ASSESSMENT REPORT

SOIL GEOCHEMISTRY OF AN AREA FORMING PART OF THE EASTERN SECTOR OF COVE 2 MINERAL CLAIM.

ALBERNI MINING DIVISION, B.C.
N.T.S. : 92F-5W
LAT. 49° 17' 15"
LONG. 125° 56' 15"

REGISTERED OWNER: R.H.JANES

OPERATOR: W.G.BOTEL, R.H.JANES, J.E.MULLER & H.VEERMAN

PREPARED BY: R.H.JANES, P.ENG.

R.H. Janes

PROFESSIONAL ENGINEER
PROVINCE OF
BRITISH COLUMBIA

15 NOVEMBER, 1989

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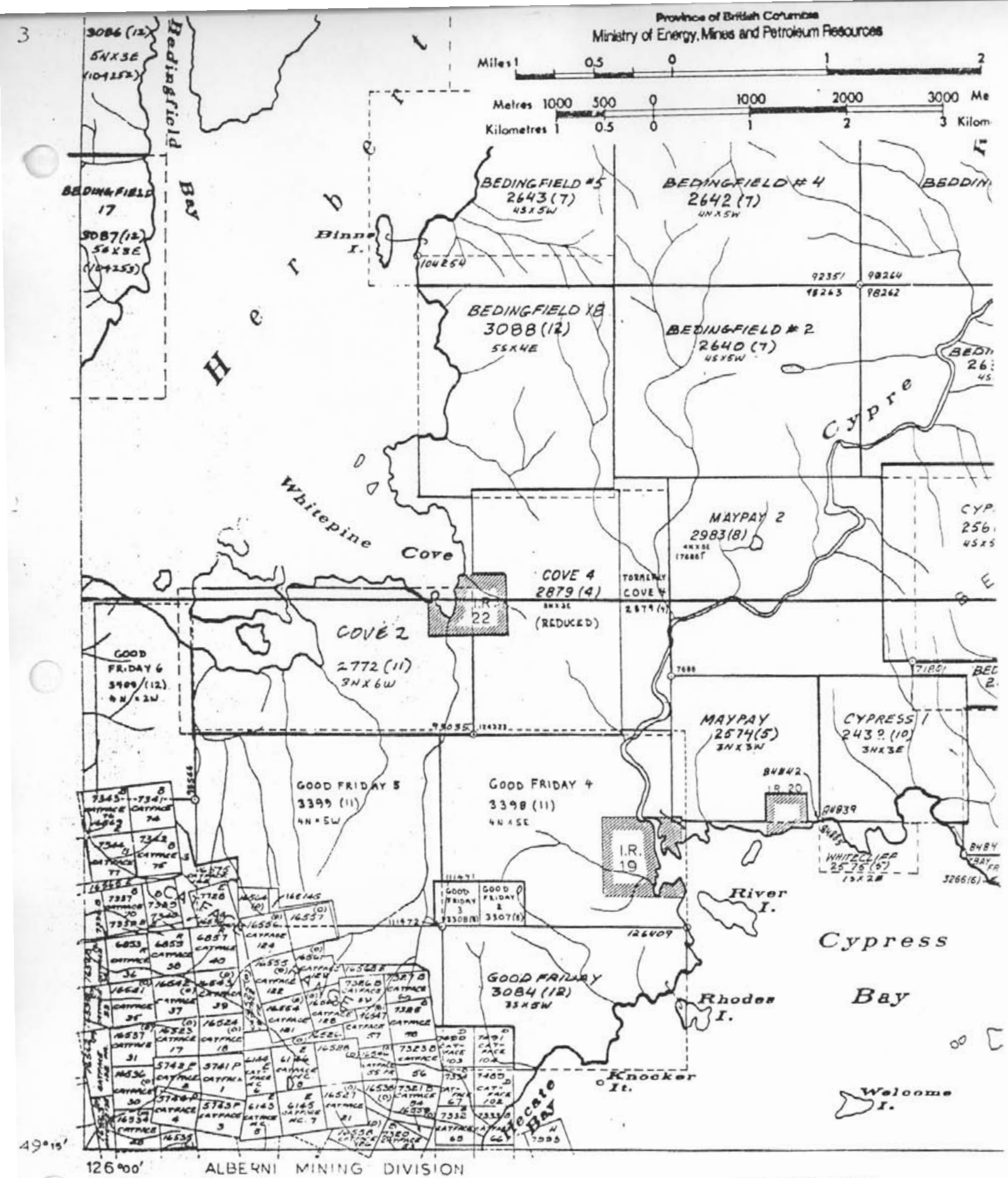


For up-to-date information on claims in any area you should apply to the Mining Recorder for the Mining Division concerned

COVE CLAIMS

Alberni M.D., B.C.

LOCATION

N.T.S.:92F-5W Nov.1989 R.H.Janes

Figure 1

INTRODUCTION

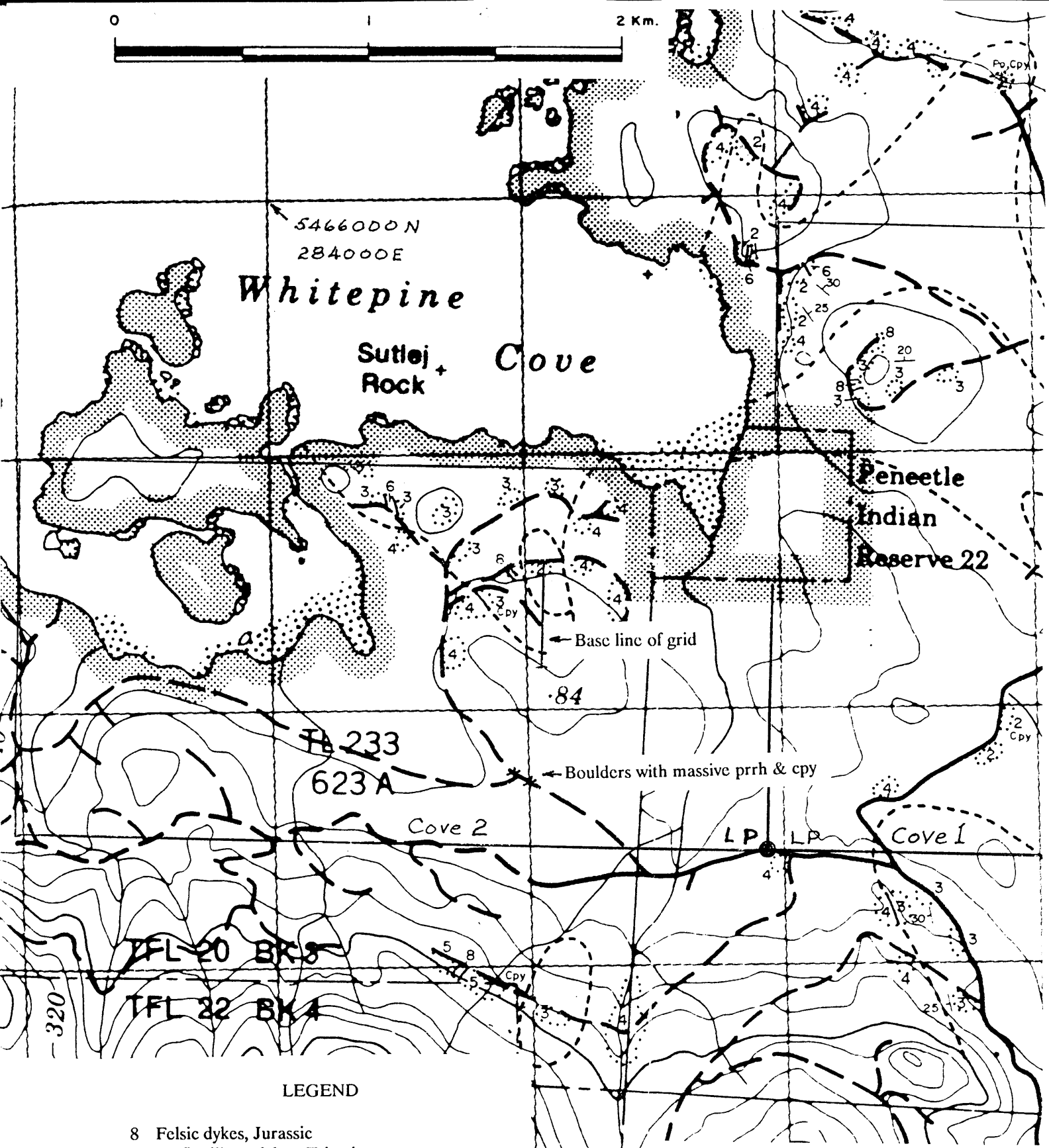
The claims COVE 2 and COVE 4 are situated on tidal water on the west coast of Vancouver Island. These cover low hills between Catface Mountain to the south and Bedingfield Range to the northeast, on the peninsula between Herbert Inlet and Bedwell Sound. Access is by water from Tofino, 16 km to the south of the claims and connected via the Alberni - Tofino highway with the main population centres of Vancouver Island.

Directly south of the claims, on Catface Mountain, is the Catface Cpper-Molybdenum property, at present owned by Falconbridge Ltd.. To the north are the Cypre and Bedingfield claims, staked on the basis of extensive outcrops of rhyolite and rhyolite breccia in the Myra Formation of the Sicker Group. These claims were optioned to Cominco Ltd. from September 1985 to January 1988 and are now under option to Falconbridge Ltd.

The claims roughly coincide with PW and RW claims of Fort Reliance Minerals ltd., staked in 1968 and 1969 and subsequently abandoned. Of the present claims COVE 2 was staked November 6, 1985 and recorded November 28, 1985. Claims COVE 1 and COVE 3, staked and recorded together with COVE 2, have lapsed. COVE 4 was staked March 15, 1986 and recorded April 7, 1986. W.G.Botel, R.H.Janes, J.E.Muller and H.Veerman have equal interests in the claims.

During 1985 Cominco carried out reconnaissance geoogical mapping along logging roads in the area of the soil survey. This work comprised part of the exploration program on the Bedingfield property.

Previous work done by the partners consisted of geological reconnaissance mapping, augmented with spot sampling of mineralized rock. For the present report Janes carried out a geochemical soil survey, combined with geological observations, during the period October 18th to 25th, 1989. The weather was continuously wet.



LEGEND

8 Felsic dykes, Jurassic
6 Mafic sills & dykes, Triassic
5 Karmutsen: pillow lavas, flows, basalt, Triassic
4 Karmutsen: gabbro, basalt
3 Buttle Lake: limestone, minor chert & argillite, Permian
2 Sediment sill: argillite, green-maroon chert, mafic sills, Sicker Gp., Ord-Dev.

Geology by Cominco 1985
Main logging road
Subsidiary road

COVE CLAIMS
Alberni M.D., B.C.
LOCATION OF
SOIL SAMPLE GRID
& AREA GEOLOGY
N.T.S.:92F-5W Nov.1989 R.H.Janes.

Figure 2

GEOLOGY OF SOIL SAMPLE GRID

Geological observations were confined to the more prominent outcrops occurring along the grid lines. Steeply dipping interbedded cherts and metasediments, some possibly tuffaceous, of the Sicker Group, striking north to northwesterly, and limestone of the Buttle Lake Formation underlie the grid-area.

From east to west these are represented by chert, some outcrops of which exhibit white to light grey bands varying around one centimetre thick. Janes at first identified some of these rock as rhyolite but J.E.Muller believes they are chert, probably representing silicified limestone. The cherts and sediments are assigned to the Sediment-Sill Unit (Juras'(1987) Thelwood Formation). A band of white, massive crystalline limestone adjoins the chert. The limestone shows distinctive fluting in outcrop due to solution during weathering. It is locally interbedded with felsic metasediments. The contact between the Sediment-Sill Unit and the Buttle Lake limestone was not observed. The latter is exposed extensively in the area and also in the Bedingfield Range. There Freeze (1985) considered the Buttle Lake limestone to lie unconformably on the Sediment-Sill unit.

Fine-grained green metasediments, possibly tuffaceous, with iron-stained, light-coloured siliceous or felsic tops, together with less argillaceous siltstone and chert, crop out to the west. The metasediments exhibit cyclic layers up to one metre thick with the light coloured tops up to 15 centimetres thick. Pyrite concentrations along fractures and as weak disseminations were locally observed within the cyclic metasediments. This sequence is in places intruded by a dark green, fine grained mafic rock with a distinctively pitted weathered surface. They are presumably the sills of the Sediment-Sill unit, considered to be comagmatic with Karmutsen volcanics. This rock forms a prominent rock ridge on the east side of the grid.

A rusty boulder, 0.5 metre in diameter, set in a road bed, is present about 480 metres south of the south end of the grid baseline. It is composed partly of massive pyrrhotite and chalcopyrite and is similar to a rounded boulder found during the previous survey at the road junction 50 metres farther west. The in-situ source of these boulders is unknown.

52+50 W 52+00 W 51+50 W 51+00 W 50+50 W 50+00 W 49+50 W 49+00 W 48+50 48+00 W 47+50 W

10+00 S
10+50 S
11+00 S
11+50 S
12+00 S
12+50 S
13+00 S
13+50 S
14+00 S
14+50 S

0 50 100 150
metres

int. or and., Fe st'd.
Interbedded lst & intermediate - acid tuff or felsic meta-sed. Contorted, py in frac's
30
ch
Fe st'd
meta-sed & lst
lst
lst
limestone
int int
argill. meta-sed.
fg green meta-sed, rusty rind.
int
?
ch
Int. w inclusion of interbedded ch, lst & meta-sed? (calc) w. rusty rind.
50
80
attitude of contact
mod
int
ch & lst
ch, banded
rock ridge
int
argill's/calc silt-stone, banded, < 5cms
int
ch
int
Blder, ch, py in frac's
Qvn, 10cms in int.
hair line frac's in vn
int
int & and.
int
ch
ch
lst
ch
ch
Falls
int? fractured veined
Cyclic fg green meta-sed. w. light col'd felsic lap, 6-10cms, Fe st'd.
50
72
lst
ch, banded, ~1cm.
76
and, frac'd.
Irregular siliceous masses, 0.5m dia to 1m long, py in frac's.
Cyclic green meta-sed, ~1m thick, w. light col'd felsic laps (>15cms), Fe st'd.
int
Discontinuous o/c's of lst.
Meta-sed w. carbonate, (rusty rind) & volc. fragmental, frags. flat, ~0.5cm. long, some weathered out.
int

Legend

- Flagged line
- Subsidiary logging rd.
- Outcrop
- Creek
- + Outcrop, small
- Qtz vn & attitude
- 30 Bedding attitude
- 20 Fracture cleavage attitude
- ch Chert
- meta-sed Meta-sediments
  Sediment Sill Unit
- lst Limestone, Buttle Lake Fm.
- int Basic intrusive, Sediment-Sill Unit and/or Karmutsen.
- fg Fine grained
- st'd Stained
- col'd Coloured
- frac's Fractures
- w With.
- volc Volcanic
- and. Andesite
- calc Calcareous
- frags Fragments
- argill Argillaceous

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA R. H. JANES

COVE CLAIMS
Alberni M.D., B.C.
GEOLOGY OF SOIL SAMPLE GRID
EASTERN SECTOR,
COVE #2 CLAIM

N.T.S.:92F-5W Nov.1989 R.H.Janes
Figure 3

SOIL PROFILES

A

Location: 11+08S, 51+68W; south bank of road cut.

0.0 m ↓ Soil disturbed. No A horizon

1081

0.3 ----- B hor., various shades of brown, some rusty patches associated with Fe stained rock fragments.

1082

0.6 ..... B hor., highly organic at top, becoming more sandy & gritty & less organic with increasing depth.

1083

1.0 m ----- Ligt grey, hard, composed of clay & rock fragments, vary from fine & angular to coarser with rounded edges - a till?

1084

Sample no.	Co	Cu	Fe	Mn	Ni	Pb	Zn
	values in ppm, Fe in %						
1081	3	59	8.9	200	12	5	48
1082	7	91	7.3	395	18	15	76
1083	13	147	4.7	430	35	5	100
1084	20	245	3.6	620	48	10	114

B

Location: 10+47S, 52+46W; west bank of creek.

0.0 m ↓

1091

0.1 ----- A horizon, very dark brown, organic.

1092

0.18 ..... brown.

1093

0.23 ..... B horizon, light grey brown, irreg. banding

1094

0.3 .....

1095 B horizon, grey brown with grey (organic) layers - not included in sample.

0.6 m

Soil profile probably reflects influence of creek e.g. disruption & contribution.

Sample no.	Co	Cu	Fe	Mn	Ni	Pb	Zn
	values in ppm, Fe in %						
1091	1	17	2.9	490	7	20	76
1092	4	40	5.8	280	10	5	184
1093	2	18	3.5	220	9	10	124
1094	6	44	6.9	325	22	10	136
1094	9	52	3.8	220	21	10	152

Figure 4

GEOCHEMICAL SOIL SURVEY

The object of the survey was to locate and reproduce a zinc anomaly documented by Westervelt Engineering Ltd. for Fort Reliance Minerals Ltd. (Westervelt and Saleken, 1970). The anomaly, with a general strike of about N 165 E, straddled the boundary of Fort Reliance claims PW 17 and PW 18. The authors show its location between 450 and 730 metres south of the shoreline of Whitepine Cove and approximately 365 to 425 metres west of the southwest corner of the Peneetle Indian Reserve 22.

The survey area is situated on a north-facing gently rising slope that culminates in an east-west trending ridge of about 80 metres elevation. The general area was logged after the work done by Fort Reliance and is now covered by a growth of young trees, averaging about two metres high, salal, scrub brush together with a tangle of fallen logs. This ground-cover hampers passage and locally by its density inhibits sample collection.

Access was via an extensive system of logging roads. Accommodation was provided by Hagensborg Seafarm, located to the south at Hecate Bay, approximately 7 kilometres from the work site. Transport to the site was by mountain bike, vehicle or foot.

a) Field Procedure

The sample control grid comprised a 450 metres long north-south baseline with east-west cross lines about 375 metres long, spaced at 50 metres intervals. Lines were established by compass and hip-chain with flagged sample stations at 25-metre intervals.

Sample sites were selected as opportunity arose and collected using a grub-hoe. The "B" horizon was the preferred medium, but "A" was taken in places. Soil characteristics, soil type sampled, depth, topography and vegetation were noted and are tabulated in Appendix I. Samples were placed in numbered standard-sized heavy duty kraft envelopes and partly dried in camp.

Stream sediments were sampled where present and accessible. However, in several places sample collection was impossible due to fallen trees or piles of cedar shake blocks.

b) Soil

Within the region areas of low elevation and gentle relief are covered by extensive fluvio-glacial deposits, generally less than two, but up to three metres thick. In the area sampled the thickness of the overburden is about one metre. The individual soil horizons are commonly not well defined in the areas of slash due to disturbance during logging.

Where observed within the forest the "A" horizon is typically a black organic mat, grading into a light grey leached layer. Its thickness is rarely more than one third of a metre. At a number o f sample sites in the slash area the soil has been disturbed by logging and the "A" horizon has been removed.

The "B" horizon is about one metre thick, coloured various shades of brown and is generally highly organic. It rests on light coloured fluvio-glacial sand to gravel and/or boulder clay or direcly on glaciated bedrock.

Soil profile A shows a marked increase with depth for the values of cobalt, copper, manganese, nickel and zinc. Iron shows the reverse trend and lead values are too low to be meaningful. Profile B is judged not typical as it has probably been effected by the adjacent stream.

Interpretation of Results

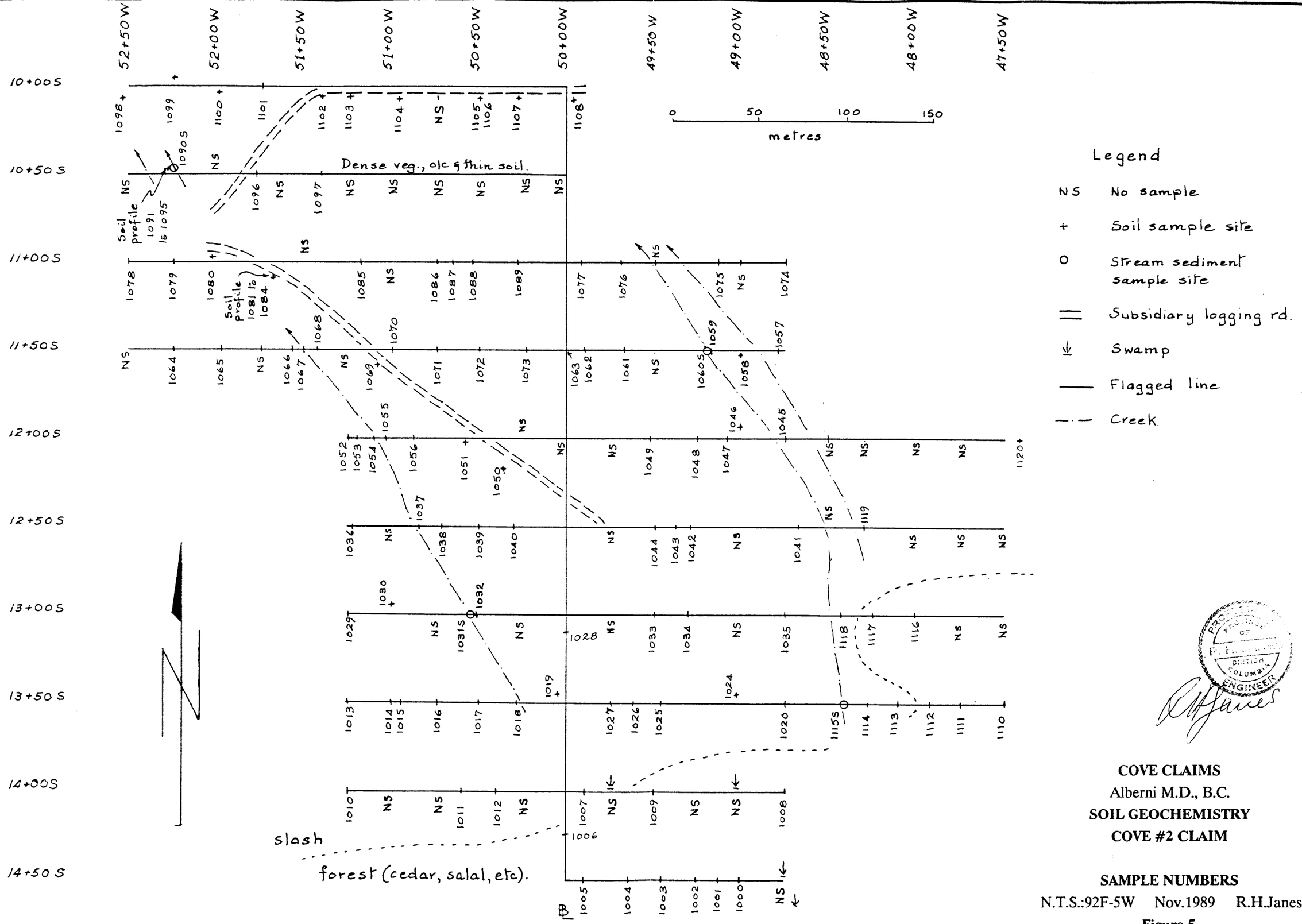
Samples were analysed for silver, cobalt, copper, iron, manganese, molybdenum, nickel, lead and zinc, applying aqua regia digestion and the inductively coupled plasma (ICP) method (see Appendix II). Values for silver and molybdenum are low and constant and consequently not plotted. Trace element values for copper, lead and zinc were statistically examined using histograms and probability plots in order to identify different populations and threshold values (Appendix III).

Probability plots with contoured values indicate the presence of two populations for lead and zinc and three populations for copper. In the latter case soils influenced by the basic intrusive rock may constitute a distinctive population.

The element of interest, zinc, exhibits a zone of anomalous but irregular values trending southeast to northwest which is down the drainage slope. Cobalt, copper, manganese, nickel and lead values show a few anomalous highs, more or less coincident with the zone of anomalous zinc values.

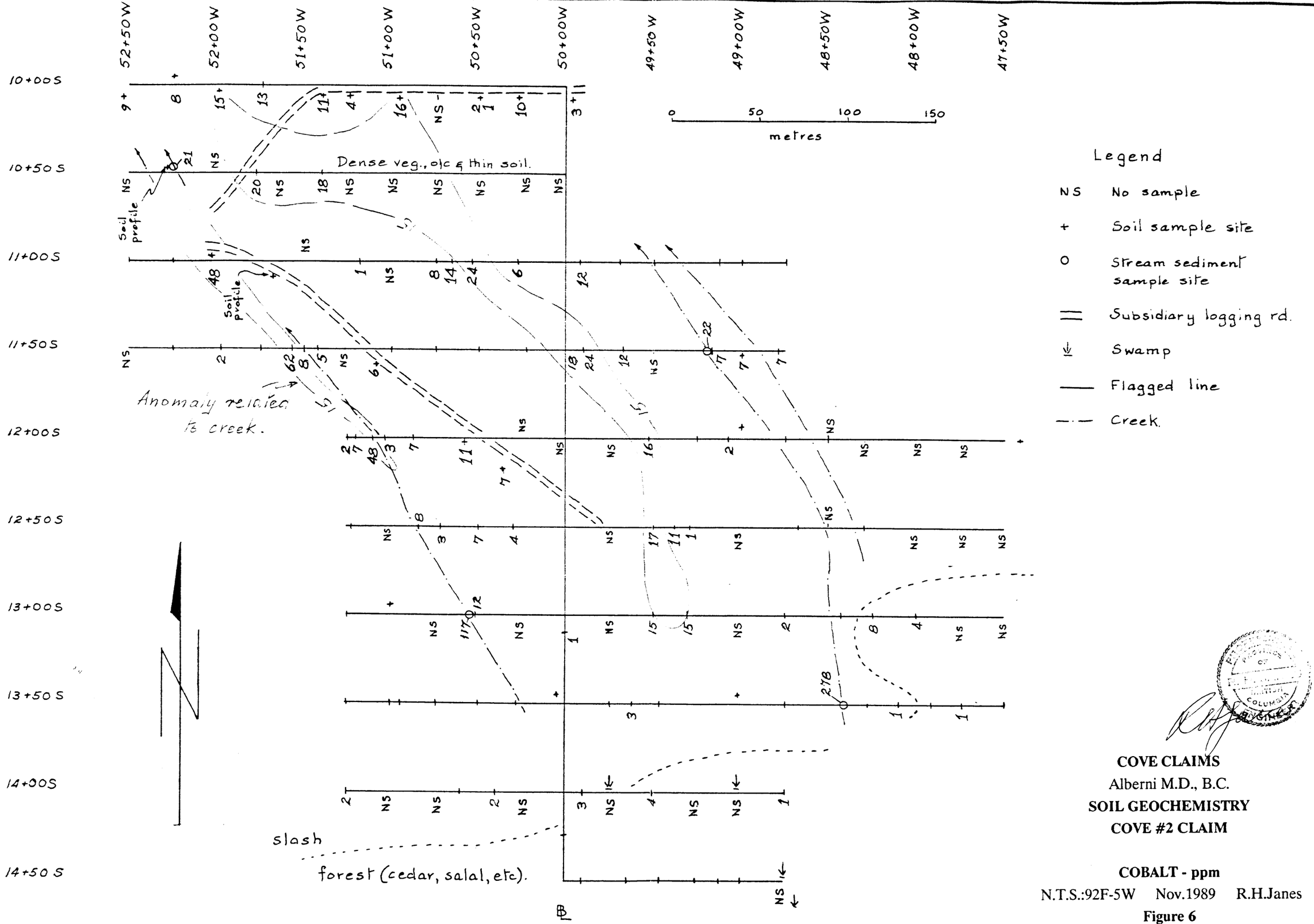
The highest zinc values occur (i) at the intersection of line 11+50S and the baseline and (ii) at line 10+100S, 51+00W. Near the former there is an outcrop of argillaceous (or sericitized) metasediment and carbonate-rich metasediment, exhibiting an iron-stained rind on the freshly broken surface. At the latter iron-stained basic rock is exposed.

In conclusion the zinc anomaly found by Fort Reliance Minerals has been located but not fully defined. Further work by surface stripping, trenching and rock sampling at the two locations noted are considered to be merited. If these results are encouraging the survey should be extended both to the north and to the east.



COVE CLAIMS
Alberni M.D., B.C.
SOIL GEOCHEMISTRY
COVE #2 CLAIM

SAMPLE NUMBERS
N.T.S.:92F-5W Nov.1989 R.H.Janes
Figure 5



COVE CLAIMS
Alberni M.D., B.C.
SOIL GEOCHEMISTRY
COVE #2 CLAIM

COBALT - ppm
N.T.S.:92F-5W Nov.1989 R.H.Janes
Figure 6

Note: Value absent where element is below detection level.

52+50W 52+00W 51+50W 51+00W 50+50W 50+00W 49+50W 49+00W 48+50W 48+00W 47+50W

10+00S
10+50S
11+00S
11+50S
12+00S
12+50S
13+00S
13+50S
14+00S
14+50S

0 50 100 150
metres

Dense veg., o/c & thin soil.

Soil profile

slash

forest (cedar, salal, etc).

Legend

- NS — No sample
- \+ — Soil sample site
- O — Stream sediment sample site
- Subsidiary logging rd.
- Swamp
- Flagged line
- Creek.

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA R.H. JANES

COVE CLAIMS
Alberni M.D., B.C.
SOIL GEOCHEMISTRY
COVE #2 CLAIM

COPPER - ppm
N.T.S.:92F-5W Nov.1989 R.H.Janes
Figure 7

52+50W 52+00W 51+50W 51+00W 50+50W 50+00W 49+50W 49+00W 48+50W 48+00W 47+50W

10+00S
10+50S
11+00S
11+50S
12+00S
12+50S
13+00S
13+50S
14+00S
14+50S

0 50 100 150
metres

Dense veg., o/c & thin soil.

Soil profile

Soil profile

slash

forest (cedar, salal, etc).

Legend

- NS — No sample
- \+ — Soil sample site
- O — Stream sediment sample site
- Subsidiary logging rd.
- Swamp
- Flagged line
- Creek.

COVE CLAIMS
Alberni M.D., B.C.
SOIL GEOCHEMISTRY
COVE #2 CLAIM

NICKEL - ppm
N.T.S.:92F-5W Nov.1989 R.H.Janes
Figure 8

52+50W 52+00W 51+50W 51+00W 50+50W 50+00W 49+50W 49+00W 48+50W 48+00W 47+50W

10+00S
10+50S
11+00S
11+50S
12+00S
12+50S
13+00S
13+50S
14+00S
14+50S

0 50 100 150
metres

Legend

NS No sample
\+ Soil sample site
O Stream sediment sample site
Subsidiary logging rd.
Swamp
Flagged line
Creek.

Soil profile
Soil profile

slash
forest (cedar, salal, etc).

N

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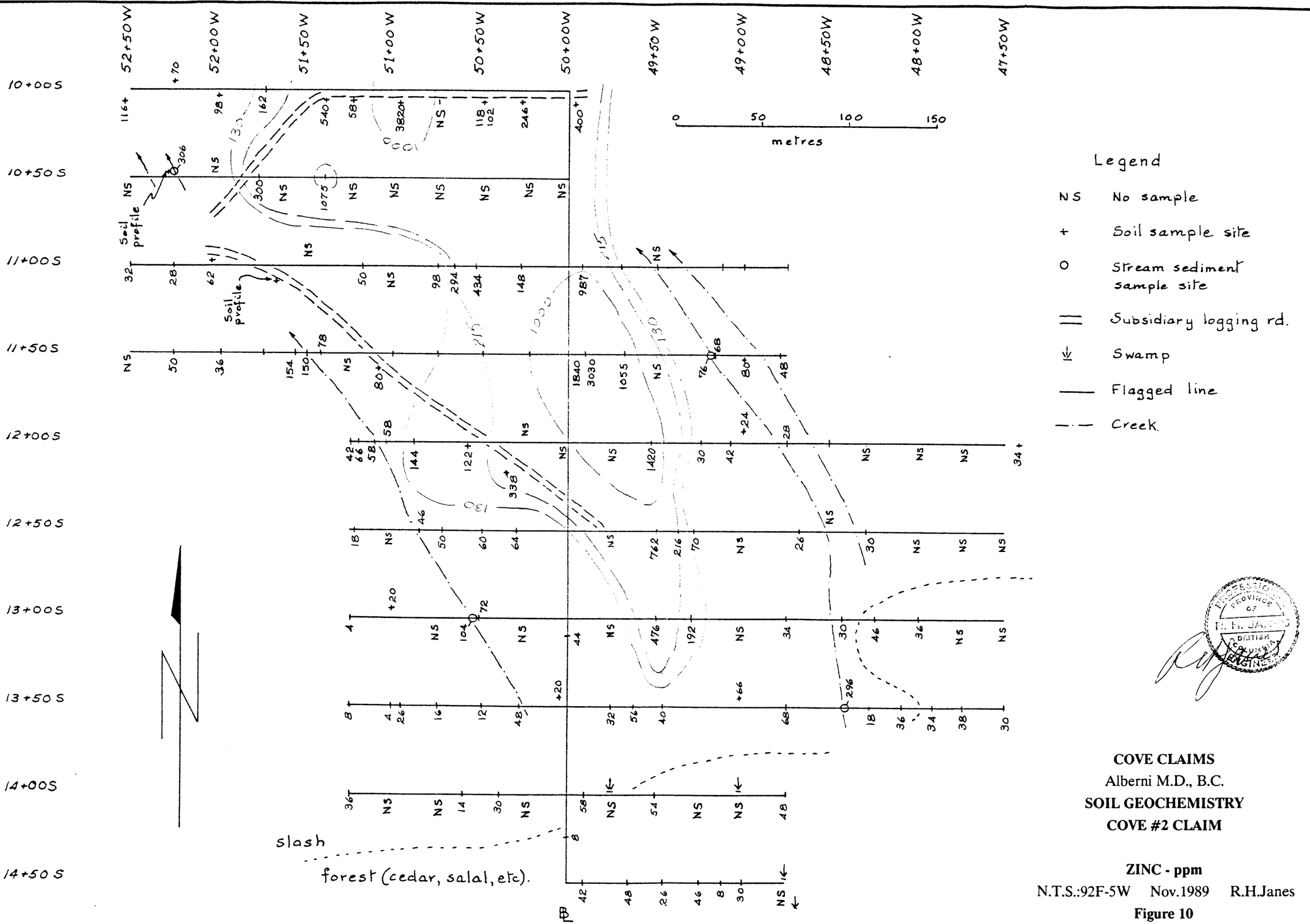
PROVINCE OF BRITISH COLUMBIA
R. H. JANES

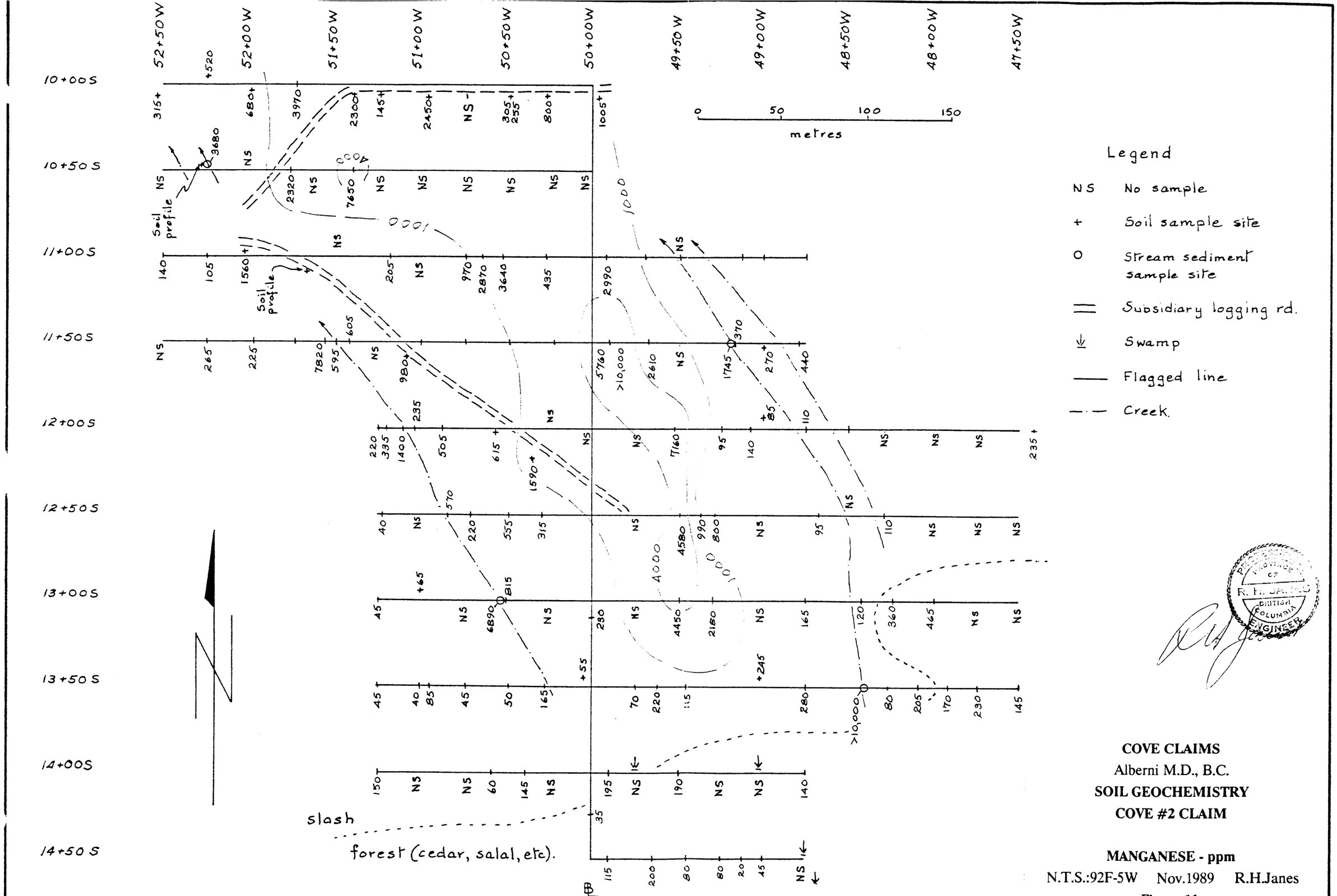
COVE CLAIMS
Alberni M.D., B.C.
SOIL GEOCHEMISTRY
COVE #2 CLAIM

LEAD - ppm
N.T.S.:92F-5W Nov.1989 R.H.Janes
Figure 9



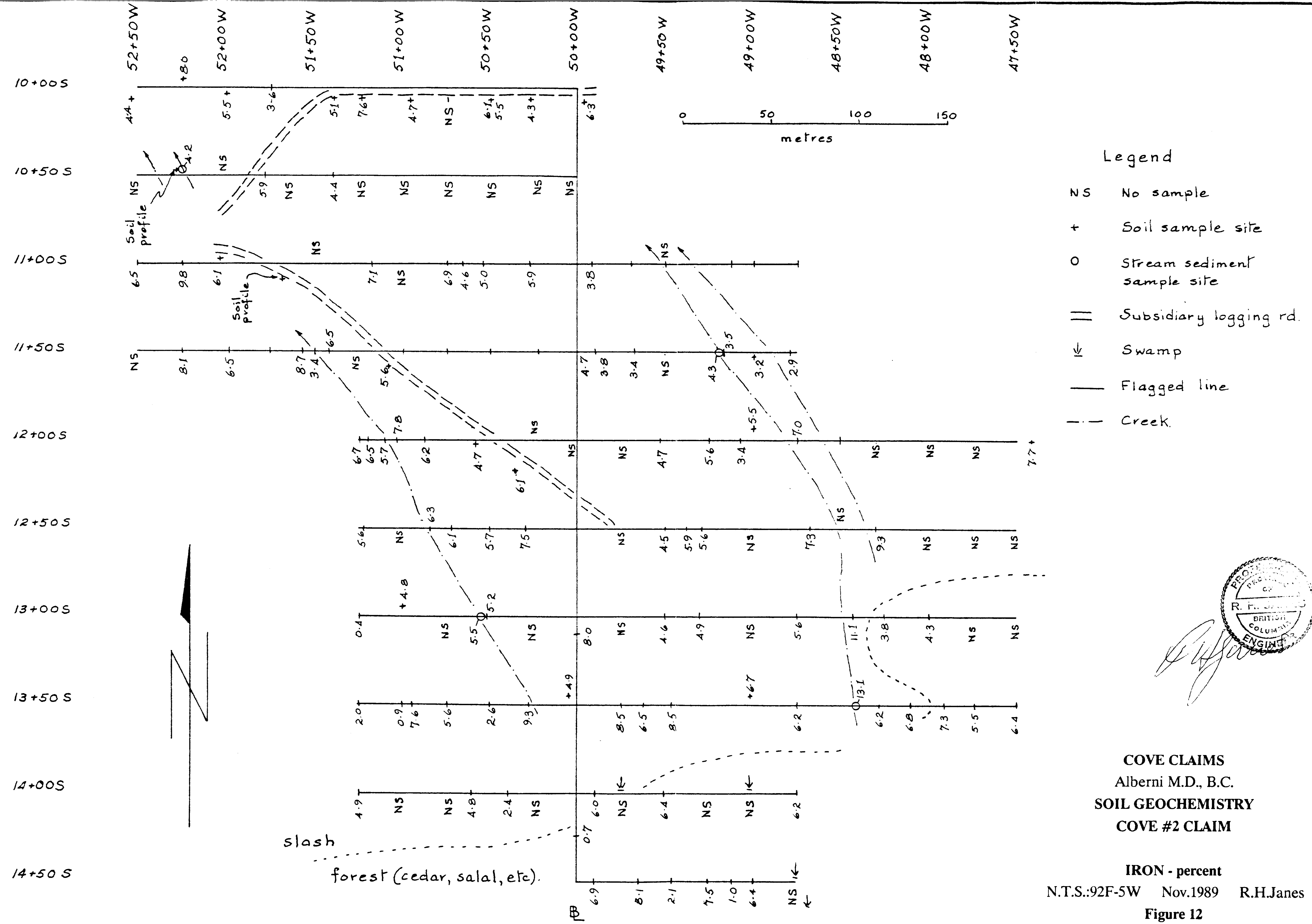
COVE CLAIMS
Alberni M.D., B.C.
SOIL GEOCHEMISTRY
COVE #2 CLAIM

ZINC - ppm
N.T.S.:92F-5W Nov.1989 R.H.Janes
Figure 10



COVE CLAIMS
Alberni M.D., B.C.
SOIL GEOCHEMISTRY
COVE #2 CLAIM

MANGANESE - ppm
N.T.S.:92F-5W Nov.1989 R.H.Janes
Figure 11



COVE CLAIMS
Alberni M.D., B.C.
SOIL GEOCHEMISTRY
COVE #2 CLAIM

IRON - percent
N.T.S.:92F-5W Nov.1989 R.H.Janes
Figure 12

REFERENCES

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Westervelt, R.D and Saleken, L.W. (1970): Magnetometer and Geochemical Report, Fort Reliance Minerals Ltd. B.C.Ministry of Energy, Mines and Petroleum Resources, Assessment Report No. 2454.

ITEMIZED COST STATEMENT

Oct. 17	B.C. Ferries	Horseshoe Bay Nanaimo	$ 21.75
	B.C. Ferries	Supper	8.60
	Tyee Village Motel	Lodging, Port Alberni	39.96
Oct. 18	Super-Stud Water Taxi	Tofino to Hagensborg Seafarm	40.00
	Arlington Hotel	Breakfast	5.85
Oct. 26	Hagensborg Seafarm	Accommodation and meals, October 18 to 26	400.00
Oct. 26	B.C. Ferries	Nanaimo to Horseshoe Bay	21.75
	B.C. Ferries	Lunch	8.95
Nov. 7	Chemex Labs Ltd.	Sample analysis	720.00
	Chemex Labs Ltd.	Statistical analysis & histograms	25.00
	R.H. Janes	Use of car: 440 km @ 29¢/km	127.60
	R.H. Janes	9-1/2 days (Oct. 17-26) fieldwork & travel time @ $400/day	3800.00
	R.H. Janes	10-1/2 days (Oct. 30 to Nov. 16) Preparation of report, copying and typing @ $250/day	2625.00
	Multiple Business Services	Typing title blocks & legend for figures	31.25
		TOTAL	$7873.71

CERTIFICATE

I, Richard H.Janes of Vancouver, British Columbia, do hereby certify:

1. That I have actively practised the profession of mining geology since 1956.

2. That I am a graduate of the Royal School of Mines, London, U.K. with B.Sc. (Mining Geology) degree.

3. That I am an independent mining geologist employed by R.Janes & Associates Ltd.; business adress: 306 - 402 West Pender Street, Vancouver, B.C. V6B 1T6.

4. That I am a registered Professional Engineer in the Province of British Columbia, a member of the Canadian Institute of Mining and Metallurgy and a fellow of the Geological Association of Canada.

5. That I spent the period October 18 to 25, 1989 carrying out a geochemical soil survey and a cursory geological examination of part of Cove 2 Mineral Claim.

R.H.Janes

APPENDIX I

GEOCHEMICAL SOIL SURVEY

CAMP Hogensborg Sea farm
COLLECTOR R. Janes
DATE 19 Oct '89

PROJECT Cove claims (254)
MAP SHEET 92F-5W

SAMPLE CODE
AREA (Lake, River)
AERIAL PHOTO

No.	SAMPLE No.	LOCATION LINE	LOCATION STN.	TOPO.	DRAIN	TERR.	VEG.	SOIL TYPE	DEPTH HORIZ.	COLOUR	TEXT.	REMARKS	ANALYTICAL RESULTS Mo	Cu		
1	NS	14+50 S	48+75 W		swamp											
2	RA 1000	-"-	49+00	slope			cedar + salal	A	8"	dk brn	clayey					
3	1001	-"-	49+12				-"-	A	12"	dk blue grey	-"-					
4	1002	-"-	49+25				-"-	B	6"	brn.	-"-	rock frags				
5	1003	-"-	49+46	In slight depression			-"-	A	12"		-"-	wet				
6	1004	-"-	49+65	slope	to N		-"-	B	9	brn	-"-					
7	1005	-"-	49+90	slope	to N		-"-	B	9	kaki	-"-					
8	1006	12	14+25	gentle slope	to N		-"-	A		grey	-"-	wet				
9	1007	14+00	49+90	Under roots of b.d.			-"-	B	4	brn.	-"-					
10	1008	-"-	48+75	well drained.			-"-	B	12	brn	-"-					
11	NS	-"-	49+00	swamp												
12	1009	-"-	49+50	Soil disturbed			-"-	B?	surf	brn	clayey	rock frags				
13	NS	-"-	49+75	Swamp, in			slash									
14	1010	-"-	51+25	Slope	to SE (15-20)		slash	B	10	brn	clayey					
15	NS	-"-	51+00	Very thin soil			-"-									
16	NS	-"-	50+75	cover, organic			-"-									
17	1011	-"-	50+60	Gentle slope	to N		-"-	B	4-5	brn	clayey	Thin soil cover.				
18	1012	-"-	50+40		wet		-"-	A		grey → dk. brn	-"-					
19	1013	13+50	51+25	Top of N facing slope			Slash	A	~14		-"-					
20	1014	-"-	51+00	Plateau, above slope				A		grey	-"-	From roots of blow-down.				

GEOCHEMICAL SOIL SURVEY

CAMP ____________ SAMPLE CODE ____________

COLLECTOR ____________ PROJECT Cove claims (2&4) AREA (Lake, River) ____________

DATE 20 Oct 89 MAP SHEET 92F-5 AERIAL PHOTO ____________

No.	SAMPLE No.	LOCATION LINE	LOCATION STN.	TOPO.	DRAIN	TERR.	VEG.	SOIL TYPE	DEPTH HORIZ.	COLOUR	TEXT.	REMARKS	ANALYTICAL RESULTS Mo	ANALYTICAL RESULTS Cu		
1	RJ 1015	13+50	50.95				slash	B	12"	brn	clayey					
2	1016	-"-	50.75	Start of slope to N			-"-	B	6	brn	-"-	wet				
3	1017	-"-	50.50	Bank (30° slope) of cr.			-"-	B>A	12	grey brn.	-"-					
4	1018	-"-	50.28	Crk bank.			-"-	B	6	rusty	-"-					
5				Below o/c, some beds have rusty light col'd tops - siliceous?												
6	1019	13+45	50.05	Bank of cr. below o/c, etc.				B>A	12	grey brn	clayey					
7	1020	13+50	48.75	Plateau			slash	B	6	brn	-"-	rock frag's				
8				Soil disturbed, no A.												
9	1021 & 1023			Rock samples, no 1022												
10	1024	13+45	49.02	Plateau			slash	B	6	brn	clayey	rock frag's				
11				Soil dist'd, no A												
12	N.S.	13+50	49.25	Carpet of felled timber, on 1st ridge.												
13	1025	-"-	49.46	Plateau			slash	B	8	brn	clayey	rk frag's				
14				Soil dist'd, no A.												
15	1026	-"-	49.62	Plateau			slash	B	8	brn	clayey	rk. fgs, soil dist'd				
16	1027	-"-	49.75	Plateau			-"-	B	14	brn	-"-	rk. fgs.				
17	1028	13+10	50.00	Slope to N			-"-	B	12	brn.	-"-	rk fgs, soil dist'd				
18	1029	13+00	51.25	——	"	——	-"-	A	14	grey	-"-	rk fgs, wet				
19	1030	12+95	51.00	——	"	——	-"-	B	6	brn	-"-	rk fgs, soil dist'd				
20	1031S	13+00	50.55	Crk.	silt,	dk area - blk. grit + org. [illegible]										

GEOCHEMICAL SOIL SURVEY

CAMP _____ SAMPLE CODE _____

COLLECTOR _____ PROJECT Cove claims (2 & 4) AREA (Lake, River) _____

DATE 20 & 21 Oct. 89 MAP SHEET 92F-5 AERIAL PHOTO _____

No.	SAMPLE No.	LOCATION LINE	LOCATION STN.	TOPO.	DRAIN	TERR.	VEG.	SOIL TYPE	DEPTH HORIZ.	COLOUR	TEXT.	REMARKS	ANALYTICAL RESULTS Mo	Cu		
1	NS	13+00	51+75	Carpet of felled trees.												
2	RT 1032	13+00	50-03	Bank facing		west	slash	B	8"	brn	clayey	soil dist'd,				
3	NS	-"-	50-25	Dense veg, carpet of felled trees.												
4	1033	-"-	49-50	Slope to N			slash	A+B	18	grey brn	clayey					
5	1034	-"-	49-30	-"-	-"-		-"-	B	8	brn	-"-	soil dist'd				
6	1035	-"-	48-75	-"-	-"-		-"-	B	6	brn	-"-	soil dist'd				
7	1036	12-50	51-22	-"-	-"-	from bank	-"-	B & A	8	brn. w grey patches	-"-					
8	1037	-"-	50-85	3-Arm Edge cr.			-"-	B	14	brn	clayey	wet				
9	1038	-"-	50-72	Slope to N			-"-	B	14	brn	-"-					
10	1039	-"-	50-50	-"-	-"-		-"-	B	6	dk brn	-"-	soil dist'd, rk fgs				
11												Subcrop ~ 8"				
12	1040	-"-	50-30	-"-	-"-		-"-	B	14	brn	clayey	rk fgs, v. heavy veg				
13	1041	-"-	48-67	-"-	-"-	from bank	-"-	B	12	brn	-"-					
14	1042	-"-	49-29	-"-	-"-		-"-	B	14	brn	-"-	rk fgs.				
15	1043	-"-	49-37	-"-	-"-		-"-	B	6	brn	-"-	soil dist'd, rk fgs				
16	1044	-"-	49-50	-"-	Bank of small gully			A+B?	8	v. dk brn	gritty	rk fgs				
17	1045	12-00	48-75	V gentle slope to N			slash	B	14	brn	clayey					
18	1046	11-93	49-00	Slope to N			-"-	B	10	brn	-"-	soil dist'd, rk fgs				
19	1047	12-00	49-08	-"-	-"-		-"-	B	8	dk brn	-"-	soil dist'd, rk fgs				
20												(Thin)				

GEOCHEMICAL SOIL SURVEY

CAMP ______________________ SAMPLE CODE ______________________

COLLECTOR ______________________ PROJECT Cove cls (2 & 4) AREA (Lake, River) ______________________

DATE 21 & 22 Oct 89 MAP SHEET ______________________ AERIAL PHOTO ______________________

No.	SAMPLE No.	LOCATION		TOPO.	DRAIN	TERR.	VEG.	SOIL TYPE	DEPTH HORIZ.	COLOUR	TEXT.	REMARKS	ANALYTICAL RESULTS			
		LINE	STN.										Mo	Cu		
1	R41048	12.00	49.25	Slope	to N		Slash	B	12	brn	clayey	rk fgs				
2	49	-"-	49.53	Shallow soil (~12").			-"-	B?	8-10	dk brn	-"-					
3	NS	-"-	49.75	Dense veg., carpet of fallen timber												
4	NS	-"-	50.00	——"	——"		——"	——"	——"	——						
5	1050			Ft. bank (cut)		south side of rd		B	8	brn	clayey					
6		25m. along rd E of pt. 12+00S, 50+50W.														
7	51	12.02	50.58	Ft. bank (cut)		S. side	rd.	B	10	brn	clayey	rk frags				
8	52	12.00	51.25	Ft. bank of		log path	slash.	B	~24	brn	-"-					
9	53	-"-	51.20	Lip of gully			-"-	B	6	brn	-"-	soil dist. (from cut)				
10	54	-"-	51.10	W. bank of md. cr., 1m above flow.				B	~24	brn	-"-					
11	55	-"-	51.03	Lip of gully			slash	B	6	brn	-"-	soil dist, rk fgs				
12	56	-"-	50.88	Slope	to N		-"-	B?	18	brn	-"-	Org>B, dist, r.f.				
13	57	11.50	48.79	flat	wet		-"-	A?	14	blk	grit + org	dist, r.f.				
14	58	11.53	49.00	flat	wet.		-"-	B	18	brn	clayey					
15	59	11.50	49.19	From 0.5m	E bank above	of cr. flow	-"-	B+A	18-24	grey brn	-"-	B + patches A				
16	1060S	-"-	49.19	St. sediment, coarse + org., cr 1m-0.1m, 5°								Poor sample				
17	61	-"-	49.68	flat	wet		slash	A?	18	dk brn	grit + clay + org	hor?				
18	62	-"-	49.90	flat			-"-	A?	22	dk grey brn.	clayey	org hor ~18", rk fgs. A?				
19	63	-"-	50+00	flat	wet		-"-	B?	18	dk brn	grit, clay, org					
20	64	-"-	52.25	Slope	to N 5-10°		-"-	B?	18	brn	clayey					

GEOCHEMICAL SOIL SURVEY

CAMP _____ SAMPLE CODE _____

COLLECTOR _____ PROJECT Cove c/s 2&4 AREA (Lake, River) _____

DATE 22 & 23 Oct. 89 MAP SHEET _____ AERIAL PHOTO _____

No.	SAMPLE No.	LOCATION LINE	LOCATION STN.	TOPO.	DRAIN	TERR.	VEG.	SOIL TYPE	DEPTH HORIZ.	COLOUR	TEXT.	REMARKS	ANALYTICAL RESULTS Mo	Cu		
1	RL 1065	11.50	51.98	Slope	to N		slash	org+B?	18"	brn	clayey	V. heavy veg				
2	66	—11—	51.54	— "	——		—11—	A+B	14	brn	gritty, clayey	Rusty patches.				
3	67	—11—	51.50	— "	— wet		—11—	org A	24	dk grey brn	clayey	Rk fgs.				
4				West bank of minor cr, at water level.												
5	68	—11—	51.42	Slope	to N		slash	B+org	6	brn	clayey	Soil dist., rk fgs				
6	69	11.58	51.08	From bank rd cut			—11—	B?+org	20	brn	clayey	Rk fgs.				
7	70	11.50	51.00	Side of hill facing S			—11—	B	8	brn	clayey	Soil dist., rk fgs				
8	71	11.50	50.75		wet		—11—	org B?	10	brn	clayey	Slight depression				
9	72	11.50	50 50	flat			—11—	org B?	12	brn	clayey	Base of slope to N Rk fgs				
10	73	11 50	50.23	Slope to N.			—11—	B	8	brn	clayey	Soil dist, rk fgs				
11	74	11.00	48.75	flat			—11—	A	12	grey	clayey					
12	75	11.00	49.13	Gentle slope to N			—11—	org A	12	blk-v dk brn	clayey	Rk fgs				
13	76	11.00	49.70	flat	wet		—11—	org A	12	blk	clayey					
14	77	11.00	49.92		wet.	V. dk brn org. layer (a 2") overlies light brn layer										
15				with rk fgs (a 1cm), layer (a 3"), rests on bedrock. A, no B.												
16				Sample from both. Base of slope to N, start of terrace.												
17	78	11.00	52.50	flat	Base slope		—11—	B?	14	brn	clayey	Rk fgs Below large o/c				
18	79	11.00	52.25	Slope to N	"		—11—	B? org	8-12	brn	clayey					
19	80	10.98	52.03	S bank rd cut			—11—		18-20	brn		A few rusty streaks Rk fgs				
20																

GEOCHEMICAL SOIL SURVEY

CAMP _____ SAMPLE CODE _____

COLLECTOR _____ PROJECT Cove cls (2 & 4) AREA (Lake, River) _____

DATE 23 & 24 Oct 89 MAP SHEET _____ AERIAL PHOTO _____

No.	SAMPLE No.	LOCATION LINE	LOCATION STN.	TOPO.	DRAIN	TERR.	VEG.	SOIL TYPE	DEPTH HORIZ.	COLOUR	TEXT.	REMARKS	ANALYTICAL RESULTS Mo	Cu		
1	RT1081	11+08	51+68				slash					PROFILE				
2	82	—"—	—"—									—"—				
3	83	—"—	—"—									—"—				
4	84	—"—	—"—									—"—				
5	85	11+00	51+18	Undulating, gen. slope to N			slash	B?	8	Brn	clayey	Soil dist., rk fgs				
6	NS	11 00	51+00	Dense veg, carpet of felled trees												
7	86	11 00	50+75	flat			slash	B	8	brn	clayey	Soil dist, rk fgs				
8	87	11 00	50+66	flat			slash	org B	18	brn	clayey					
9				From E bank of log			furrow (?)									
10	88	11+00	50+54	flat			slash	org B	12-18	brn	clayey	Soil dist, rk fgs				
11	89	11+00	50+28	flat				org B	12-16	brn	clayey	Soil dist, rk fgs				
12	90S	10+47	52+25	Sl. sed, coarse veg, v.dk brn & blk,						1m x 0.2, 3°						
13	91											PROFILE				
14	92											—"—				
15	93											—"—				
16	94											—"—				
17	95											—"—				
18	96	10+50	51+78	Gentle slope S N			slash	B	18	brn	clayey	rk fgs. S. side rd. cut.				
19	97	10+50	51+50	Gentle slope,			—"—	org B	8	brn	clayey	On side of small clearing.				
20		10+50	51+50	→ 50+00 NS. Dense veg. & shallow soil cover.												

GEOCHEMICAL SOIL SURVEY

CAMP _____ SAMPLE CODE _____

COLLECTOR _____ PROJECT Cove c/s (2 & 4) AREA (Lake, River) _____

DATE 24 & 25 Oct. 1989 MAP SHEET _____ AERIAL PHOTO _____

No.	SAMPLE No.	LOCATION LINE	LOCATION STN.	TOPO.	DRAIN	TERR.	VEG.	SOIL TYPE	DEPTH HORIZ.	COLOUR	TEXT.	REMARKS	ANALYTICAL RESULTS Mo	Cu		
1	RJ 1098	10.07	52.54	Slope	to NW		slash	B org.	10"	brn	clayey	Soil dist.				
2	99	09.97	52.25	Slope	to N		—"—	B org	8	brn	clayey	Soil dist RK fgs.				
3	1100	10.03	52.00	Slope	to W		—"—	B org	10	brn	clayey	Soil dist.				
4	101	10.00	51.75		wet		—"—	A org	12-14	dk brn	clayey	RK fgs				
5				Slope	to W											
6	102	10.04	51.40	Slope	to N		slash	B org	12	brn	clayey	RK fgs. On 1st subcrop				
7				South	side of		rd. cut.									
8	103	10.05	51.25	Slope	to N		slash	B or C, org	24	brn	clayey	RK fgs > soil				
9				South	side of	rd	cut									
10	104	10.07	50.97	Slope	to N.		slash	A	8-10	grey brn	clayey	Below blk org.				
11				South	side of	rd.	cut.	Subcrop Fe		std	andesitic	volc.				
12	105	10.07	50.50	Slope	to N.		slash	B? org	3-4	rusty brn	clayey	} PROFILE.				
13	106	10.07	50.50	S. side	rd cut.		slash	B org	18-24	brn	clayey	RK fgs				
14	107	10.07	50.28	Slope	to N		slash	B org	12	brn	clayey	Soil poss. dist.				
15				S. side	rd. cut											
16	108	10.08	49.97	Slope	to N		slash	B? org	12-24	shades of brn	clayey	Soil poss. dist.				
17				S. side	rd.	cut.										
18	1109R	on	White	main,	bld. in		road	bed.	Sulfides,			prrk, cpy				
19	1110	13.50	47.50	flat			cedar + salal	B org	12	brn	clayey					
20	1111	—"—	47.75	flat			—"—	B org	18	brn	clayey					

GEOCHEMICAL SOIL SURVEY

CAMP _____ SAMPLE CODE _____

COLLECTOR _____ PROJECT Cove cls (254) AREA (Lake, River) _____

DATE 25 Oct. 1989 MAP SHEET _____ AERIAL PHOTO _____

No.	SAMPLE No.	LOCATION LINE	LOCATION STN.	TOPO.	DRAIN	TERR.	VEG.	SOIL TYPE	DEPTH HORIZ.	COLOUR	TEXT.	REMARKS	ANALYTICAL RESULTS Mo	Cu		
1	RJ 1112	13+50	47.92	flat			cedar+ salal	Borg	8"	brn	clayey	Soil dist. Edge of forest				
2	13	—11—	48.10	flat			slash	Borg	12	brn	clayey	Soil dist.				
3	14	—11—	48.28	flat			—11—	Borg	12	brn	clayey	Soil dist.				
4	155	—11—	48.41	Cr. sediment, coarse, org, flowing N				0.5m x 0.03		m, 3°,	in slight depression,					
5																
6	16	13+00	48.00	flat			cedar+ salal	B	14	brn.	gritty, clayey	Under well develop-ed grey (A) layer.				
7	17	13+00	48.25				cedar+ salal	A	16							
8				Dk brn org. & grey grn. clayey layers/patches plus rk fgs, rests on subcrop												
9	18	13+00	48.43	Slope to N			slash	Borg	12	brn	clayey					
10	19	12+50	48.30				slash	Borg	6	brn	clayey	soil dist, close to subcrop				
11							Discontinuous o/c			(basic int.)		to top of ridge.				
12	1120	12+00	47.42					Borg.	6	brn.	clayey	Soil dist. on subcrop.				
13				At	bottom of		steep	(25°)	slope	(ridge of basic int).						
14																
15																
16																
17																
18																
19																
20																

APPENDIX II

Chemex Labs Ltd.
Analytical Chemists * Geochemists * Registered Assayers
212 BROOKSBANK AVE., NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1
PHONE (604) 984-0221

7 'ANES, R. & ASSOCIATES LTD.
306 - 402 W. PENDER ST.
VANCOUVER, BC
V6B 1T6
Project :
Comments: ATTN: R. JANES

Date : 7-NOV-89
Invoice # : I-8929369
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8929369

SAMPLE DESCRIPTION	PREP CODE	Ag ppm	Co ppm	Cu ppm	Fe %	Mn ppm	Mo ppm	Ni ppm	Pb ppm	Zn ppm
RJ 1000	201 298	0.5	< 1	16	6.39	45	< 1	6	5	30
RJ 1001	201 298	< 0.5	< 1	4	0.98	20	< 1	3	< 5	8
RJ 1002	201 298	1.0	< 1	33	7.48	80	2	8	5	46
RJ 1003	201 298	< 0.5	< 1	34	2.09	80	2	5	5	26
RJ 1004	201 298	0.5	2	53	8.05	200	< 1	8	5	48
RJ 1005	201 298	0.5	< 1	48	6.88	115	1	7	10	42
RJ 1006	201 298	< 0.5	< 1	20	0.66	35	< 1	1	5	8
RJ 1007	201 298	0.5	3	68	6.00	195	< 1	12	5	58
RJ 1008	201 298	0.5	1	47	6.22	140	< 1	9	15	48
RJ 1009	201 298	0.5	4	69	6.36	190	< 1	13	5	54
RJ 1010	201 298	0.5	2	79	4.88	150	< 1	10	5	36
RJ 1011	201 298	0.5	< 1	12	4.76	60	< 1	1	5	14
RJ 1012	201 298	< 0.5	2	51	2.39	145	1	10	10	30
RJ 1013	201 298	< 0.5	< 1	4	1.99	45	< 1	< 1	5	8
RJ 1014	201 298	< 0.5	< 1	2	0.90	40	< 1	< 1	5	4
RJ 1015	201 298	< 0.5	< 1	25	7.57	85	< 1	4	5	26
RJ 1016	201 298	< 0.5	< 1	10	5.55	45	< 1	3	5	16
RJ 1017	201 298	0.5	< 1	9	2.60	50	2	1	5	12
RJ 1018	201 298	0.5	< 1	47	9.33	165	3	10	10	48
RJ 1019	201 298	< 0.5	< 1	13	4.85	55	2	2	5	20
RJ 1020	201 298	< 0.5	< 1	21	6.17	280	< 1	4	5	68
RJ 1024	201 298	0.5	< 1	129	6.72	245	1	5	5	66
RJ 1025	201 298	1.0	< 1	48	8.53	115	1	6	10	40
RJ 1026	201 298	0.5	3	61	6.54	220	1	12	5	56
RJ 1027	201 298	0.5	< 1	29	8.47	70	1	5	< 5	32
RJ 1028	201 298	0.5	1	67	7.98	230	1	8	10	44
RJ 1029	201 298	< 0.5	< 1	2	0.38	45	< 1	< 1	< 5	4
RJ 1030	201 298	0.5	< 1	19	4.83	65	1	2	5	20
RJ 1031	201 298	< 0.5	117	78	5.45	6890	2	24	15	104
RJ 1032	201 298	< 0.5	12	96	5.17	815	1	19	10	72
RJ 1033	201 298	< 0.5	15	89	4.61	4450	< 1	20	15	476
RJ 1034	201 298	< 0.5	15	221	4.86	2180	1	14	90	192
RJ 1035	201 298	< 0.5	2	92	5.62	165	1	12	10	34
RJ 1036	201 298	< 0.5	< 1	10	5.58	40	1	1	5	18
RJ 1037	201 298	< 0.5	8	33	6.28	570	1	10	10	46
RJ 1038	201 298	0.5	3	53	6.05	220	2	14	15	50
RJ 1039	201 298	< 0.5	7	42	5.71	555	3	13	10	60
RJ 1040	201 298	< 0.5	4	41	7.46	315	1	17	5	64
RJ 1041	201 298	< 0.5	< 1	24	7.25	95	< 1	5	5	26
RJ 1042	201 298	< 0.5	1	18	5.57	800	1	4	10	70

CERTIFICATION : B. Caplin

Chemex Labs Ltd.
Analytical Chemists * Geochemists * Registered Assayers
212 BROOKSBANK AVE., NORTH VANCOUVER,
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Comments: ATTN: R. JANES

Date : 7-NOV-89
Invoice # : I-8929369
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8929369

SAMPLE DESCRIPTION	PREP CODE	Ag ppm	Co ppm	Cu ppm	Fe %	Mn ppm	Mo ppm	Ni ppm	Pb ppm	Zn ppm
RJ 1043	201 298	< 0.5	11	107	5.89	990	1	17	25	216
RJ 1044	217 298	< 0.5	17	85	4.46	4580	< 1	21	20	762
RJ 1045	201 298	0.5	< 1	28	7.02	110	< 1	3	5	28
RJ 1046	201 298	0.5	< 1	27	5.54	85	< 1	4	5	24
RJ 1047	217 298	< 0.5	2	75	3.41	140	< 1	8	10	42
RJ 1048	201 298	< 0.5	< 1	19	5.57	95	< 1	4	5	30
RJ 1049	201 298	< 0.5	16	293	4.67	7160	1	35	15	1420
RJ 1050	201 298	< 0.5	7	66	6.07	1590	1	20	5	338
RJ 1051	217 298	< 0.5	11	45	4.67	615	< 1	24	15	122
RJ 1052	201 298	< 0.5	2	43	6.74	220	2	11	5	42
RJ 1053	201 298	< 0.5	7	94	6.53	335	3	16	10	66
RJ 1054	201 298	< 0.5	48	79	5.68	1400	2	11	10	58
RJ 1055	201 298	< 0.5	3	69	7.84	235	2	16	10	58
RJ 1056	217 298	< 0.5	7	108	6.23	505	1	22	180	144
RJ 1057	203 298	< 0.5	7	30	2.92	440	< 1	14	10	48
RJ 1058	201 298	< 0.5	7	48	3.25	270	1	19	5	80
RJ 1059	201 298	< 0.5	7	37	3.54	370	1	12	10	68
RJ 1060	217 298	< 0.5	22	28	4.32	1745	< 1	18	5	76
RJ 1061	217 298	< 0.5	12	198	3.39	2610	< 1	24	35	1055
RJ 1062	217 298	< 0.5	24	661	3.83	>10000	13	69	10	3030
RJ 1063	201 298	< 0.5	18	275	4.70	5760	3	43	15	1840
RJ 1064	201 298	< 0.5	< 1	46	8.12	265	2	8	10	50
RJ 1065	201 298	< 0.5	2	36	6.45	225	2	7	5	36
RJ 1066	201 298	< 0.5	62	134	8.66	7820	10	29	10	154
RJ 1067	217 298	< 0.5	8	38	3.44	595	1	26	10	150
RJ 1068	201 298	< 0.5	5	64	6.53	605	2	15	15	78
RJ 1069	201 298	< 0.5	6	55	5.55	980	2	21	20	80
RJ 1070	201 298	< 0.5	< 1	< 1	< 0.01	< 5	< 1	< 1	< 5	< 2
RJ 1071	201 298	< 0.5	< 1	< 1	< 0.01	< 5	< 1	< 1	< 5	< 2
RJ 1072	201 298	< 0.5	< 1	< 1	< 0.01	< 5	< 1	< 1	< 5	< 2
RJ 1073	201 298	< 0.5	< 1	< 1	< 0.01	< 5	< 1	< 1	< 5	< 2
RJ 1074	201 298	< 0.5	< 1	< 1	< 0.01	< 5	< 1	< 1	< 5	< 2
RJ 1075	201 298	< 0.5	< 1	< 1	< 0.01	< 5	< 1	< 1	< 5	< 2
RJ 1076	201 298	< 0.5	< 1	< 1	< 0.01	< 5	< 1	< 1	< 5	< 2
RJ 1077	217 298	< 0.5	12	89	3.77	2990	4	14	5	986
RJ 1078	201 298	< 0.5	< 1	27	6.47	140	1	8	5	32
RJ 1079	201 298	< 0.5	< 1	39	9.79	105	1	4	10	28
RJ 1080	201 298	< 0.5	48	191	6.06	1560	6	11	15	62
RJ 1081	201 298	< 0.5	3	59	8.90	200	1	12	5	48
RJ 1082	201 298	< 0.5	7	91	7.29	395	1	18	15	76

CERTIFICATION : B. Caplin

Chemex Labs Ltd.
Analytical Chemists * Geochemists * Registered Assayers
212 BROOKSBANK AVE. NORTH VANCOUVER.
BRITISH COLUMBIA, CANADA V7J-2C1
PHONE (604) 984-0221

To: JANES, R. & ASSOCIATES LTD.
306 - 402 W. PENDER ST.
VANCOUVER, BC
V6B 1T6
Project :
Comments: ATTN: R. JANES

Date : 7-NOV-89
Invoice # : I-8929369
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8929369

SAMPLE DESCRIPTION	PREP CODE		Ag ppm	Co ppm	Cu ppm	Fe %	Mn ppm	Mo ppm	Ni ppm	Pb ppm	Zn ppm
RJ 1083	201	298	< 0.5	13	147	4.68	430	< 1	35	5	100
RJ 1084	201	298	< 0.5	20	245	3.64	620	< 1	48	10	114
RJ 1085	201	298	< 0.5	1	48	7.09	205	< 1	12	10	50
RJ 1086	201	298	< 0.5	8	57	6.88	970	2	23	20	98
RJ 1087	201	298	< 0.5	14	47	4.58	2870	< 1	39	5	294
RJ 1088	201	298	< 0.5	24	99	4.95	3640	< 1	31	15	434
RJ 1089	201	298	< 0.5	6	59	5.89	435	1	12	15	148
RJ 1090	217	298	< 0.5	21	35	4.22	3680	1	30	< 5	306
RJ 1091	201	298	< 0.5	1	17	2.87	490	1	7	20	76
RJ 1092	201	298	< 0.5	4	40	5.75	280	5	10	5	184
RJ 1093	201	298	< 0.5	2	18	3.48	220	1	9	10	124
RJ 1094	201	298	< 0.5	6	44	6.91	325	1	22	10	136
RJ 1095	201	298	< 0.5	9	52	3.79	220	1	21	10	152
RJ 1096	201	298	< 0.5	20	38	5.88	2320	2	24	10	300
RJ 1097	201	298	< 0.5	18	71	4.35	7650	< 1	51	10	1075
RJ 1098	201	298	< 0.5	9	43	4.41	315	3	28	10	116
RJ 1099	201	298	< 0.5	8	60	8.03	520	3	15	15	70
RJ 1100	201	298	< 0.5	15	31	5.46	680	1	20	5	98
RJ 1101	217	298	< 0.5	13	83	3.62	3970	1	30	10	162
RJ 1102	201	298	< 0.5	11	48	5.07	2300	< 1	13	65	540
RJ 1103	201	298	< 0.5	4	77	7.57	145	2	12	< 5	58
RJ 1104	201	298	< 0.5	16	537	4.68	2450	1	65	10	3820
RJ 1105	201	298	< 0.5	2	50	6.12	305	2	13	15	118
RJ 1106	201	298	< 0.5	1	55	5.54	255	1	10	5	102
RJ 1107	201	298	< 0.5	10	103	4.31	800	1	20	10	246
RJ 1108	201	298	< 0.5	3	39	6.27	1005	4	7	10	400
RJ 1110	201	298	< 0.5	< 1	53	6.35	145	1	10	5	30
RJ 1111	201	298	< 0.5	1	61	5.45	230	1	17	5	38
RJ 1112	201	298	< 0.5	< 1	50	7.28	170	1	10	10	34
RJ 1113	201	298	< 0.5	1	58	6.78	205	2	12	10	36
RJ 1114	201	298	< 0.5	< 1	25	6.20	80	2	2	5	18
RJ 1115	201	298	< 0.5	278	53	13.10	>10000	6	17	15	296
RJ 1116	201	298	< 0.5	4	37	4.26	465	< 1	15	5	36
RJ 1117	201	298	< 0.5	8	97	3.81	360	< 1	47	< 5	46
RJ 1118	201	298	< 0.5	< 1	29	11.05	120	2	5	5	30
RJ 1119	201	298	< 0.5	< 1	50	9.31	110	2	4	< 5	30
RJ 1120	201	298	< 0.5	< 1	93	7.74	235	3	9	10	34

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A8929369

Comments: ATTN: R. JANES

CERTIFICATE A8929369

JANES, R & ASSOCIATES LTD.
PROJECT :
P.O.# : NONE

Samples submitted to our lab in Vancouver, BC.
This report was printed on 7-NOV-89.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
201	105	Dry, sieve -80 mesh; soil, sed.
203	1	Dry, sieve -35 mesh and ring
217	11	Geochem:Ring only.no crush/split
298	117	ICP: Aqua regia digestion

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
1005	117	Ag ppm: 9 element.soil and rock	ICP-AES	0.5	200
1929	117	Co ppm: 9 element, soil & rock	ICP-AES	1	10000
1931	117	Cu ppm: 9 element, soil & rock	ICP-AES	1	10000
1932	117	Fe %: 9 element, soil & rock	ICP-AES	0.01	15.00
1937	117	Mn ppm: 9 element, soil & rock	ICP-AES	5	10000
1938	117	Mo ppm: 9 element, soil & rock	ICP-AES	1	10000
1940	117	Ni ppm: 9 element, soil & rock	ICP-AES	1	10000
1004	117	Pb ppm: 9 element.soil and rock	ICP-AES	5	10000
1950	117	Zn ppm: 9 element, soil & rock	ICP-AES	2	10000

APPENDIX III

Histograms and Probability Plots for

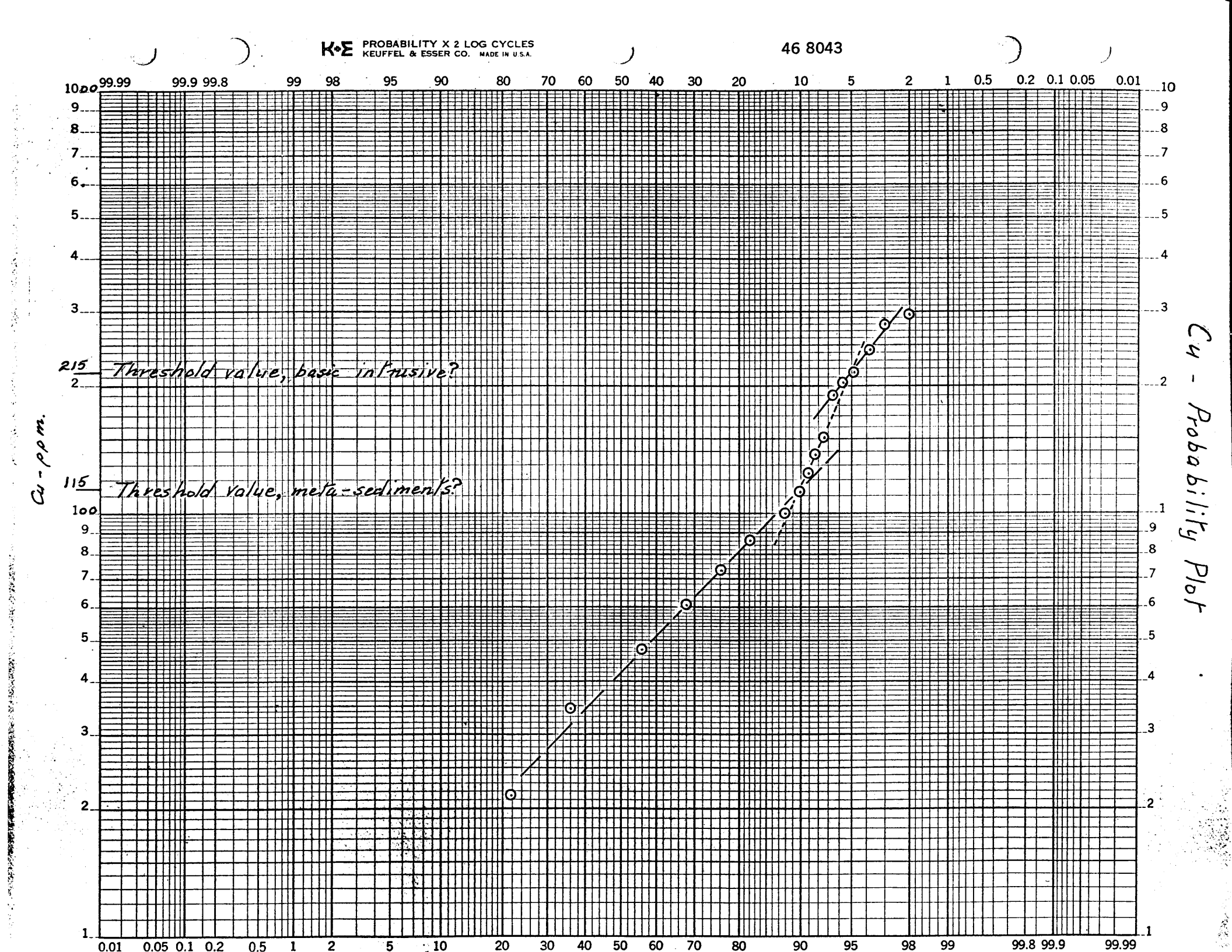
Copper, Lead and Zinc.

VARIABLE	: Cu	ppm
COLUMN NUMBER	: 7	

DETECTION LIMIT : 1.0000

NUMBER OF OBSERVATIONS	:	106
MINIMUM	:	2.000
MAXIMUM	:	661.000
MEAN	:	72.226
STANDARD ERROR OF MEAN	:	8.822
STANDARD DEVIATION	:	90.828
COEFFICIENT OF VARIATION	:	125.754
SKEWNESS	:	4.170
KURTOSIS	:	20.993

```
Var : Cu            ppm            Col#    7
D.Limit :  1.0000     [*]=  0.7% of Total
            PERCENT OF TOTAL SAMPLES
                                        20.0                          40.0
        |-----------------------------+-----------------------------+#OCCU.  PERC
        |                                                               0     0.0
    2.00+
        |*************                                                  9     8.5
   15.00+
        |*******************                                           13    12.3
   28.00+
        |***********************                                       16    15.1
   41.00+
        |*********************************                             23    21.7
   54.00+
        |****************                                              11    10.4
   67.00+
        |*************                                                  9     8.5
   80.00+
        |*********                                                      6     5.7
   93.00+
        |*********                                                      6     5.7
  106.00+
        |***                                                            2     1.9
  119.00+
        |**                                                             1     0.9
  132.00+
        |**                                                             1     0.9
  145.00+
        |**                                                             1     0.9
  158.00+
        |                                                               0     0.0
  171.00+
        |                                                               0     0.0
  184.00+
        |**                                                             1     0.9
  197.00+
        |**                                                             1     0.9
  210.00+
        |**                                                             1     0.9
  223.00+
        |                                                               0     0.0
  236.00+
        |**                                                             1     0.9
  249.00+
        |                                                               0     0.0
  262.00+
        |                                                               0     0.0
  275.00+
        |**                                                             1     0.9
  288.00+
        |**                                                             1     0.9
  301.00+
        |***                                                            2     1.9
        |-----------------------------+-----------------------------+#OCCU.  PERC
                                        20.0                          40.0
            PERCENT OF TOTAL SAMPLES
```

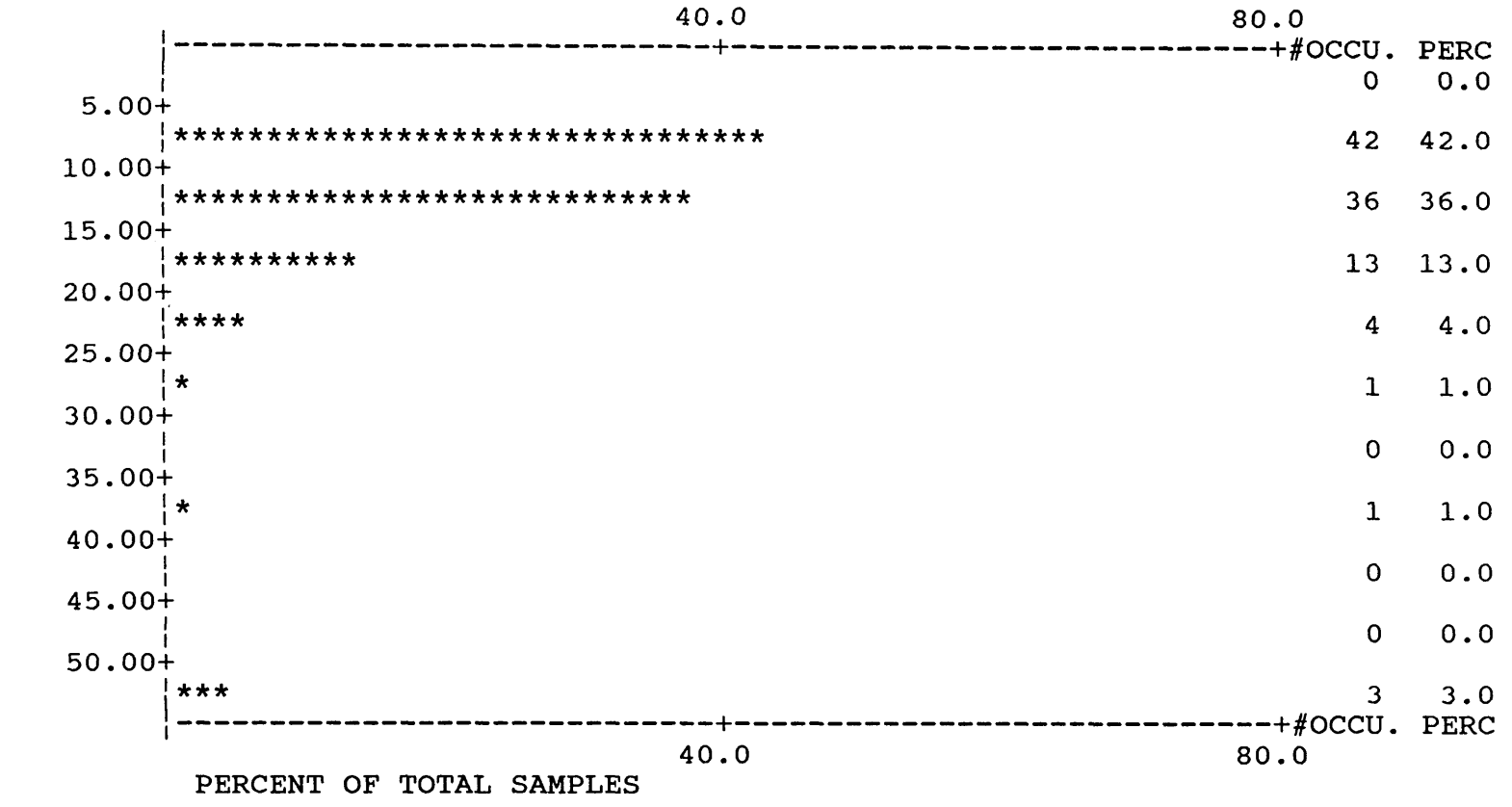

K+E PROBABILITY X 2 LOG CYCLES
KEUFFEL & ESSER CO. MADE IN U.S.A.
46 8043
99.99 99.9 99.8 99 98 95 90 80 70 60 50 40 30 20 10 5 2 1 0.5 0.2 0.1 0.05 0.01
0.01 0.05 0.1 0.2 0.5 1 2 5 10 20 30 40 50 60 70 80 90 95 98 99 99.8 99.9 99.99
Cu - ppm.
215
Threshold value, basic intrusive?
115
Threshold value, meta-sediments?
Cu - Probability Plot

VARIABLE	: Pb	ppm
COLUMN NUMBER	: 12	

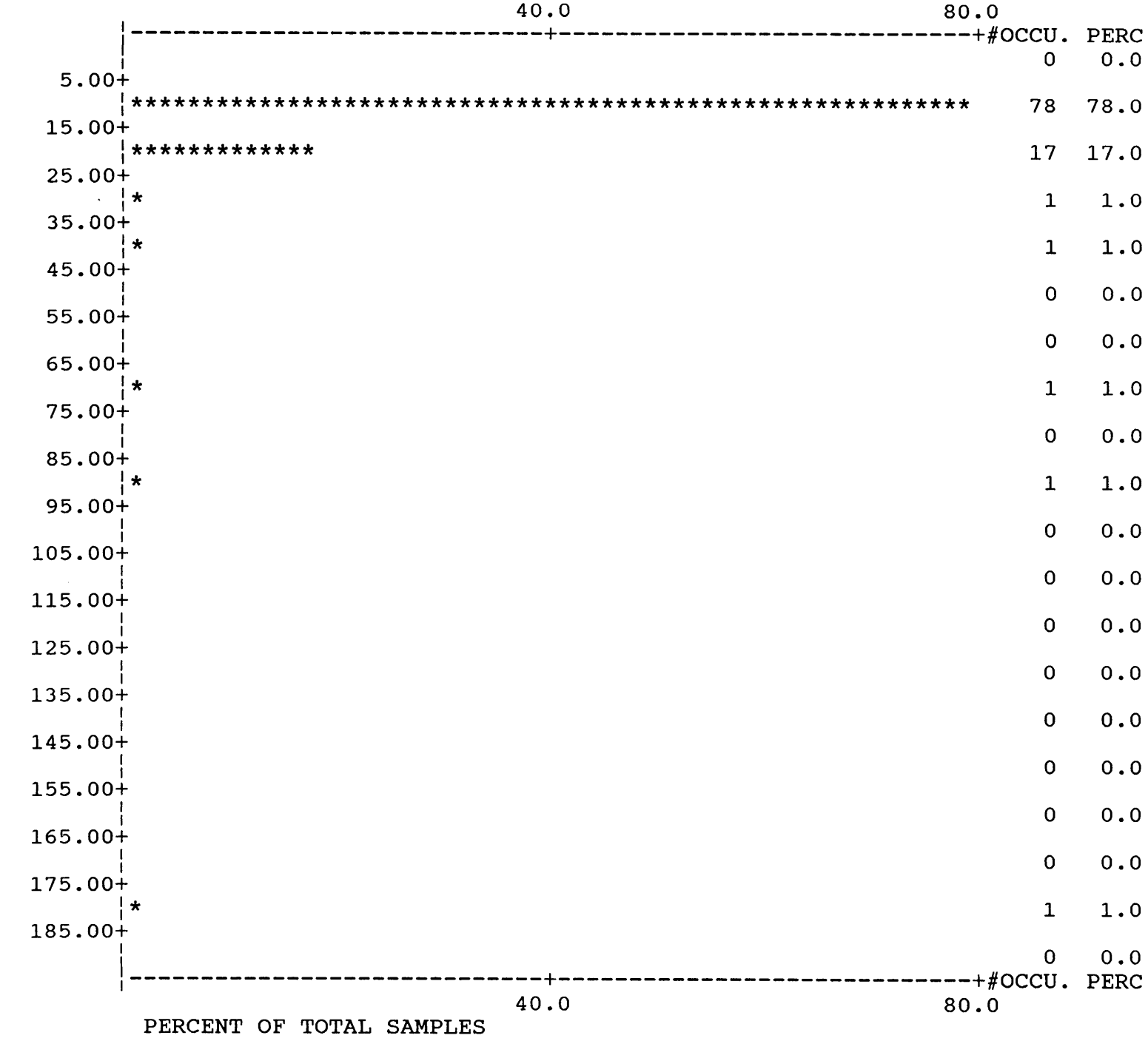
DETECTION LIMIT : 5.0000

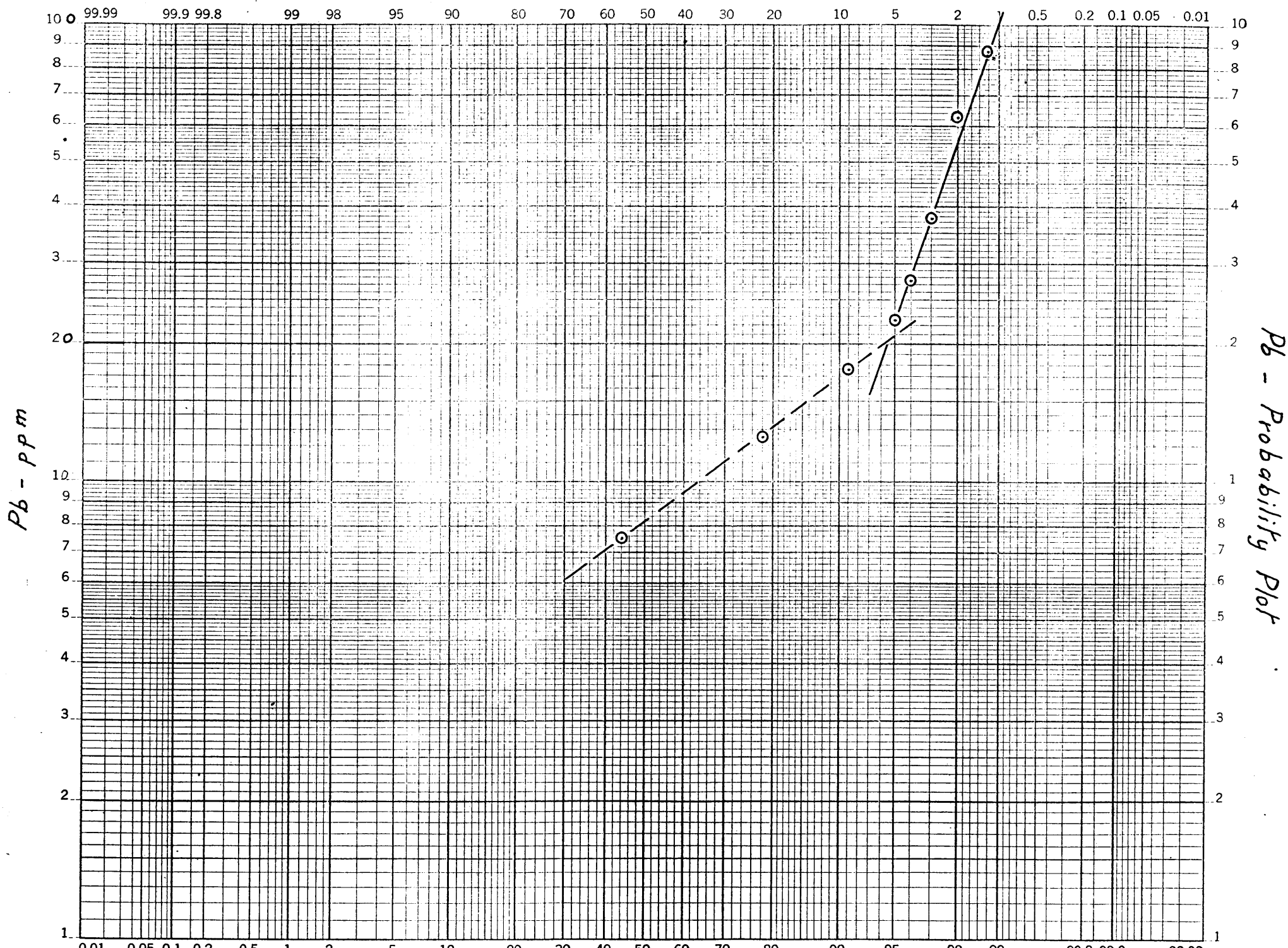
NUMBER OF OBSERVATIONS	:	100
MINIMUM	:	5.000
MAXIMUM	:	180.000
MEAN	:	12.400
STANDARD ERROR OF MEAN	:	2.019
STANDARD DEVIATION	:	20.195
COEFFICIENT OF VARIATION	:	162.859
SKEWNESS	:	6.458
KURTOSIS	:	47.108

Var : Pb ppm Col# 12
D.Limit : 5.0000 [*]= 1.3% of Total



Var : Pb ppm Col# 12
D.Limit : 5.0000 [*]= 1.3% of Total



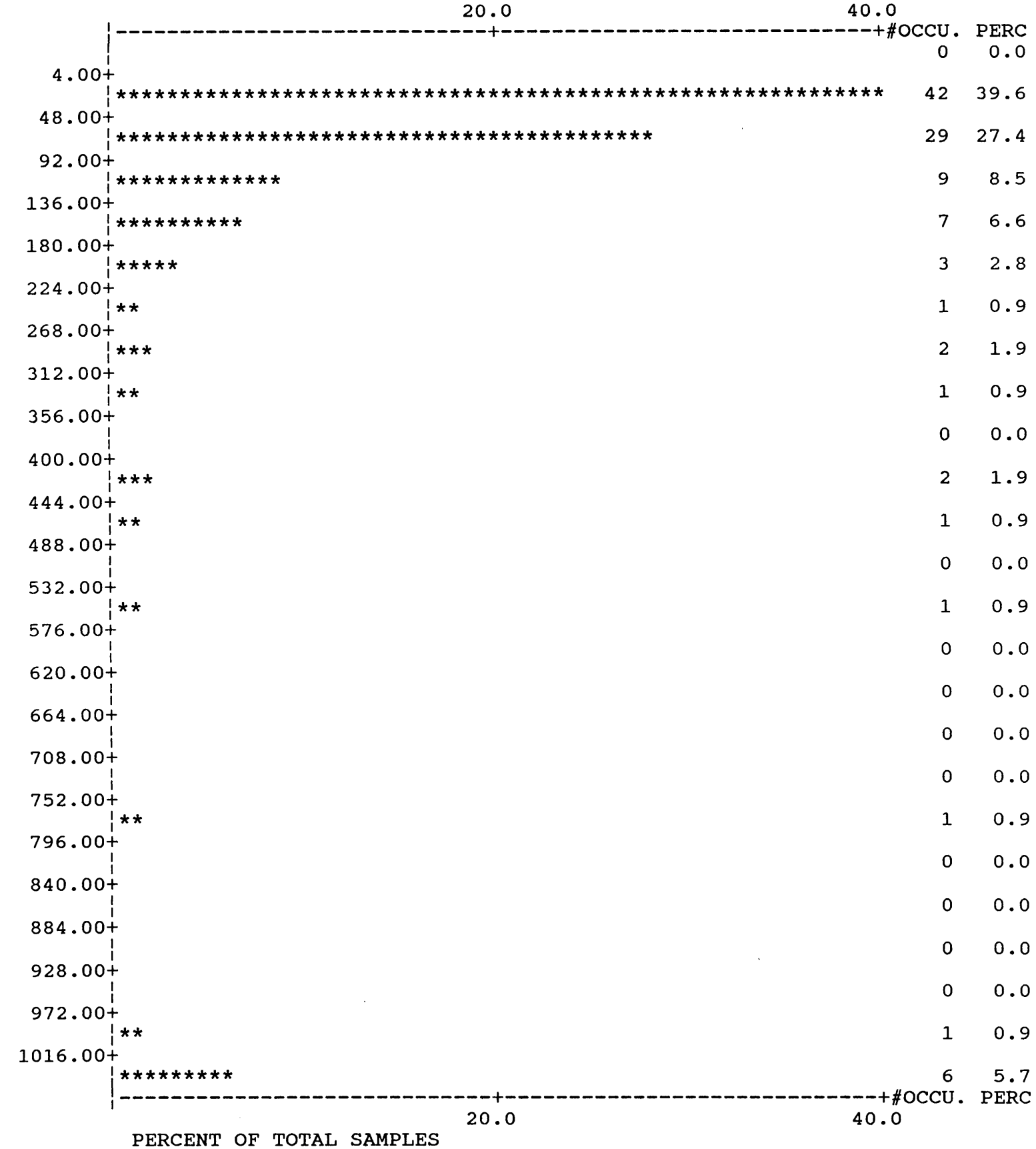


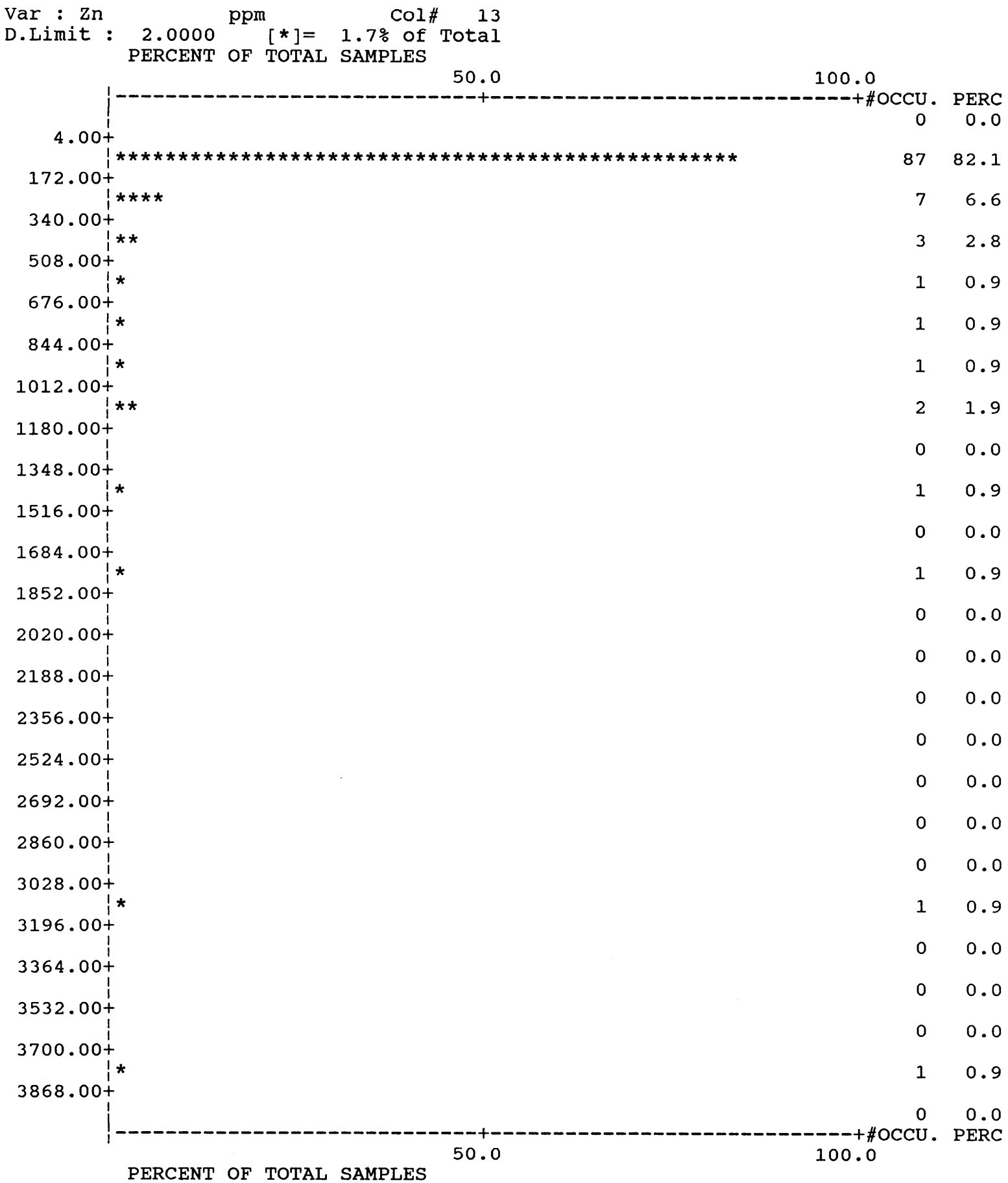
VARIABLE	: Zn	ppm
COLUMN NUMBER	: 13	

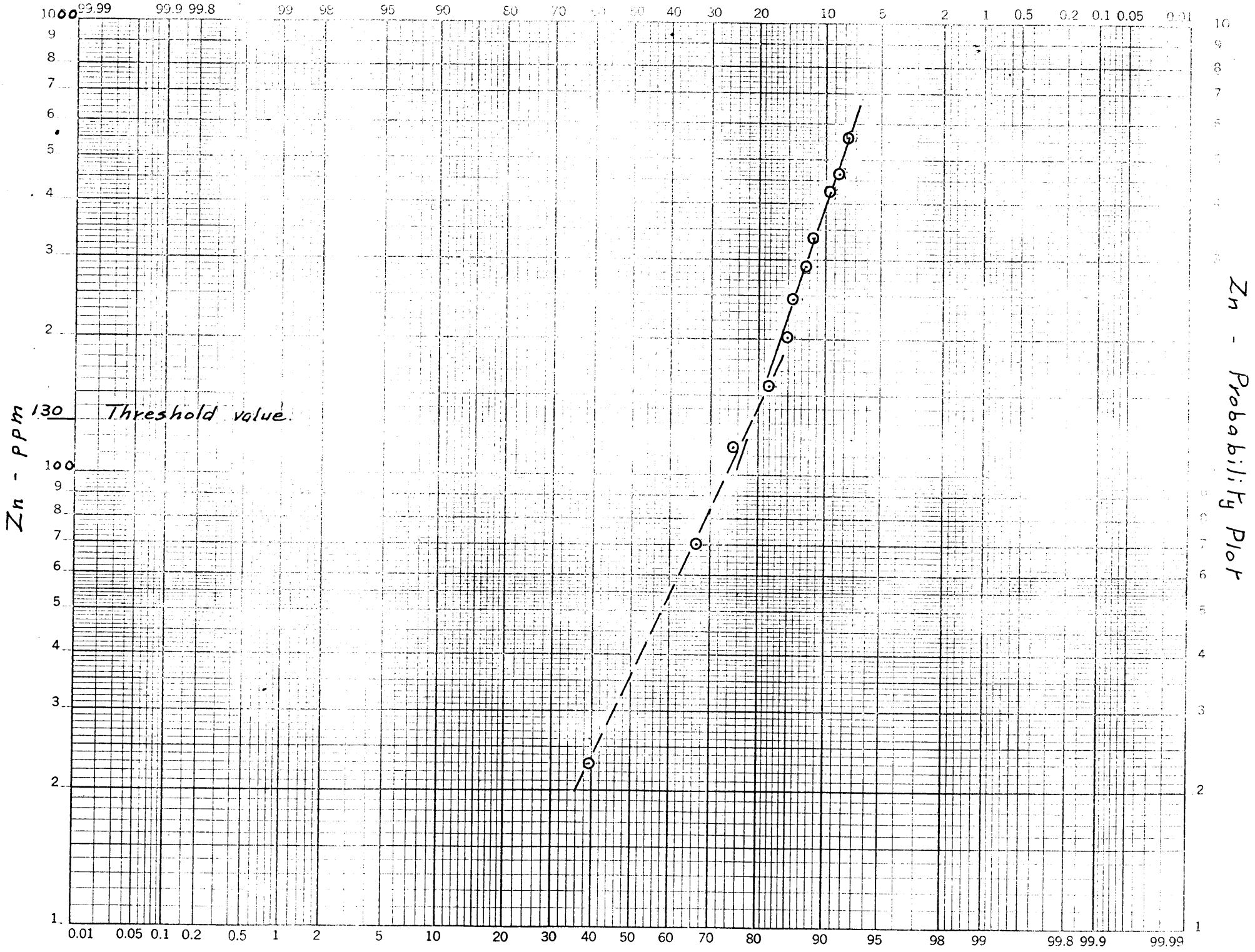
DETECTION LIMIT : 2.0000

NUMBER OF OBSERVATIONS	:	106
MINIMUM	:	4.000
MAXIMUM	:	3824.000
MEAN	:	213.415
STANDARD ERROR OF MEAN	:	51.875
STANDARD DEVIATION	:	534.086
COEFFICIENT OF VARIATION	:	250.257
SKEWNESS	:	4.769
KURTOSIS	:	25.239

Var : Zn ppm Col# 13
D.Limit : 2.0000 [*]= 0.7% of Total




Var : Zn ppm Col# 13
D.Limit : 2.0000 [*]= 1.7% of Total
PERCENT OF TOTAL SAMPLES
50.0
100.0
#OCCU. PERC
0 0.0
4.00
87 82.1
172.00
7 6.6
340.00
3 2.8
508.00
1 0.9
676.00
1 0.9
844.00
1 0.9
1012.00
2 1.9
1180.00
0 0.0
1348.00
1 0.9
1516.00
0 0.0
1684.00
1 0.9
1852.00
0 0.0
2020.00
0 0.0
2188.00
0 0.0
2356.00
0 0.0
2524.00
0 0.0
2692.00
0 0.0
2860.00
0 0.0
3028.00
1 0.9
3196.00
0 0.0
3364.00
0 0.0
3532.00
0 0.0
3700.00
1 0.9
3868.00
0 0.0
#OCCU. PERC
50.0
100.0
PERCENT OF TOTAL SAMPLES


Zn - ppm
Zn - Probability Plot
130
Threshold value.
99.99 99.9 99.8 99 98 95 90 80 70 60 50 40 30 20 10 5 2 1 0.5 0.2 0.1 0.05 0.01
0.01 0.05 0.1 0.2 0.5 1 2 5 10 20 30 40 50 60 70 80 90 95 98 99 99.8 99.9 99.99
1000 100 10 9 8 7 6 5 4 3 2 1