

LOG NO: 11-30	RD.
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ASSESSMENT REPORT  
ON  
GEOCHEMICAL WORK  
ON THE FOLLOWING CLAIM

TREATY 16 . . . . 7828(8)

located

60 KM NORTH OF  
STEWART, BRITISH COLUMBIA  
SKEENA MINING DIVISION

56 degrees 29 minutes latitude  
130 degrees 02 minutes longitude

N.T.S. 104B/8E

PROJECT PERIOD: August 17-26, 1990

ON BEHALF OF  
BRIAN MCINTYRE  
ABBOTSFORD, B.C.

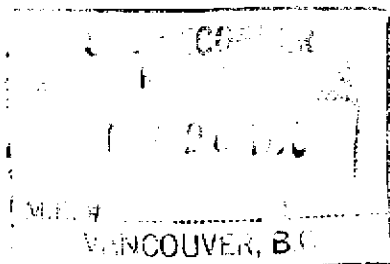
REPORT BY

D. Cremonese, P. Eng.  
602-675 W. Hastings  
Vancouver, B.C.

Date: November 22, 1990

20,484

GEOLOGICAL BRANCH  
ASSESSMENT REPORT



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## 1. INTRODUCTION

### A. Property, Location, Access and Physiography

The property is located about 60 km north of Stewart, British Columbia (see Fig. 1). Nearest permanent road is Highway 37, about 28 km to the northeast. The Knipple Glacier ice-road, part of the recently completed access road into the Brucejack Lake gold-silver property (Newhawk/Granduc joint venture), is about 4 km to the southwest. Current access into the property is by helicopter, either from the base at Stewart or at Bell II on Highway 37.

The Legal Corner Post for the claim is located on the southeast corner of the claim, at the edge of an extensive icefield covering the height of land atop the southeastern portion of a ridge on the northeast side of Knipple Glacier. Property elevations vary from approximately 1500 to just over 2000 m. Vegetation in the area is sparse because of the general high altitude and limited rock exposure; where present it consists mainly of little shrubs, mountain grasses and heathers. Slopes range from steep to precipitous; the greater portion of the property is covered by glacier or icefields.

Climate is severe, particularly at the higher elevations. Heavy snowfalls in winter and rain in the short summer working season are typical of the Stewart area.

### B. Status of Property

Relevant claim information is summarized below:

Name	Record No.	No. of Units	Record Date
Treaty 16	7828(8)	9	Aug. 26, 1990

Claim locations are shown on Fig. 2 after government N.T.S. map 104B/8E. The claims are registered in the name of Brian McIntyre of Abbotsford, British Columbia.

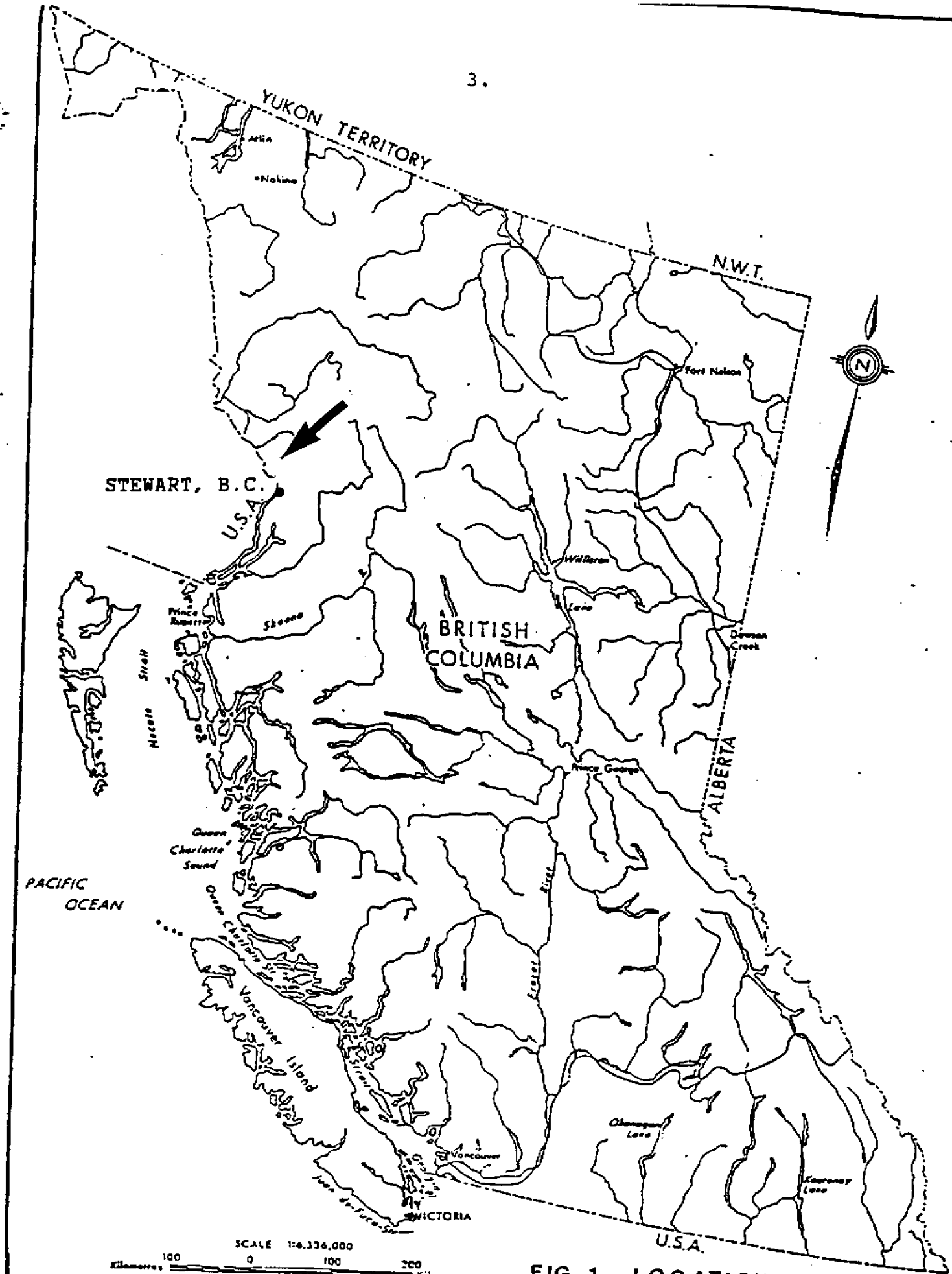
### C. History

There are no references to any early exploration work on the property area in conventional references such as the Annual Minister of Mines Reports, Geological Bulletins, or Assessment Reports (Index and Maps), etc.

In the modern era, interest in the general region was aroused after discovery of high grade gold-silver mineralization near Brucejack Lake. Very recent regional discoveries such as the rich Eskay Creek deposits have intensified exploration efforts through-

130  
4531  
9711

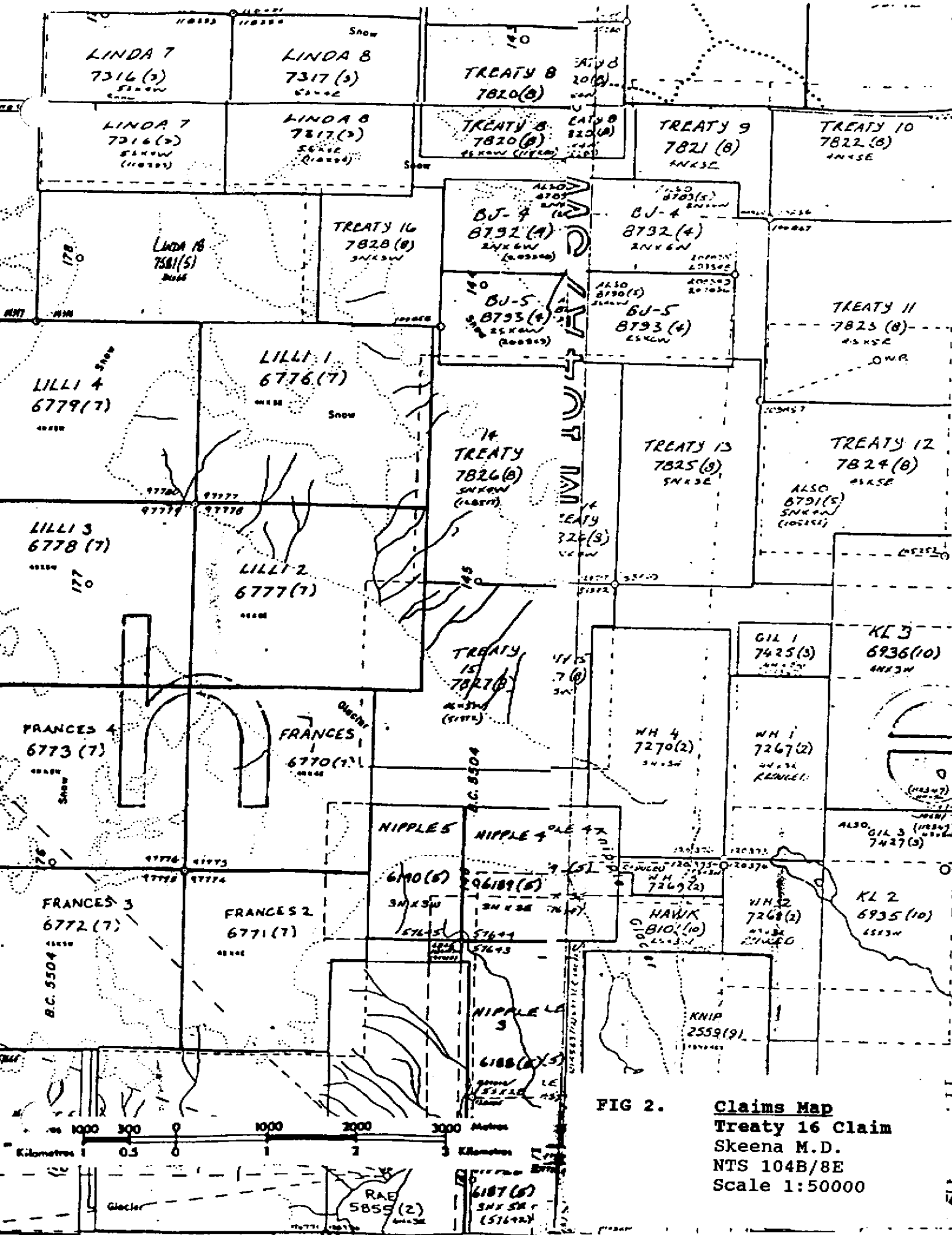
3.



2000  
2

SCALE 1:6,336,000  
 100 0 100 200  
 Kilometres Kilometres

FIG 1 LOCATION MAP  
 BRITISH COLUMBIA



out the Stewart area. In particular, this renewed search has concentrated on particular felsic volcanic suites which are thought to be favourable hosts for exhalative-type mineralization.

#### D. References

1. GROVE, E.W. (1971): Bulletin 58, Geology and Mineral Deposits of the Stewart Area. B.C.M.E.M.P.R.
2. GROVE, E.W. (1982): Unuk River, Salmon River, Anyox Map Areas. Ministry of Energy, Mines and Petroleum Resources, B.C.
3. GROVE, E.W. (1987): Geology and Mineral Deposits of the Unuk River-Salmon River-Anyox Area, Bulletin 63, BCMEMPR
4. ALLDRICK, D.J.(1984); Geological Setting of the Precious Metals Deposits in the Stewart Area, Paper 84-1, Geological Fieldwork 1983", B.C.M.E.M.P.R.
5. ALLDRICK, D.J.(1985); "Stratigraphy and Petrology of the Stewart Mining Camp (104B/1E)", p. 316, Paper 85-1, Geological Fieldwork 1984, B.C.M.E.M.P.R.
6. BRITTON, J.M. AND ALLDRICK, D.J. (1988); "Sulphurets Map Area", p. 199, Paper 1988-1, Geological Fieldwork 1987, B.C.M.E.M.P.R.

#### E. Summary of Work Done.

The rock geochemical survey conducted over the claims area was undertaken by geological contractor, International Kodiak Resources Inc., of Vancouver, B.C., as part of a larger project in the immediate area spanning the period from August 17 to August 26, 1990. Object of the 1990 program was to carry out reconnaissance geochemical sampling over accessible rock outcrops with particular attention to gossanous zones and favourable geological structures.

Fieldwork was carried out on August 23 consisting of collection of 4 rock geochemical (character) samples. Sampler was geologist Shawn McGrath. Access to the property was by helicopter (Northern Mtn.) originating from International Kodiak's main camp on the Iskut River, about 20 km southwest of Bob Quinn on Highway 37.

All of the samples were analysed for gold by standard AA techniques, for mercury, and also for 30 elements by I.C.P. (Inductively Coupled Argon Plasma) at the Eco-Tech facility in Kamloops, B.C.

## 2. TECHNICAL DATA AND INTERPRETATION

### A. Regional Geology

The property lies within a broad, north-northwest trending belt of Triassic and Jurassic volcanic and sedimentary rocks termed by Grove (1971) as the "Stewart Complex". This belt is bounded to the west by the Coast Crystalline Belt (mainly granodiorites) and to the east by a thick series of sedimentary rocks known as the Bowser Assemblage (Middle Jurassic to Upper Jurassic age).

Property location relative to regional geology is shown on Fig. 3.

### B. Property Geology

Due to the steep topography on the Treaty 16 claim, only a short interval along the ridge crest was examined. This ridge is cored by shallowly northeast dipping argillites with minor arenites.

The argillites consist of dark grey weathering, fine grained siltstone to shale interbedded with subordinate fine, tan weathering arenites. Arenitic layers are up to 40 cm thick whereas argillaceous layers are between 1 and 4 cm thick. The argillites weather a medium red colour and contain minor disseminated pyrite and local pyritic stringers. No other sulphides were identified in the argillaceous interval.

### C. Geochemistry - Rock Samples

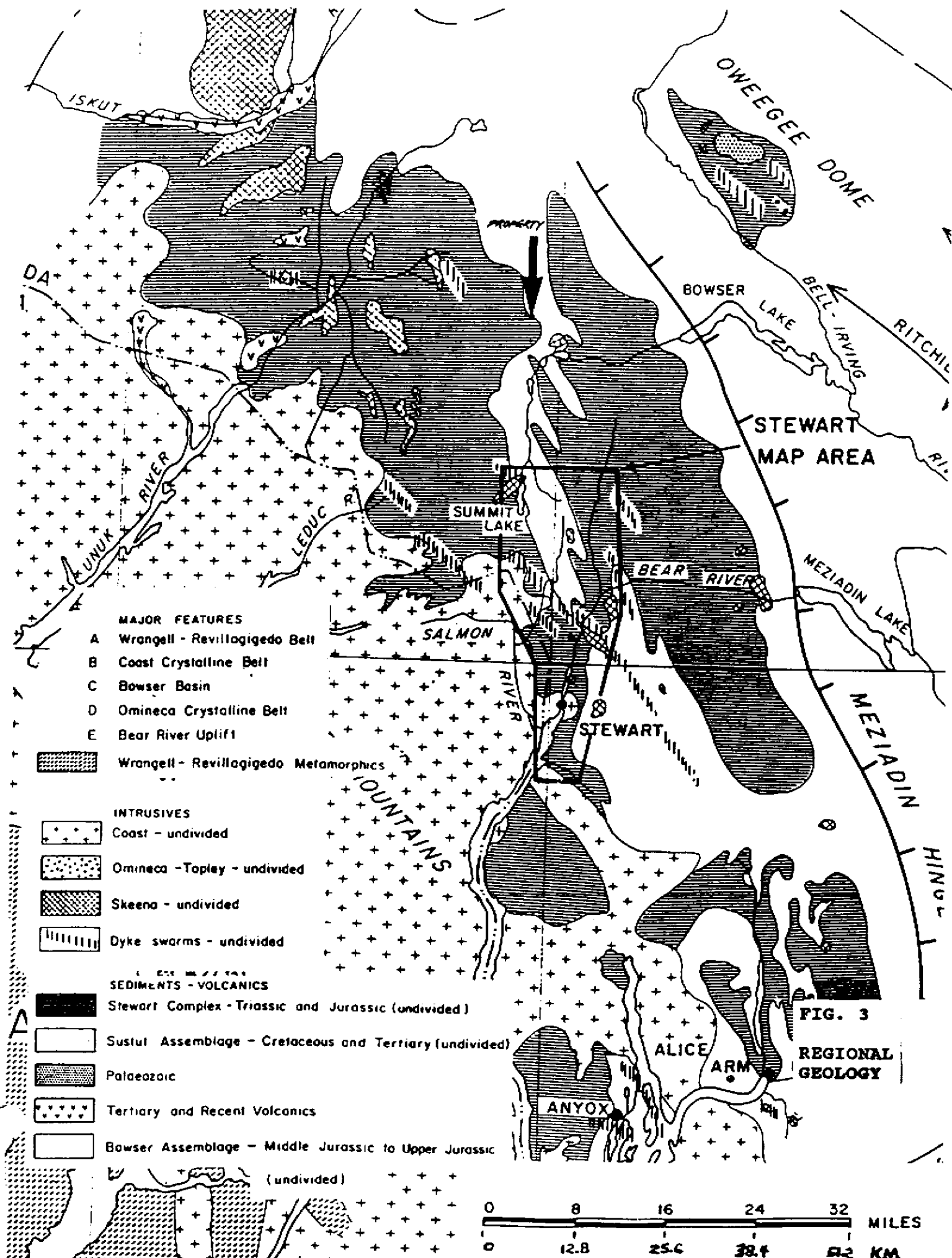
#### a. Introduction

Four rock geochem samples were collected by Shawn McGrath during one day of traversing over the Treaty 16 claims. Sample sites were plotted on a base map prepared from a government topographic map (cf. Sample Location Map--Fig. 4). Sample locations were fixed according to field altimeter readings and by reference to air photos.

Gold values in ppb and silver values in ppm have been plotted on Fig. 5, which is drawn at a scale of 1:5,000. Fig. 6, at the same scale, presents values of the following pathfinder elements: mercury (in ppb), arsenic (in ppm) and antimony (in ppm).

#### b. Treatment of Data

The 4 rock geochem samples collected during the 1990 work program comprise much too small a set for efficient use of standard statistical methods for determining threshold and anomalous



ISKUT

OWEGEE DOME

DA

UNUK RIVER

LEDUC RIVER

SALMON RIVER

BOWSER LAKE

BELL-IRVING RIVER

RITCHIE RIVER

STEWART MAP AREA

SUMMIT LAKE

BEAR RIVER

MEZIADIN LAKE

STEWART

MEZIADIN RIVER

MOUNTAINS

ALICE ARM

ANYOX



levels. In lieu of such treatment, the author has simply chosen anomalous levels by reference to several rock geochemical programs conducted over other properties in the Stewart region over the past ten years. Anomalous values, on this basis, are indicated below:

<u>Element</u>	<u>Anomalous Above</u>
Gold	100 ppb*
Silver	3.6 ppm
Mercury	400 ppb
Arsenic	120 ppm
Antimony	30 ppm

\* A value of about 100 ppb for gold is considered the norm for the Betty Creek-Salmon River Formation rocks (these underlie the study area); a greater value, say in the 200 ppb range, would be more appropriate for the more highly mineralized Unuk River Formation.

Although many more elements were analyzed for by I.C.P., they were not selected for pictorial representation either because of their relatively flat, uninteresting distribution or their limited economic relevance.

#### c. Sample Descriptions

Following are rock sample descriptions from field notes. Those elements containing anomalous levels of any of the elements listed in the preceding section have those values appended to the descriptions. Unless otherwise indicated, all samples are grabs.

SM-R-089 Thinly bedded argillites with iron stain along bedding planes.

SM-R-090 Description as above.

SM-R-091 Description as above.

SM-R-092 Description as above.

#### d. Discussion

None of the four rock geochem samples taken during the geochem program returned anomalous values. The uniformly low results obtained are not unexpected considering the minimal mineralization observed in the argillites and arenites underlying the area investigated.

#### D. Field Procedure and Laboratory Technique

Rock samples were taken in the field with a prospector's pick and emplaced in a standard sample bag. The bags were then marked and transported by helicopter to Eco-Tech's sample prep lab in Stewart, B.C. After standard sample preparation, pulps were shipped by bus to the main Eco-Tech laboratory in Kamloops, B.C.

At the lab, a .500 gram subsample was digested with 3ml of 3-1-2 HCl-HNO<sub>3</sub>-H<sub>2</sub>O at 95 degrees Centigrade for one hour, then diluted to 10 ml with water. The resulting solution was tested by Inductively Coupled Argon Plasma to yield quantitative results for 30 elements. Gold was analysed by standard atomic absorption methods from a 10 gram subsample.

#### E. Conclusions

The 1990 exploration program over the Treaty 16 claim consisted of helicopter-supported rock geochemical sampling. The program was of a reconnaissance nature, designed to isolate areas worthy of follow-up.

The areas traversed were underlain by argillites and arenites containing little in the way of mineralization. Visual examination of non-accessible areas of the claim indicate that these too are underlain by similar rocks. The low results obtained in the rock geochem survey suggests that the sediments have minimal economic potential and for this reason no further work is recommended on this property.

Respectfully submitted:



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D. Cremonese, P.Eng.  
Nov. 22, 1990

## APPENDIX I -- WORK COST STATEMENT

Field Personnel: Contractor -- International Kodiak Project Period--August 17-26, 1990 Shawn McGrath, Geologist 1.0 day @ \$240/day	\$ 240
Helicopter--Northern Mtn. (from Kodiak Camp--Iskut River) Crew drop-offs/pick-ups Aug. 23: 0.2 hrs.* @ \$725	145
Contractor's camp/board/food/support costs: 1 man-days @ \$125/man-day	125
Field supplies	20
Mob-demob charges (Personnel/equip. from Vancouver to base camp and return). Prorated portion: 1/18 x \$3,300	183
Assays -- Eco-Tech (Kamloops lab) Geochem Au, Hg, I.C.P. and rock sample preparation 4 @ \$22 per sample	88
Project supervision/Report and map preparation D. Cremonese, P.Eng., 0.75 day @ \$400/day Draughting -- RPM Computer Word Processor - 3 hrs. @ \$25/hr. Copies, blow-ups, jackets, maps, etc.	300 150 75 40
TOTAL..... \$	1,366

Amount Claimed Per Statement of Exploration: \$ 900

\*Split-charter with other jobs in area.

## APPENDIX II - CERTIFICATE

I, Dino M. Cremonese, do hereby certify that:

1. I am a mineral property consultant with an office at Suite 602-675 W. Hastings, Vancouver, B.C.
2. I am a graduate of the University of British Columbia (B.A.Sc. in metallurgical engineering, 1972, and L.L.B., 1979).
3. I am a Professional Engineer registered with the Association of Professional Engineers of the Province of British Columbia as a resident member, #13876.
4. I have practiced my profession since 1979.
5. This report is based upon work carried out on the Treaty 16 mineral claim, Skeena Mining Division in August of 1990. Reference to field reports, notes and maps made by geologist assistant Shawn McGrath and his immediate supervisor, geologist Rick Walker, is acknowledged. I have full confidence in the abilities of all samplers used in the 1990 geochemical program and am satisfied that all samples were taken properly and with care.
6. I am a principal of Teuton Resources Corp., currently part owner of the Treaty 16 claim. This report was prepared solely for satisfying assessment work requirements in accordance with government regulations.

Dated at Vancouver, B.C. this 22 day of November, 1990.



D. Cremonese, P.Eng.

**APPENDIX III**

**ASSAY CERTIFICATES**

ECO-TECH LABORATORIES LTD.

INTERNATIONAL KODIAK RESOURCES - ETK 90-502

PAGE 2

ETI	DESCRIPTION	AR(ppb)	AG	AL(%)	AS	B	BA	BI	CA(%)	CD	CO	CR	CU	FE(%)	Z(%)	LA	MG(%)	NI	MO	NA(%)	NI	P	PB	SD	SI	SR	TI(%)	V	V	V	Y	ZN	
502 - 27	E-00-E 342	5	60	1.4	.76	25	82	30	5	.93	1	0	49	45	5.51	.10	<10	.20	75	72	.05	23	678	24	45	<20	13	.25	<10	107	<10	2	194
502 - 28	E-00-E 343	5	115	.6	1.62	25	66	10	5	.19	1	10	40	47	6.24	.07	20	1.32	460	22	.05	25	1070	30	10	<20	9	.01	10	55	<10	4	73
502 - 29	E-00-E 344	5	140	.6	1.70	15	70	50	15	.36	1	11	51	13	5.44	.08	<10	1.30	435	11	.06	14	1100	10	42	<20	0	.17	10	42	<10	6	89
502 - 30	V-SN-E 089	10	60	1.2	2.53	30	70	60	20	.06	<1	4	117	21	5.90	.07	<10	1.04	697	3	.06	34	1140	22	5	<20	21	<.01	<10	90	<10	2	89
502 - 31	V-SN-E 090	5	50	.2	1.49	25	104	45	10	.92	<1	5	121	19	4.16	.06	<10	1.17	490	7	.06	29	2640	22	5	<20	90	.06	<10	65	<10	5	71
502 - 32	V-SN-E 091	5	75	.4	2.27	30	74	50	15	.04	<1	9	106	43	5.33	.07	<10	2.05	731	3	.05	57	700	24	10	<20	16	<.01	<10	94	<10	1	110
502 - 33	V-SN-E 092	5	60	.4	1.85	30	88	65	10	.11	<1	4	89	32	4.05	.09	<10	1.62	506	6	.05	41	1060	22	10	<20	12	<.01	<10	84	<10	2	94

TREATY  
16

NOTE: C = LESS THAN

*[Signature]*  
 ECO-TECH LABORATORIES LTD.  
 JETTA JEALOUSIE  
 B.C. CERTIFIED ASSAYER

SC90/INT.KODIAK

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

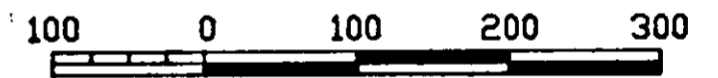
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LEGEND

- CLAIM LINE
- CONTOUR (500')
- - - ICE
- STREAM
- x SM-R 092 Hg(ppb), As(ppm), Sb(ppm)

SCALE 1:5000



METERS

TREATY 16  
#7828

LCP

TREATY 16 CLAIM  
1990 GEOCHEMICAL PROGRAM

FIG. 4  
SAMPLE LOCATION MAP  
(ROCKS)

①

J.C.

SKEENA M.D., B.C.

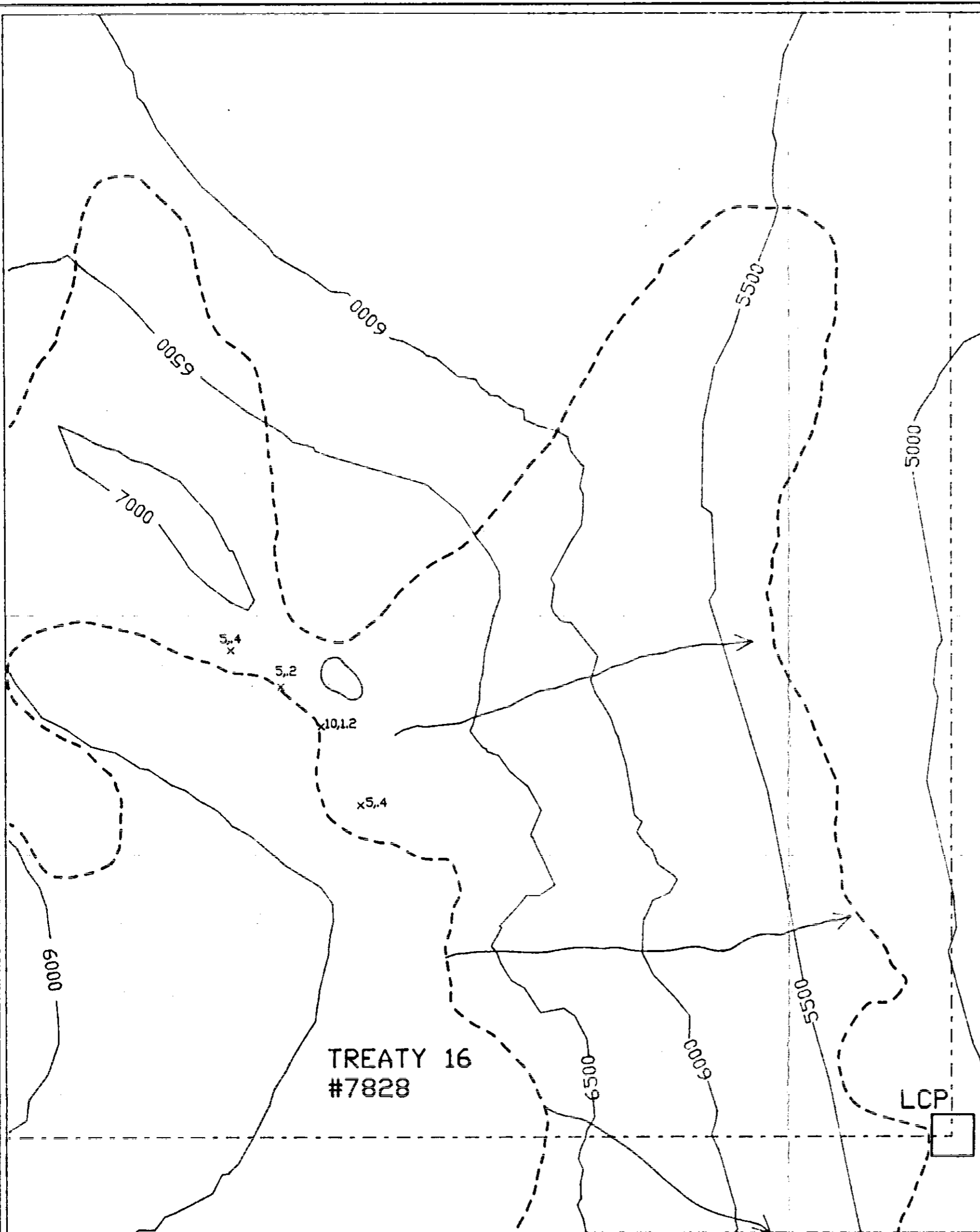
DATE: NOV. 1990

N.T.S. 104 B/8E

DRAWN BY RPM MAPPING

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

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LEGEND

- CLAIM LINE
- CONTOUR (500')
- - - - - ICE
- > STREAM
- x 5.4 Hg(ppb), As(ppm), Sb(ppm)

SCALE 1:5000



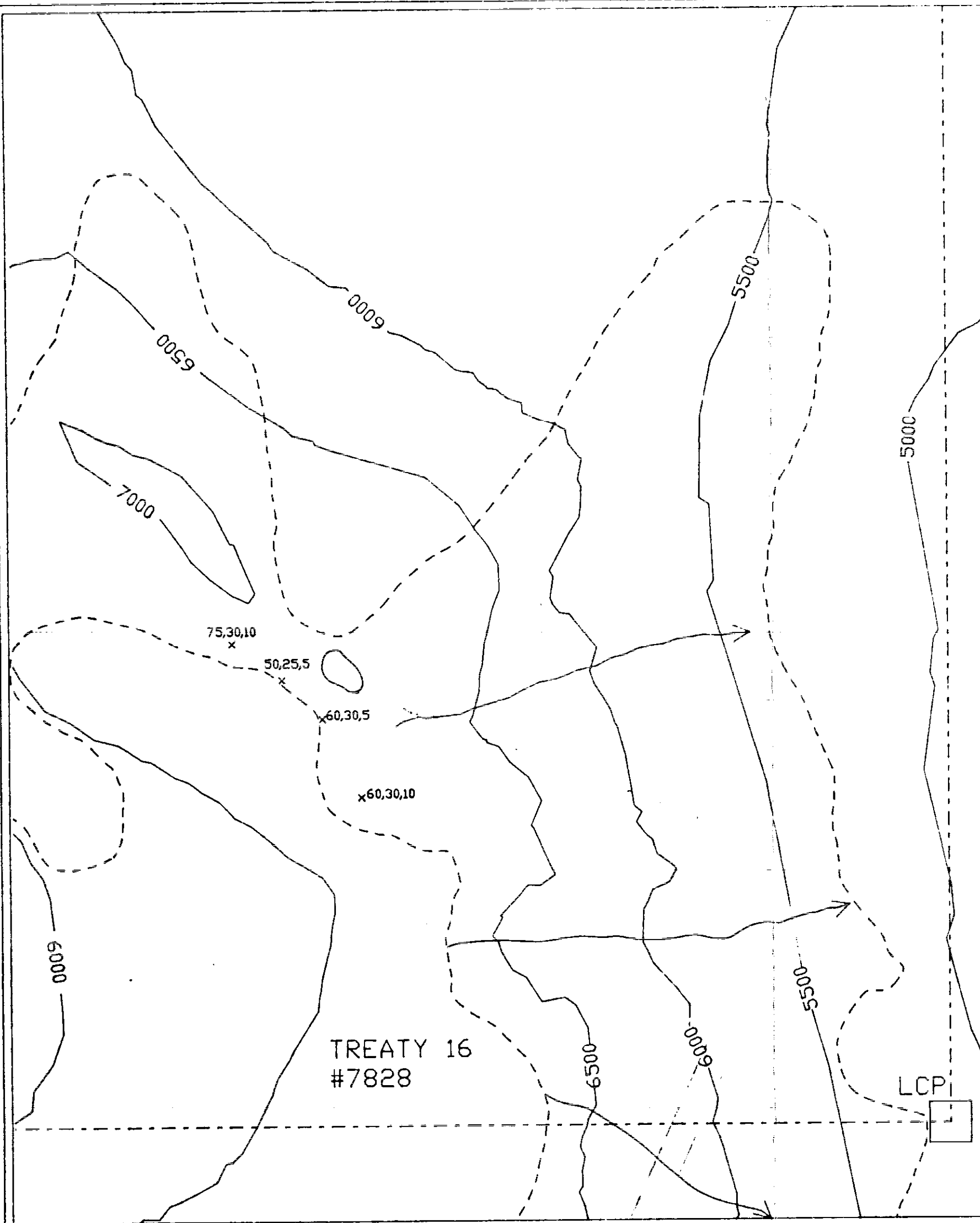
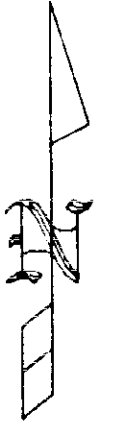
METERS

TREATY 16 CLAIM	
1990 GEOCHEMICAL PROGRAM	
FIG. 5 Au(ppb) & Ag(ppm) VALUES	
②	<i>J.C.</i>
SKEENA M.D., B.C.	DATE: NOV. 1990
N.T.S. 104 B/8E	DRAWN BY RPM MAPPING



GEOLOGICAL BRANCH  
ASSESSMENT REPORT

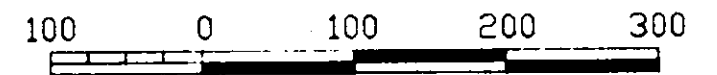
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LEGEND

- CLAIM LINE
- ~~~~~ CONTOUR (500')
- - - - ICE
- STREAM
- x 60,30,10 Hg(ppb), As(ppm), Sb(ppm)

SCALE 1:5000



METERS

TREATY 16  
#7828

LCP

TREATY 16 CLAIM	
1990 GEOCHEMICAL PROGRAM	
FIG. 6 Hg(ppb), As(ppm) & Sb(ppm) VALUES	
(3)	<i>J.C.</i>
SKEENA M.D., B.C.	DATE: NOV. 1990
N.T.S. 104 B/BE	DRAWN BY RPM MAPPING