REPORT ON
DIAMOND DRILLING

by

N. von Fersen

on the

Al 4 Mineral Claims

situated north of Metsantan Lake
in the Liard Mining Division

57°28'N, 127°24'W
NTS 94E/6W

owned by
KIDD CREEK MINES LTD.

work by
KIDD CREEK MINES LTD.

September, 1984

Vancouver, B.C.

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INTRODUCTION

Location, Access and Terrain

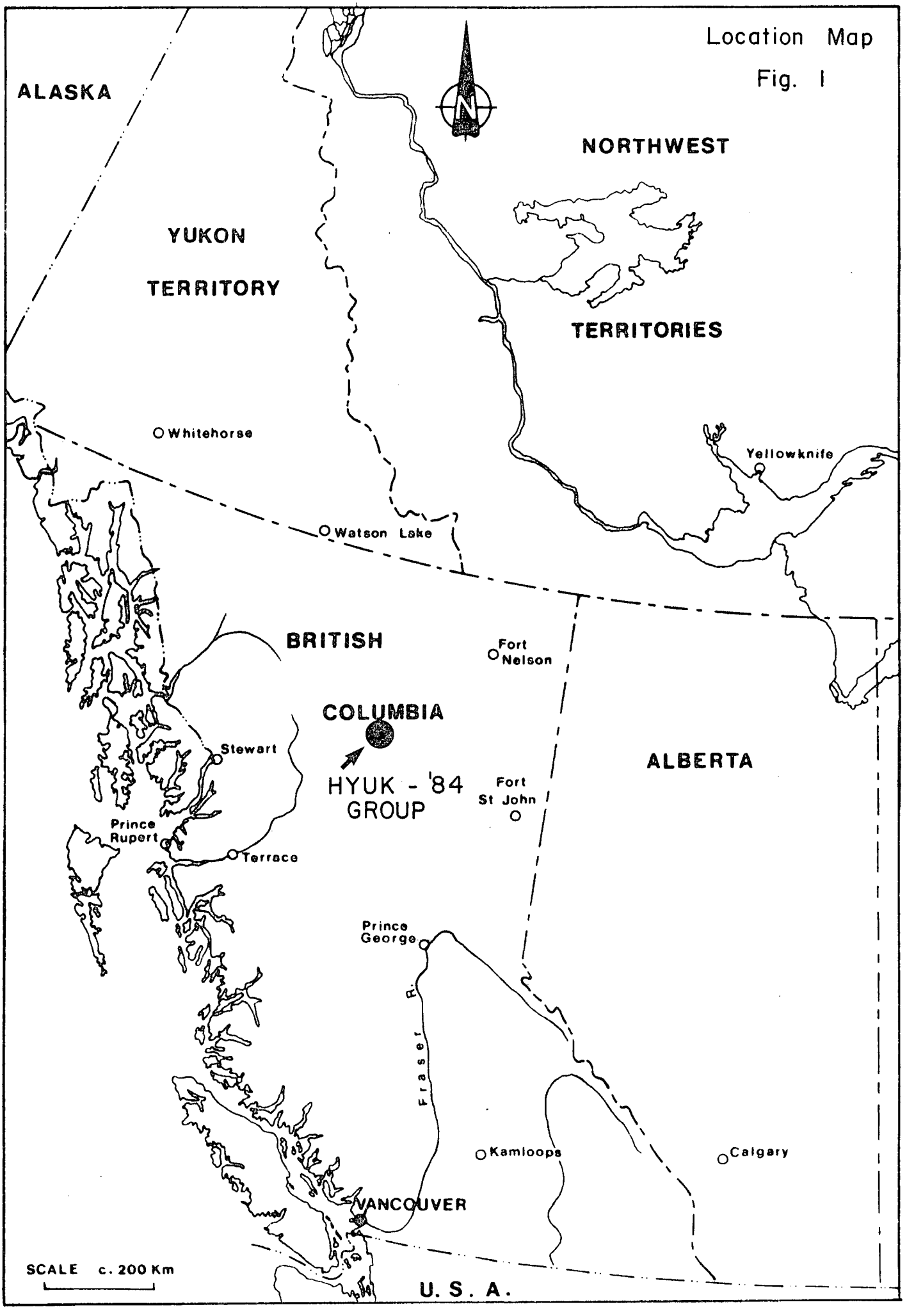
The Al property is located east of the Stikine River and directly north of Metsantan Lake, in north-central British Columbia (Figure 1). The nearest supply and transportation centres are Smithers, some 300 km due south, and Watson Lake in the Yukon, some 300 km to the north.

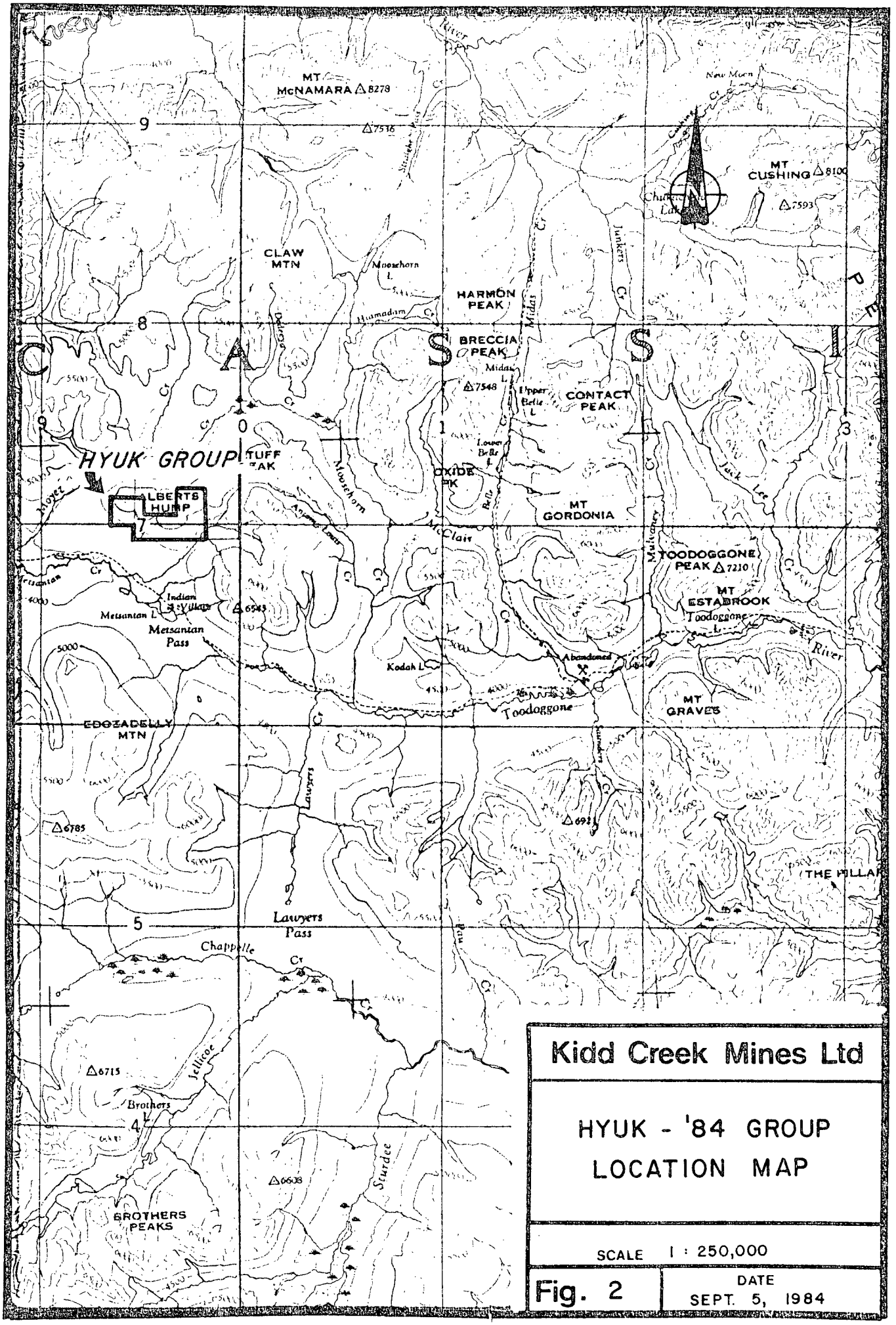
Access to the claims is by a combination of fixed wing aircraft from Smithers or Watson Lake to the Sturdee Valley airstrip 30 km south- east of the property, and local helicopter charter thereafter. Float equipped aircraft can also land at Metsantan Lake. There is no road access although it has been suggested that the Omineca mining road to the south may be extended into the Toodoggone River area in the future.

The claims are located near the eastern margin of the Spatsizi Plateau and cover a subdued ridge of gentle to moderate relief with elevations ranging from 1400 m to 1690 m (Figure 2). The lowermost parts of the property are covered by an intermixed growth of spruce, and scrub willow (below 1500 m). Extensive areas of alpine grassland, occurring above 1600 m, make for easy foot travel. Water supplies may become scarce at all but the lowest elevations during midsummer.

Property History and Definition

The area was originally staked by Sumac Mines Ltd. in 1971 for its porphyry copper potential. The claims were allowed to lapse after several seasons fieldwork. Rising prices for both gold and silver and close proximity to the Chapelle and Lawyers deposits prompted Energex Minerals Ltd. to stake the Al 1-4 claims in 1979. In 1980 these claims were optioned to Texasgulf Canada Ltd. (now Kidd Creek Mines Ltd.). The Al 5-7 claims were staked in 1980 and '81, and the Nii claim plus Hyuk 1-3 fractions were added in 1983. Work described in this report was undertaken by Kidd Creek Mines Ltd., the registered owner of the claims.


Location Map
Fig. 1
ALASKA
YUKON
TERRITORY
NORTHWEST
TERRITORIES
Whitehorse
Yellowknife
Watson Lake
BRITISH
COLUMBIA
Fort
Nelson
Stewart
HYUK - '84
GROUP
ALBERTA
Fort
St John
Prince
Rupert
Terrace
Prince
George
Fraser R.
Kamloops
Calgary
VANCOUVER
SCALE c. 200 Km
U. S. A.



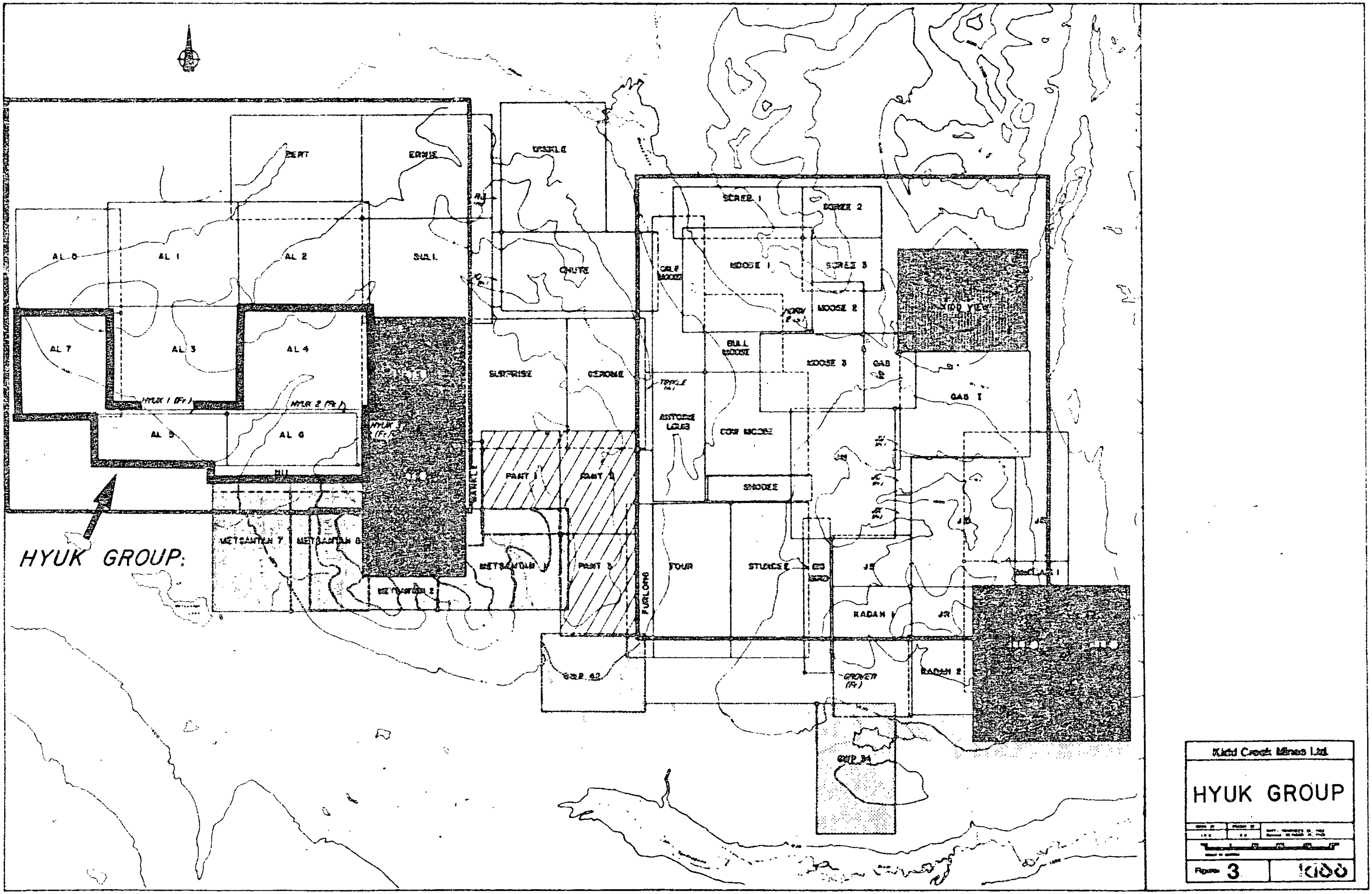
Kidd Creek Mines Ltd

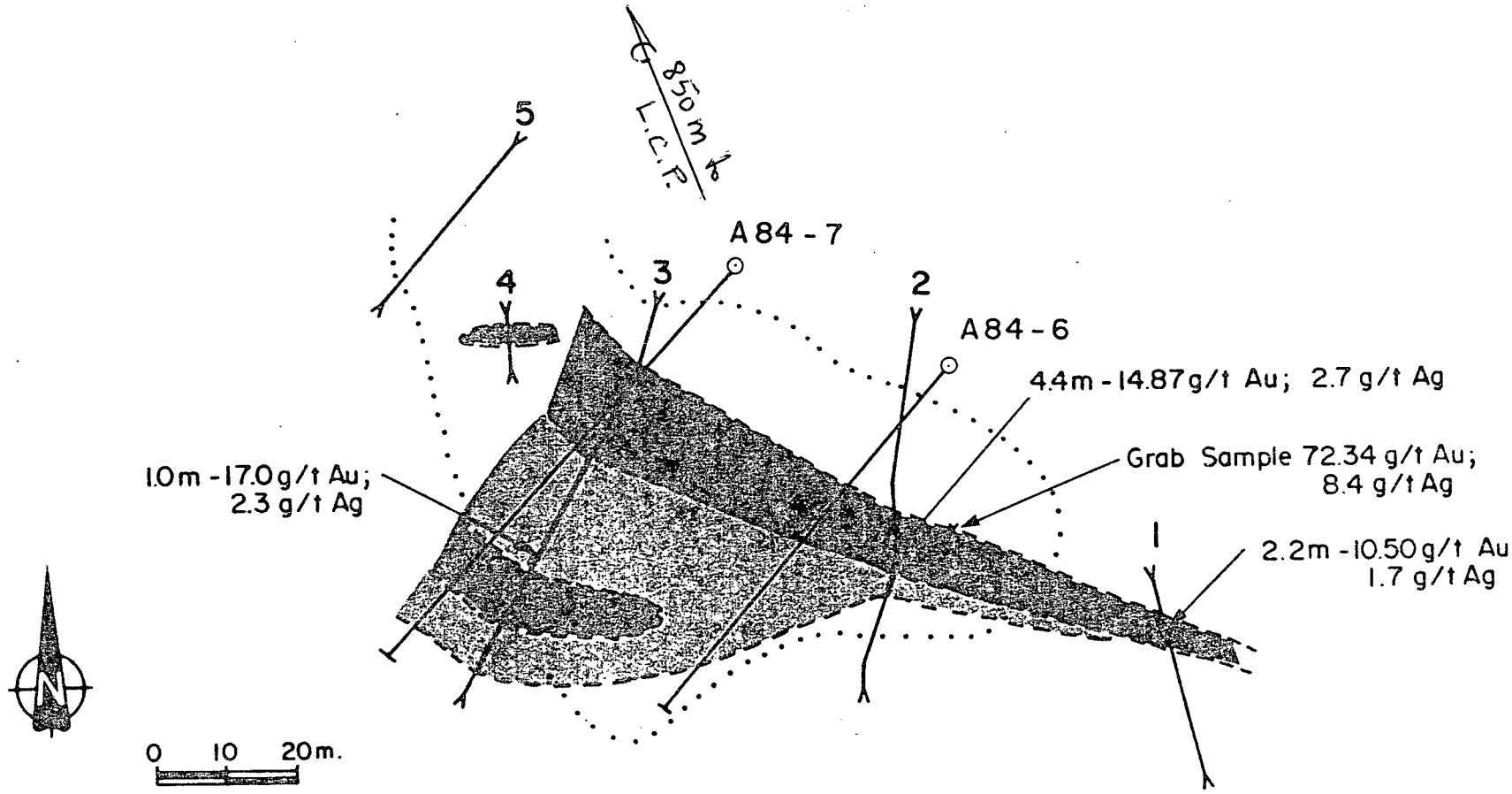
HYUK - '84 GROUP LOCATION MAP

SCALE 1 : 250,000

Fig. 2

DATE SEPT. 5, 1984


BERT
ERNIE
AL 8
AL 1
AL 2
SULL
CHUTE
AL 7
AL 3
AL 4
SURPRISE
GEROME
HYUK 1 (Fr.)
HYUK 2 (Fr.)
AL 5
AL 6
HU
PANT 1
PANT 2
PANT 3
METSANTAN 7
METSANTAN 8
METSANTAN 1
METSANTAN 2
HYUK GROUP
SCREE 1
SCREE 2
MOOSE 1
SCREE 3
MOOSE 2
KIDD VIEW
MOOSE 3
GAS I
ANTOINE LOUIS
COW MOOSE
SNOOZE
FOUR
KADAH 1
KADAH 2
JR
JS
GROVER (Fr.)
Kidd Creek Mines Ltd.
HYUK GROUP
Figure 3



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AL PROPERTY
THESIS II ZONE
1984 DIAMOND DRILL HOLE LOCATIONS

	DRAWN BY: ER	DATE: SEPT 6, 1984

SCALE 1 : 1000

Figure: 4

The "Hyuk 84" Group consists of 5 MGS claims totalling 62 units and 3 fractional claims (3 units). Al 4 was recorded in June, 1979; Al 5 and 6 in July 1980; Al 7, in April 1981; and Nii, Hyuk 1-3 Fractions in July 1983. Figure 3 indicates the claim positions and group boundaries.

Summary of Work Completed

Diamond Drilling

During the period June 15 to June 30, 1984, 2 diamond drill holes, totalling 142.95 m, were completed on the Al 4 M.C. All core was cut and sampled and analysed geochemically for Au and Ag.

Work Distribution

All work was done on the Al 4 M.C., part of the "Hyuk 84" group.

GEOLOGY

The property is underlain by a thick succession of primarily dacitic to andesitic crystal and crystal-lapilli tuffs, tuff-breccias, flows and associated hypabyssal phases. These rocks belong to the 'Toodoggone Volcanics' of Jurassic age. A more complete description of the geology can be found in previously submitted assessment reports (Sutherland, 1983; Sutherland and Clark, 1982). The relevant portion of the property showing the approximate drill hole locations, is illustrated in Figure 4.

DIAMOND DRILLING

This report presents the results of two diamond drill holes completed in 1984 on the Al 4 M.C. Orientation and depth of the holes are listed below: (see Figure 4):

D.D.H.	Azimuth	Dip	Depth
A84-6	220°	-42°	65.5 m
A84-7	224°	-45°	77.4 m

Detailed logs and geochemical results are included together in Appendix C. The core is stored in camp on the Moose 3 M.C.

The holes were drilled to test the down dip extent of known surface mineralization exposed in trenches and to clarify the geometry of the alteration zone hosting the mineralization.

GEOCHEMISTRY

Drill core was routinely cut and sampled, the standard sample interval being approximately 0.5 m. Changes in alteration and/or lithology influenced this sample interval considerably. A total of 168 were shipped to CDN Laboratories Ltd. in Delta, B.C., where they were analysed geochemically for Au and Ag. Samples containing greater than 1000 ppb Au were re-analysed by fire assay.

A summary of the extraction and analytical techniques for these metals follows:

Element	Extraction	Analysis
Au	Hot Aqua Regia	Atomic Absorption
Ag	Nitric acid	Atomic Absorption

CONCLUSIONS

Drill results indicate that the alteration zone dips steeply to the northeast. Intense silicification contains an average of 5 percent pyrite with local concentrations to 10 percent. A strong crackle brecciation is pervasively developed within the silicified interval. Grades encountered in drill core are considerably lower than those obtained from surface.

N. von Fersen

BIBLIOGRAPHY

BARR, D.A. 1980. Gold in the Canadian Cordillera. CIM Bulletin, June 1980, pp. 59-76.

CARTER, N.C. 1972. Toodoggone River area. in Geology, Exploration and Mining in British Columbia 1981. British Columbia Department of Mines and Petroleum Resources, Victoria, pp. 63-64.

GABRIELSE, H., DODDS, C.J., AND MANSY, J.L. 1975. Geology - Toodoggone River (94E). Geological Survey of Canada, Open File 306.

GABRIELSE, H., WANLESS, R.K., ARMSTRONG, R.L. and ERDMAN, L.R. 1980. Isotopic dating of Early Jurassic volcanism and plutonism in northcentral British Columbia, in Current Research, Part A, Geological Survey of Canada, Paper 80-1A, pp. 27-32

PEATFIELD, G.R. 1981. Assessment report for geological and geochemical surveys done on the Al 1-6 M.C. Report submitted for assessment work credit to the British Columbia Ministry of Energy, Mines and Petroleum Resources, Victoria, June 1981.

SCHMITT, H.R. and PEATFIELD, G.R. 1980. Assessment report for geological and geochemical surveys done on the Al 1-4 M.C. Report submitted for assessment work credit to the British Columbia Ministry of Energy, Mines and Petroleum Resources, Victoria, June, 1980.

SCHROETER, T.G. 1982. Toodoggone River (94E) in Geological Fieldwork 1981. British Columbia Department of Energy, Mines and Petroleum Resources, Victoria, pp. 122-123.

SUTHERLAND, I.G. 1982(a). Assessment report for examination of trenches on the Al 2 and Bull M.C. Report submitted for assessment work credit to the British Columbia Ministry of Energy, Mines and Petroleum Resources, Victoria, May, 1982.

SUTHERLAND, I.G. 1982 (b) Assessment report on diamond drilling on the Al 2 M.C. Report submitted for assessment work credit to the British Columbia Ministry of Energy, Mines and Petroleum Resources, Victoria; November, 1982.

SUTHERLAND, I.G. and CLARK, J.R. 1982. Assessment report for geological and geochemical surveys done on the Al 1-6 M.C. Report submitted for assessment work credit to the British Columbia Ministry of Energy, Mines and Petroleum Resources, Victoria, April 1982.

APPENDIX A

Statements of Qualifications

APPENDIX A

Statements of Qualifications

N.O., von Fersen - Geologist

N.O. von Fersen holds a B.Sc. Degree in Geolgy from the University of British Columbia, granted in 1967. Since that time he has been continuously employed in the Industry. He has been employed by Kidd Creek Mines Ltd. in Vancouver since April 1983.

APPENDIX B

Statement of Expenditures

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Statement of Expenditures

A. DIAMOND DRILLING AND SUPPORT

DIAMOND DRILLING

D.W. Coates invoice charges for drilling, survey, core boxes, supplies and equipment, moving time, etc. applicable to the holes covered in this report.		$ 12,663.00

ROOM AND BOARD

D.W. Coates personnel	12 days @ $80/day	960.00

HELICOPTER

ALC Hughes 500D	5.6 hrs @ $525/hour (incl. fuel)	2,940.00
		$ 16,563.00

(Note: Of this total $14,000 was claimed for assessment.)

APPENDIX C

Diamond Drill Logs and Analytical Results

A 84 CH006 SUMMARY

Hole A 84 CH006 was collared in an altered dacite flow which continues to the end of the hole at 65.53 m. The final six metres of rock contains approximately 2.5% xenoliths and is weakly brecciated, distinguishing it from the remainder of the hole which exhibits weak flow banding and no xenoliths.

The rock is pervasively altered ranging from a weak argillic/hematitic (mild propylitic alteration in last 6 m) to pervasive silicification and/or silicification/ pyritization.

Two zones of the latter silicification are present; from 10.97 to 15.65 m and from 24.85 to 59.10 m. The rock is pervasively silicified to 90% quartz in some intervals and pyrite is present as patches and disseminations to 5% locally.

Several intervals within the silicified zones exhibit weak to moderate 'crackle' brecciation (i.e. little hydrothermal breccia filling material) as well, intervals of argillized/silicified rock alternate with intervals of complete silicification.

A 84 CH007 **SUMMARY**

Hole A 84 CH007 was collared in altered dacite flow which continues to the end of the hole at 77.41 m. The rock in the last 5 metres is distinguished from the rest of the hole by increased biotite and xenolith content.

Alteration is pervasive ranging from mild propylization in the final 5 metres to intense silicification with local pyritization. Silicified zones are commonly argillized to a small extent. A zone of pervasive silicification is present, however, between 39.92 m and 64.25 m. A combined silicified/argillized zone was intersected betwen 20.21 m and 39.92 m.

Pyritic zones are always coupled with silicification and include; 39.92 to 46.32 m, 62.00 to 70.92 m. Pyrite occurs as disseminations, patches or flooding to 10% locally. Limonite-rich section (1%-5%) 44.04 m-55.00 m.

A weak to moderate brecciation ('crackle') is present from 29.57 m to 70.92 m, the end of any silicification.

CDN RESOURCE LABORATORIES LTD.
#8, 7550 RIVER ROAD, DELTA, B.C. V4G 1C8 / TEL. (604) 946-4448

FILE NO.: 84-138

ASSAY REPORT

CH006

Sample Description	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	GEOCHEMICAL DETERMINATIONS
AB 10265	30	.2	76	6	14	
10266	50	.3	78	12	22	
10267	60	.8	86	23	40	
10268	60	.2	84	7	16	
10269	15	.1	34	14	16	
10270	70	.1				
10271	L5	L.1				
10272	L5	L.1				
10276	80	.1				
10277	130	.2				
10278	150	.1				
10279	120	L.1				
10280	230	.1				
10281	230	.1				
10282	310	.1				
10283	670	.3				
10284	1,050	.2				
10285	790	.2				
10286	230	L.1				
10287	640	.2				
10288	1,100	.2				
10289	1,870	.2				
10290	1,630	.7				
10291	1,330	.7				
10292	1,500	.5				
10293	800	.6				
10294	975	.8				
10295	1,090	.9				
10296	1,420	1.0				
10297	1,050	.5				
10298	1,140	.8				
10299	520	.8				
10300	1,165	.9				
10301	2,390	1.1				
10302	1,390	1.2				
10303	3,080	1.3				
10304	855	.7				
10310	810	.2				
10311	980	.4				
10312	930	.8				
10313	830	.7				
10314	1,310	.5				
10322	65	.2				
10323	50	.1				
10324	815	.2				
10325	70	.2				
10326	150	.2				
10327	170	.1				
10328	220	.1				
10329	260	.2				

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ASSAY REPORT

PAGE NO.: 4 of 6

Sample Description	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	GEOCHEMICAL DETERMINATIONS
10264	L5	.1	CH006			
10273	L5	.1				
10274	L5	.1				
10275	L5	L.1				
10305	815	.6				
10306	1,100	.6				
10307	1,090	.5				
10308	880	.5				
10309	840	.5				
10315	960	1.1				
10316	510	.4				
10317	680	.3				
10318	765	.5				
10319	690	.3				
10320	180	.1				
10321	120	.1				
AB 10330	190	.1	CH006			
10331	180	.2				
10332	420	.4				
10333	890	.7				
10334	1,160	.5				
10335	1,630	.5				
10336	600	.5				
10337	200	.2				
10338	380	.3				
10339	200	.3				
10340	170	.2				
10341	180	.3				
10342	220	.3				
10343	210	L.1				

The prefix "L" indicates "less than"
The prefix "G" indicates "greater than"

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FILE NO.: 84-138

PAGE NO.: 6 of 6

ASSAY REPORT

Sample Description	Au (g/tonne)
10375	4.70
10376	1.50
10384 (A)	4.90
10392	1.35
10427 (A)	4.80

C#007

Note: (A)- control sample.

Rejects retained one month, pulps one year, unless specific arrangements made.

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FILE NO.: 84-142

ASSAY REPORT

Sample Description	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	GEOCHEMICAL DETERMINATIONS
10364	160	L.1	CH007			
10364 (A)	960	2.2	↓			
10365	180	.1				
10366	200	L.1				
10367	330	.1				
10368	380	.1				
10369	410	.3				
10370	390	.1				
10371	L5	.6				
10372	170	L.1				
10373	690	.4				
10374	910	.1				
10375	4,100	.3				
10376	1,150	.3				
10377	170	.2				
10378	230	.3				
10379	160	.2				
10380	120	L.1				
10381	950	.7				
10382	370	.6	54	6	L1	
10383	810	.7	610	7	L1	
10384	350	.2				
10384 (A)	4,300	3.8				
10385	440	.2				
10386	450	.4				
10387	560	.5				
10388	710	.7				
10389	410	.4				
10390	500	1.1				
10391	740	.9				
10392	1,250	3.6				
10393	440	.3				
10394	590	.5				
10395	300	.1				
10396	170	.1				
10397	320	.2				
10398	430	.3				
10399	430	.6				
10400	390	.6				
10401	160	.1				
10402	110	.1				
10403	150	.1				
10404	220	.2				
10405	290	.1				
10406	590	.5				Note: (A) - control sample
10407	880	.9				
10408	310	.3				
10408 (A)	1,020	2.6				
10409	370	.2				
10410	390	.6				

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FILE NO.: 84-142

ASSAY REPORT

Sample Description	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	GEOCHEMICAL DETERMINATIONS
10344	80	L.1				CH007
10344 (A)	1,290	2.6				
10345	5	L.1				
10346	10	L.1				
10347	L5	L.1				
10348	L5	L.1				
10349	L5	L.1				
10350	L5	L.1				
10351	5	.1				
10352	50	L.1				
10353	50	L.1				
10354	110	L.1				
10355	60	L.1				
10356	130	L.1				
10357	160	.2				
10358	20	L.1				
10359	40	L.1				
10360	130	.1				
10361	170	.1				
10362	170	L.1				
10363	190	L.1				
10411	370	.1				CH007
10412	230	L.1				
10413	140	L.1				
10414	200	L.1				
10415	150	.1				
10416	410	.3				
10417	630	.8				
10418	530	.8				
10419	380	.7				
10420	260	.3				
10421	110	.3				
10422	90	.2				
10423	100	.1				
10424	170	.1				
10425	L5	.1				Note: (A) - Control sample
10426	L5	L.1				
10427	L5	L.1				
10427 (A)	5,100	4.9				

Rejects retained one month, pulps one year, unless specific arrangements made.

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#8, 7550 RIVER ROAD, DELTA, B.C. V4G 1C8 / TEL (604) 946-4448

FILE NO.: 84-142

ASSAY REPORT

Sample Description	Au (g/tonne)
	CH006
10284	1.30
10288	1.30
10289	2.30
10290	2.10
10291	1.70
10292	1.60
10294	1.00
10295	1.30
10296	1.40
10297	1.10
10298	1.20
10300	1.20
10301	2.30
10302	1.40
10303	3.10
10311	1.00
10312	.90
10314	1.30
10334	1.40
10335	2.00

Results on page 6 are all assays.

THESIS II ZONE

DDH A84-6
(Az. 220° / -42°)

overburden

A2

A5/7

Argillic alteration (A2)

1.50 g/t Au, 0..8 g/t Ag
8.7m

A5, 7 with intermittent argillic sections
py to 5% locally, crackle breccia

1.40 g/t Au
1.0m

A3a (altered dacite ash flow)

65.53 m.

LEGEND

LITHOLOGY

Altered Dacite Ash Flow

ALTERATION

- A3, A3a, A3b - Propylitic
- A2 - Argillic
- A5 - Silicification
- A6 - Hematization
- A7, A7a - Silicification + pyrite

Kidd Creek Mines Ltd.

AL PROPERTY

DDH A84-6

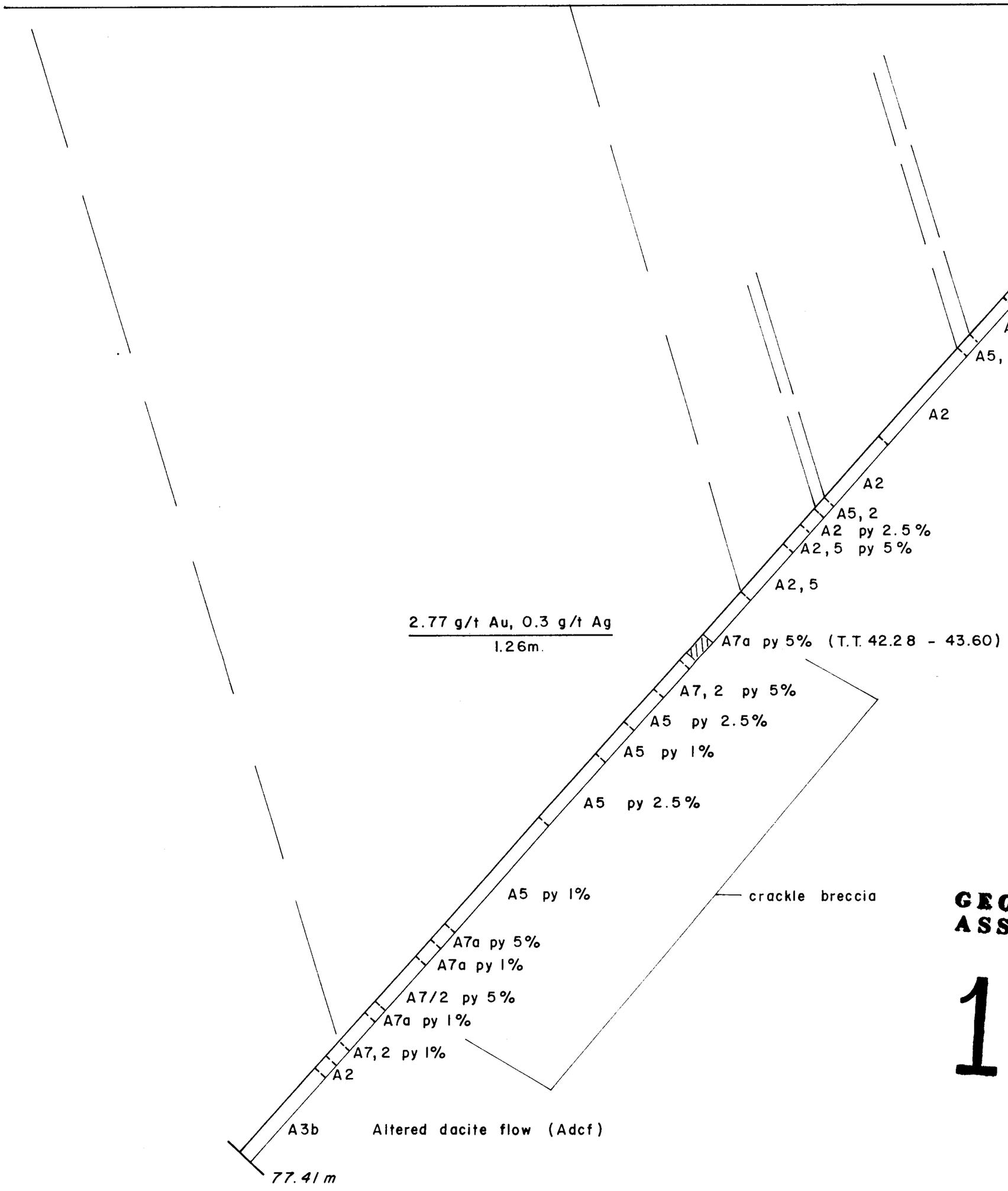
	E.R.	JULY 10/1984

SCALE 1 : 200

Figure:

THESIS II ZONE

DDH A84 - 7
Az. 224° / -42°



LITHOLOGY

Altered dacite flow (Adcf)

ALTERATION

A3, A3a, A3b	**- Propylitic**
A2	**- Argillic**
A5	**- Silicification**
A6	**- Hematization**
A7, A7a	**- Silicification + pyrite**

Kidd Creek Mines Ltd.

AL PROPERTY

DDH A84 - 7

E.R. | JULY 9 / 1984

0 5 m

SCALE 1 : 200

Figure: