



DU PONT OF CANADA EXPLORATION LIMITED

GEOLOGICAL AND GEOCHEMICAL REPORT

ON THE EVIEW PROPERTY

WHITEHORSE MINING DIVISION

(YUKON TERRITORY)

LAT. 60°27'N, LONG. 135°03'W

NTS: 105-D-6E

OWNER OF CLAIMS: DU PONT OF CANADA EXPLORATION LIMITED

OPERATOR: DU PONT OF CANADA EXPLORATION LIMITED

091044

Submitted by: H.J. Copland
J.T. Neelands
Date : 1982 May

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INTRODUCTION

During 1981 May, reconnaissance stream sediment sampling was carried out in the Whitehorse-Carcross area of southern Yukon. The sampling was undertaken as part of a large regional programme known as Kultha Project. The areal extent of this project is shown on Dwgs. KU.81-1, 1a and 2.

As the result of a lead-zinc anomaly in a sample from a creek draining south from near Lakview Mountain, the drainage area of this creek was staked as the EVIEW property.

LOCATION AND ACCESS

The EVIEW claim is located within the Whitehorse Mining Division, NTS 105-D-6E (Lat. 60°27'N, Long. 135°03'W). The property is located one kilometre east of Lakeview Mountain and eight kilometres west of McConnell Lake. The nearest population centre is Whitehorse, 30 kilometres to the north. The claim is accessible by helicopter from Whitehorse. The Carcross-Whitehorse highway passes 11 kilometres to the east of the property.

TOPOGRAPHY AND VEGETATION

The claim almost covers a small flat topped mountain which is immediately east of Lakeview Mountain. The central portion of the claim forms a broad plateau which rises to a peak of elevation 1495 metres in the north. In the south, the mountain slopes moderately to a small U-shaped valley situated north of Goat Mountain. The lowest elevation on the property is 1130 metres. One major stream drains the property to the south. Small ponds dot the upper plateau. Subalpine grasses and shrubs cover the upper areas whilst spruce and pine are most prominent on the valley floor.

PROPERTY DEFINITION

The EVIEW property consists of 16 claim units as shown on Dwg. No. KU.81-255. The claims are in good standing until 1982 June 8.

EVIEW: YA60923 to YA60938.

PREVIOUS WORK

No previous work is recorded concerning the property. The property was staked in June 1981 on the basis of a lead-zinc anomaly in a stream sediment sample. Follow-up work in August and September consisted of collecting stream sediment, soil and rock samples for analysis.

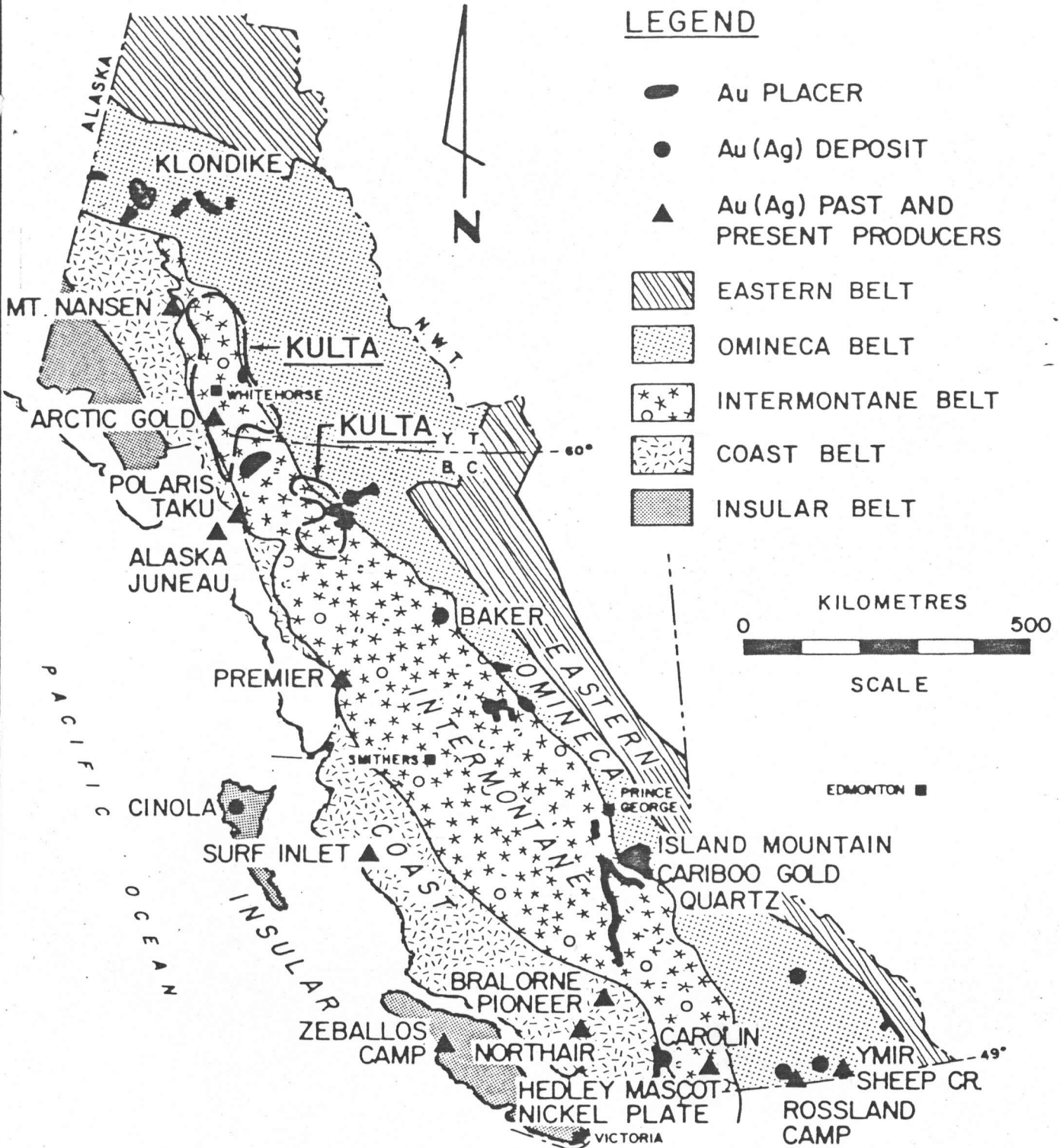
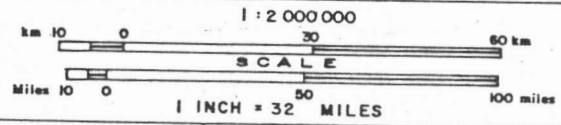


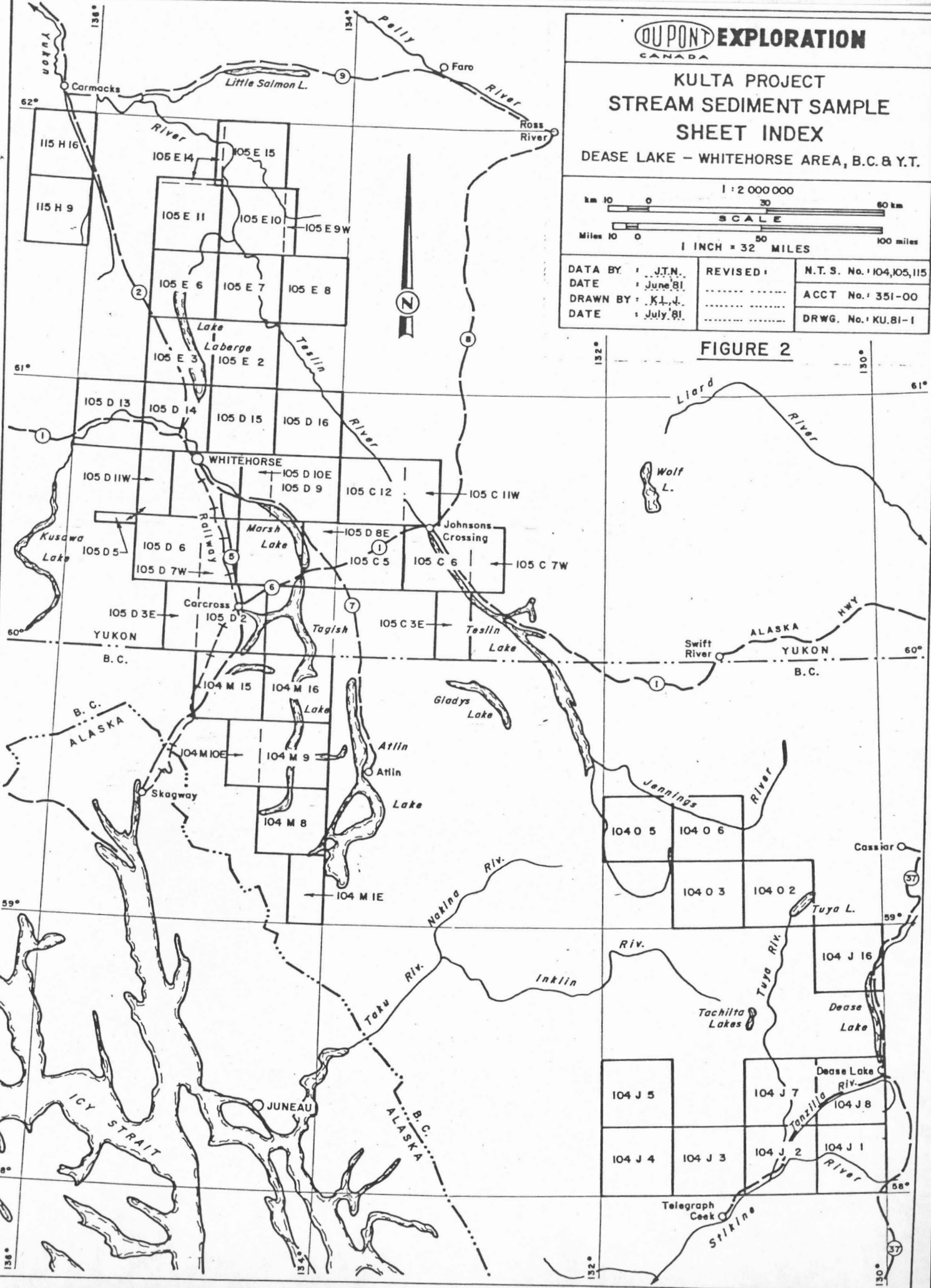
FIGURE I
KULTA PROJECT AREAS
 PRINCIPAL LODGE & PLACER GOLD DEPOSITS
 CANADIAN CORDILLERA

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

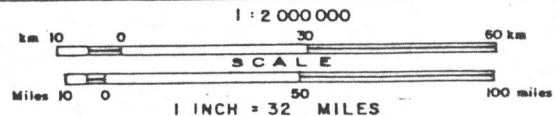


DATA BY : J.T.N.	REVISED :	N.T.S. No. : 104,105,115
DATE : June 81	.....	ACCT No. : 351-00
DRAWN BY : K.L.J.	.....	DRWG. No. : KU.81-1
DATE : July 81	.....

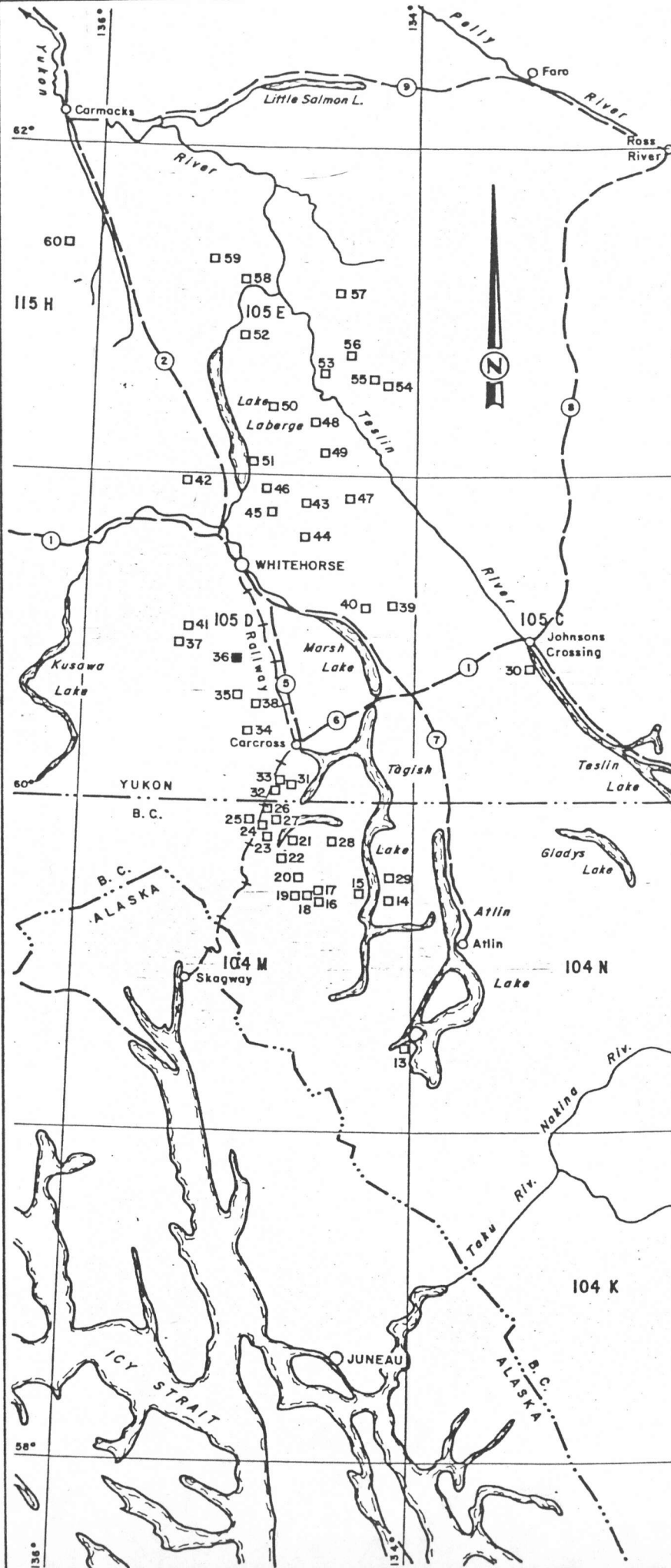
FIGURE 2



**KULTA PROJECT
CLAIM LOCATION MAP
DEASE LAKE - WHITEHORSE AREA, B.C. & Y.T.**



DATA BY :	REVISED :	N. T. S. No. : 104,105,115
DATE :	81 10 23	ACCT No. : 351-00
DRAWN BY : K.L.J.	.....	DRWG. No. : KU.81-2
DATE : July 81	.....

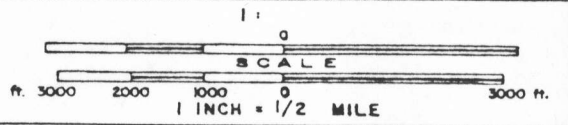


No.	CLAIM NAME	N.T.S.	No.	CLAIM NAME	N.T.S.
1	RAND	104 I 4, J 1	32	DUNK	105 D 2W
2	LATE	104 J 1E	33	UNDAL	105 D 2W
3	LAME	104 J 1E	34	EVEN-ODD	105 D 2,3
4	FLOOD	104 J 2W	35	OLLIE	105 D 6E
5	TAIL	104 J 1,2	36	EVIEW	105 D 6E
6	ALOON	104 J 3W	37	DAYIR	105 D 6W
7	HALT	104 J 4E	38	ILLIA	105 D 7W
8	EGLN	104 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
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	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	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 6W			
31	ATHES	105 D 2E,W			

3 E

DUPONT EXPLORATION
CANADA

**KULTA PROJECT
EVIEV CLAIMS
CLAIM MAP
WHITEHORSE AREA, YUKON TERRITORY**



DATA BY: J.T.N...	REVISED:	M.T.S. No.: 105 D 6E
DATE	.....	ACCT No.: 351-28
DRAWN BY: C.L.S.	.....	DRWG. No.: KU-81-255
DATE: '82.05.	.....

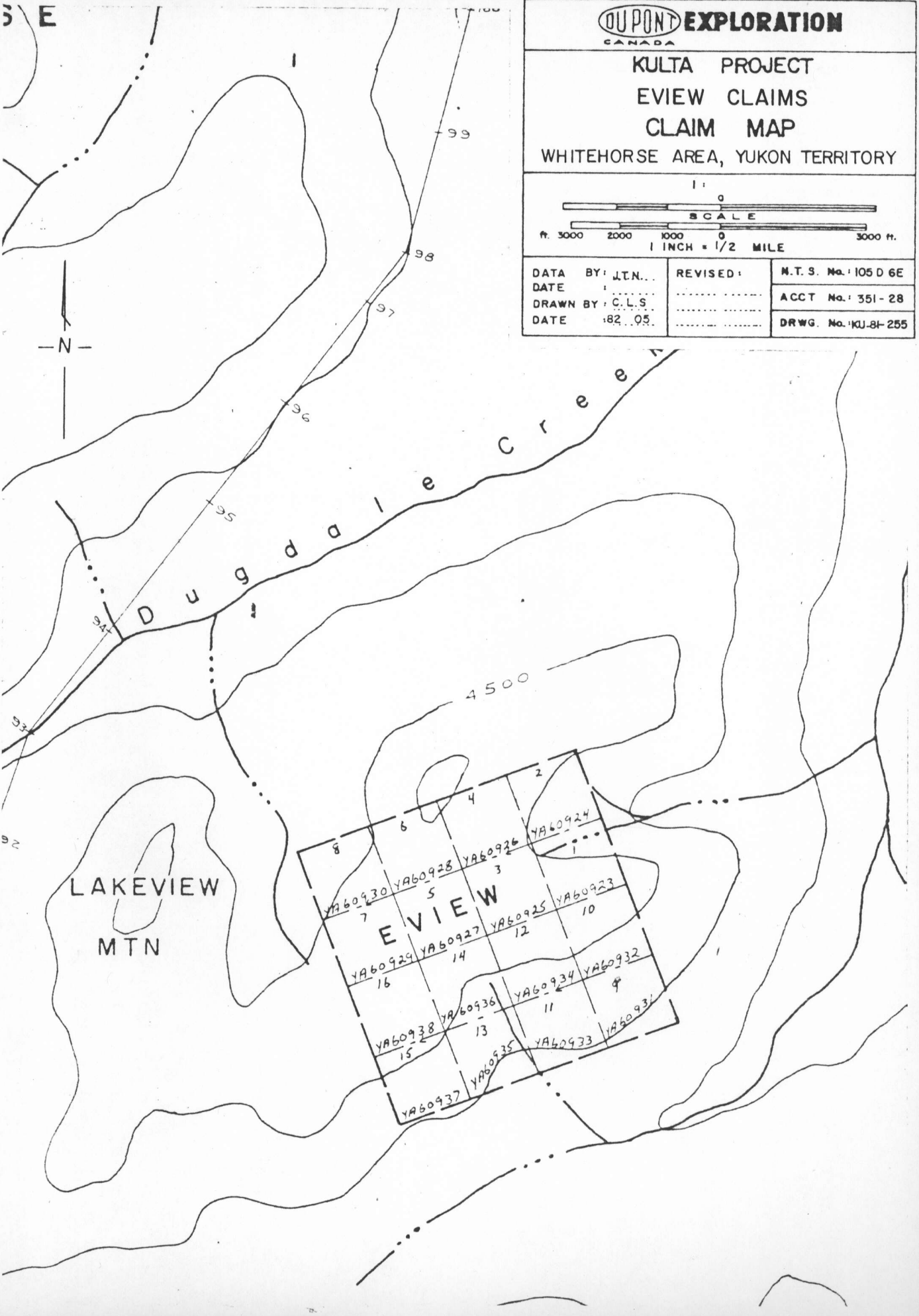


TABLE I

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.

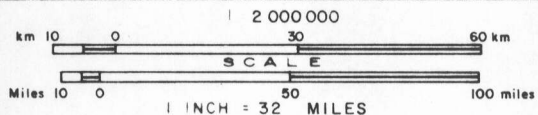
Mississippian - Triassic (MTC)

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

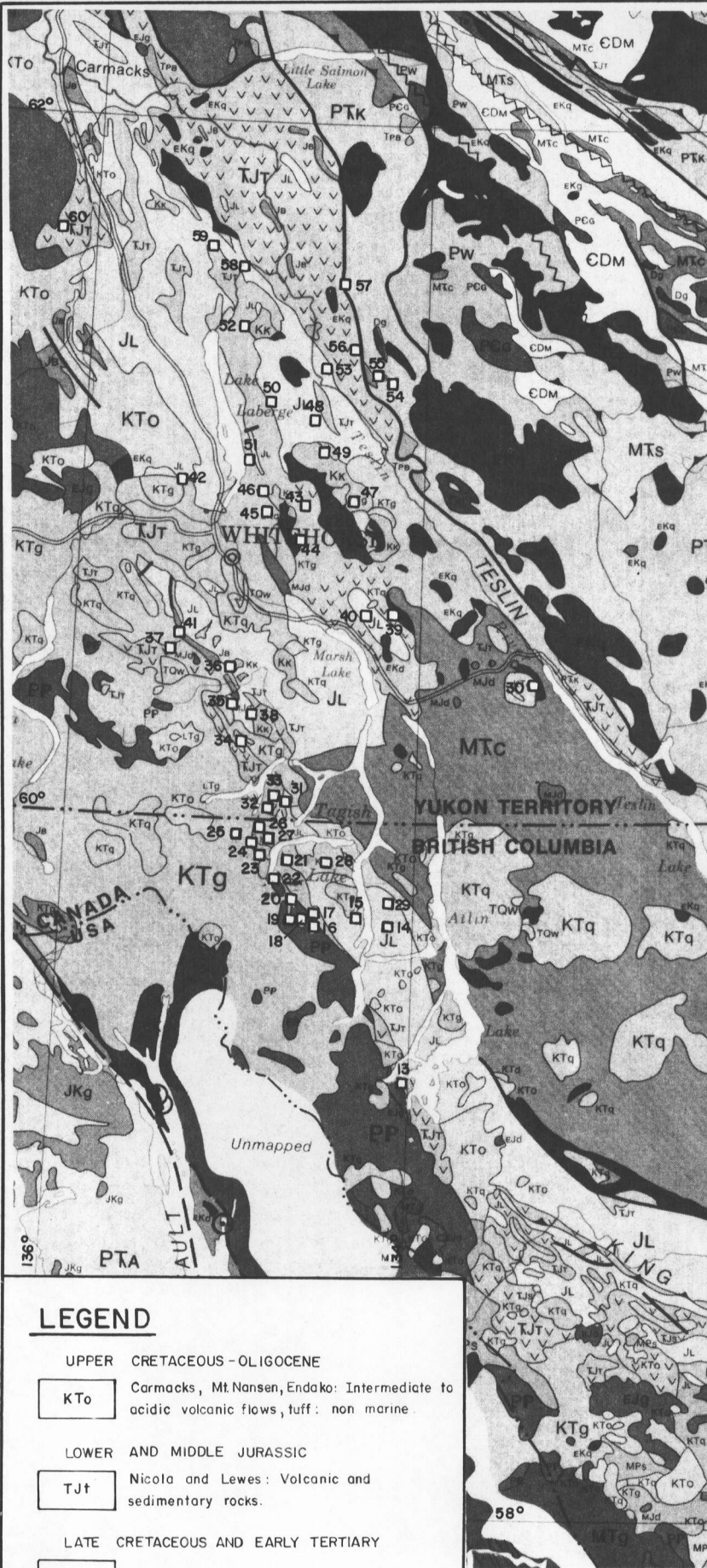
Proterozoic - Palaeozoic

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

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



DATA BY J.T.N.	REVISED	N T S 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 2 W
2	LATE	104 J 1 E	33	UNDAL	105 D 2 W
3	LAME	104 J 1 E	34	EVEN -	
4	FLOOD	104 J 2 W		ODD	105 D 2, 3
5	TAIL	104 J 1, 2	35	OLLIE	105 D 6 E
6	ALOON	104 J 3 W	36	EVIEW	105 D 6 E
7	HALT	104 J 4 E	37	DAYIR	105 D 6 W
8	EGLEN	104 J 5 E	38	ILLIA	105 D 7 W
9	YAT	104 J 7 W	39	ICHIE	105 D 9 E
10	ANTZ	104 J 8 W	40	INTO	105 D 9 W
11	LURE	104 J 16 E	41	BEXI	105 D 11 W
12	ANKI	104 J 16 E	42	FLAT	105 D 14 W
13	NARRS	104 M 8 E	43	UNCER	105 D 15 E
14	HAKER	104 M 9 E	44	SLEWER	105 D 15 E
15	AKUM	104 M 9 W	45	ERGE	105 D 15 W
16	RACE	104 M 10 E	46	LABE	105 D 15 W
17	CREED	104 M 10 E	47	UTSHIG	105 D 16 W
18	CRINE	104 M 10 E	48	CROST	105 E 2 E
19	KEAP	104 M 10 E	49	SLINE	105 E 2 E
20	SELLY-SKEL	104 M 15 E	50	AURIER	105 E 2 W
21	TAKE	104 M 15 E, W	51	AKEL	105 E 3 E
22	TUTS	104 M 15 W	52	OVOAS	105 E 6 E
23	SHUI	104 M 15 W	53	ENOF	105 E 7 E
24	GAUG	104 M 15 W	54	MAYBE	105 E 8 E
25	ANGE-BE	104 M 15 W	55	MARBEE	105 E 8 E, W
26	PENG	104 M 15 W	56	GERM	105 E 8 W
27	TSHIK	104 M 15 W	57	SBS	105 E 10 E
28	ANNIG	104 M 16 W	58	HOOT	105 E 11 E
29	UNDAS	104 M 16 E	59	RANKL	105 E 11 W
30	SAYEH	105 C 6 W	60	KIRK	115 H 9 E
31	ATHES	105 D 2 E, 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
- [Symbol] Alpine - type ultramafics



PERSONNEL

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

1981 August 22: H. Copland (Senior Geological Assistant)
L. Cunningham (Junior Geological Ass't)

1981 Sept. 29 : J.T. Neelands (Geologist)
J. Dupas (Junior Geological Assistant)
L. Harland (Junior Geological Assistant)

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).

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 displacement.

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 EVIEW claims are underlain by mafic to felsic volcanics and sediments which have been intruded by granodiorite. The sedimentary rocks are the oldest observed on the property, belonging to the Lower Jurassic Laberge Group. The rhyolite, dacite, basalt and tuff on the claim belong to the Cretaceous Hutshi Group of volcanic and minor sedimentary rocks. The youngest unit intruding all of the above is Cretaceous Coast Intrusion granodiorite. This occurs as an elongate pod in the eastern portion of the claim.

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

a. Siltstone - Map Unit 5a

This unit is fine-grained, medium green weathering to a light green to brown. Bedding is present in the form of thin bands less than 2 mm thick. In general, the rock is highly weathered, with a "bleached" surface extending 1 cm into the rock. Contact with other units is not visible.

b. Dacite - Map Unit 8b

The dacite is aphanitic, dark green, weathering to an orange/brown gossanous colour. Phenocrysts of plagioclase(?) are less than 1 mm in size and comprise up to 15% of the rock. Minor disseminated pyrite (less than 1%) is present in the dacite. The dacite was observed to be cross-cutting the sediments in one location.

c. Rhyolite - Map Unit 8a

This unit is aphanitic white to tan, weathering to a bleached white colour with local orange/brown gossans. Tubular, euhedral phenocrysts of quartz(?) less than 1 mm in size comprise 5 to 10% of the rock.

d. Basalt - Map Unit 8d

The basalt is a dark green to white colour weathering to a grey/green. Minor gossanous patches are present on the outcrop observed. The unit is fine-grained with a "peppery texture" of plagioclase and pyroxene(?) in equal proportions.

e. Tuff - Map Unit 8e

This unit is light green to brown, weathering to a light-green with weak iron staining. The rock is composed of clasts less than 1 mm in size of glassy quartz (50%) and euhedral feldspar (40%) supported by an aphanitic matrix.

Structure

Bedding observed in the siltstone was orientated at 165/36 NE. No bedding was visible in the volcanic rocks. The property is located near the southern end of the Fish Lake syncline (GSC Map 1093A, 1961).

Mineralization

No significant mineralization was observed on the property. Minor pyrite (usually 1 to 2%) is finely disseminated in the altered and porphyritic volcanic rocks in the northern part of the claims.

GEOCHEMISTRY

Procedure

A total of 95 soil, 9 rock and 10 stream sediment samples were collected during 1981. Soil sampling was carried out at 100 and 50 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 on flagging tape which 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 -14 and -10 mesh in the field and 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. The sample site was also 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. In addition, the stream sediment samples were sieved to -20 mesh and a heavy mineral separation and analysis performed for Cu, Ag and Au. Three 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 EVIEW are tabled on Dwg. No. KU.81-191. These results have also been tabulated as to frequency distribution of elements in soils (Table IV) and stream sediments (Table V).

The original stream sediment sample (9561D) ran 206 ppm Pb and 1200 ppm Zn in the fine fraction. Follow-up stream sediment sampling on the same creek, has confirmed that a Pb-Zn anomaly is present. Sample 9920D approximately 300 metres upstream from the original, produced a value of 1120 ppm Pb, 38.10 ppm Zn and 7.5 ppm Ag.

Soil samples at the head of the anomalous creek ran as high as 20,000 ppm Pb and 3570 ppm Zn in sample HC51. Numerous soil samples in this area showed high Pb, Zn and occasionally high Ag values. Gold values are generally low, whereas silver values increase with the Pb and Zn to 12.0 ppm Ag in sample HC51.

Rock geochemistry revealed only one sample with anomalous values. Sample number 9701D ran 512 ppm Pb, 890 ppm Zn and 18.67 ppm Ag. This rock was a gossanous porphyritic dacite. Table VI summarizes the rock types collected and any anomalous values present. Details of rock geochemistry and assays are tabled on Dwg. No. KU.81-190.

CONCLUSIONS AND RECOMMENDATIONS

Follow-up work on the property has confirmed the existence of a Pb-Zn-Ag anomaly. The source of this anomaly has been narrowed to the head of the southerly flowing creek on the property. Soil grids over this area and the examination of the remainder of the property not previously covered is recommended.

TABLE II

Kulita 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

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 VI

Description of Rock Samples

<u>Sample #</u>	<u>Rock Type</u>	<u>Anomalous Values</u>
0863C	Rhyolite	None
0864C	Rhyolite	None
0865C	Porphyritic dacite	None
7610C	Porphyritic Dacite	None
9700D	Siltstone	350 ppm Zn
9701D	Porphyritic dacite	512 ppm Pb, 830 ppm Zn, 18.6 ppm Ag
9702D	Rhyolite	None
9703D	Basalt	None
9704D	Tuff	None

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:

\$4,514.19

REFERENCES

- Christie, R. L.; "Geology: Bennett (104M)", G.S.C. Preliminary Series Map No. 19-1957, 1957.
- Neelands, J. T.; "Geochemical Report - Kultha Regional Stream Sediment Sampling Programme in the Dease Lake and Tagish Lake Areas", B.C. Assessment Report, 1982.
- Neelands, J. T.; "Kultha Follow-Up (104-J, 104-M)" Geological and Geochemical Report, B.C. Assessment Report, 1982.
- Wheeler, J. O.; "Whitehorse Map-Area, Yukon Territory (105-O)", G.S.C. Memoir 312, 1961.

QUALIFICATIONS

I, Hugh J. Copland Jr., do hereby certify that:

1. I am a geologist residing at 5250 Ash Street, Vancouver, British Columbia and employed by Du Pont of Canada Exploration Limited.
2. I am a recent graduate of the University of British Columbia with a B.Sc. (Honours) degree in Geology and McMaster University with a B.Eng. (Mechanical).
3. I have practised my profession in geology for the past two summers in British Columbia and the Yukon.
4. In August and September 1981, I participated in the field programme described in this report on behalf of Du Pont of Canada Exploration Limited.

A handwritten signature in cursive script that reads "Hugh J. Copland".

H. J. Copland
1982 May

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

APPENDIX I

Laboratory Procedures

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 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.

*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.



LEGEND

- TERTIARY**
- MIOCENE**
- CARMACKS GROUP**
- 12 Grey weathering massive hornblende andesite porphyry
- EOCENE**
- MT. NANSEN GROUP**
- 11 II a) Andesite II b) Basalt
- 10 IO a) Quartz monzonite IO b) Granodiorite
- CRETACEOUS**
- COAST INTRUSIONS**
- 9 9a) Quartz monzonite 9b) Granodiorite
9c) Felsic dyke 9d) Mafic dyke
- HUTSHI GROUP**
- 8 8a) Rhyolite 8b) Dacite 8c) Andesite
8d) Basalt 8e) Tuff 8f) Volcanic conglomerate
- 7 7a) Peridotite 7b) Serpentinite
- UPPER JURASSIC and/or LOWER CRETACEOUS**
- TANTALUS FORMATION**
- 6 6a) Shale 6b) Schist 6c) Quartz sericite schist
- UPPER TRIASSIC and LOWER JURASSIC**
- LABERGE GROUP**
- 5 5a) Siltstone 5b) Limestone 5c) Shale
5d) Quartzite 5e) Conglomerate 5f) Hornfels
- 4 4a) Dacite 4b) Andesite 4c) Basalt
4d) Volcaniclast

