

ASSESSMENT REPORT ON GEOLOGY AND GEOCHEMISTRY

on the

CHECK MINING CLAIM
(part of the Rose-81 Group)

by
S.G. Enns

situated north of Ealue Lake in the
Liard Mining Division

57°46'N Lat.; 129°51'W Long.
NTS 104H/13W

owned and operated by
KIDD CREEK MINES LTD.

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

10,736

October, 1982

Vancouver, B.C.

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INTRODUCTION

The ROSE property consists of 15 contiguous mineral claims (93 units) wholly owned by Kidd Creek Mines Ltd., and is located in northwestern British Columbia (Figure 1). The claims cover areas containing copper-gold mineralization in monzonitic intrusives and in associated Upper Triassic volcanic and volcanoclastic rocks.

This report presents geological mapping on a scale of 1:5,000 and limited geochemical sampling between July 31 and August 3, 1982 over the south portion of the property. Approximately \$3600 was spent of which \$3200 has been filed as assessment on the CHECK claim for two years.

Location and Access

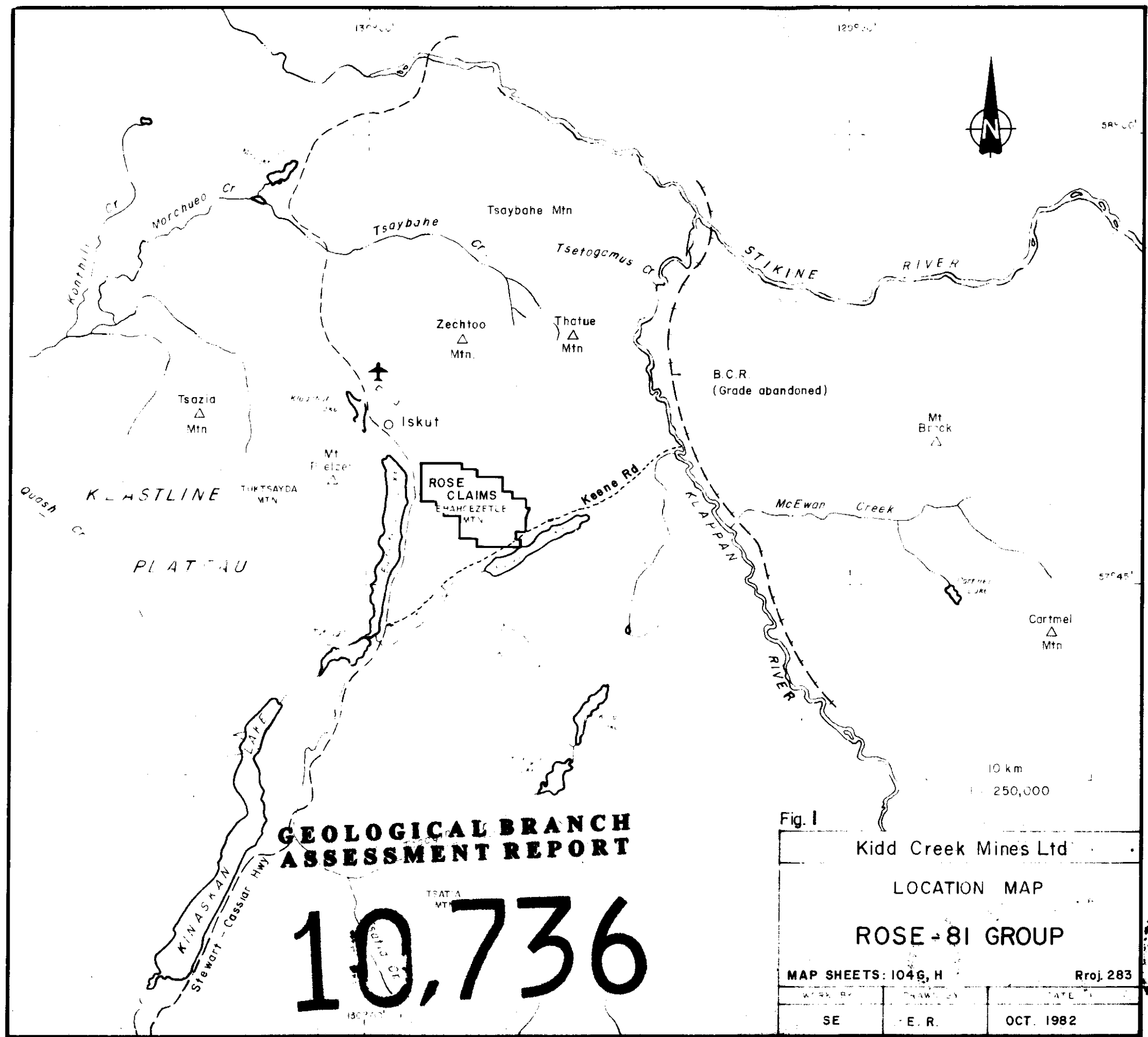
The property lies immediately east of Eddontenajon Lake and north of Ealue Lake, and is centred approximately seven kilometers southeast of Iskut at $57^{\circ}47'N$, $129^{\circ}53'W$.

Access is by helicopter from the Stewart-Cassiar Highway or the "Keene Access Road" which follows the north shore of Ealue Lake.

The claims cover most of a small massif (known as Ehahcezette Mountain) lying between Eddontenajon and Ealue Lakes. Maximum elevation is about 1900 m, and the relief on the property is of the order of 1000 m. Most of the property lies above tree line, with some scrub trees on the lower slopes and in deep valleys.

Property History and Definition

The earliest recorded work in the general area was conducted in 1929 on the "Klapan Rose" showing; eight claims covered a copper-bearing skarn immediately east of the ROSE property. A short adit was driven.



**GEOLOGICAL BRANCH
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Fig. 1

Kidd Creek Mines Ltd		
LOCATION MAP		
ROSE-81 GROUP		
MAP SHEETS: 1046, H		Rroj. 283
WORK BY	DRAWN BY	DATE
SE	E. R.	OCT. 1982

During the 1960's, a prominent limonite stain zone, on Ehahezetle Mtn, above Eddontenajon, was examined by a number of companies and the ground was staked at least once. Copper showings were discovered in the northwesterly flowing creek east of the skarn zone, but little work was done.

Two large groups of claims, held by Yukonadian Mineral Exploration Ltd., and by Silver Standard Mines Ltd., covered essentially all the ground now held as the ROSE-81 Group. When these older properties were allowed to lapse, the Rose of Klappan Claim was located by Texasgulf Canada Ltd. in June 1975, and further staking was completed, in that and subsequent years, to produce the property with present configuration of claims (see Figure 2).

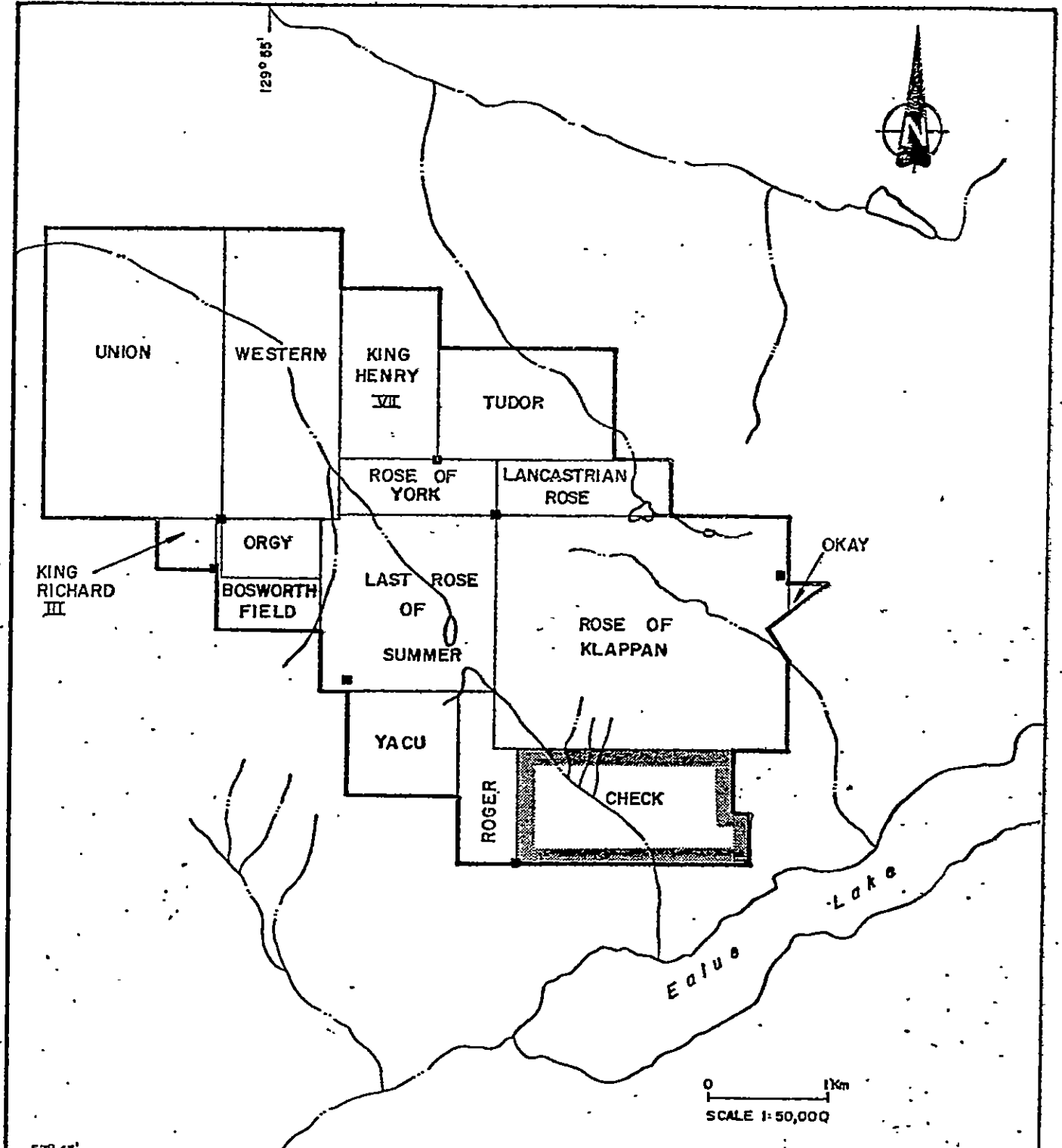
Subsequent work by Kidd Creek Mines (formerly Texasgulf Inc.) has included geological, geochemical and geophysical surveys and limited programs of hand-trenching and 695 m of diamond drilling in 10 holes.

Disposition of the claims is shown in Figure 2. The claims were grouped on August 26, 1981 to form the ROSE-81 Group and ownership has been transferred from Texasgulf Canada Ltd. to Kidd Creek Mines Ltd.

GEOLOGY

Mapping was conducted over the southern portion of the claim block using hip-chain, compass and altimeter for control. Data was plotted directly onto a 1:5000 scale prepared topographic map.

The property is underlain by a sequence of Upper Triassic to Mid Jurassic andesitic volcanic rocks with minor sediments. Coeval, irregular dykes and small stocks intrude the sequence and appear to be the source for copper-gold mineralization. Late porphyritic quartz monzonite dykes of Cretaceous age cut the sequence.



Kidd Creek Mines Ltd.		
Figure 2		
CLAIM LOCATION SKETCH		
ROSE - 81 GROUP		
104H/13		Proj. 283
WORK BY	DRAWN BY	DATE
SE	E.R.	OCTOBER 1982

Lithologic Units

The unit numbers shown on Figure 3, conform to units established by 1977 company mapping; the order of description is from apparently oldest to youngest:

"Siltstone" Unit 1

Where mapped, only poor bedrock exposures exist; they consist of black to dark grey fissile argillite and siltstone. This unit lies at or near the base of the Triassic sequence, below volcanic flows and volcanoclastic rocks.

"Green volcanics" Unit 3a

This andesite-basalt unit forms the most common lithology underlying the mapped area. Outcrops are massive; dark green to dark brown volcanoclastic beds and flows consist of lava flows, lapilli tuff and agglomerate. Clasts up to 0.1 m were observed, consisting of 1 to 2 mm feldspar and hornblende phenocrysts set in a dark green aphanitic matrix. These clasts are set in a fine-grained groundmass of broken feldspar and hornblende crystals less than 1 mm in size. Irregular patches of epidote-chlorite and minor pyrite are common

"Purple volcanics" Unit 3b

Purple to red-brown weathering lapilli tuff and agglomerate appear to be in part gradational to the underlying "green volcanics". Lapilli fragments display 2-3 mm feldspar phenocrysts and are set in a reddish-purple aphanitic matrix. Several float boulders display the presence of pink syenitic intrusive clasts.

"Monzonite" Unit 5

This unit was only found in the northwestern corner of the area shown in Figure 3 and consists of highly fractured fine- to medium-grained, pale green-brown weathering, hornblende monzonite with

20% green to pink K-feldspar and 10% chloritized hornblende set in a dark, K-spar rich matrix. Accessory minerals include magnetite, pyrite and sometimes chalcopyrite disseminations. Local zones of intrusive breccia are present near the intrusive contacts.

"Pyritic felsite" Unit 7

Only one rubbly outcrop of this unit was encountered. It consists of rusty weathering, pyritic, cream-coloured felsite. Fine-grained disseminated pyrite averages one-half percent and chloritic clasts are common. Occasional white, drusy quartz veinlets are present here and there. This unit probably represents a synvolcanic intrusive dyke of intermediate composition.

"Porphyritic quartz monzonite" Unit 10

This unit occurs as narrow, northwesterly trending dykes up to 6 m wide. Pink weathering results in highly visible quartz eyes which stand out in relief. Minerals present consist of 15 to 20% quartz, 7 to 8 mm across, 15-20% K-feldspar up to 6 mm in size and, 5% hornblende set in a fine-grained matrix. These dykes probably belong to the Cretaceous Coast Range intrusive event; they are younger than all the above units.

Altered Zones

Several zones of pyritic alteration were identified and are shown in Figure 3. Characterized by strong limonite staining, fresh rock contains 5-10% fine-grained pyrite. Where more intensely altered, pyritization is accompanied by silicification and sericitization of the rock. Some of the "limonite" is composed of jarosite and the strongest intensity of alteration appears to be localized along small shear zones.

Mineralization

Minor chalcopyrite is present at one locality within a pyritic zone. More interesting quantities of disseminated and fracture-fill chalcopyrite occur in the monzonite (although this is not reflected by rock geochemistry from selective sample 10). The latter mode of copper mineralization is considered to be of significance.

GEOCHEMISTRY

Fifteen rock chip and two soil samples were collected. Rock samples were taken from varying lithologies at sites over an area measuring one to three metres; soil samples were collected from a rusty talus zone and represent mainly C horizon.

Analytical work was performed by Acme Analytical Laboratories Ltd. of Vancouver, using a hot aqua-regia extraction and 30 element ICP-Geochemical Analysis. Results are listed in Appendix A together with type of bedrock sampled. Anomalous samples are indicated in Figure 3.

The two weakly copper-anomalous rock samples shown on Figure 3 reflect weak copper mineralization in pyritized andesitic rock. One of these samples also contains weakly anomalous silver. The two soil samples collected from a rusty talus zone are weakly anomalous in copper and arsenic and reflect disseminated chalcopyrite mineralization in the nearby monzonite. One sample contains weakly anomalous silver. No anomalous gold samples are present.



S.G. Enns

ICP GEOCHEMICAL ANALYSIS

A .500 GRAM SAMPLE IS DIGESTED WITH 3 ML OF 3:1:3 HCL TO HNO3 TO H2O AT 90 DEG.C. FOR 1 HOUR. THE SAMPLE IS DILUTED TO 10 MLS WITH WATER.
 THIS LEACH IS PARTIAL FOR: Ca, P, Mg, Al, Ti, La, Na, K, W, Ba, Sr, Cr AND B. Au DETECTION 3 ppm.
 SAMPLE TYPE - ROCK & SILT

DATE RECEIVED AUG 9 1982 DATE REPORTS MAILED Aug 20/82 ASSAYER D. Lynn DEAN TOYE, CERTIFIED B.C. ASSAYER

KIDD CREEK PROJECT # 283 FILE # B2-0786

PAGE # 1

SAMPLE #	ELEMENTS																												W	Map Unit	
	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na			K
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
SE283-82-1	1	3	8	22	.1	2	1	135	.92	7	0	ND	24	3	1	2	2	4	.02	.01	22	9	.22	27	.01	2	.44	.05	.08	2	10
SE283-82-2	1	2	7	94	.1	5	11	815	2.88	10	2	ND	3	51	1	2	2	53	.85	.14	11	12	1.71	52	.14	4	1.69	.03	.05	2	3a
SE283-82-3	1	57	74	94	.1	5	10	826	3.01	7	2	ND	3	58	1	2	2	57	1.30	.14	9	11	2.03	76	.14	3	2.02	.03	.08	2	3a
SE283-82-4	1	2	9	116	.1	2	9	526	3.32	4	2	ND	2	63	1	2	2	74	.91	.14	13	7	1.67	67	.15	2	1.51	.04	.15	2	3b
SE283-82-5	1	2	6	108	.1	3	8	593	2.56	6	2	ND	2	54	1	2	2	45	.66	.13	16	8	1.19	90	.09	3	1.22	.03	.14	2	3b
SE283-82-6	1	4	14	41	.2	1	2	224	1.05	12	2	ND	2	15	1	2	2	3	.10	.03	18	7	.44	332	.01	2	.67	.03	.21	2	7
SE283-82-7	1	302	23	77	1.1	4	12	1060	5.37	19	2	ND	2	17	1	2	2	145	.45	.14	4	10	2.05	87	.16	3	2.13	.05	.13	2	3a
SE283-82-8	1	11	3	72	.1	3	7	600	1.79	9	4	ND	2	4	1	2	2	53	.17	.07	3	10	1.17	34	.03	2	.88	.03	.03	2	3a
SE283-82-9	1	27	16	95	.2	5	15	1254	4.65	10	2	ND	2	19	1	2	2	143	1.17	.13	4	10	2.42	44	.01	5	2.09	.03	.17	2	3a
SE283-82-10	1	8	8	33	.8	2	5	330	3.43	36	2	ND	2	10	1	2	2	68	.11	.07	2	11	1.04	121	.01	6	.93	.02	.19	2	5
SE283-82-11	5	179	36	129	.5	7	31	1180	8.06	106	2	ND	2	137	1	2	3	68	.21	.21	14	10	.94	347	.01	2	1.71	.03	.19	2	
SE283-82-12	5	171	61	125	1.3	6	18	863	8.10	90	2	ND	2	312	1	2	4	71	.19	.22	10	12	.86	437	.01	2	1.56	.05	.21	2	
SE283-82-13	1	47	50	117	.8	3	6	780	2.86	10	2	ND	2	32	1	2	2	47	.62	.13	3	9	1.20	94	.16	5	1.61	.02	.19	2	3a
SE283-82-14	1	81	34	67	1.4	4	12	324	4.21	5	2	ND	2	13	3	2	2	34	.27	.11	2	6	.81	55	.09	8	1.11	.04	.28	2	3a
SE283-82-15	2	7	25	2	.7	2	2	26	.81	7	2	ND	2	6	1	2	2	3	.02	.02	2	8	.02	42	.01	5	.20	.01	.15	2	3a
SE283-82-16	1	118	25	157	.2	3	11	1069	4.66	13	2	ND	2	28	1	2	3	60	.39	.11	2	9	2.05	55	.15	4	2.22	.01	.22	2	3a
SE283-82-17	1	46	19	45	.4	2	9	148	4.48	5	2	ND	2	15	1	2	2	34	.39	.15	4	7	.49	27	.11	4	.75	.03	.26	2	3a
STD A-1	1	31	40	176	.4	34	12	940	2.74	10	2	ND	2	40	1	2	2	56	.61	.10	7	75	.76	296	.08	7	1.67	.02	.21	2	1

* Note: Samples 11 and 12 are soils, all others are rock chips.

APPENDIX B

STATEMENT OF EXPENDITURES

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STATEMENT OF EXPENDITURES

CHECK CLAIM (8 units)

SUMMARY OF WORK:

Geologic mapping and geochemical sampling

PERIOD OF WORK:

July 31 - August 3, 1982

KIDD CREEK MINES LTD. PERSONNEL:

S.G. Enns - geologist			
Period: July 31-August 3, 1982	4 days @ \$195	780.00	
K. Norris - geological assistant			
Period: July 31-August 3, 1982	4 days @ \$ 55	220.00	
		<u>1,000.00</u>	1,000.00

ROOM AND BOARD:

Period: July 31-August 3, 1982	8 man-days		305.10
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TRANSPORTATION:

Budget Rent-a-Truck (pro-rated invoice #30061)	304.60	
Fuel	138.67	
	<u>443.27</u>	443.27

GEOCHEMICAL ANALYSIS:

17 rock chip samples for 30 element ICP @ \$8/sample		136.00
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DRAFTING AND REPORT PREPARATION		<u>250.00</u>
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\$3,596.37

Filed for assessment on CHECK CLAIM (8 units) \$3,200.00

Credit on claim (300.00)

APPENDIX C

STATEMENT OF QUALIFICATIONS

APPENDIX C

STATEMENT OF QUALIFICATIONS

NAME: S.G. Enns

ADDRESS:

701 - 1281 W. Georgia, Vancouver, B.C. V6E 3J7

EDUCATION:

4 years B.Sc. - Honours Geology 1967
University of Manitoba

M.Sc. - Economic Geology 1971
University of Manitoba

EXPERIENCE:

Geol. Assist. Manitoba Mines Branch - 1964 (field season)
Geol. Assist. Sherritt Gordon Mines - 1965 (field season)
Geol. Assist. Amax Exploration Inc. - 1966-70 (field season)
Geologist Cerro Mining of Canada- 1971
Geologist Hudson's Bay Oil & Gas- 1972
Geologist BP Minerals of Canada - 1973-75
Geologist BP Alaska Exploration - 1975-79
Geologist Amax of Canada - 1979-81
Geologist Kidd Creek Mines Ltd. - 1982 - present

NAME: K. Norris

ADDRESS:

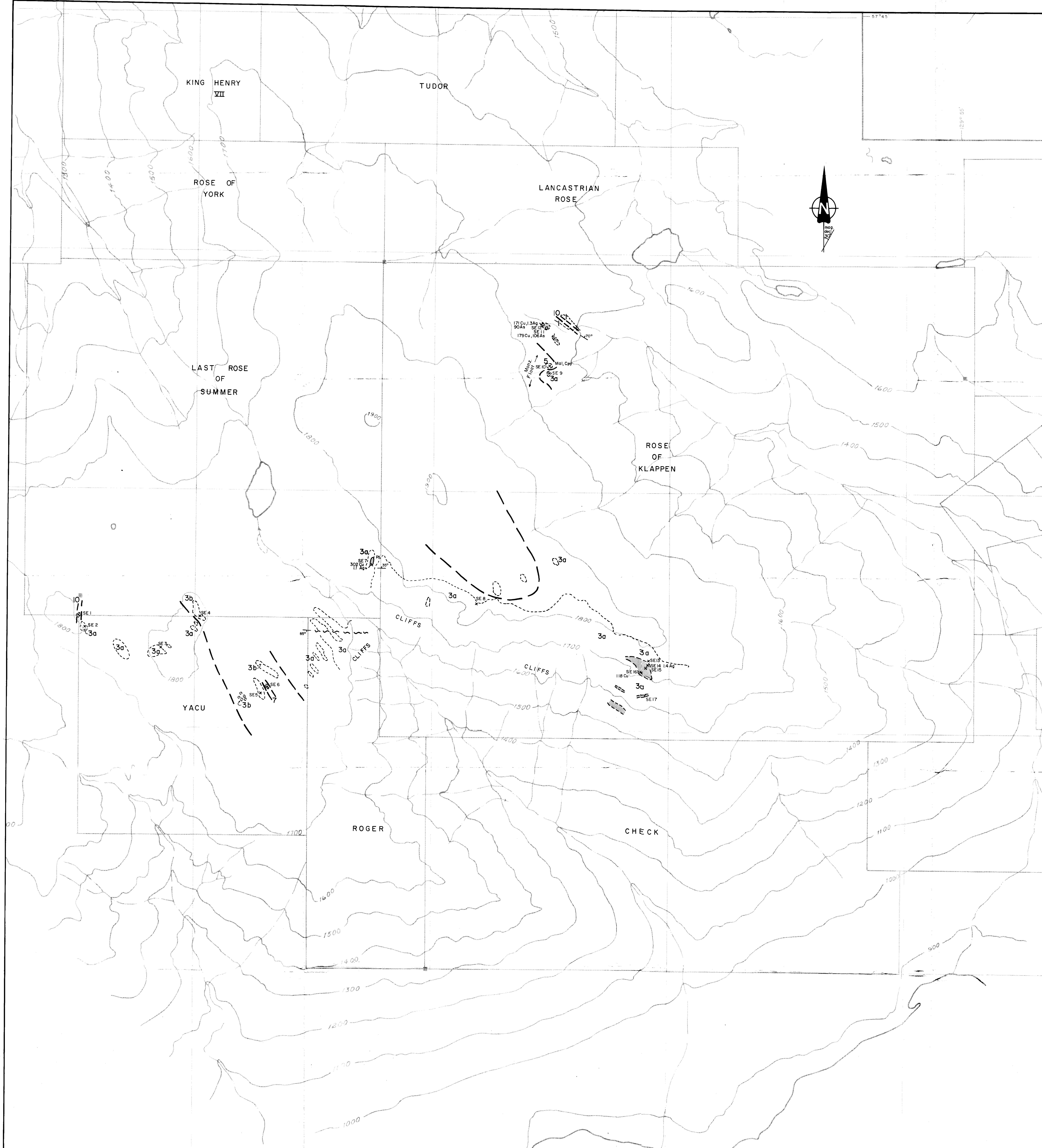
19819 - 116A Avenue, Pitt Meadows, B.C. V0M 1P0

EDUCATION:

1st Year Science, University of B.C.

EXPERIENCE:

Student Assist. on Exploration project - 1982
Labourer with Maple Ridge School District - 1981
(This was Ken's first field season in exploration)



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— LEGEND —

- Tertiary ?
- 10 Porphyritic Quartz Monzonite
- Upper Triassic (in part Jurassic ?)
- 7 Pyritic Felsite
- 5 Monzonite and Syenite
- 3b Red and Purple Agglomerate, Tuffs and Flows
- 3a Green Agglomerate, Lapilli Tuff and Crystal Flows
- 1 Black Siltstone
- x Rock Sample (anomalous metal indicated ppm)
- o Soil Sample
- Copy Mal Chalcopyrite, Malachite
- Pyritic-Limonitic Stain Zone
- Fault
- Lithologic Contact
- Outcropping Bedrock

Kidd Creek Mines Ltd.

**ROSE-81 GROUP
Geology and
Geochemical Sampling**

NTS 104G,H		Proj. 283
WORK BY	DRAWN BY	DATE: OCTOBER 1982
SE	GT	

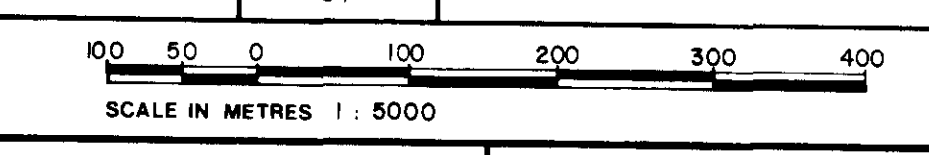


Figure: 3