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REPORT ON

GEOCHEMICAL SURVEY, SANDON AREA

FOR

PRISM RESOURCES LTD.

82F/14E

by

A. J. Sinclair, P. Eng.

November 1, 1974

INDEX

REPORT ON

GEOCHEMICAL SURVEY, SANDON AREA

FOR

PRISM RESOURCES LTD.

SUMMARY AND CONCLUSIONS:

1. A total of 229 soil B-horizon, bank and silt samples were taken in the Sandon camp and analyzed for Pb, Zn and Ag, and, in part, for Au.
2. Samples were analyzed statistically using the probability graph approach recommended by Sinclair (1974) to pick thresholds.
3. In the Sandon area soil B-horizon and silt samples are proven to be successful indicators of known mineral deposits (in particular, the Altoona and Daniel deposits were indicated by the survey).
4. Bank samples are shown to be the least useful survey approach in the Sandon area, and should be avoided in mineral exploration work except as a last resort or where required for a specific study.
5. Gold does not provide particularly useful information for the soil samples considered here. Nearly all values were below the sensitivity of the analytical technique (0.01 ppm). In general, the high cost of Au geochemcial analyses does not appear warranted.
6. Several areas of interest have been indicated by the present survey and follow-up investigations are warranted as follows:
   (1) northwest corner of L17698M,
   (2) central part of L17695M, and
   (3) upslope from samples D74-T3 and -T4.

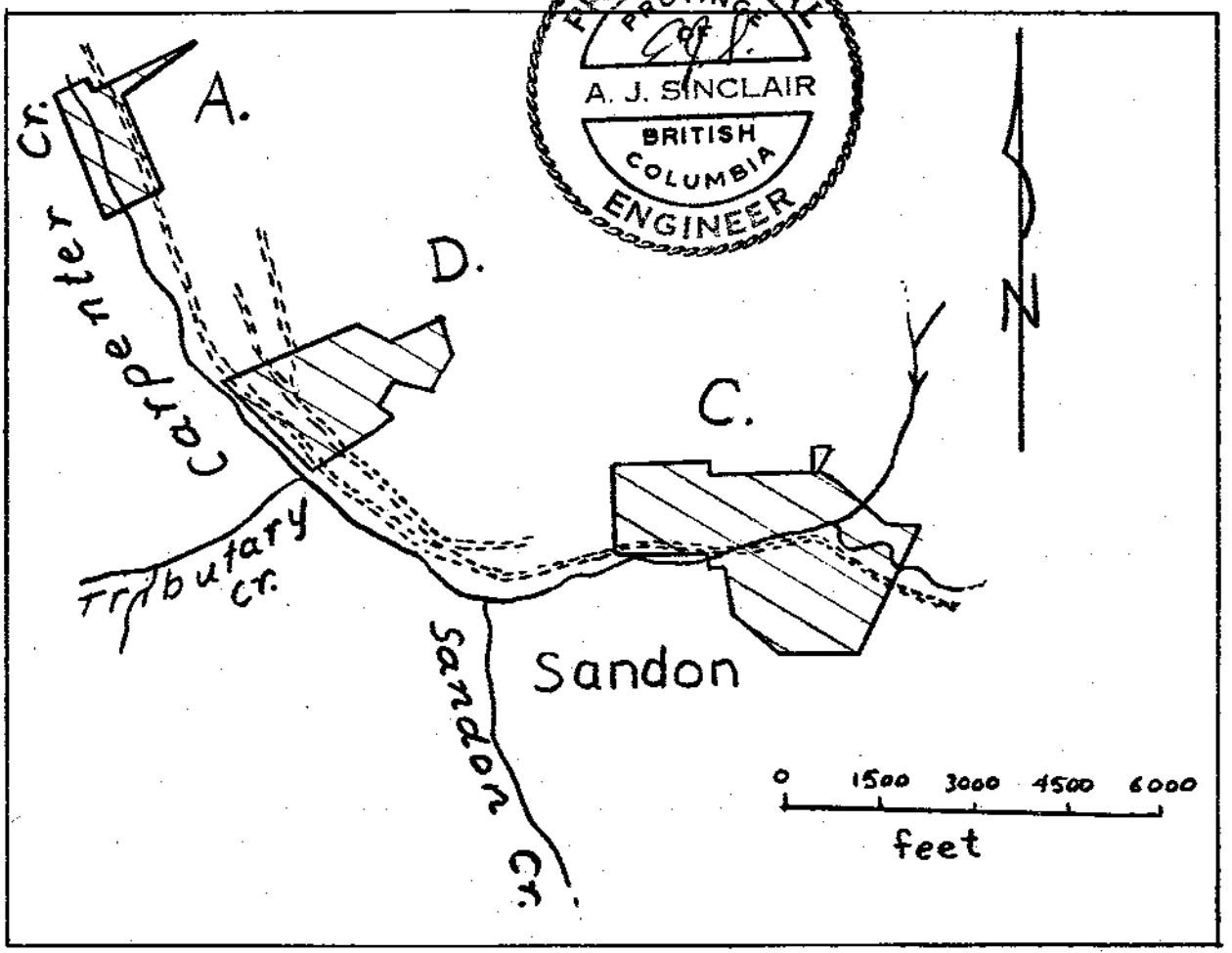


Figure 1: Location map of Sandon area showing disposition of areas A, C and D where geochemical studies were centered.

INTRODUCTION

A total of 229 bank, soil and silt samples were taken from three separate areas near Sandon in the Slocan Mining Division, British Columbia, by the writer and Mr. J. F. W. Orr, Geologist. This work was done intermittently through the months of July and August, 1974. Samples were submitted to Min-En Laboratory of North Vancouver, all to be analyzed for Pb, Zn and Ag and 134 of which were also analyzed for Au. Locations of the three areas studied are shown in figure 1.

GENERAL GEOLOGY

General geology of the area is known from early work by Cairnes (1934) and more recent detailed work by Hedley (1952). The abundant rocks underlying the area are a variety of fine-grained to aphanitic clastic sedimentary rocks now somewhat regionally metamorphosed to slates, argillites and fine-grained quartzites. These rocks belong to the Slocan Group of Upper Triassic age. The sedimentary rocks are cut here and there by a number of dykes and small plutons of irregular shape. Precise ages of these plutons are unknown--some could be pre-deformation in age. A number are either synchronous with or post-date deformation and are thought to be coeval with the nearby Nelson Batholith (cf. Cairnes, 1934). If this correlation is correct, age of the plutons is approximately 160 m.y., the age of the lowermost Middle Jurassic (Nguyen, Sinclair and Libby, 1968). Lamprophyre dykes that are essentially contemporaneous with but slightly post-date the batholith, have not been observed in the area of immediate concern here.

Layered rocks of the area have been deformed extensively, into a large recumbent structure of regional extent, known as the Slocan fold. On its limbs this large structure contains smaller, similar structures at various scales. Development of these structures somewhat post-dated the emplacement of the Nelson Batholith, with the result that thermal metamorphic effects are superimposed on the early structures. Mineral deposition in the area is later than this phase of recumbent folding and the age of batholithic emplacement. Later deformational effects have also been recognized (e.g. Ross, 1970), but evidence for them is not everywhere apparent, and might require detailed geological examination.

MINERAL DEPOSITS

Cairnes (1934) describes five mineralogical types of lode deposits in the Slocan mining camp. Two types that contain appreciable sulphides concern us here. The most abundant type are the so-called "wet" ores of silver , lead and zinc that occur in rocks of the Slocan Group. The se deposits can be divided into three sub-groups on the basis of gangue mineralogy: (a) quartz gangue only, (b) calcite gangue most abundant, and (c) siderite gangue abundant. These are by far the most common type of ore deposit found near Sandon. Rare replacement deposits in limestone are also representative of this category but are relatively low in silver content.

The second mineralogical variety is the sO-called "dry" group occurring in plutonic rocks. Sphalerite, pyrite and

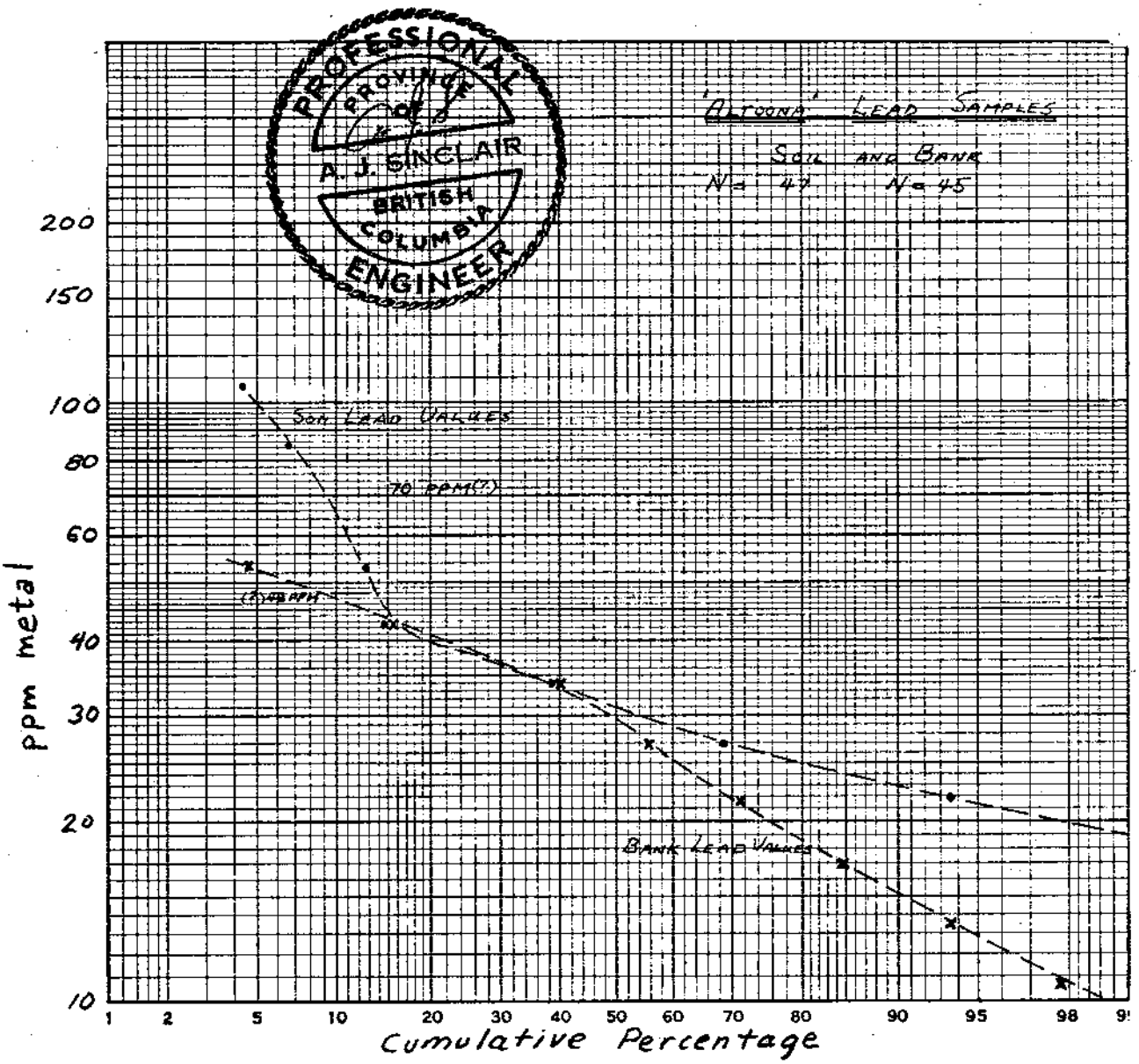


Figure 2: Probability graph of Pb in soil B-horizon samples and bank samples from area A (near Altoona deposit).

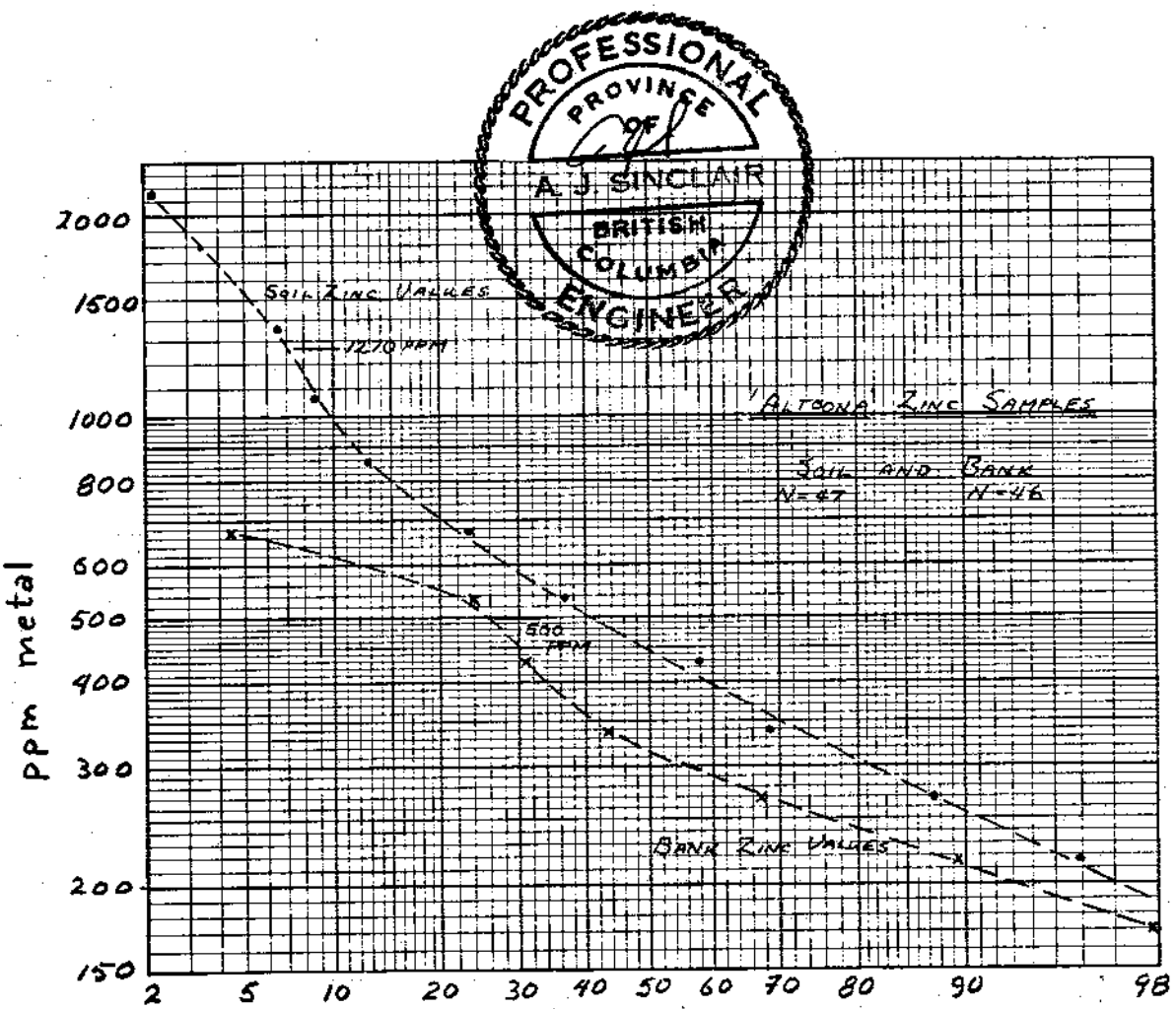


Figure 3: Probability graph of Zn in soil samples and bank samples from area A (near Altoona deposit).

galena are present but form a much smaller percentage of the total vein material than in the "wet" ores. Silver is generally more abundant compared with wet ores and can occur as argentite, stephanite, native silver, polybasite, ruby silvers, etc. Thes deposits are normally low in tonnage compared with wet deposits.

ANALYSIS OF GEOCHEMICAL DATA

Samples were first grouped and tallyed in a manner similar to that recommended by Lepeltier (1969) but on a somewhat modified and improved tally sheet (Appendix B). Data organiz ed in this manner can be used for rapid construction of histograms (shown in Appendix B) as well as putting the basic information in appropriate form for construction of probability plots. Pb, Zn and Ag data were treated by the foregoing procedure, probability graphs plotted and the plots analyzed in the manner suggested by Sinclair (1974). For our purposes data from the 3 different areas were considered separately as were data of fundamentally different types--in particular, overburden samples taken from road bands (bank samples) below the s oil profile were cons idered separately from B-horizon soil samples. Only a few silt samples were taken (noted in Appendix A) but these were too low in number to analyze using probability plots and could be evaluated only in a cursory and subjective way.

Results are considered in terms of areas (see figure 1) as follows:

Area A: (Silver 2 and 3) Adjacent to Altoona property

Area C: (Shar 1-4 incl., and Silver 6) Between Sandon and Cody

Area D: (Silver 1 Fr., Silver 4 and 5) Adjacent to Daniel property.

AREA A:

Bank and soil B-horizon samples were taken at intervals of 50 or 100 feet along the uphill side of the main Carpenter Creek road. Purpose was to provide a geochemical traverse across the A group and at the same time to test for type of geochemical response about a Zn-rich deposit (Altoona). In addition, the survey was to check on the relative effectiveness of bank and soil B-horizon samples.

Probability plots for Pb and Zn data are shown in figures 2 and 3 where results for bank samples can be compared with those for soil B-horizon samples. For both Pb and Zn statistical dispersion of values is much greater for soil samples than for bank samples. Furthermore, soil data are consistently higher for zinc, although lead values for the 2 types of samples are more-or-less comparable. Analysis of the probability plots further shows a more pronounced separation of populations in the case of soil B-horizon samples (i.e. easier definition of threshold between anomalous and background values). In general, then, one can conclude that soil B-horizon samples provide better Pb and Zn data for purely exploration purposes than the same elements in bank samples.

Samples anomalous in Pb and Zn are shown in figure 7. Greatest abundances of anomalous samples in groups are at the north end of the traverse, about a small westerly flowing stream. A silt sample from the stream is also highly anomalous. This zone is almost certainly due to "contamination" from workings of the Altoona deposit which are just several hundred feet upslope. It is of interest to note in the data of Appendix A that the very pronounced surface soil

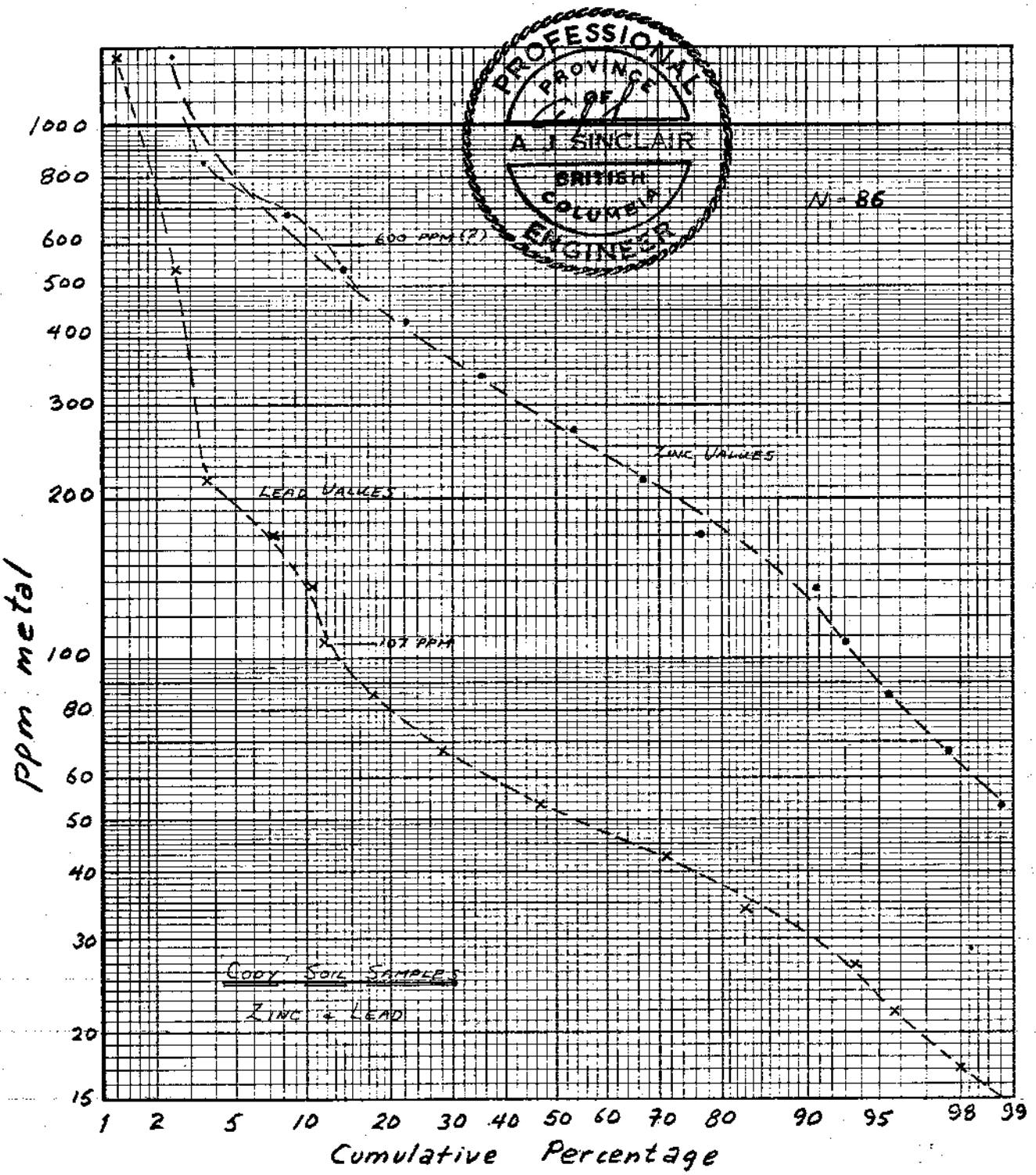


Figure 4: Probability graph of Pb and Zn data for 86 soil B-horizon samples in area C (near Cody).

and silt anomaly is not reflected in underlying bank material!

Two anomalous soils near the northernmost corner of L17698 (figure 7) deserves further upslope field investigation. Soil samples near the south end of the traverse, that are anomalous only in Pb could be surface contamination resulting from transportation of ore and concentrates in the early days of the camp. The anomalies are not reflected in Pb values in soils or Pb and Zn values in bank samples.

Silver data are discussed in a later section.

AREA C

Data are listed in Appendix A and are shown as probability plots in figure 4 (Pb and Zn) and figure 6 (Ag). Thresholds can be chosen at about 500 ppm Zn and 80 ppm Pb. Note the drastically higher Pb background compared with area A. Also Zn values are somewhat lower in area C compared with area A. These variations in background could well be tied in to mineral zonation. Consequently, it is important to consider zonal distribution of mineral depsoits in evaluating all soil geochemical data in the area. This is most easily accomplished if thresholds are chosen in the manner described by Sinclair (1974) for each specific and individual environment. It is apparent that a large body of geochemical data encompassing much of the Slocan camp must be analyzed in the light of mineral zonation in addition to the features that are considered routinely.

Anomalous samples are shown in figure 8 based on interpretation of probability plots for Pb and Zn (figure 4) and Ag (figure 6). The most pronounced grouping of samples anomalous in Pb and/or Zn

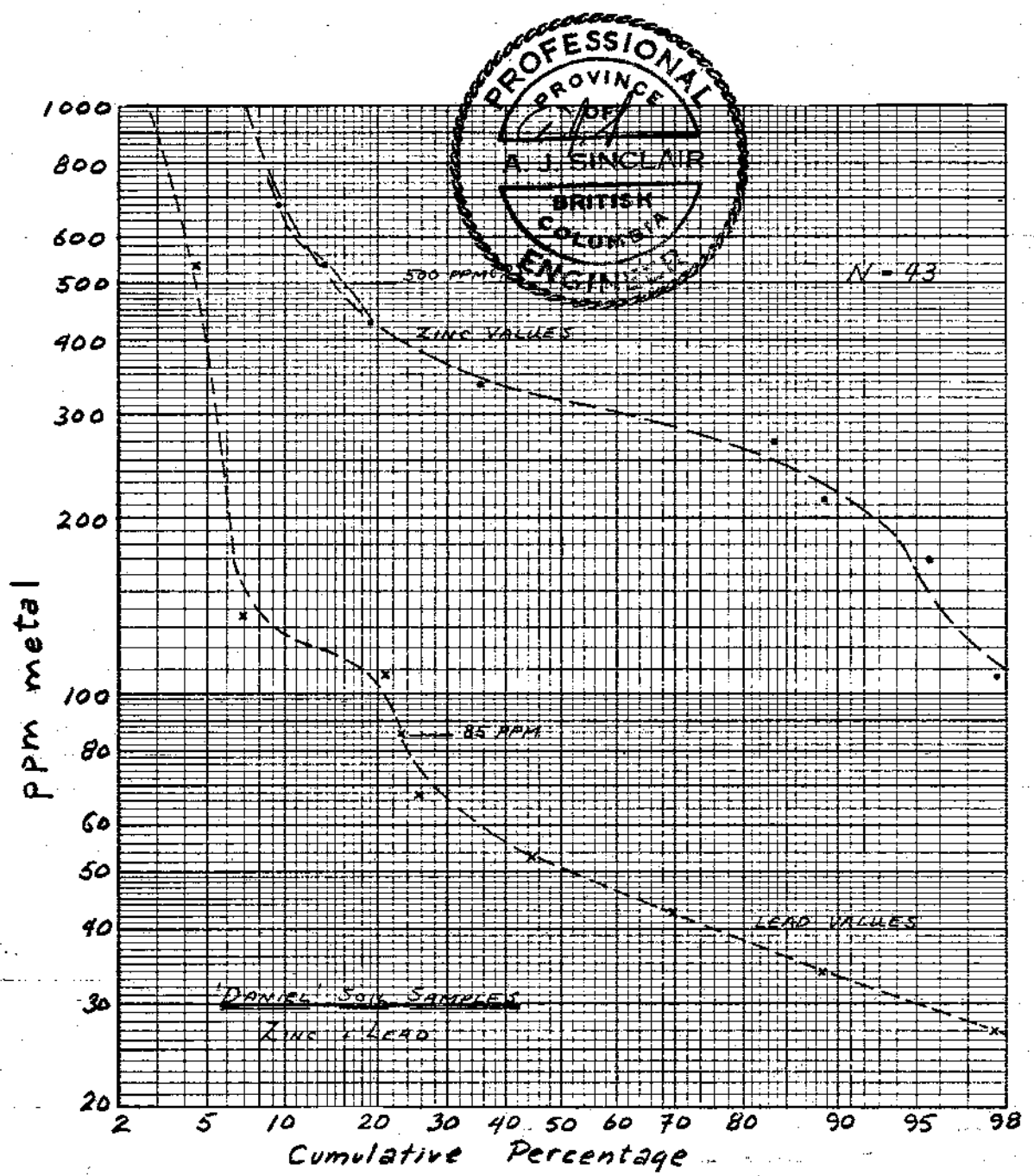


Figure 5: Probability graphs of Pb and Zn data for 43 soil B-horizon samples from area D (near Daniel mine).

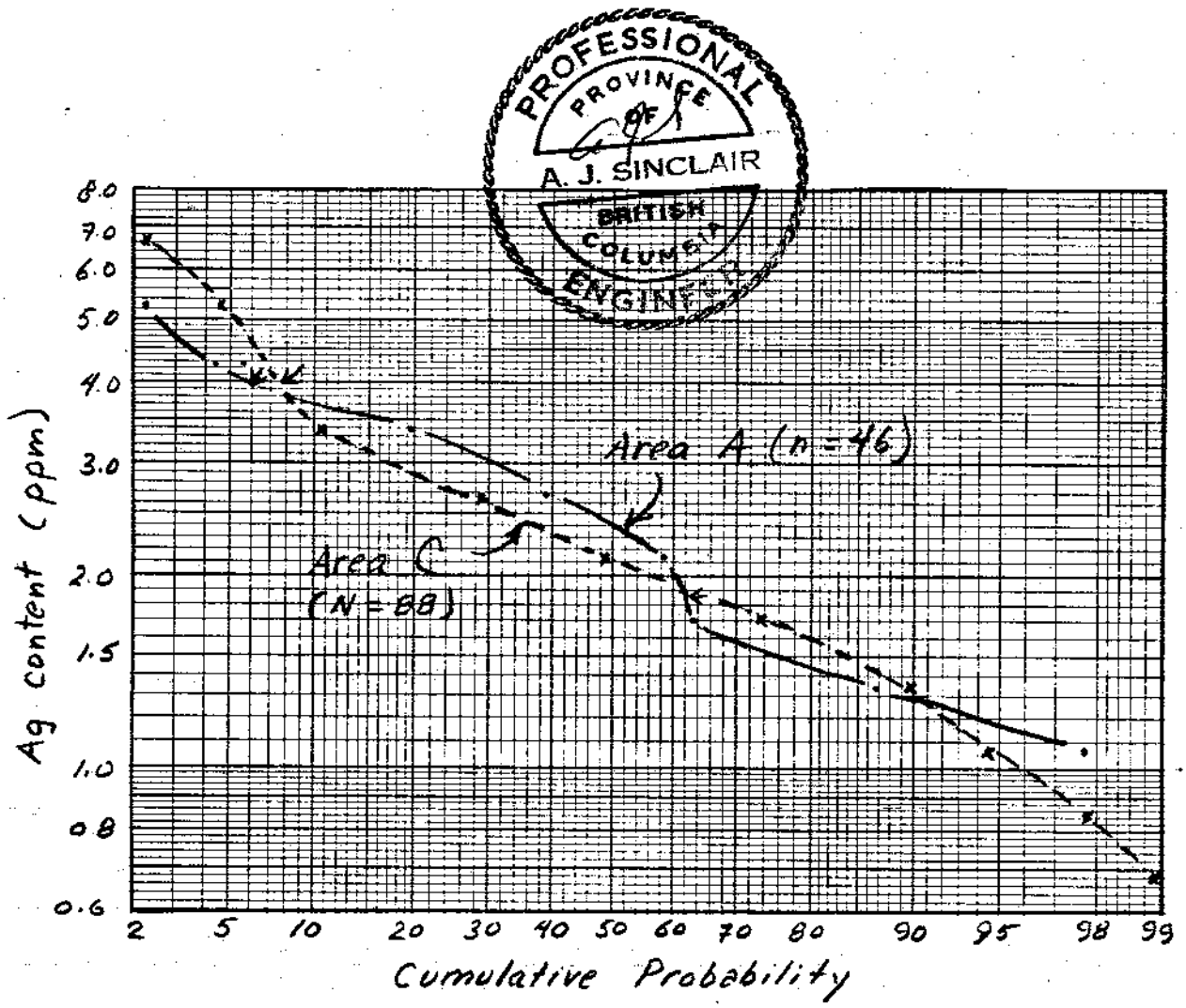


Figure 6: Cumulative probability plot of Ag in B-horizon soils, Areas A and C, Sandon area.

is near the eastern extremity of the two plotted traverses, at the road intersection on claim L17695M (Shar 3). This area warrants detailed field examination. Other indicated sample sites anomalous in Pb and/or Zn should be checked in the field but, because of their apparent erratic occurrence and physiographic positions are accorded relatively low priority, subject to additional information.

AREA D

A cumulative probability plot for Pb and Zn in B-horizon soils of area D is shown in figure 5. Thresholds can be picked approximately at 80 ppm Pb and 350 ppm Zn (cf. Sinclair, 1974). This procedure results in the recognition of anomalous samples as shown in figure 9. The majority of the anomalous samples are at the north end of the area studied and almost certainly represent dispersion from the Daniel deposit. A more detailed field investigation is required upslope from samples D74-T3 and -T4. In addition, the area about 2 samples anomalous in Pb (D74-T13 and -T14) should be investigated upslope in some detail.

SILVER ANALYSES

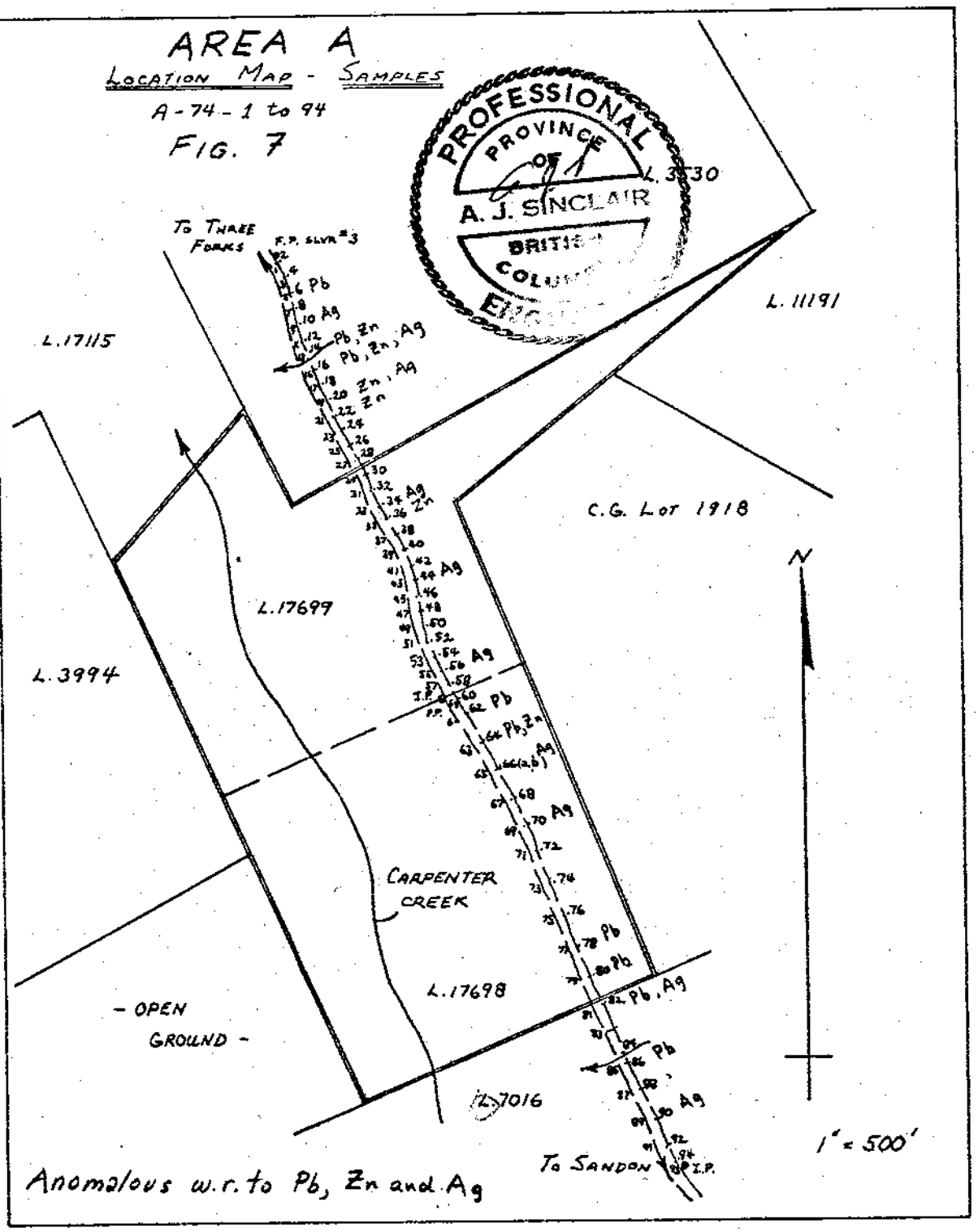
A probability graph for Ag geochemical data for areas A and C is shown in figure 6. Although the two curves differ in detail both indicate a threshold at about 4.0 ppm Ag. This value has been used to define anomalous Ag values in all three areas pending further information. Samples anomalous in Ag are indicated on figures 7, 8 and 9.

AREA A

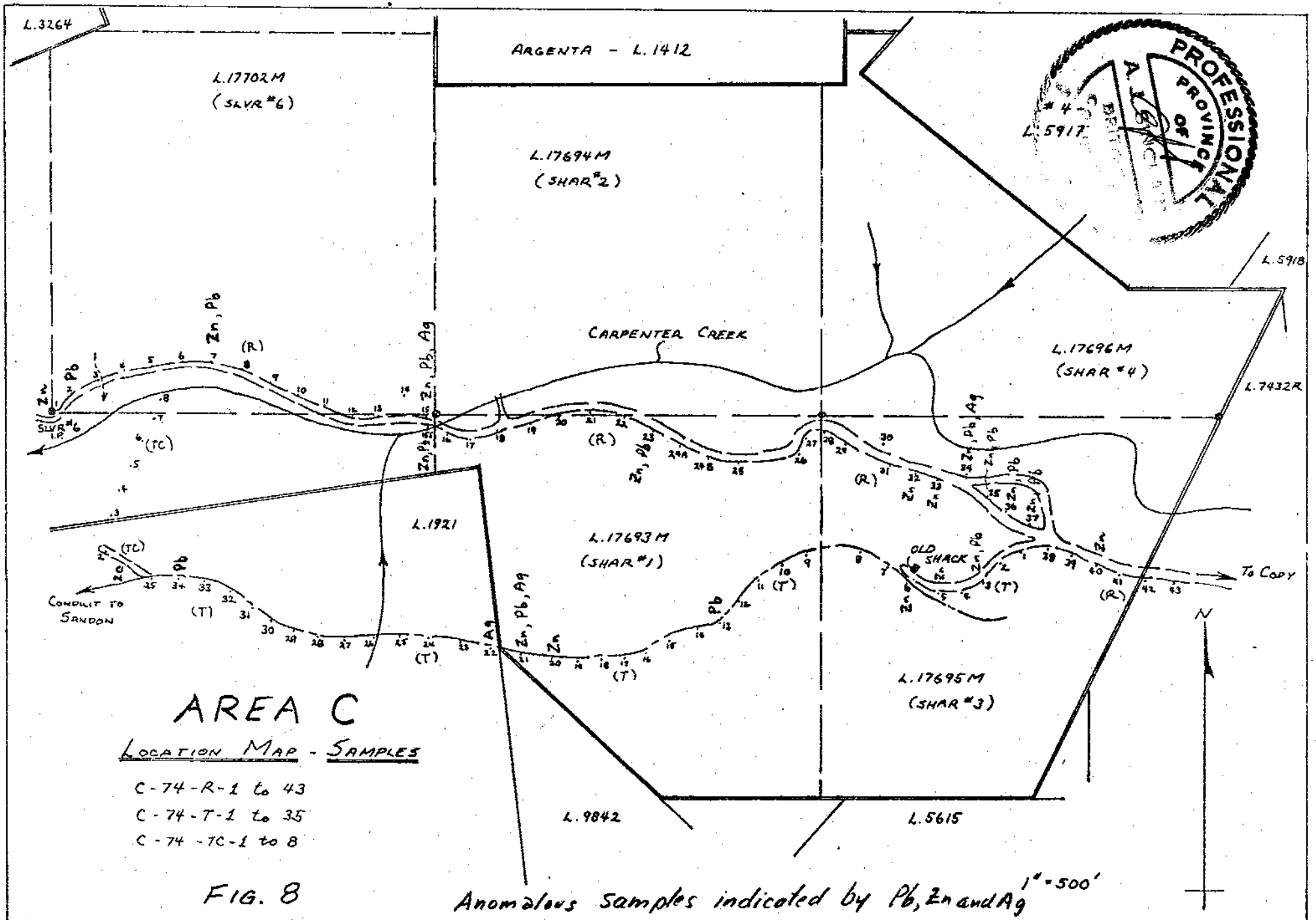
Location Map - Samples

A-74-1 to 94

FIG. 7



Anomalous w.r.to Pb, Zn and Ag



AREA C

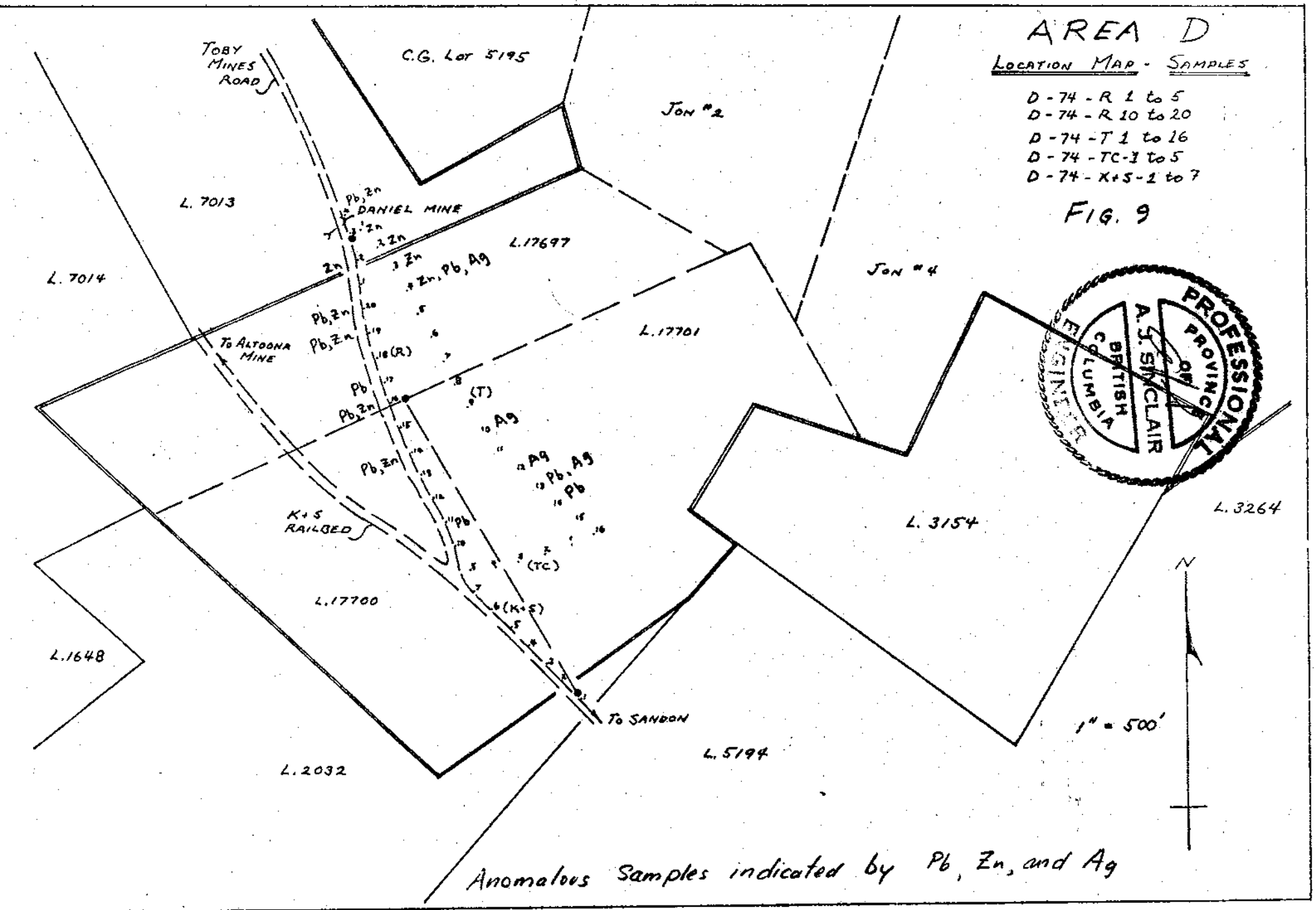
Location Map - Samples

C-74-R-1 to 43
C-74-T-1 to 35
C-74-TC-1 to 8

FIG. 8

Anomalous samples indicated by Pb, Zn and Ag

1" = 500'


AREA D
LOCATION MAP - SAMPLES
D-74-R 1 to 5
D-74-R 10 to 20
D-74-T 1 to 16
D-74-TC-1 to 5
D-74-K+5-1 to 7
FIG. 9
TOBY MINES ROAD
C.G. Lot 5195
JON #2
JON #4
L. 7013
L. 7014
DANIEL MINE
L.17697
L.17701
L.17700
TO ALTOONA MINE
K+5 RAILROAD
L. 3154
L. 3264
L.1648
L.2032
L.5194
TO SANDON
PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
A.S. SINCLAIR
N
1" = 500'
Anomalous Samples indicated by Pb, Zn, and Ag

GOLD DATA

Soil Au data, in general, appears to provide no useful pattern in the search for mineral deposits in the Sandon area. This might be purely a function of the analytical sensitivity. Gold contents of known mineral deposits in the camp varies over several orders of magnitude, and it was hoped that this variation would be reflected in soil results. Unfortunately, such was not the case.

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Hedley, M. S., 1952, Geology and ore deposits of the Sandon area, Slocan mining camp, British Columbia; B. C. Dept. Mines and Petroleum Resources, Bull. 29.

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Sinclair, A. J., 1967, Trend surface analysis of minor elements in sulfides of the Slocan mining camp, British Columbia, Canada; Econ. Geol., vol. 62, p. 1095-1101.

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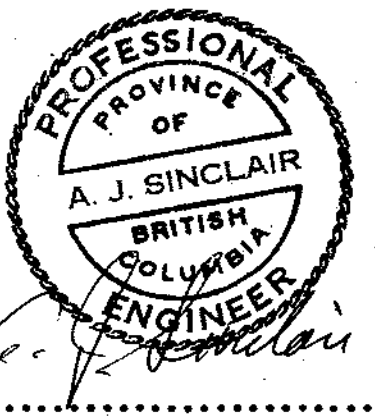

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Dr. A. J. Sinclair, P. Eng.
November 1, 1974

CERTIFICATE

I, Alastair J. Sinclair, of the city of Vancouver, province of British Columbia, hereby testify:

1. That I am a Geological Engineer residing at 5869 Dunbar St., Vancouver 13, B. C.

2. That I obtained a B. A. Sc. degree in Applide Geology from the University of Toronto in 1957, an M. A. Sc. degree in Geological Engineering from the University of Toronto in 1958, and a Ph. D. in Economic Geology from the University of British Columbia in 1964.

3. That I am a registered Professional Engineer in the Province of Ontario in the Mining Division, and in the Province of British Columbia in the Geology Branch.

4. That I have practiced my profession for thirteen years.

5. That I have no interest directly or indirectly, nor do I expect to have any direct or indirect interest in the properties or securities of Prism Resources Ltd.

6. That the accompanying report is based on field work by me or under my supervision.

Dated at Vancouver in the Province of British Columbia this 1st day of November, 1974.

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA A.J. SINCLAIR

Dr. A. J. Sinclair, P.Eng.

GEOCHEMICAL ANALYSIS BY MIN-EN LABORATORIES LTD.

Samples are processed by Min-En Laboratories Ltd. at 705 W 15th St., North Vancouver Laboratory employing the following procedures.

After drying the samples at 95°C soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed by jaw crusher and pulverized by ceramic plated pulverizer.

1.0 gram of the samples are digested for 6 hours with HNO_3 and $HClO_4$ mixture.

After cooling samples are diluted to standard volume. The solutions are analysed by Atomic Absorption Spectrophotometers

Copper, lead, zinc, silver, cadmium, cobalt, nickel and manganese are analysed using the CH_2H_2-Air flame combination but the molybdenum determination is carried out by C_2H_2-N_2O gas mixture directly or indirectly (depending on the sensitivity and detection limit required) on these sample solutions.

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
A. J. SINCLAIR

GOLD GEOCHEMICAL ANALYSIS BY MIN-EN LABORATORIES LTD.

Geochemical samples for Gold processed by Min-En Laboratories Ltd. at 705 W 15th St., North Vancouver Laboratory employing the following procedures.

After drying the samples at 95°C soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed and pulverized by ceramic plated pulverizer.

A suitable sample weight 5.0 or 10.0 grams are pre-treated with HNO_3 and $HClO_4$ mixture

After pretreatments the samples are digested with Aqua Regia solution, and after digestion the samples are taken up with 25% HCl to suitable volume

At this stage of the procedure copper, silver, and zinc can be analysed from suitable aliquote by Atomic Absorption Spectrophotometric procedure

Further oxidation and treatment of least 75% of the original sample solutions are made suitable for extraction of gold with Methyl Iso-Butyl Ketone

With a set of suitable standard solution gold is analysed by Atomic Absorption instruments. The obtained detection limit is 0.01 ppm (10 ppb).

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A. J. SINCLAIR

APPENDIX A

ANALYTICAL RESULTS

COMPANY Prism Resources

PROJECT No.: Dr. Sinclair

GEOCHEMICAL ANALYSIS DATA SHEET

MIN - EN Laboratories Ltd.

No. 887

DATE: Aug 7 1974.

Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppm
A-74-1			39	545			23					
2			24	590			16					
3			14	230			08					
4			29	210			17					
5			40	620			17					
6			42	475			27					
7			44	600			17					
8			34	760			29					
9			40	620			19					
10			38	750			33					
11			39	640			21					
12			23	675			27					
13			33	9000			19					
14			86	1200			24					
15			22	330			11					
16			122	2300			32					
17			33	620			18					
18			22	580			15					
19			31	590			17					
20			33	1650			37					
21			26	710			20					
22			26	1550			35					
23			20	635			21					
24			41	680			19					
25			45	735			17					
26			22	680			26					
27			60	380			12					
28			37	450			26					
29			39	445			16					
A-74-30			32	420			12					

CERTIFIED BY Gilbert V. Hamonville

COMPANY: Prism Resources

PROJECT No.: Dr. Sinclair

GEOCHEMICAL ANALYSIS DATA SHEET

MIN - EN Laboratories Ltd.

FILE No.: 887

DATE: Aug 7 1974.

Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppm
A-74-31			32	330			10					
32			31	655			19					
33			41	325			15					
34			25	280			40					
35			18	210			07					
36			34	1050			15					
37			26	285			07					
38			29	600			14					
39			16	220			06					
40			21	375			15					
41			21	280			07					
42			20	335			09					
43			22	275			06					
44			29	200			36					
45			16	215			07					
46			27	420			25					
47			42	295			11					
48			19	355			13					
49			20	235			07					
50			22	780			35					
51			17	265			06					
52			22	285			14					
53			24	345			09					
54			33	335			12					
55			21	420			09					
56			34	435			33					
57			10	210			06					
58			26	320			12					
59			12	210			12					
A-74-60			29	320			15					

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COMPANY: Prism Resources

PROJECT No.: Dr. Sinclair

GEOCHEMICAL ANALYSIS DATA SHEET

MIN - EN Laboratories Ltd.

FILE No. 887

DATE: Aug 7 1974.

Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppm
A-74-61			13	165			07					
62			57	490			15					
63			16	385			07					
64			62	1040			16					
65			21	220			12					
66A			31	470			26					
66B			24	370			43					
67			31	455			29					
68			22	220			23					
69			26	300			15					
70			22	235			35					
71			29	390			16					
72			28	295			26					
73			46	290			13					
74			40	215			26					
75			47	590			22					
76			38	485			26					
77			39	260			16					
78			42	335			13					
79			24	220			10					
80			48	435			29					
81			29	245			13					
82			107	430			38					
83			39	260			17					
84			23	385			13					
85			29	200			15					
86			63	325			21					
87			44	485			25					
88			33	525			24					
A-74-89			37	280			21					

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COMPANY: Eclsm Resources

PROJECT No.: Dr. Sinclair

GEOCHEMICAL ANALYSIS DATA SHEET

MIN - EN Laboratories Ltd.

File No.: 887

DATE: Aug 7. 1974.

Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppm
A74-90			35	590			60					
91			60	420			14					
92			30	505			27					
93			40	310			13					
A74-94			29	225			16					

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PROJECT No.: Sinclair

GEOCHEMICAL ANALYSIS DATA SHEET

MIN - EN Laboratories Ltd.

No. 906

DATE: Aug 16 1974.

Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppm
C74R1			75	570			2.9					.01
R2			107	410			2.8					.01
3			53	285			2.0					<.01
4			89	220			2.3					<.01
5			56	285			1.5					<.01
6			86	250			2.1					<.01
7			188	780			2.7					<.01
8			7	32			1.0					<.01
9			57	445			2.7					<.01
10			67	285			2.3					<.01
11			50	190			1.3					<.01
12			19	83			0.5					<.01
13			59	470			2.1					<.01
14			57	205			2.3					<.01
15			1350	4650			18.2					.01
15 SHT			710	1780			5.4					.01
16			29	145			1.7					<.01
17			33	90			1.2					.01
18			44	365			3.2					.01
19			76	275			2.0					<.01
20			47	390			2.9					<.01
21			49	200			1.8					<.01
22			33	215			1.5					<.01
23			255	505			2.9					<.01
10 pt 24A			32	285			2.2					<.01
0 pt 24B			40	105			1.0					<.01
25			35	85			2.1					<.01
26			23	210			1.7					<.01
27			38	380			1.3					.01
28			50	395			2.3					<.01

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COMPANY: Prism Resources

PROJECT No.: Sinclair

GEOCHEMICAL ANALYSIS DATA SHEET

MIN - EN Laboratories Ltd.

P. No. 906

DATE: Aug 16 1974.

Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppm
C74R29			39	240			2.1					<.01
30			41	340			2.4					.01
31			53	355			2.6					.02
32			68	645			3.6					.24
33			64	510			2.5					.02
34			1550	1500			17.0					.01
35			101	710			2.9					<.01
36			210	630			2.4					.01
37			154	590			3.2		✓			.02
38			35	270			1.7					.01
39			55	315			2.1					.01
40			44	610			2.3					<.01
41			56	305			1.9					.01
42			52	315			2.5					.01
43			42	265			1.5					.02

CERTIFIED BY: A Hawke

COMPANY: Crism Resources

PROJECT No.: Sinclair

GEOCHEMICAL ANALYSIS DATA SHEET

MIN - EN Laboratories Ltd.

FILE No. 906

DATE: Aug 16 1974.

Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppm
C74-T1			72	205			2.5					.01
2			77	410			2.8					.01
3			156	900			3.9					.01
4			57	180			1.5					<.01
5			47	515			2.7					.01
6			89	680			3.7					<.01
7			43	310			2.7					.01
8			28	180			1.7					<.01
9			19	107			0.7					.01
10			84	170			1.8					<.01
11			70	200			1.8					.01
12			63	138			1.7					<.01
13			190	166			1.7					<.01
14			55	235			2.1					.01
15			47	167			1.5					<.01
16			75	160			3.9					<.01
17			37	152			1.9					<.01
18			59	158			2.5					<.01
19			50	260			3.9					<.01
20			67	780			3.2					<.01
21			645	2550			5.3					.03
22			57	157			5.8					.01
23			53	148			1.5					.01
24			42	285			2.4					<.01
25			54	275			2.6					.01
26			72	310			1.7					.01
27			53	265			1.7					<.01
28			32	270			1.6					<.01
29			31	230			1.9					<.01
30			44	390			1.7					.01

CERTIFIED BY A. Hanke

COMPANY: Prism Resources

PROJECT No.: Sinclair

GEOCHEMICAL ANALYSIS DATA SHEET

MIN - EN Laboratories Ltd.

FILE No. 906

DATE: Aug 16 1974.

Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppm
C74T31			49	411			2.6					<.01
32			31	150			1.8					<.01
33			50	300			2.7					<.01
34			147	290			3.0					<.01
35			54	430			2.4					<.01

COMPANY: Prism Resources

PROJECT No.: Sinclair

GEOCHEMICAL ANALYSIS DATA SHEET

MIN - EN Laboratories Ltd.

FILE No. 906

DATE: Aug 16 1974.

Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppm
C74TC1			45	500			2.0					.01
2			32	154			1.5					<.01
3			50	220			1.8					.01
4			37	235			1.7					<.01
5			26	138			2.6					<.01
6			16	56			0.9					.01
7			43	134			1.3					.01
8			97	415			1.7					.01

COMPANY: Prism Resources

PROJECT No.: Sinclair

GEOCHEMICAL ANALYSIS DATA SHEET

MIN - EN Laboratories Ltd.

Traverse to E from Daniel

FILE No. 906

DATE: Aug 16 1974.

Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppm
D74-T1			66	560			21					<.01
T2			51	390			24					.01
T2S	SILT seepage beside T-2		33	445			32					.01
T3			68	805			27					<.01
T4			125	2000			220					.01
T4S	SILT, seepage		109	800			280					.01
T5			54	495			24					.01
T6			36	330			22					<.01
T7			50	310			27					.01
T8			27	190			19					.01
T9			49	310			38					<.01
T10			51	270			49					.01
T11			51	305			29					.03
T12			51	225			40					.01
T13			114	310			43					<.01
T14			129	355			38					<.01
T15			51	290			33					<.01
T16			27	125			19					.01

CERTIFIED BY A. Hanke

COMPANY: Prism Resources

PROJECT No.: Sinclair

GEOCHEMICAL ANALYSIS DATA SHEET

MIN - EN Laboratories Ltd.

Road near Daniel.

FILE No. 906

DATE: Aug 16 1974.

Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppm			
D74-R1			29	340			2.3					<.01			
R2			61	525			1.4					<.01			
R3			25	106			1.5					<.01			
R4			565	1150			6.9					.01			
D74-R5	*SILT (Possibly [illegible] water)*		2550	6250			18.3					.04			

COMPANY: Prism Resources

PROJECT No.: Sinclair

GEOCHEMICAL ANALYSIS DATA SHEET

MIN - EN Laboratories Ltd.

Traverse along Toby [illegible] Rd

FILE No. 906

DATE: Aug 16 1974.

Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppm			
D74R10			40	315			2.4					.01			
11			109	275			2.3					<.01			
12			47	265			2.2					<.01			
13			40	275			1.9					<.01			
14			1400	3450			20.0					<.01			
15			61	295			3.4					<.01			
16			116	540			6.6					.01			
17			89	300			2.3					.01			
18			57	205			1.7					<.01			
19			142	380			2.7					.02			
20			114	420			3.0					<.01			

COMPANY: Prism Resources

PROJECT No.: Sinclair

GEOCHEMICAL ANALYSIS DATA SHEET

MIN - EN Laboratories Ltd.

Traverse ? to id.

FILE No. 906

DATE: Aug 16 1974.

Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppm
D74TC1			39	285			20					<.01
TC2			38	305			2.3					<.01
TC3			39	315			3.1					<.01
TC4			41	325			2.1					<.01
TC5			35	275			2.7					<.01

COMPANY: Prism Resoucrces

PROJECT No.: Sinclair

GEOCHEMICAL ANALYSIS DATA SHEET

MIN - EN Laboratories Ltd.

Traverse E along K+S rd.

FILE No. 906

DATE: Aug 16 1974.

Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppm
D74KS1			49	280			20					<.01
S2			64	300			20					<.01
S3			61	270			2.1					<.01
S4			31	170			3.7					.02
S5			58	350			25					.01
S6			45	345			24					.01
S7			43	290			24					.01

APPENDIX B

HISTOGRAMS AND PROBABILITY GRAPH DATA

FREQUENCY DATA FOR Hiltonia Soils B-1 to 6

Log_{10} interval = 0·1 N= 47

Lower Class Limit		Tally — Histogram	N	Class %	Cum. %
Log_{10}	Arith.	5 10 15 20 25 30 35 40 45 50			
3·33	2138				
3·23	1698				
3·13	1349				
3·03	1076				
2·93	851				
2·83	676				
2·73	537				
2·63	427				
2·53	339				
2·43	269				
2·33	214				
2·23	170				
2·13	135		2	4.3	4.3
2·03	107		1	2.1	6.4
1·93	85·1				
1·83	67·6		3	6.4	12.8
1·73	53·1		1	2.1	14.9
1·63	42·7		11	23.4	38.3
1·53	33·9		14	29.8	68.1
1·43	26·9		12	25.5	93.6
1·33	21·4		3	6.4	100.0
1·23	17·0				
1·13	13·5				
1·03	10·7				
0·93	8·51				
0·83	6·76	5 10 15 20 25 30 35 40 45 50			
		TOTALS	47		

FREQUENCY DATA FOR Altoona Bank - Pb

Log_{10} interval = 0.1 N= 45

Lower Class Limit		Tally — Histogram	N	Class %	Cum. %
Log_{10}	Arith.	5 10 15 20 25 30 35 40 45 50			
3.33	2138				
3.23	1698				
3.13	1349				
3.03	1076				
2.93	851				
2.83	676				
2.73	537				
2.63	427				
2.53	339				
2.43	269				
2.33	214				
2.23	170				
2.13	135				
2.03	107				
1.93	85.1				
1.83	67.6		2	4.4	4.4
1.73	53.1		5	11.1	15.5
1.63	42.7		11	24.4	39.9
1.53	33.9		7	15.6	55.5
1.43	26.9		7	15.6	71.1
1.33	21.4		6	13.3	84.4
1.23	17.0		4	8.9	93.3
1.13	13.5		2	4.4	97.7
1.03	10.7		1	2.2	99.9
0.93	8.51				
0.83	6.76	5 10 15 20 25 30 35 40 45 50			
		TOTALS	45	99.9	-

FREQUENCY DATA FOR Ag in D horizon soils

Log_{10} interval = 0.1 N = 46

Lower Class Limit		Tally — Histogram	N	Class %	Cum. %
Log_{10}	Arith.	5 10 15 20 25 30 35 40 45 50			
3.33	2138				
3.23	1698				
3.13	1349				
3.03	1076				
2.93	851				
2.83	676				
2.73	537				
2.63	427				
2.53	339				
2.43	269				
2.33	214				
2.23	170				
2.13	135				
2.03	107				
1.93	85.1				
1.83	67.6		1	2.18	2.2
1.73	53.1		1	2.18	4.4
1.63	42/7		7	15.20	19.56
1.53	33/9		9	19.6	39.2
1.43	26/9		9	19.5	58.7
1.33	21/4		2	4.35	63.01
1.23	17/0		11	23.9	86.9
1.13	13/5		5	10.9	97.8
1.03	10/7		1	2.18	100.
0.93	.8/51				
0.83	.6/76	5 10 15 20 25 30 35 40 45 50			
		TOTALS	46	100.	

FREQUENCY DATA FOR Altoona Soil B- Zn

Log_{10} interval = 0.1 N= 47

Lower Class Limit Log_{10}	Lower Class Limit Arith.	Tally — Histogram	N	Class %	Cum. %
3.33	2138				
3.23	1698		2	4.3	6.4
3.13	1349		1	2.1	8.5
3.03	1076		2	4.3	12.8
2.93	851		5	10.6	23.4
2.83	676		6	12.8	36.2
2.73	537		10	21.3	57.5
2.63	427		5	10.6	68.1
2.53	339		9	19.2	87.3
2.43	269		4	8.5	95.8
2.33	214		2	4.3	100.1
2.23	170				
2.13	135				
2.03	107				
1.93	85.1				
1.83	67.6				
1.73	53.1				
1.63	42.7				
1.53	33.9				
1.43	26.9				
1.33	21.4				
1.23	17.0				
1.13	13.5				
1.03	10.7				
0.93	8.51				
0.83	6.76				

2300

1 2.1 2.1

5 10 15 20 25 30 35 40 45 50

TOTALS 47 100.1

FREQUENCY DATA FOR ALTOONA BANK - ZN

Log_{10} interval = 0·1 N= 46

Lower Class Limit		Tally — Histogram	N	Class %	Cum. %
Log_{10}	Arith.	5 10 15 20 25 30 35 40 45 50			
3·33	2138				
3·23	1698				
3·13	1349				
3·03	1076				
2·93	851				
2·83	676		2	4.4	4.4
2·73	537		9	19.6	24.0
2·63	427		3	6.5	30.5
2·53	339		6	13.0	43.5
2·43	269		11	23.9	67.4
2·33	214		10	21.7	89.1
2·23	170		4	8.7	97.8
2·13	135		1	2.2	100.0
2·03	107				
1·93	85·1				
1·83	67·6				
1·73	53·1				
1·63	42·7				
1·53	33·9				
1·43	26·9				
1·33	21·4				
1·23	17·0				
1·13	13·5				
1·03	10·7				
0·93	8·51				
0·83	6·76	5 10 15 20 25 30 35 40 45 50			
		TOTALS	46	100.0	-

FREQUENCY DATA FOR Coon Dolls (B) – Pb.

Log_{10} interval = 0·1 N= 86

Lower Class Limit		Tally – Histogram	N	Class %	Cum. %
Log_{10}	Arith.	5 10 15 20 25 30 35 40 45 50			
3·33	2138				
3·23	1698		1	1.2	1.2
3·13	1349				
3·03	1076				
2·93	851				
2·83	676		1	1.2	2.4
2·73	537				
2·63	427				
2·53	339				
2·43	269		1	1.2	3.6
2·33	214		3	3.5	7.1
2·23	170		3	3.5	10.6
2·13	135		1	1.2	11.8
2·03	107		5	5.8	17.6
1·93	85·1		9	10.4	28.0
1·83	67·6		16	18.6	46.6
1·73	53·1		21	24.4	71.0
1·63	42·7		10	12.0	83.0
1·53	33·9		9	10.4	93.4
1·43	26·9		2	2.3	95.7
1·33	21·4		2	2.3	98.0
1·23	17·0		1	1.2	99.2
1·13	13·5				
1·03	10·7				
0·93	8·51		1	1.2	100.4
0·83	6·76	5 10 15 20 25 30 35 40 45 50			
		TOTALS	86	100.4	

FREQUENCY DATA FOR Loddy Soils (B) -Cn

Log_{10} interval = 0·1 N= 86

Lower Class Limit		255D Tally — Histogram	N(	1.2 Class %	1.2 Cum. %
Log_{10}	Arith.				
3·33	2138				
3·23	1698		1	1.2	2.4
3·13	1349				
3·03	1076		1	1.2	3.6
2·93	851		4	4.6	8.2
2·83	676		5	5.8	14.0
2·73	537		7	8.1	22.1
2·63	427		11	12.8	34.9
2·53	339		16	18.6	53.5
2·43	269		11	12.8	66.3
2·33	214		9	10.4	76.7
2·23	170		12	14.0	90.7
2·13	135		2	2.3	93.0
2·03	107		2	2.3	95.3
1·93	85·1		2	2.3	97.6
1·83	67·6		1	1.2	98.8
1·73	53·1				
1·63	42·7				
1·53	33·9		1	1.2	100.0
1·43	26·9				
1·33	21·4				
1·23	17·0				
1·13	13·5				
1·03	10·7				
0·93	8·51				
0·83	6·76				
		5 10 15 20 25 30 35 40 45 50			
		TOTALS	86	100.0	

FREQUENCY DATA FOR [illegible]

Log_{10} interval = 0·1 N = 88

Lower Class Limit		Tally — Histogram	N	Class %	Cum. %
Log_{10}	Arith.	5 10 15 20 25 30 35 40 45 50			
3·33	2138				
3·23	1698				
3·13	1349				
3·03	1076				
2·93	851				
2·83	676				
2·73	537				
2·63	427				
2·53	339				
2·43	269				
2·33	214				
2·23	170		1	1.14	1.14
2·13	135		1	1.14	2.28
2·03	107				
1·93	85·1				
1·83	67·6		2	2.28	4.56
1·73	53·1		1	1.14	5.70
1·63	42·7		5	5.68	11.38
1·53	33·9		15	17.05	28.43
1·43	26·9		18	20.45	48.88
1·33	21·4		22	25.00	73.88
1·23	17·0		14	15.92	89.80
1·13	13·5		4	4.55	94.35
1·03	10·7		3	3.40	97.75
0·93	8·51		1	1.14	98.89
0·83	6·76	5 10 15 20 25 30 35 40 45 50	1	1.14	
		TOTALS	99	[illegible]	

FREQUENCY DATA FOR DANIEL SOILS (B) - P6

Log_{10} interval = 0·1 N= 43

Lower Class Limit		Tally — Histogram	N	Class %	Cum. %
Log_{10}	Arith.				
3·33	2138				
3·23	1698		1	2.3	2.3
3·13	1349				
3·03	1076				
2·93	851				
2·83	676		1	2.3	4.6
2·73	537				
2·63	427				
2·53	339				
2·43	269				
2·33	214				
2·23	170		1	2.3	6.9
2·13	135		6	14.0	20.9
2·03	107		1	2.3	23.2
1·93	85·1		1	2.3	25.5
1·83	67·6		8	18.6	44.1
1·73	53·1		11	25.6	69.7
1·63	42·7		8	18.6	88.3
1·53	33·9		4	9.3	97.6
1·43	26·9		1	2.3	99.9
1·33	21·4				
1·23	17·0				
1·13	13·5				
1·03	10·7				
0·93	8·51				
0·83	6·76				

5 10 15 20 25 30 35 40 45 50

TOTALS 43 99.9

FREQUENCY DATA FOR Daniel Soils (B) – Ln

Log_{10} interval = 0·1 N= 43

Lower Class Limit		Tally – Histogram	1/N	2.3 Class %	2.3 Cum. %
Log_{10}	Arith.				
3·33	2138				
3·23	1698		1	2.3	4.6
3·13	1349				
3·03	1076		1	2.3	6.9
2·93	851				
2·83	676		1	2.3	9.2
2·73	537		2	4.7	13.9
2·63	427		2	4.7	18.6
2·53	339		7	16.3	34.9
2·43	269		21	48.8	83.7
2·33	214		2	4.7	88.4
2·23	170		3	7.0	95.4
2·13	135				
2·03	107		1	2.3	97.7
1·93	85·1		1	2.3	100.0
1·83	67·6				
1·73	53·1				
1·63	42·7				
1·53	33·9				
1·43	26·9				
1·33	21·4				
1·23	17·0				
1·13	13·5				
1·03	10·7				
0·93	8·51				
0·83	6·76				
		5 10 15 20 25 30 35 40 45 50	TOTALS	43	

INCURRED EXPENSES TO BE APPLIED FOR ASSESSMENT WORK

Field Expenses

1. Days worked	
A. J. Sinclair--salary for 7 days at $125.00 (July 9,10,11,18,19,20,210	$875.00
J. F. Orr--salary for 11 days at $50.00	550.00
2. Transportation (vehicle rental)	
A. J. Sinclair	245.17
J. F. Orr	60.00
3. Food and Board at $15.00 per man day 18 man days	270.00
4. Shipment costs of samples to Min En Lab	10.00
Analytical Expenses	
Billing received from Min-En Lab for analyzing 229 samples	973.65
Report Preparation	
J. F. Orr, 2 days at $50.00	100.00
A. J. Sinclair, 3 days at $125.00	375.00
Reproduction expenses	12.00
TOTAL EXPENSES	$3470.82

To be applied to assessment work as indicated on British Columbia Mining Receipt No. 95539E

Declared before me at the City of Vancouver in the Province of British Columbia this 4 day of November 1974

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA A. J. SINCLAIR 1974

Dr. A. J. Sinclair, P.Eng.
November 1, 1974

Joan Jones

A Notary Public in and for the Province of British Columbia

Sub-mining Recorder