

84-968-13119

ASSESSMENT REPORT  
SOIL GEOCHEMICAL SURVEY  
ON THE  
CORE 8 - 13 CLAIMS

Owned and Operated by:  
Selco Division-BP Resources Canada Limited

Clinton Mining Division  
NTS: 92P/14W

Located approximately 20 km north northeast  
of Lac La Hache, B.C.

Latitude 51°59'N, Longitude 121°18'W

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**13,119**

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## INTRODUCTION

A geochemical soil survey was conducted over the core 8 to 13 claims from June 15th to July 12th 1984 by Selco Division - BP Resources Canada Limited, of Calgary. This report describes the results obtained from this survey.

## LOCATION AND ACCESS

The Core claims are located approximately 20 kilometres northeast of Lac La Hache, B.C. on a  $030^{\circ}$  bearing. The co-ordinates of the centre of the property are  $51^{\circ}59'N$  latitude by  $121^{\circ}18'W$  longitude. The UTM co-ordinates are 5,760,000 MN by 616000 ME on N.T.S. map sheet 92P/14.

Access to the property is gained via the Spout Lake road that leads northerly from Highway 97 at Lac La Hache. At a point along the eastern edge of Rail Lake, a logging road leads easterly to the central part of the property. An alternate route to the northern part of the property is gained via the Bradley Creek road to the east (Figure 1).

## TOPOGRAPHY AND VEGETATION

The property covers a north facing slope that leads into low wet ground approximately 8 kilometres north of the Mount Timothy

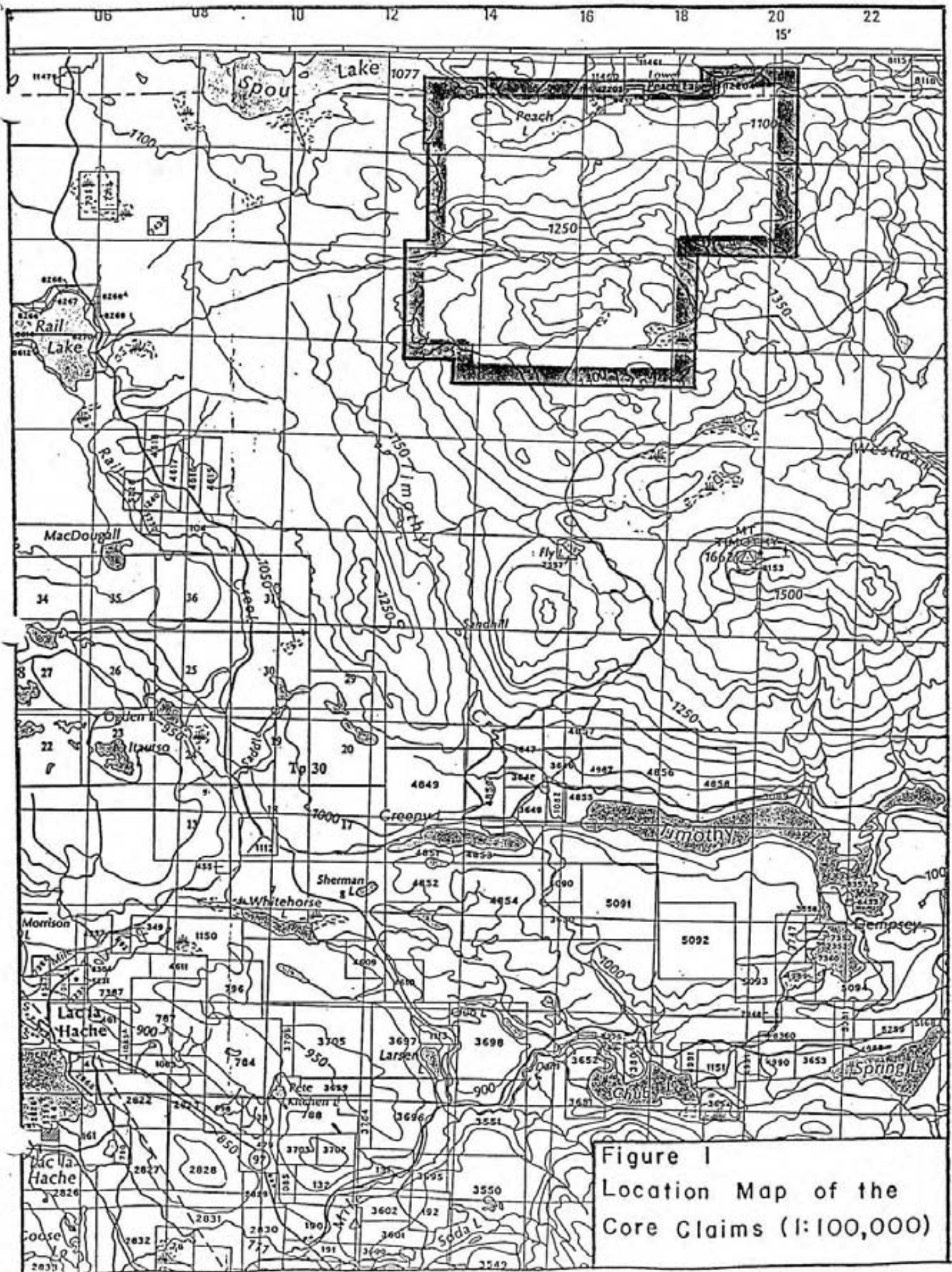


Figure 1  
Location Map of the  
Core Claims (1:100,000)

Summit. The property includes the east end of Spout Lake and all of Peach and Lower Peach Lakes that lie in an east-west trending valley. Range in elevation is from 1370 m (4500 feet) A.S.L. on the hill slope to 1036 m (3400 feet) A.S.L. in the low wet ground on the north. Local relief is moderate with gradual sloping ground leading to the flat narrow valley hosting the small lakes and swampy ground.

Vegetation consists of fir, spruce and some pine on the higher ground with some recent cut-over areas. The lower ground and creek valleys generally contain immature scrub bush and alders.

#### CLAIM STATISTICS

The Core 8 to 13 claims lies within the Clinton Mining Division on N.T.S. map sheet 92P/14W. All the claims are registered in the name of BP Resources Canada Limited of Calgary. The names, record numbers, number of units and recorded dates are as tabulated.

<u>CLAIM NAME</u>	<u>RECORD NO.</u>	<u>UNITS</u>	<u>RECORD DATE</u>
CORE 8	1489	12	04.8.83
CORE 9	1574	9	22.9.83

CORE 10	1575	16	22.9.83
CORE 11	1576	16	22.9.83
CORE 12	1577	20	22.9.83
CORE 13	1578	12	22.9.83

(TOTAL 85 units referred to as Core Group B).

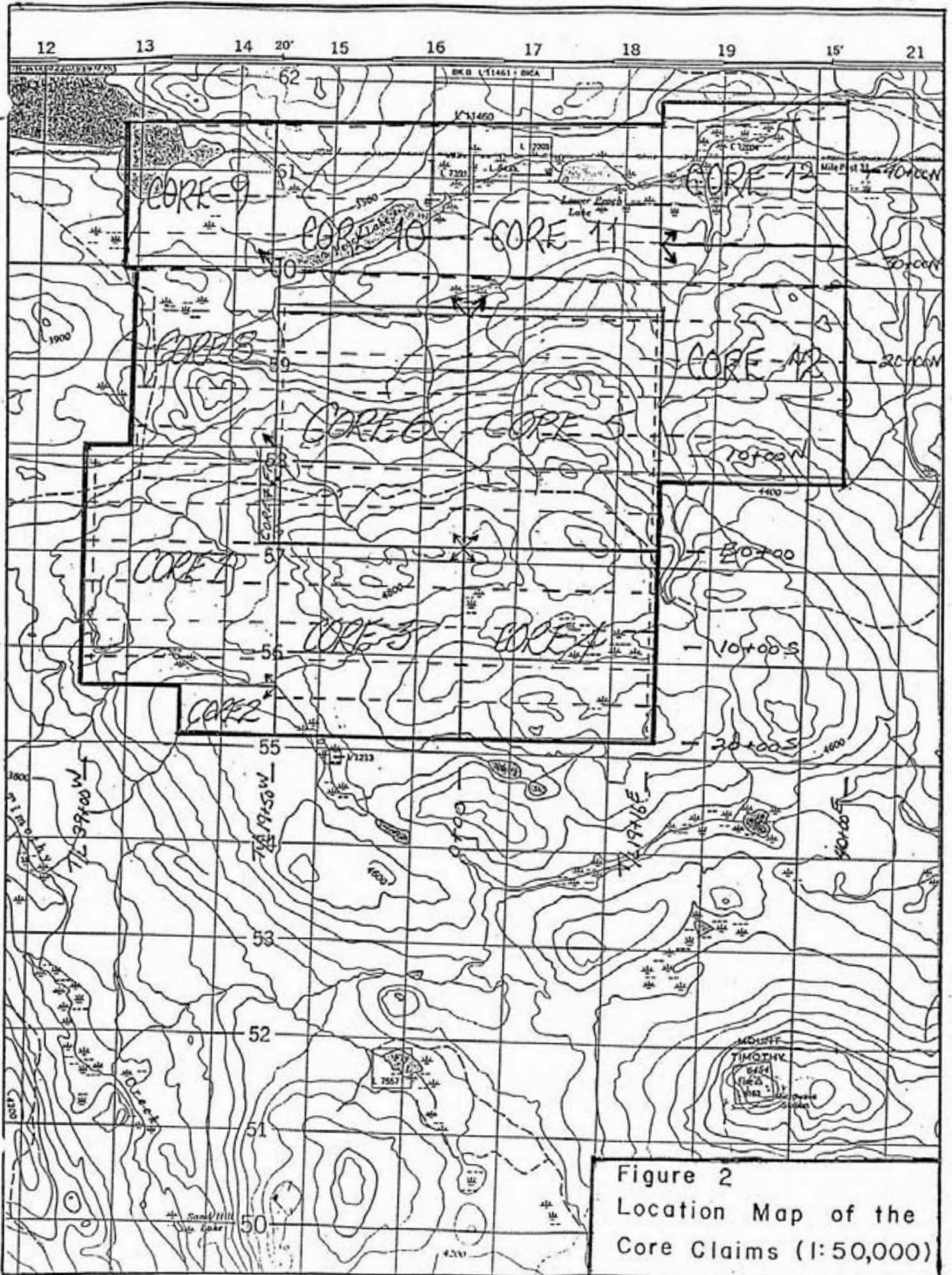
See Figure 2 for Location of Core 8-13 claims.

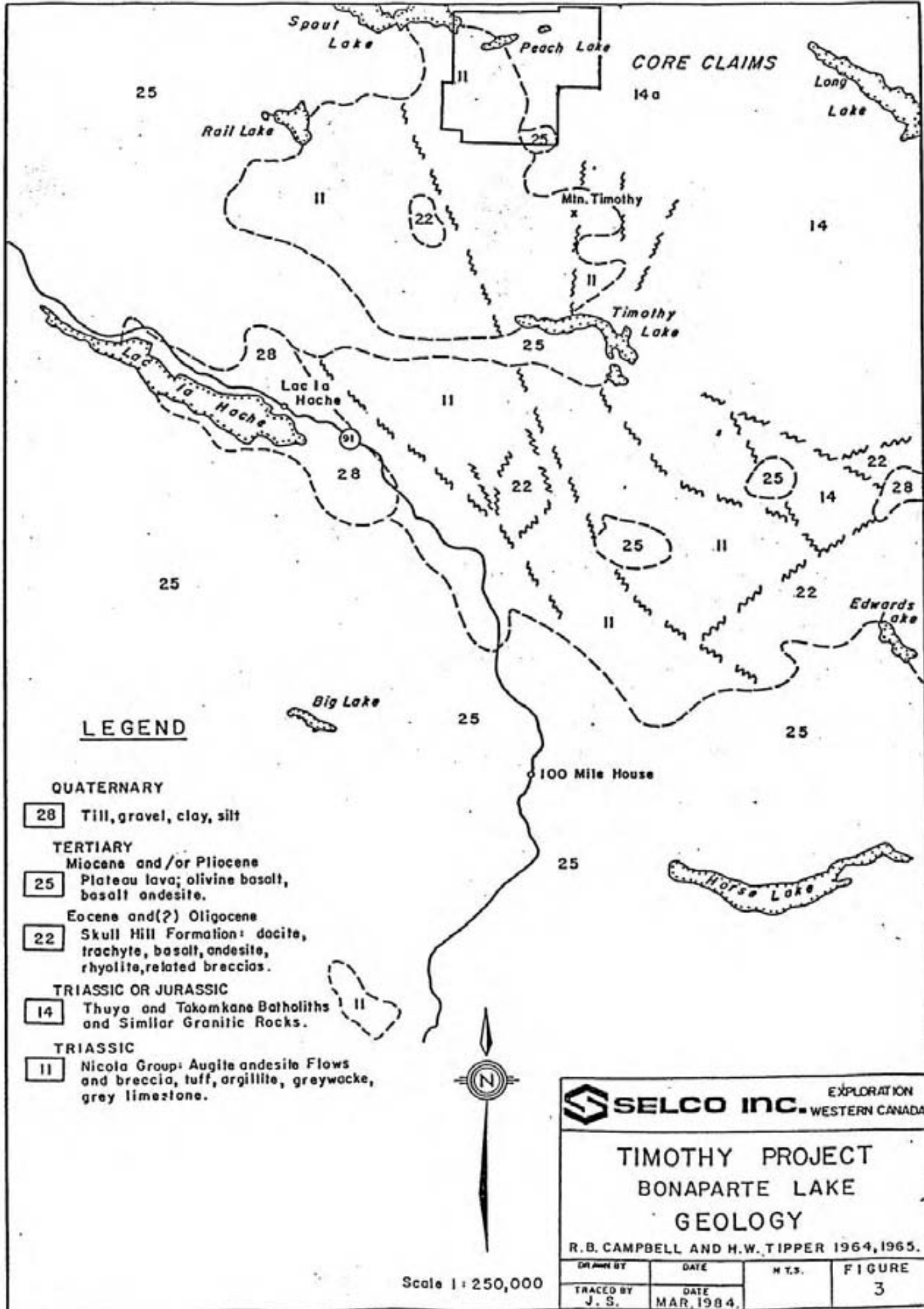
#### GEOLOGY AND PREVIOUS WORK

The regional geology as shown on Map No. 1278A "Geology of the Bonaparte Lake Map Area", G.S.C. Memoir 363, 1972 by R. B. Campbell and H. W. Tipper covers the Core claims. The area of the Core claims is shown to be underlain by Triassic alkaline volcanic and intrusive rocks of the Nicola Group which lie on the western flank of the granitic Takomkane Batholith (Triassic-Jurassic). Late Tertiary plateau basaltic lavas (micocene-pliocene) are indicated to lie extensively to the west of the property. (See Figure 3).

Previous work in the area of the property was conducted by Coranex Limited in 1966, 1967, and 1968, Assessment Reports No's 1037, 1038, 1131, 1734 and by Amax Exploration Inc. in 1969, 1972 and 1973, Assessment Reports No's 2347, 3815, 3882 4542.







**LEGEND**

**QUATERNARY**

**28** Till, gravel, clay, silt

**TERTIARY**

Miocene and/or Pliocene

**25** Plateau lava; olivine basalt, basalt andesite.

Eocene and(?) Oligocene

**22** Skull Hill Formation: dacite, trachyte, basalt, andesite, rhyolite, related breccias.

**TRIASSIC OR JURASSIC**

**14** Thuya and Takomkane Batholiths and Similar Granitic Rocks.

**TRIASSIC**

**11** Nicola Group: Augite andesite Flows and breccia, tuff, argillite, greywacke, grey limestone.



Scale 1:250,000

**SELCO INC.** EXPLORATION WESTERN CANADA

**TIMOTHY PROJECT  
BONAPARTE LAKE  
GEOLOGY**

R. B. CAMPBELL AND H. W. TIPPER 1964, 1965.

DRAWN BY	DATE	N.T.S.	FIGURE
TRACED BY J. S.	DATE MAR, 1984.		
			3

Present ongoing work has also been reported by Selco-BP (Guichon) in an Assessment Report covering Core 1-7 claims, August, 1983.

#### GRID CONTROL

A compass surveyed, flagged and topofil chained grid was established with east-west grid control lines at 400 metre spacings with 100 metre station intervals. A total of 50.5 line kilometres of gridding was completed for the soil survey control (see Figure 4). The grid has also been tied onto the adjacent previously established Core 1-7 grid system. (See Assessment Report Core 1-7, August, 1983).

The gridding and soil collection was accomplished by Company field personnel G. Owsjacki and S. Todoruk under the supervision of D. Gamble.

#### SAMPLE COLLECTION AND ANALYSIS

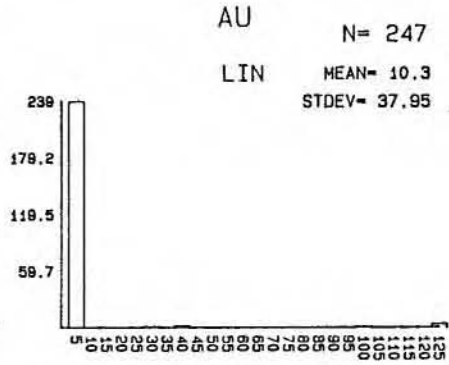
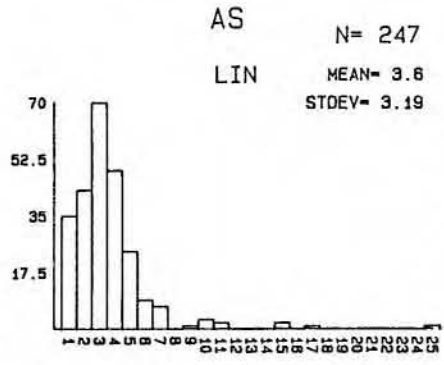
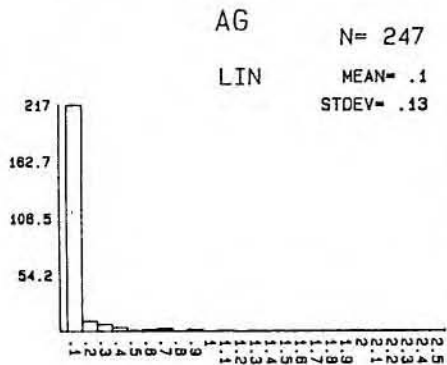
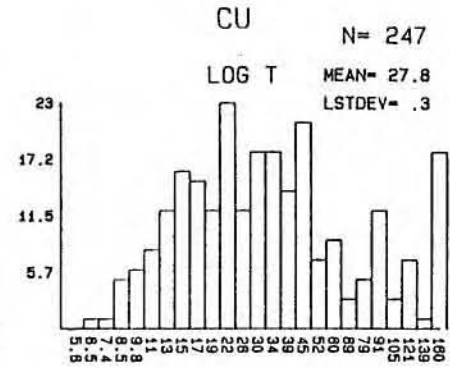
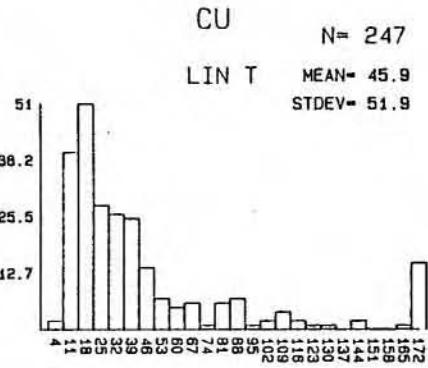
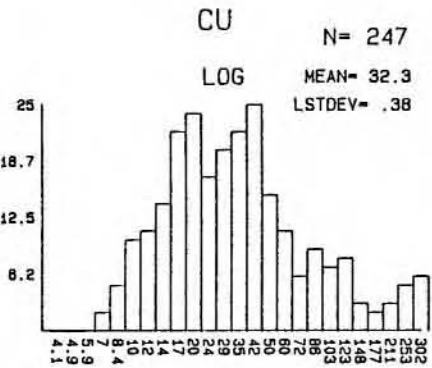
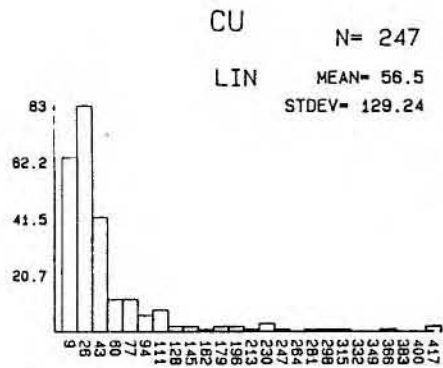
Soil samples were taken at 200 m intervals along lines 400 m apart (Fig. 4). The B soil horizon was sampled at depths of 30 cm and samples attempted to avoid organic-rich material. Samples were placed in Kraft envelopes (10 cm X 23 cm) and allowed to air dry at ambient temperatures. A flagging tape ribbon and numbered tag were left on location to mark the soil site.

Samples were submitted to Chemex Laboratories in Vancouver, B.C., for analysis of copper, silver and arsenic. Gold was determined following fire assay preconcentration technique. Analytical procedures are reported in Appendix 1, and a list of analytical data indexed to field technical information and coordinates is found in Appendix 2.

#### METHOD OF DATA EVALUATION

Appendix 2 lists the field technical data and analytical results. Histograms were drawn to summarize the distribution of metal values (Fig. 5). Selection of arithmetic or logarithmic scales is determined by reference to the detection limit for an element and a number 25X that detection limit. If the maximum value is less than 25X the detection limit, the histogram is calculated by incrementing the detection limit value arithmetically up to 25X the detection limit. If the maximum value exceeds 25X the detection limit, both arithmetic and logarithmic scales have been plotted, scale increments being a constant factor of the detection limit or the standard deviation interval.

In view of the abnormally great influence exceptionally high values have on the construction of a histogram, data sets have been truncated (T on Fig.5) where this is prudent (i.e., where



SAMPLE SELECTION CRITERIA

PROPERTY CODE	ALL
SAMPLE TYPE (S)	50
BEDROCK TYPE (S)	ALL
SOIL HORIZON (S)	ALL
SAMPLE TEXTURE (S)	ALL
OVERBURDEN ORIGIN (S)	ALL
LAB-SIZE FR-EXTRACTION (S)	ALL

LEGEND

LIN = LINEAR  
LOG = LOGARITHMIC  
LIN T = TRUNCATED LINEAR  
LOG T = TRUNCATED LOGARITHMIC

CORE 5-6 AND 8-13 CLAIMS

TIMOTHY LAKE PROJECT - B.C.

1984 SOIL GEOCHEMICAL SURVEY

HISTOGRAMS

DATE AUGUST 1984 PROJECT 545

NTS 92P/14W

the maximum value is >25 X the detection limit and truncation does not leave the remaining maximum values >25 X the detection limit). Truncated data have been replotted in arithmetic or logarithmic format; all values greater than the mean plus 1.9 standard deviation interval truncation limit being plotted in the greatest concentration class interval.

#### METHOD OF DATA PRESENTATION

Histograms are interpreted subjectively to arrive at size coding intervals. Largest dots represent the most anomalous conditions; numbers printed next to the largest dots represent the maximum values of the survey. The second largest dots represent weakly anomalous values. Dot selection otherwise attempts to divide the data into recognizable populations. Each population is subdivided by dot size selection to highlight the uppermost 5 to 10 percentile of that population. Anomalous conditions do not necessarily have to be indicated by the very largest symbols but can also be defined relative to the majority of surrounding lower values. The largest symbols are considered anomalous under all conditions, save their random distribution throughout the survey area. The method of histogram interpretation is reported in Appendix 3.

## DESCRIPTION OF RESULTS

### 1. Copper (Fig. 6A)

Five multisample copper anomalies exceed a threshold of 130 ppm, four in the west and one in the east. A maximum value of 1800ppm in the southwest represents an isolated sample. A northwesterly direction describes the trend of anomalies 2, 3 and 4.

Background values of less than 40 ppm characterize the north-central portion of the grid. Backgrounds are slightly higher in the east, but are notably higher in the southwest, averaging between 40 and 130 ppm.

### 2. Silver (Fig. 6B)

One silver anomaly is outlined, coinciding with copper anomaly 1. The maximum silver value is 1.1 ppm.

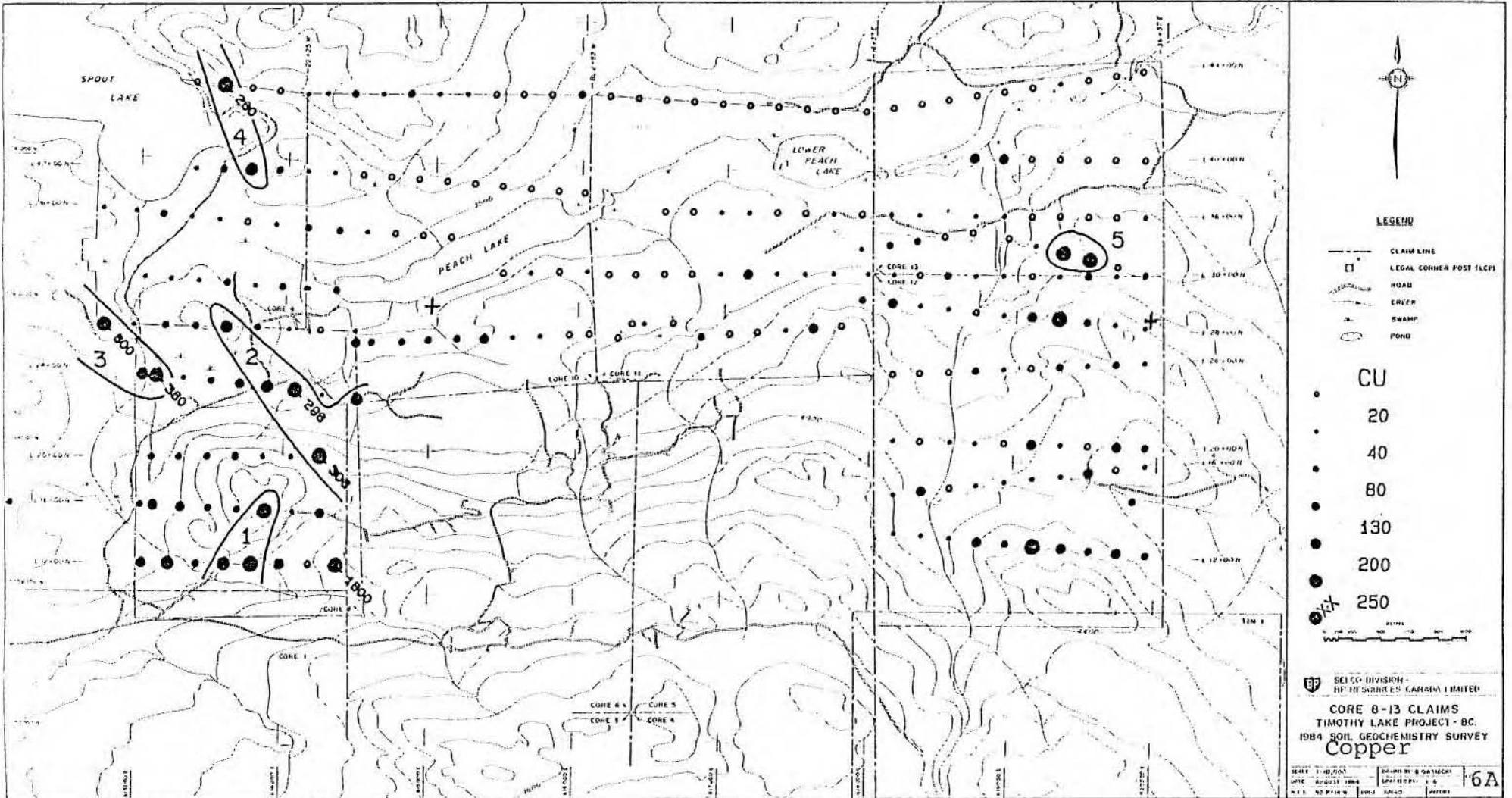
### 3. Arsenic (Fig. 6C)

Arsenic values are very low, generally below 4 ppm over most of the claim group. Higher values are evident in the southwest, where backgrounds average in the 8-12 ppm range. A maximum value of 39 ppm is found in the sample containing 1800 ppm copper. Anomalies are not defined within this

615000

620000

CU

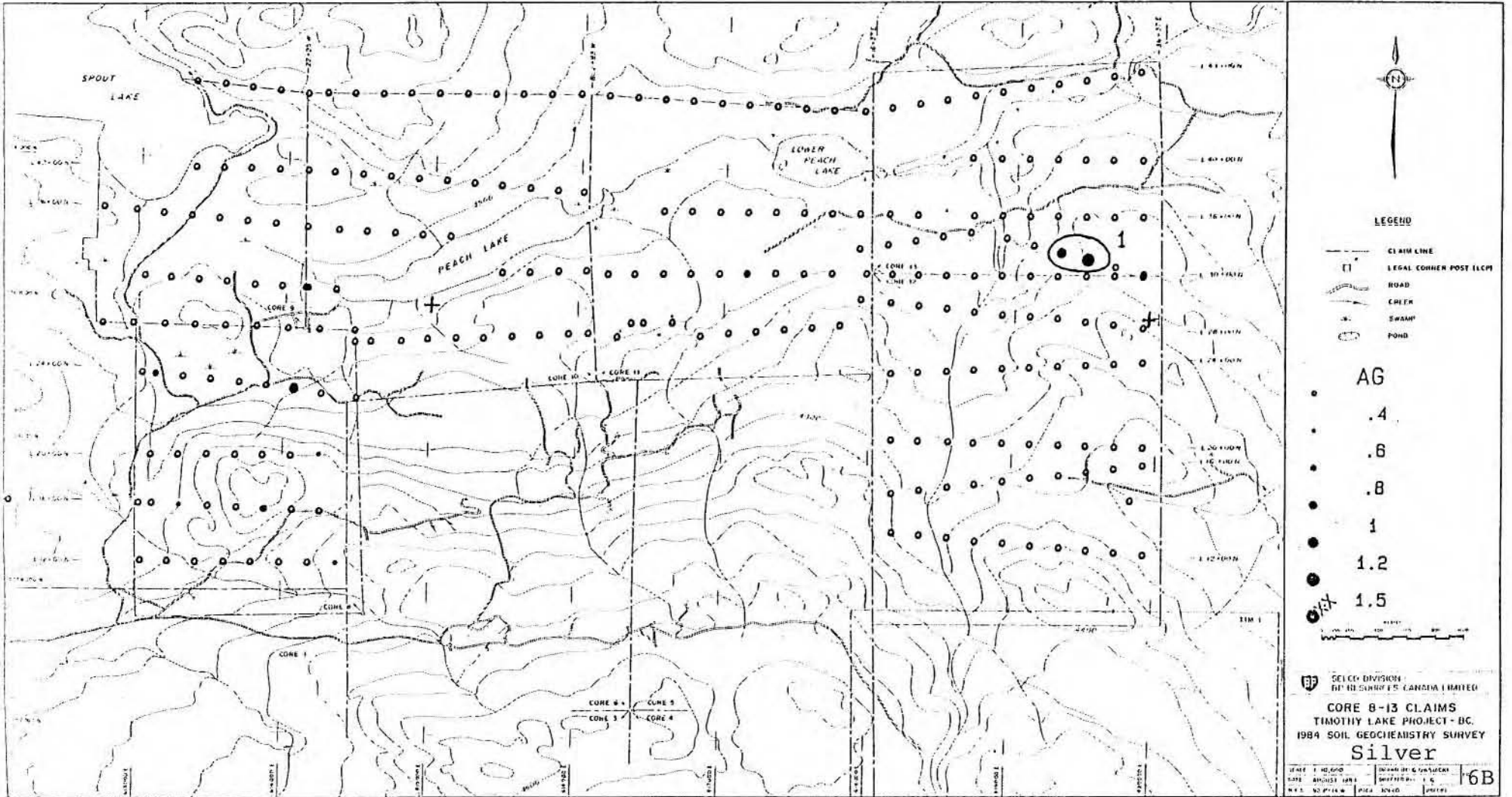




615000

620000

AG

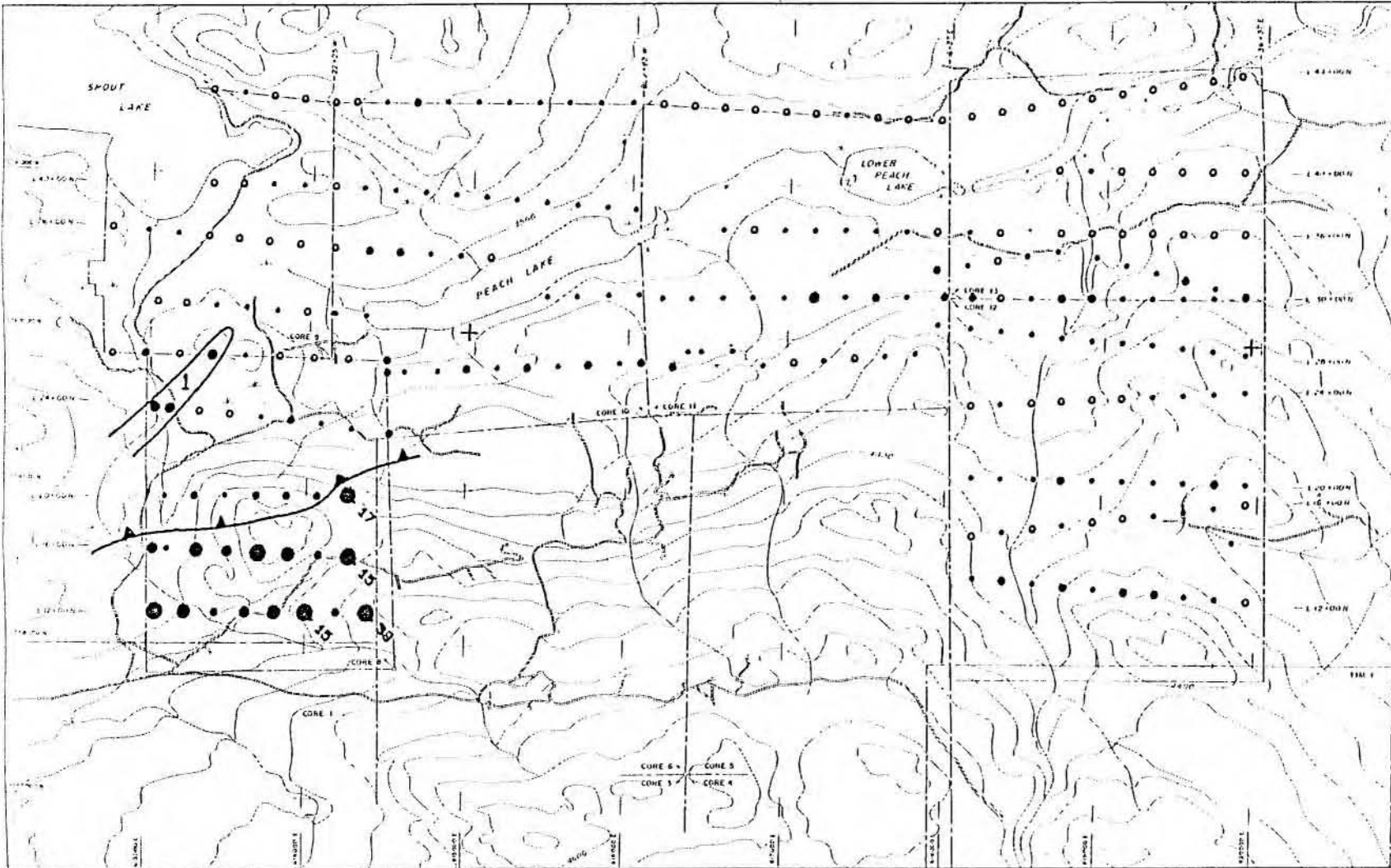


SCLCO DIVISION  
 OF SURVEY & CANADA LIMITED  
**CORE 8-13 CLAIMS**  
 TIMOTHY LAKE PROJECT - BC.  
 1984 SOIL GEOCHEMISTRY SURVEY  
**Silver**  
 SHEET 1 OF 10  
 DATE: AUGUST 1984  
 DRAWN BY: G. THOMPSON  
 CHECKED BY: J. G.  
 SCALE: AS SHOWN  
 UNIT: METERS  
 6B

615000

620000

AS

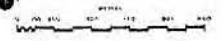


LEGEND

- CLAIM LINE
- LEGAL CORNER POST (LCP)
- ROAD
- CREEK
- SWAMP
- POH

AS

- 2
- 4
- 6
- 8
- 10
- 14



SEICO DIVISION  
OF RESOURCES CANADA LIMITED

CORE 8-13 CLAIMS  
TIMOTHY LAKE PROJECT - BC  
1984 SOIL GEOCHEMISTRY SURVEY

Arsenic

DATE: 1-10-70	SCALE: 1:10,000	BY: G. GARDNER
MAP: AUGUST 1984	PROJECT: 8-13	DATE: 1-10-70
BY: S. D. PYLE	PROJECT: 8-13	DATE: 1-10-70

6C

region of high background. Arsenic anomaly 1 is partly coincident with copper anomaly 3 within the area of lower background.

#### 4. Gold (Fig. 6D)

Most gold values are below 10 ppb. Anomalous values ranging from 40 ppb to 400 ppb, tend to be represented by isolated occurrences with the exception of gold anomaly 1 comprising 3 samples oriented in a northwesterly direction. This gold anomaly complements copper in anomalous zone 2. The 1800 ppm copper-rich sample contains 40 ppb gold.

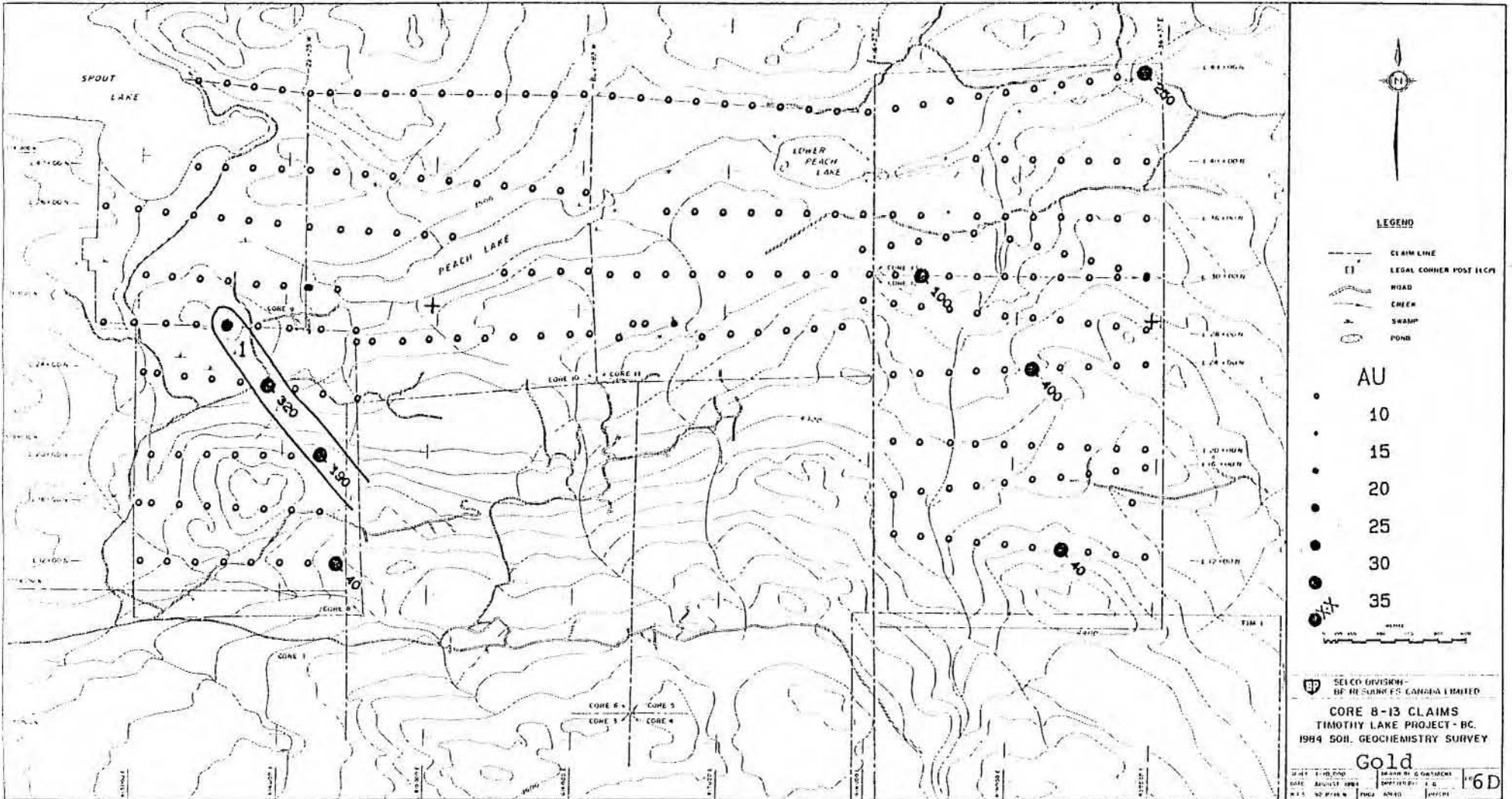
### DISCUSSION OF RESULTS

The soil survey has outlined one coincident copper-gold anomaly and has suggested 4 additional copper-rich zones without a gold association may be of interest. These lie predominantly in the west. Four isolated gold values exceeding 40 ppb are found in the east, remote from a base metal association. Both arsenic and copper appear to be indicating a change of underlying rock type to a more metal-rich variety in the west, and one copper anomaly has a weak arsenic association. The northwesterly orientation to copper-gold anomalies may be indicative of an underlying structural or lithological control.

615000

620000

AU



Bona fide anomalies normally require contiguous pairs of samples exceeding threshold values. The sample density of 200 m X 400 m here is too great to require this constraint on the present survey. Once detailed, single point anomalies could be indicative of significant exposures of mineral, although the possibility of sampling and analytical error is high and mitigates exceptional importance being given to these values without a preliminary followup effort.

Followup requires firstly, reanalysis of anomalous samples for gold, and secondly, detailed sampling at a 50 m X 100 m density within areas of interest. Trenching is recommended subsequently to locate root zones in bedrock of surface soil anomalies.

#### CONCLUSIONS

Five multi-sample copper and one multi-sample gold (coincident with copper) anomalies have been defined by soil sampling on the CORE 8-13 claims. Several isolated samples rich in gold have also been noted. Followup requires reanalysis of gold-rich samples, resampling of anomalous sites, and detailed soil sampling in anomalous areas. Trenching to locate bedrock sources of metal should be considered following completion and interpretation of preliminary followup.

RECOMMENDATIONS

(1) Reanalyze the following samples for gold:

911017

912048

912040

911058

912120

912016

912163

- (2) Resample each anomalous gold site and collect additional samples at 50 m intervals to the next existing sample station. Position an intermediate line 100 m north and 100 m south of the existing line and sample these at 50 m intervals to complete a three line grid.
- (3) The southeastern corner of the grid requires resampling at a 50 m X 100 m density. The survey should be extended to the west, south and east.
- (4) Bona fide soil anomalies defined and positioned as a consequence of (1), (2) and (3) will probably require trenching or pitting to locate their source in bedrock. An assessment of preliminary followup data should be made before decisions to trench or perform other work are finalized.

## APPENDIX 1

Geochemical Preparation  
and  
Analytical Procedures

GEOCHEMICAL PREPARATION  
AND  
ANALYTICAL PROCEDURES

1. Geochemical samples (soils, silts) are dried at 80°C for a period of 12 to 24 hours. The dried sample is sieved to -80 mesh fraction through a nylon and stainless steel sieve. Rock geochemical materials are crushed, dried and pulverized to -100 mesh.
2. A 1.00 gram portion of the sample is weighed into a calibrated test tube. The sample is digested using hot 70% HClO<sub>4</sub> and concentrated HNO<sub>3</sub>. Digestion time = 2 hours.
3. Sample volume is adjusted to 25 mls. using demineralized water. Sample solutions are homogenized and allowed to settle before being analyzed by atomic absorption procedures.
4. Detection limits using Techtron A.A.5 atomic absorption unit.

Copper	- 1 ppm
Molybdenum	- 1 ppm
Zinc	- 1 ppm
* Silver	- 0.2 ppm
* Lead	- 1 ppm
* Nickel	- 1 ppm
* Chromium	- 5 ppm
* Cobalt	- 1 ppm
Manganese	- 5 ppm
Iron	- 2 ppm

\* Ag, Pb, Co & Ni are corrected for background absorption.

5. Elements present in concentrations below the detection limits are reported as one half the detection limit, i.e. Ag - 0.1 ppm.



## PPM Antimony:

A 2.0 gm sample digested with conc. HCl in hot water bath. The iron is reduced to  $\text{Fe}^{+2}$  state and the Sb complexed with  $\text{I}^-$ . The complex is extracted with TOPO-MIBK and analyzed via A.A. Correcting for background absorption  $0.2 \text{ ppm} \pm 0.2$

Detection limit: 0.2 ppm

## PPM Arsenic:

A 1.0 gram sample is digested with a mixture of perchloric and nitric acid to strong fumes of perchloric acid. The digested solution is diluted to volume and mixed. An aliquot of the digest is acidified, reduced with KI and mixed. A portion of the reduced solution is converted to arsine with  $\text{NaBH}_4$  and the arsenic content determined using flameless atomic absorption.

Detection limit: 1 ppm

## PPB Gold:

5 gm samples ashed @  $800^\circ\text{C}$  for one hour, digested with aqua regia - twice to dryness - taken up in 25% HCl, the gold then extracted as the bromide complex into MIBK and analyzed via A.A.

Detection limit: 10 ppb

## PPM Uranium

1.0 gms sample is digested with  $\text{HClO}_4$  -  $\text{HNO}_3$  acid for approximately 2 hours. An aliquot extracted with MIBK after the addition of  $\text{Al}(\text{NO}_3)_3$  - TPAN solution and analyzed via conventional fluorometric procedure.

Detection limit: 0.5 ppm

## PPM Tungsten:

0.50 gm sample is fused with potassium bisulfate and leached with hydrochloric acid. The reduced form of tungsten is complexed with toluene 3,4 dithiol and extracted into an organic phase. The resulting color is visually compared to similarly prepared standards.

Detection limit: 2 ppm W

## PPM Tin:

1.00 gm of sample is sintered with ammonium iodide. The resulting tin iodide is leached with a dilute HCL - ascorbic acid solution. The TOPO complex is then extracted with MIBK and analyzed via A.A.

Detection limit: 1 ppm Sn

## PPB Mercury:

The sample is digested with nitric acid plus a small amount of hydrochloric acid. Following digestion the resulting clear solution is transferred to a reaction flask connected to a closed system absorption cell. Stannous sulfate is rapidly added to reduce mercury to its elemental state. The mercury is then flushed out of the reaction vessel into the absorption cell where it is measured by cold vapour atomic absorption methods with a *Varian Spectrophotometer*. The absorbance of samples is compared with the absorbance of freshly - prepared mercury standard solutions carried through the same procedure. The detection limit of this method is 5 ppb.

Oz/Ton Ag, Au

## FIRE ASSAY METHOD

Silver and gold analyses are done by standard fire assay techniques. In the sample preparation stage the screens are checked for metallics which, if present, are assayed separately and calculated into the results obtained from the pulp assay.

0.5 assay ton sub samples are fused in litharge, carbonate and silicious fluxes. The lead button containing the precious metals is cupelled in a muffle furnace. The combined Ag & Au is weighed on a microbalance, parted, annealed and again weighed as Au. The difference in the two weighing is Ag.

*5ppb detection limit*

CCRMP standards provided by the Department of Energy, Mines and Resources are analyzed along with each group of forty samples for quality control. Fire assay standards are used less frequently because of the large quantity of pulp required for the analysis.

#### PPM BISMUTH

A 2.0 gram sample is digested with perchloric and nitric acid to strong fumes (2 hrs). The solution cooled and additional hydrochloric acid added. After the addition of KI and the reduction of iron the solution is extracted with MIBK-aliquot 336 and analyzed via standard AA procedure correcting for background absorption.

## APPENDIX 2

Code Format for Recording Field Notes  
List of Field and Analytical Data  
For Soils and Rocks  
Plots of Field Notes

## GENERAL

- 1-2 SAMPLE TYPE
10. Stream sediment
  11. Stream water
  12. Drainage ditch sediment
  18. Heavy mineral concentrate
  20. Seepage (spring) sediment
  21. Seepage (spring) water
  30. Lake sediment - lake center
  31. Lake water
  32. Lake sediment-near shore
  40. Bog-upper 100 cm
  41. Bog-stagnant water
  42. Bog-below 100 cm
  43. Bog-organic material at mineral horizon interface
  44. Bog-mineral horizon
  50. Soil-top of the B horizon (or top of the C horizon if B horizon absent)

- 1-2 SAMPLE TYPE Cont.
51. Soil-other horizons (organic-rich samples or when 2 samples taken at same hole)
  52. Frost boil or seepage boil
  54. Groundwater sample
  55. Deep overburden sample
  58. Heavy mineral concentrate
  60. Talus fines
  63. Talus blocks-hand sample
  64. Talus blocks-chips
  68. Heavy mineral concentrate
  70. Biogeochemical sample
  75. Radon
  80. Bedrock hand specimen
  81. Bedrock chips + hand sample
  82. Float hand specimen
  83. Float chips + hand sample
  84. Drill core specimens

- 1-2 SAMPLE TYPE Cont.
85. Channel sample/split core
  86. Drill chips
  87. Drill sludge
  88. Heavy mineral concentrate
  - \*89. High grade sample
  - \*90. Special sample-specify 99. Standard sample
- \*Clearly label if high grade.
- Special Note  
For keypunchers benefit, 7's should be crossed 7 and 0's (letter) should be slashed 0
- 3-4 YEAR
- 5-7 PROJECT NUMBER

- 8 PROJECT IDENTIFICATION  
Blank-reconnaissance  
A,B,C, etc. - properties, anomalies, (List 6)
- 9 DUPLICATE SAMPLES  
Label duplicates as 1,2, etc. (collect 1 duplicate pair in 30)
- 10-12 SAMPLER IDENTIFICATION (10-11) (List 7)
- 13-15 SAMPLE NUMBER (12-15)
- 19-24 EAST COORDINATE
- 25-31 NORTH COORDINATE
- 34-38 NTS MAP SHEET NUMBER  
Example: record 92F/3 as 92F03

## LIST 1

- 1-- INTRUSIVE ROCKS
- 1- QUARTZ RICH
  - 1 Granite
  - 2 Quartz Monzonite
  - 3 Granodiorite
  - 4 Quartz diorite
  - 2- INTERMEDIATE
  - 1 Syenite
  - 2 Monzonite
  - 3 Diorite
  - 4 Gabbro
  - 3- FELDSPATHOID RICH
  - 1 Nepheline Syenite
  - 2 Nepheline Monzonite
  - 40 ULTRABASIC
  - 50 CARBONATITES
  - 6- SPECIAL TYPES
  - 1 Pegmatite
  - 2 Aplite
  - 3 Lamprophyre
  - 4 Trap
  - 5 Felsite
  - 6 Intrusion Breccia
  - 7 Diabase

## LIST 2

- 2-- VOLCANIC ROCKS
- 0- UNDIFFERENTIATED
  - 1- BASALT
  - 2- ANDESITE
  - 3- DACITE
  - 4- RHYOLITE
  - 5- QUARTZ LATITE
  - 6- LATITE
  - 7- TRACHYTE
  - 8- PHONOLITE
  - 9- NEPHELINE LATITE
  - 1 Fine grained flows
  - 2 Prophyritic flows
  - 3 Crystal tuffs
  - 4 Ash tuffs
  - 5 Lapilli tuffs
  - 6 Agglomerate
  - 7 Lapilli breccia
  - 8 Block breccia
  - 9 Turbidite

## LIST 3

- 3-- SEDIMENTARY ROCKS
- 1- ARENACEOUS
  - 1 Siltstone
  - 2 Mudstone
  - 3 Greywacke
  - 4 Sandstone
  - 5 Quartzite
  - 6 Conglomerate
  - 2- ARGILLACEOUS
  - 1 Shale
  - 2 Chert
  - 3- CALCAREOUS
  - 1 Limestone
  - 2 Dolomite
  - 4- CHEMICAL PRECIPITATE
  - 1 Chert
  - 2 Marble
  - 3 Iron Formation

## LIST 4

- 4-- METAMORPHIC ROCKS
- 10 FINE GRAINED CONTACT
  - 2- PHANERITIC
  - 1 Meta quartzite
  - 2 Marble
  - 3 Soapstone
  - 4 Hornfels
  - 5 Serpentine
  - 6 Skarn
  - 7 Amphibolite
  - 8 Eclogite
  - 3- MECHANICAL
  - 1 Mylonite
  - 2 Flaser
  - 3 Augen
  - 4 Ultramylonite
  - 40 SLATE
  - 50 PHYLLITE
  - 60 SCHIST
  - 7- GNEISS \*
  - 8- MIGMATITE \*
  - \*1 Granite
  - 1 Monzonite
  - 2 Granodiorite
  - 3 Conglomerate
  - 4 Sandstone
  - 5 Augen
  - 6 Granulite
  - 8 Quartz diorite
  - 9 Diorite
  - 0 Amphibolite

## STREAM SEDIMENTS

- 40 SAMPLE ENVIRONMENT
1. Side of creek
  4. Middle of stream
  9. Composite across stream
  - A. Soil
- 41 WATER MURKINESS  
Blank-clear  
1. Murky (report findings in note section)
- 42 PRECIPITATE  
Blank-none  
1. Record colour (report presence of precipitate in immediate vicinity in stream bed. If heavy precipitate, sample separately as sample type 90)
- 43 OVERBURDEN TRANSPORT  
L. Local M. Mixed local  
E. Extensive & extensive  
U. Unknown
- 45 OVERBURDEN ORIGIN  
1. Till-angular boulders  
2. Outwash-sandy, rounded boulders  
3. Lake sediment-sand/silt  
4. Alluvium-stream deposit  
5. Peat-bog  
6. Colluvium\*

- 45 OVERBURDEN ORIGIN Cont.
7. Lake sediment-clay
  8. Talus
  9. Residual \*use only if C. Boulder field\* former origin
  - D. Gravel\* cannot be identified
  - E. Soil\*
- 46 BEDROCK  
M. Mineralized  
P. Present within 100m upslope  
D. Present within 100m down-slope  
B. Underlies sample site  
G. Gossan  
F. Fe surface stains  
R. Radioactivity
- 47-48 pH
- 49 SAMPLE TEXTURE  
0. Organic-decomposed  
1. Clay  
2. Silt and fine sand  
3. Sand  
4. Gravel  
6. Cemented  
7. Precipitate  
8. Twigs or undecomposed organic matter
- 50-52 AVERAGE WIDTH OF STREAM-M  
Decimal point in col 51 (or col 52 if stream > 10m wide)

- 53-55 AVERAGE DEPTH OF STREAM-CM
- 56 STREAM VELOCITY
1. Dry
  2. Stagnant
  3. Slow
  4. Moderate
  5. Fast
  6. Turbulent
- 57 INDICATE AS TRIBUTARY  
R. Stream enters on the right looking down main stream  
L. Stream enters on left looking down main stream
- 58-60 LOCAL BEDROCK COMPOSITION  
Estimate-use Lists 1-4
- 61-66 COLOUR  
Munsell notation or abbreviation
- 67 CONTAMINATION  
Blank - none L - logging  
C - culvert M - mine  
F - farming R - road  
G - garbage T - trench  
H - house 0 - other - spec.  
I - industry

- 68 ORGANIC FRACTION \*(Complete where sediment composition is unusual)  
2. Large amount of undecomposed leaves, twigs, etc.  
4. Large amount of well-decomposed vegetation  
5. Moss  
7. Sediment grains coated in organic matter  
8. Lake sediment ooze.
- 69 MINERAL FRACTION \*(Complete where composition is unusual)  
3. Notable content of mafic minerals, resistates  
4. Very high content of mafics, resistates
- 71 SCINTILLOMETER NUMBER
- 72-75 GAMMA COUNT AT SAMPLE DEPTH  
(make note if landscape is affecting gamma count)
- 76 ROCK  
\*Star if bedrock is influencing scint count
- 77-78 APPROXIMATE SLOPE ANGLE
- 79-80 APPROXIMATE SLOPE DIRECTION

## SOILS

- 40 SITE TOPOGRAPHY
1. Hill top
  2. Gentle slope
  3. Steep slope > 20°
  4. Base of slope
  5. Valley floor
  6. Depression
  7. Level
  8. Rolling
  9. Bog
- 41 SAMPLE ENVIRONMENT
1. Tundra-hummocky
  2. Tundra-dry
  3. Tundra-swampy
  4. Grassland, meadows
  5. Peat mounds
  6. Bog in depression
  7. Forest-coniferous
  8. Forest-deciduous
  9. Forest-mixed
  - A. Alder or willows
  - B. Cultivated land
  - C. Desert, semi-arid
  - D. Barren
  - E. Talus fan
  - F. Bank soil-stream
  - G. Bank soil-lake
  - H. Road cut
- 42 SITE DRAINAGE
1. Dry
  2. Moist
  3. Wet
  4. Saturated
- 43 OVERBURDEN TRANSPORT  
L. Local  
E. Extensive  
U. Unknown  
M. Mixed
- 44 WATER MOVEMENT  
S. Seepage

- 45 OVERBURDEN ORIGIN
1. Till-angular boulders
  2. Outwash-sandy, rounded boulders
  3. Lake sediment-sand/silt
  4. Alluvium-stream deposit
  5. Peat-bog
  6. Colluvium
  7. Lake sediment-clay
  8. Talus
  9. Residual
  - A. Frost boils\*
  - B. Seepage boils\*
  - C. Boulder field\*
  - D. Gravel\*
- \* Use only if former origin cannot be identified.
- 46 BEDROCK  
M. Mineralized  
P. Present within 100m upslope  
D. Present within 100m down-slope  
B. Underlies sample site  
G. Gossan  
F. Fe surface stains  
R. Radioactivity
- 47-48 pH
- 49 SAMPLE TEXTURE  
0. Organic muck  
1. Fibrous, peaty organic matter  
2. Very sandy  
3. Sandy  
4. Sand-silt  
5. Sand-silt-clay  
6. Silt  
7. Silt-clay  
8. Clay  
9. Gravel
- 50-51 THICKNESS OF SOIL SAMPLE INTERVAL-CM
- 52-54 BOTTOM OF SOIL SAMPLE INTERVAL-CM

- 55-56 SOIL HORIZON
- LH. Leaf, humus layer, undecomposed vegetation lying on the ground surface (do not sample)
- AH. Dark grey to black, organic-rich mineral horizon usually no deeper than 15cm from the surface (do not sample)
- AE. Grey to white (occasionally brown) leached mineral horizon near ground surface, usually sandy; accompanied by BF or BT horizon at depth (do not sample)
- BH. Black, organic-rich mineral horizon at depths greater than 15cm (do not sample)
- BF. Red-brown, iron-rich horizon
- BT. Brown, clay-rich horizon
- BG. Horizon which is water-saturated most of the year, identified by red brown mottles
- BM. Brown horizon which is only slightly different in appearance from underlying parent material
- CL,C2,C3, etc. Parent material for soil
- CA. White calcium carbonate precipitate in C horizon 0.1, 0.2, 0.3, etc. Bog sample at various depths
- TF. Talus fines
- 57 SOIL TYPE  
C. Chernozem-prairie soil usually under grassland or meadow, thick Ah) 10cm, CA horizon at depth  
S. Solonchok-saline soil, high content of NaCl

- 57 SOIL TYPE Cont.
- L. Luvisol-BT horizon diagnostic
- P. Podzol-BF horizon diagnostic
- B. Brunisol-BM horizon is only B horizon of profile
- R. Regosol-litric or no soil development, no B soil horizon, only LH (maybe) and C horizon
- G. Gleysol-BG horizon diagnostic
0. Organic soil-bog vegetation-no mineral matter
- 58-60 LOCAL BEDROCK COMPOSITION  
Estimate-use Lists 1-4
- 61-66 COLOUR  
Munsell notation or abbreviation
- 67 CONTAMINATION  
Blank - none L - logging  
C - culvert M - mine  
F - farming R - road  
G - garbage T - trench  
H - house 0 - other - spec.  
I - industry
- 68-69 COARSE FRAGMENTS
- 70 SHAPE OF COARSE FRAGMENTS  
A. Angular  
R. Rounded  
S. Subrounded  
M. Mixed above types
- 71 SCINTILLOMETER NUMBER
- 72-75 GAMMA COUNT AT SAMPLE SITE  
Scint reading at ground level over hole
- 76 ROCK  
\*Star if bedrock is influencing scint counts
- 77-78 APPROXIMATE SLOPE ANGLE
- 79-80 APPROXIMATE SLOPE DIRECTION

## LAKE SEDIMENTS

## 40 TOPOGRAPHY-SETTING OF LAKE OR LANDSCAPE

1. Cirque basin
2. Gentle slope
3. Steep slope > 20°
4. Footslope
5. Valley floor
- 6.
7. Level
8. Rolling
9. Major bog

## 41 DRAINAGE BASIN ENVIRONMENT

1. Tundra-arctic
2. Tundra-alpine
3. Grassland, pasture, meadows
4. Bog, swamp
5. Forest-coniferous
6. Forest-deciduous
7. Forest-mixed
8. Cultivated land
9. Semi-arid to desert

## 42 LAKE TYPE

- 1 - Oligotrophic  
 2 - Eutrophic  
 3 - Hypertrophic  
 4 - Other - specify

## 43 OVERBURDEN TRANSPORT

1. Local E. Extensive-thin  
 T. Extensive-thick

## 44 WATERED AREA

1. Low 0-1 km<sup>2</sup>
2. Moderate 1-3 km<sup>2</sup>
3. Relatively large 3-10 km<sup>2</sup>
4. Very large > 10 km<sup>2</sup>

## 45 PREDOMINANT GLACIAL OVERBURDEN

1. Till
2. Outwash sand
3. Lacustrine sand
4. Alluvium
5. Peat
6. Colluvium
7. Lacustrine clay
8. Talus
9. Residual
0. Unknown

## 46 FLOODING RATE

1. None
2. Low
3. Moderate
4. High

## 47-48 DM

## 49 TEXTURE

1. Nearshore sands/gravels
2. Deltic sands/gravels
3. Woody
4. Well decomposed vegetation (bog)
5. Algae
6. Silt
7. Clay
8. Silt/sand
9. Pre-lake deposits

## 50-52 MAXIMUM LAKE LENGTH IN METRES - 10

## 53-55 MAXIMUM LAKE WIDTH IN METRES - 10

## 56-57 LAKE DEPTH AT POINT OF SAMPLING-METRES

## 58-60 LOCAL BEDROCK COMPOSITION-PRIMARY UNIT

Estimate - see lists 1-4

## 61-64 COLOR

Munsell notation or abbreviation

## 67 CONTAMINATION

Blank - none C - logging  
 D - oilvert H - mine  
 F - farming S - road  
 G - garbage T - trench  
 W - house B - other - spec.  
 I - industry

## 68 LAKEHORE CHARACTER

1. Boggy  
 2. Sandy  
 3. Rocky  
 4. Mixed boggy and sandy/cracky

## 69 NUMBER OF MAJOR INFLOW STREAMS

- Blank - none  
 1. 1  
 2. 2  
 3. 3  
 4. 4-10  
 5. > 10

## 70 PROXIMITY OF SAMPLE SITE TO MAJOR INFLOW STREAMS

1. 0-50m
2. 51-100m
3. 101-250m
4. 251-500m
5. > 500m

## 71 SAMPLE HOMOGENEITY

- H. Homogeneous  
 L. Layered  
 T. Turbidite  
 B. Other - specify

## 72 SEDIMENT CONSISTENCY

1. Soupy  
 2. Firm  
 3. Other

## 73 ISLAND

- Blank=none  
 1. Low density  
 2. Moderate density  
 3. High density

## 74 PRECIPITATE

- F. Fe oxides-red brown  
 M. Mn oxides-black  
 C. Calcium-carbonate  
 -white  
 6. Other - specify

## 75 FEATURE

1. Fe concretions
2. Mn concretions
3. Ferrn concretions
4. Shell fragments
5. Other - specify

## 76 SEDIMENT COLOR

- Blank=none  
 H. Hydrogen sulphide  
 F. Fishy  
 B. Other - specify

## 78-80 LOCAL BEDROCK COMPOSITION

Secondary Unit  
 Estimate-see lists 1-4

○ INFORMATION RECORDED ON SITE

□ INFORMATION NOTED ON SITE IF UNUSUAL

## ROCK CHIP SAMPLES

## 22 SELECTIVE LITHOGEOCHEMICAL SAMPLE

- Blank = representative sample  
 A. Altered zone - specify alteration minerals in col 77-82  
 C. Carbonate vein  
 G. Gossan zone  
 I. Iron stained (rusty) zone  
 M. Mineralized zone  
 Q. Quartz vein  
 R. Radioactive zone  
 S. Shear zone  
 B. Other - specify

## 40 OUTCROP TOPOGRAPHY

1. Rugged ridge
2. Recessive ridge
3. Steep slope (> 20°)
4. Shallow slope
5. Cirque headwall
6. Cirque floor
7. Valley floor
8. Flat land
9. Creek-channel
- A. Nickpoint
- B. Other

## 41 OUTCROP EXPOSURE

1. Continuous-well
2. Continuous-poor
3. Intermittent-well
4. Intermittent-poor
5. Isolated-well
6. Isolated-poor
7. Flout
- 8.

## 43 WEATHERING

1. Frost heaved
2. Mechanical-plants
3. Sheeting(oxidation)
4. Chemical disintegration
5. Mechanical disintegration (gravel)
6. Leached
8. Other

## 44 CHEMICAL WEATHERING

1. Fresh 3. Weathered
2. Normal 4. Decomposed

## 43 SURFACE COATING OR STAIN

1. Gossan-mineralized
2. Gossan-barren
3. Primary ore minerals
4. Secondary ore minerals
5. Iron and manganese
6. Iron
7. Manganese
8. Calcium carbonate
9. Malachite/azurite
0. Other

## 46-48 WEATHERED SURFACE COLOR

- L.-light M.-medium D.-dark  
 #R = Orange BR = Brown  
 #E = Red BK = Black  
 #Y = Yellow GR = Grey  
 #P = Pink WH = White  
 #L = Blue AB = Red Brown  
 #U = Purple #O = Orange Brown  
 #G = Green

## 49 TEXTURE #1

- A - Aphanitic  
 F - fine grained  
 M - medium grained  
 C - coarse grained  
 E - equigranular  
 P - porphyritic  
 V - vesicular  
 B - brecciated  
 S - massive  
 G - glassy

## 50 TEXTURE #2

Use same coding as for col. 49

## 51 FRACTURE INTENSITY

1. Massive
2. Widely spaced
3. Moderately spaced
4. Closely spaced
5. Shattered

## 52 VEINING INTENSITY

1. Massive
2. Widely spaced
3. Moderately spaced
4. Closely spaced
5. Very closely spaced

## 54-56 FRESH SURFACE COLOR

- Use same codes as for columns 47-49

## 57 FORMATION NAME

- Use a list describing local lithological units

## 58-62 LOCAL BEDROCK COMPOSITION

- Use list 1-4 detailed on the rock coding form

## 64-65 ONE ELEMENT #1

Use chemical element symbol

## 66-67 ONE ELEMENT #2

Use chemical element symbol

## 68-69 ONE ELEMENT #3

Use chemical element symbol

## 70-71 ONE ELEMENT #4

Use chemical element symbol

## 72 PROMINENT OUTCROP FEATURE #1

1. Bedding
2. Banding
3. Foliation
4. Shearing
5. Veining
6. Diking
7. Contact zone
8. Alteration
- A. Crossbedding
- B. Fold axis
- C. Grasshikat nets
- D. Amphibolite nets
- E. Contact nets

## 74 PROMINENT OUTCROP FEATURE #2

Use same codings as for col 73

## 75 PROMINENT OUTCROP FEATURE #3

Use same coding as for col 73

## 77 ALTERATION MINERAL #1

- A. Albite/Anorthite
- B. Secondary biotite
- C. Carbonate
- E. Epidote
- G. Gypsum/andrydrite
- I. Illite
- K. Kaolinite
- L. Chlorite
- M. Montmorillonite
- F. Pucash Feldspar
- Q. Quartz/illite
- S. Sericite
- T. Tourmaline
- Z. Zeolites
- B. Other-specify in notes

## 78 ALTERATION MINERAL #2

Use list for col 77

## 79 ALTERATION MINERAL #3

Use list for col 77

## 80 ALTERATION MINERAL #4

Use list for col 77

## SELECTION # 1

SAMPLE TYPE(S) ALL  
 BEDROCK TYPE(S) ALL  
 SOIL HORIZON(S) ALL  
 SAMPLE TEXTURE(S) ALL  
 OVERBURDEN ORIGIN(S) ALL  
 LABORATORY-SIZE FRACTION-EXTRACTION(S) ALL  
 PAIR STATUS ALL

REC#	PRSTAT	SMPL#	UTM E	UTM N					CU	AG	AS	AU			
1	1111	5084545	911001	6130115758180	92P14W792E 1	410	258FP217MRB	L25S	3500W	1200N	91	0.2	11	5	
2	1111	5084545	911002	6131995758178	92P14W792E 1	410	308MB217MBR	L35S	3300W	1200N	173	0.2	9	5	
3	1111	5084545	911003	6133945758177	92P14W272E 1	410	258MB217MBR	10S	2H	3100W	1200N	65	0.1	6	5
4	1111	5084545	911004	6135935758181	92P14W271E 1	410	308FP217MRB	20S	5HW	2900W	1200N	167	0.4	7	5
5	1111	5084545	911005	6137835758183	92P14W2H1E 1B	310	258FP227MRB	30S	7NW	2700W	1200N	220	0.1	10	5
6	1111	5084545	911006	6139815758185	92P14W271E 1D	410	308FP217MRBR	40S	10W	2500W	1200N	107	0.2	15	5
7	1111	5084545	911007	6141785758186	92P14W27 L 9B	4 5	158FP217MRBR	40A	10W	2300W	1200N	16	0.1	5	5
8	1111	5084545	911008	6143715758187	92P14W171L 9B	4 5	158MB217MBR	40A		2100W	1200N	1800	0.5	39	40
9	1111	5084545	911009	6142525758546	92P14W771L 9P	10	258MB217MBR	25S		2200W	1600N	110	0.1	15	5
10	1111	5084545	911010	6140595758554	92P14W271L 9P	410	258MB217MBR	40A	10S	2400W	1600N	37	0.2	6	5
11	1111	5084545	911011	6138665758556	92P14W271L 9B	510	258MB217MBR	20S	5S	2600W	1600N	240	0.7	10	5
12	1111	5084545	911012	6136735758562	92P14W271L 9B	4 5	108FP217MRBR	15A	5W	2800W	1600N	75	0.2	11	5
13	1111	5084545	911013	6134735758569	92P14W471L 9P	410	208MB217MBR	30S	2W	3000W	1600N	50	0.1	7	5
14	1111	5084545	911014	6132765758575	92P14W271L 9	410	258FP217MRBR	30S	2W	3200W	1600N	84	0.6	10	5
15	1111	5084545	911015	6130835758582	92P14W771E 1	410	258MB217MBR	35S		3400W	1600N	81	0.1	4	5
16	1111	5084545	911016	6128035758803	92P14W771E 1	410	258FP217MRBR	50S		3500W	1600N	70	0.3	7	5
17	1111	5084545	911017	6142445758942	92P14W271L 9B	4 5	158FP217MRBR	40A	20N	2200W	2000N	308	0.6	17	190
18	1111	5084545	911018	6140475758931	92P14W271L 9B	4 5	108FP217MRBR	30A	20N	2400W	2000N	40	0.2	5	5
19	1111	5084545	911019	6138535758930	92P14W271L 9B	4 5	158MB217MBR	25A	15N	2600W	2000N	34	0.1	6	5
20	1111	5084545	911020	6136615758929	92P14W271L 9B	4 5	208MB217MBR	25A	10N	2800W	2000N	70	0.1	6	5
21	1111	5084545	911021	6134635758928	92P14W271L 9B	4 5	108FP217MRBR	40A	15NW	3000W	2000N	59	0.1	4	5
22	1111	5084545	911022	6132645758923	92P14W491L 9P	4 5	208FP217MRBR	30A		3200W	2000N	42	0.2	6	5
23	1111	5084545	911023	6130725758920	92P14W771L 1	4 5	258MB217MBR	30S		3400W	2000N	79	0.1	3	5
24	1111	5084545	911024	6179895761424	92P14W271E 1	410	308FP215MBR	10S	5S	4400N	1637E	10	0.1	1	5
25	1111	5084545	911025	6177735761425	92P14W272E 1	410	408MB215MBR	L10S	5S	4400N	1437E	16	0.1	2	5
26	1111	5084545	911026	6175785761432	92P14W271E 1	410	358MB215MBR	L10S	5S	4400N	1237E	15	0.1	2	5
27	1111	5084545	911027	6173795761443	92P14W271L 9B	410	358MB225MBR	L15A	5S	4400N	1037E	17	0.1	3	5
28	1111	5084545	911028	6171835761450	92P14W271L 9P	410	308MB225MBR	L10A	5S	4400N	837E	14	0.1	1	5
29	1111	5084545	911029	6169925761457	92P14W271E 1	410	308FP217MRB	10S	5S	4400N	637E	10	0.1	1	5
30	1111	5084545	1911030	6167935761469	92P14W271E 1	410	308MB217MBR	L10S	5S	4400N	437E	11	0.1	1	5
31	1111	5084545	2911031	6165995761476	92P14W271E 1	410	358MB217MBR	L10S	5S	4400N	437E	12	0.1	1	5
32	1	5084545	911032	6165995761476	92P14W271E 1	410	408FP113MRBR	10S	5S	4400N	237E	10	0.1	1	5
33	1111	5084545	911033	6164065761485	92P14W291E 1	410	308FP113MRB	L10S	5S	4400N	037E	14	0.1	1	5
34	1111	5084545	911034	6162075761493	92P14W291E 1	410	308MB113MBR	L10S	5S	4400N	163W	12	0.1	1	5
35	1111	5084545	911035	6187695760712	92P14W772E 1	410	458GG227MRB	L		3600N	2437E	28	0.1	1	5
36	1111	5084545	911036	6189665760714	92P14W771E 1	410	308FP227MRB			3600N	2637E	31	0.1	2	5
37	1111	5084545	911037	6191605760714	92P14W271E 1	410	308MB227MRB		5SW	3600N	2837E	15	0.1	1	5
38	1111	5084545	911038	6193535760720	92P14W291E 1	410	258FP227MRBR	15S	10W	3600N	3037E	19	0.1	1	5
39	1111	5084545	911039	6195665760720	92P14W271E 1B	4 5	208FP227MRBR	20S		3600N	3237E	15	0.1	1	5

40	1111	5084545	911040	6197465760719	92P14W271L 9B	410	35BFP227MORBR	10S	10N	3600N	3437E	12	0.1	2	5
41	1111	5084545	911041	6199485760723	92P14W271L 9B	4 5	20BFP227MRB	10S	10N	3600N	3637E	26	0.1	1	5
42	1111	5084545	911042	6199355761122	92P14W271E 1	410	30BFP227MORBR		5N	4000N	3637E	15	0.1	2	5
43	1111	5084545	911043	6197285761120	92P14W271E 1	410	30BFP227MORBR		5NW	4000N	3437E	13	0.1	2	5
44	1111	5084545	911044	6195335761117	92P14W271E 1	410	25BMB227MBR		5N	4000N	3237E	11	0.1	1	5
45	1111	5084545	911045	6193415761117	92P14W271L 1	410	30BMB227MBR		5NW	4000N	3037E	18	0.1	2	5
46	1111	5084545	911046	6191445761116	92P14W271E 1	410	35BFP227MORBR		5NW	4000N	2837E	16	0.1	2	5
47	1111	5084545	911047	6189495761114	92P14W7A1E 1	410	45BGG227MGLBR			4000N	2637E	116	0.1	4	5
48	1111	5084545	911048	6187495761115	92P14W763E 1	410	40BMB227MBR			4000N	2437E	107	0.1	2	5
49	1111	5084545	911049	6181785761453	92P14W791E 1	410	30BFP227MORBR	10S		4400N	1837E	8	0.1	1	5
50	1111	5084545	911050	6183715761486	92P14W592E 1	510	30BGG227MGLBR	10S	2SE	4400N	2037E	14	0.1	1	5
51	1111	5084545	911051	6185585761517	92P14W292E 1	510	25BGG227MGLBR	10S	3SE	4400N	2237E	9	0.1	1	5
52	1111	5084545	911052	6187535761552	92P14W292E 1	510	30BGG227MGLBR	10S	3SE	4400N	2437E	17	0.1	2	5
53	1111	5084545	911053	6189435761581	92P14W271E 1	410	25BMB227MBR	10S	5S	4400N	2637E	14	0.1	1	5
54	1111	5084545	911054	6191385761613	92P14W271E 1	410	30BMB227MGLBR	10S	3S	4400N	2837E	9	0.1	1	5
55	1111	5084545	911055	6193305761645	92P14W272E 1	510	45BGG227MGLBR	10S	3S	4400N	3037E	30	0.1	1	5
56	1111	5084545	911056	6195235761673	92P14W271E 1	410	35BMB227MBR	10S	3S	4400N	3237E	9	0.1	2	5
57	1111	5084545	911057	6197155761707	92P14W271E 1	410	30BMB227MGYBR	R10S		4400N	3437E	20	0.1	1	5
58	1	5084545	911058	6199045761740	92P14W271E 1	410	35BFP227MORBR		2N	4400N	3637E	13	0.1	2	250
59	1111	5084545	911059	6182415758754	92P14W272E 1	410	50BFP227MRB	5S	2E	1600N	1837E	27	0.1	2	5
60	1111	5084545	911060	6184335758782	92P14W371E 1	710	30BMB217GY		25SW	2037E	1600N	90	0.1	4	5
61	1111	5084545	1911061	6186295758809	92P14W272E 1	410	25BFP217MBR	5S	3N	2237E	1600N	16	0.1	1	5
62	1111	5084545	2911062	6186295758806	92P14W272E 1	410	35BFP217MRB	5S	3N	2237E	1600N	18	0.1	1	5
63	1111	5084545	911063	6188165758831	92P14W272L 9B	410	30BFP217DORBR	5S	5N	2437E	1600N	30	0.1	3	5
64	1111	5084545	911064	6190125758856	92P14W272E 1	10	30BMB217MBR	10S	8N	2637E	1600N	37	0.1	1	5
65	1111	5084545	911065	6192055758884	92P14W272E 1	410	25BFP217MORBR	20S	5N	2837E	1600N	33	0.1	1	5
66	1111	5084545	911066	6194035758903	92P14W271L 9B	410	25BFP217MORBR	10S	5W	3037E	1600N	40	0.1	3	5
67	1111	5084545	911067	6195955758933	92P14W171L 9B	4 5	15BFP217MORBR	20S		3237E	1600N	120	0.1	3	5
68	1111	5084545	911068	6197855758956	92P14W272L 9B	5 5	20BFP217MORBR	25A	5N	3437E	1600N	16	0.1	3	5
69	1111	5084545	911069	6199885758983	92P14W272L 9B	510	25BFP217MORBR	10A	10N	3637E	1800N	37	0.1	1	5
70	1111	5084545	911070	6199045758736	92P14W272L 9B	410	25BFP217MRB	25A	5S	3637E	1500N	44	0.1	3	5
71	1111	5084545	912001	6141125761464	92P14W192L 9B	4 5	15BMB113MB	10S	0	2225W	4400N	22	0.1	1	5
72	1111	5084545	912002	6139155761484	92P14W292L 9	410	25BFP113MRB	10A	5SW	2425W	4400N	18	0.1	2	5
73	1111	5084545	912003	6137215761501	92P14W291L 9P	4 5	15BMB113MB	30S	5W	2625W	4400N	19	0.1	1	5
74	1111	5084545	912004	6135325761522	92P14W291L 9B	2 5	10TF 113MB	60A	5S	2825W	4400N	280	0.3	3	5
75	1111	5084545	912005	6133345761536	92P14W292E 1	410	30BMB113MB	15S	5SW	3025W	4400N	18	0.1	1	5
76	1111	5084545	912006	6141275760926	92P14W292L 1	410	25BMB113MB	45A	5W	2225W	4400N	29	0.1	1	5
77	1111	5084545	912007	6139275760930	92P14W592E 1	510	25BMB1130BR	30S	0	2425W	4000N	64	0.1	3	5
78	1111	5084545	912008	6137285760934	92P14W992E 5	710	40BGG113QLBR	5S	0	2625W	4000N	133	0.1	4	5
79	1111	5084545	912009	6135375760933	92P14W592E 1	410	35BGG113MB	5S	0	2825W	4000N	43	0.1	2	5
80	1111	5084545	912010	6133455760935	92P14W591E 1	410	30BMB113MB	15S		3025W	4000N	25	0.1	1	5
81	1111	5084546	912011	6182175759592	92P14W272L 9P	410	20BMB227MB	15A	10E	1837W	2400N	15	0.1	2	5
82	1111	5084546	912012	6184035759604	92P14W272L 9	410	25BMB227MB	25A	5E	2037W	2400N	20	0.1	3	5
83	1	5084546	912013	6186045759615	92P14W272L 9	510	30BMB227MB	25A	5E	2237E	2400N	13	0.1	2	5
84	1111	5084546	912014	6187945759630	92P14W272L 9	5 5	15BFP227MRB	15A	5E	2437E	2400N	60	0.1	2	5
85	1111	5084546	912015	6189905759643	92P14W272L 9	510	25BFP227MR	20S	5E	2637E	2400N	33	0.1	2	5
86	1111	5084546	912016	6191795759654	92P14W272L 9	5 5	20BFP227MR	20S	5E	2837E	2400N	19	0.1	2	400
87	1111	5084546	912017	6193775759667	92P14W272L 9	510	20BFP227MRB	25S	5NE	3037E	2400N	68	0.1	4	5
88	1111	5084546	912018	6195735759678	92P14W272L 9	510	25BMB227MB	20A	5NE	3237E	2400N	38	0.1	4	5
89	1111	5084546	912019	6197695759690	92P14W272L 9	510	25BMB227MB	20A	5NE	3437E	2400N	45	0.1	4	5
90	1111	5084546	912020	6199655759703	92P14W272L 9	510	30BMB227MB	20A	5NE	3637E	2400N	52	0.1	4	5



91	1111	5084545	912021	6141315760531	92P14W292E 1	410	25BMB215MB	35S	5SW	2225W	3600N	47	0.1	2	5	
92	1111	5084545	912022	6139085760551	92P14W292E 1	410	20BMB215MB	25S	5SW	2425W	3600N	34	0.1	2	5	
93	1111	5084545	912023	6137095760566	92P14W292E 1	410	25BFP215MRB	25S	5S	2625W	3600N	17	0.1	2	5	
94	1111	5084545	912024	6135165760581	92P14W292E 1	410	30BFP215MRB	15S	5N	2825W	3600N	36	0.1	2	5	
95	1111	5084545	912025	6133235760596	92P14W592E 1	510	30BFP215MRB	25S	0	3025W	3600N	37	0.1	2	5	
96	1111	5084545	912026	6131275760612	92P14W592E 1	510	30BMB215MB	25S	0	3225W	3600N	60	0.1	3	5	
97	1111	5084545	912027	6129355760630	92P14W592E 1	510	35BMB215MDLBR	20S	0	3425W	3600N	31	0.1	3	5	
98	1111	5084545	912028	6127075760647	92P14W292E 1	510	40BMB215DLBR	15S	5W	3700W	3600N	29	0.1	2	5	
99	1111	5084545	912029	6130055760173	92P14W592E 1	410	30BMB215DLBR	20S	0	3425W	3200N	33	0.1	2	5	
100	1111	5084545	912030	6131885760163	92P14W292E 1	410	30BMB215MB	35S	5NW	3225W	3200N	30	0.1	2	5	
101	1111	5084545	912031	6133815760152	92P14W292E 1	410	30BMB215MB	40S	5N	3025W	3200N	34	0.1	3	5	
102	1111	5084545	912032	6135765760142	92P14W592E 1	4	5	20BMB215MB	20S	0	2825W	3200N	43	0.1	4	5
103	1111	5084545	912033	6137725760122	92P14W292E 1	410	25BMB215MB	25S	5E	2625W	3200N	24	0.1	3	5	
104	1111	5084545	912034	6139625760117	92P14W292E 1	410	30BMB215MB	20S	5E	2425W	3200N	51	0.1	1	5	
105	1111	5084545	912035	6141265760110	92P14W292E 1	410	40BMB215MB	25S	5E	2225W	3200N	23	0.1	3	5	
106	1111	5084545	912036	6127185759835	92P14W593E 1	410	30AHC215BL	0	0	3725W	2800N	600	0.1	2	5	
107	1111	5084545	912037	6129295759837	92P14W292E 1	510	25BMB215MB	20S	5NW	3500W	2800N	32	0.1	5	5	
108	1111	5084545	912038	6131525759836	92P14W292E 1	415	25BMB215MB	20S	5NW	3275W	2800N	43	0.1	1	5	
10	11	5084545	912039	6133625759833	92P14W292E 1	510	30BMB215MB	25S	5S	3050W	2800N	41	0.1	7	5	
110	1111	5084545	912040	6135765759832	92P14W292E 1	4	5	10BFP215MRB	10A	5N	2825W	2800N	183	0.1	3	30
111	1111	5084545	912041	6137955759829	92P14W792L 9	410	15BMB215MB	15A	0	2600W	2800N	44	0.1	1	5	
112	1111	5084545	912042	6140145759821	92P14W292L 9	410	25BMB215MB	25A	5E	2375W	2800N	33	0.1	2	5	
113	1111	5084545	912043	6142325759817	92P14W792L 9	510	30BMB215MB	25A	0	2150W	2800N	29	0.1	2	5	
114	1111	5084545	912044	6144755759814	92P14W792E 1	510	35BFP215MRB	10S	0	1925W	2800N	32	0.1	5	5	
115	1111	5084545	912045	6144985759341	92P14W292E 1	4	5	15BMB215MB	45S	5N	1925W	2400N	142	0.2	5	5
116	1111	5084545	912046	6142555759365	92P14W292L 9	410	30BFP215MRB	30S	5N	2125W	2400N	40	0.1	4	5	
117	1111	5084545	912047	6140645759398	92P14W292E 1	515	35BMB215MB	10S	5N	2325W	2400N	298	0.9	3	5	
118	1111	5084545	912048	6138715759418	92P14W292E 1	410	25BMB215MB	45S	5NE	2525W	2400N	144	0.2	6	320	
119	1111	5084545	912049	6136825759435	92P14W292L 9	510	20BMB215MRB	10A	5N	2725W	2400N	105	0.1	4	5	
120	1111	5084545	912050	6134825759452	92P14W794E 1	920	20AHC215BL	0	0	2925W	2400N	47	0.1	1	5	
121	1111	5084545	912051	6132885759468	92P14W292L 9	410	25BMB215MB	10A	5NW	3125W	2400N	31	0.1	2	5	
122	1111	5084545	912052	6130965759485	92P14W292E 1	020	20AHC215BL	0	5N	3325W	2400N	360	0.7	7	5	
123	1111	5084545	912053	6130015759492	92P14W292L 9	510	25BMP215MB	20A	5E	3445W	2400N	189	0.4	7	5	
124	1111	5084545	912054	6160785760265	92P14W292E 1	510	25BMB MB	10S	5NE	283W	3200N	34	0.1	4	5	
125	1111	5084545	912055	6158845760258	92P14W292E 1	410	25BMB MB	10S	10N	483W	3200N	20	0.1	4	5	
126	1111	5084545	912056	6156845760245	92P14W292E 1	410	30BMB MB	10S	10N	683W	3200N	22	0.1	3	5	
127	1111	5084545	912057	6154935760239	92P14W292E 1	410	30BMB MB	10S	10NW	883W	3200N	20	0.1	3	5	
128	1111	5084545	912058	6144805759735	92P14W292E 1	410	30BMB MB	10S	5NE	1925W	2800N	82	0.1	5	5	
129	1111	5084545	912059	6145905759740	92P14W292E 1	510	35BMB MB	10S	5N	1783W	2800N	56	0.1	4	5	
130	1111	5084545	1912060	6148005759746	92P14W-92E 1	410	20BMB MB	40S	5N	1583W	2800N	70	0.1	3	5	
131	1111	5084545	2912061	6149835759764	92P14W-92E 1	410	20BFP MRB	40S	5N	1583W	2800N	51	0.1	6	5	
132	1111	5084545	912062	6151805759775	92P14W-92E 1	510	25BMB MB	10S	5N	1383W	2800N	44	0.1	3	5	
133	1111	5084545	912063	6153715759779	92P14W-93E 1	410	45BMB MB	10S	5N	1183W	2800N	103	0.1	5	5	
134	1	5084545	912064	6155705759793	92P14W292E 1	410	30BFP MRB	10S	5N	983W	2800N	40	0.1	4	5	
135	1111	5084545	912065	6157615759805	92P14W792E 1	510	35BFP MRB	10S	0	783W	2800N	36	0.1	5	5	
136	1111	5084545	912066	6159635759821	92P14W792E 1	510	25BMB MB	10S	0	583W	2800N	20	0.1	4	5	
137	1111	5084545	912067	6160995759827	92P14W292E 1P	510	25BMB GRBR	10S	5E	383W	2800N	14	0.1	5	5	
138	1111	5084545	912068	6163015759805	92P14W292E 1	510	30BGG GR	10S	5E	283W	2800N	19	0.1	5	5	
139	1111	5084545	912069	6179875760463	92P14W292E 1	5	5	15BMB227MB	35S	10N	1637E	3200N	36	0.1	5	5
140	1111	5084545	912070	6181765760493	92P14W292L 9	510	20BMB227MB	25S	10N	1837E	3200N	21	0.1	5	5	
141	1111	5084545	912071	6183655760523	92P14W292L 9	510	20BMB227MB	10S	5E	2037E	3200N	21	0.1	5	5	

142	1111	5084545	912072	6145445760509	92P14W792E	1	510	25BMB215MB	15S	0	1800W	3600N	40	0.1	5	5	
143	1111	5084545	912073	6147405760502	92P14W291E	1	410	25BMB2150LBR	10S	5SE	1600W	3600N	12	0.1	3	5	
144	1111	5084545	912074	6149325760492	92P14W292E	1	410	25BMB2150LBR	10S	5SE	1400W	3600N	16	0.1	4	5	
145	1111	5084545	912075	6151275760485	92P14W292E	1	510	20BMB215MB	10S	5SE	1200W	3600N	17	0.1	2	5	
146	1111	5084545	912076	6160125761500	92P14W292E	1	510	40BMB1130LBR	10S	5S	283W	4400N	49	0.4	4	5	
147	1111	5084545	912077	6158055761493	92P14W292E	1	5	5	25BMB113HOLBR	25S	5SE	483W	4400N	8	0.1	4	5
148	1111	5084545	912078	6156075761491	92P14W292E	1	410	25BFF113MRB	20S	5SE	683W	4400N	18	0.3	3	5	
149	1111	5084545	912079	6154155761486	92P14W292E	1	510	30BMB113MB	35S	5SE	883W	4400N	11	0.1	4	5	
150	1111	5084545	912080	6152205761485	92P14W792E	1	510	35BMB113GRBR	15S	0	1083W	4400N	23	0.1	4	5	
151	1111	5084545	912081	6150255761482	92P14W292E	1	510	25BMB113MB	10S	5SE	1283W	4400N	21	0.1	3	5	
152	1111	5084545	912082	6148275761481	92P14W292E	1	410	30BMB113MB	50S	5E	1483W	4400N	42	0.1	3	5	
153	1111	5084545	912083	6146355761473	92P14W291L	9B	4	5	15BFF113MRB	50A	5N	1683W	4400N	22	0.1	5	5
154	1111	5084545	912084	6144385761472	92P14W392L	9B	4	5	10BFF113MRB	40A	20N	1883W	4400N	80	0.1	4	5
155	1111	5084545	912085	6142485761470	92P14W391L	9	410	20BFF113MRB	40A	20W	2083W	4400N	24	0.1	2	5	
156	1111	5084545	912086	6143105760918	92P14W292E	1	410	25BFF113MRB	10S	5E	1983W	4000N	21	0.1	4	5	
157	1111	5084545	912087	6145085760906	92P14W291E	1	410	25BMB113	10S	15S	1783W	4000N	6	0.1	4	5	
158	1111	5084545	912088	6147015760896	92P14W292E	1	410	30BFF113MRB	20S	15S	1583W	4000N	8	0.1	3	5	
159	1111	5084545	912089	6148965760884	92P14W192E	1	410	30BMB113MB	35S	5S	1383W	4000N	10	0.1	4	5	
161	1111	5084545	912090	6150925760873	92P14W291E	1	410	30BMB113MB	10S	10S	1183W	4000N	12	0.1	3	5	
161	1111	5084545	2912091	6150915760873	92P14W291E	1	410	20BMB113MB	10S	10S	1183W	4000N	9	0.1	4	5	
162	1111	5084545	912092	6152855760859	92P14W292E	1	4	5	20BMB113HOLBR	20S	5SE	983W	4000N	8	0.1	3	5
163	1111	5084545	912093	6154775760846	92P14W292E	14	10	25BMB113MB	10S	5S	783W	4000N	8	0.1	3	5	
164	1111	5084545	912094	6156745760833	92P14W292E	1	410	25BMB113MB	10S	5SE	583W	4000N	7	0.1	3	5	
165	1111	5084545	912095	6158675760821	92P14W592E	1	510	30BMB113MB	10S	0	383W	4000N	16	0.1	3	5	
166	1111	5084545	912096	6160475760813	92P14W591E	1	510	25BMB113MB	15S	0	283W	4000N	12	0.1	3	5	
167	1111	5084545	912097	6141445760108	92P14W272E	1	515	30BMB227MB	20S	5E	2225W	3200N	27	0.1	3	5	
168	1111	5084545	912098	6143395760098	92P14W792E	1	520	35BMB227MB	10S	0	2025W	3200N	47	0.1	4	5	
169	1111	5084545	912099	6179795760706	92P14W292E	1	520	30BMB227MB	20S	5N	1637E	3600N	15	0.1	2	5	
170	1111	5084545	912100	6177845760702	92P14W292E	1	5	5	15BMB227GRBR	20S	5N	1437E	3600N	28	0.1	3	5
171	1111	5084545	912101	6175875760703	92P14W292E	1	415	30BFF227MRB	25S	5E	1237E	3600N	12	0.1	4	5	
172	1111	5084545	912102	6173925760703	92P14W292E	1	515	25BMB227MB	15S	5S	1037E	3600N	9	0.1	4	5	
173	1111	5084545	912103	6171995760698	92P14W792E	1	5	5	25BFF227MRB	10S	0	837E	3600N	26	0.3	4	5
174	1111	5084545	912104	6170045760696	92P14W792E	1	510	30BMB227MB	25S	0	637E	3600N	24	0.1	3	5	
175	1111	5084545	912105	6168075760697	92P14W292E	1	510	25BMB227MB	25S	5W	437E	3600N	9	0.1	2	5	
176	1111	5084545	912106	6166115760693	92P14W292E	1	520	25BMB227GRBR	35S	5W	237E	3600N	13	0.1	3	5	
177	1111	5084545	912107	6181845760709	92P14W292E	1	3	5	10BFF227MRB	25S	5N	1837E	3600N	26	0.1	3	5
178	1111	5084545	912108	6183795760708	92P14W292E	1	510	20BMB227MB	25S	5N	2037E	3600N	29	0.1	2	5	
179	1111	5084545	912109	6199615760324	92P14W272L	9P	415	25BFF227MRB	20A	5S	3637E	3400N	27	0.1	2	5	
180	1111	5084545	912110	6197635760370	92P14W271L	9P	410	20BFF227MRB	10A	5W	3437E	3400N	14	0.1	3	5	
181	1111	5084545	912111	6195715760418	92P14W773U	9	520	25AHC227BL	0	5W	3237E	3400N	230	1.1	5	5	
182	1111	5084545	912112	6193845760463	92P14W793U	9	025	25AHC227BL	0	0	3037E	3400N	235	0.9	3	5	
183	1111	5084545	912113	6191935760509	92P14W271L	9	410	25BFF227MRB	20A	10N	2837E	3400N	30	0.1	3	5	
184	1111	5084545	912114	6190025760557	92P14W271L	9	410	20BFF227MRB	25S	5N	2637E	3400N	16	0.1	3	5	
185	1111	5084545	912115	6187525760591	92P14W291E	1	515	25BFF227MRB	20S	5N	2437E	3400N	20	0.1	4	5	
186	1111	5084545	912116	6185575760559	92P14W291E	1	410	25BFF227MRB	20S	5N	2237E	3400N	20	0.1	4	5	
187	1111	5084545	912117	6183675760526	92P14W291E	1	510	25BMB227MB	20S	5N	2037E	3400N	43	0.1	2	5	
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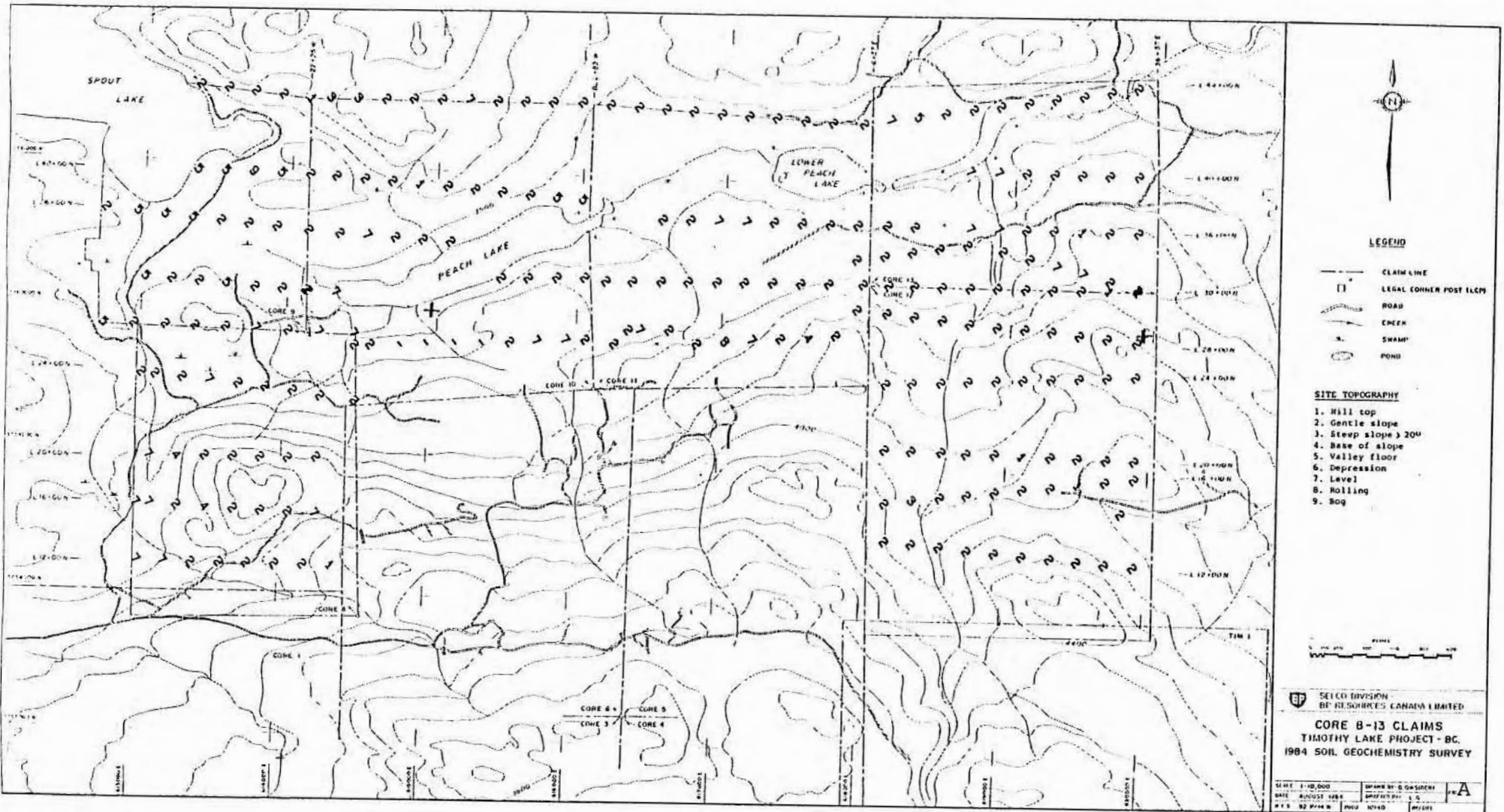
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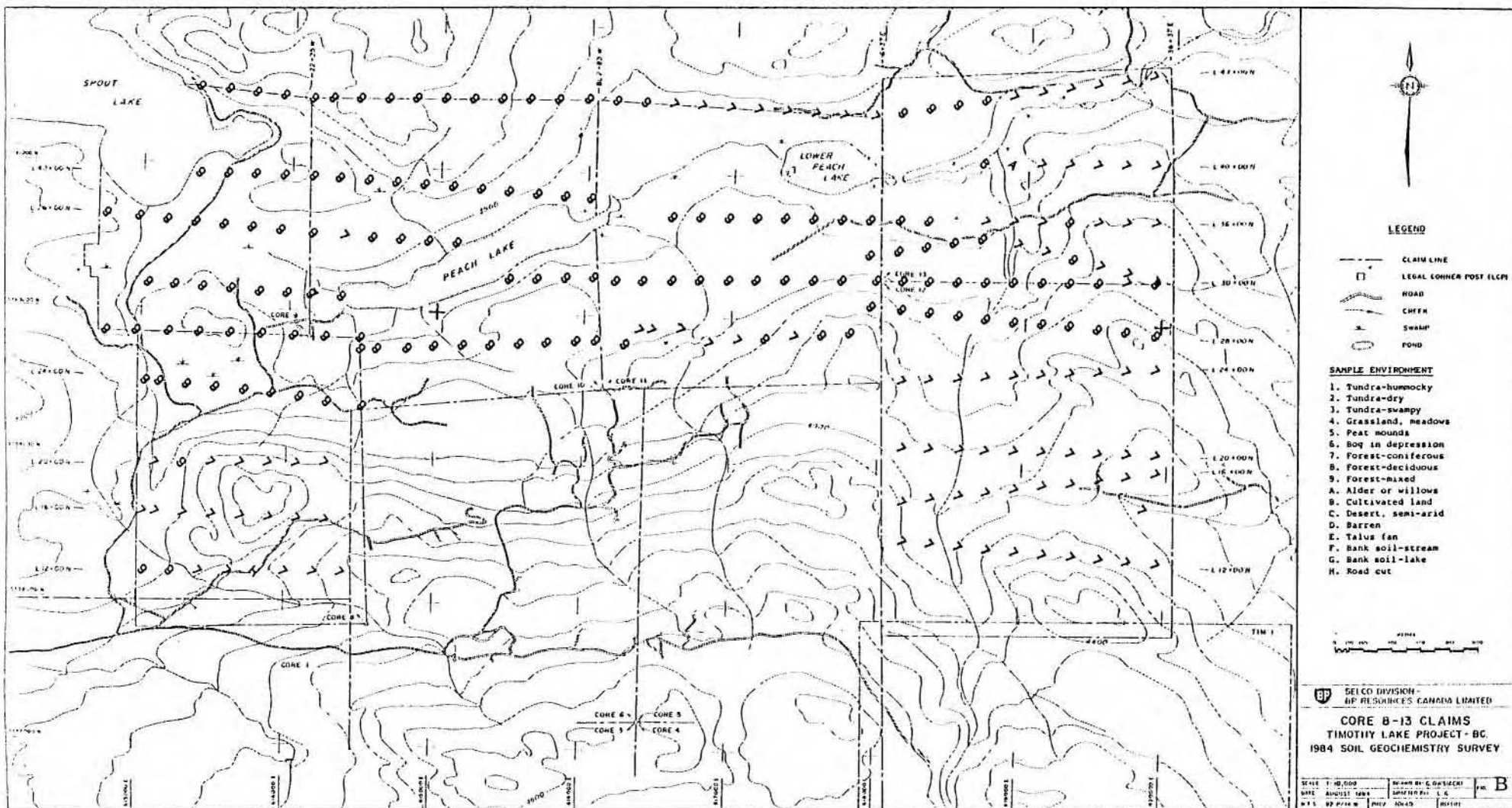
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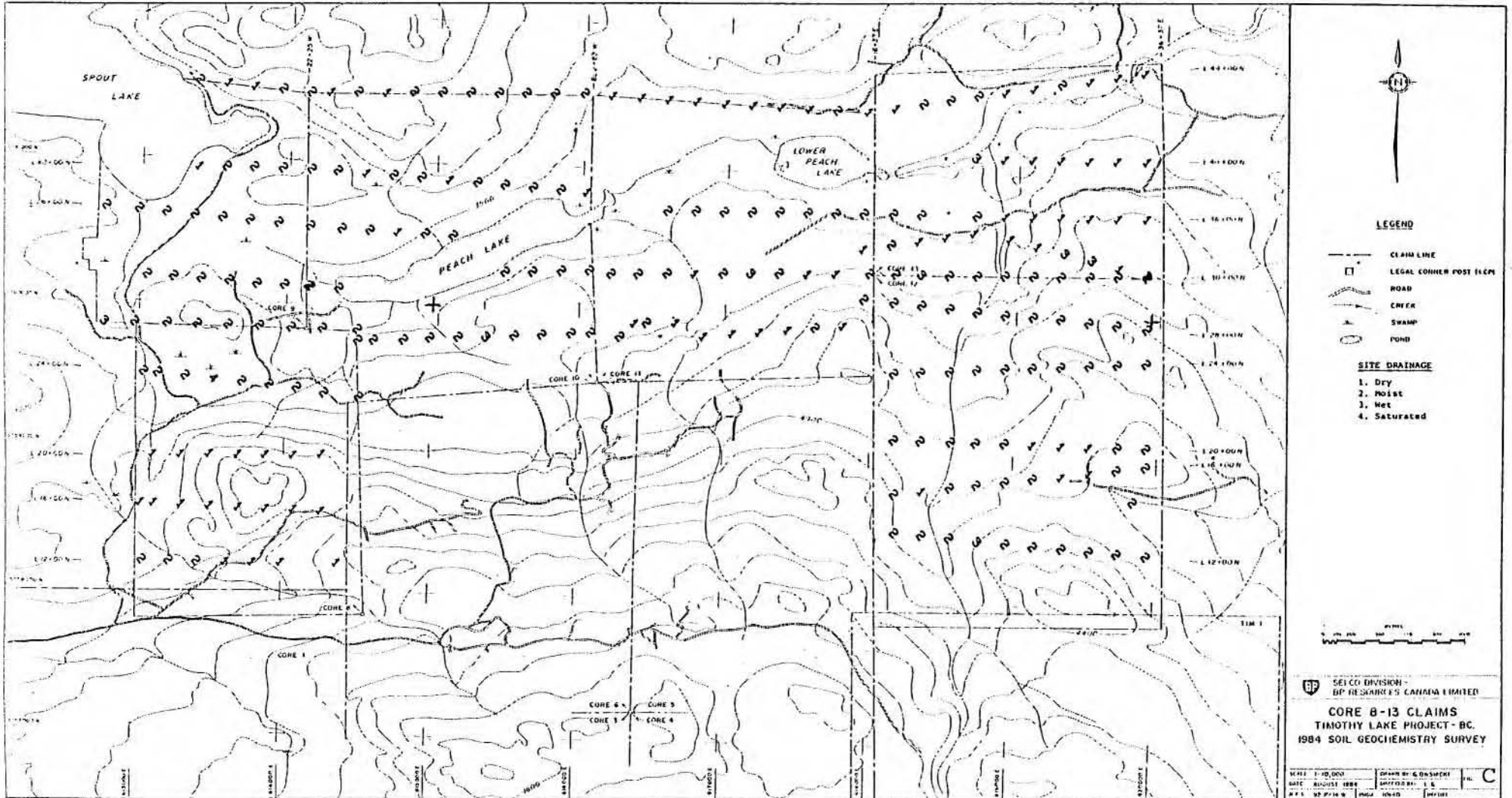
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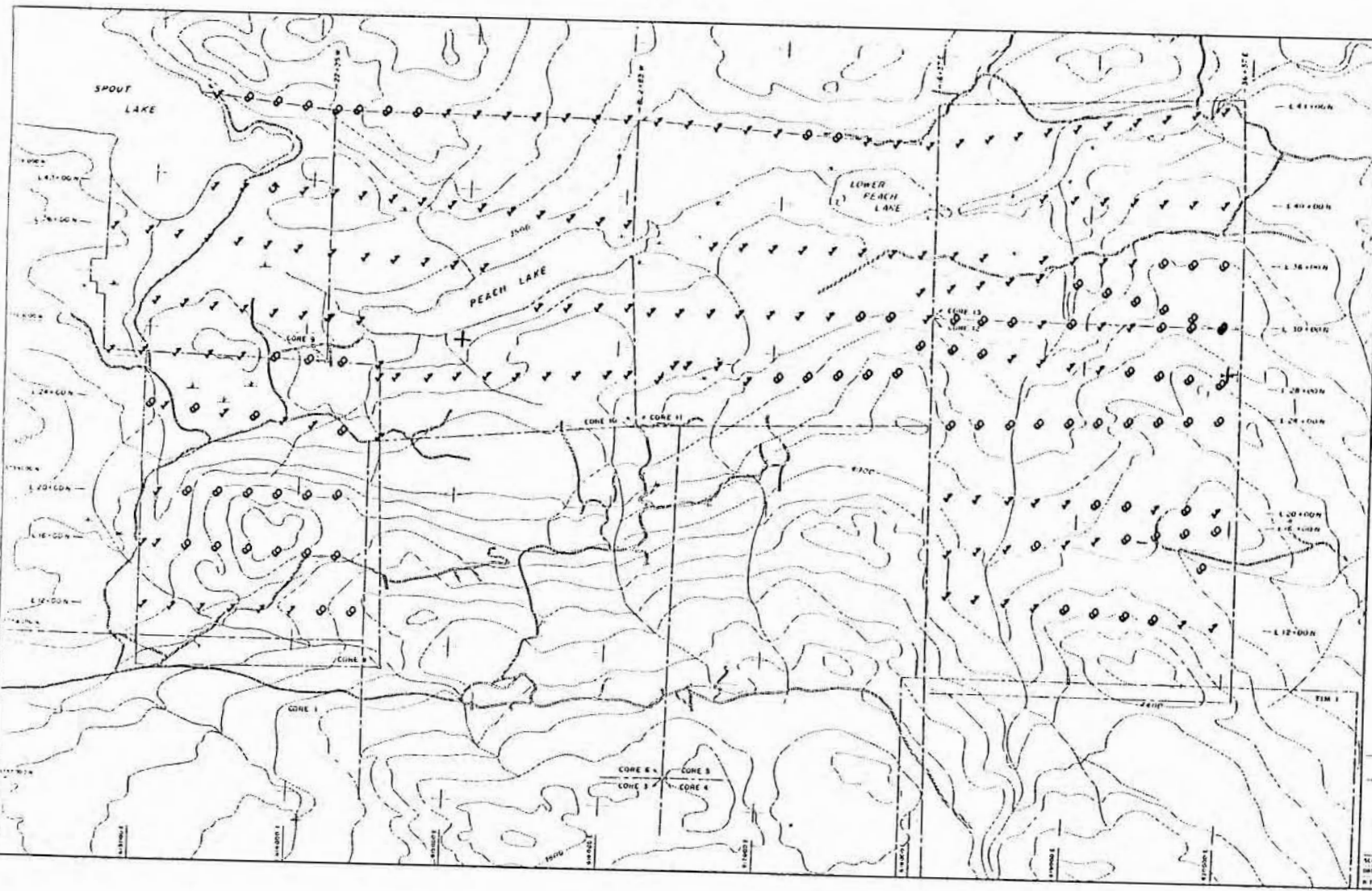
# DRAINAGE



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# OB ORIGIN

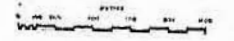


### LEGEND

- CLAIM LINE
- LEGAL CORNER POST ILCM
- ROAD
- CREEK
- SWAMP
- POND

### OVERBURDEN ORIGIN

1. Till-angular boulders
  2. Outwash-sandy, rounded boulders
  3. Lake sediment-sand/silt
  4. Alluvium-stream deposit
  5. Peat-bog
  6. Colluvium
  7. Lake sediment-clay
  8. Talus
  9. Residual
  - A. Frost boils\*
  - B. Seepage boils\*
  - C. Boulder field\*
  - D. Gravel\*
- \* Use only if former origin cannot be identified.



SEI CO DIVISION -  
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**CORE 8-13 CLAIMS**  
 TIMOTHY LAKE PROJECT - BC.  
 1984 SOIL GEOCHEMISTRY SURVEY

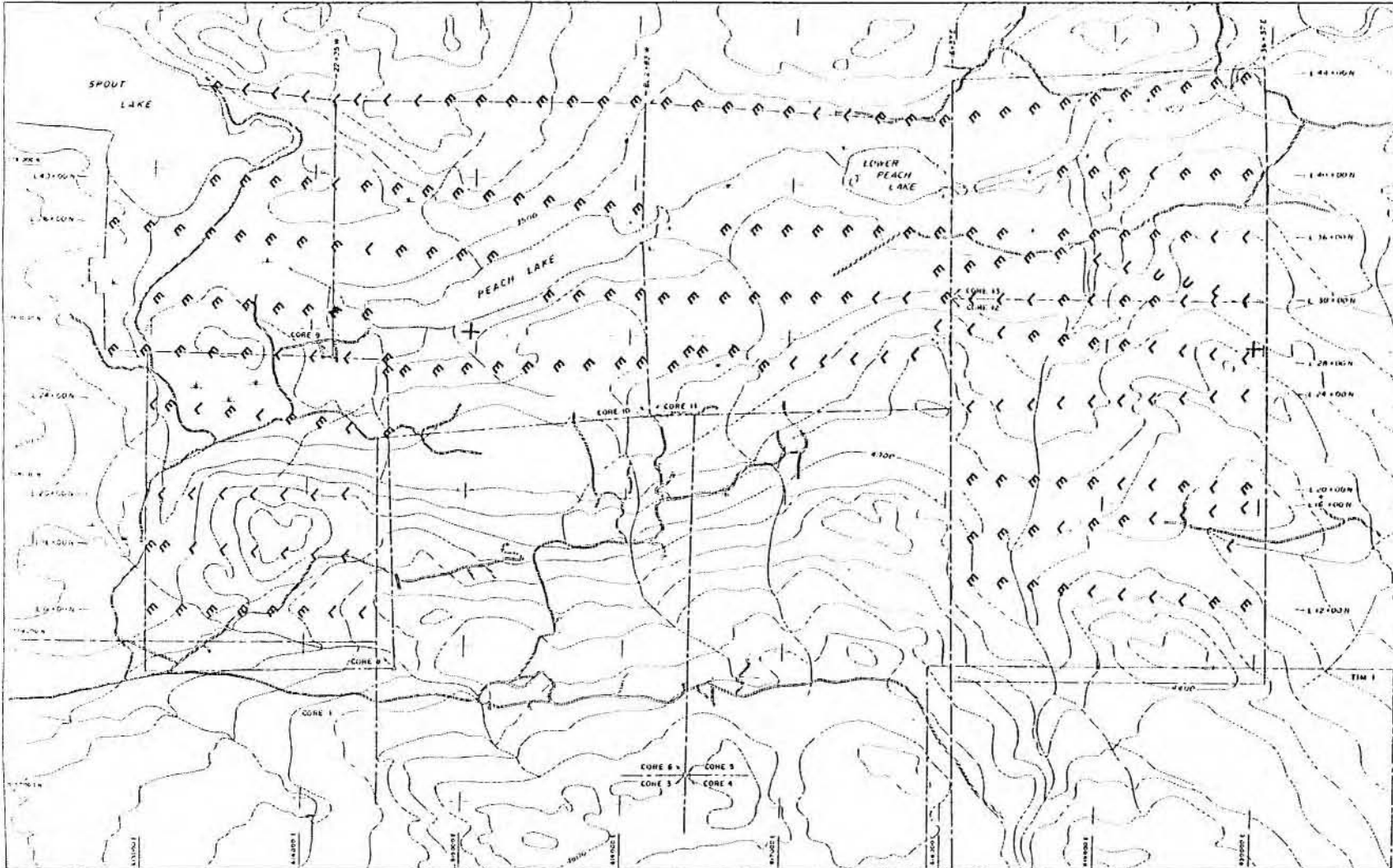
SCALE 1:10,000	DESIGNED BY G. THOMPSON	P.D.
DRAWN: AUGUST 1984	CHECKED BY: G. THOMPSON	
BY: S. B. PETERSON	PROJECT: 84-13	



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# OB TRANSPORT

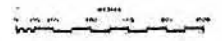


### LEGEND

- CLAIM LINE
- LEGAL CORNER POST (LCP)
- ROAD
- ~ CREEK
- ~ SWAMP
- POND

### OVERBURDEN TRANSPORT

- L. Local
- E. Extensive
- U. Unknown
- M. Mixed



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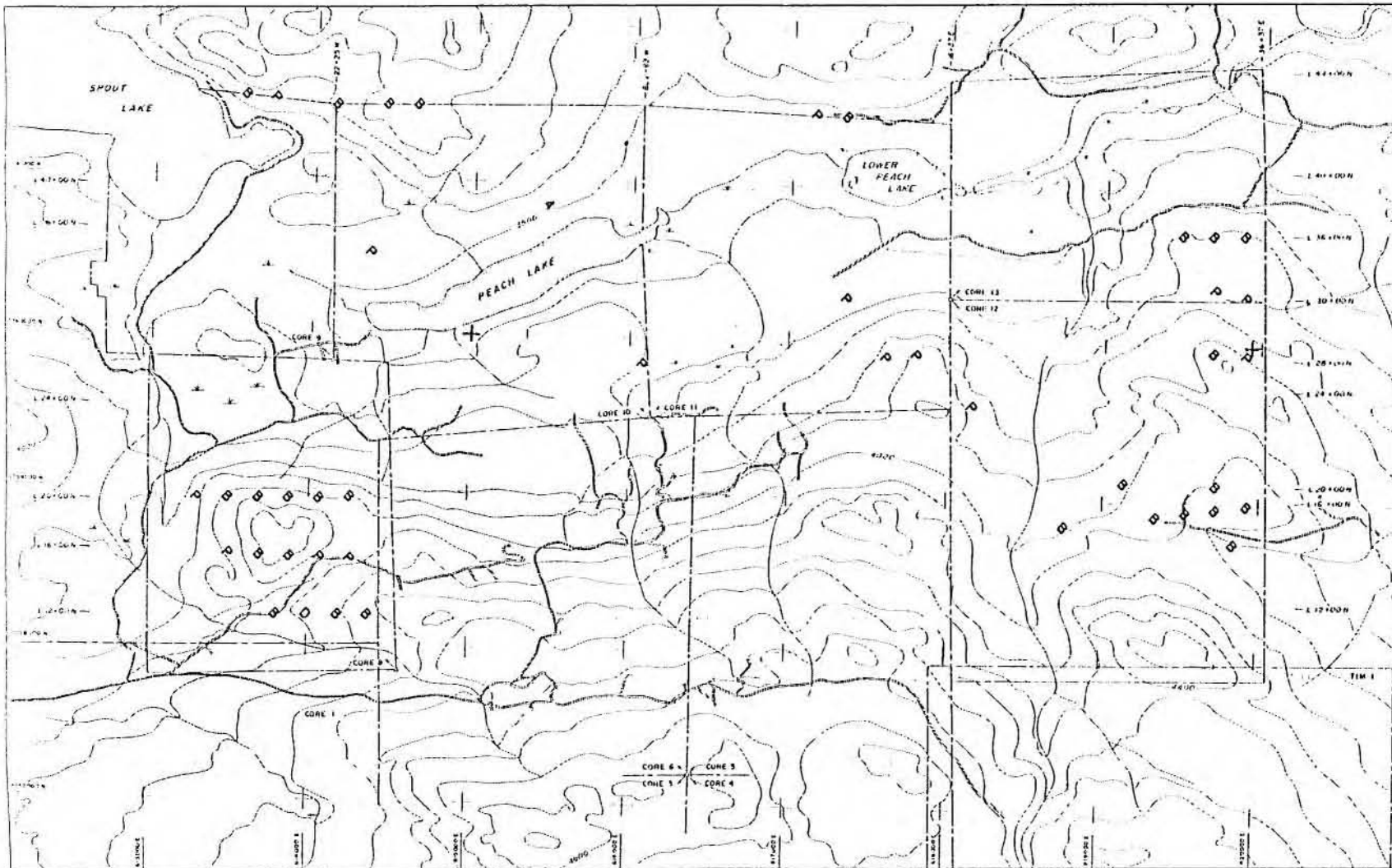
**CORE 8-13 CLAIMS**  
 TIMOTHY LAKE PROJECT - BC.  
 1984 SOIL GEOCHEMISTRY SURVEY

SCALE 1:40,000  
 DATE AUGUST 1984  
 DRAWN BY G. DASZAKI  
 CHECKED BY C. G.  
 PROJECT

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# OUTCROP EXPO

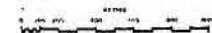


### LEGEND

- CLAIM LINE
- LEGAL CORNER POST (LCP)
- ROAD
- CREEK
- SWAMP
- POND

### BEDROCK

- M. Mineralized
- P. Present within 100m up-slope
- D. Present within 100m down-slope
- B. Underlies sample site
- G. Gossan
- F. Fe surface stains
- R. Radioactivity



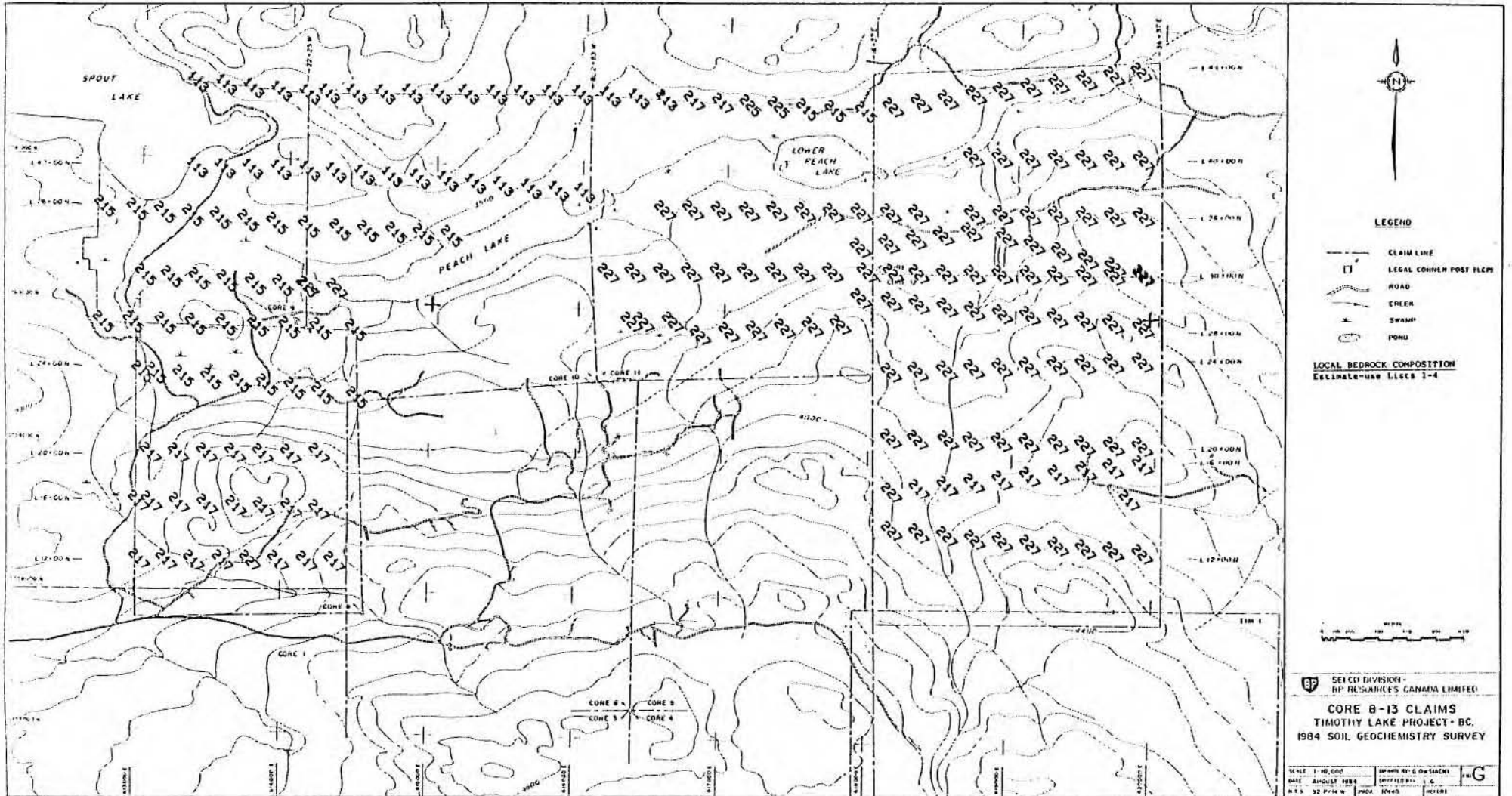
**SEI CO DIVISION -**  
**BP RESOURCES CANADA LIMITED**  
**CORE 8-13 CLAIMS**  
**TIMOTHY LAKE PROJECT - BC.**  
**1984 SOIL GEOCHEMISTRY SURVEY**

SCALE 1:10,000  
 DATE AUGUST 1984  
 BY S. S. P. & G. D. G. & J. S. G.  
 PROJECT NO. 1111  
 SHEET NO. 1111

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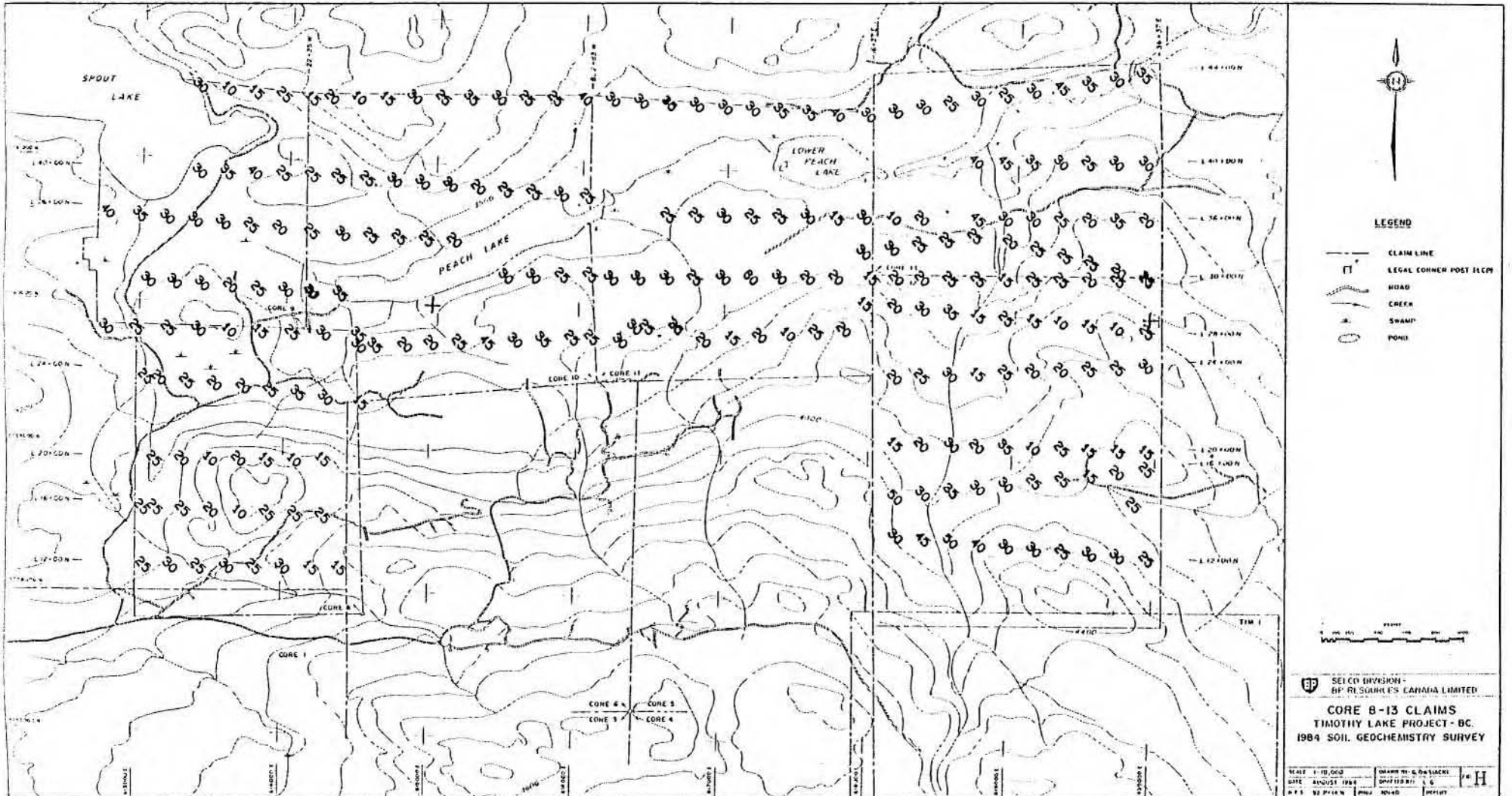
# BEDROCK COMP



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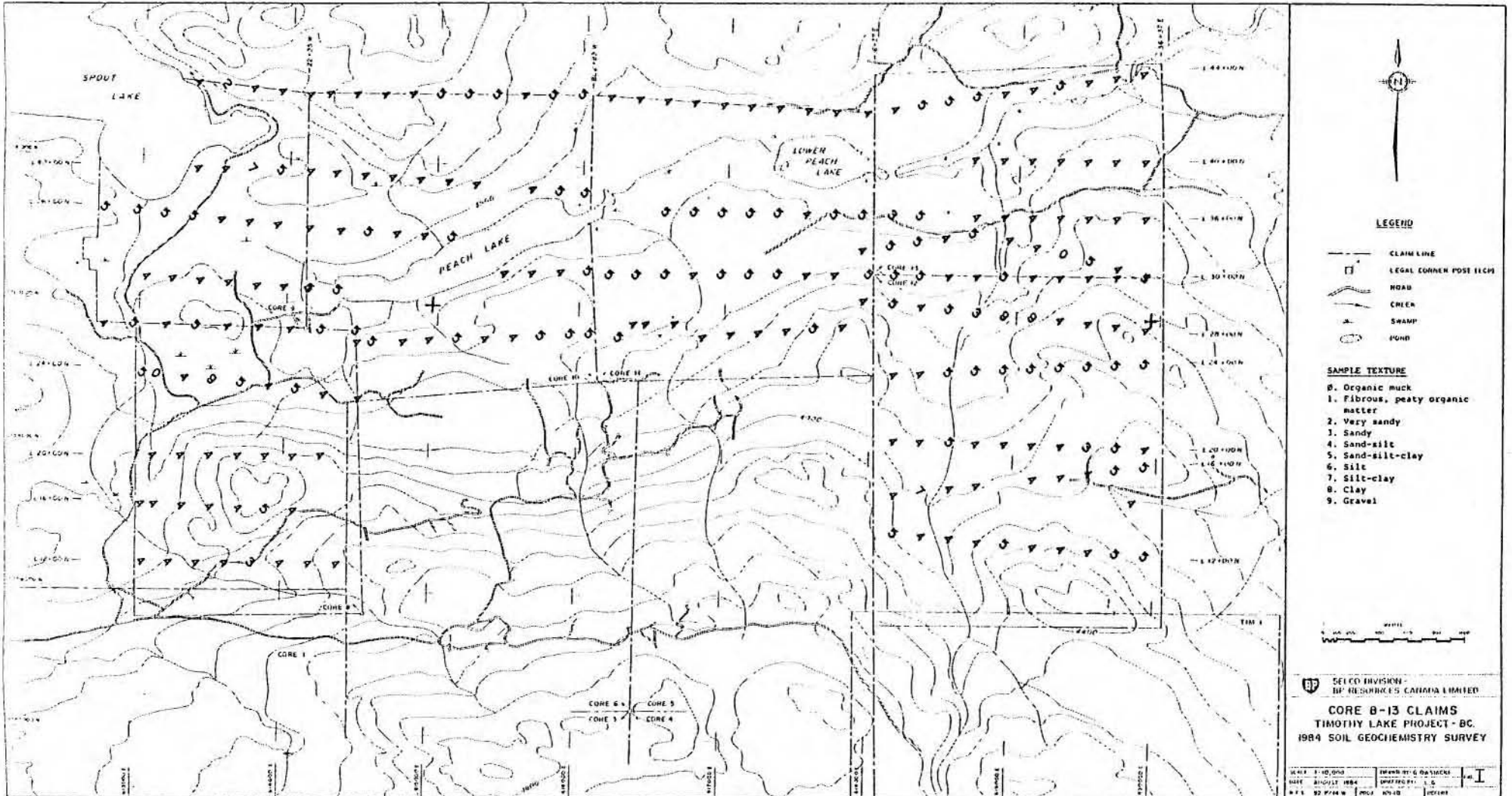
# BTM SMPL INT



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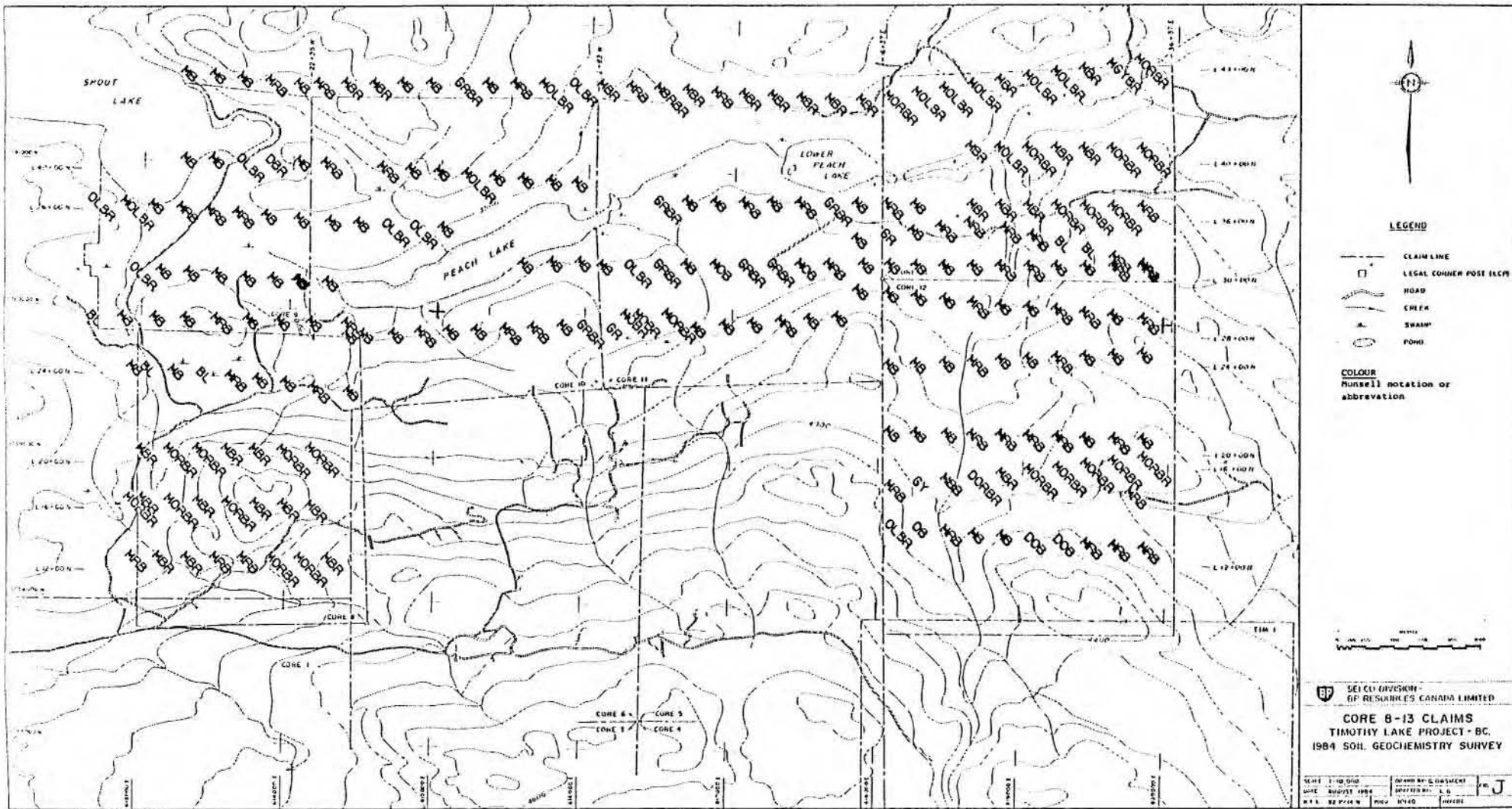
# SAMPLE TEXTURE



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# SAMPLE COLOUR

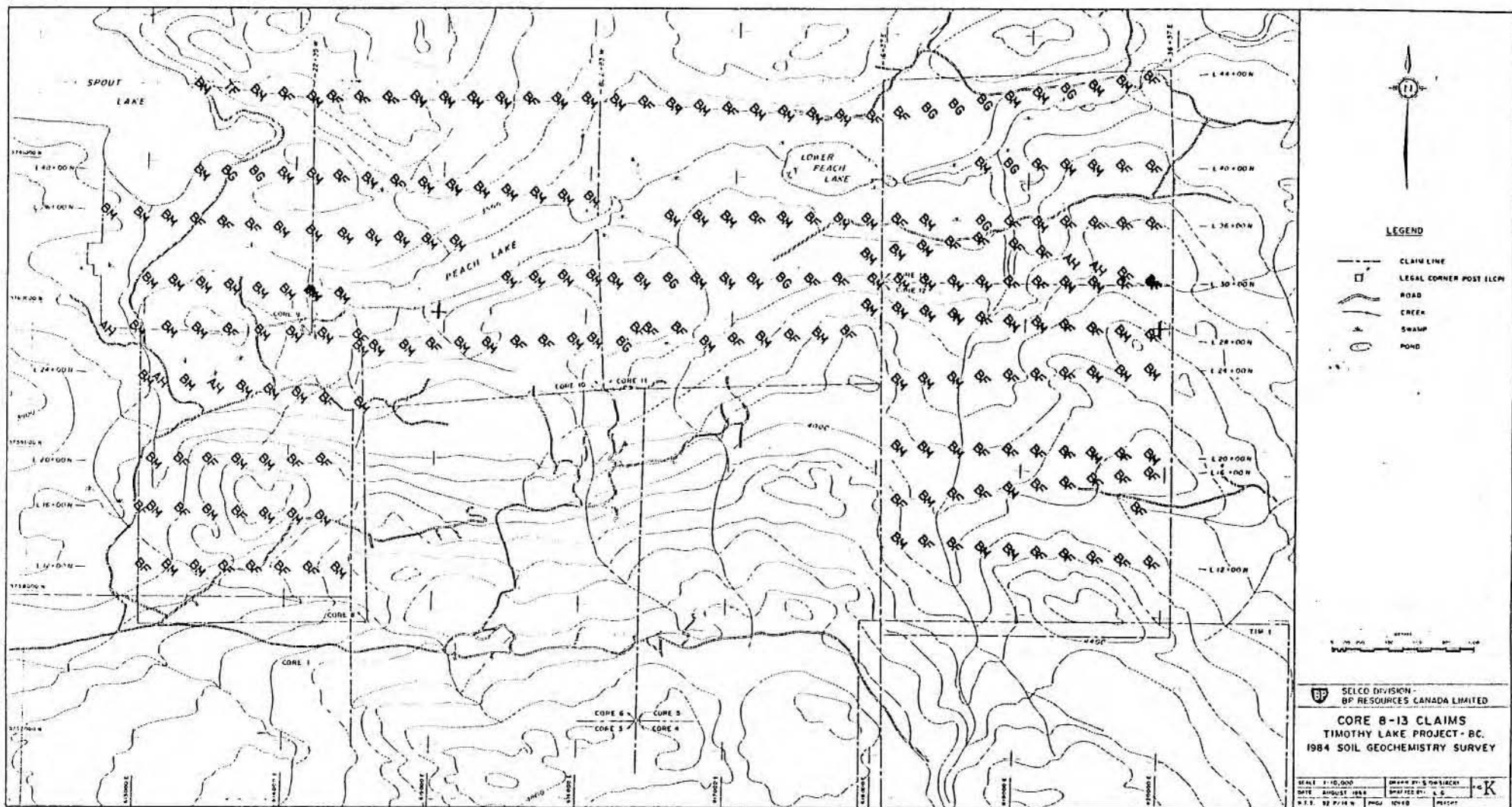


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# SOIL HORIZON

## SOIL HORIZON

- LH. Leaf, humus layer, unde-composed vegetation lying on the ground surface (do not sample)
- AM. Dark grey to black, organic-rich mineral horizon usually no deeper than 15cm from the surface (do not sample)
- AE. Grey to white (occasionally brown) leached mineral horizon near ground surface, usually sandy; accompanied by BF or BT horizon at depth (do not sample)
- BH. Black, organic-rich mineral horizon at depths greater than 15cm (do not sample)
- BF. Red-brown, iron-rich horizon
- BT. Brown, clay-rich horizon
- BG. Horizon which is water-saturated most of the year, identified by red brown mottles
- BM. Brown horizon which is only slightly different in appearance from underlying parent material
- C1, C2, C3, etc. Parent material (for soil)
- CA. White calcium carbonate precipitate in C horizon
- O1, O2, O3, etc. Bog sample at various depths
- TF. Talus fines



SELCO DIVISION -  
BP RESOURCES CANADA LIMITED

**CORE 8-13 CLAIMS**  
TIMOTHY LAKE PROJECT - BC  
1984 SOIL GEOCHEMISTRY SURVEY

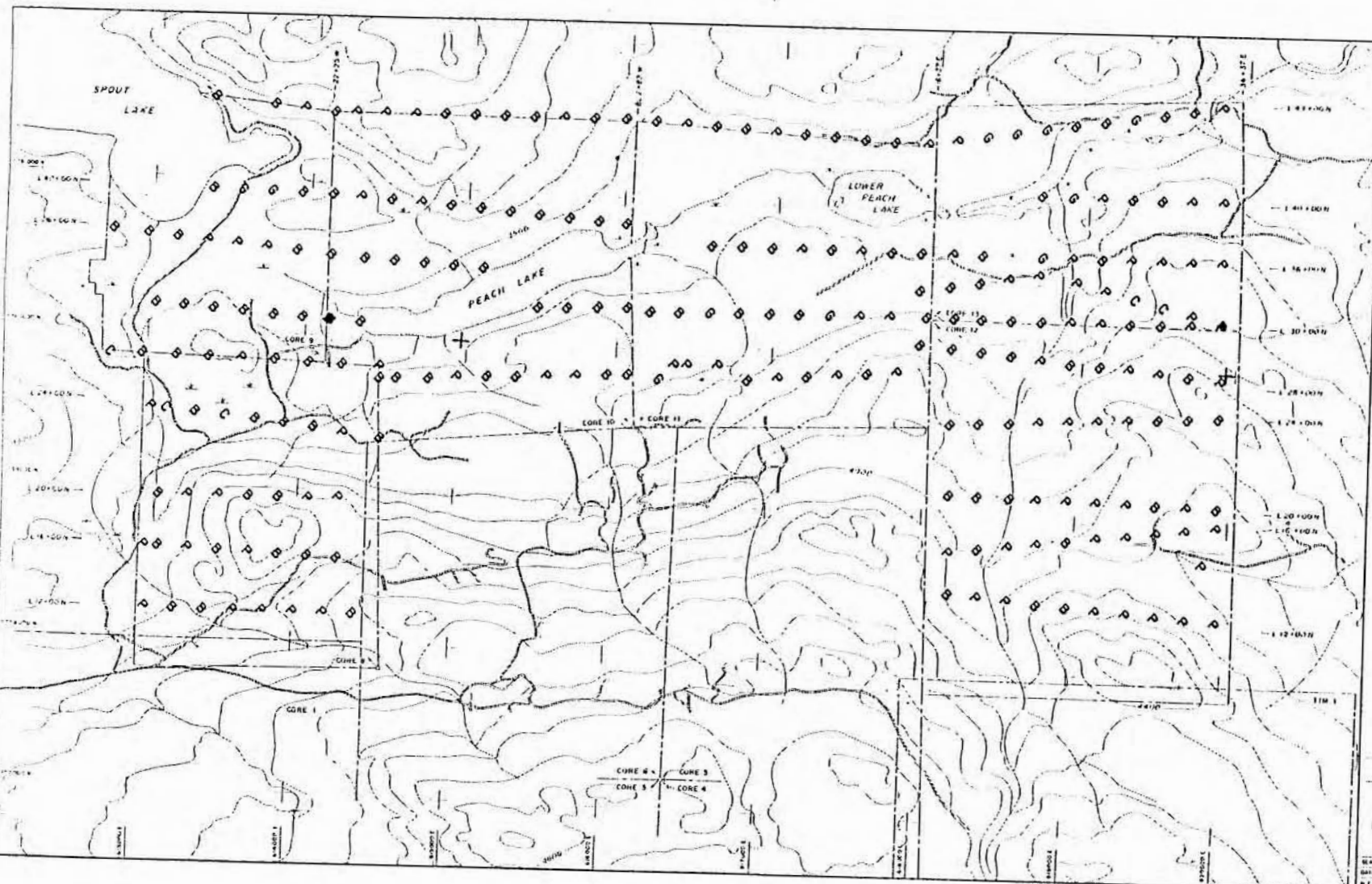
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DATE AUGUST 1984  
W.T. 92 P.18 W. PMSJ 12140 PRECIP

DATE 01-5-1984  
DRAWN BY S. SWINICKY  
CHECKED BY L.S.  
C.K.

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# SOIL TYPE

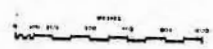


### LEGEND

- CLAIM LINE
- LEGAL CORNER POST 11CM
- ROAD
- CRTH
- SWAMP
- POND

### SOIL TYPE

- C.** Chernozem-prairie soil usually under grassland or meadow, thick AH > 10cm, CA horizon at depth
- S.** Solonchek-saline soil, high content of NaCl
- L.** Luvisol-BT horizon diagnostic
- P.** Podzol-BF horizon diagnostic
- B.** Brunisol-BM horizon is only B horizon of profile
- R.** Regosol-little or no soil development. No B soil horizon, only Lh (maybe) and C horizon
- G.** Gleysol-BG horizon diagnostic
- B.** Organic soil-bog vegetation-no mineral matter



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**CORE 8-13 CLAIMS**  
 TIMOTHY LAKE PROJECT - BC,  
 1984 SOIL GEOCHEMISTRY SURVEY

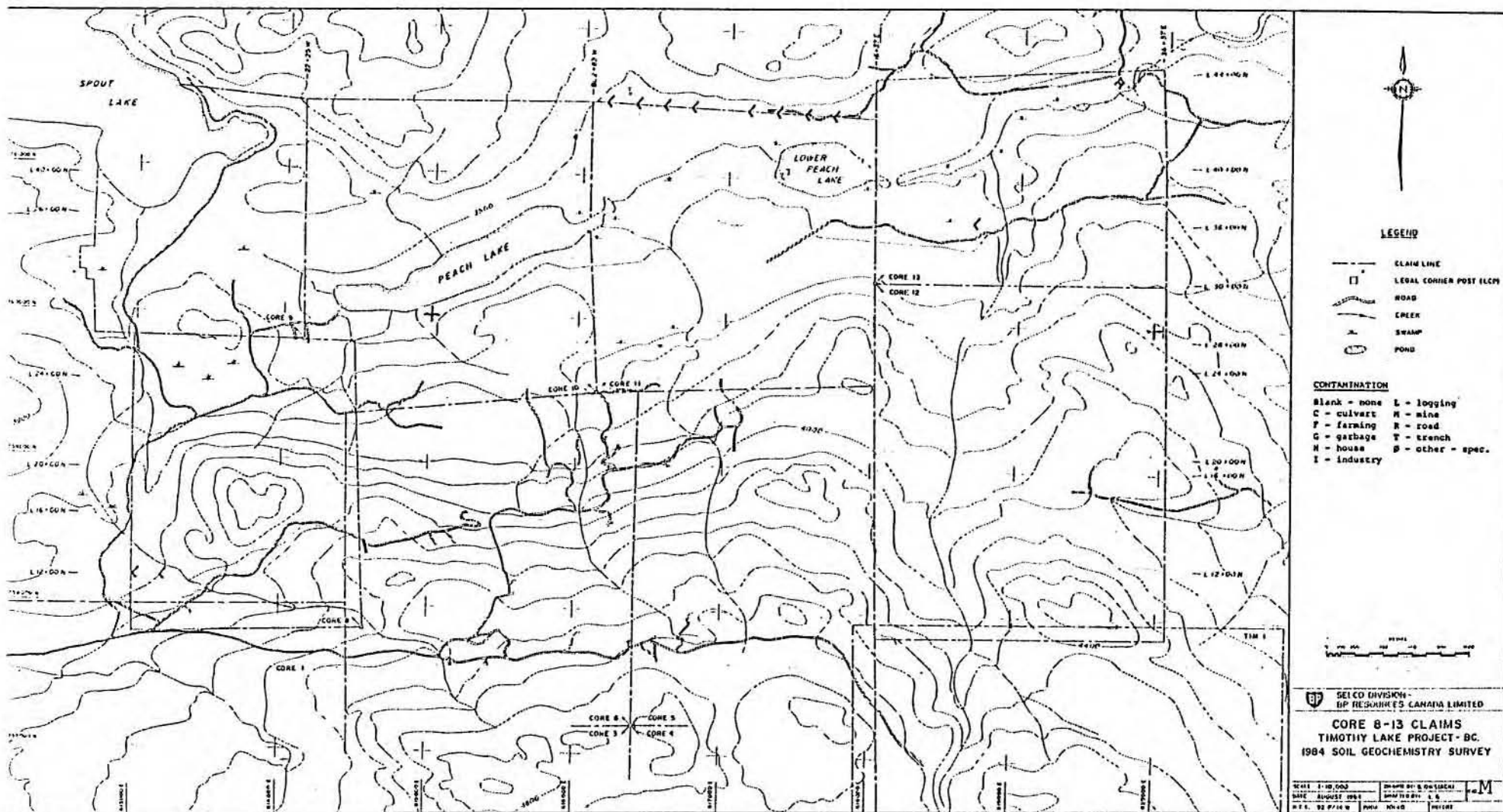
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DATE AUGUST 1984	DIFFUSION 1:5
BY 10 P 11 N	FILE 1040



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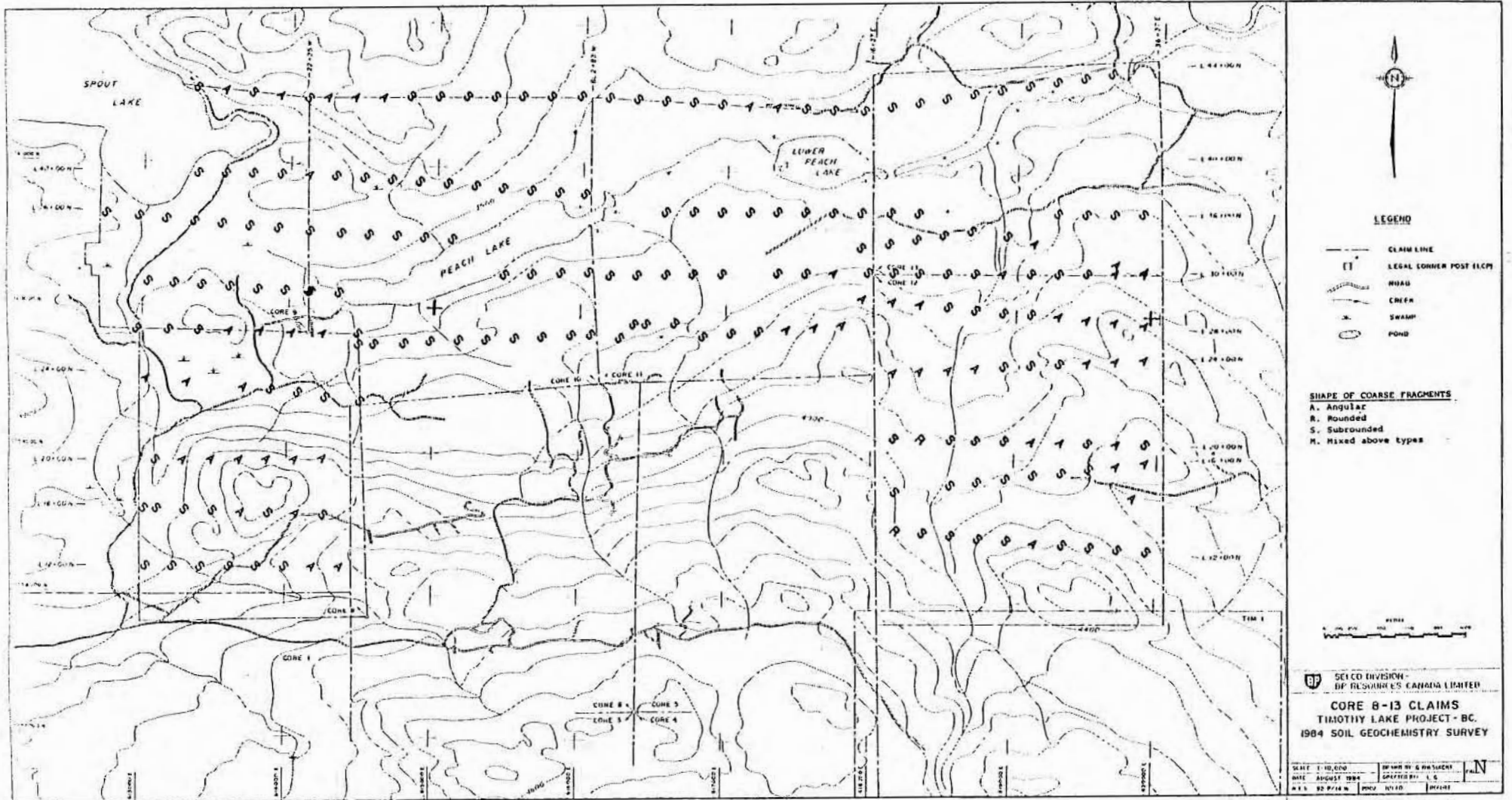
# CONTAMINATION



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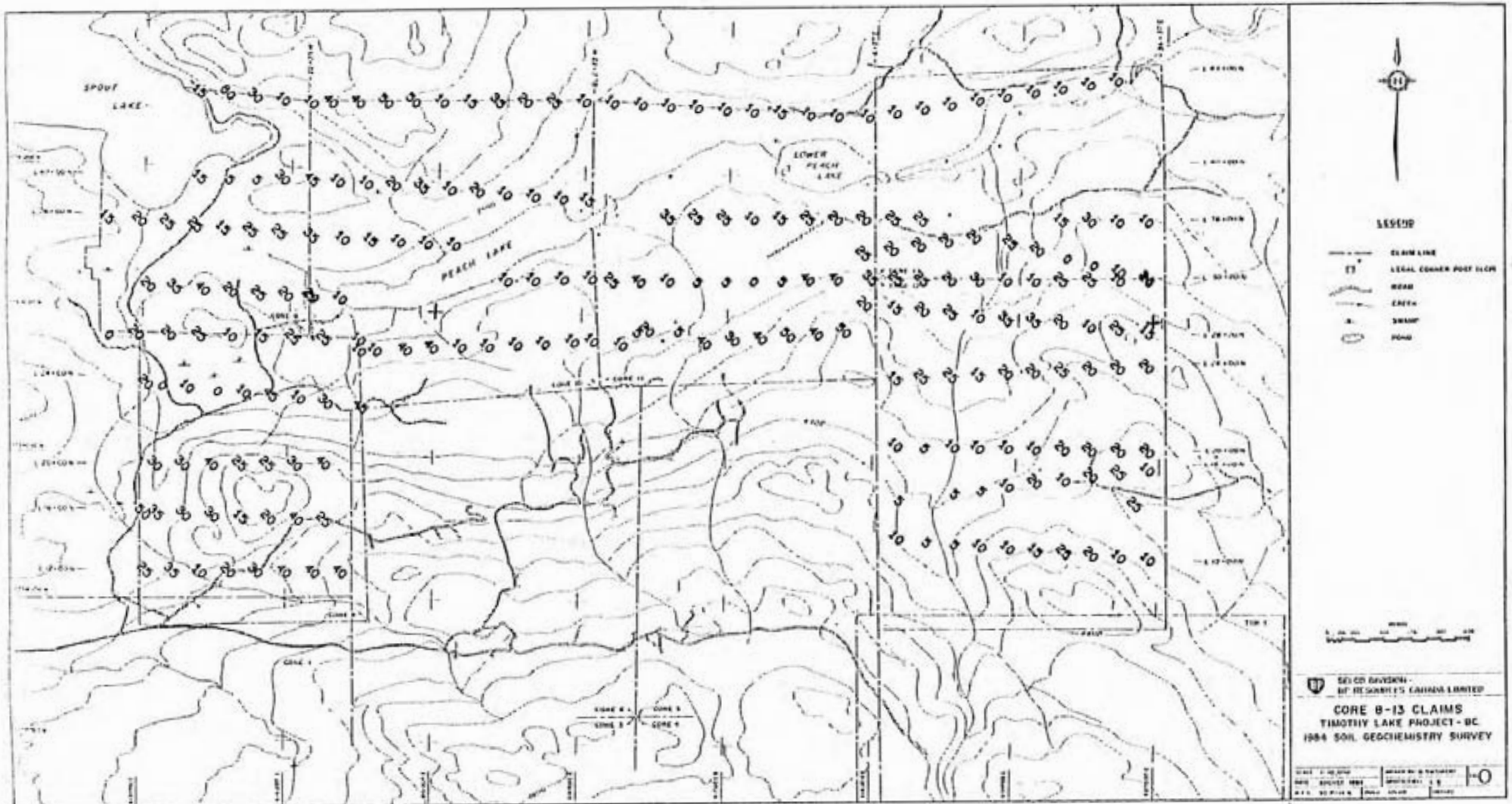
# SHAPE FRAGS



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# % COARSE FRAGS



APPENDIX 3

Method of Histogram Interpretation

Rules for choice of size coding or contouring intervals

- (1) Examine both arithmetic and logarithmic histograms for each type of survey data. Choose the histogram which most closely approximates a normal (or lognormal) distribution. If there are several populations exhibited on the histogram, subjectively divide the data into a series of normal or lognormal distributions. Avoid interpreting histograms which are strongly skewed. Portions of the arithmetic or logarithmic histograms may be chosen for data interpretation over specific metal concentration intervals, if this allows for the best portrayal of the data in graphical form.
- (2) Choose, as two of the coding intervals, points which represent between 90% and 95%, and 95% and 97.5% of the data, two different numbers. These choices highlight 1 in 10 and 1 in 20 samples which are considered slightly anomalous and definitely anomalous, respectively. These limits are optimistic in that the two categories are defined to be anomalous regardless of the distribution of values on the remainder of the histogram. A rigorous statistical approach would suggest that only the 97.5% value be considered the anomaly threshold.
- (3) Divide the remaining portion of the histogram into recognizable populations. The dividing point of each of these populations is chosen as a coding interval. Minimums caused by the failure of a laboratory to record specific concentration values are ignored. These artificial breaks in the histogram can be recognized by scanning the laboratory reports.
- (4) For each population, choose one or two numbers which correspond to the 90% and 95% cumulative frequencies for that population (1 in 10 and 1 in 20 samples for that population respectively). These will also be used to represent anomalous conditions for each population.
- (5) A maximum of six numbers can be chosen to plot symbol maps. This number is dictated by the ability to present data in graphical form with sufficiently different symbol sizes to be easily distinguishable, particularly if maps are to be reduced. The seven defined concentration classes are normally sufficient to represent geochemical data on a map. More intervals can be chosen if data are to be contoured. Avoid choosing arithmetic intervals without considering rules (1) and (4).
- (6) Maps plotted using the preceding instructions might result in two areas being distinguished from each other by a relatively uniform density of symbol sizes, yet only poor contrast anomalies are indicated. Differences between the two areas, A and B, might be due to underlying geology, overburden character, soils etc. Whatever the cause, the data are not well displayed. If the underlying control distinguishing A and B can be recognized, the data must be divided and re-interpreted following steps (1) to

(5). Two sets of maps can be drawn, or both sets of interpreted data can be plotted on a single map. For such superimposed geochemical maps the symbol sizes lose their absolute meaning but assume a more important stance, that of reflecting anomalous conditions regardless of the underlying control. To illustrate, consider the case where A and B are areas underlain by very different geology. Anomalous conditions for low background rock types might be concentrations which are much lower than average values for the high background rock types. Nevertheless, anomalies defined in each area are to be considered significant. Reliance on absolute concentrations can be misleading in such cases.

APPENDIX 4

Statement of Costs

COST STATEMENTCORE 8-13, RECORD #s 1489, 1574-1578. (85 Units).

1)	<u>Grid Preparation and Soil Sampling</u>	
	June 15th - July 12th, 1984	
	50.5 line kilometres by Company Personnel.	
	(G. Owsiacski, S. Todoruk)	
	40 man/days @ \$225.00/day	\$9,000.00
2.	<u>Accommodation</u>	
	1 month @ \$325.00/month	325.00
3.	<u>Board</u>	
	40 man/days @ \$23.00/man/day	920.00
4.	<u>Transportation</u>	
	Vehicle Operation	
	30 days @ \$25.00/day	750.00
5.	<u>Field Supplies</u>	
	Sample bags, flagging, toposil,	
	shipping charges	340.00
6.	<u>Geochemical Analyses</u>	
	Chemex Labs Ltd. as per Invoice -	
	Inv. #18413321, 16 July, 1984	
	255 Samples @ \$10.675/each	2,722.27



7. Drafting and Reproduction

4 man/days @ \$200.00/day 800.00

8. Report Writing, Typing, Supervision

3 man/days @ \$200.00/ man/day 600.00

TOTAL:             
\$15,457.27

**BRITISH COLUMBIA MINING RECEIPT**

Mining Division..... CLINTON.....

Issued at..... Vancouver..... No 216958 E

Date..... Aug 3..... 19 84

RECEIVED from..... B.P. Resources Canada Ltd

the sum of..... eight thousand six..... - Dollars,

in payment of..... recording notice to - Eprop

plus 2 years' work to apply to CORE 8-13  
( \$ 17,000.00 )

Signature..... John Turner.....

\$ 860.00

Office..... SUB-RECORDER.....



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• GEOCHEMISTS

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55,  
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NORTH VANCOUVER, B.C.  
CANADA V7J 2C1  
TELEPHONE: (604) 984-0221  
TELEX: 043-52597

*Cor 13 TH*  
*8*

\*\*\* INVOICE \*\*\*  
**RECEIVED**  
JUL 18 1984  
SELCO - BP EXPLORATION  
VANCOUVER, B.C.

To : SELCO MINING CORPORATION LTD  
700 - 890 W. PENDER ST.  
VANCOUVER, B.C.  
V6C 1K5

Invoice # : 18413321  
Date : 16-JUL-84  
P.C. # : NCNE  
Project 10140

Invoice for analytical work reported on certificate(s) A8413321-001 to -007

Quantity	Analysed for code	description	unit price	amount
255	002 - Cu	ppm		
	006 - Ag	ppm		
	013 - AS	ppm		
	017 - AU-AA	ppb	11.15	2843.25
1	002 - Cu	ppm		
	006 - Ag	ppm		
	017 - AU-AA	ppb	7.90	7.90

Sample preparation and other charges :

248	201 - soil + sediment -80 mesh	0.70	173.60
8	214 - Bag pulp	0.00	0.00

TOTAL \$ 3024.75  
Discount ( 10 %) \$ 302.48

Please pay this amount ----> \$ 2722.27  
=====

TERMS -- NET 30 DAYS  
1.5 % per month (18 % per annum) charged on overdue accounts





# CHEMEX LABS LTD.

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• ANALYTICAL CHEMISTS

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• REGISTERED ASSAYERS

TELEPHONE: (604) 984-0221

TELEX: 043-52597

## CERTIFICATE OF ANALYSIS

TO : SELCO MINING CORPORATION LTD

700 - 890 W. PENDER ST.  
VANCOUVER, B.C.  
V6C 1K5

CERT. # : A8413321-001-  
INVOICE # : I8413321  
DATE : 17-JUL-84  
P.C. # : NGNE  
10140

CC: SELCO - KAMLOOPS

Sample description	Prep code	Cu ppm	Ag ppm	AS ppm	AU-AA ppb		
5084545911001	201	91	0.2	11	<10	--	--
5084545911002	201	173	0.2	9	<10	--	--
5084545911003	201	65	0.1	6	<10	--	--
5084545911004	201	167	0.4	7	<10	--	--
5084545911005	201	220	0.1	10	<10	--	--
5084545911006	201	107	0.2	15	<10	--	--
5084545911007	201	16	0.1	5	<10	--	--
5084545911008	201	1800	0.5	39	40	--	--
5084545911009	201	110	0.1	15	<10	--	--
5084545911010	201	37	0.2	6	<10	--	--
5084545911011	201	240	0.7	10	<10	--	--
5084545911012	201	75	0.2	11	<10	--	--
5084545911013	201	50	0.1	7	<10	--	--
5084545911014	201	84	0.6	10	<10	--	--
5084545911015	201	81	0.1	4	<10	--	--
5084545911016	201	70	0.3	7	<10	--	--
5084545911017	201	308	0.6	17	190	--	--
5084545911018	201	40	0.2	5	<10	--	--
5084545911019	201	34	0.1	6	<10	--	--
5084545911020	201	70	0.1	6	<10	--	--
5084545911021	201	59	0.1	4	<10	--	--
5084545911022	201	42	0.2	6	<10	--	--
5084545911023	201	79	0.1	3	<10	--	--
5084545911024	201	10	0.1	1	<10	--	--
5084545911025	201	16	0.1	2	<10	--	--
5084545911026	201	15	0.1	2	<10	--	--
5084545911027	201	17	0.1	3	<10	--	--
5084545911028	201	14	0.1	1	<10	--	--
5084545911029	201	10	0.1	1	<10	--	--
5084545911030	201	11	0.1	1	<10	--	--
5084545911031	201	12	0.1	1	<10	--	--
5084545911032	201	10	0.1	1	<10	--	--
5084545911033	201	14	0.1	1	<10	--	--
5084545911034	201	12	0.1	1	<10	--	--
5084545911035	201	28	0.1	1	<10	--	--
5084545911036	201	31	0.1	2	<10	--	--
5084545911037	201	15	0.1	1	<10	--	--
5084545911038	201	19	0.1	1	<10	--	--
5084545911039	201	19	0.1	1	<10	--	--
STD-01	214	220	1.5	32	100	--	--

*Haut Buchler*

Certified by .....



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CANADIAN TESTING  
ASSOCIATION



# CHEMEX LABS LTD.

212 BROOKSBANK AVE  
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TELEPHONE: (604) 984-02

TELEX: 043-525

## CERTIFICATE OF ANALYSIS

TO : SELCO MINING CORPORATION LTD

700 - 890 W. PENDER ST.  
VANCOUVER, B.C.  
V6C 1K5

CERT. # : A8413321-002

INVOICE # : I8413321

DATE : 17-JUL-84

P.C. # : NCAE

10140

CC: SELCO - KAMLOOPS

Sample description	Prep code	CU ppm	Ag ppm	AS ppm	AU-AA ppb		
5084545911040	201	12	0.1	2	<10	--	--
5084545911041	201	26	0.1	1	<10	--	--
5084545911042	201	15	0.1	2	<10	--	--
5084545911043	201	13	0.1	2	<10	--	--
5084545911044	201	11	0.1	1	<10	--	--
5084545911045	201	18	0.1	2	<10	--	--
5084545911046	201	16	0.1	2	<10	--	--
5084545911047	201	116	0.1	4	<10	--	--
5084545911048	201	107	0.1	2	<10	--	--
5084545911049	201	8	0.1	1	<10	--	--
5084545911050	201	14	0.1	1	<10	--	--
5084545911051	201	9	0.1	1	<10	--	--
5084545911052	201	17	0.1	2	<10	--	--
5084545911053	201	14	0.1	1	<10	--	--
5084545911054	201	9	0.1	1	<10	--	--
5084545911055	201	30	0.1	1	<10	--	--
5084545911056	201	9	0.1	2	<10	--	--
5084545911057	201	20	0.1	1	<10	--	--
5084545911058	201	13	0.1	2	250	--	--
5084545911059	201	27	0.1	2	<10	--	--
5084545911060	201	90	0.1	4	<10	--	--
5084545911061	201	16	0.1	1	<10	--	--
5084545911062	201	18	0.1	1	<10	--	--
5084545911063	201	30	0.1	3	<10	--	--
5084545911064	201	37	0.1	1	<10	--	--
5084545911065	201	33	0.1	1	<10	--	--
5084545911066	201	40	0.1	3	<10	--	--
5084545911067	201	120	0.1	3	<10	--	--
5084545911068	201	16	0.1	3	<10	--	--
5084545911069	201	37	0.1	1	<10	--	--
5084545911070	201	44	0.1	3	<10	--	--
5084545912001	201	22	0.1	1	<10	--	--
5084545912002	201	18	0.1	2	<10	--	--
5084545912003	201	19	0.1	1	<10	--	--
5084545912004	201	280	0.3	3	<10	--	--
5084545912005	201	18	0.1	1	<10	--	--
5084545912006	201	29	0.1	1	<10	--	--
5084545912007	201	64	0.1	3	<10	--	--
5084545912008	201	133	0.1	4	<10	--	--
STD-01	214	235	1.4	36	100	--	--

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# CHEMEX LABS LTD.

212 BROOKSBANK AV  
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• GEOCHEMISTS

• REGISTERED ASSAYERS

TELEPHONE: (604) 984-02  
TELEX: 043-5251

## CERTIFICATE OF ANALYSIS

TO : SELCO MINING CORPORATION LTD

700 - 890 W. PENDER ST.  
VANCOUVER, B.C.  
V6C 1K5

CERT. # : A8413321-003  
INVOICE # : 18413321  
DATE : 17-JUL-84  
P.C. # : NCNE  
10140

CC: SELCO - KAMLOOCS

Sample description	Prep code	Cu ppr	Ag ppm	AS ppr	AU-AA ppb		
5084545912009	201	43	0.1	2	<10	--	--
5084545912010	201	25	0.1	1	<10	--	--
5084545912011	201	15	0.1	2	<10	--	--
5084545912012	201	20	0.1	3	<10	--	--
5084545912013	201	13	0.1	2	<10	--	--
5084545912014	201	60	0.1	2	<10	--	--
5084545912015	201	33	0.1	2	<10	--	--
5084545912016	201	19	0.1	2	400	--	--
5084545912017	201	68	0.1	4	<10	--	--
5084545912018	201	38	0.1	4	<10	--	--
5084545912019	201	45	0.1	4	<10	--	--
5084545912020	201	22	0.1	4	<10	--	--
5084545912021	201	47	0.1	2	<10	--	--
5084545912022	201	34	0.1	2	<10	--	--
5084545912023	201	17	0.1	2	<10	--	--
5084545912024	201	36	0.1	2	<10	--	--
5084545912025	201	37	0.1	2	<10	--	--
5084545912026	201	60	0.1	3	<10	--	--
5084545912027	201	31	0.1	3	<10	--	--
5084545912028	201	29	0.1	2	<10	--	--
5084545912029	201	33	0.1	2	<10	--	--
5084545912030	201	30	0.1	2	<10	--	--
5084545912031	201	34	0.1	3	<10	--	--
5084545912032	201	43	0.1	4	<10	--	--
5084545912033	201	24	0.1	3	<10	--	--
5084545912034	201	51	0.1	1	<10	--	--
5084545912035	201	23	0.1	3	<10	--	--
5084545912036	201	600	0.1	2	<10	--	--
5084545912037	201	32	0.1	5	<10	--	--
5084545912038	201	43	0.1	1	<10	--	--
5084545912039	201	41	0.1	7	<10	--	--
5084545912040	201	183	0.1	3	30	--	--
5084545912041	201	44	0.1	1	<10	--	--
5084545912042	201	33	0.1	2	<10	--	--
5084545912043	201	20	0.1	2	<10	--	--
5084545912044	201	32	0.1	5	<10	--	--
5084545912045	201	142	0.2	5	<10	--	--
5084545912046	201	40	0.1	4	<10	--	--
5084545912047	201	298	0.9	3	<10	--	--
STD-01	214	230	1.2	36	140	--	--

Certified by *Hank Becker*



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# CHEMEX LABS LTD.

212 BROOKSBANK  
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• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

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TELEX: 043-

## CERTIFICATE OF ANALYSTS

TO : SELCO MINING CORPORATION LTD

700 - 890 W. PENDER ST.  
VANCOUVER, B.C.  
V6C 1K5

CERT. # : A8413321-C  
INVOICE # : I8413321  
DATE : 17-JUL-84  
P.C. # : NONE  
10140

CC: SELCO - KAMLOOPS

Sample description	Prep code	Cu ppr	Ag ppm	AS ppr	AU-AA ppb		
5084545912048	201	144	0.2	6	320	--	--
5084545912049	201	105	0.1	4	<10	--	--
5084545912050	201	47	0.1	1	<10	--	--
5084545912051	201	31	0.1	2	<10	--	--
5084545912052	201	360	0.7	7	<10	--	--
5084545912053	201	189	0.4	7	<10	--	--
5084545912054	201	34	0.1	4	<10	--	--
5084545912055	201	20	0.1	4	<10	--	--
5084545912056	201	22	0.1	3	<10	--	--
5084545912057	201	20	0.1	3	<10	--	--
5084545912058	201	82	0.1	5	<10	--	--
5084545912059	201	56	0.1	4	<10	--	--
5084545912060	201	70	0.1	3	<10	--	--
5084545912061	201	51	0.1	6	<10	--	--
5084545912062	201	44	0.1	3	<10	--	--
5084545912063	201	103	0.1	5	<10	--	--
5084545912064	201	40	0.1	4	<10	--	--
5084545912065	201	36	0.1	5	<10	--	--
5084545912066	201	20	0.1	4	<10	--	--
5084545912067	201	14	0.1	5	<10	--	--
5084545912068	201	19	0.1	5	<10	--	--
5084545912069	201	36	0.1	5	<10	--	--
5084545912070	201	21	0.1	5	<10	--	--
5084545912071	201	55	0.1	5	<10	--	--
5084545912072	201	40	0.1	5	<10	--	--
5084545912073	201	12	0.1	3	<10	--	--
5084545912074	201	16	0.1	4	<10	--	--
5084545912075	201	17	0.1	2	<10	--	--
5084545912076	201	49	0.4	4	<10	--	--
5084545912077	201	8	0.1	4	<10	--	--
5084545912078	201	18	0.3	3	<10	--	--
5084545912079	201	11	0.1	4	<10	--	--
5084545912080	201	23	0.1	4	<10	--	--
5084545912081	201	21	0.1	3	<10	--	--
5084545912082	201	42	0.1	3	<10	--	--
5084545912083	201	22	0.1	5	<10	--	--
5084545912084	201	80	0.1	4	<10	--	--
5084545912085	201	24	0.1	2	<10	--	--
5084545912086	201	21	0.1	4	<10	--	--
STC-01	214	217	1.2	35	90	--	--

*Hart Buchler*

Certified by .....



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# CHEMEX LABS LTD.

212 BROOKSBANK #  
NORTH VANCOUVER,  
CANADA V7J

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

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TELEPHONE: (604) 984-1

TELEX: 043-52

## CERTIFICATE OF ANALYSIS

TO : SELCO MINING CORPORATION LTD

700 - 890 W. PENDER ST.  
VANCOUVER, B.C.  
V6C 1K5

CERT. # : A8412321-00  
INVOICE # : 18412321  
DATE : 17-JUL-84  
P.C. # : NGNE  
10140

CC: SELCO - KAMLOOPS

Sample description	Prep code	Cu ppm	Ag ppm	AS ppr	AU-AA ppb		
5084545912087	201	6	0.1	4	<10	--	--
5084545912088	201	8	0.1	3	<10	--	--
5084545912089	201	10	0.1	4	<10	--	--
5084545912090	201	12	0.1	3	<10	--	--
5084545912091	201	9	0.1	4	<10	--	--
5084545912092	201	8	0.1	3	<10	--	--
5084545912093	201	8	0.1	3	<10	--	--
5084545912094	201	7	0.1	3	<10	--	--
5084545912095	201	16	0.1	3	<10	--	--
5084545912096	201	12	0.1	3	<10	--	--
5084545912097	201	27	0.1	3	<10	--	--
5084545912098	201	47	0.1	4	<10	--	--
5084545912099	201	15	0.1	2	<10	--	--
5084545912100	201	28	0.1	3	<10	--	--
5084545912101	201	12	0.1	4	<10	--	--
5084545912102	201	9	0.1	4	<10	--	--
5084545912103	201	26	0.3	4	<10	--	--
5084545912104	201	24	0.1	3	<10	--	--
5084545912105	201	9	0.1	2	<10	--	--
5084545912106	201	13	0.1	3	<10	--	--
5084545912107	201	26	0.1	3	<10	--	--
5084545912108	201	29	0.1	2	<10	--	--
5084545912109	201	27	0.1	2	<10	--	--
5084545912110	201	14	0.1	3	<10	--	--
5084545912111	201	230	1.1	5	<10	--	--
5084545912112	201	235	0.9	3	<10	--	--
5084545912113	201	30	0.1	3	<10	--	--
5084545912114	201	16	0.1	3	<10	--	--
5084545912115	201	20	0.1	4	<10	--	--
5084545912116	201	20	0.1	4	<10	--	--
5084545912117	201	43	0.1	2	<10	--	--
5084545912118	201	44	0.1	3	<10	--	--
5084545912119	201	25	0.1	5	<10	--	--
5084545912120	201	19	0.1	2	100	--	--
5084545912121	201	41	0.1	3	<10	--	--
5084545912122	201	39	0.1	5	<10	--	--
5084545912123	201	22	0.3	5	<10	--	--
5084545912124	201	14	0.1	4	<10	--	--
5084545912125	201	27	0.1	3	<10	--	--
STC-01	214	225	1.2	33	90	--	--







# CHEMEX LABS LTD.

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CANADA V7J 2C1

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

TELEPHONE: (604) 984-0221

TELEX: 043-52597

## CERTIFICATE OF ANALYSIS

TO : SELCO MINING CORPORATION LTD

700 - 890 W. PENDER ST.  
VANCOUVER, B.C.  
V6C 1K5

CERT. # : A8413321-007-  
INVOICE # : I8413321  
DATE : 17-JUL-84  
P.C. # : NONE  
10140

CC: SELCO - KAMLCOPS

Sample description	Prep code	Cu ppr	Ag ppm	AS ppm	AU-AA ppb		
5084545912166	201	92	0.1	5	<10	--	--
5084545912167	201	27	0.1	3	<10	--	--
5084545912168	201	22	0.1	6	<10	--	--
5084545912169	201	21	0.1	3	<10	--	--
5084545912170	201	28	0.1	3	<10	--	--
5084545912171	201	15	0.1	3	<10	--	--
5084545912172	201	33	0.1	4	<10	--	--
5084545912173	201	23	0.1	5	<10	--	--
5084545912174	201	15	0.1	3	<10	--	--
5084545912175	201	110	0.1	4	<10	--	--
5084545912176	201	37	0.1	3	<10	--	--
5084545912177	201	19	0.1	3	<10	--	--
5084545912178	201	88	0.3	6	<10	--	--
5084545912179	201	41	0.1	3	<10	--	--
RE-5084545911001	214	85	0.1	N.S.S.	<10	--	--
STD-01	214	221	1.2	33	120	--	--



MEMBER  
CANADIAN TESTING  
ASSOCIATION

Certified by Hart Bechler

APPENDIX 5

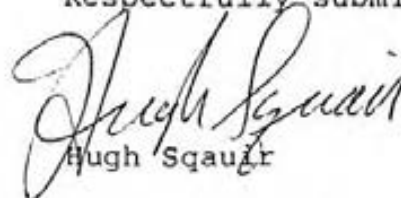
List of Qualifications

CERTIFICATE

I, Hugh Squair, of 4287 Staulo Crescent, Vancouver, British Columbia, hereby certify that:

1. I am a geologist residing at the above address.
2. I am a graduate of the University of Saskatchewan and London with B.A. 1959, and Ph.d degrees in Geology and Mining Geology and have practised my profession for 19 years.
3. I am registered as a member of the Association of Professional Engineers of the Province of Ontario.
4. I directed the geochemical work carried out on the Claim Group by Mr. A.P.D. Gamble and Mr. G. Owsiacski and attest that the values presented and their spatial relationships to each other are correct within reasonable limits of error.
5. I hold no interest, direct, or indirect in the Core Claim Group which is the subject of this report.

Respectfully submitted,

  
Hugh Squair

Vancouver, B.C.  
October, 1984.



CERTIFICATE OF AUTHOR

I Dave Gamble, of 7182 Blackwell Road, Kamloops, British Columbia hereby certify that:

1. I am a geologist residing at the above address.
2. I am a graduate of the University of Ottawa with an Honours B.Sc. degree in Geology (1973) and have completed two years graduate studies leading to a M.Sc. at Laurentian University.
3. I have practised my profession for more than 7 years.
4. I supervised the geochemical survey work on the Core Claims and interpreted the results of the survey Described herein.
5. I hold no interest, direct or indirect, in the Core Claim Group which is the subject of this report.

Respectfully submitted,

A. P. D. Gamble  
Project Geologist  
October, 1984  
Kamloops, B.C.

CERTIFICATE OF AUTHOR

I, George Owsiacki, of 281 Viking Drive, Kamloops, British Columbia hereby certify that:

1. I am a geologist residing at the above address.
2. I am a graduate of Queen's University, Kingston, Ontario with an Honours B.Sc. degree in Geology (1981).
3. I have practised my profession for more than 1 year full time and for 5 summer field seasons.
4. I co-supervised the sample collection described herein.
5. I hold no interest, direct or indirect, in the Core Claim Group which is the subject of this report.

Respectfully submitted,

G. Owsiacki  
Field Geologist  
October, 1984  
Kamloops, B.C.

CERTIFICATE OF AUTHOR

List of Qualifications - S. J. Hoffman

- BSc 1969 - McGill University (Hons., Geology and Chemistry)  
 MSc 1972 - The University of British Columbia (Geochemistry)  
 PhD 1976 - The University of British Columbia (Geochemistry)

List of Publications (to August, 1984)

1. Hoffman, S. J., 1972  
 Geochemical dispersion in bedrock and glacial overburden around a copper property in south central British Columbia. MSc thesis, unpublished, U.B.C., 209 pp.
2. Hoffman, S. J. and Fletcher, W.K., 1972  
 Distribution of copper at the Dansey-Rayfield River property, south central British Columbia. J. Geoch. Expl. 1, 163-180.
3. Hoffman, S. J. and Waskett-Meyers, M. J., 1974  
 Determination of molybdenum in soils and sediments with a modified zinc dithiol procedure. J. Geoch. Expl. 3, 61-66.
4. Hoffman, S. J., 1974  
 Pebble cards - A record of the coarse fraction of stream sediments for geochemical exploration. J. Geoch. Expl. 3, 387-388.
5. Hoffman, S. J. and Fletcher, W. K., 1976  
 Reconnaissance geochemistry on the Nechako Plateau, B.C., using lake sediments. J. Geoch. Expl. 5, 101-114.
6. Hoffman, S. J., 1976  
 Mineral Exploration of the Nechako Plateau, central British Columbia, using lake sediment geochemistry. PhD thesis, unpublished, U.B.C., 347 pp.

7. Hoffman, S. J., 1977  
Talus fine sampling as a regional geochemical exploration technique in mountainous regions.  
J. Geoch. Expl. 7, 349-360.
8. Hoffman, S. J. and Fletcher, W. K., 1979  
Sequential extraction of copper, zinc, iron, manganese and molybdenum from soils and sediments.  
In Geochemical Exploration 1978, Proceedings of the Seventh International Geochemical Exploration Symposium, Golden, Colorado, 289-299.
9. Hoffman, S. J. and Fletcher, W. K., 1981  
Detailed lake sediment sampling of anomalous lakes on the Nechako Plateau, central British Columbia - Comparison of trace metal distributions in Capoose and Fish Lakes.  
J. Geoch. Expl. 14, 221-224.
10. Hoffman, S. J. and Fletcher, W. K., 1981  
Organic matter scavenging of copper, zinc, molybdenum, iron, and manganese, estimated by a sodium hypochlorite extraction (pH 9.5).  
J. Geoch. Expl. 15, 549-562.
11. Hoffman, S. J., 1983  
Geochemical exploration for unconformity-type uranium deposits in permafrost terrain - Hornby Bay Basin, Northwest Territories, Canada.  
J. Geoch. Expl. 19, 11-32.
12. Hoffman, S. J., Arnold, P. M. and Zink, E. W., 1984  
Rapid field determination of copper by anodic stripping voltammetry (ASV).
13. Hoffman, S. J., 1984  
Lake sediment geochemistry.  
In press, Encyclopedia of Earth Sciences.
14. Hoffman, S. J., and Mitchell, G. G., 1984  
Microcomputers in geochemical exploration. Presented, Helsinki, August, 1983, and Reno, March, 1984.  
In press, J. Geoch. Expl.



List of Memberships

1. Geological Association of Canada, since 1967.
2. Canadian Institute of Mining and Metallurgy, since 1973.
3. Association of Exploration Geochemists, since 1973.
4. American Society of Agronomy, since 1973.
5. Geochemical Society, since 1983.





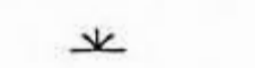

Other Qualifications

1. Instructor of methods of geochemical exploration for the B.C. Department of Mines prospecting school, May 1977 - 1984 (8 years).
2. Instructor, Short course on Geochemical Exploration in the Canadian Shield, McGill University, January 1979.
3. Speaker, CIM in Prince George, B.C. on "Lake Sediment Geochemistry", May, 1977.
4. Speaker, Geosciences Council, Yellowknife on "Lake Sedimentary Geochemistry, Hornby Bay area", December 1978, and also December 1980.
5. Instructor, Short course on Geochemical Exploration (computer and statistical applications), Northwest Mining Association, Spokane, Washington, December 1979.
6. Council member, Association of Exploration Geochemists, 1980-1984.
7. Chairman, GOLD-81 Symposium. Precious Metals in the Northern Cordillera: April 12-15, 1981. Co-sponsored by the Association of Exploration Geochemists and the Cordilleran Section of the Geological Association of Canada.
8. Business Editor, Proceedings of the GOLD-81 Symposium published February 1982.
9. Lecturer, Exploration geochemistry, University of British Columbia, credit course, 1983, 1984.
10. Member, committee to determine qualifications for geochemical option of professional geologist (P. Geol.), a sub classification of P. Eng., 1982-1983.

11. Chairman, Geochemistry 1986 Symposium, to be held in Vancouver.
12. External examiner, MSc thesis, University of Calgary, 1984.



**LEGEND**

-  CLAIM LINE
-  LEGAL CORNER POST (LCP)
-  ROAD
-  CREEK
-  SWAMP
-  POND

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

METRES  
0 100 200 400 600 800 1000

**13,119**

**BP** SELCO DIVISION -  
BP RESOURCES CANADA LIMITED

**CORE 8-13 CLAIMS  
TIMOTHY LAKE PROJECT - BC.  
1984 SOIL GEOCHEMISTRY SURVEY  
SAMPLE LOCATION MAP**

SCALE 1:10,000	DRAWN BY: G. OWSIACKI	FIG. 4
DATE AUGUST, 1984	DRAFTED BY: L.G.	
N.T.S. 92 P/14 W	PROJ. 10140	REPORT BPVR 84-20