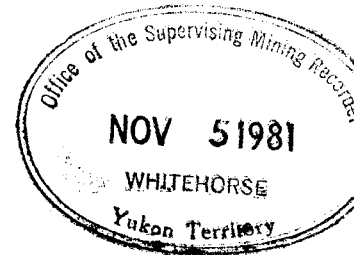




GEOPHYSICAL REPORT

on

VANCOUVER, RIGHT HOOK  
and THOROUGHFARE ~~CLAIMS~~ <sup>LEASES</sup>



June to August, 1981

Claim Sheet

Latitude 63°40' N

Longitude 137°05' W

Submitted in fulfillment of the Yukon  
~~CLAIMS~~ <sup>PACER</sup> Mining Act as representation  
of work on the aforementioned ~~CLAIMS~~ <sup>LEASES</sup>  
as of this date for the recording  
year of 1981.

120055

D. W. Litchfield, Eng.  
Mining Consultant

~~090957~~

September 30th, 1981

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## I INTRODUCTION

In July of 1981 property assessment work was undertaken on Vancouver Creek, Right Hook Creek, and Thoroughfare Creek placer leases.

The purpose of the assessment work was to prospect and plan for future development of the claims. Work included identifying location posts, cutting lines and undertaking Geophysical research for the following claim holders:

<u>Prospecting Lease</u>	<u>Owner</u>
5302	Vera Asp
5303	Charlene McGinty
5304	Annabelle McGinty
5305	Nancy Blanchard
5306	Larry McGinty

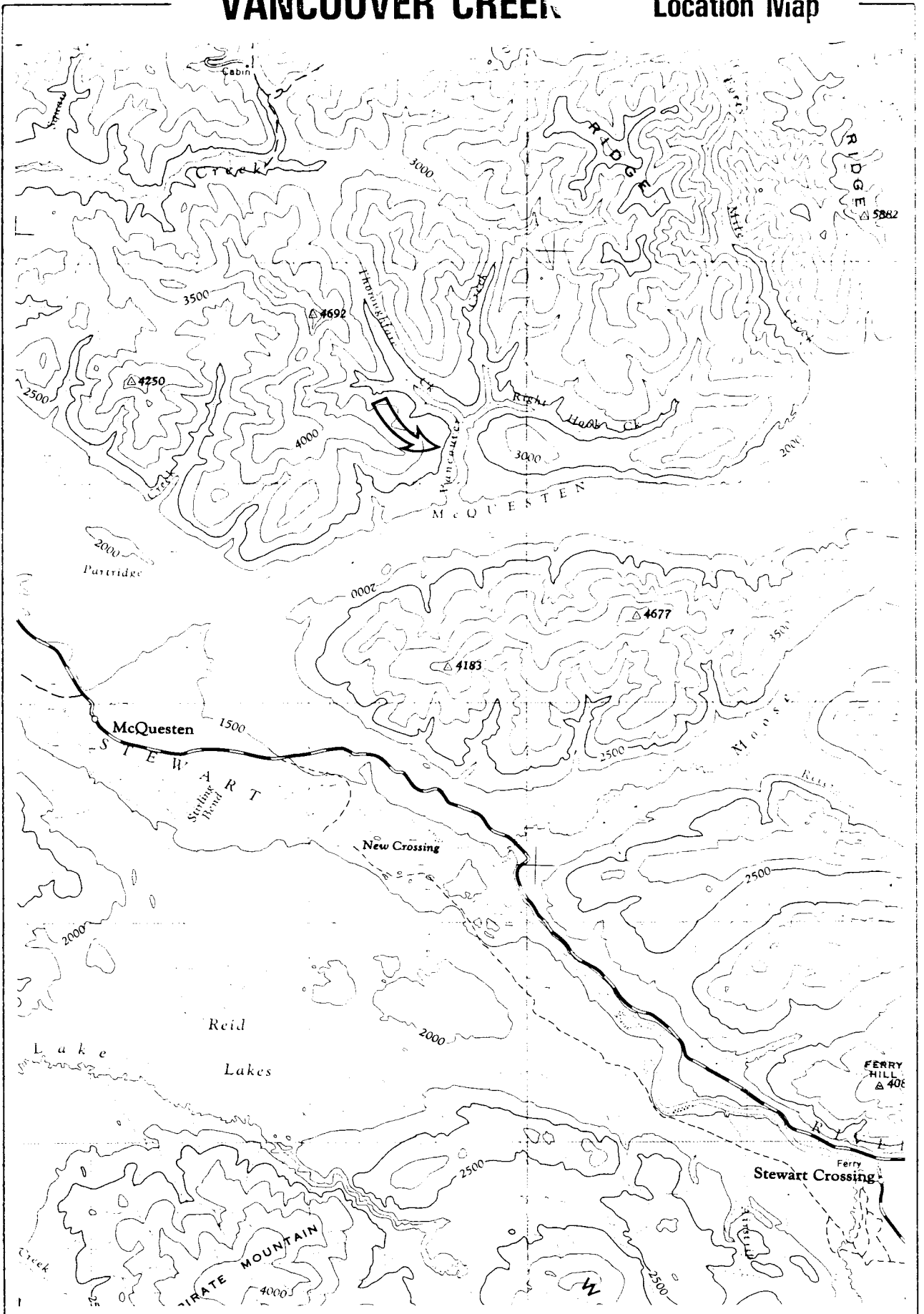
The leases are in the McQuesten Map Sheet area 115 P, and are located at latitude  $63^{\circ} 40'$  north and longitude  $137^{\circ} 05'$  west. At the confluence of the creeks, the valley bottom elevation is between 1800 and 1900 feet, sloping gently down to the McQuesten River on a grade of approximately 1.8%. The valleys of the creeks are flat-bottomed with steeply rising sides. There was no evidence of glacial activity in the lower creek-valleys. Reference to the Yukon Land and Resource Inventory Map dealing with Quaternary Geoscience Activity indicates the majority of the glacial activity was limited to the upper reaches of the watersheds of Vancouver, Right Hook, and Thoroughfare Creeks.

## II GEOLOGY

The Vancouver Creek properties are located slightly west of the Tintina Trench, an area of tectonic activity that has resulted in extensive folding, faulting, and fracturing. The Tintina Trench cuts across the Yukon Plateau, an area of stability that had been eroded to only slight relief. Widespread uplift then occurred causing a stream rejuvenation which increased the head and the erosive power of the streams. The result of the downcutting was valleys with sides rising sharply up from the valley floor which then became more gradual in relief on the intervening ridges.

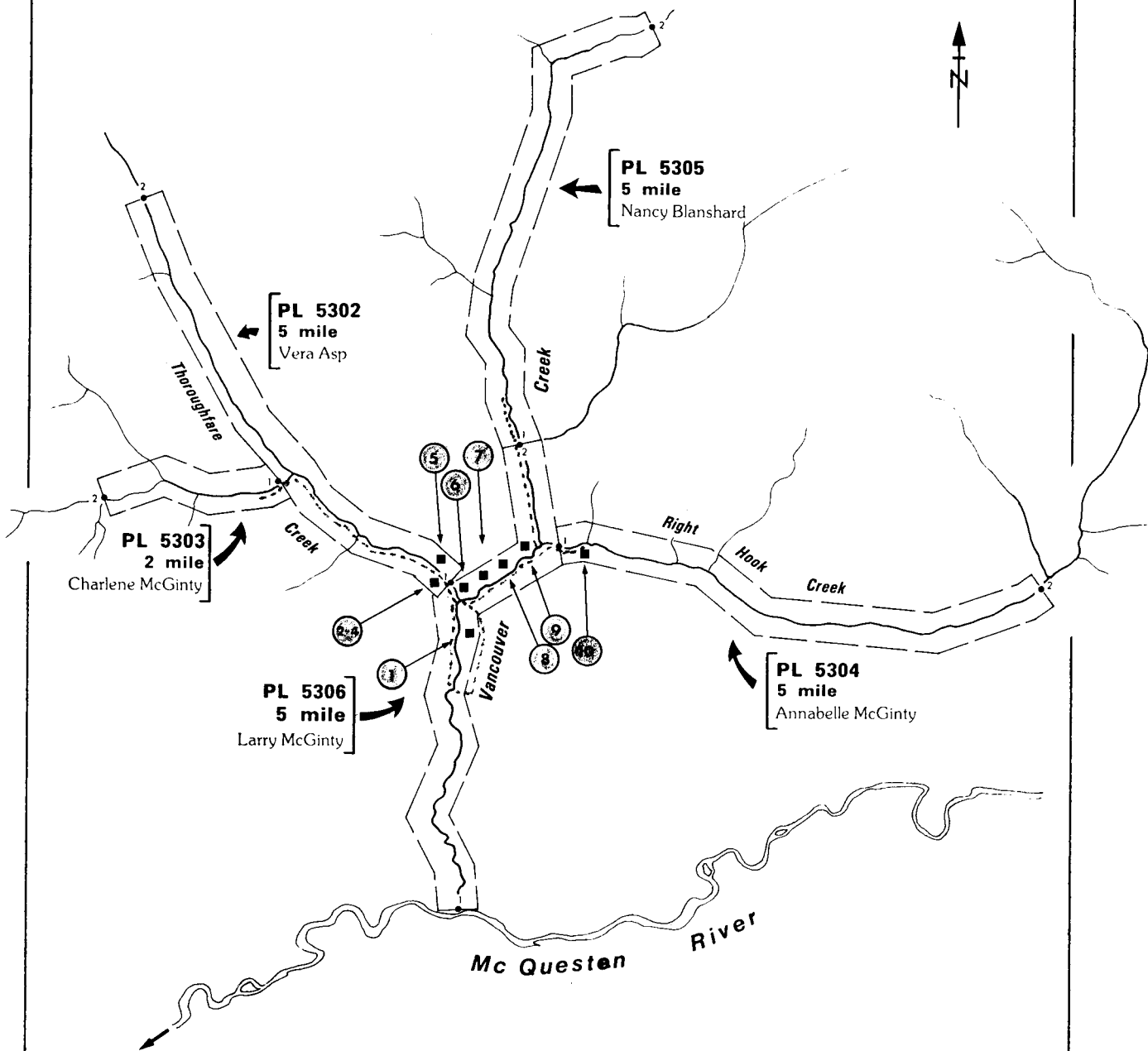
# VANCOUVER CREEK

## Location Map



# VANCOUVER CREEK

## Site Plan



### Key

- Post Location
- ⊙ Geophysical Site
- - - Geology Traverse

GEOLOGY (Continued)

The Vancouver Creek area is composed of 5 different map units defined by Bostock in the McQuesten Map Sheet on Geology. The predominant map unit is from the Yukon Group and consists of mica schist, micaceous quartzite, phyllite, and limestone. This unit is interrupted by intrusive rocks of granite, granodiorite, and quartz monzonite. The other three map units are depositional sedimentary, consisting of stream deposits, alluvium, and surficial deposits of till. The oldest of these materials (late tertiary) is the 'White Channel' gravel which lies directly on granite bedrock, consisting of white vein-quartz and quartzite with some foreign black and grey chert. Dark and originally iron-bearing rocks such as the schist have had their iron content leached out. The 'White Channel' gravels are overlain by a brown or rust brown gravel containing tough foreign rocks such as chert, diorite, quartzite, and greenstone. Overlaying the tertiary sands and gravels are deposits of glacial till and post-glacial stream and alluvial deposits.

The intervening ridges between Vancouver, Right Hook, and Thoroughfare Creeks are composed largely of the Yukon schist, quartzite, and phyllite. Sands and gravels derived from this rock are quite micaceous. The ridges between the valleys contain some small local intrusions of granite and granodiorite with with exception of Vancouver Creek whose headwaters flow through a massive intrusion. This was evident in the stream float of respective creeks. Large rounded boulders of granite float were much more in evidence in Vancouver Creek than in the others.

Glacial till and stream deposits of late tertiary are found only on the ridges between the creeks, except for the upper reaches of Thoroughfare Creek where glaciation reached the valley bottom and till was deposited.

Also found on Thoroughfare are tertiary gravels containing the 'White Channel' and overlying tertiary brown gravels. Where

## II GEOLOGY (Continued)

these gravels are not exposed and till is not present, material on the valley bottom consists of stream deposits and alluvium.

## III SURVEY EQUIPMENT

Equipment used for assessment on the property included an ER-2 Conductance-Resistivity Meter. Information was obtainable on subsurface sand and gravel deposits as well as indications of bedrock. The electrodes used on the Vancouver Creek assessment project had a maximum separation of 20 feet. The stratigraphic variation at a constant depth of 10 feet below surface was therefore derived.

## IV SITE EVALUATION

### Site #1

length of traverse....480'  
width of traverse.....n/a

The values of ohm/feet recorded along this traverse would seem to indicate a uniform sequence of stream deposits within the top ten foot strata that was surveyed. The traverse follows the general course of the valley on a narrow strip of flat land before the sharp increase in slope. Higher values found at 101 and 104 may indicate a significantly coarser type of stream deposit, perhaps gravel. Until correlative trenching. However, actual identification of the sub-strata type in conjunction with resistivity values is speculative.

### Sites #2 - #4

length of traverse....approx. 480'  
width of traverse.....60' - 180'

At Sites #2 - #4, a north-south axis was established along a flat area of land parallel to the hillside. Values in ohm/feet

Sites #2 - #4 (Continued)

along this axis were found to be relatively high, indicating the possibility of broken bedrock at the base of the steep slope. Medium to low values were recorded in a region 240 feet long and 180 feet wide, bounded by Thoroughfare Creek, Vancouver Creek, and the hillside (see site map 2 - 4 p.). Minor trenching at this location indicated a definite profile of stream deposits, chiefly sand and silt. Fine gravel deposits were also located but in small amounts.

Site #5

length of traverse....240'  
width of traverse.....120'

Readings at Site #5 seem to indicate a different pattern than was experienced in the previous sites. High readings were found almost everywhere except for mid-range values nearer the streams. The area traversed was flat, rising gently along the north-south axis. To the east, sharply rising slope is evident. The extremely high readings may indicate the presence of broken bedrock. Stream deposits appear to be limited to a narrow corridor adjacent to the channels.

Site #6

length of traverse....240'  
width of traverse.....120'

The readings at Site #6 were in a low to medium range (110 - 399 ohm/feet). This would seem to indicate a uniform type of deposit, possibly of stream origin. Trenching at this site would aid in the definite identification of strata type indicating the economic viability of placer mining at this locale.

Site #7

length of traverse....360'  
width of traverse.....120'

The axis of this traverse follows the general orientation of the valley. A steep hillside is located on one side of the valley and the stream on the other. Most of the readings found here were mid-range to high. The lower values were received near the stream and the higher values toward the hillside. Similar to earlier surveys, this might indicate the presence of broken bedrock at the base of the slope and alluvial materials and associated deposits adjacent to the stream.

Site #8

length of traverse....420'  
width of traverse.....60' - 180'

The lower values usually associated with stream deposits were also found on the easter 180 feet of the east-west axis on this site. High values predominate in other areas, again indicating the possibility of finding broken bedrock. An area of lower values was also found along the hillside being oriented in the north-easterly part of that site.

Site #9

length of traverse....420'  
width of traverse.....180' - 240'

In this area, signs of frequent flooding were found in the form of intermittent streams. The streams ran parallel being oriented in a northeast-southwesterly direction. A large sandbar is also present on Vancouver Creek, measuring 180 feet in length and 30 feet in width.

Readings found in this area were almost all in the low to medium range with the exception of a well defined pocket of high values (see site plan 9, p. 4 ). The medium to low values may indicate

Site #9 (Continued)

the predominance of stream deposits. The expanse of the area would seem to warrant the further investigation of depth and therefore volume of stream deposits located here. Seismic sounding or trenching is strongly recommended for this site.

Site #10

length of traverse....480'  
width of traverse.....180' - 240'

In this region, extremely high values were found except in a narrow corridor alongside the stream. It can be assumed that the lower readings indicated deposits and that broken bedrock is dominant in the remainder of this large survey area. The presence, however, of surface water within the muskeg may have influenced the readings on the equipment and trenching or drilling is recommended in order to prove or disprove these findings.

NOTE: Headings of Maps & Charts

It should be noted that the following maps and charts are labelled as Vancouver Creek. It is meant that the sites evaluated were on or in the vicinity of Vancouver Creek, including it's tributaries of Right Hook and Thoroughfare Creeks.

Please see claim map for actual location.

METHODOLOGY

The electrical conductivity/resistivity method of subsurface investigation can be used for various types of work. Although the system has many limitations, the key to it's success is based on it's operation and, more importantly, on interpretation of the data. Electrical resistivity surveys can be used for horizontal profiles and vertical sounding. It is particularly useful for prospecting and deliniating boundaries of sand and gravel deposits and identifying bedrock contacts.

The fundamental property of material is it's resistance, which is independent of volume but relative to the shape and size of the specimen. Conversely, the conductance of any specimen is the reciprocal of it's resistance. In practice, the volume of material through which a current passes is proportional to the distance between test electrodes; the current being transformed into hemispherical equipotential surfaces. The fundamental equation for resistivity on a four probe system is as follows:

$$P = \frac{2IIV}{I} \frac{1}{\frac{1}{r_1-r_2} - \frac{1}{r_3-r_4}}$$

There are two basic probe configurations used in this work. Schlumberger and Wenner are most often used with adaptions for the Barnes Layer and the More cumulative method of interpretation. The Wenner configuration is the most commonly used conductance/resistivity variability of lateral formations and detection of subsurface bedrock materials having depths to 60 feet. Readings in ohm/feet or ohm/metres are recorded and charted on one or two cycle log graphs. By using various methods of correlation and interpretation, results may indicate material variables as well as depths to unconformable intersections. Resistivity values used in conjunction with seismograph readings will indicate absolute values as well as positive identification of materials, their orientation and underlying bedrock characteristics.

### OBSERVATIONS

Data interpretation on Vancouver, Right Hook and Thoroughfare Creeks was found to be difficult. An abundance of water and/or perma-frost caused many technical problems, thereby producing unreliable information. To this end, one would be reluctant to indicate absolute values on the data. Fortunately, field crews recorded pertinent data related to the local structural geology which, when correlated to information from the several hand-dug trenches, gave a data base for some evaluation of resistivity readings.

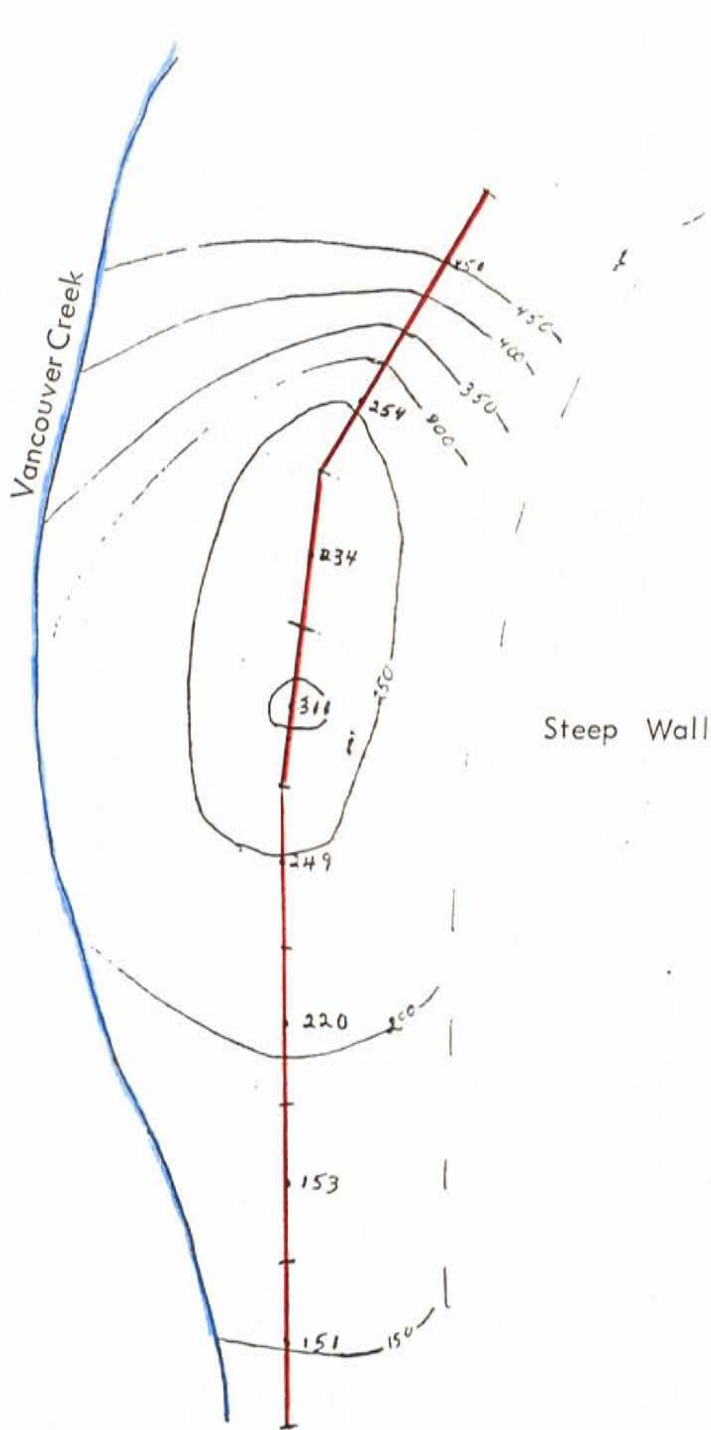
Information correlated from test sites indicates that variable deposits of alluvial gravels and sands are situated in relatively narrow strips between adjacent broken bedrock slopes; depths vary as to location. Instrument readings indicate the deposits are relatively shallow being underlain by either fractured bedrock or perma-frost. Referring to the site plans, resistivity readings (re-indexed for interpretation) indicate the presence of some sands and gravels with a predominance of broken bedrock.

Absolute values and structural components cannot, however, be determined at this time. It will be necessary to perform complimentary seismic work or drilling in the next season to confirm present data.

# VANCOUVER CREEK

STRATIGRAPHIC VARIABILITY

Site 1



50 ohm intervals  
Scale 1" 75 m.

# VANCOUVER CREEK

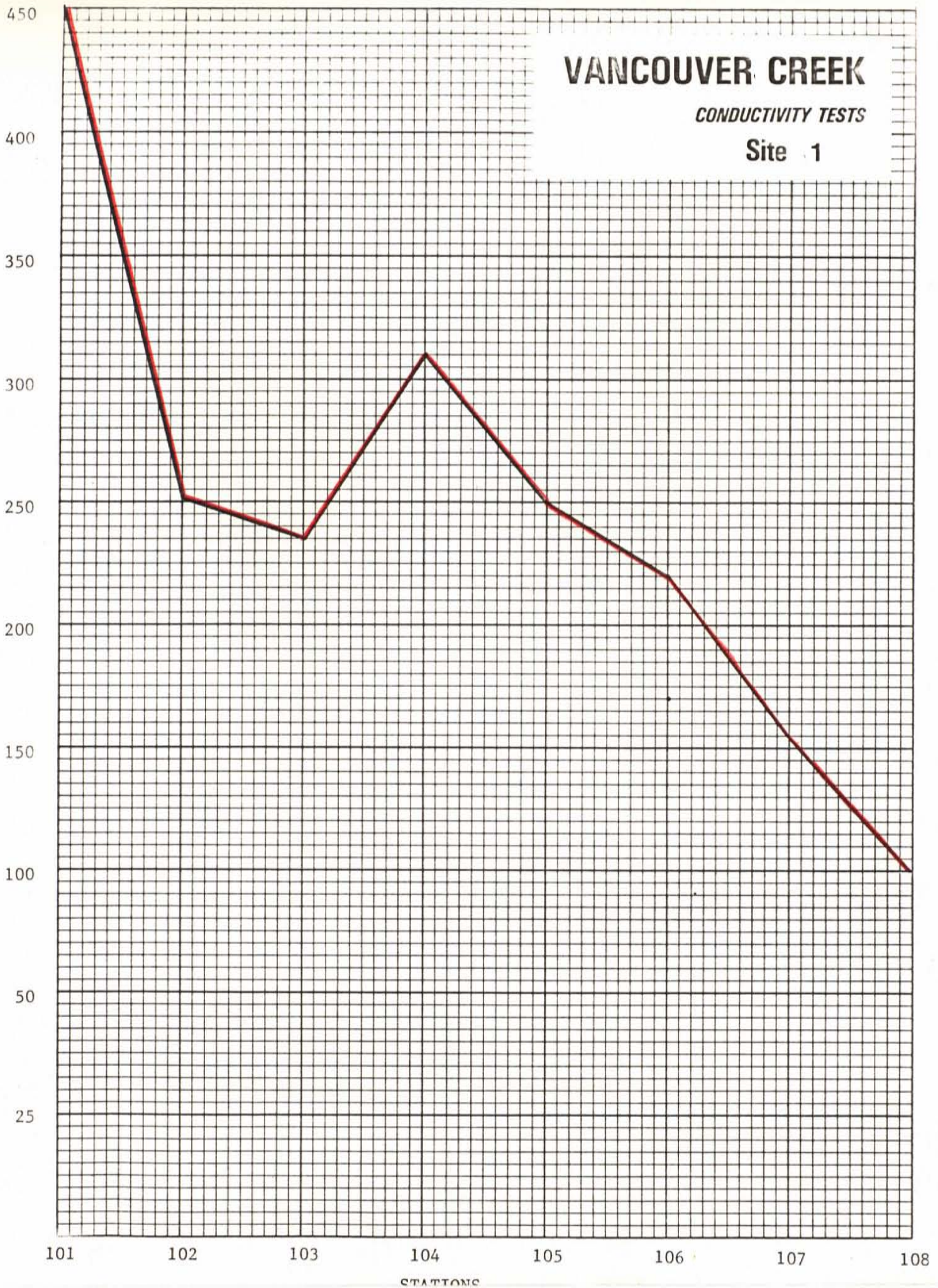
CONDUCTIVITY TESTS

Site 1

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MADE IN CANADA

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SPECIFY TRACING OR DRAWING PAPER

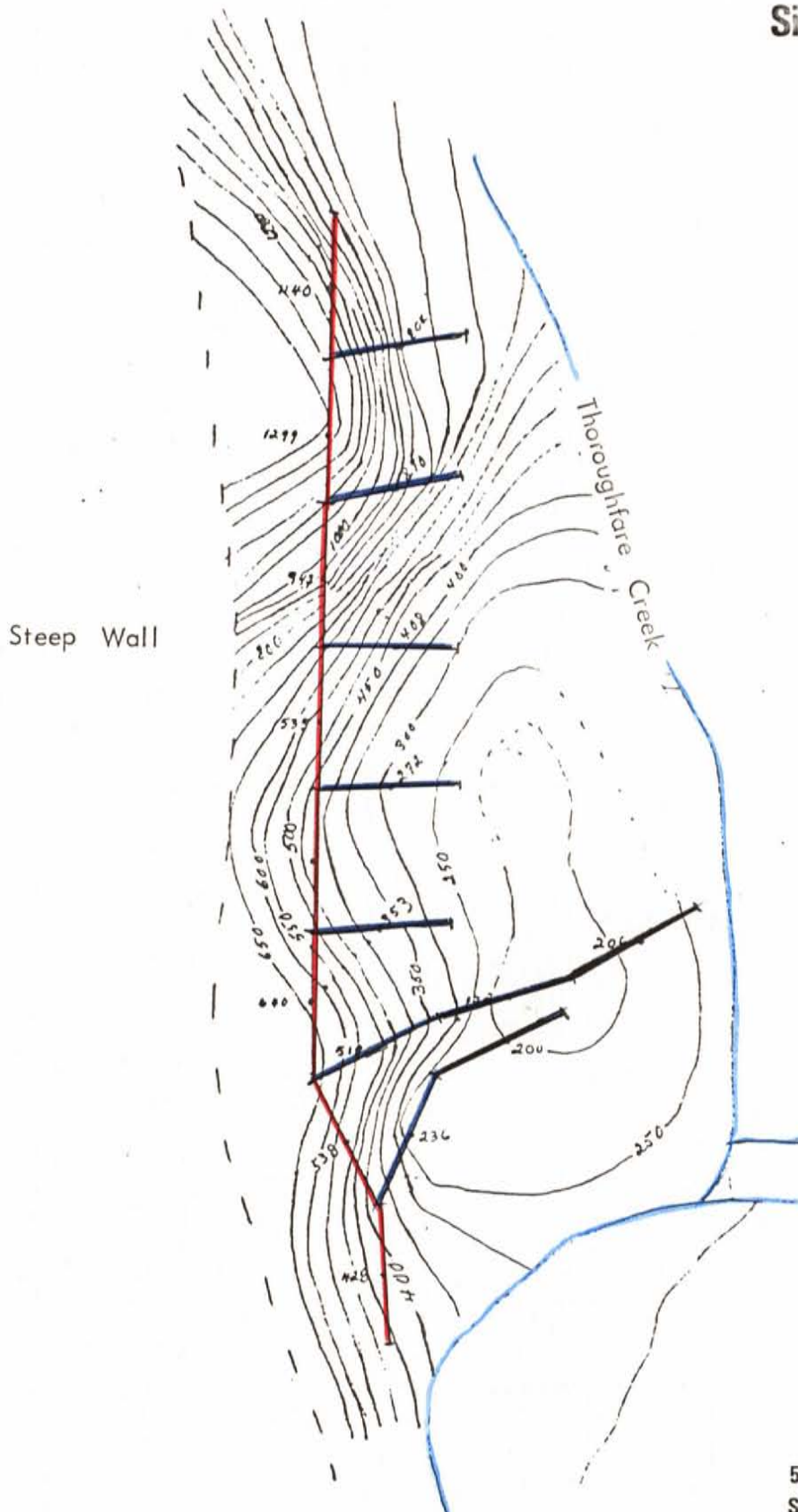
OHMS



# VANCOUVER CREEK

STRATIGRAPHIC VARIABILITY

Site 2-4



50 ohm intervals  
Scale 1" 75 m.

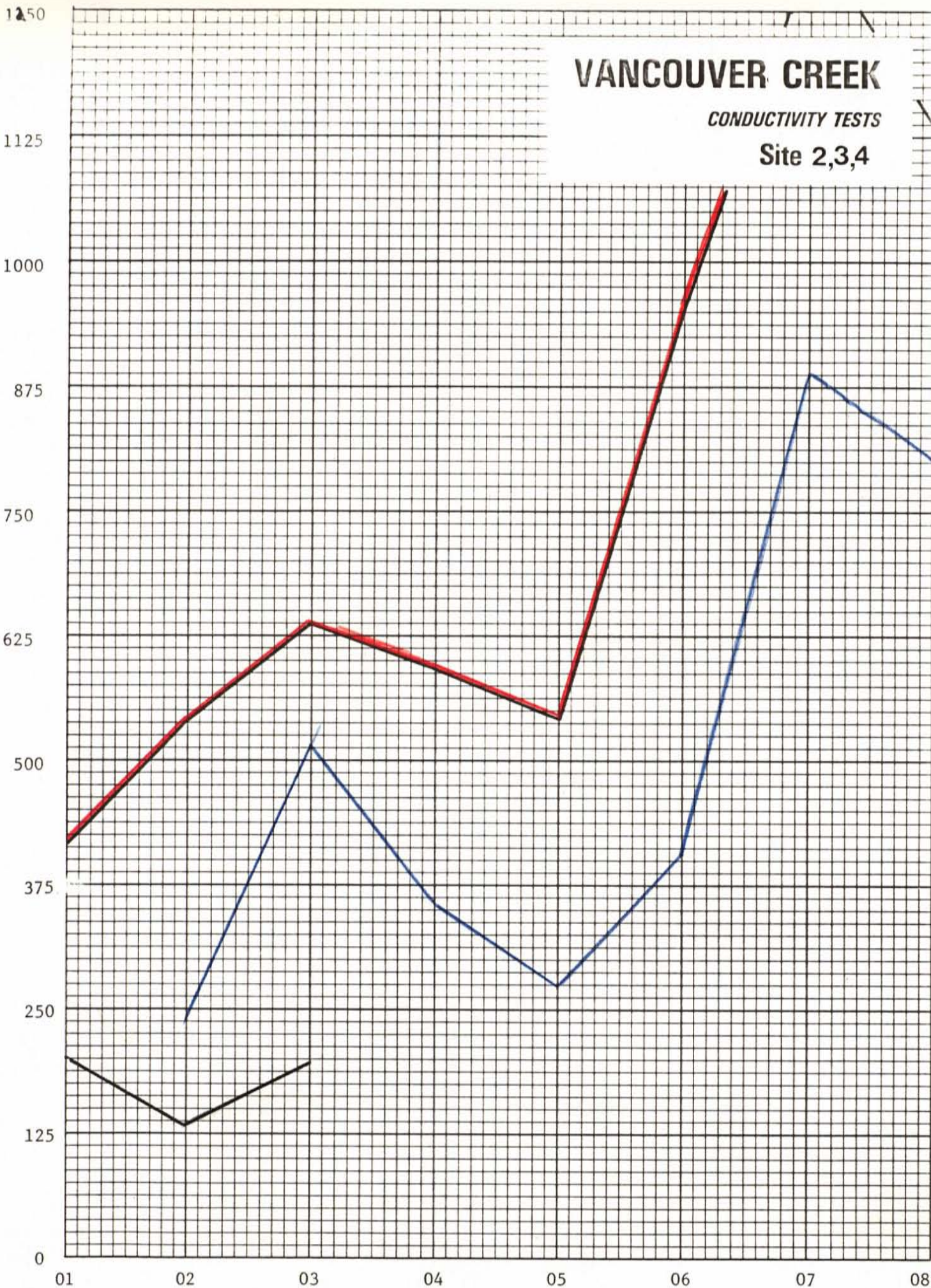
# VANCOUVER CREEK

CONDUCTIVITY TESTS

Site 2,3,4

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MADE IN CANADA

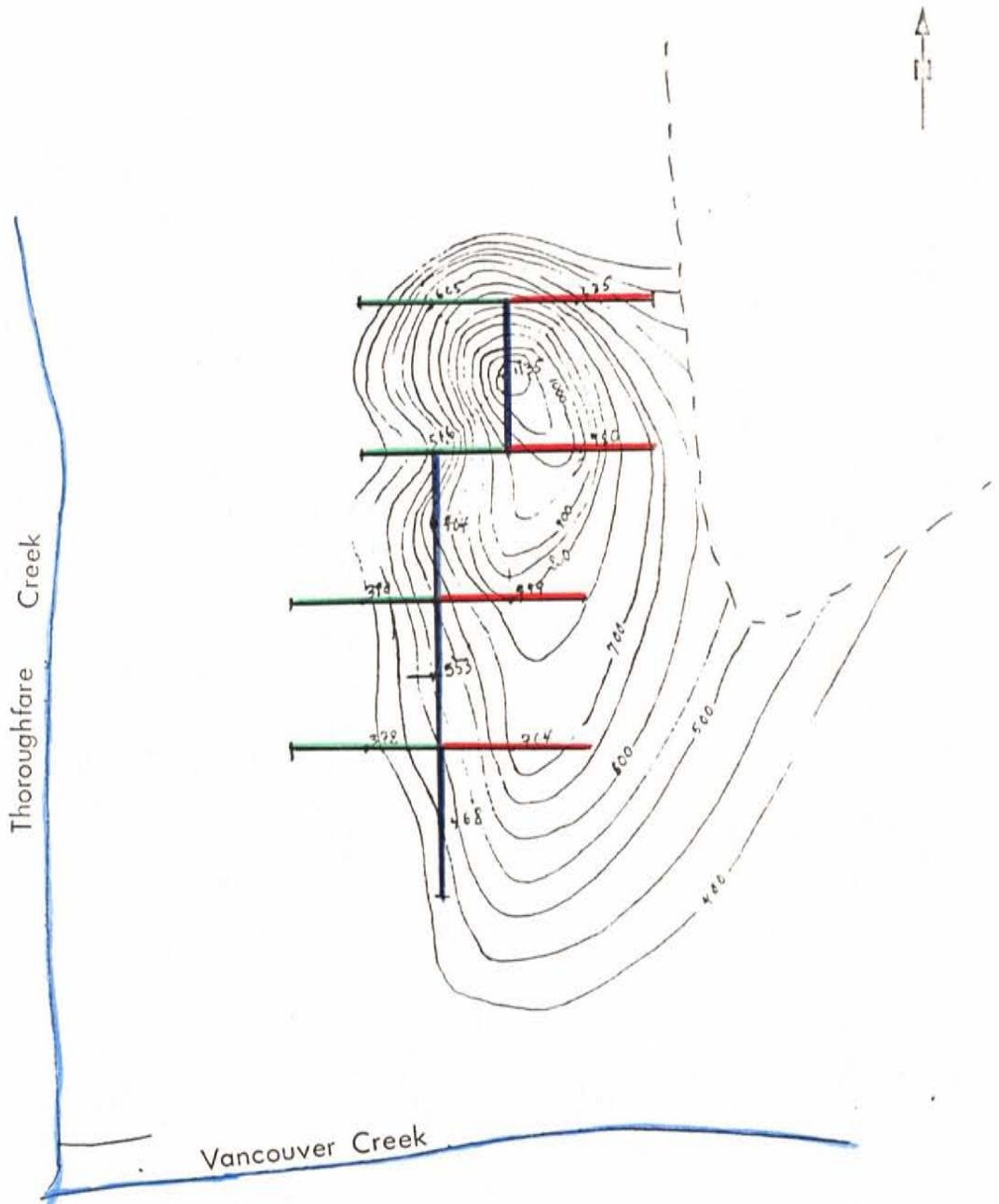
G-5 SQUARE 10 X 10 TO THE INCH  
SPECIFY TRACING OR DRAWING PAPER  
OHMS



# VANCOUVER CREEK

STRATIGRAPHIC VARIABILITY

Site 5



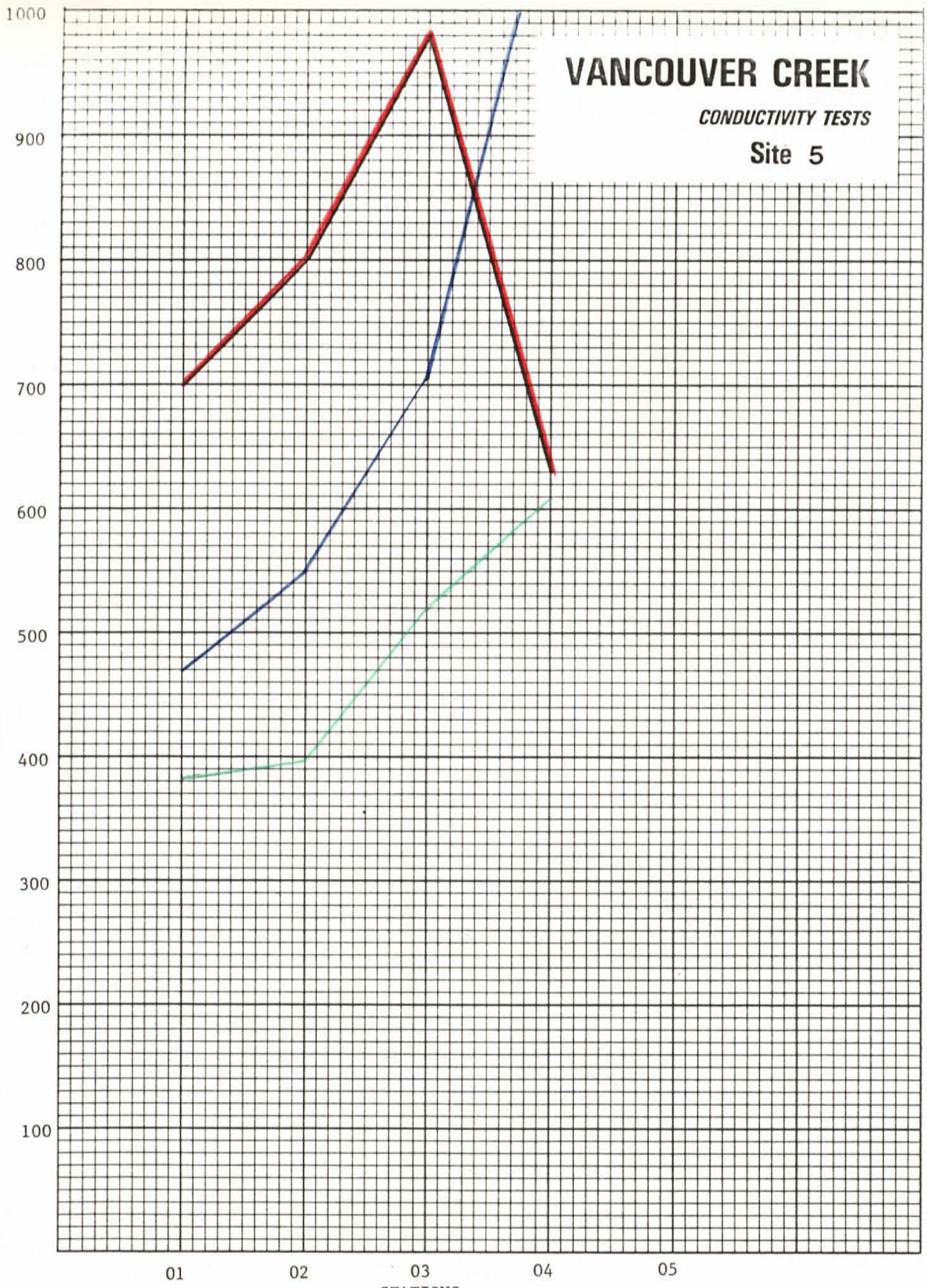
50 ohm intervals  
Scale 1" = 75 m.

GRAPHIC CONTROLS CANADA LTD.  
MADE IN CANADA

G-5 SQUARE 10 X 10 TO THE INCH  
SPECIFY TRACING OR DRAWING PAPER

# VANCOUVER CREEK

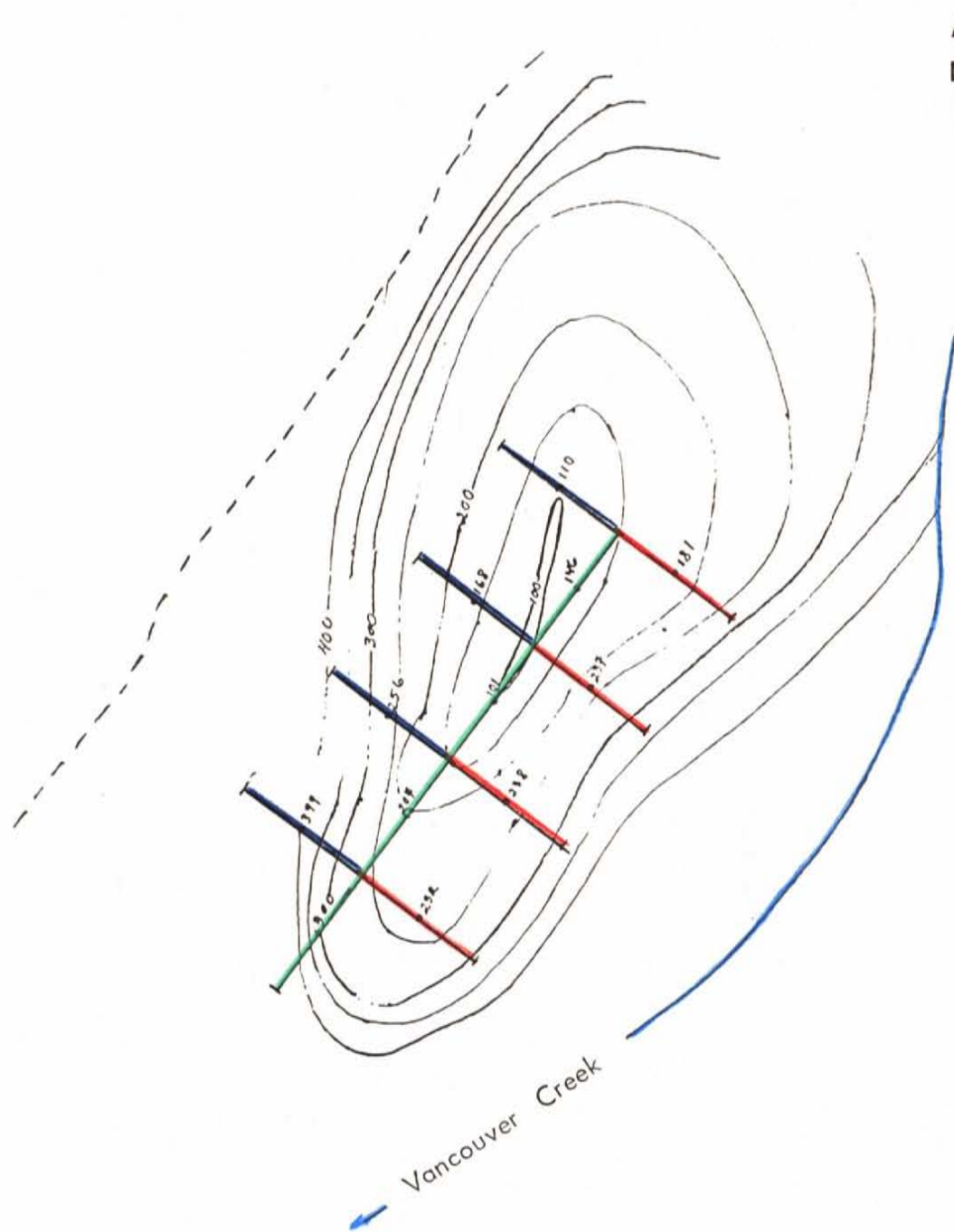
CONDUCTIVITY TESTS  
Site 5



# VANCOUVER CREEK

STRATIGRAPHIC VARIABILITY

Site 6



50 ohm intervals  
Scale 1" 75 m.

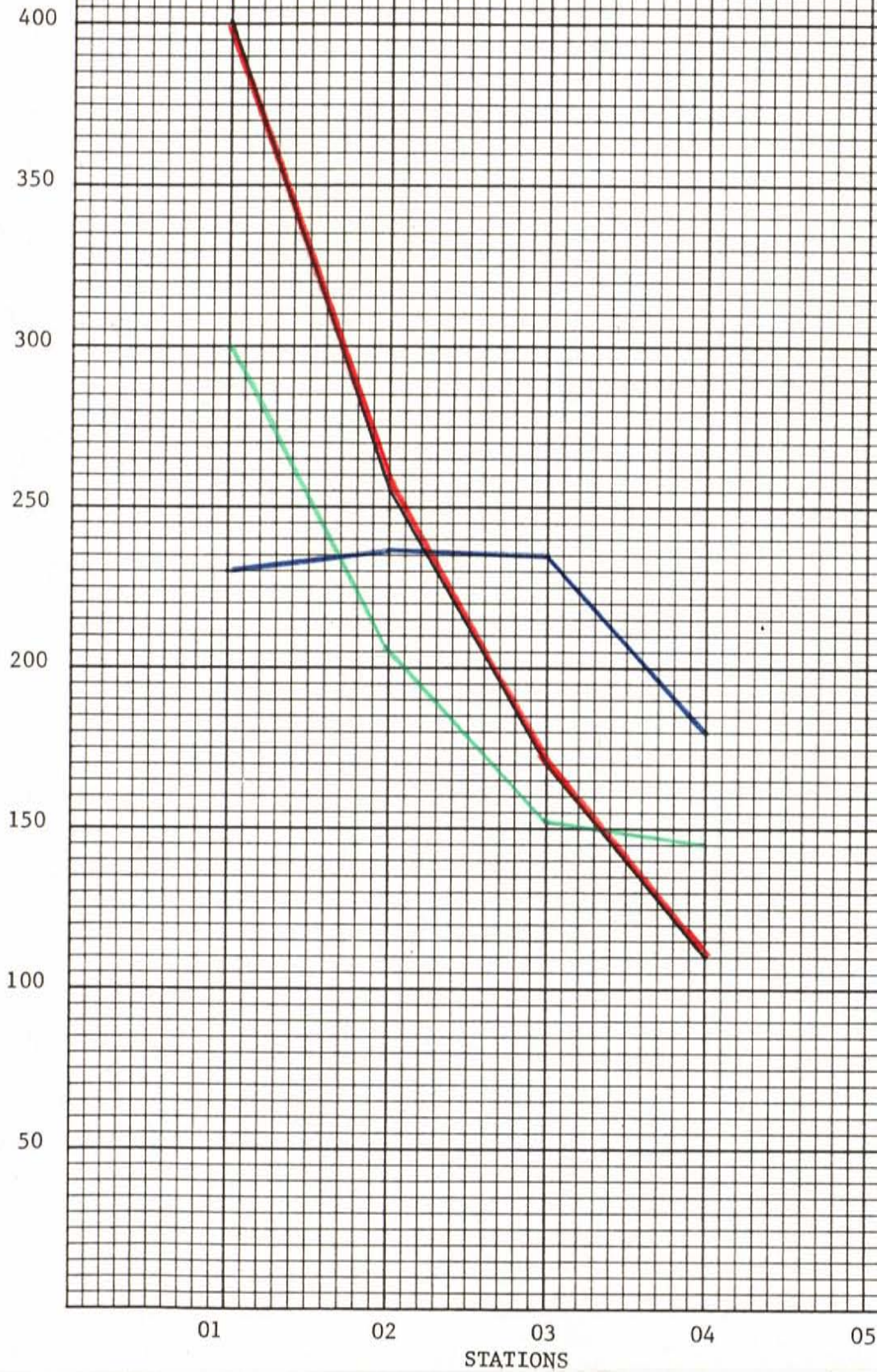
# VANCOUVER CREEK

CONDUCTIVITY TESTS

Site 6

GRAPHIC CONTROLS CANADA LTD  
MADE IN CANADA

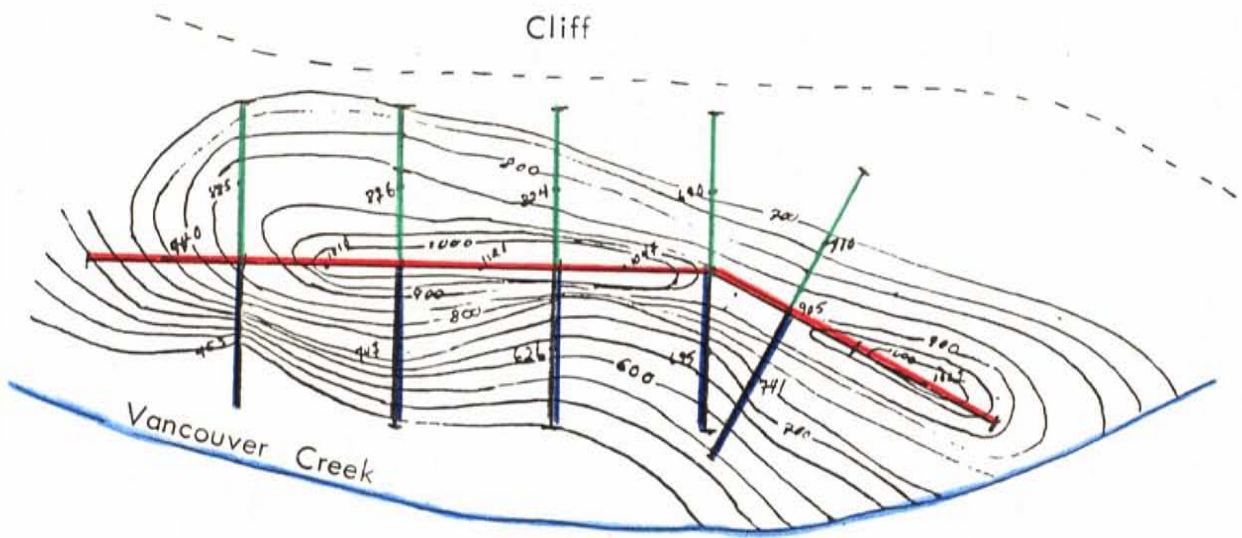
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SPECIFY TRACING OR DRAWING PAPER  
OHMS



# VANCOUVER CREEK

STRATIGRAPHIC VARIABILITY

Site 7

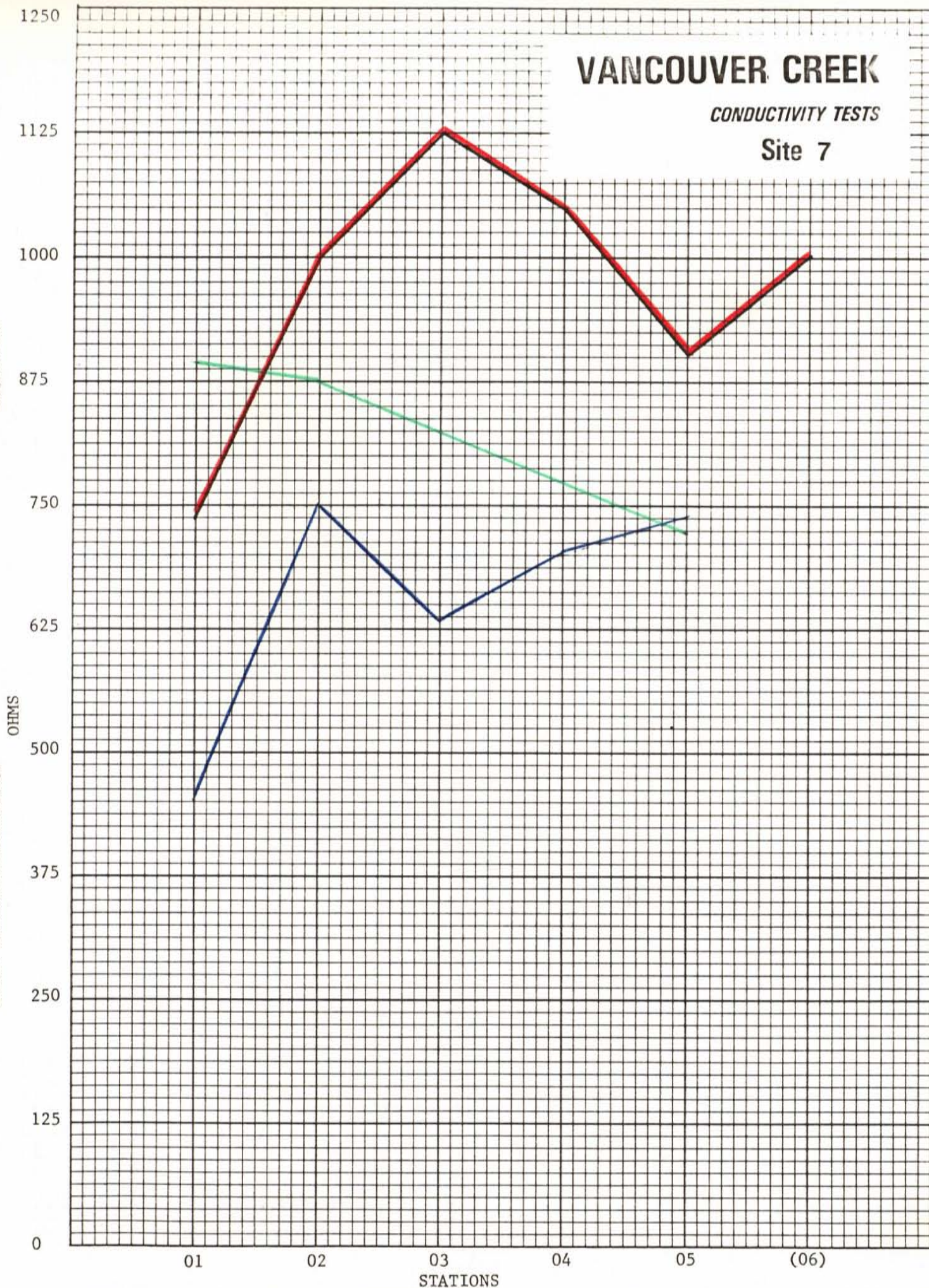


50 ohm intervals  
Scale 1" 75 m.

# VANCOUVER CREEK

CONDUCTIVITY TESTS

Site 7



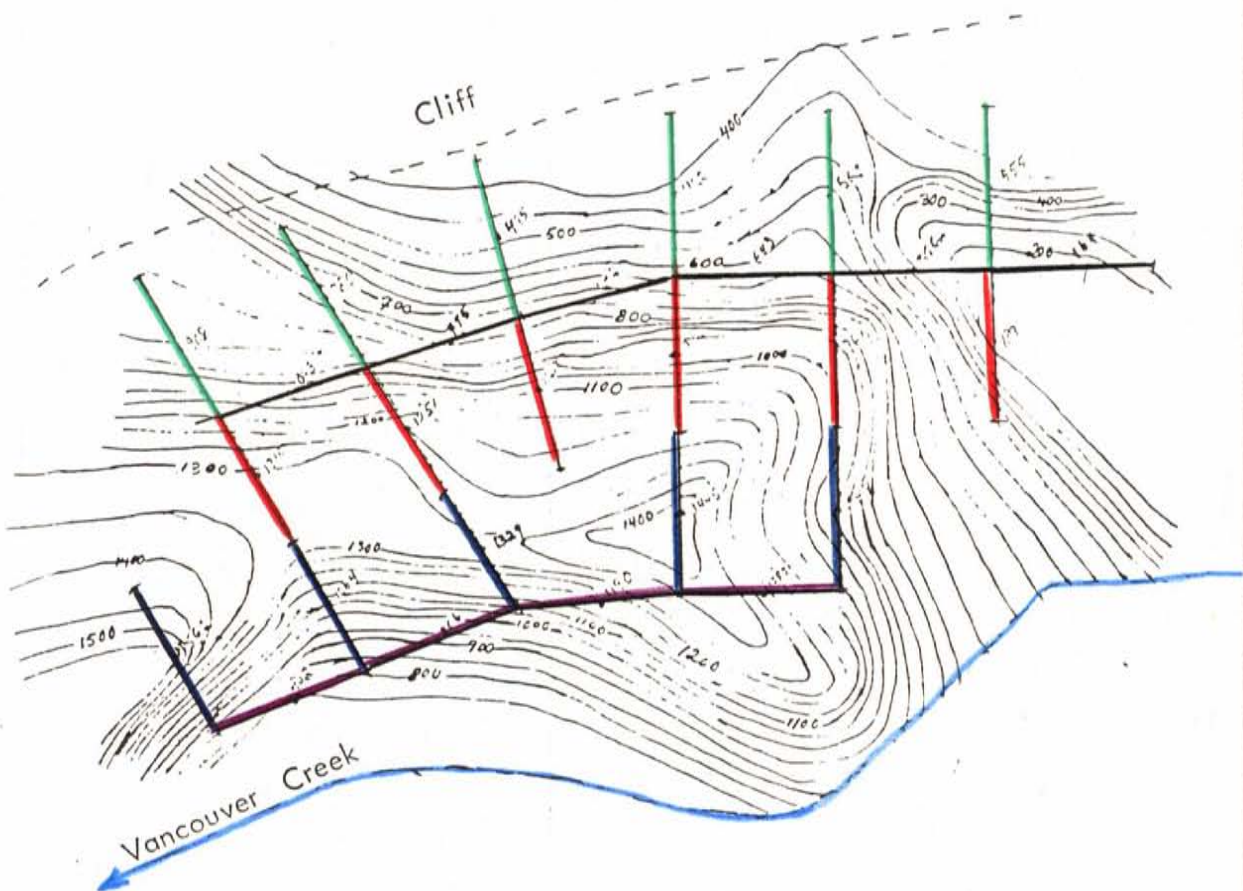
GRAPHIC CONTROLS CANADA LTD.  
MADE IN CANADA

G-5 SQUARE 10 X 10 TO THE INCH  
SPECIFY TRACING OR DRAWING PAPER

# VANCOUVER CREEK

STRATIGRAPHIC VARIABILITY

Site 8



50 ohm intervals  
Scale 1" 75 m.

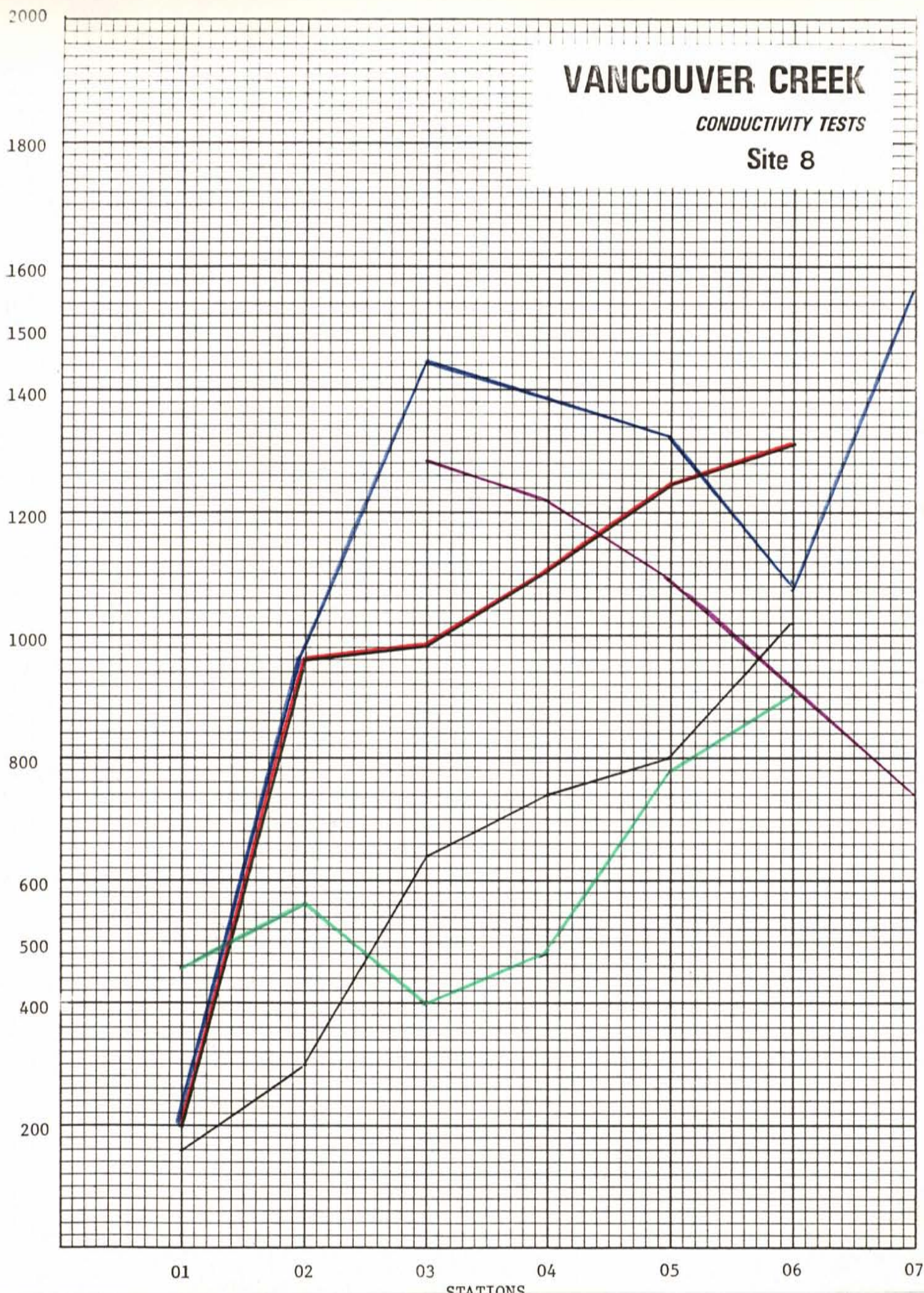
# VANCOUVER CREEK

CONDUCTIVITY TESTS

Site 8

GRAPHIC CONTROLS CANADA LTD.  
MADE IN CANADA

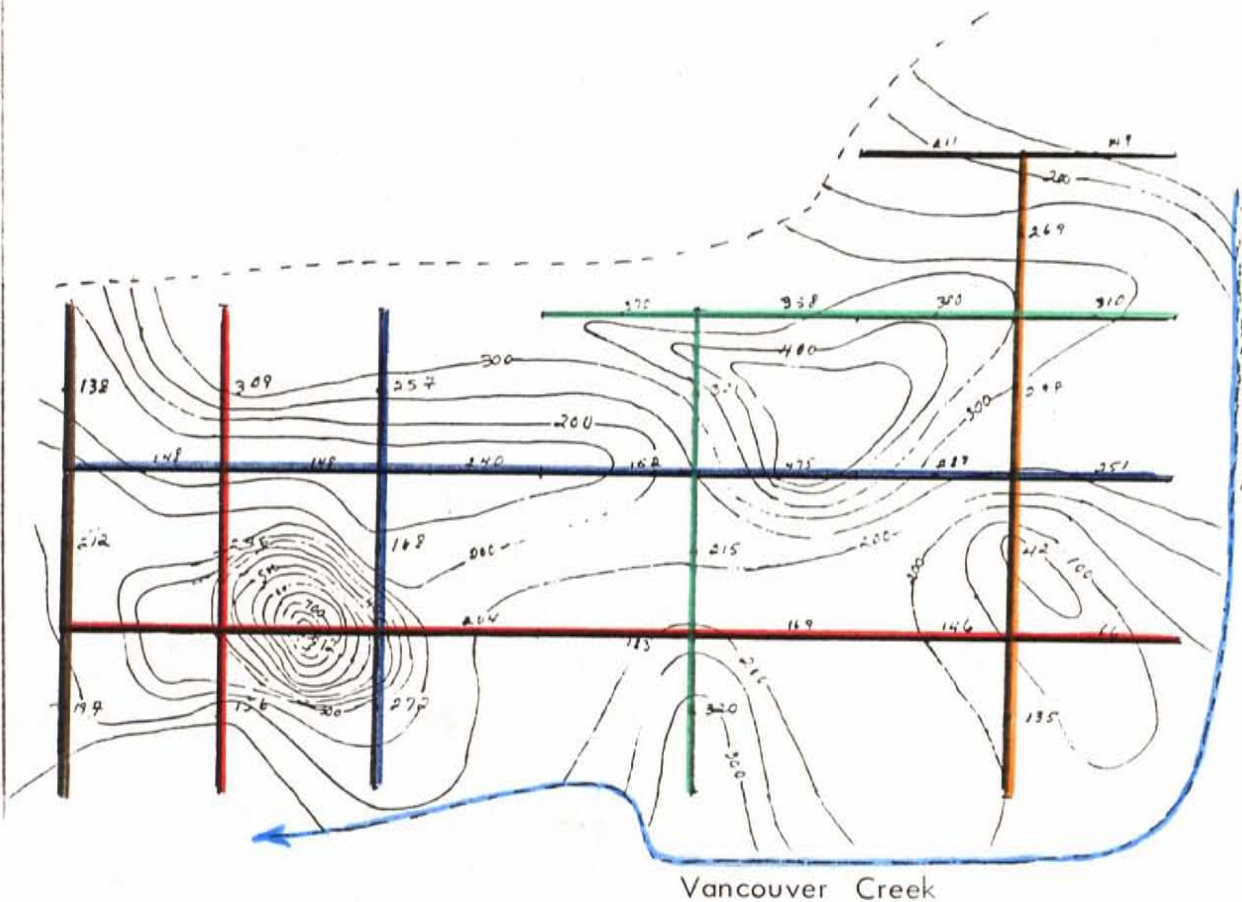
G-5 SQUARE 10 X 10 TO THE INCH  
SPECIFY TRACING OR DRAWING PAPER  
OHMS



# VANCOUVER CREEK

## STRATIGRAPHIC VARIABILITY

### Site 9



Vancouver Creek

50 ohm intervals  
Scale 1" 75 m.

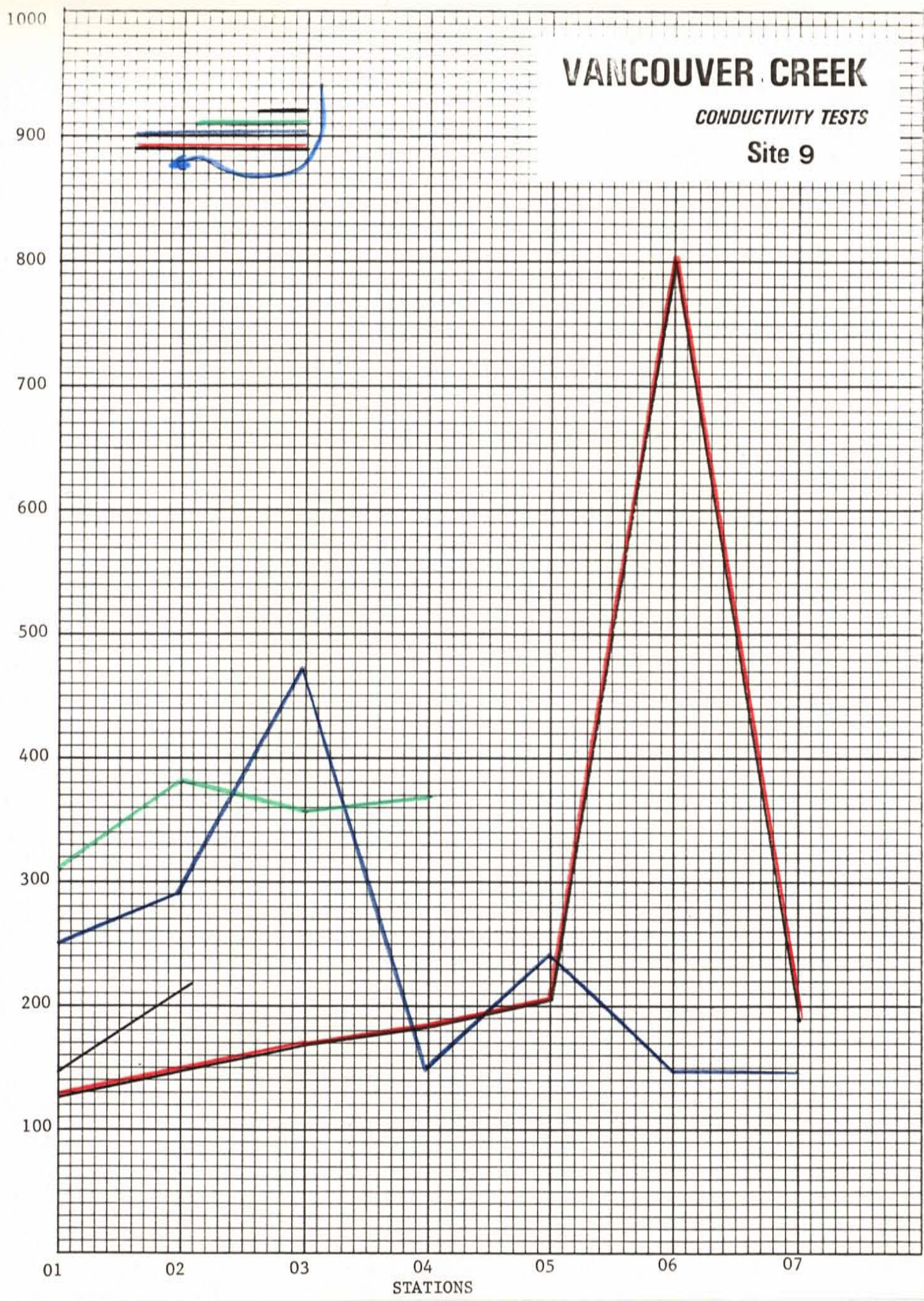
# VANCOUVER CREEK

CONDUCTIVITY TESTS

Site 9

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SPECIFY TRACING OR DRAWING PAPER  
OHMS

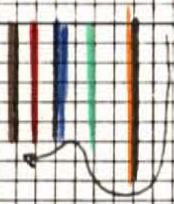
GRAPHIC CONTROLS CANADA LTD.  
MADE IN CANADA



# VANCOUVER CREEK

CONDUCTIVITY TESTS

Site 9



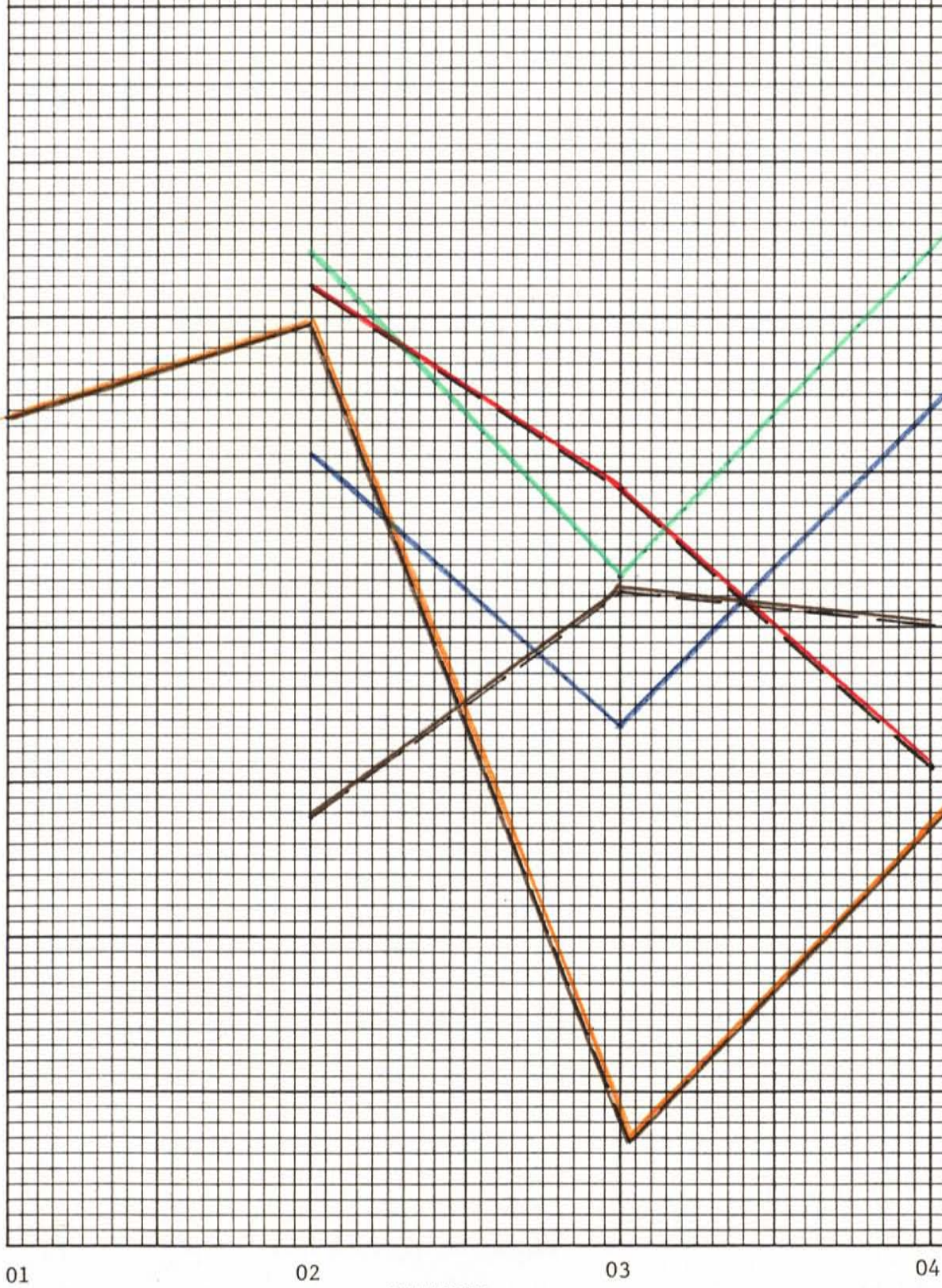
GRAPHIC CONTROLS CANADA LTD.  
MADE IN CANADA

G-5 SQUARE 10 X 10 TO THE INCH  
SPECIFY TRACING OR DRAWING PAPER  
OHMS

400  
300  
200  
100  
0

01 02 03 04

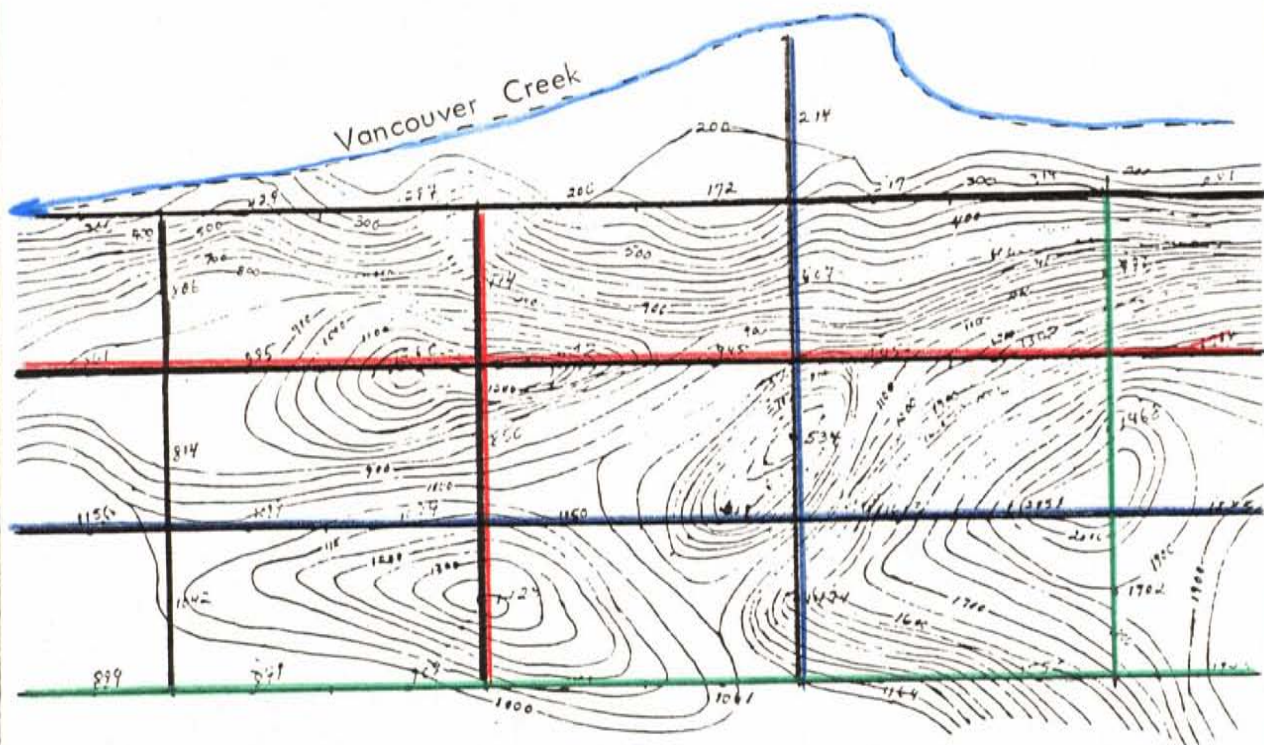
STATIONS



# VANCOUVER CREEK

STRATIGRAPHIC VARIABILITY

Site 10



50 ohm intervals  
Scale 1" 75 m.

# VANCOUVER CREEK

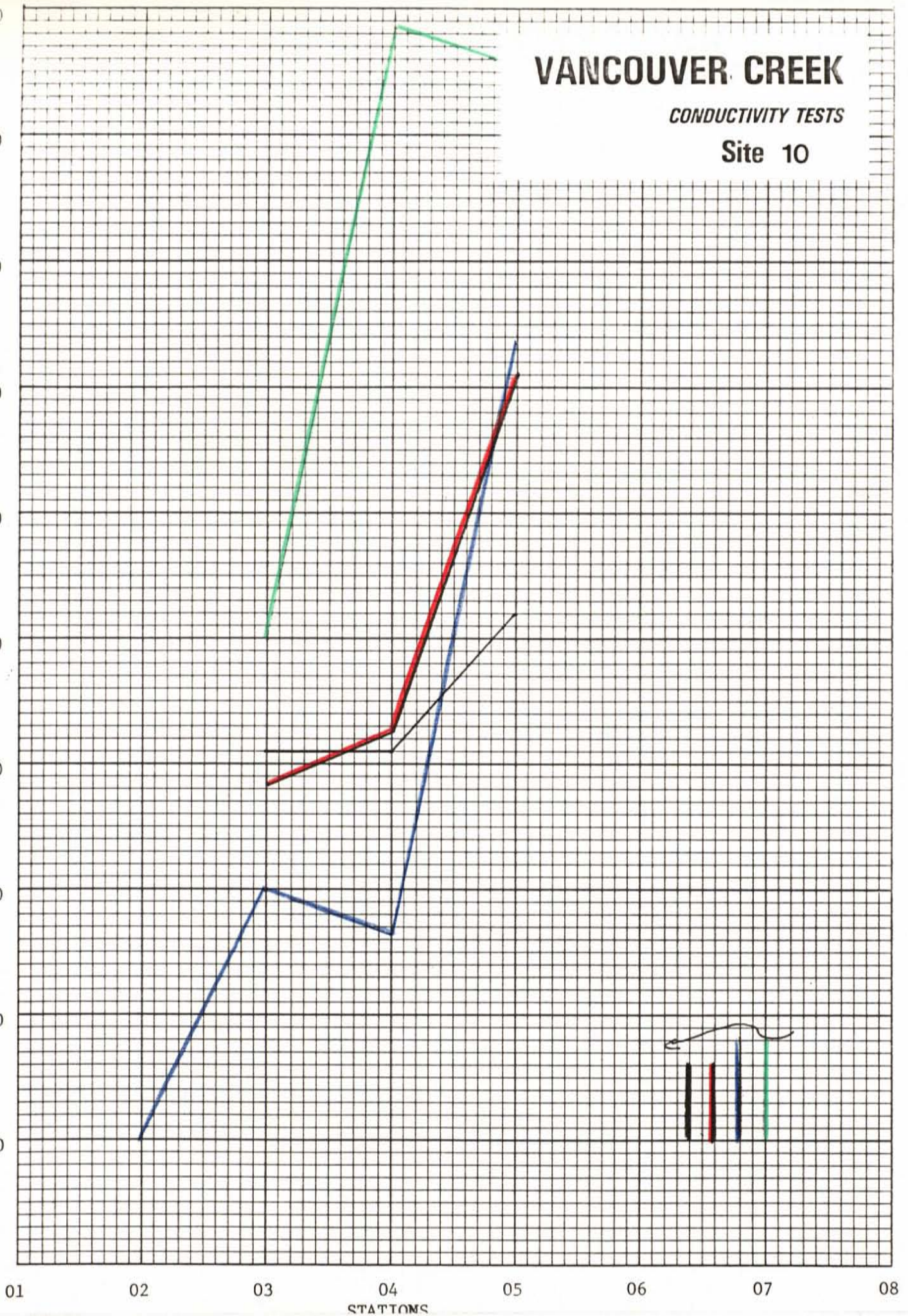
CONDUCTIVITY TESTS

Site 10

GRAPHIC CONTROLS CANADA LTD.  
MADE IN CANADA

OHMS

G-5 SQUARE 10 X 10 TO THE INCH  
SPECIFY TRACING OR DRAWING PAPER



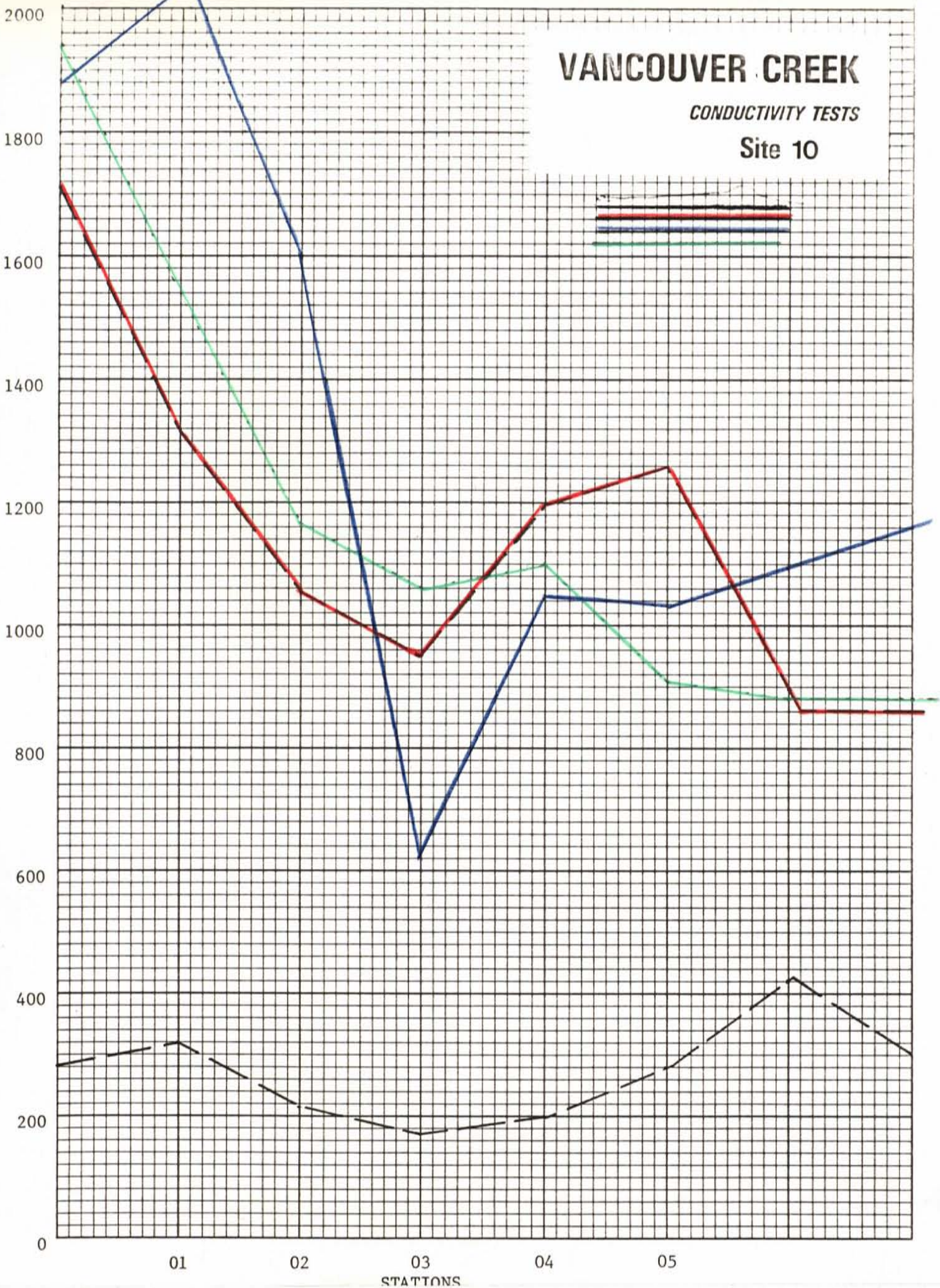
# VANCOUVER CREEK

CONDUCTIVITY TESTS

Site 10

GRAPHIC CONTROLS CANADA LTD.  
MADE IN CANADA

G-5 SQUARE 10 X 10 TO THE INCH  
SPECIFY TRACING OR DRAWING PAPER OHMS



FROM SEPTEMBER 1974 TO DECEMBER 1977:

President and Principal Consultant of D.W. Litchfield & Associates, Inc., Mining Consultants and Land Planners. Prime Contractor for Olin Corporation on the Emery Ridge Phosphate Project driving exploration adits, trenching sample taking, beneficiation studies, mapping environmental analysis and baseline data studies, geological and structural mapping, and transportation studies. All government reports and regulation studies and requirements were met and successfully completed.

FROM DECEMBER 1976 TO OCTOBER 1977:

Principal and President of Orex, Inc. Responsible charge of mining and operations contract to develop the Seven Throughs Mining District and to explore the Four Generations and Mardis Properties in Nevada.

FROM OCTOBER 1977 TO JULY 1978:

Exploration of the Silver Mountain Project for Olin Corporation. Included access road development, drill sites, camp and facilities construction, mapping and survey geological and structural mapping, drilling and sample taking, assays and evaluation reports.

FROM JULY 1978 TO DECEMBER 1979:

evaluation and testing of a large gold-silver project near Caldis, Nevada for Paymaster Corporation. The first phase includes drilling, trenching, development stripping, and fill testing of the deposit and the second phase, during the 2nd and 3rd years included building a mill and preparation for the string of 10,000 tpd.

Mr. Litchfield is named the principal Engineer and is the chief executive officer of the Contractor.

FROM DECEMBER 1979 TO MAY 1980:

Design and construction supervision for a placer gold test plant at Lovelock, Nevada.

FROM MAY 1980 TO SEPTEMBER 1980:

Responsible charge of exploration and evaluation of the Minerva Mine at Atlanta, Idaho for Jack Black of Boise, Idaho. Included trenching sampling and underground excavation and site design and construction.

FROM SEPTEMBER 1980 TO FEBRUARY 1981:

Responsible charge of design of Gravity plant for gold and the design and lining of an open pit for Kild Cat Lode Ltd. including trenching, bench designs, plant designs and construction. Mill location and drilling and tails pond design and construction.

FROM OCTOBER 1980 TO OCTOBER 1980:

Also provided engineering and supervision of a large scale exploration at White Rock, Idaho City, Nevada including drilling and sampling for the 3 Corporation.

FROM SEPTEMBER 1965 TO JUNE 1966:

Surveyor and Design Assistant. Erwin U. Moser, Logan, Utah. Responsible for land surveys and engineering design.

FROM JUNE 1966 TO OCTOBER 1966:

Graduation from Utah State University with a B.S. in Civil Engineering. Project Engineer, Weyher Construction Co., Kennecott Copper Co., Garfield, Utah. Design and installation of acid lines and various engineering works.

FROM OCTOBER 1966 TO APRIL 1968:

Estimating Engineer and Trouble Shooter. S.S. Mullen, Inc. Salt Lake City, Utah. Responsible charge of estimating of costs, bidding, design of operational plans, mining engineering, equipment utilization and new project planning. Responsible charge of engineering, problem solving, on-going projects.

FROM APRIL 1968 TO JUNE 1969:

Mining Consultant and Engineer. Client, Brush Beryllium Co. Delta, Utah. Responsible charge of all engineering and design of the Roadside Open Pit Mine. Project engineer for contract to remove overburden. Design and engineering of mining plan and stockpile placement.

FROM JUNE 1969 TO OCTOBER 1970:

Mining Consultant, Mines, Inc., Salt Lake City, Utah. Mine evaluation and planning for numerous clients in Utah, Arizona, California, Idaho and Montana and Mexico, for Strip Copper, Inc., Mine delo Mineo, SA, Mexico, Continental Gold and Silver. Government of Mexico.

FROM OCTOBER 1970 TO SEPTEMBER 1971:

Mineral Consulting for Continental Dynamics, Rowan W. Williams and Brush Beryllium Co.

FROM SEPTEMBER 1971 TO JULY 1972:

Mining Consultant and Engineer, client, Brush Wellman, Inc. (Brush Beryllium), Delta, Utah. Design and project engineering of Blue Chalk North Pit. Responsible charge of all engineering design and project engineering in the completion of this project.

FROM JULY 1972 TO SEPTEMBER 1972:

Mining Consultant, client, consolidated Medical Ind. Evaluation of gold placer and stream channel properties in Colorado and Utah, coal identification studies and feasibility reports.

FROM SEPTEMBER 1972 TO MARCH 1973:

Mine Engineer and General Manager, 4 Generations Mining Co. Lovelock, Nevada. Responsible charge for mining and process planning and operation of gold placer operation.

FROM MARCH 1973 TO SEPTEMBER 1974:

Consulting Engineer to obtain designation on a ranch and evaluation of the ranch for gold field, coal and oil. 3 projects completed and 2 more in progress.

V CONCLUSIONS

The geophysical work completed gives us target areas to do seismic surveys and trenching to evaluate specific areas. It is shown by these surveys that a reasonable, economic, pre-disturbance evaluation of material strata and locations should be a useful tool in placer evaluation studies.

VI FINANCIAL

The geophysical work on Vancouver, Right Hook and Thoroughfare Creek claim- was done in two phases by Eagles Nest Mining, exploration division, while acting on behalf of the aforementioned owners.

PHASE I June 1981

Director: D. Litchfield

Crew: T. Lowe, G. Hulse, S. Lowe

EXPENSES

Helicopter.....	1800.00
Equipment.....	700.00
Supplies.....	2000.00
Fees.....	2000.00
Wages.....	3000.00
Sundries.....	1500.00

TOTAL. 11000.00

PHASE II July - August 1981

Director: D. Litchfield

Coordinator: I. H. Norie

Geotechnical Crew: M. Beidler, D. Braam

EXPENSES

Helicopter.....	1550.00
Equipment.....	1150.00
Supplies.....	800.00
Fees.....	2000.00
Wages.....	5000.00
Sundries.....	1000.00

TOTAL. 11500.00

VII REFERENCES

1. Bostok, Geol. Survey of Canada Map 1143A McQueston 1:250,000
2. Yukon Land & Resource Inventory Atlas
3. N.T.S., McQueston Map Sheet 115 P/11, 1:50,000
4. Soiltest, Earth Resistivity Manual 1968

## Resume

DOUGLAS W. LITCHEFIELD  
 220 South 200 East, Suite 300  
 Salt Lake City, Utah 84111  
 (801) 531-6326



## PERSONAL INFORMATION

Age: 49 Years  
 Birth Date: September 11, 1932  
 Marital Status: Married, 4 Children

## AREAS OF EXPERTISE

Mining Engineering, Mining, Mineral Exploration, Earth-moving, Project Planning, Project Evaluation.

## FROM 1943 TO MAY 1950:

Equipment operator, chairman, redman, instrument man and foreman at Coleman Collieries and for Southern Road and Irrigation Construction Co. Ltd. Alberta, Canada. (Summer work in family business.)

## FROM MAY 1950 TO SEPTEMBER 1950:

Instrument Man. National Parks Service. Waterton Lakes National Park, Alberta, Canada.

## FROM SEPTEMBER 1950 TO NOVEMBER 1952:

Fuller Day Paints Missionary. West Central States Mission. Billings, Montana.

## FROM NOVEMBER 1952 TO SEPTEMBER 1954:

Public Relations Officer. National Parks Service. Banff National Park, Alberta, Canada. (Major) general public relations work, lectures, films, guided tours (Winter Ski Patrol and Racing.)

## FROM SEPTEMBER 1954 TO JULY 1957:

Chief Clerk, then Assistant Assistant Engineer, Department of Public Works, Trans Canada Highways Division, Edmonton, Alberta. Preliminary survey, construction design, survey and supervision. Responsible charge of work with regard to all phases of engineering on three projects of all classes, under the supervision of a senior assistant in charge of ten projects. Completed total projects from preliminary location to finished paving.

## FROM JULY 1957 TO MAY 1963:

Location Engineer, Department of Public Works, Highways Division, Edmonton, Alberta. Responsible charge of location of road and bridge projects from the Peace River to the Mackenzie Delta, on Great Slave Lake, and North to the Athabasca, on Great Bear Lake, and South to the Peace River, on the Athabasca Delta.

FROM MAY 1958 TO JUNE 1960:

Project Engineer, Square M Construction and Coleman Collieries Ltd. Alberta, Canada. Responsible charge of all engineering on roadway, bridges, open pit mining, and construction of an oil refinery. Trouble shooter on the numerous projects of the company.

FROM JUNE 1960 TO SEPTEMBER 1960:

Project Engineer, W.C. Wells Construction Co., Lethbridge, Alberta, Canada. Responsible charge of engineering on 20 miles of roadway reconstruction.

FROM SEPTEMBER 1960 TO JUNE 1961:

Utah State University, Logan, Utah. Laboratory Assistant and Instrument Repairman at Utah State University. Instruction and field practice supervision of survey students and the care and repair of all instruments and survey equipment. Also assisted Professor Tingey on land surveys and private consulting work. (Part time)

FROM JUNE 1961 TO AUGUST 1961:

Part Chief, Dam Construction, Inc. Flaming Gorge Dam, Utah. Responsible charge of block location crew.

FROM AUGUST 1961 TO DECEMBER 1961:

Shift Superintendent, J.H. Beckman Construction Co. at Lyman, Wyoming. Charge of heavy construction crew, building Interstate 80 section near Church Palles.

FROM JANUARY 1961 TO JULY 1961:

Laboratory Assistant at Utah State University. Same work as in 1960. (Part time)

FROM JULY 1961 TO DECEMBER 1963:

Project Engineer and Superintendent, LeGrande Johnson Construction Co., Logan, Utah. Responsible charge of estimating, bidding and project engineering and supervision on roads, quarry, airport and dam projects.

FROM SEPTEMBER 1963 TO MARCH 1964:

Surveyor and Design Assistant. Edwin H. Moser, PE, Logan, Utah. Responsible for land surveys and design of subdivisions and engineering works.

FROM MARCH 1964 TO DECEMBER 1964:

Shift Superintendent, Stout Construction Co., Kanneraville, Utah. Responsible for heavy construction, supervision on section of I-15.

FROM DECEMBER 1964 TO JUNE 1965:

Surveyor and Design Assistant. Edwin H. Moser, PE, Logan, Utah. Road surveys and subdivision projects.

FROM JUNE 1965 TO DECEMBER 1965:

Shift Superintendent, Stout Construction Co., Kanneraville, Utah. Responsible for heavy construction, supervision on section of I-15.

FROM FEBRUARY 1981 TO DECEMBER 1981:

Responsible charge of exploration, development and plant design and operation for Eagles Nest Mining Ltd. on projects at Atlin B.C., Canada, Mayo Lake, Yukon Territories, and Barlow Creek, Yukon Territories and of exploration on Dip Creek, Rude Creek, Quartz Creek, Grayling Creek, Vancouver Creek, Casino Creek, Issac Creek and others in Yukon Territories and Poorman and Bighorn Creek in B.C. Continuing to design and evaluate data from the summer field work.

REFERENCES:

Olin Corporation - Stamford, Connecticut  
Robert Grill (203) 356-3083

Olin Corporation - Houston, Texas  
Richard A. Smith (Chief Geologist) (713) 682-1363

Brush Wellman - Salt Lake City, Utah  
Leland J. Davis (Chief Geologist) (801) 467-5441