3924

REPORT ON

GEOLOGICAL AND GEOCHEMICAL SURVEY

DOC NOS. 1 - 6 MINERAL CLAIMS

GOLDEN MINING DIVISION

50°6.7' Lat. - 116°10' Long.

WORK PERIOD : AUGUST 27 - 30, 1972

OWNERS : Kerr Addison Mines Limited,

405 - 1112 West Pender Street,

Vancouver 1, B.C.

TABLE OF CONTENTS

INTRODUCTION

The Doc Nos. 1 - 6 Mineral Claims were staked in September, 1971. They are located approximately 6.5 miles south-west of Doctor Creek mouth in the Golden Mining Division.

Access to the property is via helicopter from Cranbrook, B.C., a distance of 45 miles. An old logging and mining road, along Doctor Creek, passes within 3 miles of the property. From this point to the property, travel is difficult because of dense brush and steep terrain, the relief is over 3,000 feet.

Exploration work was conducted during the period between August 27 - 30, 1972. The survey consisted of concurrent geological mapping, prospecting and soil sampling. This was done in an effort to locate and examine the type of lead mineralization previously indicated by soil and silt geochemistry.

SCHEDULE OF CLAIMS

Claim Name	Tag No.	Date Staked	Record No.	Date Recorded
Doc # 1	213016 M	Sept. 13/72	16809	Sept. 28/71
2	213017	"	16810	"
3	213018	"	16811	"
4	213019	"	16812	"
5	213020	"	16813	"
6	213021	"	16814	"

DOMINION OF CANADA:

PROVINCE OF BRITISH COLUMBIA. } In the Matter of Geological and Geochemical Soil Survey of Doc Nos. 1 - 6 Mineral Claims.

TO WIT:

I, John C. Lund

of 405 - 112 West Pender Street, Vancouver 1, B.C.

in the Province of British Columbia, do solemnly declare that the following is a true and accurate statement of costs involved in the survey :

COST STATEMENTS

Name	Job	Dates Worked	Total Days	Total Pay
A. T. LaRose	Soil Sampler	Aug. 27-30, 1972	4	$112.00
D. Wright	Geochemical Ass't	" "	4	68.00
W. Gruenwald	Geological Mapping	" "	4	112.00
G. Gruenwald	Geologist Ass't	" "	4	56.00
		TOTAL WAGES		$348.00
	Camp Operation :	16 man-days @ $12.67		202.72
	Assaying :	84 samples @ $ 2.20		184.80
		TOTAL COSTS FOR DOC GROUP		$735.52

APPORTIONMENT OF TOTAL COSTS TO CLAIMS INVOLVED

CONTROL OF SURVEY LINES

A NW-SE base line, 3,400 feet long, bearing S 65° E was established along the ridge across claims 3, 2 and 1. Cross lines at 500-foot intervals on the NE side plus parallel lines at 200-foot and 400-foot intervals on the SW side were run concurrently with the surveys. All the survey lines were established by Brunton compass, paced and marked with coloured flagging.

GEOLOGY

The Doc claim group covers a lead prospect which occurs near the contact between the Creston and the Upper Division of the Aldridge Formation.

Geological mapping and prospecting on the Doc claims has revealed that the host rocks are dark grey to black argillites and argillaceous quartzites of the Aldridge Formation (see Map 3). The black argillites contain quartz veins which vary from 1 - 14 inches wide, strike N 45° W and dip vertically. Other veins appear to conform with the bedding of the argillites which strike north-easterly about 55° - 75° and dip north-westerly at about 15° - 30°.

The quartz is milky white in colour. Scattered blebs of galena occur in the quartz and the mineralization is confined to the veins. A small number of the veins show minor chalcopyrite, sphalerite and pyrite.

Two selected samples picked at random from the quartz rubble assayed 0.6% and 0.9% lead.

GEOCHEMISTRY

Soil Survey

The samples were taken at 200-foot intervals along the survey lines. Greater intervals were used where soil was not available in sufficient quantities for a sample. The soil samples were taken from the top of

the "B" horizon, and if not available, the bottom of the "A" horizon. Sample depth ranges from 2 to 6 inches.

The samples were collected by digging a small hole with a shovel and/or pick. By this means it was possible to distinguish the "B" horizon and observe the composition of this and other horizons exposed. The soil samples were then taken with a small trowel or spoon and placed in high wet-strength $3\frac{1}{2}$" x $6\frac{1}{2}$" Kraft paper bags, on which sample numbers had been marked.

Notes were entered into a field book, recording the grid line location, the sample number, the depth of the sample horizon, the soil type, drainage direction and vegetation.

Analysis

Vangeochem Lab used the following analytical procedure to determine acid soluble Cu, Zn and Pb in geochemical samples.

1. Sample Preparation
   a) The samples we dried in a ventilated oven.
   b) The dried soil silt samples were sifted by using a shaking machine using a 80-mesh stainless steel sieve. The plus 80-mesh fraction was rejected and the minus 80-mesh fraction was transferred into a new bag for analysis later.

2. Methods of Digestion
   a) 0.5 gram of the minus 80-mesh samples were used. Samples were weighed out by using a top-loading balance.
   b) Samples were heated in a sand bath with nitric and perchloric acids (15% to 85% by volume of the concentrated acids respectively)
   c) The digested samples were diluted with demineralized water to a fixed volume and shaken.

3. Method of Analysis
   Analyses were determined by using a Tecktron Atomic Absorption Spectrophotometer Model AA4 or Model AA5 with their respective

hollow cathode lamps. The digested samples are aspirated directly into an air and acetylene flame. The results, in parts per million, were calculated by comparing a set of standards to calibrate the atomic absorption unit.

The analyses were supervised or determined by Mr. Conway Chunn or Mr. Laurie Nicol and their laboratory staff.

All the samples were analysed for total metal content in copper, zinc and lead. The assays expressed in parts per million are plotted on the geochemical plan, then a contour map was made to show the dispersion of each element. The results for copper, zinc and lead are shown on Map Nos. 4A, 4B and 4C respectively.

Interpretation

Claims 1 - 4 occupy an area of steep terrain, where mechanical erosion has removed most of the residual soil. Claims 5 and 6 are mainly covered by rock and soil from the erosion uphill.

Where high lead (greater than 1,000 ppm) content is encountered in the soils, this accumulation results from a combination of chemical and mechanical dispersion. See Map No. 4C.

Zinc and copper values are exceptionally low for a base metal deposit.

Areas which are considered to be background values are uncoloured on the map. Weakly anomalous areas are coloured light blue. These levels are 201-300 ppm for copper, 301-400 ppm for zinc, and 101-200 ppm for lead. Moderately amonalous areas are coloured dark blue. These levels are 301-300 ppm for copper, 401-500 ppm for zinc, and 201-300 ppm for lead. Definitely anomalous areas are coloured purple, orange and increasingly deeper tones of red.

CONCLUSION

The programme of geological mapping and prospecting was successful in locating and exposing the source of the high lead geochemical assays obtained from the previous year's regional programme. Galena mineralization was found

to occur in narrow quartz veins and veinlets comparable to and cross-cutting the argillite member of the Upper Aldridge Formation.

The results of the soil survey indicate that substantial amounts of lead and traces of copper and zinc are dispersed in the soils on the Doc claims.

Mechanical erosion is the chief factor for the exceptionally high, lead geochemical values obtained downhill from the relatively low-grade galena showings. This is substantiated by the results which show 3000-9000 ppm lead in the soils and assays of 0.6% -0.9% lead in the mineralized quartz.

Vancouver 1, B.C.
October 12, 1972

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
JOHN C. LUND
J. C. Lund, P. Eng.

QUALIFICATIONS OF GEOLOGIST AND GEOCHEMICAL SAMPLERS

The geological mapping and geochemical sampling was done by Mr. Werner Gruenwald and Mr. A. Ted LaRose, whose qualifications are as follows :-

Mr. W. Gruenwald - Geologist

Atlas Exploration Limited

Four months as field assistant in mapping of geology and geochemical sampling.

Kerr Addison Mines Limited

Four months as field assistant in I.P. magnetic and electromagnetic surveys, plus geological and geochemical surveys.

Four months as party leader on exploration programme conducting geological and geochemical surveys.

Three months as field assistant on property examinations.

B.Sc. Geology, U.B.C. 1972

Mr. A. T. LaRose - Sampler

Frobex Exploration Limited

Two years as Field Supervisor for airborne radiometric surveys, follow-up ground prospecting and staking, and drill supervision.

Area Mines Limited

Seven years as geophysical party leader for electromagnetic, magnetic and gravity surveys.

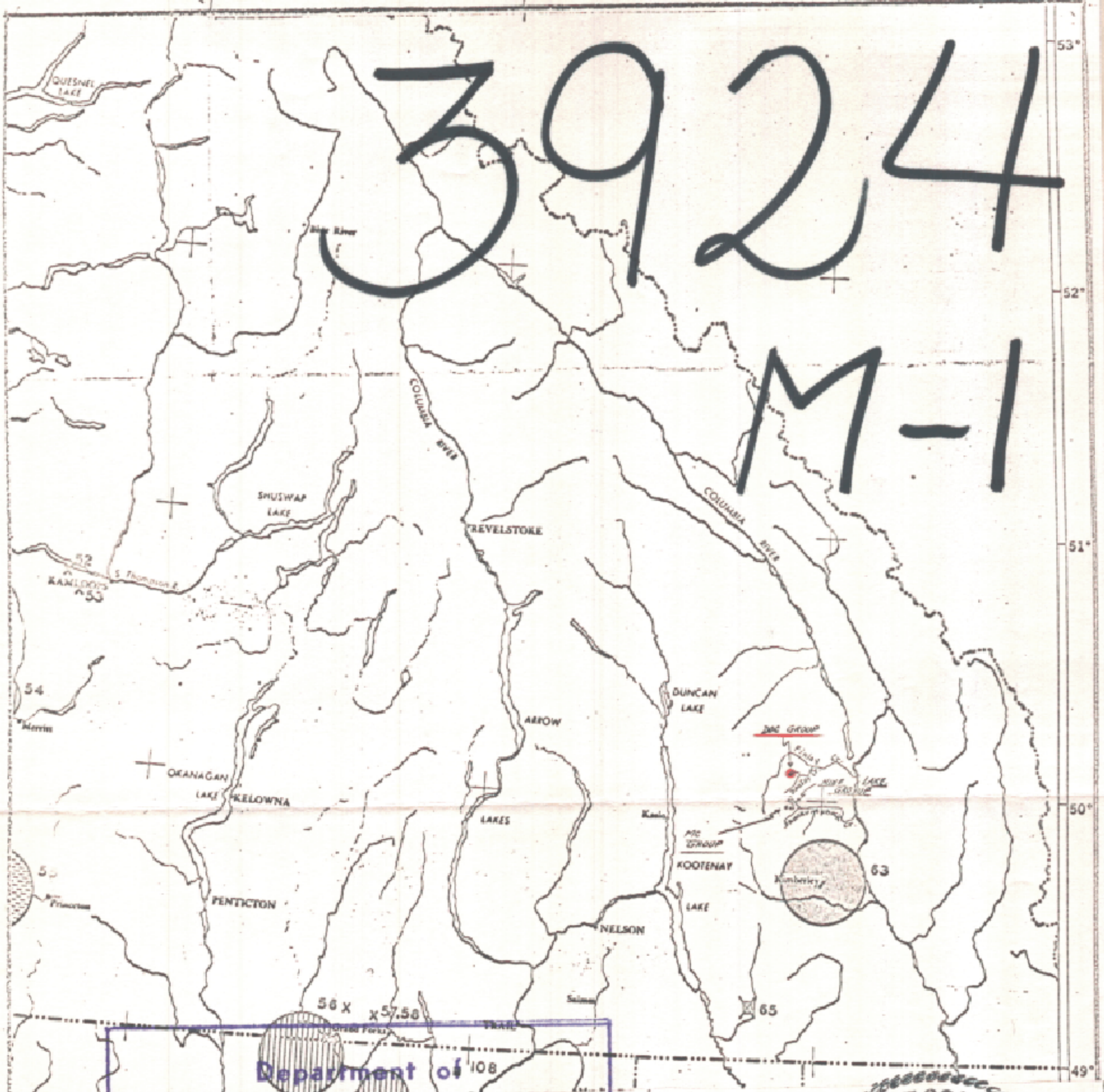
Kerr Addison Mines Limited

Four and a half years as party leader on electromagnetic, magnetic, and I.P. surveys; drill supervision and geochemical sampling.

SCHEDULE OF ACCOMPANYING MAPS

1.	Key Map	1" = 40 miles
2.	Claim Map	1" = ½ mile
3.	Geological Map	1" = 400'
4A.	Geochemical Soil Survey - Copper	1" = 400'
4B.	" " " - Zinc	1" = 400'
4C.	" " " - Lead	1" = 400'

3924
M-1



This map to accompany the
Geophysical and Geochemical
report by J. C. Lund, P. Eng.
on the Doc Claim Group, on
Greenland Creek, ~~Fort Steele~~ Golden M.D.,
dated 2 October, 1972

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
JOHN C. LUND

KERR ADDISON MINES LIMITED

KEY MAP OF

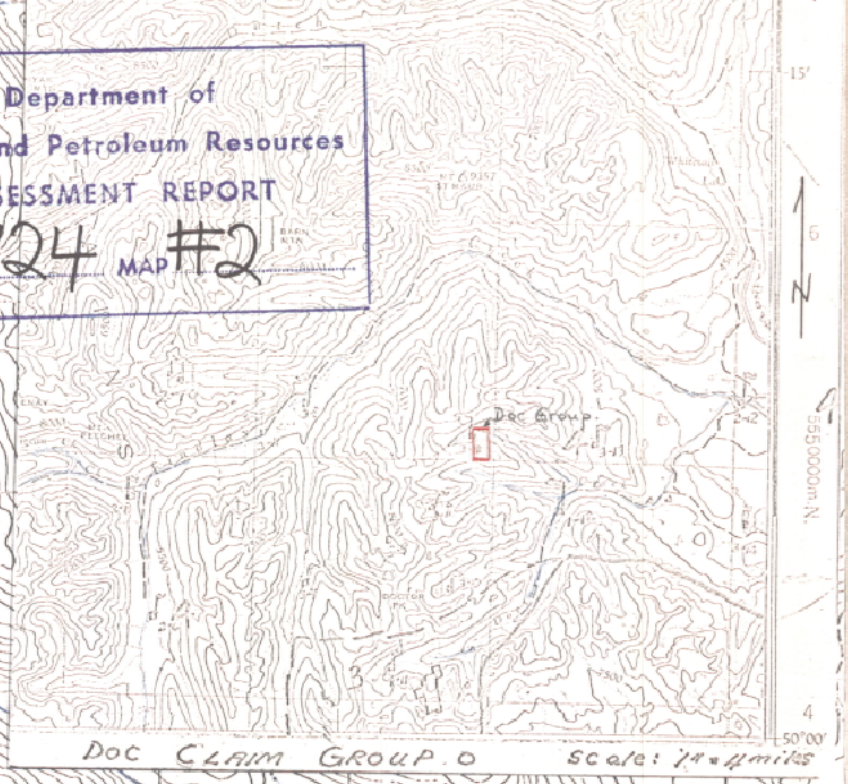
Doc

MINERAL CLAIMS

~~Fort Steele~~ Golden MINING DIVISION

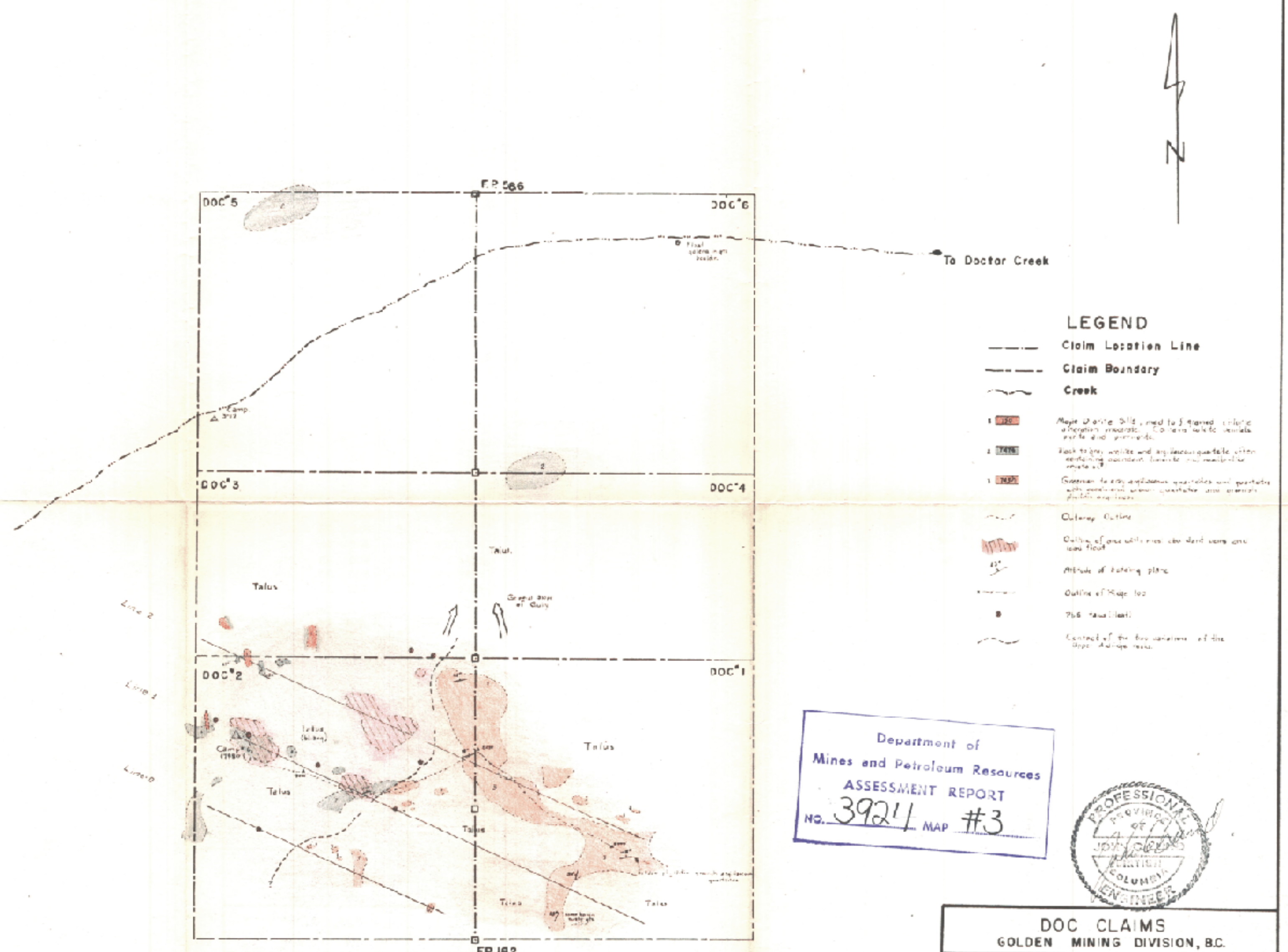
SCALE : 1 MI. = 40 MI.

MAP No. 1	NTS.
DRAWN BY: J. L. Chout	DATE : Sept. 27, 1972



DOC CLAIM GROUP.0 Scale: 1" = 4 miles

KERR ADDISON MINES LIMITED	
DEWAR CREEK PROJECT B.C.	
DOC CLAIM GROUP	
LOCATION PLAN	
STAKED SEPT. 15/71	Scale: 1" = 1/2 mile



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3921 MAP #3

DOC CLAIMS
GOLDEN MINING DIVISION, B.C.

GEOLOGICAL PLAN

KERR ADDISON MINES LTD.

SCALE: 1" = 400'
OFFICE: VANCOUVER

MAP NO. 3

SURVEYED BY: W. GRUENWALD
DRAWN BY: W. GRUENWALD Oct 1972

N

LEGEND

- Claim Location Line
- Claim Boundary
- Soil Sample Site
- Silt Sample Site
- Creek
- Geochemical Assay (Cu,Zn,Pb) (in parts per million)

Color No.	GEOCHEM Cu ppm.	COLOR Zn ppm	CODE Pb ppm.
916	0 - 50	0 - 100	0 - 25
913	51 - 100	101 - 200	26 - 50
909	101 - 200	201 - 300	51 - 100
905	201 - 300	301 - 400	101 - 200
902	301 - 400	401 - 500	201 - 300
931	401 - 500	501 - 600	301 - 400
918	501 - 600	601 - 700	401 - 1000
928	601 - 700	701 - 800	1001 - 2000
930	701 - 800	801 - 900	2001 - 3000
924	800+	900+	3000+

DOC CLAIMS
GOLDEN MINING DIVISION, B.C.

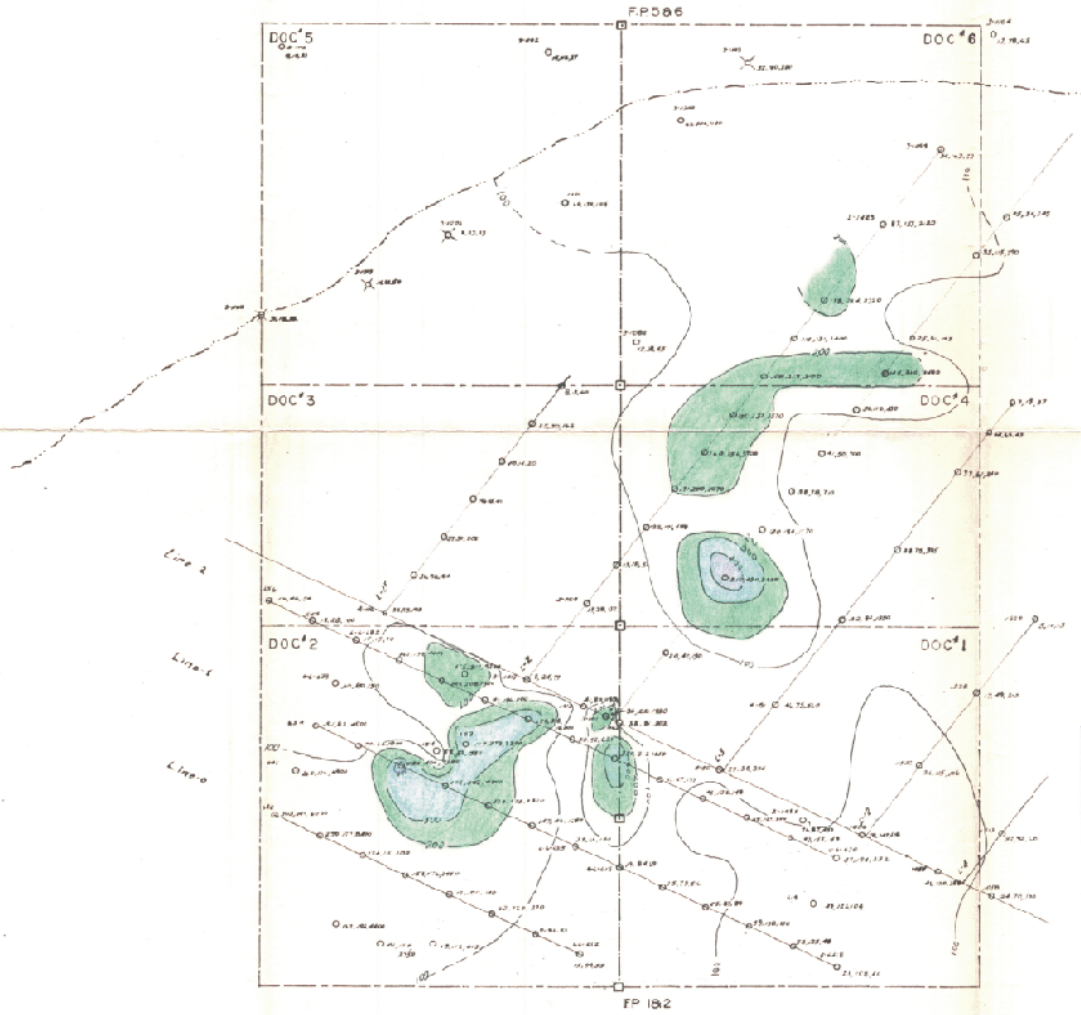
GEOCHEMICAL PLAN (CU,ZN,PB)

KERR ADDISON MINES LTD

SCALE: 1" = 400'
OFFICE: VANCOUVER

MAP NO. 4 A

SURVEYED BY: T. LAROSE, W. GRUENWALD
DRAWN BY: W. GRUENWALD
Oct. 1972



N

LEGEND

- Claim Location Line
- Claim Boundary
- Soil Sample Site
- Silt Sample Site
- Creek
- Geochemical Assay (Cu,Zn,Pb) (in parts per million)

Color No	GEOCHEM Cu ppm.	COLOR CODE Zn ppm	Pb ppm.
96	0 - 50	0 - 100	0 - 25
93	51 - 100	101 - 200	26 - 50
909	101 - 200	201 - 300	51 - 100
905	201 - 300	301 - 400	101 - 200
902	301 - 400	401 - 500	201 - 300
931	401 - 500	501 - 600	301 - 400
918	501 - 600	601 - 700	401 - 1000
928	601 - 700	701 - 800	1001 - 2000
930	701 - 800	801 - 900	2001 - 3000
924	800+	900+	3000+

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
JOHN C. LYONS

DOC CLAIMS
GOLDEN MINING DIVISION, B.C.

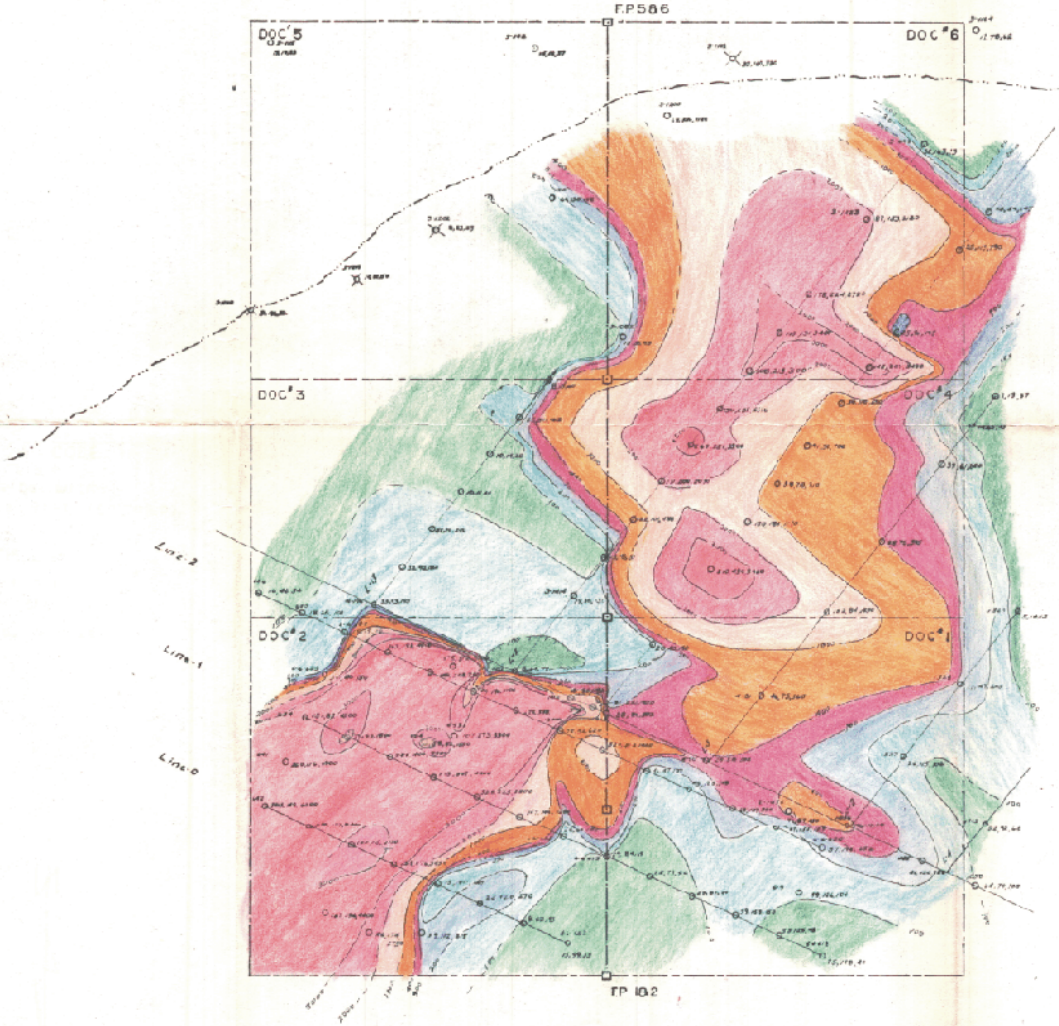
GEOCHEMICAL PLAN
(~~Cu~~,Zn,~~Pb~~)

KERR ADDISON MINES LTD.

SCALE: 1" = 400'
OFFICE: VANCOUVER

MAP NO. 4 B

SURVEYED BY: T.LAROSE, W.GRUENWALD
DRAWN BY: W. GRUENWALD
Oct. 1972



N

LEGEND

- Claim Location Line
- Claim Boundary
- Soil Sample Site
- Silt Sample Site
- Creek
- Geochemical Assay (Cu,Zn,Pb) (in parts per million)

Color No	GEOCHEM Cu ppm.	COLOR Zn ppm	CODE Pb ppm.
916	0 - 50	0 - 100	0 - 25
913	51 - 100	101 - 200	26 - 50
909	101 - 200	201 - 300	51 - 100
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951	401 - 500	501 - 600	301 - 400
918	501 - 600	601 - 700	401 - 1000
928	601 - 700	701 - 800	1001 - 2000
950	701 - 800	801 - 900	2001 - 3000
924	800+	900+	3000+

DOC CLAIMS
GOLDEN MINING DIVISION, B.C.

GEOCHEMICAL PLAN (Cu,Zn,Pb)

KERR ADDISON MINES LTD.

SCALE: 1" = 400'
OFFICE: VANCOUVER

MAP NO. 4 c

SURVEYED BY: T. LAROSE, W. GRUENWALD
DRAWN BY: W. GRUENWALD
Oct. 1972