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DU PONT OF CANADA EXPLORATION LIMITED

GEOLOGICAL AND GEOCHEMICAL REPORT

ON THE GAUG PROPERTY

CASSIAR MINING DIVISION

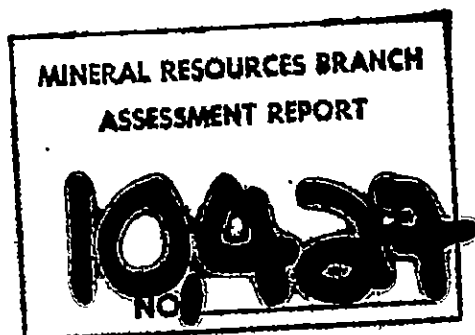
(BRITISH COLUMBIA)

LAT. 59°56'N, LONG. 134°53'W

NTS: 104-M-15W

OWNER OF CLAIMS: DU PONT OF CANADA EXPLORATION LIMITED

OPERATOR: DU PONT OF CANADA EXPLORATION LIMITED



Submitted by: J.T. Neelands
L. Holmgren

Date : 1982 May

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1470

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INTRODUCTION

During 1981 May, reconnaissance stream sediment sampling was carried out in the Tagish-Bennett Lake area of northwestern British Columbia. The sampling was undertaken as part of a large regional programme known as Kulda Project. The areal extent of this project is shown on Dwgs. KU.81-1, 1a and 2.

As the result of a gold anomaly in a sample from a creek draining into Bennett Lake, the drainage area of this creek was staked as the GAUG property (Dwg. No. KU.81-244).

LOCATION AND ACCESS

The GAUG claim is located within the Cassiar Mining Division, NTS 104-M-15W (Lat. 59°56'N, Long. 134°53'W). The property is located on the east side of Bennett Lake, approximately 5 kilometres north of Paddy Pass. The nearest population centre is Carcross, YT, 28 kilometres to the north. The claim is accessible by helicopter from Carcross or by boat along Bennett Lake. The White Pass and Yukon Railroad passes along the east side of Bennett Lake and through the western portion of the claim. Six kilometres to the east, the Carcross-Skagway Alaska highway runs along the Tutshi Lake.

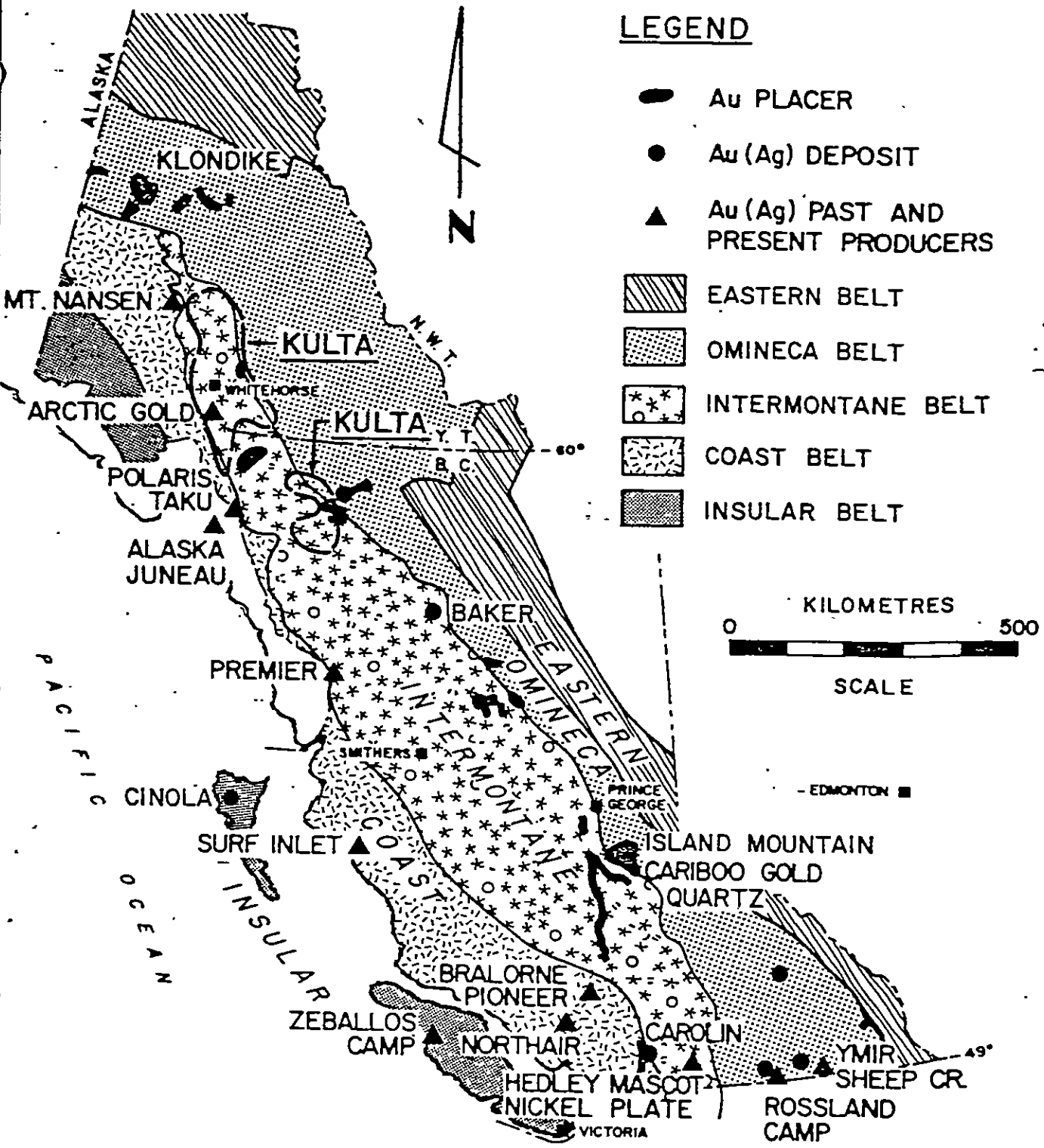
TOPOGRAPHY AND VEGETATION

The claim lies on the east side of Bennett Lake along the western slope of a small range of mountains separating Tutshi Lake from Bennett Lake. Elevation varies from 1850 metres in the southwestern corner of GAUG 2 to 660 metres at Bennett Lake in the west. A small plateau in the east is covered by grass, moss and scattered low shrubs while the lower slopes have a dense cover of spruce, alders and willow.

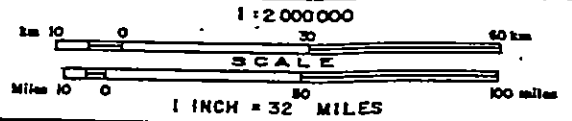
PROPERTY DEFINITION

The GAUG property consists of three claims: GAUG 1, 10 units; GAUG 2, 12 units; and GAUG 3, 6 units. See Dwg. No. KU.81-250 for claim location. The claims are in good standing until 1982 June 23.

<u>Claim Name</u>	<u>Record No.</u>	<u>Tag No.</u>	<u>Date Recorded</u>
GAUG 1	1462	75818	1981 June 23
GAUG 2	1463	75819	1981 June 23
GAUG 3	1461	75817	1981 June 23

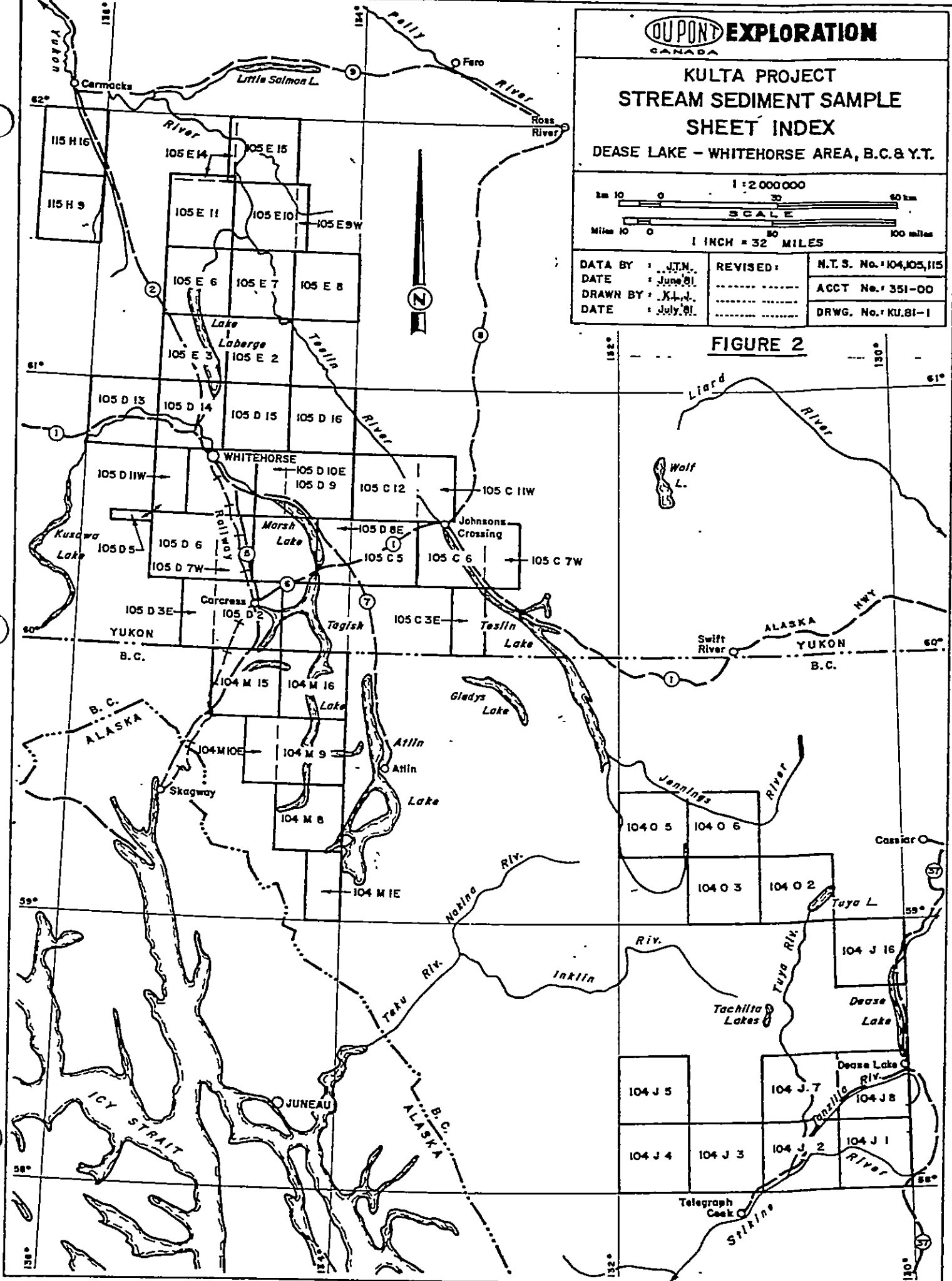


**KULTA PROJECT
STREAM SEDIMENT SAMPLE
SHEET INDEX
DEASE LAKE - WHITEHORSE AREA, B.C. & Y.T.**



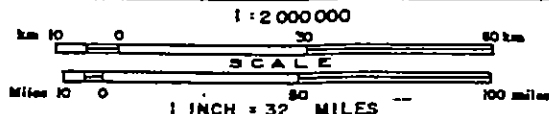
DATA BY : J.T.H.	REVISED :	N.T.S. No. 104,105,115
DATE : June 81	.....	ACCT No. 351-00
DRAWN BY : K.L.J.	.....	DRWG. No. KU.81-1
DATE : July 81	.....

FIGURE 2



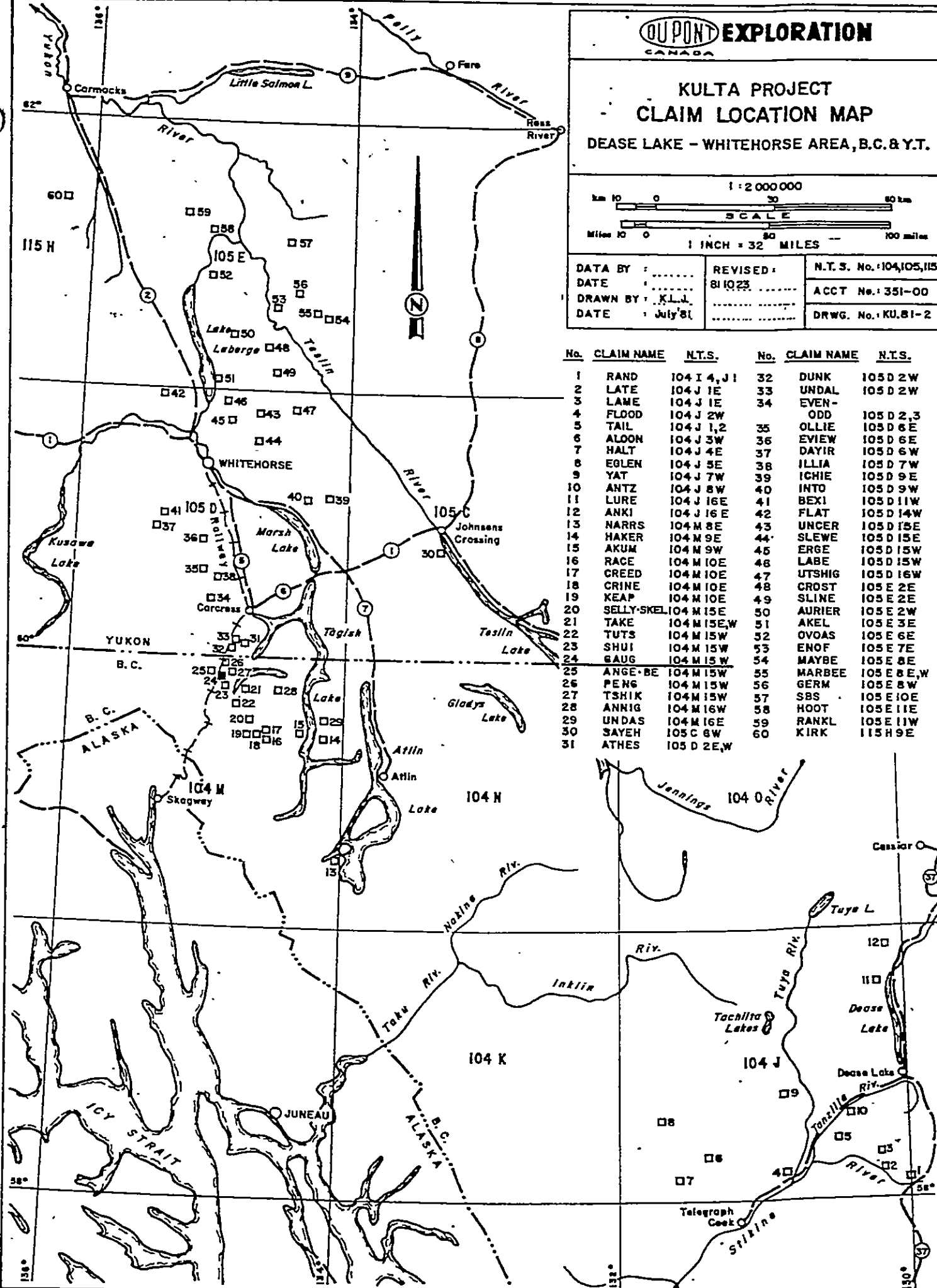
**KULTA PROJECT
CLAIM LOCATION MAP**

DEASE LAKE - WHITEHORSE AREA, B.C. & Y.T.

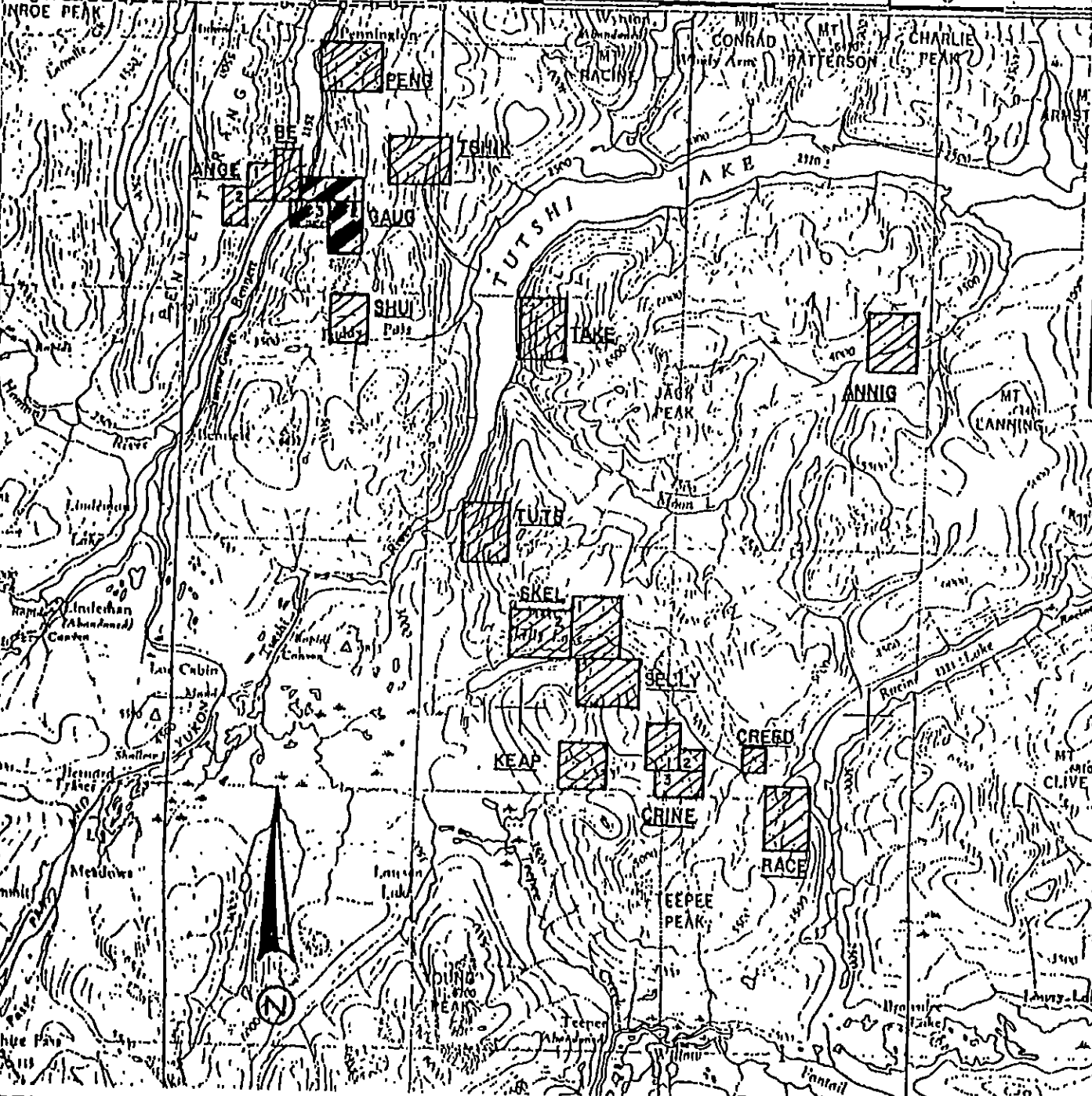


DATA BY :	REVISED :	N.T.S. No.: 104,105,115
DATE :	8/10/23	ACCT No.: 351-00
DRAWN BY : K.L.J.	.....	DRWG. No.: KU.81-2
DATE : July '81	.....

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	ALOOD	104 J 3W	37	DAYIR	105 D 6W
7	HALT	104 J 4E	38	ILLIA	105 D 7W
8	EULEN	104 J 5E	39	ICHIE	105 D 9E
9	YAT	104 J 7W	40	INTO	105 D 9W
10	ANTZ	104 J 8W	41	BEX1	105 D 11W
11	LURE	104 J 16E	42	FLAT	105 D 14W
12	ANKI	104 J 16E	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	CRDST	105 E 2E
18	CRINE	104 M 10E	49	SLINE	105 E 2E
19	KEAP	104 M 10E	50	AURIER	105 E 2W
20	SELY-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 8W			
31	ATHES	105 D 2E,W			



135°00' To Waterhouse 59m 51 41' 52 30' 53

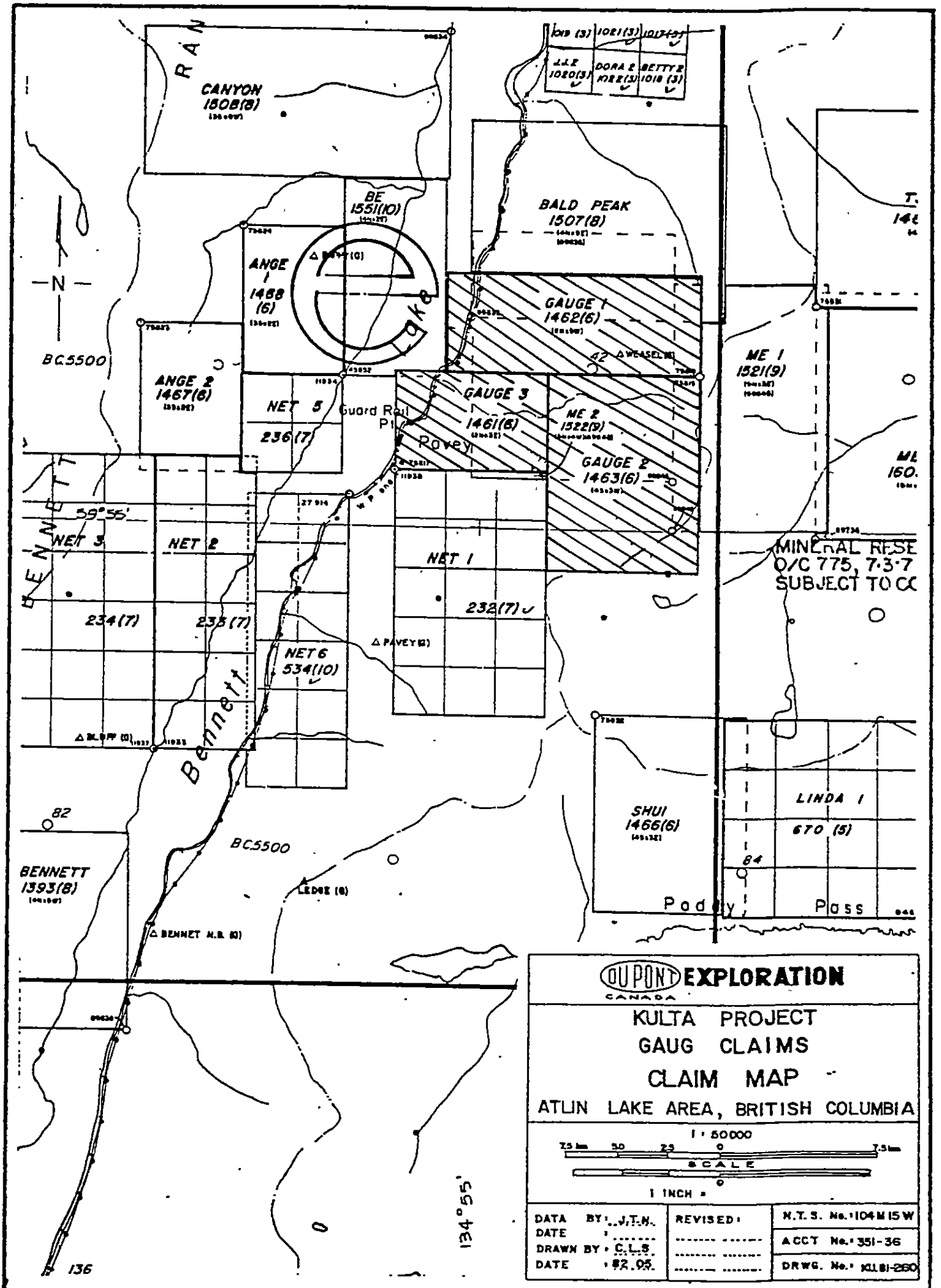


DUPONT EXPLORATION
CANADA

KULTA PROJECT
CLAIM LOCATION MAP
TAGISH LAKE AREA, B.C.

1:200 000
0 0.5 1.0 1.5 2.0 2.5 3.0 km
0 0 1000 2000 3000 4000 5000 FEET

DATA BY: J.T.H.	REVISED:	N.T.S. No. 104 M
DATE	.....	ACCT No. 301-00
DRAWN BY: G.L.B.	.....	DRWG. No. 101/01-24
DATE: 83.09.	.....



RAN
CANYON
150B(8)
150(007)

101B(13)	1021(13)	1017(13)
L.L.R. 1020(13)	DORA & BETTY 1018(13)	M.R.R. 1018(13)

BALD PEAK
1507(8)
150(002)

BE
155(10)
155(007)

ANGE 1
1458(6)
145(001)

GAUGE 1
1462(6)
146(007)

ANGE 2
1467(6)
146(002)

NET 5
236(7)
23(001)

GAUGE 3
1461(6)
146(002)

ME 2
1522(9)
152(004)

ME 1
1521(9)
152(003)

T.
146
14

ML
150.
150

MINERAL RESE
O/C 775, 7-3-7
SUBJECT TO CC

NET 1
232(7)
23(002)

NET 2

234(7)

235(7)

NET 6
534(10)
53(001)

BLUFF (0)
1033

PAVEY (0)

SHUI
1466(6)
146(002)

LINDA 1
670(5)
67(001)

Poddy

Pass

BENNETT
1393(8)
139(007)

BENNET N.R. (0)

LEDGE (0)

136

134° 55'

PREVIOUS WORK

There is evidence of previous work concerning this property. Old claim posts dating back to 1965 have been located. Three adits have been located in the northwestern corner of GAUG 2. A well developed trail runs from Bennett Lake through the properties to the east. The property was staked in 1981 June on the basis of an auriferous stream sediment anomaly.

PERSONNEL

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

1981 August 6: L. Holmgren & J. Peter (Sr. Geological Ass'ts)
A. MacArthur, A. Deak, P. Webb & C. Naas (Jr. Geological Assistants)

1981 Sept. 26: J.T. Neelands (Geologist)
J. Dupas & L. Harland (Jr. Geological Ass'ts)

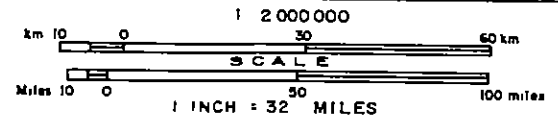
GEOLOGYRegional Geology

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).

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



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	EGLN	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
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18	CRINE	104 M 10E	49	SLINE	105 E 2E
19	KEAP	104 M 10E	50	AURIER	105 E 2W
20	SELY-SKEL	104 M 15E	51	AKEL	105 E 3E
21	TAKE	104 M 15E,W	52	OVOFAS	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 8W			
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



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 Fm): 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.

The rocks generally occur in northwest trending belts as part of a large regional synclinalorium (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 occurring 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.

Local Geology

The property is underlain by volcanic rocks (tuffs, breccias, rhyolite, andesite and basalts) intruded by granitic rocks ranging in composition from quartz diorite to true granite. The volcanic rocks probably belong to the Taku Group - an assemblage of volcanic and sedimentary rocks. Pennsylvanian to Permian in age (Wheeler 1961, P. 29). The intrusive rocks which occur as small plugs and dykes belong to the Cretaceous Coast Intrusions. The rhyolite occurs as an oblong pod surrounded by andesites and granodiorite. Outcrops of volcanic tuff, breccia and conglomerate occur further out from the rhyolite. These pyroclastic rocks show sharp contacts with the andesites.

The following is a brief description of the units observed thus far on the property:

- a. Pyroclastic Units (tuffs, breccia, conglomerate)
Map Units 3 a,b,c

The crystal tuff has a light grey matrix weathering to a slight gossanous colour due to disseminate pyrite. Large tabular broken fragments of plagioclase up to 10 mm x 2 mm in size occur throughout. The rock has a somewhat foliated appearance. A more massive grey green tuff is also represented by this unit. The volcanic breccia and conglomerate consists of angular and subrounded clasts. The groundmass appears heavily altered and weathered. Clasts are similar in composition to the groundmass and include minor chert and jasper clasts. Average size of the clasts is 0.8 cm ranging from 2 mm to 2 cm.

b. Volcanic Flow Units (basalts, andesites, rhyolite)
Map Units 4a,d,e

The andesite has a grey/green, fine-grained groundmass with small (e mm) euhedral to subhedral plagioclase phenocrysts. Texture of this rock is vaguely trachytoid. The unit is also locally vesicular.

Basalts are highly weathered with a soft grey/green groundmass. They are generally porphyritic with small feldspar phenocrysts and weatehred out pockets 1 to 2 mm in size, possibly after pyrite.

c. Intrusive Rocks (quartz diorite, granodiorite)
Map Units 7b,c

The quartz diorite is medium- to coarse-grained, equigranular and contains feldspar, quartz and mafics - primarily hornblende and secondary chlorite.

Structure

Structural features are lacking in the outcrops examined. GSC Map 19-1957 (Bennett) indicates that the volcanic and sedimentary units in the area have a northwesterly strike and a steep dip towards the east.

Mineralization

Low grade copper, gold and silver mineralization is associated with the volcanic flow units and occurs gossanous quartz veins. the copper is associated with malachite which occurs in fractures in basalt. The gold and silver occurs in quartz veins in both basalt and rhyolite near the rhyolite-basalt contact. All samples collected to date generally contain less than 0.05 oz/ton Au and 0.6 oz/ton Ag. In the northwest corner of GAUG 2 an east-west striking vein 30 cm wide contains less than 10% arsenopyrite and pyrite.

GEOCHEMISTRY

Procedure

A total of 41 soil, 8 rock and 11 stream sediment and silt samples were collected during 1981. Soil sampling was carried out at 100 metre intervals. The 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 flagging tape was secured at the sample site.

Stream sediment samples were collected at 200 metre intervals with the use of an aluminum scoop. They were sieved to -1000 -14 or -10 mesh in the field and approximately 500 gms of sample was placed in a plastic bag with a sample tag. The sample site was marked with flagging tape bearing the sample number.

Rock samples were collected at random throughout the claim group and placed in plastic bags along with a sample tag. Each sample site was marked with a length of flagging tape.

All samples were shipped to Min-En Laboratories Ltd., North Vancouver for preparation and analysis. All samples were analyzed for Mo, Cu, Pb, Zn, Ag, Hg, As, Mn, Au and Sb. A heavy mineral separation and analysis for Cu, Ag and Au was performed on the stream sediment samples. In addition, five of the rock samples were assayed for Pb, Zn, Ag and Au.

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 median 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 GAUG are tabled on Dwg. No. KU.81-167. These results have also been tabulated according to frequency distribution of elements in soils (Table IV) and in stream sediments and heavy minerals (Table V).

The original stream sediment sample (5078D) ran 80 ppb Au in the fine fraction. Silver and lead were also slightly above background in this sample. Follow-up stream sediment analysis on this creek confirmed the anomaly. Anomalous gold and silver values turned up in every sample along the creek. The highest values were those of sample No. 8389C which contained 11500 ppb Au and 48 ppm Ag in the fine heavy mineral fraction. A creek approximately 100 metres south of the anomalous creek contained only background values in silts and sediment samples.

In the soils, several Mo and Cu anomalies turned up just south of GAUG 3, the highest being Sample No. J0182 (14 ppm Mo,

TABLE II

Kulda Regional Stream Sediment Sampling Programme

Background and Anomalous Values

<u>Element</u>	<u>No. of Samples</u>	<u>Mean ppm</u>	<u>Median Background ppm</u>	<u>Standard Deviation</u>	<u>95% Threshold ppm</u>
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

Kulfa 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
HMs						

800 ppm Cu). Through the central portion of GAUG 1 several anomalous values of Mo, Cu, Ag, Hg, Mn and Au occurred. Highest Au, Ag and Hg values occurred in sample L08 (410 ppb Au, 10 ppm Ag, 940 ppb Hg).

Rock assays in the area just above the anomalous creek revealed several high values. Four samples in arsenopyrite and pyrite bearing quartz assayed as high as 0.039 oz/ton Au (853C) and 0.71 oz/ton Ag (855C). In GAUG 1 where Cu anomalies occurred in soils, a sample of malachite-stained basalt assayed 1.34% copper. A summary of the rock types and their associated anomalous values is given below. Full geochemical results are tabulated on Dwg. No. KU.81-166.

<u>Sample #</u>	<u>Rock Type</u>	<u>Anomalous Values</u>
852C	Cherty quartz vein	0.011 oz/t Au, 0.09 oz/t Ag
853C	Cherty qtz, 5% AsPy. 1% Py	0.39 oz/t Au, 0.58 oz/t Ag
854C	Siliceous zone, 1% AsPy	0.047 oz/t Au, 0.43 oz/t Ag
855C	Chert Ztz, 5% AsPy	0.029 oz/t Au, 0.71 oz/t Ag
856C	Basalt, malachite stain	0.025 oz/t Au, 1.34% Cu
8632D	Gossanous pyritic tuff	None
8633D	Gossanous pyritic tuff	None
8634D	Gossanous quartz diorite	1900 ppb Hg

CONCLUSIONS AND RECOMMENDATIONS

Follow-up work on the original anomalous stream sediment samples confirmed the existence of an anomaly on the property. Rock geochemistry has outlined an area of auriferous quartz veins in the vicinity of the rhyolite-basalt contact. High copper values occur in soils and basalt in the norther regions of the proeprty.

It is recommended that further detail geological mapping and soil grids be conducted in the anomalous areas in order to determine the extent of the mienralized zones.

HJC/krl

COST STATEMENTWages

	<u>Cost</u>
1 Geologist, 1 manday(s), (1981 September 26)	\$ 150.00
3 Sr. Geol. Assistant, 3 manday(s) (1981 Aug. 6)	197.98
5 Jr. Geol. Assistants, 5 manday(s) (1981 Aug. 6)	260.44
2 Jr. Geol. Assistants, 2 manday(s) (1981 Sept. 26)	107.99
	<u>\$ 716.41</u>

Room & Board

<u>Location</u>	<u>Daily Rate</u>	<u>Date</u>	<u>No. of Days</u>	
Carcross	\$25.00	1981 Aug. 6	8	\$200.00
Whitehorse	\$50.00	1981 Sept. 26	3	150.00
				<u>\$350.00</u>

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): Aug. 6, Sept. 26 No. of hrs: 3.25 1,405.63
\$1,477.33

Analytical Services

<u>Type of Sample</u>	<u>No. of</u>	<u>Fraction Analyzed</u>	<u>Elements Analyzed</u>											<u>Unit Price</u>		
			F	FHM	CHM	Mo	Cu	Pb	Zn	Ni	Ag	Hg	As			Mn	Au	Sb
Heavy Mineral	6	X		X	X	X	X		X	X	X	X		X	\$17.75	\$ 106.50
	6		X				X		X					X	7.90	47.40
	6			X			X		X					X	7.90	47.40
Soil	10			X	X	X	X	X	X	X	X	X	X	X	23.65	236.50
	34			X	X	X	X		X	X	X	X		X	22.75	773.50
Rock	3			X	X	X	X	X	X	X				X	22.75	68.25
	5			X	X	X			X	X				X	15.05	75.25
	5						X	X	X					X	31.00	155.00

Preparation - Rock 8 @ \$2.25/sample 18.00
 - Heavy Mineral 6 @ \$20.00/sample 120.00
 - Soil/Silt 52 @ \$0.85/sample 37.40

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)

\$1,685.20

Report PreparationCost

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:\$4,435.46

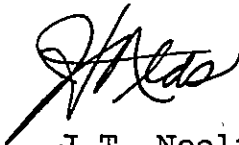
REFERENCES

- 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", B.C. Assessment Report, 1982.
- Neelands, J. T.; "Kulta Follow-Up (104-J, 104-M)" Geological and Geochemical Report, B.C. Assessment Report, 1982.
- Wheeler, J. O.; "Whitehorse Map-Area, Yukon Territory (105-0)", 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, Lisa Dawne Holmgren, do hereby certify that:

1. I am a geologist residing at 68 Wood Cres., SW, Calgary, Alberta and am employed by Du Pont of Canada Exploration Limited.
2. I am a graduate of The University of British Columbia with a B.Sc. (Honors) degree in geology.
3. I am an Associate of the Geological Association of Canada.
4. I have been practicing my profession in geology continuously for the past two years in British Columbia and Yukon Territory, Canada.
5. Between 1981 May and 1981 August, I participated in the field programme described in this report on behalf of Du Pont of Canada Exploration Limited.



L. D. Holmgren
1982 May

APPENDIX I

Laboratory Procedure

*MIN-EN Laboratories Ltd.**Specialists in Mineral Environments*Corner 15th Street and Bewicke
705 WEST 15th STREET
NORTH VANCOUVER, B.C.
CANADAANALYTICAL PROCEDURE REPORTS FOR ASSESSMENT WORKPROCEDURES 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 Gutzeit method using $\text{Ag CS}_2\text{N} (\text{C}_2\text{H}_5)_2$ as a reagent. The detection limit obtained is 1.2 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.

*MIN-EN Laboratories Ltd.**Specialists in Mineral Environments*Corner 15th Street and Bewicke
705 WEST 15th STREET
NORTH VANCOUVER, B.C.
CANADAANALYTICAL PROCEDURE REPORTS FOR ASSESSMENT WORKPROCEDURE 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.

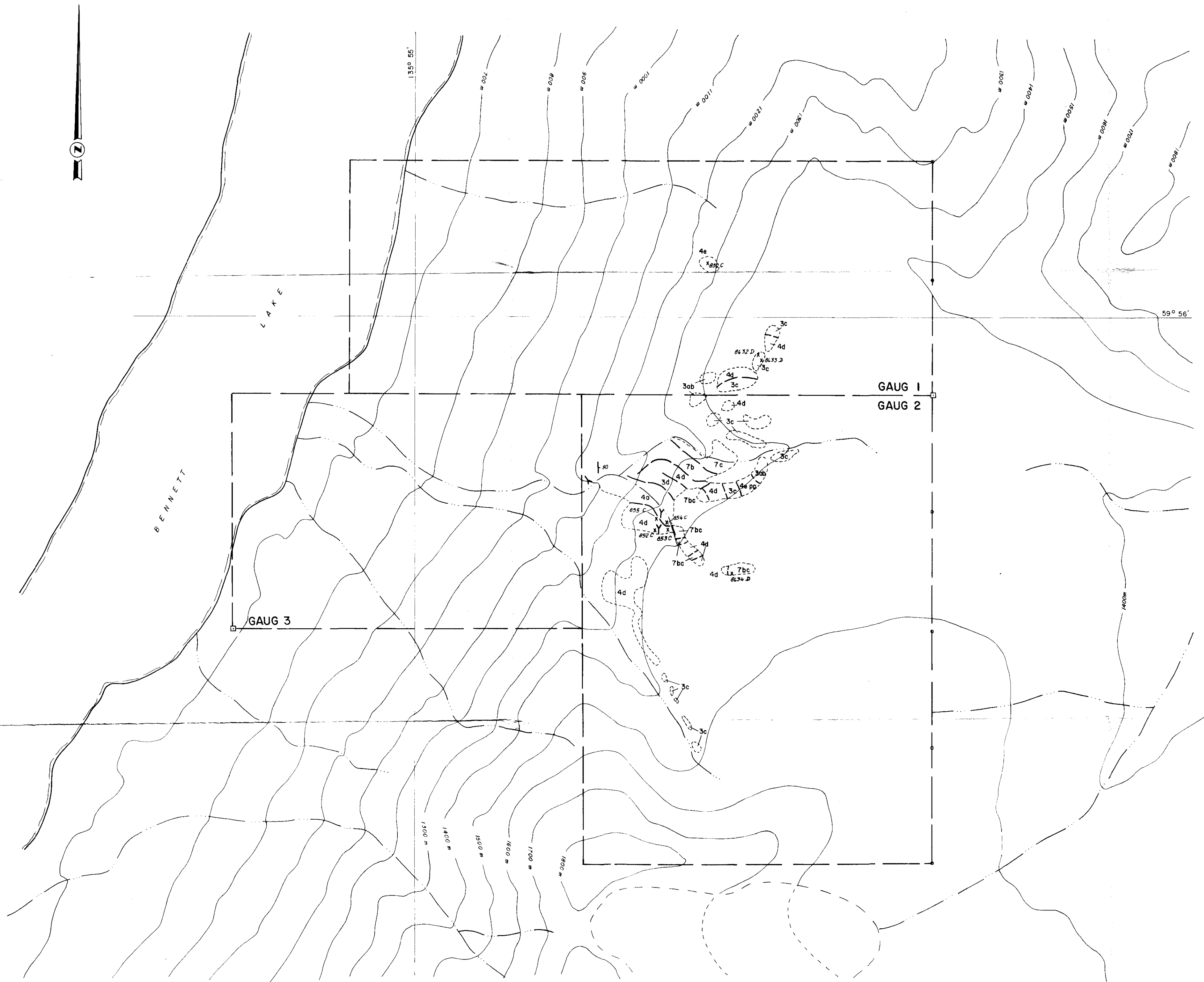
A suitable sample weight 5.0 or 10.0 grams are pre-treated with HNO_3 and HClO_4 mixture.

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.



LEGEND

JURASSIC OR LATER

POST LOWER JURASSIC

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

JURASSIC

LOWER JURASSIC AND LATER

- 6
- LABERGE GROUP
 6a) Conglomerate 6b) Graywacke 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

SYMBOLS

- OUTCROP
- CONTACT
- x 852 C ROCK SAMPLE LOCATION AND NUMBER
- △ MINERAL OCCURRENCE
- L.C.P. CLAIM LINE AND LEGAL CORNER POST
- IDENTITY POST
- BEDDING, STRIKE AND DIP
- ADIT

Sample	ROCK GEOCHEMICAL RESULTS									
	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Ag ppm	Hg ppm	As ppm	Au ppm	Sb ppm
852 C	9	43	39				10	5060		44
853 C	2	114	890				15	22500		600
854 C	6	157	560				5	16500		420
855 C	3	64	930				5	8500		4100
856 C	24	12300	58				20	146		150
8632 D	2	50	28	63	95	1.7	145	45	5	135
8633 D	2	19	15	56	26	0.8	10	2	5	54
8631 D	1	394	10	79	8	1.3	1900	16	30	210

ROCK ASSAYS

Sample	Pb %	Zn %	Ag oz/T	Au oz/T
852 C	0.01	0.01	0.09	0.011
853 C	0.09	0.02	0.58	0.039
854 C	0.05	0.03	0.43	0.027
855 C	0.10	0.06	0.71	0.029
856 C	0.01	0.03	0.56	0.025

Cu Z 1,340

MINERAL RESOURCES BRANCH
 ASSESSMENT REPORT
10427

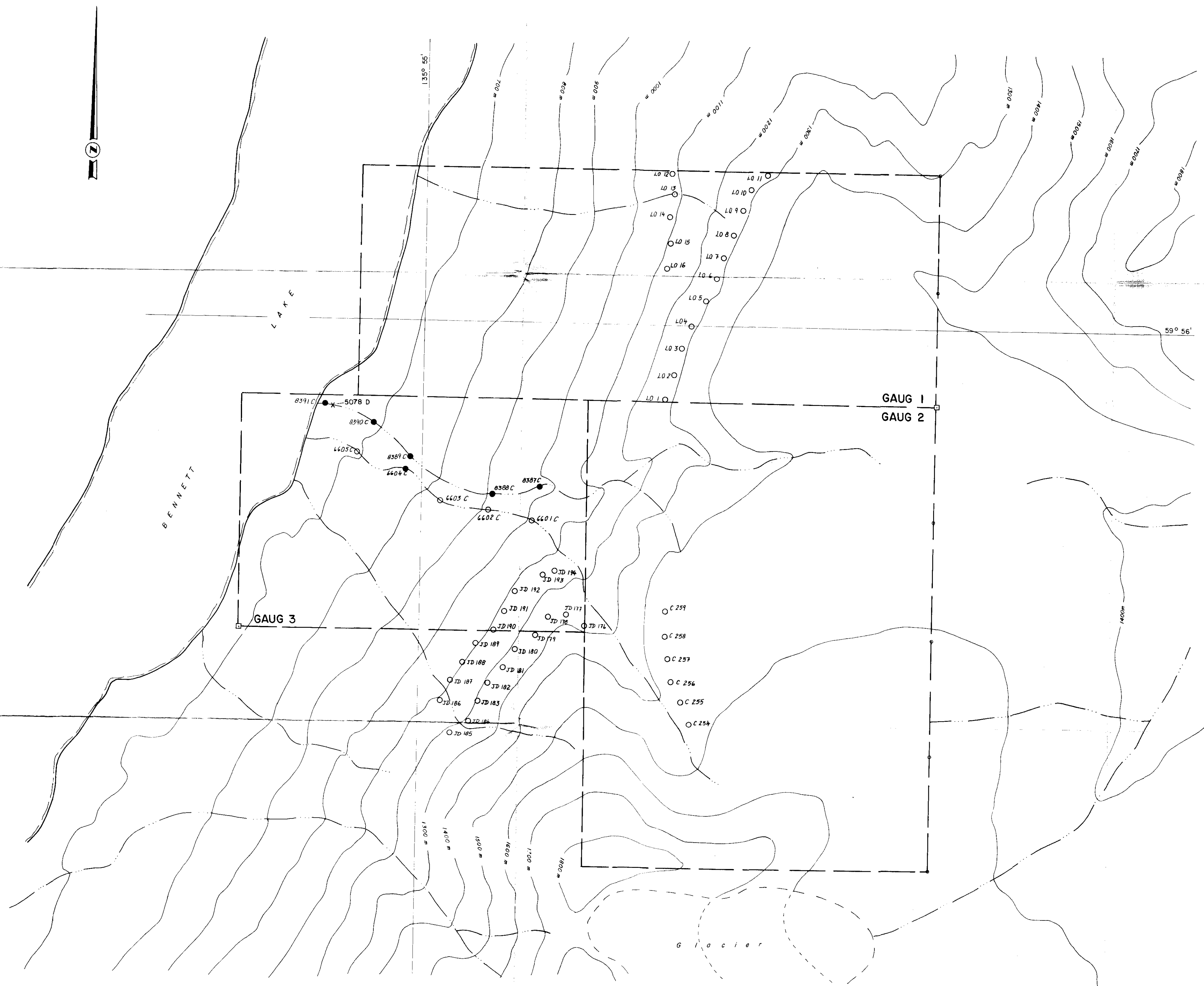
DUPONT EXPLORATION
 CANADA

**KULTA PROJECT
 GAUG CLAIMS
 GEOLOGY**

ATLIN LAKE AREA, BRITISH COLUMBIA

1:10,000
 0 100 200 300 400 500 m
 0 1 2 3 4 5 INCH = 833 FEET

MAPPED BY: J.T.N., J.M.P.	REVISED:	N.T.S. No.: 104 M5W
DATE: 81 08 06		ACCT No.: 591 - 36
DRAWN BY: C.H.K.		DRWG. No.: KU 81 - 166
DATE: 82 02 15		



LEGEND

- JD 176 SILT or SOIL SAMPLE LOCATION and NUMBER
- 8391 C SIEVED HEAVY MINERAL SAMPLE LOCATION and NUMBER
- X -5078 D ORIGINAL SIEVED HEAVY MINERAL SAMPLE LOCATION (1981) and NUMBER

1981 SAMPLE RESULTS

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	Hg ppb -80 F	As ppm -80 F	Mn ppm -80 F	Au ppb -80 F	Sb ppm -80 F
Soil											
C 254	1	29	29	102	21	0.8	40	82	1220	5	30
C 256	1	27	38	101	22	0.7	45	85	1220	10	18
C 257	3	35	32	81	20	0.7	30	82	900	30	30
C 258	2	21	36	76	18	1.3	40	62	1160	5	45
C 259	2	29	33	55	22	0.6	65	63	550	10	40

Sample	Mo ppm -80 F	Cu ppm -80 F	Pb ppm -80 F	Zn ppm -80 F	Ag ppm -80 F	Hg ppb -80 F	As ppm -80 F	Mn ppm -80 F	Au ppb -80 F	Sb ppm -80 F
Soil										
JD 176	1	36	25	62	0.8	80	470	525	10	30
JD 177	4	38	22	66	1.0	60	300	600	5	32
JD 178	6	53	27	82	1.3	90	138	700	5	25
JD 179	4	70	39	86	1.2	90	290	900	10	32
JD 180	2	111	25	75	1.2	90	420	880	5	24
JD 181	8	92	24	84	1.0	90	175	600	5	26
JD 182	14	800	26	82	2.1	105	400	1030	15	66
JD 183	6	78	21	36	0.9	65	125	260	10	14
JD 184	10	89	27	90	1.4	75	350	730	5	28
JD 185	7	69	31	86	1.3	70	560	770	5	55
JD 186	10	80	35	111	1.4	90	380	630	5	38
JD 187	9	41	24	50	1.0	120	177	280	5	18
JD 188	5	46	25	71	1.0	120	430	500	10	28
JD 189	6	49	23	42	1.1	110	260	185	5	16
JD 190	4	112	28	90	1.2	100	177	1010	40	22
JD 191	5	63	27	67	1.0	65	310	760	20	28
JD 192	2*	14*	9*	37*	0.3*	200*	29*	80*	15*	12*
JD 193	4	38	20	60	0.9	55	390	300	5	24
LO 1	9	30	32	63	1.0	20	260	560	20	34
LO 2	7	54	112	114	1.8	15	152	2300	20	28
LO 3	5	34	54	72	1.3	25	114	1400	5	20
LO 4	9*	28*	54*	95*	1.2*	10*	70*	2180*	5*	20*
LO 5	9	128	40	58	1.6	20	61	1700	10	26
LO 6	23	800	80	141	2.7	65	79	2330	120	34
LO 7	13	88	108	102	1.7	25	177	6500	30	40
LO 8	14	200	112	145	10.0	100	950	2500	410	70
LO 9	9	85	182	380	6.2	85	106	2300	55	22
LO 10	7	43	35	58	1.7	15	70	1000	5	20
LO 11	10	48	53	104	2.0	45	81	1680	10	30
LO 12	9	42	28	130	0.9	30	53	2300	10	22
LO 13	8	56	64	106	2.2	75	117	980	10	25
LO 14	5*	38*	10*	49*	0.4*	110*	11*	280*	5*	25*
LO 15	8	37	24	58	0.8	40	99	500	30	45
LO 16	6	50	33	157	1.2	120	82	2080	5	15
LO 17	16*	168*	40*	76*	1.8*	60*	50*	1880*	5*	16*

* -40 Mesh

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	Hg ppb -80 F	As ppm -80 F	Mn ppm -80 F	Au ppb -80 F	Sb ppm -80 F
-10 Sieve											
5078 D	3	33	4	162	130	2.5	0.8	650	80	5	131

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	Hg ppb -80 F	As ppm -80 F	Mn ppm -80 F	Au ppb -80 F	Sb ppm -80 F
6601 C	7	23	15	48	14	0.5	20	129	600	5	12
6602 C	2	14	24	64	16	0.5	70	198	710	15	15
6603 C	4	14	20	65	16	0.6	55	310	720	5	18
6605 C	3	33	22	63	18	1.0	85	211	660	5	22

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	Hg ppb -80 F	As ppm -80 F	Mn ppm -80 F	Au ppb -80 F	Sb ppm -80 F	H.M. wt. F/C	H.M. Z F/C	Orig. wt. F/C
-20 Sieve														
6604 C	2	32	82	70	30	71	18	0.7	1.5	10	224	690	25	95
8387 C	2	28	169	278	120	127	19	46.0	69.0	10	310	990	9500	550
8388 C	3	27	218	216	195	125	22	66.0	61.0	10	380	790	7100	725
8389 C	1	26	154	204	120	131	20	48.0	53.0	25	350	780	11500	230
8390 C	1	25	196	176	115	110	20	39.0	57.0	30	300	700	5000	510
8391 C	2	22	169	91	87	89	20	44.3	20.0	10	155	600	2950	115

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
10,427

DUPONT EXPLORATION
CANADA

**KULTA PROJECT
GAUG CLAIMS
GEOCHEMISTRY**
Au, Ag, As, Cu, Hg, Mn, Mo, Ni, Pb, Sb, Zn, %HM

ATLIN LAKE AREA, BRITISH COLUMBIA

SCALE: 1" = 1000 FT
1" = 33.33 METERS

MAPPED BY: J.T.N., J.M.R.
DATE: 81.08.06
DRAWN BY: C.H.K.
DATE: 82.02.15

REVISED: _____
N.T.S. No.: 104 M 15W
ACCT No.: 551-36
DRWG. No.: KU-81-167