

REPORT ON STREAM SEDIMENT SURVEY

KLAST 1 TO KLAST 5 CLAIMS

LIARD MINING DIVISION

NTS 104G/16

LAT 57°46'

LONG 130°14'

LOG NO: 07-01	RD.
ACTION:	
FILE NO:	

LOG NO: May 6/91	RD.
ACTION: Date received back from amendment	
FILE NO:	

OWNER

CHRIS W. GRAF, P. ENG.

WORK PERFORMED FROM JULY 31st TO AUGUST 12th 1990

REPORT BY

M. WASKETT-MYERS  
GEOCHEMIST

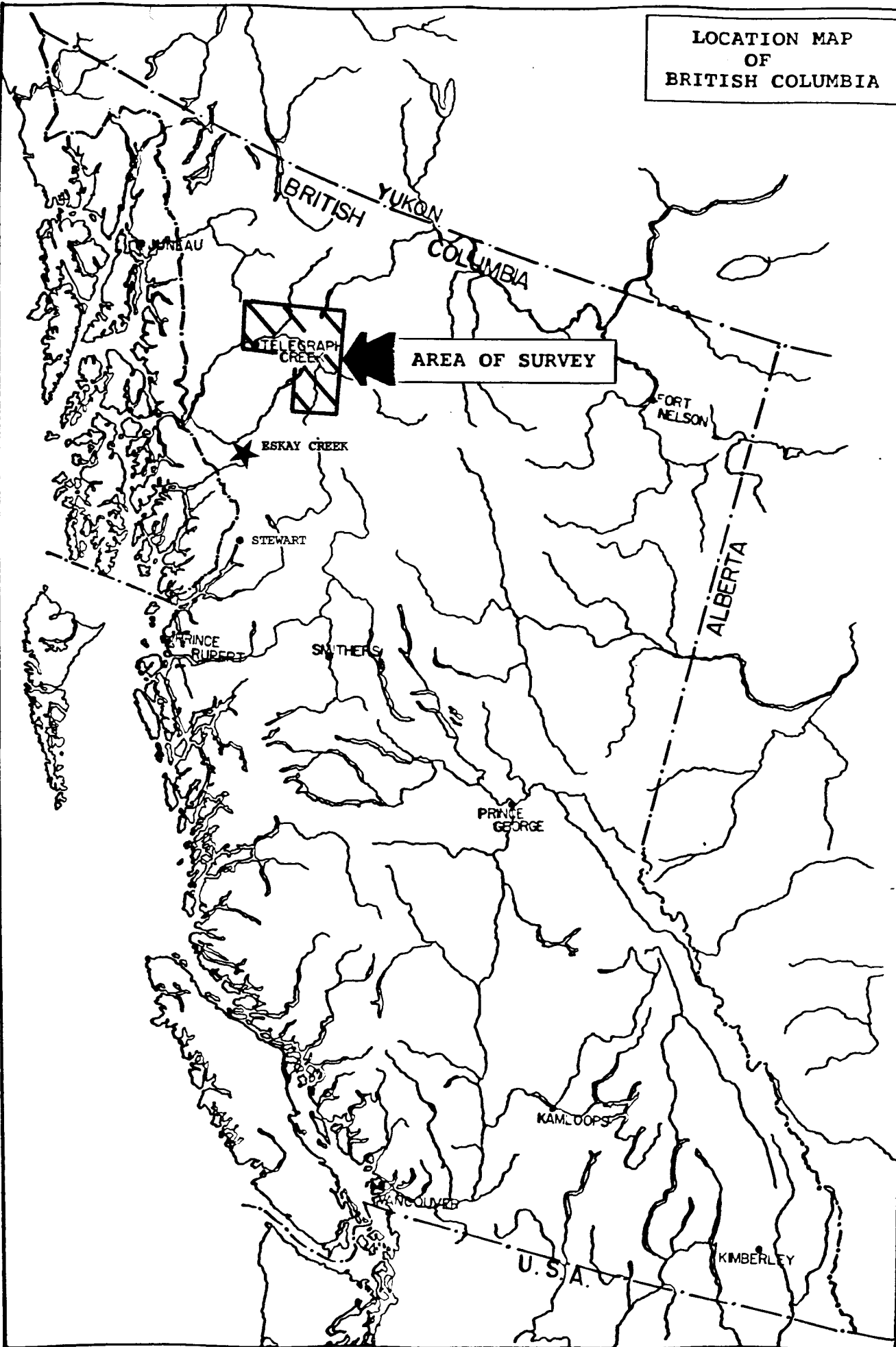
**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**20,760**

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LOCATION MAP  
OF  
BRITISH COLUMBIA



REPORT ON STREAM SEDIMENT GEOCHEMISTRY

KLAST 1-5 MINERAL CLAIMS

LIARD MINING DIVISION

1.00 SUMMARY

A helicopter supported, silt and heavy mineral sampling program was carried out on creeks flowing on and around the property.

A total of 16 sites were sampled, at which a silt and a heavy mineral sample were taken in each case for a total of 32 samples.

Only one sample gave a high gold value, however, other elements were found to be at elevated levels in most samples.

The work was performed by M. Waskett-Myers and N. Leach.

The Klast claims were staked along upper Quash Creek on the Klastline plateau to explore for the source of placer gold occurring in Quash Creek.

Total expenditure for this survey was \$5608.00.

2.00 INTRODUCTION

2.10 Property Definition

The Klast property is 100% owned by Chris W. Graf of Vancouver, British Columbia and consists of 85 units 5,251.30 acres.

<u>Claim Name</u>	<u>Record No.</u>	<u>Number of Units</u>	<u>Expiry Date</u>
Klast 1	6772	15	February 23, 1991
Klast 2	6773	18	February 23, 1991
Klast 3	6774	20	February 23, 1991
Klast 4	6775	16	February 23, 1991
Klast 5	6776	16	February 23, 1991

2.20 Location and access

The Klast property is located on approximately the centre of the Klastline plateau, 58 kilometres east-southeast of Telegraph Creek. Access is limited to helicopter from any of the bases in the area, in the present case the helicopter belonged to Yukon Airways Ltd. and was based in Dease Lake.

### 2.30 Topography and Vegetation

The property is in an area of varied topography, ranging from flat grassland to vertical cliffs. Elevations range from 1400 to 2000 metres. The vegetation consists mainly of alpine grasslands with some small scrub brush.

### 2.40 Objectives

The geochemical survey was undertaken to assess the potential for base and precious metal mineralization within the survey area.

## 3.00 **GEOCHEMISTRY**

### 3.10 Sampling Procedure

Sample sites were preselected in the office and 16 silt samples and 16 heavy samples were taken in the field. At the sample site a sample of the stream silt was collected and put into a kraft paper bag. The heavy mineral sample was collected by screening, to -20 mesh, enough material to give a 3-5 kg sample. The heavy mineral samples were collected from parts of the stream where the water flow tended to slow down i.e. from high to low energy. Once collected, the heavies sample was put into a 6 mil plastic bag.

### 3.20 Heavy Mineral Concentration

To eliminate sample prep and reduce transportation costs; the heavies were concentrated at the helicopter base in Dease Lake. The concentration was carried out by use of a Gold Genie spiral concentrator. The resulting concentrate was sieved to - 40 mesh, dried, the magnetics were removed and the remaining sample placed in a plastic vial.

### 3.30 Analytical Procedure

All samples were sent to Min-En Labs in North Vancouver for analysis.

The samples were analyzed for gold by means of fire assay with atomic absorption finish. Following the gold assay the samples were run for 12 elements (Ag,As,Cd,Do,Cu,Fe,Mn,Ni,Pb,Sb,Zn,Sn) using inductively coupled plasma (I.C.P.).

## 4.00 **CONCLUSIONS**

The silts were not anomalous in any elements and did not give an indication of mineralization.

One heavy mineral sample showed an elevated value for gold (24 ppb) and, as well, high values were detected for several elements (Ag, Co, Ni, Fe, Mn, Sn, Cu).

There is an indication of possible mineralization with associated gold which makes this property worthy of further work.

## LEGEND FOR GEOCHEMICAL MAPS

### HEAVIES

▲ Au Greater than 20 ppb

■ As Greater than 10 ppm

● Zn Greater than 200 ppm

### SILTS

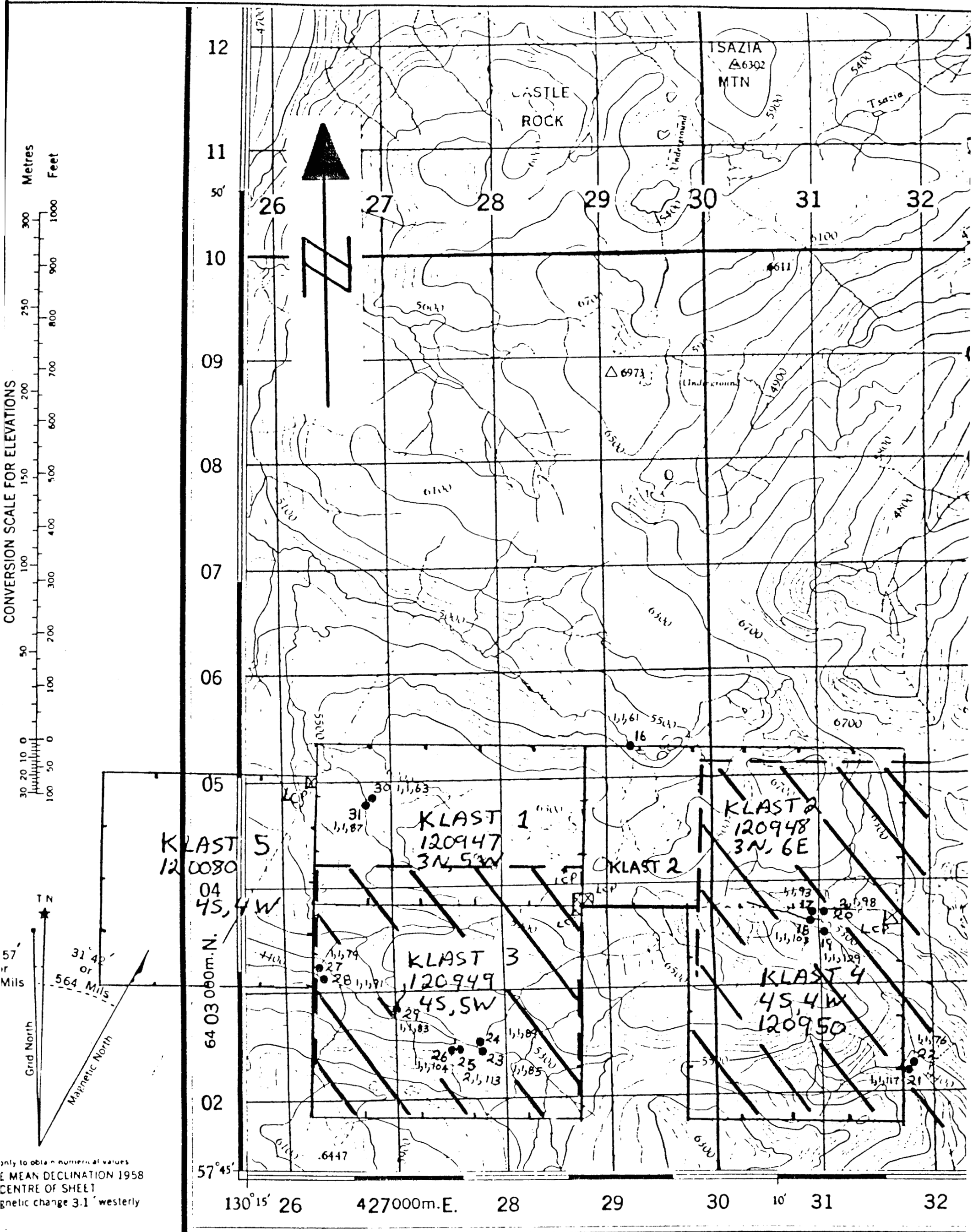
▲ Au Greater than 10 ppb

■ As Greater than 4 ppm

● Zn Greater than 200 ppm

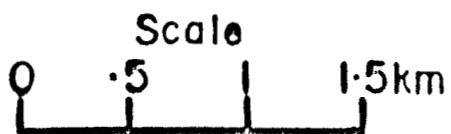


Alienated claims



only to obtain numerical values  
 MEAN DECLINATION 1958  
 CENTRE OF SHEET  
 magnetic change 3.1' westerly

• Sample site Au, As, Zn



# ACTIVE MINERALS LTD

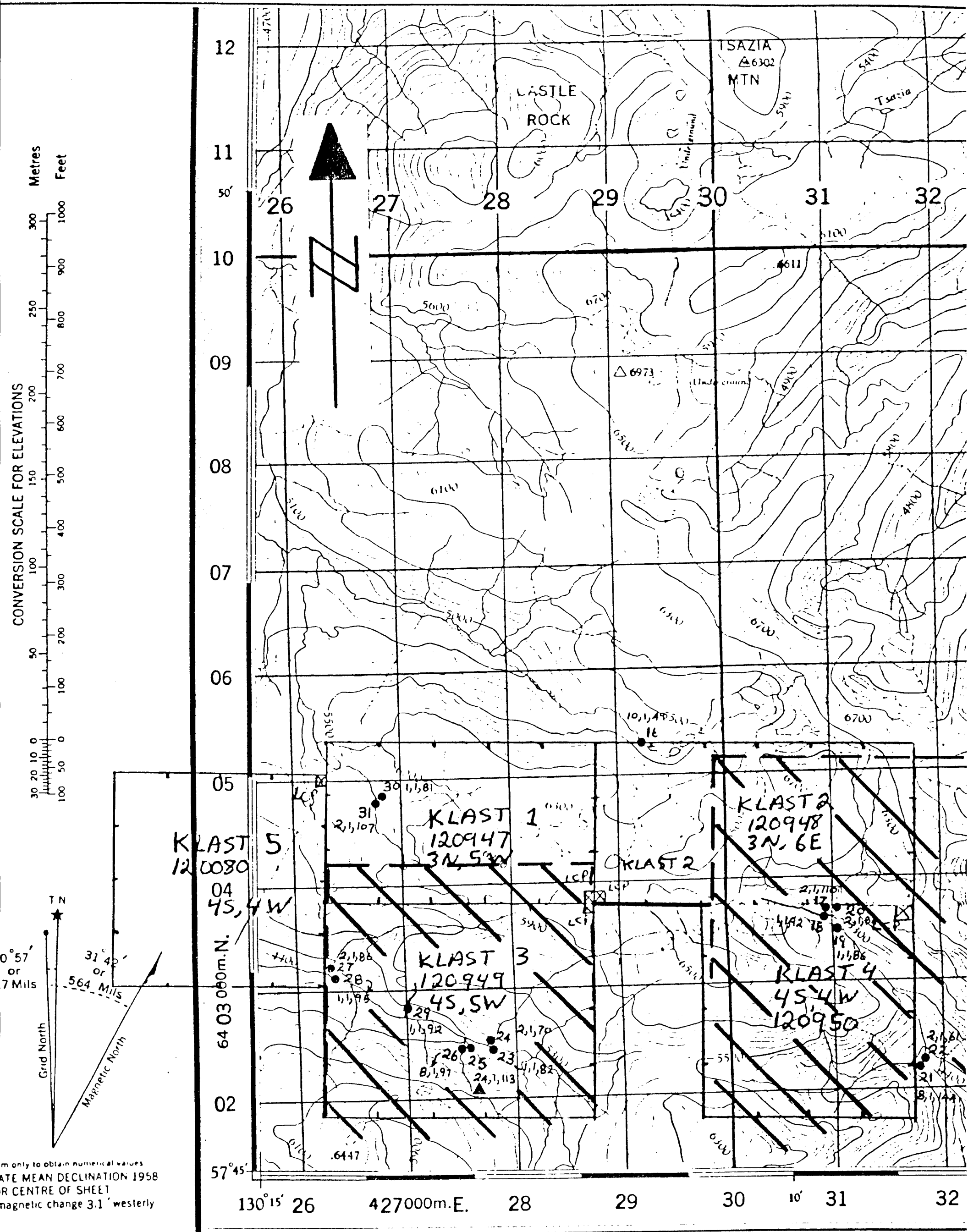
STIKINE GOLD PROJECT  
 KLAST CLAIMS  
 STREAM SILT GEOCHEM

Scale: ~~1:50,000~~

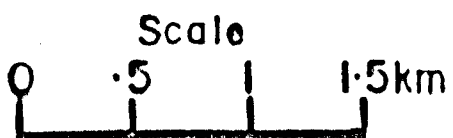
Date: SEP. 1990

Plate: 2





• Sample site Au,As,Zn



**ACTIVE MINERALS LTD**  
**STIKINE GOLD PROJECT**  
**KLAST CLAIMS**  
**HEAVY MINERAL GEOCHEM**

Scale: ~~1:50,000~~

Date: SEP. 1990

Plate: 3

STREAM SILT ASSAY RESULTS

KLAST CLAIMS

SAMPLE NAME	AG PPM	AS PPM	CD PPM	CO PPM	CU PPM	FE PPM	MN PPM	NI PPM	PB PPM	SB PPM	ZN PPM	SN PPM	AU PPB
DS016	2.2	1.0	0.1	28.0	84	61190	1091	24	17	1.0	61	1.0	1
DS017	1	1.0	0.1	27.0	88	53550	1180	60	25	1.0	93	1.0	1
DS018	1	1.0	0.1	24.0	79	50250	1308	37	23	1.0	103	1.0	1
DS019	0.8	1.0	0.1	24.0	99	50060	1343	26	30	1.0	129	1.0	1
DS020	0.6	1.0	0.1	26.0	129	57430	1801	30	36	1.0	98	1.0	2
DS021	0.3	1.0	0.1	20.0	82	46900	1092	30	44	1.0	117	1.0	1
DS022	0.1	1.0	0.1	23.0	106	62000	1290	10	29	1.0	76	1.0	1
DS023	0.3	1.0	0.1	20.0	74	45830	1208	30	33	1.0	85	1.0	1
DS024	0.5	1.0	0.1	20.0	97	44960	1183	16	34	1.0	89	1.0	1
DS025	0.8	1.0	0.1	22.0	93	48240	1271	38	40	1.0	113	1.0	2
DS026	1	1.0	0.1	20.0	69	44510	1219	29	37	1.0	104	1.0	1
DS027	0.9	1.0	0.1	19.0	86	43270	737	29	30	1.0	79	1.0	1
DS028	0.4	1.0	0.1	21.0	73	49080	1041	32	37	1.0	91	1.0	1
DS029	0.5	1.0	0.1	26.0	72	54230	1209	50	26	1.0	83	1.0	1
DS030	3.8	1.0	0.1	40.0	39	80270	1023	39	13	1.0	63	1.0	1
DS031	7.3	1.0	0.1	47.0	54	89050	1025	47	11	1.0	87	1.0	1

HEAVY MINERAL ASSAY RESULTS

KLAST CLAIMS

SAMPLE NAME	AG PPM	AS PPM	CD PPM	CO PPM	CU PPM	FE PPM	MN PPM	NI PPM	PB PPM	SB PPM	ZN PPM	SN PPM	AU PPB
DH16	2.1	1	0.1	44	198	115140	917	63	40	1	49	5	10
DH17	3.7	1	0.1	78	96	151890	1586	233	12	1	110	9	2
DH18	2.1	1	0.1	54	50	91510	1162	200	12	1	92	4	1
DH19	1.7	1	0.1	60	96	110060	1177	235	12	1	86	11	1
DH20	2	1	0.1	59	85	125470	1354	166	12	1	84	5	2
DH21	3.3	1	0.1	76	127	140770	1427	223	135	1	144	11	8
DH22	1.5	1	0.1	50	126	130400	1071	86	23	1	61	9	2
DH23	2.5	1	0.1	52	64	113460	1323	129	22	1	82	9	1
DH24	2.7	1	0.1	54	117	118760	1148	121	239	1	70	7	2
DH25	4.6	1	0.1	90	67	129030	1388	309	12	1	113	9	24
DH26	1.8	1	0.1	55	51	90970	1159	226	12	1	97	5	8
DH27	2.4	1	0.1	56	86	114880	1061	149	14	1	86	7	2
DH28	3.2	1	0.1	69	60	134120	1352	185	11	1	95	7	1
DH29	2.1	1	0.1	56	68	101100	1094	174	24	1	92	8	1
DH30	5.7	1	0.1	69	39	127560	1247	187	12	1	81	1	1
DH31	4.5	1	0.1	74	43	141620	1324	212	13	1	107	7	2

EXHIBIT "A"  
STATEMENT OF EXPENDITURES  
STREAM SEDIMENT GEOCHEMISTRY  
KLAST 1-4 CLAIMS  
LIARD MINING DIVISION

Salaries	M. Waskett-Myers	\$ 487.52
	N. Leach	250.08
Transportation	Air Fare	190.56
	Helicopter	3,542.42
	Car (incl. Gas)	136.82
Room and Board	Motel, Food	145.66
Analysis	Heavies (Prep., Gold, I.C.P.)	
	16 samples @ \$16.75/sample	268.00
	Silts (Prep., Gold, I.C.P.)	
16 samples @ \$13.00/sample	208.00	
Field Supplies	Sample Bags, Vials, etc.	16.67
Miscellaneous	Radios, Maps, Cab Fares, etc.	63.63
Report Preparation	Chris Graf	125.00
	M. Waskett-Myers	164.00
	Supplies, Photocopying	<u>9.91</u>
	TOTAL	<u>\$5,608.00</u>

M. WASKETT-MYERS, Geochemist

IN THE MATTER OF THE  
B.C. MINERAL ACT  
AND  
IN THE MATTER OF A SOIL GEOCHEMISTRY PROGRAM  
CARRIED OUT ON THE KLAST 1 - 5 MINERAL CLAIMS  
in the Liard Mining Division of the  
Province of British Columbia

AFFIDAVIT

I, M. Waskett-Myers, of Delta in the Province of British Columbia, make oath and say:

1. That I am a Consultant Geochemist and as such, have a personal knowledge of the facts to which I hereinafter depose;
2. That annexed hereto and marked as Exhibit "A" to this my Affidavit is true copy of expenditures incurred on a Soil Geochemistry program, on the Klast mineral claims.
3. That the said expenditures were incurred between the 31st day of July, 1990 and the 12th day of August, 1990, for the purpose of mineral exploration on the above-noted claims.



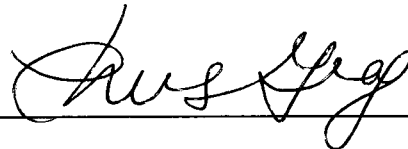
M. WASKETT-MYERS  
Geochemist

ACTIVE MINERALS LTD.

STATEMENT OF QUALIFICATIONS

M. D. Waskett-Myers has worked in Mineral Exploration for the past twenty five years, principally in the field of geochemistry.

I consider him qualified to prepare this report.

A handwritten signature in cursive script, appearing to read "Chris Graf", is written above a horizontal line.

Chris W. Graf, P. Eng.  
President

45° 30' 15' 130°00' 58°00'



**ACTIVE MINERALS LTD**  
**STIKINE GOLD PROJECT**  
**KLAST & KIN CLAIMS**  
**GEOLOGY**

Scale: 1:250,000	Date: SEP. 1990	Plate: 4
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MESOZOIC

TRIASSIC AND JURASSIC  
POST-UPPER TRIASSIC PRE-LOWER JURASSIC

12 Syenite, orthoclase porphyry, monzonite, pyroxenite

HICKMAN BATHOLITH

10. Hornblende granodiorite, minor hornblende-quartz diorite 11. Hornblende, quartz diorite, hornblende-pyroxene diorite, amphibolite and pyroxene-bearing amphibolite

TRIASSIC  
UPPER TRIASSIC

9 Undifferentiated volcanic and sedimentary rocks (units 5 to 8 inclusive)

8 Augite-andesite flows, pyroclastic rocks, derived volcaniclastic rocks and related subvolcanic intrusions; minor greywacke, siltstone and polymictic conglomerate

7 Siltstone, thin-bedded siliceous siltstone, ribbon chert, calcareous and dolomitic siltstone, greywacke, volcanic conglomerate, and minor limestone

6 Limestone, fetid argillaceous limestone, calcareous shale and reefoid limestone; may be in part younger than some 7 and 8

5 Greywacke, siltstone, shale; minor conglomerate, tuff and volcanic sandstone

MIDDLE TRIASSIC

4 Shale, concretionary black shale; minor calcareous shale and siltstone

PERMIAN  
MIDDLE AND UPPER PERMIAN

3 Limestone, thick-bedded mainly bioclastic limestone; minor siltstone, chert and tuff

PERMIAN AND OLDER

2 Phyllite, argillaceous quartzite, quartz-sericite schist, chlorite schist, greenstone, minor chert, schistose tuff and limestone

MISSISSIPPIAN

1 Limestone, crinoidal limestone, ferruginous limestone; maroon tuff, chert and phyllite

B Amphibolite, amphibolite gneiss; age unknown probably pre-Upper Jurassic

A Ultramafic rocks; peridotite, dunite, serpentinite; age unknown, probably pre-Lower Jurassic

- Geological boundary (defined and approximate, assumed) .....
- Bedding (horizontal, inclined, vertical, overturned) .....
- Anticline .....
- Syncline .....
- Fault (defined and approximate, assumed) .....
- Thrust fault, teeth on hanging-wall side (defined and approximate, assumed) .....
- Fossil locality .....
- Mineral property .....
- Glacier .....

INDEX TO MINERAL PROPERTIES

LEGEND

CENOZOIC

QUATERNARY  
PLEISTOCENE AND RECENT

29 Fluvialtle gravel; sand, silt; glacial outwash, till, alpine moraine and colluvium

28 Hot-spring deposit, tufa, aragonite

27 Olivine basalt, related pyroclastic rocks and loose tephra; younger than some of 29

TERTIARY AND QUATERNARY  
UPPER TERTIARY AND PLEISTOCENE

26 Rhyolite and dacite flows, lava domes, pyroclastic rocks and related subvolcanic intrusions; minor basalt

25 Basalt, olivine basalt, dacite, related pyroclastic rocks and subvolcanic intrusions; minor rhyolite; in part younger than some 26

CRETACEOUS AND TERTIARY  
UPPER CRETACEOUS AND LOWER TERTIARY  
SLOKO GROUP

24 Light green, purple and white rhyolite, trachyte and dacite flows, pyroclastic rocks and derived sediments

22 23 Biotite leucogranite, subvolcanic stocks, dykes and sills  
23. Porphyritic biotite andesite, lava domes, flows and (?) sills

SUSTUT GROUP  
21 Chert-pebble conglomerate, granite-boulder conglomerate, quartzose sandstone, arkose, siltstone, carbonaceous shale and minor coal

20 Felsite, quartz-feldspar porphyry, pyritiferous felsite, orbicular rhyolite; in part equivalent to 22

19 Medium-to coarse-grained, pink biotite-hornblende quartz monzonite

JURASSIC AND/OR CRETACEOUS  
POST-UPPER TRIASSIC PRE-TERTIARY

18 Hornblende diorite

17 Granodiorite, quartz diorite; minor diorite, leucogranite and migmatite

JURASSIC  
MIDDLE (?) AND UPPER JURASSIC  
BOWSER GROUP

16 Chert-pebble conglomerate, grit, greywacke, subgreywacke, siltstone and shale; may include some 13

MIDDLE JURASSIC  
15 Basalt, pillow lava, tuff-breccia, derived volcaniclastic rocks and related subvolcanic intrusions

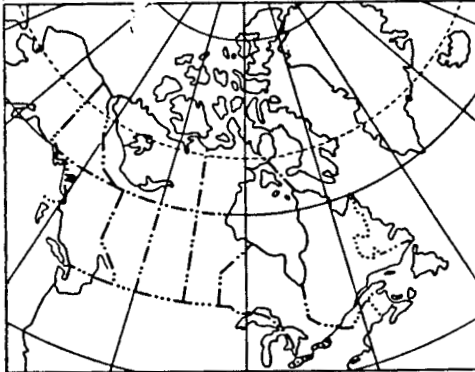
LOWER AND MIDDLE JURASSIC  
14 Shale, minor siltstone, siliceous and calcareous siltstone, greywacke and ironstone

LOWER JURASSIC  
13 Conglomerate, polymictic conglomerate; granite-boulder conglomerate, grit, greywacke, siltstone; basaltic and andesitic volcanic rocks, peperites, pillow-breccia and derived volcaniclastic rocks



Published, 1972

Copies of this map may be obtained from the  
Geological Survey of Canada, Ottawa



INDEX MAP

Geology by J. G. Souther 1956-58, 1961, 1965-67, 1969

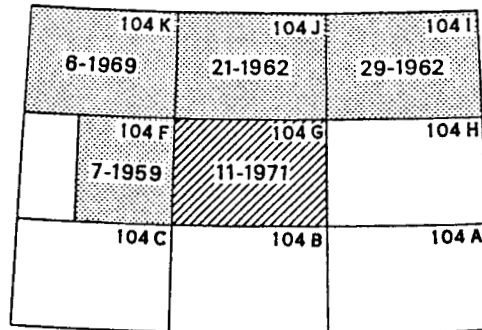
To accompany G. S. C. Paper 71-44 by J. G. Souther

This preliminary edition may be subject to revision and correction

Geological cartography by the Geological Survey of Canada

Any revisions or additional geological information known to the  
user would be welcomed by the Geological Survey of Canada

Printed by the Surveys and Mapping Branch

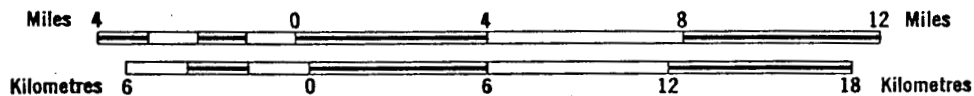


NATIONAL TOPOGRAPHIC SYSTEM REFERENCE AND INDEX  
TO ADJOINING GEOLOGICAL SURVEY OF CANADA MAPS

MAP 11-1971  
TELEGRAPH CREEK  
BRITISH COLUMBIA

MAP 11-1971  
PAPER 71-44  
GEOLOGY  
TELEGRAPH CREEK  
BRITISH COLUMBIA

Scale 1:250,000



Universal Transverse Mercator Projection

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