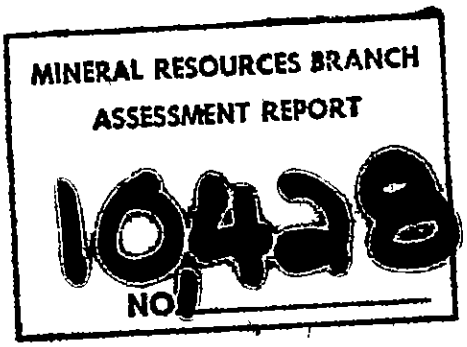
82-372-10428



DU PONT OF CANADA EXPLORATION LIMITED

GEOLOGICAL AND GEOCHEMICAL REPORT

ON THE SELLY PROPERTY

ATLIN MINING DIVISION

(BRITISH COLUMBIA)

LAT. 59°45', LONG. 134°53'

NTS: 104-M-5E

OWNER OF CLAIMS: DU PONT OF CANADA EXPLORATION LIMITED

OPERATOR: DU PONT OF CANADA EXPLORATION LIMITED

Submitted by: J.T. Neelands
D. M. Strain,
Date : 1982 May

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LIST OF DRAWINGS

INTRODUCTION

During 1981 May, reconnaissance stream sediment sampling was carried out in the Tagish-Bennett Lake areas of northwestern British Columbia. The sampling was undertaken as part of a large regional programme known as Kulta Project. The areal extent of this project is shown on Dwgs. KU.81-1 and KU.81-1a. As a results of an anomalous gold sample in a creek draining north into Skelly Lake the SELLY Property and other Du Pont properties were staked (Dwg. KU.81-244).

LOCATION AND ACCESS

The SELLY claim is located within the Atlin Mining Division, NTS 104-M-5E (Lat. 59°45'N, Long. 134°53'W). The property is located at the southwest end of Skelly Lake. The nearest population centre is Carcross, YT, approximately 50 km to the northwest. The claim is accessible by helicopter from Carcross or from a point along the Carcross-Skagway Alaska Highway, 15 kilometres west of the claims.

TOPOGRAPHY AND VEGETATION

The claims lie on the mountain slope at the southwest corner of Skelly Lake. Elevation varies from a high of 1750 metres to a low of 850 metres at the lake. The slope is dissected by various streams running north into Skelly Lake and northeast into Racine Creek. Mature stands of spruce occur at the lower elevations while willow, alders and spruce bushes dominate in the higher regions.

PROPERTY DEFINITION

The SELLY property consists of one claim of 20 units. See Dwg. KU.81-247 for claim locations. The claims are in good standing until 1982 June 23.

SELLY	Record No.:	1453
	Tag No. :	75800
	Date Recorded:	1981 June 23

PREVIOUS WORK

No previous work is recorded concerning the property. The property was staked in 1981 June on the basis of an auriferous stream sediment anomaly. Follow-up work in July and August consisted of collecting the following samples: 27 soil, 12 rock, and 6 stream sediment. The property was observed to be underlain by metamorphic rocks intruded by granitic rocks.

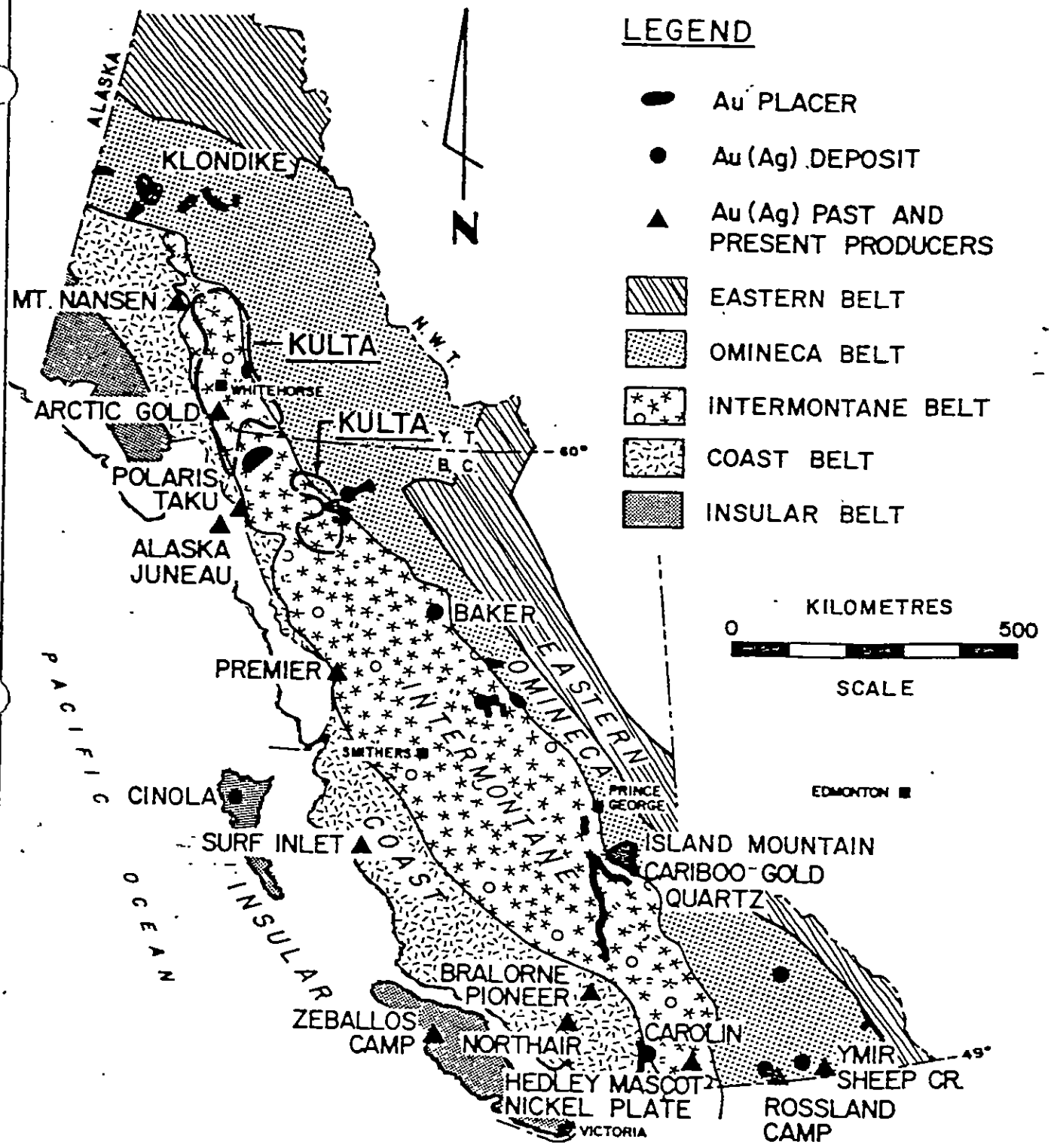


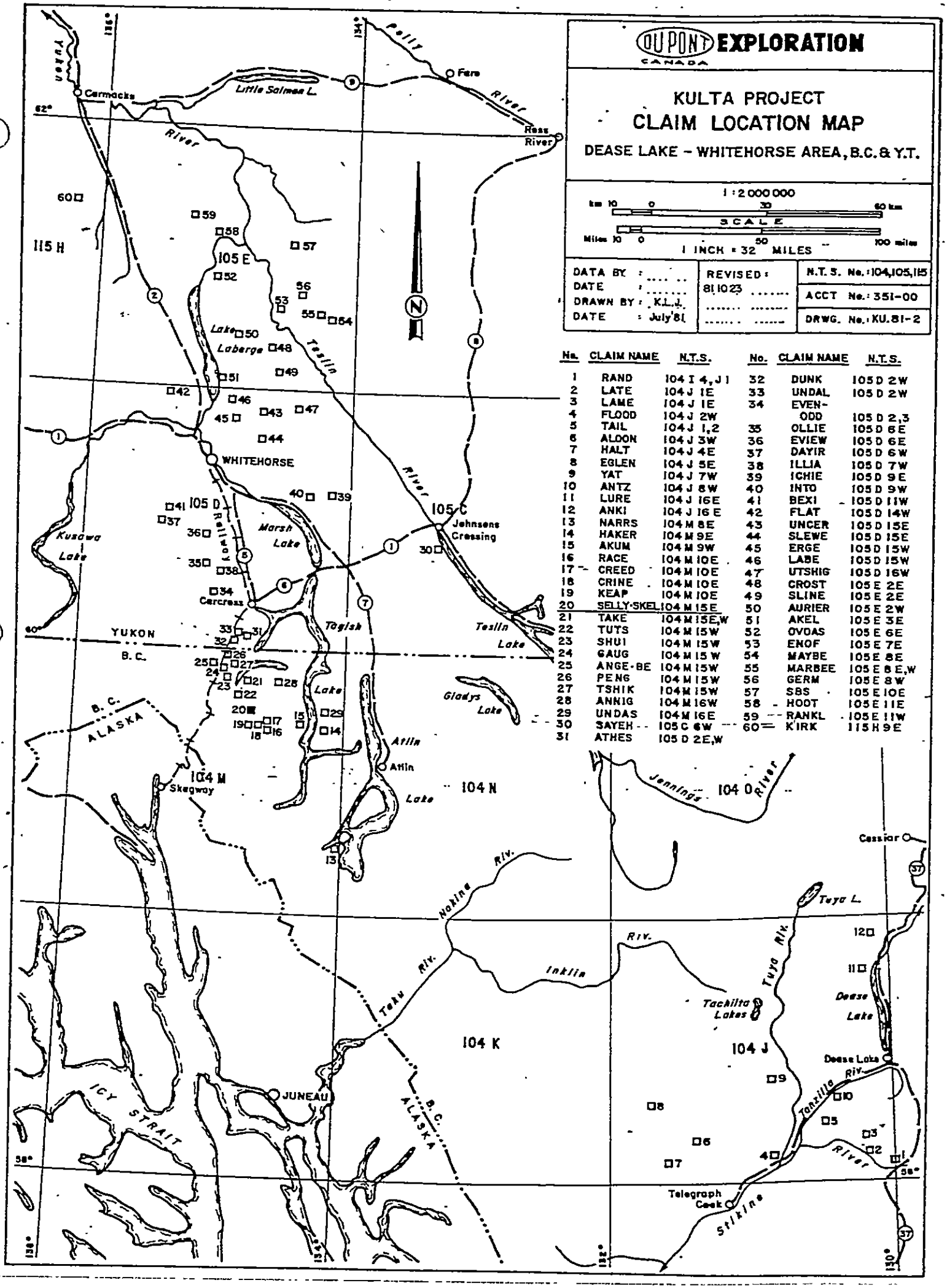
FIGURE 1

KULTA PROJECT AREAS

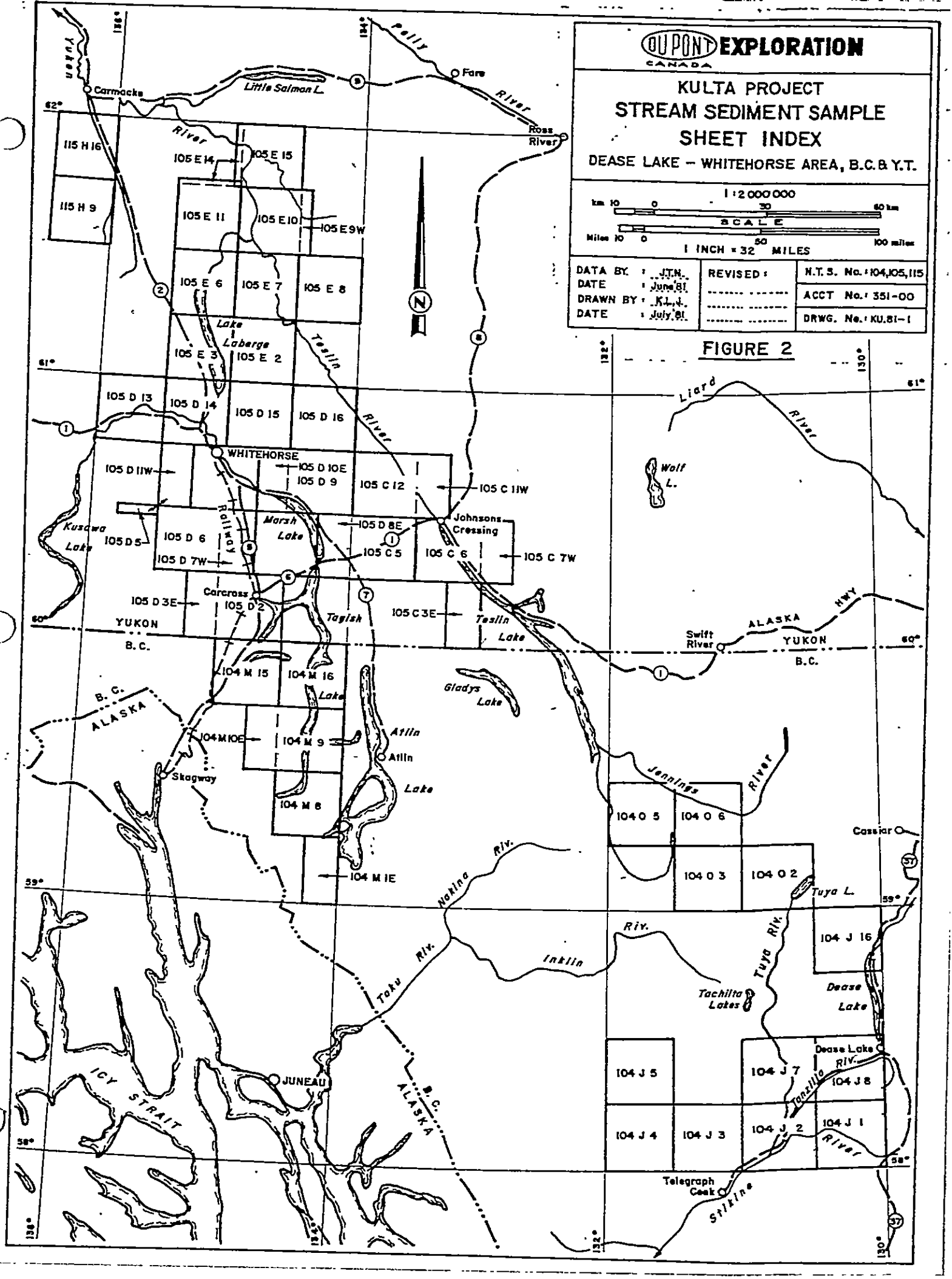
PRINCIPAL LODE & PLACER GOLD DEPOSITS CANADIAN CORDILLERA

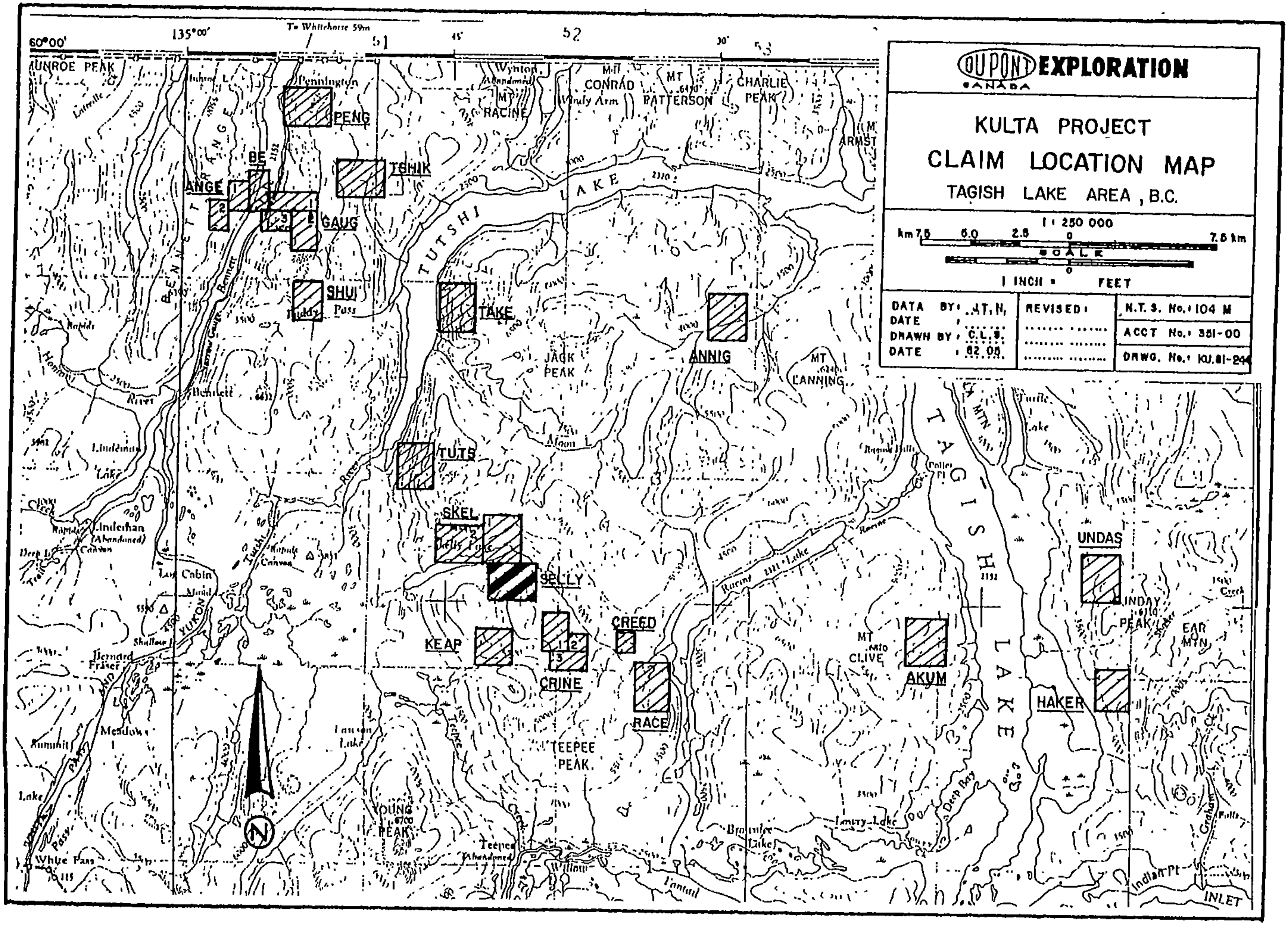
K.L.J. 81 11 26

DRWG No. KU.81-1a



No.	CLAIM NAME	N.T.S.	No.	CLAIM NAME	N.T.S.
1	RAND	104 I 4, J 1	32	DUNK	105 D 2W
2	LATE	104 J 1E	33	UNDAL	105 D 2W
3	LAME	104 J 1E	34	EVEN-ODD	105 D 2,3
4	FLOOD	104 J 2W	35	OLLIE	105 D 6E
5	TAIL	104 J 1,2	36	EVIEW	105 D 6E
6	ALOON	104 J 3W	37	DAYIR	105 D 6W
7	HALT	104 J 4E	38	ILLIA	105 D 7W
8	EGLEN	104 J 5E	39	ICHIE	105 D 9E
9	YAT	104 J 7W	40	INTO	105 D 9W
10	ANTZ	104 J 8W	41	BEXI	105 D 11W
11	LURE	104 J 16E	42	FLAT	105 D 14W
12	ANKI	104 J 16 E	43	UNCER	105 D 15E
13	NARRS	104 M 8E	44	SLEWE	105 D 15E
14	HAKER	104 M 9E	45	ERGE	105 D 15W
15	AKUM	104 M 9W	46	LABE	105 D 15W
16	RACE	104 M 10E	47	UTSHIG	105 D 16W
17	CREED	104 M 10E	48	CROST	105 E 2E
18	CRINE	104 M 10E	49	SLINE	105 E 2E
19	KEAP	104 M 10E	50	AURIER	105 E 2W
20	SELLY-SKEL	104 M 15E	51	AKEL	105 E 3E
21	TAKE	104 M 15E,W	52	OVOAS	105 E 6E
22	TUTS	104 M 15W	53	ENOF	105 E 7E
23	SHUI	104 M 15W	54	MAYBE	105 E 8E
24	GAUG	104 M 15W	55	MARBEE	105 E 8E,W
25	ANGE-BE	104 M 15W	56	GERM	105 E 8W
26	PENG	104 M 15W	57	SBS	105 E 10E
27	TSHIK	104 M 15W	58	HOOT	105 E 11E
28	ANNIG	104 M 16W	59	RANKL	105 E 11W
29	UNDAS	104 M 16E	60	KIRK	115 H 9E
30	SAYEH	105 C 6W			
31	ATHES	105 D 2E,W			


DUPONT EXPLORATION
CANADA
KULTA PROJECT
STREAM SEDIMENT SAMPLE
SHEET INDEX
DEASE LAKE – WHITEHORSE AREA, B.C. & Y.T.
1:2 000 000
SCALE
1 INCH = 32 MILES
DATA BY : J.T.N.
DATE : June '81
DRAWN BY : K.L.
DATE : July '81
REVISED :
N.T.S. No. : 104,105,115
ACCT No. : 351-00
DRWG. No. : KU.81-1
FIGURE 2
Yukon
Carmacks
Little Salmon L.
Pelly River
Fare
Ross River
Lake Laberge
Teslin River
WHITEHORSE
Liard River
Wolf L.
Kusawa Lake
Marsh Lake
Johnsons Crossing
Alaska Hwy
Carcross
Tagish
Teslin Lake
Swift River
YUKON
B.C.
Gladys Lake
Atlin
Atlin Lake
Skagway
B.C.
ALASKA
Jennings River
Cassiar
Nahlin Riv.
Tuya L.
Tuya Riv.
Inklin Riv.
Tahltan Riv.
Tachilta Lakes
Dease Lake
Tanzilla River
Telegraph Creek
Stikine River
JUNEAU
ICY STRAIT
105 E 15
105 E 14
115 H 16
115 H 9
105 E 11
105 E 10
105 E 9W
105 E 6
105 E 7
105 E 8
105 E 3
105 E 2
105 D 13
105 D 14
105 D 15
105 D 16
105 D 11W
105 D 10E
105 D 9
105 C 12
105 C 11W
105 D 8E
105 D 5
105 D 6
105 D 7W
105 C 5
105 C 6
105 C 7W
105 D 3E
105 D 2
105 C 3E
104 M 15
104 M 16
104 M 10E
104 M 9
104 M 8
104 M 1E
104 O 5
104 O 6
104 O 3
104 O 2
104 J 16
104 J 5
104 J 7
104 J 8
104 J 4
104 J 3
104 J 2
104 J 1


DUPONT EXPLORATION
CANADA
KULTA PROJECT
CLAIM LOCATION MAP
TAGISH LAKE AREA, B.C.
1 : 250 000
km 7.5 5.0 2.5 0 7.5 km
SCALE
1 INCH = FEET
DATA BY: J.T.N.
DATE
DRAWN BY: C.L.S.
DATE: 82.08
REVISED:
N.T.S. No.: 104 M
ACCT No.: 351-00
DRWG. No.: KU.81-244
PENG
TSHIK
BE
ANGE
GAUG
SHUI
TAKE
ANNIG
TUTS
SKEL
SELLY
CREED
KEAP
CRINE
RACE
AKUM
UNDAS
HAKER
TUTSHI LAKE
TAGISH LAKE
JACK PEAK
MT LANNING
MT CLIVE
TEEPEE PEAK
YOUNG PEAK
INDAY PEAK
EAR MTN
CONRAD
MT PATTERSON
CHARLIE PEAK
MT RACINE
MUNROE PEAK
YUKON
INLET
60°00'
135°00'
To Whitehorse 59m

PERSONNEL

Property work was performed by the following people on the dates indicated:

1981 July 30: D. M. Strain
July 31: D. M. Strain, C. L. Colwell
Aug. 1 : D. M. Strain, C. L. Colwell, P. Webb

GEOLOGY

Regional Geology

The property lies within the Intermontane Belt of the western Cordillera. The belt consisting mainly of sedimentary and volcanic rocks stretches from the Yukon to southern British Columbia. The belt averages 150 kilometres in width and trends northwest-southeast. Bordering the belt to the west are the granitic rocks of the Coast Mountain Intrusions, which stretch along the entire B.C. coast into Alaska.

Physiographically, the region is part of the Yukon Plateau. This area is characterized by glaciated mountain peaks generally under 2000 metres in elevation and long narrow lake-filled valleys. To the west, the rugged extensively glaciated peaks of the Coast Mountains dominate.

The Tagish-Bennett Lake areas are dominated by rocks of the Intermontane Belt with small plutons (2-8 km in size) of Late Cretaceous Coast Intrusions scattered throughout. The main front of the Coast Mountains occurs seven kilometres west of the area. The rocks of the Intermontane Belt comprise Palaeozoic metamorphic rocks (schists and gneiss), Pennsylvanian (?) and Permian volcanic and meta-volcanic rocks (Taku Group), Lower and Middle Jurassic sediments (Laberge Group), and Upper Cretaceous volcanic rocks (Hutshi Group). See Table of Formations (Table 1) and Dwg. No. KU.81-2b (Kulta Project Regional Geology).

The rocks generally occur in northwest trending belts as part of a large regional synclinorium (Wheeler 1961, p. 103). All Pre-Cretaceous rocks show this trend. Locally tight folding has been observed, possibly due to intrusive placement.

Economic mineralization has been exploited in the area from various sources. The Engineer Mine (Au,Ag) is hosted by quartz-calcite veins occuring in shales and greywackes of the Laberge Group. Venus Mine (Au,Ag) is hosted by a quartz vein cutting through Hutshi Group andesites. Numerous other showings similar to the Venus Mine occur in the Tagish Lake region.

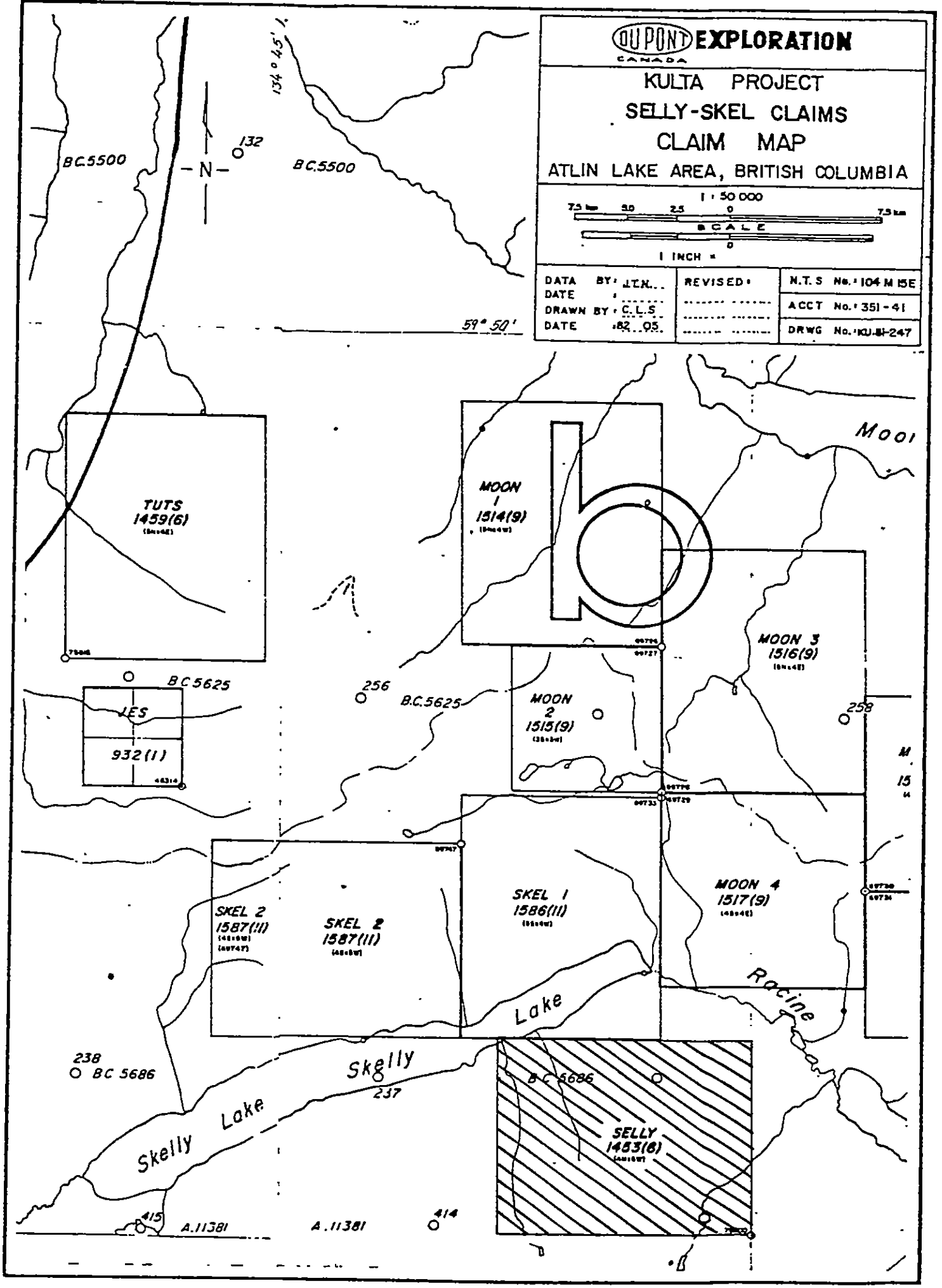

DUPONT EXPLORATION
CANADA
KULTA PROJECT
SELLY-SKEL CLAIMS
CLAIM MAP
ATLIN LAKE AREA, BRITISH COLUMBIA
1 : 50 000
7.5 km 5.0 2.5 0 7.5 km
SCALE
1 INCH =
DATA BY: J.T.N.
DATE :
DRAWN BY : C.L.S
DATE : 82 05
REVISED :
N.T.S No. : 104 M 15E
ACCT No. : 351 - 41
DRWG No. : KU-81-247
BC.5500
N
132
134° 45'
BC.5500
59° 50'
TUTS
1459(6)
MOON
1
1514(9)
MOON 3
1516(9)
MOON
2
1515(9)
MOON 4
1517(9)
SKEL 2
1587(11)
SKEL 2
1587(11)
SKEL 1
1586(11)
SELLY
1483(8)
BC 5625
JES
932(1)
256
B.C.5625
258
238
BC 5686
Skelly
237
Skelly Lake
BC 5686
Lake
Racine
415
A.11381
A.11381
414

TABLE I

Table of Formations

Miocene to Pleistocene (TQW)

Wrangell-Garibaldi: Basic to intermediate volcanics.

Upper Cretaceous-Oligocene (KTo)

Ootsa Lake - Kamloops (Hutshi Group): Intermediate to acidic volcanic flows, tuff; non-marine.

Late Cretaceous and Early Tertiary

Nisling Range Alaskite, Nanika (KTq): Granite, quartz monzonite lesser granodiorite.

Babine (KTg): Granodiorite, quartz diorite, quartz monzonite, lesser quartz monzonite, diorite, monzonite.

Lower and Middle Jurassic (JL)

Laberge-Quesnel (Stuhini Fmn): Greywacke, argillite, conglomerate; marine.

Late Triassic - Early Jurassic

Hogem Granodiorite (EJg): Quartz diorite, granodiorite, lesser diorite, quartz monzonite.

Iron Mask (Ejd): Diorite, monzonite, syenite, quartz, diorite, minor pyroxenite, granodiorite.

Upper Triassic - Lower Jurassic (TJT)

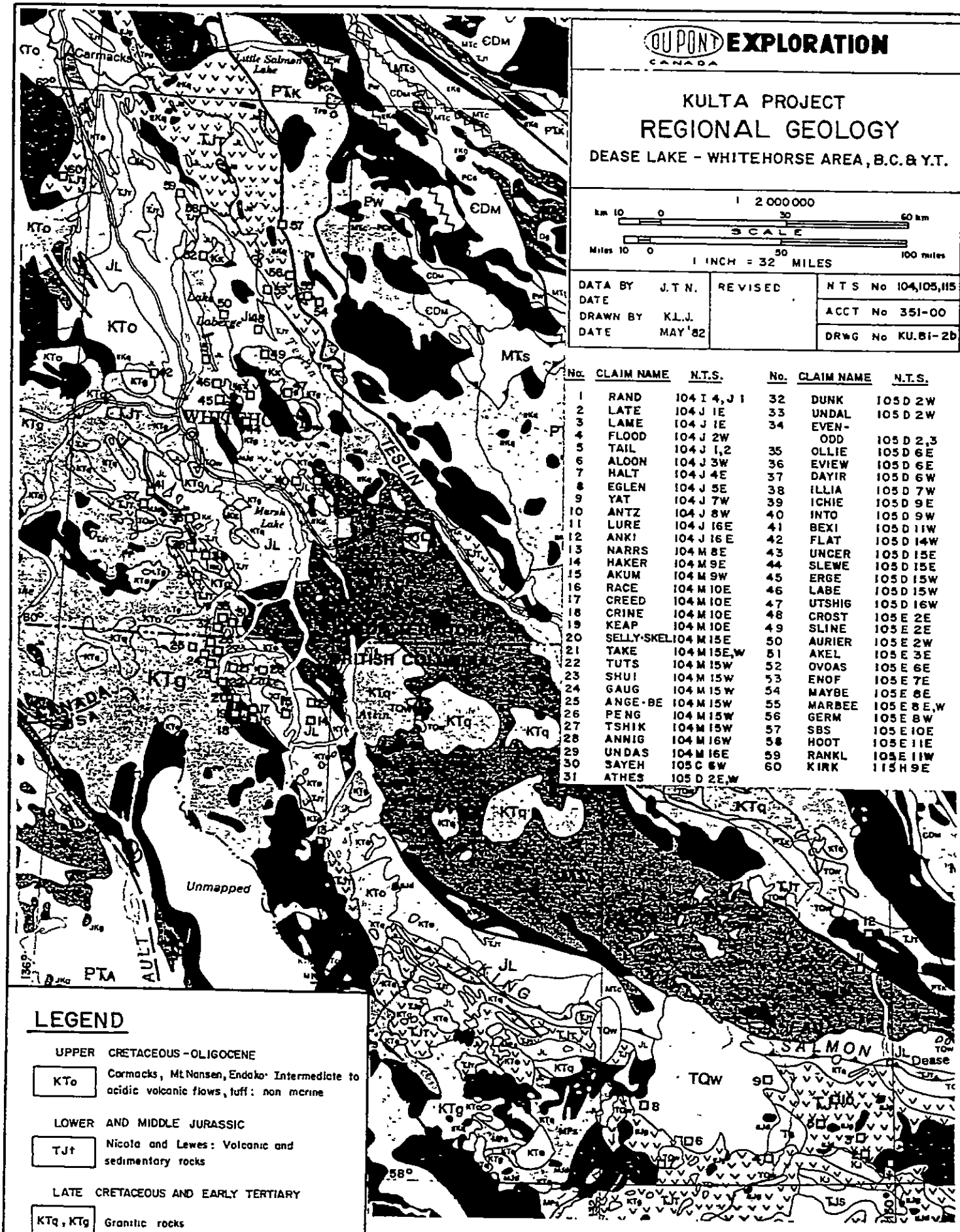
Takla-Nicola: Augite porphyry, basaltic volcanics; siltstone, shale, limestone, conglomerate.

Mississippian - Triassic (MTC)

Cache Creek - Anvil Range: Chert, argillite, carbonate, basalt, associated diabase, gabbro, alpine ultramafic; marine.

Proterozoic - Palaeozoic

Central Gneiss - Skagit: Granitoid Gneiss, migmatite schist, amphibolite, plutonic rocks.



DUPONT EXPLORATION
CANADA

KULTA PROJECT
REGIONAL GEOLOGY
DEASE LAKE - WHITEHORSE AREA, B.C. & Y.T.

1 2 000 000

km 10 0 30 60 km

SCALE

Miles 10 0 50 100 miles

1 INCH = 32 MILES

DATA BY	J.T.N.	REVISED	NTS No 104,105,115
DATE			ACCT No 351-00
DRAWN BY	K.L.J.		DRWG No KU.81-2b
DATE	MAY '82		

No.	CLAIM NAME	N.T.S.	No.	CLAIM NAME	N.T.S.
1	RAND	104 I 4, J 1	32	DUNK	105 D 2W
2	LATE	104 J 1E	33	UNDAL	105 D 2W
3	LAME	104 J 1E	34	EVEN-ODD	105 D 2,3
4	FLOOD	104 J 2W	35	OLLIE	105 D 6E
5	TAIL	104 J 1,2	36	EVIEW	105 D 6E
6	ALOON	104 J 3W	37	DAYIR	105 D 6W
7	HALT	104 J 4E	38	ILLIA	105 D 7W
8	EGLEN	104 J 5E	39	ICHIE	105 D 9E
9	YAT	104 J 7W	40	INTO	105 D 9W
10	ANTZ	104 J 8W	41	BEXI	105 D 11W
11	LURE	104 J 16E	42	FLAT	105 D 14W
12	ANKI	104 J 16 E	43	UNCER	105 D 15E
13	NARRS	104 M 8E	44	SLEWE	105 D 15E
14	HAKER	104 M 9E	45	ERGE	105 D 15W
15	AKUM	104 M 9W	46	LABE	105 D 15W
16	RACE	104 M 10E	47	UTSHIG	105 D 16W
17	CREED	104 M 10E	48	CROST	105 E 2E
18	CRINE	104 M 10E	49	SLINE	105 E 2E
19	KEAP	104 M 10E	50	AURIER	105 E 2W
20	SELLY-SKEL	104 M 15E	51	AKEL	105 E 3E
21	TAKE	104 M 15E,W	52	OVOAS	105 E 6E
22	TUTS	104 M 15W	53	ENOF	105 E 7E
23	SHUI	104 M 15W	54	MAYBE	105 E 8E
24	GAUG	104 M 15W	55	MARBEE	105 E 8 E,W
25	ANGE-BE	104 M 15W	56	GERM	105 E 8W
26	PENG	104 M 15W	57	SBS	105 E 10E
27	TSHIK	104 M 15W	58	HOOT	105 E 11E
28	ANNIG	104 M 16W	59	RANKL	105 E 11W
29	UNDAS	104 M 16E	60	KIRK	115 H 9E
30	SAYEH	105 C 6W			
31	ATHES	105 D 2E,W			

LEGEND

UPPER CRETACEOUS - OLIGOCENE

KTo — Carmacks, Mt Nansen, Endako: Intermediate to acidic volcanic flows, tuff: non marine

LOWER AND MIDDLE JURASSIC

TJt — Nicola and Lewes: Volcanic and sedimentary rocks

LATE CRETACEOUS AND EARLY TERTIARY

KTq, KTg — Granitic rocks

LATE PALEOZOIC - TRIASSIC

Alpine - type ultramafics

Local Geology

The SELLY claim is underlain by metamorphosed sediments and volcanics intruded by granites and granodiorites in the western portion of the claim. The metamorphic rocks have been determined to be Pre-Permian (GSC Map 19-1957, Bennett) and in the property area are composed mainly of quartzites, gneiss, and chloritic meta-volcanics. Intruding in the west are the granodioritic lower Jurassic Coast Intrusions. Mafic dykes probably related to the intrusion occur in the metamorphic rocks near the contact. Large xenoliths of the metamorphic rocks are observed surrounded by the intrusion adjacent to the contact.

The following is a brief description of the units observed:

a. Granodiorite - Map Unit, 7ab

This unit is medium grained and equigranular. In some areas it weathers to a red-brown gossan. Mode of this rock averages: 40% Plagioclase, 20% K-feldspar, 15% Quartz, 15% Biotite.

b. Metasediments & Volcanics - Map Units 1a,b,c,d,h

These units are primarily light grey, fine-grained quartzites weathering to a storng gossanous colour in some areas. Poorly developed gneisses occur with dark green chloritic layering. Minor flow-banded rhyolite is present within the gneiss that is associated with chlorite and albite. Most of these rocks are well foliated.

c. Dykes - Map Unit 7f

These dykes observed cutting the metamorphic rocks near the intrusive contact have a light grey matrix with phenocrysts of plagioclase and biotite. The plagioclase is euhedral up to 0.5 cm in size. Biotite phenocrysts are small and comprise 5-10% of the rock. Generally, the rock can be said to be andesitic in composition.

Structure

Foliation of the metamorphic rocks follow regional trends. Orientation of foliation gives a northwest trend and generally steep dips. Poorly defined bedding visible in the quartzites shows a steep near vertical dip and a northeast strike.

Mineralization

Numerous gossans occur on this property. These are due to disseminated pyrite and pyrrhotite found in the rocks. Near the intrusive contact zones of carbonatization and small skarns occur. Within these altered zones, minor pyrite, pyrrhotite, chalcopyrite, and galena were observed to be finely disseminated. Small quartz veins are also present in the metamorphic rocks adjacent to the intrusion. Minor disseminated sphalerite is present in the flow banded rhyolite.

GEOCHEMISTRY

Procedure

A total of 27 soil, 6 rock and 12 stream sediment samples were collected during 1981. Stream sediment samples were collected on the anomalous creek, above the original sample at 200 metre intervals. They were collected with an aluminum scoop and after sieving to either -14 mesh or 10 mesh were placed in a plastic bag with a sample bag. The sample site was marked with flagging tape bearing the same number.

Soil samples were collected on a 100 metre spacing along a traverse covering the northwestern portion of the claims. The soil samples were collected from below the organic layer with a mattock and placed in a kraft paper envelope. A sample number was marked on the bag and on flagging tape which was secured to the sample site.

Rock samples were taken at random points throughout the property. Stream samples were sieved to -14 mesh in the field except for the original which was -10 mesh.

All samples were shipped to Min-En Laboratories ltd., North Vancouver, for preparation and analysis. All samples were analyzed for Cu, Pb, Zn, Ag, As, Au. In addition, the soil and sediment samples were also analyzed for Hg and Sb. All samples were sieved to -80 mesh. The stream sediment samples were first sieved to -20 mesh and a heavy mineral separation and analysis was performed for Cu, Ag and Au. Refer to Appendix A for detail analytical procedures.

Results

A statistical analysis of the results obtained from regional stream sediment samples was performed to determine background and anomalous values for the various elements. Details of this analysis appears in a report by Neelands (1982) titled "Geochemical Report - Kulta Regional Stream Sediment Sampling

Programme in the Dease Lake and Tagish Lake Areas". Table II reproduced from that report reveals medium background values obtained for the elements studied. Table III shows the results of a report titled "Kulta Follow-Up" (Neelands 1982). The two studies show a good correlation between the stream sediment (heavy mineral) samples. The anomalous values given in Table III will be applied to the results of this property.

The results of geochemical sampling on SELLY are tabled on Dwg. No. KU.81-159. These results have also been tabulated as to frequency distribution of elements for soils (see Table IV) and stream sediments (Table V).

The original stream sediment samples (5087D & 5088D) ran 85 ppb and 45 ppb respectively in the coarse heavy minerals fraction. Follow-up stream sediment samples taken upstream of the original also turned up anomalous gold values: 9206D:120 ppb, 9205D:105 ppb and 9204D:100 ppb. Soil samples adjacent to this creek located only normal background values. A series of anomalous soil samples occur near Skelly Lake just north of the SELLY claims. High values of Cu, Zn, Ag and Sb were encountered. One sample (C249) ran 522 ppb Au.

Rock geochemistry failed to isolate the source of the anomalous values. Summarized below are the rock samples taken, their type, and any anomalous values they contained:

CONCLUSIONS AND RECOMMENDATIONS

Follow-up work on the original anomalous stream sediment sample failed to isolate the source of the high gold values. It is recommended that further sampling be carried out on the property. The stream from which sediment sample 8087D was obtained should be examined to confirm the orignal value. Soil traverses should be carried out on the eastern half of the claims to find extensions of the 522 ppb gold value in soil sample C249.

HJC/krl

TABLE II

Kulta Regional Stream Sediment Sampling Programme

Background and Anomalous Values

Element	No. of Samples	Mean ppm	Median Background ppm	Standard Deviation	95% Threshold ppm
Mo	625	1.8	1.0	1.39	4.0
Cu(C1)CHm	598	44.5	38.0	27.39	150.0
Cu(C2)F	621	35.9	32.0	21.15	80.0
Pb	622	16.3	15.0	7.08	30.0
Zn	598	67.0	65.0	23.77	150.0
Ag(S1)CHm	623	1.04	1.0	0.50	2.5
Ag(S2)F	628	0.71	1.0	0.32	1.6
Mn	602	589.6	570.0	232.6	1200.0
Au(G1)CHm	588	8.21	5.0	5.22	25.0
Au(G2)F	579	6.2	5.0	4.66	15.0
%HM			6.0%		

TABLE III

Kulta Follow-Up

Background and Anomalous Values

Element	Medium					
	Heavy Mineral (227 samples)		SiH (43 Samples)		Soil (461 samples)	
	Median	Anomalous	Median	Anomalous	Median	Anomalous
MoF	1.0	3.0	1.0	2.0	4.0	15.0
CuF	30.0	90.0	70.0	160.0	40.0	250.0
CuFHM						
CuHM	50.0	180.0				
PbF	20.0	60.0	20.0	30.0	20.0	50.0
ZnF	60.0	160.0	80.0	100.0	90.0	200.0
AgF	0.8	1.5	0.9	1.2	0.8	1.7
AgFHM						
AgCHM	0.8	2.6				
HgF	25.0	50.0	40.0	80.0	35.0	160.0
AsF	10.0	50.0	15.0	45.0	15.0	120.0
MnF	500.0	1000.0	800.0	2000.0	700.0	2000.0
AuF	5.0	30.0	5.0	15.0	5.0	20.0
AuFHM						
AuCHM	5.0	50.0				
SbF	15.0	40.0	25.0	40.0	20.0	40.0
HM%						

Table IV
Soil SELLY
Frequency Distribution of Elements

Class Interval ppm/ppb	Mo F	Cu F	Cu FHM	Cu CHM	Pb F	Zn F	Ag F	Ag FHM	Ag CHM	Hg F	As F	Mn F	Au F	Au FHM	Au CHM	Sb F	H.I
0.1																	
0.2																	
0.3																	
0.4																	
0.5							1										
0.6																	
0.7							1										
0.8																	
0.9							3										
1.0							5										
1.1							2										
1.2																	
1.3							2										
1.4							6										
1.5																	
1.6-1.7																	
1.8-1.9							1										
1.9-2.0					1		1										
2.1-2.3																	
2.4-2.6																	
2.7-2.9							2										
3.0-3.9							2										
4.0-4.9							1										
5.0-5.9										1			22				
6.0-10										2	1		3			.1	
11 - 15					4					1			2			4	
16 - 20					3					1						3	
21 - 25		2			3					1	2					3	
26 - 30					5					5	1					2	
31 - 35		2			1					5	2					3	
36 - 40		2			3					1	4					1	
41 - 45		3			1	2					1					3	
46 - 50		2			2						2					2	
51 - 60		2				2				1						2	
61 - 70		2			2	2				2	1						
71 - 80		2								4	2						
81 - 90						2					4					1	
91 -100		1				4				2						1	
101-120		2				3					1						
121-140		1				3					2						
141-160		1				2					1						
161-180		1															
181-200		1															
201-250		1				3					1						
251-300		1				1											
301-350		1															
351-400																	
401-450						1					1						
451-500																	
501-600						1											
601-700																	
701-800																	
801-900																	
901-1000																	
1001-2000																	
2001-3000																	
3001-4000																	
4001-5000																	
>5000																	

Table IV Selly
Heavy Mineral Stream Sediment
Frequency Distribution of Elements

Class Interval ppm/ppb	Mo F	Cu F	Cu FHM	Cu CHM	Pb F	Zn F	Ag F	Ag FHM	Ag CHM	Hg F	As F	Mn F	Au F	Au FHM	Au CHM	Sb F
0.1																
0.2																
0.3																
0.4																
0.5																
0.6																
0.7																
0.8																
0.9																
1.0																
1.1																
1.2							1									
1.3																
1.4																
1.5									1							
1.6-1.7							1									
1.8-1.9							1									
1.9-2.0	3						2									
2.1-2.3																
2.4-2.6																
2.7-2.9																
3.0-3.9	1															
4.0-4.9									1							
5.0-5.9	1						1		2							
6.0-10	1								1	3			4			
11 - 15													2	1		
16 - 20									1							
21 - 25																
26 - 30																1
31 - 35															1	
36 - 40		1			2											1
41 - 45																1
46 - 50					1										1	
51 - 60		1			1											
61 - 70		1				1					1					2
71 - 80		1														
81 - 90		2			1						1					
91 -100															1	
101-120				1	1						1					
121-140				1		4					1				3	
141-160																
161-180																
181-200																
201-250				1		1										
251-300																
301-350																
351-400											1					
401-450				1												
451-500				1												
501-600																
601-700												1				
701-800				1								1				
801-900																
901-1000																
1001-2000												3				
2001-3000												1				
3001-4000																
4001-5000																
>5000																

TABLE VI

Description of Rock Samples

Sample No.	Rock Type	Anomalous Values
8370D	Meta-sediment xenolith	Pb (133 ppm)
8371D	Quartz veining	None
8372D	Quartz vein near contact	Pb (121 ppm)
8373D	Quartz vein float	None
8374D	Quartz vein in skarn	Cu (121 ppm)
8375D	Pyrite-bearing calcite vein	Zn (136 ppm)
8376D	Pyrite-bearing quartz float	Pb (105 ppm), Au, (20 ppb)
8377D	Quartz float with pyrite & pyrrhotite	None
8378D	Quartz vein in gneiss	None
8379D	Pyrite-bearing gneiss	None
8380D	Grey quartz vein in gneiss	None
8449D	Unknown	None

COST STATEMENT

Wages

	Cost
1 Sr. Geol. Assistant, 3 manday(s) (1981 July 30,31,Aug.7)	$ 219.18
2 Jr. Geol. Assistants, 3 manday(s) (1981 July 31,Aug.7)	152.46
	$ 371.64

Room & Board

Location	Daily Rate	Date	No. of Days	
Carcross	$25.00	1981 July 30,31,Aug.7	6	$ 150.00

Transportation

a. Truck Rental (Avis-Whitehorse, YT): 2 day(s) @ $35.85/day	$ 71.70
b. Helicopter in support of field work @ $432.50/hr including fuel (Flying by Viking Helicopter Ltd. of Prince George)	
Dates (1981): July 30,31 Aug.7 No. of hrs: 1.2	$ 519.00
	$ 590.70

Analytical Services

Type of Sample	No. of	Fraction Analyzed F	FHM	CHM	Elements Analyzed Mo	Cu	Pb	Zn	Ni	Ag	Hg	As	Mn	Au	Sb	Unit Price	
Heavy	4	X			X	X	X	X		X	X	X	X	X	X	$22.75	$ 91.00
Mineral	4			X		X				X				X		7.90	31.60
Soil	27				X	X	X	X		X	X	X		X	X	20.95	565.65
Rock	11	X				X	X	X		X		X		X		12.70	139.70

Preparation - Rock	11 @ $2.25/sample	24.75
- Heavy Mineral	4 @ $20.00/sample	80.00
- Soil/Silt	27 @ $0.85/sample	22.95

Mo($0.90), Cu($0.90), Pb($0.90), Zn($0.90), Ni(0.90), Ag($0.90/$2.00), Hg($4.50), As($3.00), Mn($0.90), Au($5.00), Sb($3.75)

$ 955.65

Report Preparation	Cost
Drafting: 1 day @ $100/day	$ 100.00
Typing: 1 day @ $95.00	95.00
Map preparation 8 maps (9 sq ft) at 16¢/square foot	11.52
	$ 206.52
GRAND TOTAL:	$2,274.51

REFERENCES

Christie, R. L.; "Geology: Bennett (104M)", G.S.C. Preliminary Series Map No. 19-1957, 1957.

Neelands, J. T.; "Geochemical Report - Kulta Regional Stream Sediment Sampling Programme in the Dease Lake and Tagish Lake Areas", Assessment Report, 1982.

Neelands, J. T.; "Kulta Follow-Up (104-J, 104-M)" Geological and Geochemical Report, 1982.

Wheeler, J. O.; "Whitehorse Map-Area, Yukon Territory (105-O)", G.S.C. Memoir 312, 1961.

QUALIFICATIONS

I, John Thomas Neelands, do hereby certify that:

1. I am a geologist residing at 118-B W. 14th Ave, Vancouver, British Columbia and employed by Du Pont of Canada Exploration Limited.

2. I am a graduate of Carleton University (1971) in Ottawa, Canada, and hold a B.Sc., degree in Geology.

3. I am a member of the Geological Association of Canada and of the Association of Exploration Geochemists.

4. I have been practising my profession for the past ten years and have been active in the mining industry for the past sixteen years.

5. Between 1981 May and 1981 October, I supervised and participated in the field programme described in this report on behalf of Du Pont of Canada Exploration Limited.

J.T. Neelands
1982 May

QUALIFICATIONS

I, David M. Strain, do hereby certify that:

1. I am a geologist residing at #7 - 2341 West Broadway, Vancouver, British Columbia, and employed on a part time basis by Du Pont of Canada Exploration Limited.

2. I am a graduate of Cambrian College of Applied Arts and Technology (Sudbury, Ontario) with a Diploma in Geological Engineering Technology.

3. I am presently enrolled in the Geological Sciences programme at the University of British Columbia endeavoring to obtain a B.Sc. degree in geology.

4. I have practised my profession in geology for the past four years in Ontario and British Columbia.

5. On 1982 August 10 and 11, I executed geological and geochemical surveys on the OLLIE claim on behalf of Du Pont of Canada Exploration Limited.

David M. Strain
1982 May

APPENDIX I

Laboratory Procedures

PHONE 980-5814

APPENDIX I

MIN-EN Laboratories Ltd.
Specialists in Mineral Environments
Corner 15th Street and Bewicke
705 WEST 15th STREET
NORTH VANCOUVER, B.C.
CANADA

ANALYTICAL PROCEDURE REPORTS FOR ASSESSMENT WORK

PROCEDURE FOR GOLD GEOCHEMICAL ANALYSIS.

Geochemical samples for Gold processed by Min-En Laboratories Ltd., at 705 W. 15th St., North Vancouver Laboratory employing the following procedures.

After drying the samples at 95°C soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed and pulverized by ceramic plated pulverizer.

A suitable sample weight 5.0 or 10.0 grams are pre-treated with HNO_3 and $HClO_4$ mixture.

After pretreatments the samples are digested with Aqua Regia solution, and after digestion the samples are taken up with 25% HCl to suitable volume.

At this stage of the procedure copper, silver and zinc can be analysed from suitable aliquote by Atomic Absorption Spectrophotometric procedure.

Further oxidation and treatment of at least 75% of the original sample solutions are made suitable for extraction of gold with Methyl Iso-Butyl Ketone.

With a set of suitable standard solution gold is analysed by Atomic Absorption instruments. The obtained detection limit is 5. ppb.

APPENDIX I

MIN-EN Laboratories Ltd.
Specialists in Mineral Environments
Corner 15th Street and Bewicke
705 WEST 15th STREET
NORTH VANCOUVER, B.C.
CANADA

ANALYTICAL PROCEDURE REPORTS FOR ASSESSMENT WORK

PROCEDURES FOR Mo, Cu, Cd, Pb, Mn, Ni, Ag, Zn, As, F

Samples are processed by Min-En Laboratories Ltd., at 705 W. 15th St., North Vancouver Laboratory employing the following procedures.

After drying the samples at 95°C soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed by a jaw crusher and pulverized by ceramic plated pulverizer.

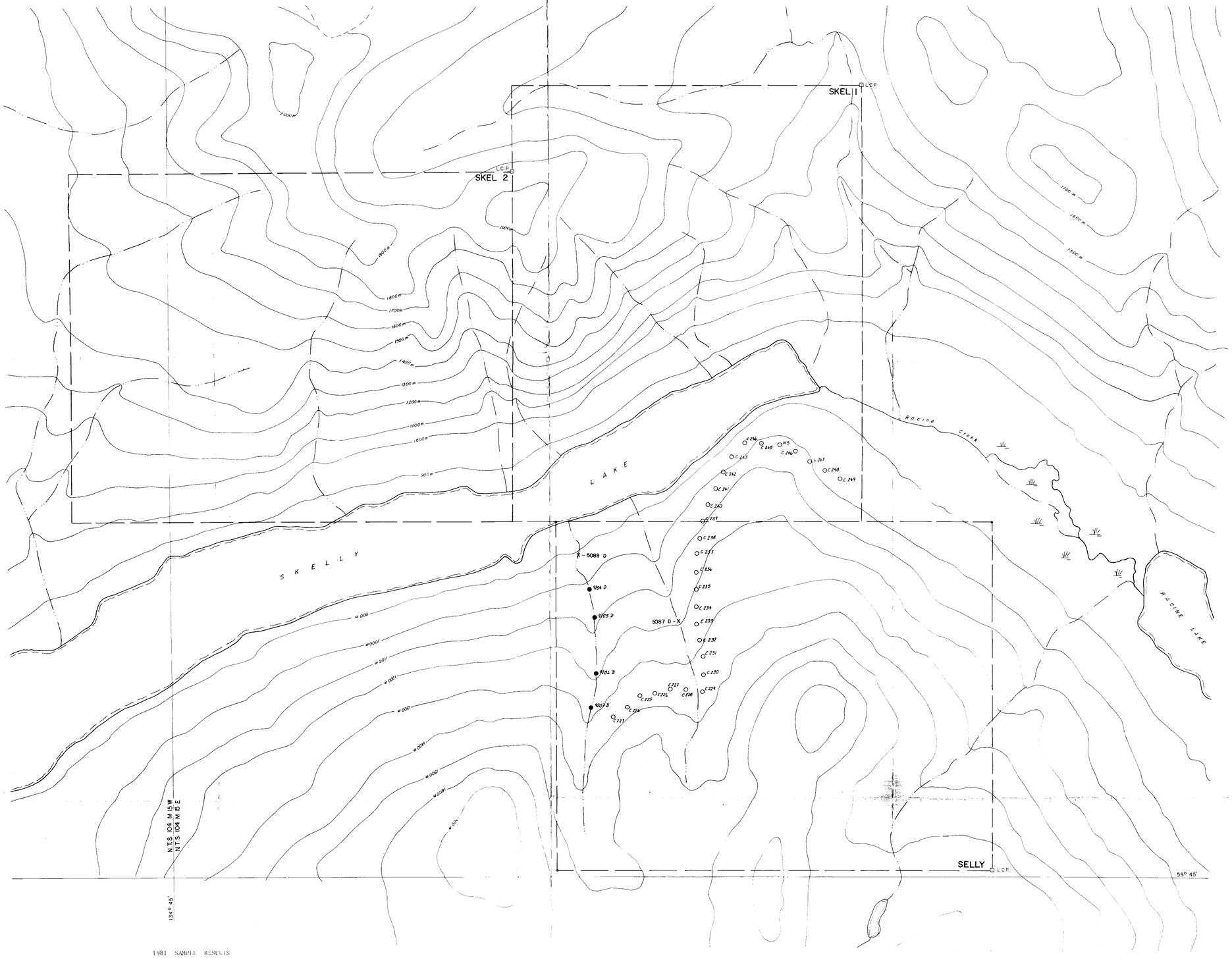
1.0 gram of the samples are digested for 6 hours with HNO_3 and $HClO_4$ mixture.

After cooling samples are diluted to standard volume. The solutions are analyzed by Atomic Absorption Spectrophotometers.

Copper, Lead, Zinc, Silver, Cadmium, Cobalt, Nickel and Manganese are analysed using the CH_2H_2-Air flame combination but the Molybdenum determination is carried out by C_2H_2-N_2O gas mixture directly or indirectly (depending on the sensitivity and detection limit required) on these sample solutions.

For Arsenic analysis a suitable aliquote is taken from the above 1 gram sample solution and the test is carried out by Gutzit method using Ag $CS_2N(C_2H_5)_2$ as a reagent. The detection limit obtained is 1. ppm.

Fluorine analysis is carried out on a 200 milligram sample. After fusion and suitable dilutions the fluoride ion concentration in rocks or soil samples are measured quantitatively by using fluorine specific ion electrode. Detection limit of this test is 10 ppm F.



LEGEND

- ○ 9204 D — SOIL SAMPLE LOCATION and NUMBER
- ● C 249 — SIEVED HEAVY MINERAL SAMPLE LOCATION and NUMBER
- X - 5088 D — ORIGINAL SIEVED HEAVY MINERAL SAMPLE LOCATION (1981) and NUMBER

1981 SAMPLE RESULTS

Sample	Cu ppm -80 F	Pb ppm -80 F	Zn ppm -80 F	Ag ppm -80 F	Hg ppb -80 F	As ppm -80 F	Au ppb -80 F	Sb ppm -80 F
Soil								
C 223	110	12	82	1.4	100	86	5	32
C 224	111	17	112	1.4	30	75	5	45
C 225	70	15	90	0.9	65	46	5	23
C 226	38	2	43	0.5	75	37	5	12
C 227	148	16	132	1.4	35	89	10	50
C 228	79	17	92	1.0	30	101	5	26
C 229	74	26	83	1.1	10	26	5	32
C 230	58	27	98	1.4	10	31	<5	35
C 231	66	37	141	1.4	15	219	5	45
C 232	44	15	55	0.7	5	10	5	12
C 233	41	22	94	1.3	35	24	5	20
C 234	46	21	68	0.9	25	38	10	14
C 235	36	36	133	1.0	30	27	<5	25
C 236	32	30	107	1.3	70	43	5	20
C 237	94	41	230	1.9	95	133	5	42
C 238	24	12	45	1.0	60	25	10	8
C 239	126	61	516	2.8	55	409	5	55
C 240	42	23	93	1.0	80	49	5	40
C 241	204	53	220	2.0	30	156	5	30
C 242	310	62	409	3.9	35	90	15	95
C 243	255	48	133	4.1	75	37	5	55
C 244	184	30	150	3.3	35	121	15	80
C 245	164	47	204	2.7	35	81	5	50
C 246	46	40	279	1.1	80	77	5	18
C 247	34	29	55	1.0	30	67	5	20
C 248	58	30	102	1.4	40	37	5	15
C 249	22	32	64	0.9	20	34	522	25

Sample	Mo ppm -80 F	Cu ppm -80 F	Cu ppm -20 +80 CHM	Pb ppm -80 F	Zn ppm -80 F	Ag ppm -80 F	Ag ppm -20 +80 CHM	Hg ppb -80 F	As ppm -80 F	Mn ppm -80 F	Au ppb -80 F	Au ppb -80 F HM	Au ppb -20 +80 CHM	Sb ppm -80 F	H.M. wt. % f/c gm	H.M. % f/c	Orig. wt. f/c gm
-20 Sieve																	
9204 D	5	90	381	32	123	1.8	5.1	5	92	940	5		100	55		4.22	
9205 D	7	80	411	43	135	1.9	4.9	5	310	920	5		105	36		4.36	
9206 D	2	70	620	89	140	1.5	4.4	5	79	980	5		120	32		2.51	
9207 D	2	40	123	32	66	1.1	1.4	165	55	585	5		30	22		2.94	
-10 Sieve																	
5087 D	2	59	116	105	198	4.6	15.0			1850	10	nes	85		nes	nes/ 7.70	nes/ 95
5088 D	3	83	200	50	122	1.7	1.0			690	10	10	45		0.11/-	2.75/ 2.00	4.0/ 325

nes - not enough sample

DUPONT CANADA EXPLORATION

KULTA PROJECT
SELLY SKEL CLAIMS
GEOCHEMISTRY
Au, Ag, As, Cu, Hg, Mn, Mo, Pb, Sb, Zn, %HM
ATLIN LAKE AREA, BRITISH COLUMBIA

SCALE
1 INCH = 833 FEET

MAPPED BY	J.T.H., D.M.S.	REVISED	N.T.S No. 104 M/6E/W
DATE	81 08 01		ACCT No. 351 - 41
DRAWN BY	C.H.K.		DRWG. No. KU 81-159
DATE	82 01 21		

SKEL 1 LCP

SKEL 2 LCP

SELLY LCP

2000 m
1900 m
1800 m
1700 m
1600 m
1500 m
1400 m
1300 m
1200 m
1100 m
1000 m
900 m

Racine Creek

LAKE

SKELLY

RACINE LAKE

Talus

N.T.S. 104 M/15W
N.T.S. 104 M/15E

134° 45'

59° 45'

LEGEND

JURASSIC OR LATER

POST LOWER JURASSIC

COAST INTRUSIONS

7	7a) Granite 7b) Granodiorite 7c) Quartz diorite 7d) Diorite 7e) Felsic dyke 7f) Mafic dyke

JURASSIC

LOWER JURASSIC AND LATER

LABERGE GROUP

6	6a) Conglomerate 6b) Greywacke 6c) Argillite 6d) Siltstone 6e) Hornfels

PENNSYLVANIAN TO TRIASSIC

5	5a) Felsic dyke 5b) Mafic dyke
4	4a) Rhyolite 4b) Rhyodacite 4c) Dacite 4d) Andesite 4e) Basalt
3	3a) Volcanic breccia 3b) Volcanic conglomerate 3c) Tuff
2	2a) Siltstone 2b) Limestone

PRE-PERMIAN

1	1a) Schist 1b) Gneiss 1c) Phyllite 1d) Limestone 1e) Quartzite 1f) Arenite 1g) Slate 1h) hornfels

SYMBOLS

- OUTCROP
- CONTACT approx. / observed
- x 8380 D — ROCK SAMPLE LOCATION AND NUMBER
- MINERAL OCCURRENCE
- LCP — CLAIM LINE AND LEGAL CORNER POST
- IDENTITY POST
- G — LIMONITE GOSSAN
- qzt — QUARTZITE BED with DIP
- QUARTZ VEIN
- corb. — CARBONATIZED ZONE
- skn — SKARN

ROCK GEOCHEMICAL RESULTS

Sample	Cu ppm −80 F	Pb ppm −80 F	Zn ppm −80 F	Ag ppm −80 F	As ppm −80 F	Au ppb −80 F
8370 D	43	133	78	1.8	46	5
8371 D	15	12	38	0.9	3	5
8372 D	23	121	37	1.6	14	5
8373 D	7	13	7	0.8	25	5
8374 D	121	25	100	1.9	<1	5
8375 D	42	38	136	3.0	47	5
8376 D	3	105	103	1.1	104	20
8377 D	39	19	50	1.2	30	5
8378 D	35	30	26	1.8	53	5
8379 D	4	16	17	0.8	12	5
8380 D	4	12	20	1.0	13	5

Sample	Mo ppm −80 F	Cu ppm −80 F	Pb ppm −80 F	Zn ppm −80 F	Ni ppm −80 F	Ag ppm −80 F	Bi ppb −80 F	As ppm −80 F	Au ppb −80 F	Sb ppm −80 F
8449 D	1	15	84	81	27	2.8	5	101	10	55

DU PONT EXPLORATION CANADA

KULTA PROJECT
SELLY SKEL CLAIMS
GEOLOGY

ATLIN LAKE AREA, BRITISH COLUMBIA

SCALE 1:10 000
m 300 200 100 0 300 600 m
1 INCH = 833 FEET

MAPPED BY	J.T.N., D.M.S.	REVISED	N.T.S. No.: 104 M/15E/W
DATE	81 08 01		ACCT. No.: 351-41
DRAWN BY	C.H.K.		DRWG. No.: KU 81-158
DATE	82 01 25		