

KENNCO EXPLORATIONS, (WESTERN) LIMITED

REPORT

ON

SOIL AND SILT GEOCHEMICAL SURVEYS

BABE MINERAL CLAIMS 1 to 32

AND

RIC MINERAL CLAIMS 1 to 12 & 20 Fr to 26 Fr

Situated 11 miles south of Port Clements,
Skeena Mining Division,
British Columbia

53°N 132°W

103 F / 9E

3517

By

K.A. Grace, P. Eng.

May 3 to May 13, 1971

February 4, 1972

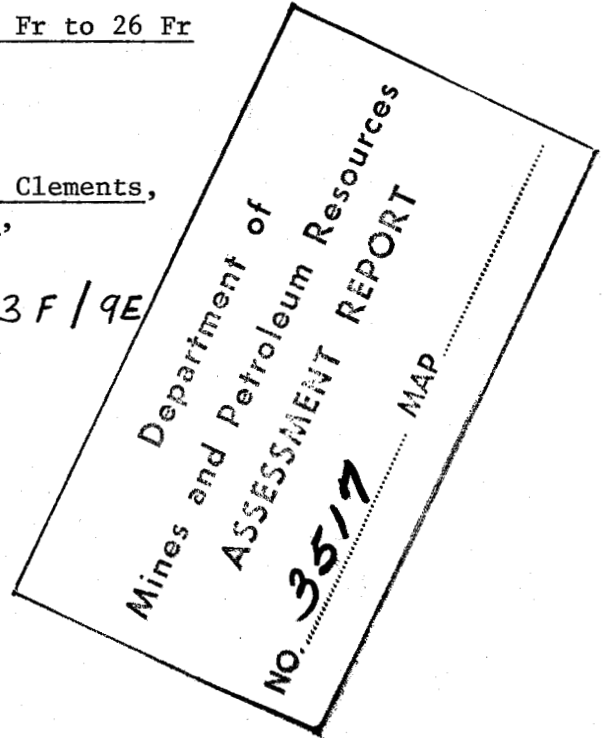


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Plates

1 Plate No. 1	Mo in Soil & Silt	1" = 500'
2 Plate No. 2	Cu in Soil & Silt	"
3 Plate No. 3	Zn in Soil & Silt	"
4 Plate No. 4	Pb in Soil & Silt	"
5 Plate No. 5	Ag in Soil & Silt	"
6 Plate No. 6	Ni in Soil & Silt	"
7 Plate No. 7	Co in Soil & Silt	"
8 Plate No. 8	Hg in Soil & Silt	"
9 Plate No. 9	Hg in Peat	"
10 Plate No. 10	Au in Soil & Silt	"
11 Plate No. 11	Sample Sites	"

INTRODUCTION

The property discussed in this report is situated about 11 miles south of Port Clements on Graham Island, British Columbia. The exploration work herein described consisted of a soil and silt geochemical survey. The objective of this survey was to locate areas of mineralization as indicated by previously reported preliminary work.

The work was done under the general supervision of K.A. Grace, P. Eng.

STATEMENT OF COSTS INCURRED

BABE NO. 1 GROUP

Comprising Babe 1 to 17, Babe 30 to 32,
Ric 1 to 12, Ric 20 Fr to 26 Fr

Chemical Analysis

(a) Mo, Cu, Pb, Zn, Co, Ni, Ag:	318 @ \$5.00	\$1,590.00
(b) Au:	318 @ \$2.00	636.00
(c) Hg in Soil	318 @ \$2.00	636.00
(d) Hg in Peat	300 @ \$2.00	600.00
		<u>3,462.00</u>

Support Costs

2/3 of \$1,650.00 (See separate statement for details) 1,100.00

\$4,562.00

BABE NO. 2 GROUP

Comprising Babe 18 to 29

Chemical Analysis

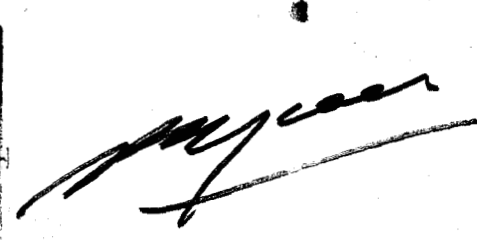
(a) Mo, Cu, Pb, Zn, Co, Ni, Ag:	150 @ \$5.00	\$ 750.00
(b) Au:	126 @ \$2.00	252.00
(c) Hg in Soil	150 @ \$2.00	300.00
(d) Hg in Peat	113 @ \$2.00	226.00
		<u>1,528.00</u>

Support Costs

1/3 of \$1,650.00 550.00

\$2,078.00

Declared before me at the *City*, in the
of *Manowick* Province of British Columbia, this *19th*
day of *Feb* *1972*, A.D.



G R Phillips
A Commissioner for taking Affidavits within British Columbia or
A Notary Public in and for the Province of British Columbia.
SUB-MINING RECORDER

STATEMENT OF SUPPORT COSTS

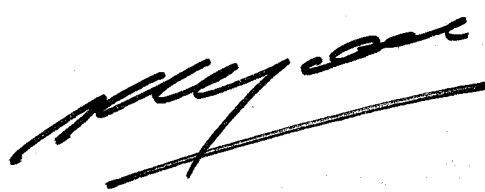
Work Performed May 3 to May 13 Inclusive

Minimum Wages & Board:

R. Sebastian	May 3-13 inclusive, 11 days @	(\$15.00+\$10.00)	\$ 275.00
P. Archibald	May 3-13 inclusive, 11 days @	(\$15.00+\$10.00)	275.00
T. Black	May 3-13 inclusive, 11 days @	(\$15.00+\$10.00)	275.00
S. Earle	May 3-13 inclusive, 11 days @	(\$15.00+\$10.00)	275.00
B. MacKay	May 3-13 inclusive, 11 days @	(\$15.00+\$10.00)	275.00
A. Vanderhorst	May 3-13 inclusive, 11 days @	(\$15.00+\$10.00)	<u>275.00</u>
			<u>\$1,650.00</u>

Time and effort divided between Babe No. 1 and Babe No. 2 Group's in ratio of 2:1.

Declared before me at the *City*
of *Vancouver*, in the
Province of British Columbia, this *17th*
day of *Feb* *1972*, A.D.



[Signature]
A Commissioner for taking Affidavits within British Columbia or
A Notary Public in and for the Province of British Columbia,

SUB-MINING RECORDER

LOCATION AND ACCESS

Immediately north of the Yakoun River, 11 miles south of Port Clements on Graham Island in the Queen Charlotte Island Group, B.C. The claims are situated on hilly countryside, with altitudes from 100 to 1500 feet a.s.l. Local relief is subdued, about 500 feet. The claim area was logged over about 25 years ago and is now densely regrown resulting in very difficult local foot access in places.

Access to the property from Queen Charlotte City is by good blacktop highway to Port Clements, about 40 miles. Thence by logging road for 23 miles to the claim area.

SOIL GEOCHEMICAL SURVEY

Sample Site Control

Sample sites were plotted in the field on a topographic map having a scale of 1" = 500'. These maps were obtained by enlarging portions of the 1:50,000 topographic map. Each sampling traverse was started from a known point on a claim boundary, and samples were collected at 200' intervals along these boundaries. Sample site locations were plotted by tape and compass until another easily identifiable checkpoint was reached. The location of the sample sites is shown on Plate No. 11.

The samples were collected by digging a small hole with a mattock. By this means it was possible to see where the top of the "B" horizon was. The soil sample was then taken from the "B" horizon with a small trowel.

A note was made of the location, the sample number, and the depth to the top of the "B" horizon.

Wherever possible a sample of the "A" horizon was also taken for an additional mercury analysis.

Packaging

The samples were placed in 9" x 4" brown paper envelopes on which the sample numbers had been marked. These were closed with a triangular triple fold. (The bags are not anomalous in trace metals).

Sample Preparation

The samples were shipped to Kennco's laboratory in North Vancouver, where they were oven-dried at 80°C and sieved through an 80 mesh size stainless steel screen. (These sieves do not show noticeable wear even after several thousand samples have been sifted). The minus 80 mesh fraction was collected for all the analysis involved.

Analysis

The samples were analysed in the North Vancouver laboratory of Kennco Explorations, (Western) Limited under the supervision of H. Goddard, laboratory manager.

The Cu, Mo, Pb, Zn, Co, Ni, Ag analyses utilizes a one-gram 80 mesh sample which is placed in a 25 x 200 mm test tube. Two ml of concentrated nitric acid is added. The sample is allowed to digest 15 minutes, and 5 ml of 70% perchloric acid is added. The sample is digested on a medium heat hot plate for four hours. After cooling the sample is diluted to 55 ml with distilled water, agitated, and after settling, the solution is used for the determination of Cu, Mo, Pb, Zn, Co, Ni, Ag by an Atomic Absorption Spectrophotometer (Techtron AA5).

The Au analysis utilizes a 10 gm sample treated and analysed as above.

In the Hg analysis, a 1 gm sample is digested in warm H_2SO_4 and HNO_3 for 3 - 4 hours. Hydrogen peroxide is introduced several times, decomposed by gentle heat, after which excess $KMnO_4$ solution is added. The solution is diluted with hydroxylamine sulphate and sodium chloride solutions, and stannous sulphate reagent is added immediately before mercury concentrations are measured on a flameless Atomic Absorption Spectrophotometer. When the mercury exceeds 1000 ppb, a second determination, using less than 1 gm of sample, is made.

Interpretation

Over most of the area, a good sample which was representative of the "B" horizon was obtained. The depth of overburden varies from a few inches to probably about 20' over most of the area sampled. Considering the type of soil, it would seem likely that soil geochemistry is a reliable technique. The samples were analysed for total metal content in Cu, Mo, Pb, Zn, Co, Ni, Ag, Au, and Hg. Samples collected from the "A" horizon were analysed for mercury only.

Sample stations that are considered to be background are uncolored. Sample stations that are considered to be only weakly anomalous are colored yellow. Sample stations that are definitely anomalous are colored red. The results are plotted on Plates No. 1-10.

Gold is anomalous or weakly anomalous over the central portion of the claim group particularly in the area of Babe 5, 6, 7, & 8. Scattered gold anomalies occur elsewhere. Silver is weakly anomalous in locations usually coincident with gold.

Mercury is anomalous throughout the claim group. Very high values for mercury in soil occur in the central portion of the claim group.

SILT GEOCHEMICAL SURVEY

Silt Sample Collection

In general, the samples were taken wherever a soil sample traverse line crossed a stream, depending on where suitable silt could be found.

Samples were taken from active material; that is, under flowing water, either in streams or seepages. The samples were taken by hand, utilizing a contamination-free tight rubber glove by feeling in the stream bottom for pockets of silt. Fine-grained silt was selected. Care was taken to avoid high organic material and well washed clay.

The sample site and number were then plotted on the field map and the sample site flagged with surveyors tape. A note was made of the sample number; the type of sediment sampled; and any peculiarities of nearby drainages, such as above or below a pond or swamp.

Packaging

The samples were placed in a 9" x 4" brown paper envelope on which the sample numbers had been marked. These were closed with a triangular triple fold. (The bags are not anomalous in trace metals).

Sample Preparation

The samples were shipped to Kennco's laboratory in North Vancouver, where they were oven-dried at 80°C, and sieved through an 80-mesh size stainless steel screen. (These sieves do not show noticeable wear even after several thousand samples have been sifted). The minus 80 mesh fraction was collected for all the analysis involved.

Analysis

The analytical procedures and the place of analysis used on the silt samples were the same as those used on the soil samples. These are described under the section entitled 'Soil Geochemical Survey'.

Interpretation


The purpose of the silt survey was to explore the potential of the soil-covered portions of the property. The configuration of streams and seepages made this a practicable method.

Sample stations that are considered to be background are uncolored. Sample stations that are considered to be only weakly anomalous are colored yellow; those that are highly anomalous are colored red.

Weak gold anomalies are scattered throughout the property, but are also concentrated near the central portion coincident with soil anomalies.

Vancouver, B. C.

February 4, 1972



K. A. Grace, P. Eng.



LEGEND

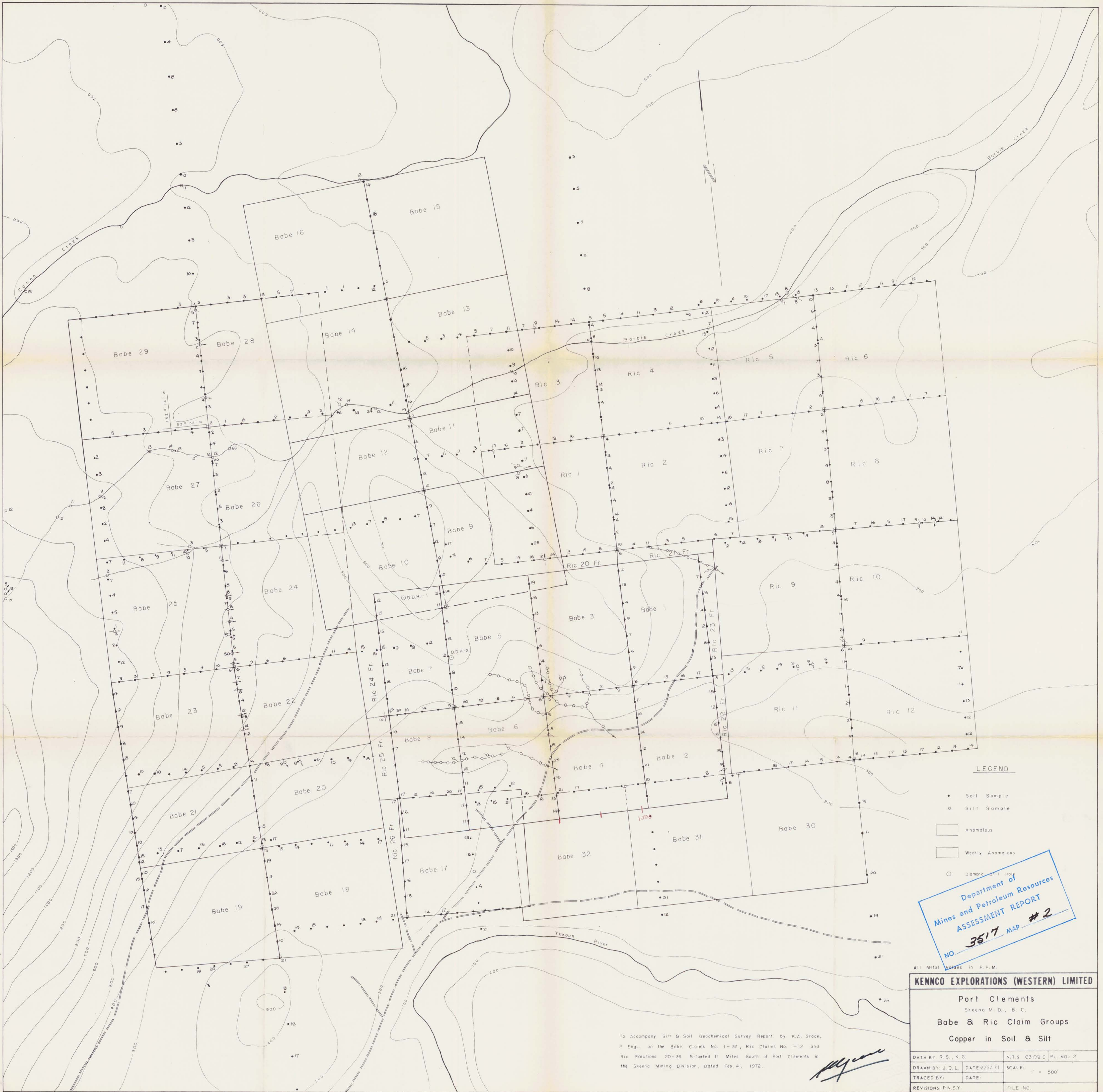
- Soil Sample
- Silt Sample
- Anomalous
- Weekly Anomalous
- Diamond Drill Hole

Department of
 Mines and Petroleum Resources
ASSESSMENT REPORT
 No. 3517 MAP # 1

KENNCO EXPLORATIONS (WESTERN) LIMITED			
Port Clements Skeena M. D., B. C.			
Babe & Ric Claim Groups Molybdenum in Soil & Silt			
DATA BY: R.S., K.G.	N.T.S. 103 F/9 E	PL. NO.: 1	
DRAWN BY: J.Q.L.	DATE: 2/5/71	SCALE: 1" = 500'	
TRACED BY:	DATE:		
REVISIONS: P.N.S.Y.		FILE NO.	

To Accompany Silt & Soil Geochemical Survey Report by K.A. Grace,
 P. Eng., on the Babe Claims No. 1-32, Ric Claims No. 1-12 and
 Ric Fractions 20-26 Situated 11 Miles South of Port Clements in
 the Skeena Mining Division, Dated Feb. 4, 1972

[Handwritten Signature]



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ASSESSMENT REPORT
 NO. 3517 MAP #2

All Metal Values in P.P.M.

KENNCO EXPLORATIONS (WESTERN) LIMITED			
Port Clements Skeena M. D., B. C.			
Babe & Ric Claim Groups Copper in Soil & Silt			
DATA BY: R. S., K. G.	N.T.S. 103 F/9 E	P.L. NO. 2	
DRAWN BY: J. O. L.	DATE: 2/5/71	SCALE: 1" = 500'	
TRACED BY:	DATE:		
REVISIONS: P. N. S. Y.	FILE NO.		

To Accompany Silt & Soil Geochemical Survey Report by K.A. Grace,
 P. Eng., on the Babe Claims No. 1-32, Ric Claims No. 1-12 and
 Ric Fractions 20-26 Situated 11 Miles South of Port Clements in
 the Skeena Mining Division, Dated Feb. 4, 1972.

Kennco



LEGEND

- Soil Sample
- Silt Sample
- Anomalous
- Weakly Anomalous
- Diamond Drill

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 NO. 3517 MAP # 3

KENNCO EXPLORATIONS (WESTERN) LIMITED			
Port Clements Skeena M. D., B. C.			
Babe & Ric Claim Groups			
Zinc in Soil & Silt			
DATA BY: R.S., K.G.	N.T.S. 103 P/9 E	PL. NO.: 3	
DRAWN BY: J.O.L.	DATE: 2/5/71	SCALE: 1" = 500'	
TRACED BY:	DATE:		
REVISIONS: P.N.S.Y.		FILE NO.	

To Accompany Silt & Soil Geochemical Survey Report by K.A. Grace, P. Eng., on the Babe Claims No. 1-32, Ric Claims No. 1-12 and Ric Fractions 20-26 Situated 11 Miles South of Port Clements in the Skeena Mining Division, Dated Feb. 4, 1972.

K.A. Grace



LEGEND

- Soil Sample
- Silt Sample
- Anomalous
- Weakly Anomalous
- Diamond Drill Hole

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ASSESSMENT REPORT
 NO. 3517 MAP #4

All Meter Values in P.P.M.

KENNCO EXPLORATIONS (WESTERN) LIMITED			
Port Clements Skeena M. D., B. C.			
Babe & Ric Claim Groups			
Lead in Soil & Silt			
DATA BY: R.S., K.G.	N.T.S. 103 F/9 E	PL. NO. 4	
DRAWN BY: J.O.L.	DATE: 2/5/71	SCALE: 1" = 500'	
TRACED BY:	DATE:		
REVISIONS: P.N.S.Y.	FILE NO.		

To accompany Silt & Soil Geochemical Survey Report by K.A. Grace, P. Eng., on the Babe Claims No. 1-32, Ric Claims No. 1-12 and Ric Fractions 20-26 Situated 11 Miles South of Port Clements in the Skeena Mining Division, dated Feb. 4, 1972.

[Handwritten signature]



LEGEND

- Soil Sample
- Silt Sample
- Anomalous
- Weakly Anomalous
- Diamond Drill Hole

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 NO. 3517 MAP #6

All Metal Values in P.P.M.
KENCO EXPLORATIONS (WESTERN) LIMITED

Port Clements
 Skeena M.D., B.C.
Babe & Ric Claim Groups
 Nickel in Soil & Silt

DATA BY: R.S., K.G.	N.T.S. 103/9 E PL. NO.: 6
DRAWN BY: J.O.L.	DATE: 2/5/71
TRACED BY: DATE:	SCALE: 1" = 500'
REVISIONS: P.N.S.Y.	FILE NO.

To Accompany Silt & Soil Geochemical Survey Report by K.A. Grace, P. Eng., on the Babe Claims No. 1-32, Ric Claims No. 1-12 and Ric Fractions 20-26 Situated 11 Miles South of Port Clements in the Skeena Mining Division, Dated Feb. 4, 1972.

[Handwritten Signature]



LEGEND

- Soil Sample
- Silt Sample
- Anomalous
- Weakly Anomalous
- Diamond Drill Hole

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NO. **3517** MAP # **7**

All Metal Values in P.P.M.

KENCO EXPLORATIONS (WESTERN) LIMITED			
Port Clements Skeena M.D., B.C.			
Babe & Ric Claim Groups Cobalt in Soil & Silt			
DATA BY: R.S., K.G.	N.T.S. 103 F/9 E	PL. NO.: 7	
DRAWN BY: J.O.L.	DATE: 2/5/71	SCALE: 1" = 500'	
TRACED BY:	DATE:		
REVISIONS: P.N.S.Y.	FILE NO.		

To Accompany Silt & Soil Geochemical Survey Report by K.A. Grace, P. Eng., on the Babe Claims No. 1-32, Ric Claims No. 1-12 and Ric Fractions 20-26 Situated 11 Miles South of Port Clements in the Skeena Mining Division, Dated Feb. 4, 1972.

[Handwritten Signature]



LEGEND

- Soil Sample
- Silt Sample
- Anomalous - Greater Than 20 P.P.M.
- Weakly Anomalous - 15 P.P.M. to 20 P.P.M.
- Diamond Drill Hole

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All Metal Values in P.P.M.

KENCO EXPLORATIONS (WESTERN) LIMITED			
Port Clements Skeena M.D., B.C.			
Babe & Ric Claim Groups Silver in Soil & Silt			
DATA BY: R.S., K.G.	N.T.S. 103/9 E	PL. NO.: 5	
DRAWN BY: J.O.L.	DATE: 2/5/71	SCALE:	
TRACED BY:	DATE:		
REVISIONS: P.N.S.Y.		FILE NO.	

To Accompany Silt & Soil Geochemical Survey Report by K.A. Grace,
 P. Eng., on the Babe Claims No. 1-32, Ric Claims No. 1-12 and
 Ric Fractions 20-26 Situated 11 Miles South of Port Clements
 in the Skeena Mining Division, Dated Feb 4, 1972

Kelly

S10671
 S10672
 S10673
 S10674
 S10675



LEGEND

- Soil Sample
- Silt Sample
- Anomalous - Greater than 200 PPB
- Weakly Anomalous
- Diamond Drill Hole

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All Metal Values in PPB

KENCO EXPLORATIONS (WESTERN) LIMITED	
Port Clements Skeena M. D., B. C.	
Babe & Ric Claim Groups	
Mercury in Peat	
DATA BY: R. S. K. G.	M.T.S. 103 F/9 E PL. NO.: 9
DRAWN BY: J. Q. L.	DATE: 2/5/71 SCALE: 1" = 500'
TRACED BY:	DATE:
REVISIONS: R.N.S.Y.	FILE NO.

To Accompany Silt & Soil Geochemical Survey Report by K.A. Grace, P. Eng., on the Babe Claims No. 1-32, Ric Claims No. 1-12 and Ric Fractions 20-26 Situated 11 Miles South of Port Clements in the Skeena Mining Division, Dated Feb 4, 1972.

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S10672 - 210
 S10673 - 280
 S10674 - 130



LEGEND

- Soil Sample
- Silt Sample
- Anomalous — Greater Than 0.06 P.P.M.
- Weakly Anomalous — 0.04 P.P.M. to 0.06 P.P.M.
- Diamond Drill Hole

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KENNCO EXPLORATIONS (WESTERN) LIMITED

Port Clements
Skeena M. D., B. C.
Babe & Ric Claim Groups
Gold in Soil & Silt

DATA BY: R. S., K. G.	N.T.S. 103 F/9 E	PL. NO.: 10
DRAWN BY: J. O. L.	DATE: 2/5/71	SCALE: 1" = 500'
TRACED BY:	DATE:	FILE NO.
REVISIONS: P.N.S.Y.		

To Accompany Silt & Soil Geochemical Survey Report by K.A. Grace, P. Eng., on the Babe Claims No. 1-32, Ric Claims No. 1-12 and Ric Fractions 20-26 Situated 11 Miles South of Port Clements in the Skeena Mining Division, Dated Feb. 4, 1972.

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LEGEND

- Soil Sample
- Silt Sample
- Anomalous - Greater Than 200 P.P.B.
- Weakly Anomalous
- Diamond Drill Hole

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All Metal Values in P.P.B.

KENCO EXPLORATIONS (WESTERN) LIMITED

Port Clements
 Skeena M.D., B.C.
 Babe & Ric Claim Groups
 Mercury in Soil & Silt

DATA BY: R.S., K.G.	N.T.S. 103 F/9 E	PL. NO. 8
DRAWN BY: J.O.L.	DATE: 2/5/71	SCALE: 1" = 500'
TRACED BY:	DATE:	
REVISIONS: F.N.S.Y.	FILE NO.	

To Accompany Silt & Soil Geochemical Survey Report by K.A. Grace,
 P. Eng., on the Babe Claims No. 1-32, Ric Claims No. 1-12 and
 Ric Fractions 20-26 Situated 11 Miles South of Port Clements
 in the Skeena Mining Division, Dated Feb. 4, 1972.

K.A. Grace



LEGEND

- Soil Sample
- Silt Sample
- ◊ Diamond Drill Hole

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 Mines and Petroleum Resources
 ASSESSMENT REPORT
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KENCO EXPLORATIONS (WESTERN) LIMITED

Port Clements
 Skeena M. D., B. C.
 Babe & Ric Claim Groups
 Soil & Silt Sample Sites

To Accompany Silt & Soil Geochemical Survey Report by K.A. Grace,
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 Ric Fractions 20-26 Situated 11 Miles South of Port Clements
 in the Skeena Mining Division, Dated Feb. 4, 1972.

Handwritten signature

DATA BY: R.S., K.G.	N.T.S. 103 F/9 E	PL. NO. 11
DRAWN BY: J.Q.L.	DATE: 2/5/71	SCALE: 1" = 100'
TRACED BY:	DATE:	
REVISIONS: P.N.S.Y.	FILE NO.	

To S10671 - S10675 every 400' to Yakoun River
 S10670