DU PONT OF CANADA EXPLORATION LIMITED

GEOLOGICAL AND GEOCHEMICAL REPORT

ON THE MIST 1 AND 2 CLAIMS

LIARD MINING DIVISION

LAT. 57°38'N, LONG. 131°50'W

NTS: 104-G-12W

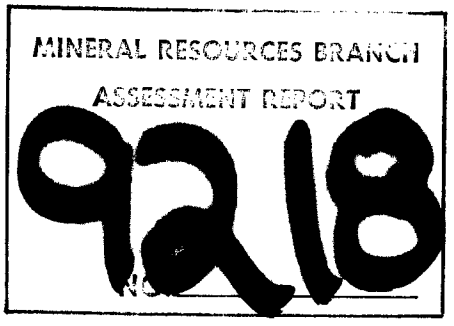
OWNER OF CLAIMS: Du Pont of Canada Exploration Limited

OPERATOR: Du Pont of Canada Exploration Limited

L. Eccles

Author: L. Eccles

Date Submitted:



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I INTRODUCTION

(a) Location and Access

The MIST 1 and 2 claims are located in north-western British Columbia within the Liard Mining Division, NTS 104-G-12W. The property is situated 11 km due west of the confluence of the Chutine and Stikine Rivers, between Mt. Conover and Cuteye Mountain. It is centered by latitude 57°38'N and longitude 131°50'W.

At present access into the property is via helicopter from Telegraph Creek 47 km to the northeast.

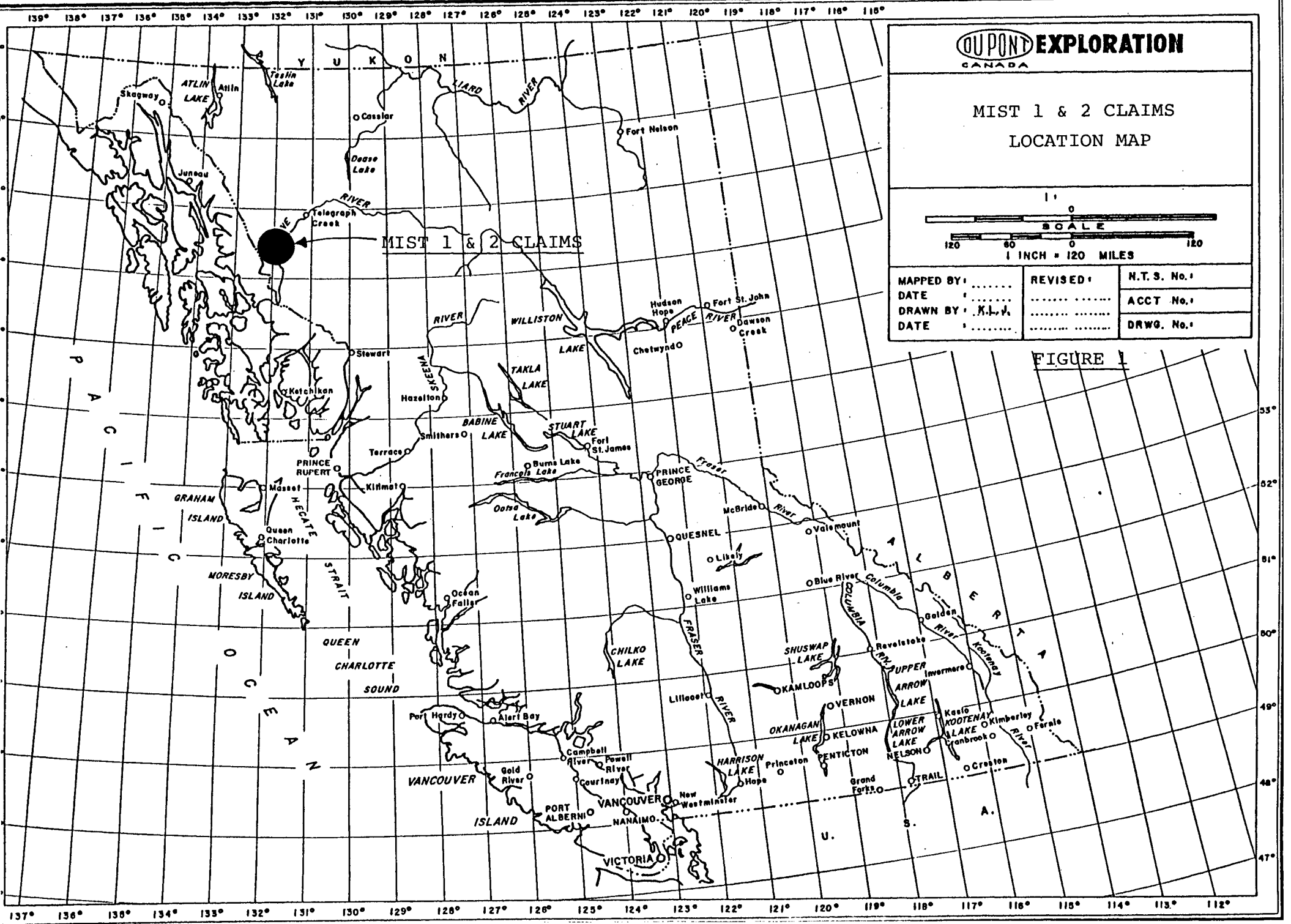
(b) Physiography

The MIST property is situated within the Boundary Ranges of the Coast Mountains. This geographic province consists of a mountainous and glaciated terrain that exhibits relief up to and in excess of 3000 m. Tree-line varies from 1000-1200 m above sea level. Below this point, particularly within the lower valleys, vegetation predominantly consists of a dense growth of conifers. Active glaciation is prevalent in the area, particularly in terrain above 1500-2000 m.

Elevation over the MIST claims varies from 1890 m above sea level in the extreme northwest corner of MIST 1 to 1040 m at the legal corner post and Misterjay Creek. With the exception of the Misterjay Creek valley the entire property is situated above tree-line. Covering the western segment of MIST 2 is the presence of a small icefield. Overall, the property contains relatively broad valleys that exhibit steep precipitous slopes, particularly in terrain above 1220-1370 m.

(c) Claim Status

The MIST property consists of two adjoining mineral claims. MIST 1 consists of 20 units whereas MIST 2 entails 15 units. Pertinent data for each claim is outlined below:


DUPONT EXPLORATION
CANADA
MIST 1 & 2 CLAIMS
LOCATION MAP
1" = 0
SCALE
120 60 0 120
1 INCH = 120 MILES
MAPPED BY:
DATE:
DRAWN BY: K.L.J.
DATE:
REVISED:
N.T.S. No.:
ACCT No.:
DRWG. No.:
MIST 1 & 2 CLAIMS
FIGURE 1
YUKON
ALBERTA
U.S.A.
PACIFIC OCEAN
VANCOUVER ISLAND
Skagway
Atlin
ATLIN LAKE
Teslin Lake
Cassiar
Dease Lake
Dease River
Liard River
Fort Nelson
Juneau
Telegraph Creek
Stewart
Ketchikan
Hazelton
Skeena River
Williston Lake
Takla Lake
Hudson Hope
Fort St. John
Peace River
Dawson Creek
Chetwynd
Smithers
Babine Lake
Stuart Lake
Fort St. James
Terrace
Prince Rupert
Burns Lake
Francois Lake
Kitimat
Masset
Graham Island
Queen Charlotte
Moresby Island
Hecate Strait
Queen Charlotte Sound
Ocean Falls
Prince George
Fraser River
McBride
Valemount
Quesnel
Likely
Williams Lake
Blue River
Columbia River
Golden
Revelstoke
Kootenay River
Invermere
Shuswap Lake
Kamloops
Vernon
Okanagan Lake
Kelowna
Penticton
Upper Arrow Lake
Lower Arrow Lake
Nelson
Kaslo
Kootenay Lake
Cranbrook
Kimberley
Fernie
Creston
Trail
Grand Forks
Princeton
Hope
Harrison Lake
Lillooet River
Chilko Lake
Fraser River
Port Hardy
Alert Bay
Campbell River
Powell River
Courtnay
Gold River
Port Alberni
Nanaimo
Victoria
Vancouver
New Westminster

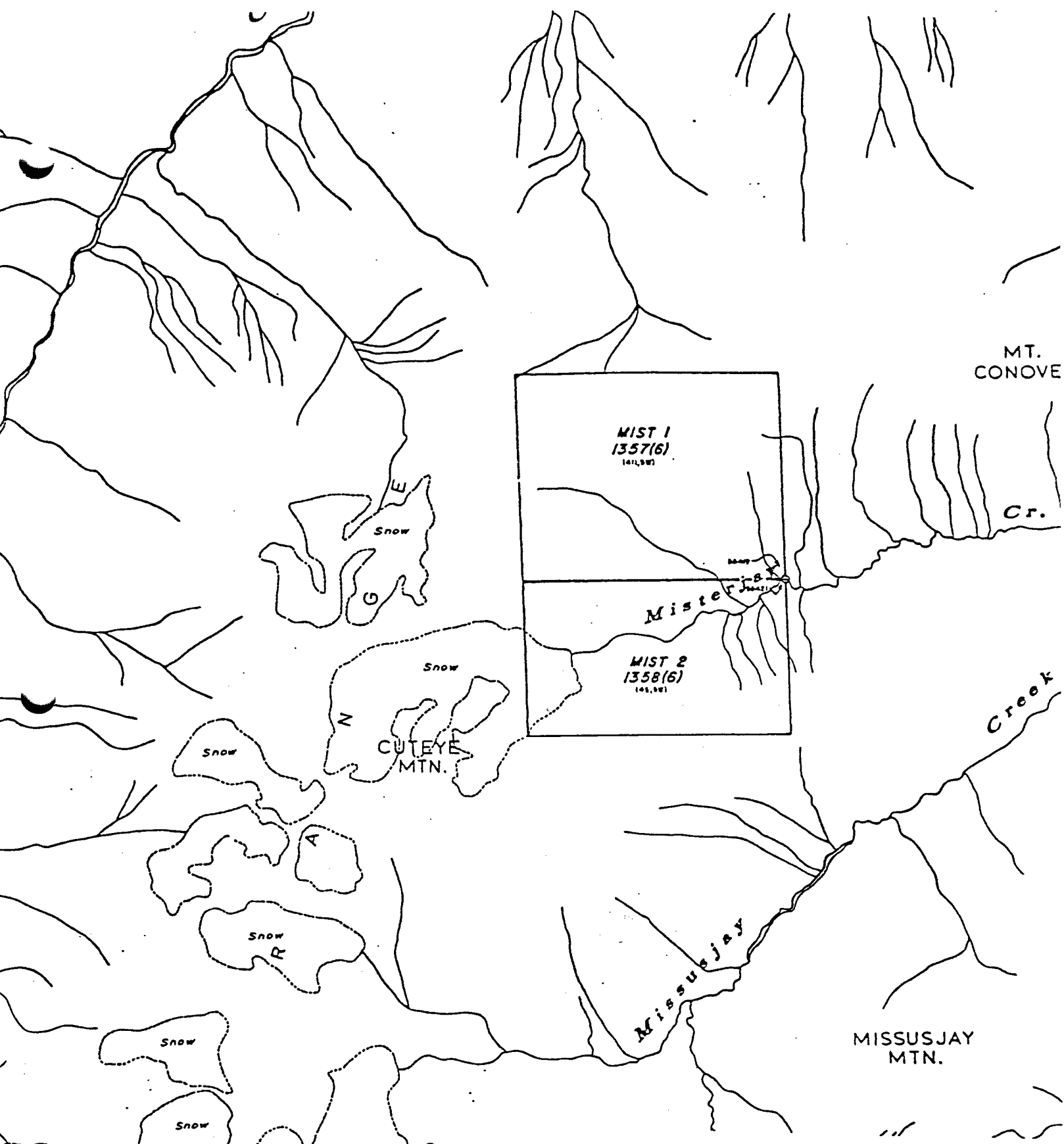


FIGURE 2

Index Map - MIST 1 & 2 Clm

NTS: 104-G-12W

SCALE: 1:50 000

Claims centered @ Lat. 57°38'N, long. 131°50'W.

MIST 1	Record No:	1357
(20 units)	Tag No:	55419
	Date Recorded:	June 25, 1980

MIST 2	Record No:	1358
(15 units)	Tag No:	55421
	Date Recorded:	June 25, 1980

The MIST 1 and 2 claims are owned and operated by Du Pont of Canada Exploration Limited.

(d) History and Economic Assessment of Property

Previous work in the immediate vicinity of the MIST property appears to have been limited. According to Geological Survey of Canada Memoir 246 (page 78) in the vicinity of Missusjay Mountain and Conover Mountain quartz and calcite veins are said to carry chalcopyrite. On the eastern slope of Missusjay Mountain quartz stringers have been observed to host gold.

The MIST claims were staked on the basis of a regional stream sediment survey conducted in May-June 1980. The subsequent evaluation programme revealed that the property is underlain by a variety of rock units including basalt, andesite, chert and mafic and felsic intrusives. No significant mineralization has been observed on the property and with the exception of the lower portion of Misterjay Creek the stream sediment geochemistry has returned only background values.

(e) Summary of Work

The MIST 1 and 2 claims were staked on June 7, 1980. On August 7 a two person crew conducted a follow-up programme entailing geological mapping and stream sediment sampling. The geological mapping was plotted on a scale of 1:10 000 (Dwg. AR 80-203). A total of one rock and twenty-one stream sediment samples were obtained and analyzed.

II GEOLOGY

(a) Regional Geology

The Boundary Ranges of the Coast Mountains occur along the contact of the Intermontane and Coast Crystalline geologic provinces. The latter, the bulk of which occurs across the border in the Alaskan Panhandle consists of Tertiary and Cretaceous quartz monzonite and quartz diorite.

The Intermontane Belt in the vicinity of the Stikine-Chutine River area consists of Upper Triassic andesitic-basaltic volcanics to the west abutting the crystalline complex and Stuhini Group sediments and volcanics to the east. Lenticular exposures of Permian limestone and lesser Carboniferous and Permian schists and gneisses are noted in the area. Intruding this assemblage are Tertiary-Jurassic quartz monzonite and quartz diorite and Triassic diorite and gabbro.

Pliocene to recent aerial volcanism extruded rhyolites, basalts and tuffs in the Level Mountain area to the north and Edziza Peak to the east.

(b) Property Geology

The MIST claims, as indicated by GSC Map 1418A, (1974), are underlain by Upper Triassic Stuhini Group undifferentiated sediments and volcanics and a narrow exposure of Carboniferous or Permian schists and gneisses. A Cretaceous-Tertiary quartz monzonite batholith truncates this sequence near the south boundary of the claims.

Geological mapping conducted on the property to date has revealed the presence of at least seven prominent lithologies. The chronologic relationship in regards to the various units is largely in question.

The following is a brief description of the various rock types observed on the claims.

i) Basalt - Unit 1

This volcanic unit is fine grained, dark green in colour and massive. In addition the unit is magnetic and locally displays a rusty weathered surface.

ii) Porphyritic Basalt/Pyroxenite - Unit 2

The unit is widely distributed across the northern portion of MIST 1. It exhibits essentially the same characteristics as Unit 1 (Basalt), except in that this unit is coarse grained. It may, in part, reflect an intrusive equivalent.

iii) Andesite - Unit 3

This andesitic unit comprises a rugged ridge between Misterjay Creek and its North Branch. It occurs amidst several mafic intrusive (Unit 5) exposures. Its relationship with the intrusive appears to suggest that the volcanics occur as a roof pendent. This relationship however is in question. The unit exhibits a relatively fresh appearance, is green in colour and predominantly consists of andesite with sedimentary interbeds. Lesser flow-top breccias, tuffs and agglomerates are present.

iv) Chert - Unit 4

This unit occurs as a precipitous, massive outcrop within the southern portion of MIST 2. It is grey to green in colour, exhibits several gossans and occurs as wide, massive beds.

v) Mafic Intrusive - Unit 5

The intrusive outcrops at a relatively low elevation within the Misterjay Creek and North Branch valleys. The unit is chloritic and compositionally was described as a chloritized diorite to gabbro.

vi) Feldspar Porphyry - Unit 6

Several dyke-like bodies with widths of 3 to 200 metres occur within the northern portion of MIST 1. The intrusive is coarse grained and exhibits a green matrix. One exposure, a 3 metre dyke in the extreme northeast corner of MIST 1 was described as a feldspar-hornblende porphyry. The dykes clearly crosscut the basalt.

A northwest striking fault is inferred to trend across the northeastern portion of MIST 1. The degree of movement is unknown. Associated with this structure within the adjacent basalts is the development of carbonate zones. No significant quartz was noted to be associated. In conjunction with the fault and shear zones and the associated carbonate zones are the occurrence of gossans.

No structural determinations with respect to the attitude of the various lithologies have been obtained to date.

(c) Mineralization

Minor pyrite occurs as disseminations within the basalts and as disseminations and stringers within a narrow feldspar-hornblende dyke. Pyrrhotite occurs as disseminations within a chert bed (MIST 2). Basaltic float along the south side of the Misterjay Creek contained copper staining and specular hematite. No quartz veining has been observed on the property.

One rock sample was obtained from a pyrrhotite bearing chert bed (#3493) it assayed 0.001 oz/ton gold.

(d) Conclusions

The MIST claims are underlain by a sequence of andesite, basalt and chert in addition to the intrusion of diorite-gabbro and feldspar porphyry. No significant mineralization has been observed

to occur with either the pyrrhotite bearing chert beds or within the shear/fault zone in MIST 1.

III GEOCHEMISTRY

(a) Procedure

A total of 1 rock and 21 stream sediment samples were obtained from the MIST 1 and 2 claims.

The stream sediment samples were collected from Misterjay Creek and from its North Branch. Samples were obtained at 200 metre intervals. Each sample was placed in numbered wet-strength sample envelopes and the various locations were flagged indicating their respective numbers.

The samples were shipped to Min-En Laboratories in North Vancouver for preparation and analysis. The rock sample was crushed, split, pulverized, sieved to -100 mesh, and assayed for gold (oz/ton). The stream sediment samples were sieved to -80 mesh and analyzed for Au (ppm). Sample #5836 was sieved to -40 mesh. Subsequent determinations through Riocanex Laboratory were performed for Ag (ppm), Cr (ppm), Cu (ppm), Mo (ppm), Pb (ppm), and Zn (ppm).

(b) Results

Drawing AR 80-204 denotes the various sample locations and their respective results.

Stream sediment samples were obtained from Misterjay Creek and its North Branch. This was undertaken in order to define the source of anomalous gold concentrations (-20 mesh: 11 000 ppb) obtained during the regional survey. This sample was obtained immediately downstream from the confluence of the North Branch with Misterjay Creek.

Results obtained from the North Branch returned negative results with regard to all of the elements analyzed. Sample #5844, located 110 metres upstream along the Misterjay River from the regional sample

site (#1621) contained 170 ppb Au. A further 140 metres upstream sample #5846 analyzed 30 ppb. Samples obtained from tributaries draining the south side of the Misterjay valley, in the vicinity of the anomalous stream sediment samples returned background values. This was also determined for samples obtained further upstream along the Misterjay River.

With respect to Ag, Cu, Cr, Mo, Pb and Zn no anomalous results were obtained within the MIST property.

To summarize, immediately upstream from the highly gold anomalous regional stream sediment sample one follow-up stream sediment sample contained 170 ppb Au whereas a second returned 30 ppb. The remaining samples all were determined to contain background concentrations. Results obtained to date do not appear to define the source or substantiate the regional survey sample.

IV COST STATEMENT

(a) Wages

	Rate/ day	Dates	No. days	Cost
1 geologist	$119.42	Aug.7/80	1	$ 119.42
1 jr. field asst.	46.58	Aug.7/80	1	46.58
1 geologist	146.92	Apr.9,10,16/81	2.5	367.30
				$ 533.30

(b) Room and Board

Per diem rate of $36.70 per person day. Total = 2 person days:	$ 73.40

(c) Transportation

Helicopter - Terr-Air Rotary Ltd.

Charter ticket #925 (1.0 hours) (Invoice #030)	$ 366.00

(d) Analytical Services

Min-En Laboratories Invoice #7140

21 stream seds. - prep. (@ $0.60 each)	$ 12.60
21 stream seds. - Au (@ $4.25 each)	89.25
1 rock - Au (@ $7.50 each)	7.50
1 rock - prep. (@ $2.50 each)	2.50
	$ 111.85

Riocanex Laboratory

21 stream seds.-Ag,Cr,Mo,Cu,Pb,Zn (@ $4.75 ea)	$ 99.75
	$ 99.75

Total analytical services: $ 211.60

(e) Report Preparation

	Rate/ day	Dates	No. days	
Drafting	$127.00	Apr.14,15/81	2	$ 254.00
Typing	64.80	Apr.15,16/81	1.5	97.20
				$ 351.20

(f) Miscellaneous

Transportation - Re: camp equipment, personnel and fuel:

Air North Inv.#6391 (Jul.29-30/80)	$5,840.95
Air North Inv.#25312	891.44
	$6,732.39

(f) Miscellaneous (cont.)

Room and board for cook & pilot 2 x 13 days @ $36.70 =		$ 954.20
Cooks wages - 13 days @ $80/day		$1,040.00
	Total	$8,726.59
MIST portion of miscellaneous costs:		$ 459.29
	GRAND TOTAL	$1,994.79

V. QUALIFICATIONS

I, Louise K. Eccles, do hereby certify that:

1. I am a geologist residing at 782 West 22nd Avenue, Vancouver, British Columbia and was employed by Du Pont of Canada Exploration Limited at the time of the programme.

2. I am a graduate of the University of British Columbia with a B.Sc. (Honours) degree in geology.

3. I have practised my profession in geology continuously for the past four years in British Columbia, Ontario, the Yukon and Northwest Territories.

4. Between June 25 and August 31, 1980 I directed/ supervised a field programme on the MIST 1 & 2 property on behalf of Du Pont of Canada Exploration Limited.

L. Eccles

Louise K. Eccles

PHONE 980-5814

APPENDIX A

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 A

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.

131° 50'

57° 38'

Red Volcanics

1a

1

2

6

?(3m width)

1,2

6

5

GOSSAN

2a

MIST 1

North Branch

3

L.C.P.

Misterjoy Creek

MIST 2

4

Cu staining
Spec. Hematite

X — 3493 Pyrrhotite - rich chert bed

LEGEND

6	FELDSPAR PORPHYRY
5	MAFIC INTRUSIVE
4	CHERT
3	ANDESITE - INCLUDES TUFFS, AGGLOMERATES, SEDIMENTS
2	PORPHYRITIC BASALT / PYROXENITE a) CARBONATE ALTERATION
1	BASALT a) CARBONATE ALTERATION

NOTE : SEQUENCE INDICATED ABOVE QUESTIONABLE

SYMBOLS

- AREA OF OUTCROP / EXPOSURE
- CONTACT , APPROXIMATE
- FAULT, INFERRED
- GOSSAN
- X — FLOAT
- X — 3493 ROCK SAMPLE LOCATION & No.
- CLAIM LINE & LEGAL CORNER POST

ROCK ASSAYS	
Tag No.	Au ozs/ton
3493D	0.001

DU PONT CANADA EXPLORATION

ARGONAUT PROJECT
MIST CLAIMS
GEOLOGY

TELEGRAPH CR. AREA, BRITISH COLUMBIA

1 : 10 000

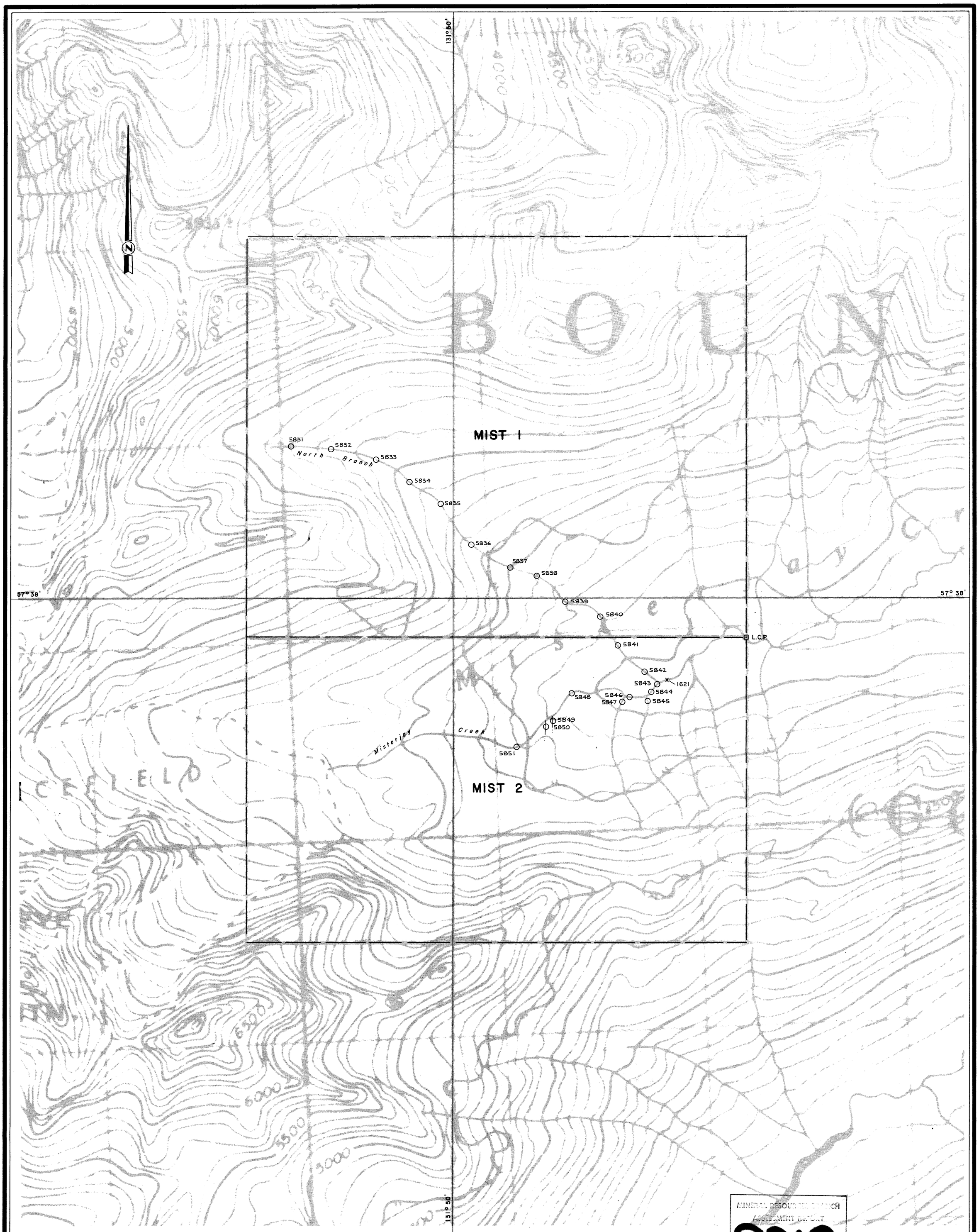
m 300 0 300 600 m

SCALE

ft 1000 0 1000 2000 ft.

1 INCH = 833 FEET

MAPPED BY :	L.K.E.	REVISED :	N.T.S. No.: 104 G 12W
DATE :	80 08 07		ACCT No.: 347-26
DRAWN BY :	K.L.J.		DRWG. No.: AR. 80-203
DATE :	81 04 15		



LEGEND

5851 ○ STREAM SEDIMENT SAMPLE LOCATION & No. ('D' SERIES)

X—1621 ORIGINAL STREAM SEDIMENT SAMPLE LOCATION & No.

ORIGINAL SAMPLE RESULTS

Tag No.	Mesh	Au P.P.B.	Hg P.P.B.	Pb P.P.M.	Cu P.P.M.	Ag P.P.M.	%H.M.
1621 D	- 20	11000	-	12	62	2.5	38.22
	-100	90	6	20	82	1.4	-

Note Regarding Original Sample Results:

The results of the analysis of the heavy mineral concentrate from the -20(-20 +100 mesh) fraction are not weighted.

FOLLOW-UP SOIL SAMPLE RESULTS

Tag	Mesh	Au P.P.B.	Ag P.P.M.	Cr P.P.M.	Cu P.P.M.	Mo P.P.M.	Pb P.P.M.	Zn P.P.M.
5831	- 80	5	0.3	339	148	3	17	86
5832	- 80	5	0.3	265	142	2	12	69
5833	- 80	15	0.3	265	134	2	9	65
5834	- 80	15	0.3	306	153	2	16	79
5835	- 80	5	0.3	268	115	2	7	59
5836	- 40	5	0.1	166	83	2	3	41
5837	- 80	5	0.3	220	124	2	8	59
5838	- 80	10	0.3	202	127	2	5	53
5839	- 80	5	0.3	222	143	2	7	69
5840	- 80	10	0.2	205	120	2	6	55
5841	- 80	15	0.2	156	106	2	4	40
5842	- 80	< 5	0.3	202	115	2	6	54
5843	- 80	25	0.4	105	74	2	16	47
5844	- 80	170	0.5	153	116	2	11	54
5845	- 80	15	0.2	196	91	1	3	53
5846	- 80	30	0.3	78	65	2	9	52
5847	- 80	5	0.4	143	109	2	5	53
5848	- 80	5	0.3	76	62	2	15	54
5849	- 80	10	0.3	138	119	1	4	49
5850	- 80	< 5	0.3	120	121	2	5	46
5851	- 80	10	0.4	59	45	2	10	55

DU PONT CANADA **EXPLORATION**

ARGONAUT PROJECT
MIST CLAIMS
GEOCHEMISTRY

Au IN P.P.B. & Ag, Cr, Cu, Mo, Pb, Zn IN P.P.M.

TELEGRAPH CR. AREA, BRITISH COLUMBIA

1 : 10 000

m 300 0 300

SCALE

ft 1000 0 1000

1 INCH = 833 FEET

MAPPED BY :	L.K.E.	REVISED :	N.T
DATE :	80 08 07		
DRAWN BY :	K.L.J.		
DATE :	81 04 15		