BATEAUX GROUP

Bateaux, Bateaux 2, 3, 4, Aura Mineral Claims

Kitgoro Inlet
N.W. Moresby Island
Queen Charlotte Islands, B.C.

N.T.S. 103F/1W, Lat. 53°04', Long. 132°29'
Skeena Mining Division

REPORT ON GEOLOGY AND GEOCHEMISTRY

by
P. Lickley
J. S. Vincent, P. Eng.

Dates of Work: May 25th - July 13th, 1980

Owner: G. G. Richards
Operator: Canadian Nickel Co. Ltd.

TABLE OF CONTENTS

INTRODUCTION

A total of 114 man days were spent on the Bateaux Claims during May, June and July of 1980. The size of the camp varied from two to five people and the personnel at various times involved two seniors, Peter Lickley and Ian Beck, three juniors, Gord Kuzniar, Greg Beischer and Tom Bertulli, and supervising project geologist, Peter Peto and district geologist, Jack Vincent. The work was conducted in two 3-week intervals, one in May and the other in late June and early July.

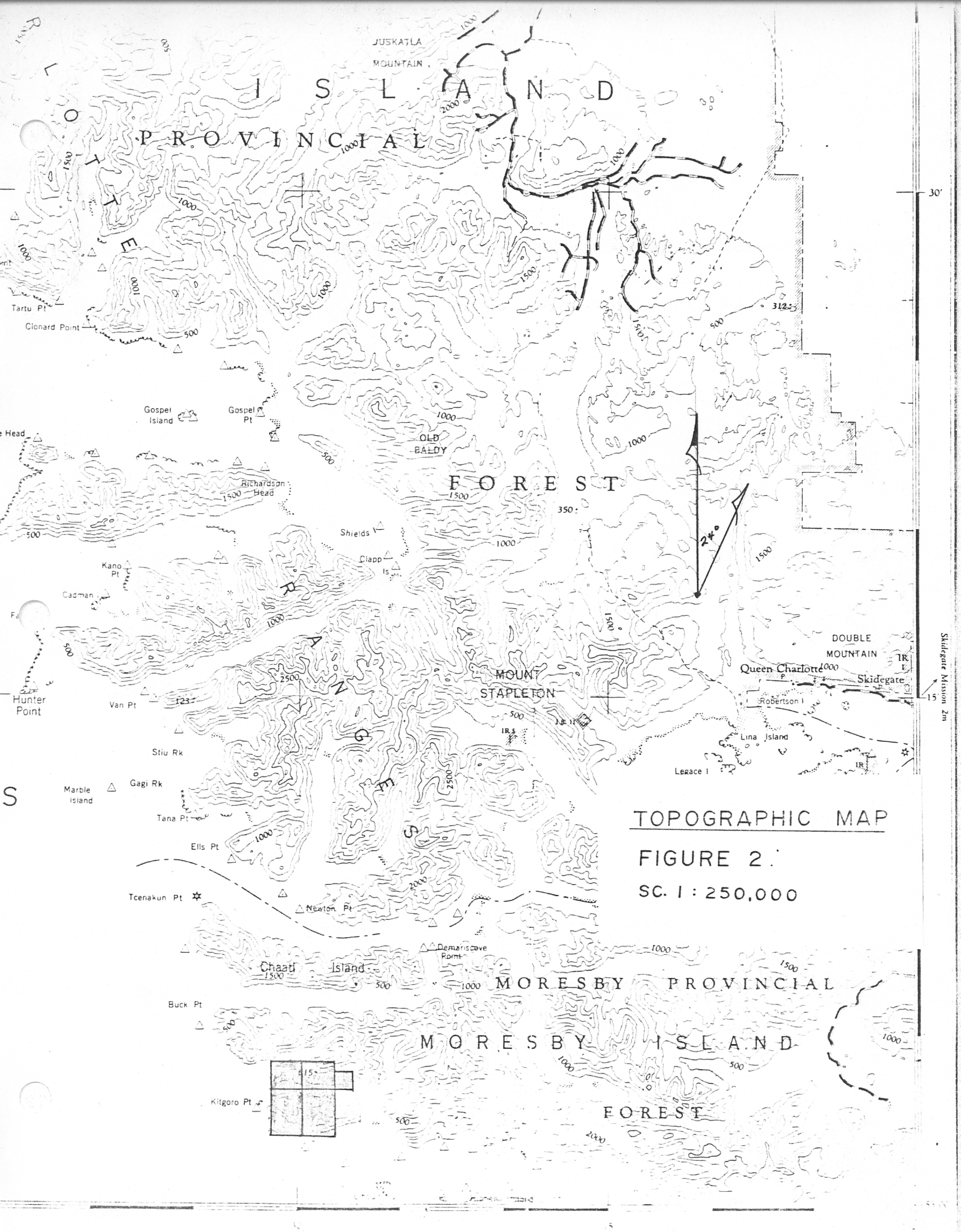
In May, a grid was put in and stream silt, soil and rock chip geochem samples were collected at the 30-metre intervals along lines spaced at 50 and 100 metres. These results outlined several geochemical anomalies which were followed up in June and July. This follow-up work entailed staking an additional claim, detailed geological mapping, lithogeochem resampling of anomalies, soil profiling and reconnaissance work in other areas on the property.

The purpose of this report is to summarize work completed both prior to and during the 1980 summer field season. The results will be discussed and summarized and recommendations made for future work.

LOCATION MAP

FIGURE 1.

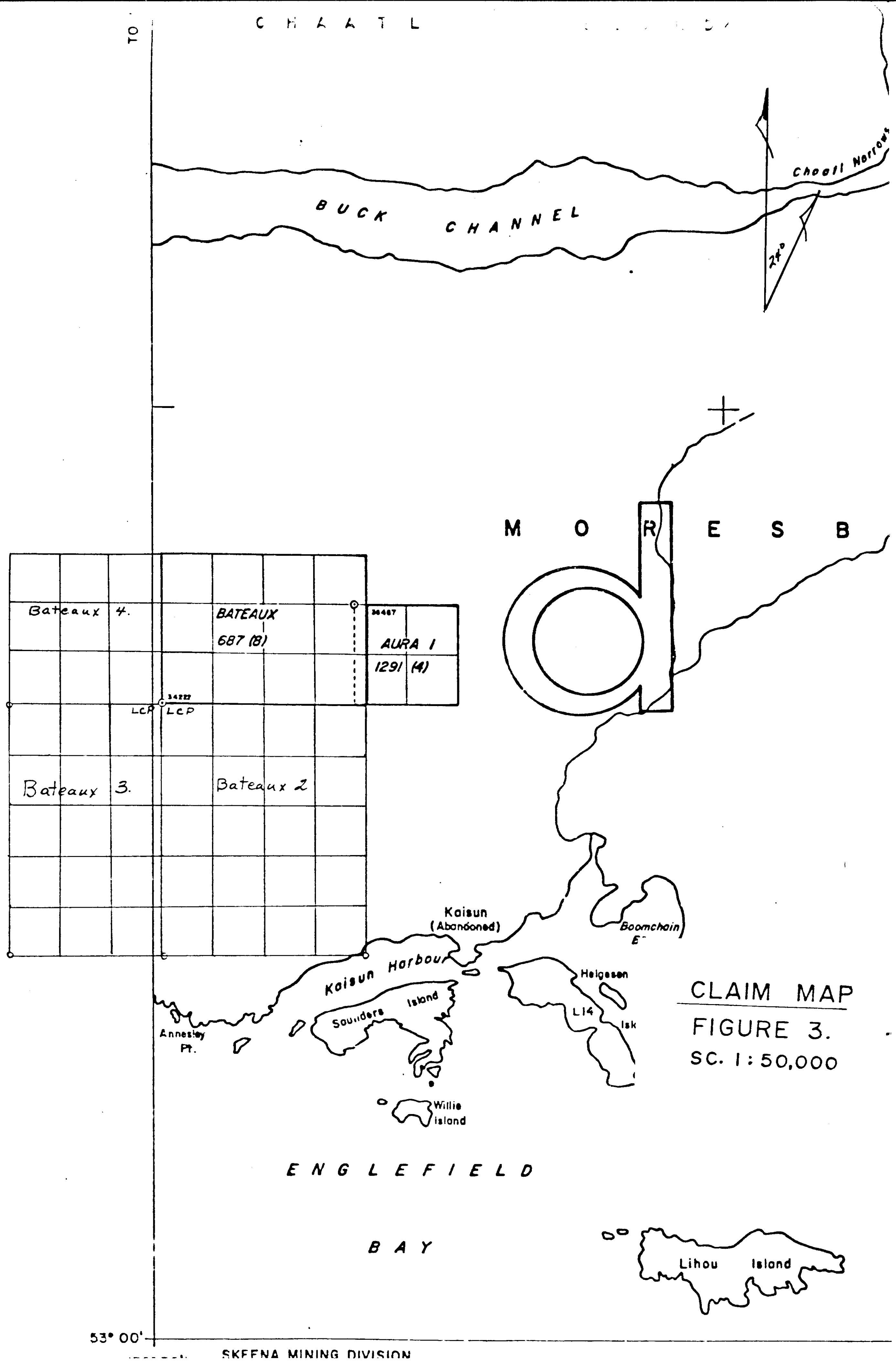
SC. 1in = 60 mi



TOPOGRAPHIC MAP

FIGURE 2.

SC. 1 : 250,000



CLAIM MAP
FIGURE 3.
SC. 1:50,000

SKEENA MINING DIVISION

PROPERTY, LOCATION, AND ACCESS

The Bateaux Claims are located on the west coast of Moresby Island on Kitgoro Inlet (Figs. 1, 2 & 3). The property consists of five claims comprising 60 units in the Skeena Mining Division: N.T.S. 103F/1W, 53°04'N x 132°29'W.

Bateaux 687	12 units due August 3, 1980
Bateaux 2 1855	20 units due November 1, 1980
Bateaux 3 1856	15 units due November 1, 1980
Aura 1291	4 units due April 17, 1980
Bateaux 4	9

The property is accessible by helicopter from Sandspit or by boat to Kitgoro Inlet.

The Bateaux Claims are located on the extreme western edge of the Insular Tectonic Belt. Elevations here range from 0 to 2,300 feet above sea level. Steep slopes and bluffs restrict the workable area and lend to generally rugged and treacherous terrain.

The climate is cool and damp all year round and frequently fog and rain worsen working conditions and prevent helicopter access. Temperatures range between 10 and 24 degrees Celsius in the daytime and between 5 and 15 degrees at night. The vegetation consists of mature stands of large hemlock, spruce and cedar in the valleys. The ridges and hilltops are wooded with smaller stands, and saddle areas are generally covered by stunted and twisted trees.

PREVIOUS WORK

The Bateaux area was first examined by Gord Richards on March 20, 1979 after stream sediment anomalies had initiated the original staking of the claims. Follow-up stream sediment sampling, rock chip sampling and recon geology led Mr. Richards to stake Bateaux 2 and 3. An agreement to option the ground from Mr. Richards was reached on December 14, 1979.

Preliminary examination of the claims was carried out by J. S. Vincent and G. R. Cooke. This work entailed recon mapping and geochem sampling in April and August of 1979. A value of 485 ppb gold was returned April and the second more detailed survey yielded values ranging up to 4,850 ppb gold. It was on the basis of these anomalies that the claims were optioned.

PROGRAM - 1980

In May 1980, two 2-man camps were established under the supervision of P. Peto, project geologist. One camp was established on Kitgoro Inlet and the other at the 1,100 foot elevation on the Bateaux 2 claim. From these camps, 16,600 m of grid was laid out over the anomalies in the Bateaux and Bateaux 2 claims. The grid consisted of a north striking baseline and 15 picket lines running E-W at 100 metre intervals. Along these picket lines at 30 m intervals, rock chips, soil and stream silt samples were collected in conjunction with geological mapping at a scale of 1:5,000. A total of 1,095 geochem samples were collected comprised of 457 rock chips, 221 stream silts, and 417 soils.

On June 24th, a 2-man party returned to the claims to follow-up anomalies generated from the previous work, and the 9-unit Bateaux 4 claim was staked adjacent to Bateaux 1 and 3 claims to cover a possible extension of one of the anomalous zones. Extra E-W picket lines were run through the saddle area (150S-250N/420E-270W) at 50 m intervals and detailed outcrop sampling and geological mapping was done at a scale of 1:1,000. Mapping and sampling at this scale was also undertaken on "Anomaly C" at 55N-75N/46W-83W. A total of 24 silt, soil and rock chip samples were collected during two traverses along the coast on the south sides of Bateaux 2 and

Bateaux 3, as shown on Fig. 5 in the attempt to substantiate old anomalies. A total of 321 geochem samples were collected in this three-week period ending July 14. Of these samples there were 280 rock chips, 26 stream silts, and 15 soils.

GEOLOGY

Regional to Property

Figure 4 illustrates the regional geology in the area of the Bateaux property as compiled by Dr. A. Sutherland-Brown in Bulletin 54 of the B.C. Dept. of Mines. These maps indicate that the Upper Triassic Karmutsen volcanics underly most of the area, and suggest that exposures of the younger Kunga and Yakoun Formations occur to the south. However, property examination shows that the Kunga limestones are well-represented, and that both the Karmutsen and Kunga are cut by acidic syntectonic intrusives.

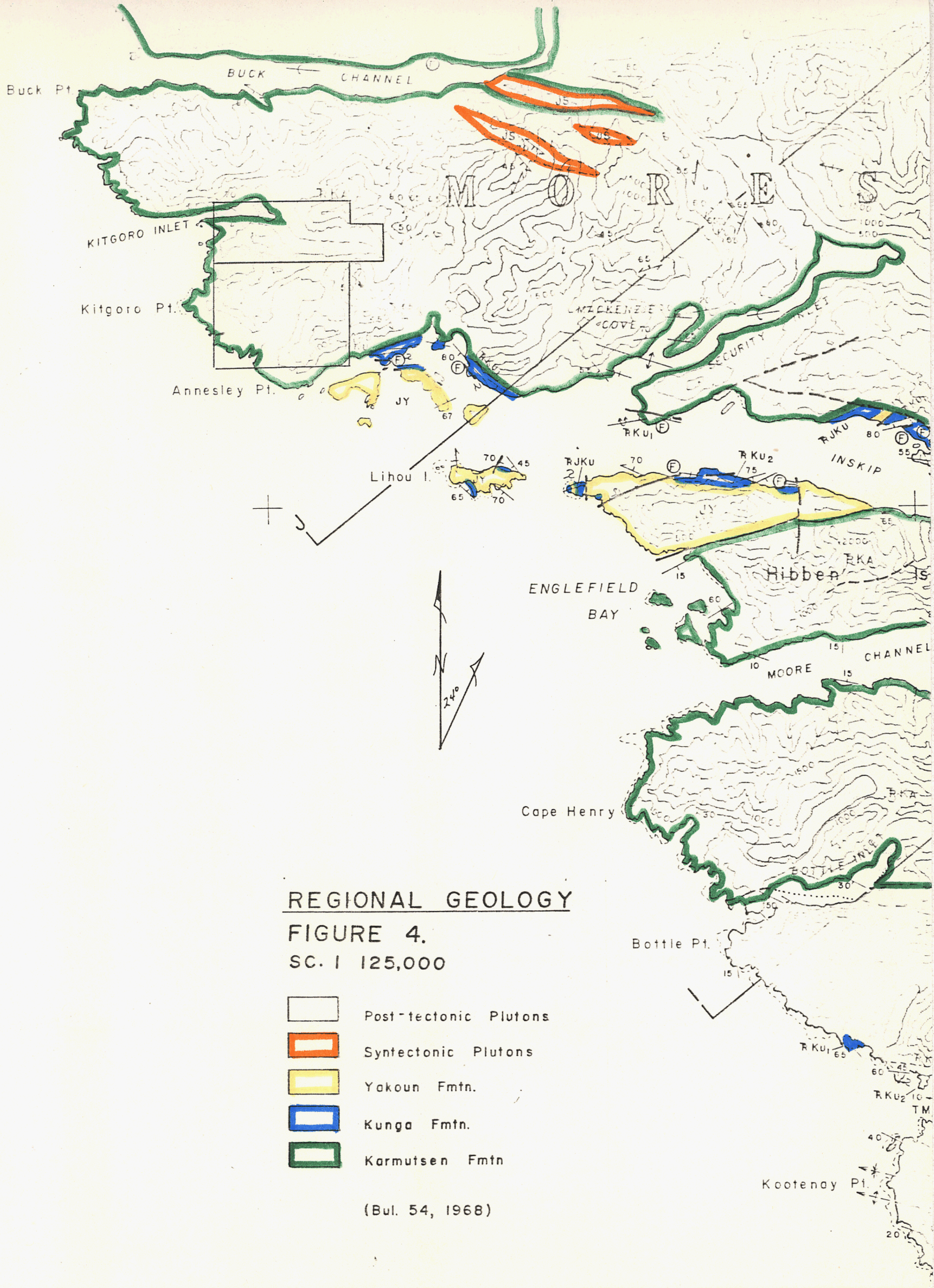
There are no major structural features shown on Brown's map, but it is evident that a strong northwesterly fault zone runs through the Kitgoro valley, and a prominent northeasterly-trending break cuts across the saddle area. The former appears to be the northwesterly extension of the fault zone shown on Brown's map just south of Security Inlet.

The table of formations accompanying Fig. 4 illustrates the relative ages of the formations in the Islands, and those encountered on the property.

The Triassic Karmutsen volcanics are overlain by the Upper Triassic to Jurassic Kunga limestones and argillites, and both are intruded by plutonic rocks which range in composition from diorite to granite. It is probable that these rocks belong to Brown's syntectonic group of intrusives.

The limestones mapped along the south side of the Kitgoro valley vary from massive grey units several meters thick to limey argillaceous beds. It may be that these beds are inter-lava sediments which fall within the total Karmutsen section, since they are in contact above and below with Karmutsen basalts. On the other hand, the massive thicker limestones observed on the north side of the Kitgoro valley appear to belong to the Kunga Formation, and occupy this relative position because the ridge forming the north side of the valley may be a down-faulted block.

Fine grained prophyritic sills and dikes were first observed along the south side of the valley, and preliminary sampling returned values ranging



REGIONAL GEOLOGY
FIGURE 4.
SC. 1 125,000

[illegible] MASSET FORMATION: subaerial basalt flows and breccias, rhyolite ash flows, lesser dacite

TM - Undivided Masset Formation

Divided Tartu Facies

TMc - Basalt member

TMb - Rhyolite member

TMa - Mixed member

Hypabyssal Equivalents

TMd - Feldspar porphyry

TMe - Gabbro-diabase

CRETACEOUS

QUEEN CHARLOTTE GROUP (KS, KHo, KHA)

KS | SKIDEGATE FORMATION: shaly siltstone, feldspathic sandstone, calcareous siltstone

[illegible] | HONNA FORMATION: conglomerate with granitic cobbles, arkosic grits, minor shale

ALBIAN-TURONIAN

KHA | HAIDA FORMATION: green glauconitic and grey sandstone, grey silty shale and siltstone, buff calcareous siltstone

NEOCOMIAN

KL | LONGARM FORMATION: dark grey calcareous siltstone and fine lithic greywacke, angular fine conglomerate, minor volcanic rocks

VANCOUVER GROUP (TRKA, TRKU, JKU, JM, JY)

JURASSIC

BAJOCIAN-CALLOVIAN

JY | YAKOUN FORMATION: porphyritic andesite agglomerate and flows, calcareous scoraceous lapilli tuff, volcanic sandstone and conglomerate, minor tuffaceous shale, coal

PLIENSBACHIAN-TOARCIAN

JM | MAUDE FORMATION: grey blocky argillite and shale, grey green lithic sandstone

JURASSIC AND TRIASSIC

KARNIAN-SINEMURIAN

TRJKU | KUNGA FORMATION: massive grey limestone, flaggy black limestone, flaggy black argillite-undivided

JKU | Flaggy black argillite member, minor limestone

TRKU | Limestone members-undivided

TRKU2 | Flaggy black limestone member, minor argillite

TRKU1 | Massive grey limestone member

TRIASSIC

KARNIAN AND OLDER

TRKA | KARMUTSEN FORMATION: basalt massive flows, pillow lavas, pillow breccia and tuff, related sills, minor interlava limestone, volcanic sandstone and shale, amphibolitized equivalents

---

PLUTONIC ROCKS

CRETACEOUS AND TERTIARY

KTP | POST-TECTONIC PLUTONS: quartz monzonite, granite, granodiorite, quartz diorite

JURASSIC ?

JS | SYNTECTONIC PLUTONS: hornblende diorite, quartz diorite

JSM | MIGMATITE: mixed hornblende diorite and amphibolite up to 4,000 ppb gold and 1,500 ppm arsenic. Further investigation showed these acid intrusives to be consistently anomalous and to be closely associated with the siliceous zones discovered at higher elevations.

A larger mass of intrusive rock ranging in composition from granitic to dioritic underlies the major hill on Bateaux 3, but its relationship to the dikes is not understood at this time.

The major areas of interest outlined at present are the silicified zones which contain veins and stockworks of calcedonic quartz. Gold and arsenic values range to 3,040 ppb and 4,500 ppm respectively, and two specimens returned values of .132 and .108 ounces of gold per ton.

The description of rock types which follows recognizes a variety of felsites which occur in the zones of interest. Petrographic and analytical work is in progress to obtain a better understanding of these rocks, and hopefully determine their relationship to the mineralizing process. The term "felsite" as used here refers to a very fine-grained rock with intrusive affinites and acid composition.

Rock Units:

Fine Crystalline Felsite

The crystalline felsite is the most common and is characterized by a fine crystallinity which is sometimes cherty in appearance. The fresh surface is light green-blue to brown, and weathers to a buff colour. The rock is generally fractured and laced with micro veinlets of quartz, limonite and less commonly chlorite. Pyrite, when present, occurs as fine disseminations. Around quartz veining and stringing zones hydrothermal alteration can be seen.

Areas such as these have numerous quartz veins and the rock possesses a gritty, bleached appearance (upper saddle). The fresh surfaces are pale green, and heavy fracturing with limonite coatings and quartz filling are usual. Breccias in this unit consisting of Karmutsen and felsite fragments are usually found in lineaments of near fault boundaries and contacts with the Karmutsen.

Granitic Felsite

Outcrops of granitic felsite are usually found in association with Karmutsen and granite units on the west part of the grid. The fresh surface is light to medium brown or green and weathers to a rusty buff white. Medium grained (1 - 2mm) crystalline feldspar and quartz are the major consituents with little or no biotite or hornblende. Pyrite is an accessory mineral commonly found as discrete grains in the rock. Limonite and chlorite are sometimes found with quartz filling small microfractures, but this is not widespread.

Both gradational and sharp contacts between granitic felsite, granite, and siliceous crystalline felsite have been noted, though no fault contacts were observed. Small dykes of the granitic felsite cut Karmutsen blocks within the granite.

Foliated Felsite

Outcrops of foliated felsite are found throughout the north half of the grid. This unit is very similar to the crystalline felsite unit except that a foliated texture is well-developed. The rock is very fine-grained and siliceous, and contains mostly feldspar and quartz with little or no biotite or hornblende. Pyrite is sometimes present as discrete or disseminated grains. The fresh surface is light green or grey, and it weathers to a buff white. The foliation is made up of interlaminated, very thin cherty bands or stringers (0.5mm), and partings along these planes highlight the foliation. This unit commonly shows fine microfractures filled with quartz, limonite, and sometimes chlorite (see P. Peto 15W-50S).

Contacts between foliated felsite and crystalline felsite are usually gradational, whereas contacts with foliated felsite and Kunga and granite are sharp. Fault contacts between foliated felsite and Karmutsen rocks occur at 75N/83W and 72N/75W.

Cherty Felsite

The Cherty Felsite unit is found in the lower saddle area of the grid and stretches from the "lower forty" at 250S to the south wall of Kitgoro valley at 350N. Some rocks termed fine crystalline felsites are indeed cherty in texture, but their mineralogy is different from the felsites found in the saddle; thus a distinction is made between the two.

The most distinctive characteristic of the cherty felsite is their pink to grey weathering and light grey to dark black fresh surface (see Peto 50S/0E, 250N/210E). No minerals other than fine grains of pyrite are discernable in the aphanitic matrix. Felsite breccias consisting of angular to subrounded chert fragments in a similar matrix are common and quartz filled fractures and microfractures are found throughout the unit.

No contacts other than sharp boundaries with small Karmutsen bodies have been found. The cherty felsites are generally bounded by major slope changes and lineaments in the saddle area and seem to be restricted to the lower saddle area.

Hybrid Felsite

Hybrid felsites occur in two restricted zones in the lower saddle where they border the knoll of cherty felsites between lines 50N and 250S.

A variety of rock types make up this group, and their main diagnostic characteristic is the heavily chloritized blue-green colour. Their textures range from fine crystalline and siliceous with occasional flowbanding, to a blue, coarse crystalline rock with plagioclase, quartz eyes and chlorite. All of these rocks weather brown or rust, and pyrite is common in grains and blebs. The rocks show no fine fracturing or bleaching and appear fresher than the other felsites. Two different types of breccia have been noted in these zones. One consists of a light green, fine, crystalline felsite fragment in a very chlorite-rich matrix. The other has fragments of white felsite in a chlorite-rich plag-quartz matrix. Coarse calcite blebs occur in these rocks along with large fresh plagioclase laths and coxcomb boxwork quartz veins. No contacts with any of the other varieties were observed.

Granite

The granitic rocks occur on the ridge to the west of the grid. The rock is white to green, weathers white, and consists of coarse-grained euhedral plagioclase, quartz, hornblende, biotite and pyrite. Finer-grained phases are found grading into granitic felsite, and also the granite becomes heavily chloritized in places near the lower saddle (P. Peto 20N/0W). Karmutsen blocks are commonly found in the granite and are sometimes cut by granitic and felsite dykes. Sharp contacts have been noted between granite and foliated felsite and crystalline felsites.

Karmutsen Volcanics

The Karmutsen mafic volcanics are the second most abundant rock type found on the property, and consist of predominantly fine to coarse-grained amphibolites and foliated schists (P. P. 15N/18E). They are generally a green crystalline quartz-poor rock, with varying amounts of disseminated pyrite. Chlorite and epidote are common alteration minerals. Vesicular flows or flowtops have been noted at 200W/210E, and purple flows with calcite amygdales at 75N/200E. Sharp contacts have been noted between Karmutsen and most felsites, and many contacts have fault planes along them. Reaction rims of epidote are evident in some Karmutsen blocks within the granite.

Kunga Limestone

Kunga limestone is found only in the north and northeast parts of the grid, and consists of a black fine-grained fetid micritic limestone. In places it is heavily stockworked with calcite and quartz veins and veinlets. Argillaceous units and beds are common intercalated with the massive beds.

GEOCHEMISTRY

The geochemical surveys on the Bateaux entailed the collecting of rock chip, soil and stream silt samples on both detailed and reconnaissance scales. In May 1980, all three types of samples were collected along 100-metre spaced grid lines. Stream silt samples were collected where streams or dried streambeds crossed the lines, while rock chip and soil samples were taken at 30-metre intervals along the lines.

Rock samples were chipped over a 5 m - 10 m square area of outcrop around the station, bagged in paper geochem envelopes, and numbered. The outcrop was mapped on the rock type described as to texture, mineralization and structure. If no outcrop was found near the station, chips were sampled from local float and noted accordingly. This procedure was followed in the June and July follow-up sampling and mapping. A total of 737 rock chip samples were collected, 457 in May and 280 in June and July.

Stream silt samples were collected along the lines where they crossed streams. Samples were taken near the centre of the streams, thus minimizing soil or bank contamination. Fine sand and silt made up most of the material collected.

Soil samples taken at 30 m intervals along grid lines were collected using a grubhoe or small shovel. The B horizon was sampled in over 90% of the samples and the A horizon and Undifferentiated horizon made up the rest. Soil profiles were sampled in June and July in an attempt to gain information as to the distribution of metals between horizons. Four main horizons were observed: the A Horizon, AE horizon, B horizon and C horizon. The dark brown A horizon varies from 2 to 18 inches thick, and consists of 40 - 90% growing and decaying moss and organics, 5 - 20% clay, 5 - 20% silt and little or no sand.

The greyish AE horizon varies from 2 to 10 inches thick and consists of 30 - 40% clay, 30 - 40% silt, 10 - 30% sand with some gravel. The B horizon is most charcterized by its lighter or rusty yellow brown colour. It is usually made up of 10 - 50% clay, 10 - 30% sand, 20 - 40% silt, 10% gravel and is always greater than 6 inches thick. The lowermost

C horizon usually is composed of equal components of clay, silt, sand and gravel. Its colour is usually brown but sometimes takes on the colour of the host rock or rocks in the area.

Stream silt, soil and profile soil notes were recorded on columned data sheets for later computer compiling of data. Analytical work was carried out by Acme Analytical Laboratories in Vancouver. The rock chip samples were crushed and pulverized, and the silt and soils sieved to obtain the -80 mesh fraction for analysis. Total digestion in aqua regia was followed by atomic absorption.

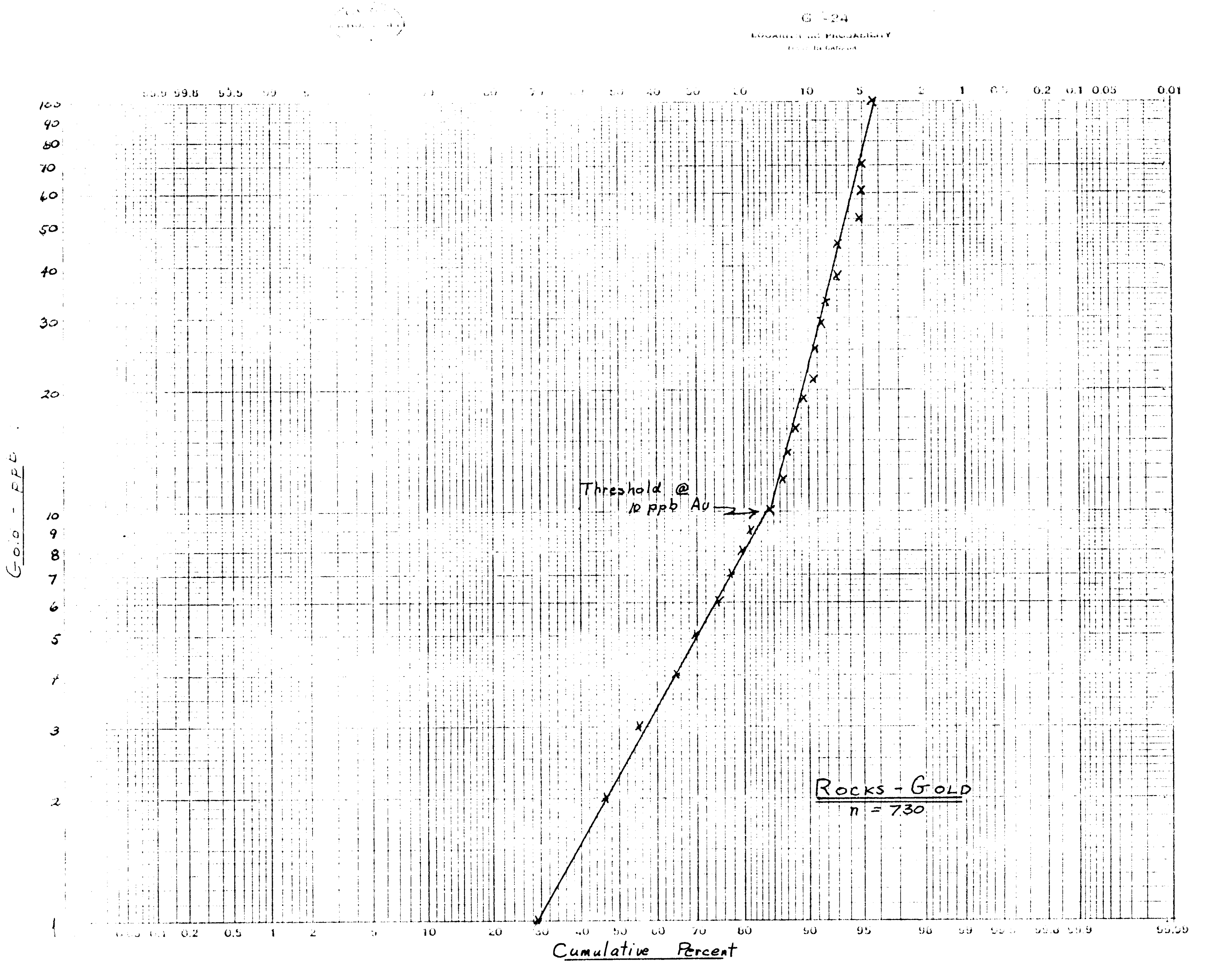
The analytical results for gold and arsenic in soils and silts, along with various physical parameters of the samples, were key-punched for computer processing, and a program at U.B.C. was utilized to establish sample population, thresholds, and anomalous values. The results for rock were plotted manually. The following cumulative probability plots illustrate these results, and the tabulation summarizes the descriptive statistics and threshold values.

DESCRIPTIVE STATISTICS

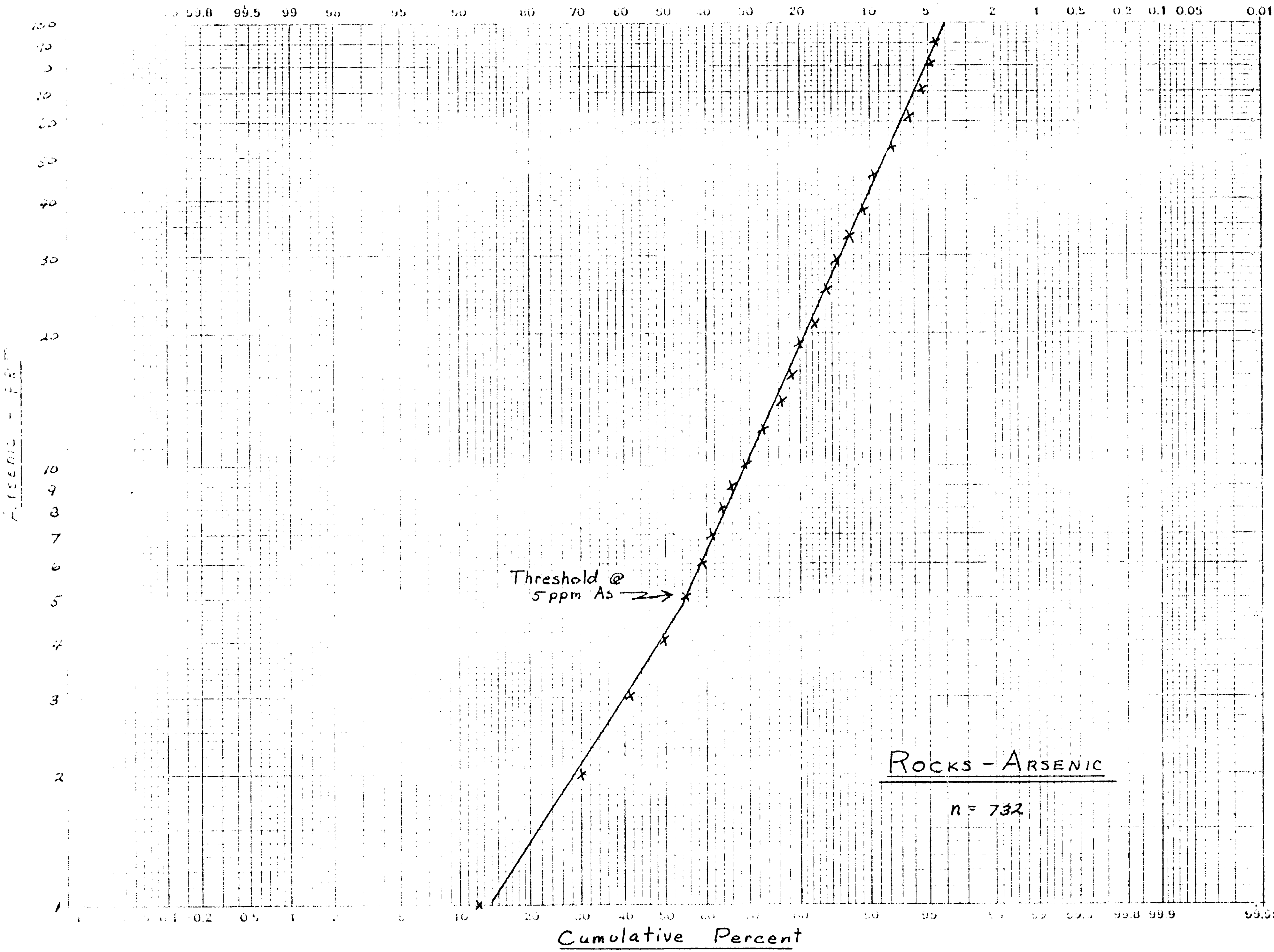
		Mean	Variance	Standard Deviation	N
Arsenic ppm	Soils	26.8	1915	43.8	417
	Silts	47.6	11540	107.4	247
	Rocks	4.0	--	4.0	732
Gold ppb	Soils	10	2715	52.1	416
	Silts	9.8	424	20.6	243
	Rocks	4	--	6	730

THRESHOLDS FOR PROBABILITY PLOTS

Arsenic ppm	Soils	Probably anomalous > 5; definitely anomalous > 27
	Silts	Probably anomalous > 6; definitely anomalous > 42
	Rocks	Probably anomalous > 5
Gold ppb	Soils	Probably anomalous > 5
	Silts	Definitely anomalous > 8
	Rocks	Probably anomalous > 9



G-24
LOGARITHMIC PROBABILITY
Gold - ppb
Threshold @
10 ppb Au
Rocks - Gold
n = 730
Cumulative Percent

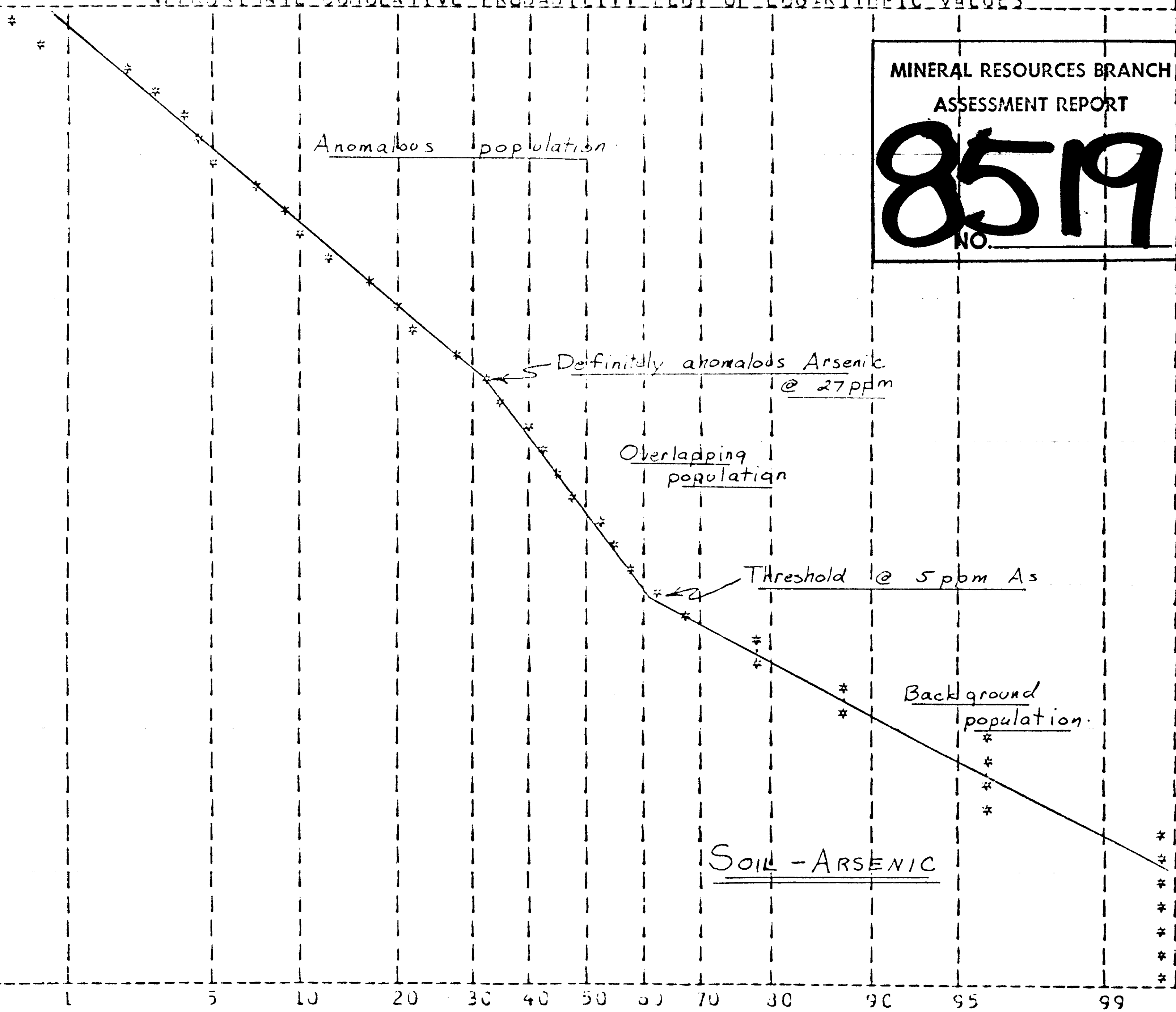

Threshold @
5 ppm As
Rocks - Arsenic
n = 732
Cumulative Percent

HISTOGRAMS AND CUMULATIVE PROB. PLOTS; FILE=BATEAUX/SOIL; MCN 24/11/80

VARIABLE NAME IS: AS

CELL	LOWER LIMIT	NO	CUMPCT	ARITH.LIM
1	2.45	1	0.2	281.3
2	2.38	2	0.7	238.2
3	2.30	5	1.9	201.7
4	2.23	3	2.6	170.8
5	2.16	5	3.8	144.6
6	2.09	2	4.3	122.5
7	2.02	3	5.0	103.7
8	1.94	8	7.0	87.83
9	1.87	7	8.6	74.37
10	1.80	4	9.6	62.98
11	1.73	12	12.5	53.33
12	1.65	16	16.3	45.16
13	1.58	16	20.1	38.24
14	1.51	9	22.3	32.38
15	1.44	26	28.5	27.42
16	1.37	16	32.4	23.22
17	1.29	14	35.7	19.66
18	1.22	15	39.3	16.65
19	1.15	14	42.7	14.10
20	1.08	14	46.0	11.94
21	1.00	9	48.2	10.11
22	0.933	16	52.0	8.562
23	0.860	9	54.2	7.250
24	0.788	14	57.6	6.139
25	0.716	18	61.0	5.199
26	0.644	25	67.0	4.402
27	0.571	42	77.9	3.728
28	0.499	0	77.9	3.157
29	0.427	38	87.1	2.673
30	0.355	0	87.1	2.264
31	0.283	39	96.4	1.917
32	0.210	0	96.4	1.623
33	0.138	0	96.4	1.375
34	0.659E-01	0	96.4	1.164
35	-0.627E-02	15	100.0	0.9857
36	-0.785E-01	0	100.0	0.8347
37	-0.151	0	100.0	0.7068
38	-0.223	0	100.0	0.5985
39	-0.295	0	100.0	0.5068
40	-0.367	0	100.0	0.4292
41	-0.440	0	100.0	0.3634

APPROXIMATE CUMULATIVE PROBABILITY PLOT OF LOGARITHMIC VALUES

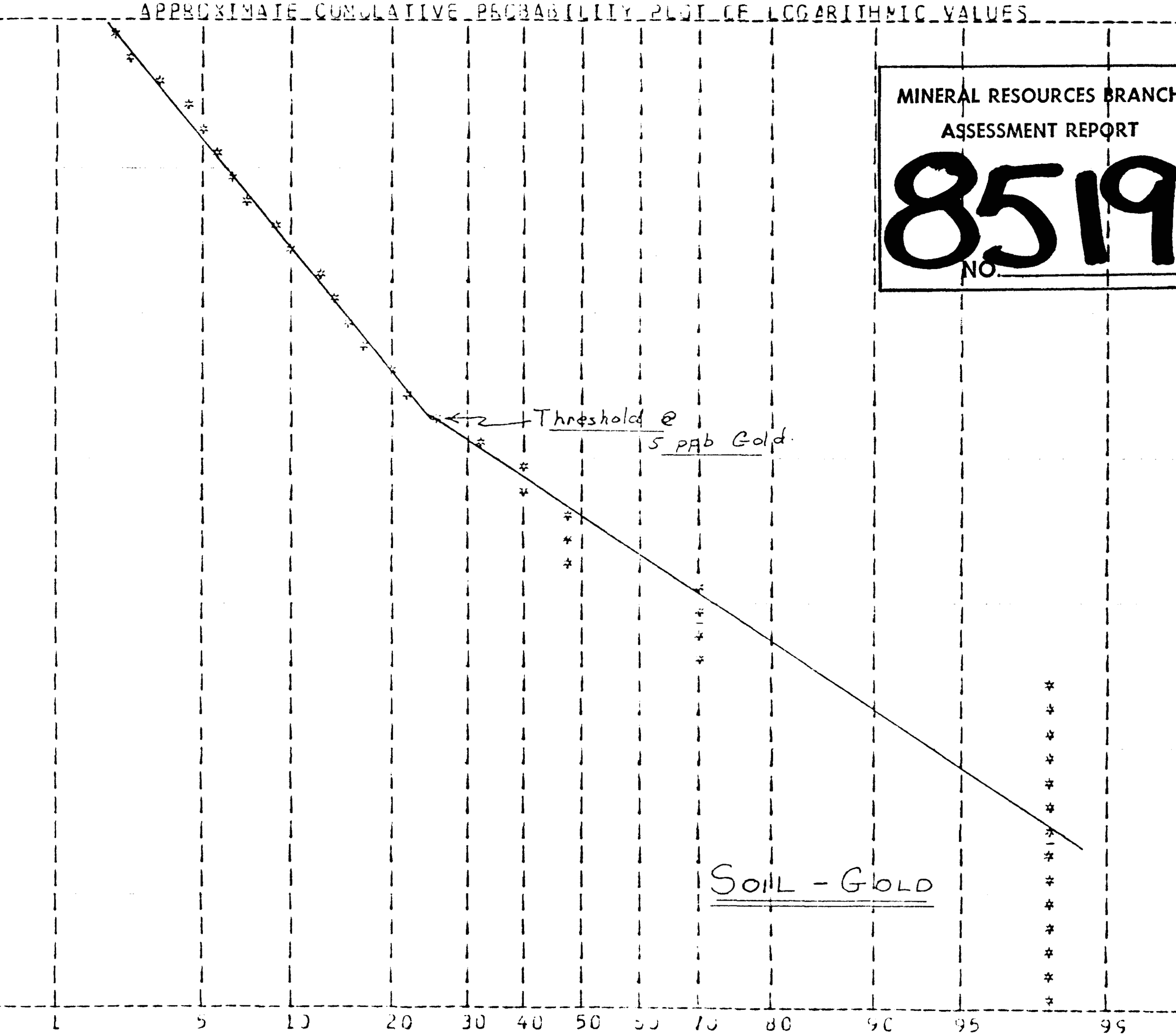


HISTOGRAMS AND CUMULATIVE PROB. PLOTS, FILE-...
SOIL

VARIABLE NAME IS: AU

CELL	LOWER LIMIT	N	CUMPCT	ARITH.LIM
1	1.81	9	2.2	64.20
2	1.74	1	2.4	54.89
3	1.67	4	3.4	46.93
4	1.60	3	4.1	40.12
5	1.54	4	5.0	34.30
6	1.47	1	5.3	29.32
7	1.40	4	6.3	25.07
8	1.33	3	7.0	21.43
9	1.26	9	9.1	18.32
10	1.19	5	10.3	15.67
11	1.13	9	12.5	13.39
12	1.06	3	13.2	11.45
13	0.991	11	15.9	9.786
14	0.923	3	16.6	8.369
15	0.855	12	19.5	7.155
16	0.787	13	22.6	6.117
17	0.718	16	26.4	5.229
18	0.650	25	32.5	4.471
19	0.582	30	39.7	3.822
20	0.514	0	39.7	3.268
21	0.446	33	47.6	2.794
22	0.378	0	47.6	2.388
23	0.310	0	47.6	2.042
24	0.242	87	68.5	1.746
25	0.174	0	68.5	1.492
26	0.106	0	68.5	1.276
27	0.378E-01	0	68.5	1.091
28	-0.303E-01	123	98.1	0.9326
29	-0.984E-01	0	98.1	0.7973
30	-0.166	0	98.1	0.6816
31	-0.235	0	98.1	0.5828
32	-0.303	0	98.1	0.4982
33	-0.371	0	98.1	0.4259
34	-0.439	0	98.1	0.3642
35	-0.507	0	98.1	0.3113
36	-0.575	0	98.1	0.2662
37	-0.643	0	98.1	0.2275
38	-0.711	0	98.1	0.1945
39	-0.779	0	98.1	0.1663
40	-0.847	0	98.1	0.1422
41	-0.915	0	98.1	0.1216

APPROXIMATE CUMULATIVE PROBABILITY PLOT OF LOGARITHMIC VALUES

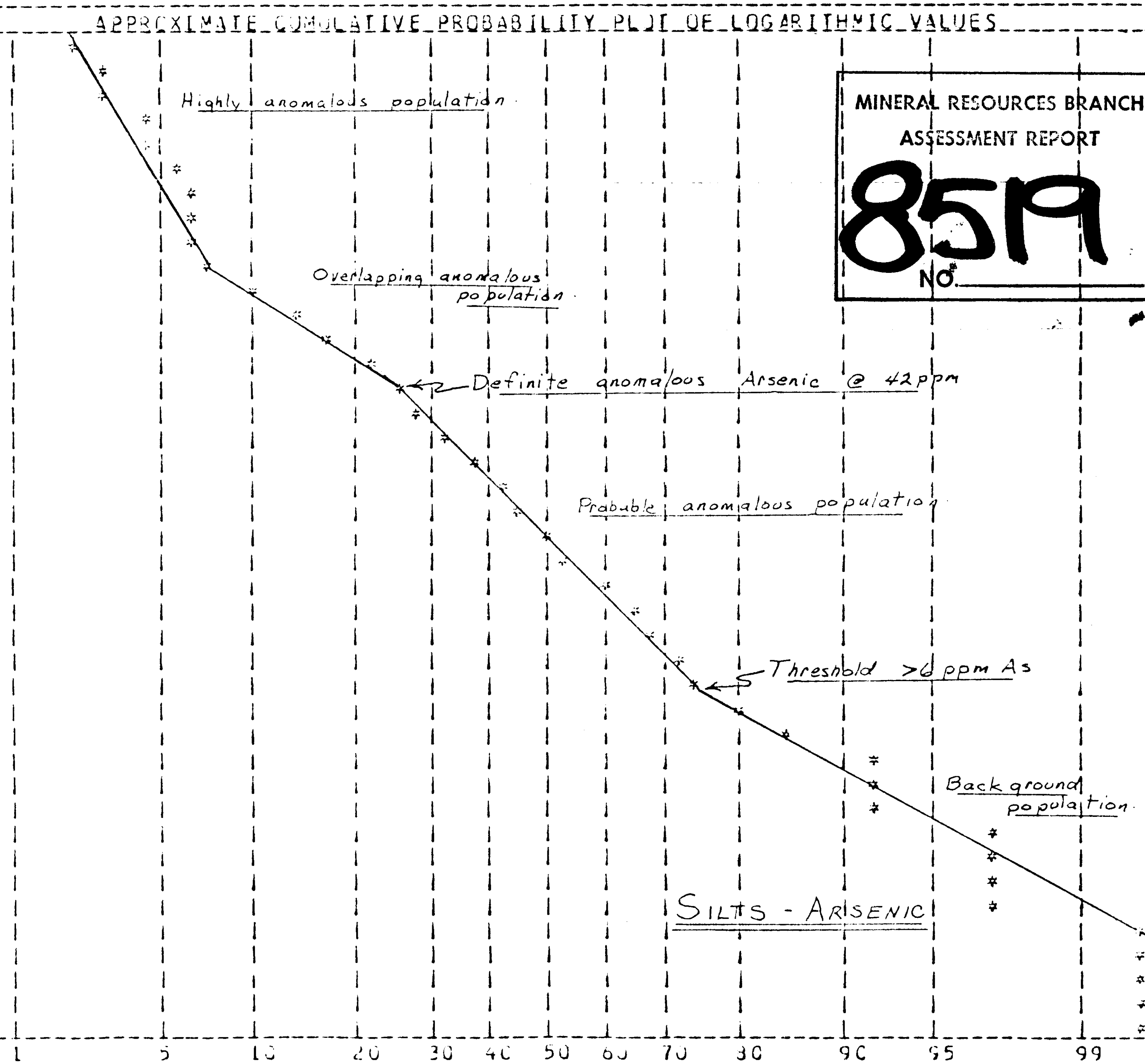


HISTOGRAMS AND CUMULATIVE PROB. PLOTS; FILE=BATEAUX/SEDS; MCN 24/11/80

(SILTS)

VARIABLE NAME IS: AS

CELL	LOWER LIMIT	NO	CUMPCT	ARITH.LIMIT
1	2.69	5	2.0	492.9
2	2.62	2	2.8	413.3
3	2.54	0	2.8	346.6
4	2.46	3	4.0	290.6
5	2.39	0	4.0	243.7
6	2.31	3	5.3	204.4
7	2.23	3	6.5	171.4
8	2.16	0	6.5	143.7
9	2.08	0	6.5	120.5
10	2.00	1	6.9	101.0
11	1.93	7	9.7	84.73
12	1.85	11	14.2	71.05
13	1.78	8	17.4	59.58
14	1.70	11	21.9	49.96
15	1.62	11	26.3	41.89
16	1.55	5	28.3	35.13
17	1.47	12	33.2	29.46
18	1.39	8	36.4	24.70
19	1.32	14	42.1	20.71
20	1.24	8	45.3	17.37
21	1.16	10	49.4	14.56
22	1.09	10	53.4	12.21
23	1.01	17	60.3	10.24
24	0.934	11	64.8	8.588
25	0.857	9	68.4	7.201
26	0.781	7	71.3	6.038
27	0.704	6	73.7	5.063
28	0.628	14	79.4	4.246
29	0.551	14	85.0	3.560
30	0.475	18	92.3	2.986
31	0.399	0	92.3	2.504
32	0.322	0	92.3	2.099
33	0.246	12	97.2	1.760
34	0.169	0	97.2	1.476
35	0.927E-01	0	97.2	1.238
36	0.162E-01	0	97.2	1.038
37	-0.608E-01	7	100.0	0.8704
38	-0.137	0	100.0	0.7295
39	-0.213	0	100.0	0.6120
40	-0.290	0	100.0	0.5132
41	-0.366	0	100.0	0.4303

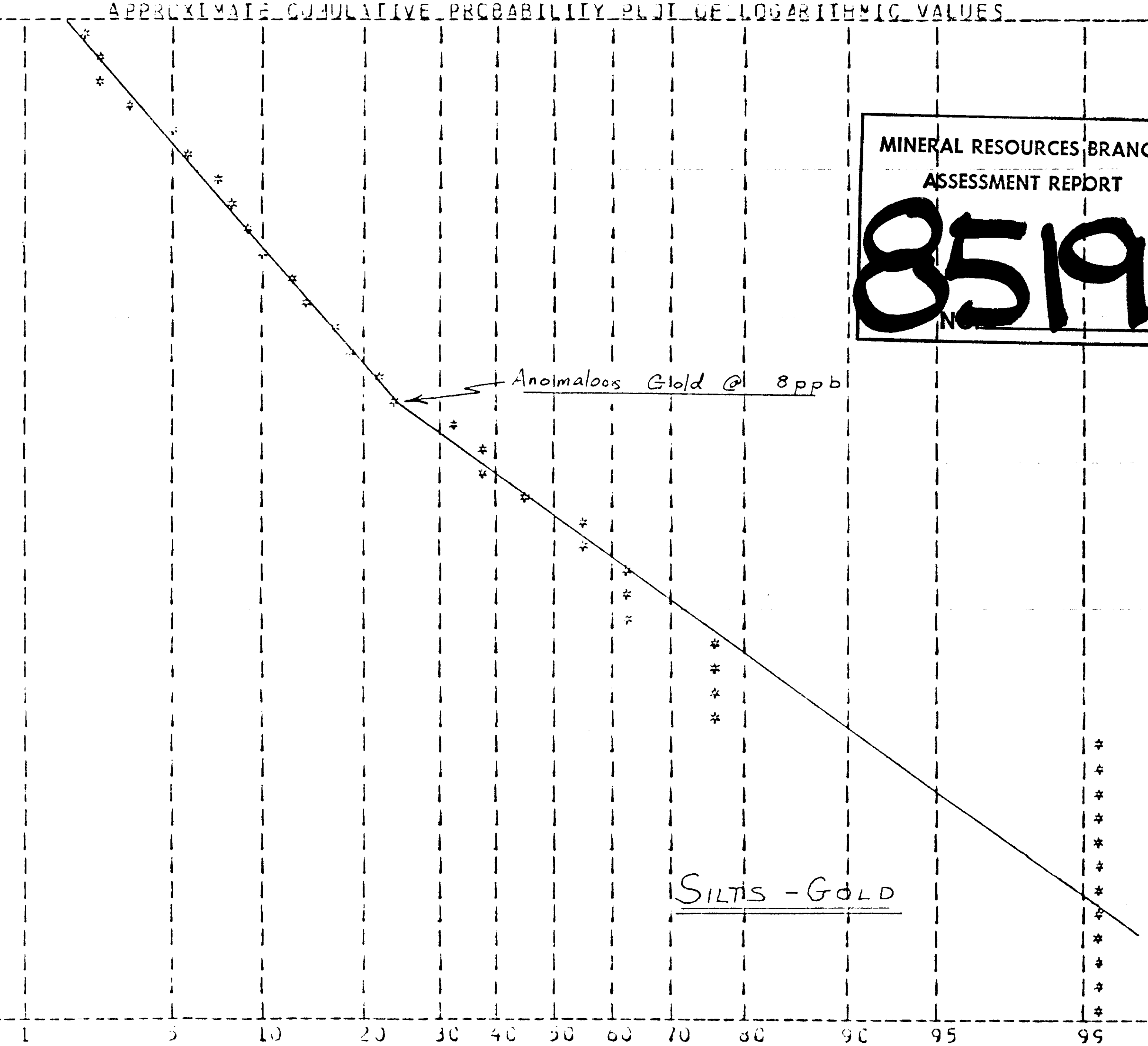


HISTOGRAMS AND CUMULATIVE PROB. PLOTS; FILE=BATEAUX/SEDS; MLF 24/11/80
(SILTS)

VARIABLE NAME IS: AU

CELL	LOWER LIMIT	NO	CUMPCT	ARITH. LIM
1	1.91	5	2.1	80.88
2	1.84	1	2.5	69.37
3	1.77	0	2.5	59.50
4	1.71	2	3.3	51.04
5	1.64	3	4.5	43.78
6	1.57	2	5.3	37.55
7	1.51	4	7.0	32.21
8	1.44	2	7.8	27.63
9	1.37	3	9.1	23.70
10	1.31	3	10.3	20.33
11	1.24	4	11.9	17.43
12	1.17	4	13.6	14.95
13	1.11	7	16.5	12.83
14	1.04	4	18.1	11.00
15	0.975	11	22.6	9.437
16	0.908	4	24.3	8.095
17	0.842	21	32.9	6.943
18	0.775	13	38.3	5.955
19	0.708	0	38.3	5.108
20	0.642	14	44.0	4.382
21	0.575	25	54.3	3.758
22	0.508	0	54.3	3.224
23	0.442	18	61.7	2.765
24	0.375	0	61.7	2.372
25	0.308	0	61.7	2.034
26	0.242	33	75.3	1.745
27	0.175	0	75.3	1.497
28	0.108	0	75.3	1.284
29	0.419E-01	0	75.3	1.101
30	-0.248E-01	58	99.2	0.9445
31	-0.914E-01	0	99.2	0.8102
32	-0.158	0	99.2	0.6949
33	-0.225	0	99.2	0.5961
34	-0.291	0	99.2	0.5113
35	-0.358	0	99.2	0.4385
36	-0.425	0	99.2	0.3762
37	-0.491	0	99.2	0.3226
38	-0.558	0	99.2	0.2767
39	-0.625	0	99.2	0.2374
40	-0.691	0	99.2	0.2036
41	-0.758	0	99.2	0.1746

APPROXIMATE CUMULATIVE PROBABILITY PLOT OF LOGARITHMIC VALUES



DISCUSSION OF RESULTS

The combination of gold geochemistry in rocks and soils has outlined an anomalous zone across the saddle area which varies in width from 100 to 250 meters, and extends along a northeasterly strike for a sampled length of 700 meters. The limit of this area is defined by the 10 ppb Au contour and is outlined on Figures 5 and 9. Regional sampling on traverses off the measured grid suggests extensions along strike in both directions, but detailed sampling will be required to confirm this.

Bedrock sampling along the saddle grid at 100 x 30 meter intervals outlines an anomaly offset to the west by varying amounts, but roughly coincident. Figure 9 illustrates the configuration of this area as defined by the 10 ppb contour for gold which was established as the threshold for rock. A 100-meter width along a 400-meter strike length is fairly constant, and the zone is possibly open to the southwest. The north portion of the saddle grid, beyond that which is detailed in Fig. 6, contains an anomalous gold zone approximately 100 x 200 meters in size. It is offset 300 meters to the west of a possible northeasterly strike extension of the main saddle zone, and may be a) a separate isolated zone, or b) a faulted and displaced segment.

Detailed mapping and sampling of the saddle area is depicted in Fig. 6, and the geochemical gold values are outlined using the 10 ppb threshold value. The area defined by the total grid and detailed sampling is reasonably coincident, and the former possibly suggests a broader zone to the north where detailed work was not done. The detailed work did not extend north of L250N, and thus the anomalous area centered at 550N x 100W was not mapped.

The results of soil sampling are shown in Fig. 10. Values across the saddle are scattered and are not conducive to contouring. Spotty highs fall within the anomalous zone defined by the rock analysis, but also occur beyond L250N. North of L450N the slope drops rapidly and a portion of the spread of values are attributable to migration. There is, however, a coincidence with the northern rock anomaly.

Silt sampling produced results similar to those of the soils and does not appear to provide any significant indication of hidden mineralization in the grid area (Fig. 11). However, the approach does have application on a broader scale and appears to be effective in pointing out areas for follow-up. Using threshold values of 8 ppb gold and 42 ppm arsenic, there is a significant distribution of anomalous silts from various drainages over the claim group, as illustrated on Fig. 5. Values along the south side of Kitgoro valley range up to 25 ppb gold and 440 ppm arsenic, and are interpreted to reflect values located in bedrock up-slope ranging to 1900 ppb gold in zones of silicification. The north slope of Kitgoro valley requires follow-up above silt sample sites returning values of 15 ppb gold and 400 ppm arsenic.

Drainages on the south slope of the mountain on Bateaux 3 returned a number of anomalous gold values which also require follow-up.

Anomaly C, Fig. 7, represents a small area of scattered but strongly anomalous gold values in the area of 650N x 620W. The spread of values does not lend itself to contour interpretation, but rock values up to 0.132 oz. of gold per ton require that further detailed work be done in this area.

Rock chip sampling and mapping on the small detailed valley grid, Fig. 8, was carried out prior to the upper level work. Values here ranged up to 830 ppb gold and >1000 ppm arsenic.

In summary, the silt geochemistry has been effective in locating significant areas hosting anomalous gold values, and in pointing out other areas on the property which require follow-up. Values in the soil are useful where bedrock is not available, but the aspect of migration must be considered along with the nature of the material sampled. Rock geochemistry in conjunction with careful mapping is the most useful approach, and fortunately, a good 50 - 60% exposure is available. With a grubhoe, patience and perserverance, perhaps up to 75% of the bedrock is accessible.

To date, gold is the only metal of significance detected and analysis for silver has not indicated an appreciable association. Arsenic is a close companion but appears to enjoy a wider distribution in bedrock. Perhaps its most useful contribution is on a regional scale. Anomalous gold values have a definite affinity for silicification, as might be suspected, and the areas of specific interest in the saddle and "C" anomalies coincide with brecciated and silicified felsitic rocks. High values are produced by vein material which consists of layered chalcedonic silica with vuggy openings and channels, a general low-temperature type of material. The veins range in width from several inches to microscopic. Although oxidation and surface leaching is not particularly evident on the outcrop surface, a sawn specimen surface is well-oxidized and contains numerous tiny pits where sulphides, likely pyrite, has been leached out. Fracture surfaces are limonite coated as well, and it is reasonable to question as to whether or not appreciable leaching of near-surface gold values has taken place. Diamond drilling will be required to effectively answer such a question and evaluate the anomalous zones.

CONCLUSIONS AND RECOMMENDATIONS

Geochemical sampling of soil and bedrock, in conjunction with geological mapping, has outlined an area of brecciation and silicification with strongly anomalous gold and arsenic values which is approximately 200 x 700 meters in size. Silt sampling and property traverses suggest continuity of the zone along strike to the northeast and southwest. Silt sampling has also indicated other areas on the property which require follow-up and checking.

A program of geological mapping and bedrock sampling is recommended to define the limits of the known anomalous zones, and an induced polarization survey coupled with a proton magnetometer survey is suggested to locate areas of alteration and sulphide concentration.

Diamond drilling will be required to evaluate the targets.

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
J. S. VINCENT

COST STATEMENT

Personnel			
P. Peto	6 days at $162	$ 972	
P. Lickley	33 days at $70	2,310	
G. Beischer	33 days at $50	1,650	
I. Beck	21 days at $70	1,470	
G. Kuzniar	21 days at $50	1,050	$ 7,452
Camp Costs			
a) Food	114 man days at $14	$ 1,596	
b) Misc.	Fuels, supplies	900	$ 2,496
Transportation			
a) Airfares	8 at $150	$ 1,200	
b) Helicopters	28.35 hrs. @ $398	11,284	
c) Freight		384	$12,868
Expediting			$ 450
Analytical			
Assays and geochemical			$ 3,174
Supervision and Report at 12%			$ 3,172
Overhead at 12%			$ 3,553
		TOTAL	$33,166

J. S. Vincent, P. Eng.

PROFESSIONAL PROVINCE OF J. S. VINCENT BRITISH COLUMBIA ENGINEER

CERTIFICATE

I, John S. Vincent, P. Eng., of Vancouver, British Columbia do hereby certify that:

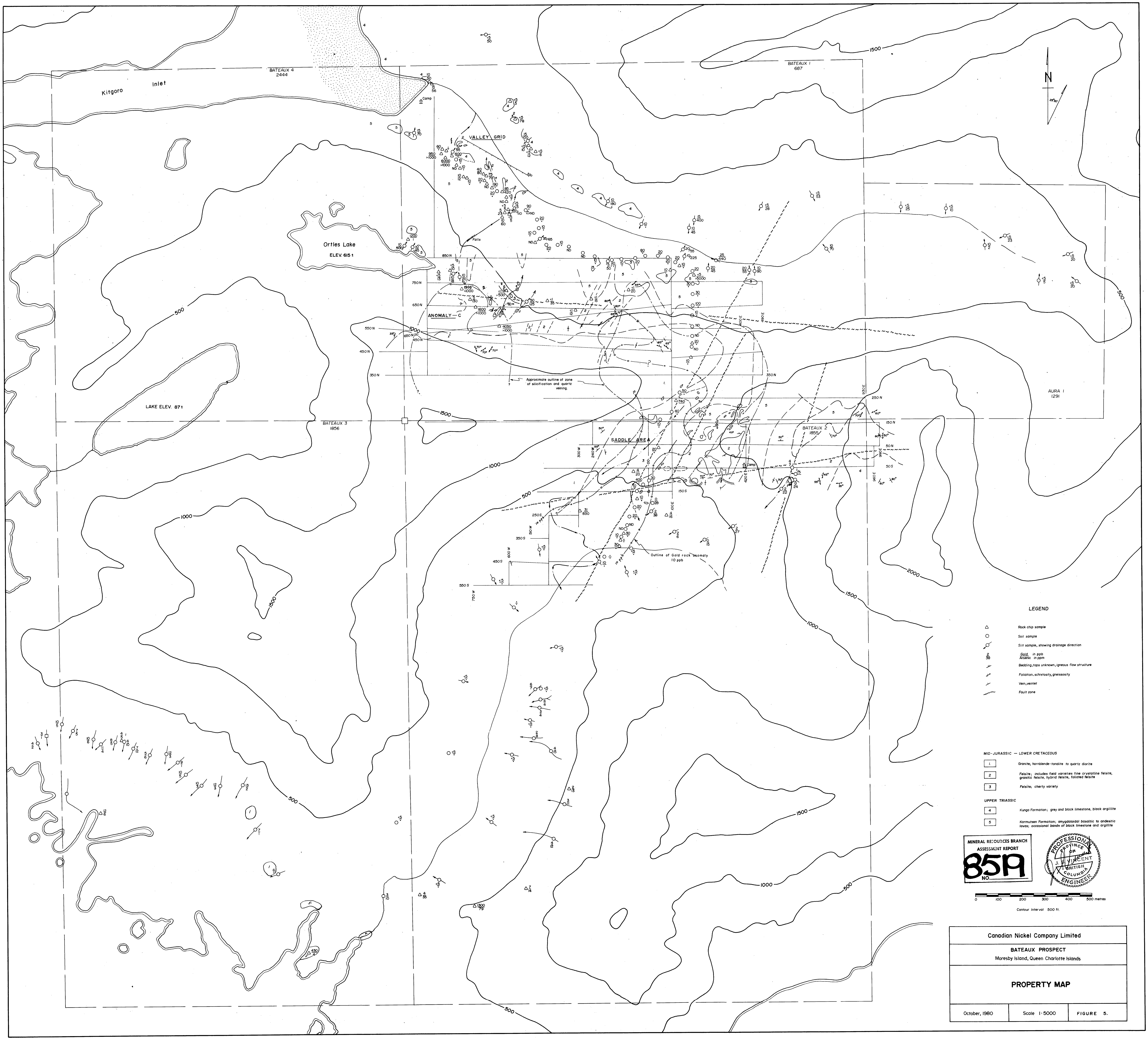
1. I am a Professional Engineer and Fellow of the Geological Association of Canada.

2. I am a graduate of Queen's University, Kingston, Ontario, B.Sc., 1959, and of McGill University, Montreal, Quebec, M.Sc., 1962 (Geological Sciences).

3. I have practiced my profession as a mining geologist since 1959.

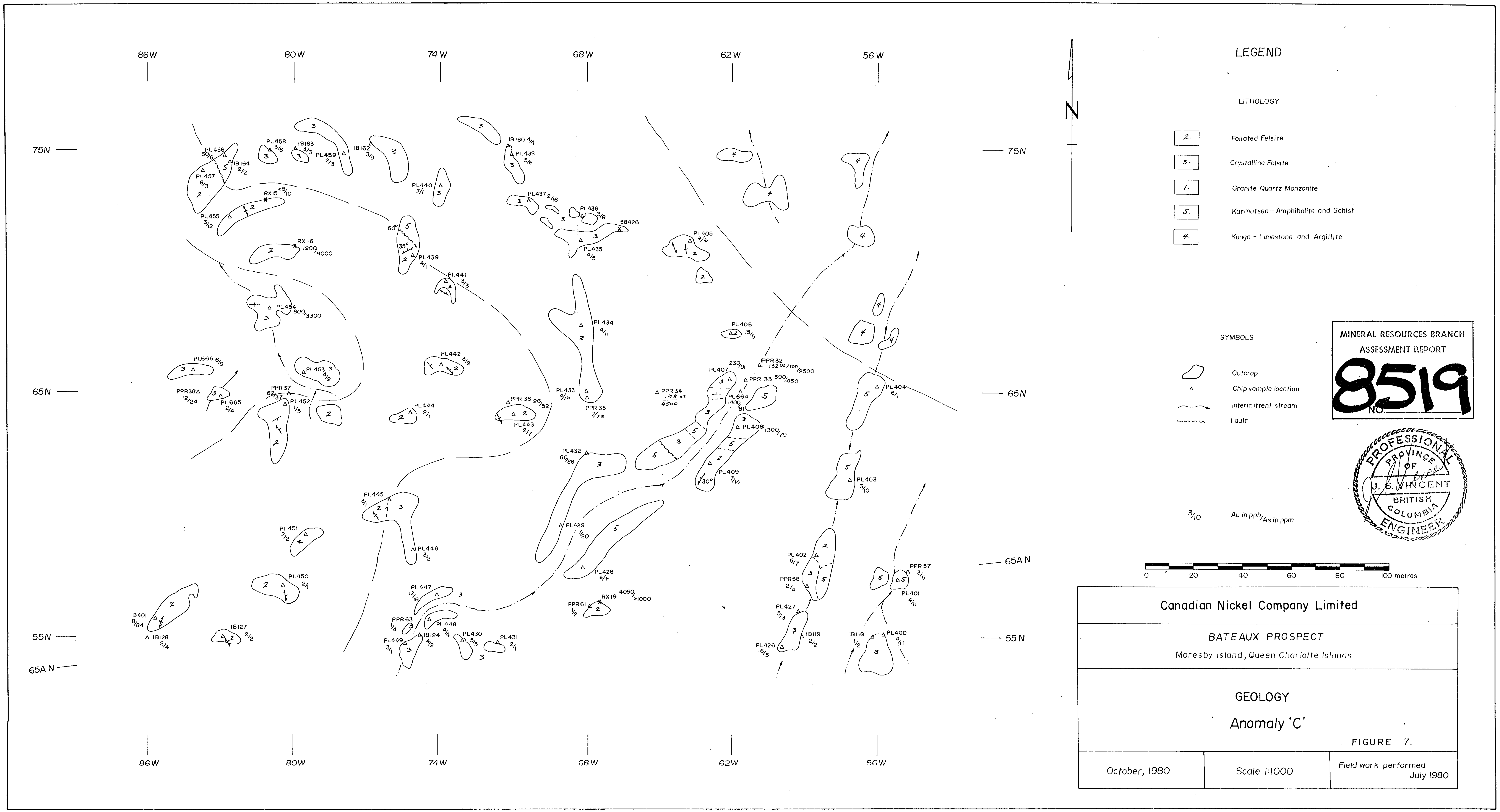
4. This report is based on my personal knowledge of the district and property, and my direct supervision of the work described in this report.

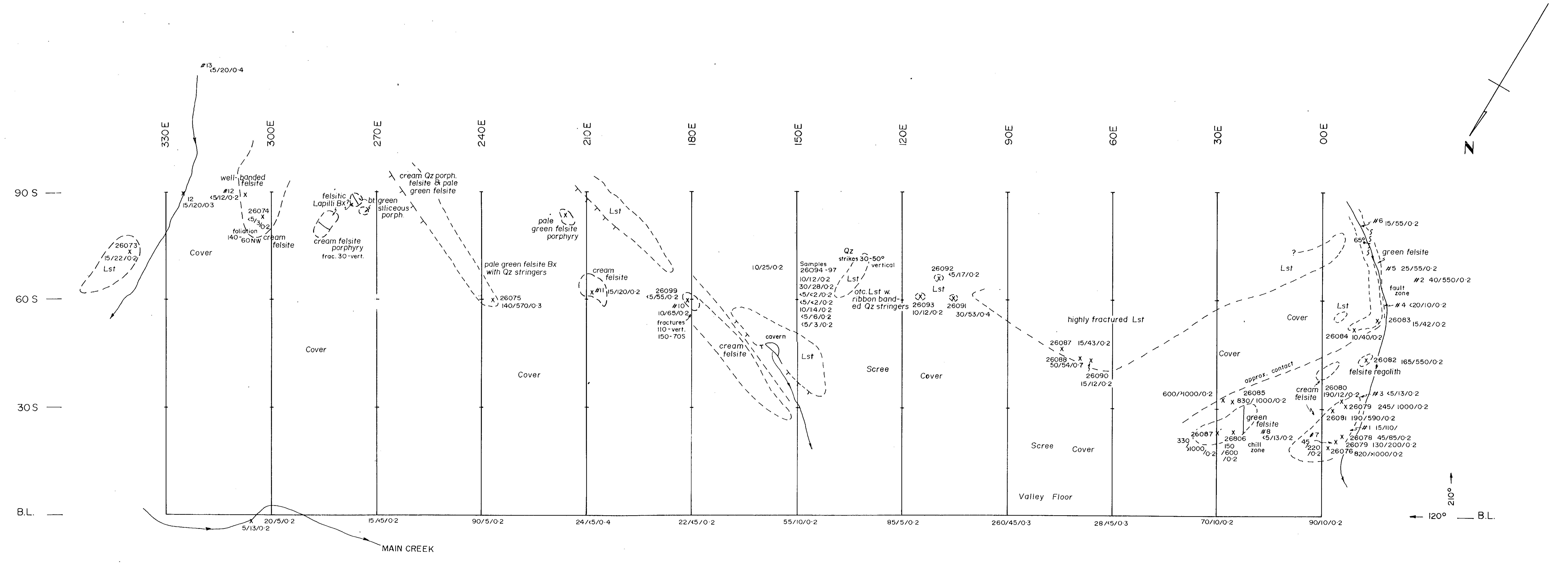
John S. Vincent, P. Eng.
December 3, 1980



N
Kitgoro Inlet
BATEAUX 4
2444
BATEAUX 1
687
BATEAUX 3
1856
BATEAUX 2
1855
AURA 1
1291
Ortles Lake
ELEV. 615±
LAKE ELEV. 87±
Camp
Falls
VALLEY GRID
ANOMALY - C
SADDLE AREA
Approximate outline of zone of silicification and quartz veining.
Outline of Gold rock anomaly 10 ppb
500
1000
1500
2000
LEGEND
Rock chip sample
Soil sample
Silt sample, showing drainage direction
Gold in ppb
Arsenic in ppm
Bedding, tops unknown, igneous flow structure
Foliation, schistosity, gneissosity
Vein, veinlet
Fault zone
MID-JURASSIC — LOWER CRETACEOUS
1. Granite; hornblende-tonalite to quartz diorite
2 Felsite; includes field varieties fine crystalline felsite, granitic felsite, hybrid felsite, foliated felsite
3 Felsite; cherty variety
UPPER TRIASSIC
4 Kunga Formation; grey and black limestone, black argillite
5 Karmutsen Formation; amygdaloidal basaltic to andesitic lavas; occasional bands of black limestone and argillite
MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
NO. 8519
PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
J. S. VINCENT
0 100 200 300 400 500 metres
Contour Interval 500 ft.
Canadian Nickel Company Limited
BATEAUX PROSPECT
Moresby Island, Queen Charlotte Islands
PROPERTY MAP
October, 1980
Scale 1:5000
FIGURE 5.

LEGEND
LITHOLOGY
3B Granitic Felsite - coarse crystalline Felsite
Crystalline Felsite - fine and siliceous
3C Hybrid Felsite
3A Foliated Felsite
3 Cherty Felsite
1 Granitic, Quartz Monzonite
5 Karmutsen - Amphibolite and Schist
4 Kunga - Limestone and Argillite
SYMBOLS
Outcrop
Chip sample location
Stream
Intermittent stream
Lineament
Fault
70° Quartz vein or stringer orientation
60° Foliation orientation
C.P. Claim post
Cotours Gold in ppb
3/9 Au in ppb/As in ppm
0 20 40 60 80 100 metres
MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
No 8519
PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
J. S. VINCENT
CAMP
HELICOPTER PAD
Canadian Nickel Company Limited
BATEAUX PROSPECT
Moresby Island, Queen Charlotte Islands
GEOLOGY
Saddle Area
FIGURE 6.
October, 1980
Scale 1:1000
Field work performed June and July, 1980.


86W
80W
74W
68W
62W
56W
75N
65N
55N
65A N
LEGEND
LITHOLOGY
2. Foliated Felsite
3. Crystalline Felsite
1. Granite Quartz Monzonite
5. Karmutsen – Amphibolite and Schist
4. Kunga – Limestone and Argillite
SYMBOLS
Outcrop
Chip sample location
Intermittent stream
Fault
3/10 Au in ppb/As in ppm
0 20 40 60 80 100 metres
MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
NO. 8519
PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
J. S. VINCENT
Canadian Nickel Company Limited
BATEAUX PROSPECT
Moresby Island, Queen Charlotte Islands
GEOLOGY
Anomaly 'C'
FIGURE 7.
October, 1980
Scale 1:1000
Field work performed July 1980



x 26082 165/550/0·2 Sample location and number;
Au in ppb/As in ppm/Ag in ppm

0 5 10 15 metres

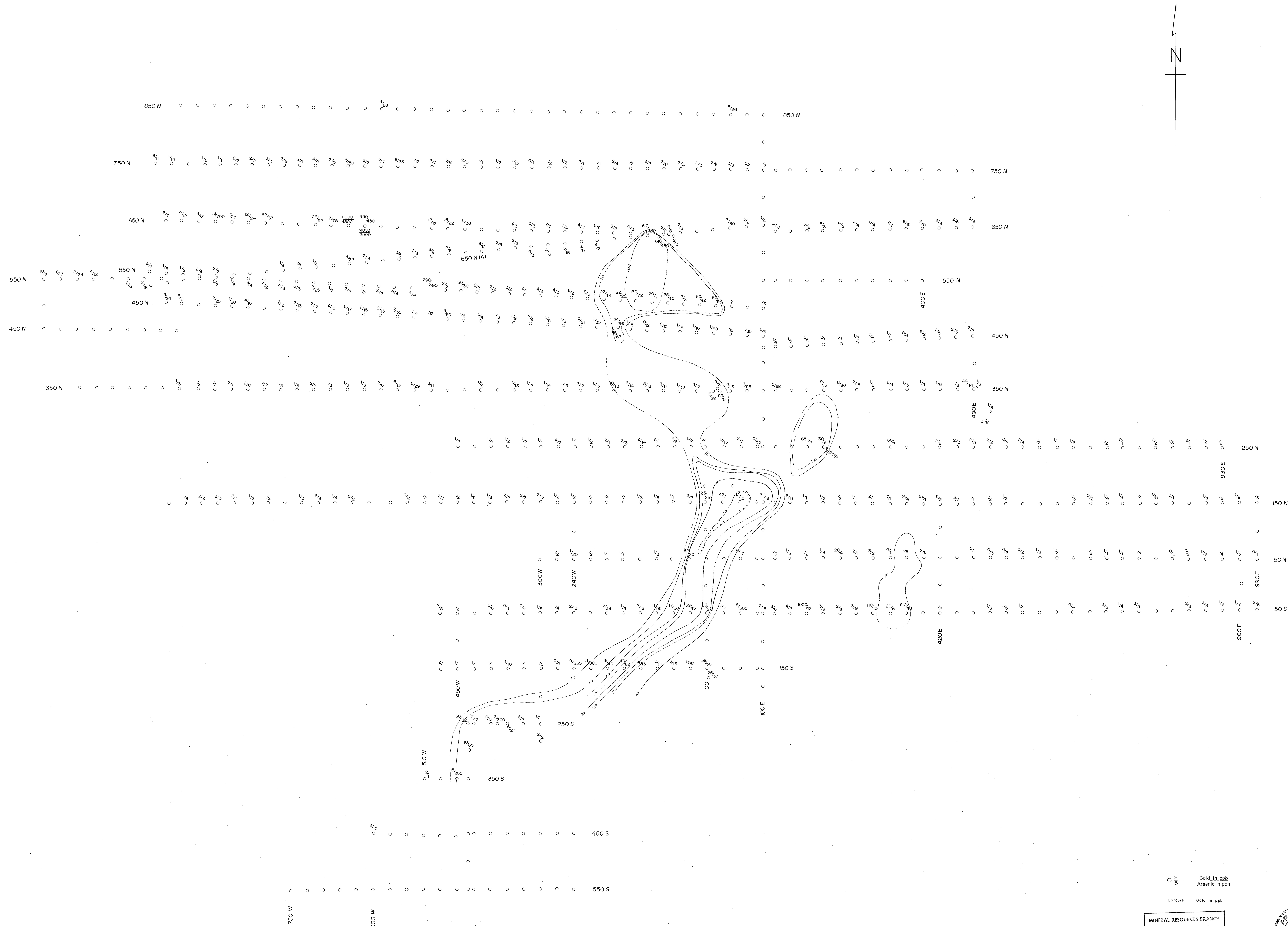
Canadian Nickel Company Limited

BATEAUX PROSPECT

Moresby Island, Queen Charlotte Islands

Sketch Map
VALLEY GRID

October, 1980	Scale : as shown	FIGURE 8.



Canadian Nickel Company Limited

BATEAUX PROSPECT

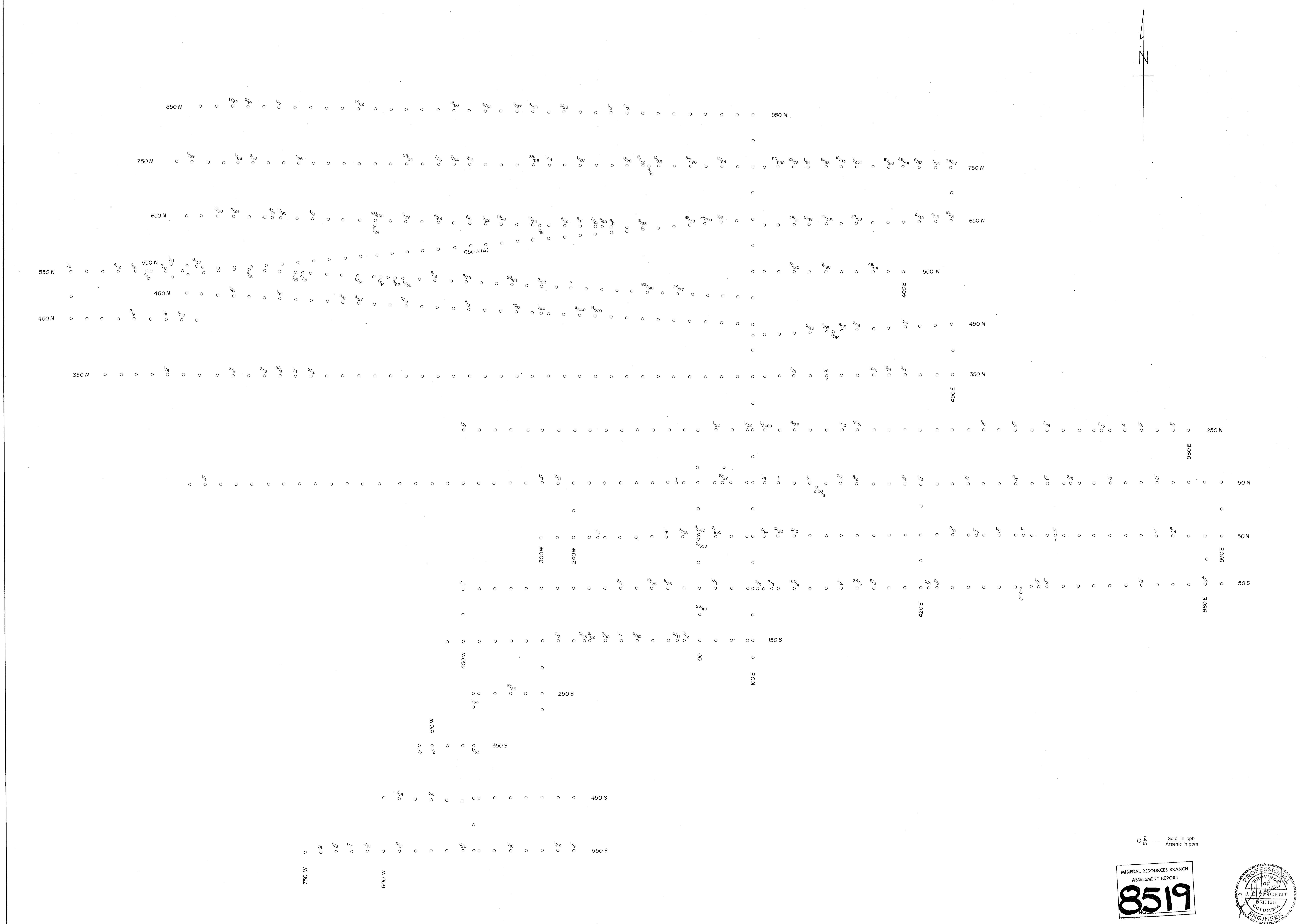
Moresby Island, Queen Charlotte Islands

GEOCHEMISTRY

Rock Chip Samples

October, 1980	Scale 1:2500	FIGURE 9.

Canadian Nickel Company Limited		
BATEAUX PROSPECT Moresby Island, Queen Charlotte Islands		
GEOCHEMISTRY Soil Samples		
October, 1980	Scale 1:2500	FIGURE 10.



Canadian Nickel Company Limited

BATEAUX PROSPECT

Moresby Island, Queen Charlotte Islands

GEOCHEMISTRY

Silt Samples

October, 1980	Scale 1:2500	FIGURE 11.