Valley Copper Feasability Report

896390

Table 2-1 · 2-1 Xerox

2.1.3-1

2.1-3-2

Figure 2-1-1-1 – Location map

2-1-2-1a, 1b

2-1-3-1 and Legend Soils

2-1-4-2 Water Flow

Drawings B 2553-2 + Legend
Hydrogeological map

2553-3 + Legend

2553-4 Bedrock contours

2553-9

2553-10

2553-11

TABLE 2.1.2-1

MONTHLY AND ANNUAL PRECIPITATION AT HIGHLAND VALLEY, LORNEX STATION, 1970-1976 (1,276 m elevation)

	Monthly Total* Precipitation (mm)													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Total	Winter Snow (mm)
1970	25.9	3.8	13.2	20.6	19.6	21.3	1.0	14.2	41.9	7.9	63.5	61.0	293.9	1,577
1971	91.4	22.9	31.8	11.4	19.8	34.8	8.1	2.8	14.7	13.7	22.9	94.0	368.3	2,596
1972	38.1	10.2	20.6	31.0	-	-	-	-	-	-	-	-	-	-
1973	16.5	39.4	14.7	2.0	10.2	13.7	0.5	20.1	18.0	39.4	64.5	32.0	271.0	-
1974	89.9	31.8	19.8	10.9	21.3	10.4	28.7	36.1	3.8	25.9	35.3	30.7	344.7	1,961
1975	49.0	52.6	19.1	21.8	31.0	36.1	8.9	23.4	8.4	15.0	21.1	18.0	304.3	2,024
1976	8.9	27.9	10.2	6.6	20.6	32.3	15.5	98.8	10.2	10.4	10.4	9.7	261.4	1,026
Six-year Means	46.9	29.7	18.1	12.2	20.4	24.8	10.5	32.6	16.2	18.7	36.3	40.9	307.3	
SD	36.4	16.4	7.6	7.8	6.6	11.2	10.5	34.2	13.5	11.9	22.9	31.3	41.8	

SD - Standard Deviation

* Winter snow, converted to water equivalent through multiplication by 0.1, is included in Total Precipitation.

TABLE 2.1.3-1

PROFILE AND SITE DESCRIPTIONS OF HIGHLAND VALLEY SOILS

Profile Description						Site Description					
Horizon	Depth (cm)	Colour	Texture	Structure	Roots	Location	Elevation (m)	Slope (%)	Aspect	Landform	Drainage
1. Degraded Dystric Brunisols Developed on Glaciofluvial Outwash and Colluvium											
LF	1-0				abundant	O.K. Mine	1500	10-20	N	outwash delta	well
Ae	0-3	10 YR 6/2	gravelly sandy loam	single-grained	abundant	road					
Bm	3-32	7.5 YR 5/4	gravelly sandy loam	single-grained	abundant						
C	32+	10 YR 5/4	gravelly sandy loam	single-grained	occasional						
2. Orthic Gray Luvisols Developed on Glacial Till											
LF	8-0										
Ae	0-5	10 YR 5/2	gravelly silt loam	single-grained	abundant	Near O.K.	1900	3-6	W	glacial	moderately
Bt	5-35	10 YR 2/2	gravelly clay loam	weak subangular blocky	few	Mine				till	well
Cgj	35+	10 YR 4/3	gravelly clay loam	pseudoplaty	few						
3. Orthic Dark Gray Chernozems Developed on Lacustrine Deposits											
Ah	0-12	10 YR 5/2	silty loam	weak subangular blocky	abundant	Plain near	1250	0-3	-	lacustrine	moderately
Ahe	12-25	10 YR 6/2	silty loam	weak subangular blocky	abundant	Witche's				plain	well
Bm	25-30	10 YR 4/4	silty loam	blocky	few	Brook Creek					
BCgj	30-42	10 YR 4/4	loam	single-grained	few						
Cgj	42+	10 YR 6/1	loam	single-grained	none						
4. Orthic Regosols Developed on Alluvium											
H	12-0	10 YR	organic	single-grained	abundant	Floodplain	1280	0-3	-	floodplain	poorly
C1	0-38	10 YR 5/6	sandy loam	single-grained	abundant	near Witche's					
C2	38+	10 YR 5/2	sandy loam	single-grained	few	Brook Creek					

TABLE 2.1.3-2

CHEMICAL AND PHYSICAL PROPERTIES OF HIGHLAND VALLEY SOILS

Parameter	Horizon	Luvisols on Glacial Till			Regosols on Alluvium		Chernozems on Lacustrine			Brunisols on Glaciofluvial			Brunisols on Colluvium		
		Ae	Bt	Cgj	H	Cl	Ah	Bm	Cgj	Ae	Bm	C	AH	Bm	C
	Depth (cm)	0-5	5-35	35+	12-0	0-38	0-12	25-30	42+	0-3	3-32	32	0-3	3-10	20+
			(HV5)		(HV3)			(HV10)			(HV11)			(HV2)	
1. Physical Properties															
Particle % 2mm		75	77	74	100	100	100	100	100	58	30	32	95	90	95
Size % sand		-	57	46	-	74	-	45	45	22	71	75	78	-	80
Distribution % silt		-	35	32	-	18	-	44	37	63	15	10	19	-	17
% clay		-	8	22	-	8	-	11	18	15	15	15	3	-	3
Textural class		-	sandy loam	loam	organic	sandy loam	-	loam	loam	silt loam	sandy loam	sandyloam	loamy sand	-	loamy sand
Bulk density (g/cm^3)		1.24	-	-	0.94	-	1.03	-	-	1.15	-	-	1.53	-	-
Total porosity (%)		53	-	-	-	-	61	-	-	57	-	-	42	-	-
Minimum aeration porosity (%)		27	-	-	-	-	26	-	-	52	-	-	-	-	-
Moisture retention 0.1 bar (%)		-	26.7	24.7	-	15.4	-	-	-	-	15.6	11.5	23.9	-	11.6
0.3 bar (%)		-	12.8	18.3	101.8	11.6	34.3	38.6	12.3	-	10.7	8.1	14.8	-	6.2
15 bar (%)		-	9.8	11.6	68.5	6.0	21.0	22.9	6.7	-	6.6	5.5	7.6	-	3.2
A.W.S.C. (%)		13.6	16.1	12.0	31.0	14.7	13.3	16.2	5.8	3.0	3.1	2.2	23.7	-	12.2
2. Chemical Properties															
pH ($CaCl_2$)		4.9	4.8	4.9	5.1	5.1	5.6	5.9	6.0	5.2	4.8	4.8	4.2	4.7	4.9
Organic Matter (%)		3.1	2.1	1.0	48.5	0.4	5.1	3.8	0.2	4.8	1.9	1.9	14.7	0.9	0.2
CEC (me / 100 g)		176.6	13.9	32.8	114.5	8.2	43.2	27.2	9.2	18.5	13.9	10.6	15.8	7.7	5.5
Exchangeable Cations Ca (me/100 g)		7.5	5.4	10.1	68.5	6.9	26.2	28.5	21.4	4.1	4.8	4.8	8.6	4.6	2.9
Mg		1.8	1.2	3.2	14.6	1.6	15.6	7.2	3.2	0.8	1.0	1.2	2.0	1.5	1.4
Na		0.07	0.06	0.08	1.0	0.1	0.3	1.1	0.3	0.02	0.04	0.03	0.01	0.01	0.02
K		0.31	0.32	0.39	0.6	0.2	1.5	0.6	0.3	0.6	0.4	0.2	0.85	0.4	0.1
Total N (%)		0.09	0.05	0.04	2.04	0.01	0.50	0.16	0.02	0.11	0.05	0.03	0.13	0.04	0.01
Total S (%)		0.006	0.009	0.001	0.26	0.02	0.02	0.05	0.001	0.001	0.003	0.003	0.002	0.013	0.016
Available Macronutrients P (ppm)		18.8	27.9	25.5	7	16	5	1	6	23	30	22	29	7	14
K		97	195	235	275	205	332	355	220	380	255	160	645	156	120
Ca		1460	2110	3585	19380	2560	28170	58490	15250	1495	1725	1765	2905	980	1125
Mg		219	295	765	1460	370	3226	3075	1035	180	235	260	490	176	315
Available Micronutrients Cu (ppm)		9.2	6.8	9.5	27.5	82.1	0	0	1.2	3.9	3.5	4.7	8.5	13.4	49.6
Zn		4.8	6.6	1.7	3.0	3.9	0	0	0.2	8.3	1.2	1.5	8.1	0.8	0.6
Fe		254	456	192	215	444	1	1	1	254	164	127	24	37	93
Mn		135	255	40	227	30	4	5	30	241	32	16	238	81	20

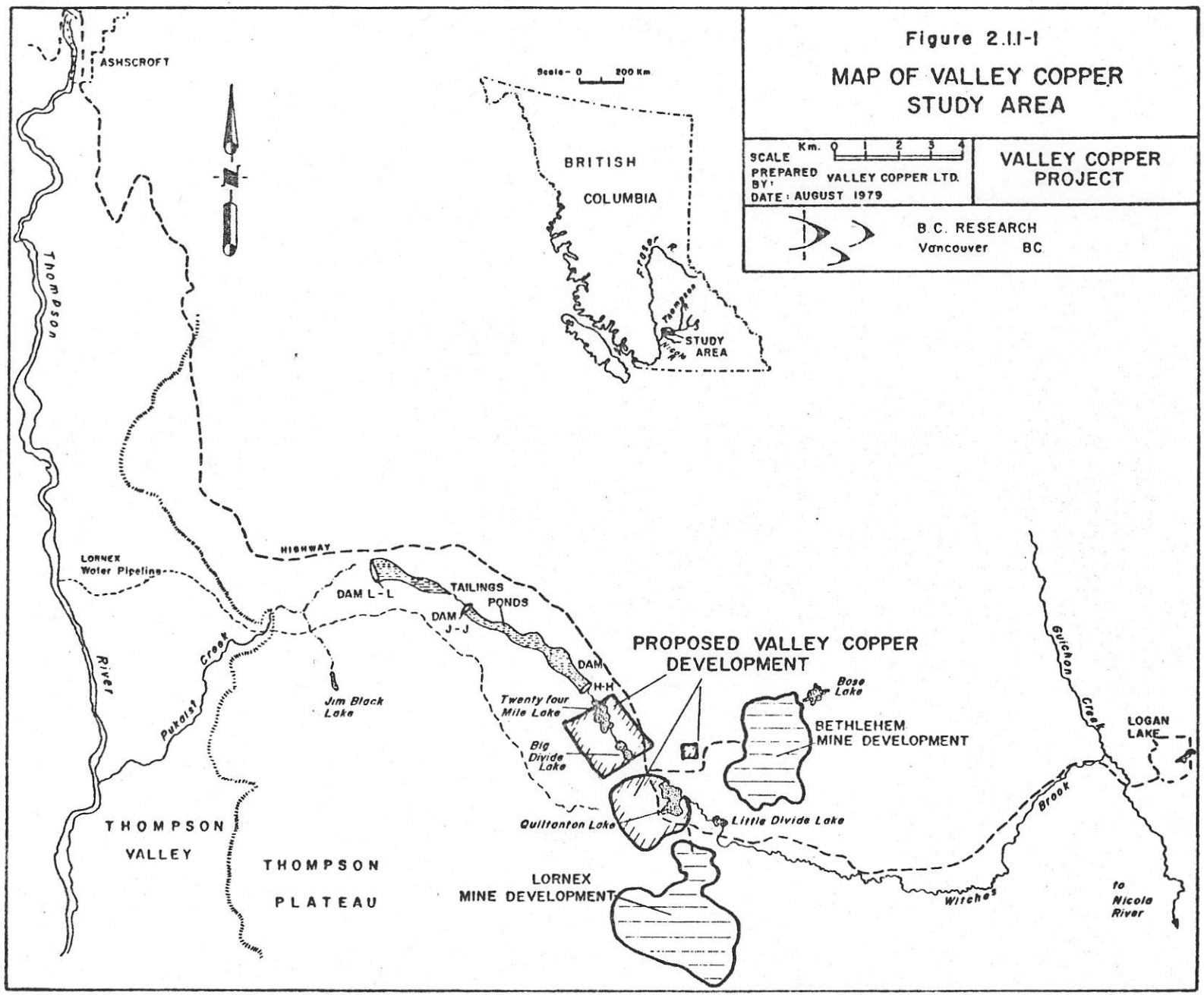


Figure 2.1.1-1
MAP OF VALLEY COPPER STUDY AREA
SCALE Km. 0 1 2 3 4
PREPARED BY: VALLEY COPPER LTD.
DATE: AUGUST 1979
VALLEY COPPER PROJECT
B.C. RESEARCH
Vancouver BC
Scale- 0 200 Km
BRITISH COLUMBIA
STUDY AREA
ASHCROFT
Thompson River
HIGHWAY
LORNEX Water Pipeline
DAM L-L
TAILINGS PONDS
DAM J-J
DAM H-H
PROPOSED VALLEY COPPER DEVELOPMENT
Pukaist Creek
Jim Black Lake
Twenty four Mile Lake
Big Divide Lake
Bose Lake
BETHLEHEM MINE DEVELOPMENT
Guichon Creek
LOGAN LAKE
Quilltonton Lake
Little Divide Lake
Witches Brook
to Nicola River
THOMPSON VALLEY
THOMPSON PLATEAU
LORNEX MINE DEVELOPMENT

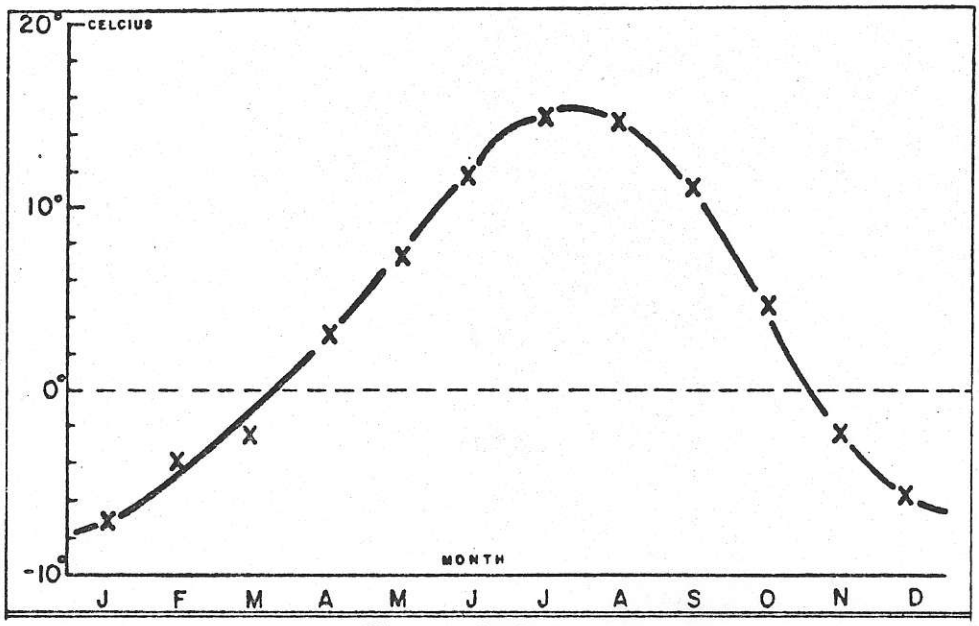


Figure 2.1.2-1a
MEAN MONTHLY TEMPERATURE AT LORNEX STATION (elev. 1,276 m.)
1970-1971 and 1973-1976

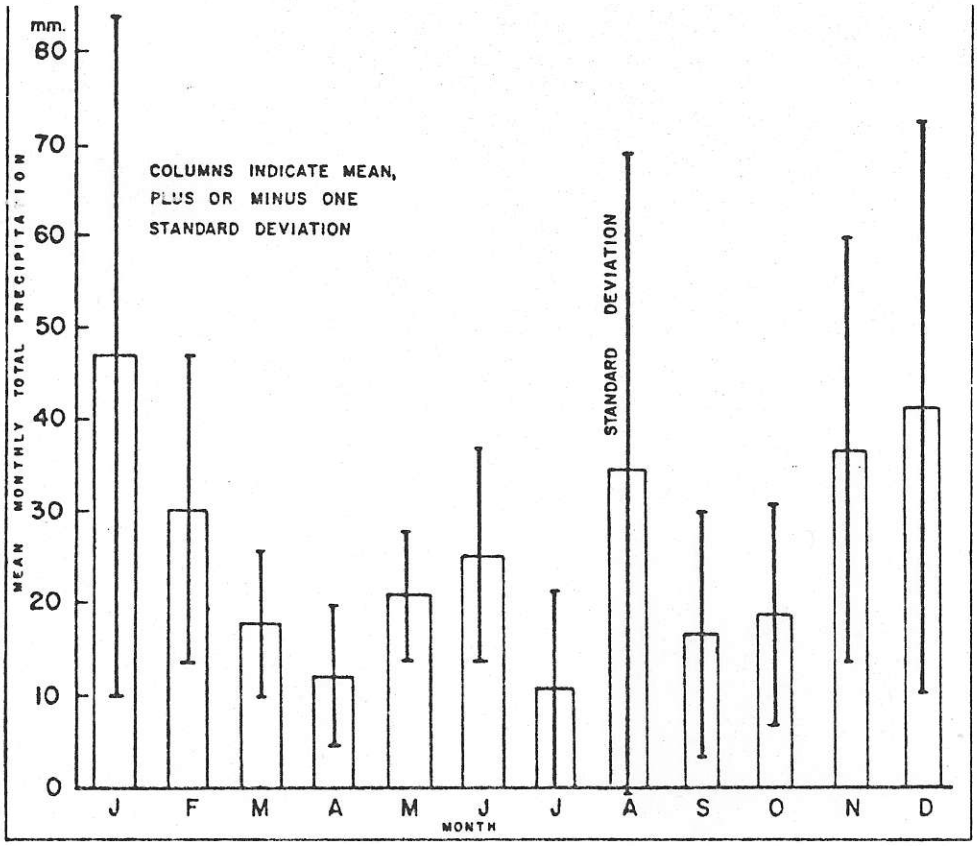
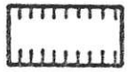
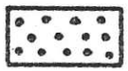
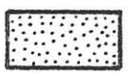


Figure 2.1.2b
MEAN MONTHLY PRECIPITATION AT LORNEX STATION (elev. 1,276 m.)
1970-1971 and 1973-1976

LEGEND

Preliminary Soils and Landforms Map

Tone	Parent Material	Landform	Topography	Slope	Soil Association	Orders	Great Groups
	glacial fluvial	kames eskers	moderately sloping	9-15%	Gisborne GN4	Brunisol	Degraged and Orthic Dystric Brunisols
		terraced hummocky	very steeply sloping	30-60%	Gisborne GN1	Brunisol	
		terraced slumped	steeply sloping	15-30%	Gisborne GN2	Brunisol	
	ablation till - glacial fluvial	kame	moderately sloping	9-15%	Ab^{7}-GN3	Brunisol	Orthic and Degraded Drystic Brunisols
	basal till	basal till to shallow till over rock	steeply sloping	15-30%	Minnie MN1	Luvisol	Orthic Gray Luvisol
		basal till slumped or eroding	very steeply sloping	30-60%	Minnie Mn2	Luvisol	Orthic Gray Luvisol
	alluvium-lacustrine sediments	floodplain - lacustrine plain	very gently sloping	0.5-2%		Regosol Chernozem	Orthic Regosol Orthic Dark Gray Chernozem
	water overlying alluvium-lacustrine sediments						

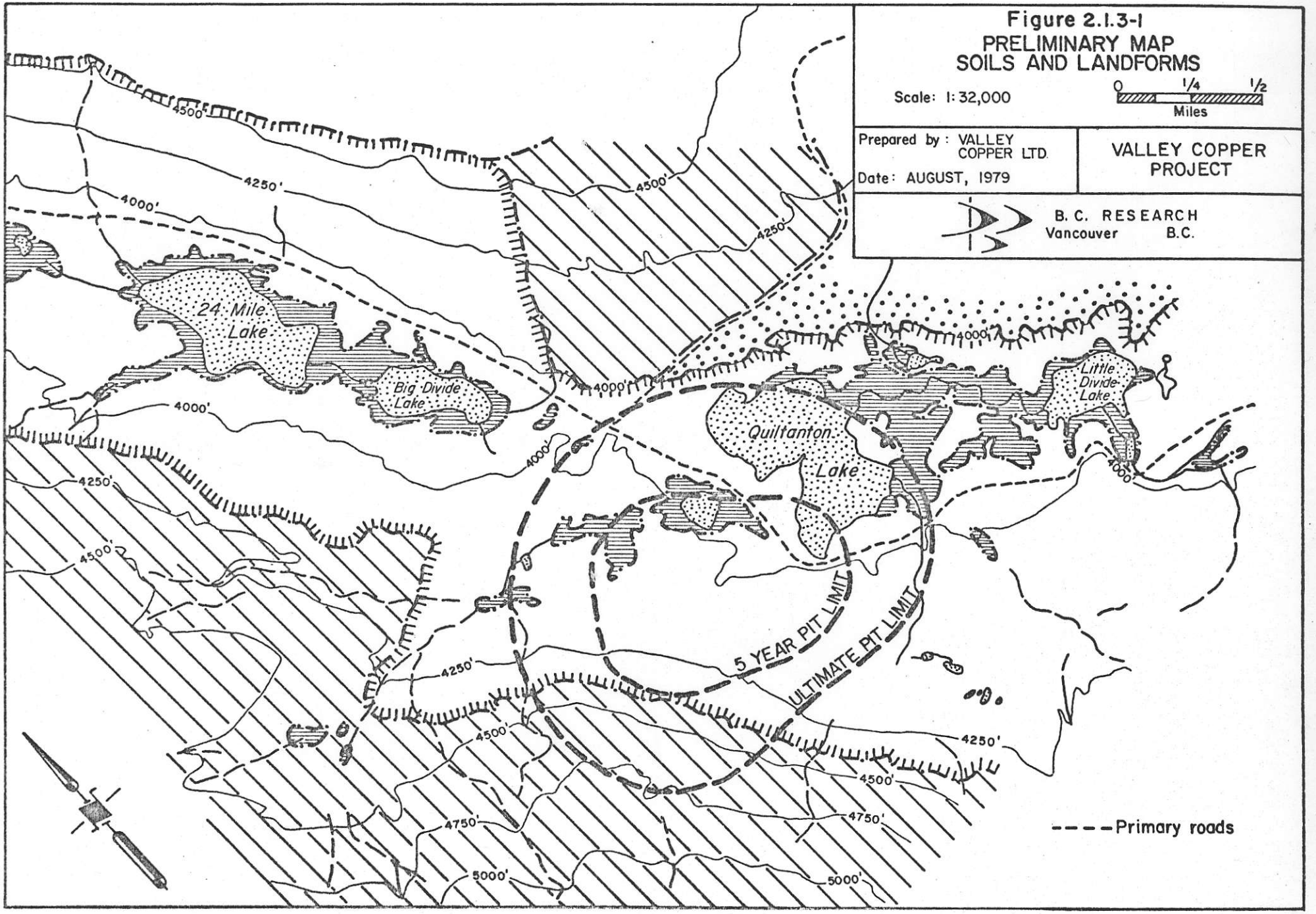


Figure 2.1.3-1
PRELIMINARY MAP
SOILS AND LANDFORMS
Scale: 1:32,000
0 1/4 1/2
Miles
Prepared by: VALLEY COPPER LTD.
Date: AUGUST, 1979
VALLEY COPPER PROJECT
B. C. RESEARCH
Vancouver B.C.
24 Mile Lake
Big Divide Lake
Quiltanton Lake
Little Divide Lake
4000'
4250'
4500'
4750'
5000'
5 YEAR PIT LIMIT
ULTIMATE PIT LIMIT
Primary roads

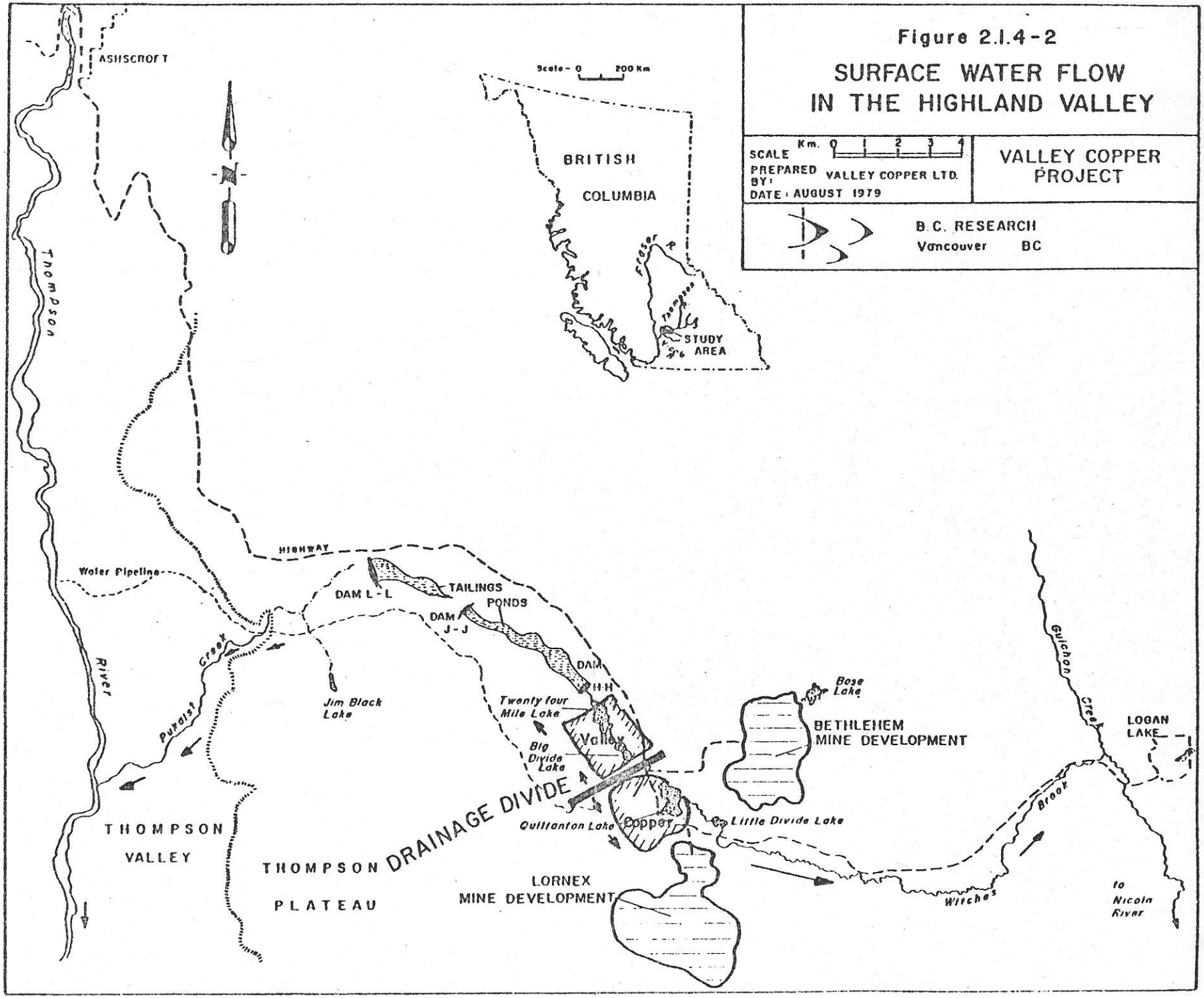
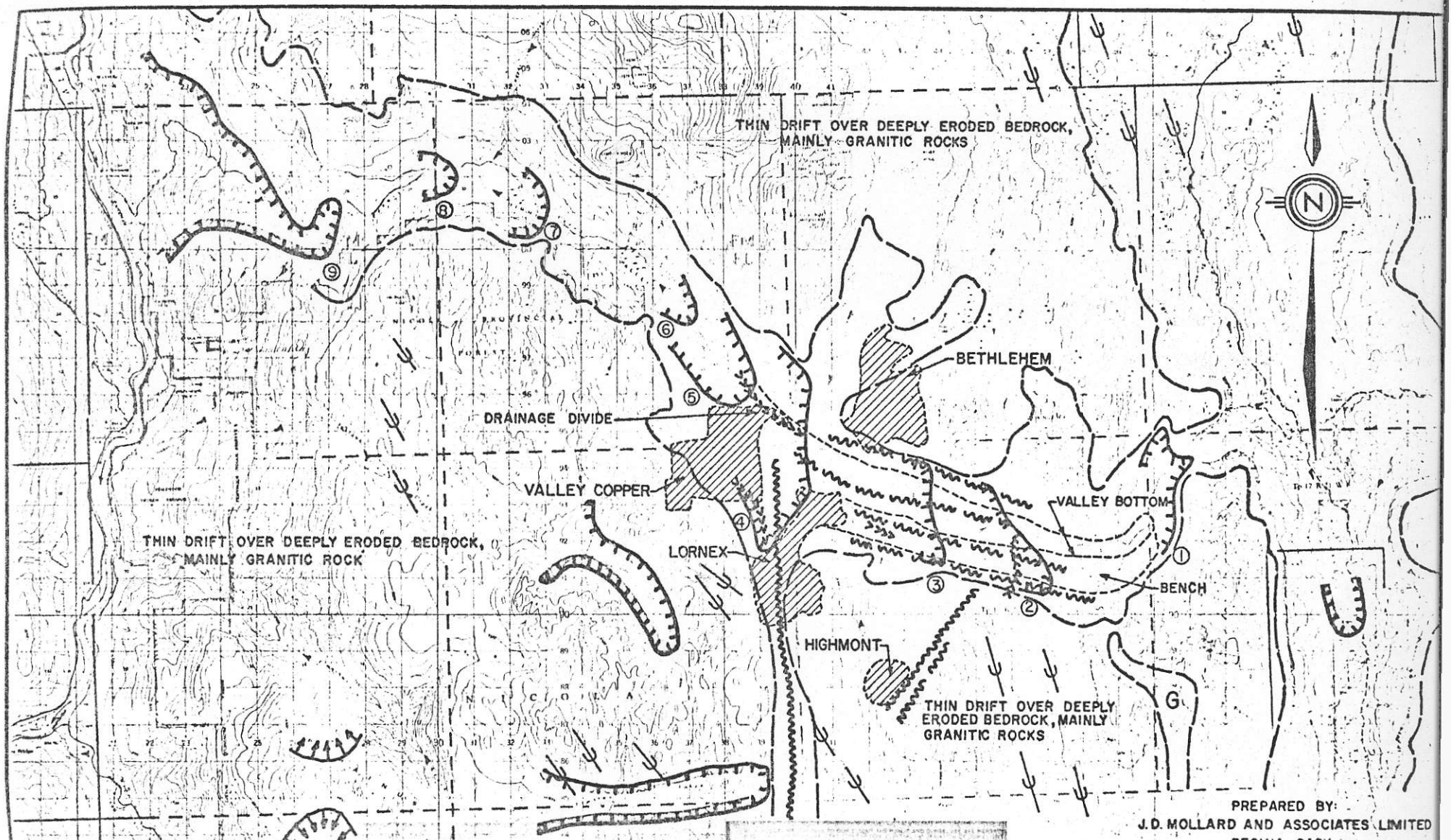


Figure 2.1.4-2
SURFACE WATER FLOW
IN THE HIGHLAND VALLEY
SCALE Km. 0 1 2 3 4
PREPARED BY: VALLEY COPPER LTD.
DATE: AUGUST 1979
VALLEY COPPER PROJECT
B.C. RESEARCH
Vancouver BC
Scale - 0 200 Km
BRITISH COLUMBIA
STUDY AREA
Fraser R.
Thompson
ASHCROFT
Thompson River
HIGHWAY
Water Pipeline
DAM L-L
TAILINGS PONDS
DAM J-J
DAM H-H
Jim Black Lake
Twenty four Mile Lake
Big Divide Lake
Valley
Copper
Quilchena Creek
Bose Lake
BETHLEHEM MINE DEVELOPMENT
LOGAN LAKE
Little Divide Lake
Quilchena Brook
Witches
to Nicola River
Quilchena Lake
THOMPSON DRAINAGE DIVIDE
THOMPSON VALLEY
THOMPSON PLATEAU
LORNEX MINE DEVELOPMENT

DRAWINGS

Drawing No.	Title
B-2553-1	Location Plan
X-2553-2	Regional Hydrogeological Map
B-2553-2A	Legend for Drawing X-2553-2
X-2553-3	Surficial Geology Map
B-2553-3A	Legend for Drawing X-2553-3
X-2553-4	Hydrogeologic Map of Bedrock
X-2553-5	Hydrogeologic Map of Overburden - Lower Aquiclude
X-2553-6	Hydrogeologic Map of Overburden - Lower Aquifer
X-2553-7	Hydrogeologic Map of Overburden - Upper Aquiclude
X-2553-8	Hydrogeologic Map of Overburden - Upper Aquifer
X-2553-9	Transverse Sections of the Valley
X-2553-10	Transverse Section "D" Through Pit
B-2553-11	Section "E" Along Highland Valley



PREPARED BY:
J.D. MOLLARD AND ASSOCIATES LIMITED
REGINA, SASK.

NOTE: Drawing taken from Ripley, Klohn & Leonoff Report "J.A. Mine Feasibility Study" prepared for Bethlehem Copper Corporation Ltd., September, 1972.

SCALE 0 1/2 1 2 3 MILES

TO BE READ WITH KLOHN LEONOFF CONSULTANTS LTD. REPORT DATED: Nov. 23, 1979. SCALE As Shown

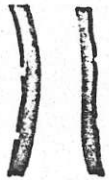
KLOHN LEONOFF CONSULTANTS LTD.
CIVIL • GEOTECHNICAL • HYDRAULIC
VANCOUVER · CALGARY · WINNIPEG, CANADA

VALLEY COPPER GROUNDWATER STUDY

REGIONAL HYDROGEOLOGICAL MAP

CLIENT: B. C. RESEARCH

APPR. DWN. J.K. DATE Aug 80 B - 2553 - 2

Symbols	Descriptions
	Approximate location of upper margins of deep bedrock valleys with thick (up to 1000 ft) valley fills composed mainly of surficial ice-contact and outwash deposits (eskers, kames, kame deltas, kame terraces, ablation till, valley outwash and outwash deltas) plus underlying basal till, stratified drift, interglacial and possibly preglacial alluvium, and talus. The water table in these unconsolidated sediments appears to be situated near ground surface beneath the valley bottom. Such a complexly layered succession of sediments of variable permeability and thickness represents a potentially large groundwater storage reservoir. Anticipated coefficients of permeability should range roughly from 0.001 to about 2 $igpd/ft^2$ in the basal (lodgement) till and in the preloaded laminated silt layers, 1 to 10 $igpd/ft^2$ in the ablation till, 50 to 200 $igpd/ft^2$ in the fine sand layers, 200 to 2000 $igpd/ft^2$ in the preloaded sand and gravel strata, and 2000 to 5000 $igpd/ft^2$ in the cleaner surficial outwash deposits having little silt. The permeability of some of the very coarse gravel layers (where mud losses have been excessive) might reach 15000 igd/ft^2.
	Highly irregular upland underlain by mostly granitic rocks having a thin and patchy till cover with pockets of somewhat deeper bouldery drift in the hollows. The land surface lies generally above elevation 4600. Expect some fracture (secondary) porosity and permeability to a depth of about 150 ft and relatively tight granodiorite rock below this except for occasional faults that may contain openwork fault gouge. Wells to 150 ft deep in the granitic rocks may have mean yields of anywhere from 1 to 50 igpm, with 1 to 10 igpm being more likely.
 ①	Places in the Highland Valley where, in late glacial times, dumps of ice-marginal glacial drift were accumulated. The number shown is not necessarily in order of their age of formation, but the order seems reasonable. These inferred ice-marginal localities represent approximate positions of temporary glacier-ice stillstands or, perhaps, the sites of local and minor readvances of the ice terminus. The ticks indicate the inferred glacier side of the wasting ice tongues.

Symbols	Descriptions
	Present-day, or modern, drainage courses
	Fault or graben-like fault block margin (definite and defined approximately from the literature and from airphotos; inferred and approximate and determined from inspection of high-altitude airphotos and scattered borehole logs)
	Esker ridge
	Direction of last glacier-ice flow on the upland
	Large slump blocks or crescentic scars of slump headwall on upland
G	Upland granular deposits

NOTE: Drawing taken from Ripley, Klohn & Leonoff Report "J.A. Mine Feasibility Study" prepared for Bethlehem Copper Corporation Ltd., September, 1972.

TO BE READ WITH KLOHN LEONOFF CONSULTANTS LTD. REPORT DATED: Nov. 23, 1979.

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VANCOUVER · CALGARY · WINNIPEG, CANADA

VALLEY COPPER GROUNDWATER STUDY

LEGEND FOR DRAWING B-2553-2

CLIENT: B. C. RESEARCH

APPR. | DWN. J.K. | DATE Aug 79 | B-2553-2A

Symbols	Description
GM	Ground-moraine deposits. Thin and patchy veneer of silty sand to silty gravel ground moraine (till) over highly uneven deeply eroded granitic intrusive rocks. Restricted to upland, mostly above elevation 4600. Relatively low permeability. Expect deeper till in low-lying pockets. The surface is locally fluted.
KT	Kame-terrace deposits on valley sides mainly between 4000 and 4600 elevation. Complex association of a) weak washed coarse stony flowtill; b) poorly sorted dirty stratified glaciofluvial sand and gravel; c) clean and well sorted glacio-fluvial sand and gravel; d) surface cobbles and small to large boulders. This unit is complexly bedded. Poorly sorted granular strata contain numerous till inclusions. Expect mostly intermediate permeability with frequent high-permeability pockets and lenses. In detail, highly variable in composition. Deposition occurred between downwasting stagnant glacier ice and nearby valley wall.
>>>>>>>	Esker. Mostly sand with some gravel sizes. High permability.
HD	"Hanging" delta deposits. Mostly sand with some gravelly beds and surface cobbles. Includes esker-delta and kame-delta as well as fluvial inwash deltas. Flat-topped with lobate front. Expect high permeability. These deposits generally occur high on valley sides and are therefore "hanging" and drained. Common surface elevations are 4050±, 4150± (mainly), and 4375±. Note HD_k where kettled.
AM	Variably sorted, coarse stony ablation moraine (till) with numerous inclusions of stratified silt, sand and gravel. Locally with a bouldery surface. Intermediate permeability on average but highly erratic. In the map-area, this unit occurs as low hummocky moraine confined mostly to the valley floor between 3900 and 4000 approximately and chiefly east of the airstrip.
K	Isolated kames. Mostly poorly to well sorted stratified sands and gravelly sand with coarse flowtill (ablation till that has slid off the adjoining stagnant steep ice margin). Intermediate to mostly high permeability sediments. Largely stratified drift with minor till. Chiefly conical to elongate steep-sided knobs located in the valley bottom and along lower valley sides.

Symbols	Description
KM	Kame-moraine deposit. Mostly hummocky ice-contact stratified sand, gravel and cobbles overlying and locally interbedded with ablation till. Forms the divide between Quiltanton Lake and Big Divide Lake, chiefly between 3935 and 4050 elevation. Intermediate to high permeability. Generally highly variable.
LS	Lacustrine silt with minor postglacial alluvial silt. Mostly thin (0 to 5 ft) laminated silt and very fine sand with minor clayey silt bands and overlying loose stony ablation till or outwash-delta sand and gravel. The lacustrine mantle seems to reach elevation 3910 approximately; but has been removed by stream erosion along present-day and former Witches Brooks stream channels. Generally low permeability.
OD	Outwash-delta cobbly, gravelly and sandy deposits becoming finer (higher sand content) toward the east and north, possibly with some silt and till interbeds. Level and non-kettled. Occupies the valley bottom in the flat area south and southwest of the airstrip. Extends below the LS unit in eastern part of map-area. Expect relatively high permeability strata.
KO	Kettled outwash and collapsed ablation till in valley bottom. Mostly clean to silty sand and gravel overlain by surficial ponded postglacial sediments. Mostly high permeability stratified sediments with numerous till inclusions and possibly groundwater barriers of buried ablation till. High water table. Marshy. Mostly below 3950 to 4000 ft elevation. Merges in to OD map unit.
AF	Alluvial fans. Mostly poorly to well sorted sand and gravel strata deposited as fan-shaped deposits locally along and just above the edge of the valley bottom. Locally, may include parts of higher-level hanging deltas. Generally high permeability subsoils.

NOTE: Drawing taken from Ripley, Klohn & Leonoff Report "J.A. Mine Feasibility Study" prepared for Bethlehem Copper Corporation Ltd., September, 1972.

TO BE READ WITH KLOHN LEONOFF CONSULTANTS LTD. REPORT DATED Nov 23, 1979.

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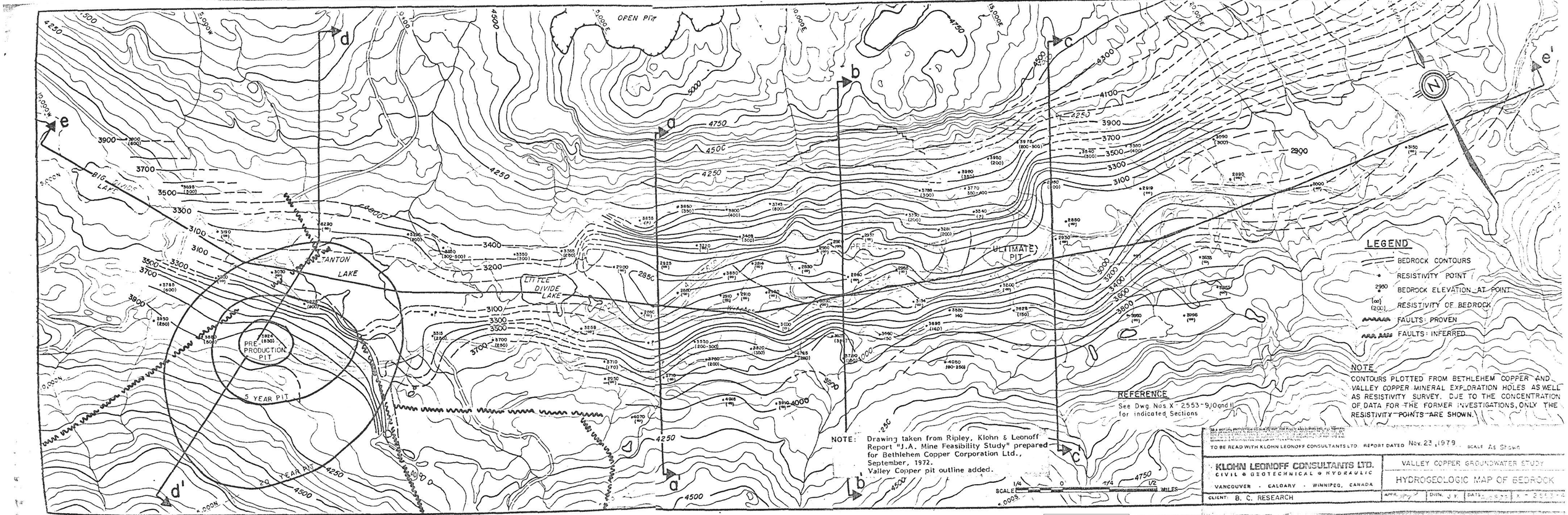
VANCOUVER · CALGARY · WINNIPEG, CANADA

VALLEY COPPER GROUNDWATER STUDY

LEGEND FOR DRAWING B-2553-3

CLIENT: B. C. RESEARCH

APPR. [illegible] DWN. J.K. DATE Aug 8/79 B-2553-34


OPEN PIT
ULTIMATE PIT
PRE PRODUCTION PIT
5 YEAR PIT
20 YEAR PIT
BIG DIVIDE LAKE
TANTON LAKE
LITTLE DIVIDE LAKE
a
a'
b
b'
c
c'
d
d'
e
e'
N
LEGEND
BEDROCK CONTOURS
RESISTIVITY POINT
2950 BEDROCK ELEVATION AT POINT
(∞) (200) RESISTIVITY OF BEDROCK
FAULTS: PROVEN
FAULTS: INFERRED
NOTE
CONTOURS PLOTTED FROM BETHLEHEM COPPER AND VALLEY COPPER MINERAL EXPLORATION HOLES AS WELL AS RESISTIVITY SURVEY. DUE TO THE CONCENTRATION OF DATA FOR THE FORMER INVESTIGATIONS, ONLY THE RESISTIVITY POINTS ARE SHOWN.
REFERENCE
See Dwg. Nos. X-2553-9,10 and 11 for indicated Sections
NOTE: Drawing taken from Ripley, Klohn & Leonoff Report "U.A. Mine Feasibility Study" prepared for Bethlehem Copper Corporation Ltd., September, 1972. Valley Copper pit outline added.
SCALE 1/4 0 1/4 1/2 MILES
TO BE READ WITH KLOHN LEONOFF CONSULTANTS LTD. REPORT DATED Nov. 23, 1979 SCALE As Shown
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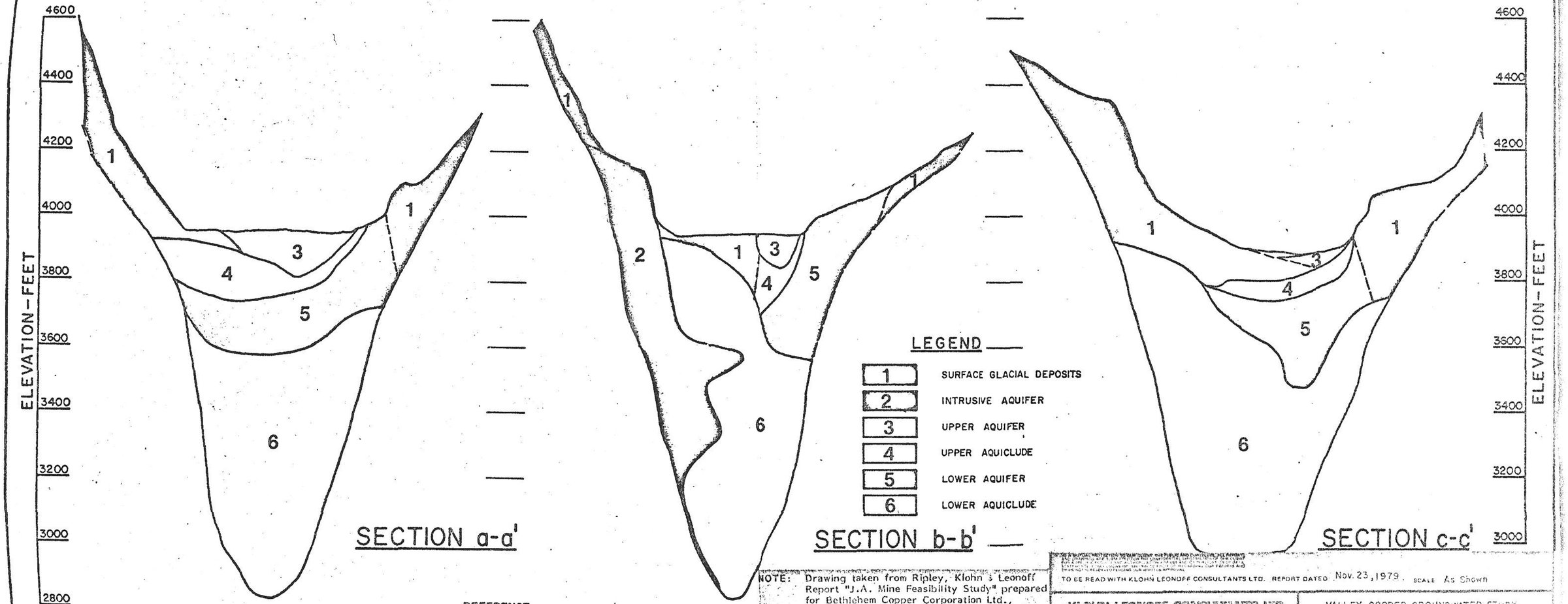
VANCOUVER · CALGARY · WINNIPEG, CANADA
CLIENT: B. C. RESEARCH
VALLEY COPPER GROUNDWATER STUDY
HYDROGEOLOGIC MAP OF BEDROCK
APPR. WP | DWN. J.K. | DATE Nov 79 | X - 2553-12
inches
0 1
0 1 2
centimetres
This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.



REFERENCE

SEE DWGS. X-2553-4 TO 9 FOR LOCATION OF SECTIONS.

NOTE: Drawing taken from Ripley, Klohn & Leonoff Report "J.A. Mine Feasibility Study" prepared for Bethlehem Copper Corporation Ltd., September, 1972.

SCALE 1/4 0 1/4 1/2 MILES

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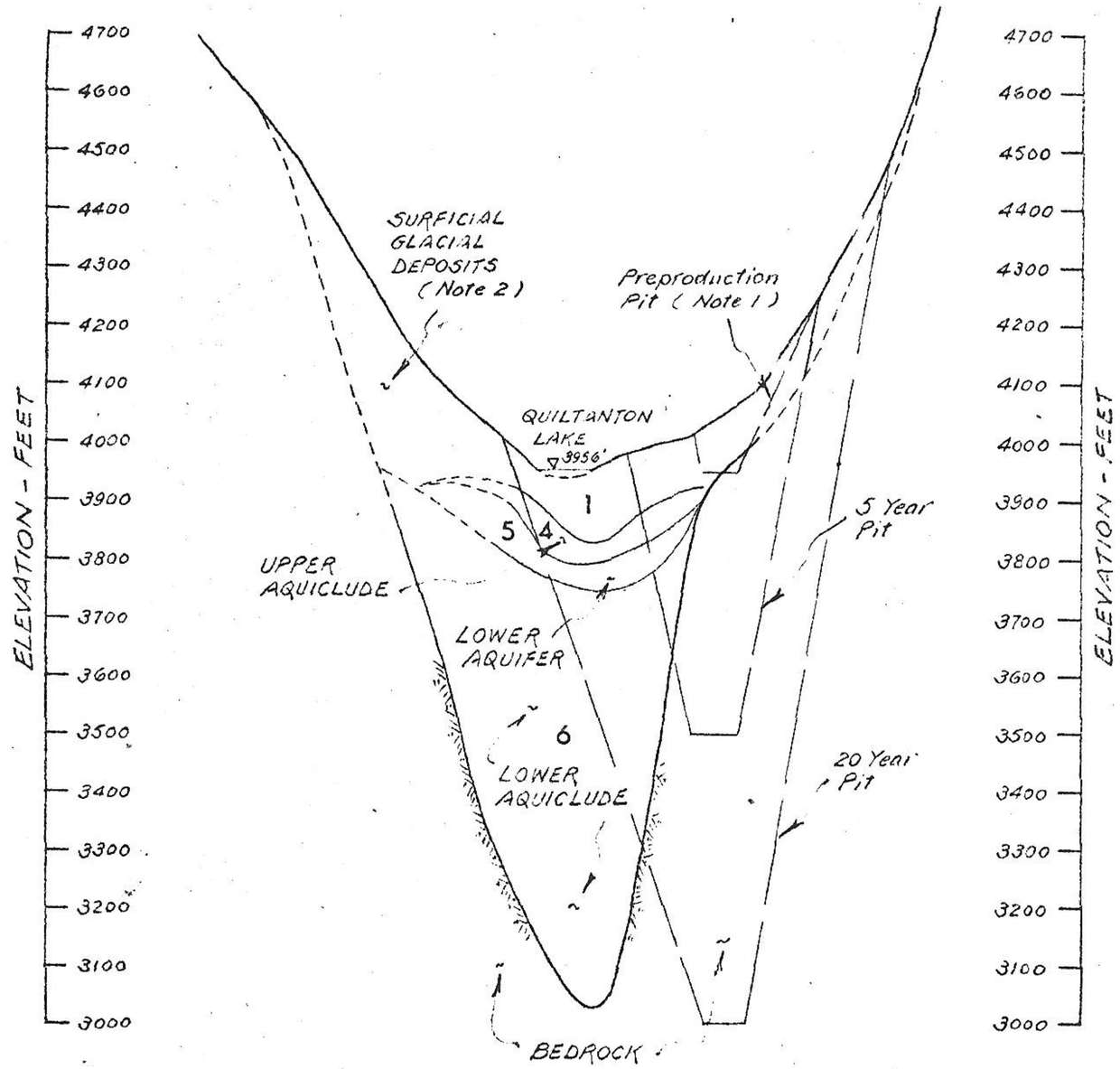
VALLEY COPPER GROUNDWATER STUDY

TRANSVERSE SECTIONS OF THE VALLEY

CLIENT: B. C. RESEARCH | APPR. | DWN. J.K. | DATE Aug 79 | X - 2553 - 9



SECTION d THROUGH PIT

NOTES

1. Pit outlines shown are approximate only.
2. Details of surficial glacial deposits are given on Dwgs. X-2553-3 and 3A.
3. Numbering system for sub-surface units corresponds to Dwg. X-2553-9.

SCALE 1" = 2000' H. 1" = 200' V.

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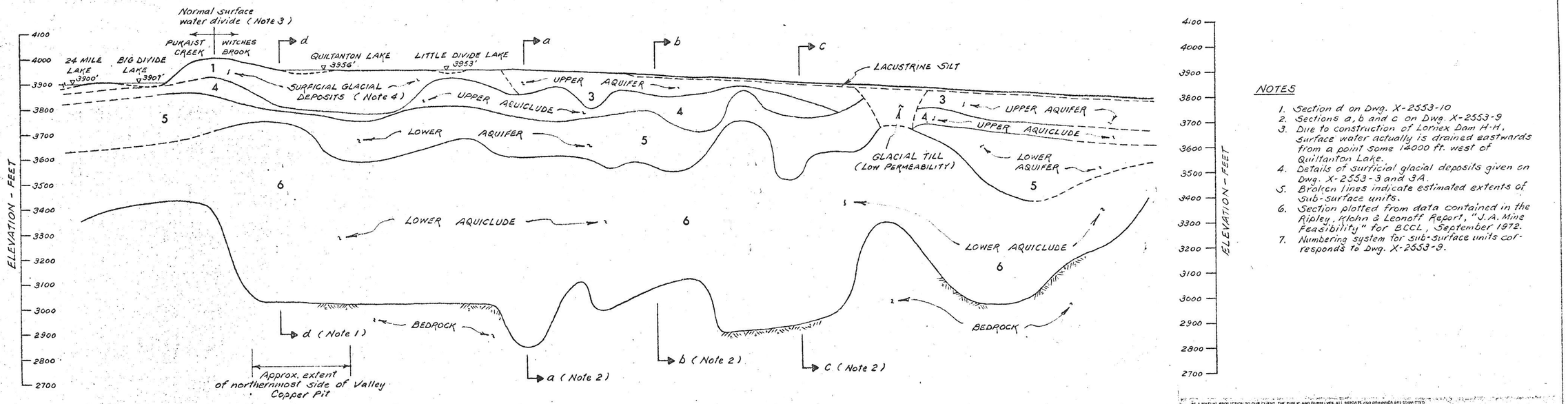
PROJECT: VALLEY COPPER GROUNDWATER STUDY
TITLE: TRANSVERSE SECTION d THRU PIT
CLIENT: B. C. RESEARCH
DATE OF ISSUE: Nov 23/79
APPROVED:
JOB NO: VA-2553
DWG. NO: X-2553-10
REV:



NOTES

1. Section d on Dwg. X-2553-10
2. Sections a, b and c on Dwg. X-2553-9
3. Due to construction of Lornex Dam H-H, surface water actually is drained eastwards from a point some 14000 ft. west of Quiltanton Lake.
4. Details of surficial glacial deposits given on Dwg. X-2553-3 and 3A.
5. Broken lines indicate estimated extents of sub-surface units.
6. Section plotted from data contained in the Ripley, Klohn & Leonoff Report, "J.A. Mine Feasibility" for BCCL, September 1972.
7. Numbering system for sub-surface units corresponds to Dwg. X-2553-9.

SCALE: 1" = 2000' H.
1" = 200' V.

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VALLEY COPPER GROUNDWATER STUDY
SECTION ALONG HIGHLAND VALLEY ℄

CLIENT: B. C. RESEARCH

JOB NO. VA-2553 DWG. NO. X-2553-11

inches 0 1
centimetres 0 1 2

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