 110	35 Co ppm 115	40 Ag ppm 120	45 Fe ppm 125	50 Hg ppb 130	55 As ppm 135	60 Mn ppm 140	65 Au ppb 145	70 V ppm 150	75 Ba ppm 155	80 ppm 160
RR-PA-81-0450				21	42		6	07			17			45	650	
			51	14	49		4	07			12			51	400	
			52	23	87		12	08			31			78	440	
			53	8	16		5	06			17			40	670	
			54	16	33		4	07			7			39	890	
			55	25	65		5	10			25			67	780	
			56	10	10		2	03			13			20	700	
			57	25	77		9	07			15			66	490	
			58	23	76		5	06			16			58	690	
			59	11	15		3	03			5			18	580	
			60	16	35		5	05			8			34	590	
			61	19	44		6	06			9			46	700	
			62	13	12		3	04			13			16	500	
			63	13	10		3	04			15			23	540	
			64	16	21		3	06			10			42	410	
			65	10	9		1	06			8			21	610	
			66	16	33		3	05			14			39	510	
			67	8	11		2	06			11			17	530	
			68	10	21		2	03			18			19	610	
			69	8	30		3	05			9			22	700	
			70	9	28		3	04			10			18	690	
			71	12	24		2	06			7			14	670	
			72	13	73		5	06			17			14	570 (20M)	
			73	9	9		2	06			3			10	620	
			74	10	18		4	04			8			32	720	
			75	15	115		7	09			11			53	1350	
			76	23	87		8	09			12			52	1530	
RR-PA-81-0477				22	87		7	08			15			47	1400	







GEOCHEMICAL ANALYSIS DATA SHEET

1-8  
DATE: July 2 1981.

PROJECT No.: AFE 1414 FAC 08353

MIN - EN Laboratories Ltd.

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
PHONE (604) 980-5814

ATTENTION: E.P. Dillon

Sample Number	6 Mg ppm	10 Ca ppm	15 Sr ppm	20 Pb ppm	25 Zn ppm	30 Ni ppm	35 Co ppm	40 Ag ppm	45 Fe ppm	50 Hg ppb	55 As ppm	60 Mn ppm	65 Au ppb	70 V ppm	75 Ba ppm	80 ppm
RR-PA-81-4	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160
				9	25		4	07						28	1090	
				13	30		4	08						43	620	
				13	39		4	10						30	870	
				9	26		3	08						27	990	
				12	28		4	12						30	940	
				11	45		5	09						31	810	
				11	24		5	09						21	990	
				15	62		6	12						24	970	
				10	10		4	09						10	730	
				5	4		2	06						13	680	
				13	74		5	13						27	1090	
				8	6		1	05						11	700	
				10	14		2	10						28	1200	
				6	6		1	07						26	530	
				9	28		3	10						22	1070	
				13	25		4	07						34	1350	
				3	7		2	06						20	790	
				4	8		2	05						14	630	
				7	23		4	09						26	1060	
				6	22		4	08						32	690	
				8	6		3	10						24	710	
RR-PA-81-4				12	28		3	09						42	1000	
RR-PA-81-5				9	17		2	08						30	630	
				7	22		4	08						8	820	
				14	58		5	08						29	790	
				13	55		6	10						27	1010	
				9	21		3	07						15	600	
				15	95		9	11						40	1130	
				11	25		4	08						33	900	
RR-PA-81-5				11	21		4	07						30	700	

*[Handwritten signature]*

PROJECT No.: AFE 1414 FAC 08353

MIN - EN Laboratories Ltd.

DATE: July 23

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2

PHONE (604) 980-5814

1981.

ATTENTION: F. P. Dillon

Sample No	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb	V ppm	Ba ppm		
81	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160
RR-PA-81-546			26	15		2	07						10	3120		
			47	45		7	09						46	3820		
			48	34		7	09						20	3700		
			49	12		5	08						9	6350		
			50	11		4	08						24	8300		
			51	7		4	10						13	2490		
			52	12		3	11						25	3430		
			53	20		10	08						66	1800		
			54	5		4	05						19	1240		
			55	21	130	14	14						82	1320		
			56	15	82	10	09						63	1650		
			57	25	183	19	23						97	760		
			58	20	102	13	10						54	2180		
			59	11	101	10	14						27	3850		
			60	20	60	10	12						35	2090		
			61	15	68	8	08						34	820		
			62	20	56	11	11						46	1160		
			63	10	16	6	09						23	1200		
			64	7	8	3	10						11	540		
			65	15	52	15	18						44	1020		
			66	16	52	10	18						44	840		
			67	10	36	7	09						45	810		
			68	16	46	6	08						52	4500		
			69	16	53	6	08						50	1090		
			70	14	63	6	07						57	2350		
			71	12	18	5	10						30	2200		
			72	20	51	9	11						42	1060		
			73	14	32	5	13						53	920		
			74	19	66	7	11						42	1200		
RR-PA-81-575			21	63		6	14						39	1820		

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PROJECT No.: AFE 1414 FAC 08353

MIN - EN Laboratories Ltd.

DATE: July 23

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
PHONE (604) 980-5214

1981.

ATTENTION: E. P. Dillon

Sample Number	Mg ppm	Xr ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb	V ppm	Ba ppm		
6	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	
81	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160
RR-PA-81-600			39	69		7	14						28	1370		
		0.1	35	66		7	0.7						29	1200		
		0.2	30	8		2	0.4						21	730		
		0.3	43	52.3		7	1.2						92	1720		
		0.4	111	83		5	2.1						36	2600		
		0.5	40	83		2	0.7						48	1540		
		0.6	42	72		4	1.1						57	1330		
		0.7	41	44		3	0.9						54	1200		
		0.8	42	105		6	1.0						66	1290		
		0.9	43	138		10	1.6						58	1880		
		1.0	40	75		6	0.9						52	1020		
		1.1	42	80		4	1.1						74	1480		
		1.2	76	82		4	2.0						43	4050		
		1.3	43	116		5	1.2						80	1730		
		1.4	41	58		4	0.9						68	700		
		1.5	46	82		6	1.2						64	960		
		1.6	40	35		4	1.1						41	640		
		1.7	40	41		2	1.0						48	810		
		1.8	42	166		9	1.7						49	1110		
		1.9	41	85		6	1.0						59	800		
		2.0	40	24		5	1.0						34	600		
		2.1	44	93		8	1.5						43	770		
		2.2	43	34		4	1.2						42	560		
		2.3	42	37		4	1.4						58	480		
		2.4	43	43		5	1.2						78	510		
		2.5	41	27		3	0.8						29	580		
		2.6	22	30		5	1.2						38	610		
		2.7	14	23		3	0.7						25	680		
		2.8	16	21		6	0.8						34	600		
RR-PA-81-629			22	75		6	1.0						23	890		

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PROJECT No.: AFE 1414 FAC 08353

MIN - EN Laboratories Ltd.

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
PHONE (604) 980-5814

ATTENTION: E. P. Dillon

Sample Number	6	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80
	Na	K	Pb	Zn	Ni	Co	Ag	Fe	Hg	As	Mn	Au	V	Ba		
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppb	ppm	ppm		
	86	90	100	105	110	115	120	125	130	135	140	145	150	155	160	
RR-PA-81-6	30		32	105		15	13							72	3930	
	31		23	84		8	12							55	1470	
	32		28	98		13	12							69	1000	
	33		23	62		7	11							66	800	
	34		22	76		13	09							70	1030	
	35		6	8		4	08							18	670	
	36		18	58		11	16							112	1690	
	37		19	83		12	13							59	1000	
	38		20	60		8	12							77	830	
	39		16	50		8	09							44	870	
	40		13	18		5	09							45	700	
	41		18	75		9	11							64	800	
	42		20	83		7	11							58	1120	
	43		19	58		8	12							56	900	
	44		18	62		6	13							63	770	
	45		7	26		4	08							22	830	
	46		21	80		10	10							34	1040	
	47		20	65		7	10							52	610	
	48		22	57		8	10							43	560	
	49		25	32		9	10							51	610	
	50		20	80		9	12							88	630	
	51		10	23		6	07							28	830	
	52		20	60		7	11							75	690	
	53		48	98		17	18							85	2000	
	54		12	33		4	07							53	780	
	55		15	45		5	06							64	980	
	56		9	28		2	08							85	850	
	57		3	20		3	06							55	1100	
	58		12	36		8	11							50	730	
RR-PA-81-6	59		11	50		9	12							80	740	

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ATTENTION: E.P. Dillon

6	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	
Sample. No	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb	V ppm	Ba ppm			
81	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160
RR-PA-81-660		16	96		9	13							75	1800		
	61	11	41		5	11							55	870		
	62	13	118		9	22							130	1170		
	63	15	40		6	11							65	700		
	64	24	334		14	15							155	2540		
	65	28	391		15	18							185	2500		
	66	21	474		10	13							130	2200		
	67	20	105		7	12							45	1700		
	68	24	139		12	15							95	1730		
	69	12	111		9	11							55	1620		
	70	23	124		13	15							115	1500		
	71	23	99		14	17							95	1130		
	72	6	12		4	08							20	890		
	73	22	115		11	32							100	1740		
	74	24	385		16	18							80	1730		
	75	12	74		3	09							75	1430		
	76	28	473		19	16							180	4850		
	77	26	880		16	16							130	3420		
	78	28	450		14	16							190	4390		
	79	23	270		14	14							135	2900		
	80	15	93		8	08							60	1390		
	81	10	32		4	06							70	900		
	82	3	8		2	06							45	730		
	83	18	76		12	10							35	1160		
	84	9	36		4	09							55	1100		
	85	20	93		14	12							65	1140		
	86	27	78		10	22							182	2160		
	87	21	112		10	11							73	1800		
	88	4	8		2	06							16	1150		
RR-PA-81-689		8	31		2	08							39	1900		

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PROJECT No.: AFE 1414 FAC 08353

MIN - EN Laboratories Ltd.

DATE: July 23

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2

1981.

PHONE (604) 980-5814

ATTENTION: E.P. Dillon

Sample Number	6	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80
	X <sup>m</sup>	X <sup>m</sup>	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb	V ppm	Ba ppm		
	86	90	100	105	110	115	120	125	130	135	140	145	150	155	160	
RR-PA-81-6	96		1	4		1	04						8	710		
	97		15	60		3	09						72	990		
	98		5	9		2	09						15	820		
	99		10	6		3	09						16	800		
	700		7	3		2	10						10	830		
	01		11	24		4	09						27	1010		
	02		46	39		3	12						47	550		
	03		53	65		4	11						55	900		
	04		56	65		4	10						42	1040		
	05		59	66		6	10						59	990		
	06		68	88		6	12						98	1200		
	07		68	74		6	09						58	1130		
	08		70	57		2	09						81	890		
	09		82	101		7	14						126	730		
	10		85	90		6	15						113	940		
	11		80	70		4	25						74	980		
	12		81	131		6	13						68	1280		
	13		75	26		4	10						14	410		
	14		78	24		3	20						20	1200		
	15		94	78		4	12						108	1000		
	16		96	75		3	09						114	810		
	17		107	109		6	12						143	900		
	18		98	67		6	10						75	1000		
	19		104	96		7	10						82	1210		
	20		101	98		8	09						72	1440		
	21		95	16		4	10						19	1110		
	22		106	102		6	12						64	1330		
	23		111	128		14	19						93	1160		
	24		113	338		20	17						146	2730		
RR-PA-81-7	25		128	148		6	19						98	1720		

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PROJECT No.: AFE 1414 FAC 08353

MIN - EN Laboratories Ltd.

DATE: July 23

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
PHONE (604) 980-5814

1981.

ATTENTION: F. P. Dillon

Sample Number	6 As ppm	10 X ppm	15 Cu ppm	20 Pb ppm	25 Zn ppm	30 Ni ppm	35 Co ppm	40 Ag ppm	45 Fe ppm	50 Hg ppb	55 As ppm	60 Mn ppm	65 Au ppb	70 V ppm	75 Ba ppm	80 160
81	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160
RR-PA-81-7		26		124	264		14	22						148	1600	
		27		119	46		2	14						46	1130	
		28		126	116		7	13						97	1240	
		29		129	92		4	12						95	1150	
		30		126	161		6	12						173	1400	
		31		133	315		20	19						97	1990	
		32		54	164		6	15						135	70	
		33		21	245		10	11						110	1030	
		34		21	362		13	14						115	1180	
		35		40	550		8	210						480	1190	
		36		22	660		4	27						710	1900	
		37		15	259		4	65						115	880	
		38		16	245		5	40						170	1730	
		39		30	126		4	24						112	690	
		40		22	94		3	09						80	880	
		41		26	119		5	15						85	1500	
		42		29	139		6	15						90	1360	
		43		10	165		4	10						45	2730	
		44		25	182		12	09						70	1120	
		45		32	1510		9	22						1650	1700	
		46		28	1780		9	24						730	950	
		47		30	101		5	12						115	860	
		48		19	114		9	06						45	1300	
		49		14	36		4	08						60	960	
		50		10	21		2	05						25	890	
		51		16	92		6	08						75	740	
		52		17	56		5	09						80	1230	
		53		18	71		3	08						75	900	
		54		64	169		15	17						130	930	
RR-PA-81-7		55		13	50		2	04						45	870	

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PROJECT No.: AFE 1414 FAC 08353

MIN - EN Laboratories Ltd.

DATE: July 30

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2

1981.

PHONE (604) 980-5814

ATTENTION: E. P. Dillon

Sample. Number	6 81	10 86	15 90	20 95	25 100	30 105	35 110	40 115	45 120	50 125	55 130	60 135	65 140	70 145	75 150	80 155	85 160
		X <sup>o</sup> ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb	V ppm	Ba ppm		
RR-PA-773				20	101		7	11							28	1240	
		74		19	27		3	07							35	1020	
		75		18	27		2	08							35	980	
		76		15	78		5	10							70	2500	
		77		18	80		7	09							55	2220	
		78		18	108		6	08							65	1530	
		79		12	49		4	09							45	1200	
		80		21	83		6	10							82	1160	
		81		9	50		4	12							30	1720	
		82		16	46		4	09							45	1050	
		83		28	150		10	18							125	4070	
		84		22	143		10	13							100	2360	
		85		22	98		7	13							95	2490	
		86		22	161		11	19							115	2900	
		87		19	107		8	16							80	1700	
		88		14	67		7	12							85	1780	
		89		9	23		4	10							42	1140	
		90		20	54		7	14							55	1280	
		91		16	112		7	10							60	1200	
		92		21	79		7	12							52	1720	
		93		21	125		9	12							64	1360	
		94		23	109		7	10							72	1470	
		95		2	12		3	06							23	370	
		96		19	105		9	08							54	1250	
		97		15	117		10	08							45	1500	
		98		19	108		9	09							35	1100	
		99		12	80		9	08							40	990	
		800		8	36		4	08							52	980	
		01		16	94		8	09							60	2090	
RR-PA-802				10	48		4	10							55	890	

PROJECT No.: AFF 1414 FAC 08353

MIN - EN Laboratories Ltd.

DATE: July 30705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
PHONE (604) 980-5814ATTENTION: E.P. Dillon

1981.

Sample No	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb	V ppm	Ba ppm
RR-PA-803		17	99		7	12						85	730
04		15	174		11	14						78	1270
05		20	210		10	16						145	1120
06		13	71		6	08						55	780
07		11	60		6	12						56	1000
08		23	97		5	10						105	1140
09		56	119		10	50						102	1500
10		7	33		4	11						44	700
11		7	36		3	11						45	890
12		8	31		4	08						46	830
13		3	10		5	09						22	730
14		8	32		4	09						35	910
15		11	73		7	10						75	740
16		16	110		9	12						62	1200
17		15	86		9	11						60	1000
18		13	91		6	13						55	1320
19		68	166		9	14						64	960
20		20	97		6	12						50	830
21		18	98		6	11						55	1340
22		12	89		7	14						52	1060
23		56	137		16	15						70	2850
24		15	85		7	09						42	1460
25		15	280		13	24						120	1900
26		21	450		8	45						290	4550
27		22	131		5	21						180	1060
28		18	115		7	15						115	890
29		11	46		7	09						45	990
30		15	81		6	12						70	1280
31		10	38		6	09						45	780
RR-PA-832		15	38		8	18						50	1420

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PROJECT No.: AFE 1414 FAC 08353

MIN - EN Laboratories Ltd.

DATE: July 30

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
PHONE (604) 980-5814

1981

ATTENTION: E. P. Dillon

Sample Number	6 81	10 86	15 90	20 95	25 100	30 105	35 110	40 115	45 120	50 125	55 130	60 135	65 140	70 145	75 150	80 155	85 160
		X ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb	V ppm	Ba ppm		
RR-PA-833				26	95		10	16						85	2770		
		34		14	66		8	12						65	1520		
		35		7	64		4	26						45	1080		
		36		11	95		6	16						52	980		
		37		10	61		7	12						48	800		
		38		26	56		4	16						52	1920		
		39		20	34		4	10						40	1010		
		40		5	8		3	12						25	800		
		41		12	33		5	13						35	1100		
		42		10	13		3	11						22	600		
		43		12	18		7	12						24	500		
		44		64	29		7	09						30	490		
		45		10	105		6	16						60	1430		
		46		14	480		10	18						320	3500		
		47		20	225		11	20						110	2290		
		48		24	740		8	38						1400	4600		
		49		20	108		13	11						90	1900		
		50		14	91		8	14						45	1230		
		51		16	91		7	12						55	1200		
		52		13	116		6	12						70	1470		
		53		16	112		8	12						65	1200		
		54		16	126		9	14						80	1430		
		55		15	106		9	13						70	1630		
		56		15	73		10	14						65	980		
		57		20	78		11	12						45	900		
		58		21	123		17	14						42	1890		
		59		6	16		4	11						18	730		
		60		12	98		11	16						42	2270		
		61		17	105		15	12						44	1770		
RR-PA-862				12	43		4	13						38	910		

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PROJECT No.: AFF 1414 FAC 08353

MIN - EN Laboratories Ltd.

DATE: July 30

ATTENTION: E.P. Dillon

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
PHONE (604) 980-5814

1981

Sample Number	Mg ppm <sub>10</sub>	Cu ppm <sub>15</sub>	Pb ppm <sub>20</sub>	Zn ppm <sub>25</sub>	Ni ppm <sub>30</sub>	Co ppm <sub>35</sub>	Ag ppm <sub>40</sub>	Fe ppm <sub>45</sub>	Hg ppb <sub>50</sub>	As ppm <sub>55</sub>	Mn ppm <sub>60</sub>	Au ppb <sub>65</sub>	V ppm <sub>70</sub>	Ba ppm <sub>75</sub>	Cu ppm <sub>80</sub>
RR-PA-81-0869	X	86.9	22	79			10						68	1930	21
		70	21	106			11						59	1310	39
		71	25	64			10						72	1600	24
		72	23	79			10						75	1480	31
		73	21	58			08						58	1360	14
		74	19	66			08						39	1370	15
		75	22	110			10						56	1430	37
		76	17	98			09						28	1600	56
RR-PA-81-0877		87.7	20	51			11						44	1530	30
RR-PA-81-0900		90.0	30	116			11						79	1200	51
		01	24	88			10						98	990	33
		02	19	55			08						91	1300	28
		03	22	63			09						115	970	35
		04	22	73			10						62	980	24
		05	29	97			11						113	1020	42
		06	20	109			09						88	1260	37
		07	32	123			12						111	1120	88
		08	27	177			13						114	1540	79
		09	26	230			13						133	1600	92
		10	22	31			08						56	930	27
		11	55	103			10						385	780	167
		12	21	118			11						85	1300	54
		13	19	56			11						54	1000	35
		14	18	41			07						54	980	34
		15	22	58			10						58	2200	39
		16	21	101			07						52	2700	50
		17	22	136			08						49	1450	71
		18	23	55			06						44	1460	15
		19	14	42			10						38	1190	35
RR-PA-81-0920		92.0	15	93			10						53	1450	57

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COMPAS

Gulf Minerals Canada

## GEOCHEMICAL ANALYSIS DATA SHEET

F No. 1-...7

PROJECT No.: AFE 1414 FAC 08353

MIN - EN Laboratories Ltd.

DATE: Sept. 5

ATTENTION: E.P. Dillon

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
PHONE (604) 980-5814

1981.

Sample Number	Mo ppm	Sr ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb	V ppm	Ba ppm		
81	26	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160
RR-PA-81-1430			✓ 18	5.8			1.1						35	1470		
			31	✓ 22	6.8		1.1						54	1050		
			32	✓ 24	7.5		1.1						92	1060		
			33	✓ 24	5.5		1.2						68	940		
			34	✓ 22	1.81		1.5						152	2230		
			35	✓ 22	7.5		1.4						106	960		
			36	✓ 22	1.61		2.0						84	1650		
			37	✓ 20	1.89		1.2						80	2790		
			38	✓ 22	1.16		2.2						77	1400		
			39	✓ 19	1.14		1.1						68	1170		
			40	✓ 28	3.45		1.7						112	1710		
			41	✓ 22	1.16		1.2						66	2030		
			42	✓ 26	8.6		1.8						80	1700		
			43	✓ 28	1.07		1.3						96	2030		
			44	✓ 22	1.12		2.1						88	1910		
			45	✓ 30	1.30		1.3						84	1500		
			46	✓ 53	1.00		1.1						44	1400		
			47	✓ 23	8.6		0.9						54	1580		
			48	✓ 20	1.54		1.0						43	2200		
			49	✓ 29	1.33		1.3						72	1410		
			50	✓ 40	7.7		2.1						80	2080		
			51	✓ 28	1.22		1.0						48	1490		
			52	✓ 32	2.45		1.3						41	1900		
			53	✓ 20	7.0		0.9						45	1340		
			54	✓ 36	4.22		1.5						1.64	1990		
			55	✓ 24	1.30		1.0						63	1430		
			56	✓ 22	1.08		0.9						58	1300		
			57	✓ 21	7.5		0.8						34	1720		
			58	✓ 26	1.72		1.9						90	1900		
RR-PA-81-1459			✓ 15	8.8			1.1						27	1280		

*[Handwritten signature]*

COMPAL

Gulf Minerals Canada

## GEOCHEMICAL ANALYSIS DATA SHEET

No. 1-117

DATE: Sept. 5

PROJECT No.: AFE 1414 FAC 08353

MIN - EN Laboratories Ltd.

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
PHONE (604) 960-5814

1981.

ATTENTION: E.P. Dillon

6	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	
Sample. Number	Xo ppm	Se ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb	V ppm	Ba ppm		
81	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160
RR-PA-81-14	60	✓	26	125			1.0						71	1600		
	61	✓	24	124			1.3						74	1170		
	62	✓	28	140			2.5						109	1120		
	63	✓	34	105			1.9						275	1700		
	64	✓	25	475			1.6						485	3490		
	65	✓	22	131			1.8						70	1420		
	66	✓	28	217			1.0						94	1630		
	67	✓	45	242			0.8						73	1780		
	68	✓	15	79			0.8						45	1020		
	69	✓	16	88			1.2						56	900		
	70	✓	8	18			0.8						32	620		
	71	✓	21	135			1.0						64	940		
	72	✓	16	74			1.0						47	900		
	73	✓	12	72			0.7						39	1000		
	74	✓	27	214			1.0						97	920		
	75	✓	24	126			2.6						145	1130		
	76	✓	30	76			2.1						212	1490		
	77	✓	26	146			1.8						115	1840		
	78	✓	8	840			0.9						26	590		
	79	✓	18	252			1.5						223	1430		
	80	✓	25	277			2.0						225	1690		
	81	✓	15	935			2.0						300	3090		
	82	✓	16	161			1.5						79	1460		
	83	✓	16	161			1.1						79	1500		
	84	✓	16	53			1.0						50	720		
	85	✓	16	68			0.8						62	770		
	86	✓	24	92			1.4						67	1050		
	87	✓	25	77			1.4						65	1040		
	88	✓	25	86			1.4						72	1030		
RR-PA-81-14	89	✓	26	80			2.7						85	1120		

72 1030  
85 1120  
E.P. Dillon



PROJECT No.: AFE 1414 FAC 08353

MIN - EN Laboratories Ltd.

DATE: Sept. 11

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2

1981.

ATTENTION: E.P. Dillon

PHONE (604) 980-5814

6	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	
Sample Number	MX ppm	Si ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb	V ppm	Ba ppm		
81	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160
RR-PA-81-14	98	✓	18	61			20						64	940		
	99	✓	24	202			20						142	1790		
	1500	✓	23	104			1.3						90	1000		
	01	✓	20	67			0.8						24	560		
	02	✓	24	3160			5.5						1310	2970		
	03	✓	41	610			5.3						1600	3710		
	04	✓	19	131			1.3						66	1160		
	05	✓	17	96			1.2						54	750		
	06	✓	20	162			1.4						56	1870		
	07	✓	16	54			0.9						46	1150		
	08	✓	20	119			1.0						44	1860		
	09	✓	22	203			7.1						48	2500		
	10	✓	31	735			8.6						400	6040		
	11	✓	27	950			6.2						880	5530		
	12	✓	20	381			4.2						245	3800		
	13	✓	18	152			1.7						84	1830		
	14	✓	25	120			1.4						116	1960		
	15	✓	22	188			1.1						72	2520		
	16	✓	20	107			0.8						80	1610		
	17	✓	26	52			0.7						74	1270		
	18	✓	30	123			1.0						88	1500		
	19	✓	28	139			1.0						92	1650		
	20	✓	21	125			1.0						45	1690		
	21	✓	28	121			1.1						102	1290		
	22	✓	11	29			1.0						23	820		
	23	✓	6	8			0.6						8	700		
	24	✓	7	22			0.8						15	530		
	25	✓	14	62			1.3						44	890		
	26	✓	18	84			1.3						45	2210		
RR-PA-81-15	27	✓	22	122			1.8						89	1190		

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COMPAN Gulf Minerals Canada

## GEOCHEMICAL ANALYSIS DATA SHEET

F. No. 1-117PROJECT No.: AFE 1414 FAC 08353

MIN - EN Laboratories Ltd.

DATE: Sept. 5

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2

ATTENTION: E.P. Dillon

PHONE (604) 980-5814

1981.

6	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	
Sample.	Xo	Xo	Pb	Zn	Ni	Co	Ag	Fe	Hg	As	Mn	Au	V	Ba		
Number	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppb	ppm	ppm		
81	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160
RR-PA-81-1582			✓ 24	172			0.9						40	2130		
		83	✓ 26	383			1.0						48	2690		
		84	✓ 47	350			1.5						94	2320		
		85	✓ 40	180			1.1						76	2190		
		86	✓ 14	230			0.8						21	1700		
		87	✓ 19	344			1.1						46	2070		
		88	✓ 30	192			2.1						69	3400		
		89	✓ 16	146			1.2						14	1700		
		90	✓ 23	223			1.1						75	2530		
		91	✓ 24	392			1.3						63	2600		
		92	✓ 24	214			1.4						92	2920		
		93	✓ 20	220			1.2						109	3030		
		94	✓ 31	122			1.1						95	1960		
		95	✓ 24	240			1.3						127	3120		
		96	✓ 47	82			5.6						235	2700		
		97	✓ 24	139			0.8						79	2350		
		98	✓ 29	163			0.9						111	1800		
		99	✓ 88	118			2.3						132	2120		
		100	✓ 28	145			1.5						126	2300		
		01	✓ 13	36			1.0						34	900		
		02	✓ 20	91			0.7						59	1590		
		03	✓ 22	86			0.8						103	1510		
		04	✓ 29	106			0.9						62	1770		
		05	✓ 32	92			1.6						98	2040		
		06	✓ 27	120			1.3						74	1470		
		07	✓ 18	69			0.6						34	1270		
		08	✓ 21	90			0.8						51	1120		
		09	✓ 15	51			0.6						39	960		
		10	✓ 22	76			0.8						58	1010		
RR-PA-81-1611			✓ 25	89			1.0						64	1120		

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GEOCHEMICAL ANALYSIS DATA SHEET

PROJECT No.: AFE 1414 FAC 08353

MIN - EN Laboratories Ltd.

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
PHONE (604) 980-5814

ATTENTION: E.P. Dillon

6	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	
Sample. Number	Ni ppm	Cd ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb	V ppm	Ba ppm		
81	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160
RR-PA-81-1634			✓ 24	18.5				1.9						128	1530	
		35	✓ 21	33.7				1.2						109	1800	
		36	✓ 40	41.7				1.8						88	900	
		37	✓ 40	86.0				2.3						267	2800	
		38	✓ 27	58.0				1.8						198	2100	
		39	✓ 14	20.3				1.6						47	1410	
		40	✓ 18	33.8				1.2						53	1490	
		41	✓ 22	35.1				1.7						60	2200	
		42	✓ 18	27.5				1.7						36	870	
		43	✓ 24	49.0				1.2						57	1820	
		44	✓ 20	22.6				1.5						64	1230	
		45	✓ 29	24.7				1.7						85	1790	
		46	✓ 19	18.8				1.3						98	930	
		47	✓ 20	16.9				1.5						74	1600	
		48	✓ 10	5.4				1.4						36	910	
		49	✓ 14	47.5				1.7						95	2300	
		50	✓ 5.6	12.0				1.7						68	1030	
		51	✓ 18	12.6				1.7						96	1400	
		52	✓ 7	8.4				1.2						23	610	
		53	✓ 6	3.6				1.3						10	600	
		54	✓ 19	15.7				1.3						97	1510	
		55	✓ 33	31.3				3.1						104	1420	
		56	✓ 32	15.1				1.4						103	1320	
		57	✓ 5.2	17.9				1.8						162	1600	
		58	✓ 3.2	8.1				1.8						86	1610	
		59	✓ 2.4	15.4				2.5						160	1990	
		60	✓ 2.1	10.6				1.7						148	1900	
		61	✓ 2.3	8.9				1.0						91	1410	
		62	✓ 1.7	5.8				1.0						72	1200	
RR-PA-81-1663			✓ 6.5	12.9				1.7						128	1620	

*[Handwritten Signature]*

## GEOCHEMICAL ANALYSIS DATA SHEET

1. 7

PROJECT No AFE 1414 FAC 08353

MIN - EN Laboratories Ltd.

DATE: Sept. 10

ATTENTION: EP. Dillon

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
PHONE (604) 980-5314

1981.

Sample Number	6	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80
		$\mu\text{g/g}$	$\mu\text{g/g}$	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb	V ppm	Ba ppm	
81	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160
RR-PA-81-1		664	✓	144	107			20						157	1700	
		65	✓	26	81			10						75	1000	
		66	✓	14	126			10						59	1800	
		67	✓	11	161			13						104	1300	
		68	✓	11	292			14						211	2520	
		69	✓	48	244			18						95	1690	
		70	✓	36	218			11						92	1200	
		71	✓	19	159			11						73	1320	
		72	✓	26	191			11						97	1290	
		75	✓	12	42			10						32	800	
		76	✓	34	147			13						98	1100	
		77	✓	50	118			11						100	1320	
		78	✓	40	177			12						103	1710	
		79	✓	21	81			10						65	690	
		80	✓	29	158			18						144	920	
		81	✓	34	950			21						162	1640	
		82	✓	52	208			48						345	2350	
		83	✓	33	404			18						117	1940	
		84	✓	42	405			18						82	1690	
		85	✓	28	361			16						68	1580	
		86	✓	21	274			16						90	1500	
		87	✓	21	232			22						69	1610	
		88	✓	15	259			14						74	1910	
		89	✓	17	136			12						69	1200	
		90	✓	22	169			13						101	2120	
		91	✓	23	103			28						121	2100	
		92	✓	33	142			37						238	2720	
		93	✓	21	167			16						152	1900	
RR-PA-81-1		694	✓	16	61			12						68	1090	

[Signature]

*Area B*

PROJECT No.: AFE 1414 FAC 08353

MIN - EN Laboratories Ltd.

DATE: July 2

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2

PHONE (604) 980-5814

1981.

ATTENTION: F. P. Dillon

Sample Number	6 86	10 90	15 95	20 100	25 105	30 110	35 115	40 120	45 125	50 130	55 135	60 140	65 145	70 150	75 155	80 160
				Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb	V ppm	Ba ppm	Cu ppm
RR-PA-81-2278				25	1600			24			(40 mesh)			54	3300	69
											(40 mesh)			47	6050	89
											(40 mesh)			58	4640	82
											(40 mesh)			48	2480	85
														42	3600	65
											(20 mesh)			41	2930	86
											(40 mesh)			49	3830	54
											(40 mesh)			46	3600	134
														114	6400	130
														143	9450	158
														114	7500	119
														144	10000	104
														138	9650	108
														136	8100	118
														152	8300	145
														65	3270	75
														55	4400	72
														63	3980	63
														69	3700	96
														123	4050	91
											(40 mesh)			82	2580	112
											(40 mesh)			60	2600	76
														57	2250	58
														49	2620	42
														48	2480	40
														27	3070	39
														35	2820	39
														32	2730	44
														44	3190	35
RR-PA-81-2307														26	2540	32

*[Handwritten signature]*

PROJECT No.: AFE 1414 FAC 08353

MIN - EM Laboratories Ltd.

DATE: July 2

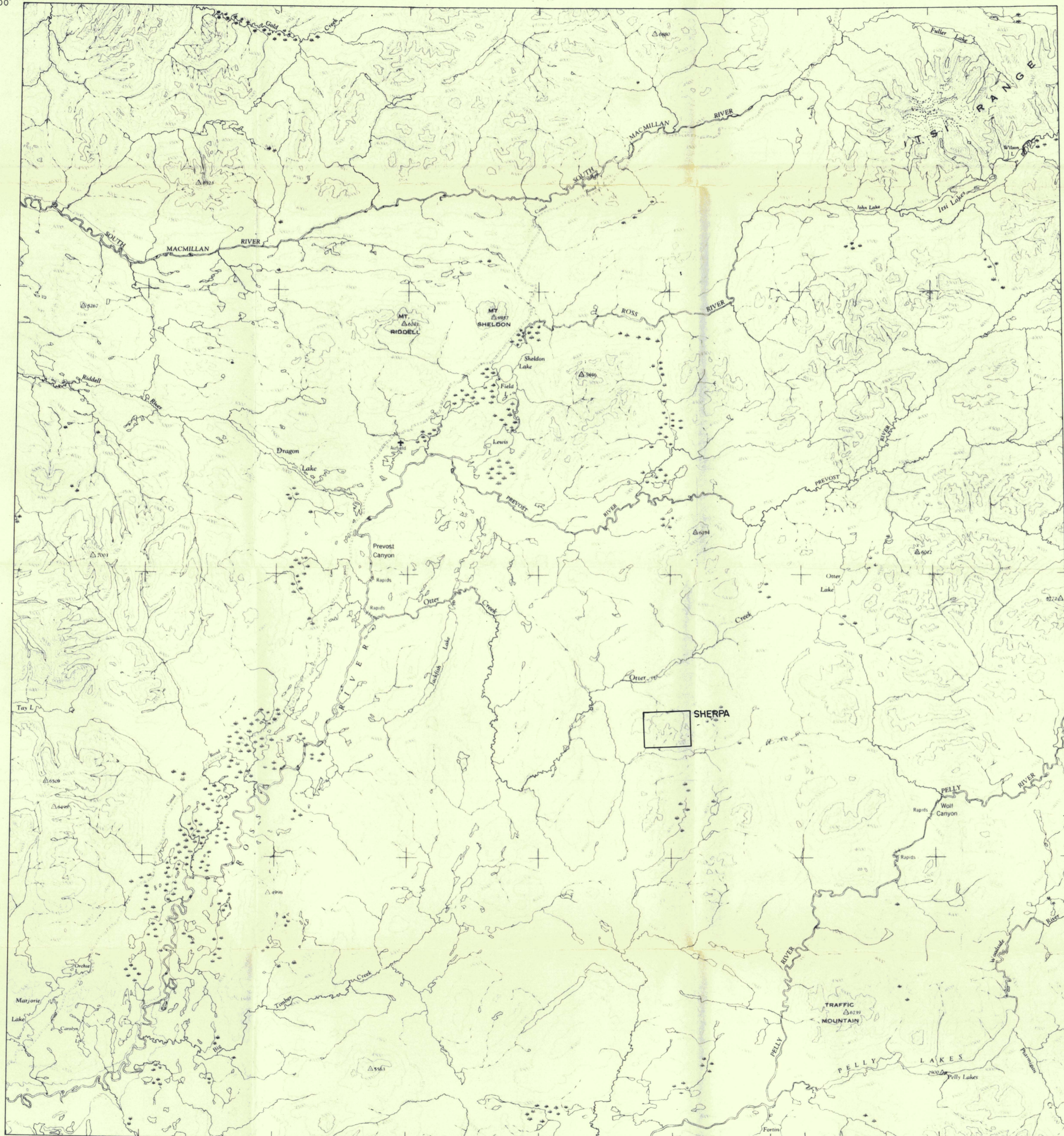
ATTENTION: E.P. Dillon

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
PHONE (604) 980-5814

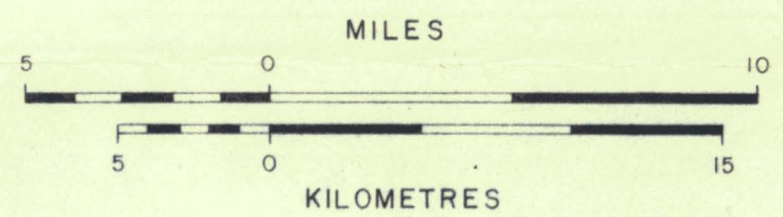
1981.

Sample Number	6 86	10 90	15 95	20 100	25 105	30 110	35 115	40 120	45 125	50 130	55 135	60 140	65 145	70 150	75 155	80 160
		Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppb	Mn ppm	Au ppb	V ppm	Ba ppm	Cu ppm
RR-PA-81-2308			308	15	95			08						23	3290	30
			09	12	110			09						38	2400	32
			10	11	110			09						45	2130	32
			11	10	112			09			(40 mesh)			38	2600	40
			12	23	230			12						61	2820	68
			13	13	1650			51			(40 mesh)			470	8250	355
			14	16	2240			23						250	4700	250
			15	9	3200			24						260	6250	156
			16	12	1640			17			(40 mesh)			198	6200	116
			17	17	1140			17			(40 mesh)			179	5650	119
			18	16	1380			13						102	2570	70
			19	13	1710			17						123	2700	76
			20	12	1050			13						125	2900	78
			21	12	630			12						84	2450	55
			22	9	960			11						75	2830	58
			23	11	920			10			(40 mesh)			97	3400	66
			24	17	1180			14						108	3490	84
			25	8	180			09			(40 mesh)			31	1280	35
			26	5	250			10						45	1590	42
			27	7	145			09						38	1480	38
			28	19	177			07						47	1130	37
			29	20	164			08						50	1290	35
			30	23	179			08			(40 mesh)			42	1300	44
			31	21	154			06			(40 mesh)			35	1470	36
			32	21	126			12						36	1300	33
			33	21	139			10						40	1120	31
			34	20	138			08						29	1340	30
			35	20	121			06						38	1470	26
RR-PA-81-2336				20	127			09						42	1650	29

132°00'  
63°00'



62°00'  
130°00'



**Gulf Minerals Canada Limited**

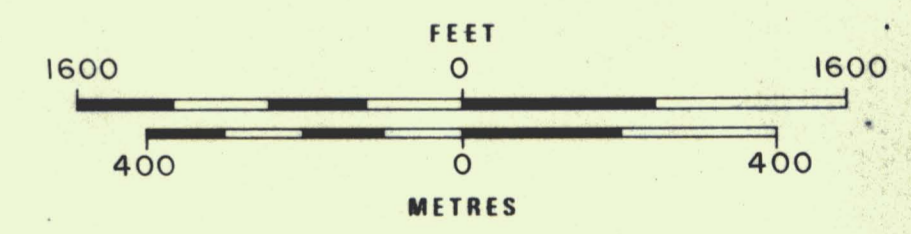
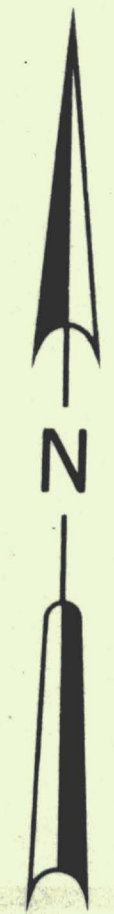
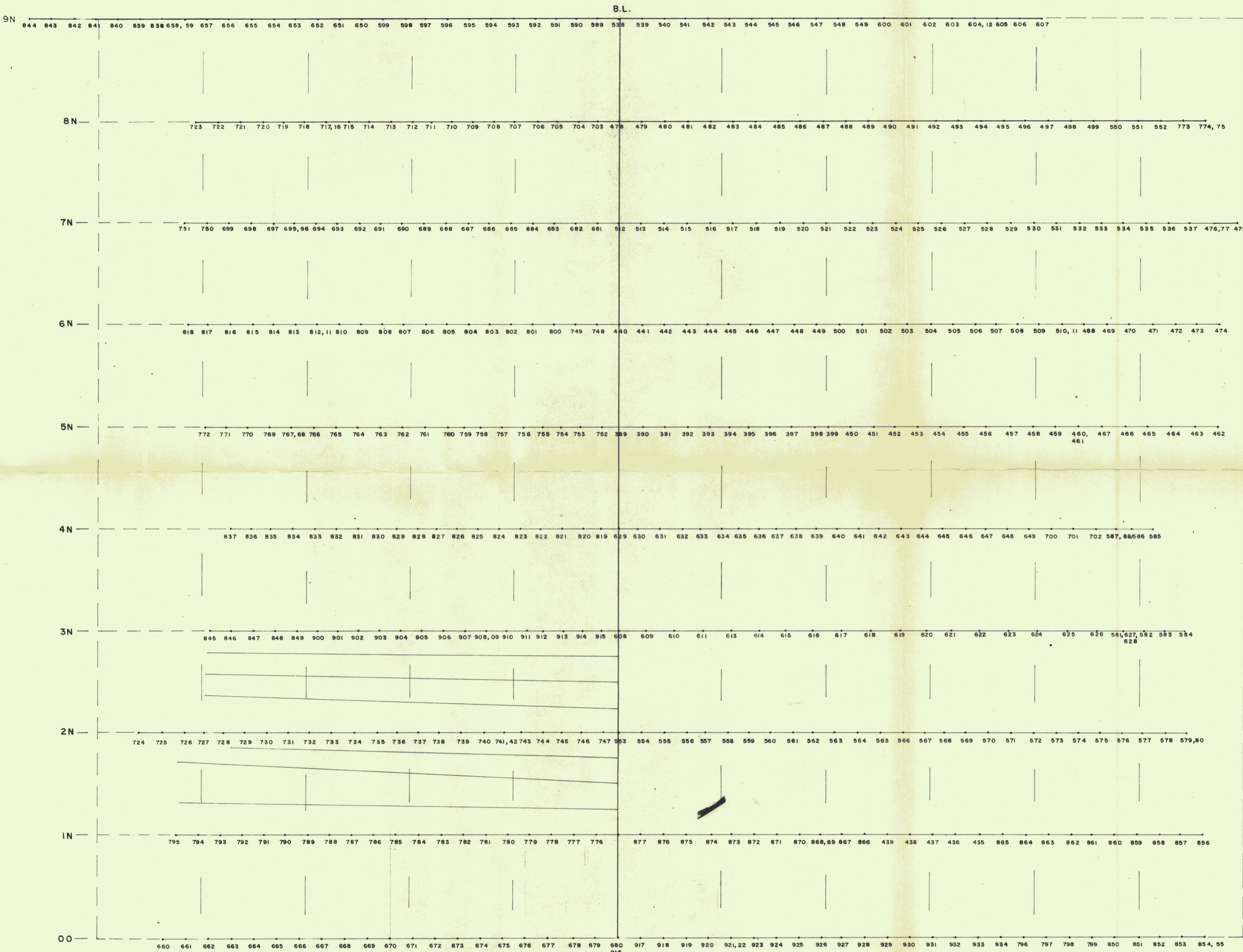
CORDILLERAN SEDIMENTS PROJECT

Location of the SHERPA claims

YUKON TERRITORY

091000

DATE:	SCALE:	DRAWN BY:	PLATE:
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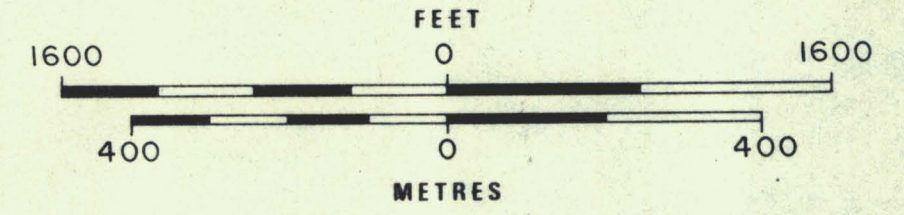
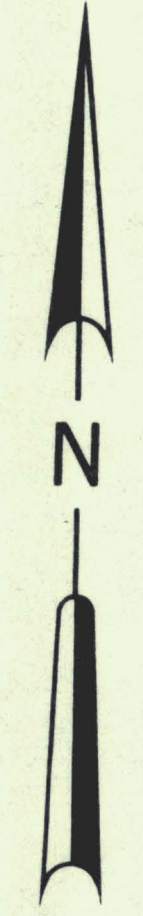
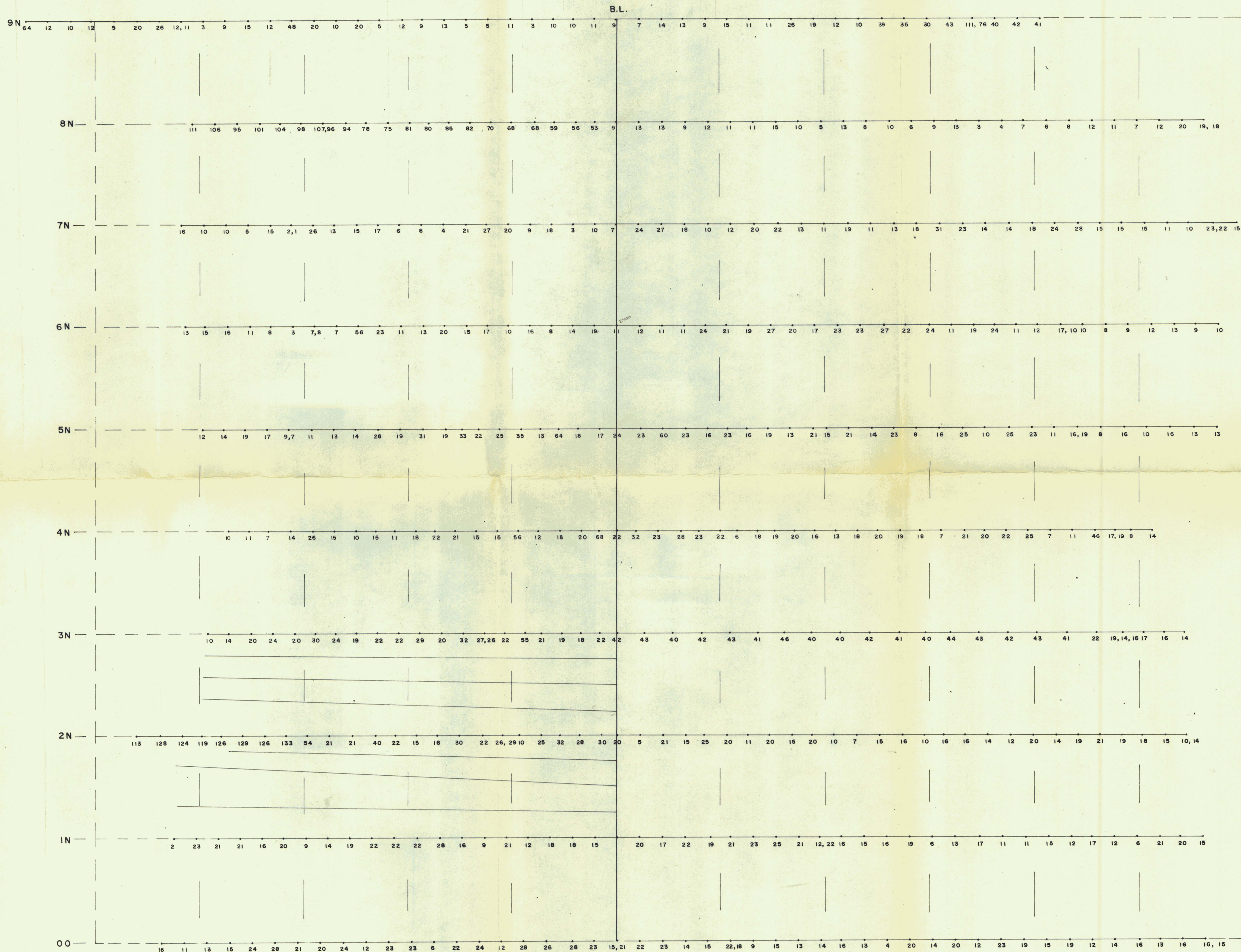


**Gulf Minerals Canada Limited**

ROSS RIVER PROJECT  
SHERPA Claims

SOIL SAMPLES  
SAMPLE LOCATIONS  
YUKON TERRITORY 091000

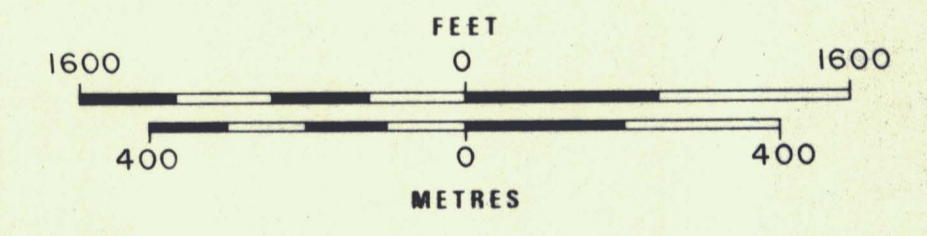
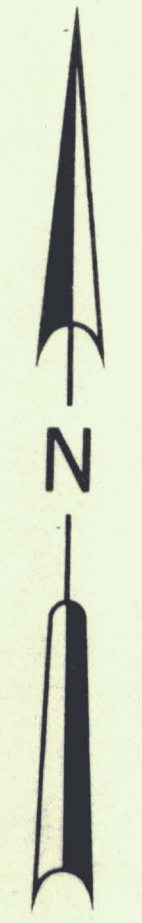
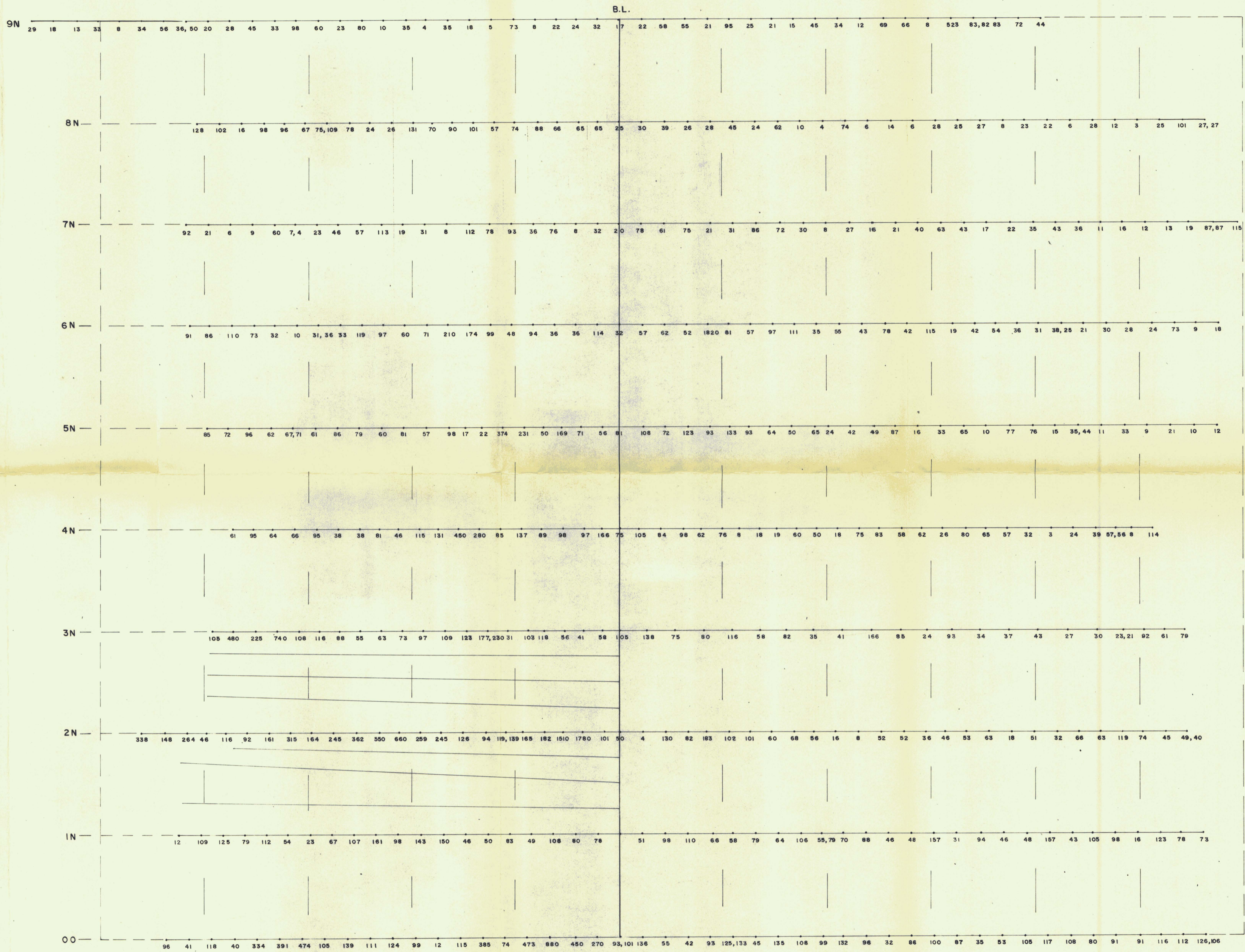
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**Gulf Minerals Canada Limited**

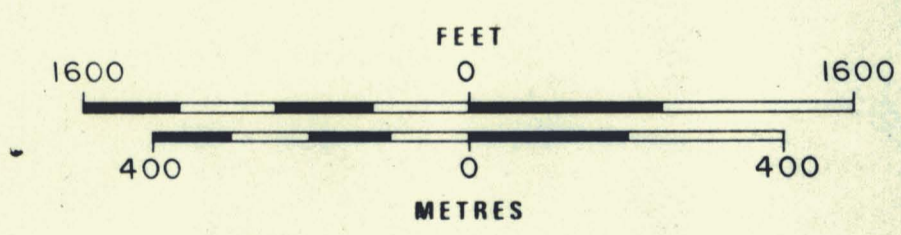
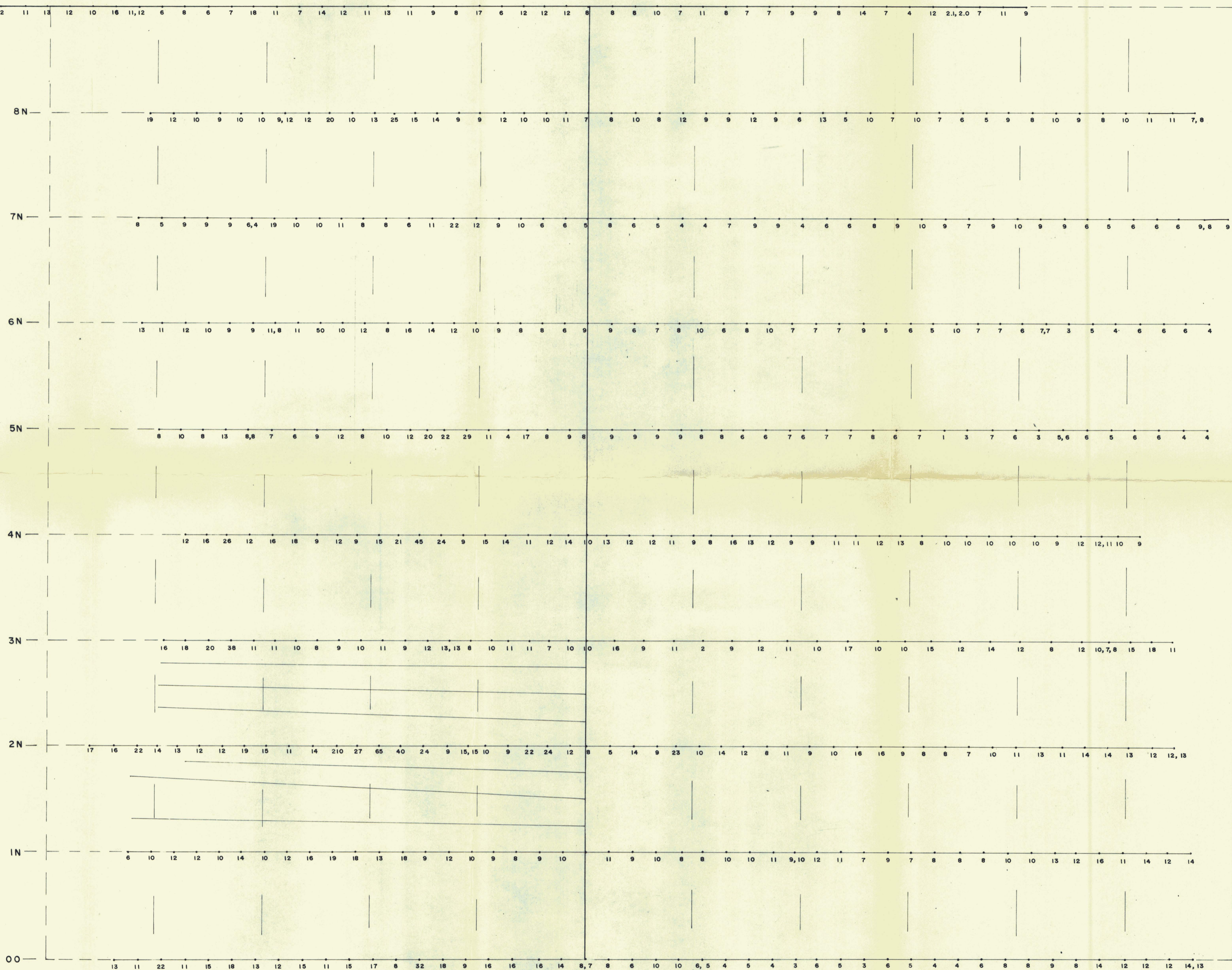
ROSS RIVER PROJECT  
 SHERPA Claims  
 SOIL SAMPLES  
 Pb. in PPM  
 YUKON TERRITORY 091000

DATE: SEPT., '81	SCALE: 1:10,000	DRAWN BY: DSR	PLATE: // b 5.2.3
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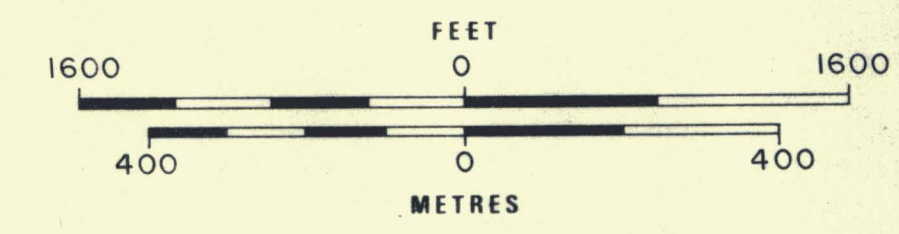
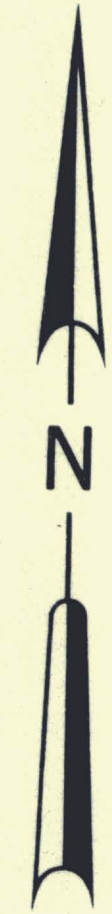
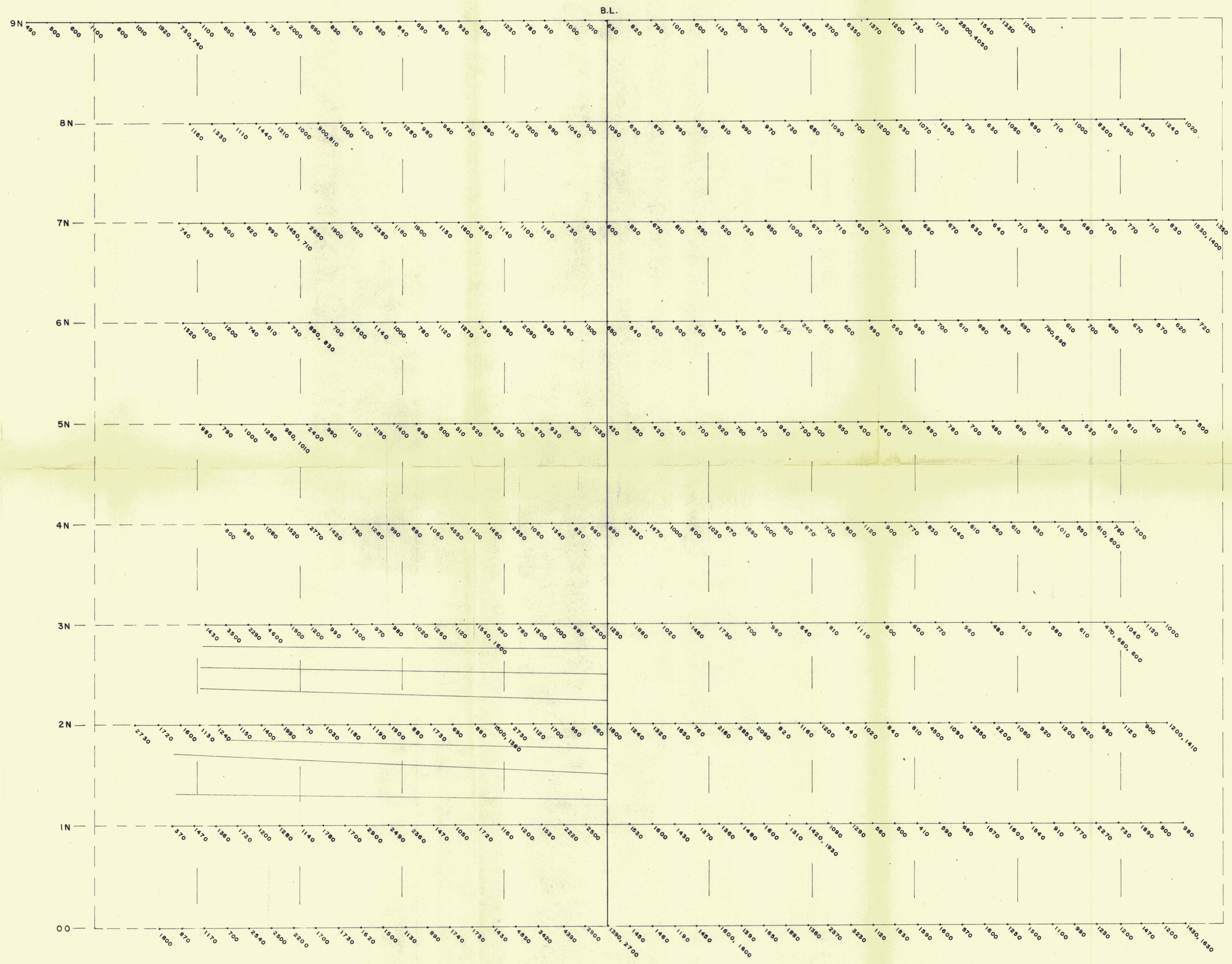


<b>Gulf Minerals Canada Limited</b>			
ROSS RIVER PROJECT			
SHERPA Claims			
SOIL SAMPLES			
Zn in PPM			
YUKON TERRITORY 091000			
DATE:	SCALE:	DRAWN BY:	PLATE: J/c
SEPT., '81	1:10,000	DSR	5.2.4

B.L.



<b>Gulf Minerals Canada Limited</b>			
ROSS RIVER PROJECT			
SHERPA Claims			
SOIL SAMPLES			
Ag in PPM x 10			
YUKON TERRITORY <b>091000</b>			
DATE: SEPT., '81	SCALE: 1:10,000	DRAWN BY: DSR	PLATE: <i>11d</i> 5.2.5



Gulf Minerals Canada Limited

ROSS RIVER PROJECT

SHERPA Claims

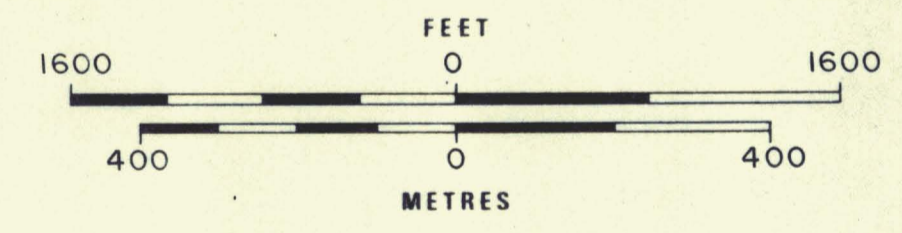
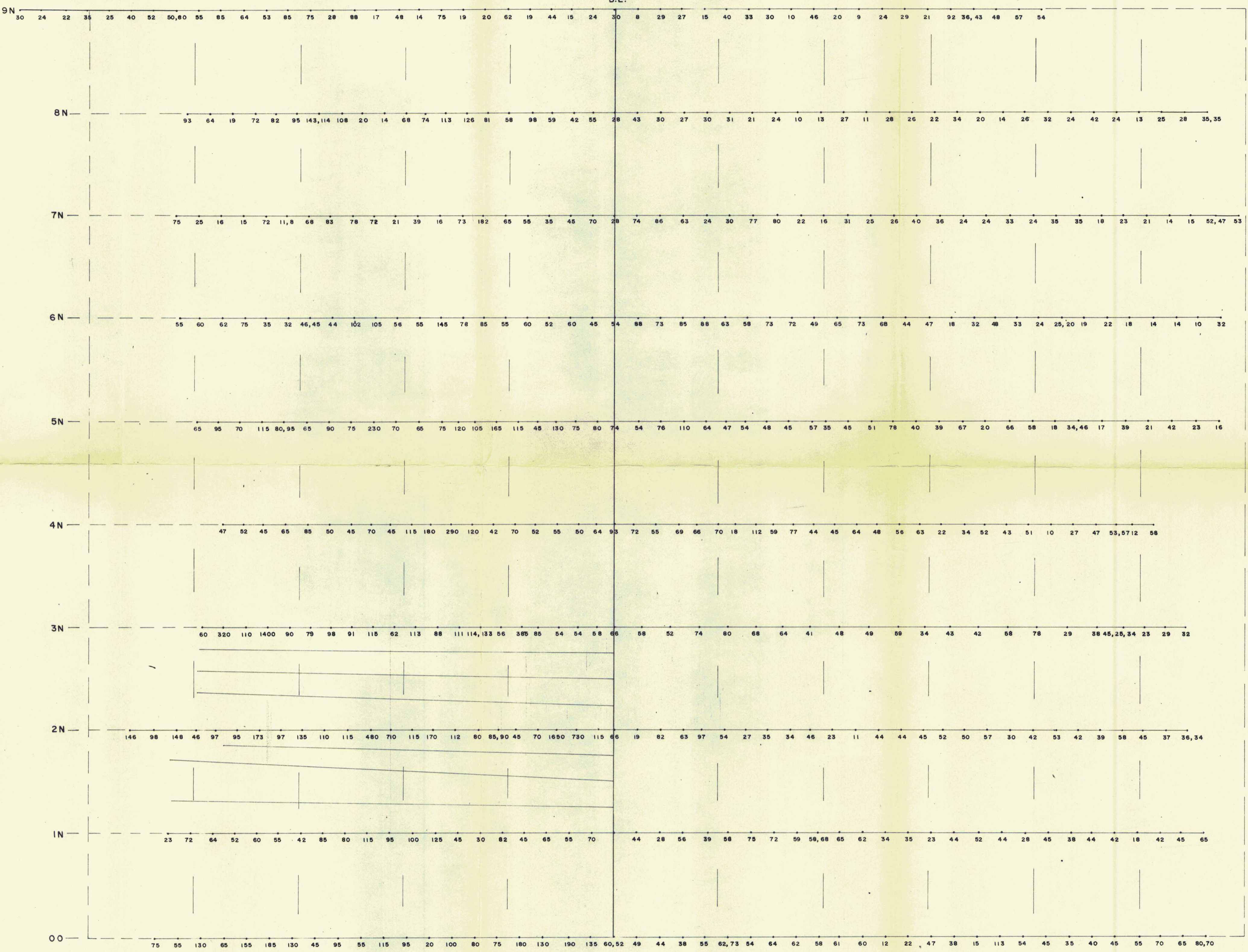
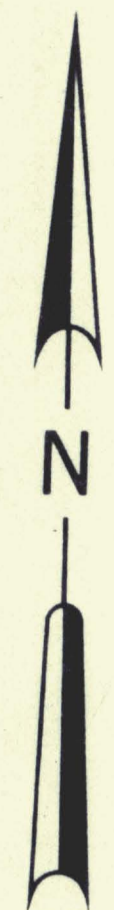
SOIL SAMPLES

Ba in PPM

YUKON TERRITORY 091000

DATE: SEPT., '81	SCALE: 1:10,000	DRAWN BY: DSR	PLATE: 11e 5.2.6
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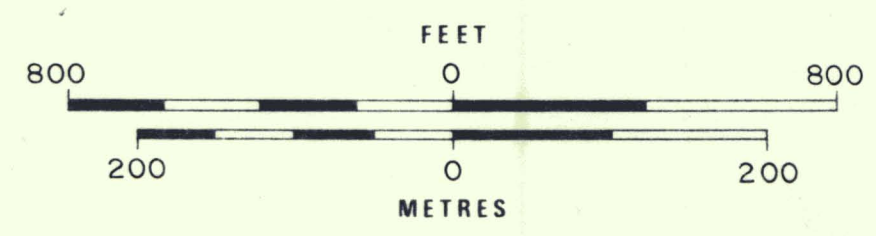
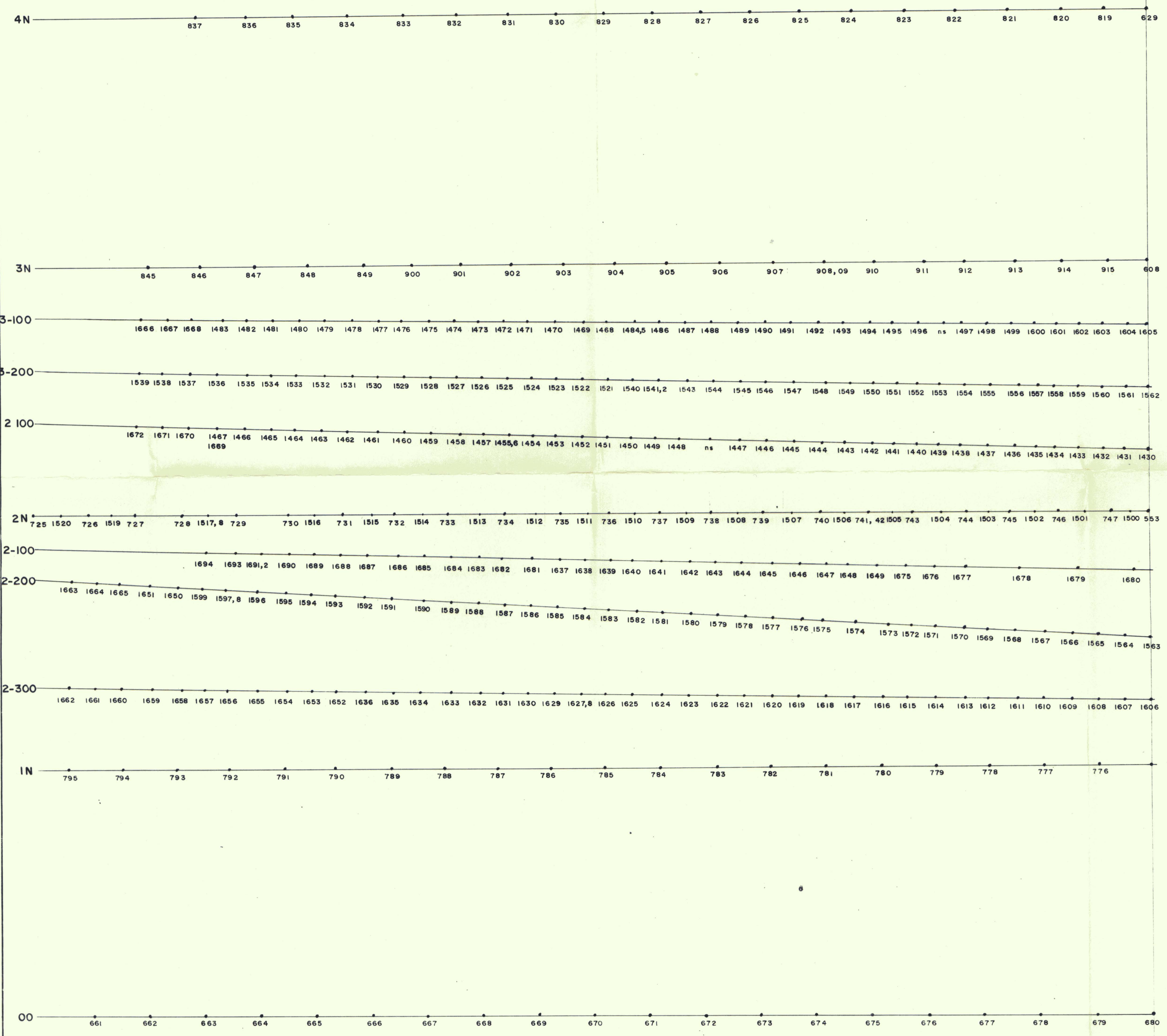
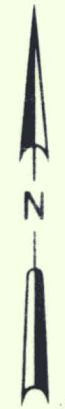
B.L.



Gulf Minerals Canada Limited

ROSS RIVER PROJECT  
SHERPA Claims  
SOIL SAMPLES  
V in PPM  
YUKON TERRITORY 091000

DATE: SEPT., '81	SCALE: 1:10,000	DRAWN BY: DSR	PLATE: 11f 5.2.7
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**Gold Minerals Canada Limited**

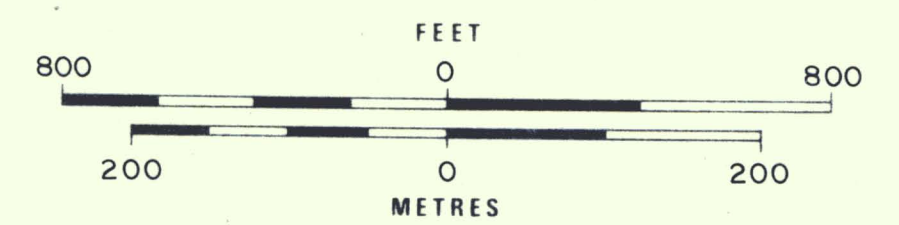
ROSS RIVER PROJECT

SHERPA CLAIMS  
DETAIL AREA

SAMPLE LOCATIONS

YUKON TERRITORY 091000

DATE: SEPT 1981	SCALE: 1:5000	DRAWN BY: EPD	PLATE: IIIa 5.2.9
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**Gold Minerals Canada Limited**

ROSS RIVER PROJECT

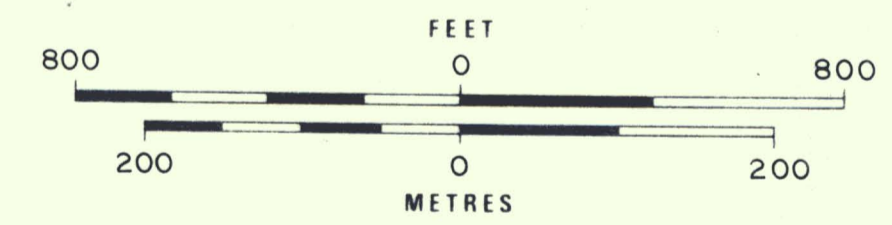
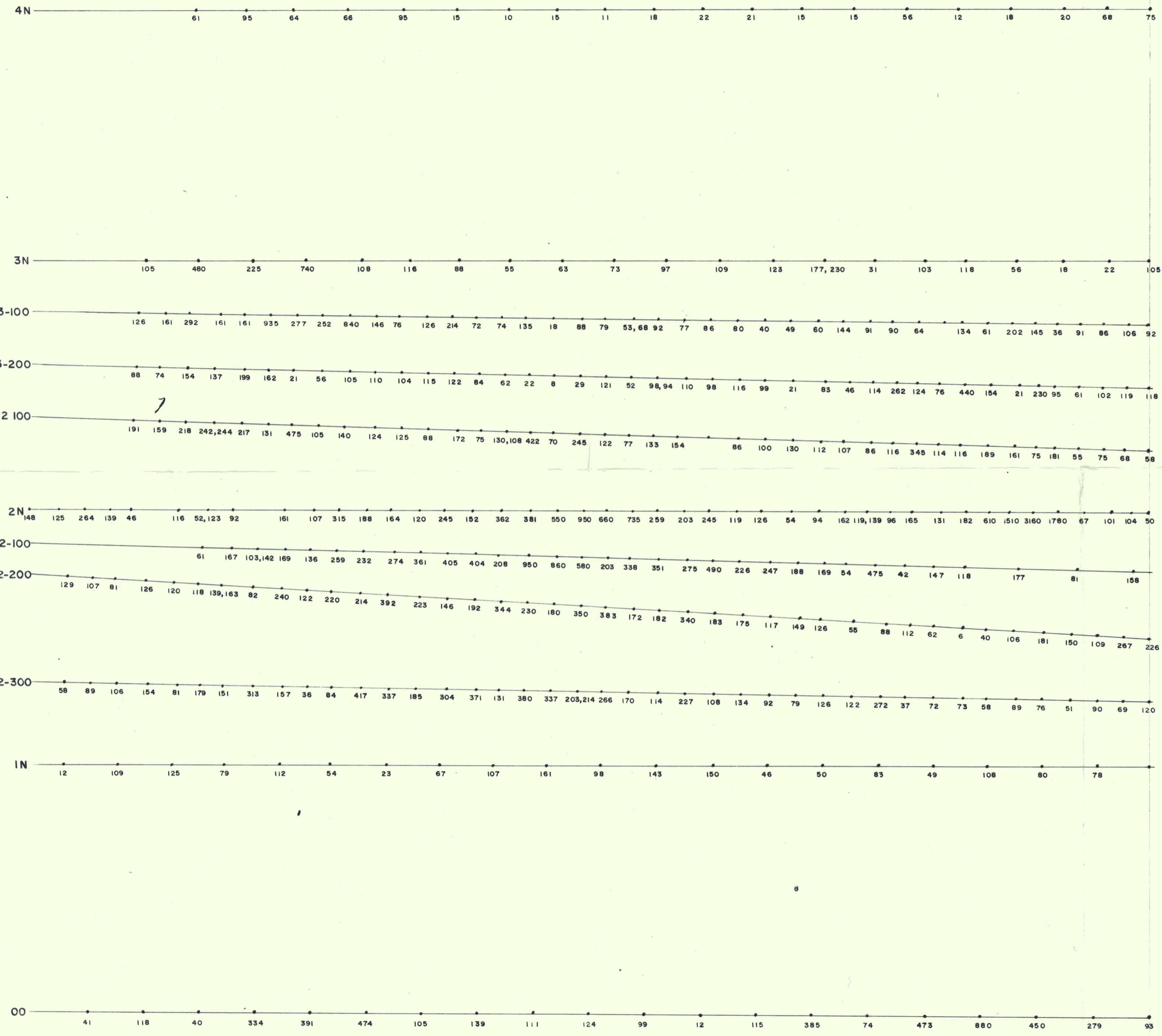
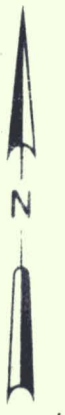
SHERPA CLAIMS  
DETAIL AREA

Pb in PPM

YUKON TERRITORY **091000**

DATE: SEPT 1981	SCALE: 1:5000	DRAWN BY: E P D	PLATE: <b>III b</b> 5.2.10
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B.L.



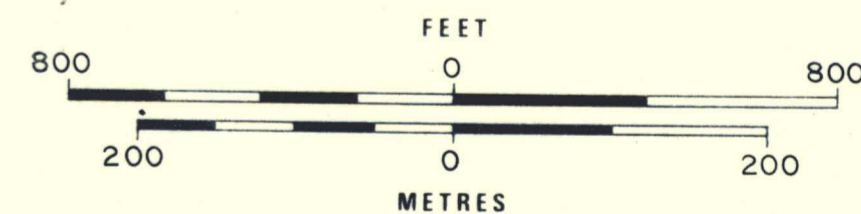
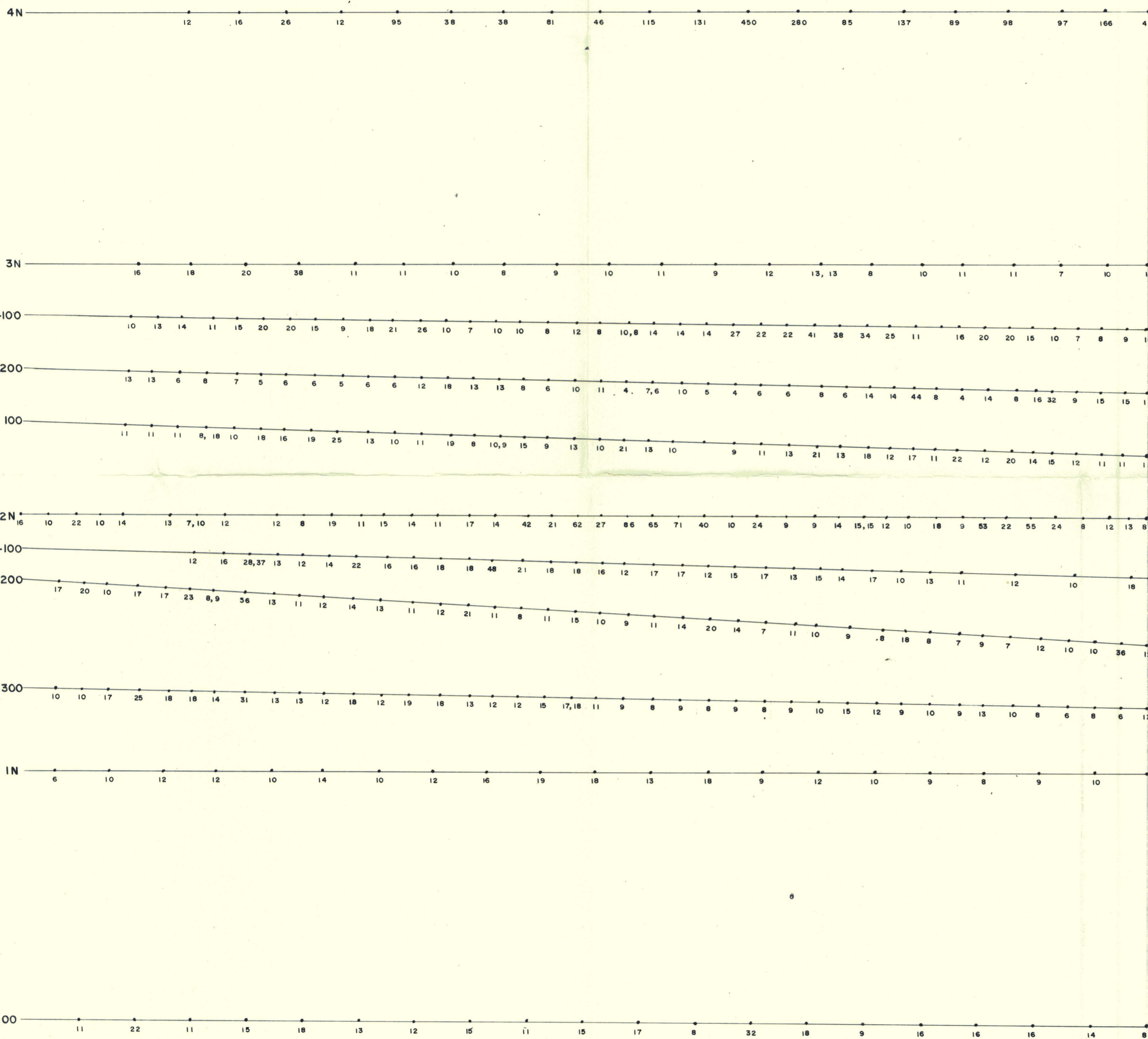
**Stur Minerals Canada Limited**

ROSS RIVER PROJECT  
SHERPA CLAIMS  
DETAIL AREA

Zn in PPM

YUKON TERRITORY 091000

DATE: SEPT 1981	SCALE: 1:5000	DRAWN BY: E P D	PLATE: IIIc 5.2.11
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**Gulf Minerals Canada Limited**

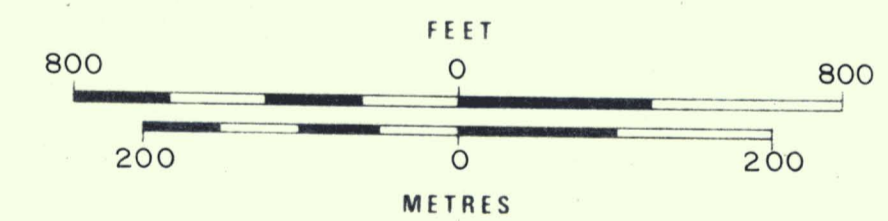
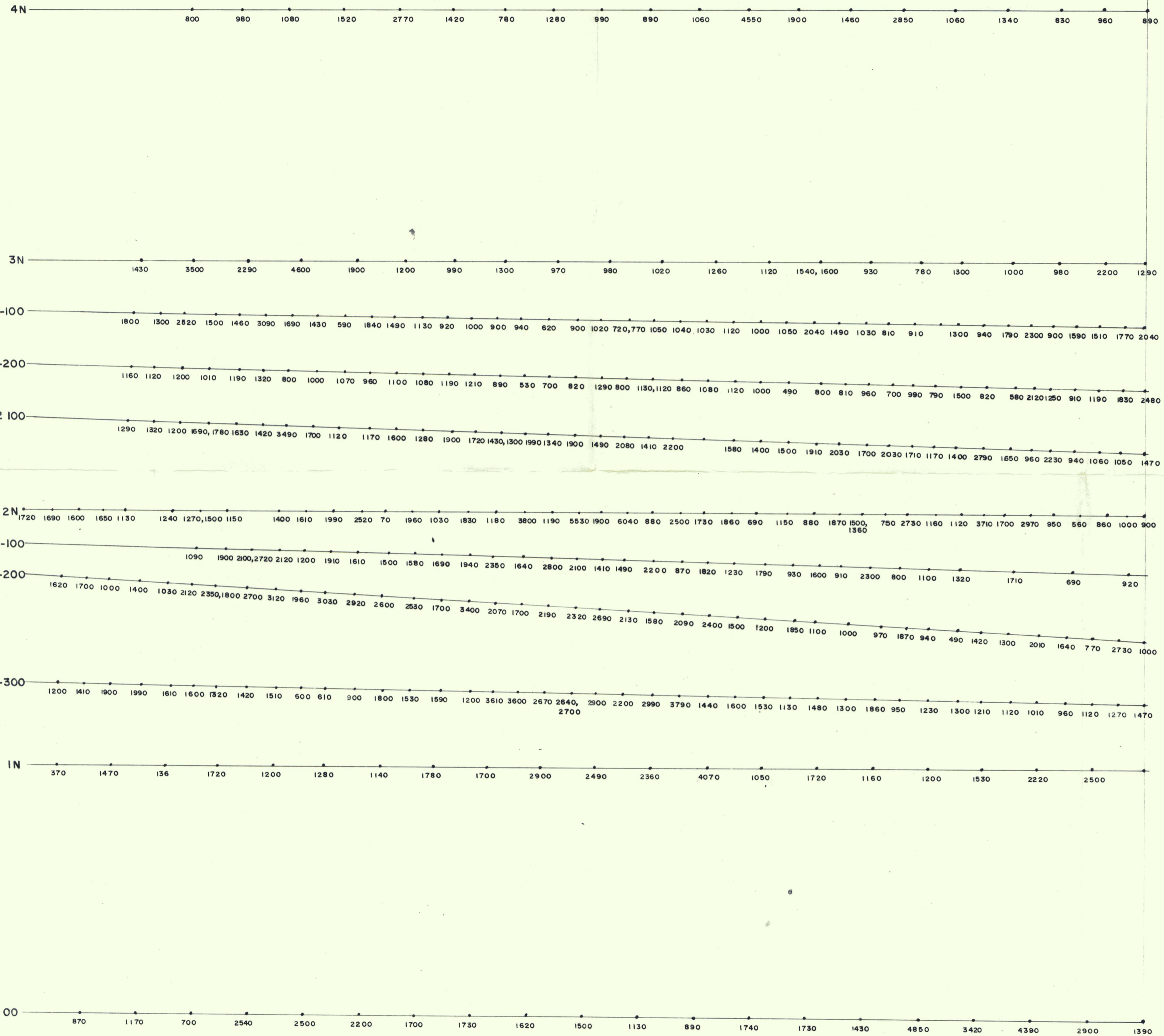
ROSS RIVER PROJECT  
SHERPA CLAIMS  
DETAIL AREA

Ag in PPM x 10

YUKON TERRITORY 091000

DATE: SEPT 1981	SCALE: 1:5000	DRAWN BY: E P D	PLATE: III d 52.12
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B.L.



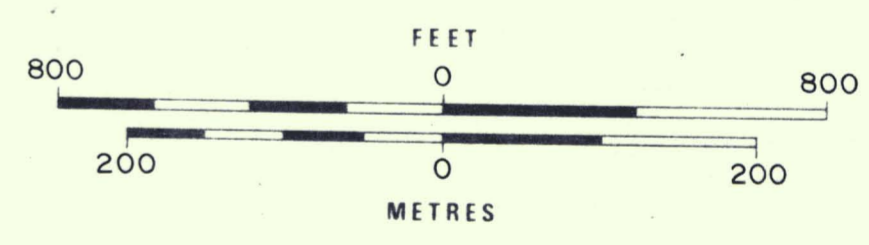
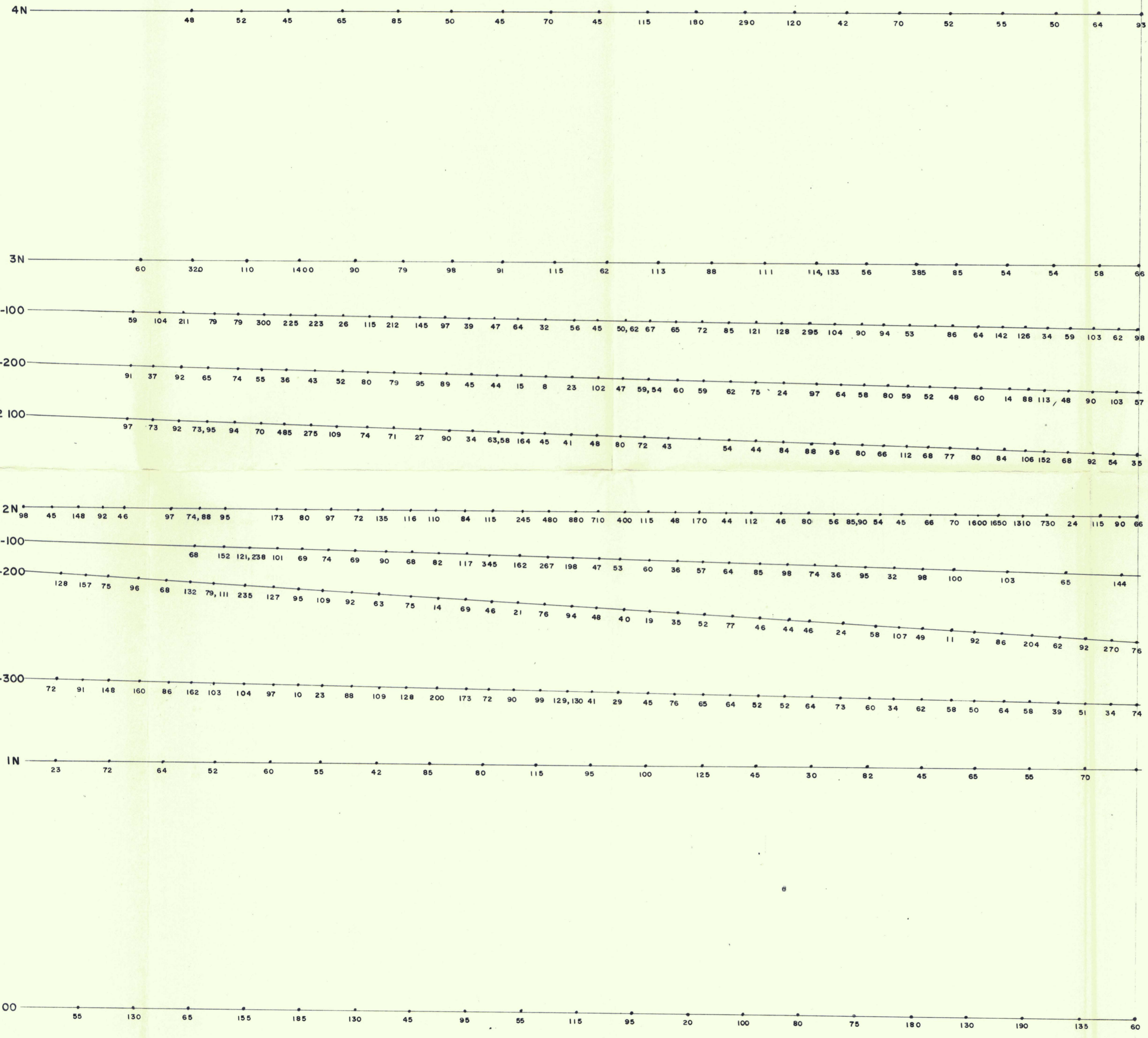
**Star Minerals Canada Limited**

ROSS RIVER PROJECT  
SHERPA CLAIMS  
DETAIL AREA

Ba in PPM

YUKON TERRITORY 091000

DATE: SEPT 1981	SCALE: 1:5000	DRAWN BY: E P D	PLATE: III e 5.2.13
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**Gulf Minerals Canada Limited**

ROSS RIVER PROJECT  
 SHERPA CLAIMS  
 DETAIL AREA

V in PPM

YUKON TERRITORY **091000**

DATE: SEPT 1981	SCALE: 1:5000	DRAWN BY: EPD	PLATE: IIII 52.14
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