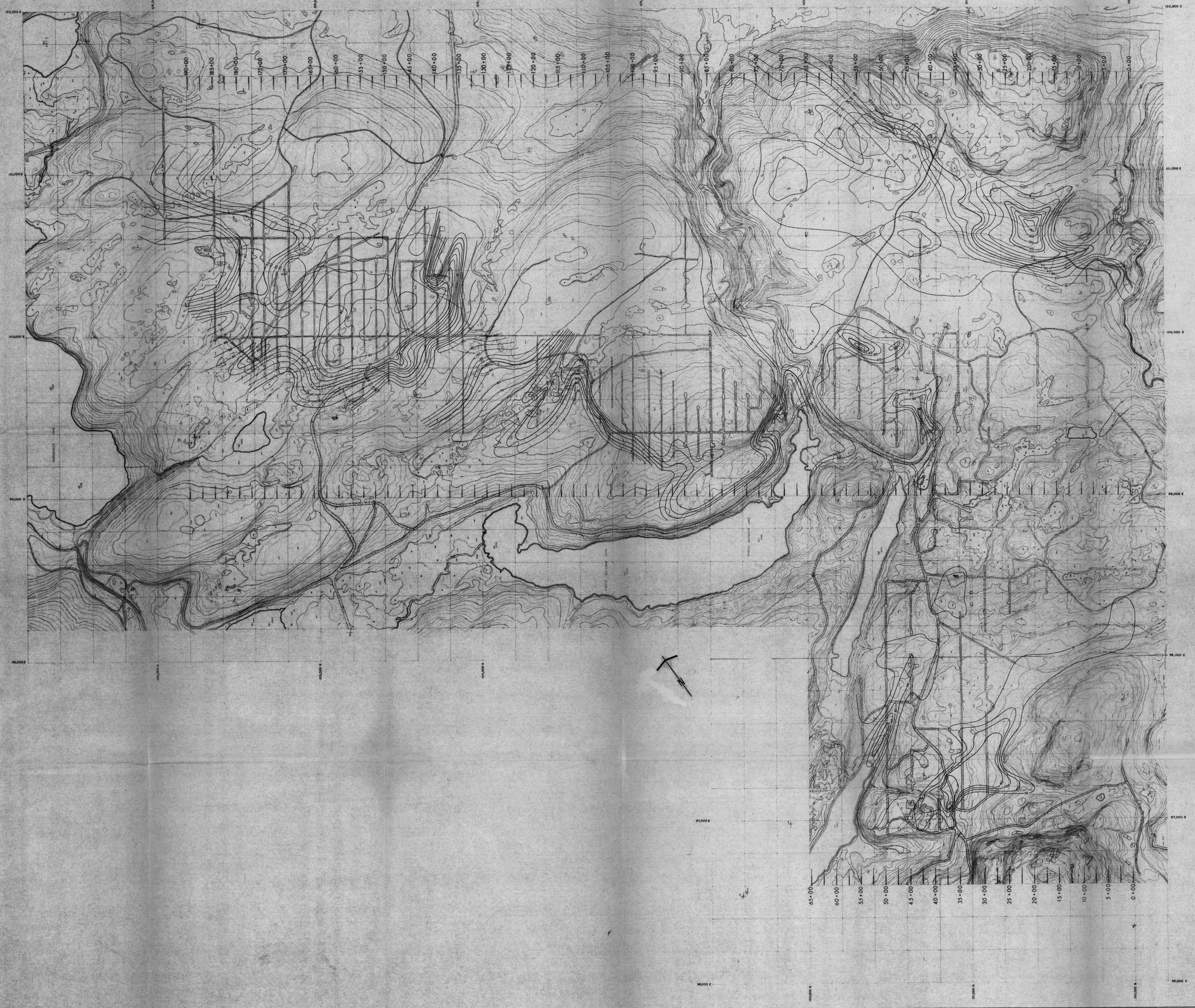


#821

| REFERENCE DRAWINGS | |
|---|---|
| QSG 381 GF 37 | Used as base See QSG 376,77,79 & 80 GF 37 (Rest of set) |

| ISSUE | DATE | INIT'L | REVISIONS |
|---|---|---|---|
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| ISSUE | DATE | INIT'L | REVISIONS |
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| | | | |

QUINSAM COAL LTD.

VANCOUVER ISLAND

| | BY | DATE |
|---|---|---|
| DRAWN | G.d.B. | 17/3/80 |
| CHECKED | | |
| APPROVED | | |
| 1st ISSUED | | |

TITLE

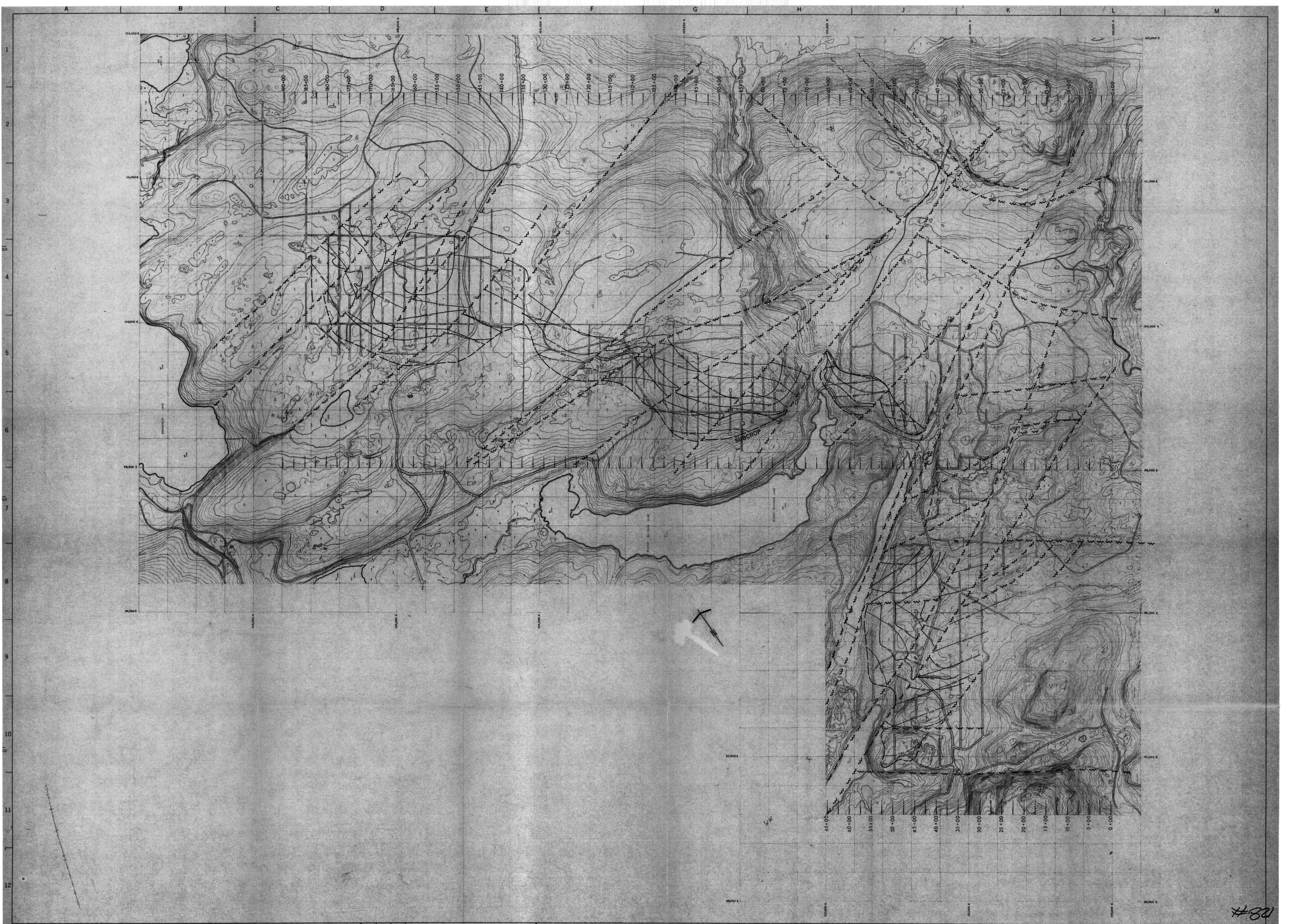
# GLACIAL TILL ISOPACH

C.I. = 10 ft.

DRAWING NO.

QSG 378 GF 37

ISSUE




| REFERENCE DRAWINGS | | ISSUE | DATE | INITL | REVISIONS | ISSUE | DATE | INITL | REVISIONS |
|---|---|---|---|---|---|---|---|---|---|
| QSG 361 GF 37 | Used as base See QSG 376-78, 380 (Rest of set) | | | | | | | | |

QUINSAM COAL LTD.

VANCOUVER ISLAND

LEGEND:
- —100— STRUCTURE CONTOUR
- —200— OVERBURDEN THICKNESS
- —— SUBCROP
- ~~ FAULTS

| SCALE 1 : 8,000 (200 400 0 200 METERS) | BY | DATE |
|---|---|---|
| DRAWN | G.d.B. | 26/3/80 |
| CHECKED | | |
| APPROVED | | |
| 1st ISSUED | | |

TITLE

STRUCTURE CONTOUR
SEAM NO. 1

C.I. = 50 ft.

DRAWING NO.

QSG 379 GF 37

ISSUE

#821

SUBCROP

Copy Map only

#821

| REFERENCE DRAWINGS | | ISSUE | DATE | INIT'L | REVISIONS | ISSUE | DATE | INIT'L | REVISIONS |
|---|---|---|---|---|---|---|---|---|---|
| QSG 361 GF 37 | Used as base. See QSG 377-380-GF 37 (Rest of set). | | | | | | | | |

QUINSAM COAL LTD.

VANCOUVER ISLAND

SCALE 1 : 8,000 (200 100 0 200 METERS)

| | BY | DATE |
|---|---|---|
| DRAWN | G.d.B. | 25/3/80 |
| CHECKED | | |
| APPROVED | | |
| 1st ISSUED | | |

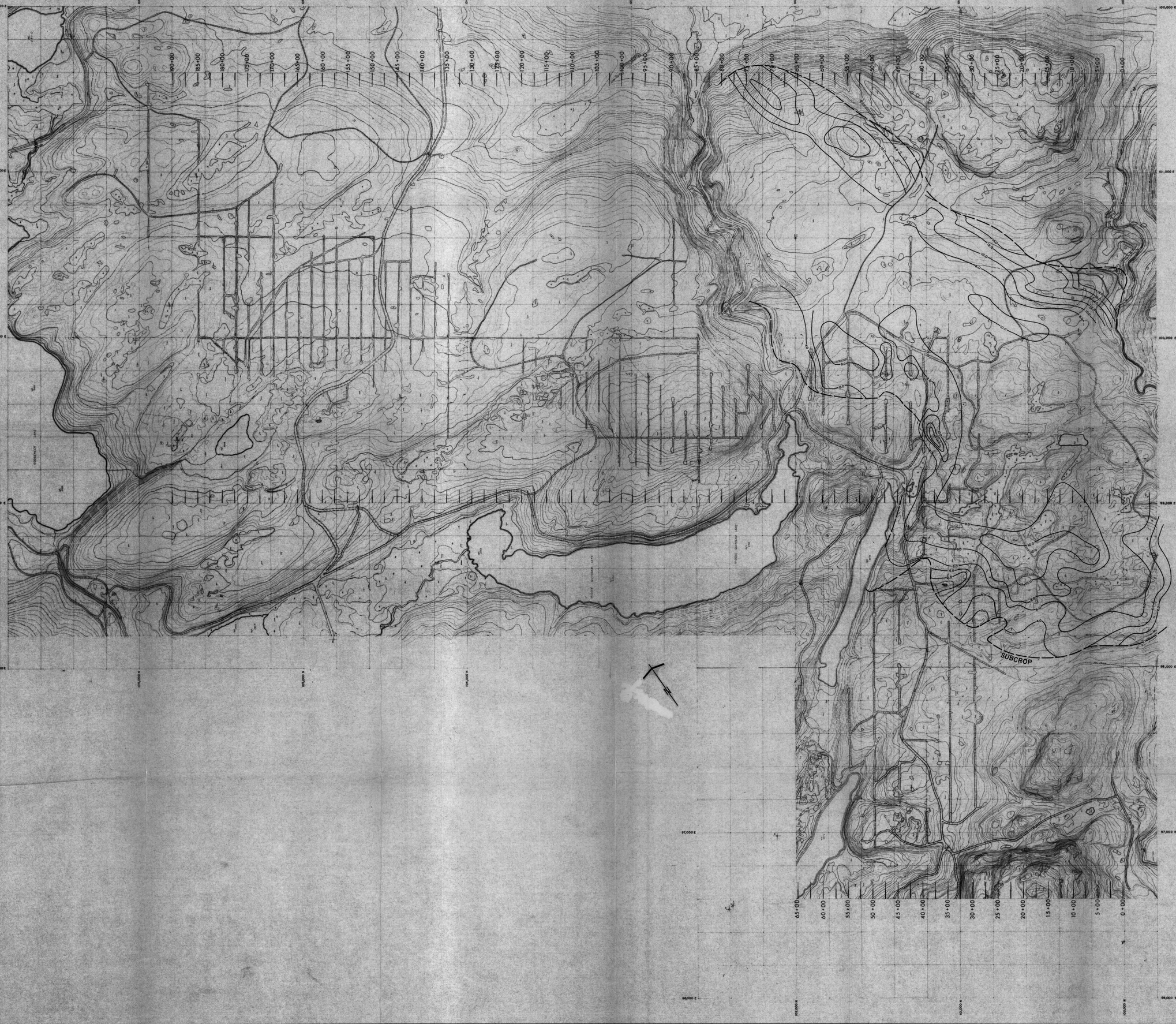
TITLE

SEAM THICKNESS ISOPACH
FOR SEAM NO. 1
NO. 1 RIDER INCLUDED
C.I. = 2.0 ft.

DRAWING NO.

QSG 376 GF 37

ISSUE




| REFERENCE DRAWINGS | | ISSUE | DATE | INIT'L | REVISIONS | ISSUE | DATE | INIT'L | REVISIONS |
|---|---|---|---|---|---|---|---|---|---|
| QSG 361 GF 37 | Used as base See QSG 376,378-380 (Rest of set) | | | | | | | | |

QUINSAM COAL LTD.

VANCOUVER ISLAND

| SCALE 1 : 9,000 (200 100 0 200 METERS) | BY | DATE |
|---|---|---|
| DRAWN | G.K.B. | 21/3/80 |
| CHECKED | | |
| APPROVED | | |
| 1st ISSUED | | |

TITLE

# SEAM THICKNESS ISOPACH FOR SEAM NO. 3

C.I. = 2.0 ft.

DRAWING NO.

QSG 377 GF 37

ISSUE

#821

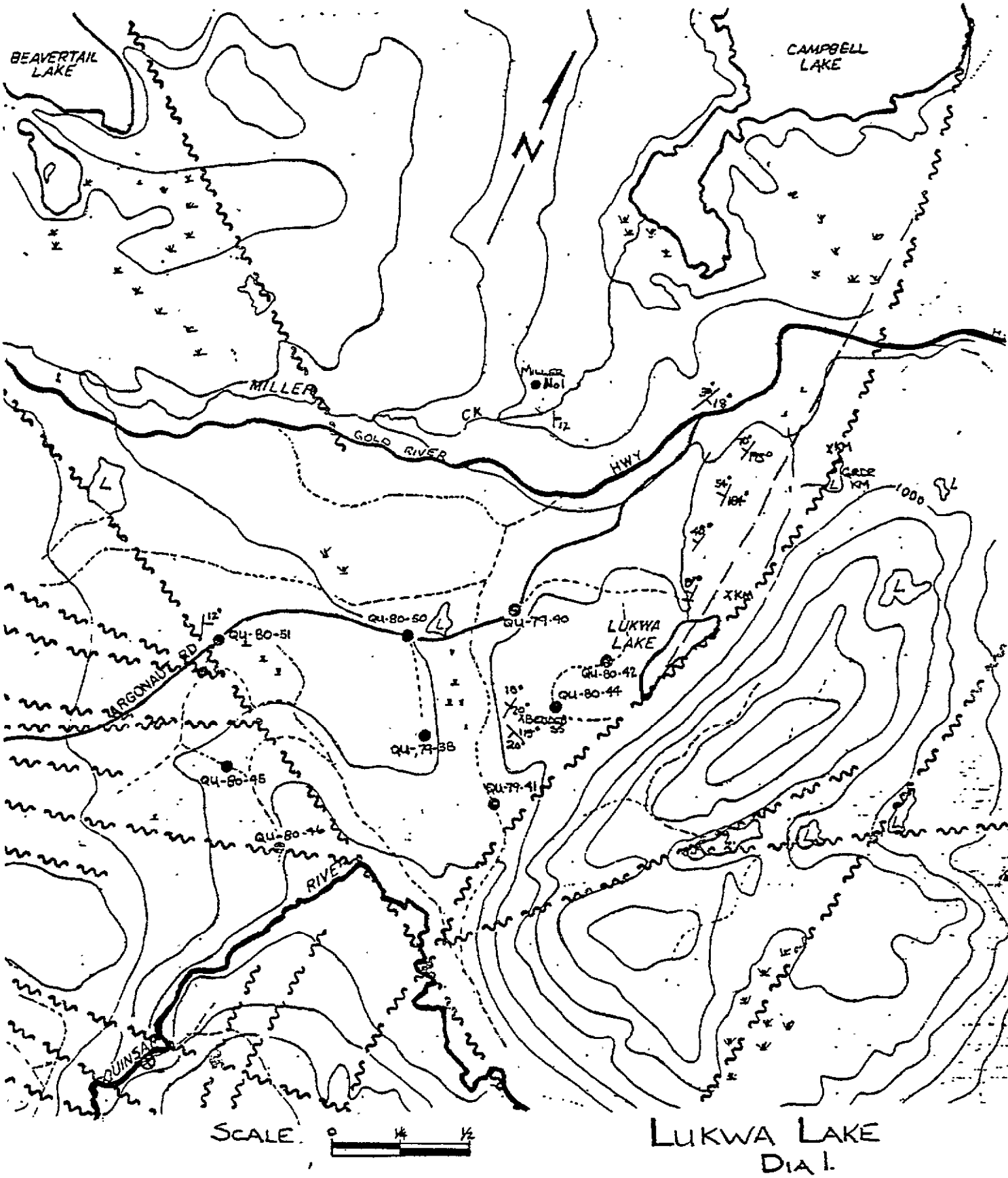
The following report will summarize the results of the drilling program in the Lukwa Lake and Lower Quinsam Areas. The object of this program was to verify the coal potential of the sedimentary basins indicated by the previous summer's mapping program.

In July of 1979, air photo interpretation and subsequent mapping delineated two areas of Comox sediments; one in the Lukwa Lake Area and the other east and north of the Lower Quinsam Lake.

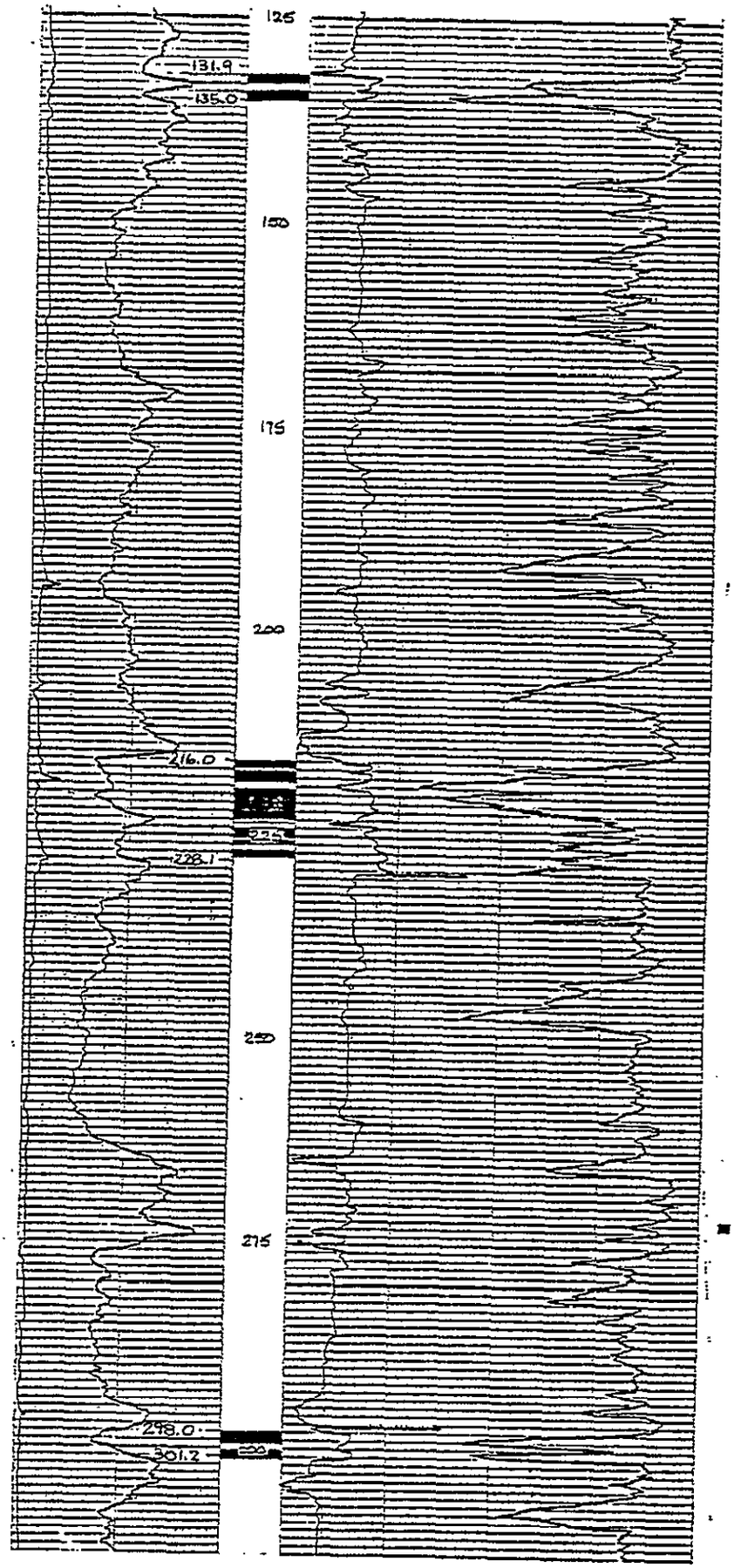
In the Lukwa Lake Area, mapping along the eastern flank of the sedimentary basin proved that the sediments have been upwarped to produce a synform, with dips on the east flank of 20° increasing to the north (see Diagram 1).

Drilling commenced on this eastern flank, with seven holes to prove up potential of the area. Access into this area was on existing rail grade which, midway through the program, was washed out by seasonal rains. None of the seven holes encountered economic coal within 500 feet from surface. It was concluded that the economic coal seams in Hole Miller No. 1, to the north, were not brought close enough to surface by the upwarping action.

At the same time, two holes were drilled north of Pit 7 across the Quinsam River (see Diagram 1). This drilling encountered three seams of coal; one of which has economic importance. These three seams are thought to be the #4, #3 and #2 seams of the Quinsam mining block (see Diagram 2). It was beyond the scope of this program to follow this coal up-dip, because extensive line cutting and clearing would be involved.


BEAVERTAIL LAKE
CAMPBELL LAKE
MILLER CK
MILLER No1
GOLD RIVER HWY
ARGONAUT RD
QU-80-50
QU-80-51
QU-79-40
LUKWA LAKE
QU-80-42
QU-80-44
QU-79-38
QU-80-45
QU-79-41
QU-80-46
RIVE
QUINSAM
SCALE
0
1/4
1/2
LUKWA LAKE
DIA I.

# QU-80-46


SEAM No4
SEAM No3
SEAM No2
125
131.9
135.0
150
175
200
216.0
228.1
250
275
298.0
301.2

DIA. 2

Qu-80-46

| | |
|---|---|
| 81 | Till |
| 2.4 | 131.9 - #4 Seam |
| 5.2 | 216.0 - #3 Seam |
| 2.6 | 298.0 - #2 Seam |

Approximately 7 miles east of the Quinsam mining block is a sedimentary basin that extends from Campbell River in the north to Nanoose Harbour in the south. Previous drilling on the very north end of this basin indicated a potential mineable reserve. It was the intention of this program to verify the existance of a seam ranging in size from 4 to 6 feet.

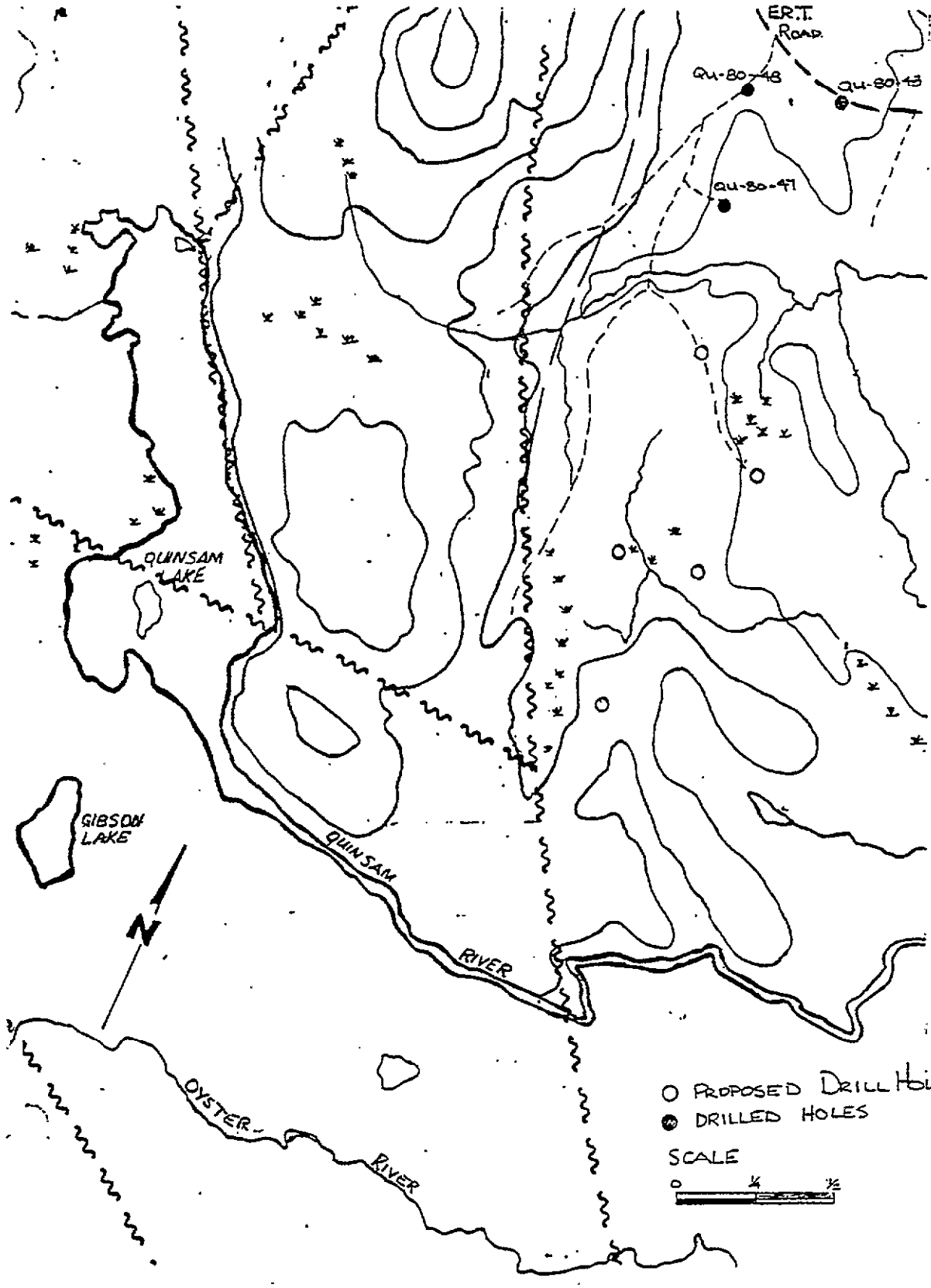
Only three holes of an eight-hole program were drilled as access proved to be impossible (see Diagram 3). To provide access into the area, a bridge would have to be built across a major stream swollen by seasonal rains. Forestry would not allow the steep banks to be cut down to allow fording of the stream.

Two of the three holes were drilled up-dip of the subcrop but the third verified the existance of two coal seams; one greater than six feet, the other greater than five feet (see Diagram 4).

Qu-80-43

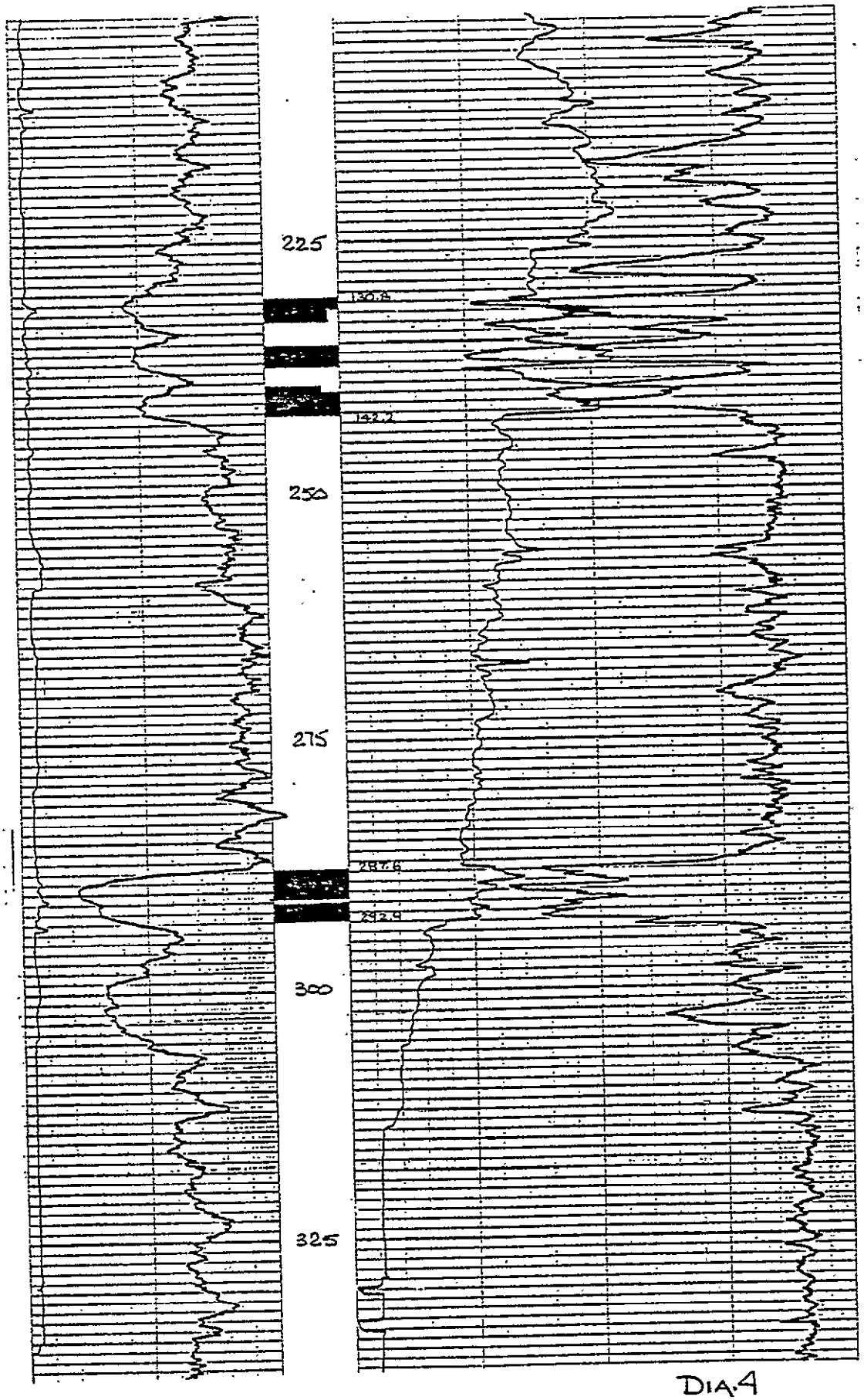
| | |
|---|---|
| 48 | Till (sand) |
| 6.6 | 130.8 Split into 3 seams |
| 5.3 | 287.6 |

Mapping in the area indicates Comox Sediments strike north-south and dip approximately $10^{\circ}$ to the east. The section (Diagram 5) shows the coal seams are consistant down-dip, but have lateral variation in thickness. This variation may be tectonic in nature rather than sedimentary, due to the upwarping action from the Vancouver Group to the east.

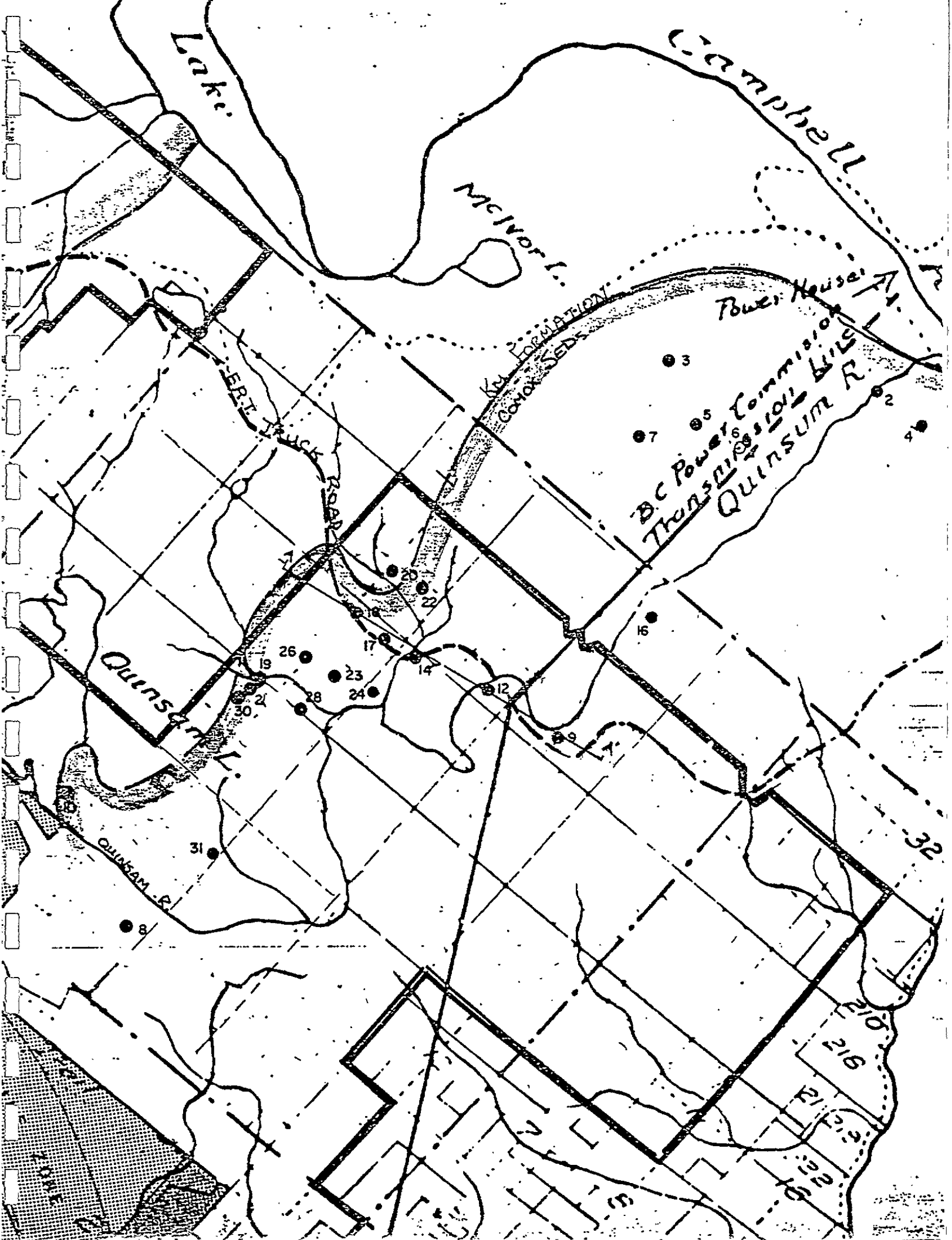



LOWER QUINSAM.
DIA 3

QU 80-43




DIA.4


Lake
Campbell
McIvor L.
Power House
Ker Formation
Coal Seds.
B.C. Power Commission
Transmission Line
Quinsam R.
ERT Truck Road
Quinsam L.
Quinsam R.
32
210
216
21
32
16
15
1
2
3
4
5
6
7
8
9
10
11
12
14
16
17
18
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21
22
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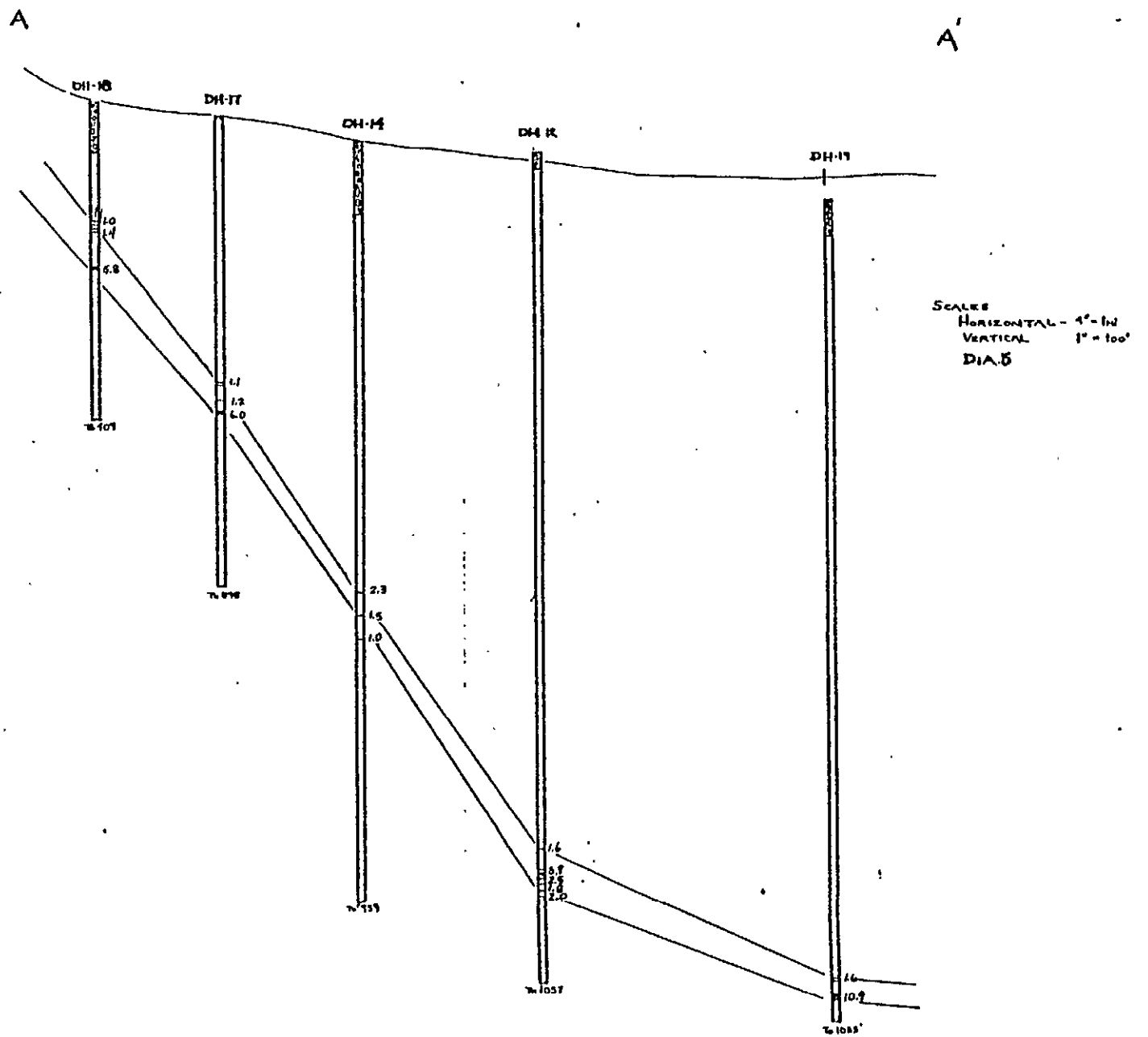
24
26
28
30
31


A
A'
DH-18
DH-17
DH-14
DH-16
DH-19
1.0
1.4
6.8
1.1
1.2
6.0
2.3
1.5
1.0
1.6
8.9
2.5
1.6
2.0
1.6
10.9
Scales
Horizontal - 4" = 1M
Vertical 1" = 100'
DIA.5

If access could be obtained to this area drilling would verify strip and underground reserves, possibly to the Quinsam River.