

REPORT ON
RECONNAISSANCE GEOLOGICAL MAPPING
AND GEOCHEMISTRY

06/87

OF
LLOYD AND NORDIK CLAIM GROUPS
CARIBOO MINING DIVISION
NTS 93A/12E

Lat.: 52° ~~33' N.~~ Long.: 121° ~~31' W.~~
33' FOR 34.5'

BIG VALLEY RESOURCES INC.
(OWNER & OPERATOR)

BY

Uwe Schmidt, B.Sc., F.G.A.C.
NORTHWEST GEOLOGICAL CONSULTING LTD.

FILMED

GEOLOGICAL BRANCH
ASSESSMENT REPORT

14,854

MINISTRY OF ENERGY, MINES
AND PETROLEUM RESOURCES
Rec'd JUL 16 1986
SUBJECT _____
FILE _____
VANCOUVER, B.C.

NORTHWEST GEOLOGICAL CONSULTING LTD.

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REPORT
ON
RECONNAISSANCE GEOLOGICAL MAPPING
AND GEOCHEMISTRY
OF
LLOYD AND NORDIK CLAIM GROUPS
CARIBOO MINING DIVISION
NTS 93A/12E
Lat.: 52° 35' N. Long.: 121° 37' W.
for
BIG VALLEY RESOURCES INC.
(OWNER & OPERATOR)

By:
Uwe Schmidt, B.Sc., F.G.A.C.

July 15, 1986

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1. SUMMARY AND RECOMMENDATIONS

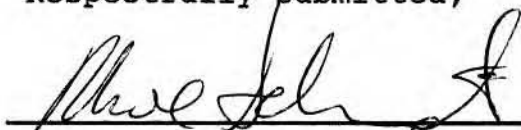
The Lloyd-Nordik claim groups are located in the Cariboo Mining division 75 km northeast of Williams Lake, B.C. The two groups consist of 143 contiguous units immediately north and east of the Cariboo-Bell copper-gold property. In May 1986, Northwest Geological Consulting Ltd. was commissioned by Big Valley Resources Inc., the owners of the property, to examine the property and make recommendations on possible further work. This program was carried out in early May, and three areas of interest were outlined.

Further detailed geochemical sampling at a sample spacing of 50 by 50 metres is recommended over the southern half of the Lloyd 2 claim. The aim of this sampling program is to outline possible areas of copper-gold or gold mineralization. Sufficient geochemical sampling was carried out by the writer to prove that soil sampling reflects the present known limits of copper mineralization.

Smaller detailed soil sampling grids and hand trenching are also recommended in the vicinity of two anomalous gold soil sample sites on the Nordik 2 and 4 claims.

If results are positive, VLF-EM and magnetometer surveys are recommended to further evaluate the targets.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Uwe Schmidt', written over a horizontal line.

Uwe Schmidt, B.Sc., F.G.A.C.

2. INTRODUCTION

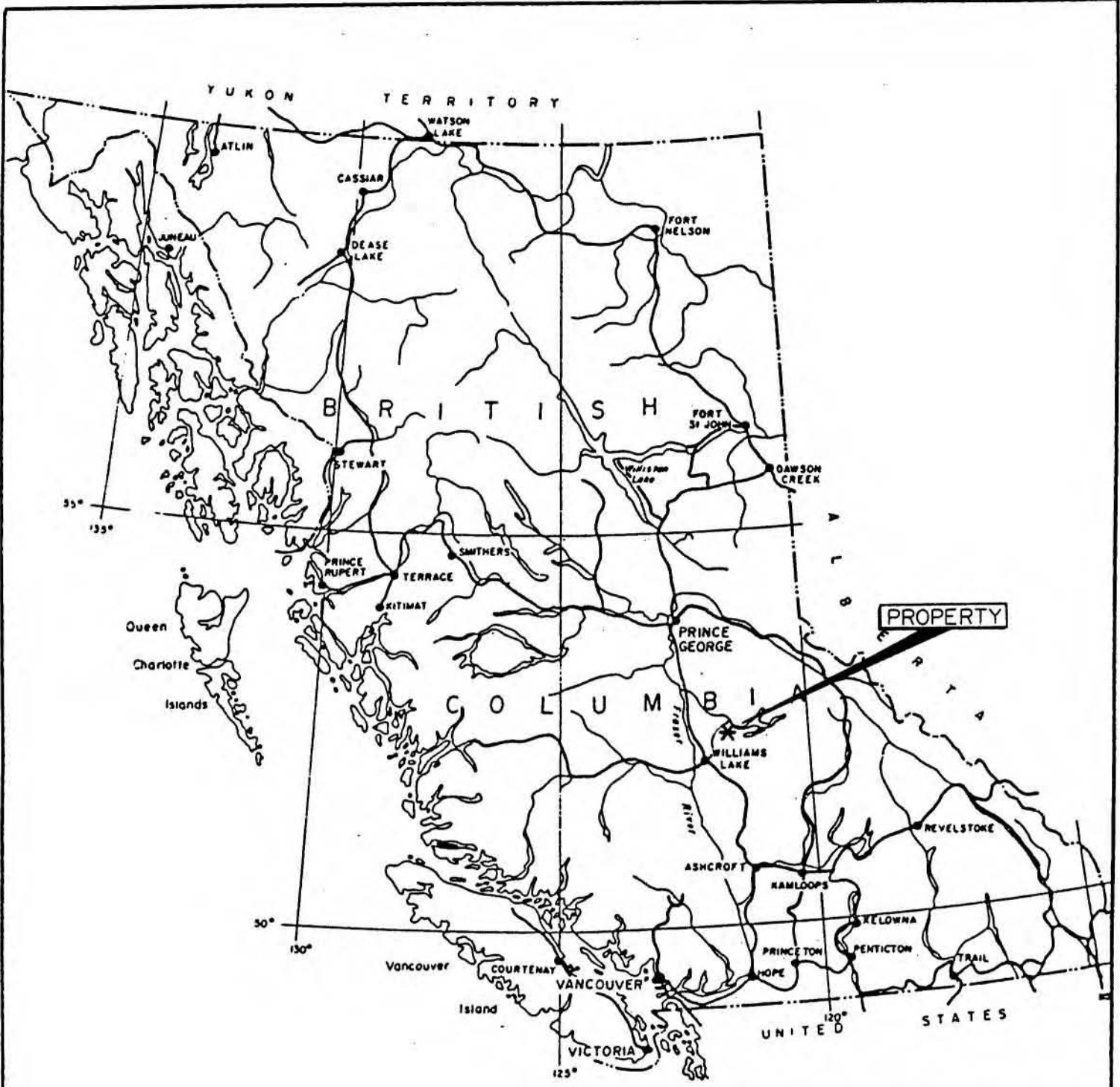
In May 1986 Northwest Geological Consulting Ltd. was commissioned by Big Valley Resources Inc. to carry out a reconnaissance of the company's mineral claim holdings and make recommendations on possible further work. During the period from May to 14, 1986, the writer, and geologist Leo Lindinger carried out a program of reconnaissance mapping, geochemical sampling and compass surveys of the claims and selected outcrops. This report summarizes the work carried out. After this program, Big Valley Resources Inc. carried out a limited test pitting program in the southern Nordik group.

3. PROPERTY, LOCATION AND ACCESS

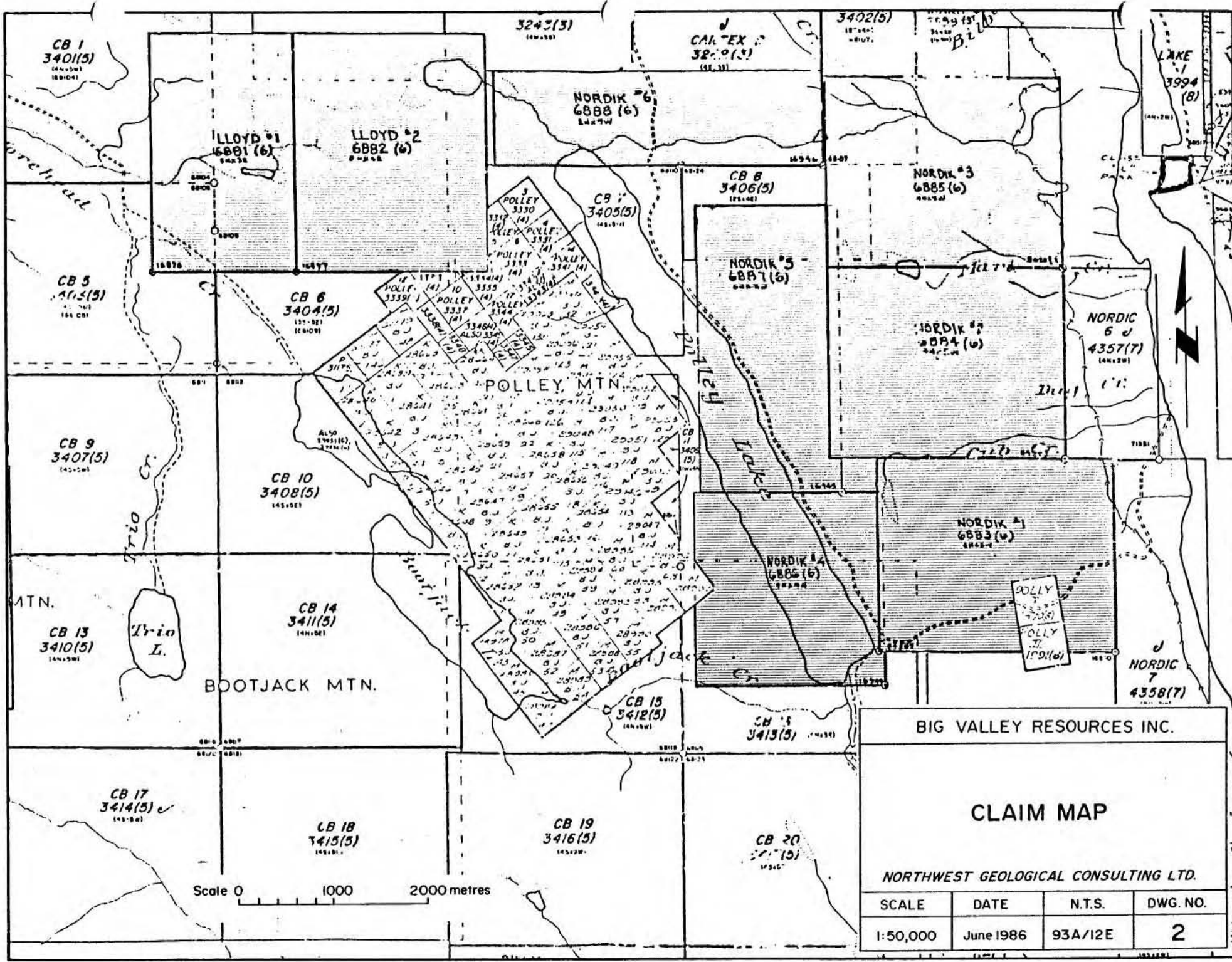
The Lloyd-Nordik Property of Big Valley Resources Inc. consists of 143 mineral claim units located in the Cariboo Mining Division in NTS 93 A/12E map area. The property is divided into the 49 unit Lloyd group and the 94 unit Nordik group. The geographic coordinates of the approximate centre of the property are 52° 35"N latitude and 121° 37'W longitude.

The details of the claims are as follows:

CLAIM NAME	NO.OF UNITS	RECORD NO.	EXPIRY DATE
<u>LLOYD GROUP</u>			
LLOYD 1	15	6881	JUNE 25, 1986
LLOYD 2	20	6882	JUNE 25, 1986
NORDIK 6	14	6888	JUNE 25, 1986



BIG VALLEY RESOURCES INC.			
LOCATION			
<i>NORTHWEST GEOLOGICAL CONSULTING LTD.</i>			
SCALE	DATE	N.T.S.	DWG. NO.
1:7,000,000	June 1986		1



BIG VALLEY RESOURCES INC.

CLAIM MAP

NORTHWEST GEOLOGICAL CONSULTING LTD.

SCALE	DATE	N.T.S.	DWG. NO.
1:50,000	June 1986	93A/12E	2

CLAIM NAME	NO. OF UNITS	RECORD NO.	EXPIRY DATE
<u>NORDIK GROUP</u>			
NORDIK 1	20	6883	JUNE 24, 1986
NORDIK 2	20	6884	JUNE 25, 1986
NORDIK 3	20	6885	JUNE 25, 1986
NORDIK 4	16	6886	JUNE 25, 1986
NORDIK 5	18	6887	JUNE 25, 1986
	<u>143</u>		
TOTAL	143		

The property is located 4 km southwest of Likely. This is approximately 75 km, by road, northeast of Williams Lake. The western, Lloyd group is accessible by 2 wheel-drive vehicle from the Likely road via the Morehead-Bootjack lakes road.

The eastern, Nordik block is accessible via the two-wheel drive "Ditch" road which connects to the Likely road 1 km west of Likely. Additional 4 wheel drive accessible logging roads cross the property.

The claim boundaries in both groups were examined. The boundaries are well marked and locations are plotted with acceptable accuracy on government claim maps. The claim locations shown on fig. 4 are those determined by the writer.

4. PHYSIOGRAPHY

The property is located near the southeastern boundary of the Fraser Basin, a sub-division of the Interior Plateau. On a large scale the Fraser Basin is characterized by low relief with flat to rolling surfaces which for the most part lie below elevation of 900 m. Few bedrock exposures occur in these predominantly drift covered areas. Glacial ice moved in a

northwesterly direction on the property.

Elevations on the property range from 925 to 1130 metres. Outcrop is limited to road cuts certain areas along ridge tops and steep slopes. No outcrop was located on Lloyd 1 and the northwest corner of Lloyd 2. Even in higher and steeper terrain bedrock exposure is limited.

5. HISTORY

Although many of the copper occurrences in Quesnel Trough were probably first discovered during the Cariboo gold rush, documentation of hardrock exploration began with the discovery of surface exposures of the Cariboo-Bell deposit, in 1964.

Extensive mineral exploration for porphyry copper mineralization has been carried out intermittently in the area until the late 1970's when most of the known alkalic plutons in the area were staked and explored.

The B.C. Ministry of Mines Assessment Report Index Maps shows that previous work has been carried within the present property boundary.

In 1971, Ardo Mines Ltd. carried out a magnetometer survey on the company's Polley Group. The work was carried out 5.5 km Southwest of Likely, but there is insufficient topographic detail given to locate the work precisely. It appears to have been carried out in the vicinity of the present Nordik 6 claim.

In 1979, JMT Services Corp. carried out an auger geochemical soil sampling survey on the Cab 1-5 claims. This work was carried out within the present LLOYD 1 & 2 claim area.

No outcrop was found and the Dithizone-Heavy Metals Field geochemistry produced spotty results.

In 1981, Premier Geophysics Inc. carried out an I.P. Survey on a larger property which included the Cab 1-5 claims. The expanded property is now covered by the Lloyd 1 and 2 mineral claims. Four I.P. and resistivity lines were run across the centre of the property in an east-west direction. Results of the survey indicated that a layer of deep and somewhat conductive overburden underlies the surveyed area.

6. REGIONAL GEOLOGY

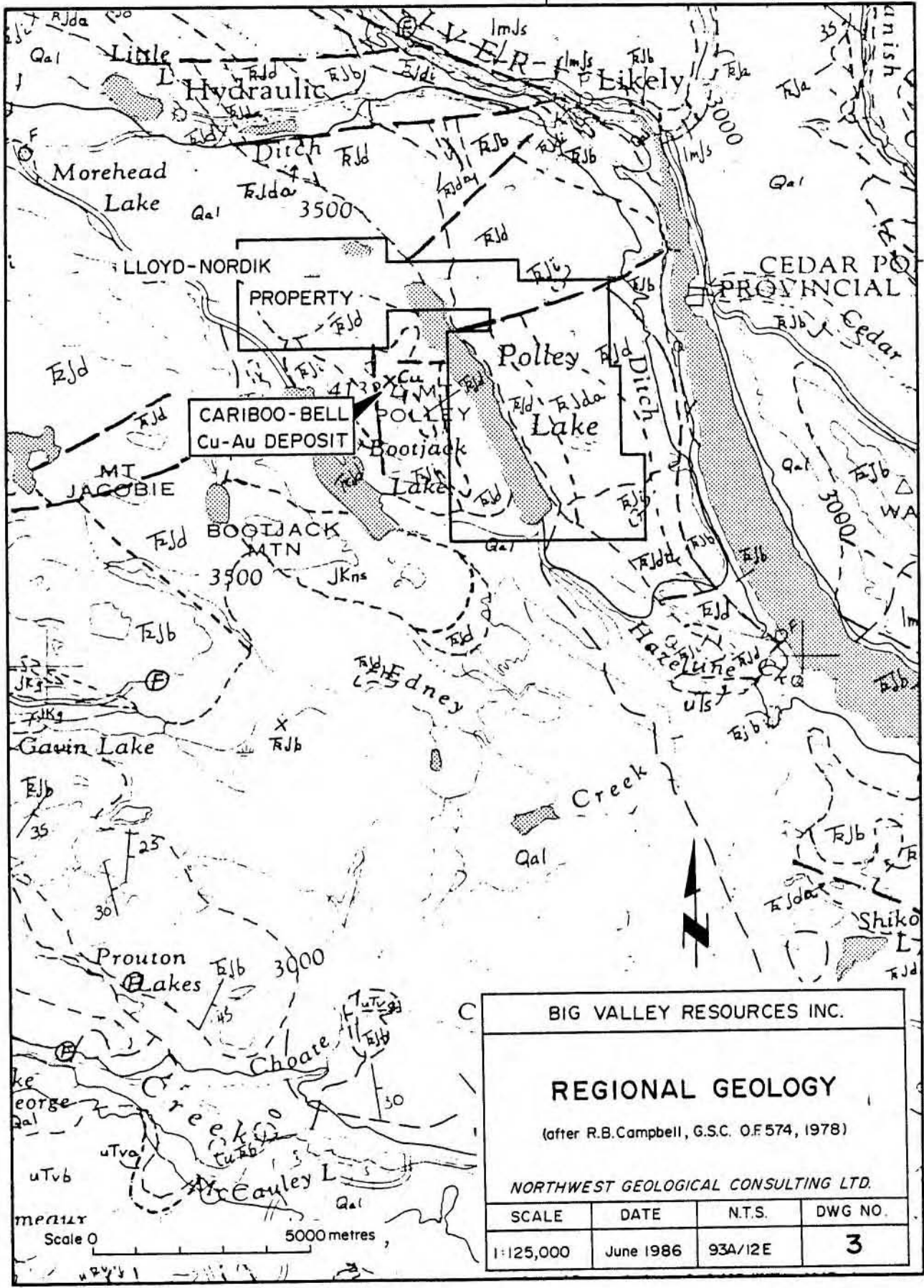
The property lies within Quesnel Trough, a narrow belt of Mesozoic volcanic and sedimentary rocks. Quesnel Trough is a division of the Intermontane tectonic belt which is one of 5 major tectonic elements of the Canadian Cordillera.

The lithologies of Quesnel Trough have been traced southward to beyond the international border and northwestward beyond Prince George. The Mesozoic succession near the property and northward have been assigned to the Upper Triassic and Lower Jurassic Takla Group. To the south, the lower, Upper Triassic sequences have been assigned to the Nicola Group.

The trough is fault bounded on the west and east. To the west, Quesnel Trough lies in fault contact with Paleozoic rocks of the Pinchi Belt. To the east the boundary between the trough and Intermontane Belt is marked by a major shear zone. Large scale tectonic imbrication and mylonitization on both sides of the zone suggest an eastward thrusting of the

121°35'

52°35'



BIG VALLEY RESOURCES INC.			
REGIONAL GEOLOGY			
(after R.B.Campbell, G.S.C. O.F.574, 1978)			
NORTHWEST GEOLOGICAL CONSULTING LTD.			
SCALE	DATE	N.T.S.	DWG NO.
1:125,000	June 1986	93A/12E	3

LEGEND

QUESNEL LAKE (93-A) MAP-AREA

PLEISTOCENE AND RECENT

Qal

Glacial deposits, till, gravel, sand, silt;
alluvium: few scattered unmapped outcrops

TERTIARY

MIOCENE AND PLIOCENE

uTva

Plateau basalt: olivine basalt, feldspar
porphyry basalt, minor breccia, conglomerate
and sandstone: uTva areas underlain by
plateau basalt, few scattered unmapped outcrops;
uTva coarse feldspar porphyry, may be older
intrusions

JURASSIC AND CRETACEOUS

JKg

Granodiorite, quartz monzonite, quartz diorite

JKns

Nepheline syenite, syenite

CRETACEOUS AND (?) TERTIARY

KTs

Conglomerate, sandstone, shale

QUESNEL RIVER GROUP (uJw to ImJd)

JURASSIC

LOWER AND (?) MIDDLE JURASSIC

PLIENSCHACHIAN TO (?) BAJOCIAN

ImJs

Conglomerate (local granitic clasts), greywacke,
shale

TRIASSIC AND JURASSIC

UPPER TRIASSIC AND LOWER JURASSIC

TJi

Syenite, monzonite, diorite; sub-volcanic
intrusive phases, probably mainly lower Jurassic

NORIAN TO SINEMURIAN

TJd

Purple or maroon, minor grey and green basaltic
and felsitic breccia, minor flows, tuff,
sandstone and limestone. TJdw; purple and
maroon basalt with analcite phenocrysts

NORIAN AND (?) HETTANGIAN

TJc

Green and purple conglomerate and sandstone

NORIAN AND (?) YOUNGER

TJb

Augite porphyry basalt breccia, minor flows,
tuff and tuffaceous argillite; local andesitic
basalt

TJa

Basaltic tuff and breccia, generally fine-
grained; argillite, flows, chert

Intermontane over the Omineca Belt (REES,1981).

Quesnel Trough was the site of extensive island-arc volcanic and sedimentary deposition from late Triassic to early Jurassic time. The base of Quesnel Trough is an Upper Triassic black argillite unit. This unit is exposed near the eastern margin of the trough where it commonly overlies ophiolitic rocks of the Slide Mountain Group. The basal black argillite is overlain by a series of augite porphyry flows, breccias and minor argillites. These rocks are overlain by a second sequence of argillites and volcanoclastic rocks of Upper Triassic to Lower Jurassic age. The presence of sub-aerial volcanoclastics in the geologic record indicates that volcanic centres in the trough emerged in early Jurassic time. This is postulated to have occurred in conjunction with the rise and deformation of Omineca Crystalline Belt rocks to the east.

Block faulting and tilting are the dominant structural styles in the belt. Faults trend in a northwest and northeast direction. Folding is restricted to the eastern margin of the belt near its structural boundary with the Omineca Crystalline Belt.

Two major episodes of granitic intrusion are recognized along a northwest trending belt slightly oblique to Quesnel Trough. The intrusive events cluster around 200 and 100 million year ages.

Copper and copper-gold deposits have an affinity for 200 million year old alkalic plutons and Triassic-Jurassic volcanic rocks. Molybdenum deposits on the other hand are associated

with the 100 million year intrusive event.

7. ECONOMIC GEOLOGY

A common exploration target in Quesnel Trough has been the copper-gold association found in the alkalic porphyry copper environment. The Cariboo-Bell Cu-Au deposit, 1 km south of the LLOYD 2 claim boundary is a good example of this environment.

CARIBOO-BELL

The Cariboo-Bell copper-gold deposit was first actively explored in 1964 after the ground examination of an airborne magnetic anomaly revealed copper oxide mineralization. Intensive, intermittent exploration by various operators has continued to the present time.

The most recent exploration on the property was carried out by E & B Explorations Inc. (Mascot Gold Mines Limited). The latest published geologic reserves are: 117 million tons 0.31% Cu, 0.012 oz./ton Au, (Saleken & Simpson, 1984).

The Cariboo-Bell belongs to the alkalic class of Copper-gold porphyry deposits of Triassic age. The mineralization is hosted by a multiphase alkalic intrusive complex intruded into Upper Triassic volcanoclastic rocks, flows and minor sedimentary rocks which are part of a regionally extensive Mesozoic volcanic event.

Mineralization consists of chalcopyrite, magnetite and alteration minerals directly associated with the development of a "crackle breccia." This breccia generally coincides with an

intrusion breccia phase of the complex. The intrusive complex has been described as a tilted multiple laccolith with a length of 6 km and a thickness of 2 to 3 km. Textures vary from coarse plutonic in the lower southwestern part to sub-volcanic textures in the upper, northeastern part. Intrusive phases include syenodiorite, monzonite porphyry, intrusion breccia and pyroxenite-gabbro.

Alteration assemblages are concentric around the mineralized zone. Alteration reflects the alkalic nature of the deposit and grades from potash feldspar-biotite-diopside core to garnet-epidote intermediate zone to a pyritic epidote perimeter zone.

Hodgson, Bailes and Verzosa (1976) have interpreted the geology of the deposit as a local volcanic centre within Quesnel Trough. The volcanic pile was built up on a regionally extensive blanket of Upper Triassic volcanic derived conglomerate and sandstone. Within the area of the Cariboo-Bell, alternating flows and lahar deposits accumulated in a submarine environment which later evolved into a subaerial environment. The high level laccolith complex, which hosts most of the mineralization, intruded and the centre of the volcanic pile in early Jurassic time.

8. PROPERTY GEOLOGY

Mapping by R.B. Campbell of the G.S.C. indicates that the property is underlain by two Upper Triassic and Lower Jurassic volcanic units. These are intruded by slightly younger plugs

of syenite.

For mapping purposes, the volcanic rocks were divided into four mappable units, RJD1 to 4.

The property is predominantly covered by a blanket of sandy glacial till. Sediment thickness varies from a few to tens of metres. Bedrock is poorly exposed. Road cuts and sidehills and ridge tops provide the best exposure.

Basic to intermediate varieties of volcanic breccias, tuffs, flows and minor epiclastic rocks were observed.

The following unit sub-divisions were made:

- RJD1: andesitic crystal and lapilli tuff
- RJD2: dark green to black amygdaloidal basalt and breccia
- RJD3: grey-green, fine grained to porphyritic basalt, augite porphyry basalts.
- RJD4: polymictic basaltic breccia and agglomerate

Altered varieties of these rock-types were also observed. Alteration commonly included pervasive salmon pink coloured potassic alteration and chlorite-epidote alteration, which commonly occurs along fractures. An "a" prefix is assigned to these altered varieties on the geology map, fig 4.

Malachite and finely disseminated pyrite were observed in an east west trending trench, located along the Lloyd 2 south claim boundary. An assay of the highest visible concentration of secondary copper minerals returned 0.91% Cu, 0.025 oz/ton Au

and 0.15 oz/ton Ag over a 10 metre sample interval.

Zones of alteration cross the trench in a north south direction. The copper mineralization and alteration appear to be a northern extension of the Cariboo-Bell Cu-Au mineralization event.

Alteration and minor malachite staining was also observed in outcrop in a road cut, located 450 metres north of the trench. A geochemical analysis of this material returned 3,232 ppm Cu and 75 ppb Au.

9. GEOCHEMISTRY

A total of 54 samples were taken during the property reconnaissance. This includes 36 soil, 7 silt, 10 rock samples and 1 rock assay. Soil samples were taken from the B horizon which, with the exception of the Nordik 4, claim was developed in sandy and pebbly glacial till. Overburden on Nordik 4 is a wet clay-rich pebbly till. The aim of the geochemical sampling was to give an indication of the backgrounds of various elements and determine the most favourable combination of elements to test for in future soil sampling programs.

Soil samples were taken generally at 250 metre intervals along north-south and east-west lines across the property.

Silt samples were taken when favourable sample sites were encountered. The property is poorly drained even though there is considerable relief. Streams tend to have low flow rates and high organic content.

Rock geochemistry samples were taken areas where

mineralization was evident and at sites of alteration. Rock and soil samples were taken at adjacent sites along a trench located in the southeast corner of the Lloyd 2 claim, as a comparison of rock and soil geochemical response.

Sample density is not sufficient to draw conclusions on the geochemistry of the area, however a number of isolated values and groups of geochemical analyses suggest areas which require more detailed work.

Specifically the southern half of the Lloyd 2 claim shows an anomalous response in copper and gold. Gold analyses the to be higher and more variable in rock than in nearby soils. However, the gold response and copper response is well reflected in the soils. In addition, this increase is reflected up to 1 km north of the trench, which is the present limit of sampling.

An isolated high of 23 ppb Au was obtained from soil taken near the boundary of Nordik 2 and 3.

A second isolated high of 21 ppb Au and 147 ppm Cu was obtained from clay rich till on the Nordik 4 claims. Both sample sites require further follow up sampling.

10. CONCLUSIONS

Reconnaissance mapping and sampling on the Lloyd-Nordik, property revealed the presence of copper mineralization in the southern half of the Lloyd 2 claim. This area is immediately adjacent to the Cariboo-Bell Cu-Au property and indicates that an extension of the Cariboo-Bell mineralization or a related

event extends onto the Lloyd-Nordik property. Stream sediment and rock geochemical sampling support this hypothesis. Elevated copper and gold geochemical results were obtained from a silt sample located 1 km north the Cariboo Bell property boundary. Additional detailed geochemical soil sampling is justified in this area.

Isolated high, gold analyses were obtained on the Nordik 2 and Nordik 4 claims. Further detailed sampling also needs to be carried out in these areas.

11. REFERENCES

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- SALEKEN, L.W. and SIMPSON, R.G. (1984): Cariboo-Quesnel Gold Belt: A geological overview, Western Miner, April, 1984
- SCHLAX, M.G. and SHORE, G.A. (1981): Induced Polarization Survey of the CAB Group, B.C. Assessment Report 9970.
- STRUIK, L.C. (1981): A re-examination of the type area of the Devono-Mississippian Cariboo Orogeny, central B.C., Can. Jour. Earth Sci. vol. 18 no. 12.
- VENKATARAMANI, S. and CROSBY, R.O. (1971): Assessment Report 3229, Magnetometer Survey of Polly Claim Group.

12. Statement of Cost

*indicates pro rata division of cost

LLOYD GROUPI) FIELD COSTS

1) Labour

U. Schmidt: May 2,3,4,5,6,8($\frac{1}{2}$),13
6.5 days at \$250/day = \$ 1,625.00

L. Lindinger: May 5,6,8($\frac{1}{2}$),13
3.5 days at \$200/day = \$ 700.00

Travel

U. Schmidt: May 1,14
2 days at \$250/day = \$ 500.00

L. Lindinger: May 4, 14
2 days at \$200/day = \$ 400.00

\$ 900.00 * \$ 529.20

2) Room & Board

19 man days at \$30 = \$ 570.00 * \$ 335.16

3) Transportation

2 wheel drive, 2 days at \$25 = \$ 50.00

4 wheel drive, 10 days at \$40 = \$ 400.00

Fuel = \$ 132.12

Airfare = \$ 106.70

\$ 668.82 * \$ 405.03

4) Instrument Rental

2 MT 500 2 way radios
2 weeks at \$132/week = \$ 264.00 * \$ 155.23

5) Consumables and Field Supplies = \$ 368.88 * \$ 216.90

6) Geochemical Analysis and Assay

1 assay at \$23 = \$ 23.00

7 rock geochem at \$13 = \$ 91.00

11 soil/silt geochem at \$10.68 = \$ 117.48

\$ 231.48 \$ 231.48

II. OFFICE COSTS

1) Labour

U. Schmidt: June 9,10,15
 3 days at \$250/day = \$ 750.00 * \$ 441.00

2) Drafting = \$ 243.00 * \$ 142.88

3) Map Reproduction & Photocopying
 & Communication = \$ 264.91 * \$ 145.18

LLOYD GROUP TOTAL * \$ 4,927.06

Physical Work 7 pits \$6000.00
 (4.9m x 3.0m)

NORDIK GROUPI) FIELD COSTS

1) Labour

U. Schmidt: May 7,8($\frac{1}{2}$),9,10
3.5 days at \$250/day = \$ 875.00

L. Lindinger: May 7,8($\frac{1}{2}$),9,10
3.5 days at \$200/day = \$ 700.00

Travel

U. Schmidt: May 1,14
2 days at \$250/day = \$ 500.00

L. Lindinger: May 4, 14
2 days at \$200/day = \$ 400.00

\$ 900.00 * \$ 370.80

2) Room & Board

19 man days at \$30 = \$ 570.00 * \$ 234.84

3) Transportation

2 wheel drive, 2 days at \$25 = \$ 50.00

4 wheel drive, 10 days at \$40 = \$ 400.00

Fuel = \$ 132.12

Airfare = \$ 106.70

\$ 668.82 * \$ 275.55

4) Instrument Rental

2 MT 500 2 way radios
2 weeks at \$132/week = \$ 264.00 * \$ 108.77

5) Consumables and Field Supplies = \$ 368.88 * \$ 151.98

6) Geochemical Analysis and Assay

3 rock geochem at \$13 = \$ 39.00

42 soil/silt geochem at \$10.68 = \$ 448.56

\$ 487.56 \$ 487.56

II. OFFICE COSTS

1) Labour

U. Schmidt: June 9,10,15
3 days at \$250/day = \$ 750.00 * \$ 309.00

2) Drafting = \$ 243.00 * \$ 100.12

3) Map Reproduction & Photocopying
& Communication = \$ 264.91 * \$ 109.14

NORDICK GROUP TOTAL * \$ 3,721.96

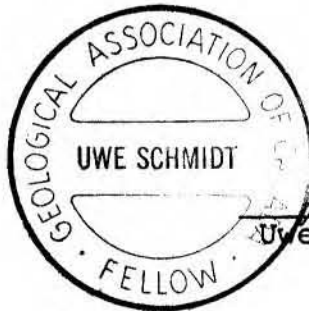
APPENDIX A

STATEMENT OF QUALIFICATIONS

I, Uwe Schmidt, of 656 Foresthill Place, Port Moody, B.C. do hereby declare:

- (1) I am a 1971 graduate of the University of British Columbia with a B.Sc. degree in Geology.
- (2) I am a Fellow of the Geological Association of Canada.
- (3) I have practiced my profession continuously since graduation.
- (4) Since graduation, I have managed various mineral projects in the Yukon Territory, British Columbia and Ontario.
- (5) This report is based on field work carried out by me or under my supervision and on selected publications and reports.

July 15, 1986
Port Moody, B.C



Uwe Schmidt
Uwe Schmidt, B.Sc., F.G.A.C.

APPENDIX B

GEOCHEMICAL ICP ANALYSIS

.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, CA, P, CR, MG, BA, TI, B, AL, NA, K, W, SI, ZR, CE, SM, Y, NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: ROCKS & SOILS -80 MESH AU* ANALYSIS BY AA FROM 10 GRAM SAMPLE.

DATE RECEIVED: MAY 16 1986

DATE REPORT MAILED:

*May 26/86*ASSAYER: *D. Lopez* DEAN TOYE. CERTIFIED B.C. ASSAYER.

NORTHWEST GEOLOGICAL PROJECT - 123 FILE # 86-0702

PAGE 1

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	W	Au*
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	1	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	1	1	PPM	PPM	1	PPM	1	PPM	1	1	1	PPM	PPB
L002	1	114	15	61	.2	12	12	789	4.35	8	5	ND	2	70	1	6	2	122	1.14	.19	15	22	1.18	29	.17	2	3.02	1.51	.14	1	2
L024	1	143	6	42	.2	12	13	591	4.23	5	5	ND	2	52	1	4	2	122	1.40	.17	13	11	1.08	30	.42	2	1.87	.09	.18	2	4
L036	7	220	10	270	.3	57	21	724	4.32	2	5	ND	1	28	2	3	2	92	1.96	.20	8	32	.99	40	.12	4	1.92	.07	.06	1	1
B60510-1	1	95	7	61	.2	49	10	1035	3.76	4	5	ND	2	37	1	2	2	97	.44	.14	16	29	.61	52	.03	2	.77	.07	.13	1	2
R48	1	3232	19	143	1.2	4	12	2309	3.26	2	5	ND	1	68	2	2	2	106	2.44	.14	19	4	1.15	66	.10	11	1.47	.05	.15	1	75
R55	1	609	7	137	.5	3	12	1733	3.78	19	5	ND	1	349	1	3	2	134	3.11	.22	19	1	1.21	143	.16	18	2.57	.65	.11	1	6
R58	3	543	6	71	.4	2	6	939	2.01	11	10	ND	3	34	1	2	2	56	.92	.04	8	2	.17	105	.01	4	.66	.07	.19	1	12
R60	1	541	11	152	1.4	6	22	2257	7.03	61	10	ND	2	195	1	2	2	263	4.59	.25	15	2	2.44	62	.23	19	3.97	.04	.06	1	18
R70	1	81	7	76	.1	23	15	1052	4.91	27	5	ND	2	25	1	3	2	164	1.80	.09	5	6	1.42	67	.26	44	1.77	.03	.05	1	3
R71	3	522	7	76	.5	4	6	1413	3.88	30	6	ND	1	69	1	2	2	136	3.03	.13	11	5	1.12	145	.13	10	2.25	.03	.07	1	24
STD C/AU-0.5	19	59	40	136	7.0	73	28	1189	3.97	42	18	8	35	48	19	16	21	61	.47	.11	39	61	.89	179	.08	37	1.73	.07	.10	13	505

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Hg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au* PPB
S001	3	356	202	4147	2.8	42	16	1457	4.78	31	5	ND	2	158	17	8	2	126	1.34	.12	20	64	1.25	353	.13	13	2.43	.12	.11	1	90
S002	2	302	9	107	.9	37	10	696	2.97	2	5	ND	1	90	1	4	2	71	1.77	.07	19	66	.70	201	.08	11	1.84	.02	.08	1	6
S003	5	582	18	254	.7	32	14	1086	3.76	6	5	ND	2	80	1	3	2	79	.79	.02	15	45	.76	333	.09	8	2.17	.03	.11	1	10
S004	4	209	8	84	.8	34	12	845	3.79	8	5	ND	2	71	1	3	2	81	.56	.08	17	52	.73	154	.07	8	2.29	.02	.11	1	3
S005	1	24	4	71	.1	20	7	446	2.91	2	5	ND	3	53	1	2	2	66	.34	.06	16	38	.48	97	.09	5	1.36	.02	.07	1	1
S006	1	38	7	97	.5	27	10	818	2.93	2	5	ND	2	54	1	2	2	63	.50	.06	16	42	.62	138	.09	6	1.61	.02	.08	1	1
S007	1	32	6	66	.1	26	9	542	2.83	4	5	ND	3	54	1	2	2	60	.60	.04	16	40	.52	76	.09	7	1.25	.01	.08	1	3
S008	3	147	11	69	.4	29	11	892	3.36	7	5	ND	3	50	1	2	2	76	.59	.05	16	46	.57	102	.09	9	1.62	.02	.13	1	21
S009	1	16	2	93	.1	19	6	238	2.85	2	5	ND	3	28	1	2	2	58	.32	.07	13	34	.40	72	.08	7	1.35	.01	.05	1	3
L001	2	452	7	79	.9	35	10	1178	2.82	4	5	ND	1	173	1	4	2	65	1.57	.08	21	50	.80	155	.06	9	2.04	.02	.08	1	14
L003	2	75	4	62	.5	37	14	1892	3.59	4	5	ND	2	101	1	2	2	93	1.37	.10	16	80	1.15	109	.09	11	2.49	.04	.09	1	5
L004	2	82	8	120	.4	53	24	2835	5.19	8	5	ND	3	106	1	2	2	138	1.74	.15	17	92	2.31	136	.17	13	2.58	.29	.06	1	3
L005	1	33	7	89	.2	32	12	397	3.47	2	5	ND	2	49	1	2	2	67	.39	.22	11	78	.79	76	.10	6	1.92	.01	.06	1	4
L006	1	39	6	81	.1	31	13	748	3.49	2	5	ND	2	28	1	2	2	73	.40	.13	12	102	1.05	122	.12	8	1.67	.01	.05	1	2
L007	1	24	8	79	.1	27	10	677	3.47	2	5	ND	3	40	1	3	2	71	.49	.15	14	79	.66	117	.11	9	1.71	.02	.07	1	1
L008	1	39	3	63	.2	29	10	423	2.98	2	5	ND	2	44	1	2	2	69	.53	.08	14	65	1.08	59	.11	7	1.75	.02	.06	1	23
L009	1	77	7	57	.4	35	14	930	3.81	4	5	ND	2	69	1	2	2	106	1.01	.12	19	92	1.22	75	.13	8	2.12	.02	.08	1	4
L010	1	33	7	73	.1	31	14	842	4.26	2	5	ND	2	42	1	2	2	104	.62	.10	10	114	.82	55	.17	11	1.93	.02	.06	1	1
L011	1	38	9	147	.1	39	14	819	4.70	2	5	ND	2	47	1	2	2	94	.61	.37	11	77	.95	151	.15	9	2.90	.01	.13	1	2
L012	1	48	6	103	.1	25	12	1339	4.09	2	5	ND	2	34	1	4	2	98	.46	.14	8	56	.72	108	.15	11	2.00	.02	.09	1	3
L013	1	669	32	80	.2	23	14	1135	4.26	2	5	ND	3	62	4	2	2	122	.87	.01	17	58	1.07	41	.16	9	2.18	.03	.07	1	2
L014	1	33	4	83	.1	26	10	670	3.81	2	5	ND	3	35	1	2	2	93	.44	.10	10	68	.60	64	.15	8	1.72	.02	.06	1	4
L015	1	70	8	107	.2	52	16	571	4.33	3	5	ND	3	61	1	2	2	103	.87	.13	13	113	1.21	61	.16	10	2.52	.02	.09	1	6
L016	1	40	6	74	.3	26	11	502	3.00	2	5	ND	3	46	1	2	2	75	.73	.05	9	79	.91	52	.12	6	1.79	.02	.05	1	1
L017	1	73	7	73	.3	42	17	470	4.41	2	5	ND	6	86	1	2	2	122	1.48	.10	13	113	1.62	81	.15	8	2.31	.11	.10	1	5
L018	1	41	6	80	.1	33	14	414	4.34	3	5	ND	3	32	1	2	2	107	.42	.11	10	99	.71	65	.14	9	2.19	.01	.07	1	2
L019	1	31	8	85	.1	36	13	698	4.05	2	5	ND	2	45	1	2	2	90	.59	.12	10	89	.89	84	.13	7	2.06	.02	.08	1	1
L020	1	32	4	74	.3	24	10	1819	3.00	4	5	ND	2	121	1	3	2	76	.96	.08	10	44	.71	131	.11	8	1.48	.04	.07	1	2
L021	1	76	6	102	.1	32	13	812	4.56	4	5	ND	3	45	1	5	2	111	.49	.16	9	68	.77	90	.16	9	2.44	.02	.08	1	1
L022	1	34	7	162	.1	31	15	1398	4.55	2	5	ND	2	38	1	2	2	99	.37	.32	7	98	.50	95	.13	7	2.26	.02	.09	1	2
L023	1	42	10	91	.2	29	12	630	4.46	2	5	ND	2	41	1	5	2	111	.44	.17	11	53	.66	67	.15	10	2.27	.01	.08	1	3
L025	1	44	10	136	.1	30	12	640	4.35	2	5	ND	3	67	1	3	2	100	.61	.21	11	58	.73	97	.16	10	2.12	.01	.08	1	1
L026	1	84	9	68	.1	38	15	505	4.66	2	5	ND	2	60	1	2	2	111	.63	.14	10	55	.92	62	.15	9	2.53	.02	.07	1	1
L027	1	97	9	93	.1	36	16	1156	4.16	2	5	ND	2	46	1	2	2	99	.76	.18	6	55	1.27	148	.17	9	2.65	.02	.10	1	4
L028	1	46	4	110	.1	34	17	1050	4.72	2	5	ND	2	34	1	2	2	104	.53	.36	5	125	1.06	111	.18	8	2.01	.01	.10	1	3
L029	2	59	5	74	.1	40	19	1045	4.44	2	5	ND	1	43	1	2	2	118	.67	.13	9	125	2.02	67	.18	9	1.66	.10	.05	1	2
STD C/AU-0.5	21	59	42	134	7.0	72	28	1168	3.95	37	17	7	35	47	18	16	18	60	.49	.11	38	62	.88	177	.08	36	1.70	.07	.11	13	500

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe 1	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca 1	P 1	La PPM	Cr PPM	Mg 1	Ba PPM	Ti 1	B PPM	Al 1	Na 1	K 1	W PPM	Au# PPB
L030	1	42	8	82	.1	31	13	593	4.07	5	5	ND	2	32	1	2	3	100	.44	.25	3	139	1.02	102	.17	2	1.75	.01	.05	1	2
L031	1	89	4	90	.1	45	18	638	4.42	3	5	ND	2	51	1	2	4	109	.58	.13	4	124	1.36	85	.15	5	2.39	.02	.05	1	1
L032	1	33	2	40	.1	21	10	392	2.90	4	5	ND	2	40	1	2	4	83	.50	.06	5	54	.66	34	.11	2	1.11	.02	.06	1	3
L033	1	20	4	32	.1	18	6	182	2.25	2	5	ND	1	26	1	2	2	58	.27	.07	2	40	.43	22	.09	2	.95	.01	.03	1	2
L034	1	42	6	101	.3	51	16	1050	4.08	8	5	ND	1	44	1	6	2	91	.43	.20	5	86	1.15	66	.13	2	2.09	.01	.06	1	1
L035	1	32	6	97	.1	35	12	1598	3.35	3	5	ND	2	67	1	2	2	81	.70	.11	4	60	.67	116	.12	2	1.76	.01	.09	1	2
L037	1	38	2	81	.1	27	12	559	4.00	2	5	ND	2	55	1	2	3	101	.56	.22	4	69	.72	94	.15	4	2.07	.01	.08	1	4
L038	1	177	8	101	.5	53	22	2222	4.48	7	5	ND	3	60	1	2	3	121	1.17	.08	20	88	1.53	84	.11	2	4.00	.05	.10	1	8
L039	1	51	7	67	.1	32	14	444	4.97	2	5	ND	2	53	1	2	2	131	.49	.20	5	84	.82	67	.16	2	2.18	.02	.07	1	2
L040	1	146	11	135	.3	37	14	1126	4.87	11	5	ND	3	83	1	2	2	135	.68	.15	12	60	.93	181	.13	4	2.46	.02	.13	1	15
D055	1	57	5	107	.2	24	10	559	3.99	4	5	ND	2	71	1	3	2	107	.44	.04	6	46	.65	155	.14	3	1.83	.02	.08	1	3
D056	1	75	7	98	.1	29	11	482	4.09	8	5	ND	3	50	1	2	2	104	.31	.03	8	49	.70	152	.13	2	2.30	.01	.07	1	4
D057	1	23	6	71	.3	13	5	351	3.11	3	5	ND	2	34	1	2	2	90	.22	.03	6	35	.29	125	.11	2	1.12	.01	.04	1	2
D058	2	205	11	180	.4	19	12	1417	4.13	3	5	ND	2	25	1	2	2	103	.19	.07	6	37	.43	155	.10	2	1.69	.01	.08	1	4
D060	2	205	4	177	.3	12	12	788	5.58	12	5	ND	2	145	1	5	2	177	.66	.09	4	17	.62	164	.08	6	2.03	.01	.06	1	3
D070	1	181	7	138	.4	27	14	1176	4.12	10	5	ND	3	66	1	5	2	100	.73	.14	8	38	.81	165	.11	4	2.53	.02	.11	1	7
D071	2	267	10	245	.6	24	12	1122	4.65	21	5	ND	2	49	1	3	2	120	.69	.18	6	33	.67	166	.12	2	2.88	.01	.07	1	5
STD C/AU-0.5	21	59	41	139	7.1	74	29	1211	3.96	43	15	7	34	48	18	16	21	61	.49	.11	37	63	.87	182	.08	36	1.73	.06	.11	13	505

NORTHWEST GEOLOGICAL PROJECT - 123 FILE # 86-0702

PAGE 4

SAMPLER	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	M	As*
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	I	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	I	I	PPM	PPM	I	PPM	I	PPM	I	I	I	PPM	PPB
POO1 PAN-CONC.	1	51	3	43	.1	34	15	730	3.70	5	5	ND	1	48	1	8	2	107	.97	.10	6	159	1.71	34	.14	3	1.18	.13	.04	1	2
POO2 METAL	1	4	58537✓	1	8.1	1	1	2	.09	1120	5	ND	1	1	1	8215	36	1	.01	.01	2	2	.01	1	.01	3	.01	.01	.01	1	-
STD C/AU-0.5	20	61	42	135	7.0	69	29	1236	3.97	39	19	8	36	30	19	16	18	63	.48	.11	40	62	.88	188	.08	36	1.74	.07	.11	13	500

metal - mostly Pb - needs assay for correct data.

ACME ANALYTICAL LABORATORIES LTD.

852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

PHONE 253-3158

TELEX 04-53124

ASSAY CERTIFICATE

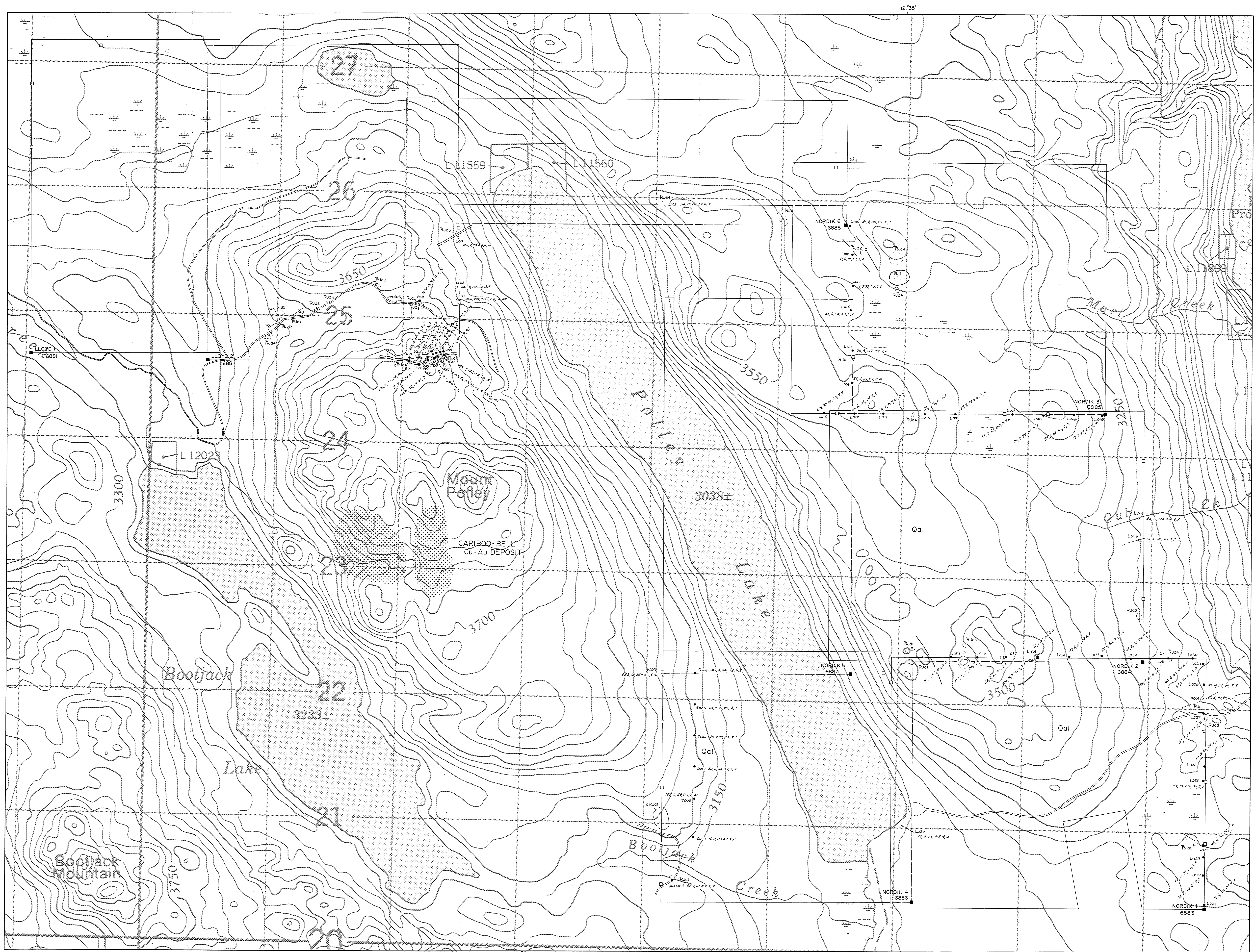
SAMPLE TYPE: ROCK CHIPS AU# 10 GRAM REGULAR ASSAY

DATE RECEIVED: MAY 16 1986 DATE REPORT MAILED: *May 26/86* ASSAYER: *D. Joy* DEAN TOYE, CERTIFIED B.C. ASSAYER.

NORTHWEST GEOLOGICAL PROJECT - 123 FILE # 86-0702A

PAGE 1

SAMPLE#	Mo %	Cu %	Pb %	Zn %	Ag OZ/T	Ni %	Co %	Mn %	Fe %	As %	U %	Th %	Cd %	Sb %	Bi %	Au OZ/T
DR-57	.001	.91	.02	.03	.15	.01	.01	.29	8.25	.01	.002	.01	.010	.010	.010	.025



52°35'

↑

LEGEND

PLEISTOCENE AND RECENT

Qal Glacial deposits, mainly sandy pebble till, minor clay, pebble till

TRIASSIC AND JURASSIC

Ru1 SYENITE

Ru2 BASALTIC AND MINOR ANDESITIC BRECCIA, FLOW, TUFFS AND EPICLASTIC ROCKS

Ru21 andesitic crystal and lapilli tuff

Ru22 dark green to black amygdaloidal basalt and breccia

Ru23 grey-green, fine grained to porphyritic basalt, augite porphyry basalt

Ru24 polymictic basaltic breccia and agglomerate

o prefix indicates altered variety: alteration is predominantly salmon pink potassic, also chlorite-epidote along fractures

SYMBOLS

GEOCHEMISTRY

△ Pan
 x Silt Loos SAMPLE NO.
 ● Soil Cu, Pb, Zn, Ag, As: (PPM); Au: (PPB)
 ■ Rock (Rock Assay in %)

○ Limit of outcrop
 Small outcrop
 ○ Limit of sub-outcrop
 --- Geological Boundary: defined, inferred, assumed
 // Bedding, Foliation, Joints: inclined
 ↗ Glacial Direction
 ■ LCP, Claim Post
 == Gravel Road
 --- Trench

Scale 0 200 400 600 800 metres

BIG VALLEY RESOURCES INC.

GEOLOGY & GEOCHEMISTRY
 LLOYD, NORDIK CLAIM GROUPS

SCALE	DATE	N.T.S. No.	DWG. No.
1:10,000	June 1986	93A/2E	4

GEOLOGICAL BRANCH
 ASSESSMENT REPORT

14,854