

MAP NO.: ASSESSMENT REPORT X  
105 N 08 PROSPECTUS  
CONFIDENTIAL X  
OPEN FILE

DOCUMENT NO: 093069  
MINING DISTRICT: Mayo  
TYPE OF WORK: Geological And  
Geochemical Evaluation.

REPORT FILED UNDER: Kennecott Canada Inc.

DATE PERFORMED: August 12, 1992.

DATE FILED: February 8, 1993.

LOCATION: LAT.: 63°26'N  
LONG.: 132°17'W

ARFA: Hess River  
VALUE \$: 2,715.00

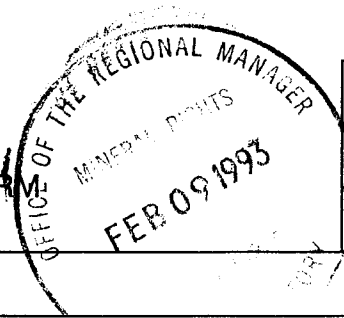
CLAIM NAME & NO.:  
Spot 1 - 10, YB19884 - YB19893, Spot 13 - 14, YB19896 - YB19897,  
Spot 15 - YB19899, Spot 16 - YB19898, Spot 17 - YB19901,  
Spot 18 - YB19900, Spot 19 - YB19903, Spot 20 - YB19902,  
Spot 21 - YB19905, Spot 22 - YB19904, Spot 25 - 26 YB19908 - YB19909,  
Spot 27 - YB19911, Spot 28 - YB19910, Spot 29 - YB19913,  
Spot 30 - YB19912, Spot 32 - YB19916.

WORK DONE BY: Gerald G. Carlson

WORK DONE FOR: Kennecott Canada Inc.

DATE TO GOOD STANDING:

REMARKS: # 105 O - Hess River Area  
The company staked claims to cover anomalous base metal values reported in 1991 G.S.C. Regional Geochemical Program. A total of 37 soil samples were collected. The samples revealed a northwesterly trending horizon which is enriched in Zn and possibly Ba. however no mineralization was noted which would explain the anomalous geochemistry. A small detailed grid was proposed for 1993 to try a define the anomalous results. The company is exploring for barite hosted stratabound Pb-Zn deposits.



M.R. file no. **7775-6-1**  
 R.M.M.R. file no.  
 Date forwarded **08 FEB 1993**

TRANSMITTAL FORM

From Mining Recorder at: **MAYO**

To Regional Manager, Mineral Rights at Whitehorse, Y.T.

For action are:

- NEW APPLICATION FOR PLACER LEASE TO PROSPECT Name
- RENEWAL APPLICATION PLACER LEASE TO PROSPECT Name Lease no.
- AFFIDAVIT OF EXPENDITURE ON PLACER LEASE Name Lease no.
- SECURITY DEPOSIT
- FINANCIAL ABILITY
- ASSIGNMENT OF PLACER LEASE NO. From To
- GROUPING APPLICATION UNDER SEC. 52(2) PLACER MINING ACT. Owner
- DIAMOND DRILL LOGS Claims Claim sheet no.
- QUARTZ ASSESSMENT REPORT Claims Claim sheet no.

Claims **SPOT ~~1-34~~ 1-10, 13-20, 21, 22, 25-30, 33-19884-917 + 32.** Claim sheet no. **N 105-8-8**  
 Type of report **GEOLOGICAL & GEOCHEMICAL** Submitted by **GERALD CARLSON FOR KENNECOTT CANADA INC**  
 Cls. work performed on **SPOTT-34 See card r Fax.** \$ req. for ren. application **\$3400.00**

PLEASE RETURN ONE NUMBERED COPY AND INDEX CARDS FOR OUR FILES.

*[Signature]*  
 Signature **\$2,715.00**

Date returned

REPLY ACTION

*Approved for ammended amount. Consulted with David Wiebe Mayo Mining Recorder. Kennecotte is aware of the problem and is process of dropping claims. Robert DeLub Feb 18/93*

*\* Claim numbers are not consecutive. They are jumbled. Claim sheet No. was recorded wrong. See assessment card.*

**093069**

Signature

FAX TRANSMISSION

TO: NAME Rob DeKlerk  
 TITLE Staff Geologist  
 PHONE # \_\_\_\_\_  
 FAX # 668-2176

FROM: NAME DAVID WIEBE  
 TITLE MINING RECORDER  
 PHONE # (403) 996-2256  
 FAX # (403) 996-2617

DATE 18 Feb 93

PAGE 1 OF 2

LONG \_\_\_\_\_ SHORT 2

*Rob: I just received this faxed letter from Kennecott regarding the SPOT 1-34 claims. I enclose this for your info. Dave.*

Kennecott Canada Inc.  
Granville Square  
138-200 Granville Street  
Vancouver, B.C.  
V8C 1S4  
Tel. (604) 688-1280  
FAX (604) 688-5255

**Kennecott**

February 18, 1993

Via Facsimile: (403) 996-2617

Mr. David Wiabe  
MINING RECORDER  
P.O. Box 10  
Mayo, Yukon  
Y0B 1M0

Re: Spot Claims

Dear Dave:

You pointed out that the expenditures on the Spot 1-34 claims were insufficient to hold all claims. Consequently Kennecott Canada Inc. elects to apply the work to the Spot 1-10, 13-22, 25-30 and 32 claims. The Spot 11, 12, 23, 24, 31, 33 and 34 claims will therefore not have work applied to them so that the expiry dates will not be extended.

Yours truly,

KENNECOTT CANADA INC.

F  Mark Fields  
Geologists

B:\Mark\SpotCln.Let

REPORT FOR ASSESSMENT



GEOLOGICAL AND GEOCHEMICAL EVALUATION

OF THE

**SPOT 1 to 34 CLAIMS**

Hess River Area  
Mayo Mining District

*N*  
NTS 105●/08

63° 26' N; 132° 17' W

Prepared for:

Kennecott Canada Inc.  
138-200 Granville St.  
Vancouver, B.C.  
V6C 1S4

15 January 1993

**093 069**

Prepared by:

Gerald G. Carlson  
Mineral Exploration Geologist  
1740 Orchard Way  
West Vancouver, B.C.  
V7V 4E8  
Phone and FAX (604)925-9883

This report has been examined by  
the Geological Evaluation Unit  
under Section 53 (4) Yukon Quartz  
Mining Act and is allowed as  
representation work in the amount  
of \$ 2,715.00.

*Robert Dechuk*

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

## TABLE OF CONTENTS

INTRODUCTION .....	1
LOCATION AND ACCESS .....	1
LIST OF CLAIMS .....	3
GENERAL GEOLOGY .....	3
WORK COMPLETED .....	6
RESULTS .....	6
Geology .....	6
Geochemistry .....	6
CONCLUSIONS AND RECOMMENDATIONS .....	6
REFERENCES .....	7
CERTIFICATION .....	8
LIST OF PERSONNEL .....	9
STATEMENT OF EXPENDITURES .....	10
APPENDIX - Geochemical Certificates of Analysis .....	11

## LIST OF FIGURES

Figure 1	Location Map .....	2
Figure 2	Claim Sketch .....	4
Figure 3	SPOT Grid Sample Numbers - 1:5,000 .....	Pocket
Figure 4	SPOT Grid Pb-Zn-Ba - 1:5,000 .....	Pocket

## INTRODUCTION

In early spring, 1991, a proposal was approved to carry out a data compilation on a relatively little known portion of Selwyn Basin, Yukon, on behalf of Kennecott Canada Inc. This area included the Lansing map sheet (105N) and adjacent parts of the Mayo (105M) map sheet. The initial program involved staking some known occurrences and carrying out a small baseline study in preparation for an announced government reconnaissance geochemical release over the proposed project area.

In response to strongly anomalous geochemical values reported in the geochemical survey (Friske and others, 1991), the FIDO claim group was staked in July, 1991. Preliminary follow-up sampling demonstrated an anomalous Zn geochemistry trend off the east end of the claims. This was covered by the 34 SPOT claims, staked in September, 1991.

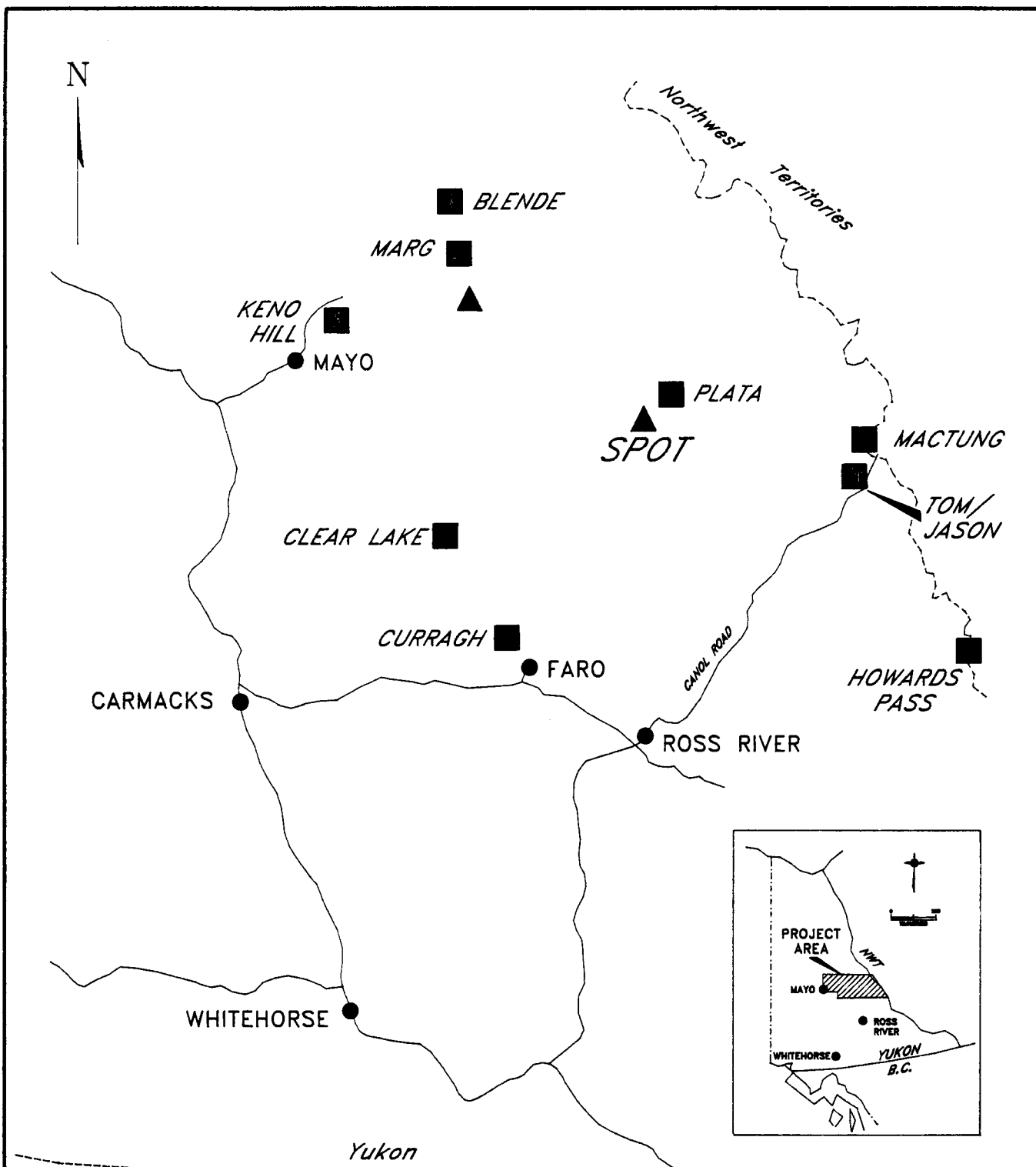
In 1992, a crew of five geologists, with helicopter support from Carmacks, examined a number of claim groups in the area from fly camps and a base camp on the Plata airstrip. On August 12, two geologists from the Plata base spent a full day prospecting and sampling the SPOT claim group. A total of 37 soil samples were collected. It is this work, valued at \$--,

3,700.00

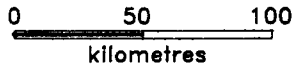
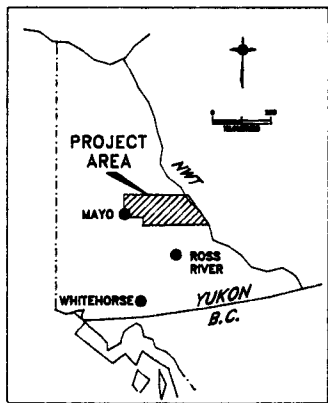
## LOCATION AND ACCESS


The SPOT claims are located in east central Yukon (Figure 1), centred at 63° 26' N; 132° 17' W, NTS 105N/08, in the Mayo Mining Division. The claims are located roughly 350 km north-northeast of Whitehorse and 150 north of the town of Faro.

Access is by helicopter from Mayo, 170 km to the west, Carmacks, 260 km southwest, Ross River, 180 km south, or by fixed wing aircraft to the Plata airstrip (Islander, Cessna 206, Twin Otter), 15 km southeast of the property.



- ▲ KENNECOTT PROPERTIES
- MINERAL DEPOSITS



 Kennecott Canada Inc.  
 FIGURE 1  
 LANSING PROJECT  
 SPOT CLAIMS  
 AREA LOCATION  
 YUKON  
 DATA DEC 1992  
 DRAWN BY: A.M. LANPLOC

## LIST OF CLAIMS

The SPOT claim group is located in NTS sheet 1050/08, centred at 63° 26' N; 132° 17' W, as shown in Figure 2. The claims have been recorded in the Mayo Mining Division in the name of Kennecott Canada Inc.:

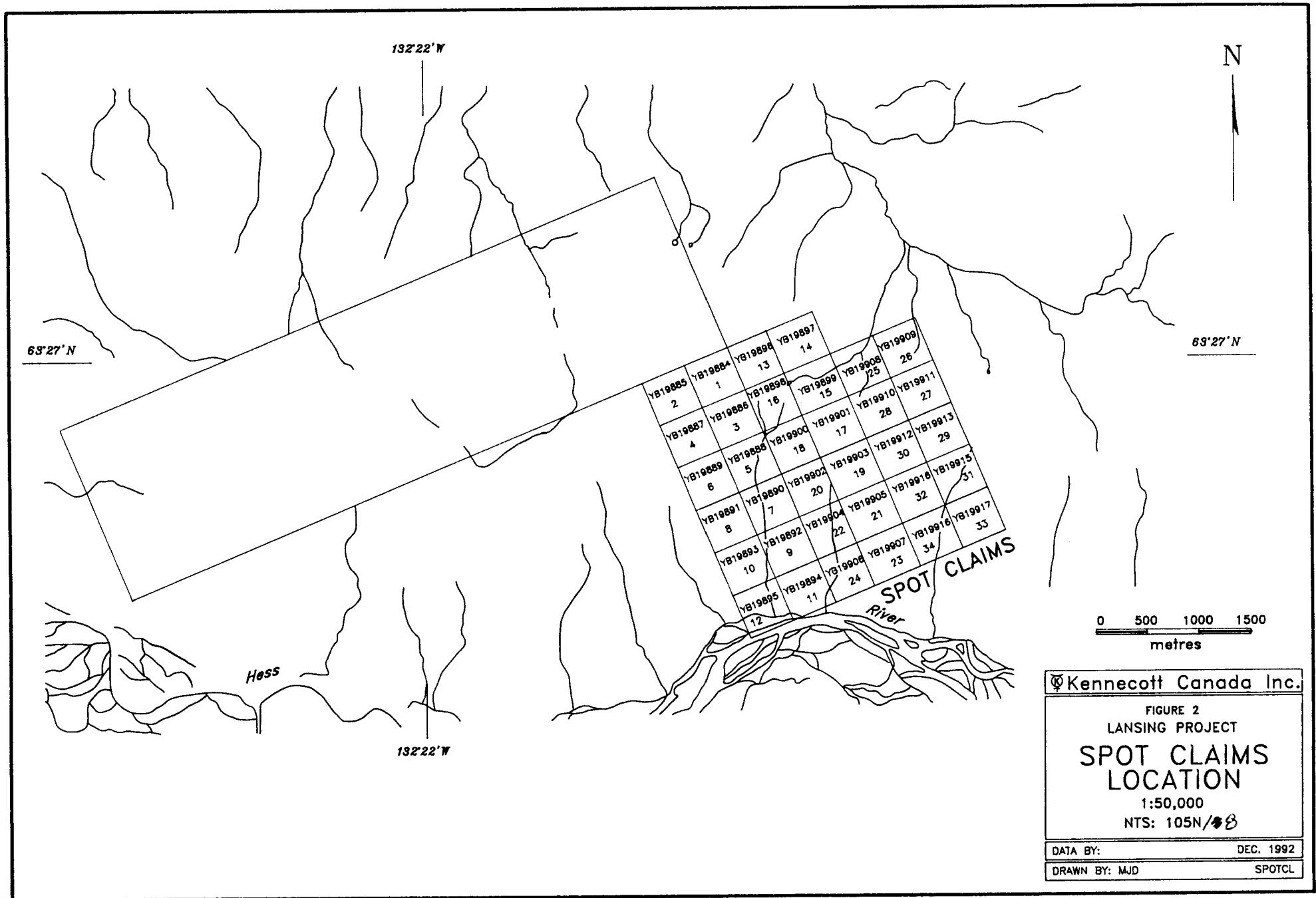
<u>Claim Name</u>	<u>Record No.</u>	<u>NTS</u>	<u>Expiry Date</u>
SPOT 1-34	YB19884-917	105N/08	03 Oct. 1992

## GENERAL GEOLOGY

The claims are underlain by the Selwyn Basin tectono-stratigraphic province. Selwyn Basin formed as a result of regional basin down warping of the passive North American continental margin in the early Paleozoic. In Devonian to Mississippian time, renewed tectonism is indicated by widespread graben formation throughout the basin. At least two ages of sediment hosted or SEDEX (Carne and Cathro, 1982) Pb-Zn+/-Ag deposits are known to occur within the basin.

The Proterozoic to early Cambrian basement rocks which underlie the entire area, informally known as the "Grit Unit", have been formally defined as the Hyland Group by Gordey (in press). These rocks are predominantly gritty quartzose sandstone and maroon, green and buff weathering shale. Minor bedded limestone is also present, while some of the clastic rocks are variably cemented with carbonate.

Earliest sedimentation within Selwyn Basin belongs to the Ordovician to Silurian Road River Group, a graptolitic unit typically consisting of calcareous black shale, argillaceous limestone and chert (Gabrielse, 1967). The top of the unit is marked by an orange-weathering, bioturbated siltstone. To the southwest, in central Selwyn Basin, varicoloured basinal cherts predominate. Initial mapping in the Lansing map sheet by the GSC (Blusson, 1974) was of a reconnaissance



132°22'W

N

63°27'N

63°27'N

Hess

132°22'W

SPOT CLAIMS  
River

0 500 1000 1500  
metres

© Kennecott Canada Inc.

FIGURE 2  
LANSING PROJECT  
SPOT CLAIMS  
LOCATION  
1:50,000  
NTS: 105N/48

DATA BY: DEC. 1992  
DRAWN BY: MJD SPOTCL

nature, showing most of the project area to be underlain by Road River strata. More recent, detailed work in a few local areas suggests a significant portion of these rocks in fact belongs to the younger Earn Group.

One of the largest Pb-Zn accumulations in the world, the Howard's Pass deposit, occurs within Early Silurian pyritic and calcareous shales and mudstones, apparently localized in sub-basins along the main axis of Selwyn Basin at the time of deposition.

The Earn Group, originally defined by Campbell (1967), ranging in age from Devonian to mid-Mississippian, is widespread throughout Selwyn Basin (Gordey and others, 1982). Lower Earn Group, spanning most of the Devonian, is distinguished by gun-blue weathering siliceous shale and chert. Upper Earn Group is characterized by brown weathering shale. It is not siliceous and chert is uncommon. Locally derived submarine fan complexes, consisting of grey weathering chert pebble conglomerate with lesser quartz-chert sandstone occur in both Lower and Upper Earn. These accumulations are indicative of rifting during deposition, interrupting the otherwise passive basinal sedimentation.

Bedded barite deposits are observed throughout the Earn Group while baritic Pb-Zn-Ag sulphide deposits appear to be restricted to siliceous shale facies and turbiditic fan complexes of the Lower Earn Group.

A return to more passive margin sedimentation is indicated by Mississippian through to Triassic cherts and siltstones, with local intervals shallow water, coarser clastic deposition.

These strata have been intruded by the Cretaceous Selwyn Plutonic Suite, a northwest trending belt of equigranular, biotite quartz monzonite intrusions. These form numerous small to medium-sized stocks that are often surrounded by extensive and very distinctive rusty hornfels.

Regional structure is dominated by major basinal bounding faults. These faults, originally interpreted to be normal, are now observed as zones of thrusting, as in the Dawson Thrust and Robert Service thrust along the north boundary of the project area (Gordey, 1990; Abbott, 1990). Here, Paleozoic strata are thrust over "Grit Unit" and the Precambrian is in turn thrust over Paleozoic shelf assemblage. On the northeastern side of the project area, these relationships are more complex, with imbricate thrusting repeating the stratigraphy a number of times. Within the basin, strata are variably deformed, from flat lying to vertical and tightly folded, apparently in response to the shortening event. Close to the thrusts, foliation is

intense so as to have obscured original bedding (Gordey, 1990).

### **WORK COMPLETED**

Work was supported from fixed-wing aircraft from Whitehorse to the Plata airstrip where a base camp was established. Work on the claims included prospecting and contour soil sampling in an attempt to define the source of high Zn in stream sediments encountered during reconnaissance sampling in 1991. In total, 37 soil samples were collected.

Results of this work are shown in figures 3 through 6 on the following pages.

### **RESULTS**

#### **Geology**

Mapping in 1991 showed the area to be underlain by a monotonous sequence of black shales and cherts with minor quartzite. Black chert was the predominant lithology noted in the vicinity of the 1992 sampling. No mineralization was noted which would explain the anomalous geochemistry.

#### **Geochemistry**

Streams draining the SPOT claims produced values of in excess of 5,000 ppm Zn and 12,000 ppm Zn in their sediments. The 1992 soil sampling, although widely spaced, appears to indicate a northwesterly trending horizon which is enriched in Zn and possibly Ba. Soils along this trend contain several hundred to 3,917 ppm Zn and up to 12,000 ppm Ba. A single sample along the trend, with only 81 ppm Zn, contains 98 ppm Pb.

### **CONCLUSIONS AND RECOMMENDATIONS**

The age of these rocks is indeterminate: They may be Road River equivalent. The soil survey defines an anomalous trend which is likely the cause of the high silt values. However, the sampling is not tight enough nor the geology well enough known to clearly define the significance of the source.

It is recommended that a small line grid with northwest trending baseline be mapped and sampled at 25 m spacing on four or five 250 m spaced lines to fully evaluate this target.

## REFERENCES

- Abbott, J.G., 1986, Geology of the Plata-Inca property, Yukon; in Yukon Geology, Volume 1, Indian and Northern Affairs Canada, pp. 109-112.
- Abbott, J.G., 1990, Preliminary results of the stratigraphy and structure of the Mt. Westman map area, central Yukon; in Current Research, Part E, Geol. Surv. Can.; Paper 90-1E, pp. 15-22.
- Blusson, S.L., 1974, Drafts of five geological maps of Operation Stewart (northern Selwyn Basin), Yukon and District of Mackenzie, N.W.T. (includes NTS 106A,B,C and 105N,O); Geol. Surv. Can., Open File 205.
- Campbell, R.B., 1967, Reconnaissance geology of Glenlyon map area, Yukon Territory; Geol. Surv. Can., Mem. 352.
- Carlson, Gerald G., 1992, 1991 Lansing Project Final Report; Report prepared for Kennecott Canada Inc., February, 1992, 31 p.
- Carne, R.C. and Cathro, R.J., 1982, Sedimentary exhalative (Sedex) zinc-lead-silver deposits, northern Canadian Cordillera; CIM Bull, Vol. 75, No. 840, pp.66-78.
- Friske, P.W.B, Hornbrook, E.H.W., Lynch, J.J., McCurdy, M.W., Gross, H., Galletta, A.C. and Durham, C.C., 1991A, Regional Stream Sediment and Water Geochemical Data, East-central Yukon, Lansing Map Sheet, 105N; Geological Survey of Canada Open File 2363.
- Gabrielse, H., 1967, Tectonic evolution of the Canadian Cordillera; Can. Jour. Earth Sci., Vol. 4, pp. 271-298.
- Gordey, S.P., 1990, Geology and Mineral Potential, Tiny Island Lake map area, Yukon; in Current Research, Part E, Geol. Surv. Can., Paper 90-1E, pp. 23-29.
- Gordey, S.P., Abbott, J.G. and Orchard, M.J., 1982, Devonian-Mississippian (Earn Group) and younger strata in east-central Yukon; in Current Research, Part B; Geol.Surv.Can., Paper 82-1B, pp. 93-100.

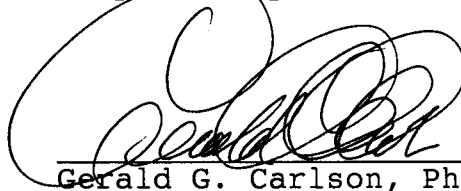
## CERTIFICATION

I, Gerald G. Carlson, am self-employed as a Mineral Exploration Geologist with offices at 1740 Orchard Way, West Vancouver, B.C. I was directly involved in the work reported in this document and the associated costs incurred:

I further attest that:

1. I graduated with a B.A.Sc. in Geological Engineering from the University of Toronto in 1969.
2. I graduated with a M.Sc. in Economic Geology from Michigan Technological University, Houghton, Michigan in 1974.
3. I graduated with a Ph.D. in Economic Geology from Dartmouth College, Hanover, New Hampshire in 1978.
4. With the exception of time taken out for graduate studies, I have been practicing my profession continuously for the past 24 years.
5. I am a member in good standing of the Association of Professional Engineers of the Yukon Territory and of the Association of Professional Engineers and Geoscientists of British Columbia.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Gerald Carlson', written over a horizontal line.

Gerald G. Carlson, Ph.D., P.Eng.

## LIST OF PERSONNEL

The following personnel were employed on the field portion of this project:

Gerald G. Carlson, Geologist  
1740 Orchard Way  
West Vancouver, B.C.  
V7V 4E8

Roger Hulstein, Geologist  
c/o Aurum Geological Consultants Inc.  
P.O. Box 4367  
Whitehorse, Yukon  
Y1A 3T5

Greg Smith, Geologist  
c/o Aurum Geological Consultants Inc.  
P.O. Box 4367  
Whitehorse, Yukon  
Y1A 3T5

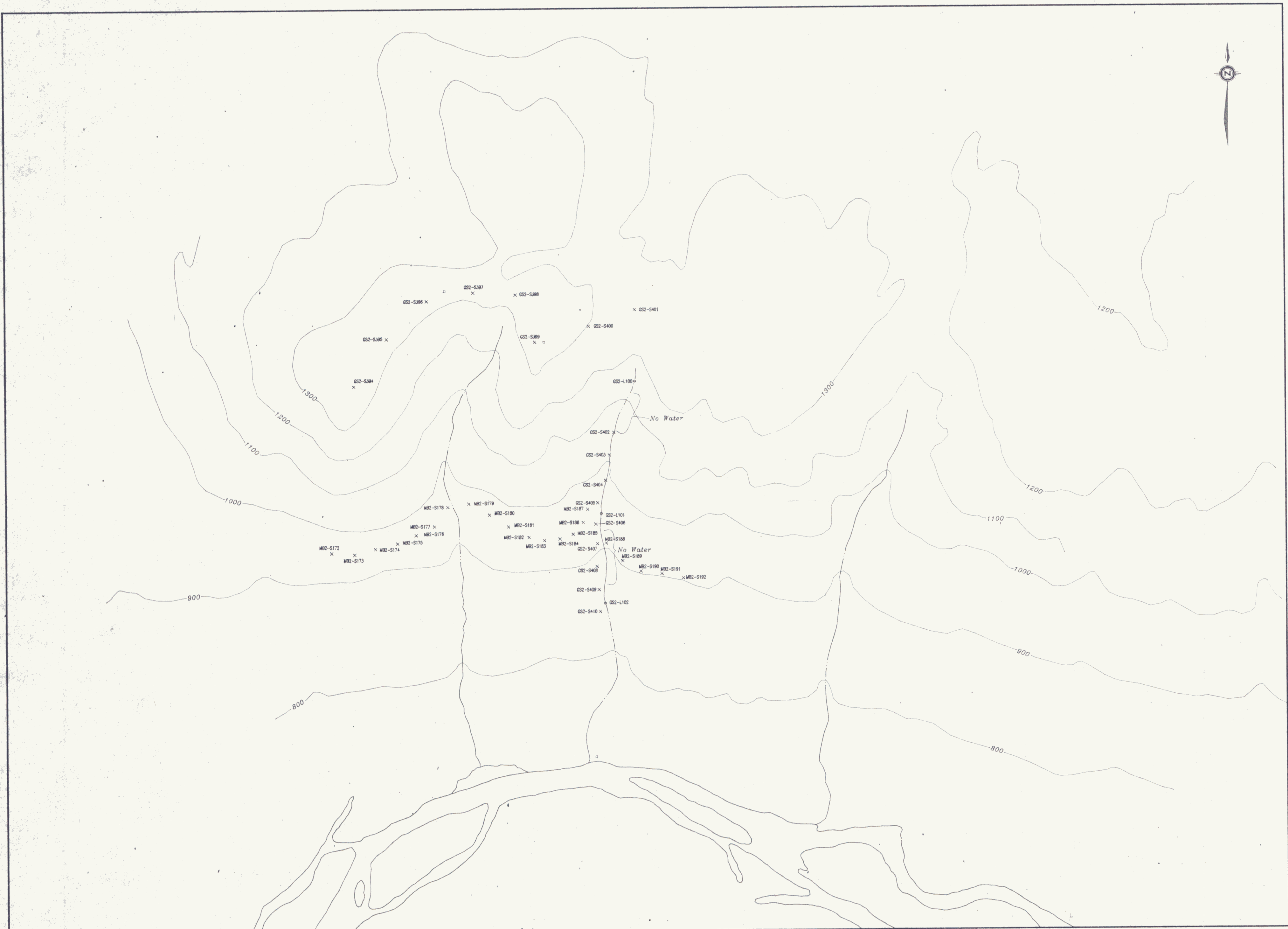
Mark Baknes  
c/o Kennecott Canada Inc.  
138 - 200 Granville Street  
Vancouver, B.C.  
V6C 1S4

## STATEMENT OF EXPENDITURES

August 12, 1992

Wages:	G. Smith	1 day @ \$320	320
	M. Baknes	1 day @ \$250	250
Helicopter		0.7 Hr. @ \$650	455
Share of mobilization & general expenses *		1 dy @ \$1,290/dy	1,290
Analytical		40 samples @ \$10.00	<u>400</u>
		TOTAL	<u>\$ 2,715</u>

\* Note: All costs related to preparation for the field program, mobilization, rentals of camp and radio, costs of consumable supplies, including fuel, and demobilization were totaled and divided by the total number of days in the field during the actual field work portion of this program, July 4 to August 12, 1992, inclusive. Thus all general expenses are fairly distributed in proportion to the amount of work carried out on each claim group.



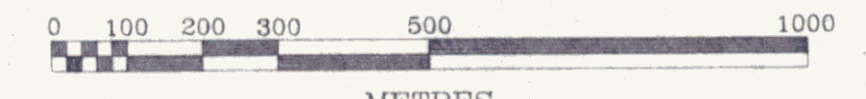
TOPOGRAPHIC LEGEND

- Ridge top.
- Creek.
- Dry Creekbed.


GEOCHEMISTRY LEGEND

- ⊗ Grid Soil Sample Site
- ⊗ Soil Sample Site
- Silt Sample Site
- Rock Sample Site

SCALE 1:10000

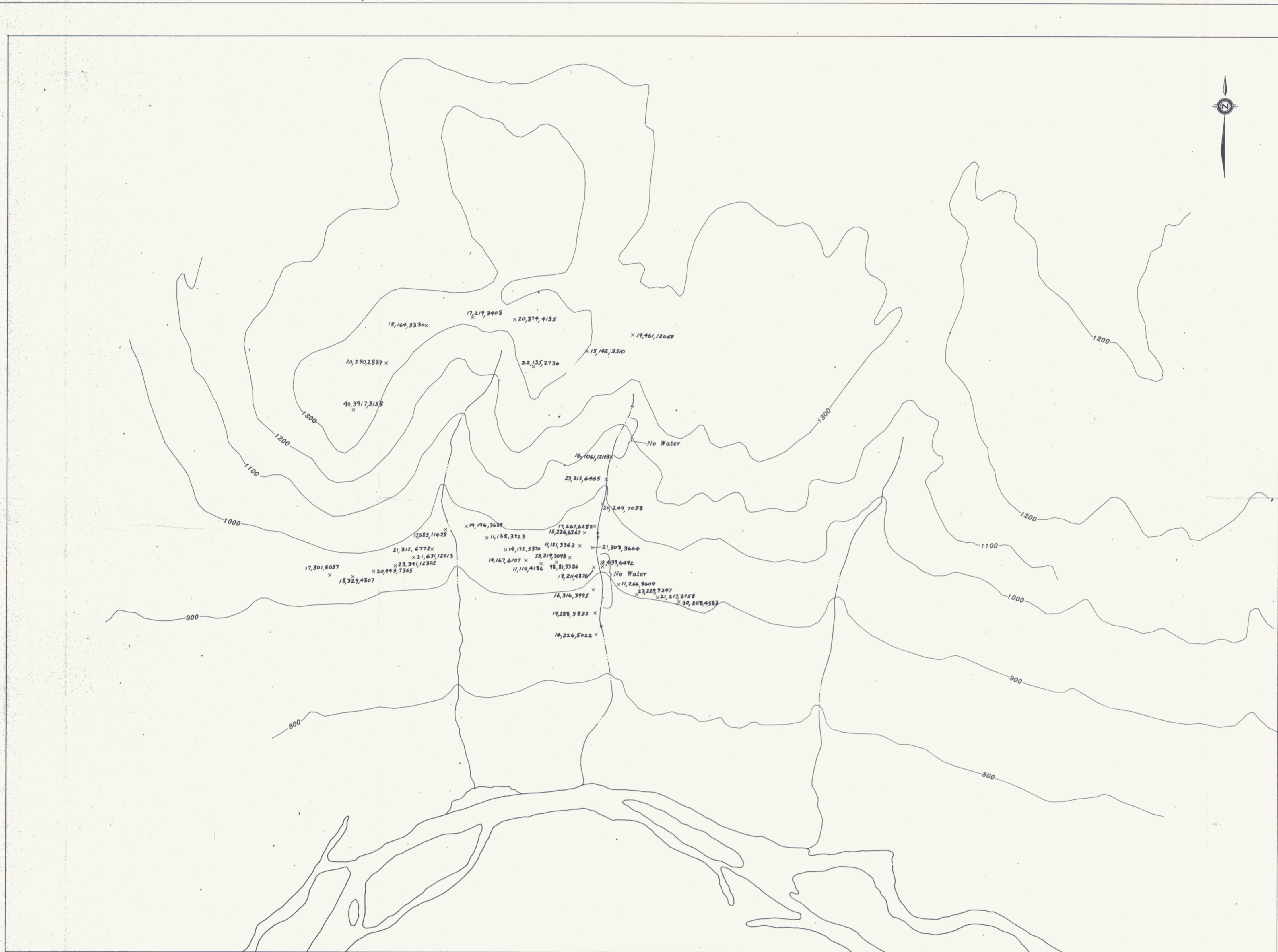


METRES DWG 91


**Kennecott Canada Inc.**  
 198-200 Granville St, Vancouver, B.C., V6C 1S4  
**LANSING PROJECT**  
**SPOT CLAIMS**  
 MAYO M.D. **093069**  
**SAMPLE LOCATIONS**

to accompany a report by: G. Carlson		
Drawn by: KWS	NTS:	Acad file: SPOT
Date: DEC. 1992	Ref. No.:	Map No.:

Figure 3



TOPOGRAPHIC LEGEND

- Ridge top.
- Creek.
- Dry Creekbed.

GEOCHEMISTRY LEGEND

- o Grid Soil Sample Site
- o 6S2-5132 Soil Sample Site
- o 6S2-1030 Silt Sample Site
- o RH2-R39 Rock Sample Site

SCALE 1:10000



DWG 92

**K** Kennecott Canada Inc.  
138-200 Granville St, Vancouver, B.C., V6C 1S4

**LANSING PROJECT  
SPOT CLAIMS**  
MAYO M.D. **093069**  
SOIL and SILT GEOCHEMISTRY

to accompany a report by: G. Carlson		
Drawn by: KWS	NTS: .	Acad file: SPOT
Date: DEC. 1992	Ref. No: .	Map No:

Figure 4

**APPENDIX A**

**SPOT CLAIMS**

Geochemical Analysis Certificates



SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Ba* ppm
GS2 S-380	41	14	32	28	.9	4	3	22	1.33	23	5	ND	11	58	.6	8	2	58	.02	.034	7	9	.02	139	.01	3	.23	.01	.04	2	1536
GS2 S-381	31	13	25	27	.7	3	2	26	1.18	18	5	ND	3	20	.2	5	2	52	.02	.050	4	7	.02	104	.01	3	.22	.01	.03	1	1632
GS2 S-382	56	67	56	55	1.7	7	7	42	7.43	67	5	ND	3	57	.2	7	2	208	.02	.084	5	17	.03	182	.01	2	.38	.01	.06	1	2392
GS2 S-383	22	12	21	14	1.2	2	1	14	.92	16	5	ND	2	24	.3	3	2	48	.01	.028	4	6	.01	295	.01	4	.20	.01	.03	1	1710
GS2 S-384	15	5	15	7	.4	1	1	8	.53	11	5	ND	1	19	.2	2	2	26	.01	.029	3	4	.01	114	.01	4	.12	.01	.03	1	1397
GS2 S-385	16	3	10	9	.1	1	1	5	.38	8	5	ND	1	16	.2	3	2	36	.01	.009	3	4	.01	69	.01	5	.08	.01	.01	1	1691
GS2 S-386	21	7	21	9	.4	3	2	17	.72	13	5	ND	1	22	.4	4	2	39	.01	.022	3	5	.01	155	.01	5	.18	.01	.03	1	1391
GS2 S-387	16	7	18	5	.5	1	1	13	.37	8	5	ND	1	14	.2	3	2	19	.01	.009	2	3	.01	95	.01	4	.09	.01	.03	1	873
GS2 S-388	13	4	14	8	.4	1	1	22	.30	5	5	ND	1	10	.2	2	2	17	.01	.008	2	2	.01	81	.01	4	.11	.01	.02	1	980
GS2 S-389	7	3	15	5	.4	1	1	8	.15	3	5	ND	2	6	.2	2	2	9	.01	.002	2	1	.03	40	.01	4	.14	.01	.02	1	1400
GS2 S-390	11	3	16	6	.1	1	1	3	.14	6	5	ND	1	8	.2	2	2	9	.01	.003	2	2	.01	49	.01	2	.09	.01	.02	1	1180
GS2 S-391	196	40	24	10254	1.0	952	146	4277	35.16	10	49	ND	3	39	217.5	16	6	143	.18	.160	5	23	.09	1036	.01	2	.49	.01	.14	1	2617
GS2 S-392	8	60	39	158	.7	33	12	230	5.43	62	5	ND	4	212	.2	3	2	46	.06	.267	8	28	.15	261	.01	7	1.00	.01	.14	1	40169
GS2 S-393	22	50	81	164	7.0	35	6	71	2.88	29	5	ND	1	47	1.6	8	4	414	.13	.315	9	82	.15	1448	.01	12	1.12	.01	.07	1	4025
GS2 S-394	37	74	40	3917	.5	700	219	11789	32.57	44	5	ND	1	35	5.7	2	2	31	.07	.152	2	14	.06	911	.01	2	1.13	.01	.03	1	3158
GS2 S-395	12	36	20	290	3.8	48	12	500	4.75	27	5	ND	3	90	1.4	4	2	309	.37	.680	14	73	.23	845	.03	12	1.78	.01	.09	1	2889
GS2 S-396	26	35	18	164	8.2	36	7	160	3.59	40	5	ND	1	41	.9	6	4	888	.14	.202	15	85	.23	1136	.06	7	1.63	.01	.10	1	3330
GS2 S-397	12	43	17	219	4.3	66	6	129	2.52	16	5	ND	1	20	1.0	3	2	234	.06	.111	16	72	.17	677	.01	7	1.17	.01	.07	1	3408
GS2 S-398	26	48	20	374	.6	60	11	240	3.67	27	5	ND	1	23	1.9	11	2	237	.03	.086	19	31	.22	704	.01	8	1.30	.01	.11	1	4135
GS2 S-399	7	33	22	135	1.0	27	9	289	2.96	15	5	ND	4	30	.8	2	2	92	.07	.067	17	32	.37	426	.02	4	1.90	.01	.09	1	2736
GS2 S-400	5	42	15	142	.7	38	13	207	3.26	17	5	ND	3	18	.5	2	2	69	.07	.046	13	27	.38	639	.02	6	1.55	.01	.10	1	3510
GS2 S-401	29	134	19	461	3.4	113	10	109	3.10	53	5	ND	2	37	7.5	16	5	356	.08	.150	20	88	.18	2921	.01	5	1.17	.01	.14	1	12069
GS2 S-402	34	130	16	1061	2.1	146	11	370	2.16	42	5	ND	2	105	14.3	19	2	219	.88	.086	19	42	.41	3097	.01	2	.92	.01	.10	1	12103
GS2 S-403	11	54	23	315	1.2	56	22	1332	2.58	16	5	ND	3	64	5.9	6	3	106	.31	.086	16	27	.33	2401	.02	7	1.19	.01	.08	1	6465
GS2 S-404	13	50	20	249	1.5	48	11	439	2.54	23	5	ND	2	89	2.6	4	2	166	.35	.119	16	33	.30	1644	.01	7	1.00	.01	.14	1	7038
GS2 S-405	8	30	17	267	.9	41	12	270	3.18	27	5	ND	4	47	1.4	3	2	166	.18	.169	15	36	.37	1295	.01	3	1.29	.01	.12	1	6282
GS2 S-406	9	24	21	308	.9	36	15	373	4.06	19	5	ND	5	34	1.6	3	2	108	.19	.146	12	30	.33	956	.02	4	1.76	.01	.10	1	3664
GS2 S-407	9	26	18	211	.9	37	12	176	3.32	23	5	ND	5	36	1.1	3	6	111	.11	.108	16	27	.28	1026	.01	5	1.21	.01	.12	1	4876
GS2 S-408	10	37	16	316	.5	50	14	204	3.82	20	5	ND	5	35	.6	2	2	99	.07	.068	15	26	.31	829	.02	8	1.42	.01	.12	1	3995
GS2 S-409	12	34	19	288	.2	46	12	168	3.56	19	5	ND	5	40	.7	2	2	152	.10	.098	17	35	.34	732	.01	9	1.45	.01	.12	1	5832
GS2 S-410	6	33	14	226	.8	40	7	305	1.56	10	5	ND	2	194	2.4	3	2	78	1.64	.068	9	18	.38	1074	.01	6	.81	.01	.06	1	5022
RE GS2 S-405	8	26	20	261	.8	41	11	266	3.07	24	5	ND	4	53	1.3	2	2	160	.25	.161	15	36	.37	1271	.01	8	1.27	.01	.11	1	5854
MB2 S-164	63	95	46	147	2.0	50	7	123	4.04	73	7	ND	7	56	.5	15	2	386	.06	.105	16	34	.15	186	.03	6	2.88	.01	.18	1	99451
MB2 S-165	19	176	60	350	2.4	68	19	368	10.19	199	5	ND	5	81	.9	11	7	204	.07	.247	4	29	.30	208	.01	3	2.35	.01	.09	1	32382
MB2 S-166	25	39	11	116	.3	45	6	44	3.43	57	5	ND	3	62	.8	3	2	161	.01	.083	3	22	.06	189	.01	5	1.75	.01	.12	1	293593
MB2 S-167	4	171	28	207	1.2	63	27	939	5.09	22	5	ND	1	29	.2	2	5	21	.02	.068	2	25	.27	787	.01	4	1.01	.01	.04	1	9464
MB2 S-168	37	48	7	51	.4	39	4	26	2.91	48	22	ND	5	21	.2	4	2	337	.02	.040	6	25	.03	304	.01	2	1.73	.01	.13	1	137894
MB2 S-169	5	224	55	448	1.7	96	35	1356	12.47	208	5	ND	4	52	.3	27	7	24	.04	.112	2	12	.05	121	.01	4	2.10	.01	.14	1	90166
STANDARD C/CB-1200	20	59	41	141	7.3	74	29	1098	3.96	42	20	8	40	53	19.1	16	20	61	.50	.085	40	61	.94	184	.09	35	1.95	.07	.14	11	2130

SPOT

Sample type: PULP. Samples beginning 'RE' are duplicate samples.

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Tl	B	Al	Na	K	W	Ba*
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm
MB2 S-170	6	241	2117	820	45.0	74	32	914	9.45	158	5	ND	11	28	.2	137	2	17	.02	.097	2	8	.05	395	.01	2	.42	.01	.06	2	18015
MB2 S-171	166	42	58	60	3.9	18	7	33	7.29	109	5	ND	6	94	.2	32	2	325	.01	.117	5	35	.04	64	.03	2	.60	.01	.27	1	31969
MB2 S-172	17	58	17	301	11.8	50	9	137	4.22	53	5	ND	7	85	1.5	5	2	281	.25	.878	12	58	.35	1278	.02	3	2.63	.01	.16	1	5057
MB2 S-173	26	32	18	329	7.1	49	8	99	4.74	37	5	ND	5	79	4.5	9	2	493	.18	.970	11	78	.20	1210	.03	5	1.88	.01	.16	1	4807
MB2 S-174	24	67	20	443	11.8	62	8	140	4.12	45	5	ND	4	152	5.9	13	2	438	.45	.759	15	91	.27	845	.03	4	1.82	.01	.21	1	7365
MB2 S-175	44	80	23	341	9.8	49	3	121	2.47	26	5	ND	1	280	6.3	14	4	1217	.22	.212	28	435	.07	433	.27	2	.64	.01	.18	1	12302
MB2 S-176	70	131	21	631	24.7	117	6	38	4.70	54	5	ND	6	471	3.8	28	6	2958	.36	1.830	25	449	.30	614	.11	4	3.26	.01	.22	1	12013
MB2 S-177	27	62	21	312	12.9	60	6	59	3.55	35	5	ND	4	130	2.8	11	2	739	.21	.369	17	234	.11	810	.11	3	1.05	.01	.15	1	6772
MB2 S-178	15	87	17	585	1.7	106	14	397	3.15	28	5	ND	2	110	4.9	5	2	193	.34	.147	19	49	.35	1459	.02	3	1.11	.01	.14	1	11428
RE MB2 S-182	8	28	20	176	.4	33	8	172	2.71	16	5	ND	3	60	.5	2	2	120	.20	.145	17	30	.27	998	.01	3	1.17	.01	.13	1	6429
MB2 S-179	6	24	19	196	.7	41	10	185	3.76	25	5	ND	4	38	.6	2	3	162	.13	.131	15	39	.34	823	.02	2	1.73	.01	.11	1	3629
MB2 S-180	5	20	11	138	.9	21	7	236	2.43	15	5	ND	3	28	.6	2	2	106	.12	.077	16	26	.24	966	.03	2	1.03	.01	.12	1	3923
MB2 S-181	7	38	14	172	.9	33	10	345	3.29	16	5	ND	1	35	.8	2	4	101	.08	.117	15	25	.23	1129	.01	3	1.06	.01	.12	1	5370
MB2 S-182	8	29	14	167	.6	34	8	174	2.75	15	5	ND	4	60	.4	2	2	122	.20	.144	17	28	.28	1019	.01	4	1.20	.01	.13	1	6107
MB2 S-183	5	21	11	110	.9	21	6	174	2.02	14	5	ND	2	36	.2	2	3	87	.14	.063	16	22	.25	1165	.02	5	1.02	.01	.10	1	4186
MB2 S-184	3	10	98	81	1.9	13	5	94	2.67	60	5	ND	3	54	.4	3	2	62	.04	.077	21	19	.16	458	.02	6	.96	.01	.16	1	3386
MB2 S-185	8	107	33	219	1.0	31	12	127	7.26	22	5	ND	1	91	.2	2	3	60	.06	.125	11	20	.07	197	.01	2	.66	.02	.28	1	3098
MB2 S-186	4	17	11	121	.5	18	7	106	2.27	14	5	ND	2	21	.8	2	2	81	.08	.071	15	20	.17	514	.02	2	.92	.01	.09	1	3363
MB2 S-187	15	39	15	226	.4	47	11	166	2.48	15	5	ND	1	28	1.3	3	2	100	.09	.068	17	20	.21	1440	.02	2	.87	.01	.13	1	6267
MB2 S-188	9	52	12	439	1.1	62	13	444	2.54	17	5	ND	1	137	3.7	2	5	105	.79	.102	14	27	.33	1881	.01	7	1.20	.01	.10	1	6492
MB2 S-189	8	46	11	266	.7	54	11	255	2.32	14	5	ND	3	90	1.8	2	2	106	.35	.098	19	27	.37	1936	.01	7	1.02	.01	.13	1	8609
MB2 S-190	10	72	23	229	1.6	61	11	352	3.25	13	5	ND	3	82	1.0	2	3	144	.25	.100	15	36	.40	2136	.01	7	1.60	.01	.20	1	9297
MB2 S-191	4	40	21	217	.5	45	10	145	3.56	10	5	ND	3	21	1.4	2	2	80	.07	.053	13	20	.22	646	.01	2	1.05	.01	.10	1	3758
MB2 S-192	9	33	30	208	1.7	36	9	176	3.70	17	5	ND	4	23	.3	2	2	140	.04	.074	15	36	.33	770	.01	2	1.71	.01	.13	1	4583
RH2 S-274	39	43	13	39	.6	10	4	34	3.64	37	5	ND	3	7	.2	5	2	72	.01	.024	4	15	.04	1062	.01	2	.72	.01	.03	1	80830
RH2 S-275	3	28	25	132	.1	34	24	764	3.88	16	5	ND	1	11	.2	2	3	20	.06	.049	4	15	.22	194	.01	2	.75	.01	.04	1	1575
RH2 S-276	2	31	29	147	.1	42	22	799	4.15	19	5	ND	1	12	.2	2	5	19	.08	.059	3	13	.21	315	.01	2	.78	.01	.04	1	1597
RH2 S-277	6	43	36	181	.5	49	16	494	4.19	23	5	ND	1	24	.5	2	2	43	.09	.071	3	18	.18	461	.01	2	.98	.01	.06	1	2250
RH2 S-278	3	37	33	140	.5	41	16	434	3.76	19	5	ND	2	16	.2	2	2	23	.08	.070	3	14	.16	398	.01	2	.73	.01	.05	1	2274
RH2 S-279	22	37	20	96	.5	22	11	533	2.79	39	5	ND	1	51	.7	5	5	82	.06	.066	6	14	.16	674	.01	2	.65	.01	.10	1	7948
RH2 S-281	21	73	28	142	.7	21	13	349	8.29	37	5	ND	2	45	.2	11	2	78	.02	.091	3	14	.08	358	.01	2	.69	.01	.19	1	2999
RH2 S-282	9	49	24	101	.7	19	8	109	4.04	38	5	ND	2	25	.2	4	2	77	.02	.064	5	17	.11	218	.01	2	.67	.01	.06	1	2312
RH2 S-283	8	55	32	128	.8	28	9	125	5.26	36	5	ND	2	30	.2	4	3	56	.02	.073	4	29	.25	200	.01	2	1.14	.01	.05	1	3084
RH2 S-284	15	39	25	73	1.1	20	7	84	3.34	33	5	ND	2	33	.2	4	3	76	.04	.064	8	24	.21	222	.02	2	1.01	.01	.07	1	1903
RH2 S-285	25	21	19	47	2.2	10	4	78	1.72	32	5	ND	3	58	.9	8	2	101	.05	.075	4	14	.05	349	.01	2	.27	.01	.10	1	2218
RH2 S-286	11	53	29	160	1.1	38	14	297	3.96	34	5	ND	2	42	.2	5	2	46	.05	.078	5	19	.23	799	.01	2	.81	.01	.06	1	3877
RH2 S-287	19	27	19	59	.5	13	5	86	2.17	27	5	ND	3	23	.2	3	2	31	.02	.037	3	12	.04	481	.01	2	.20	.01	.04	1	1746
RH2 S-288	23	95	36	130	1.0	31	12	155	4.97	24	5	ND	5	43	.2	3	2	50	.02	.077	7	20	.25	592	.01	2	.88	.01	.06	1	6025
STANDARD C/CB-1200	20	60	38	133	7.4	73	32	1073	3.96	41	19	7	40	53	18.5	14	19	58	.49	.083	39	61	.93	185	.09	34	2.00	.07	.14	11	2120

SPOT

Sample type: PULP. Samples beginning 'RE' are duplicate samples.