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M. 82 F SE	
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FILE NO:	

ASSESSMENT REPORT

ZINC #5

Gordon Johnstone
 1202 2015, 2 st., N
 Cranbrook, B.C.
 ph. 426-2805

Fort Steel Min. Div.

82 F / 8 E

49° 22' 30" N
 116° 10' W

by

N. GASS
 GASS AND ASSOCIATES LTD.,
 2604 Exshaw Rd. N.W.,
 Calgary Alberta. T2M4E5
 ph. 282 - 6179.
 January, 1991.

GEOLOGICAL BRANCH
 ASSESSMENT REPORT

20,936

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 GOVERNMENT AGENT

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INTRODUCTION

During the 1989 field season reconnaissance prospecting was carried out based on the concept that Sullivan type base metal deposits would be located along E-W basement rifts. It was projected that the location of these rifts would be reflected in the overlying sediments through subsequent movement and compaction. Several such "E-W shadow lineations" were located. The Kamma Creek trend was an obvious possibility. Prospecting along this general trend located a carbonitite type intrusive dyke carrying lead, zinc, and tungsten which was staked as the Zinc and Eagle claims.

During the summer of 1990 the carbonitite and immediate environs were prospected and mapped and two diamond drill holes were drilled.

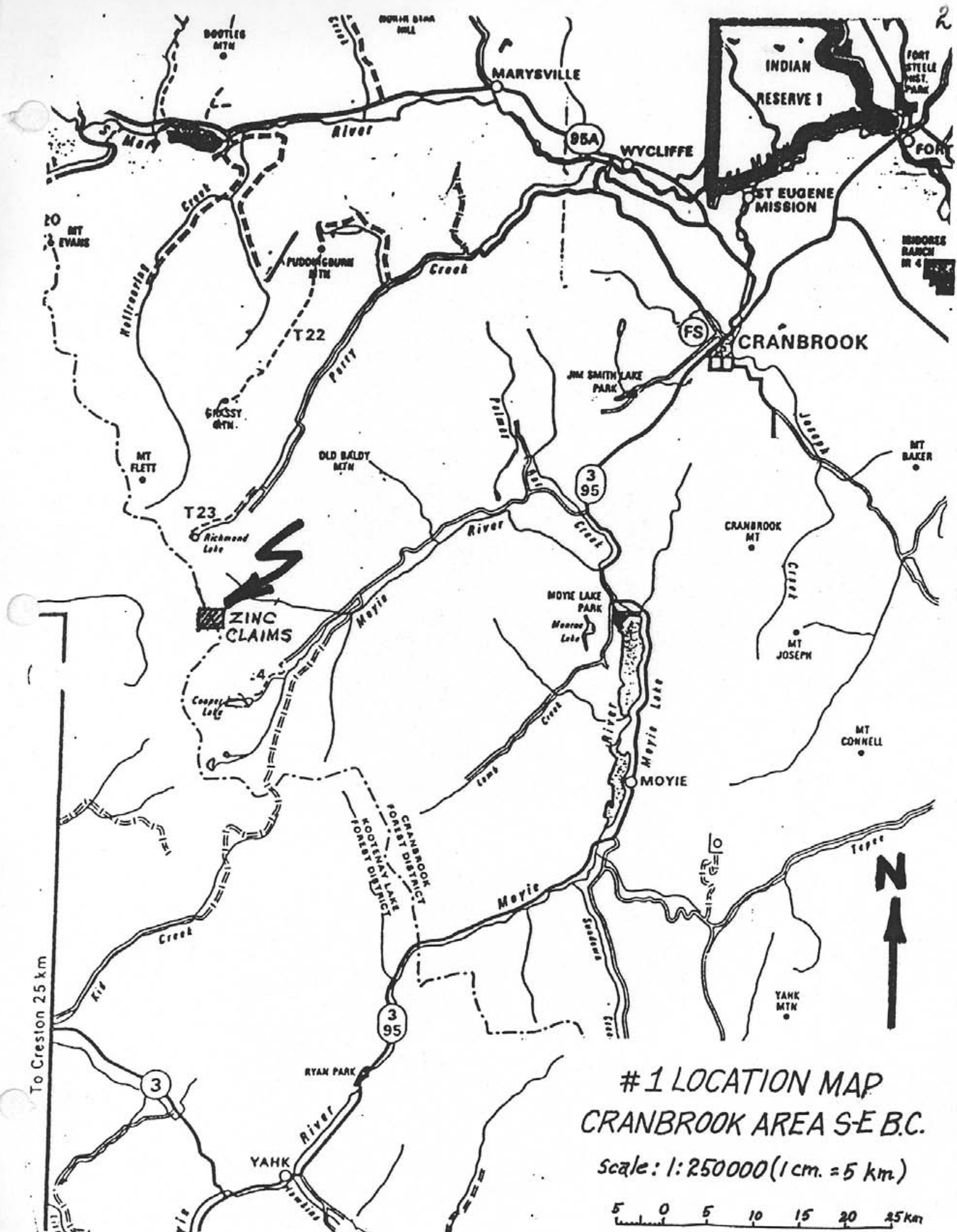
LOCATION AND ACCESS

The zinc claims are located on NTS map 82F/8 latitude 49° 22' 30" North longitude 116° 10'W approx. 2 1/2 km south of Richmond lake, south of the headwaters of North Moyie Creek. See #1 location map and #2 claims map.

The block consists of 5 Zinc claims and the 8 Eagle claims. It can be reached by travelling 12km south of Cranbrook on B.C. 3/95 to Lumberton. Turn west at Lumberton and travel west and south along the Moyie River for 20km to the North Moyie Cr. bridge on an all weather logging road. From this junction travel west for 5km along the North Moyie Cr. summer logging road. From there a steep 4 wheel drive road travels south and west for two kilometres. The main prospect is the carbonitite outcrop at 6500'.

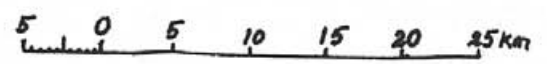
HISTORY

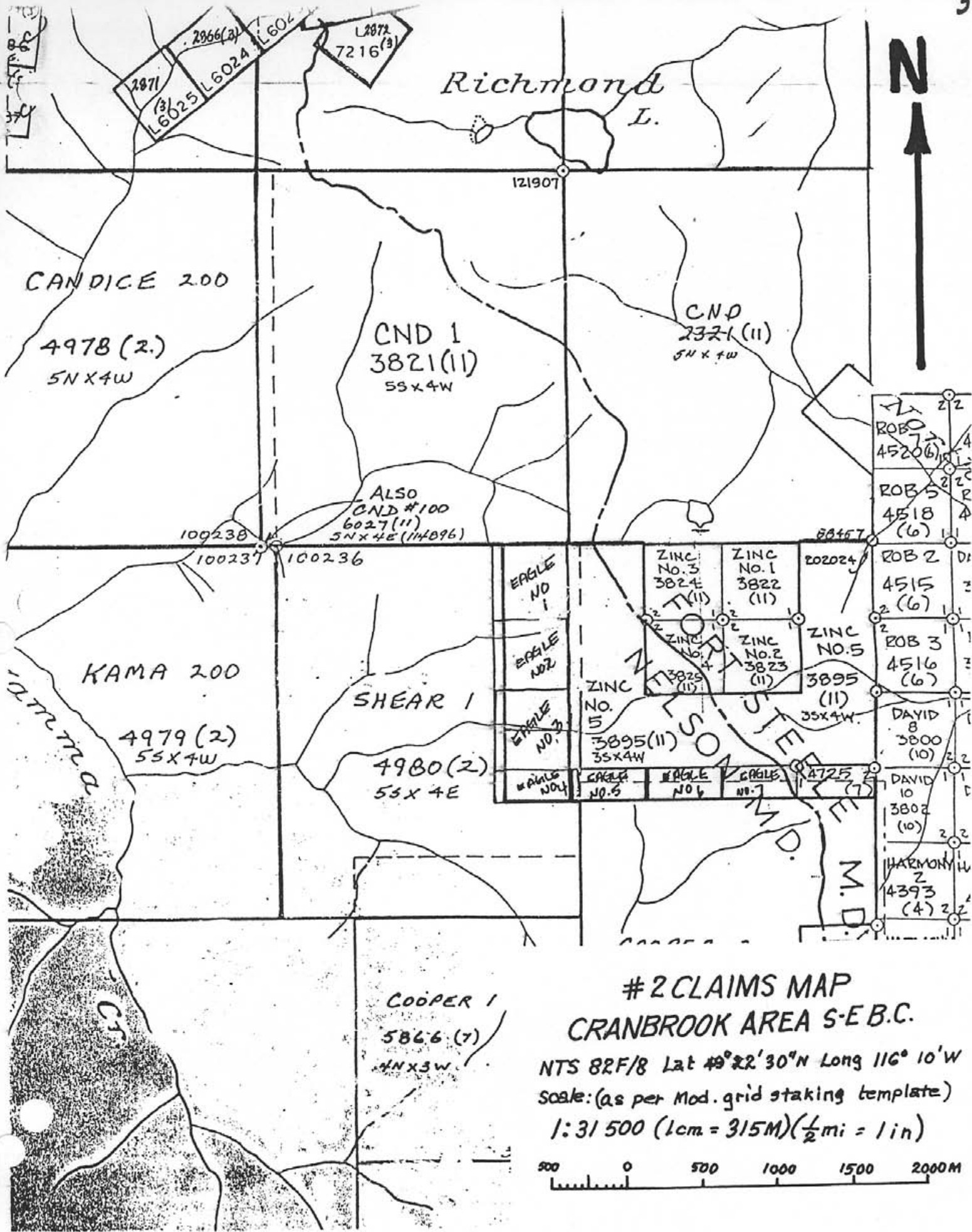
The carbonitite occurrence on the Zinc claims appears to have been first explored by a syndicate of miners from Kimberly. A diamond drill hole was drilled at about 45° inclination, along strike to the north and to a depth of about 60ft. The best reported assays from this effort were 1.4oz/t Ag, 4.58% Pb, 1.09% Zn, .34% WO₃. No subsequent reference to the occurrence have been uncovered.



#1 LOCATION MAP
CRANBROOK AREA S-E B.C.

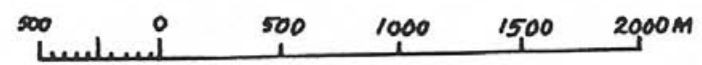
Scale: 1:250000 (1 cm. = 5 km.)





**#2 CLAIMS MAP
CRANBROOK AREA S-E B.C.**

NTS 82F/8 Lat 49°22'30"N Long 116° 10'W
 Scale: (as per Mod. grid staking template)
 1:31 500 (1cm = 315M) (1/2 mi = 1 in)



REGIONAL GEOLOGY

The regional geological setting is presented on map #3 Regional Geology Cranbrook B.C. This is a composite map compiled from provincial, federal, and corporate maps of the area and presented on a 1in.= 4mi. format to fit easily within the text of the report. The map shows the location of the zinc claims in relation to the main rock units and major faults. In addition, the E-W shadow traces of hypothesized basement rifts are superimposed. The Zinc and Eagle claims are athwart the Kamma Cr. trend which is the same trend shown as the southern limit of the Crowsnest Deflection on the Lewis Thrust illustrated in Fig.1 p.6.

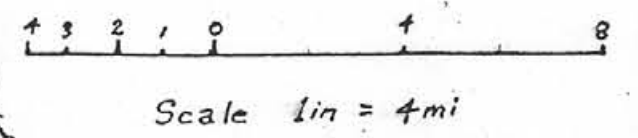
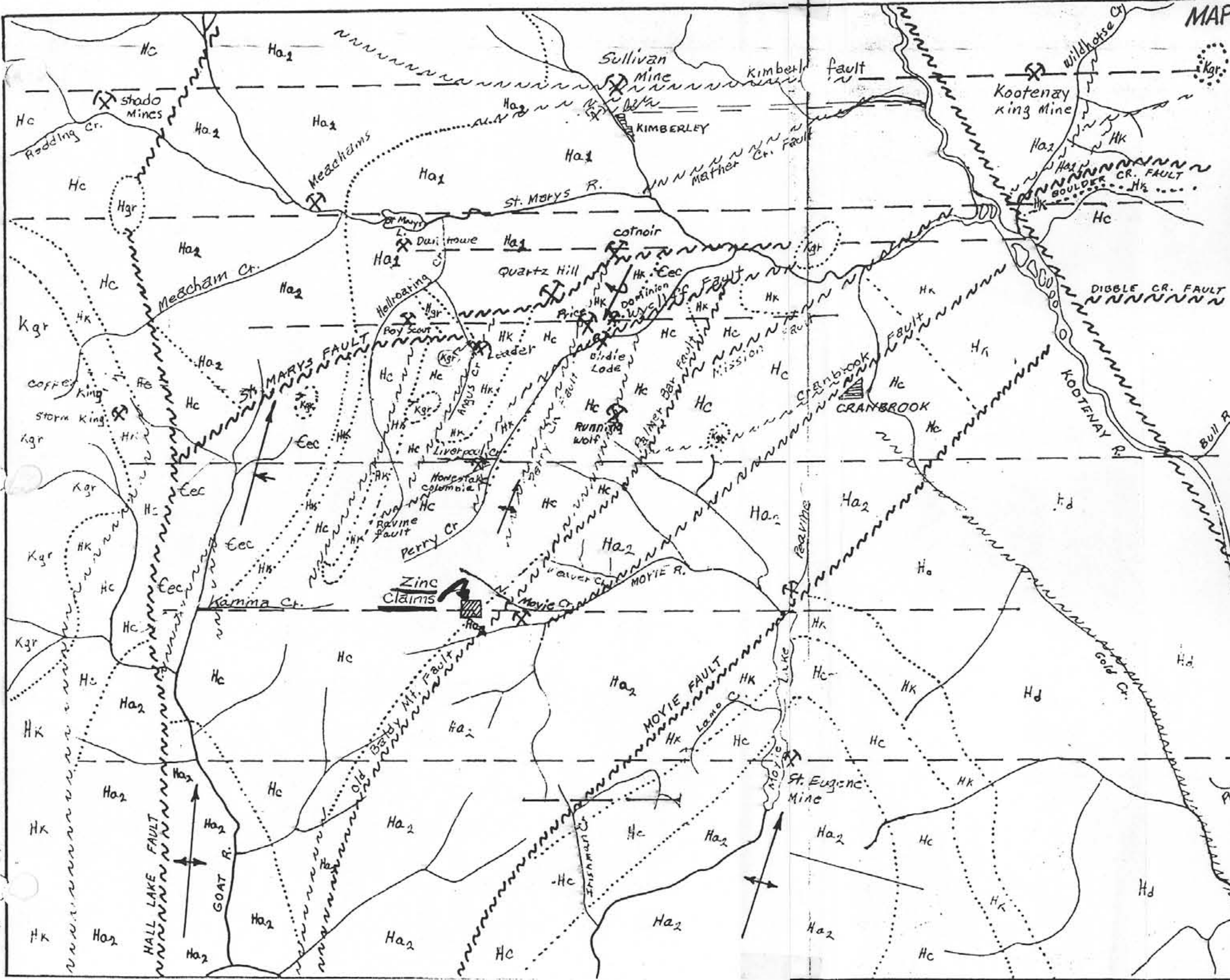
The claims are located with respect to the local physiography on map #4 North Moyie topographic map. Map #5 North Moyie geomagnetic map shows the local high just south-east of the claims which is being interpreted as a subsurface granitic intrusive and probably the source of the carbonitite dyke and quartz veins.

Map #6 Zinc Group Revised (pocket) locates the hypothetical crosssection A-A' fig.2 (pocket) and map #7 the detailed geological Interim Map of the carbonitite occurrence.

MAP#3 REGIONAL GEOLOGY CRANBROOK AREA B.C.

LEGEND

- Kgr CRETACEOUS granite
- Eec CAMBRIAN Eiger and Cranbrook Formations
- HELIKIAN Purcell Super Group**
- Hgr Purcell or Moyie intrusive granite or pegmatite
- Hk Kitchener & Dutch Cr. Hd
- Hc Creston
- Ha2 Aldridge middle & upper
- Ha1 Aldridge lower
- Anticline
- Monocline
- Anticline overturned
- Formation boundary
- Major fault
- Minor fault
- E-W shadow trace
- mineral occurrence or mine



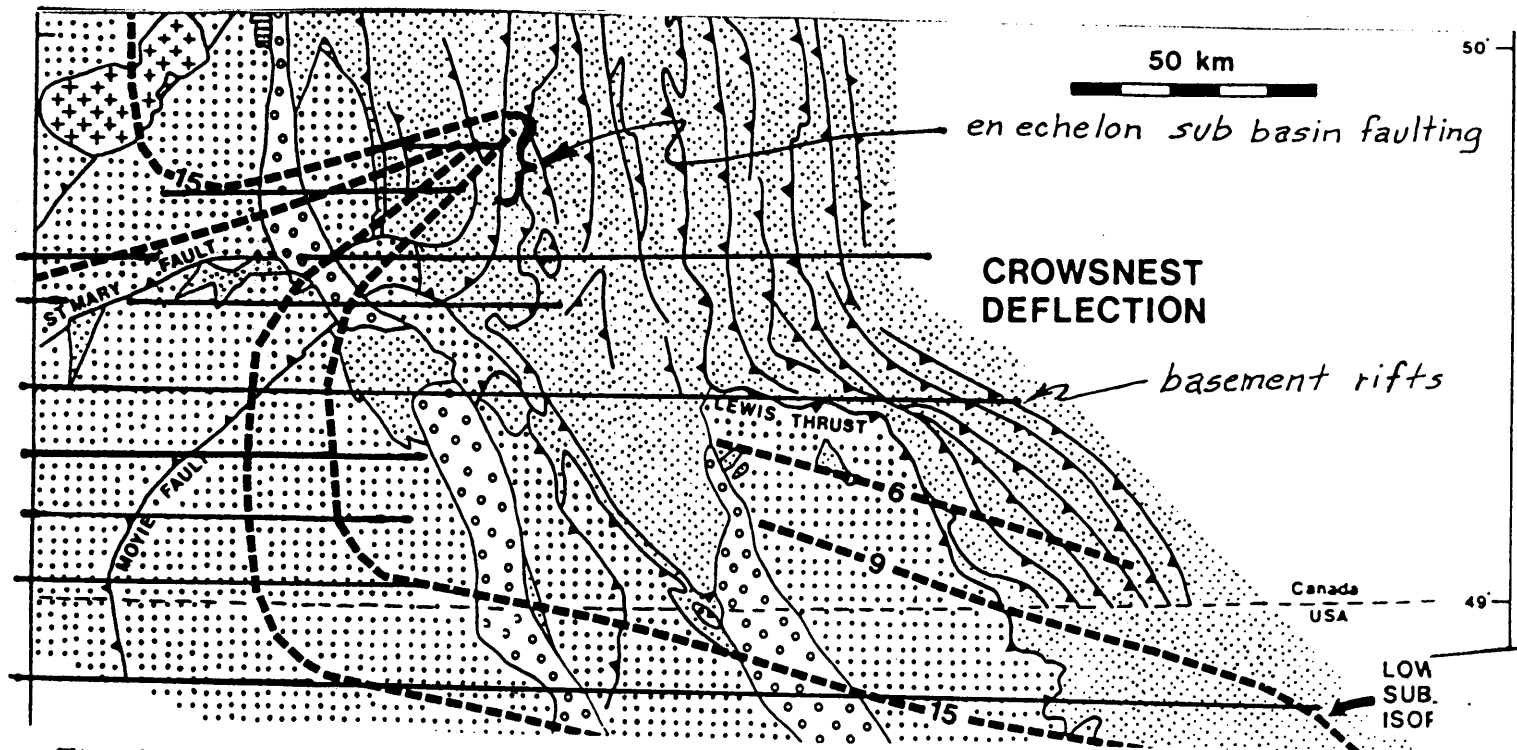
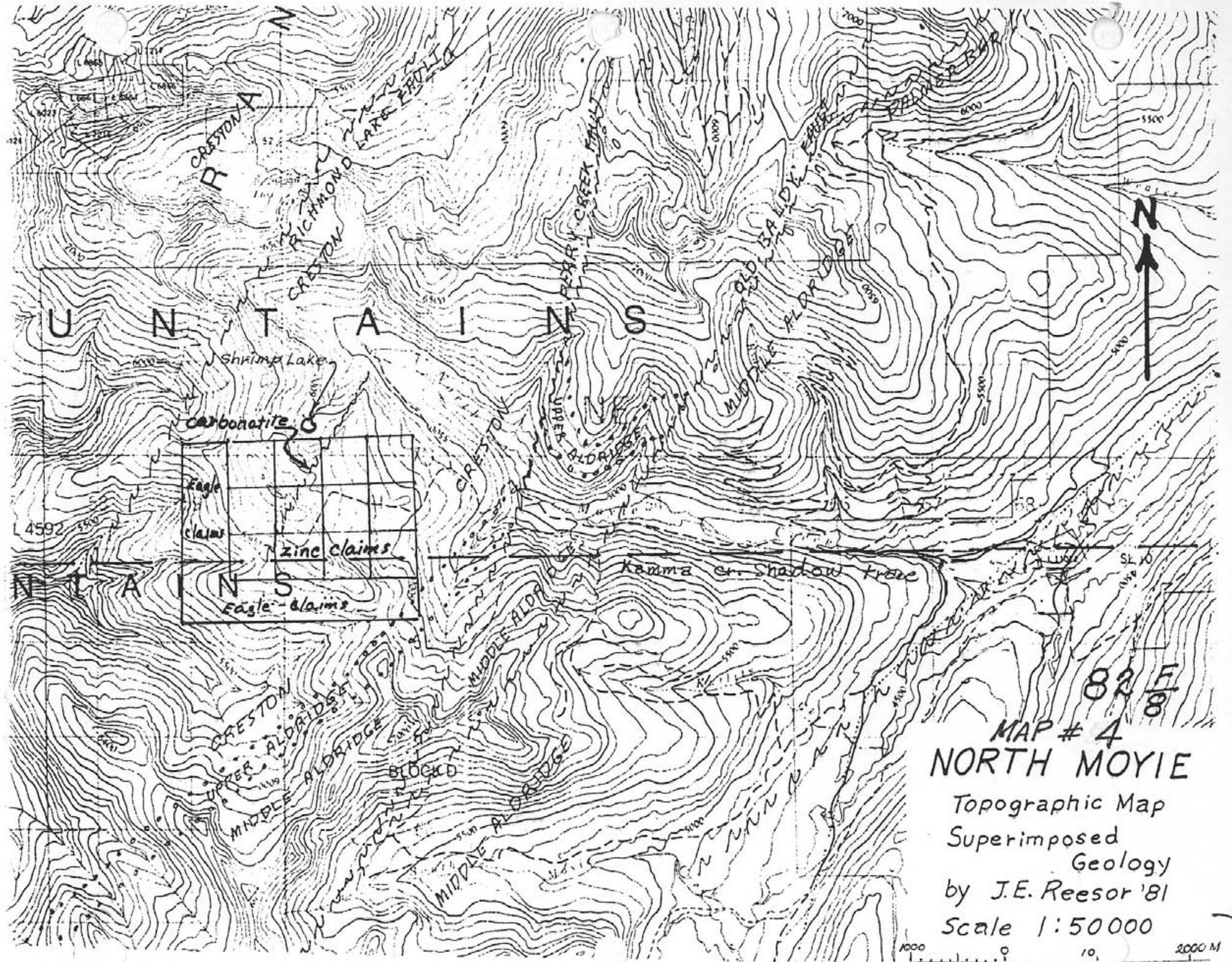


Fig. 1 Hypothesized basement rifts and en echelon sub basin faulting superimposed on lower subunit isopachs.



82 $\frac{E}{8}$
 MAP # 4
 NORTH MOYIE
 Topographic Map
 Superimposed
 Geology
 by J.E. Reesor '81
 Scale 1:50000



MAP #5
NORTH MOYIE
Geomagnetic Map
Scale 1:63360
1 in. = 1 mi

1990 FIELD SEASON

Geological Mapping

Approximately eleven hectares were mapped on a scale of 1:500 just south west of Shrimp Lake at the end of the road on Zinc #3 (map 7). A small anticline plunging at 28°-32° N is present on the west side. An apparent monocline open to the west is present on the east side. This is assumed to imply a syncline through the meadow. A minor fault is implied running SE-NW through the centre of the map area. Some support for this minor structure is evidenced by a lination apparent on air photos. The large ten foot thick quartz vein exposed on Nancy's creek projects over the ridge to the south to line up with the "dog's leg" on Jean's creek on the west side of the claims (Map #6). This coincidence is taken to represent a major feature. The silicified Creston on the west side of the map area appears to form a dome capped by the large quartz vein since eroded.

The main prospect is a medium crystalline, buff coloured, rusty weathering, dolomite dyke at the end of the road. The dyke strikes between 0° and 015° dipping approximately 70°E. It appears to have been injected along the local foliation but is seen to be present in a variety of attitudes including congruent with the bedding particularly as it lenses out. The dolomite is cut by a series of thin .5cm-2cm quartz veins which strike on the average 35°SW. Appreciable amounts of brownish black sphalerite and minor galena occur along the foliation planes. Scattered tiny crystals of scheelite are evident under black light.

Geophysical Mapping

An attempt was made to define the limits of the carbonitite using a ground magnetometer (Map #8/pocket). Results appeared to show a weak low along the traverse direction of 125° which is roughly perpendicular to the surface strike of 015° for the dyke. Whatever the nature of this apparent low it would not seem to be related to the dyke.

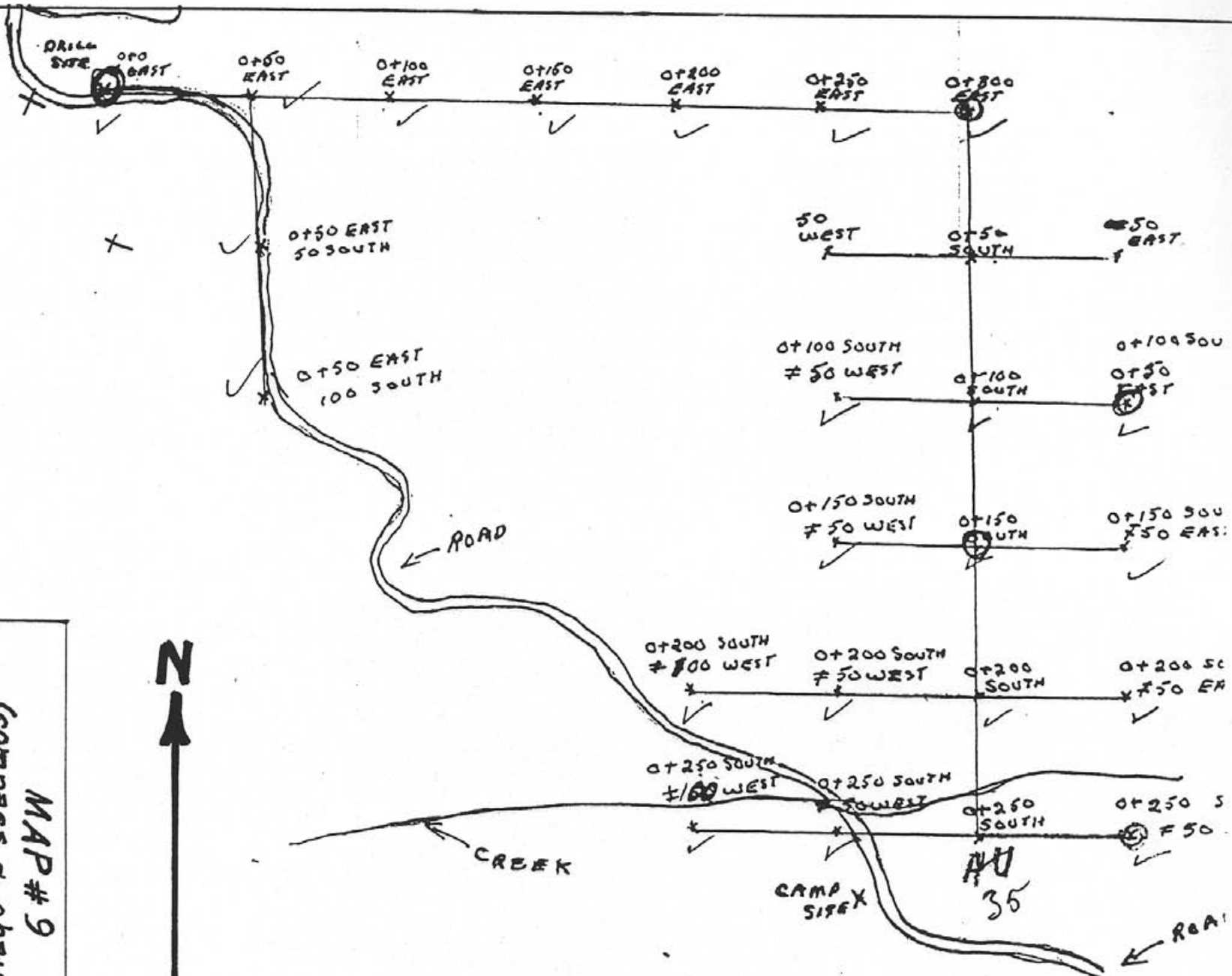
Trenching

Two dynamite trenches 3Mx1Mx1M were blasted into the footwall of the large quartz vein on Nancy's Cr. Assays of samples taken from these trenches showed negligible gold values but did show anomalous cobalt (Appendix B4₂).

A 4Mx2Mx2M trench 50M to the north was blasted in a highly pyritized zone within the silicified Creston. This location was dubbed "The Gold Bar" and proved to carry no gold either, though anomalous cobalt is evident (Appendix B4₂).

Soil Sampling

An incomplete soil sample grid was run east and south of the drill site on zinc #3 (Map #9). 24 samples were taken on a 50M spacing. Only one of these samples showed anomalous gold at 0+250' south. Although it is marginally anomalous at 35ppb it is just 20 to 40M down slope from a NE-SW fault. Another sample 00 shows Ca and P which is interpreted as aplite probably related to an acid intrusive by way of carbonitite. 15-20ppm Cu, Ph, Zn is considered anomalous for the area. By this measure 23 of the 24 samples evidence anomalous values.



MAP # 9
 (compass & chain)
 SOIL SAMPLE GRID
 ZINC # 9

N. GASS 1990

Scale: 1cm. = 20m



Drilling

Two diamond drill holes were drilled across the strike of the carbonitite dyke. Zinc #1 was drilled on a bearing of 090° inclined at 57° to a depth of 75'. Core recovery was less than 50% but cuttings were collected every 5'. Some dolomite was intersected between 18 and 25' but the main amounts (8-12%) of pyrite was not encountered until 55'. Assays indicate some gold, lead, and zinc from 15' to the bottom of the hole (see appendix B2). A very anomalous pb 823 ppm and au 1020 ppb occur at about the 30' mark. As described in the notes below this appears to be a definite contact. The drill log indicates a quartz vein. The main dolomite dyke contact is at 55'. Again, gold is very anomalous at 1 000ppb and 5656ppm phosphorous suggests aplite indicative of plutonic or metamorphic origin. Gold is consistently anomalous at from 160ppm to 525ppb to the bottom of the hole at 75'.

Zinc #2 was drilled on a bearing of 270° inclined at 52° to a depth of 30'. Core recovery was again less than 50%. This hole appears to have cut but not penetrated the carbonitite dyke exposed on the surface. Some lead and zinc is described throughout but for some reason was not included in the assay. A small (270ppb) of gold and 49ppm cadmium appears at a depth of 15'. Molybdenum is anomalous at 1490ppm to 3470ppm for the whole 30'.

Notes On Assaying

(1) In zinc #1 (appendix B2) it appears that values for Mn, Ca, Zn, and Au may more accurately define the dyke proper at about 30' than do values for Magnesium Sr seems to be somewhere in between. This is not inconsistent with theories of dolomitization as a later process of a more mobile ion often referred to in descriptions of the dolomites on the plains. This suggests that the original carbonitite dyke intrusion may have been calcium carbonitite dolomitized later as well as some of argillite and siltite of the Creston country rock.

(2) In zinc #1 the top 55' were assayed by Acme Analytical using a multi acid leach and show consistently anomalous values for Zn and several for Pb in the carbonitite dyke interval. Assays by Eco Tech for the remaining 20' show no such anomalous values. This is assumed to underscore again the absolute necessity of using multi acid leach for base metals in carbonate environments.

(3) Assays by Chemex for zinc #2 show an appreciable molybdenum anomaly where it is scarcely a trace element in zinc #1. This could indicate a completely different timing or origin of the dyke exposed on surface or could be some unidentified factor of analysis.

PROPOSED PROGRAM

1. Carbonitite

a) the existing 75' diamond drill hole will be deepened to the maximum depth of the XR drill capability or until it penetrates the base of the dyke.

b) A diamond drill hole will be drilled in a westerly direction from the east of the quartz vein on the east side of the hogback. This hole again to be drilled to the maximum XR capability or through the footwall of the dyke.

c) A third hole to be located just west of the projected synclinal axis in the meadow and drilled in a southwesterly direction to intersect the dyke at an elevation approximately 50-100m below (b).

d) Considerable detailed prospecting is required to delimit the extent of the occurrence as broadly distributed float has been found north of the escarpment.

2. The E-W Kamma Creek Shadow Lination

a) Projection of the large quartz vein on the north margin of the property in Nancy creek correlates with the deflection of the east branch of Kamma creek 2km to the S.W. This deflection occurs at the intersection of the E-W shadow lination.

(i) Very detailed prospecting including bulk sampling needs to be done at this location.

(ii) Detailed prospecting of the projected intersection of this vein and the Richmond Lake III fault and the ground between these two intersections is required.

b) The entire length of the shadow lination across the property must be subjected to detailed prospecting since to date there is no way of predicting where along the E-W trend the "smoker" might have occurred. Particular attention needs to be paid to the intersection with the anticlinal axis.

(i) The intersection with the middle and lower Creston contact must be closely prospected.

CONCLUSIONS

The assay results of the first season's prospecting of the zinc claims, although inconclusive, are certainly significant. The best values to date are: 5.4%Pb, 2.4oz./t Ag, .03oz/t Au, 1.1%Zn, .34%Wo, 826ppm Co, and 3470ppm Mo. This suite of minerals demands further investigation.

It must be borne in mind that the erosion appears to have only just exposed the mineralizing carbonitite. Values are relatively reproducible and drilling appears to indicate a significant increase in sulfide with depth. The geological events presented on the diagrammatic cross section suggest that a variety of other deposit types are probable. Stockwork of small quartz veins in the carbonitite appear to carry gold. Other stockwork connected with the anticline or faulting could provide a practical objective. The margins of the silicification of quartz flood zone may prove to be significant sulfide zones. Large quartz veins emanating from the proposed granitic intrusive may carry both gold and base metals.

The intraformational breccia below the sole fault will carry sulfides but will await deep drilling which will probably be contingent on proving significant values in the upper plate. One would hope that these upper plate values will obtain from the program proposed for the '91 field season. Ultimately it is projected to attract sufficient funding to effect a seismic program in order to locate the precise position of the proposed basement rift as well as the subsequent associated faulting in the Aldridge sediments which in turn is expected to delineate the mineralized intraformational breccias.

Drilling by Greenstone approximately 3km to the SE on a sheer zone showing very anomalous gold values just east of the magnetic high suggest good potential for gold values on the zinc and eagle claims.

Care must be taken to use multi acid leach in all assays for base metal in the area as the magnesium carbonate does not appear to be confined to the main mass of carbonitite.

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- | | |
|------|------------|
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QUALIFICATIONS

- 14.1 The writer, N. Gass, obtained his B.Sc. in geology from Dalhousie University, Halifax, N.S. in 1955 and his M.Sc. in geology from the same institution in 1957.
- 14.2 Experience
- 1955 Detailed mapping & prospecting American Smelting and Refining Ltd., Newfoundland.
- 1956 Regional mapping and detailed study of Pegmatites of the Winnipeg River, Manitoba Department of Mines.
- 1957-62 Surface and subsurface exploration, mapping, wellsite and special projects in Saskatchewan, Alberta, & British Columbia. Chevron Standard Oil Co. Ltd.
- 1963 Wellsite consultant, Chevron Standard.
- 1964 Developed House Mt. Oil field for Chevron Standard.
- 1971 Uranium and base metal exploration in Saskatchewan for V. Zay Smith and Associates, Calgary.
- 1976 Uranium exploration northern Saskatchewan for Rio Alto Exploration Ltd.
- 1979 Drilling program on fossil placer, Gay's River, N.S., Calgary syndicate.
- 1980 Drilling program Nelson, B.C. for Dekalb Mining.
- 1981 Geological mapping and geophysical survey, La France Creek, B.C., Dekalb Mining.
- 1982 Lithium, tantalium, gemanium prospecting and reconnaissance survey, Winnipeg River, Manitoba, Dekalb Mining.
- 1983-90 Base metals, gold/silver prospecting, Cranbrook, B.C.

Appendix A1

KOKANEE EXPLORATIONS LTD.

Suite 104, 135 - 10th Avenue South
Cranbrook, British Columbia VIC 2N1

Tel. (604) 489-4144
Fax (604) 489-1121

Zinc Property
Drill Hole Log ZINC #1

Drill Hole: Zinc East, 1990
Azimuth: 0
Dip: - 0

Logged by: G. DePaoli
Date: July, 1990

Depths in feet. 1 FT = 30.5 cm

<u>From</u>	<u>To</u>	<u>Description</u>	<u>Sample No.s</u>
0	5	Dolomitic phyllite.	00650
5	10	Dolomitic phyllite.	00651
10	15	Dolomitic phyllite.	00652
15	18	Light brown drill cuttings.	00653
18	20	Phyllitic dolomite with scattered calcite dolspar veinlets.	00654
20	25	Dolomitic sericite schist.	00655
25	30	Mainly white quartz, minor dolspar veins host weakly disseminated galena - pyrite. Rare chalcopyrite.	00656
30	35	Quartz with minor phyllite, finely disseminated pyrite throughout.	00657
35	40	Silicified phyllite, finely disseminated pyrite.	00658/00659
40	45	Phyllitic argillite, slightly dolomitic, minor pyrite.	00660
45	50	Pyritic quartz with rare galena.	00661/00662
50	55	Calcareous quartz with disseminated pyrite.	00663/00664

Appendix A1

- 2 -

Zinc Property
Drill Hole Log ZINC #1

Drill Hole: Zinc East, 1990
 Azimuth: 270°
 Dip: -33°

Logged by: G. DePaoli
 Date: July, 1990

Depths in feet.

<u>From</u>	<u>To</u>	<u>Description</u>	<u>Sample No.s</u>
55	60	Light grey dolomitic-siliceous carbonatite with 12% pyrite in fine grained disseminations.	00680/00684
60	65	Light grey dolomitic-siliceous carbonatite as above with 8% pyrite, minor Pb, Zn.	00681/00685
65	70	As 55 - 60, 12% pyrite.	00682/00686
70	75	As 50 - 60, 15% pyrite in fine grained disseminations.	00683/00687

Appendix A2

Zinc Property
Drill Hole Log *ZINC #2*

Drill Hole: Zinc West, 1990
 Azimuth: 0
 Dip: - 0 --

Logged by: G. DePaoli
 Date: July, 1990

Depths in feet.

<u>From</u>	<u>To</u>	<u>Description</u>	<u>Sample No.s</u>
0	5	Carbonatite, light brown-grey. Some thin (5mm) light pink syenite dikelets. 2% Pb, 1% Zn.	00665
5	10	Carbonatite, light brown. Partly dolomitized. Minor Pb, Zn.	00666/00671
10	15	As above, 1% Zn, 1% Pb, radio-active halos?	00667/00672
15	20	As above, minor pyrite, minor Pb, Zn.	00668/00673
20	25	As above, banded dolomitized(?) fabric @45°	00669/00674
25	30	As above, minor Pb and Zn, highly dolomitized.	00670/00675

Glen DePaoli

KOKANEE EXPLORATIONS LTD.

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Statement of Qualifications

1. I, Glen Robert DePaoli, hold a Bachelor of Science in Geology from the University of Calgary, 1988.
2. I, Glen Robert DePaoli, have been employed as a geologist by Kokanee Explorations Ltd. since March, 1989.

Glen R. DePaoli

GLEN R. DePAOLI

GEOCHEMICAL ANALYSIS CERTIFICATE

Kokanee Explorations Ltd. File # 90-5262

104 - 135 - 10th Ave S., Cranbrook BC V1C 2N1

T 11:11

Appendix B1

Appendix B1

SAMPLES	Mo	Cu	Pb	Zn	Ag	Ml	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	M	AL
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppb
ZINC 50 WEST	1	3	10	24		6	4	144	1.34	2	5	ND	3	1	2	3	2	11	.04	0.18	25	17	1.68	17	0.13	2	2.02	.01	.02		3
ZINC 0+50 SOUTH	1	4	13	20		5	4	91	1.69	2	5	ND	1	4	2	2	2	15	.01	0.26	31	14	1.03	34	0.02	2	1.84	.01	.04		3
ZINC 0+100 SOUTH	1	2	2	10		1	2	20	.91	2	5	ND	4	3	2	2	2	9	.01	0.15	32	7	.40	24	0.01	3	1.15	.01	.02		2
ZINC 0+150 SOUTH	1	18	10	6		6	3	52	1.32	3	5	ND	2	12	2	2	2	30	.08	0.40	4	5	.11	10	0.15	2	4.42	.04	.02		3
ZINC 0+200 SOUTH	1	6	15	20		7	5	86	1.19	3	5	ND	1	5	2	2	2	17	.02	0.55	18	14	.56	49	0.04	2	2.62	.01	.05		2
ZINC 0+250 SOUTH	1	4	5	28		9	14	130	1.72	2	7	ND	1	6	2	3	4	13	.03	0.64	23	10	.54	65	0.01	3	2.28	.01	.05		35
ZINC 0+100 SOUTH/0+50 EAST	1	17	25	37		15	11	138	3.12	6	5	ND	4	6	2	3	2	37	.02	0.43	16	18	.49	53	0.09	3	4.04	.01	.07		2
ZINC 0+150 SOUTH/50 EAST	1	2	2	21		5	3	58	1.49	2	5	ND	3	1	2	2	2	11	.01	0.25	34	7	.27	19	0.03	2	1.20	.01	.03		3
ZINC 0+200 SOUTH/50 EAST	1	6	15	26		5	3	94	2.26	4	5	ND	3	2	2	2	22	.01	0.43	20	9	.22	24	0.06	3	2.15	.01	.03		1	
ZINC 0+250 SOUTH/50 EAST	1	10	15	26		5	8	299	2.07	2	5	ND	1	5	2	2	20	.03	0.52	19	11	.40	56	0.06	3	2.33	.01	.05		3	
ZINC 0+0 EAST	1	33	31	76		8	23	2905	4.89	16	14	ND	104	80	2	5	2	10	5.14	2.57	10	12	.75	40	0.01	2	1.58	.01	.12		1
ZINC 0+50 EAST	1	4	16	26		10	12	151	2.76	8	5	ND	4	2	2	2	4	26	.01	0.80	26	10	.50	33	0.04	5	1.25	.01	.03		1
ZINC 0+100 EAST	1	8	45	57		10	14	1032	2.70	2	7	ND	1	6	2	3	2	22	.05	0.66	23	17	.74	67	0.04	3	2.28	.01	.07		1
ZINC 0+150 EAST	1	13	13	10		4	2	47	.35	2	5	ND	1	20	2	2	2	21	.18	0.75	6	6	.10	18	0.11	3	3.63	.05	.02		3
ZINC 0+200 EAST	1	1	2	22		8	4	68	1.51	2	5	ND	3	2	2	2	10	.03	0.34	34	11	1.08	25	0.01	2	1.67	.01	.03		1	
ZINC 0+250 EAST	1	7	12	60		10	4	141	3.03	3	5	ND	3	5	2	2	35	.03	0.53	24	14	.56	37	0.10	2	1.80	.01	.05		1	
ZINC 0+300 EAST	2	25	11	27		13	6	132	2.82	7	5	ND	1	7	3	2	27	.03	0.53	17	13	.39	55	0.09	4	2.07	.01	.05		4	
50 EAST	1	17	17	39		7	3	162	2.42	2	6	ND	3	6	2	3	41	.02	0.54	9	8	.21	42	0.14	4	4.97	.02	.05		1	
0+50 EAST/50 SOUTH	1	8	65	47		10	22	1189	2.86	5	5	ND	1	4	4	2	21	.03	0.57	23	16	.79	37	0.06	3	2.19	.01	.05		1	
0+50 EAST/100 SOUTH	1	3	20	39		12	9	203	2.67	5	5	ND	1	2	4	2	17	.01	0.35	30	18	1.39	31	0.02	2	2.27	.01	.05		2	
0+100 SOUTH/50 WEST	1	4	13	29		15	6	75	1.71	3	5	ND	2	2	5	2	17	.01	0.22	18	19	1.78	26	0.02	3	2.42	.01	.03		1	
0+150 SOUTH/50 WEST	1	5	4	16		8	3	48	1.60	2	5	ND	5	3	3	2	19	.01	0.27	27	11	.58	35	0.04	2	2.26	.01	.03		1	
0+200 SOUTH/50 WEST	1	2	14	16		8	4	41	1.14	2	5	ND	1	3	2	3	12	.01	0.14	27	10	.68	38	0.02	3	1.35	.01	.04		1	
0+200 SOUTH/100 WEST	1	5	20	5		16	24	87	12.20	2	5	ND	4	1	2	2	15	.02	0.29	2	28	.12	26	0.01	2	.37	.01	.05		1	
0+250 SOUTH/50 WEST	1	3	19	10		8	3	31	.95	3	5	ND	1	3	3	2	7	.01	0.16	35	10	.63	33	0.01	2	1.14	.01	.03		4	
0+250 SOUTH/100 WEST	1	7	8	12		4	1	55	.67	2	5	ND	1	11	2	2	10	.10	0.50	8	5	.12	18	0.09	2	2.85	.03	.02		4	
STANDARD C/AU-S	19	62	43	133		72	32	1060	3.97	61	20	7	38	52	8.4	15	22	58	.47	0.95	39	61	.90	183	0.08	31	1.90	.06	.13		53

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 NCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B V AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM. SAMPLE TYPE: SOIL AU* ANALYSIS BY ACID LEACH/AA FROM 10 GN SAMPLE.

DATE RECEIVED: OCT 12 1990 DATE REPORT MAILED: Oct 17/90 SIGNED BY: e. Leong D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

GEOCHEMICAL ANALYSIS CERTIFICATE

Kokanee Explorations Ltd. File # 90-3106 Page 1

104 - 135 - 10th Ave S., Cranbrook BC V1C 2N1 Submitted by: D. PIGHIN

SAMPLE#	No				Mn	Co	Ni	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	La	Cr	Mg	Ba	Pb	B	Al	Na	K	Li	Ag
	Ppm	Ppm	Ppm	Ppm																									
50 0-5	1	2	18	49	34	17	631	2.63	16	5	ND	8	67	5	2	2	5	2.91	18	1	7.76	13	58	2	.21	.81	.13	2	2
51 5-10	1	1	15	30	34	16	346	2.13	25	5	ND	15	24	5	2	2	5	1.09	21	2	6.07	15	51	2	.23	.81	.13	4	4
52 10-15	1	2	11	43	26	12	510	1.82	19	5	ND	11	125	5	2	2	3	2.39	14	4	4.43	17	54	2	.21	.81	.13	4	4
54 18-20	1	1	5	50	22	11	473	2.37	7	5	ND	12	120	7	2	2	4	1.83	28	1	5.46	24	58	4	.38	.81	.22	1	1
56 25-30	1	7	323	56	9	4	1213	1.28	7	5	ND	2	146	5	4	3	3	4.19	4	7	2.78	12	58	2	.13	.81	.07	17	17
57 30-35	1	17	30	135	9	7	3607	4.75	11	5	ND	8	375	5	2	2	8	11.90	3	1	5.83	17	58	4	.27	.81	.15	1020	1020
59 30-40	4	10	26	115	8	8	2185	3.41	9	26	ND	23	322	12	2	2	7	11.05	5	1	4.98	24	58	3	.47	.81	.24	70	70
59 40-45	1	21	20	133	9	9	2875	3.90	11	91	ND	16	394	12	2	2	9	14.21	5	1	5.69	19	58	4	.36	.81	.18	97	97
51 45-50	1	6	100	221	6	4	2889	2.83	8	7	ND	13	487	12	2	2	10	14.78	7	1	4.77	20	58	14	.45	.81	.22	15	15
54 50-55	1	14	28	144	8	8	3863	7.35	11	5	ND	2	237	12	2	3	7	18.23	2	1	6.43	7	58	6	.13	.81	.06	630	630
STANDARD C	18	62	40	131	71	32	1053	3.99	42	18	8	36	52	18.8	15	20	56	.51	37	59	.88	179	58	36	1.90	.81	.14	111	-

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR NI FE SR CA P LA CR MG BA TI B U AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM. - SAMPLE TYPE: P1 Core P2 Sharings AU* ANALYSIS BY ACID LEACH/AA FROM 10 GR SAMPLE.

DATE RECEIVED: AUG 2 1990 DATE REPORT MAILED: Aug 9/90 SIGNED BY: C. Chung B. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

F. Fairclough, Zinc Property, Carbonatite
ore

Kokanee Explorations Ltd. FILE # 90-3106

Page 2

SAMPLE#	No				Mn	Co	Ni	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	La	Cr	Mg	Ba	Pb	B	Al	Na	K	Li	Ag
	Ppm	Ppm	Ppm	Ppm																									
53 15-18	2	46	132	128	40	15	1505	2.84	11	5	ND	11	166	12	4	6	5	4.26	7	5	4.25	153	58	2	.29	.81	.14	38	38
58 35-40	3	50	43	142	31	11	1961	3.49	11	5	ND	13	286	12	5	4	6	7.13	5	6	4.72	58	58	3	.49	.81	.22	125	125
52 45-50	2	43	38	229	25	12	2202	3.64	20	5	ND	11	374	12	4	2	6	8.60	4	5	4.76	91	58	2	.43	.81	.17	280	280
57	2	68	127	158	21	12	3169	4.86	24	5	ND	7	373	12	16	9	7	10.05	3	6	5.46	37	58	2	.22	.81	.08	38	38
STANDARD C	18	57	38	131	71	31	1051	3.96	42	17	7	38	52	18.4	15	20	56	.51	37	55	.89	181	58	37	1.88	.81	.14	111	-

F. Fairclough, Zinc Property, Carbonatite

Appendix B Ki

AUG 09 1990 14:42

Appendix B2a

ECO-TECH LABORATORIES LTD.

KOKANEE EXPLORATIONS LTD.

- ETK 90-487

10041 EAST TRANE CANADA HWY.
 KAMLOOPS, B.C. V2C 2T3
 PHONE - 604-573-5700
 FAX - 604-573-4557

104 135 -10th Ave. S.
 CRANBROOK, B.C.
 V6C 2N1

AUGUST 31, 1990

VALUES IN PPM UNLESS OTHERWISE REPORTED

21 CORE SAMPLES RECEIVED AUGUST 27, 1990

ET#	DESCRIPTION AU(ppb)	AG	AL(%)	AS	B	BA	BI CA(%)	CD	CO	CR	CU	FE(%)	K(%)	LA	MG(%)	NH	MO	NA(%)	NI	P	PB	SB
20-25 487	- 1 00 655 ZINC PROBLEM 10	.3	.44	14	12	15	15 5.24	11	9	7	11	1.66	.33	110	3.77	569	11	1.01	11	131	14	15
55-60 487	- 2 00 680 0.051 1000	.3	.18	30	12	15	15 13.49	11	5	26	7	5.49	.02	110	7.68	4535	3	1.01	3	5656	9	15
50-65 487	- 3 00 681 0.02 160	.4	.16	10	12	15	12.43	11	4	26	10	3.57	.06	110	6.60	3918	1	1.01	1	1961	18	15
65-70 487	- 4 00 682 485	1.0	.35	18	12	15	11.21	11	3	15	10	4.28	.02	110	6.07	3555	11	1.01	11	1663	3	15
70-75 487	- 5 00 683 ZINC PROBLEM 410	.3	.35	7	12	15	10.88	11	3	14	3	3.95	.02	110	5.81	3498	11	1.01	11	2569	5	15
55-60 487	- 6 00 684 525	.6	.17	26	12	15	8.83	11	9	10	11	3.91	.04	110	4.16	2288	1	1.01	11	1732	18	15
60-65 487	- 7 00 685 405	.7	.21	39	12	8	8.40	11	10	14	21	4.60	.06	110	4.88	2742	1	1.01	14	1629	28	15
65-70 487	- 8 00 686 395	1.3	.21	34	12	8	7.12	11	10	18	31	4.44	.09	110	4.18	2180	11	1.01	14	924	18	15
70-75 487	- 9 00 687 455	.8	.20	26	12	15	9.46	11	11	8	41	5.67	.06	110	5.78	3073	11	1.01	14	3222	16	15
on 62 487	- 10 00 688 5	1.2	1.94	15	12	15	2.22	11	9	13	11	1.38	.17	25	3.31	319	11	1.01	16	115	12	15
Drill 487	- 11 00 689 5	.4	.44	7	5	15	.08	11	204	171	12	5.31	.04	110	.42	157	5	1.01	15	159	16	15

SM	SR	TI(%)	U	V	W	Y	ZN
120	274	1.01	110	5	110	7	20
120	447	1.01	54	11	110	16	57
120	408	1.01	26	9	110	9	71
120	395	1.01	17	8	110	5	60
120	386	1.01	14	7	110	6	56
120	190	1.01	21	6	110	5	64
120	273	1.01	20	7	20	5	82
120	263	1.01	48	6	36	2	73
120	352	1.01	22	8	36	5	75
120	1	1.01	110	3	110	2	23
120	4	1.01	110	4	110	11	11

APPENDIX B2a



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-884-0221

KOKANEE EXPLORATIONS LTD.

104 - 135 10TH AVE. S.
CRANBROOK, BC
V1C 2N1

Page Numl. : 1-A
Total Pages : 1
Invoice Date : 20-AUG
Invoice No. : I-90202
P.O. Number :

Project :
Comments :

Swirclough

ZINC Property

CERTIFICATE OF ANALYSIS

A9020248

SAMPLE DESCRIPTION	PREP CODE	As ppb YA+AA	Ag PPM	Al %	As PPM	Ba PPM	Be PPM	Bi PPM	Ca %	Cd PPM	Co PPM	Cr PPM	Cu PPM	Fe %	Ga PPM	Hg PPM	K %	La PPM	Mg %	Mn PPM
5 FT WEST 00665	205 294	< 5	2.4	0.90	< 5	30	< 0.5	< 2	>15.00	1.5	< 1	31	3	3.16	< 10	< 1	0.43	< 10	5.53	3470
10 FT WEST 00666	205 294	< 5	0.2	0.70	< 5	30	< 0.5	6	12.15	1.5	< 1	29	3	2.71	< 10	< 1	0.36	< 10	8.15	2190
15 FT WEST 00667	205 294	270	1.6	0.81	< 5	30	< 0.5	< 2	14.10	49.0	< 2	36	3	2.81	< 10	< 1	0.37	< 10	6.55	3200
20 FT WEST 00668	205 294	< 5	< 0.2	1.06	< 5	50	< 0.5	< 2	12.90	1.0	< 1	21	< 1	2.30	< 10	1	0.49	< 10	6.09	2020
25 FT WEST 00669	205 294	< 5	< 0.2	0.82	< 5	50	< 0.5	< 2	14.95	1.5	< 1	29	< 1	2.72	< 10	< 1	0.40	< 10	6.80	2790
30 FT WEST 00670	205 294	< 5	< 0.2	1.54	< 5	30	< 0.5	4	6.69	1.0	< 1	11	< 1	2.75	< 10	< 1	0.32	10	7.76	1490

Appendix B3

SAMPLE#	AU*
GOLD BAR #2	1

450 B41-1

ANALYTICAL LABORATORIES LTD.
 . HASTINGS ST. VANCOUVER B.C. V6A 1R6
 E(604)253-3158 FAX(604)253-1716

DATE RECEIVED: JUL 26 1990
 DATE REPORT MAILED: Aug. 7/90

GEOCHEMICAL ANALYSIS CERTIFICATE

Frank Fairclough FILE # 90-2954 Page 1
 402 Briar Ave, Cranbrook BC V1C 4B5

SAMPLE#	Pb ppm	Zn ppm	Ag ppm	W ppm
Z 0+30E	105	120	.1	4
Z 0+60E	20	63	.1	1
Z 0+90E	12	33	.1	2
Z 0+120E	15	53	.1	2
Z 0+150E	26	57	.2	2
STANDARD C	39	132	7.1	12

Zinc

Prelim Soil Sample Redone See map 16.25 B41-2

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM. - SAMPLE TYPE: P1-P4 Soil P5 Rock

SIGNED BY *C. Leung* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

ACME ANALYTICAL LABORATORIES LTD.
 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
 PHONE(604)253-3158 FAX(604)253-1716

DATE RECEIVED: JUL 16 1990
 DATE REPORT MAILED: July 25/90

ASSAY CERTIFICATE

Kokanee Explorations Ltd. FILE # 90-2559
 104 - 135 - 10th Ave S., Cranbrook BC V1C 2M7

Gold Bar

SAMPLE#	Pb %	Zn %	Ag oz/t	Au oz/t
87252	1.02	41	20	.001
87253	5.43	38	1.81	.001

B41-3

- SAMPLE TYPE: Rock Au - Na2O2 FUSION AU - 10 GR REGULAR ASSAY
 SIGNED BY *C. Leung* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

F. FAIRCLOUGH
 ZINC Property

GEOCHEMICAL ANALYSIS CERTIFICATE

Kokanee Explorations Ltd. File # 90-2559

104 - 135 - 10th Ave S., Cranbrook BC V1C 2M1

SAMPLE#	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	%	%	%	%
87251	1	10	9	5		114	826	459	14.32		5	ND	1	35		6	2	2	3.22		2	7	2.04	3		5	.09	.01	.01

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B V AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: Rock AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

B42-1

DATE RECEIVED: JUL 16 1990 DATE REPORT MAILED: July 23/90 SIGNED BY: Chung D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

GEOCHEMICAL ANALYSIS CERTIFICATE

Frank Fairclough File # 90-2465

402 Briar Ave, Cranbrook BC V1C 4B5

SAMPLE#	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	U	Tl	Hg
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	ppm	%	%	%	ppm	ppm	ppb	
ZINC O-4N (GOLD/BAR)	1	13	22	1	3	76	787	301	13.91	2	5	ND	1	31	3	7	2	2	2.55	.037	2	51	1.23	4	.01	2	.04	.01	.01	1	2	5

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B V AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: Rock HG ANALYSIS BY FLAMELESS AA.

B42-2

DATE RECEIVED: JUL 12 1990 DATE REPORT MAILED: July 19/90 SIGNED BY: Chung D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

WHOLE ROCK ICP-MS ANALYSIS

Frank Fairclough File # 90-2826 Page 3

402 Briar Ave, Cranbrook BC V1C 4B5

Main Carbonates

SAMPLE	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Ta
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Zc	22	16	27	3	18	6	1	4	1	3	1	1	1	2	1

.100 GRAM SAMPLE FUSED WITH .6 GM LiBO2 AND IS DISSOLVED AND DILUTED TO 50 ML WITH 5% HNO3. ANALYSIS BY ICP MASS SPECTROMETER
 - SAMPLE TYPE: Rock

B42-3

DATE RECEIVED: JUL 23 1990 DATE REPORT MAILED: Aug 20/90 SIGNED BY: Chung D. TOYE OR C. LEONG, CERTIFIED B.C. ASSAYERS

Appendix B42

Appendix C₁

"ZINC PROPERTY OF NORTH MOYIE"

the 8 EAGLE units and the 12 ZINC units have been grouped under ZINC no.5 group.

FRANK FAIRCLOUGH F.M.C. NO. 216510 CODE. FARF.

GORDON JOHNSTONE F.M.C. NO. 294682 CODE. JOHNG.

ZINC CLAIMS

expiry date is November 25/90

Appendix C.2

(ZINC PROPERTY OF NORTH MOYIE)

"TWO MAN PROJECT" (Johnson & Fairclough)		
June 22 & 23/90	clear & upgrade road	460
JUNE 30/90	2m x 10h x 2d x 11.50	
	general prospecting and rock sampling	\$ 230
JULY 1/90	2m x 10h x 11.50	
	general prospecting and rock sampling	\$ 230
JULY 8/90	2m x 10h x 11.50	
	staking eagle claims for zinc property ^{staking not} applicable to _{assessment work}	\$
JULY 15/90		
	general prospecting and rock sampling	\$ 230
JULY 22/90	2m x 10h x 11.50	
	rock and soil sampling	\$ 230
AUGUST 11/90		
	general prospecting and samples taken ^{2m x 10h x 11.50} from creek	\$ 230
AUGUST 25/90		
	general prospecting on north boundary	\$ 230
Oct 1/90		
	soil sampling	230
		230
	Total	\$ 2070

Appendix C₃

(ZINC PROPERTY OF NORTH MOYIE)

"DIAMOND DRILLING" "TWO MAN PROJECT" (Johnson / Fairclough)

JULY 26/90

started drilling towards the east at a 32 degree angle
drilled 35 feet $2m \times 10h \times 13.50$ \$ 270

JULY 27/90

drilled same hole to 55 feet $2m \times 10h \times 13.50$ \$ 270

JULY 29/90

drilled towards the west at a 38 degree angle,
drilled for 30 feet. $2m \times 10h \times 13.50$ \$ 270

AUGUST 18/90

drilled on eastern hole to 70 feet. $2m \times 10h \times 13.50$ \$ 270

AUGUST 19/90

drilled to 75 feet on eastern hole $2m \times 12h \times 13.50$ \$ 324

AUGUST 19/90

sub total 1404

same day found old drill hole at a 30 degree angle
towards the west and drilled to 55 feet

"DIAMOND DRILLING EXPENSES"

gas and oil \$ _____

drill bits \$ _____

copper rods and adapters INV. no. 3504 \$ 397.34

miscellaneous \$ 72.45

Total 1873.79

Appendix C₄

"ZINC PROPERTY OF NORTH MOYIE"

"1986 DODGE 3/4 ton 4x4"

June 22+23

JUNE 30/90

JULY 1/90

JULY 8/90

JULY 15/90

JULY 22/90

JULY 26/90

JULY 27/90

JULY 29/90

AUG. 11/90

AUG. 18/90

AUG. 19/90

AUG. 25/90

Oct 1/90

	80
\$	<u>40</u>
\$	<u>40</u>
\$	<u> </u>
\$	<u>40</u>
\$	<u>40</u>
\$	<u>40</u>
\$	<u>40</u>
\$	<u>40</u>
\$	<u>40</u>
\$	<u>40</u>
\$	<u>40</u>
\$	<u>40</u>
	40
	<u>560</u>



Appendix C₅

AND ASSOCIATES EXPLORATION
2604 EXSHAW ROAD N.W., CALGARY, ALBERTA T2M 4E5

ZINC CLAIMS N. MOVIE
FMC # 283212

July 14	Recon, Sampling	350
July 15	Magnetometer trial, sampling structure	350
July 16	Mapping (magnetometer)	350
July 17	Structural analysis	350
July 19	Geological mapping	350
Sept 15 & 16	Report & Map	700
		<hr/>
	Sub total	2450
Oct 12	Report & Map	350
		<hr/>
		2800
4x4	July 14, 16, 17, 19 @ \$40	160
Room & Board	5d @ \$60	300
		<hr/>
		3200

Appendix C₆

KOKANEE EXPLORATIONS LTD.

ZINC PROPERTY OF NORTH MOYIE

CHEMEX LABS.

INV. NO.

"	"	(PB & ZN)	\$154.00	I9022299
"	"	(RARE EARTH)	\$189.00	I9020248
"	"	(" ")	\$157.00	I9020249
"	"	(" ")	\$ 7.00	I9021296

sub total 507.00

ACME LABS

INV. NO.

"	"	(FIRE)	\$ 34.00	90-3106R
"	"	(ICP)	\$161.85	90-3106

sub total 195.85

Total \$702.85

Plus F. Fairclough

80.70
783.55

Summary Incidental Expenses, Frank Fairclough 1990 field season.

I Transportation:

Gas: June 25 - 241.47
 July 17 - 115.65
 July 23 - 248.32
 July 25 - 121.23
Total \$ 58.20

Repair: July 7 tires - 54.40
 Aug 7 tires - 54.40
 Aug 17 Brakes - 42.50
 Aug 18 Repair - 191.78
 Aug 21 Tires - 100.80
 Sept 4 tire - 29.95
 6 Brakes - 46.25
 15 tow - 53
 Oct 4 Repair - 98.79
Total 671.87

II Food:

July 14 Super Value 61.90
 July 20 144.43
 Aug 3 83.27
 Aug 11 91.17
 Sept 4 32.60
 Sept 8 85.04
Total 398.41

IV Assays:

April 18 47.00
 July 19 77.70
 Aug 4 217.35
 8 83.50
 20 53.00
 Sept 5 70.85
 25 367.65
 Oct 19 37.10
 Kokanee Oct 9 40.00
 17 238.00
 total 1162.15

III Equipment Rental & Repair

April 21 Douglas Enterprise 34.40
 June 29 Repair Drill head 100.00
 July 23 Rent auger 53.00
 July 24 Parts 70.00
 July 27 welding 50.00
 July 31 B.J. Industrial 397.34
 Fabricate Adaptors
 Aug 30 Repair Drill Head 50.00
 Sept 4 C.S. Holdings 29.92
 Oct 3 reweld & fit 50.00
Total \$ 834.66

VI Staking:

Tanis 4 units 28.00
 Booth 10 " 70.00
 Sawyet 4 " 28.00
 wildhorse 14 " 98.00
 Selkirk 36 " 252.00
 Angus 6 " 42
 Zino 6 42
\$ 560.00

III Greyhound Express

Sept 6.45
 Oct. 8.25
 15.45
 Nov 18.95
 Dec 4.95
 8.25
Total \$ 62.30

GRAND Total \$ 4547.59

Appendix D

(Filing) 2604 EXSHAW Rd. N.W.
 (Address) Calgary Alta.
A03-282-6179 T2M4E5
 (Telephone) (Postal Code)
 Valid subsisting FMC No. 283212
 FMC Code

(Name(s)) #1414-2015-2nd St. N.
 (Address) Cranbrook B.C.
604-926-2805 VIC 3L4
 (Telephone) (Postal Code)
 Valid subsisting FMC No. 294682
 FMC Code Johnn

STATE THAT: (NOTE: If only paying cash in lieu, turn to reverse and complete columns G to J and Q to T.)

I have done, or caused to be done, work on the Zinc #1-5 & #8 (Ft. Steel)
#1-7 (Nelson) Claim(s)

Record No(s) Zn #1-5 (322, 23, 24, 25, 3895) Lynx #1-8 (6523, 24, 25, 26, 27, 28, 4725)

Work was done from June 22nd, 19 90, to 1 Oct., 19 90;

and was done in compliance with Section 50 of the Mineral Tenure Act and

Section 19(3) of the Regulation YES NO

I hereby request that the claims listed in Column G on this Statement of Work be Grouped and I confirm that all claims listed are contiguous YES NO Grouped under Zn #5
 FEE — \$10.00

TYPE OF WORK

- PHYSICAL: Work such as trenches, open cuts, adits, pits, shafts, reclamation, and construction of roads and trails. Details as required under section 13 of the Regulations, including the map and cost statement, must be given on this statement.
- PROSPECTING: Details as required under section 9 of the Regulations must be submitted in a technical report. Prospecting work can only be claimed once by the same owner of the ground, and only during the first three years of ownership.
- GEOLOGICAL, GEOPHYSICAL, GEOCHEMICAL, DRILLING: Details must be submitted in a technical report conforming to sections 5 through 8 (as appropriate) of the Regulations.
- PORTABLE ASSESSMENT CREDIT (PAC) WITHDRAWAL: A maximum of 30% of the approved value of geological, geophysical, geochemical and/or drilling work on this statement may be withdrawn from the owner's or operator's PAC account and added to the work value on this statement.

TYPE OF WORK (Specify Physical (include details), Prospecting, Geological, etc.)	VALUE OF WORK		
	Physical	*Prospecting	*Geological etc.
<u>2m x 2d x 10h + 2.75x4 + 4x4 + Cal-Cran</u>	<u>752</u>		
<u>2m x 7d x 10h + 4x4</u>		<u>1890</u>	
<u>2m x 5d x 10h + 2h DD + 4x4</u>			<u>1604</u>
<u>D.D. (XR) 160' + repair + misc.</u>			<u>2869</u>
<u>Geol. + ass. + R&B + assays</u>			<u>4760</u>
TOTALS	A <u>752 +</u>	B <u>1890 +</u>	C <u>9233 =</u>
PAC WITHDRAWAL — Maximum 30% of Value in Box C Only			D <u>11875</u>
from account(s) of _____			E → E
		TOTAL	F <u>11875</u>

* Who was the operator (provided the financing)? Name Gordon Johnson
 Address 1414-2015-2nd St N.
Cranbrook BC phone: 426-2805

Transfer amount in Box F to reverse side of form and complete as required

F 11870 I WISH TO APPLY \$ 5875 OF THE TOTAL VALUE FROM BOX F AS FOLLOWS:

Columns through P inclusive MUST BE COMPLETED before work credits can be granted to claims. Columns G through J and Q through T inclusive MUST BE COMPLETED before a cash payment or rental payment can be credited. Columns not applicable need not be completed.

CLAIM IDENTIFICATION

G	H	I	J
CLAIM NAME (one claim/lease per line)	RECORD No.	No. OF UNITS*	CURRENT EXPIRY DATE
Zinc #1	3822	1	25/11/90
2	23	1	"
3	24	1	"
4	25	1	"
5	95	8	"
Eagle #1	6523	1	"
2	24	1	"
3	25	1	"
4	26	1	"
5	27	1	"
6	28	1	"
7	29	1	"
8	4725	1	"
Grouped under Zinc #5			

APPLICATION OF WORK CREDIT

K		L	M	N	O	P
WORK TO BE APPLIED			Recording Fees	PRIOR EXCESS CREDIT BEING USED	NEW EXPIRY DATE	EXCESS CREDIT REMAINING
VALUE	YEARS					
300	3		15		25/11/93	
300	3		15		"	
300	3		15		"	
300	3		15		"	
2400	3		120		"	
300	3		15		"	
300	3		15		"	
300	3		15		"	
300	3		15		"	
300	3		15		"	
300	3		15		"	
300	3		15		"	
300	3		15		"	
6000						
TOTAL OF K						
			300			
			TOTAL OF M			

*2 POST. FRACTION, REV. CROWN GRANT AND PLACER CLAIM ARE 1 UNIT EACH

NOTICE TO GROUP No. _____ RECORDED _____

Value of work to be credited to portable assessment credit (PAC) account(s).
[May only be credited from the approved value of Box C not applied to claims.]

Name

Name of
owner/operator

1. GORDON JOHNSTONE

2.

3.

9233 (column C)
- 3358

Amount

\$ 5875

I, the undersigned Free Miner, hereby acknowledge and understand that any statement or provide false information under the Mineral Tenure Act and the exploration and development has not been performed, then the work reported on this statement will be cancelled and vest back to the Province.

Appendix A

Appendix B

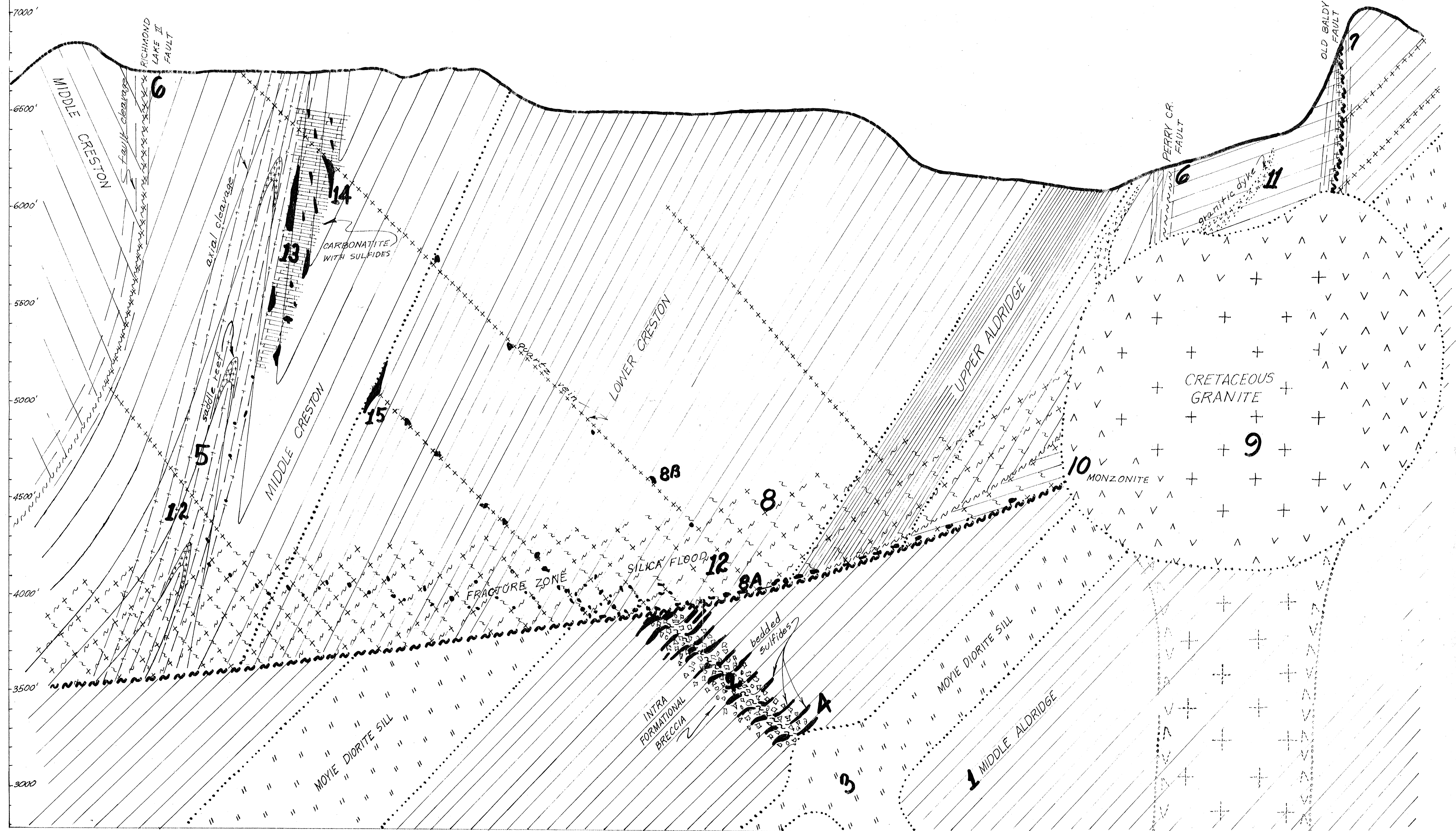
TOTAL C

APPENDIX E

ANNUAL WORK APPROVAL NUMBER

SAVE THIS SLIP. You may need this slip or number when you record a **Statement of Exploration and Development** with the Mineral Titles Branch to maintain your title. Without this number or other proof of Work Program Approval, the work carried out to maintain title may not be accepted.

FER 90 - m-66



1. Middle Aldridge turbidites were deposited in a depositional reentrant (Gulf) in the Proterozoic land mass.
2. Basement rifts were reactivated, faulting the Aldridge formation, producing intraformational breccias. These rifts are reflected through thousands of feet of sediments by compacting and subsequent movement producing the "shadow lineations" on the present surface.
3. Diorite intruded through the rifts and up the faults to form sills along the newly deposited poorly consolidated Aldridge sediments.
4. Percolation of hot solutions from the intruded diorite up through the permeable breccia formed "smokers" on the sea floor and produced strataform replacement sulfide deposits within the breccia.
5. Laramide folding produced cleavage parallel to the anticlinal axis.
6. Intensity of folding increased producing imbricate faulting (Richmond lake II and Perry Cr. faults).
7. Imbricate faulting culminated in a decolment or sole fault (Old Baldy/Palmer Bar fault).
8. The upper plate was shoved eastward over the more homogeneous block of middle and lower Aldridge, producing an extensive fracture zone along the base of the upper plate as encountered by Chapleau Resources drilling above the Palmer Bar fault. The lower plate was being wedged north eastward into the reentrant giving rise to the Moyle Cranbrook and other NW-SE faults (not shown).
- 8A A subsurface "train" of sulfides ground off of the subcrop of the intra formational breccia could be expected to be present in a roughly south easterly direction perpendicular to the sole fault (Old Baldy).
- 8B Quartz veining coincident with this train could be expected to carry some sulfides.
9. Basement rifts provided loci for granitic intrusives during the Cretaceous.
10. These intrusives were modified from a granitic composition to more sodic and calcic feldspars by assimilating argillaceous and diorite materials from the Aldridge.
11. Granitic dykes tend to be of this more basic composition.
12. Immense quantities of silica were remobilized from the siliceous turbidites producing a "silica flood" along the fracture and axial cleavage zones silicifying the country rock.
13. Remobilized calcium and magnesium ions from the diorite and Creston quartzites probably picked up oxygen from the flood of silica which separated out and was injected along the margin of the overturned eastern limb of the anticline.
14. Base metal ions from the bedded sulfides and gold and tungsten from the granite were replaced with the carbonatite either as an integral part of that phase or by later hydrothermal replacement.
15. The relative age of the major quartz veins with respect to the carbonatite and quartz flood is not clear. They may however, be involved in other secondary base metal deposits and primary gold.

Fig. 2
 DIAGRAMMATIC CROSSSECTION A-A'
 ZINC CLAIMS N. MOYLE CR.

by N. Gass
 GEOLOGICAL BRANCH
 ASSESSMENT REPORT

20,936

LEGEND

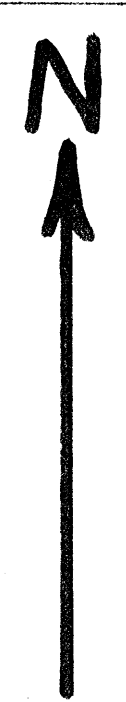
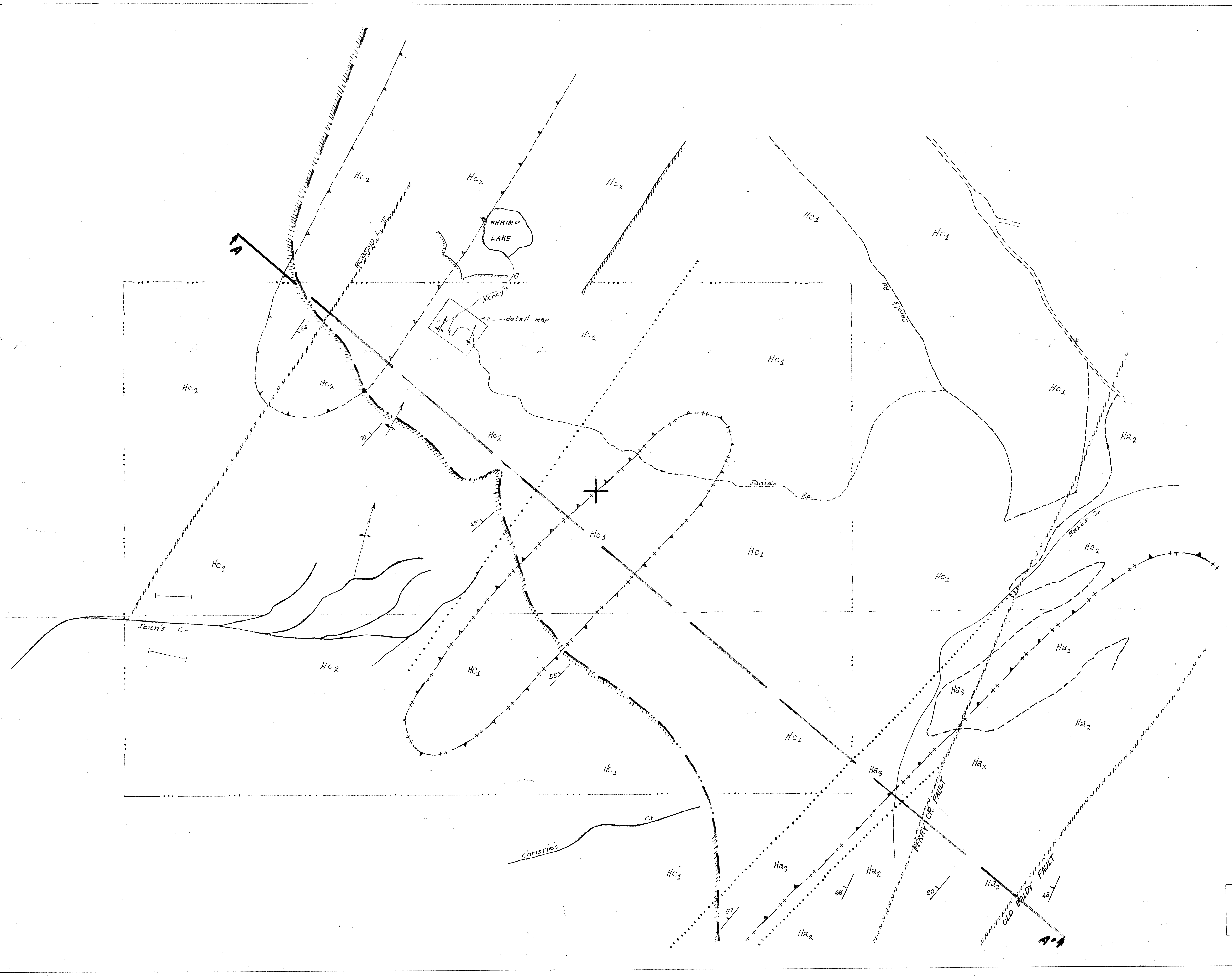
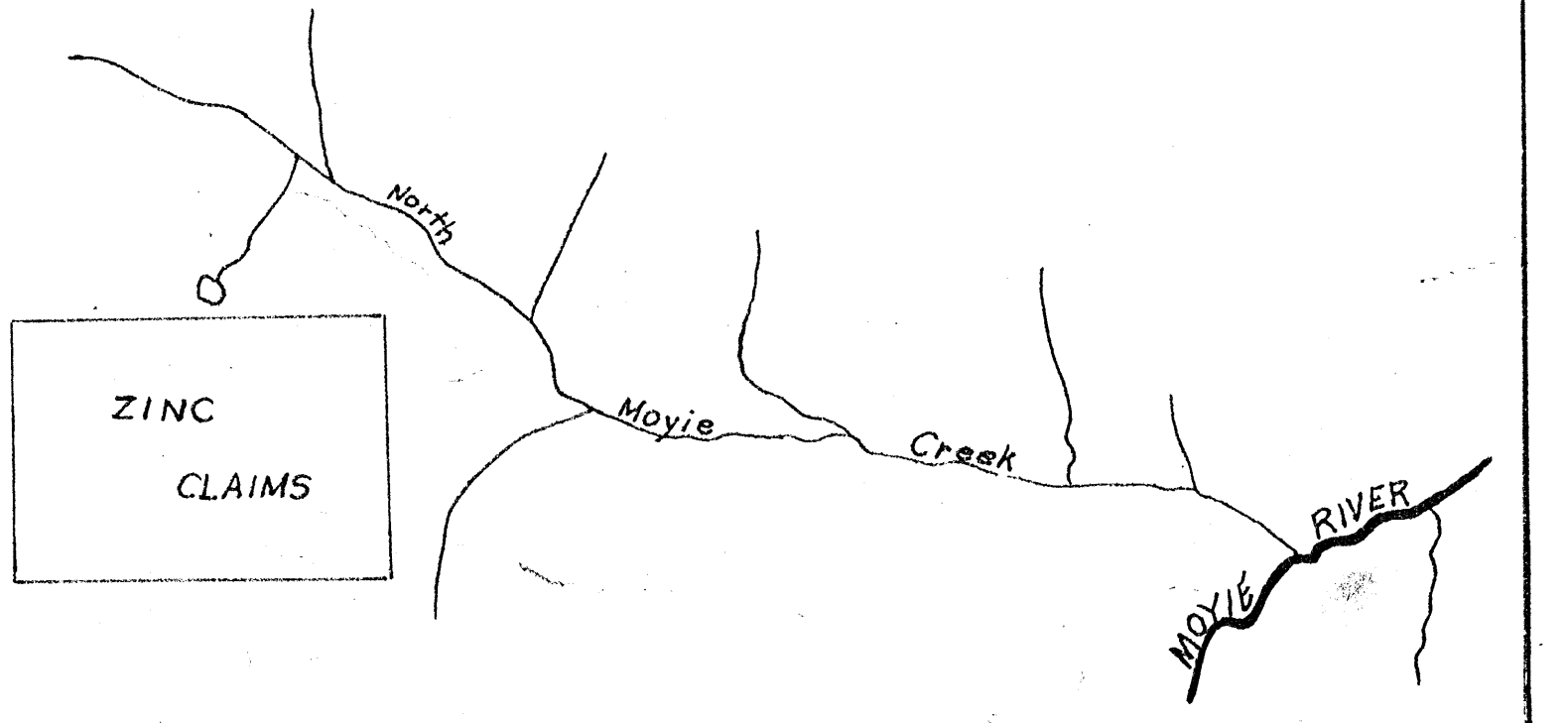
- HELMAN (PROTEROZOIC)**
- Hc₂** MIDDLE CRESTON gr. blk. sltstn. in. quartz. 20cm. blk. rpl. mkl. ppl. mkl. + lined. mkl. blk./ppl. argil. + tn. bd. sltstn. wh. quartz assoc. ppl. mud ch'p braccias.
 - Hc₁** LOWER CRESTON thin bd. dk. argil. + gr. sltstn. pinch/swell. rpl. x-lam. md. cks. cut/fill gr. sltstn. intb. of argillite.
 - Ha₃** UPPER ALDRIDGE rty. weath. blk. argil. + stty. argil. fine regular sltstn. laminae.
 - Ha₂** MIDDLE ALDRIDGE lt. gr. weath. lt. gr. quartz + sltstn. intbds. dk. argillite + tn. bd. blk. argillite + gr. sltstn.

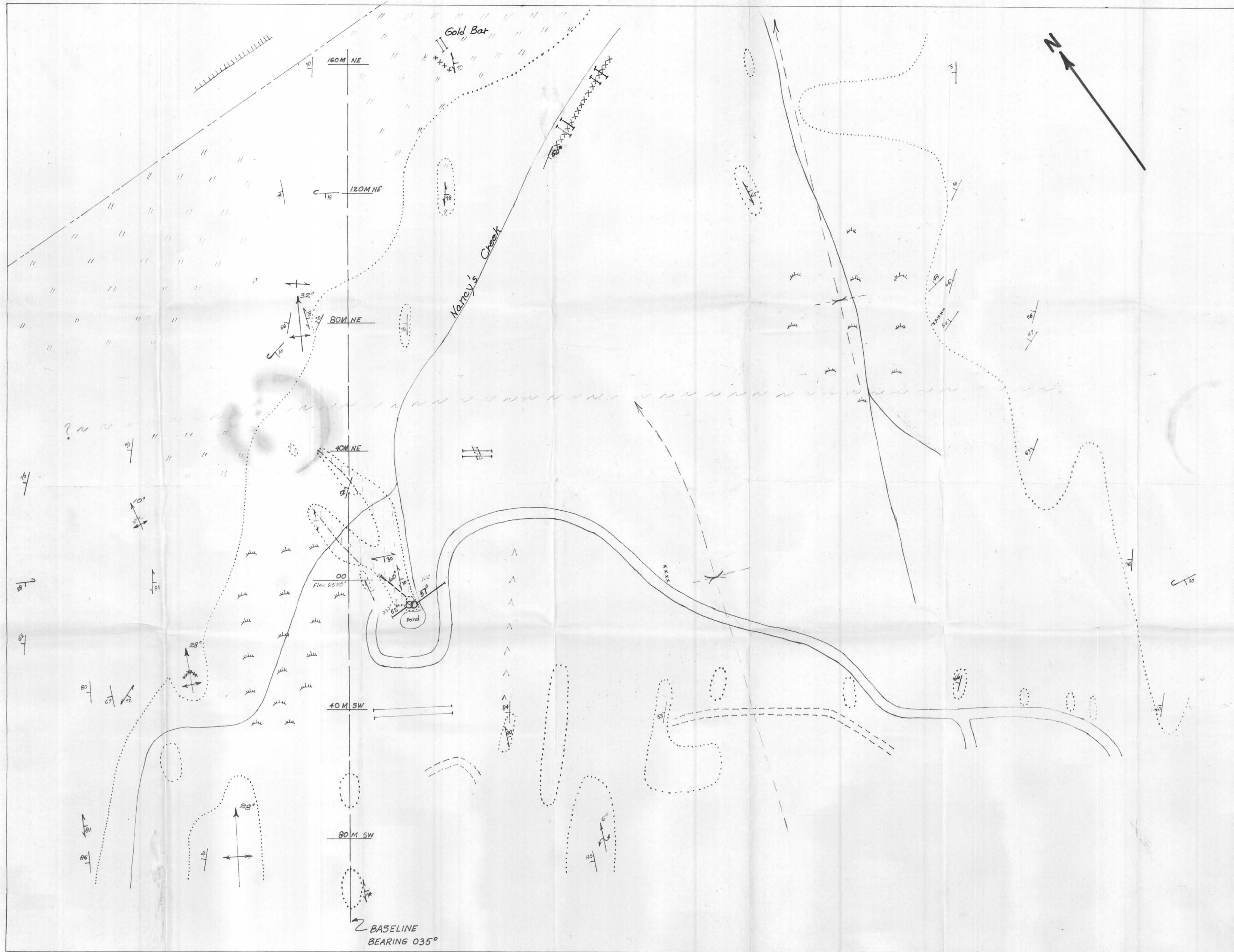
- Mining Division Boundary
- Claim Line
- Road
- Stream
- ||||| Cliff
- Geological Boundary
- ▲▲▲ Aeromag High
- ▼▼▼ Aeromag Low
- Shadow trace (lineation) Placement Rift
- ~~~~~ Fault
- 10° Strike + Dip of bedding
- Anticlinal Axis with Plunge
- ← Synclinal Axis with Plunge
- ⊕ Geophoto Control Centre
- Fracture-direction
- A-A' Cross Section

Regional Geology by J.E. Reesor, Open File 820 1981
Aeromagnetics G.S.C. 1969-70 Geotrex Ltd.

MAP # 6
ZINC GROUP
REVISED

by N. Gass
North Moyie Cr. 82F/8
Lat 49° 22' 30" N Long. 116° 10' W
Scale: 1:5000, 1 cm = 50m





LEGEND

- MIDDLE CRESTON FORMATION
- SILICIFIED MIDDLE CRESTON
- CARBONATITE
- QUARTZ VEIN
- STRIKE AND DIP OF BEDDING
- STRIKE AND DIP OF FOLIATION
- STRIKE AND DIP OF JOINT
- PLUNGE OF ANTICLINAL AXIS
- HYPOTHOSIZED SYNCLINAL AXIS
- HYPOTHOSIZED FAULT
- APPROXIMATE EDGE OF OUTCROP
- TRENCH
- CLIFF EDGE
- "HOGSBACK"
- MEADOW/SWAMP
- NEW ROAD
- OLD ROAD
- STREAM
- CLAIM LINE
- PROJECTED DEPTH OF D.D.H.
- OLD D.D.H.
- DRAG FOLD

GEOLOGICAL BRANCH
ASSESSMENT REPORT

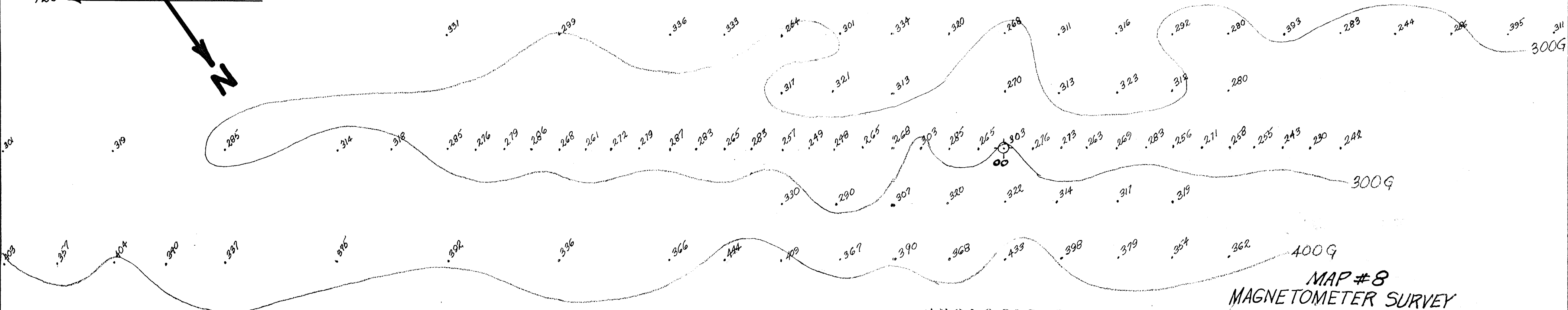
20,936

INTERIM MAP #7
CARBONATITE OCCURANCE
ZINC CLAIMS
40° 22' 15" N - 116° 10' 10" W
NORTH MOYIE R. CRANBROOK B.C.
by
N. GASS
Scale: 1cm. = 5M

125° ←



apparent
strike & dip
of carbonatite



GEOLOGICAL BRANCH
ASSESSMENT REPORT

20,936

MAP #8
MAGNETOMETER SURVEY
across
CARBONATITE DYKE
ZINC CLAIMS
contour interval 100 gammas
Scale 1cm. = 10M

