

1127

Mining Recorder's Office  
RECORDER  
OCT 1 1967  
AT.....M  
SMITHERS, B. C.

PROGRESS REPORT  
ON  
KEN & HUDSON GROUPS  
OF  
MINERAL CLAIMS  
FOR  
BABINE LAKE MINES LTD. (N.P.L.)

By:

F.C. TOMLINSON, P. ENG.

I N D E X  
\*\*\*\*\*

PAGE

1. Progress Report on Ken Group.
1. Introduction
1. Brunton and Tape Surveys
2. Claim Posts Survey & Harvey Creek
3. Soil Sampling
3. & 4. Conclusion & Recommendations
5. # 4 Soil Sampling Results - Ken Group ( Plan showing north eastern part of Ken Group, adjoining claims, roads surveyed and location of soil samples.)
6. Progress Report on Hudson Group
6. Location Topography Regional structure and geology
7. Soil samples taken and sampling results
7. Recommendations

PLANS ATTACHED

1. # 1 Geology of Northern Babine Lake M.M. Report, 1965  
1 inch = 1 mile.
2. # 2 Location Map - Hudson Group, Scale 2 inches = 1 mile.
3. # 3 Soil Sample Location Map, 1 inch = 300 ft.

PROGRESS REPORT

ON

KEN GROUP OF MINERAL CLAIMS

HELD BY

BABINE LAKE MINES LTD. (N.P.L.)

DRIFTWOOD CREEK, OMINICA M.D.

*1/2 a days drive  
from Smithers  
north of (?)*

*54° 53'  
126° 57'*

INTRODUCTION

The writer accompanied by Mr. John OLIVER, Mr. Jerry TROJAN, Mr. Joe McDONALD and Jim McDONALD left Vancouver by plane on June 8th., 1967 for Smithers B.C. The plane arrived at Smithers at 7:45 p.m. approximately.

The object of the trip was to verify the staking of The KEN GROUP, at least in part, and tie in adjoining property showings by Brunton and Tape survey so that a soil sampling or bulldozer stripping program could be laid out in the most likely area to produce results on the KEN GROUP.

BRUNTON AND TAPE SURVEYS

After purchasing supplies in Smithers on the morning of the 8th, we proceeded to Driftwood Creek by truck and set up camp at an old sawmill clearing on the west side of the creek, elevation 3400 ft. where the road crosses the creek from the east side. In the afternoon a traverse was started on the steep bulldozed road running easterly from the bridge, to some old cabins at station 9 and farther up the hill to some bulldozed open cuts, reported to be on the L.W. No. 3 claim (see plan 1" = 500 ft.). We completed the survey to the main showing on the central open cut on the 8th, Stn. 14, elevation 3790 ft., completed the survey to the upper open cut, Stn. 21 elevation 3960 ft. and the lower one, Stn. 24, elevation 3551 ft. on the morning of the 9th.

VEIN AND MINERALIZATION

At the central open cut at Stn. 14 which runs in a north-easterly direction, a large tree had toppled from the upper edge of the open cut bringing a lot of overburden with the roots which covered most of the showing and one side of the vein. We were able to uncover part of the north wall of the vein which had a local strike at N. 88° E and a dip of 55° to the south. The wall of the vein was in contact with a basic volcanic andesite.

The vein matter consisted of quartz gangue heavily mineralized with chalcopryrite, bornite and grey copper (chalcocite). This ore is similar in appearance to a quantity of cobbled ore found in the old tumble-down cabin

at station 9, elevation 3559 ft. which had been there for some considerable time. It had been bagged but the bags had all rotted away. Since the bulldozed cuts have been made recently, it is doubtful whether any of the ore in the cabin come from the above showing. There is some evidence of mineralization in the open cut at Stn. 20 on the upper open cut and above at Stn. 21 where there is a large rock outcrop but no well defined vein could be located during the brief inspection. The upper open cut and workings are from 140 to 170 ft. higher in elevation than the main central open cut showing. If the indicated dip of  $55^{\circ}$  to the south at the main showing represents the general overall dip, its outcrop at the higher elevation would be some distance to the north of the area inspected.

Sample No. 1 was taken from the north wall of the vein and can be classed as a grab sample representative of the north wall of the vein, for a width of about a foot. This sample assayed 0.92 Au., 28.75 ounces Ag. and 8.87% Cu. total value \$145.00 per ton at Au. 37.50 oz., Ag. 1.40 oz., Cu. 40¢ lb. Sample No. 2 is a grab sample of lumps taken from vein matter turned up by the bulldozer in the floor of the cut under the trunk of the fallen tree. This sample assayed 0.30 Au. 19.85 oz. Ag. and 5.8% Cu. per ton, total value \$85.44 per ton.

#### CLAIM POSTS SURVEY

Before leaving camp on June 13th, a traverse of the road paralleling Driftwood Creek to the N.E. from the camp to tie in the claim posts along the road which is the location line between claims, KEN 1 & 2, 3 & 4, 5 & 6. A traverse of the logging road running to the N. West from the camp following a creek was also made. Two claim posts were tied in on this survey, post common to KEN 5 & 6, 7 & 8 and post common to KEN 15 - 16 and 35 - 36 on the next location line to the north-west.

#### HARVEY CREEK

Since no detail map of roads or trails could be located of the area, a survey of the Driftwood Creek road was made to the junction of the Harvey Creek road and up the switchback "cat" road to Harvey Creek showings. This survey was started on June 9th and completed on June 11th. We walked to the Harvey Creek showings on June 10th. We found the old tunnel and one showing to the south of the portal. We did not have the plan of the old workings with us and could not locate the other showings or find the trails leading to them. We entered the flatter part of the creek canyon above the camp clearing and found a number of pieces of float among the rocks of the creek bed, which were well mineralized with chalcopyrite, bornite and grey copper.

The mineralized specimens appeared to consist of highly fractured andesite or rhyolite with mineral on the fractures and disseminated through the rock. These specimens must have come from farther up the canyon which was too steep to climb without the aid of ropes or ladders.

Two samples of the above mineralized float have been sent in for assay No. 3 sample rock - fractured andesite and No. 4 sample rock - fractured rhyolite and quartz. No. 3 sample assayed Au. 0.05, Ag. 19.85, Cu. 2.25 - total value 48.45. No. 4 sample assayed Au. 0.015, Ag. 6.55, Cu. 2.55 - total value 30.11.

#### SOIL SAMPLING

33 soil samples were taken by auger at depths of from 2 to 2½ ft. on the KEN GROUP by John Oliver and Joe McDonald. 18 samples on lines A and B see plan. 15 samples were taken along the roads to the N.E. and N.W. of the camp as indicated on the attached plan. Values in parts per million are marked on the plan at the location of each sample.

#### CONCLUSION AND RECOMMENDATIONS

The work done so far on the KEN GROUP shows that KEN No. 1, 2 and 4 claims overlap the LW 2 and 3 claims which were staked before the KEN GROUP. The location line for LW 1, 2 and 3 claims was not located. The location line for KEN No. 53, 54 and 55 were not located. Elevation of station 1 at 3250 ft. above sea-level (datum) aneroid barometer reading is low by approximately 160 ft. According to old government G.S. reports, the elevation of the tunnel on Harvey Creek is 4200 ft. The calculated elevation of the tunnel from the Brunton and Tape Survey, using a Tripod and reading vertical angles to nearest 10 minutes is 4033 ft., a difference of 167 ft. Our datum at station 1, would be more correct at 3400 ft. elevation. 160 ft. was added to the elevation of each station of the traverses to check more closely with the tunnel elevation at 4200 ft. The location line and posts for the Hallmark claims was not located. As shown on the attached plan, they are only approximate. The workings on the Hallmark Group on Harvey Creek are plotted from a larger scale plan contained in the Minister of Mines Report 1929, Page C-166.

Since the ore in the old tumbledown cabin which had been made ready for shipment could not have come from any showing inspected by the writer, it must have come from some closer by workings. In all probability from the Rainbow Claims described in G.G.S. Report, 1934 A and included verbatim in the writer's preliminary report, page 7 on the KEN GROUP dated Nov. 1966.

The logical procedure for the area as a whole, would be for the Babine Lake Mines to take a working option on the S.W. Group and develop them along with the KEN GROUP. I believe that some effort has been made to obtain such an option but no agreement has been reached.

If a reasonable agreement cannot be negotiated, it is recommended that:

- (1) The other old showings be located and tied in with respect to the adjoining KEN claims and included on the attached plan.
- (2) The location line and posts of the L.W. claims be located and tied in with the survey of the area.
- (3) The location line and posts for KEN 53, 54 and 55 be located and tied in for mapping purposes. According to ~~H.A.M.~~ Report, 1934 the veins found on the Wright property "Rainbow" 1 and 2, etc. in numerous open cuts and several short adits have an east-west strike and have a vertical or steep dip. (See page 8, writer's preliminary report Nov. 1966.) "Wrights Property".

It is probable that the favourable formation and similar occurrences will be found on the north side of Driftwood Creek on KEN 1 and 3 claims. Also that part of KEN No. 4 which does not overlap L.W. 3 on the east side of Driftwood Creek. Soil sampling and, or bulldozing stripping should be directed to investigate the above possibility.

- (4) The road following Driftwood Creek to the north-east from the bridge, could be used as a base line and lines could be cut running due north at 400 ft. intervals using the established stations for starting the lines. Soil samples to be taken at 400 ft. intervals on the north-south lines. This work could be followed by bulldozer stripping if copper bearing deposits are indicated or a Ronka E.M. 16 unit could be rented for a survey of the lines. The Ronka E.M. 16 unit can be rented for \$300.00 per month from Geo-X Surveys Ltd., 627 Hornby St., Vancouver, B.C.
- (5) If a reasonable working option can be obtained on the Hallmark group without down-payment before examination, a thorough sampling of all showings would be in order. The source of the float found in Harvey Creek should be located if possible. It is estimated that it would not take much more than one day, say 10 to 12 hours to clear the road from the Driftwood Creek road to the camp on Driftwood Creek so that four-wheel drive trucks could be used.

The pole frame of the cabin 16' x 24' is in good condition but would require new plywood floor, roof and walls. A tent camp could be used for the initial examination and sampling.

SOIL SAMPLING RESULTS - KEN GROUP

Of the 33 soil samples taken on the KEN GROUP, (See Plan) only 8 carried more than 20 parts per million which can be considered anomalous or above back ground from 4 to 14.

Samples 13 to 18 were taken on lines A & B see plan on KEN No. 8 claim east and west of the creek. Samples No. 9 and 133 are isolated higher values. More soil samples should be taken in the vicinity of the above samples which are circled in pencil on the attached print, as well as other work recommended.

PROGRESS REPORT ON HUDSON GROUP

BABINE LAKE - Location: N.  $\bar{E}$ .  $126^{\circ} 15' - 55^{\circ}$

This group consists of 33 claims on the west shore, Morrison Arm of Babine Lake extending north from the main body of the lake. The claims cover about one-half of the west shore of the arm. The group is a maximum of 4 claims wide and 12 claims long. (See enlarged staking plan 2" = 1 mile.)

A camp was set up in a southerly facing bay, formerly a logging road extending westerly from the Bay. The initial post of claims, HUDSON 7 and 8 are located on the shore south of the clearing. The location line runs westerly. A traverse of the logging road was made to station 28 on June 16th and extended to station 34 on August 19th.

TOPOGRAPHY

There are no known outcrops of rock on the property and most of the ground is low-lying less than 100 ft. above lake level, except for some higher ground near the north end of the group. There is a lake on the west central part of the group.

REGIONAL STRUCTURE AND GEOLOGY

The trace of two major faults showing on the geological map of the area to the south of the 55th parallel of latitude if extended further to the north, would lie just to the west of the HUDSON GROUP. The easterly fault extension intersects the west boundary of the HUDSON GROUP south of the lake.

The Granisle ore body lies about midway between these faults which are about 4000 ft. apart at Copper Island.

The Noranda ore body on Newman Peninsula approximately  $4\frac{1}{2}$  miles to the north  $30^{\circ}$  west of the Granisle lies just to the west of the trace of the west fault.

Both ore occurrences are associated with a biolite feldspar porphyry, feldspar porphyry, hornblend feldspar porphyry or dacite porphyry intrusives in the older volcanic series of tuffs, breccias and massive andesite flows. An outcrop of Feldspar porphyry exists in the forming of a small island in the bay immediately south of the south boundary of the HUDSON GROUP claims 9 and 11. This intrusive outcrop lies very close to the extended trace of the easterly fault extension which would intersect the west boundary of the HUDSON GROUP near the west end of the lake. (See claim plan, scale 2" = 1 mile. If the intrusive porphyry extends in a northerly direction onto the HUDSON GROUP, a geological and structural condition



exists on the HUDSON GROUP which is decidedly interesting.

#### SOIL SAMPLING

Soil samples were taken at 400 ft. intervals along the logging road and at 400 ft. intervals north and south of the road. (See plan 1" = 400 ft. Samples Nos.)

Soil samples were taken on a traverse of the location line between claims 9 and 12 and 10 and 11. Soil samples were also taken 400 ft. north and south of the line which runs north  $59^{\circ}$  to  $65^{\circ}$  west. Another series of soil samples were taken along the location line between claim lines 25 and 26 and 31 and 32. (Sample No. B-1 to 10, See attached plans.)

Diamond drilling is in progress on the Golden West Mines Group across the arm of the lake, investigating an anomaly which is reported to strike in east-west direction. Diamond drilling has been reported to be in progress on the Golden West Group to the west, but the report has not been confirmed as to location.

#### SOIL SAMPLING RESULTS - HUDSON GROUP

The copper determinations on the soil samples taken on the HUDSON GROUP show a low of 4 parts per million to a high of 40 parts per million with the greater number of samples from 10 P.P.M. to 14 P.P.M. There are a few samples in the region of the camp on lines 1, 2 and 3 running over 19 P.P.M. and a few on the claim line 3000 ft. to the south which run over 19 P.P.M.

Depending on the depth of overburden, these higher determinations can be considered for the time being as parts of larger anomalous areas in their respective localities.

#### RECOMMENDATION

It is recommended that the lines started on the road traverse to the west of the camp be extended to the north and additional samples be taken at 400 ft. intervals on these lines covering the ground between Babine Lake and the small lake (Trojan Lake) to the west.

Lines should also be extended south from the traverse base line and north from the claim line traverse to cover the ground in between. There could be a connection between the areas of higher values as indicated near the traverse lines.

Soil samples taken at 400 ft. intervals on the above lines should extend or confirm the presence of larger anomalous areas.

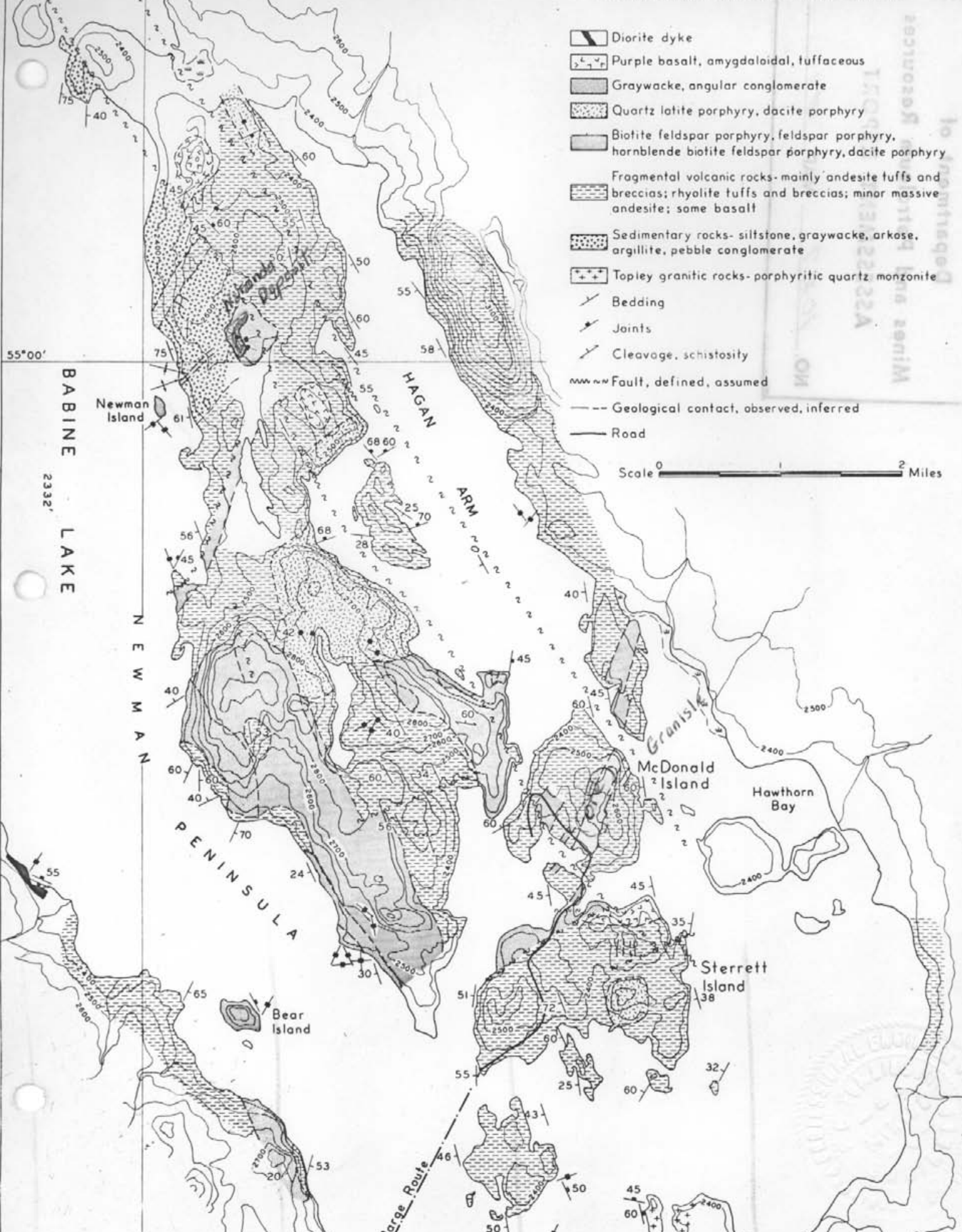
The copper zinc ratio of P.P.M. if 0.3 or above are considered anomalous. Samples No. 1, 14, 20 and 29 are the only samples above this ratio. However, some of the zincs are abnormally high for instance, sample No. 3 which carried on 6 P.P.M. cu. ran 315 P.P.M. in zinc.

More samples will have to be taken as suggested above to prove or disprove an anomalous area which might be worth further development in the form of a geophysical survey and diamond drilling.

July 18th, 1967.  
VANCOUVER, B.C.

  
.....  
F.C. TOMLINSON, P. Eng.

Figure 14  
**GEOLOGY**  
**OF THE**  
**NORTHERN BABINE LAKE AREA**



BABINE LAKE MINES LTD. (N.P.L.)

Re: KEN and HUDSON Groups of Claims  
PROGRESS REPORT

---

(1) By what instrument was the sample taken: for example, by auger, spade, etc.?

Ans.... It was taken by 1 inch Auger with 4 ft. welded handle.

(2) If possible, identify the soil horizon sampled; if not, briefly describe the material.

Ans.... Sampled from  $1\frac{1}{2}$  to  $2\frac{1}{2}$  ft. below surface.

(3) How were the samples packaged?

Ans.... In strong manilla sacks supplied by T.S.L. Laboratories.

(4) How were the samples dried and screened?

Ans... They were dried and screened by T.S.L. Laboratories.

(5) Were the tests made in the field or in a laboratory?

Ans.... They were made in the laboratory.

(6) By what procedures were the samples tested?

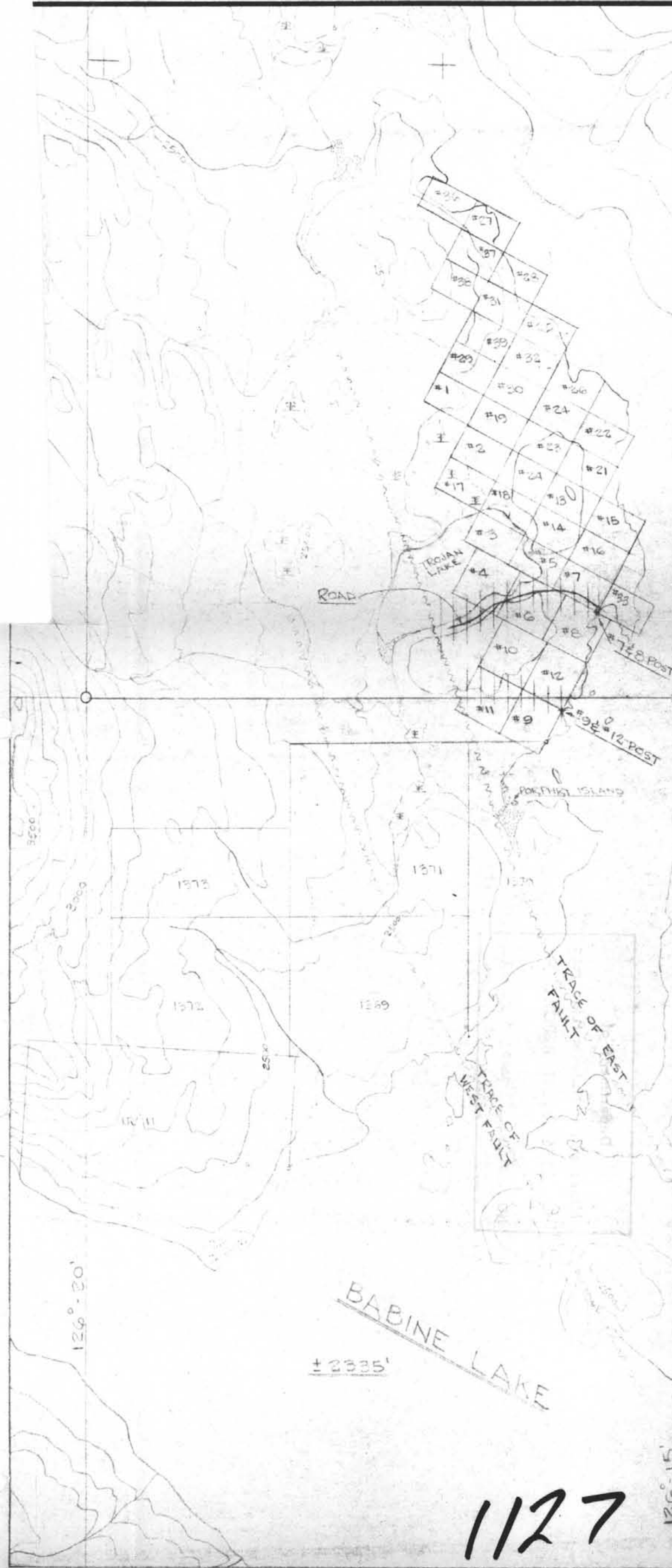
Ans.... Hot acid and Atomic Absorbtion.

Name of Claims

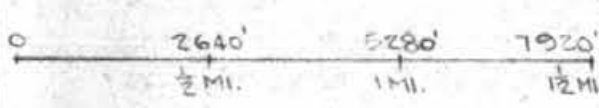
KEN No. 1, KEN No. 2, KEN No. 3, KEN No. 4, KEN No. 5, KEN No. 6

KEN No. 54, and KEN No. 55.

CLAIM NO.	RECORD NO.	TAG NO.
1	42788	
2	42789	
3	42790	
4	91	
5	92	
6	93	
7	94	
8	95	
9	96	
10	97	
11	98	
12	99	
13	42800	
14	01	
15	02	
16	03	
17	04	
18	05	
19	06	
20	07	
21	08	
22	09	
23	42810	
24	11	
25	12	
26	13	
27	14	
28	15	
29	16	
30	17	
31	18	
32	19	
33	42820	



55° 05'



SCALE = 2" = 1 MILE

BABINE LAKE MINES LTD.  
(N.P.L.)

GENERAL LOCATION  
OF  
"HUDSON GROUP OF CLAIMS"

FROM NOTES BY:  
F.C. TOMLINSON P. ENG.  
J. OLIVER

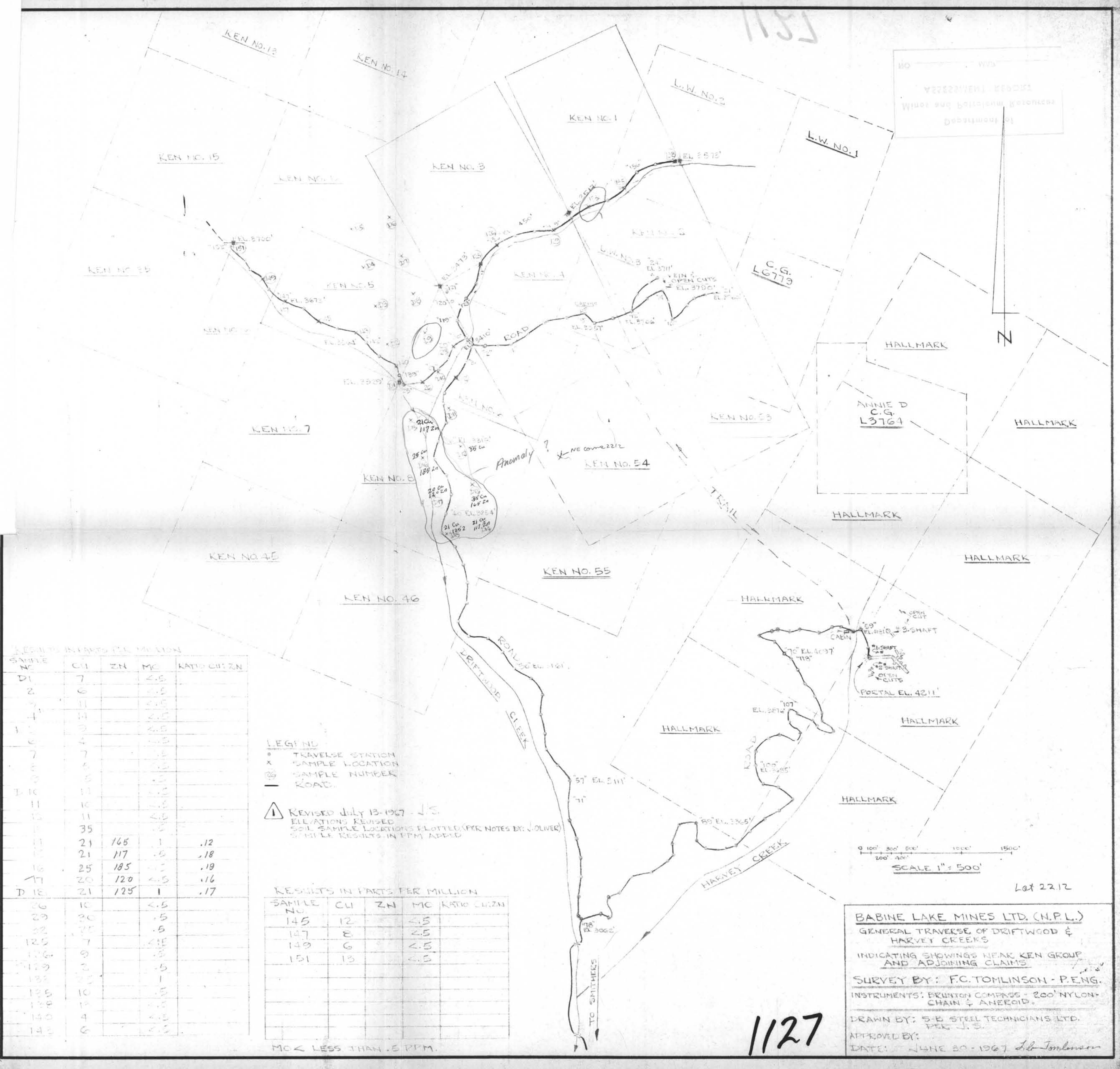
CONTOUR INTERVAL: 100'  
REF. MAP: DEPT. LANDS-Forest  
& WATER RESOURCES  
SURVEYS & MAPPING  
BRANCH  
MAP 93 W-PROVISIONAL

BABINE LAKE

± 2635'

1127

F. C. Tomlinson  
PREPARED BY: S. D. STEEL TECHNICIANS LTD.  
PER J.S. JULY 16-1967



RESULTS IN PARTS PER MILLION

SAMPLE NO.	CU	ZN	MC	RATIO CU:ZN
D1	7		<.5	
2	6		<.5	
3	11		<.5	
4	13		<.5	
5	3		<.5	
6	4		<.5	
7	7		<.5	
8	6		<.5	
9	6		<.5	
D10	11		<.5	
11	16		<.5	
12	11		<.5	
13	35		<.5	
14	21	165	1	.12
15	21	117	.6	.18
16	25	185	.5	.19
17	20	120	<.5	.16
D18	21	125	1	.17
26	10		<.5	
29	20		.5	
32	20		.5	
125	7		<.5	
126	9		.5	
129	2		.5	
131	20		1	
135	10		.5	
138	12		<.5	
140	4		<.5	
142	6		<.5	

**LEGEND**  
 \* TRAVEL STATION  
 x SAMPLE LOCATION  
 @ SAMPLE NUMBER  
 — ROAD

⚠ Revised July 13-1967 - J.S.  
 ELEVATIONS REVISED  
 SOIL SAMPLE LOCATIONS PLOTTED (PER NOTES BY J. OLIVER)  
 SAMPLE RESULTS IN PPM ADDED

RESULTS IN PARTS PER MILLION

SAMPLE NO.	CU	ZN	MC	RATIO CU:ZN
145	12		<.5	
147	8		<.5	
149	6		<.5	
151	13		<.5	

MC < LESS THAN .5 PPM.

**BABINE LAKE MINES LTD. (N.P.L.)**  
 GENERAL TRAVERSE OF DRIFTWOOD & HARVEY CREEKS  
 INDICATING SHOWINGS NEAR KEN GROUP AND ADJOINING CLAIMS  
 SURVEY BY: F.C. TOMLINSON - P.ENG.  
 INSTRUMENTS: BRUNTON COMPASS - 200' NYLON-CHAIN & ANEROID.  
 DRAWN BY: S-B STEEL TECHNICIANS LTD.  
 APPROVED BY: FEE J.S.  
 DATE: JUNE 30 - 1967 J.C. Tomlinson

1127