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REPORT ON ROCK GEOCHEMISTRY

VINE 26 and VINE 29

Fort Steele Mining Division

Cranbrook Area

FILMED

N.T.S. 82G/5W

Lat: 49° 22' N

Long: 115° 52' W
**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

17,933

Owner:

COMINCO LTD.,
Kootenay Exploration,
1051 Industrial Road No. 2,
Cranbrook, B.C. V1C 4K7

Report by:

F.R. Edmunds, PhD., FGAC,
EDMUNDS & ASSOCIATES,
Geological Consultants,
6840 Hycroft Road,
West Vancouver, B.C. V7W 2K8

On the Instructions of:

D. Anderson,
COMINCO LTD.,
Senior Geologist

Work performed during July, 1988

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COMINCO LTD.

EXPLORATION

WESTERN DISTRICT

Kootenay Exploration, Industrial Road No 2, Cranbrook, B.C. V1C 4K2

Report on Rock Geochemistry, VINE 26 and VINE 29, Fort Steele M.D.

by F.R. Edmunds, EDMUNDS & ASSOCIATES, West Vancouver, B.C.

1.0. SUMMARY

A rock geochemical survey of the VINE 26 and VINE 29 claims, 17 km southwest of Cranbrook, B.C., was undertaken between 1 July and 12 July, 1988. It consisted of 100 samples of Aldridge Formation argillite distributed in traverses across the areas of available outcrop.

The samples were analysed for Pb, Zn, Ag and Hg at Cominco's Exploration Research Laboratory, Vancouver (Job V 88-0401R). The results are typical of background Aldridge Formation argillite, and do not indicate bedded sulphide mineralization subcropping or buried in the near vicinity.

Expenditures on this project were \$6,500.00.

2.0. INTRODUCTION

2.1. Property Definition

The VINE 26 and VINE 29 claims are of 12 units and 20 units respectively, and lie within the Fort Steele Mining Division. They are owned 100% by Cominco Ltd.

2.2. Location and Access

The property is approximately 17 km SSW of Cranbrook, B.C. within NTS Sheet 82G/5W. It is centred on Lat. 49° 22' N and Long. 115° 52' W.

It is reached from Cranbrook via Hwy 95/3 south to the Green Bay turn-off. Thence, 3 km of hard-surface road, followed by gravel road leads to Monroe Lake, which lies in the centre of the property.

2.3. Topography, Vegetation and Land Use

Relief is moderate surrounding Monroe Lake (elev. 1077 m.). West of the lake, it rises steeply towards the property boundary, achieving 1450 m at the northwest corner of VINE 26.

There are summer cottages occupying the east shore of the north arm of Monroe Lake. A sanitary landfill site is under construction on the eastern part of VINE 26.

The area is well-wooded with cedar, poplar, larch, lodge-pole pine and fir. It has been logged at least once, and most of it is covered by mature second growth. Scrub bush and alder lies around the north and northwest margins of Monroe Lake.

2.4. Objectives

The objective of the survey is to obtain a lithochemical profile for selected trace elements across the Aldridge Formation stratigraphy underlying the property. It is to assist the search for Sullivan-type lead-zinc-silver mineralization.

3.0. ROCK GEOCHEMISTRY

3.1. Background

In previous proprietary work by the writer on behalf of Cominco Ltd., it has been indicated that bedded lead-zinc sulphide mineralization may be anticipated by the levels of certain trace elements in sediments some considerable distance away in the plane of the bedding.

The optimum sampling scheme is one in which traverses are run across strike. The traverses may be far apart as long as it is possible to sample them fairly densely. At each sample spot, it is necessary to take more than one sample to provide an internal check on representativeness and a built-in confirmation sample. It is a guard against misinterpreting random high values.

The sample itself is about 10 cm of contiguous stratigraphy, as fresh as possible. It provides about half a kilo in surface sampling. Fine grained lithologies containing an appreciable clay mineral content, such as argillites and shales, are preferable to quartzites and sandstones.

In the interpretation of the results, any anomalous sample spot requires follow-up close-sampling. A tendency for high values to cluster, however, is more significant than their absolute scores. When a lithochemical response is established, the source may be buried at some considerable distance. Then, to properly evaluate the response, it is best to consider other types of remote-sensing data as well, and the general geologic environment.

3.2. Sampling Procedure

After reconnaissance, establishing general dip and strike of the underlying Aldridge Formation, and the areas of suitably dense outcrop, the maximum stratigraphic coverage was obtained from sampling along the three separated traverses shown on the accompanying plan. Elsewhere, outcrop is sparse.

In the most northerly of these three areas, sampling extends beyond the claim boundary of VINE 26. This is justified because it provides information on VINE 26 by projection a few metres along strike.

The sampling approximates a traverse across strike as closely as outcrop distribution permits in each of the three areas. Spots were sampled and flagged as close as possible to 25 m apart (across strike). At each spot, two samples were taken 3 m apart (stratigraphic). Each sample consisted of about half a kilo of contiguous argillite.

The survey achieved 100 samples in 50 spots, distributed as shown on the accompanying sample plan. At each of the 50 spots, the lowest (odd) numbered sample of the pair is marked. Thus, at spot 21, samples V-88-021 and V-88-022 were taken.

3.3. Analytical Procedure

The sample set, numbered V-88-001 to V-88-100 inclusive, was shipped to Cominco's Exploration Research Laboratory in Vancouver for analysis for Pb, Zn, Ag and Hg. Mercury was determined by flameless AA spectroscopy. The remaining trace elements were determined by AAS following aqua regia digestion.

The results are listed under ERL numbers R8809032 to R8809131 inclusive, corresponding in sequence to field numbers V-88-001 to V-88-100. They comprise ERL Job V-88-0401 R, and they are given in Table 1.

3.4. Results

The results listed in Table 1 are uniformly typical of background, unmineralized Aldridge Formation argillite. Samples V-88-042 (100 ppm Zn) and V-88-086 (58 ppm Pb) are sporadic and statistically expectable highs, with values well within three standard deviations of the mean for Aldridge Formation argillite for Zn and Pb respectively. The adjacent samples from the same spot do not indicate a region of mild elevation of trace element values in either case.

4.0. CONCLUSION

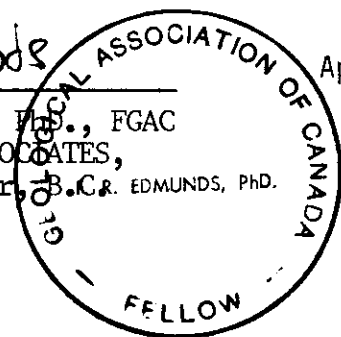
The results of this lithochemical survey do not indicate the presence of bedded Pb-Zn sulphide mineralization within the stratigraphy sampled in the vicinity or on VINE 26 or VINE 29.

These intervals have been thoroughly evaluated from closely-spaced sample points. Nevertheless, detailed mapping may show that they do not represent the complete underlying sequence. There may be significant gaps due to outcrop distribution, for example, beneath the northern arm of Monroe Lake.

Report submitted, 30 September, 1988, by

F.R. Edmunds

F.R. Edmunds, Ph.D., FGAC
EDMUNDS & ASSOCIATES,
West Vancouver, B.C. EDMUNDS, PH.D.



Approved for Release by:

John Hamilton

J.M. Hamilton
Manager, Exploration
Western Canada
COMINCO LTD.

Copies to: Mining Recorder (2)
Western District, Exploration
Kootenay Exploration

Figure 1. Location Map

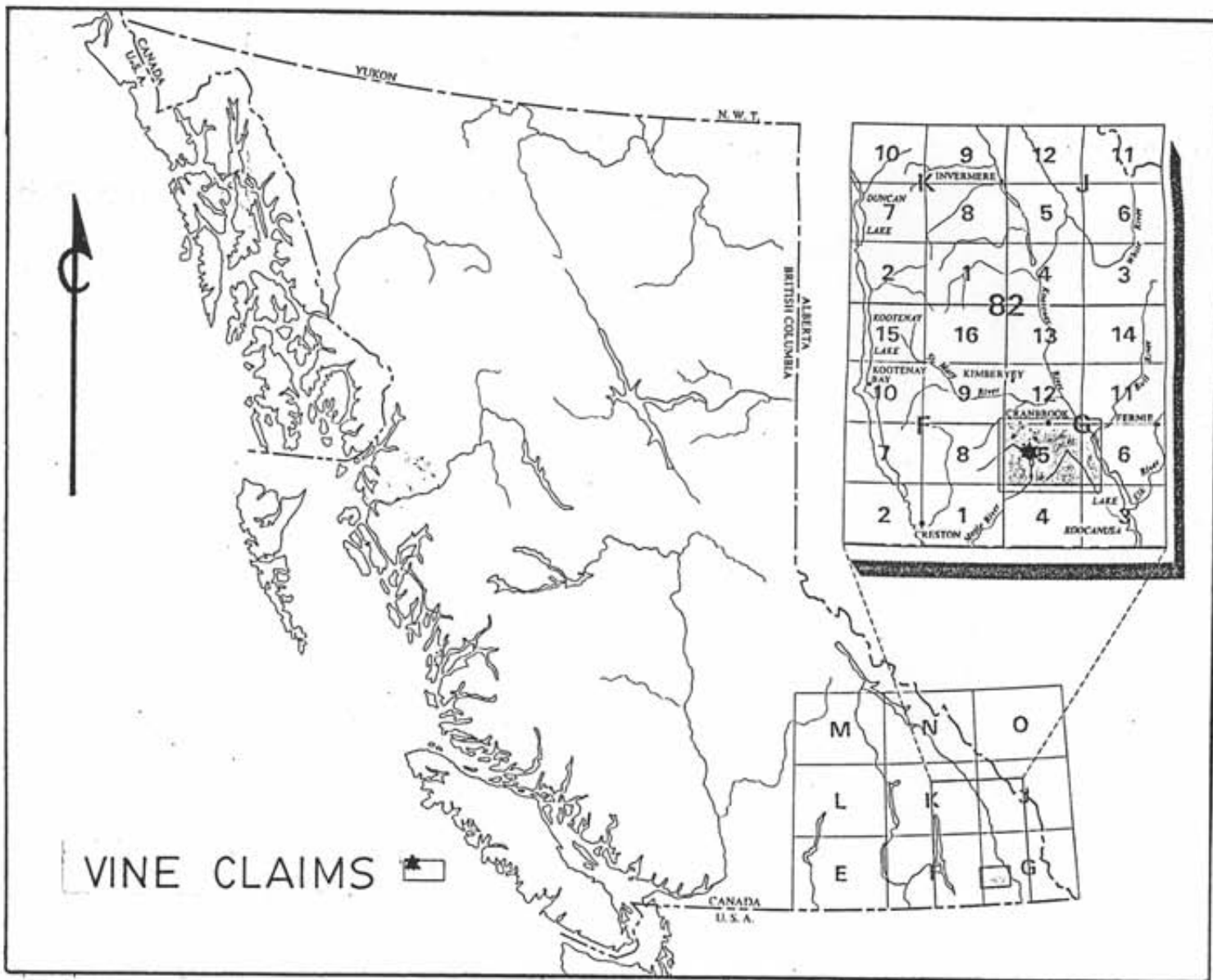


Table 1. Analytical Results in ppm (Hg in ppb). ERL Job V 88-0401R

Lab. No	Field No	Pb	Zn	Ag	Hg	Lab. No	Field No	Pb	Zn	Ag	Hg
R8809032	V-88-001	16	80	< 0.4	< 10	R8809082	V-88-051	< 4	38	< 0.4	< 10
33	002	23	54	< 0.4	< 10	83	052	< 4	59	< 0.4	< 10
34	003	7	29	< 0.4	< 10	84	053	11	52	< 0.4	< 10
35	004	4	36	< 0.4	< 10	85	054	19	36	< 0.4	< 10
36	005	< 4	27	< 0.4	< 10	86	055	< 4	53	< 0.4	< 10
37	006	4	15	< 0.4	< 10	87	056	8	45	< 0.4	< 10
38	007	< 4	29	< 0.4	< 10	88	057	< 4	40	< 0.4	< 10
39	008	4	23	< 0.4	< 10	89	058	< 4	57	< 0.4	< 10
40	009	4	11	< 0.4	< 10	90	059	< 4	59	< 0.4	< 10
41	010	< 4	21	< 0.4	< 10	91	060	< 4	38	< 0.4	< 10
42	011	7	35	< 0.4	< 10	92	061	4	49	< 0.4	< 10
43	012	11	29	< 0.4	< 10	93	062	7	48	< 0.4	< 10
44	013	6	81	< 0.4	< 10	94	063	6	27	< 0.4	< 10
45	014	< 4	33	< 0.4	< 10	95	064	< 4	30	< 0.4	< 10
46	015	11	24	< 0.4	< 10	96	065	< 4	44	< 0.4	< 10
47	016	< 4	34	< 0.4	< 10	97	066	< 4	20	< 0.4	< 10
48	017	< 4	39	< 0.4	< 10	98	067	< 4	37	< 0.4	< 10
49	018	17	31	< 0.4	< 10	99	068	5	67	< 0.4	< 10
50	019	< 4	28	< 0.4	< 10	100	069	9	68	< 0.4	< 10
51	020	4	26	< 0.4	< 10	101	070	< 4	14	< 0.4	< 10
52	021	< 4	41	< 0.4	< 10	102	071	< 4	19	< 0.4	< 10
53	022	< 4	47	< 0.4	< 10	103	072	< 4	28	< 0.4	< 10
54	023	< 4	46	< 0.4	< 10	104	073	5	28	< 0.4	< 10
55	024	< 4	42	< 0.4	< 10	105	074	5	69	< 0.4	< 10
56	025	< 4	28	< 0.4	< 10	106	075	< 4	38	< 0.4	< 10
57	026	7	53	< 0.4	< 10	107	076	< 4	40	< 0.4	< 10
58	027	< 4	11	< 0.4	< 10	108	077	< 4	54	< 0.4	< 10
59	028	< 4	35	< 0.4	< 10	109	078	< 4	45	< 0.4	< 10
60	029	8	35	< 0.4	< 10	110	079	< 4	57	< 0.4	< 10
61	030	< 4	71	< 0.4	< 10	111	080	10	63	< 0.4	< 10
62	031	< 4	64	< 0.4	< 10	112	081	4	37	< 0.4	< 10
63	032	< 4	45	< 0.4	< 10	113	082	5	29	< 0.4	< 10
64	033	< 4	18	< 0.4	< 10	114	083	7	27	< 0.4	< 10
65	034	< 4	29	< 0.4	< 10	115	084	23	82	< 0.4	< 10
66	035	< 4	36	< 0.4	< 10	116	085	6	30	< 0.4	< 10
67	036	< 4	24	< 0.4	< 10	117	086	58	43	< 0.4	< 10
68	037	< 4	34	< 0.4	< 10	118	087	9	81	< 0.4	< 10
69	038	9	14	< 0.4	< 10	119	088	7	39	< 0.4	< 10
70	039	7	33	< 0.4	< 10	120	089	6	27	< 0.4	< 10
71	040	< 4	76	< 0.4	< 10	121	090	6	30	< 0.4	< 10
72	041	< 4	38	< 0.4	< 10	122	091	6	25	< 0.4	< 10
73	042	10	110	< 0.4	< 10	123	092	4	38	< 0.4	< 10
74	043	< 4	85	< 0.4	< 10	124	093	6	17	< 0.4	< 10
75	044	< 4	44	< 0.4	< 10	125	094	5	30	< 0.4	< 10
76	045	5	88	< 0.4	< 10	126	095	4	19	< 0.4	< 10
77	046	9	76	< 0.4	< 10	127	096	6	18	< 0.4	< 10
78	047	6	66	< 0.4	< 10	128	097	7	51	< 0.4	< 10
79	048	< 4	48	< 0.4	< 10	129	098	7	37	< 0.4	< 10
80	049	5	52	< 0.4	< 10	130	099	6	45	< 0.4	< 10
81	050	13	46	< 0.4	< 10	131	100	6	33	< 0.4	< 10

EXHIBIT "A"
 STATEMENT OF EXPENDITURES
 ROCK GEOCHEMISTRY
 VINE 26 and VINE 29 CLAIMS
 FORT STEELE MINING DIVISION

Fees

Based on Field Costs: 8 days @ \$ 350/day	\$ 2,800.00
Office Costs: 3 days @ \$ 350/day	1,050.00

Expenses

Motel and meals: 8 days @ \$ 60/day	480.00
Airfare: Vancouver-Cranbrook-Vancouver	355.00

<u>Materials</u> (sample bags, flagging, tape)	50.00
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<u>Analyses</u> : 100 samples @ \$ 12.00 inclusive	1,200.00
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Transportation

Truck rental: 8 days @ \$ 40/day	320.00
Gasoline and oil	80.00

Miscellaneous

Sample shipping (Loomis)	30.00
Report: typing, draughting, photocopying	135.00

\$ 6,500.00

F.R. Edmunds
 F.R. Edmunds, Ph.D. FGAC
 GEOLOGICAL ASSOCIATION OF CANADA
 FELLOW

IN THE MATTER OF THE

B.C. MINERAL ACT

AND

IN THE MATTER OF A ROCK GEOCHEMISTRY PROGRAM

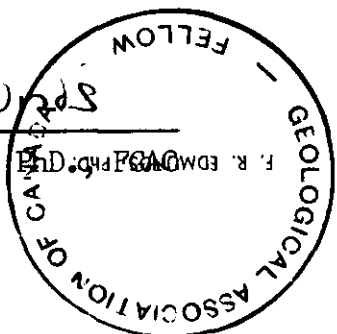
CARRIED OUT ON THE VINE 26 and VINE 29 MINERAL CLAIMS

in the Fort Steele Mining Division of the
Province of British Columbia

A F F I D A V I T

I, F.R. Edmunds, of the City of West Vancouver in the Province of British Columbia, make Oath and say:

1. That I am a Consulting Geologist contracted by Cominco Ltd. for the purpose of carrying out the program of Rock Geochemistry referred to on the Vine 26 and Vine 29 Claims, and have a personal knowledge of the facts to which I hereinafter depose:
2. That annexed hereto and marked as Exhibit "A" to this my Affidavit is true copy of expenditures incurred on a Rock Geochemistry program, on the Vine 26 and Vine 29 mineral claims.
3. That the said expenditures were incurred between the 1st day of July, 1988 and the 30th day of September, 1988, for the purposes of mineral exploration on the above noted claim.


F.R. Edmunds
 F.R. Edmunds, F.D.C. (P.C.A.C.)


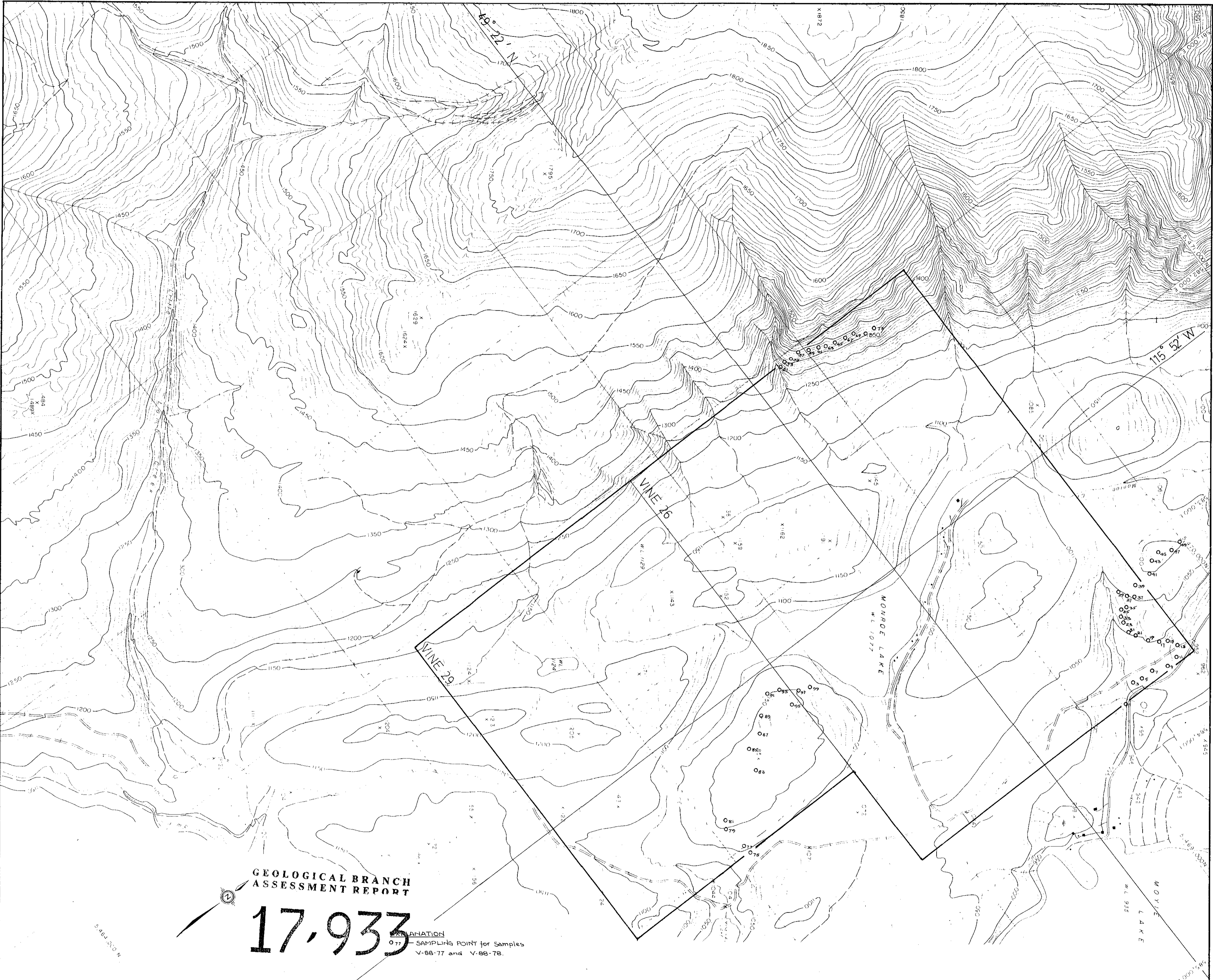
CERTIFICATE

I, Frederick R. Edmunds, hereby certify that:

1. I am a consulting geologist residing at 6840 Hycroft Road, West Vancouver, B.C. V7W 2K8.
2. I am a graduate of Keele University, U.K. with the degree of BA (Geology, 1958), of Toronto University, Canada with the degree of MSc (Petrology, 1966) and of the Pennsylvania State University, U.S.A. with the degree of PhD (Mineralogy and Petrology, 1977).
3. I am registered with the Geological Association of Canada as a Fellow.
4. I have practiced my profession as a geologist for the past 30 years in Canada, USA, and parts of Europe.
5. I do not have, nor do I expect to have, directly or indirectly, any interest in the properties of Cominco Ltd.
6. This report is based on the results of field work conducted by myself during the month of July, 1988, and my general knowledge of the Aldridge Formation in southeast British Columbia.
7. I place no restriction on the lawful use of the material which I have certified.

Dated at West Vancouver, British Columbia
30 September, 1988

F.R. Edmunds
 F.R. Edmunds,  F.R. EDMUNDS, PH.D.



**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

17,933

EXPLANATION
 O 77 — SAMPLING POINT for Samples
 V-88-77 and V-88-78.

Date by: FRE		Traced by:	
Revised by:	Date:	Revised by:	Date:
VINE 26 and VINE 29 LITHOCHEMICAL SURVEY			
Scale: 1:10,000	Sheet: 10	Date: 15 SEPT. 1988	Plate: 1