82-841-10497

DU PONT OF CANADA EXPLORATION LIMITED

KULTA FOLLOW-UP

GEOLOGICAL & GEOCHEMICAL REPORT

ON THE

LATE, LAME, FLOOD, TAIL, ALOON, YAT
EGLEN ANTZ, LURE, ANKI CLAIM GROUPS

LIARD MINING DIVISION

} A.R. 10387

AND THE

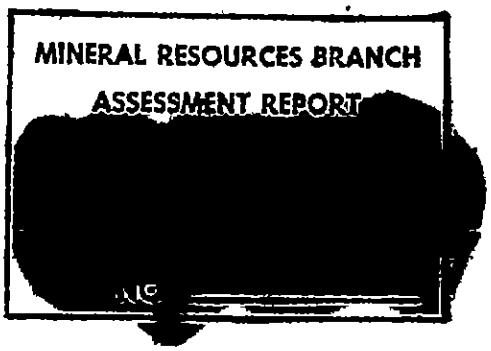
~~EGLEN~~, NARRS, HAKER, AKUM, RACE, CREED, KEAP, TAKE, PENG, TSHIK, ANNIG, UNDAS CLAIM GROUPS

ATLIN MINING DIVISION

BETWEEN: Latitudes 58°00' and 60°00' North and Longitudes 130°00' and 136°00'West

NTS: 104-J, 104-M

OWNER OF CLAIMS: DU PONT OF CANADA EXPLORATION LIMITED
OPERATOR OF CLAIMS: DU PONT OF CANADA EXPLORATION LIMITED



Author: J.T. Neelands
Date Submitted: 1982 May

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KU.81-172	TSHIK Property, Geology	"
KU.81-174	ANNIG Property, Geology	"
KU.81-176	UNDAS Property, Geology	"

SUMMARY

As a result of a regional exploration programme carried out in 1982 between May 1 and June 8 (1982 Neelands), twenty-nine properties were staked in British Columbia. This report describes the geochemical sampling and geological mapping carried out on twenty-one and the remaining eight are described in individual reports. The descriptions of the twenty-one properties are included in this report in order to obtain assessment credits.

Split into AR # 10387 and AR # 10417

LOCATION AND ACCESS

The claims are located in map sheets 104-J and 104-M, (Dwgs. KU.81-1a, 2, 240 to 244). A description of the claims and their location occurs in Table 1. Access to all of the groups is by helicopter except for the FLOOD group which is adjacent to the Telegraph-Dease Lake road. The Skagway-Carcross road, the Atlin road, the Telegraph-Dease Lake road and the Stewart-Cassiar Highway are the only means of access to the two map sheets. Follow-up work was carried out from Dease Lake and Carcross in a Hughes 500D helicopter owned by Viking Helicopters.

CLAIM DEFINITION

The claims lie within the Liard and Atlin Mining Divisions and the number of claims and units per property are described in Table 1.

PREVIOUS WORK

On most of the properties there is no history of any work being completed.

SUMMARY OF WORK PERFORMED

The purpose of the work completed during the follow-up was to locate the source of the anomaly by resampling the stream sediments, by sampling the soils and by mapping possible source areas. The amount of work completed on each property depended upon the amount of geological exposure and favourable indicators such as gossans, mineralization and quartz-carbonate veins. Table 2 contains a description of the number of samples taken for each claim(s).

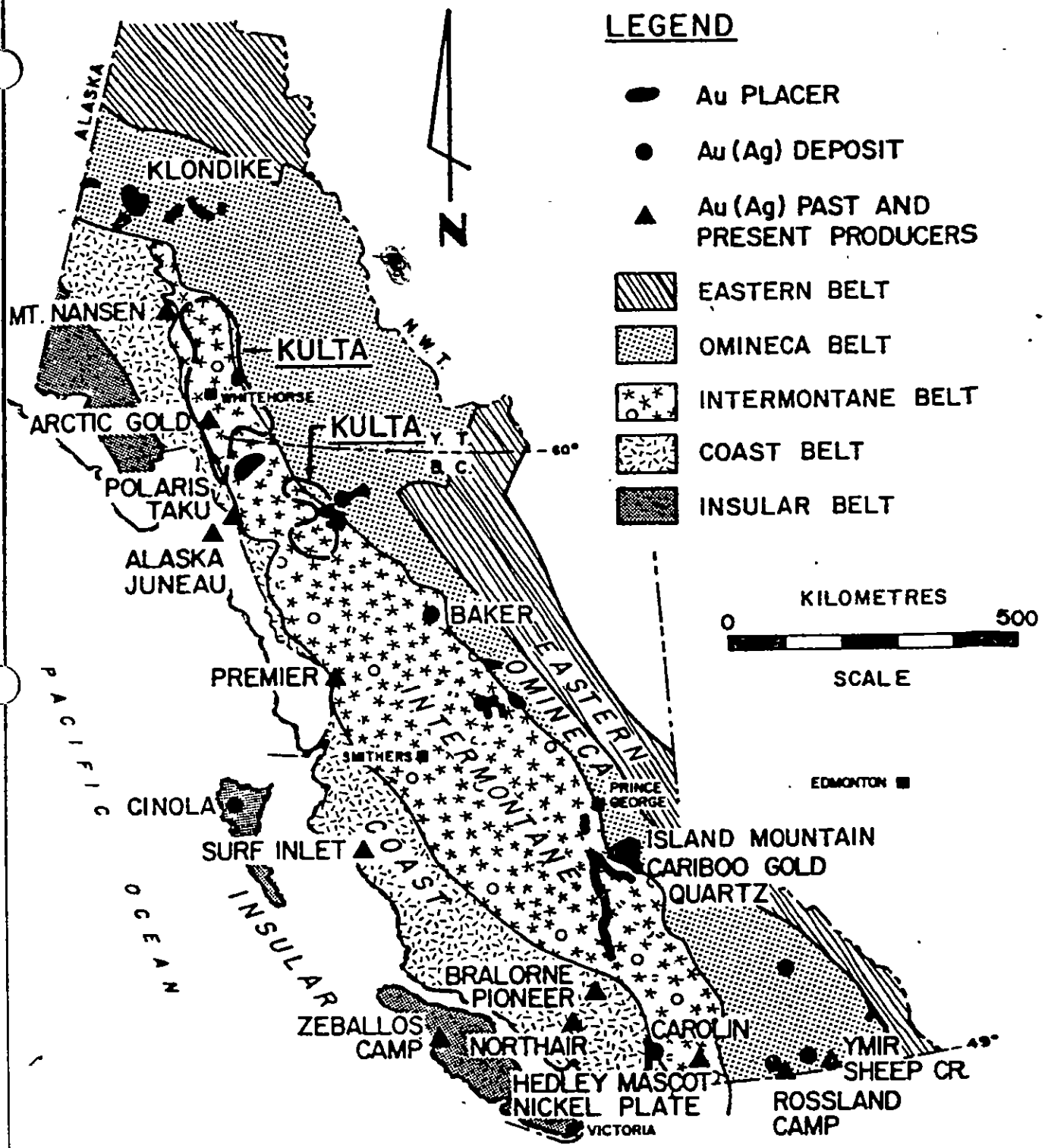


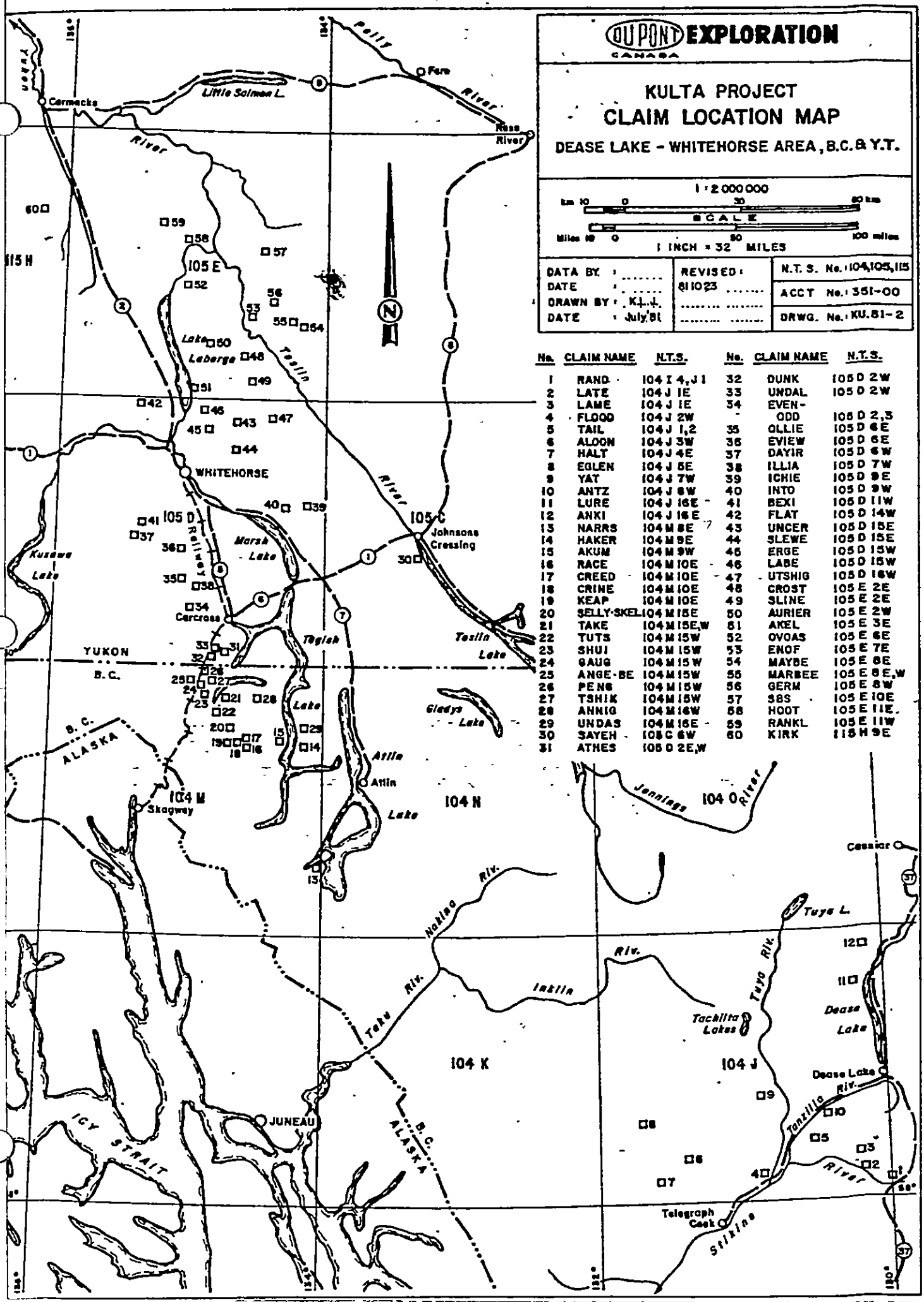
FIGURE 1

KULTA PROJECT AREAS

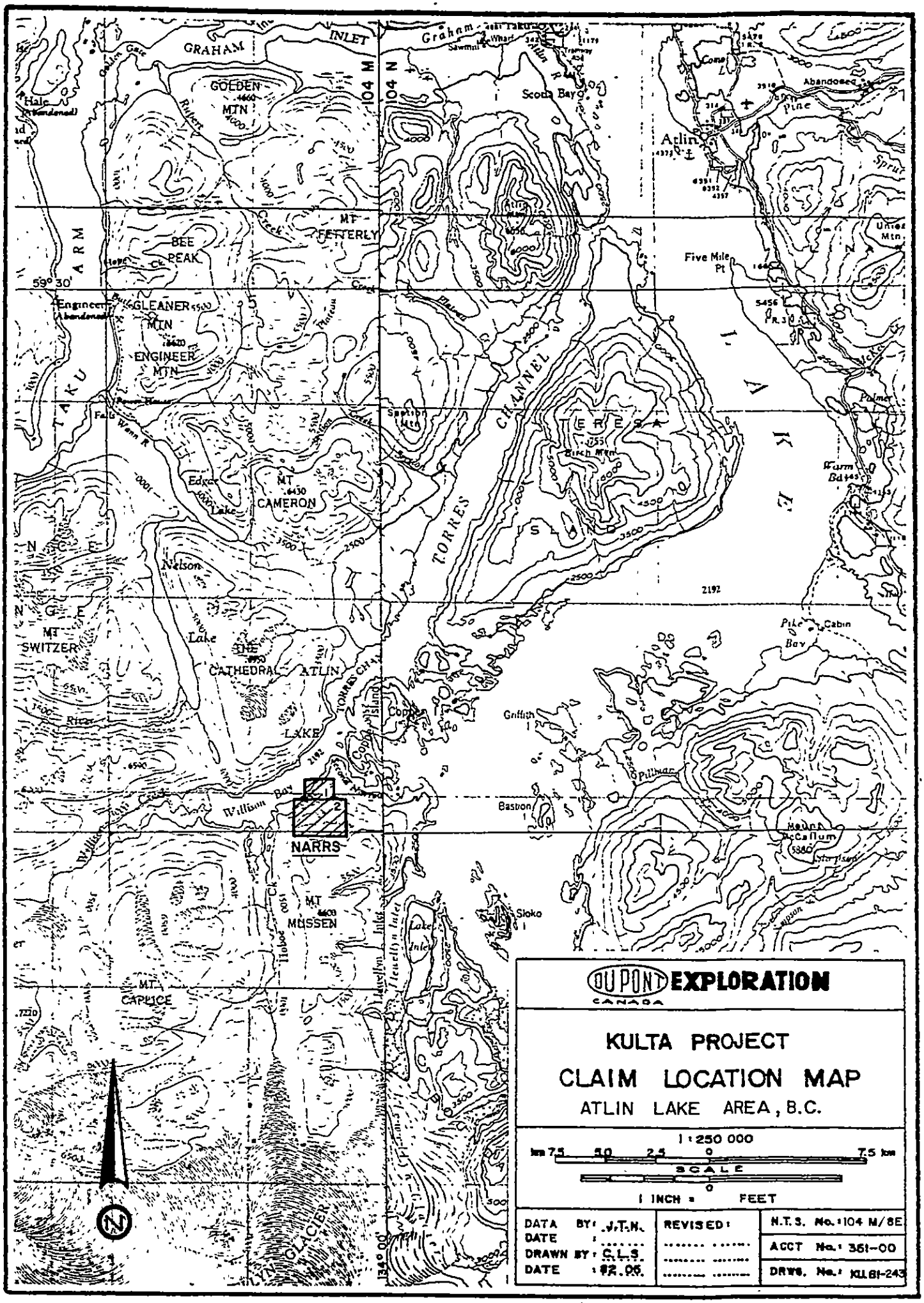
PRINCIPAL LODE & PLACER GOLD DEPOSITS CANADIAN CORDILLERA

K.L.J. 8111 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 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	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

CLAIM LOCATION MAP

ATLIN 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.	REVISED:	N.T.S. No.: 104 M/8E
DATE :	....	ACCT No.: 351-00
DRAWN BY: C.L.S.	....	DWG. No.: KL81-243
DATE : 82.06.	....	

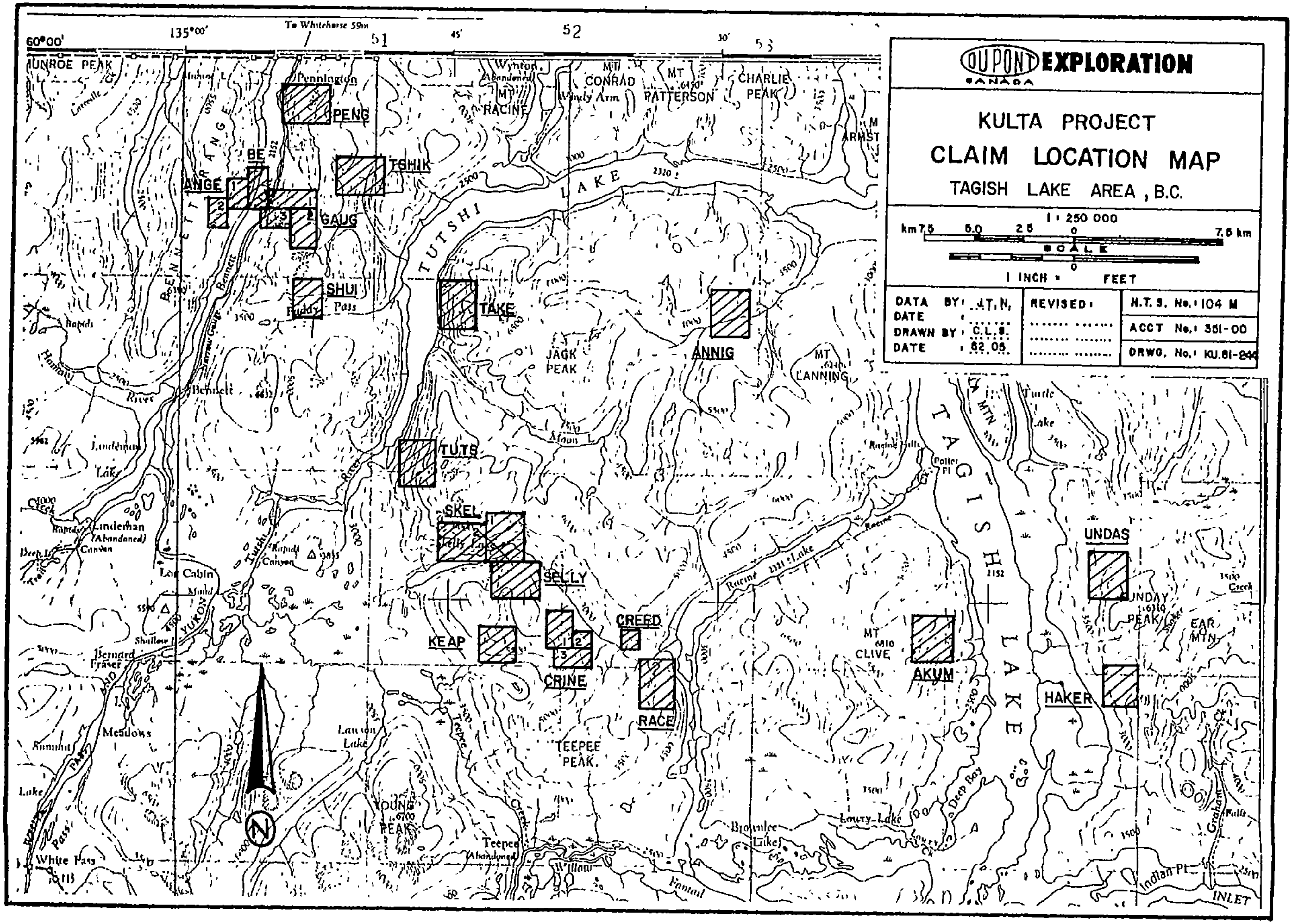

DUPONT EXPLORATION
CANADA
KULTA PROJECT
CLAIM LOCATION MAP
TAGISH LAKE AREA, B.C.
1 : 250 000
SCALE
1 INCH = FEET
DATA BY: J.T.N.
DATE
DRAWN BY: C.L.S.
DATE: 82.05.
REVISED:
N.T.S. No.: 104 M
ACCT No.: 351-00
DRWG. No.: KU.81-244
PENG
BE
TSHIK
ANGE
GAUG
SHUI
TAKE
ANNIG
TUTS
SKEL
SELLY
KEAP
CRINE
CREED
RACE
AKUM
UNDAS
HAKER
TUTSHI LAKE
TAGISH LAKE
BENNETT RANGE
JACK PEAK
MT LANNING
MT CLIVE
TEEPEE PEAK
YOUNG PEAK
MT CONRAD
MT PATTERSON
CHARLIE PEAK
MT RACINE
MUNROE PEAK
Bennett
Lindeman
Log Cabin
White Pass
Lawson Lake
Racine Lake
Lowry Lake
Brownlee Lake
Moon L
Pennington
To Whitehorse 59m
60°00'
135°00'
30'
45'
51
52
53
N

TABLE 1

Location and Descriptions of Claim Groups

Claim Group Name	NTS	Lat.N/Long.W	Claim Names	No. of Units	Date Recorded
LATE	104-J-1E	58°06'/130°10'	LATE	20	1982 07 02
LAME	104-J-1E	56°08'/130°10'	LAME	20	1982 07 02
FLOOD	104-J-2W	58°05'/130°50'	FLOOD 1&2	6,16	"
TAIL	104-J-1,2	58°10'/130°30'	TAIL 1&2	20,12	"
ALOON	104-J-3W	58°10'/131°25'	ALOON 1,2&3	16,6,20	"
YAT	104-J-7W	58°25'/130°52'	YAT	20	"
ANTZ	104-J-8W	58°20'/130°25'	ANTZ	20	1982 07 09
LURE	104-J-16E	58°47'/130°10'	LURE	18	"
ANKI	104-J-16E	58°50'/130°07'	ANKI	20	"
EGLEN	104-J-5E	58°15'/131°43'	EGLEN	20	"
NARRS	104-M-8E	59°16'/134°04'	NARRS 1&2	20,6	1982 06 23
HAKER	104-M-9E	59°43'/134°08'	HAKER	20	"
AKUM	104-M-9W	56°43'/134°18'	AKUM	20	"
RACE	104-M-10E	56°43'/134°33'	RACE	20	"
CREED	104-M-10E	59°44'/134°35'	CREED	4	"
KEAP	104-M-10E	59°44'/134°42'	KEAP	16	"
TAKE	104-M-15E,W	49°53'/134°45'	TAKE	20	"
PENG	104-M-15W	59°59'/134°54'	PENG	20	"
TSHIK	104-M-15W	59°57'/134°50'	TSHIK	20	"
ANNIG	104-M-16W	59°53'/134°30'	ANNIG	20	"
UNDAS	104-M-17E	59°45'/134°10'	UNDAS	20	"

AR #10382

TABLE 2

Work Completed

Claim Group Name	Stream HM*	Sed. Silt	Soils	Rock
LATE	6			
LAME	7			
FLOOD	5			2
TAIL	34	1		1
ALOON	14			
YAT	11		4	
ANTZ	9	11	56	3
LURE	3			
ANKI	6	7	21	3
EGLEN	10	9	13	9
NARRS	13	1	51	4
HAKER	9			1
AKUM	9		46	6
RACE	8		46	
CREED	1	2		2
KEAP	17			9
TAKE	12			
PENG	8	1	69	
TSHIK	15	2	24	3
ANNIG	8	6	22	
UNDAS	7	2	18	

*Does not include original anomalous sample(s).

AR # 10387

PHYSIOGRAPHY

The Dease Lake area is located along the eastern margin of the Coast Range Mountains and the Tagish Lake area is located within them. The Dease Lake area consists mainly of gently sloped mountains which vary in elevation from 750 m to 1850 m. Drainage is to the southwest into the Stikine River. The Tagish Lake area is characterized by V-shaped valleys, minor glaciation, long linear lakes (such as Bennet, Tutshi, Tagish and Atlin) and elevation variations similar to the Dease Lake area. Drainage is to the north to the Yukon River. Though forest cover is greatest in the Dease Lake area, no commercial lumbering exists.

GEOLOGY

The reconnaissance survey included most of the Triassic-Jurassic volcanics and sediments between Dease Lake and Carcross (Dwg.KU.81-2b). This includes the Takla-Nicola volcanics and sediments of Upper Triassic to Lower Jurassic age, the Laberge-Quesnel sediments of Lower and Middle Jurassic and the Ostsa Lake-Kamloops intermediate to acidic volcanics of Upper Cretaceous-Oligocene Age. Portions of Proterozoic gneisses, schists and Cretaceous Coast Range intrusives were also included in the survey area. Table 3 describes the various geological units in the survey area.

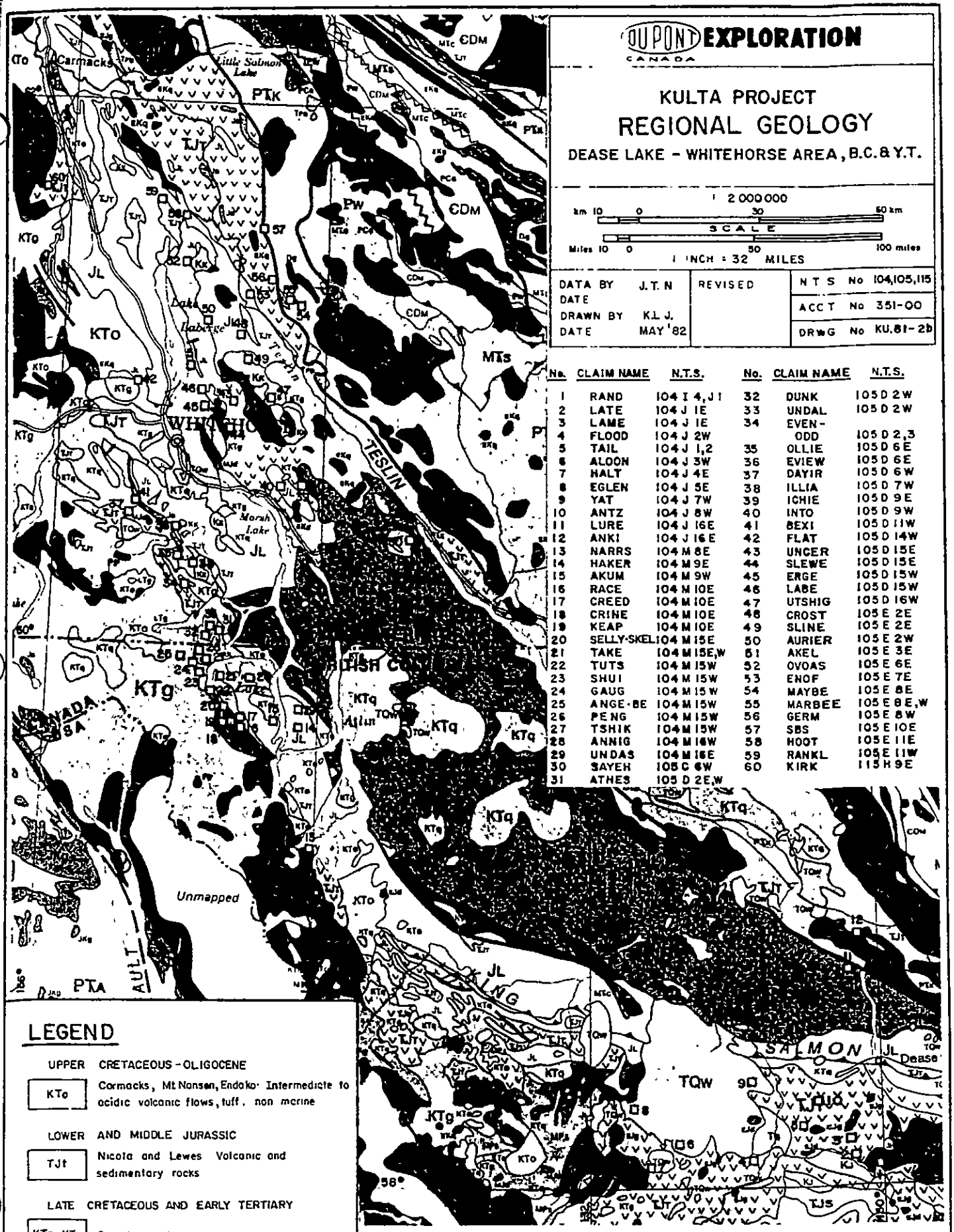
Mineralization

Known gold occurrences in the area occur at the Engineer Mine on Tagish Lake and the Venus Mine on Windy Arm, YT. At the Engineer, native gold with minor telluride, pyrite and native antimony occur in quartz-calcite veins in shear zones that are hosted by finely-textured greywackes of the Laberge Group. And at the Venus Mine, silver and gold occur in long gently sinuous quartz-carbonate veins that carry irregular bands and pods of pyrite, arsenopyrite, galena, sphalerite with minor tetrahedrite and chalcopyrite. These are hosted by Oolsa Lake-Kamloops volcanics. Sampling by United Keno Hill ML indicated proven reserves of 77,600 tons grading 2.11% Pb, 1.38% Zn, 7.2 oz/ton Ag and 0.27 oz/ton Au across a 5 ft width.

GEOCHEMISTRY

Description of Claims

Evidence of glaciation (glacial debris) is more prevalent in Dease Lake area than the Tagish Lake area. The soils taken in the Dease Lake area tended to be more developed than the more



DUPONT EXPLORATION
CANADA

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

1 : 2 000 000

km 10 0 30 50 km

SCALE

Miles 10 0 50 100 miles

1 INCH = 32 MILES

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.
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15	AKUM	104 M 9W	45	ERGE	105 D 15W
16	RACE	104 M 10E	46	LABE	105 D 15W
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21	TAKE	104 M 15E,W	51	AKEL	105 E 3E
22	TUTS	104 M 15W	52	OVOAS	105 E 6E
23	SHUI	104 M 15W	53	ENOF	105 E 7E
24	GAUG	104 M 15W	54	MAYBE	105 E 8E
25	ANGE-BE	104 M 15W	55	MARBEE	105 E 8E,W
26	PENG	104 M 15W	56	GERM	105 E 8W
27	TSHIK	104 M 15W	57	SBS	105 E 10E
28	ANNIG	104 M 16W	58	HOOT	105 E 11E
29	UNDAS	104 M 16E	59	RANKL	105 E 11W
30	SAYEH	105 C 6W	60	KIRK	115 H 9E
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

KTg, KTg — Granitic rocks

LATE PALEOZOIC - TRIASSIC

Alpine - type ultramafics

TABLE 3

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.

soils of the Tagish Lake area. In general, an attempt was made to sample the B horizon or C horizon of residual soils.

Sampling Procedure

During the follow-up, heavy mineral stream sediment samples were collected every 200 m upstream from the anomalous samples, and ten to twenty kilogram samples were sieved in the field to -10 or -14 mesh. Approximately 500 gms of sample were retained. Samples were collected in plastic bags that were numbered and labelled. A corresponding numbered flag was attached to foliage to mark the sample location. Silt samples were taken either from small tributaries draining into the main stream or in the main stream to supplement heavy mineral sampling. Soil samples were taken along contours at 100 metre intervals with mattocks and collected in brown kraft paper bags. Sample locations were marked with orange flagging. All samples and their results are plotted on the accompanying geochemical maps. Rock samples were collected from veins, mineralized rock or gossans. All of the rock samples are considered to be grab samples and their locations are plotted on the geology maps.

Laboratory Procedure

All samples were sent to Min-En Laboratories Ltd. in North Vancouver, BC and analyzed according to the description set out in Appendix I. Before analysis, the heavy mineral samples were split into 2 fractions, a coarse fraction (-10, -14 to +80 mesh) and a fine fraction (-80 mesh).

The coarse fractions were passed through a heavy liquid medium (tetrabromothane) and after centrifuging the heavies were analyzed for Cu, Ag and Au. The fine fraction was treated as a silt sample and in most cases, analyzed for Mo, Cu, Pb, Zn, Ag, Mn, Hg, As, Au and Sb. In some cases, the fine fraction was concentrated and analyzed.

Statistics

The frequency distribution of each element for each sample type was first determined for all the properties. These were then totalled and appear in Tables 4, 5 & 6. From the tables, threshold values were determined as the 95 cumulative percent of a normally distributed population. Table 7 contains the arbitrarily selected background and anomalous (threshold) values for the various elements for each medium.

Table 4
Silt
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.M. %
0.2																	
0.3																	
0.4							4										
0.5							5										
0.6							6										
0.7							2										
0.8							6				<1=3						
0.9							3										
1.0	20						1										
1.1							3										
1.2							5										
1.3																	
1.4																	
1.5																	
1.6-1.7																	
1.8-1.9											2					2	
1.9-2.0	6																
2.1-2.3																	
2.4-2.6																	
2.7-2.9																1	
3.0-3.9	1										4		<5=2			1	
4.0-4.9										2	2		23			1	
5.0-5.9										1	5		5			2	
6.0-10	1									1	4		1			6	
11 - 15					3					3	2		1			1	
16 - 20		2			13											4	
21 - 25		1			12											2	
26 - 30		3			3					4	3					2	
31 - 35		1			1					3						1	
36 - 40		2								1	2		1			2	
41 - 45		2			1					1	1		1			1	
46 - 50		1				1				2						1	
51 - 60		1				8				7	1					3	
61 - 70		1			1	6				3	1					2	
71 - 80		2				3				2						1	
81 - 90						5				2	2					1	
91 -100		2				5											
101-120		1															
121-140		7				1					1						
141-160						1				1							
161-180		2															
181-200		1															
201-250		3				1											
251-300		1															
301-350																	
351-400						1											
401-450		1										1					
451-500												3					
501-600												3					
601-700												4					
701-800												1					
801-900												4					
901-1000												10					
1001-2000						1						1					
2001-3000																	
3001-4000																	
4001-5000																	
55000																	

Soils
Frequency Distribution of Elements

Class Interval ppm/ppb	Mo F	F	Cu FHM	CHM	Pb F	Zn F	F	Ag FHM	CHM	Hg F	As F	Mn F	F	Au FHM	CHM	Sb F	H.M. %
0.1																	
0.2							5										
0.3							18										
0.4							36										
0.5							24										
0.6							43										
0.7							46										
0.8							51										
0.9							53				<1=78						
1.0	141						38				6						
1.1							22										
1.2							27										
1.3							22										
1.4							22										
1.5							16										
1.6-1.7							15										
1.8-1.9							6				2					12	
1.9-2.0	67						3				6						
2.1-2.3							8										
2.4-2.6							2										
2.7-2.9							3										
3.0-3.9	10										9					9	
4.0-4.9	23				2	1	1			1	17		<5=10			15	
5.0-5.9	12	1			5					39	16		270			19	
6.0-10	36	26			42					29	62		96			80	
11 - 15	14	51			120	1				24	37		40			58	
16 - 20	9	45			80					36	35		11			65	
21 - 25	4	24			68	2				28	22		7			49	
26 - 30	3	23			48	3				30	20		1			26	
31 - 35	1	27			21	8				35	24		2			29	
36 - 40		35			23	3				25	17		6			16	
41 - 45		26			15	3				11	17		5			17	
46 - 50		20			8	12				24	9		1			4	
51 - 60		28			11	63				40	21		2			13	
61 - 70		27			7	62				27	12		2			26	
71 - 80		21			1	41				28	6		2			8	
81 - 90		15			3	35				7	7					4	
91 -100		8			3	23				13	2					3	
101-120		7				52				14	14					4	
121-140		4				37				9	4		2			1	
141-160		8			1	30				6	4	3	1			1	
161-180		9				23				10	4		1			1	
181-200		11				23				5	3					1	
201-250		20			3	29				4		5					
251-300		8				7				1	1	5					
301-350		5				2				2	2	11					
351-400		3				1				1		10					
401-450		4				1				1		9	1				
451-500		1				3				3		25					
501-600		1								1		22					
601-700		1								1	1	27					
701-800		1								2	1	17					
801-900											1	15					
901-1000										3		16					
1001-2000		1									1	68					
2001-3000										1		4					
3001-4000												2					
4001-5000																	
>5000																	

Heavy Mineral Stream Sediment
Frequency Distribution of Elements

Class Interval ppm/ppb	Mo F	F	Cu FHM	CHM	Pb F	Zn F	F	Ag FHM	CHM	Hg F	As F	Mn F	F	Au FHM	CHM	Sb F	H.M. %
0.1							10		2								1
0.2							4		14								4
0.3							6		16								3
0.4							23		14								3
0.5							22		24								2
0.6							19		20								6
0.7							14		20		<1=40						2
0.8							34		16		3						1
0.9							30		16								3
1.0	133						27		15								3
1.1							11		12								4
1.2							4		10								2
1.3							5		5								2
1.4							3		7								6
1.5									3								2
1.6-1.7							8		3							6	9
1.8-1.9							1		6								9
1.9-2.0	69						1		7		8						11
2.1-2.3							1		3		3						15
2.4-2.6							2		6							7	24
2.7-2.9	1								2		3				<5=7	5	26
3.0-3.9	10						2		1		13		<5=6		126	6	18
4.0-4.9	4								4	38	18		148	2	30	52	35
5.0-5.9	1	2			2					29	33		41		14	30	14
6.0-10	6	4		3	18				1	14	30		10	1	4	28	10
11 - 15	3	15		8	69					20	17		4	2	4	15	8
16 - 20		28		15	45					32	15		2	2	8	16	
21 - 25		41		21	37					26	8		2		6	16	
26 - 30		39		14	21	1				16	5		2	1	8	8	
31 - 35		28		12	7	5				15	6		1		2	9	
36 - 40		13		14	6	7				8	5		1		4	2	
41 - 45		9		11	1	17				4	5				3	7	
46 - 50		5		18	2	16				12	3					4	
51 - 60		11		25	5	39				2	7				2	6	
61 - 70		10		18	2	51				4			2			2	
71 - 80		3		16		26				4						3	
81 - 90		3		11	2	20				4	3		1	1	2	3	
91 -100		4		3	3	13				2		1	1			2	
101-120		3		2	2	4					1	1	1		1		
121-140		2		10	2	9				2					2		
141-160		2		6		4					1						
161-180		1		6		2				1							
181-200		3		4		1				3		3			1		
201-250		1		6		4						6					
251-300				1		1				1		10					
301-350				2		1						17					
351-400				1								29			3		
401-450						1						24	1				
451-500						4				1		23	1				
501-600												43					
601-700										1		25	2				
701-800												18					
801-900												8					
901-1000												19	1	1			
1001-2000														2			
2001-3000																	
3001-4000																1	
4001-5000																	
>5000																	

TABLE 7

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%						

PROPERTY DESCRIPTIONS

NARRS PROPERTY

1. Location (NTS: 104-M-8E)

The property is located 27 km southwest of Atlin, BC, (Dwg. KU.81-243).

2. Personnel

Sr. Geological Assistant: D. Strain
Field Assistants: C. Colwell, C. Naas, P. Webb

3. Previous Work

No previous work is recorded.

4. Geology

The anomalous stream which traverses the property is underlain by volcanic conglomerate of Pennsylvanian - Triassic age, (Dwg.KU.81-144). Size of clasts range from 0.5 cm to 10 cm; and composition consists of porphyritic volcanics, green and red andesite and minor granitic rocks. A small breccia zone occurs at sample site 8384D and small quartz-carbonate vein at sample site 8386D. Thick glacial debris covers most of the claim.

5. Mineralization

Minor malachite occurs in the conglomerate below sample site 8386D. No copper bearing minerals were found in place.

6. Rock Description

Sample No. 8384D - Brecciated volcanic conglomerate which contains minor fuchsite.
Sample No. 8385D - Graphitic zone (possible fault).
Sample No. 8386D - Quartz-carbonate vein, 20 cm wide and 2 m long.
Sample No. 8387D - Quartz vein in float.

7. Geochemistry

The original sample contained 4700 ppb Au in the coarse fraction (Dwg.KU.81-145). Resampling of the stream did not return any significant gold values though the Pb, Zn, Hg and Ag values are anomalous. Soil samples taken from above bedrock contain only scattered zinc anomalous values but contain numerous mercury anomalous values. Unfortunately none of these values coincide with high Au values.

8. Recommendations

No further work is recommended at this time.

COST STATEMENT (NARRS)

1. Wages

	Cost
1 Sr. Geol. Ass't(s), 1 manday(s) (1981 August 7)	$ 73.06
3 Field Assistant(s), 1 manday(s) (1981 August 7)	$ 150.34
	$ 223.40

2. Room & Board

Location	Daily Rate	Date	No. of Days	
Carcross	$25	1981 Aug. 7	4	$ 100.00

3. Transportation

a. Truck Rental (Avis-Whitehorse, YT):
1 day(s) @ $35.85/day — $ 35.85

b. Helicopter in support of field work @ $432.50/hr including fuel (Flying by Viking Helicopter Ltd. of Prince George)

Dates (1981): August 7 No. of hrs: 2.8 — $1,211.00

$1,246.85

4. 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 Mineral Silt	13	X	X X X X X X X X X X	$17.75	$ 230.75
	13	X	X X X X	7.90	102.70
	13	X	X X X X	7.90	102.70
Soil	52	X	X X X X X X X X X X X	23.65	1,229.80
Rock	4	X	X X X X X X X X X X	22.75	91.00
Preparation - Rock			4 @ $2.25		$ 9.00
- Soil/Silt			52 @ $0.85/sample		44.20

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)

$1,810.15

Cost Statement (NARRS -continued)

e. Report Preparation

	Daily Rate	Date	No. of Days	Cost
Drafting	$100.00	1981 Dec. 16	0.5	$ 50.00
Typing	$ 95.00		0.1	9.50
Map preparation	8 maps at 16¢/square foot			11.52
				$ 71.02
			GRAND TOTAL	$3,451.42

HAKER PROPERTY

1. Location (NTS: 104-M-9E)

The property is located 17 km northwest of Atlin, B.C. (Dwg. KU.81-244).

2. Personnel

Sr. Geological Assistant: H. Copland
Field Assistants: L. Cunningham

3. Previous Work

No previous work appears in the assessment files.

4. Geology

Almost the entire claim group is covered by glacial drift (Dwg. KU.81-146). No outcrop was seen along the entire length of the main creek. One boulder of dacite was sampled.

5. Rock Description

Sample No. 8418D - Porphyritic dacite. Anhedral and angular quartz crystals that measure 1 cm in length compose 25% of rock. Micro-veinlets of quartz occur in groundmass which is light green and aphanitic.

6. Geochemistry

The original sample contained 475 ppb Au in the fine fraction, (Dwg. KU.81-147). Resampling of the anomalous stream returned one anomalous sample of 115 ppb Au, (Sample No. 6890D). This sample occurs below the original anomalous sample and its source is assumed to be placer.

8. Recommendations

No further work is recommended at this time.

COST STATEMENT (HAKER)

1. **Wages**

	Cost
1 Sr. Geol. Ass't(s), 1 manday(s) (1981 July 29)	$ 59.29
1 Field Assistant(s), 1 manday(s) (1981 July 29)	$ 53.58
	$ 112.87

2. **Room & Board**

Location	Daily Rate	Date	No. of Days	
Carcross	$25.00	1981 July 29	2	$ 50.00

3. **Transportation**

a. Truck Rental (Avis-Whitehorse, YT):
0.5 day(s) @ $35.85/day — $ 17.93

b. Helicopter in support of field work @ $432.50/hr including fuel (Flying by Viking Helicopter Ltd. of Prince George)

Dates (1981): July 29 No. of hrs: 1.1 — $ 475.75

$ 493.68

4. **Analytical Services**

Type of Sample	No. of	Fraction Analyzed			Elements Analyzed											Unit Price	
		F	FHM	CHM	Mo	Cu	Pb	Zn	Ni	Ag	Hg	As	Mn	Au	Sb		
Heavy	9	X			X	X	X	X		X	X	X	X	X	X	$22.75	$1,842.75
Mineral	9			X		X				X				X		7.90	71.10
Silt																	
Soil																	
Rock	1	X				X	X	X		X		X		X		12.70	12.70
Preparation - Rock						1 @ $2.25											$ 2.25
- Heavy Mineral						9 @ $20/sample											180.00

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)

$2,108.80

Cost Statement (HAKER -continued)

e. Report Preparation

	Daily Rate	Date	No. of Days	Cost
Drafting	$100.00	1981 July 30	0.5	$ 50.00
Typing	$ 95.00		0.1	9.50
Map preparation	8 maps at 16¢/square foot			11.52
				$ 71.02
			GRAND TOTAL	$2,836.37

AKUM PROPERTY

1. Location (NTS: 104-M-9W)

The property is located 13 km northwest of Atlin, B.C. (Dwg. KU.81-244).

2. Personnel

Sr. Geological Assistant: D. Strain
Field Assistants: C. Colwell, A. Deak, A. McArthur, C. Naas

3. Previous Work

No previous work appears in the assessment files.

4. Geology

The southwest portion of the property is underlain by interbedded greywacke and siltstone which are well bedded. The greywacke is generally light to dark grey and the siltstone is black. The trend of the bedding is generally southeast with a shallow dip to the southwest. These sediments are intruded and altered to hornfels by porphyritic dykes and diorite. The plagioclase phenocrysts in the dykes are 3 mm long, euhedral and occur in a fine-grained, green matrix. The diorite consists of equigranular crystals of 70% plagioclase, 20% hornblende and 10% biotite. The diorite and horfels are cut by aplite dykes. The greywackes and siltstone contain disseminated (<1%) pyrite and pyrrhotite. Minor carbonate zones which occur within the greywacke are brecciated and contain small quart veins.

5. Rock Description

Sample No. 8364D - Brecciated greywacke with 1% pyrite
8365D - Quartz-carbonate zone with 1% pyrite
8366D - Granodiorite with a few specs of molybdenite
8367D - Shear zone in greywacke and siltstone
8368D - Small quartz vein (2 cm wide in carbonated greywacke
8369D - Float of calcite cemented breccia, greywacke fragments.

6. Mineralization

Molybdenite occurs as specs along a fracture plane in granodiorite at sample location No. 8366D.

7. Geochemistry

Original sample No. 7540D contained 20 ppb Au in the fine fraction and 540 ppb Au in the coarse fraction. Follow-up sampling reproduced this value in one sample, No. 9200D which contained 500 ppb Au in the coarse fraction. Soil samples CW 11 to 13 contain anomalous amounts of Cu, Zn, Ag, As, Au and Sb. These values, though anomalous, are all generally low: Cu (335, 262 ppm), Zn (296 ppm), Ag (1.8 1.7 ppm), As (111 ppm), Au (40, 40) and Sb (135, 160 ppm).

8. Recommendations

Though the anomalous value was repeated in one sample follow-up work did not enlarge the anomaly, therefore no further work is recommended.

COST STATEMENT (AKUM)

1. Wages

		Cost
1 Sr. Geol. Ass't(s),	2 manday(s) (1981 July 27,28)	$ 146.12
5 Field Assistant(s),	4 manday(s) (1981 July 24,28,29)	$ 254.08
		$ 400.20

2. Room & Board

Location	Daily Rate	Date	No. of Days	
Carcross	$25.00	1981 July 27-29	7	$ 175.00

3. 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 27,28,29 No. of hrs: 3.0 $1,297.50

$1,369.20

4. Analytical Services

Type of Sample	No. of	Fraction Analyzed			Elements Analyzed											Unit Price	
		F	FHM	CHM	Mo	Cu	Pb	Zn	Ni	Ag	Hg	As	Mn	Au	Sb		
Heavy	9	X			X	X	X	X		X	X	X	X	X		$22.75	$ 204.75
Mineral	9			X		X				X				X		7.90	71.10
Silt																	
Soil	47	X				X	X	X		X	X	X		X	X	20.95	984.65
Rock	6	X				X	X	X		X		X		X		12.70	76.20

Preparation - Heavy Mineral 9 @ $20/sample 180.00
- Soil/Silt 47 @ $0.85/sample 39.95

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)

$1,556.65

Cost Statement (AKUM -continued)

e. Report Preparation

	Daily Rate	Date	No. of Days	Cost
Drafting	$100.00	1981 Dec. 17	1.0	$ 100.00
Typing	$ 95.00		0.1	9.50
Map preparation	8 maps at 16¢/square foot			11.52
				$ 121.02
			GRAND TOTAL	$3,622.07

RACE PROPERTY

1. Location (NTS: 104-M-10E)

The property is located 32 km northwest of Atlin, B.C. (Dwg. KU.81-244).

2. Personnel

Sr. Geological Assistant: H. Copland
Field Assistants: L. Cunningham, P. Webb

3. Previous Work

No previous work has been recorded.

4. Geology

The higher elevations of the property are underlain by volcanic and metamorphic rocks and the lower elevations by thick glacial deposits, (Dwg.KU.81-150). The southwest ridge is underlain mainly by Pre-Permian metamorphic rocks and the southeast ridge is underlain by massive dark green to grey flow-banded volcanic rocks of Pennyslvanian to Triassic Age. A small outcrop of black carbonaceous argillite occurs in the creek bed at 1050 m elevation. The carbonaceous shales in the creek contain up to 5% pyrite in the bedding planes. The volcanics contain lesser amounts of pyrite amounting to 2% of the total volume. The metasediments are generally gossanous and contain less than 1% pyrite. Minor quartz and calcite veining occur near the contact between metasediments and volcanics. A small 2 m wide brecciated zone at sample site 8424D is filled with quartz.

5. Rock Description

Sample No. 8419D - Black fissile pyritic argillite
8420D - Dark green aphanitic dacite with small quartz veinlets
8421D - Silicified dacite(?) with minor pyrite
8423D - Quartz veining in dacite
8424D - Silicified and brecciated volcanic rock
8425D - Silicified dacite (?)
8426D - Hornblendite (float)
8427D - Rhyolite tuff

6. Geochemistry

The original sample in the main stream (No.9653B) contained 9900 ppb Au. Sampling of the stream draining the property did not reproduce this value. The stream towards the junction contains banks of till that are 20 m high and because of this placer concentration of gold is suspected.

8. Recommendations

No further work is recommended.

COST STATEMENT (RACE)

1. **Wages**

	Cost
1 Sr. Geol. Ass't(s), 3 manday(s) (1981 July 29, Aug 1)	$ 177.87
2 Field Assistant(s), 3 manday(s) " " "	$ 162.22
	$ 340.09

2. **Room & Board**

Location	Daily Rate	Date	No. of Days	
Carcross	$25.00	1981 July 29,30 Aug. 1	6	$ 150.00

3. **Transportation**

a. Truck Rental (Avis-Whitehorse, YT):
3 day(s) @ $35.85/day — $ 107.55

b. Helicopter in support of field work @ $432.50/hr including fuel (Flying by Viking Helicopter Ltd. of Prince George)

Dates (1981): July 29,30, Aug. 1 No. of hrs: 1.75 — $ 756.88

$ 864.43

4. **Analytical Services**

Type of Sample	No. of	Fraction Analyzed			Elements Analyzed											Unit Price	
		F	FHM	CHM	Mo	Cu	Pb	Zn	Ni	Ag	Hg	As	Mn	Au	Sb		
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
Silt																	
Soil																	
Rock	9	X				X	X	X		X		X				12.70	114.30

Preparation - Rock	9 @ $2.25	$ 20.25
- Heavy Mineral	4 @ $20/sample	80.00
- Soil/Silt	46 @ $0.85/sample	39.10

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)

$ 376.25

Cost Statement (RACE -continued)

e. Report Preparation

	Daily Rate	Date	No. of Days	Cost
Drafting	$100.00	1981 Aug. 5	0.5	$ 50.00
Typing	$ 95.00		0.1	9.50
Map preparation	8 maps at 16¢/square foot			11.52
				$ 71.02
			GRAND TOTAL	$1,801.79

CREED PROPERTY

1. Location (NTS: 104-M-10E)

The property is located 32 km northwest of Atlin, B.C. (Dwg. KU.81-244).

2. Personnel

Sr. Geological Assistant: L. Holmgren
Field Assistants: J. Peter

3. Previous Work

No previous work has been recorded.

4. Geology

The property is underlain by volcanics and metmorphosed sediments of Pennsylvanian to Triassic age (Dwg.KU.81-152). Thick (20 m) beds of oligomictic and polymictic conglomerate, interbedded greywacke, siltstone and argillite, black porphyritic andesite and black argillite occur on the claim. The oligomictic conglomerate is well sorted, well rounded and contains granite cobbles. The polymictic conglomerate is composed of poorly sorted, sub-rounded, chert pebbles with intersticial pyrite grains. The interbedded sediments have minor calcite veins. The porphyritic andesite which may be a dyke contains small phenocrysts of feldspar and quartz. One to two percent pyrite is disseminated within the metamorphosed sedimentary units, the conglomerates and the porphyritic andesite.

5. Rock Description

Sample No. 8635D - Calcite veinlet containing less than 1% galena and sphalerite, 2-4 cm wide
9994B - Calcite veinlet in greywacke containing less than 1% galena, 10 cm wide

6. Mineralization

Small veinlets containing less that 1% galena and sphalerite occur in the greywacke.

7. Geochemistry

The original sample (No.5062D) contained 460 ppm Cu (Dwg.KU.81-153). Silt samples taken in the same area were able to reproduce the values in the fine fraction but not able to increase the size of the anomaly.

8. Recommendations

Due to the lack of encouraging results, no further work is recommended.

COST STATEMENT (CREED)

1. **Wages** — Cost

2 Sr. Geol. Ass't(s), 1 manday(s) (1981 July 29)	$ 124.92

2. **Room & Board**

Location	Daily Rate	Date	No. of Days	
Carcross	$25.00	1981 July 29	2	$ 50.00

3. **Transportation**

a. Truck Rental (Avis-Whitehorse, YT): 0.5 day(s) @ $35.85/day	$ 17.92
b. Helicopter in support of field work @ $432.50/hr including fuel (Flying by Viking Helicopter Ltd. of Prince George)	
Dates (1981): July 29 No. of hrs: 1.0	$ 432.50
	$ 450.42

4. **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	1	X			X	X	X	X		X	X	X	X	X	X	$22.75	$ 22.75
Mineral	1			X		X				X				X		7.90	7.90
Silt																	
Soil	2	X				X	X	X		X		X		X	X	20.95	41.90
Rock	1	X				X	X	X		X		X		X		12.70	12.70

Preparation - Rock	1 @ $2.25	$ 2.25
- Heavy Mineral	1 @ $20/sample	20.00
- Soil/Silt	2 @ $0.85/sample	1.70

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)

$ 109.20

Cost Statement (CREED -continued)

e. Report Preparation

	Daily Rate	Date	No. of Days	Cost
Drafting	$100.00	1982 Jan. 12	0.5	$ 50.00
Typing	$ 95.00		0.1	9.50
Map preparation	8 maps at 16¢/square foot			11.52
				$ 71.02
			GRAND TOTAL	$ 805.56

KEAP PROPERTY

1. Location (NTS: 104-M-10E)

The property is located km northwest of Atlin, B.C. (Dwg. KU.81-244).

2. Personnel

Sr. Geological Assistants: L. Holmgren, J. Peter
Field Assistants: A. Deak, A. McArthur

3. Previous Work

No previous work has been recorded.

4. Geology

The property consists of mainly pre-Permian metamorphosed rocks intruded by Post Lower Jurassic Coast Range quartz diorite (Dwg. KU.81-156). The metamorphic rocks consist of quartzite, schist, gneiss and siliceous limestone. The quartzite is a light grey colour, fine-grained and thinly banded. The schist consists of chlorite and sericite in thin foliated layers. The gneiss has alternating light and dark bands of coarse-grained feldspar crystals and micas. The quartz diorite is a light grey-green colour that contains 10% hornblende and biotite. Quartz veins, gossans and calc-silicate zones occur within the metamorphic units. The gossans are caused by pyrite and pyrrhotite.

5. Rock Description

Sample No. 8610D - Siliceous and gossanous zone in metamorphic rocks containing minor pyrrhotite.

8611D - Quartz vein, 20 cm wide, chlorite in wall rock.

8612D - Rusty siliceous zone in metamorphic rocks containing minor disseminated pyrrhotite and pyrite.

8613D - Ten metre wide siliceous and gossanous zone in metamorphic rocks containing disseminated pyrrhotite.

8614D - Siliceous quartzite bed with blebs of pyrite.

8615D - Gossan of calc-silicate zone.

9997B - Contact metasomatic zone with calcite, chlorite and pyrite.

Sample No. 9998B - Gossan containing pyrrhotite.

9999B - Gossan containing pyrrhotite.

6. Geochemistry

The original sample contained 1800 ppb Au in the fine fraction (Dwg.KU.81-157). Subsequent follow-up sampling was not able to isolate this value. Samples 9179A and 9182A contain 740 and 530 ppb Au respectively in the fine fraction.

7. Recommendations

No further work is recommended.

COST STATEMENT (KEAP)

1. **Wages**

	Cost
2 Sr. Geol. Ass't(s), 3 manday(s) (1981 July 30,31)	$ 188.44
2 Field Assistant(s), 2 manday(s) (1981 July 31)	$ 110.10
	$ 298.54

2. **Room & Board**

Location	Daily Rate	Date	No. of Days	
Carcross	$25.00	1981 July 30,31	5	$ 125.00

3. **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): 1981 July 30,31 No. of hrs: 1.75 — $ 756.88

$ 828.58

4. **Analytical Services**

Type of Sample	No. of	Fraction Analyzed			Elements Analyzed											Unit Price	
		F	FHM	CHM	Mo	Cu	Pb	Zn	Ni	Ag	Hg	As	Mn	Au	Sb		
Heavy	17	X			X	X	X	X		X	X	X	X	X	X	$22.75	$ 386.75
Mineral	17			X		X				X				X		7.90	134.30
Silt																	
Soil																	
Rock	9	X				X	X	X		X		X		X		12.70	114.30
Preparation - Rock						9 @ $2.25											$ 20.25
- Heavy Mineral						17 @ $20/sample											340.00

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)

$ 995.60

Cost Statement (KEAP -continued)

e. **Report Preparation**

	Daily Rate	Date	No. of Days	Cost
Drafting	$100.00	1982 Jan. 1	1.0	$ 100.00
Typing	$ 95.00		0.1	9.50
Map preparation	8 maps at 16¢/square foot			11.52
				$ 121.02
			GRAND TOTAL	$2,368.74

TAKE PROPERTY

1. Location (NTS:)

The property is located 42 km northwest of Atlin, B.C. (Dwg. KU.81-244).

2. Personnel

Sr. Geological Assistants: L. Holmgren, M. Jones
Field Assistants: A. Deak, A. McArthur

3. Previous Work

No previous work has been recorded.

4. Geology

In the anomalous stream granite of the Coast Range Intrusive intrudes metamorphosed sediments of Pre-Permian age which in turn are in contact with Pennsylvanian and Triassic volcanics (Dwg. KU.81-160). The granite is weathered and this appearance is probably enhanced by hydrothermal alteration in the form of silicification and sausseritization. The granite has been cut by small quartz veins and andesitic dykes. The rock contains minor (<2%) pyrite in places. The dykes are fine-grained, have a green-black colour and contain 1 mm long plagioclase phenocrysts. The dykes are less than 2 m wide generally strike north and dip steeply. The quartzite is fine-grained with a sugary texture and is a grey-green colour. The beds strike southeast and dip steeply to the northeast. The andesite and basalt are green to black, fine-grained and amygdaloidal.

5. Mineralization

Besides the small gossans in the granite, a large gossan above the contact with the volcanics and meta-sediments contains malachite staining related to east trending shears.

6. Geochemistry

The original sample contained 125 ppm Cu and 2.2 ppm Ag (Dwg.KU.81-161). These values were reproduced in the follow-up sampling but no definite high grade zone was delimited. The cause of this anomaly is attributed to copper mineralization associated with the granitic intrusion.

7. Recommendations

No further work is recommended.

COST STATEMENT (TAKE)

1. Wages

	Cost
2 Sr. Geol. Ass't(s), 2 manday(s) (1981 July 26,27)	$ 131.28
2 Field Assistant(s), 2 manday(s) (1981 July 27)	$ 110.10
	$ 241.38

2. Room & Board

Location	Daily Rate	Date	No. of Days	
Carcross	$25.00	1981 July 26,27	4	$ 100.00

3. 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 26,27 No. of hrs: 1.3	$ 562.25
	$ 633.95

4. Analytical Services

Type of Sample	No. of	Fraction Analyzed			Elements Analyzed											Unit Price	
		F	FHM	CHM	Mo	Cu	Pb	Zn	Ni	Ag	Hg	As	Mn	Au	Sb		
Heavy	12	X			X	X	X	X		X	X	X	X	X	X	$21.75	$ 261.00
Mineral	11			X		X				X				X		7.90	86.90
Preparation - Heavy Mineral 12 @ $20/sample																	$ 240.00

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)

$ 587.90

Cost Statement (TAKE -continued)

e. Report Preparation

	Daily Rate	Date	No. of Days	Cost
Drafting	$100.00	1982 Feb. 1	0.5	$ 50.00
Typing	$ 95.00		0.1	9.50
Map preparation	8 maps at 16¢/square foot			11.52
				$ 71.02
			GRAND TOTAL	$1,634.25

PENG PROPERTY

1. Location (NTS: 104-M-15W)

The property is located 51 km northwest of Atlin, B.C. (Dwg. KU.81-244).

2. Personnel

Geologist: J.T. Neelands
Sr. Geological Assistant: D. Strain
Assistant Geologists: C. Colwell, A. Deak, A. McArthur

3. Previous Work

No previous work has been recorded.

4. Geology

Outcrop on the property consists of volcanic and sedimentary rocks intruded by coast range quartz diorite and diorite (Dwg.KU.81-170). A skarn zone containing epidote occurs near the contact of carbonated siltstone and the diorite. The siltstone is thinly bedded and contains minor thin beds of carbonated mudstone. Minor pyrrhotite occurs within the beds possibly due to contact metasomatism. The rhyodacite is a light grey colour and in places contains areas that are pyritized and silicified. The andesite is dark green and porphyritic. Phenocrysts of hornblende and feldspar compose 10% of the rock. The basalt is black, fine-grained and amygdaloidal. The conglomerate is poorly sorted and polymictic. Most pebbles are less than 5 cm in diameter. The quartz diorite contains 10-20% mafics (hornblende and biotite) 10-15% quartz and 70-75% feldspars.

5. Geochemistry

The original sample (No.8331B) contained 4.4 ppm Ag in the coarse fraction, (Dwg. KU.81-17). Subsequent resampling of the stream reproduced this value as well as containing indications of Au in the heavy mineral fine fraction. The source of the gold is assumed to be the altered rhyodacite as soil samples taken in the vicinity of the outcrops contains anomalous concentrations of Ag (1.3 to 2.9 ppm).

6. Recommendation

No further work is recommended.

COST STATEMENT (PENG)

1. **Wages** — Cost

3 Sr. Geol. Ass't(s), 3 manday(s) (1981 Aug. 7, Sept. 25)	$ 274.65
4 Field Assistant(s), 4 manday(s) (1981 Aug. 7, Sept. 25)	$ 218.09
	$ 492.74

2. **Room & Board**

Location	Daily Rate	Date	No. of Days	
Carcross	$25.00	1981 Aug. 7	4	$ 100.00
Whitehorse	45.00	Sept. 25	3	135.00
				$ 235.00

3. **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. 7, Sept. 25 No. of hrs: 2.0 — $ 865.00

$ 936.70

4. **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 Mineral	8	F	X X X X X X X X X	$17.75	$ 142.00
	2	CHM	X	5.00	10.00
	6	FHM	X X X	7.90	47.40
	6	CHM	X X X	7.90	47.40
Soil	70		X X X X X X X X X X	22.75	1,592.50
	21		Ni: X	.90	18.90
Rock	1	F	X X X X X X	15.05	15.05
	1	F	X X X X	31.00	31.00

Preparation - Rock	1 @ $2.75/sample	$ 2.75
"	1 @ $2.25/sample	2.25
- Heavy Mineral	8 @ $20/sample	160.00
- Soil/Silt	70 @ $0.85/sample	59.50

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)

$2,128.75

Cost Statement (PENG -continued)

e. Report Preparation

	Daily Rate	Date	No. of Days	Cost
Drafting	$100.00	1982 Feb. 12	1.0	$ 100.00
Typing	$ 95.00		0.1	9.50
Map preparation	8 maps at 16¢/square foot			11.52
				$ 121.02
			GRAND TOTAL	$3,914.21

TSHIK PROPERTY

1. Location (NTS: 104-M-15W)

The property is located 47 km northwest of Atlin, B.C. (Dwg. KU.81-244).

2. Personnel

Geologist: J.T. Neelands
Sr. Geological Assistant: D. Strain
Field Assistants: C. Colwell, A. Deak, A. McArthur

3. Previous Work

No previous work has been recorded.

4. Geology

Outcrop mapped on the property contains volcanics and sediments of Mesozoic age (Dwg.KU.81-172). In the anomalous creek, basalt occurs at the northeast corner of the property. It is grey-green in colour and weathers greenish-brown. It contains 10% phenocrysts of pyroxene and feldspar which measure 3 and 1 mm in length respectively. Basalt also occurs along the west ridge mixed with andesite and volcanic conglomerate. The andesite is red-brown on weathered surface and grey on fresh surface. It contains large (5 mm) elongated quartz and ovoid chlorite amygdules. One outcrop of chert pebble conglomerate occurs at the northwest end of the property. Chert pebbles range from sand to pebble size. The matrix is grey and weathers orange. The conglomerate is composed of mainly basalt clasts and fragments. Epidote occurs as fracture fillings.

5. Rock Description

Sample No. 8381D - Basalt with epidote and quartz and minor malachite staining.

8382D - Quartz vein in talus.

8383D - Barren quartz carbonate float.

6. Geochemistry

The original sample contained 1775 ppb Au in the fine fraction (Dwg.KU.81-173). Follow-up sampling was able to reproduce this value only in one sample (No.9201A). This value is attributed to the concentration of placer gold. Sample 9208D contains high Cu, Zn and Ag values and the drainage further up this stream should be checked.

7. Recommendation

No further work on the property. Since sample 9208D does contain interesting Cu, Zn and Ag values, resampling should be considered in that area of the claim.

COST STATEMENT (TSHIK)

1. **Wages** — Cost

2 Sr. Geol. Ass't(s),	2 manday(s) (1981 July 26, Aug. 5)	$ 223.06
4 Field Assistant(s),	4 manday(s) (1981 July 26, Aug. 5)	$ 207.50
		$ 430.56

2. **Room & Board**

Location	Daily Rate	Date	No. of Days	
Carcross	$25.00	1981 Jul.26,Aug 7	6	$ 150.00

3. **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 26, Aug. 7 No. of hrs: 2.5 — $1,081.25

$1,152.95

4. **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	15	X	X X X X X X X X X X	$22.75	$ 341.25
	1	X	X X X X X X X X X	17.75	17.75
Mineral	15	X	X X X	7.90	126.40
	1	X	X X X	7.90	7.90
Soil	2		X X X X X X X X	20.95	41.90
	24		X X X X X X X X X X X	23.65	567.60
Rock	3		X X X X X X X X X X	22.75	68.25

Preparation - Rock	3 @ $2.25	$ 6.75
- Heavy Mineral	16 @ $20/sample	320.00
- Soil/Silt	26 @ $0.85/sample	22.10

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)

$1,519.90

Cost Statement (TSHIK -continued)

e. Report Preparation

	Daily Rate	Date	No. of Days	Cost
Drafting	$100.00	1982 Feb. 17	1.0	$ 100.00
Typing	$ 95.00		0.1	9.50
Map preparation	8 maps at 16¢/square foot			11.52
				$ 121.02
			GRAND TOTAL	$3,374.43

ANNIG PROPERTY

1. Location (NTS: 104-M-15E & 16W)

The property is located 35 km southwest of the property, (Dwg. KU.81-244).

2. Personnel

Sr. Geological Assistants: L. Holmgren, J. Peter
Assistant Geologists: A. Deak, A. McArthur

3. Previous Work

No previous work appears in the assessment files.

4. Geology

The ridge to the north west of the property is composed of granodiorite of late Cretaceous age (Dwg.KU.81-175). No outcrop was seen in the anomalous stream.

5. Geochemistry

The original anomalous sample contained 1375 ppb Au in the fine fraction (Dwg.81-175). Resampling of the stream and the ridge to the northwest did not return any gold values.

6. Recommendation

No further work is recommended.

COST STATEMENT (ANNIG)

1. Wages

	Cost
2 Sr. Geol. Ass't(s), 2 manday(s) (1981 July 28)	$ 124.92
2 Field Assistant(s), 2 manday(s) (1981 July 29)	$ 110.10
	$ 235.02

2. Room & Board

Location	Daily Rate	Date	No. of Days	
Carcross	$25.00	1981 July 28,29	4	$ 100.00

3. Transportation

a. Truck Rental (Avis-Whitehorse, YT): 1 day(s) @ $35.85/day	$ 35.85
b. Helicopter in support of field work @ $432.50/hr including fuel (Flying by Viking Helicopter Ltd. of Prince George)	
Dates (1981): July 28,29 No. of hrs: 1.8	$ 778.50
	$ 814.35

4. Analytical Services

Type of Sample	No. of	Fraction Analyzed			Elements Analyzed											Unit Price	
		F	FHM	CHM	Mo	Cu	Pb	Zn	Ni	Ag	Hg	As	Mn	Au	Sb		
Heavy	8	X			X	X	X	X		X	X	X	X	X	X	$22.75	$ 182.00
Mineral	8			X		X				X				X		7.90	63.20
Soil	28	X				X	X	X		X	X	X		X	X	20.95	586.60
Preparation - Heavy Mineral 8 @ $20/sample																	160.00
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)																	
																	$ 991.80

Cost Statement (ANNIG -continued)

e. Report Preparation

	Daily Rate	Date	No. of Days	Cost
Drafting	$100.00	1981 July 29	0.5	$ 50.00
Typing	$ 95.00		0.1	9.50
Map preparation	8 maps at 16¢/square foot			11.52
				$ 71.02
			GRAND TOTAL	$2,212.19

UNDAS PROPERTY

1. Location (NTS: 104-M-16E)

The property is located 18 km northwest of Atlin, B.C. (Dwg. KU.81-244).

2. Personnel

Sr. Geological Assistants: L. Holmgren, J. Peter
Assistant Geologists: A. Deak, A. McArthur

3. Previous Work

No previous work appears in the assessment files.

4. Geology

Outcrop in the anomalous stream consists of interbedded greywackes, argillites and gossanous fissile siltstones which has been intruded by dykes of the Coast Range Intrusions (Dwg. KU.81-176). The greywacke is dark grey, and contains coarse-grained quartz and feldspar grains in a fine-grained matrix. The argillites are black and very fine-grained; and the siltstone is fissile, black, fine-grained and gossanous. The iron-staining is attributed to fine disseminated pyrite which composes less that 1% of the rock. The sediments strike north and dip steeply to the east. These are cut by three dykes which generally strike northeast. One dyke is a fine-grained, dark grey granodiorite dyke and the other two are feldspar porphyry dykes which have a grey groundmass. The feldspar phenocryst are 2-4 mm in length and compose 10% of the rock.

5. Rock Description

Sample No. 8600D - Coarse-grained dark grey greywacke.

6. Geochemistry

The original sample contained 395 ppb Au in the fine fraction and 195 ppb Au in the coarse fraction (Dwg.KU.81-179). Follow-up stream sediment sampling was not able to reproduce these values. Sampling in the adjacent stream returned 490 ppb in the coarse fraction of sample No.9992B, but this was not repeated by sampling further up-stream.

6. Recommendation

No further work is recommended.

COST STATEMENT (UNDAS)

1. **Wages** — Cost

2 Sr. Geol. Ass't(s), 1 manday(s) (1981 July 27)	$ 124.92
2 Field Assistant(s), 1 manday(s) (1981 July 28)	$ 110.10
	$ 235.02

2. **Room & Board**

Location	Daily Rate	Date	No. of Days	
Carcross	$25.00	1981 July 27,28	4	$ 100.00

3. **Transportation**

a. Truck Rental (Avis-Whitehorse, YT):
1 day(s) @ $35.85/day — $ 35.85

b. Helicopter in support of field work @ $432.50/hr including fuel (Flying by Viking Helicopter Ltd. of Prince George)

Dates (1981): July 27,28 No. of hrs: 2.0 — $ 865.00

$ 900.85

4. **Analytical Services**

Type of Sample	No. of	Fraction Analyzed			Elements Analyzed											Unit Price	
		F	FHM	CHM	Mo	Cu	Pb	Zn	Ni	Ag	Hg	As	Mn	Au	Sb		
Heavy	7	X			X	X	X	X		X	X	X	X	X	X	$22.75	$ 159.25
Mineral	7			X		X				X				X		7.90	55.30
Soil	21	X				X	X	X		X	X	X		X	X	20.95	439.95
Rock	1	X				X	X	X		X		X		X		12.70	12.70

Preparation - Rock	1 @ $2.25/sample	$ 2.25
- Heavy Mineral	7 @ $20/sample	140.00
- Soil/Silt	21 @ $0.85/sample	17.85

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)

$ 827.30

Cost Statement (UNDAS -continued)

e. Report Preparation

	Daily Rate	Date	No. of Days	Cost
Drafting	$100.00	1982 Feb. 17	1.0	$ 100.00
Typing	$ 95.00	1982 May 5	0.1	9.50
Map preparation	8 maps at 16¢/square foot			11.52
				$ 121.02
			GRAND TOTAL	$2,184.19

GENERAL COST STATEMENT

Property	Expenditures	
LATE	$ 1,106.64	
LAME	1,407.18	
FLOOD	1,195.68	
TAIL	3,424.75	
ALOON	2,572.61	AR #10387
YAT	1,634.66	
ANTZ	4,065.34	
LURE	1,301.13	
ANKI	2,232.27	
EGLEN	3,184.54	22 124.80
NARRS	3,451.42	
HAKER	2,836.37	
AKUM	3,622.07	
RACE	1,801.79	
CREED	805.56	
KEAP	2,368.74	AR #10417
TAKE	1,634.25	
PENG	3,914.21	
TSHIK	3,374.43	
ANNIG	2,212.19	
UNDAS	2,184.19	28 205.22
TOTAL:	$50,330.02	

QUALIFICATIONS

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

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

5. Between 1981 July and October, I supervised/directed the Kulta Follow-up programme on behalf of Du Pont of Canada Exploration Limited.

J.T. Neelands
Senior Geologist
1982 May

JTN/krl

REFERENCES

Assessment Reports (BCDM):

Harron, G. A.; Du Pont of Canada Exploration Limited, Geochemical Report, Heavy Mineral Sampling for Gold in Five Areas of British Columbia - Taseko, Cry Lake, Telegraph Creek, Iskut and Chappelle, 1981.

Neelands, J. T.; Du Pont of Canada Exploration Limited, Geochemical Report - Kulta Regional Stream Sediment Sampling Programme in the Dease Lake and Tagish Lake Areas, 1982.

Publications:

Monger, J.W.H.; Upper Triassic Stratigraphy, Dease Lake and Tulsequah Map Areas, Northwestern British Columbia, Current Research Part B, Geological Survey of Canada, Energy, Mines and Resources Canada, 1980.

Maps:

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

Dease Lake Map Area (NTS: 104J), Open File 707, Produced 1969 by the Surveys and Mapping Branch, Department of Energy, Mines and Resources; 1971.

APPENDIX I

Laboratory Procedure

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.

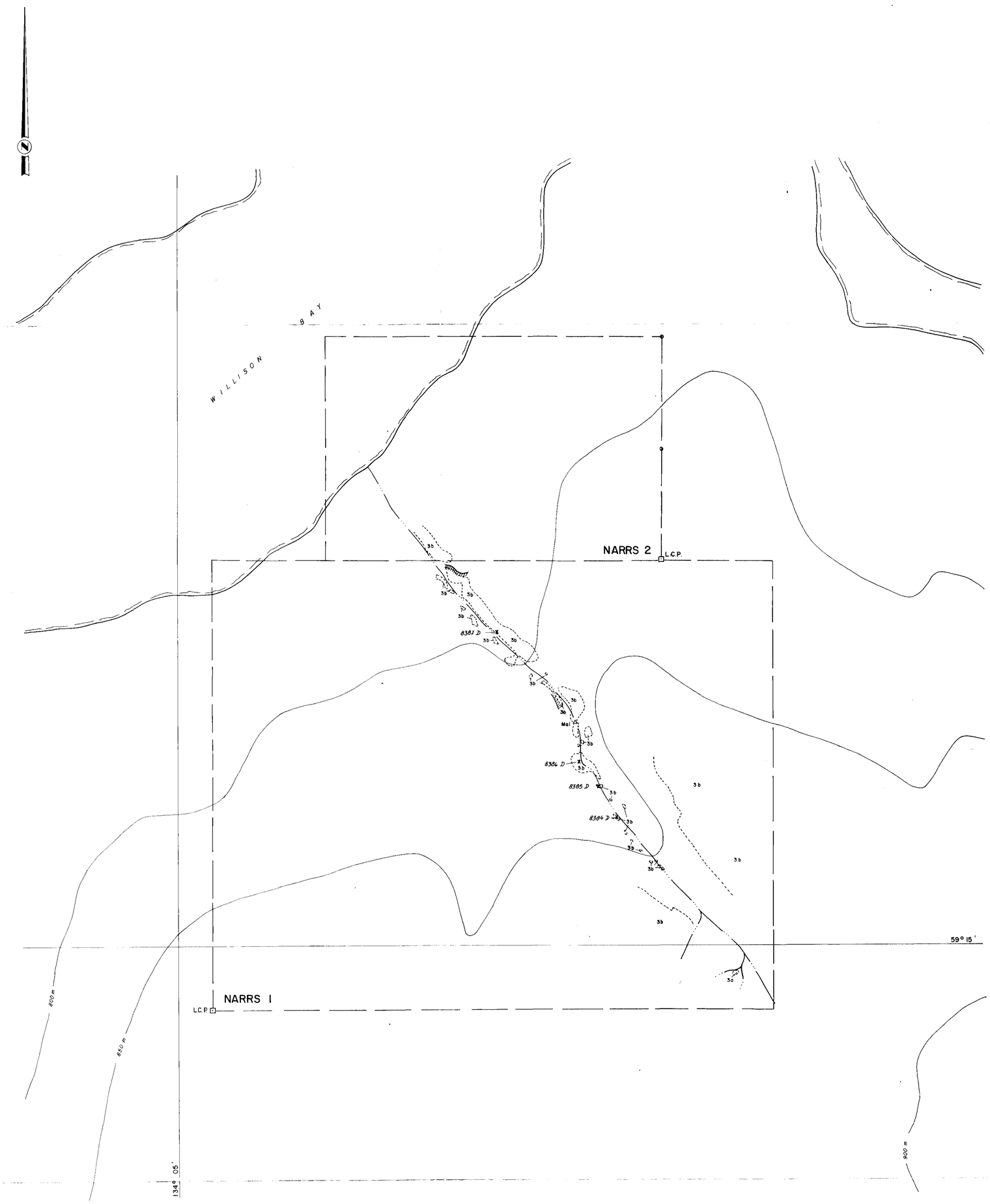
1.0 gram of the samples are digested for 6 hours with HNO_3 and $HClO_4$ mixture.

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

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

SYMBOLS

- OUTCROP
- CONTACT
- x 8381 D — ROCK SAMPLE LOCATION AND NUMBER
- △ — MINERAL OCCURRENCE
- L.C.P. — CLAIM LINE AND LEGAL CORNER POST
- IDENTITY POST
- Mal — MALACHITE
- CLIFF

ROCK GEOCHEMICAL RESULTS

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
8384 D	2	19	75	272	91	1.9	920	4	15	180
8385 D	4	352	81	197	112	1.4	1120	147	60	115
8386 D	3	17	39	101	34	1.3	155	13	5	120
8387 D	1	5	26	65	16	0.6	10	<1	10	75

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
10417
NO.

DUPONT CANADA EXPLORATION

KULTA PROJECT
NARRS CLAIMS
GEOLOGY

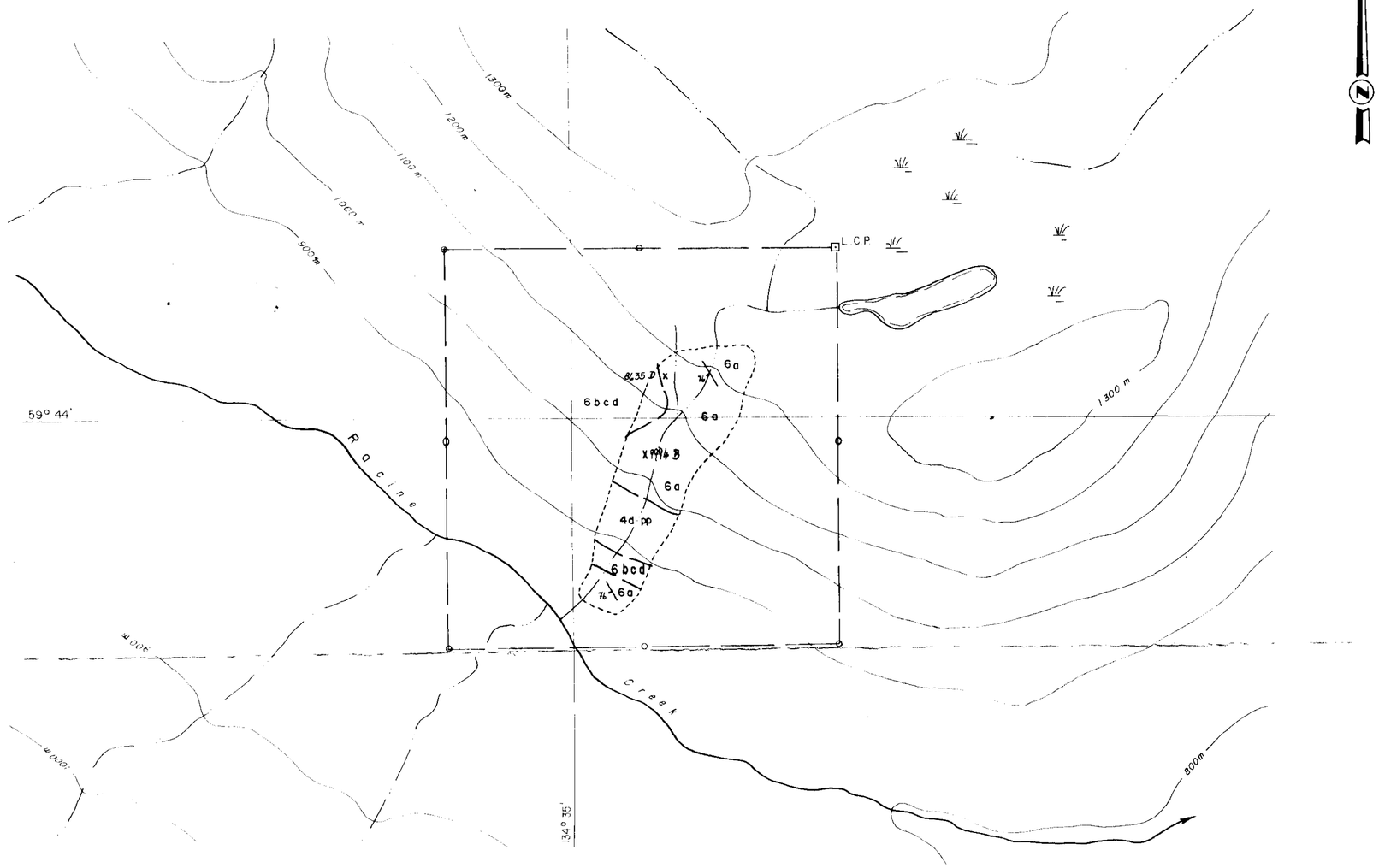
ATLIN LAKE AREA, BRITISH COLUMBIA

m 300 200 100 0 1 : 10 000 300 600 m

SCALE

0 1 INCH = 833 FEET

MAPPED BY	J.T.N., D.M.S.	REVISED	N.T.S. No.: 104 M 8E
DATE	81 08 07		ACCT No.: 351 - 49
DRAWN BY	C.H.K.		DRWG. No.: KU. 81 - 144
DATE	81 12 16		



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

SYMBOLS

- OUTCROP
- CONTACT
- x 9994 B — ROCK SAMPLE LOCATION AND NUMBER
- △ — MINERAL OCCURRENCE
- L.C.P — CLAIM LINE AND LEGAL CORNER POST
- IDENTITY POST
- 76 — STRIKE AND DIP - BEDDING
- pp — PORPHYRITIC

ROCK GEOCHEMICAL 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 F	As ppm -80 F	Au ppb -80 F	Sb ppm F
8635 D	2	50	1400	1750	20	2.9	220	16	20	210
9994 B		198	7300	3800		16.0		12	15	

DUPONT CANADA EXPLORATION

KULTA PROJECT
CREED CLAIM
GEOLOGY

ATLIN LAKE AREA, BRITISH COLUMBIA

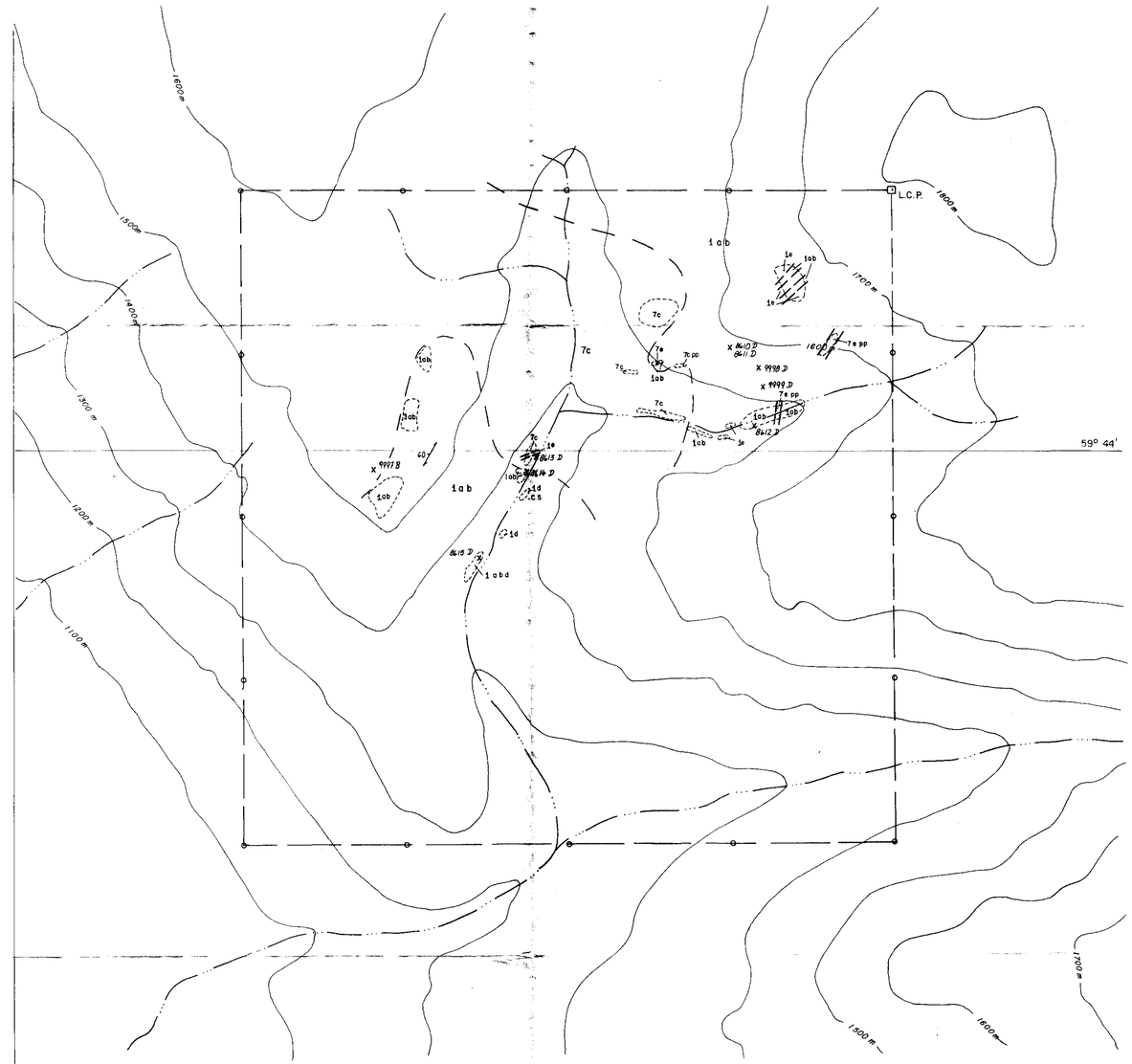
1 : 10 000

m 300 200 100 0 300 600 m

SCALE

0 1 INCH = 833 FEET

MAPPED BY	J.T.N., L.D.H.	REVISED	N.T.S. No. 104 M 10 E
DATE	81 07 29		ACCT No. 351-44
DRAWN BY	C.H.K.		DRWG No. KU. 81-152
DATE	82 01 12		



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
8610 D	87	15	50	1.7	<1	10
8611 D	11	1	18	0.3	1	5
8612 D	58	6	70	1.3	<1	5
8613 D	23	10	47	0.4	2	5
8614 D	19	1	7	0.3	13	5
8615 D	1420	18	32	3.2	1	15
9997 B	58	210	1060	6.1	590	5
9998 B	96	34	79	1.9	8	5
9999 B	195	15	40	2.0	14	5

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

SYMBOLS

OUTCROP

CONTACT — ASSUMED / APPROXIMATE

x 8614 D — ROCK SAMPLE LOCATION AND NUMBER

MINERAL OCCURRENCE

L.C.P. — CLAIM LINE AND LEGAL CORNER POST

IDENTITY POST

60 — FOLIATION - DIP and STRIKE

pp — PORPHYRITIC

cs — CALC SILICATE ZONE

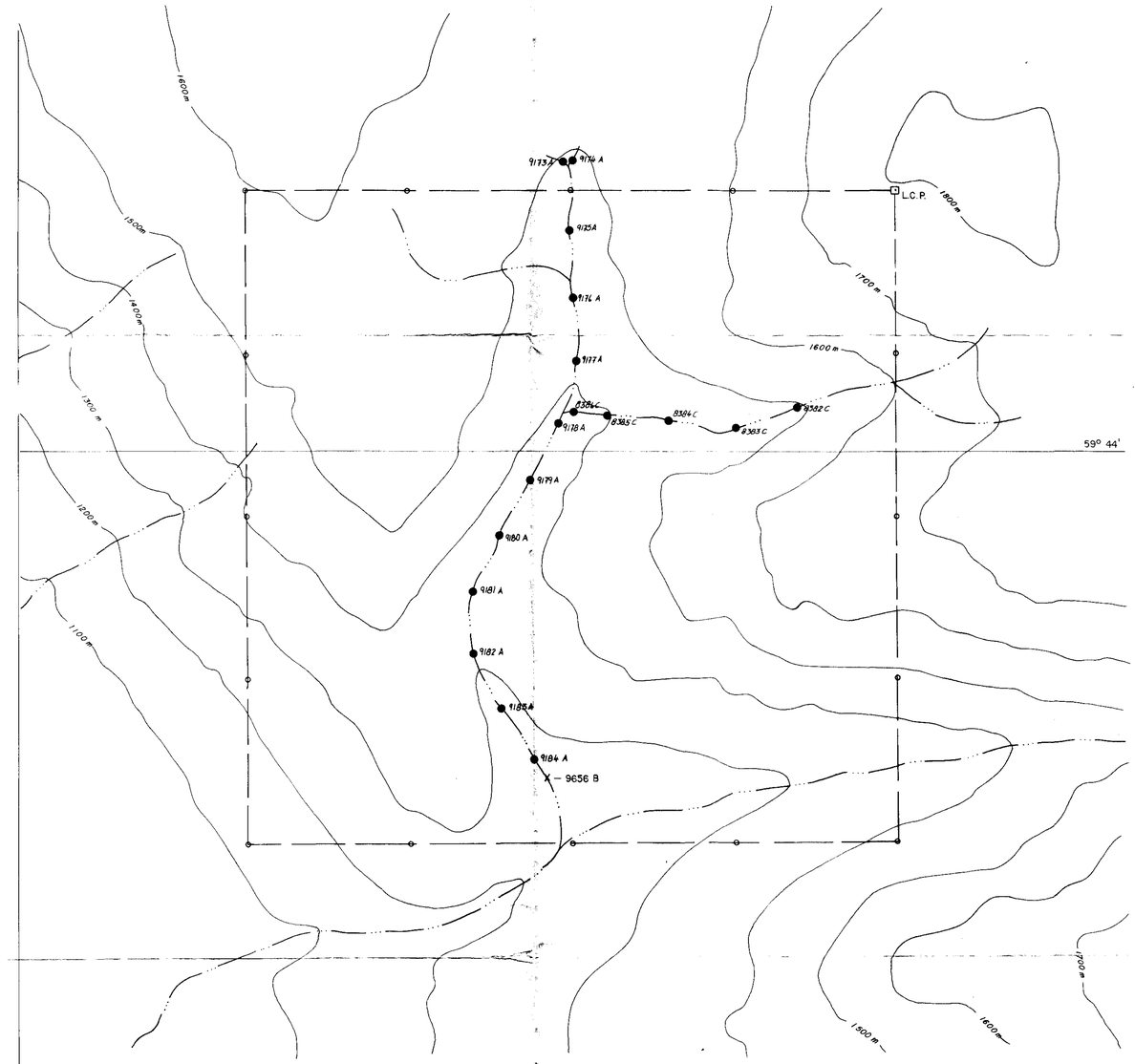
DUPONT CANADA EXPLORATION

KULTA PROJECT
KEAP CLAIM
GEOLOGY

ATLIN LAKE AREA, BRITISH COLUMBIA

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

MAPPED BY	J.T.N., L.D.H.	REVISED	N.T.S. No.: 104 M 10E
DATE	81 08 01		ACCT No.: 351-42
DRAWN BY	C.H.K.		DRWG. No.: KU. 81-156
DATE	82 01 21		



LEGEND

● 9184 A — SIEVED HEAVY MINERAL SAMPLE LOCATION and NUMBER

X - 9656 B — ORIGINAL SIEVED HEAVY MINERAL SAMPLE LOCATION (1981) and NUMBER

1981 SAMPLE RESULTS

Sample	Mo ppm -80 F	Cu -80 F	Cu ppm -20 +80 CHM	Pb ppm -80 F	Zn ppm -80 F	Ag -80 F	Ag ppm -20 +80 CHM	Hg ppb -80 F	As ppm -80 F	Mn ppm -80 F	Au -80 F	Au ppb -20 +80 CHM	Sb ppm -80 F	H.M. % /Orig. wt. gm
-14 Sieve														
8382 C	1	55	75	22	59	0.6	1.2	35	48	500	5	5	34	5.03
8383 C	1	43	68	25	58	0.7	1.3	5	31	455	25	10	32	4.86
8384 C	1	49	65	29	60	0.6	1.2	15	28	560	5	5	24	5.58
8385 C	2	45	68	31	62	0.6	1.5	5	24	520	5	5	35	5.50
8386 C	2	47	68	25	61	0.8	1.1	15	31	490	5	5	24	5.12
9173 A	3	42	65	24	61	0.7	1.0	5	15	445	5	10	18	2.28
9174 A	4	53	93	27	84	0.8	1.2	5	70	500	10	5	22	3.90
9175 A	2	40	60	27	72	0.9	1.5	5	29	485	5	30	15	2.38
9176 A	1	52	63	28	75	0.9	1.3	55	44	480	5	5	14	4.80
9177 A	1	40	166	18	52	0.9	2.7	5	30	400	5	15	12	5.03
9178 A	1	39	68	27	56	0.5	1.4	5	36	480	5	40	12	4.97
9179 A	1	39	75	25	55	0.7	1.2	5	25	460	740	15	38	5.13
9180 A	1	33	81	29	45	0.5	1.7	10	37	450	5	5	8	3.45
9181 A	1	40	85	30	53	0.9	1.4	95	14	480	<5	55	30	5.71
9182 A	1	23	67	19	41	0.5	1.1	40	16	360	530	5	35	6.85
9183 A	2	17	49	20	40	0.4	1.0	5	23	335	5	5	20	4.95
9184 A	1	29	78	22	46	0.5	1.5	35	22	410	5	5	45	8.02
-10 Sieve														
9656 B	1	30	52	23	49	0.6	1.4			425	1800	5		6.58
											-20 FHM	530		/1500

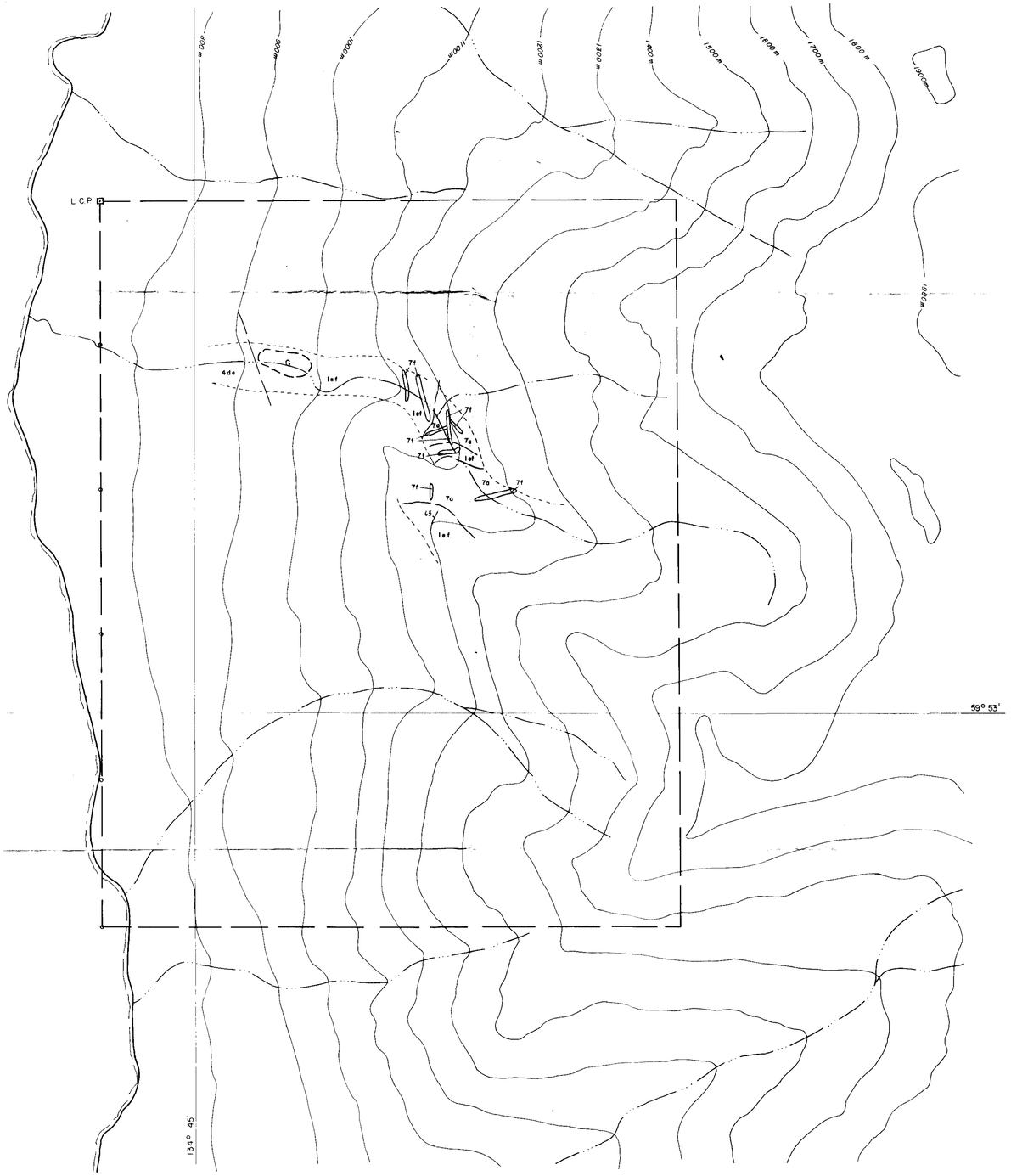
DUPONT CANADA EXPLORATION

KULTA PROJECT
KEAP CLAIM
GEOCHEMISTRY
Au, Ag, As, Cu, Hg, Mn, Mo, Pb, Sb, Zn, %HM

ATLIN LAKE AREA, BRITISH COLUMBIA

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

MAPPED BY	J.T.N., L.D.H.	REVISED	N.T.S. No. 104 M 10E
DATE	81 08 01		ACCT No. 351-42
DRAWN BY	C.H.K.		DRWG. No. KU. 81-157
DATE	82 01 20		



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

SYMBOLS

OUTCROP (approx.)

CONTACT

L.C.P. CLAIM LINE AND LEGAL CORNER POST

IDENTITY POST

G GOSSAN

DUPONT CANADA EXPLORATION

KULTA PROJECT
TAKE CLAIM
GEOLOGY

ATLIN LAKE AREA, BRITISH COLUMBIA

1 : 10 000

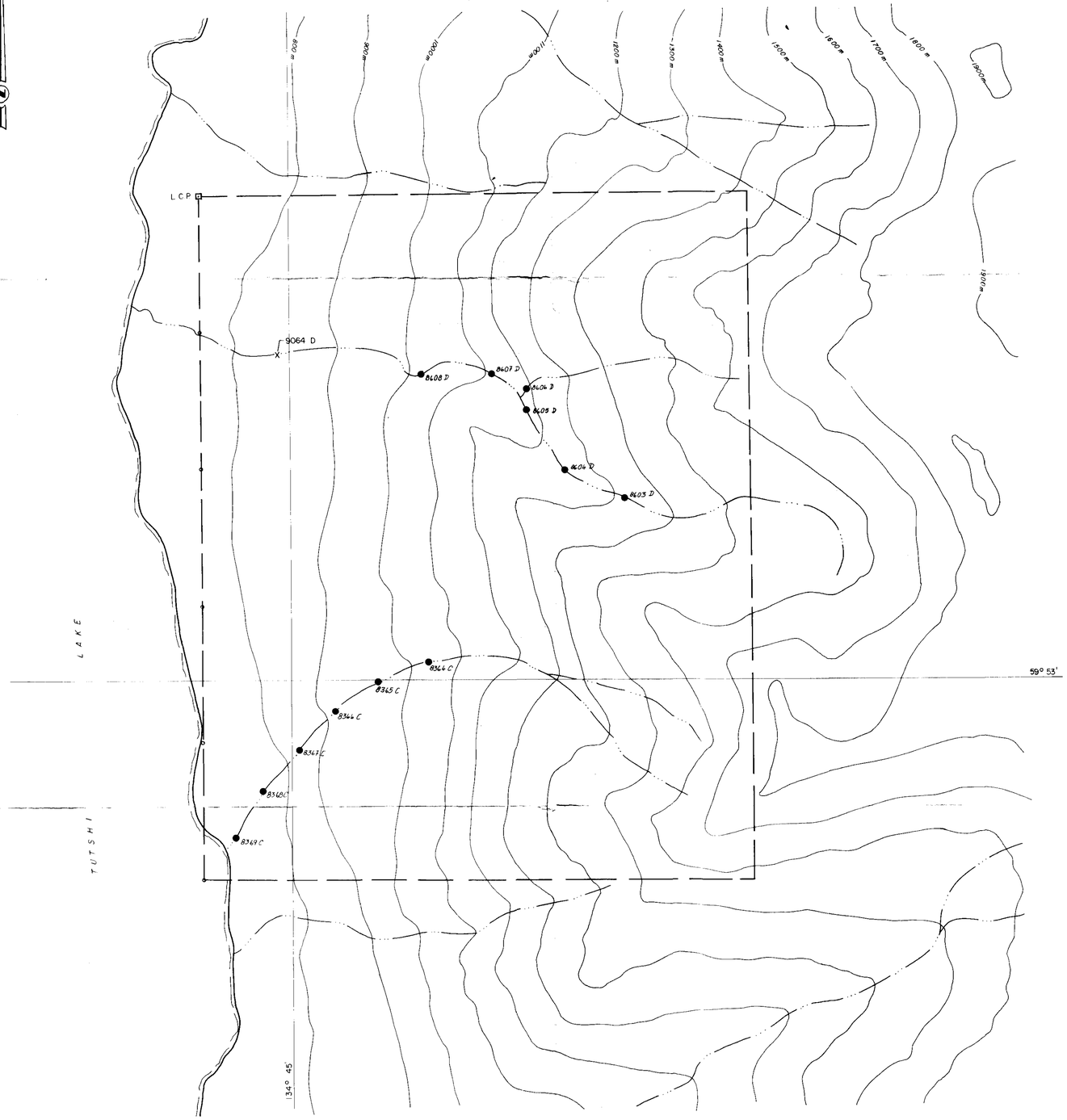
m 300 200 100 0 300 600 m

SCALE

0
1 INCH = 833 FEET

MAPPED BY :	J.T.N., M.I.J.	REVISED :	N.T.S. No. : 104 M 15 E,W
DATE :	81 07 27		ACCT No. : 351 - 38
DRAWN BY :	C.H.K.		DRWG. No. : KU. 81 - 160
DATE :	82 02 01		

WCI 228



1981 SAMPLE RESULTS

Sample	Mo ppm -80 F	Cu ppm -80 F	Cu ppm -20 +80 C HM	Pb ppm -80 F	Zn ppm -80 F	Ag ppm -80 F	Ag ppm -20 +80 C HM	Hg ppb -80 F	As ppm -80 F	Mn ppm -80 F	Au ppb -80 F	Au ppb -20 +80 C HM	Sb ppm -80 F	H.M. % (Orig. wt-gm)
-14 Sieve														
8364 C	14	39	170	247	203	1.3	3.3	10	22	680	5	5	22	2.50
8365 C	2	50	340	108	136	0.9	6.0	nes	38	700	10	10	nes	1.39
8366 C	2	30	191	60	96	1.0	2.9	5	<1	565	5	40	40	2.42
8367 C	7	38	140	91	105	1.6	2.4	5	45	540	<5	10	55	2.04
8368 C	3	28	235	52	92	0.8	2.4	5	34	485	5	10	22	1.89
8369 C	1	24	125	60	77	0.9	2.7	5	16	490	5	5	26	2.38
8605 D	1	12	165	36	52	0.8	2.3	30	8	460	5	30	12	0.80
8607 D	6	14	160	38	56	0.5	3.0	10	<1	525	5	40	3	0.33
8608 D	10	58	274	48	73	3.3	3.2	15	10	680	5	500	22	0.85
8603 D	2	18	nes	40	56	1.0	nes	nes	22	360	10	nes	nes	0.60
8604 D	1	16	87	51	70	1.0	2.0	40	2	700	5	10	15	0.65
8606 D	11	12	135	65	65	0.8	0.5	5	<1	630	10	45	nes	0.33
-10 Sieve														
9064 D	11	73	125	50	85	0.8	2.2			650	5	5		0.86 /130

nes - not enough sample

LEGEND

● 8603 D — SIEVED HEAVY MINERAL SAMPLE LOCATION and NUMBER

X - 9064 D — ORIGINAL SIEVED HEAVY MINERAL SAMPLE LOCATION (1981) and NUMBER

DUPONT EXPLORATION CANADA

KULTA PROJECT
TAKE CLAIM
GEOCHEMISTRY
Au, Ag, As, Cu, Hg, Mn, Mo, Pb, Sb, Zn & %HM

ATLIN LAKE AREA, BRITISH COLUMBIA

1 : 10 000

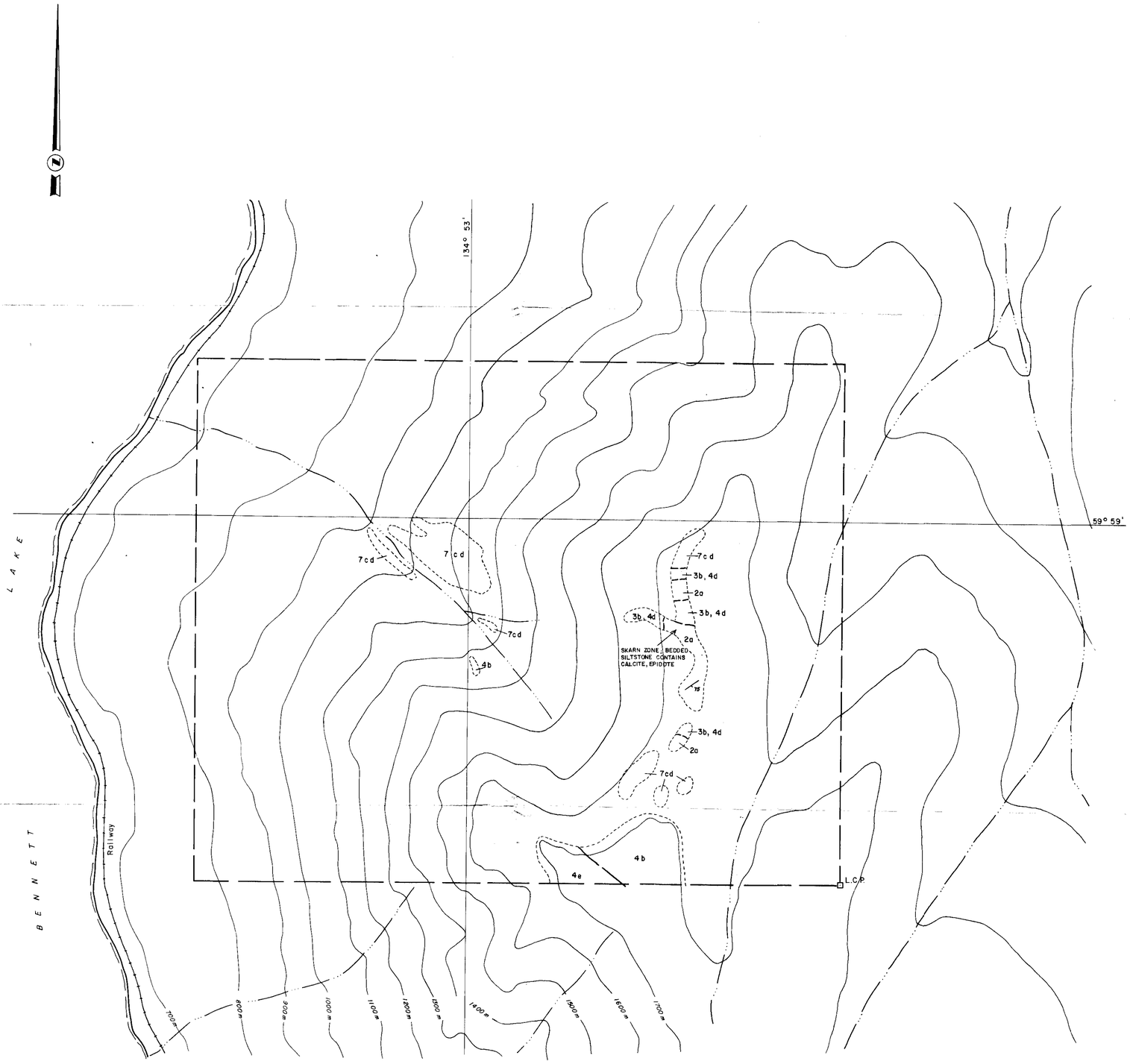
m 300 200 100 0 300 600 m

SCALE

0
1 INCH = 833 FEET

MAPPED BY	J.T.N., M.I.J.	REVISED	N.T.S. No. 104 M 15 E,W
DATE	81 07 27		ACCT No. 351 - 38
DRAWN BY	C.H.K.		DRWG. No. KU. 81 - 161
DATE	82 02 01		

KCI - 209



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

SYMBOLS

- OUTCROP
- CONTACT
- ROCK SAMPLE LOCATION AND NUMBER
- MINERAL OCCURRENCE
- L.C.P. CLAIM LINE AND LEGAL CORNER POST

DUPONT CANADA EXPLORATION

KULTA PROJECT
PENG CLAIM
GEOLOGY

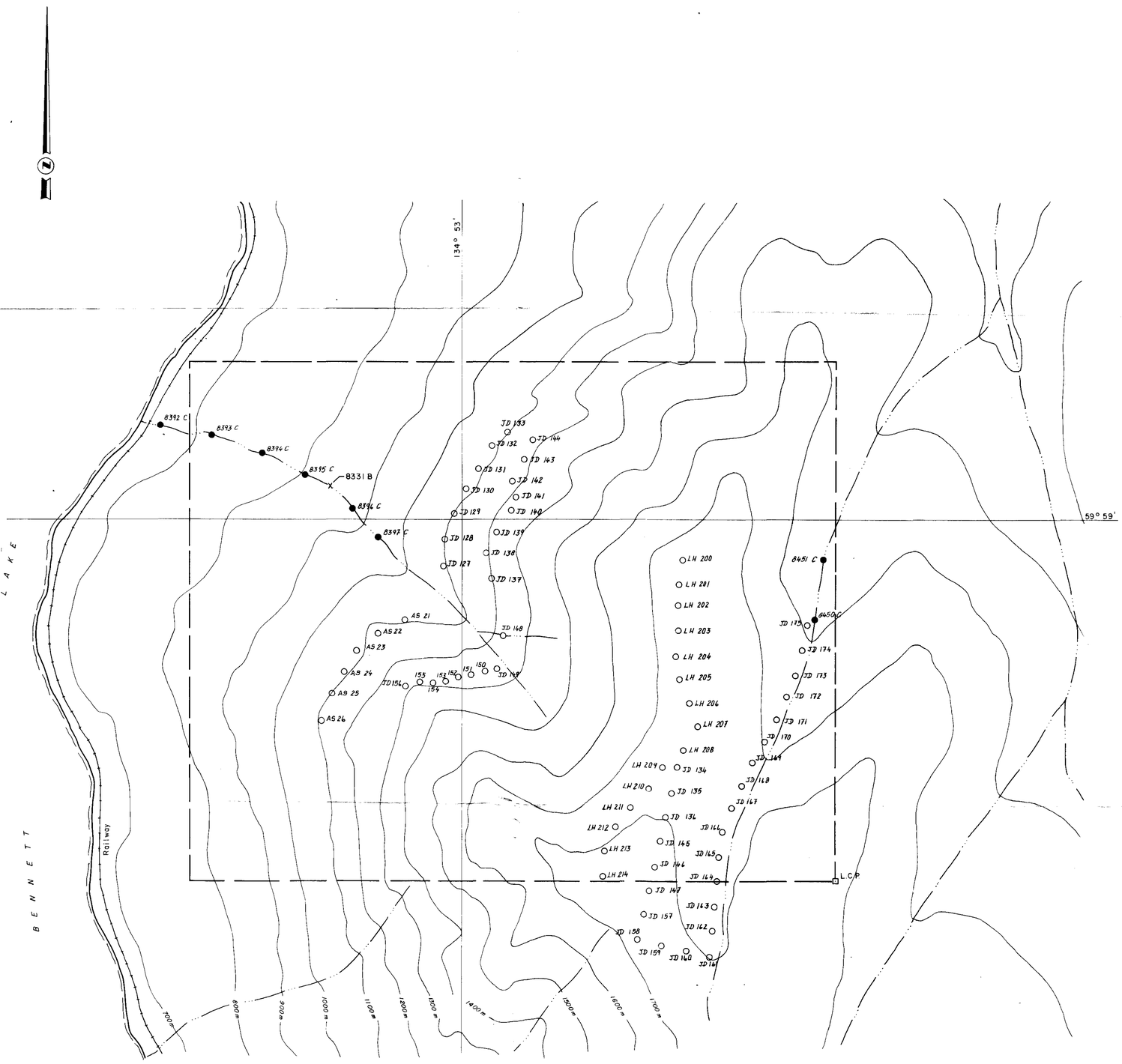
ATLIN LAKE AREA, BRITISH COLUMBIA

m 300 200 100 0 1:10 000 300 600 m

SCALE

0 1 INCH = 833 FEET

MAPPED BY	J.T.N., L.D.H.	REVISED	N.T.S. No. 104 M 15W
DATE	81 08 07		ACCT No. 351 - 33
DRAWN BY	C.H.K.		DRWG. No. KU. 81 - 170
DATE	82 02 12		



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											
AS 21	2	33	14	73	15	0.8	95	19	605	5	20
AS 22	2	61	50	137	26	1.0	75	47	1300	5	30
AS 23	3	26	11	64	11	0.4	220	17	900	5	18
AS 24	14	27	14	50	10	0.8	275	53	1910	5	10
AS 25	1	18	10	35	10	0.4	95	37	175	5	6
AS 26	9	32	11	68	13	0.6	140	46	540	5	5
JD 127	5	15	55	84		1.3	30	8	1320	5	25
JD 128	10	14	69	86		1.4	40	13	1180	5	28
JD 129	7	16	65	106		1.0	25	15	1460	5	22
JD 130	6	18	59	105		1.2	65	24	1310	5	34
JD 131	6	22	28	75		1.1	20	67	400	5	12
JD 132	9	17	42	67		0.9	20	33	640	45	20
JD 133	11	40	111	144		1.0	35	43	900	5	40
JD 134	17	53	39	142		0.9	30	87	600	5	22
JD 135	17	56	40	141		1.0	30	113	660	25	14
JD 136	12	58	43	155		1.0	30	54	680	365	16
JD 137	14	12	54	79		0.9	45	24	1300	5	4
JD 138	5	9	50	64		1.0	50	20	1630	5	8
JD 139	7	21	36	80		1.0	25	38	850	20	10
JD 140	4	14	36	73		0.9	35	31	840	10	14
JD 141	8	14	143	135		1.0	75	25	1880	5	10
JD 142	5	12	42	84		0.9	70	34	1200	5	18
JD 143	9	13	107	119		0.9	60	30	1200	5	6
JD 144	11	14	63	83		0.8	70	30	640	5	14
JD 145	19	57	38	169		1.2	75	91	670	5	12
JD 146	21	60	44	201		1.6	95	82	700	10	22
JD 147	28	81	55	324		1.3	65	128	920	15	28
JD 148 (Silt)	8	20	210	250		1.5	65	25	1120	5	16
JD 149	8	37	89	231		1.3	80	62	1160	5	20
JD 150	12	38	44	128		1.4	75	10	1040	10	26
JD 151	26	90	54	232		1.4	60	117	1560	5	50
JD 152	13	71	67	259		1.4	105	77	1230	20	16
JD 153	15	77	96	234		1.5	60	56	1250	10	22
JD 154	16	42	42	148		1.5	60	45	800	5	26
JD 155	13	76	74	404		1.6	75	144	990	5	35
JD 156	9	44	30	83		1.1	65	58	620	5	16
JD 157	35	89	46	426		1.9	75	174	1020	10	35
JD 158	24	84	45	795		1.5	80	162	1160	5	36
JD 159	13	63	28	194		0.9	65	81	820	5	28
JD 160	15	42	34	206		1.4	75	108	590	10	42
JD 161	24	81	37	155		1.2	20	102	630	5	42
JD 162	26	90	43	194		1.4	35	111	890	5	65
JD 163	22	80	47	176		1.2	50	116	780	10	34
JD 164	20	80	50	191		1.3	50	129	760	5	38
JD 165	16	86	50	199		1.4	50	101	840	5	50
JD 166	13	62	36	138		1.0	60	84	660	5	32
JD 167	8	51	49	147		1.0	65	69	880	10	24
JD 168	10	46	35	127		0.9	40	67	700	5	30
JD 169	10	47	39	132		0.9	50	97	720	5	22
JD 170	9	45	36	137		0.9	55	20	700	10	20
JD 171	4	38	32	144		1.0	80	42	760	10	24
JD 172	5	36	27	115		0.8	30	41	650	5	32
JD 173	18	75	33	182		0.8	50	46	820	5	30
JD 174	2	40	29	121		0.9	90	31	640	5	14
JD 175	6	52	40	193		1.3	80	56	740	5	32
LH 200	4	31	31	114	29	0.8	40	6	640	10	62
LH 201	6	46	31	138	42	0.9	5	42	500	40	45
LH 202	6	40	37	133	38	0.8	70	23	595	5	28
LH 203	14	45	31	123	45	0.8	5	22	480	5	55
LH 204	6	41	32	119	48	0.6	40	27	520	5	26
LH 205	2	45	33	139	44	0.6	60	42	600	10	24
LH 206	8	41	31	127	40	0.4	50	33	440	25	35
LH 207	6	46	40	162	50	0.8	40	31	625	20	35
LH 208	6	73	66	246	83	0.9	55	71	980	5	72
LH 209	1	16	53	84	16	0.7	20	7	690	10	25
LH 210	6	62	40	223	58	0.8	30	58	770	10	35
LH 211	6	28	32	154	28	0.5	40	31	1140	10	65
LH 212	16	74	220	830	56	2.9	55	113	1400	5	34
LH 213	8	123	50	870	64	1.2	20	850	590	5	105
LH 214	18	143	66	800	141	1.5	25	200	1130	5	115

LEGEND

- ○ LH 200 — SILT or SOIL SAMPLE LOCATION and NUMBER
- ● 8392 C — SIEVED HEAVY MINERAL SAMPLE LOCATION and NUMBER
- X – 8331 B — ORIGINAL SIEVED HEAVY MINERAL SAMPLE LOCATION (1981) and NUMBER

1981 SAMPLE RESULTS

Sample	Mo ppm -80 F	Mo ppm -80 F	Cu ppm -80 F	Cu ppm -80 FHM	Cu ppm -20 +80 CHM	Pb ppm -80 F	Pb ppm -80 FHM	Zn ppm -80 F	Zn ppm -80 FHM	Ni ppm -80 F	Ag ppm -80 F	Ag ppm -80 FHM	Ag ppm -20 +80 CHM	Hg ppb -80 F	As ppm -80 F	As ppm -80 FHM	Mn ppm -80 F	Au ppb -80 F	Au ppb -80 FHM	Au ppb -20 +80 CHM	Sb ppm -80 F	Sb ppm -80 FHM	H.M. wt. F/C gm	H.M. % F/C	Orig. wt. F/C gm
-10 Sieve																									
8331 B	1		18		54	45		126			1.1		4.4				595	5		5				1.37	865
-14 Sieve																									
8392 C	1		16	78	51	24		102		16		12.5	3.3	35	<1		650		35	35	40		1.28/2.25	5.02/0.59	25.5/380
8393 C	1		18	90	83	21		108		14		7.6	17.5	10	23		660		2500	265	30		1.78/2.05	6.77/0.54	26.3/379
8394 C	2		16	110	84	28		111		13		9.0	6.3	10	7		675		1600	80	16		0.50/2.47	2.00/0.68	25.0/363
8395 C	1		18	187	70	36		106		10		17.5	5.6	10	14		620		25	35	18		0.40/3.07	1.28/0.85	31.3/362
8396 C	1		16	98	37	34		113	12	12		21.7	10.0	20	<1		630		100	25	10		0.46/1.92	2.36/0.79	19.5/243
8397 C	1		18	162	68	44		120		14		16.2	8.0	10	4		660		20	25	20		0.65/2.95	1.88/1.08	34.5/274
8450 B	6	8	38	92		30	72	148	264		0.9	0.6		10	61	241	730		15	10*	15	37	1.74/82.0	6.02/3.83	28.9/4.67
8451 B	10	2	43	100		35	96	171	260		1.0	1.5		5	91	236	700		2960	5*	20	4	1.25/139.0	6.68/7.77	18.7/5.59

* -40 Mesh

DUPONT CANADA EXPLORATION

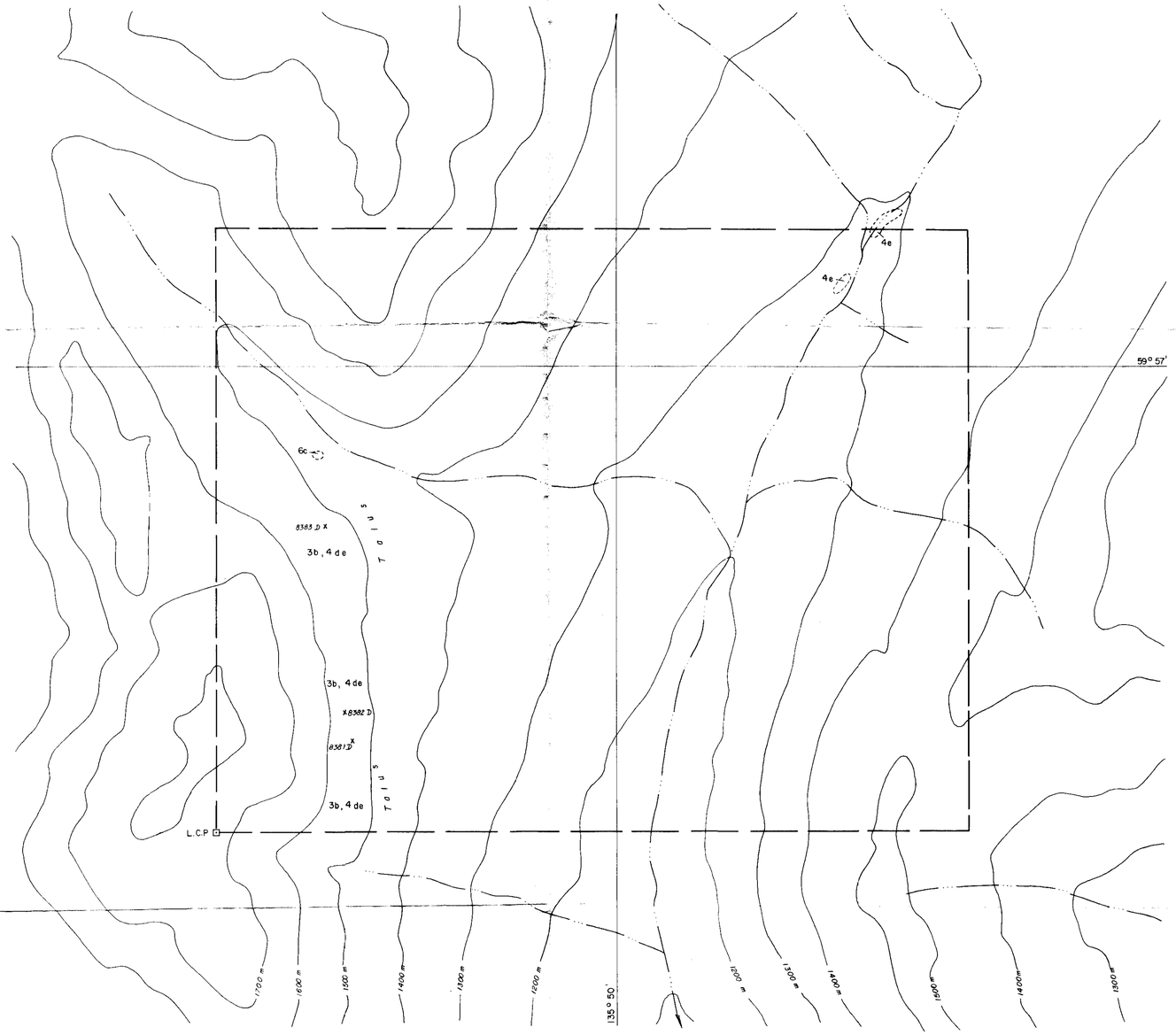
KULTA PROJECT
PENG CLAIM
GEOCHEMISTRY
Au, Ag, As, Cu, Hg, Mn, Mo, Ni, Pb, Sb, Zn, %HM

ATLIN LAKE AREA, BRITISH COLUMBIA

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

MAPPED BY :	J.T.N., L.D.H.	REVISED :	N.T.S. No. : 104 M 15W
DATE :	81 08 07		ACCT No. : 351 - 33
DRAWN BY :	C.H.K.		DRWG. No. : KU. 81 – 171
DATE :	82 02 12		

MCH-228



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

SYMBOLS

- OUTCROP
- CONTACT
- x 8381 D — ROCK SAMPLE LOCATION AND NUMBER
- △ — MINERAL OCCURRENCE
- L.C.P — CLAIM LINE AND LEGAL CORNER POST

ROCK GEOCHEMICAL 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	Au ppb -80 F	Sb ppm -80 F
8381 D	1	110	11	43	19	1.1	25	9	5	20
8382 D	1	7	11	31	12	0.7	15	<1	10	26
8383 D	2	11	25	46	17	1.0	5	5	5	90

DUPONT EXPLORATION CANADA

KULTA PROJECT
TSHIK CLAIM

GEOLOGY

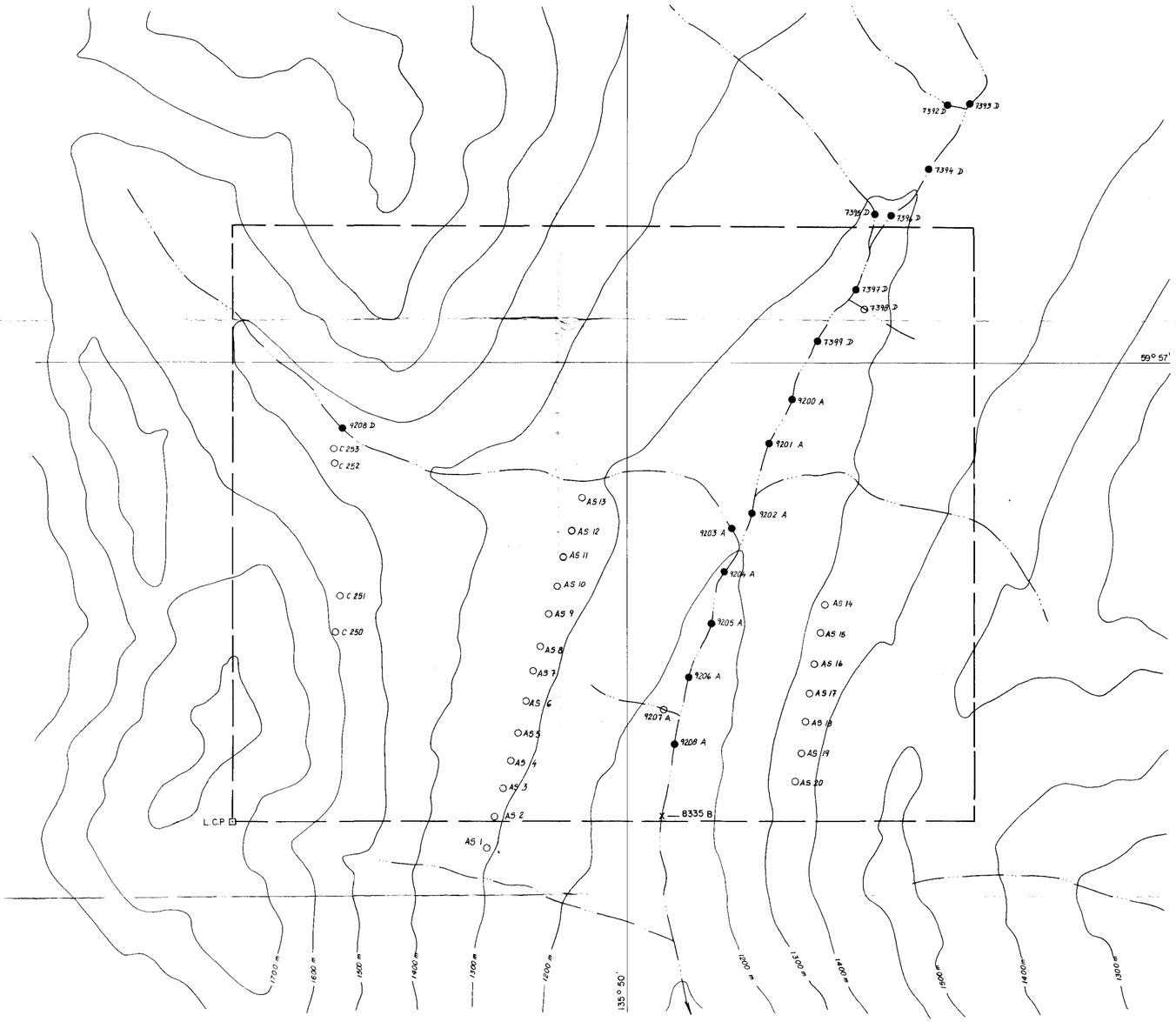
ATLIN LAKE AREA, BRITISH COLUMBIA

m 300 200 100 0 1 10 000 300 600 m

SCALE

0
1 INCH = 833 FEET

MAPPED BY	J.T.N., D.M.S	REVISED	N.T.S. No.: 104 M 15W
DATE	81 08 05		ACCT. No.: 351 - 34
DRAWN BY	C.M.K.		DRWG. No.: KU 81-172
DATE	82 02 17		



LEGEND

○ AS 13	SILT or SOIL SAMPLE LOCATION and NUMBER
● 7392 D	SIEVED HEAVY MINERAL SAMPLE LOCATION and NUMBER
X — 8335 B	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											
AS 1	1	21	17	35	11	0.3	135	26	600	5	10
AS 2	2	24	21	60	17	0.5	75	41	620	5	15
AS 3	1	30	20	62	31	0.4	75	28	680	5	24
AS 4	1	22	17	56	22	0.6	75	19	700	5	6
AS 5	4	32	25	69	33	0.6	5	22	1010	10	22
AS 6	2	15	24	50	13	0.6	100	26	1030	<5	2
AS 7	6	12	22	38	12	0.7	105	56	420	5	3
AS 8	4	30	31	67	27	0.8	65	24	490	5	2
AS 9	6	21	23	52	23	1.1	95	29	600	10	8
AS 10	2	32	31	104	24	1.2	95	64	740	5	20
AS 11	6	21	26	52	23	0.8	70	16	570	10	22
AS 12	2	19	28	63	24	0.8	60	43	560	15	34
AS 13	2	21	11	52	18	0.5	55	21	325	25	18
AS 14	3	10	9	32	30	0.6	85	5	260	5	8
AS 15	1	21	10	68	10	0.7	65	26	580	10	20
AS 16	1	26	17	69	1	0.9	5	46	910	5	15
AS 17	1	31	20	79	18	0.8	35	40	1040	5	18
AS 18	2	31	22	82	22	0.8	50	59	920	10	10
AS 19	1	25	13	76	10	0.6	80	14	590	5	12
AS 20	3	31	29	82	18	1.0	25	45	1070	5	18
C 250	2	39	15	66	28	0.6	35	1	550	20	50
C 251	2	20	16	60	22	0.7	15	<1	780	5	40
C 252	2	39	31	69	26	0.7	20	44	880	5	84
C 253	2	29	37	139	44	1.2	35	69	720	10	44

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 -20 +80 CHM	Sb ppm -80 F	H.M. wt. F/C gm	H.M. % F/C	Orig. wt. F/C gm
Silt																
7398 D		20		25	72		0.6	50	40		5		10			
9207 A		44		30	82		1.1	50	61		5		24			
-10 Sieve																
8335 B	1	28	56	24	102		0.9		2.1		600	1775	5		2.01	945
-14 Sieve																
9208 D	2	35	134 120	63	297	36	9.8	2.9	10	43	860	20	10	32	0.41/3.78	2.28/1.17	18.0/322

DU PONT EXPLORATION CANADA

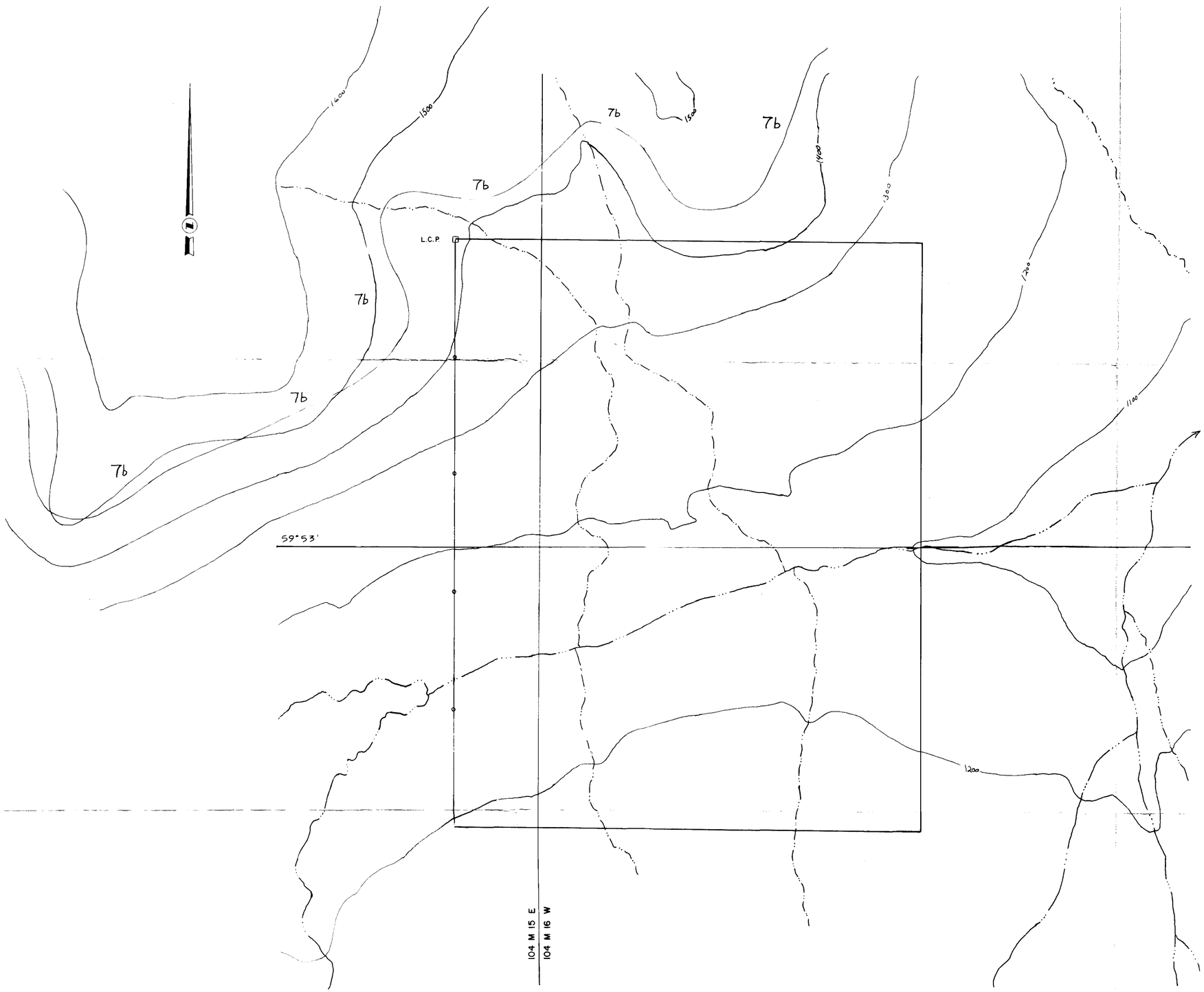
KULTA PROJECT
TSHIK CLAIM
GEOCHEMISTRY

Au, Ag, As, Cu, Hg, Mn, Mo, Ni, Pb, Sb, Zn, %HM

ATLIN LAKE AREA, BRITISH COLUMBIA

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

MAPPED BY	J.T.N., D.M.S.	REVISED	N.T.S. No.: 104 M 15W
DATE	81 08 05		ACCT No.: 351 - 34
DRAWN BY	C.M.K.		DRWG. No.: KU 81 - 173
DATE	82 02 15		



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

SYMBOLS

L.C.P. ——⊡—— CLAIM LINE AND LEGAL CORNER POST

——●—— IDENTITY POST

DU PONT CANADA EXPLORATION

KULTA PROJECT
ANNIG CLAIM
GEOLOGY

ATLIN LAKE AREA, BRITISH COLUMBIA

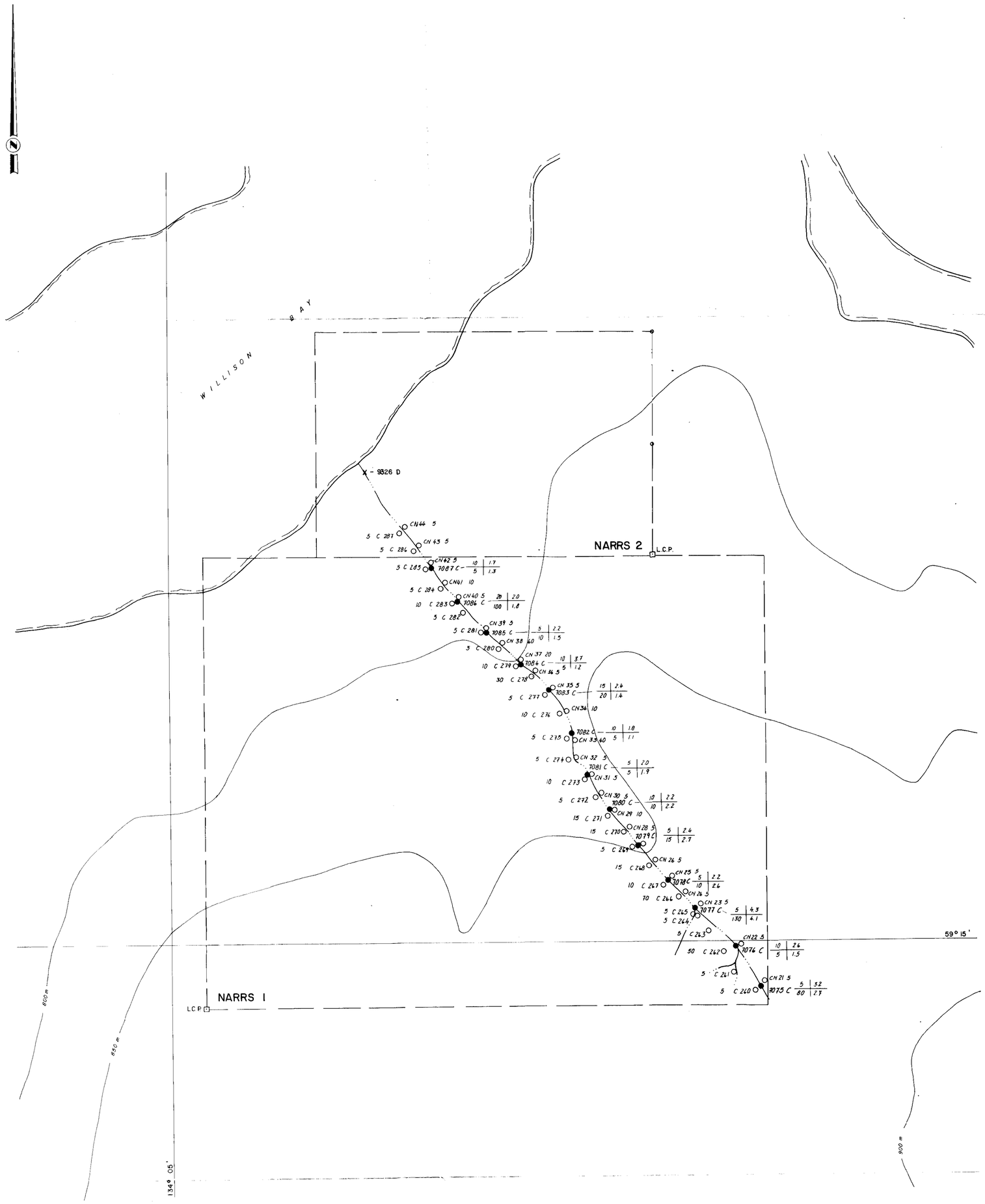
1 : 10 000

300 200 100 0 300 600 m

SCALE

1 INCH = 833 FEET

MAPPED BY :	J.T.N., L.D.H	REVISED :	N.T.S. No. : 104 M 15E & 16W
DATE :	81.07.29		ACCT No. : 351 - 39
DRAWN BY :	S.L.		DRWG. No. : KU. 81 - 174
DATE :	81.07.29		



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											
C260	1	35	22	164	19	0.8	190	13	320	5	35
C261	1	8	9	43	21	0.3	30	<1	360	5	12
C262	1	22	31	355	20	0.6	175	<1	240	50	55
C263	1	12	18	33	15	0.4	10	6	400	5	22
C264	1	20	16	43	20	0.5	25	19	600	5	15
Silt											
C265	1	16	16	386	16	0.6	160	2	750	5	35
Soil											
C266	2	44	13	59	18	0.3	300	16	320	70	15
C267	1	40	16	57	23	0.3	480	5	620	10	35
C268	2	84	14	96	48	0.4	180	10	1180	15	70
C269	1	45	18	188	23	0.4	130	8	660	5	45
C270	1	26	13	55	13	0.3	860	18	395	15	20
C271	2	100	29	197	45	0.7	1460	6	1420	15	85
C272	1	50	15	128	24	0.3	200	<1	625	5	52
C273	1	74	31	194	38	0.5	295	36	780	10	65
C274	1	53	12	85	23	0.5	185	18	540	5	38
C275	1	32	19	125	22	0.3	130	13	490	5	32
C276	2	38	16	56	19	0.5	145	<1	520	10	28
C277	1	29	16	72	22	0.4	90	4	535	5	20
C278	1	67	15	77	34	0.5	360	8	970	30	65
C279	2	41	26	61	36	0.5	140	38	590	10	45
C280	2	66	23	98	36	0.4	70	8	900	5	45
C281	1	65	21	83	28	0.6	1340	39	680	5	75
C282	1	48	20	75	22	0.6	200	10	690	5	22
C283	1	175	22	92	38	1.0	860	26	1040	10	42
C284	1	60	205	407	30	1.1	540	18	1020	5	45
C285	1	37	16	63	25	0.8	700	14	910	5	38
C286	1	38	21	124	25	0.8	205	14	620	5	28
C287	1	29	15	89	15	0.8	65	17	140	5	35
CN 21	1	14	40	151	18	1.1	200	10	235	5	18
CN 22	1	8	36	258	11	0.9	140	<1	270	5	15
CN 23	2	17	12	54	22	0.7	40	17	500	5	14
CN 24	2	20	15	93	12	0.8	55	8	335	5	16
CN 25	1	23	20	170	16	0.8	195	4	690	5	28
CN 26	1	17	30	196	16	1.2	220	3	365	5	20
CN 27	1	22	21	198	16	0.6	290	20	560	10	15
CN 28	1	12	8	42	15	0.5	25	<1	480	5	16
CN 29	1	13	8	52	18	0.4	50	3	465	10	18
CN 30	2	20	11	81	18	0.7	115	2	490	5	35
CN 31	2	48	27	173	27	0.8	190	14	900	5	44
CN 32	1	33	18	116	24	0.7	75	14	1010	5	22
CN 33	3	150	48	169	57	1.1	99	80	800	40	38
CN 34	1	61	17	85	38	1.1	215	1	1360	10	12
CN 35	2	98	20	82	39	0.9	1420	22	1740	20	18
CN 36	1	51	19	113	31	0.9	4000	16	860	5	20
CN 37	2	128	23	108	64	0.5	130	12	1560	20	24
CN 38	4	77	15	65	49	0.5	105	<1	760	60	15
CN 39	1	56	13	56	36	0.5	140	7	445	5	6
CN 40	4	29	17	103	27	0.5	125	4	680	5	8
CN 41	1	40	21	113	30	0.7	220	22	675	10	18
CN 42	4	54	18	109	29	0.7	115	4	1460	5	24
CN 43	2	37	12	60	25	0.7	200	16	615	5	16
CN 44	1	36	23	114	25	0.4	560	4	460	5	15

LEGEND

- ● 7087 C — SIEVED HEAVY MINERAL SAMPLE LOCATION AND NUMBER
- ○ CN 44 5 — SILT OR SOIL SAMPLE LOCATION, NUMBER AND Au VALUE IN PPB -80 MESH
- 10 / 3 — Au -20 +80 MESH (COARSE) HM IN PPB; Au -80 MESH (FINE) HM IN PPB.
- 1.7 / 1.3 — Ag -20 +80 MESH (COARSE) HM IN PPM; Ag -80 MESH (FINE) HM IN PPM
- X - 9326D — ORIGINAL SIEVED HEAVY MINERAL SAMPLE LOCATION (1981) AND NUMBER

1981 SAMPLE RESULTS

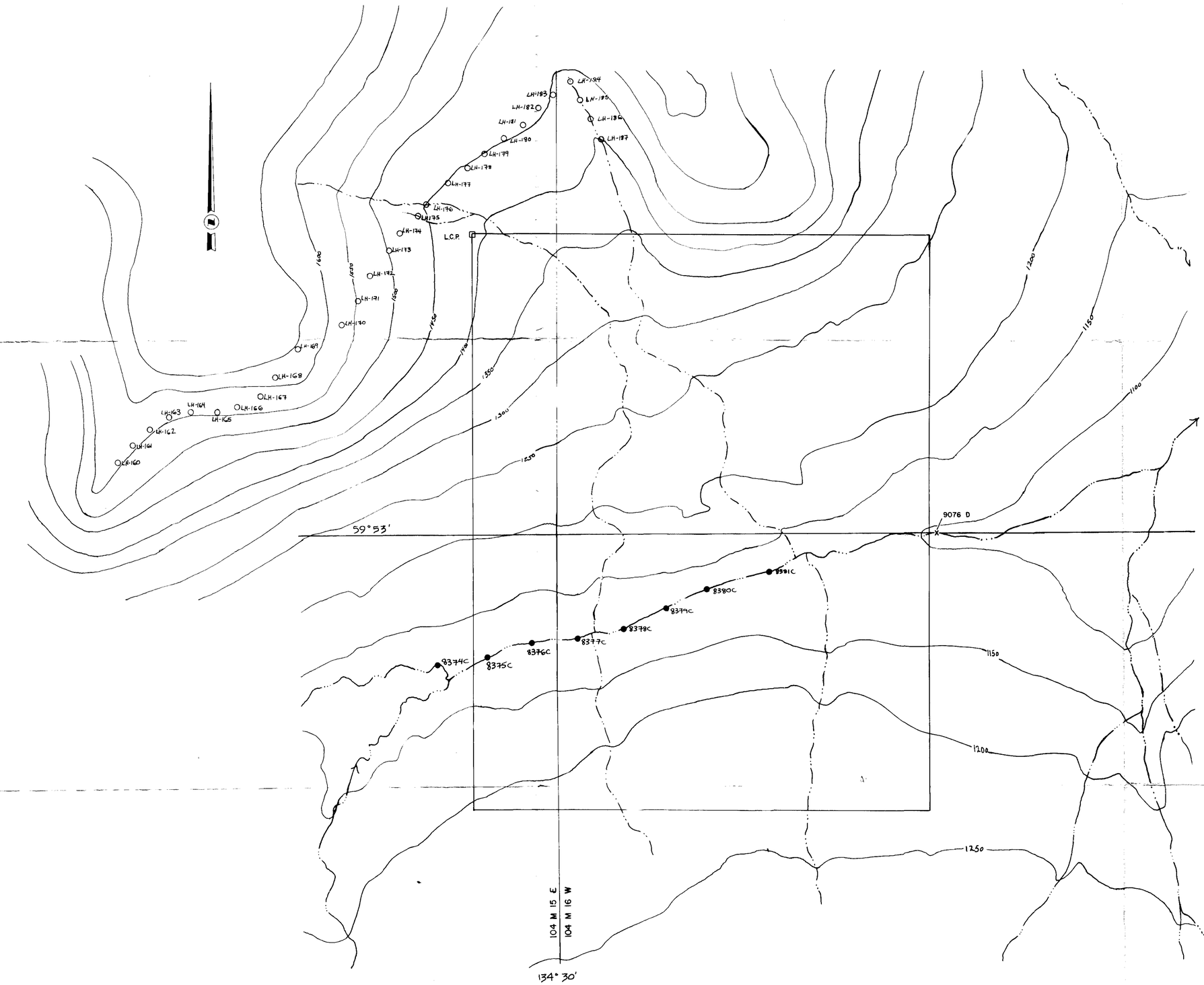
Sample	Mo ppm -80 F	Cu ppm -80 F	Cu ppm -80 FHM	Cu ppm -20 +80 CHM	Pb ppm -80 F	Zn ppm -80 F	Ag ppm -80 F	Ag ppm -80 FHM	Ag ppm -20 +80 CHM	Hg ppb -80 F	As ppm -80 F	Mn ppm -80 F	Au ppb -80 F	Au ppb -80 FHM	Au ppb -20 +80 CHM	Sb ppm -80 F	H.M. wt. of CHM gm	H.M. % of CHM	Orig. wt. gm
-14 Sieve																			
7075 C	1	28	130	130	90	469		2.7	3.2	115	16	810		80	5	26	6.07	1.52	400
7076 C	1	30	66	128	105	478		1.5	2.6	230	18	790		5	10	100	12.37	3.09	400
7077 C	2	31	76	103	92	467		4.1	4.3	230	16	770		130	5	45	9.14	2.07	442
7078 C	1	28	121	149	91	476		2.6	2.2	125	10	800		10	5	50	4.90	1.23	400
7079 C	2	27	80	93	83	423		2.7	2.4	200	10	700		15	5	35	6.77	1.60	423
7080 C	1	24	71	58	70	339		2.2	2.2	115	4	600		10	10	22	9.45	3.44	273
7081 C	1	22	60	75	53	277		1.9	2.0	95	10	640		5	5	40	8.84	2.21	400
7082 C	1	26	37	63	48	246		1.1	1.8	130	1	660		5	10	65	15.89	3.74	425
7083 C	2	20	51	50	38	178		1.4	2.4	220	4	510		20	15	40	4.09	1.48	276
7084 C	1	16	46	46	28	124		1.2	3.7	75	5	430		5	10	15	2.05	0.81	254
7085 C	1	28	54	91	32	198		1.5	2.2	160	7	565		10	5	35	6.67	1.60	418
7086 C	1	37	69	71	40	204		1.8	2.0	240	13	700		100	20	25	4.13	2.47	167
7087 C	3	20	43	73	24	123		1.3	1.7	65	<1	420			10	22	7.08	1.76	402
-10 Sieve																			
9326 D	1	44		65	39	166	0.6		2.0			545	5		4700			3.13	

DUPONT EXPLORATION CANADA

KULTA PROJECT
NARRS CLAIMS
GEOCHEMISTRY
Au, Ag, As, Cu, Hg, Mn, Mo, Pb, Sb, Zn, Ni
ATLIN LAKE AREA, BRITISH COLUMBIA

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

MAPPED BY	J.T.N., D.M.S.	REVISED	N.T.S. No.: 104 M 8E
DATE	81 08 07		ACCT No.: 351-49
DRAWN BY	C.H.K.		DRWG. No.: KU. 81-145
DATE	81 12 16		



1981 SAMPLE RESULTS

-80 Mesh Sample	F Cu ppm	Pb ppm	Zn ppm	Ag ppm	Hg ppb	As ppm	Au ppb	Sb ppm
Soil								
LH 160	12	11	51	0.2	45	1	5	4
LH 161	20	19	43	0.6	25	12	5	10
LH 162	12	17	69	0.7	30	7	10	15
LH 163	14	23	87	1.3	50	30	5	22
LH 164	13	15	62	1.2	65	11	5	5
LH 165	10	11	55	1.2	40	<1	5	16
LH 166	12	25	96	1.0	55	<1	10	6
LH 167	10	18	58	0.4	35	13	15	2
LH 168	10	18	68	0.9	60	5	5	8
LH 169	12	24	70	1.1	80	10	10	2
LH 170	12	14	58	0.5	15	6	10	2
LH 171	11	14	62	0.9	20	4	5	2
LH 172	13	12	63	1.2	30	9	5	10
LH 173	12	18	64	0.5	55	3	5	2
LH 174	11	21	64	0.4	25	7	5	3
*LH 175	10	21	59	0.8	35	29	20	10
*LH 176	7	22	64	0.7	5	26	5	2
LH 177	10	23	64	0.7	60	18	5	5
LH 178	14	31	47	1.0	70	13	5	4
LH 179	11	28	60	0.8	25	48	5	3
LH 180	5	16	58	0.6	15	3	10	4
LH 181	12	27	51	0.8	0	<1	5	3
LH 182	8	16	44	0.7	40	<1	10	6
LH 183	9	12	51	0.8	25	<1	5	8
*LH 184	6	25	52	0.6	5	8	5	6
*LH 185	8	13	54	0.5	5	7	10	5
*LH 186	6	25	55	0.7	5	4	5	10
*LH 187	6	18	30	0.2	5	3	5	5

* Silts

Sample	Mo ppm -80 F	Cu ppm -80 F	Cu ppm -20 +80 CHM F	Pb ppm -80 F	Zn ppm -80 F	Ag ppm -80 F	Ag ppm -20 +80 CHM F	Hg ppb -80 F	As ppm -80 F	Mn ppm -80 F	Au ppb -80 F	Au ppb -20 +80 CHM F	Sb ppm -80 F	H.M. %
-14 Sieve														
8374 C	2	7	24	11	44	0.2	1.1	30	7	455	10	5	18	0.75
8375 C	1	7	23	17	39	0.2	0.7	35	<1	385	5		12	1.12
8376 C	1	10	28	15	40	0.2	1.4	30	<1	405	5		32	2.26
8377 C	1	7	24	11	35	0.2	1.1	10	7	350	10	5	20	1.32
8378 C	2	5	36	13	35	0.2	1.0	5	2	305	5	5	6	0.22
8379 C	1	10	29	20	52	0.2	1.0	15	1	480	5	10	8	0.37
8380 C	1	5	33	16	32	0.2	1.0	5	7	205	5	10	10	0.33
8381 C	2	7	23	15	43	0.2	0.6	5	9	290	5	5	20	0.97
-10 Sieve														
9076 D	1	6	26	10	39	0.3	0.9			200	1375	5		

LEGEND

● 8381 C — SIEVED HEAVY MINERAL SAMPLE LOCATION and NUMBER

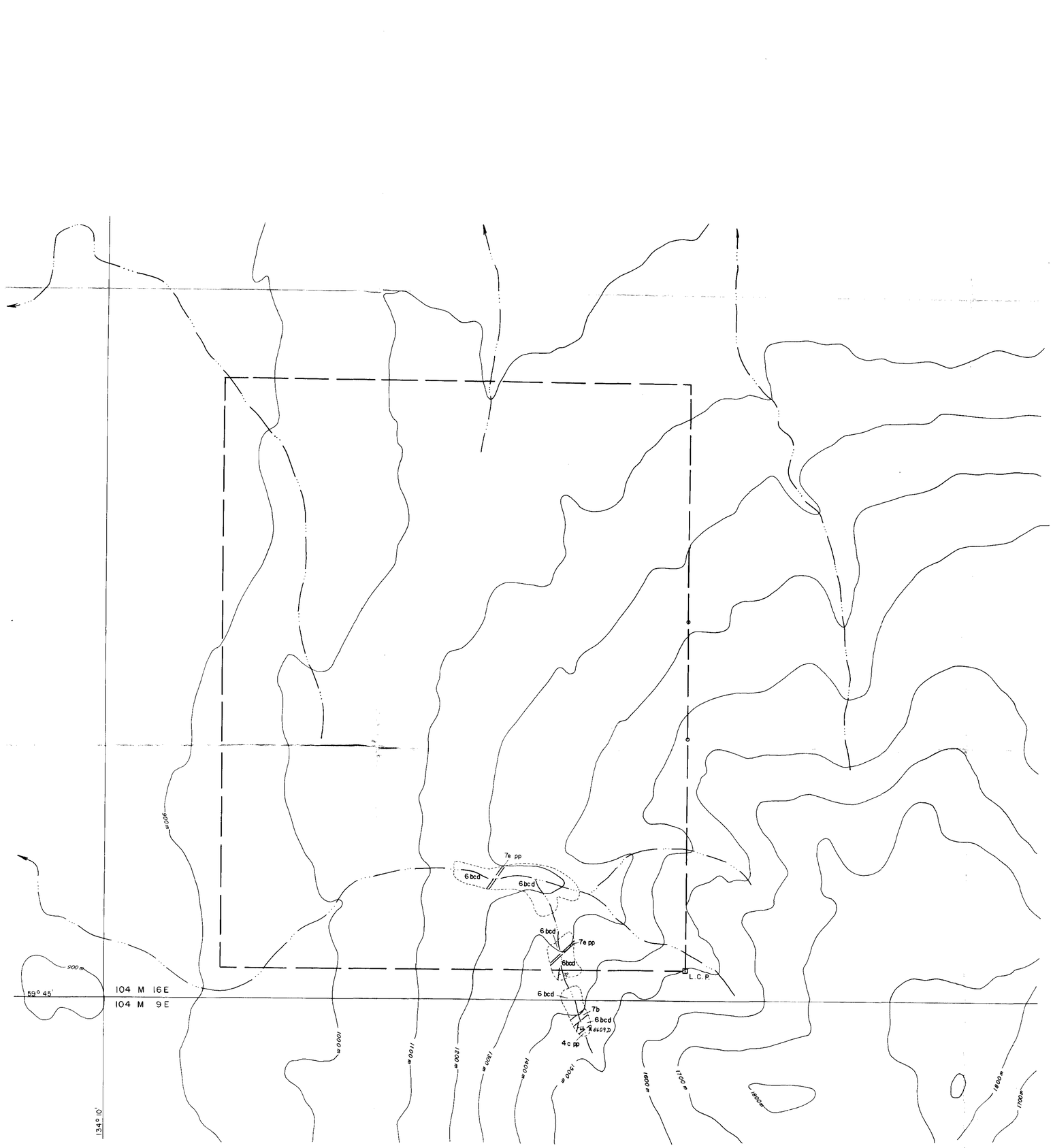
X → 9076 D — ORIGINAL SIEVED HEAVY MINERAL SAMPLE LOCATION (1981) and NUMBER

DUPONT CANADA EXPLORATION

KULTA PROJECT
ANNIG CLAIM
GEOCHEMISTRY
Au, Ag, As, Cu, Hg, Mn, Mo, Pb, Sb, Zn & % HM
ATLIN LAKE AREA, BRITISH COLUMBIA

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

MAPPED BY : J.T.N.L.D.H	REVISED :	N.T.S. No. :	104 M 15E&16W
DATE : 81.07.29		ACCT No. :	351 - 39
DRAWN BY : S.D.		DRWG. No. :	KU. 81 - 175
DATE : 81.07.29			



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

SYMBOLS

- OUTCROP
- CONTACT
- x 8609 D — ROCK SAMPLE LOCATION AND NUMBER
- MINERAL OCCURRENCE
- L.C.P. — CLAIM LINE AND LEGAL CORNER POST
- IDENTITY POST
- pp — PORPHYRITIC
- BEDDING, STRIKE and DIP

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
8609 D	16	23	48	1.1	15	5

DUPONT EXPLORATION CANADA

KULTA PROJECT
UNDAS CLAIM
GEOLOGY

ATLIN LAKE AREA, BRITISH COLUMBIA

1 : 10 000

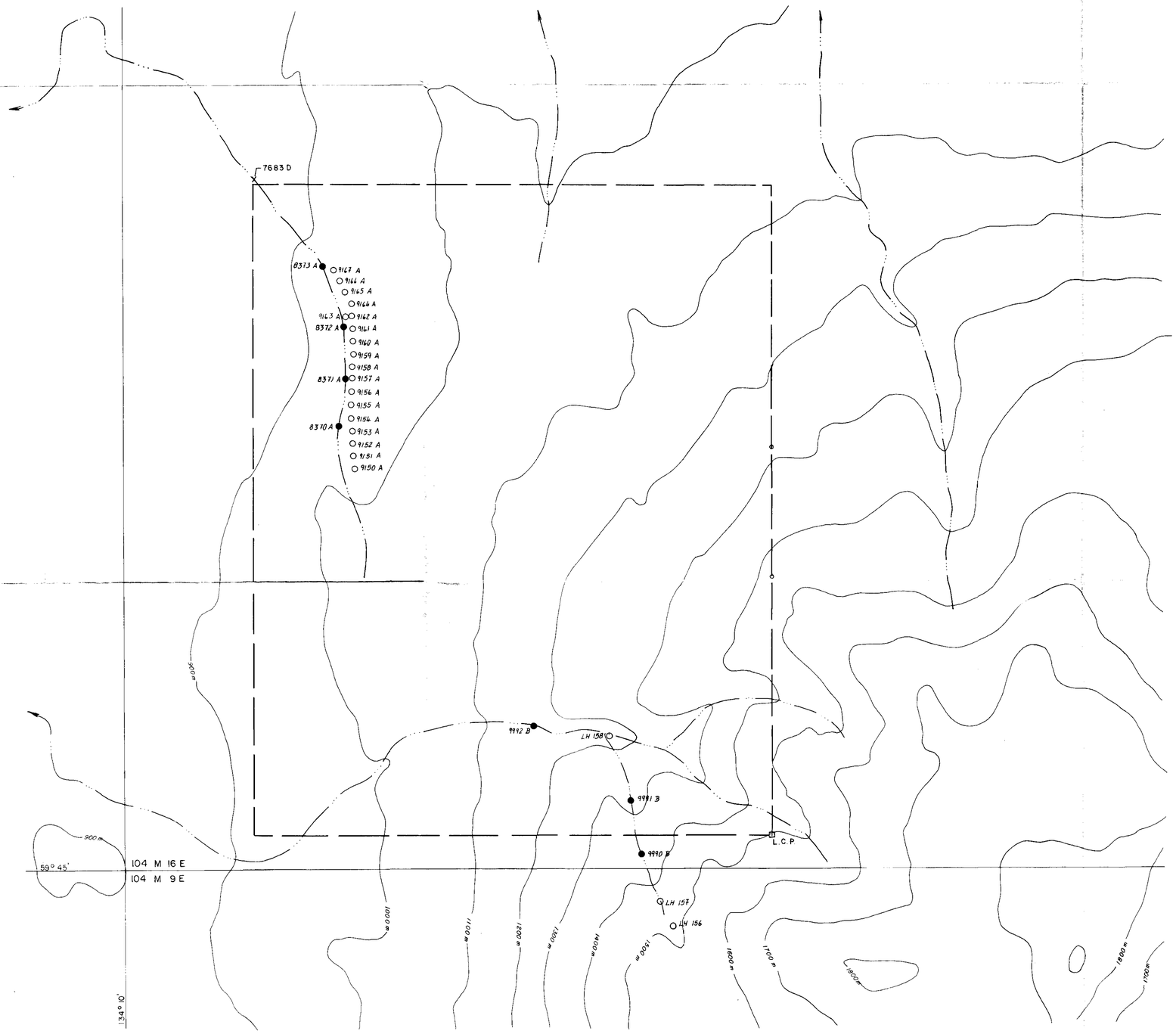
m 300 200 100 0 300 600 m

SCALE

0 1 INCH = 833 FEET

MAPPED BY : J.T.N., L.D.H.	REVISED :	N.T.S. No. : 104 M 16E
DATE : 81 08 27		ACCT No. : 351 - 47
DRAWN BY : C.H.K.		DRWG. No. : KU 81-176
DATE : 82 02 17		

MCI 229



LEGEND

○ 9150 A	SILT or SOIL SAMPLE LOCATION and NUMBER
● 8370 A	SIEVED HEAVY MINERAL SAMPLE LOCATION and NUMBER
X — 7683 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								
9150 A	80	17	75	0.4	60	8	5	15
9151 A	13	17	42	0.4	20	<1	5	8
9152 A	22	24	156	0.2	75	14	5	5
9153 A	49	44	182	0.9	25	10	5	20
9154 A	16	9	29	0.3	10	13	5	12
9155 A	17	16	43	0.3	5	5	5	10
9156 A	20	14	55	0.6	5	5	10	10
9157 A	11	10	49	0.5	5	5	10	15
9158 A	13	16	221	0.5	15	<1	5	10
9159 A	16	15	244	0.6	25	<1	5	4
9160 A	24	13	250	0.7	5	1	5	8
9161 A	20	6	39	0.4	55	<1	5	10
9162 A	236	7	41	0.7	90	15	5	6
9163 A	7	8	26	0.4	5	11	5	10
9164 A	9	11	58	0.6	15	<1	10	15
9165 A	21	18	71	0.4	10	<1	5	3
9166 A	69	6	14	0.8	60	9	5	2
9167 A	90	9	30	0.7	75	5	5	3
LH 156	34	16	50	0.9	35	5	5	8
Silt								
LH 157	24	14	51	1.3	90	5	5	10
LH 158	26	24	85	1.0	65	27	5	12

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 -20 +80 CHM	Sb ppm -80 F	H.M. %	Orig. wt. gm
-10 Sieve															
7683 D	1	12	11	7	49	0.5	0.6			235	395	195		2.82	2000
-14 Sieve															
8370 C	1	10	26	11	48	0.4	0.6	30	<1	630	5	10	6	1.26	
8371 C	1	9	12	9	41	0.4	0.5	35	<1	270	10	10	18	0.95	
8372 C	2	23	10	9	39	0.2	0.5	15	5	235	5	5	5	2.56	
8373 C	2	15	10	23	52	0.3	0.3	40	2	300	5	5	10	3.41	
-20 Sieve															
9990 B	1	22	51	13	53	0.9	0.9	45	17	420	5	20	8	2.63	
9991 B	1	24	67	11	50	0.7	0.9	30	9	360	5	10	14	1.86	
9992 B	1	18	16	19	61	0.7	1.0	15	15	380	10	490	15	9.02	

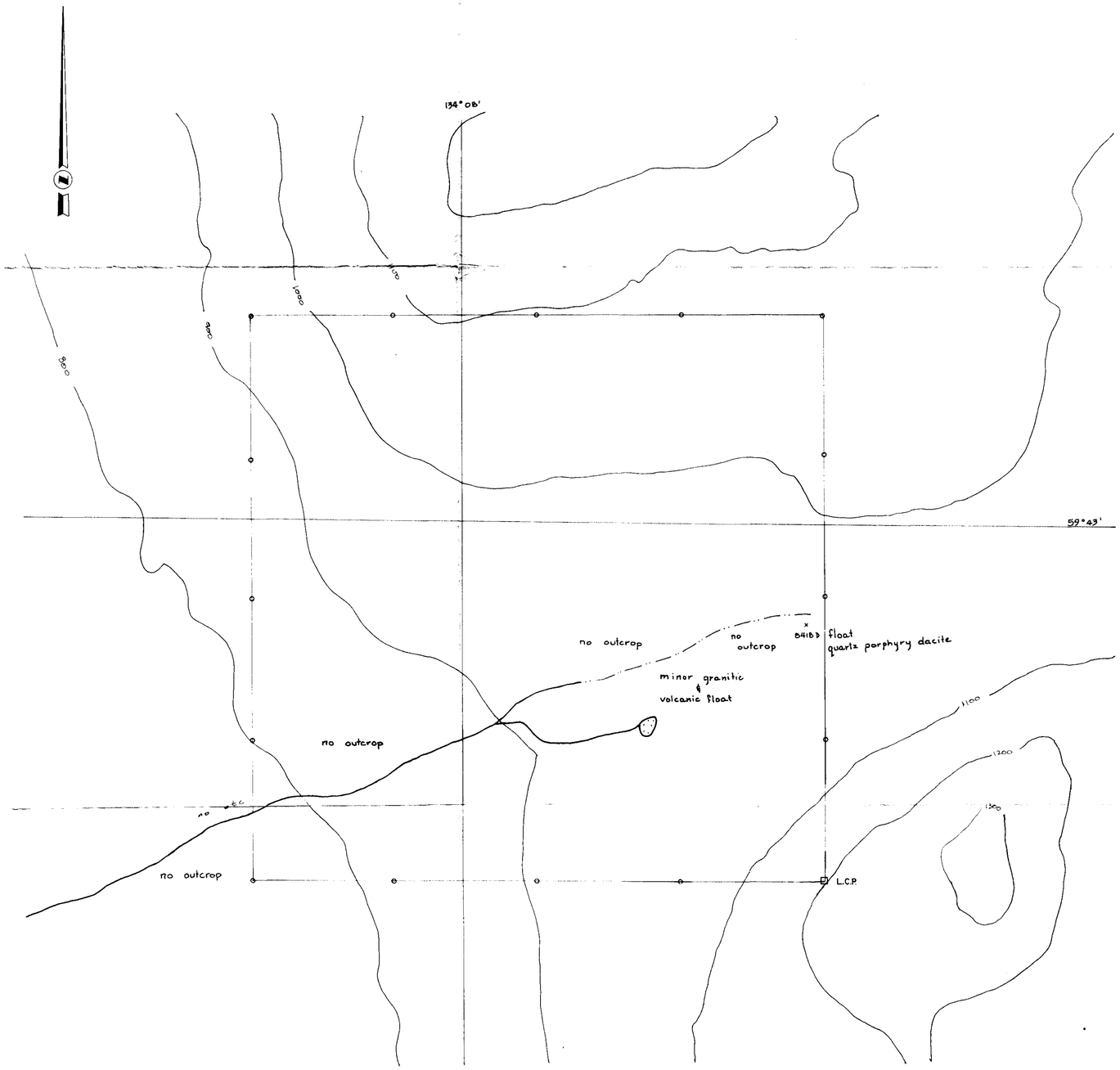
DUPONT EXPLORATION
CANADA

KULTA PROJECT
UNDAS CLAIM
GEOCHEMISTRY
Au, Ag, As, Cu, Hg, Mn, Mo, Pb, Sb, Zn & %HM
ATLIN LAKE AREA, BRITISH COLUMBIA

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

MAPPED BY :	J.T.N., L.D.H.	REVISED :	N.T.S. No.: 104 M 16E
DATE :	81 08 27		ACCT No.: 351 - 47
DRAWN BY :	C.H.K.		DRWG. No.: KU. 81 - 177
DATE :	82 02 17		

KCI - 239



SYMBOLS

x B418 D — ROCK SAMPLE LOCATION AND NUMBER

L.C.P. — CLAIM LINE AND LEGAL CORNER POST

IDENTITY POST

ROCK GEOCHEMICAL RESULTS

-80 Mesh F

Sample	Cu ppm	Pb ppm	Zn ppm	Ag ppm	As ppm	Au ppb
B418 D	11	13	59	0.8	9	5

DUPONT CANADA EXPLORATION

KULTA PROJECT
HAKER CLAIM
GEOLOGY

ATLIN LAKE AREA, BRITISH COLUMBIA

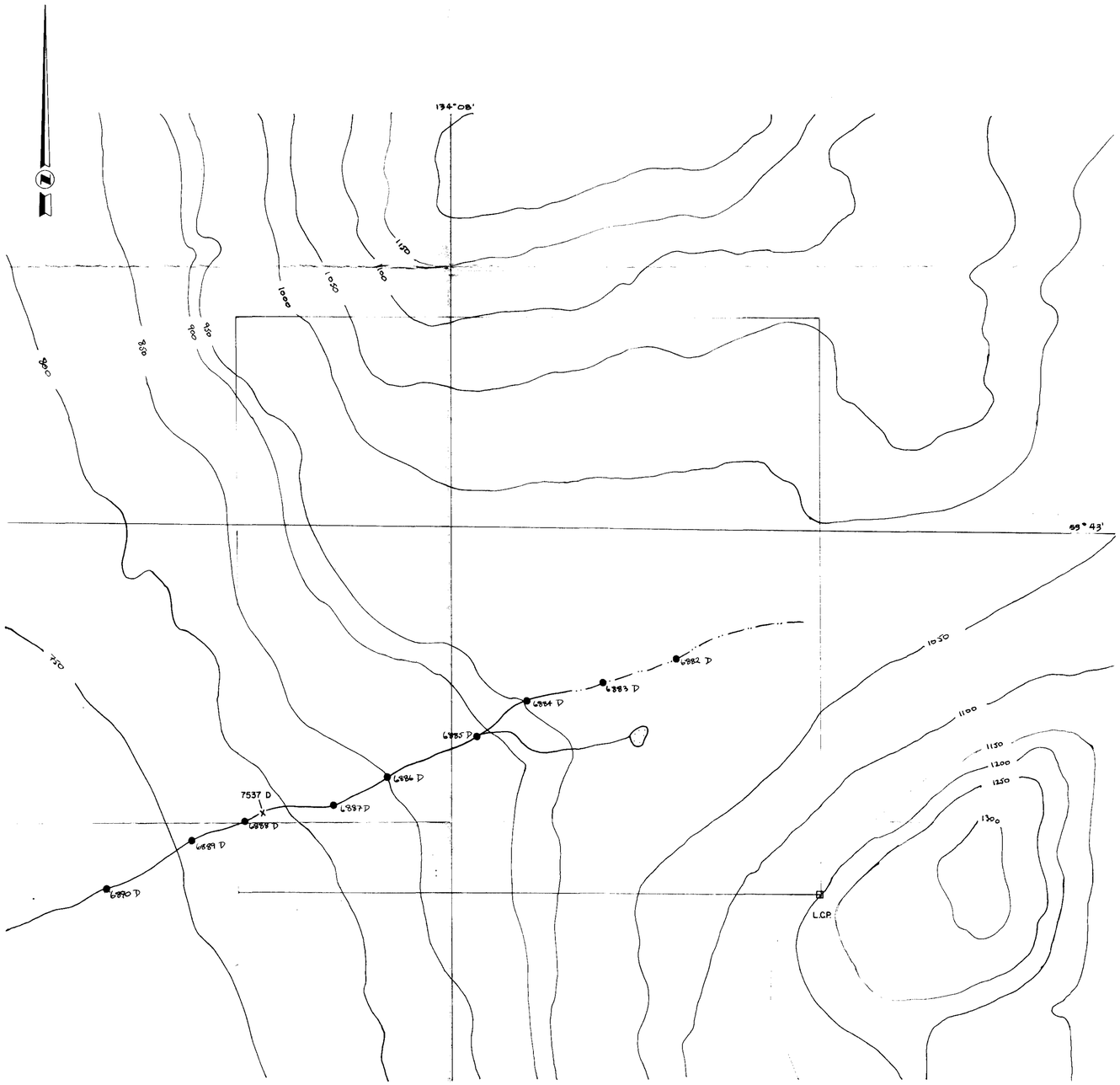
1 : 10 000

m 300 200 100 0 300 600 m

SCALE

0
1 INCH = 833 FEET

MAPPED BY	J.T.N., H.J.C.	REVISED	N.T.S. No. 104 M 9E
DATE	81 07 29		
DRAWN BY	C.N.		ACCT No. 351-48
DATE	81 07 30		DRWG. No. KU. 81-146



1981 SAMPLE RESULTS

Sample	Mo ppm -80 F	Cu -80 F	ppm -20 +80 C HM	Pb ppm -80 F	Zn ppm -80 F	Ag -80 F	ppm -20 +80 C HM	Hg ppb -80 F	As ppm -80 F	Mn ppm -80 F	Au -80 F	ppb -20 +80 C HM	Sb ppm -80 F	H.M. % Orig. wt-gm
-14 Sieve														
6882 D	1	16	13	11	50	0.5	0.7	15	15	400	5	30	10	2.73
6883 D	2	36	18	12	40	0.5	0.5	40	1	380	5	10	6	1.57
6884 D	1	12	12	9	48	1.1	0.4	20	5	1600	5	10	15	4.64
6885 D	1	14	18	9	47	0.9	0.3	10	11	480	5	5	6	7.28
6886 D	1	12	11	8	43	0.5	0.3	35	13	500	5	5	8	5.36
6887 D	1	12	12	5	33	0.4	0.7	5	8	285	5	15	8	3.89
6888 D	1	14	11	8	35	0.3	0.5	20	11	275	5	5	12	5.75
6889 D	1	10	7	5	29	0.3	0.6	5	<1	220	10	5	4	3.49
6890 D	2	39	14	13	45	0.5	0.4	30	11	295	115	5	42	4.16
-10 Sieve														
7537 D	1	13	11	6	35	0.3	0.2			220	475	20		3.68 /2735

LEGEND

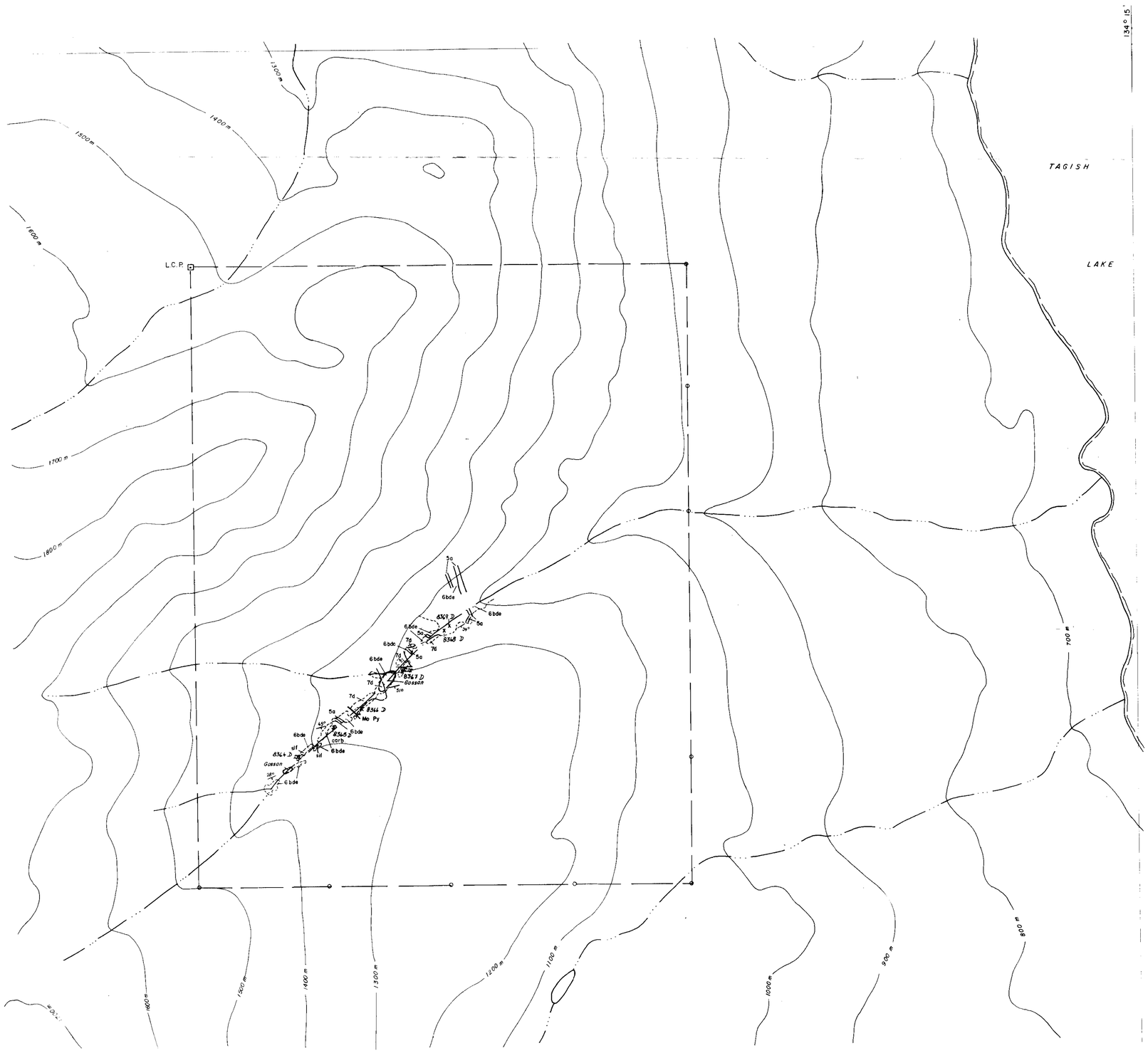
- O — SILT or SOIL SAMPLE LOCATION and NUMBER
- ● 6882 D — SIEVED HEAVY MINERAL SAMPLE LOCATION and NUMBER
- X — 7537 D — ORIGINAL SIEVED HEAVY MINERAL SAMPLE LOCATION (1981) and NUMBER

DUPONT CANADA EXPLORATION

KULTA PROJECT
HAKER CLAIM
GEOCHEMISTRY
Au, Ag, As, Cu, Hg, Mn, Mo, Pb, Sb, Zn & %HM
ATLIN LAKE AREA, BRITISH COLUMBIA

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

MAPPED BY	J.T.N., H.J.C.	REVISED	N.T.S. No. 104 M 9E
DATE	81 07 29		ACCT No. 351 - 48
DRAWN BY	C.N.		DRWG. No. KU. 81 - 147
DATE	81 07 30		



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

SYMBOLS

- OUTCROP
- CONTACT
- x 8369 D — ROCK SAMPLE LOCATION AND NUMBER
- △ — MINERAL OCCURRENCE
- L.C.P. ⊡ — CLAIM LINE AND LEGAL CORNER POST
- ⊙ — IDENTITY POST
- GOSSAN
- Mo — MOLYBDENITE
- PY — PYRITE
- carb — ALTERATION, CARBONATE
- sif — SILICIFIED

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
8364 D	23	21	48	1.1	2	5
8365 D	27	29	38	1.2	<1	5
8366 D	177	21	38	1.0	3	5
8367 D	83	21	25	1.4	<1	5
8368 D	9	61	26	1.0	2	115
8369 D	9	33	20	2.2	2	5

DUPONT CANADA EXPLORATION

KULTA PROJECT
AKUM CLAIM
GEOLOGY

ATLIN LAKE AREA, BRITISH COLUMBIA

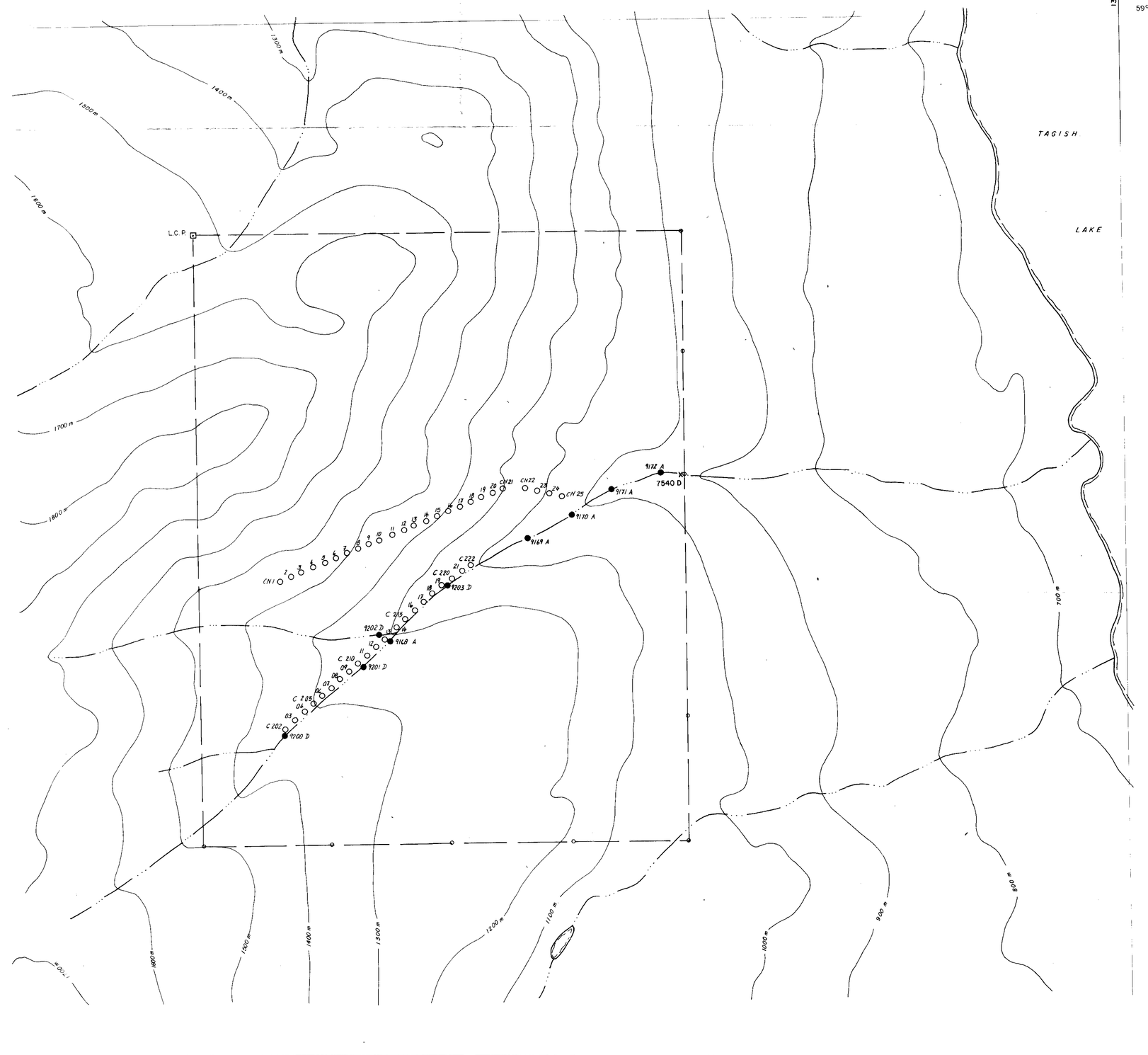
m 300 200 100 0 1 : 10 000 300 600 m
SCALE
0 1 INCH : 833 FEET

MAPPED BY	J.T.N., D.M.S.	REVISED	N.T.S. No.: 104 M 9W
DATE	81 07 30		ACCT No.: 351 - 46
DRAWN BY	C.H.K.		DRWG. No.: KU. 81 - 148
DATE	81 12 17		

1981 SAMPLE RESULTS

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 -20 +80 CHM	Sb ppm -80 F	H.M. % /Orig. wt. gm
-10 Sieve														
7540 D	4	68	164	21	82	0.6	1.7		2	440	20	540		2.89 /2015
-14 Sieve														
9168 A	1	35	75	21	65	1.0	1.2	10	7	440	5	15	25	1.54
9169 A	1	65	175	25	73	0.5	1.4	60	23	445	5	50	20	2.95
9170 A	1	65	189	32	78	0.4	1.4	30	21	495	5	45	11	2.57
9171 A	2	67	205	31	77	0.6	1.3	10	22	490	5	40	18	2.67
9172 A	2	69	195	26	75	0.8	1.6	5	22	440	5	50	20	3.28
-20 Sieve														
9200 D	2	30	88	29	83	1.0	1.2	15	10	680	5	500	22	0.89
9201 D	2	32	97	23	75	1.1	1.4	35	3	680	5	15	24	1.06
9202 D	8	76	235	28	80	1.2	1.6	5	3	620	5	40	18	2.05
9203 D	8	58	155	29	72	1.1	1.0	30	26	620	5	30	42	1.34

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								
C202	28	24	96	0.6	35	6	5	3
C203	24	17	53	0.6	15	26	5	4
C204	29	22	63	0.8	25	<1	10	2
C205	30	21	74	0.7	30	8	5	24
C206	25	20	59	0.6	20	10	5	15
C207	28	22	70	0.6	20	<1	5	8
C208	35	26	79	0.7	15	<1	10	25
C209	107	28	76	0.8	35	6	40	34
C210	43	20	67	0.9	20	<1	5	15
C211	34	26	80	0.7	25	1	5	15
C212	36	25	72	0.9	35	12	5	14
C213	120	20	79	1.0	20	14	10	45
C214	42	21	65	0.8	30	<1	5	12
C215	70	22	77	1.1	10	13	5	20
C216	172	96	210	0.6	5	88	5	65
C217	72	8	57	0.4	35	18	<5	8
C218	56	19	75	0.4	35	11	5	9
C219	94	20	133	0.4	30	21	5	26
C220	176	37	101	1.5	40	24	15	52
C221	144	18	79	1.0	45	69	5	20
C222	120	24	108	0.8	30	41	30	26
CN 1	38	26	78	0.6	50	9	5	25
CN 2	42	18	91	0.6	40	33	5	15
CN 3	36	17	82	0.6	20	20	5	22
CN 4	62	21	62	0.8	15	8	30	35
CN 5	172	20	67	1.2	15	15	10	90
CN 6	60	18	95	0.8	20	29	5	25
CN 7	100	35	102	1.0	20	76	20	55
CN 8	108	28	79	1.3	40	19	80	115
CN 9	60	42	90	0.7	20	63	35	45
CN 10	55	30	115	0.8	90	28	5	26
CN 11	108	21	296	1.0	80	35	10	34
CN 12	335	35	170	1.8	5	55	40	135
CN 13	262	43	163	1.7	15	111	40	160
CN 14	185	28	196	0.7	5	38	5	90
CN 15	96	35	173	0.8	50	16	20	60
CN 16	86	40	226	1.2	55	42	10	16
CN 17	90	29	178	1.4	35	33	5	12
CN 18	80	25	153	1.4	40	12	10	10
CN 19	56	21	116	1.3	35	38	5	8
CN 20	79	29	132	1.1	10	35	5	15
CN 21	59	30	135	1.3	35	29	10	12
CN 22	82	26	119	1.4	45	19	5	20
CN 23	68	25	112	1.3	10	38	10	18
CN 24	190	21	123	1.2	50	10	10	25
CN 25	270	26	135	1.6	50	16	20	60



LEGEND

- ● 9200 D — SIEVED HEAVY MINERAL SAMPLE LOCATION AND NUMBER
- ○ C 202 — SILT OR SOIL SAMPLE LOCATION AND NUMBER
- X – 7540 D — ORIGINAL SIEVED HEAVY MINERAL SAMPLE LOCATION (1981) AND NUMBER

DUPONT CANADA **EXPLORATION**

KULTA PROJECT
AKUM CLAIM
GEOCHEMISTRY
Au, Ag, As, Cu, Hg, Mn, Mo, Pb, Sb, Zn, %HM

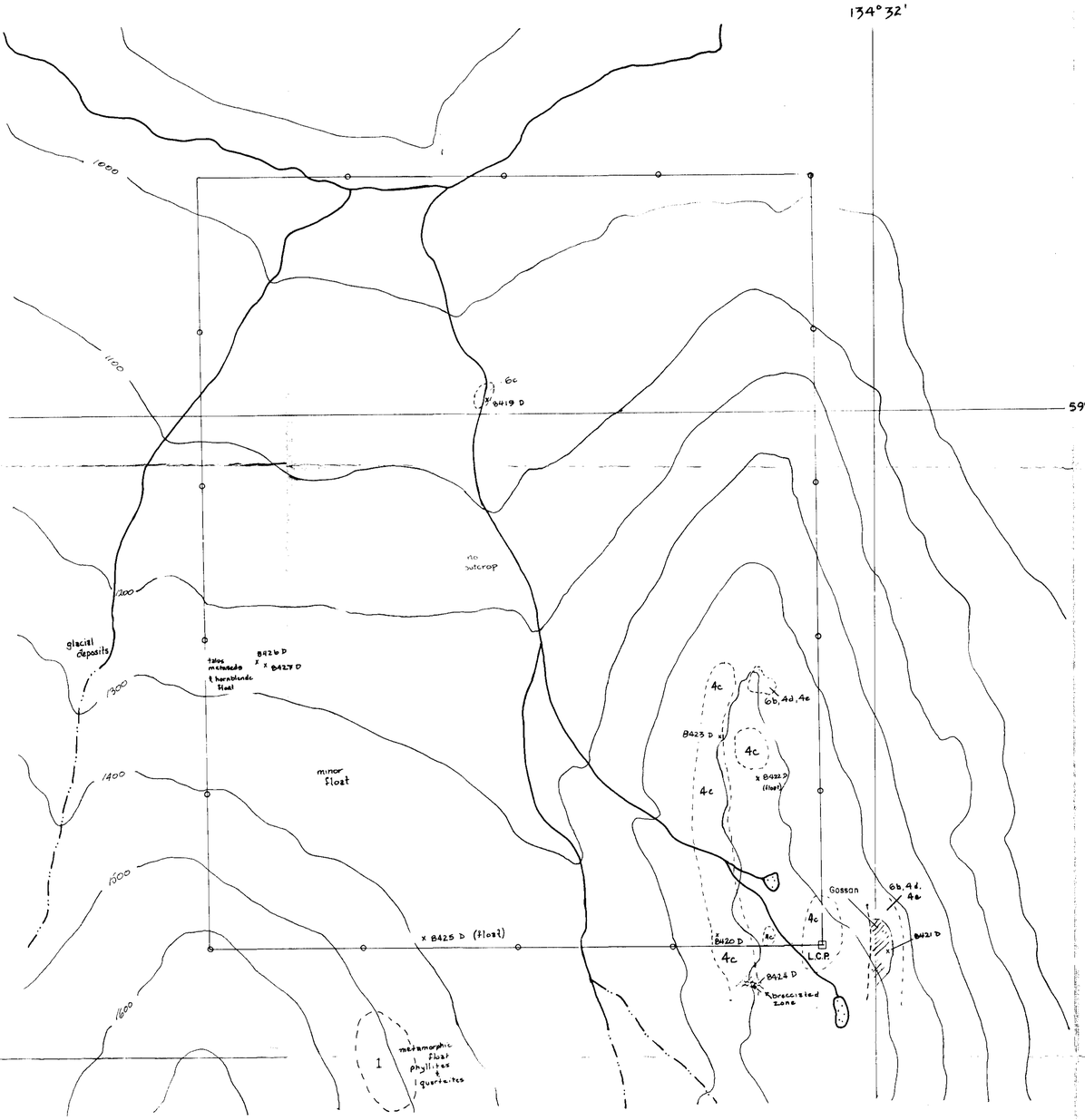
ATLIN LAKE AREA, BRITISH COLUMBIA

m 500 200 100 0 1 10 000 300 600 m

SCALE

0 1 INCH = 833 FEET

MAPPED BY	J.T.N., D.M.S.	REVISED	N.T.S. No. 104 M 9W
DATE	81 07 30		ACCT No. 351 – 46
DRAWN BY	C.H.K.		DRWG. No. KU. 81 – 149
DATE	81 12 17		



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

SYMBOLS

- OUTCROP
- CONTACT
- x 8421 D — ROCK SAMPLE LOCATION AND NUMBER
- △ — MINERAL OCCURRENCE
- L.C.P. — CLAIM LINE AND LEGAL CORNER POST
- IDENTITY POST

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
8419 D	35	20	80	1.6	10	5
8420 D	24	6	36	0.7	7	10
8421 D	10	15	28	0.9	16	5
8422 D	7	29	68	1.6	<1	15
8423 D	12	9	41	0.8	<1	<5
8424 D	9	15	38	1.5	28	20
8425 D	40	16	51	3.0	48	5
8426 D	107	31	530	1.8	139	5
8427 D	17	21	79	2.0	6	5

DUPONT EXPLORATION CANADA

KULTA PROJECT
RACE CLAIM
GEOLOGY

ATLIN LAKE AREA, BRITISH COLUMBIA

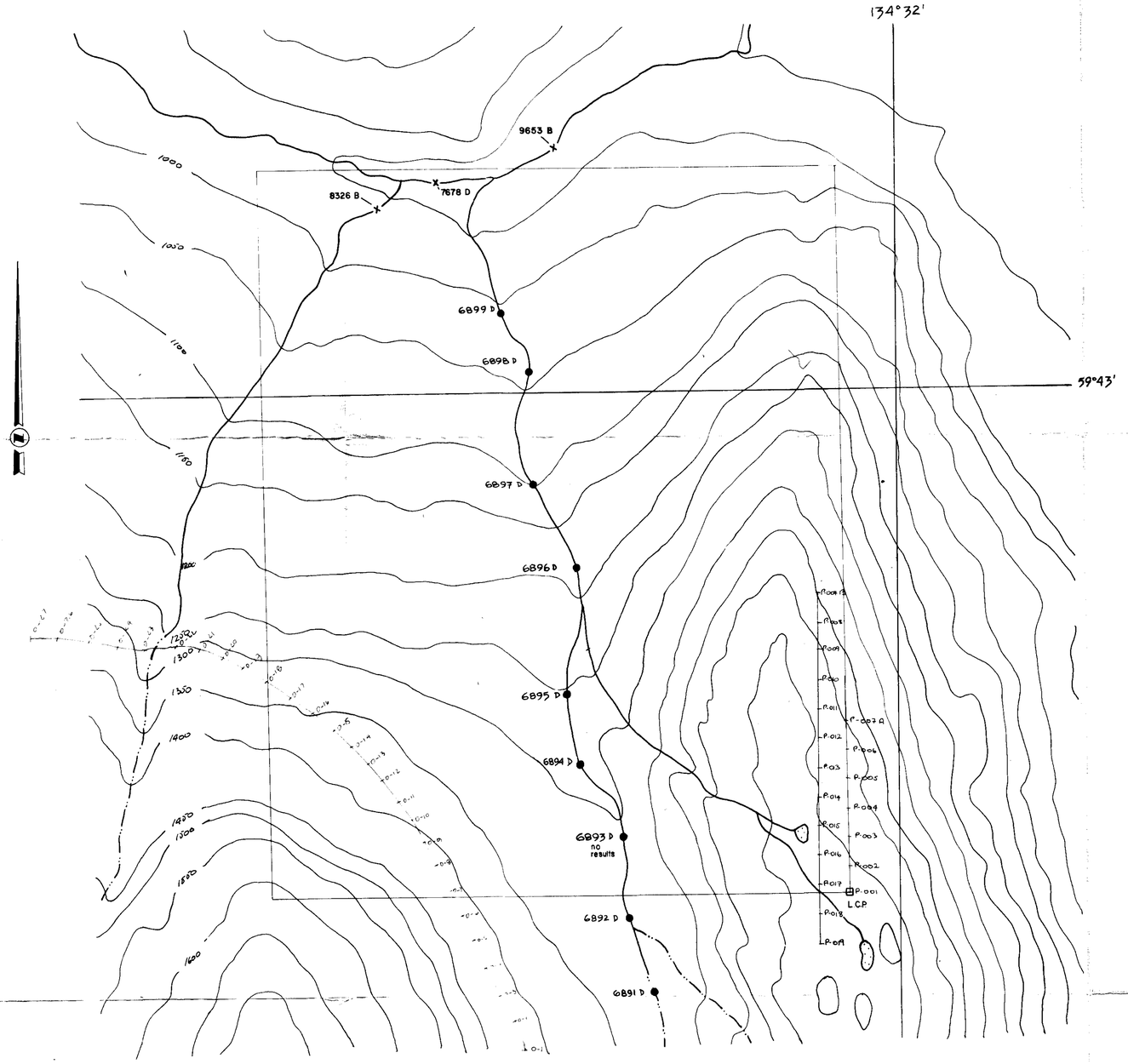
1 : 10 000

m 300 200 100 0 300 600 m

SCALE

0 1 INCH = 833 FEET

MAPPED BY	J.T.N., J.C.	REVISED	N.T.S. No. 104 M 10E
DATE	81 08 01		ACCT No. 351 - 45
DRAWN BY	C.N.		DRWG. No. KU 81 - 150
DATE	81 08 05		



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								
O 1	53	15	78	0.4	20	37	5	40
O 2	35	14	59	0.5	40	16	5	18
O 3	45	13	67	0.3	35	34	5	32
O 4	66	10	65	0.6	20	13	5	24
O 5	38	15	54	0.	50	18	5	18
O 6	36	19	79	0.3	35	55	5	24
O 7	46	16	70	0.3	90	38	10	25
O 8	45	17	70	0.4	55	28	5	22
O 9	34	13	58	0.3	35	18	5	8
O 10	50	20	94	0.2	35	37	5	24
O 11	50	22	60	0.2	20	16	5	22
O 12	32	14	46	0.4	50	14	5	20
O 14	38	13	58	0.3	55	46	5	18
O 15	36	10	75	0.3	20	32	5	22
O 16	43	[illegible]	94	0.4	10	30	5	18
O 17	40	40	110	0.4	20	51	5	14
O 18	38	12	106	0.4	40	44	5	
O 19	35	25	87	0.3	60	18	5	
O 20	39	14	60	0.4	50	23	5	
O 21	34	18	81	0.3	55	21	5	
O 22	32	23	87	0.5	20	45	5	
O 23	23	24	90	1.0	40	53	10	
O 24	20	25	106	0.4	65	16	10	
O 25	16	22	56	0.8	45	31	5	
O 26	31	23	68	0.7	60	57	5	
O 27	26	59	110	0.6	45	51	5	
P 001	32	30	87	1.2	15	49	5	20
P 002	38	27	61	1.0	40	26	5	12
P 003	78	28	126	1.6	20	28	5	18
P 004	55	25	107	1.1	20	32	5	20
P 005	64	24	112	1.1	25	34	5	32
P 006	16	14	34	1.0	35	20	5	3
P 007A	30	24	81	1.1	30	31	5	12
P 007B	94	33	141	1.4	30	140	5	16
P 008	72	30	91	1.3	55	38	5	8
P 009	90	24	111	1.2	40	28	10	14
P 010	64	93	106	1.7	50	46	5	20
P 011	76	22	86	1.6	35	20	5	16
P 012	86	43	116	1.6	20	40	5	10
P 013	70	81	127	1.4	15	82	5	12
P 014	64	60	180	1.6	35	69	5	15
P 015	54	30	101	1.2	50	35	10	10
P 016	46	26	72	0.9	55	22	5	12
P 017	60	27	85	1.5	35	35	10	25
P 018	92	53	98	1.3	30	41	5	16
P 019	44	21	44	1.1	55	29	5	18

LEGEND

- P 015 — SILT or SOIL SAMPLE LOCATION and NUMBER
- 6891 D — SIEVED HEAVY MINERAL SAMPLE LOCATION and NUMBER
- X — 7678 D — ORIGINAL SIEVED HEAVY MINERAL SAMPLE LOCATION (1981) and NUMBER

Sample	Mo ppm -80 F	Cu ppm -80 F	Cu ppm -20 +80 CHM	Pb ppm -80 F	Zn ppm -80 F	Ni ppm -80 F	Ag ppm -80 F	Ag ppm -20 +80 CHM	Mn ppm -80 F	Au ppb -80 F	Au ppb -20 +80 CHM	H.M. wt. gm	H.M. %	Orig. wt. gm
-10 Sieve														
7678 D	1	26	55	17	65	0.9	2.2		440	10	100		5.12	3190
8326 B	1	31	52	20	79	1.1	1.2		525	5	15	0.34	4.58	1045
9653 B	1	25	33	16	70	0.7	2.4		475	10	9900	5.63	10.52	535

Sample	Mo ppm -80 F	Cu ppm -80 F	Cu ppm -20 +80 FHM	Pb ppm -80 F	Zn ppm -80 F	Ni ppm -80 F	Ag ppm -80 F	Ag ppm -20 +80 FHM	Ag ppm -20 +80 CHM	Hg ppb -80 F	As ppm -80 F	Mn ppm -80 F	Au ppb -80 F	Au ppb -20 +80 FHM	Au ppb -20 +80 CHM	Sb ppm -80 F	F.W.A. of CHM gm	H.M. % of CHM	Orig.wt. of CHM gm
-14 Sieve																			
6891 D	1	34	75	74	21	96	43	3.3	2.3	45	69	840	5	5	5	55	23.70	5.93	400
6892 D	4	31		40	15	70	0.5		1.3	15	31	660	5		5			7.79	
6894 D	1	32		56	14	70	0.6		1.1	40	51	700	5		5			8.23	
6895 D	1	26	61	51	22	91	42	0.7	1.1	25	42	940		25	5	50	10.25	2.77	370
6896 D	2	26		34	12	72	0.5		0.9	10	46	660	45		10			5.87	
6897 D	2	22	52	36	19	80	32	1.0	1.2	20	24	680		5	5	12	14.14	3.54	400
6898 D	1	28		70	18	74	0.5		1.3	40	57	720	5		10			7.03	
6899 D	2	26	63	40	24	86	38	0.5	0.9	40	14	740		20	5	45	15.08	3.77	400

DUPONT CANADA EXPLORATION

KULTA PROJECT
RACE CLAIM
GEOCHEMISTRY

Au, Ag, As, Cu, Hg, Mn, Mo, Ni, Pb, Sb, Zn, %HM

ATLIN LAKE AREA, BRITISH COLUMBIA

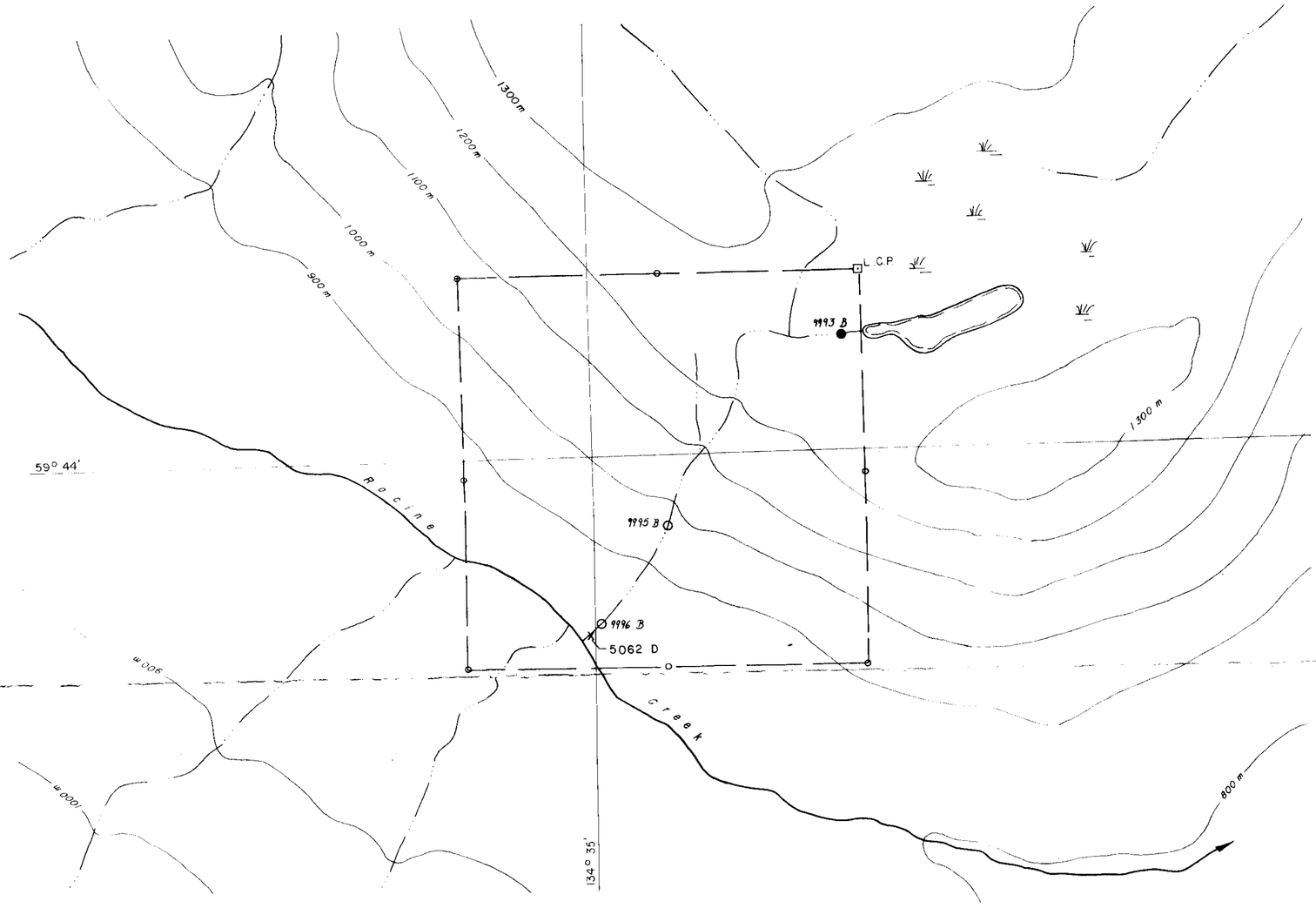
1 : 10 000

m 300 200 100 0 300 600 m

SCALE

0 1 INCH = 833 FEET

MAPPED BY :	JTN, HJC	REVISED :	N.T.S. No.: 104 M 10 E
DATE :	81 08 01		ACCT No.: 351 - 45
DRAWN BY :	C.N.		DRWG. No.: KU 81 - 151
DATE :	81 08 05		



LEGEND

- ○ 9995 B — SILT SAMPLE LOCATION and NUMBER
- ● 9993 B — SIEVED HEAVY MINERAL SAMPLE LOCATION and NUMBER
- X – 5062 D — ORIGINAL SIEVED HEAVY MINERAL SAMPLE LOCATION (1981) and NUMBER

1981 SAMPLE RESULTS

Sample	Type	Mo ppm -80	Cu -80	Cu ppm -20 +80 CHM	Pb ppm -80	Zn ppm -80	Ag -80	Ag ppm -20 +80 CHM	Hg ppb -80	As ppm -80	Mn ppm -80	Au -80	Au ppb -20 +80 CHM	Sb ppm -80	H.M. % /Orig. wt. gm
		F	F		F	F	F		F	F	F	F		F	
5062 D	-10 sieve	1	78	460	53	138	1.0	5.5			720	15	5		0.94 /195
9993 B	-14 sieve	1	40	40	11	38	1.1	1.1	30	23	360	35	10	20	2.12
9995 B	silt		136		64	208	1.4		60	127		5		26	
9996 B	silt		98		45	157	1.0		40	87		5		65	

DUPONT CANADA EXPLORATION

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

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

MAPPED BY	J.T.N., L.D.H.	REVISED	N.T.S No.: 104 M 10 E
DATE	81 07 29		ACCT No. 351-44
DRAWN BY	C.H.K.		DRWG No.: KU. 81-153
DATE	82 01 12		