

DOLMAGE CAMPBELL & ASSOCIATES LTD.
CONSULTING GEOLOGICAL & MINING ENGINEERS
1000 GUINNESS TOWER
VANCOUVER 1, B.C.

GEOCHEMICAL REPORT
on a portion of the

DOORN PROPERTY

being Mineral Claims Dip 9 Fr., Fill 1, Fill 5-6, Flo 2-5, Flo 9-10
Fur 18, Gofur 1 Fr., Gofur 2-3, Plan 1-5, Plan 6 Fr., Plan 7.

Claim Sheet No.
82E/6E

BEAVERDELL AREA

Greenwood Mining Division, B. C.

49°25' N; 119°05' W

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

NO. 3110 MAP

Owner of Claims:

Argentia Mines Ltd. (N.P.L.)

Report by:
C. R. Saunders

Work completed between May 14 and May 26, 1971.

June 15, 1971.

3110

82E-2c

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DOLMAGE CAMPBELL & ASSOCIATES LTD.

CONSULTING GEOLOGICAL & MINING ENGINEERS

1000 GUINNESS TOWER

VANCOUVER 1, B.C.

- 1 -

INTRODUCTION

On behalf of Argentic Mines Ltd. (N.P.L.), the owners of the Doorn mineral property, a geochemical soil survey was executed under the supervision of C. R. Saunders, P. Eng., of Dolmage Campbell & Associates Ltd., on the following claims of the property: Dip 9 Fr.; Fill 1, 5-6; Flo 2-5, 9-10; Fur 18; Gofur 1 Fr., 2-3; Plan 1-5, 6 Fr., 7. The claims were staked to cover mineralized surface exposures located during prospecting of the area.

LOCATION AND ACCESS: (49°25'N, 119°05'W) (NTS 82E)

The Doorn property is located a short distance south and west of the village of Beaverdell in the West Kettle Valley in south-central British Columbia, approximately 38 miles southeast of the city of Kelowna. (Figures 71-9 & 71-10). A paved highway connects Beaverdell with Rock Creek 30 miles to the south on Trans-Provincial Highway No. 3; another paved highway connects Beaverdell and Kelowna to the north. The Kettle Valley line of C P Rail runs down the West Kettle Valley to Rock Creek, Midway and to the Cominco smelter at Trail.

TOPOGRAPHY:

The hillsides are generally thinly forested with pine, tamarak and spruce with minor undergrowth; the annual precipitation averages 20-40 inches. The lower hill slopes are moderately steep and amenable to bulldozer trenching but the higher elevations are steep and locally interrupted by rock bluffs.

- 2 -

SUMMARY AND CONCLUSIONS

A geochemical survey was carried out on claims Dip 9 Fr., Fill 1 and 5-6, Flo 2-5 and 9-10, Fur 18, Gofur 1 Fr and 2-3, Plan 1-5, 6 Fr and 7 which form a portion of the Doorn South Perimeter Group.

The survey was conducted over an area in which fine disseminated lead, zinc and (local) copper mineralization had been located during prospecting of the area and over a portion of which an earlier reconnaissance soil survey had indicated some anomalous geochemical values. The mineralization is of the porphyry-type, occurring in several types of acid intrusive rocks of the Westkettle Batholith.

Statistical analysis determined the lower limits of anomalous value ranges to be 70 ppm for lead, 350 ppm for zinc, and 25 ppm for copper. A large portion of the assays were found to be anomalous, particularly for lead and zinc, resulting in the definition of three reasonably distinct anomalous zones having approximate dimensions of 4000 ft. by 3000 ft., 3000 ft. by 1000 ft, and 2000 ft. by 600-700 ft.

The anomalous zones together with the occurrence of visible fine disseminated lead-zinc- (copper) - mineralization are sufficient evidence to suggest the possible existence of one or more mineralized bodies. Although lead-zinc mineralization in a porphyry setting is rather geologically unique there is sufficient information to indicate that further, definitive exploration is warranted. This exploration should take the form of further geochemical sampling, geological mapping, prospecting, possibly geophysics, trenching, and eventually, diamond drilling.

GEOLOGICAL SETTING

The area containing the Doorn property has been mapped geologically by the Geological Survey of Canada. Map 15-1961 entitled "Geology, Kettle River, British Columbia" has been published to provide the regional geology on a scale of 1" = 4 miles.

The West Kettle district, within which the Doorn property lies, is dominated by a batholithic body of Cretaceous intrusive rocks (West Kettle Batholith), centred near the village of Beaverdell and extending fourteen miles west and one to two miles east from there. It extends twenty miles to the north and twenty miles to the south from Beaverdell. The batholith is zoned into an outer envelope of older, more basic intrusive rocks and an inner core of younger, more acidic (granite, monzonite, alaskite, etc.) intrusive rocks. The core of the West Kettle Batholith is a complex, roughly circular zone of multiple, relatively small intrusive stocks of several rock types in combinations of faulted, gradational, and intrusive contacts to one another. Also contained in the core area are small, isolated pendants of metamorphosed Paleozoic formations as well as erosional remnants of Tertiary volcanic and sedimentary formations.

Most of the claims owned by Argentia Mines Ltd. are underlain by medium crystalline pink to grey-white plutonic rocks that are mottled black by 5-20% biotite and/or hornblende. This type of rock is locally termed granodiorite but it actually includes phases ranging from syenite to monzonite to granodiorite and probably represents several different intrusive bodies, some of which are gradational to one another.

At the south end of the property the "granodiorite" is cut by a very irregularly shaped body of pinkish white, medium crystalline porphyritic quartz-feldspar rock that contains orthoclase phenocrysts up to four inches in length and local quartz phenocrysts up to $\frac{1}{4}$ inch in size. It is characteristically blocky jointed and fresh in appearance. Its negligible content of mafic minerals indicate that it can probably be classified as an alaskite. This alaskite porphyry crops out across the south part of the property as an irregular belt of east-trending dike-like bodies. To the west, on the adjoining property at the top of the mountain (AMAX), the alaskite porphyry body broadens in a laccolithic form and is there extensively sheared, pyritized and mineralized by quartz-molybdenite veinlets.

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The third general rock type noted on the property occurs in the form of andesitic dikes that range from a few feet to 50 feet in width. They cut both the granodioritic and alaskite porphyry rocks. The rock is generally medium crystalline, showing grey-white plagioclase, no quartz and 20-50% hornblende.

The only identifiable faults on the property consist of west striking, vertical to steeply dipping fracture-shear zones.

Mineralization in the form of very fine crystalline galena and sphalerite (and locally chalcopyrite) have been found disseminated in the intrusive rocks. These exposures are in isolated outcrops in largely overburden-covered hillsides. Locations of some of the mineral exposures are shown on figures 71-15, 16, 17.

- 5 -

SAMPLING TECHNIQUES

Control for the geochemical survey was obtained by establishing two baselines in survey relation to the boundary between lots 2576 and 2577. The two baselines, which are in reality one baseline with a 400 ft. north-south offset, are oriented east-west. The sample lines were then run at right-angles to the baselines (north-south) at 400 ft. intervals, and sampling stations marked at 100 ft. intervals. Samples were collected at each station but only those at 200 ft. intervals were sent for initial assaying.

Soil samples were taken by first digging a hole with a prospector pick; a small handful of soil was then taken from the "B" horizon thus exposed, and packaged in a standard high wet-strength brown kraft paper sample bag. The samples were sent to TSL Laboratories in Vancouver, B. C. They were dried at 200° F in the original sample bags and then screened through a -80 mesh nylon screen. A 1½ gram portion of the -80 mesh material was digested in hot aqua regia. Comparisons were then made with standard samples by the atomic absorption method.

The results for copper, lead and zinc were plotted and then contoured according to values related to the metal populations as determined by statistical analysis. Results of an earlier survey were incorporated with the present survey for purposes of interpretation.

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INTERPRETATION

Statistical analysis of the assay results for the three metals, copper, lead and zinc, resulted in determination of the cumulative frequency distribution for each metal. This data was plotted on two-cycle log-probability graph paper to determine the various metal populations present. The results are shown in figures 71-12, 13 & 14. Copper (figure 71-12) occurs as two and possibly three populations. The highest value population, herein considered to be anomalous, has a lower limit of approximately 25 parts per million (ppm). Consequently, the copper values as plotted on figure 71-15 have been contoured on the basis of 25, 50, 100, 200 and 400 ppm. Lead is present as two populations (figure 71-13), the higher anomalous range having a lower limit of 70 ppm. The lead assays have been contoured on figure 71-16 at values of 70, 150, 300 and 600 ppm. Zinc is also present as two populations although they are not as markedly different as those for copper and lead. The lower limit of the upper range has been chosen as 350 ppm. Zinc assays on figure 71-17 have been contoured at values of 350, 700, 1500 and 3000 ppm.

There is a good correlation between lead and zinc values but relatively poor correlation between copper and zinc and between copper and lead although some similarities do occur in these latter two comparisons. A large area predominantly anomalous in lead and zinc lies on the west side of the West Kettle valley and generally south of the west baseline. It is approximately 3000 ft by 4000 ft. in area and has a northeasterly trend. A few anomalous copper values are scattered throughout the same area. A smaller parallel zone lies to the north of the larger main zone. It is about 3000 ft by 1000 ft. in size; at its east end all three metals exhibit good correlation. Several small anomalous zones occur elsewhere on the west side of the valley but they are relatively insignificant by comparison with the two zones mentioned above.

Results on the east side of the West Kettle valley contain a lower proportion of anomalous values than on the west side. Only one zone appears significant - the northwesterly trending zone that lies mostly south of the east baseline. This zone is approximately 2000 ft in length and 600-700 ft in width. Other anomalous zones appear, from their configuration, to be at least partially limited by artificial boundaries. Anomalous values occur on one line of the present sampling program but not on adjacent lines of the earlier program. This may be a result of sampling at different times of the year and the consequent different metal ion contents as a result of variations in water table, drainage, etc.

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CONCLUSIONS

The lead-zinc mineralization upon which the Doorn South Perimeter claims were staked appears to be adequately reflected in the soils over a large surface area. Significant copper geochemical values are also present although in comparatively lesser abundance than lead or zinc. At least three distinct anomalous zones ('anomalous' values having been statistically derived) have been partially outlined by the combined results of the present and earlier geochemical surveys. These zones of lead, zinc and (minor) copper soil anomalies, together with the occurrence of visible fine crystalline disseminated galena, sphalerite and chalcopyrite in rock exposures suggest the possible existence in the area of one or more lead-zinc-(copper) mineralized bodies. Although initial indications of the nature of the mineralization, porphyry lead-zinc-(copper), suggest a somewhat geologically-unique occurrence, there is now sufficient evidence to indicate that further definitive exploration should be undertaken.

General recommendations for such exploration are: continuation of the geochemical surveys; geological mapping; prospecting for other exposed mineral occurrences; possibly geophysical surveys; trenching to bedrock in overburden-covered areas; possibly diamond drilling; etc.

Respectfully submitted,
DOLMAGE CAMPBELL & ASSOCIATES LTD.



C. R. Saunders, P.Eng.

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APPENDIX 1STATEMENT OF EXPENDITURES

Wages: 28 man-days @ \$40.25	\$1127.00
Maintenance: food & lodging @ \$8.00 per man day	\$ 224.00
Assays and Freight: (386 Samples)	\$ 782.00
Transportation: Vehicle rental, 16 days @ \$15 per day	\$ 240.00
Typing, Secretarial, Draughting:	\$ 200.00
Supervision and Report:	\$1000.00
	<hr/>
TOTAL	\$3573.00

- 9 -

APPENDIX 2DETAILED ACCOUNT OF EXPENDITURES1. WAGES

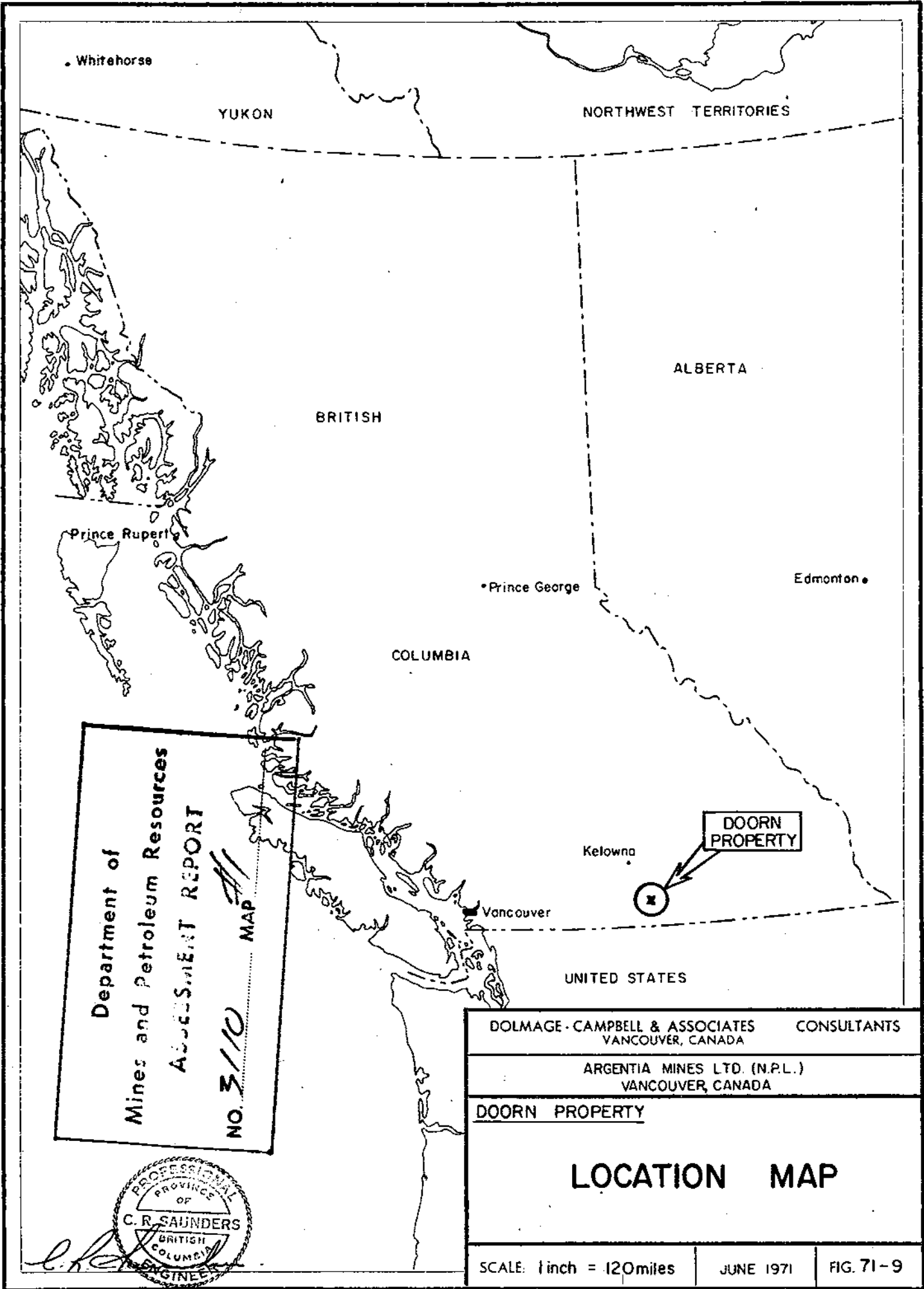
Samplers:	D. Paine, R. R. 6, Kelowna, B. C. May 14-15 (2 days)
	W. A. Roadhouse, 836 Johnson Rd., Kelowna, B. C. May 14-15 (2 days)
	C. S. Powney, 565 Municipal Ave., Penticton, B. C. May 17-26 (7 days)
	J. MacRoy, 565 Municipal Ave., Penticton, B.C. May 17-26 (10 days)
	J. Powney, 770 Duncan Ave., Penticton, B. C. May 20-26 (7 days)

Rate of Pay: \$35.00 per day

Total Wages: 28 days @ \$35.00	= \$980.00
Overhead: 15% of wages	= \$147.00
	<u>\$1127.00</u>

2. ASSAYS AND FREIGHT

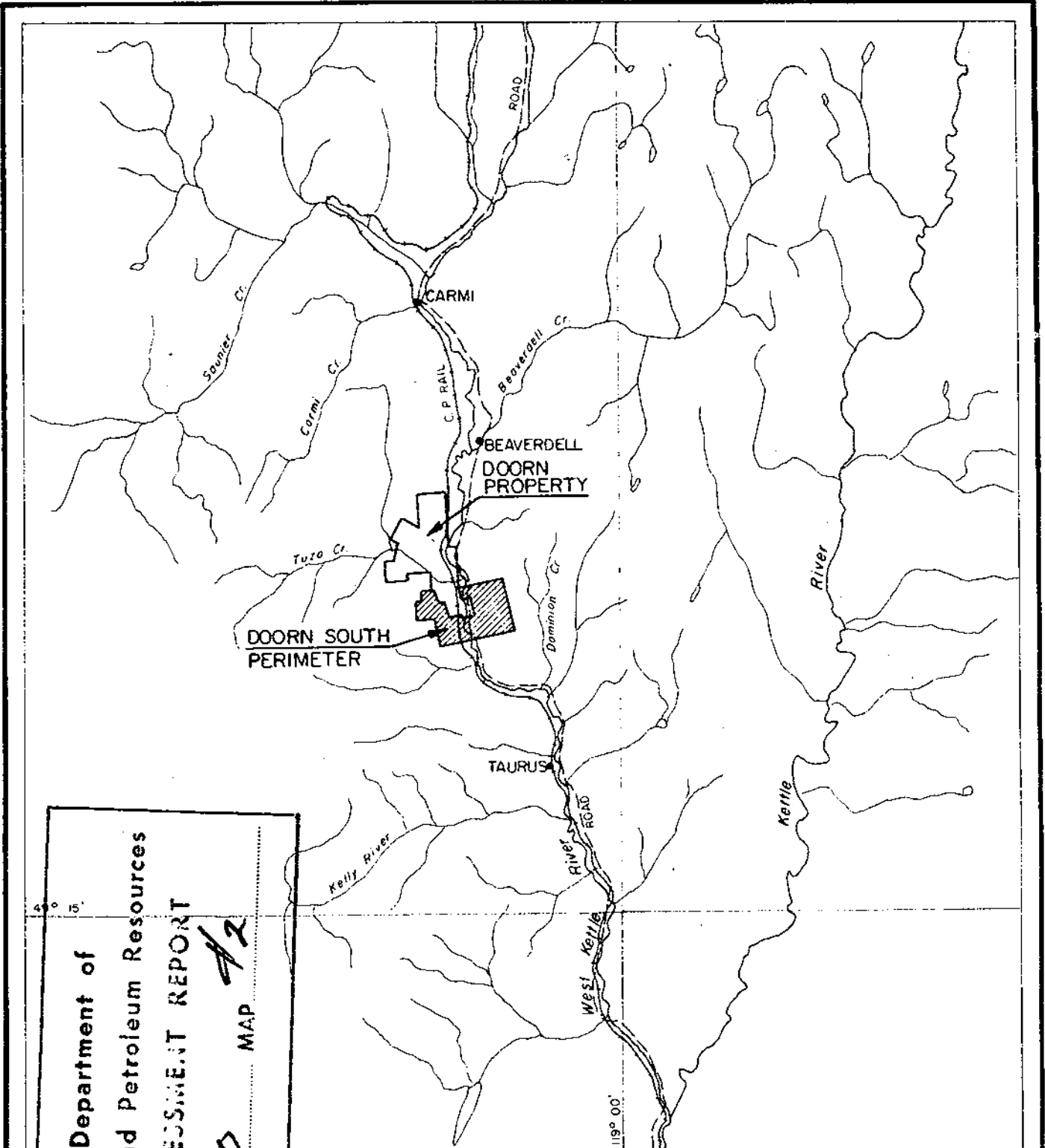
Preparation and assay of 386 samples for copper, lead and zinc @ \$2.00 per sample (Chemex Labs invoices C121, C97, C114)	\$772.00
Freight (paid by D. Paine)	<u>10.00</u>
	<u>\$782.00</u>



Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 310
 MAP



DOLMAGE-CAMPBELL & ASSOCIATES		CONSULTANTS
VANCOUVER, CANADA		
ARGENTIA MINES LTD. (N.P.L.)		
VANCOUVER, CANADA		
DOORN PROPERTY		
LOCATION MAP		
SCALE: 1 inch = 120 miles	JUNE 1971	FIG. 71-9



Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 3110 MAP 42

DOLMAGE-CAMPBELL & ASSOCIATES CONSULTANTS
 VANCOUVER, CANADA

ARGENTIA MINES LTD. (N.P.L.)
 VANCOUVER, CANADA

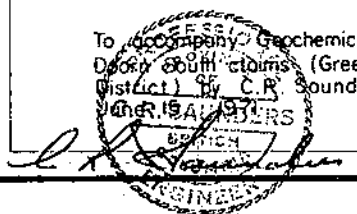
DOORN SOUTH PERIMETER

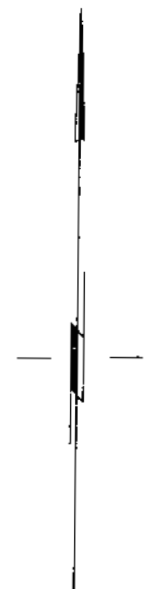
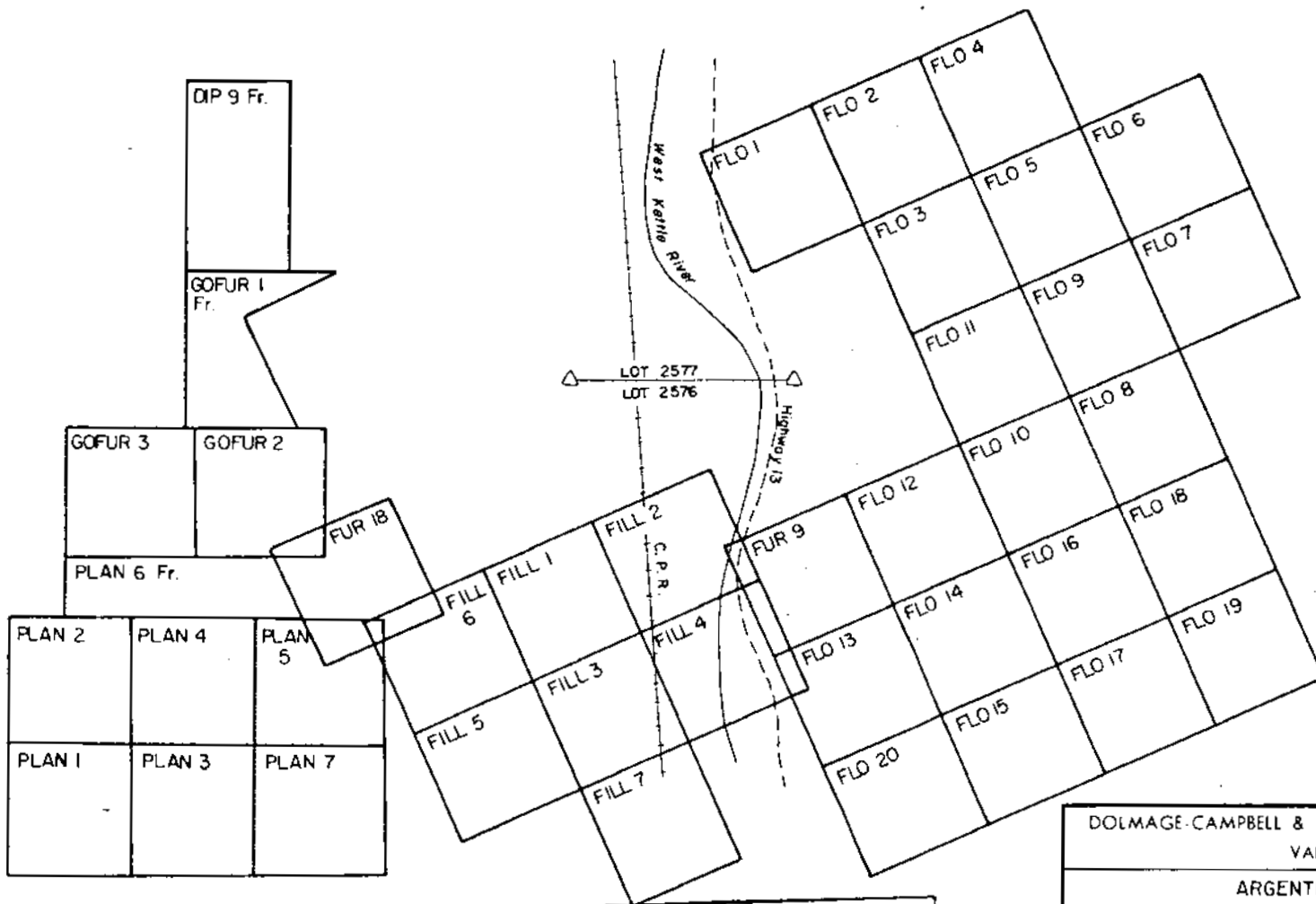
LOCATION MAP

(NTS 82 E)

SCALE: 1 : 250,000	JUNE 1971	FIG. 71 - 10
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To accompany Geochemical Report on the
 Doorn South claims (Greenwood Mining
 District) by C.R. Saunders, P.Eng. dated
 March 19, 1971





Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 3110 MAP #5

DOLMAGE CAMPBELL & ASSOCIATES CONSULTANTS
 VANCOUVER, CANADA

ARGENTIA MINES LTD. (N.P.L.)
 VANCOUVER, CANADA

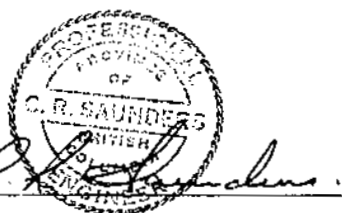
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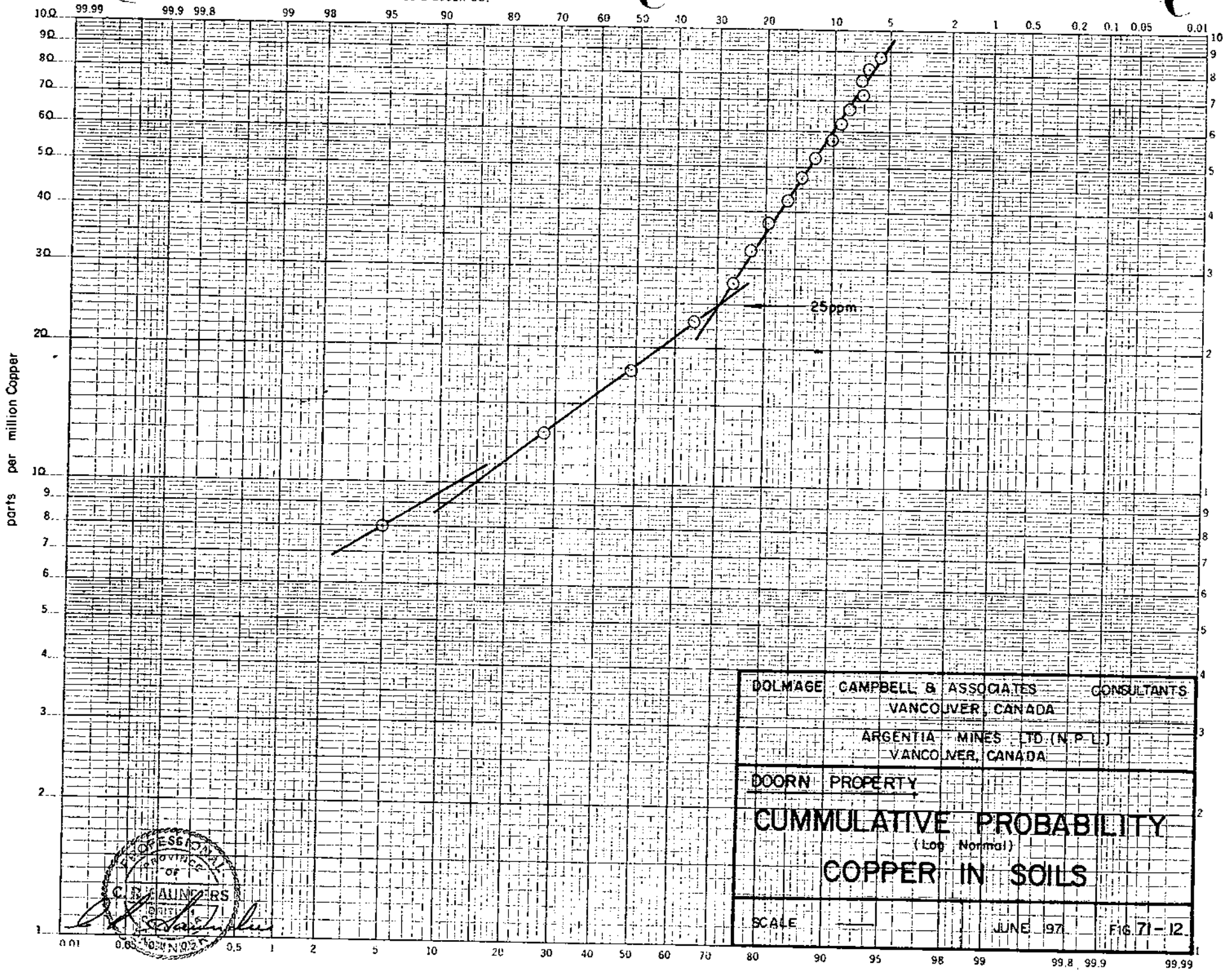
CLAIM MAP

SCALE: 1" = 2000'

JUNE, 1971

FIG 71-11





DOLMAGE CAMPBELL & ASSOCIATES CONSULTANTS
VANCOUVER, CANADA

ARGENTIA MINES LTD. (N.P.L.)
VANCOUVER, CANADA

DOORN PROPERTY

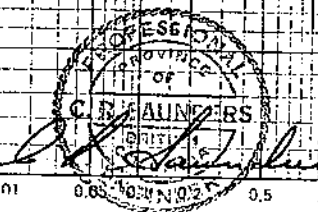
CUMMULATIVE PROBABILITY
(Log Normal)

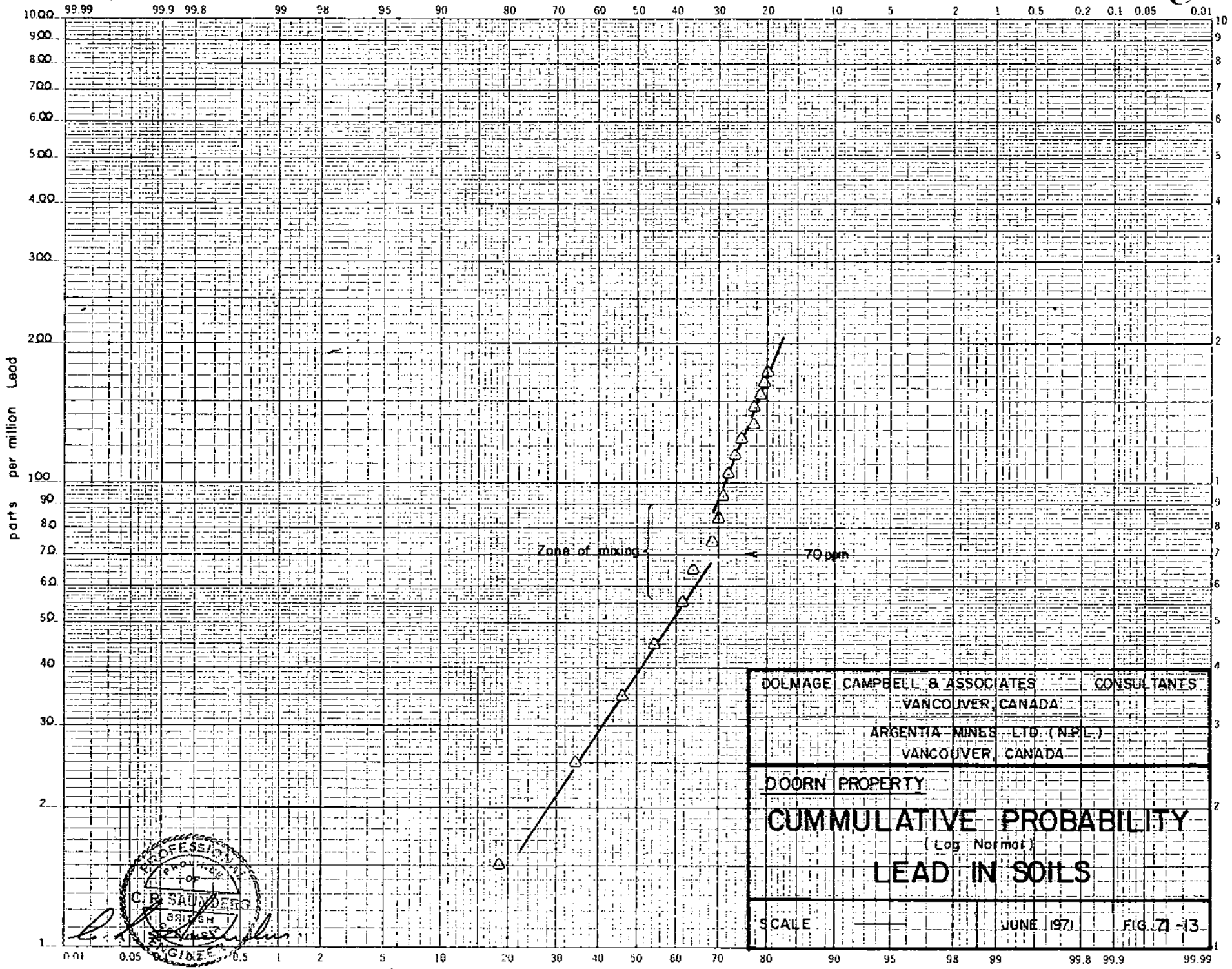
COPPER IN SOILS

SCALE _____

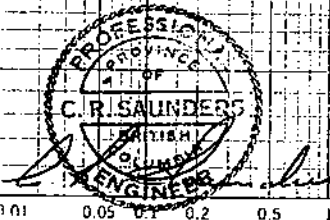
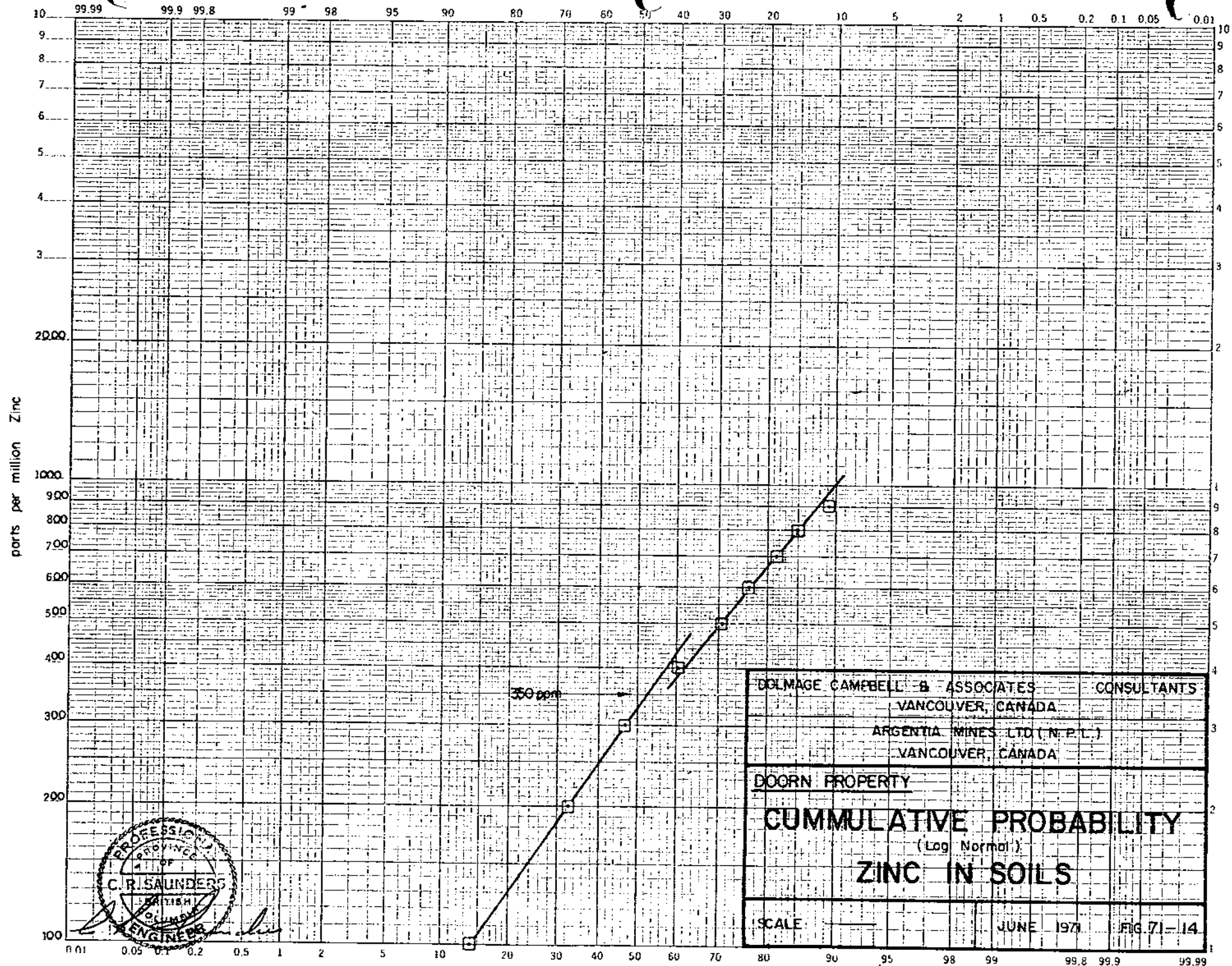
JUNE 1971

FIG. 71-12















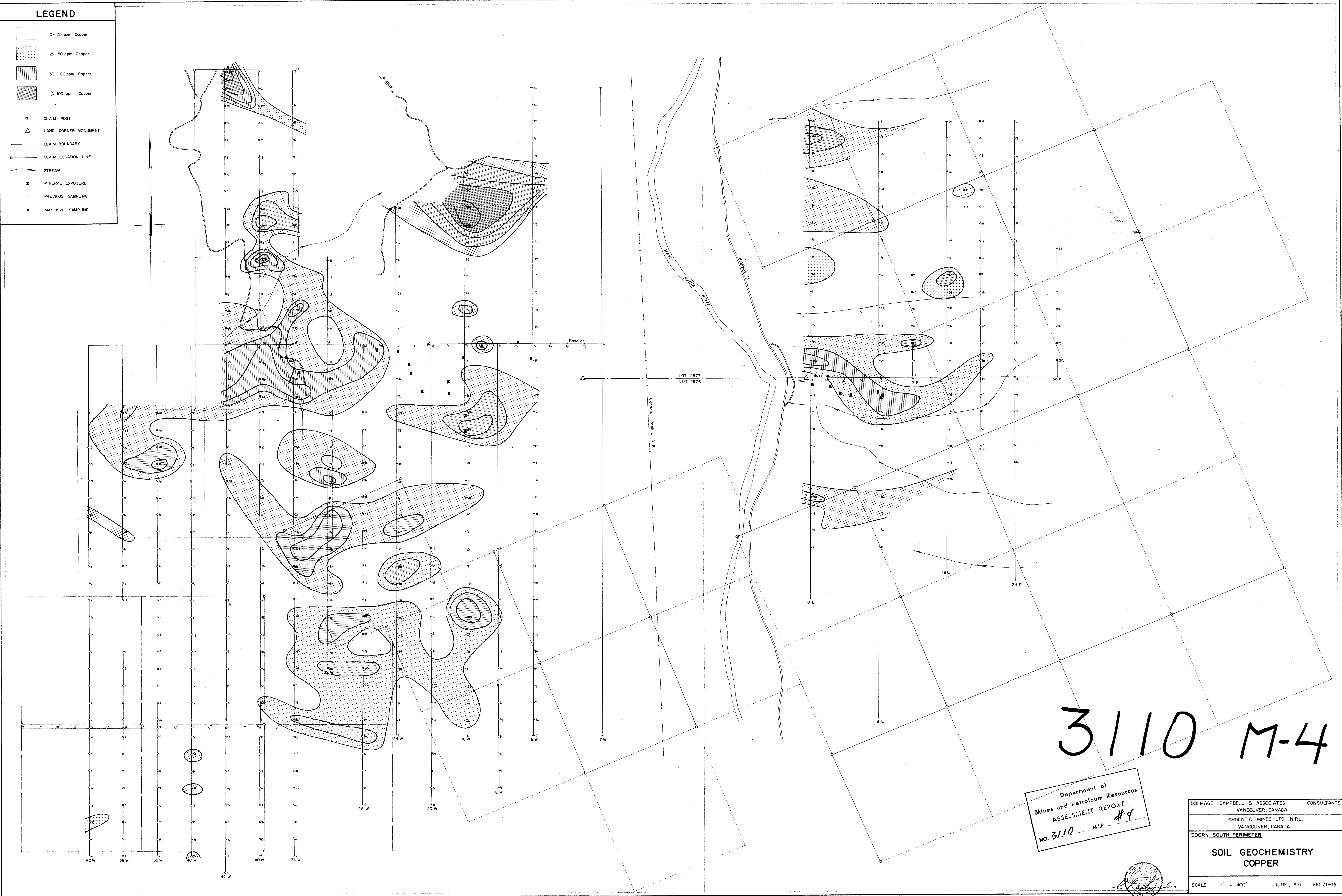


PROFESSIONAL
 ENGINEER
 OF
 CIVIL ENGINEERING
 BRITISH COLUMBIA
 C. B. SAUNDERS
 1000



LEGEND

-  0-25 ppm Copper
-  25-50 ppm Copper
-  50-100 ppm Copper
-  > 100 ppm Copper
-  CLAIM POST
-  LAND CORNER MONUMENT
-  CLAIM BOUNDARY
-  CLAIM LOCATION LINE
-  STREAM
-  MINERAL EXPOSURE
-  PREVIOUS SAMPLING
-  MAY 1971 SAMPLING


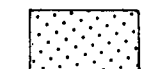












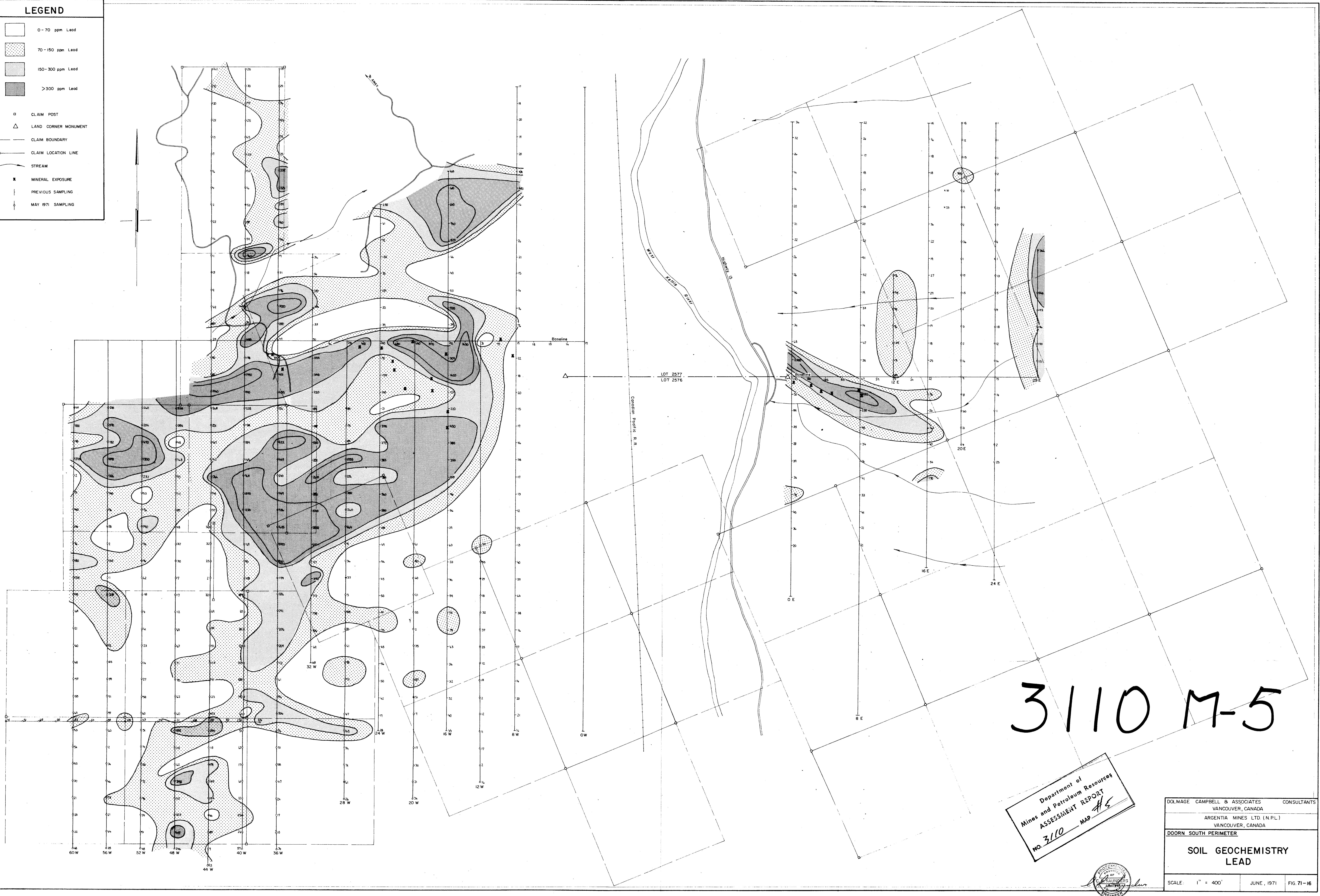
3110 M-4

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3110 MAP #4

DOLMAGE CAMPBELL & ASSOCIATES CONSULTANTS VANCOUVER, CANADA	
ARGENTIA MINES LTD. (IN P.L.) VANCOUVER, CANADA	
DOORN SOUTH PERIMETER	
SOIL GEOCHEMISTRY COPPER	
SCALE 1" = 400'	JUNE, 1971 FIG 71-15

LEGEND

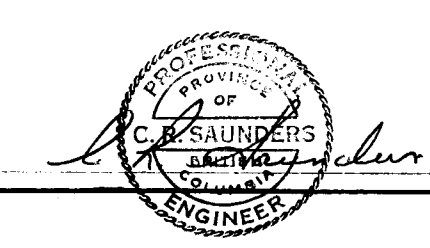
-  0 - 70 ppm Lead
-  70 - 150 ppm Lead
-  150 - 300 ppm Lead
-  >300 ppm Lead
-  CLAIM POST
-  LAND CORNER MONUMENT
-  CLAIM BOUNDARY
-  CLAIM LOCATION LINE
-  STREAM
-  MINERAL EXPOSURE
-  PREVIOUS SAMPLING
-  MAY 1971 SAMPLING



3110 M-5

Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 No. 3110 MAP #5

DOLMAGE CAMPBELL & ASSOCIATES CONSULTANTS VANCOUVER, CANADA		
ARGENTIA MINES LTD (N.P.L.) VANCOUVER, CANADA		
DOORN SOUTH PERIMETER		
SOIL GEOCHEMISTRY LEAD		
SCALE: 1" = 400'	JUNE, 1971	FIG 71-16





THE GOVERNMENT OF THE PROVINCE OF BRITISH COLUMBIA

DEPARTMENT OF MINES AND PETROLEUM RESOURCES

MINERAL ACT FORM B

RECORDED

JUN 7 1971

MINING RECORDER GREENWOOD MINING DIVISION

Affidavit on Application for Certificate of Work

I, DONALD PAINE (Name.) Agent for ARGENTIA MINES LTD (N.P.L.) (Name.)
R.R. #6 (Address.) 16th Floor 1177 W. HASTINGS. (Address.)
KELOWNA B.C. VANCOUVER B.C.
Free Miner's Certificate No. 58635 Free Miner's Certificate No. 58634
Date issued MAY 31 1971 Date issued MAY 31 1971

make oath and say:-

I have done, or caused to be done, work on the DOORN SOUTH PERIMETER GROUP

Record No.(s) 32909-32928 incl 34060-34063 incl (137979M 137989M Mineral Claim(s) 137987M 137982M Tag No.) 32961-32967 incl 32635, 32636, 32637, 32902 & 32638

situate at near Beaverdell B.C. (4 1/2 miles south)

in the GREENWOOD Mining Division, to the value of at least 4,000 dollars, since the 1st day of August, 1970

The following is a detailed statement of such work:-

(Set out full particulars of the work done in the twelve months in which such work is required to be done.)

Physical - Excavation of rock + soil with "450" John Deere Tractor with blade + back-hoe 12 5/8 hrs - 12 days - 96 hrs \$1200.00
Hand digging pits + trenches - 19 man days @ 25.00 475.00
Hand trimming mechanically dug trenches 13 1/2 days @ 25.00 337.50
Scaling rock face by hand 2 1/2 days @ 25.00 62.50
total physical \$2075.00

GEOCHEMICAL - Marking (blazing + flagging) 12.7 miles of line sampling every 100 ft on 400 ft. apart lines over 600 samples, 384 run for Cu, Pb, Zn
Geochemical work claimed \$2,500.00
total \$4,575.00
one year's work for each claim.

That I have not and will not use the work declared herein in any way for the purposes of obtaining tax exemption on a Crown-granted mineral claim under the terms of the Taxation Act.

SWORN and subscribed to at Beaverdell B.C.
this 7th day of June
1971, before me
* [Signature]

Donald Paine

* This affidavit may be taken by a person empowered to take affidavits by the Evidence Act of British Columbia.

3110

3110

M-7



NORTH
(TRUE)















From the claim map
scale 1/2 mile = 1 inch.
DOORN SOUTH PERIMETER GROUP.

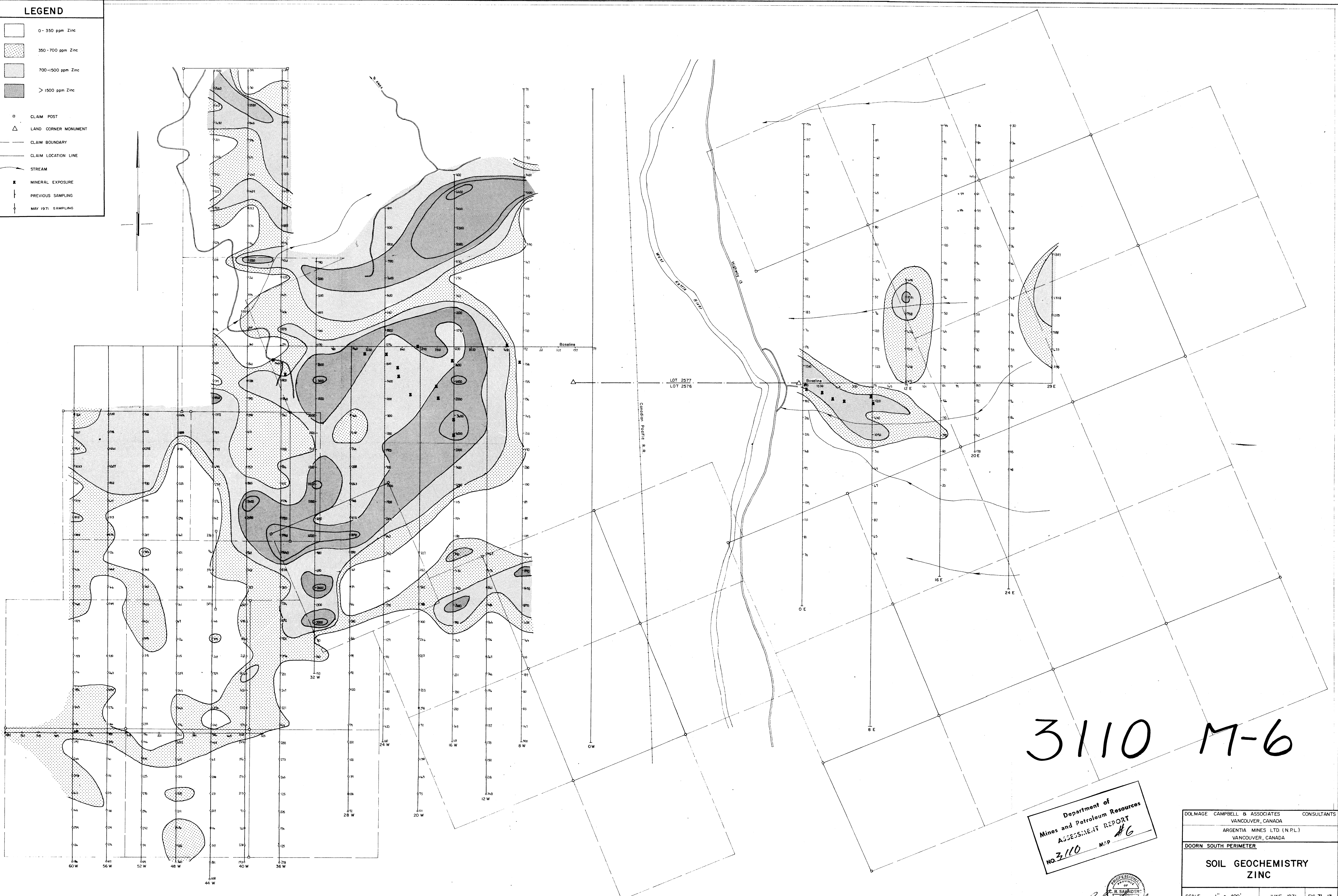
Argentina Mines Ltd. (N.P.L.)

Claims	Record No.	Tag Nos.	Number
FIL 1-20	32909-32928 inclusive		20
FILL 1-7	32961-32967 inclusive		7
PLAN 1-4	39016-39063 inclusive		4
PLAN 5+7		137979M 137987M 137989M	2
PLAN 6 Fraction			1
Cofor #1 Fraction	32635		1
Cofor 2+3	32636-32637		2
Dip #9 Fraction		137982	1
Fur #9	32902		1
Fur #18	32638		1

total 40 claim

LEGEND

-  0 - 350 ppm Zinc
-  350 - 700 ppm Zinc
-  700 - 1500 ppm Zinc
-  > 1500 ppm Zinc
-  CLAIM POST
-  LAND CORNER MONUMENT
-  CLAIM BOUNDARY
-  CLAIM LOCATION LINE
-  STREAM
-  MINERAL EXPOSURE
-  PREVIOUS SAMPLING
-  MAY 1971 SAMPLING



3110 M-6

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3110 M.P. #6

DOLMAGE CAMPBELL & ASSOCIATES CONSULTANTS VANCOUVER, CANADA		
ARGENTIA MINES LTD. (N.P.L.) VANCOUVER, CANADA		
DOORN SOUTH PERIMETER		
SOIL GEOCHEMISTRY ZINC		
SCALE: 1" = 400'	JUNE, 1971	FIG 71-17

