

A GEOLOGICAL AND GEOCHEMICAL REPORT ON
EXPLORATION ACTIVITIES AT
TCHAIKAZAN RIVER PROJECT

TASEKO LAKE AREA B.C.

JUNE - OCTOBER 1981
SUNCOR REPORT #9046
by Paul A. Hawkins, P. Eng.
81 12 17

CIRCLE

NO. | No. | From | to

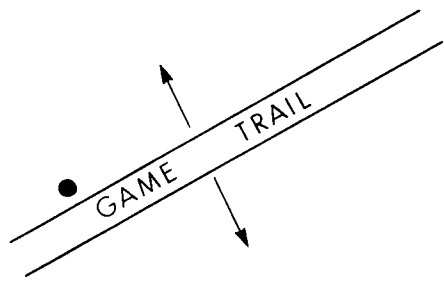
19

MEMO

MEMO

Copy 2

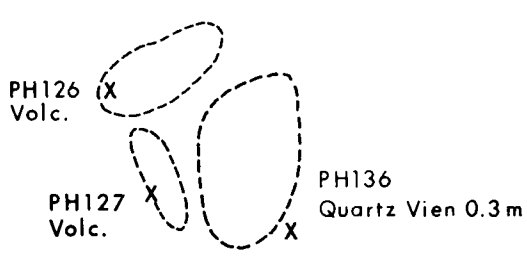
1 of 2



123° 41' 43"



CHOPPER PAD



X Boulders from Trap Dike

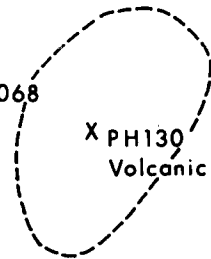
51° 10' 30"

X PH135
(Trap Dike Minor Py)

● 106067

● 106068

X PH129
Volcanic
Phorp.

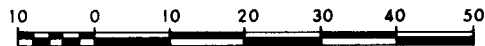


ECHO-5
942

*part 2
of 3*

LEGEND

- X ROCK SAMPLE
- SOIL SAMPLE



MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
10,330
No.

Suncor Inc. Resources Group		COAL AND MINERALS DEPARTMENT	
GEOLOGICAL RECONNAISSANCE TRAP DIKE AREA TCHAIKAZAN RIVER PROJECT TASEKO LAKE AREA, B.C.			
DATE June, 1981	SCALE Approx. 1:1000	N.T.S. 920/4	DRAWING No. 82-110

UTM LOCATION: 451500 E
5669000 N

REVISED 11/13/82

COUGAR-1
918

123° 43' W



X PH0125
Sandstone
Talus

X PH0123
(Breccia)

X PH0122
(Breccia)
Talus

X PH0124
(Sandstone
Boulder)

TALUS SLOPE
BASE OF SLOPE

PH0121 X
(Andesite
with minor Py)

51° 09' N

FLAT AREA
for
CHOPPER PAD

KB-18
X
(Andesite)

X KB-15
(Breccia)

KB-17
X
(Volcanic
Sediment)

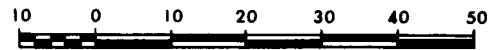
X KB-16
(Andesite)

RIDGE LINE

part 2
of 3

LEGEND

X ROCK SAMPLE



MINERAL RESOURCES BRANCH
ASSESSMENT REPORT

10,330
No.

HELICOPTER STOP No. H-1
UTM LOCATION: 450150E
5667100N

SUNCOR INC Resources Group

COAL AND MINERALS
DEPARTMENT

GEOLOGICAL RECONNAISSANCE
PURPLE CREEK AREA
TCHAIKAZAN RIVER PROJECT
TASEKO LAKE AREA, B.C.

DATE June, 1981	SCALE 1:1000	N.T.S. 920/4	DRAWING No. 82-111
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AS PER A TO 13/82



51° 13' N

TO AIRSTRIP

123° 39' W

OLD WASHED OUT BRIDGE

OLD ROAD

PH0101 (Sandstone)
PH0100 (Greywache)
PH0103 (Felsite Boulder)

290° 85°

PH0104 (Greywache)

106952

PH0105 (Quartz Vien)
Massive Greywache with minor interbedded shale some red staining

50°

106953

part 2 of 3

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
10,330
NO.

SUN-19
1146

Greywache

PH0106 (Greywache Boulder)

Greywache

FLAGGED

LINE

LEGEND

- x ROCK SAMPLE
- STREAM SAMPLE



TCHAIKAZAN RIVER

COUGAR-7
924

Suncor Inc Resources Group

COAL AND MINERALS DEPARTMENT

GEOLOGICAL RECONNAISSANCE
WASHED OUT BRIDGE AREA
TCHAIKAZAN RIVER PROJECT
TASEKO LAKE AREA, B.C.

DATE July, 1981	SCALE 1:1000	N.T.S. 920/4	DRAWING No. 82-108
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51011' N



123° 42' W

GLACIER

● 106059

SNOW

X PH131

CHOPPER PAD

X PH138

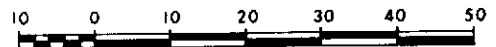
CREEK

BRIDGE

HELENA
548

LEGEND

- ROCK SAMPLE
- X STREAM SAMPLE



MINERAL RESOURCES
ASSESSMENT REPORT

10,330

part 2
9/3

UTM
LOCATION: 5670000 N
452500 W

STOP NO. H-5

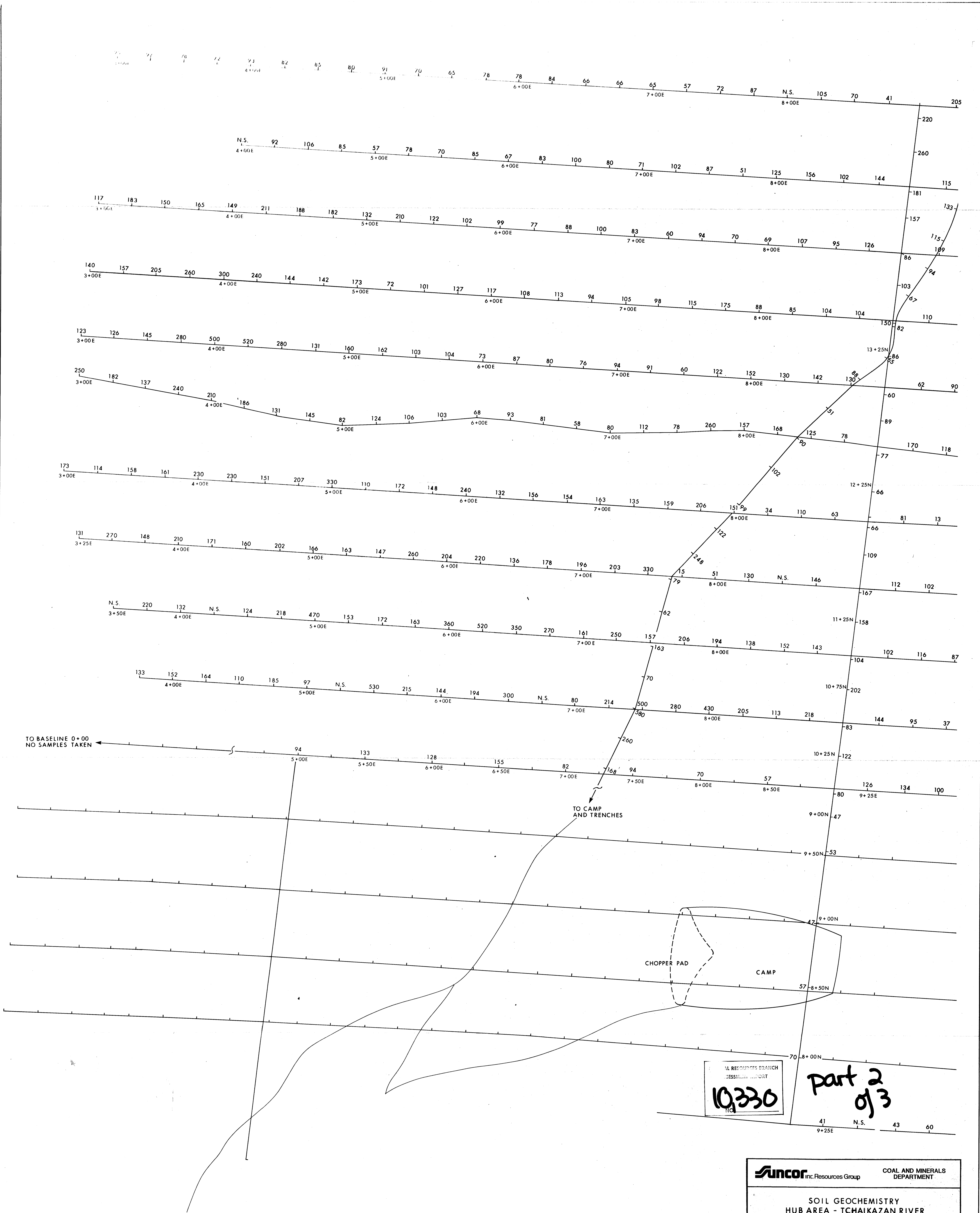
Suncor Inc. Resources Group

COAL AND MINERALS
DEPARTMENT

GEOLOGICAL RECONNAISSANCE
BRIDGE CREEK AREA
TCHAIKAZAN RIVER PROJECT
TASEKO LAKE AREA, B.C.

DATE June, 1981	SCALE Approx. 1:1000	N.T.S. 920/4	DRAWING No. 82-109
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NE. P. 10/11/81



TO BASELINE 0+00
NO SAMPLES TAKEN

TO CAMP
AND TRENCHES

CHOPPER PAD

CAMP

11 RESOURCES BRANCH
ASSESSMENT REPORT
10330

Part 2
of 3

Suncor Inc. Resources Group		COAL AND MINERALS DEPARTMENT	
SOIL GEOCHEMISTRY HUB AREA - TCHAIKAZAN RIVER SHEET - 3 ZINC (PPM) TASEKO LAKE AREA, B.C.			
DATE	SCALE	N.T.S.	DRAWING No.
Nov., 1981	1:1000	920/4	81-078-B-2

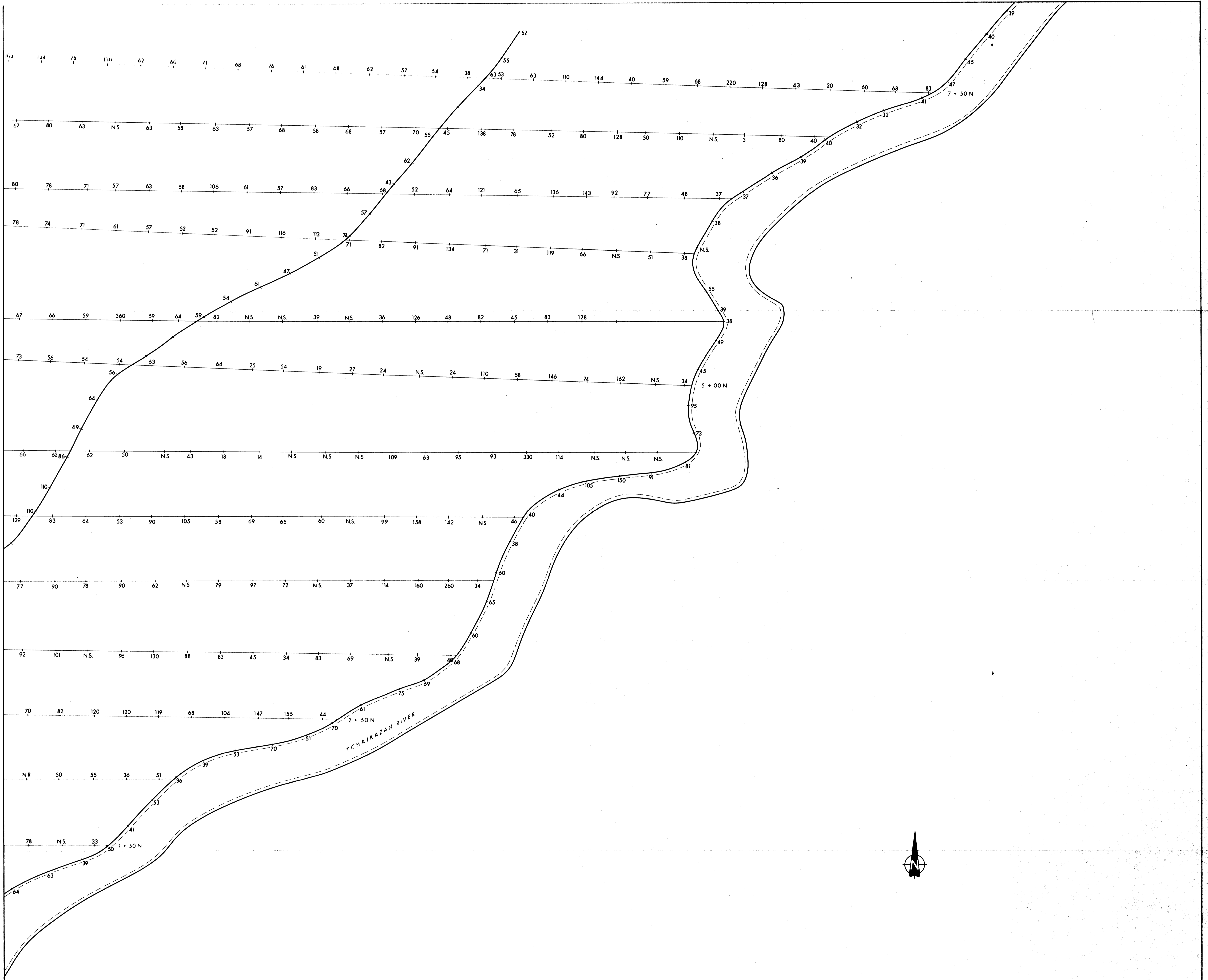
REVISED - AUG 12 1982

IJUN MAIDEN[®]
 U.S. PATENT 4,132,440 B7D
 CANADIAN IND. DESIGN REG. NO. 42524
 CANADIAN PATENT 1,065,729 B7D
 (HD) 1977

IJUN MAIDEN[®] SYSTEMS LTD. CALGARY ALBERTA CANADA



IM 42



MINCO RESOURCES BRANCH
 10,330

Part 2
 of 3
 EAST HALF

Suncor Resources Group		COAL AND MINERALS DEPARTMENT	
SOIL GEOCHEMISTRY HUB AREA - TCHAIKAZAN RIVER SHEET - 2 ZINC (PPM) TASEKO LAKE AREA, BRITISH COLUMBIA			
DATE	SCALE	N.T.S.	DRAWING No.
NOVEMBER, 1981	1:1000	920/4	82-002-2



REVISED AUG 1982



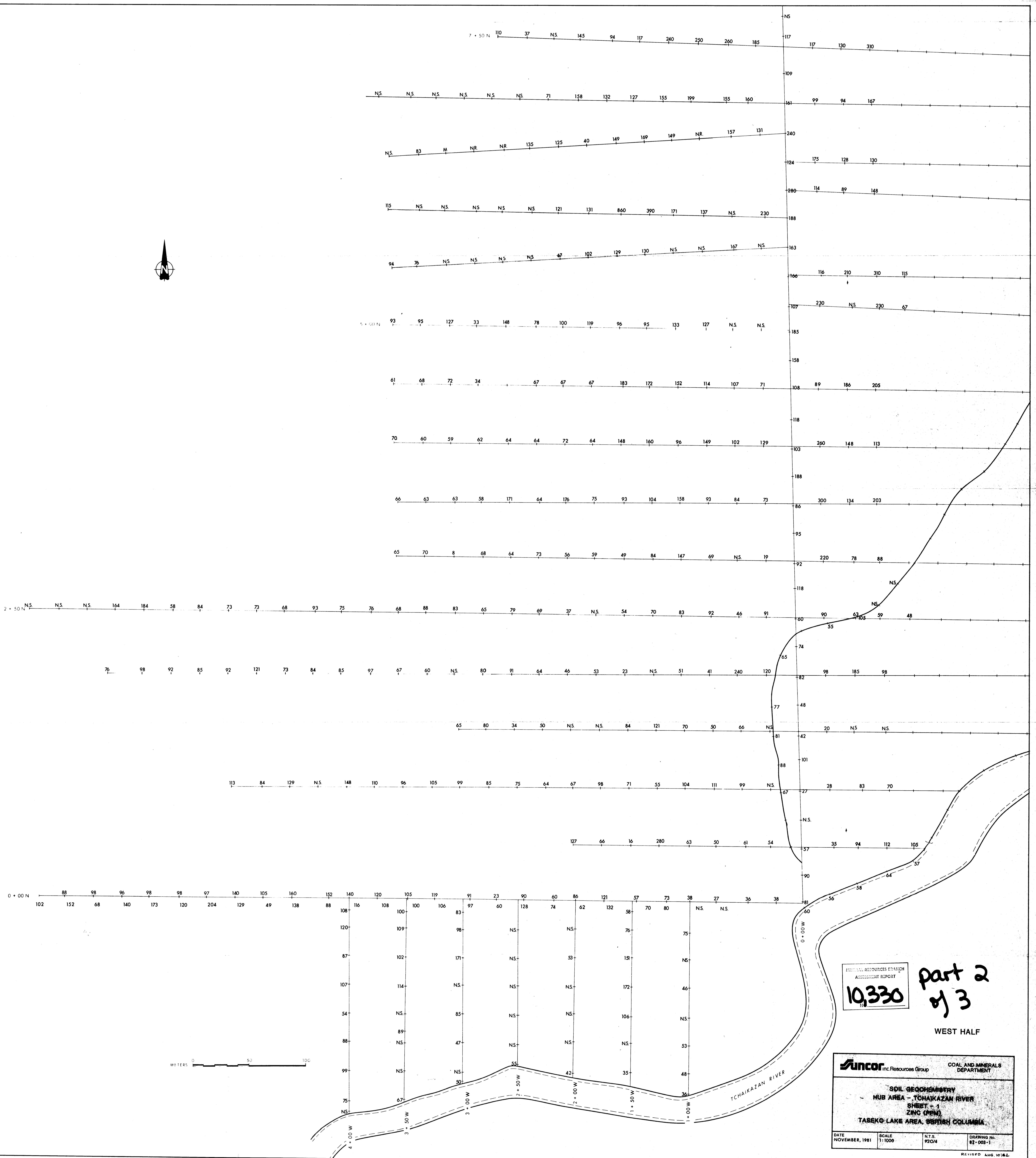
U. S. A. DESIGN PATENT 4139248-1979
 CANADIAN IND. DESIGN REG. NO. 42524
 CANADIAN PATENT 1065729-1979



IRON MAIDEN SYSTEMS LTD. CALGARY, ALBERTA, CANADA



IM 42



10330

part 2
of 3

WEST HALF

Suncor Inc. Resources Group		COAL AND MINERALS DEPARTMENT	
SOIL GEOCHEMISTRY			
HUB AREA - TCHAIKAZAN RIVER			
SHEET - 3			
ZONING (1984)			
TASIKO LAKE AREA, BRITISH COLUMBIA			
DATE NOVEMBER, 1981	SCALE 1:1000	NT.S. 920/4	DRAWING NO. 82-003-1

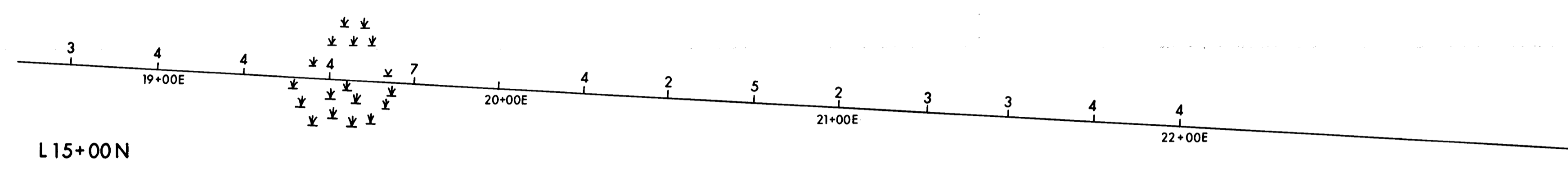
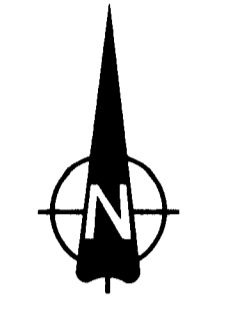
REVISED AUG. 10/82

IRON MAIDEN®
U.S.A. DESIGN PATENT 4139248 1979
CANADIAN IND. DESIGN REG. NO. 42524
CANADIAN PATENT 1065729 1979

82-081 (3043)
®

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IM 42

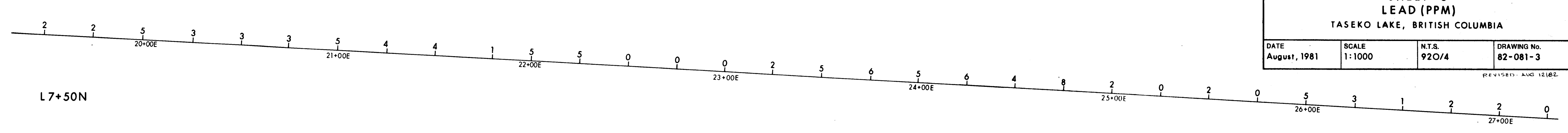


L15+00N

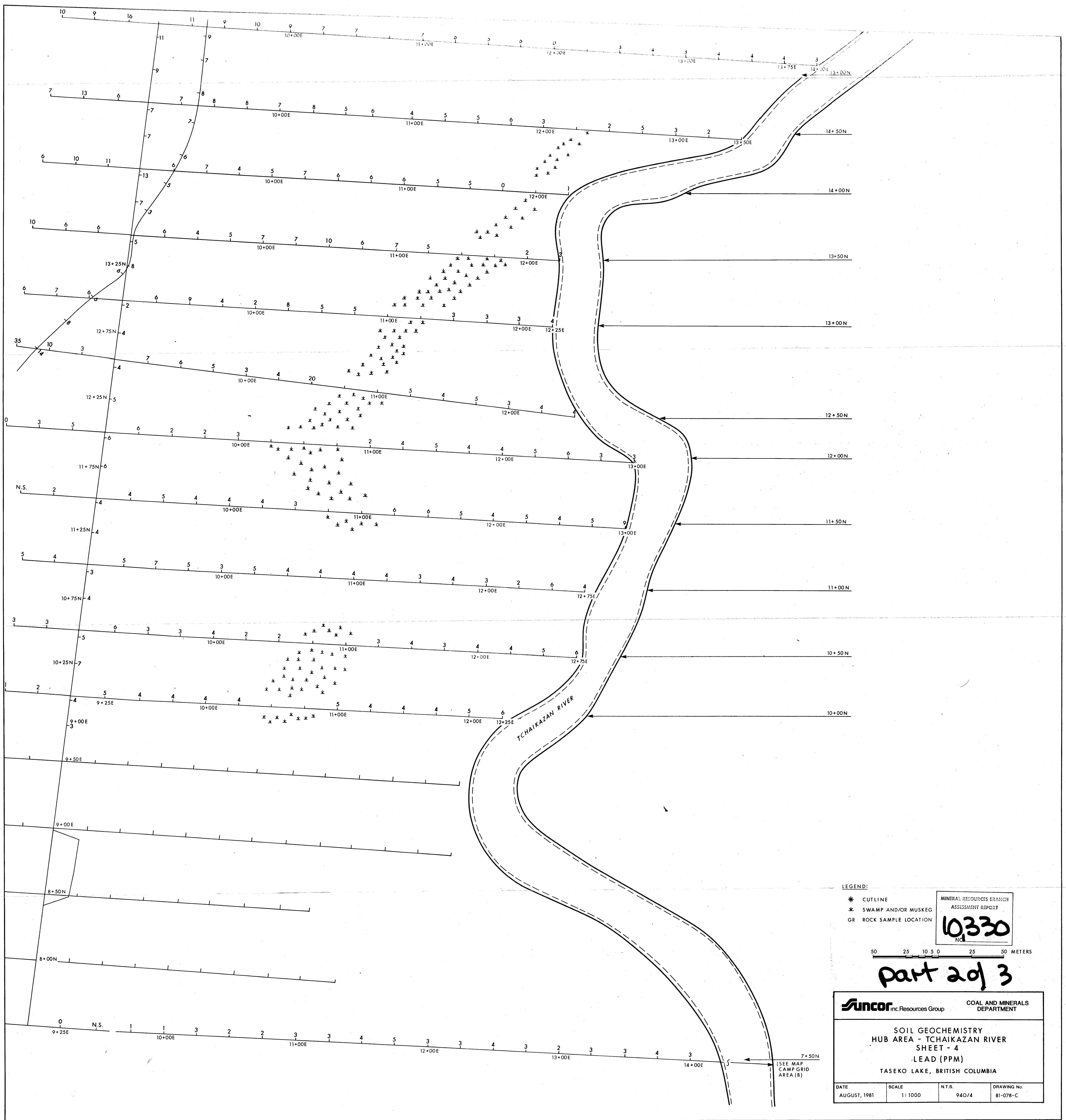
MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
10330

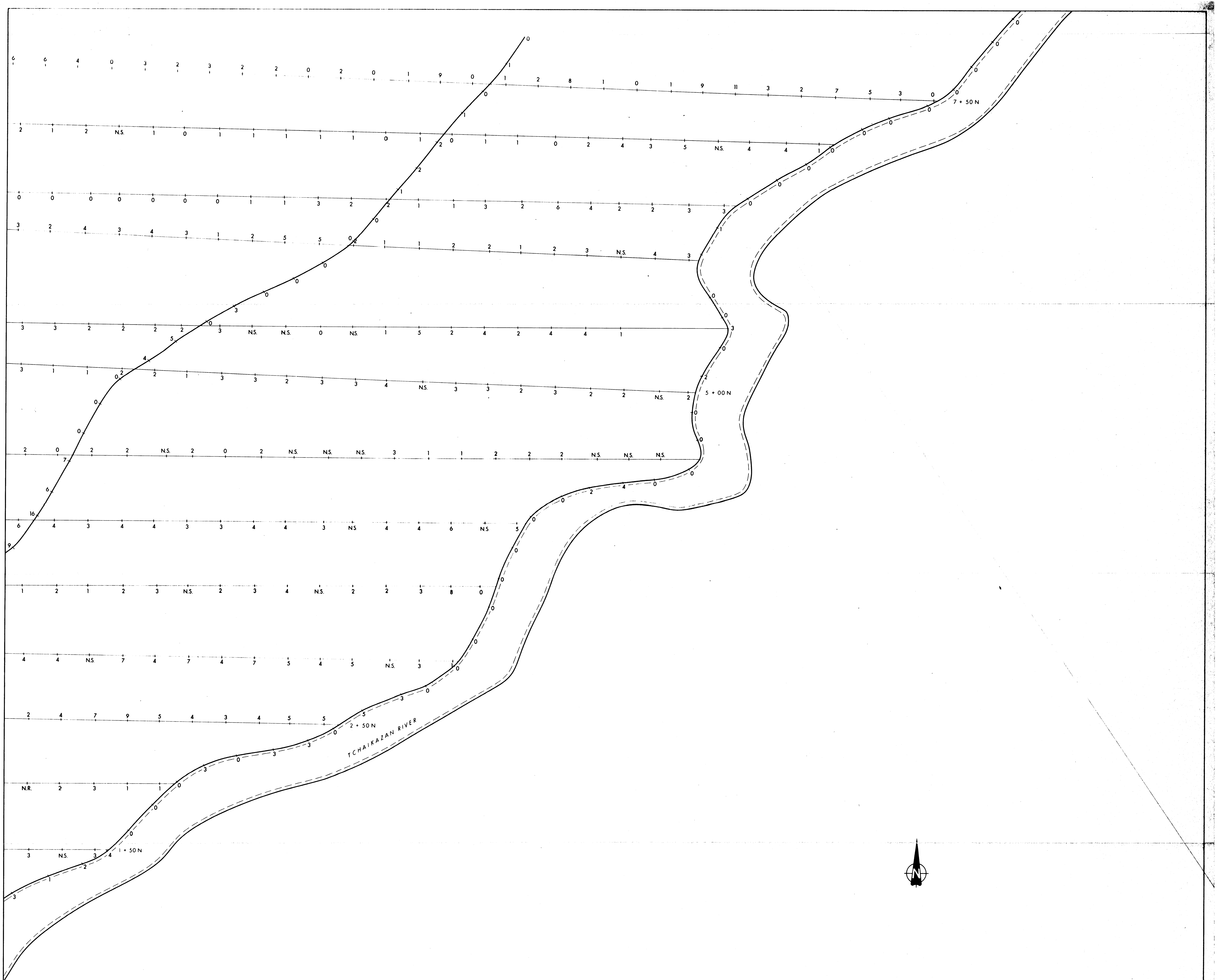
part 2
of 3

Suncor Inc. Resources Group		COAL AND MINERALS DEPARTMENT	
SOIL GEOCHEMISTRY HUB AREA - TCHAIKAZAN RIVER SHEET - 6 LEAD (PPM) TASEKO LAKE, BRITISH COLUMBIA			
DATE August, 1981	SCALE 1:1000	NTS. 920/4	DRAWING NO. 82-081-3



L7+50N

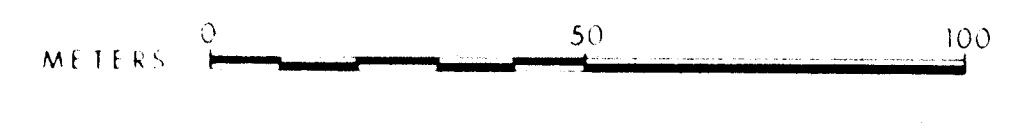


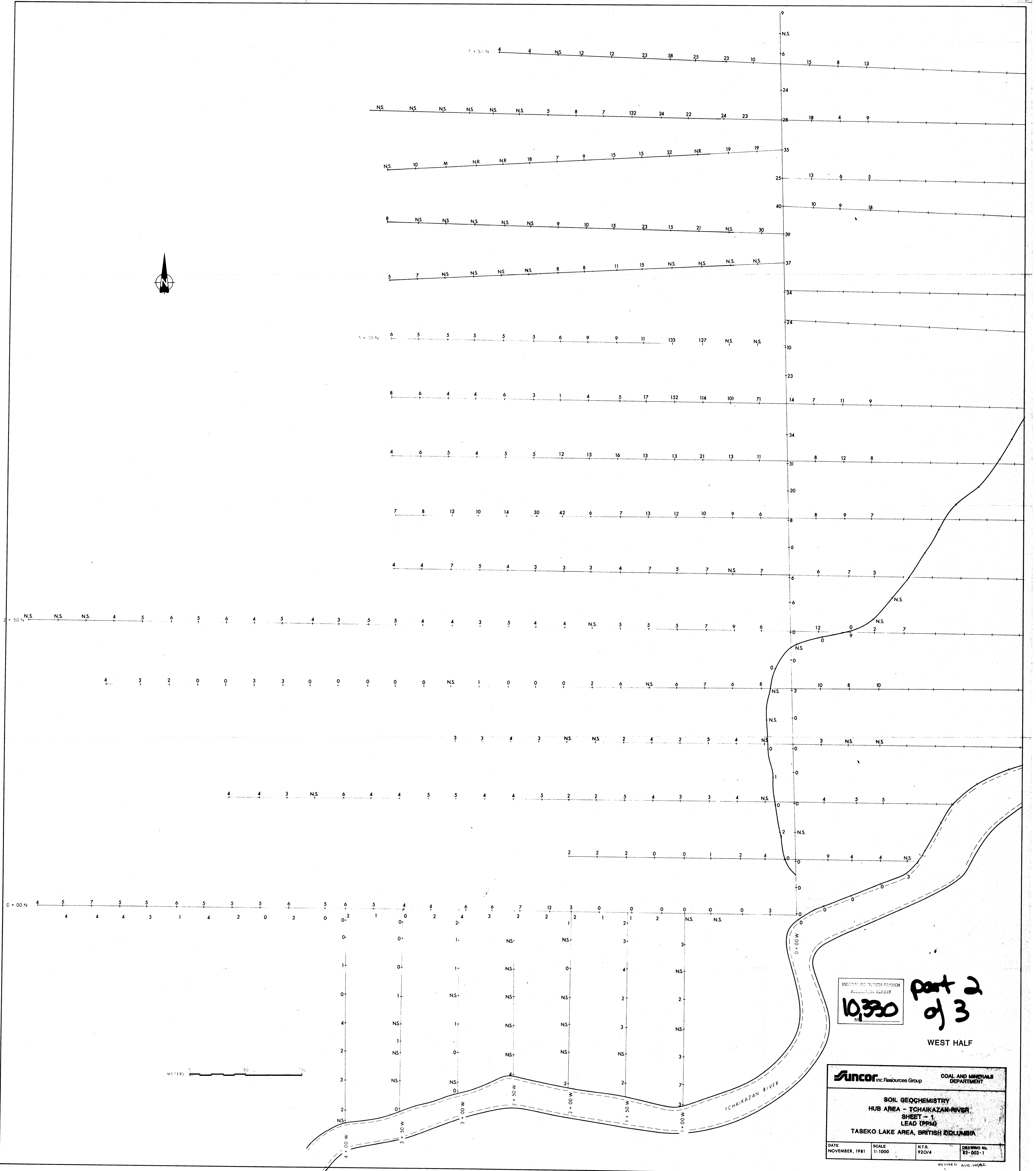


MINERAL RESOURCES BRANCH
 ASSOCIATION REPORT
 10330

part 2
 of 3
 EAST HALF

Suncor Inc. Resources Group		COAL AND MINERALS DEPARTMENT	
SOIL GEOCHEMISTRY HUB AREA - TCHAIKAZAN RIVER SHEET - 2 LEAD (PPM) TASEKO LAKE AREA, BRITISH COLUMBIA			
DATE NOVEMBER, 1981	SCALE 1:1000	N.T.S. 920/4	DRAWING NO. 82-002-2
REVISED AND/OR 181			





MINERAL RESOURCES DIVISION
 GEOLOGICAL REPORT
10330
 Part 2 of 3
 WEST HALF

Suncor Inc. Resources Group		COAL AND MINERALS DEPARTMENT	
SOIL GEOCHEMISTRY HUB AREA - TCHAIKAZAN RIVER SHEET - 1 LEAD (PPM) TASEKO LAKE AREA, BRITISH COLUMBIA			
DATE NOVEMBER, 1981	SCALE 1:1000	N.T.S. 920/4	DRAWING No. 82-002-1
REVISED AUG. 1982			

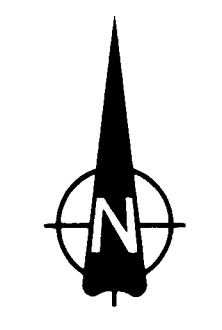
IRON MAIDEN®
U. S. A. DESIGN PATENT 4139248 1979
CANADIAN IND. DESIGN REG. NO. 42524
CANADIAN PATENT 1065729 1979

part 2 of 3



IRON MAIDEN® SYSTEMS LTD., CALGARY, ALBERTA, CANADA

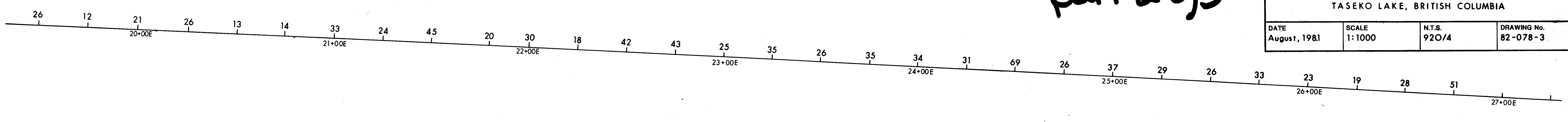
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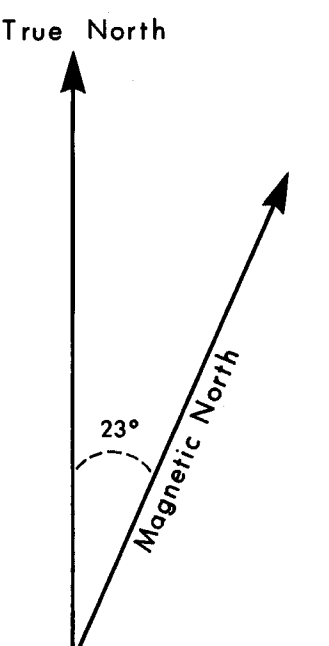
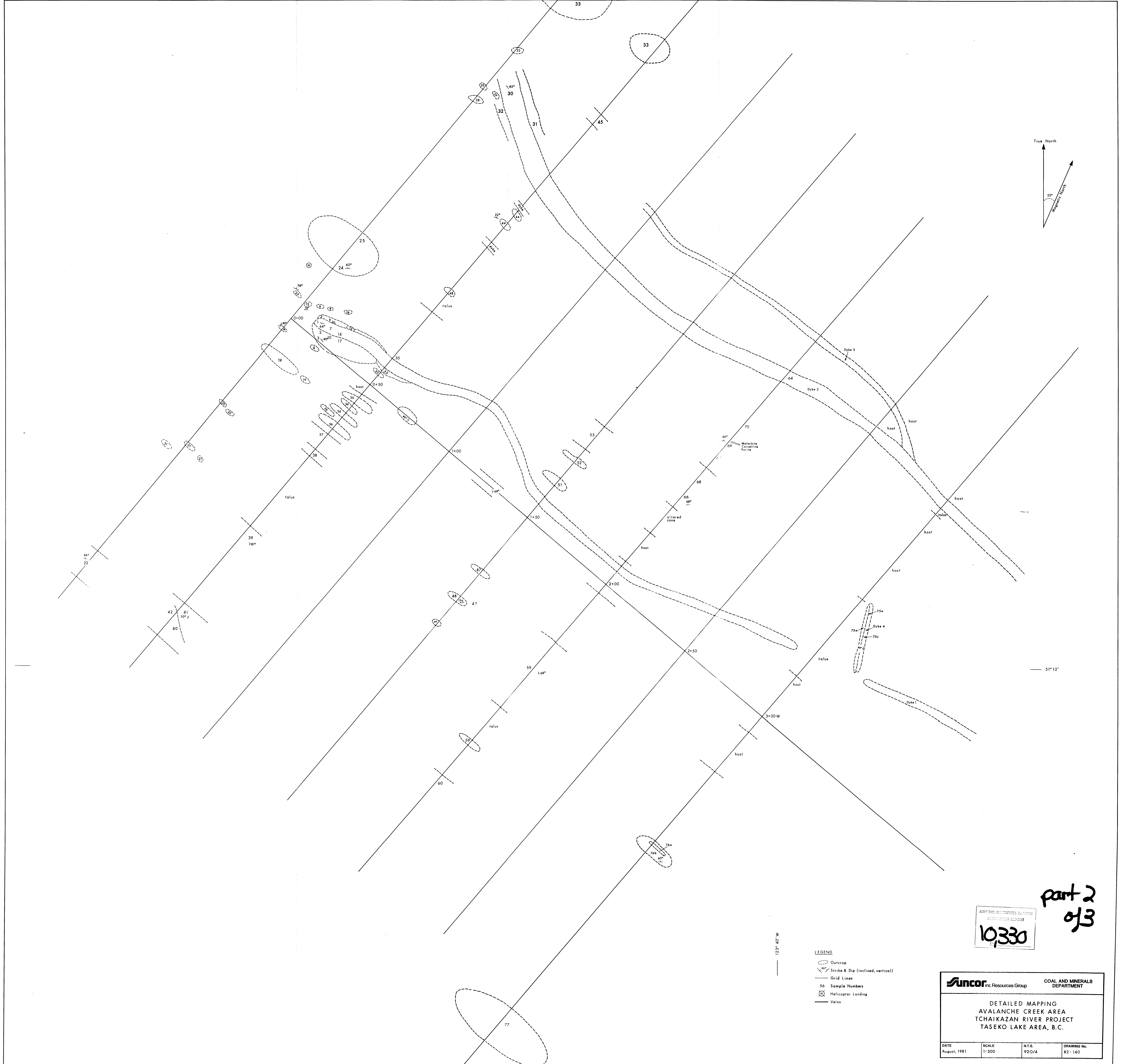
10330
NO.

part 2 of 3

Suncor Inc Resources Group		COAL AND MINERALS DEPARTMENT	
SOIL GEOCHEMISTRY HUB AREA - TCHAIKAZAN RIVER SHEET - 6 COPPER (PPM) TASEKO LAKE, BRITISH COLUMBIA			
DATE August, 1981	SCALE 1:1000	N.T.S. 920/4	DRAWING No. 82-078-3



IRON MAIDEN SYSTEMS LTD.
U.S. A. DESIGN PATENT 4,192,648 1979
CANADIAN IND. DESIGN REG. NO. 4,2324
CANADIAN PATENT 1,055,729 1979



- LEGEND
- Outcrop
 - Strike & Dip (inclined, vertical)
 - Grid Lines
 - 56 Sample Numbers
 - ⊠ Helicopter Landing
 - Veins

MINERAL RESOURCES DIVISION
ASSESSMENT BRANCH
10330

part 2
of 3

Suncor Inc. Resources Group COAL AND MINERALS DEPARTMENT

DETAILED MAPPING
AVALANCHE CREEK AREA
TCHAIKAZAN RIVER PROJECT
TASEKO LAKE AREA, B. C.

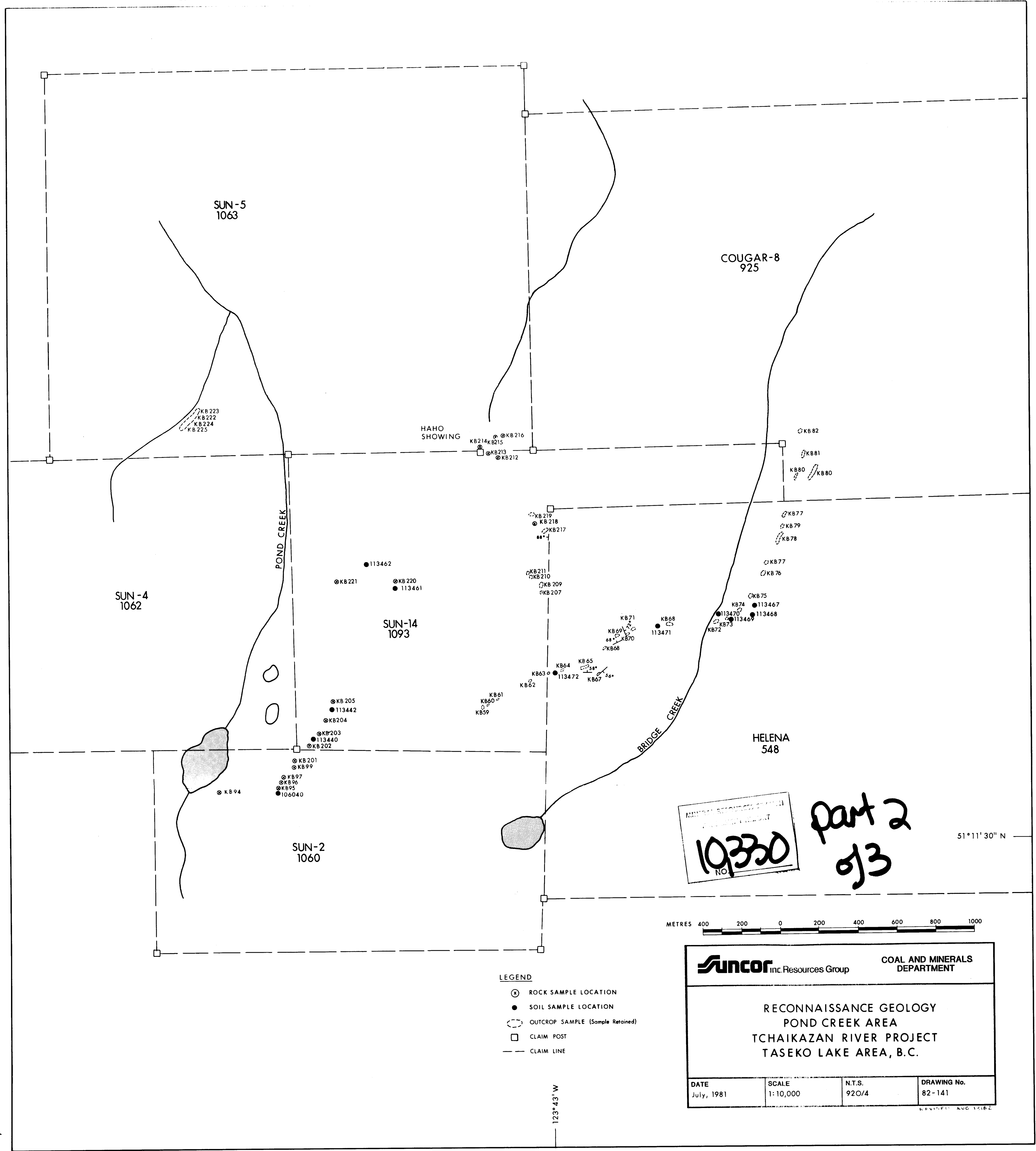
DATE August, 1981	SCALE 1:500	N.T.S. 920/4	DRAWING No. 82-140
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 U.S. A. DESIGN PATENT 4139248 1979
 CANADIAN IND. DESIGN REG. NO. 42524
 CANADIAN PATENT 1065729 1979

(RD) 1977

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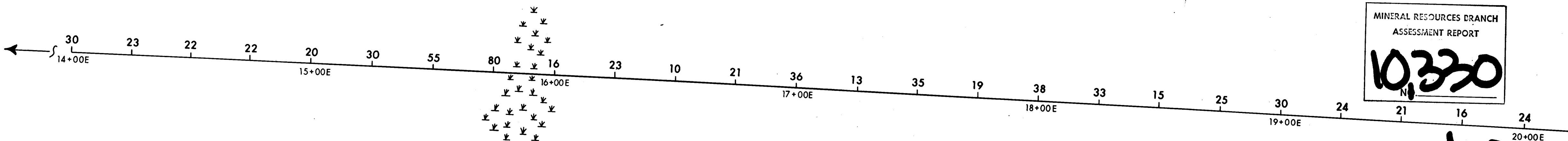
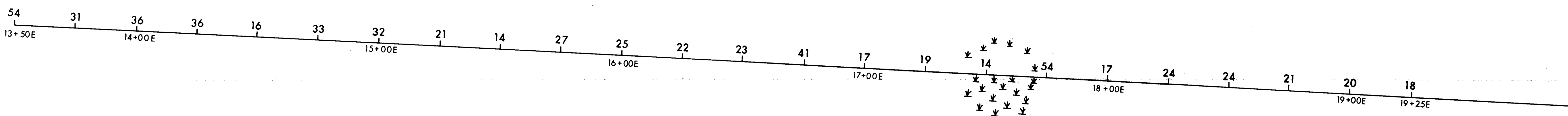
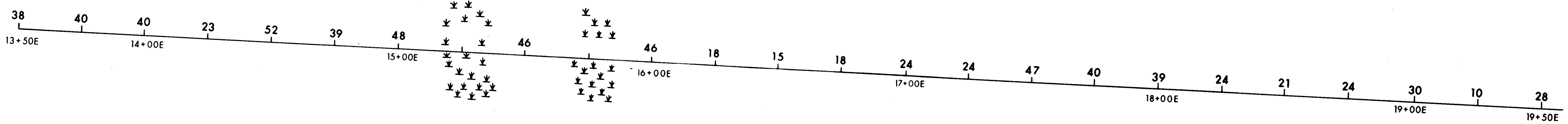
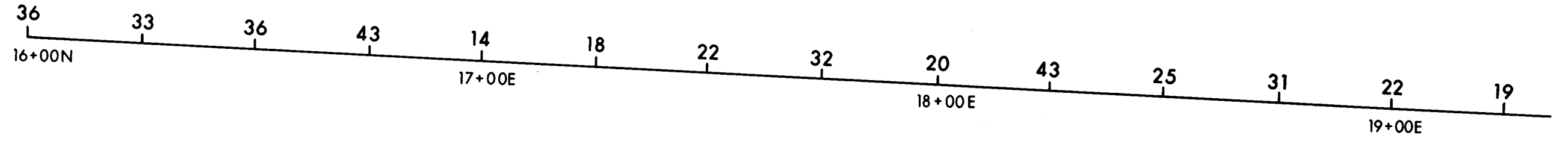
10330
 part 2
 of 3

METRES 400 200 0 200 400 600 800 1000

- LEGEND**
- ⊙ ROCK SAMPLE LOCATION
 - SOIL SAMPLE LOCATION
 - OUTCROP SAMPLE (Sample Retained)
 - CLAIM POST
 - - - CLAIM LINE

Suncor Inc. Resources Group		COAL AND MINERALS DEPARTMENT	
RECONNAISSANCE GEOLOGY POND CREEK AREA TCHAIKAZAN RIVER PROJECT TASEKO LAKE AREA, B.C.			
DATE July, 1981	SCALE 1:10,000	N.T.S. 92O/4	DRAWING No. 82-141

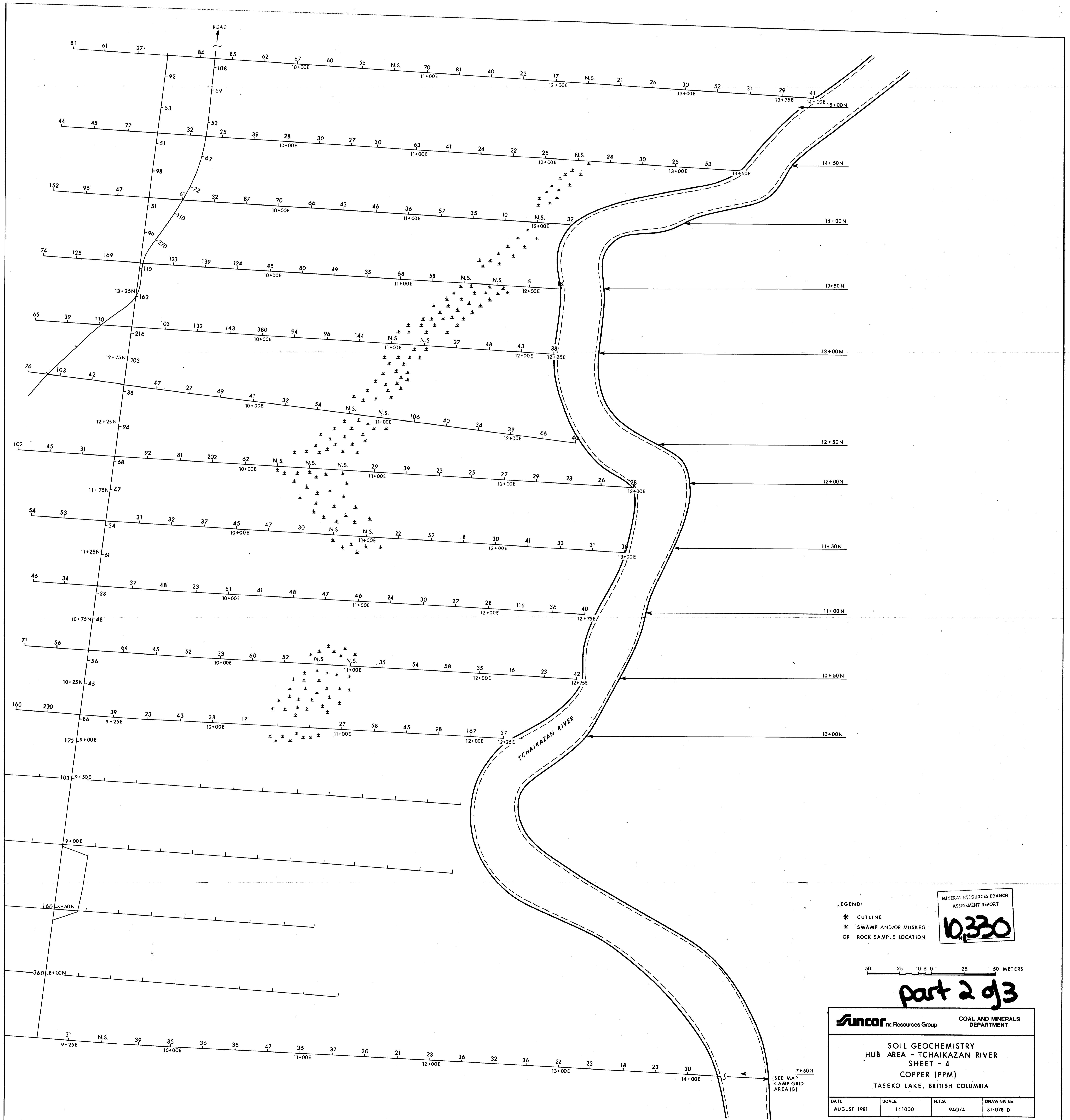
123° 43' W



MINERAL RESOURCES BRANCH
 ASSESSMENT REPORT
 10330

part 2 of 3

Suncor Inc. Resources Group		COAL AND MINERALS DEPARTMENT	
SOIL GEOCHEMISTRY HUB AREA - TCHAIKAZAN RIVER SHEET - 5 COPPER (PPM) TASEKO LAKE, BRITISH COLUMBIA			
DATE Aug., 1981	SCALE 1:1000	N.T.S. 920/4	DRAWING No. 82-078-2



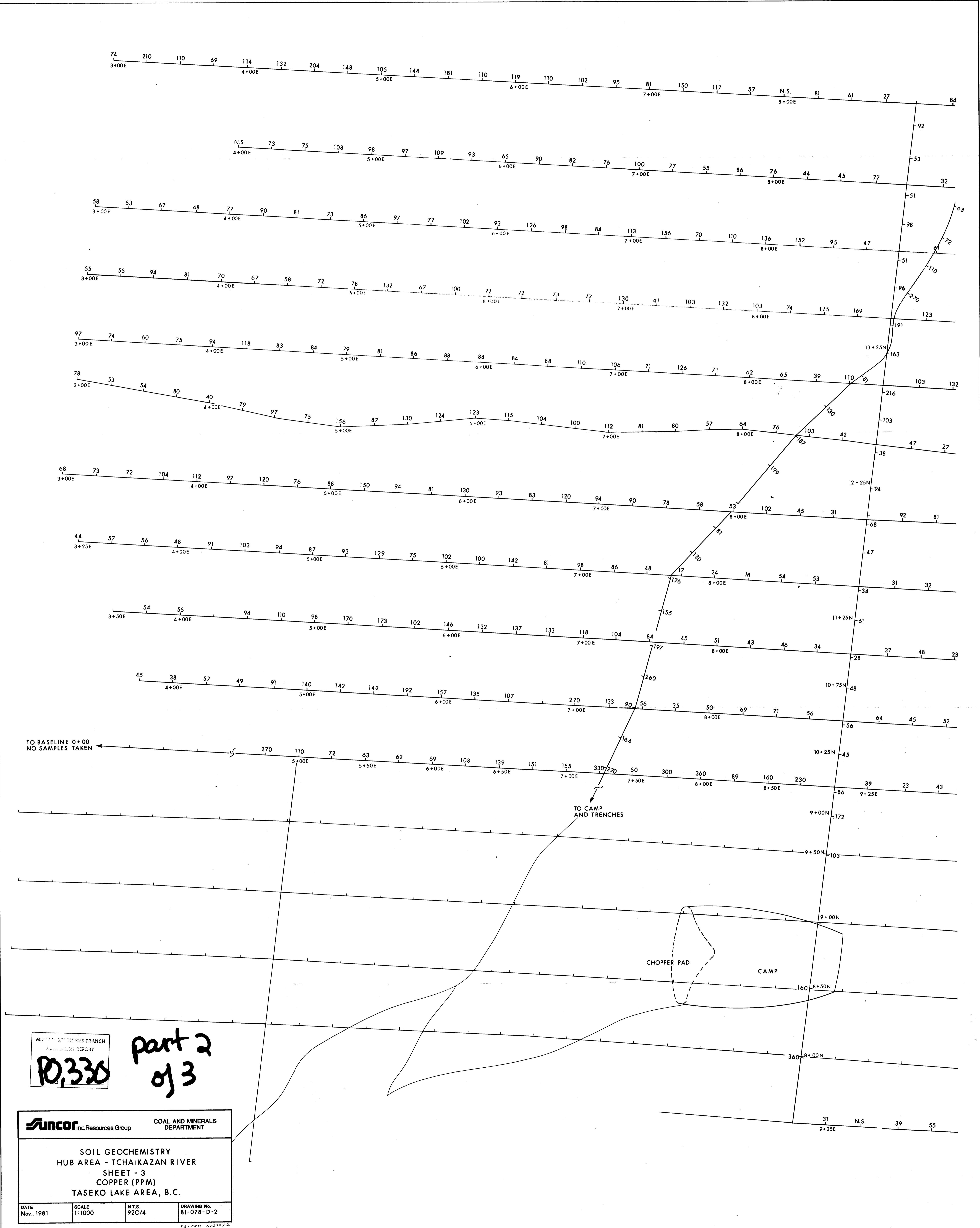
- LEGEND:
- * CUTLINE
 - ± SWAMP AND/OR MUSKEG
 - GR ROCK SAMPLE LOCATION

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
0,330

50 25 10 5 0 25 50 METERS

part 2 of 3

Suncor inc. Resources Group		COAL AND MINERALS DEPARTMENT	
SOIL GEOCHEMISTRY HUB AREA - TCHAIKAZAN RIVER SHEET - 4 COPPER (PPM) TASEKO LAKE, BRITISH COLUMBIA			
DATE AUGUST, 1981	SCALE 1:1000	N.T.S. 940/4	DRAWING No. 81-078-D



MINERAL RESOURCES BRANCH
 PRELIMINARY REPORT
 10,330

part 2
 of 3

Suncor inc. Resources Group COAL AND MINERALS DEPARTMENT

SOIL GEOCHEMISTRY
 HUB AREA - TCHAIKAZAN RIVER
 SHEET - 3
 COPPER (PPM)
 TASEKO LAKE AREA, B.C.

DATE Nov, 1981	SCALE 1:1000	N.T.S. 920/4	DRAWING No. 81-078-D-2
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REVISIONS AUTHORIZED

IRON MAIDEN®
 U.S. PATENT 4,139,248 1978
 CANADIAN PATENT 1065729 1979

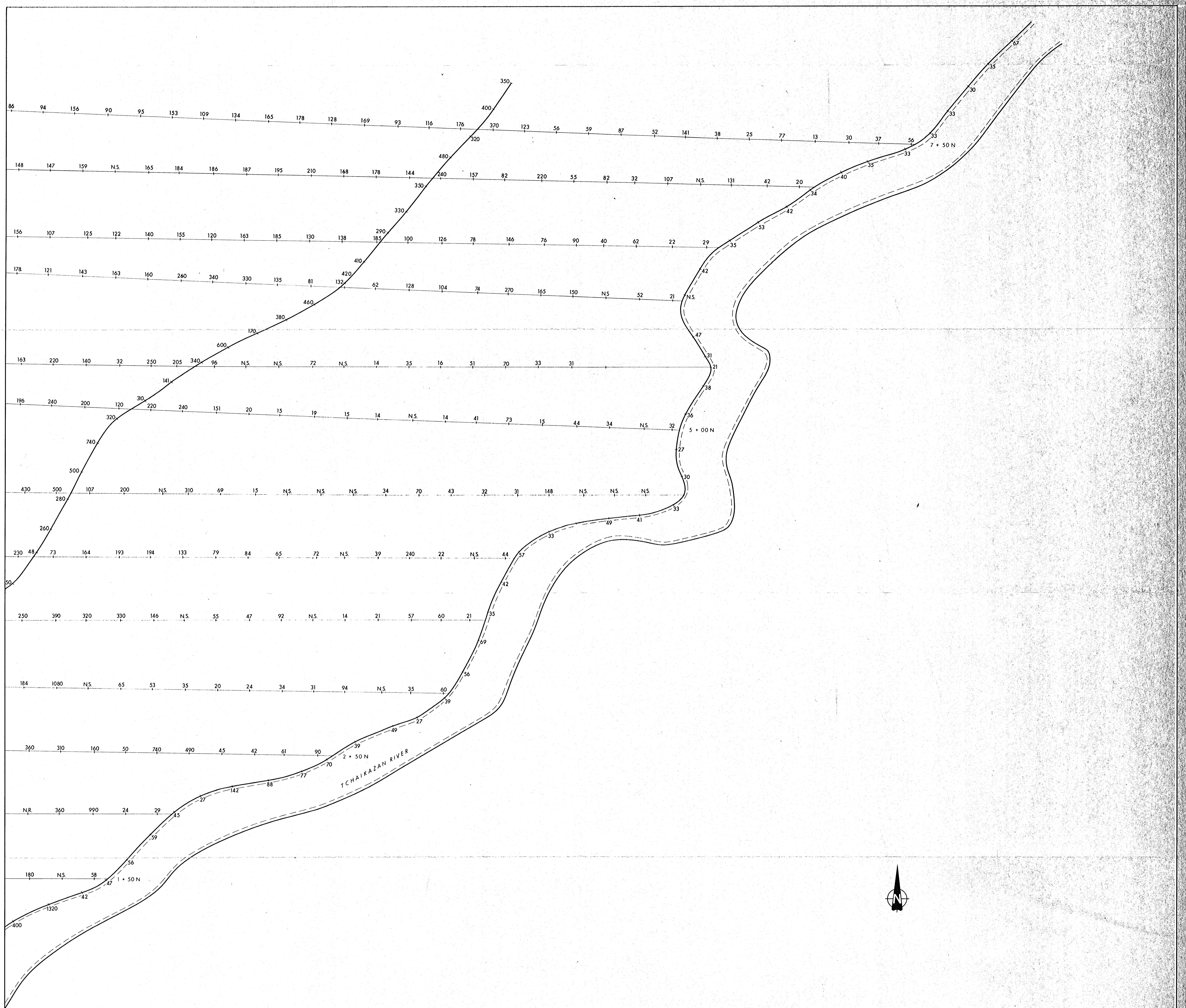
82-004 (10F2)



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IM 42



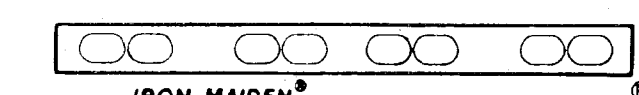
MINERAL RESOURCES BRANCH
 ASSESSMENT REPORT
10,336

part 2
of 3

EAST HALF



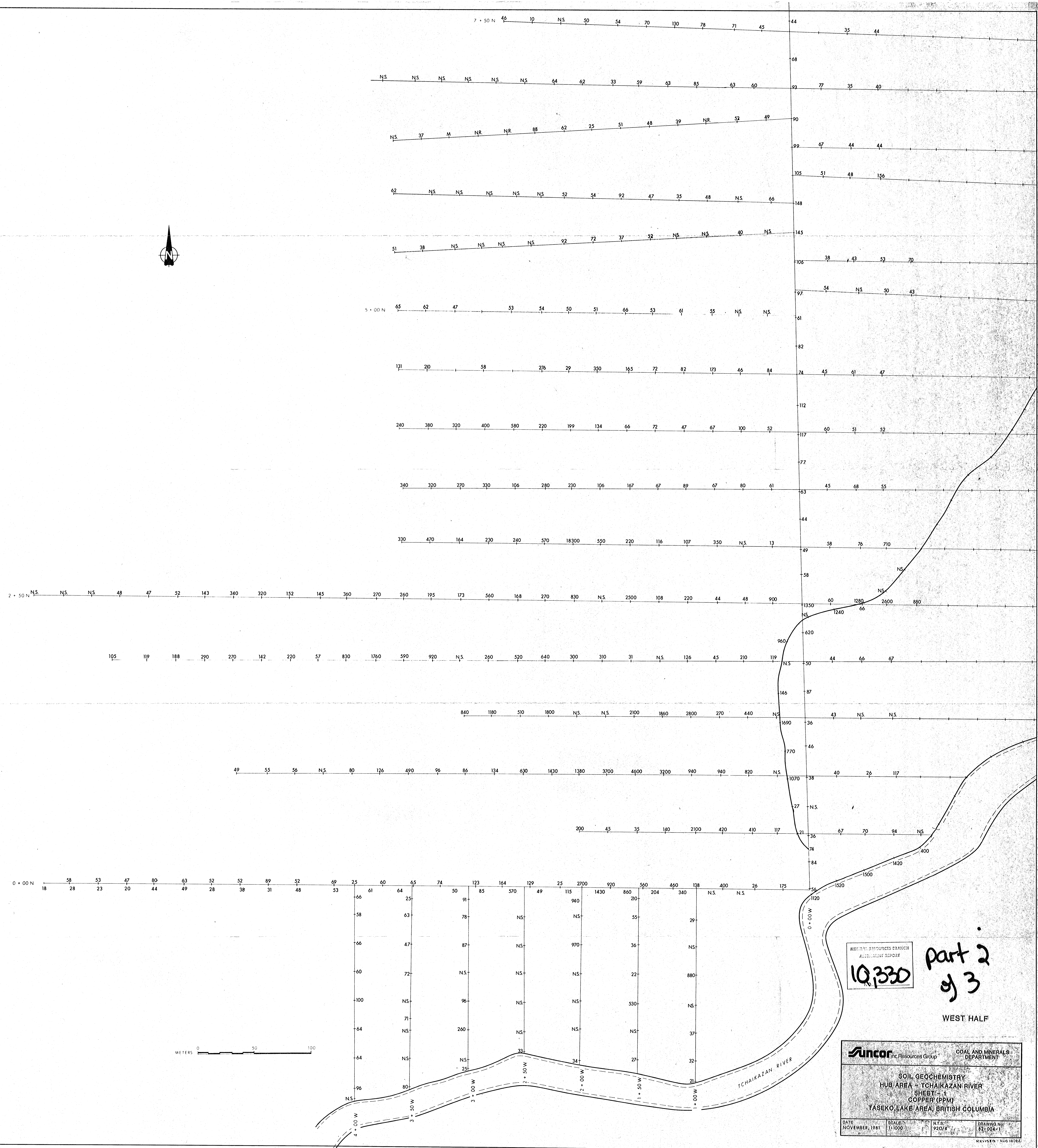
Suncor The Resources Group		COAL AND MINERALS DEPARTMENT	
SOIL GEOCHEMISTRY HUB AREA - TCHAIKAZAN RIVER SHEET - 2 COPPER (PPM) TASEKO LAKE AREA, BRITISH COLUMBIA			
DATE: NOVEMBER, 1981	SCALE: 1:1000	MT.S. 92074	DRAWING NO. 82-004-2
REVISED - AUG 1982			



U. S. A. PATENT 4139 248-1979
 CANADIAN PATENT PENDING
 OTHER FOREIGN PATENTS PENDING
 (TM) 1977



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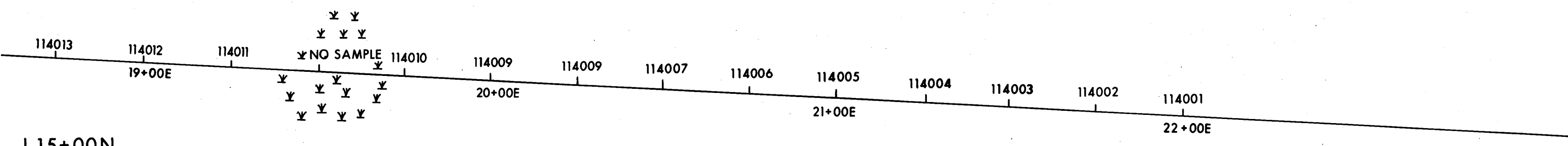
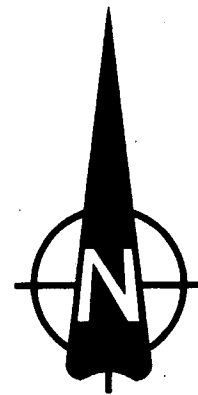
MINERAL RESOURCES BRANCH
 ALIGNMENT REPORT
 10,330

Part 2
 of 3

WEST HALF

Suncor The Resources Group		COAL AND MINERALS DEPARTMENT	
SOIL GEOCHEMISTRY HUB AREA - TCHAIKAZAN RIVER SHEET - 1 COPPER (PPM) TASEKO LAKE AREA, BRITISH COLUMBIA			
DATE NOVEMBER, 1981	SCALE 1:1000	BY J20/4	DRAWING NO. 82-004-1
REVISED - AUG 1982			

IRON MAIDEN®
U.S. PATENT 4,139,248 1979
CANADIAN PATENT PENDING
OTHER FOREIGN PATENTS PENDING
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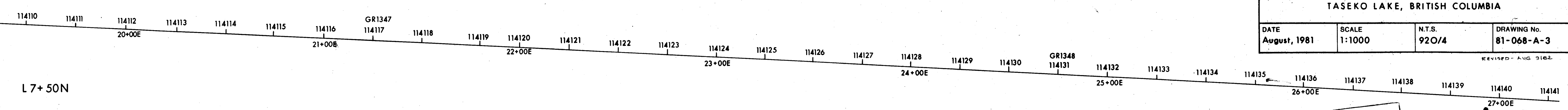
L15+00N

Suncor Inc. Resources Group COAL AND MINERALS DEPARTMENT

SOIL GEOCHEMISTRY
HUB AREA - TCHAIKAZAN RIVER
SHEET - 6
SAMPLE LOCATIONS
TASEKO LAKE, BRITISH COLUMBIA

DATE August, 1981	SCALE 1:1000	N.T.S. 920/4	DRAWING NO. 81-068-A-3
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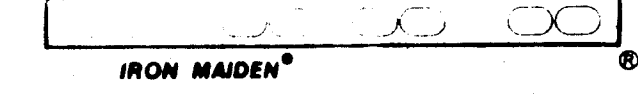
REVISED AUG 1982



L7+50N

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
10330
NO.

part 2
of 3

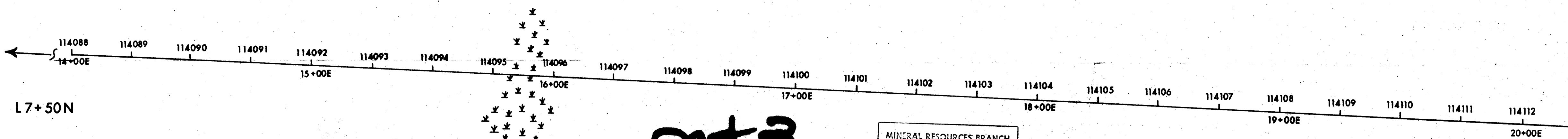
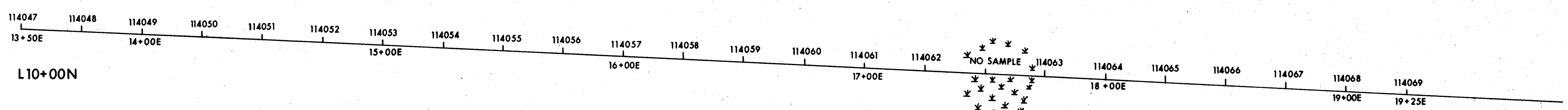
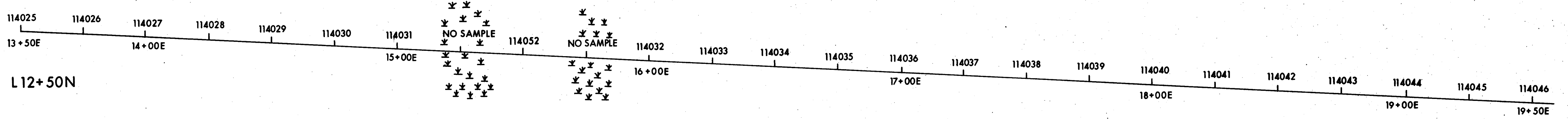
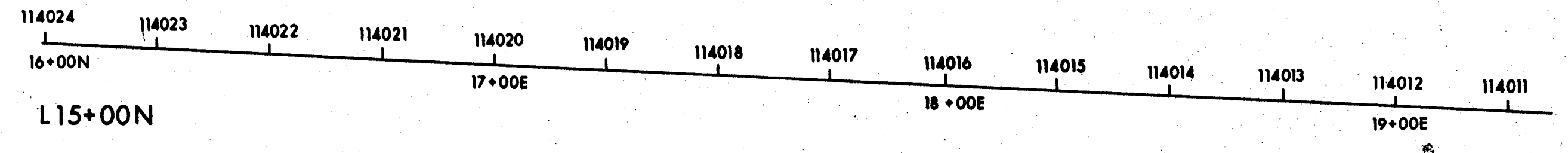


U.S.A. PATENT 4139 248-1979
CANADIAN PATENT PENDING
OTHER FOREIGN PATENTS PENDING



1977

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Part 2 of 3

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
10,330
N.C.

		COAL AND MINERALS DEPARTMENT	
SOIL GEOCHEMISTRY HUB AREA - TCHAIKAZAN RIVER SHEET - 5 SAMPLE LOCATIONS TASEKO LAKE, BRITISH COLUMBIA			
DATE August, 1981	SCALE 1:1000	N.T.S. 920/4	DRAWING No. 81-068-A-2

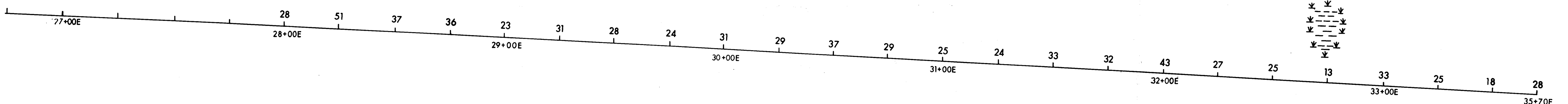
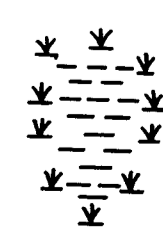
LEGEND
 * - CUTLINE
 Ψ - SWAMP AND/OR MUSKEG
 GR - ROCK SAMPLE LOCATION



Suncor Inc. Resources Group		COAL AND MINERALS DEPARTMENT	
SOIL GEOCHEMISTRY HUB AREA - TCHAIKAZAN RIVER SHEET - 7 COPPER (PPM) TASEKO LAKE, BRITISH COLUMBIA			
DATE AUG. 1981	SCALE 1:1000	N.T.S. 920/4	DRAWING No. 82-076-1

MINERAL RESOURCES BRANCH
 ASSESSMENT REPORT
 No. 10330

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 of 3





81-068-A (1 of 3)

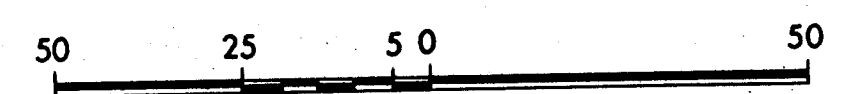
U. S. A. PATENT 4139 248-1979
CANADIAN PATENT PENDING
OTHER FOREIGN PATENTS PENDING



1977

IRON MAIDEN SYSTEMS LTD. CALGARY, ALBERTA, CANADA

LEGEND
*-CUTLINE
Y-SWAMP AND/OR MUSKEG
GR-ROCK SAMPLE LOCATION

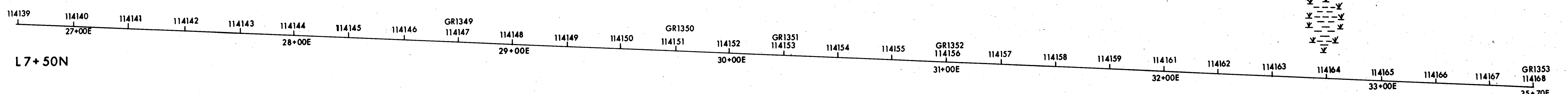


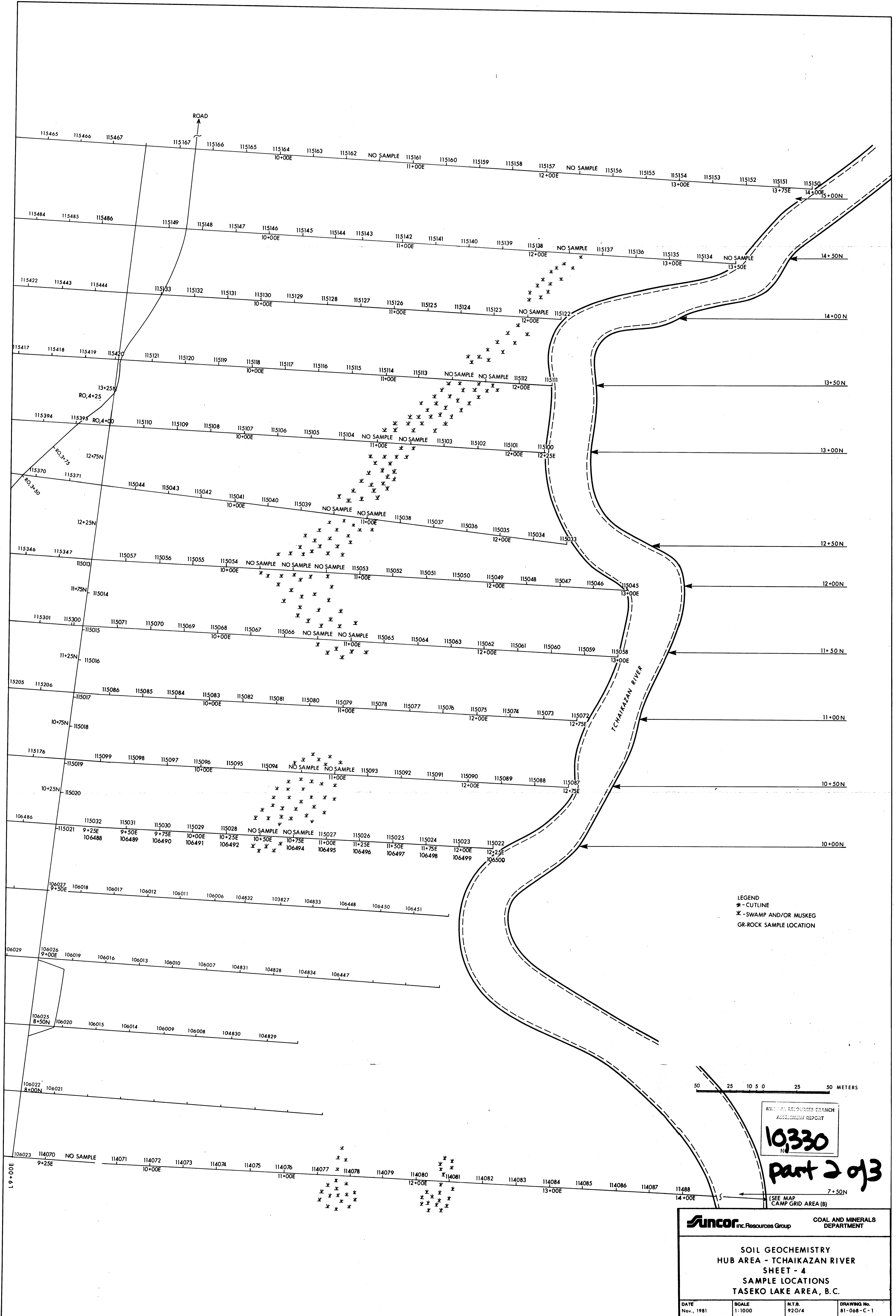
Suncor Inc. Resources Group		COAL AND MINERALS DEPARTMENT	
SOIL GEOCHEMISTRY HUB AREA - TCHAIKAZAN RIVER SHEET - 7 SAMPLE LOCATIONS TASEKO LAKE, BRITISH COLUMBIA			
DATE	SCALE	N.T.S.	DRAWING NO.
AUG. 1981	1:1000	920/4	81-068-A-1

10,330

Part 2 of 3

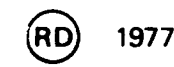
REVISED - AUG 518L





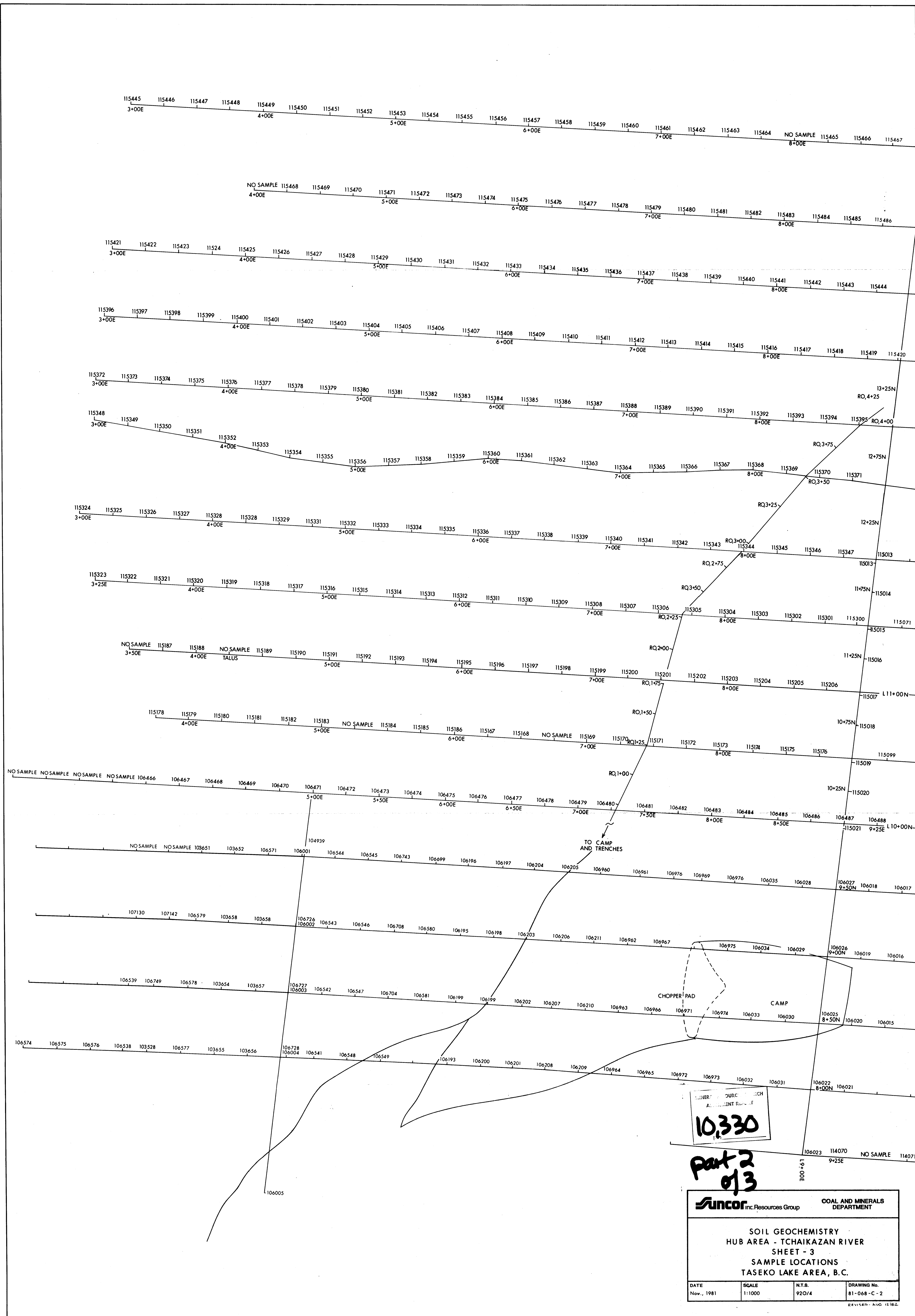


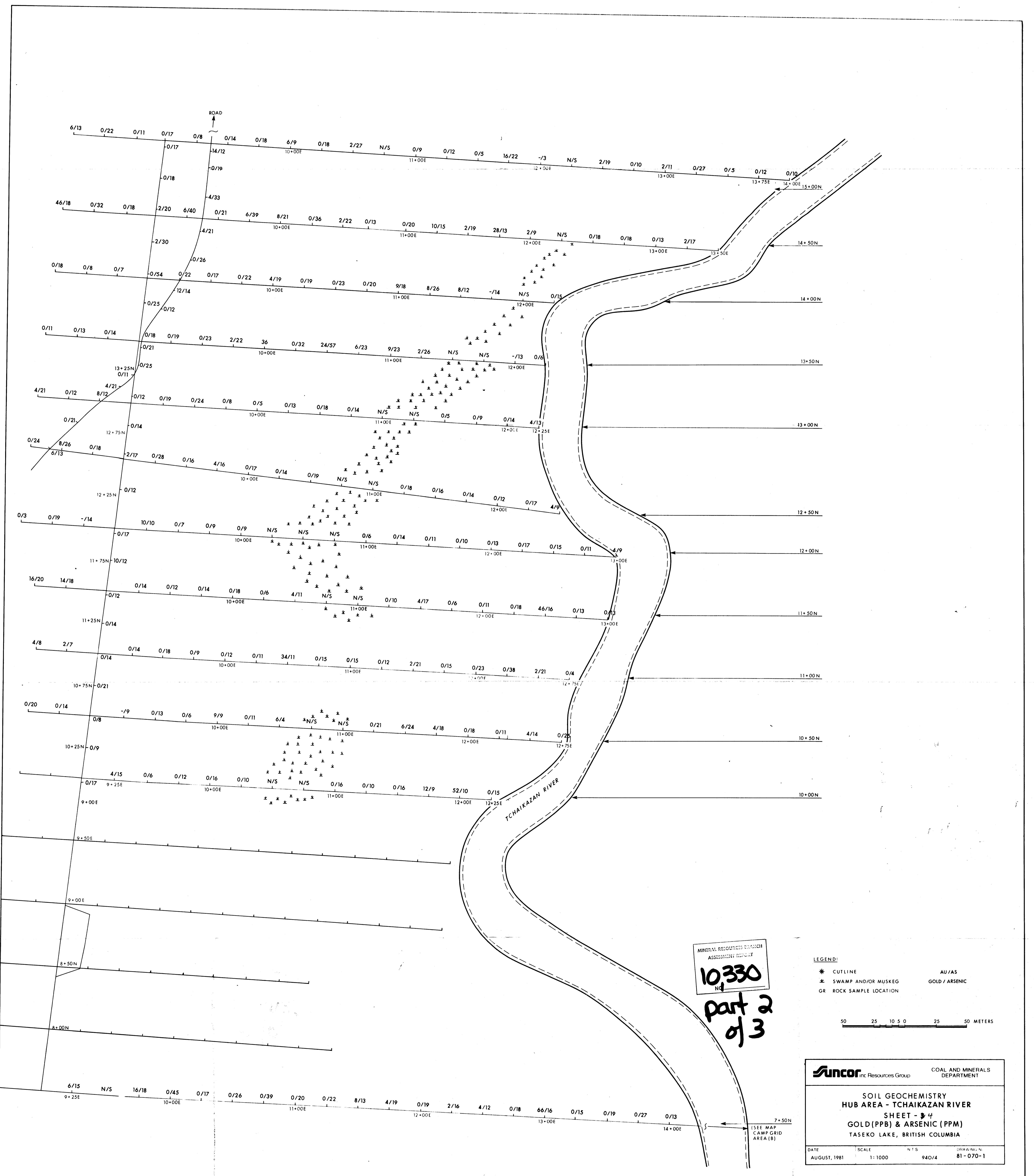
U.S.A. PATENT 4139 248-1979
CANADIAN PATENT PENDING
OTHER FOREIGN PATENTS PENDING



IRON MAIDEN SYSTEMS LTD. CALGARY, ALBERTA, CANADA

81-068-C (2 of 2)





MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
10330
No
part 2
of 3

LEGEND:
* CUTLINE
+ SWAMP AND/OR MUSKEG
GR ROCK SAMPLE LOCATION
AU/AS
GOLD / ARSENIC

50 25 10 5 0 25 50 METERS

Suncor Inc Resources Group COAL AND MINERALS DEPARTMENT

SOIL GEOCHEMISTRY
HUB AREA - TCHAIKAZAN RIVER
SHEET - 34
GOLD (PPB) & ARSENIC (PPM)
TASEKO LAKE, BRITISH COLUMBIA

DATE: AUGUST, 1981 SCALE: 1:1000 N.T.S. SHEET NO.: 81-070-1



TO BASELINE 0+00
NO SAMPLES TAKEN

TO CAMP AND TRENCHES

CHOPPER PAD

CAMP

Part 2
of 3

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
10330
6/15 N/S 16/18 0/45
9+25E

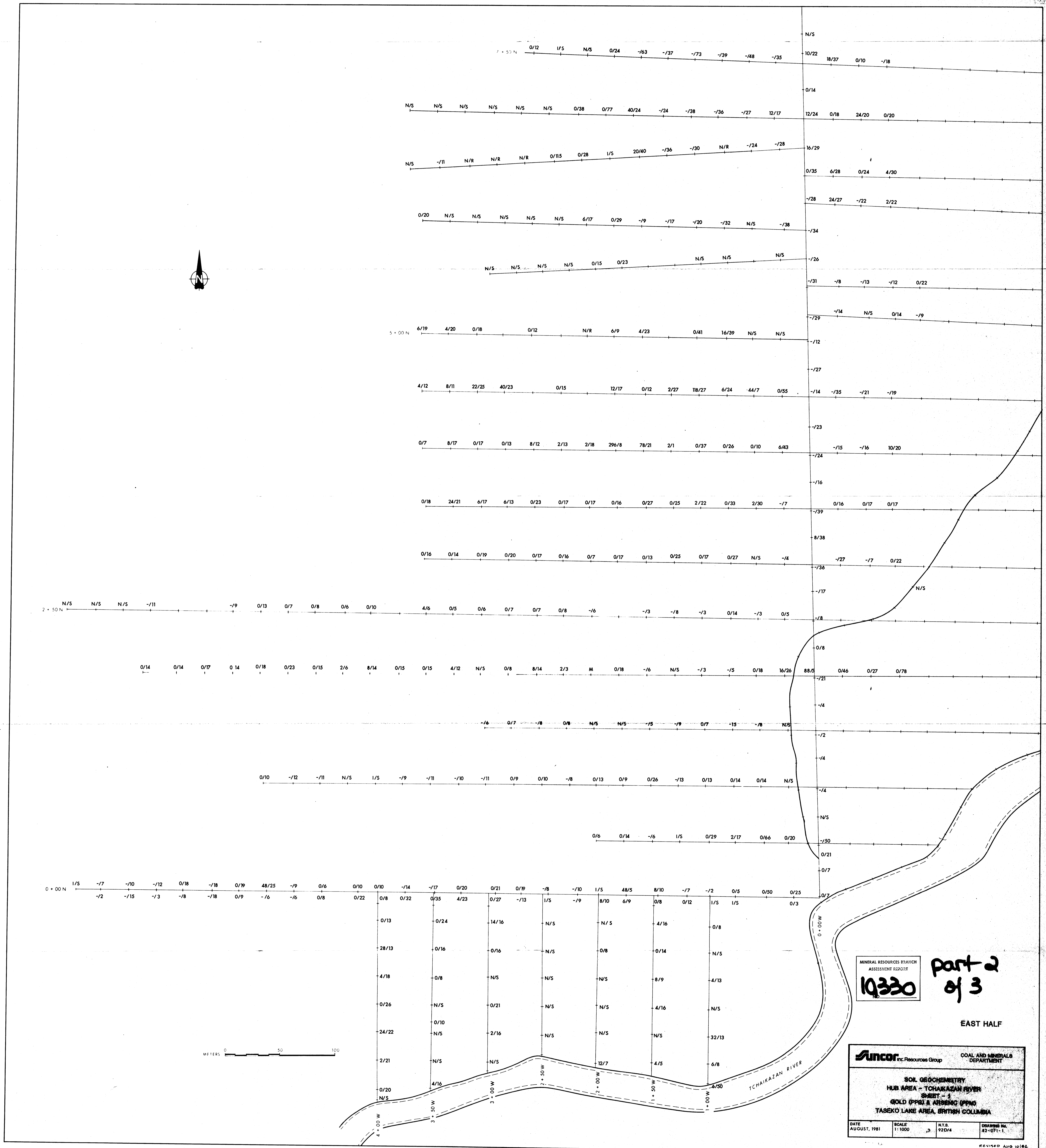
		COAL AND MINERALS DEPARTMENT	
SOIL GEOCHEMISTRY HUB AREA - TCHAIKAZAN RIVER SHEET - 3 GOLD (PPB) & ARSENIC (PPM) TASEKO LAKE AREA, B.C.			
DATE	SCALE	N.T.S.	DRAWING No.
Nov., 1981	1:1000	920/4	81-070-2

IRON MAIDEN®
 U. S. A. DESIGN PATENT 4139248 1979
 CANADIAN IND. DESIGN REG. NO. 42524
 CANADIAN PATENT 1065729 1979

82-071
 ®

IRON MAIDEN® SYSTEMS LTD. CALGARY, ALBERTA, CANADA

IM 42



MINERAL RESOURCES BRANCH
 ASSESSMENT REPORT
19330
 Part 2
 of 3

EAST HALF

Suncor inc. Resources Group COAL AND MINERALS DEPARTMENT

SOL. GEOCHEMISTRY
 HUB AREA - TCHAKAZAN RIVER
 SHEET - 1
 GOLD (PPM) & ARSENIC (PPM)
 TASEKO LAKE AREA, BRITISH COLUMBIA

DATE AUGUST, 1981	SCALE 1:1000	N.T.S. 92D/4	DRAWING NO. 82-071-1
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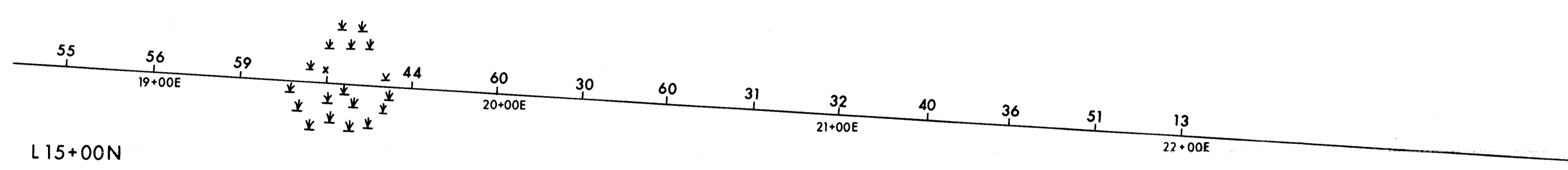
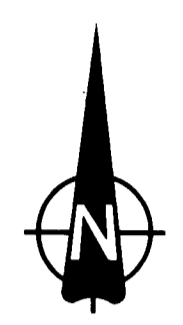
REVISED AUG 10/82

IRON MAIDEN[®]
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CANADIAN IND. DESIGN REG. NO. 42524
CANADIAN PATENT 1065729 1979

82-085(3 of 3)
®

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IM 42

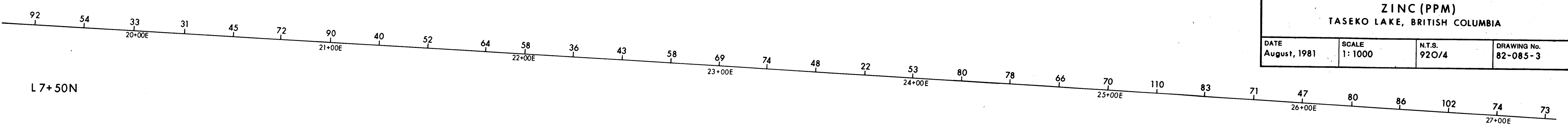


L15+00N

MINERAL RESOURCES DIVISION
ASSIGNMENT REPORT
10330

part 2
of 3

Suncor Inc. Resources Group		COAL AND MINERALS DEPARTMENT	
SOIL GEOCHEMISTRY HUB AREA - TCHAIKAZAN RIVER SHEET - 6 ZINC (PPM) TASEKO LAKE, BRITISH COLUMBIA			
DATE August, 1981	SCALE 1:1000	N.T.S. 920/4	DRAWING No. 82-085-3



L7+50N

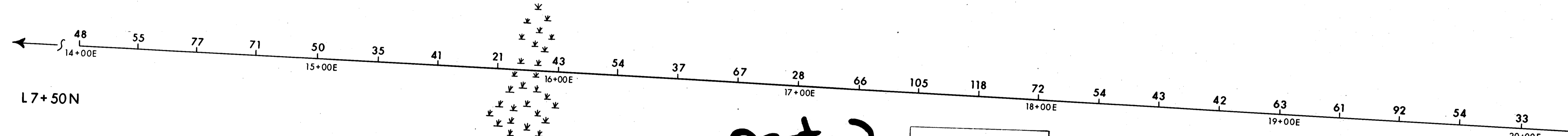
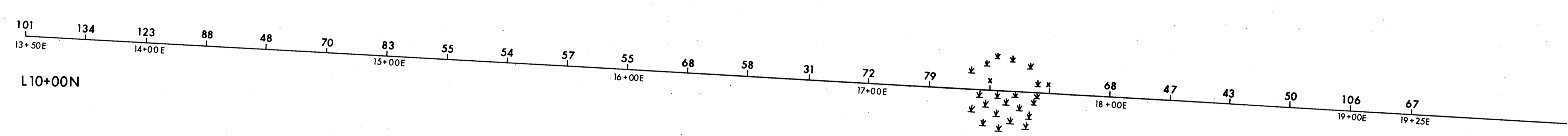
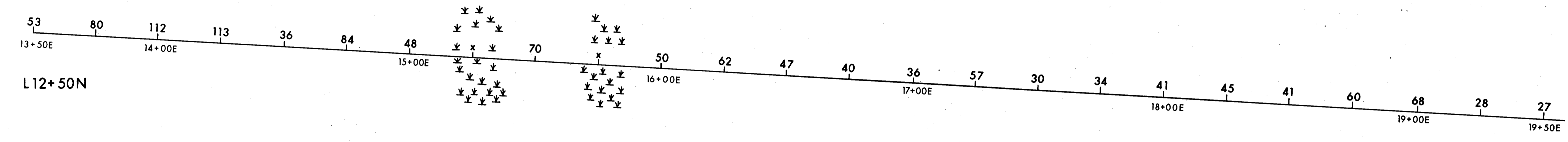
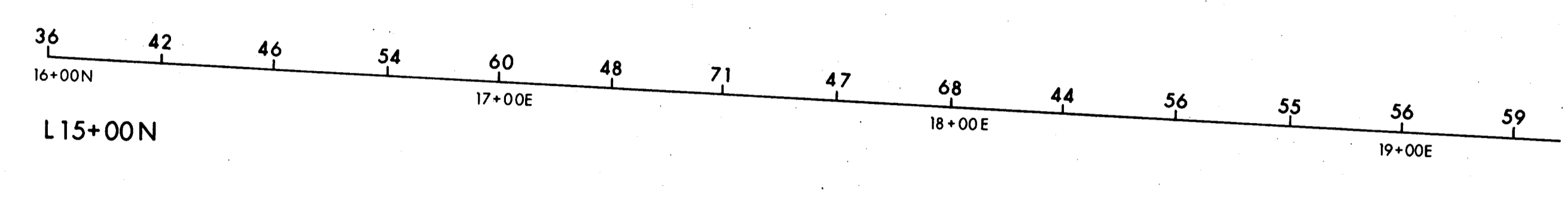
82-085(2 of 2)

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CANADIAN IND. DESIGN REG. NO. 42624
CANADIAN PATENT 1065729 1979



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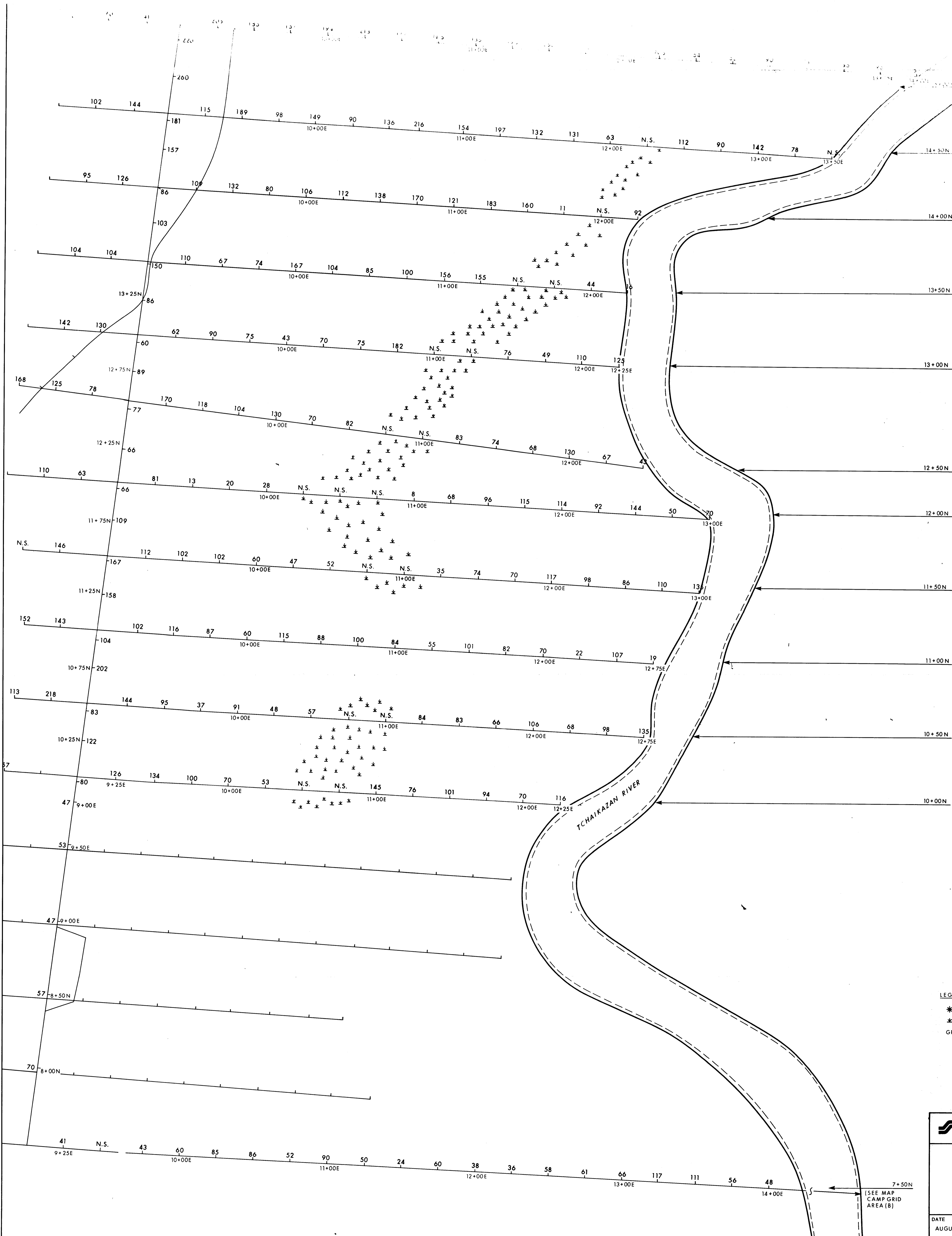
IM 42



Part 2 of 3

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
10330

Suncor Inc. Resources Group		COAL AND MINERALS DEPARTMENT	
SOIL GEOCHEMISTRY HUB AREA - TCHAIKAZAN RIVER SHEET - 5 ZINC (PPM) TASEKO LAKE, BRITISH COLUMBIA			
DATE August, 1981	SCALE 1:1000	N.T.S. 920/4	DRAWING NO. 82-085-2



MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
10,330

- LEGEND:
- * CUTLINE
 - ✱ SWAMP AND/OR MUSKEG
 - GR ROCK SAMPLE LOCATION

50 25 10.5 0 25 50 METERS

Part 2 of 3

Suncor Inc. Resources Group		COAL AND MINERALS DEPARTMENT	
SOIL GEOCHEMISTRY HUB AREA - TCHAIKAZAN RIVER SHEET - 4 ZINC (PPM) TASEKO LAKE, BRITISH COLUMBIA			
DATE AUGUST, 1981	SCALE 1:1000	N.T.S. 940/4	DRAWING No. 81-078-B-1

(SEE MAP
CAMP GRID
AREA (B))

