

5192

82M/13E

C.K. OPTION # 5192

Geochemical and Drilling Report on
CK 1 - CK 60 and RAFT 1 - RAFT 40 Claims

N.T.S. 82 M 13/E

Kamloops Mining Division

D.B. Petersen

October, 1974

82M/13E

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

NO. 5192 MAP

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DRAWINGS :

SOIL SAMPLING AND DRILL HOLES

#1 COPPER	GC 8304-1	in pocket (a)
#2 "	GC 8304-2	in pocket (b)

SOIL SAMPLING

#3 LEAD, ZINC	GC 8303-1	in pocket (c)
#4 "	GC 8303-2	in pocket (d)

#5 CLAIM MAP	DWG. L-6222	page 10
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DRILL LOGS :

DDH 1 - 4	Back
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C.K. OPTION

Geochemical and Drilling Report on
CK 1 - CK 60 and RAFT 1 - RAFT 40 Claims

I. LOCATION AND ACCESS

The CK 1 - CK 60 and RAFT 1 - RAFT 40 claims lie at approximate geographic coordinates $51^{\circ} 55' N$, $119^{\circ} 35' W$. For details of the claim configuration see Figure 1.

Access is by logging road leading northwards off Highway 5, $2\frac{1}{2}$ miles East of the village of Clearwater. This road continues past Silence Lake, across Richie Creek, and continues northwards through the claim group.

II. CLAIM DETAILS

The following data is applicable to the claim group described.

<u>Claim No's</u>	<u>Record Numbers</u>	<u>Date of Recording</u>
CK 1 thru 20	127072 thru 127901	18 October 1973
CK 21 " 60	127212 " 127251	5 November 1973
RAFT 1 " 22	127256 " 127277	13 November 1973
RAFT 23 " 40	127286 " 127305	27 November 1973

III. GEOCHEMICAL SOIL SAMPLING PROCEDURE

Sampling lines were run in an East-West direction and spaced 400 ft. apart in some areas and 800 ft. apart in others. Sample stations along these lines were spaced 100 ft. on some lines and 200 ft. apart on others. The lines were run by pace and compass. At each sample station a shovel was used to dig to the 'B' horizon and an approximate 8 ounce sample collected from it. The sample was placed in a Kraft paper envelope and numbered with the sample number and then shipped to Vancouver to the Rio Tinto Canadian Exploration Laboratory for analyzing. A total of 1759 samples were taken.

IV. LABORATORY PROCEDURE

At the laboratory each sample was dried in an oven and seived to -80 mesh. 0.6 grams of -80 mesh fraction was added to 2 mls. nitric and 1 ml. perchloric acid in a test tube and heated on a H₂O bath for 2 hours. 9 mls. of H₂O was added to the sample which was then analyzed for Cu, Pb and Zn on a Techtron AA5 atomic absorption spectrophotometer. Analysis was done by the company analyst, Mr. E. Paski, Jr.

V. GEOCHEMICAL SOIL SAMPLING RESULTS

The results of the analyses are shown on the attached map.

VI. BASELINE

A baseline 2000 feet long and 3 feet wide was cut by Amex Exploration Services Limited. Its location is shown on the attached map.

VII. BULLDOZER ROADS

A D-7 bulldozer was used to make diamond drill access roads. The location of the roads is shown on the attached map.

VIII. DIAMOND DRILLING

A total of 7 diamond drill holes were drilled by Connors Drilling Limited of Vancouver using BQ wireline equipment. The holes intersected alternating sequences of pegmatite and biotite gneiss. The logs of the holes are enclosed. All the core from the holes is stored at the drillsite of CK-4B.

Diamond drill holes CK-2A and CK-2B were drilled from the same set-up but at different dips. Similarly, CK-3A and CK-3B were drilled from the same set-up, as well as CK-4A and CK-4B.

A total of 1268 feet were drilled.

IX. EVALUATION OF RESULTS

All the work carried out in the current programme, though earlier indicating extensive anomalous zones conformable to the regional strike and associated with exposed sulphides, now clearly indicates that the zinc and lead sulphides are present in boulders overlying a till. For this reason it is concluded that the sulphides are not derived from a source within or near the anomalies which are caused by the boulders themselves, and hence treatment such as contouring is rendered superfluous.

The concentration, abundance, uniformity and size of the sulphide boulders imply that they are derived from a single source that represents a significant target. It is not known where such a source may lie though it is considered most likely that it be to the north or northeast - the most obvious up-ice directions. Weaker soil anomalies elsewhere on the property are unlikely to reflect the source.

It is planned that the stream pattern to the north and east be sampled in an attempt to find a source of the boulders. It is believed probable that stream sampling is likely to detect bedrock mineralization and be less affected by spurious anomalies caused sulphide bearing boulders.

Stream sampling will extend beyond the present claim boundaries and is to be commenced immediately.

X. STATEMENT OF PERSONNEL

The following personnel worked on the CK 1 - CK 60,
and RAFT 1 - RAFT 40 claims.

<u>Name</u>	<u>Occupation</u>	<u>Period of Work</u>		<u>Number</u>	<u>Salary</u>	<u>Total</u>
		from	to	of days	Rate	Salary
U. Paltser	Geochemical soil sampler	16 May	18 May	3	\$36/day	\$108
		22 May	25 May	4		144
		28 May	1 June	5		180
		5 June	8 June	4		144
		11 June	17 June	7		252
		20 June	23 June	4		144
H. Willson	Geochemical soil sampler	22 May	25 May	4	\$32/day	\$128
		28 May	1 June	5		160
		4 June	8 June	5		160
		11 June	17 June	7		224
		20 June	23 June	4		128
D. Kraynick	Geochemical soil sampler	4 June	8 June	5	\$34.50/ day	\$172
		11 June	17 June	7		242
		20 June	25 June	6		207
R. Talbot	Geochemical soil sampler	4 June	8 June	5	\$29/day	\$145
		11 June	17 June	7		203
		23 June	26 June	4		116
S. Schwartz	Geochemical soil sampler	4 June	8 June	5	\$23/day	\$115
		11 June	14 June	4		92
		17 June		1		23
		20 June	25 June	6		138

<u>Name</u>	<u>Occupation</u>	<u>Period of Work</u>		<u>Number of days</u>	<u>Salary Rate</u>	<u>Total Salary</u>
		<u>from</u>	<u>to</u>			
D. Petersen	Geochemical soil sampler	16 May	18 May	3	\$62/day	\$186
		22 May	25 May	4		248
		28 May	1 June	5		310
		5 June	8 June	4		248
D. Petersen	Geologist	9 June	12 June	4		248
		15 June	21 June	7		434
		25 June	29 June	5		310
		2 July	5 July	4		248
D. Petersen	Report Preparation	26 Aug.		1		62
		29 Aug.	30 Aug.	2		124
		16 Sept.	18 Sept.	3		186

XI. STATEMENT OF COSTS

1. Geochemical Soil Sampling

Total Salaries	\$4,217
Board & lodging 118 man days @ \$13.50/per man day	1,593
Truck Rental - Rio truck 27 days @ \$8.00/day	216
- Redhawke Rental 1st June - 30th June.	450
Gasoline	<u>158</u>
Total....	\$6,634

2. Laboratory Analysis

Analyzing 1759 samples @ \$2.85/sample. . \$5,013

3. Total Geochemical Costs per sample

1. and 2. = \$11,647

ie. $\$11,647 \div 1759 \text{ samples} = \6.62 per sample

4. Diamond Drilling

Drilling 1,268 feet @ \$16.31/foot.	\$20,686.81
Salary D.B. Petersen for 20 days	1,240
Board & lodging for D.B. Petersen for 20 days @ \$13.50/day	<u>270</u>
	\$22,196

ie. $\$22,196 \div 1268 \text{ feet} = \17.50 per foot.

5. Bulldozer Roads

4,300 linear feet @ 30.6¢/linear foot \$ 1,316

6. Report Preparation

Salary of D. Petersen for 6 days. \$ 372

7. Linecutting

2,000 feet baseline @ \$0.879/feet \$1,759

8. Grand Total

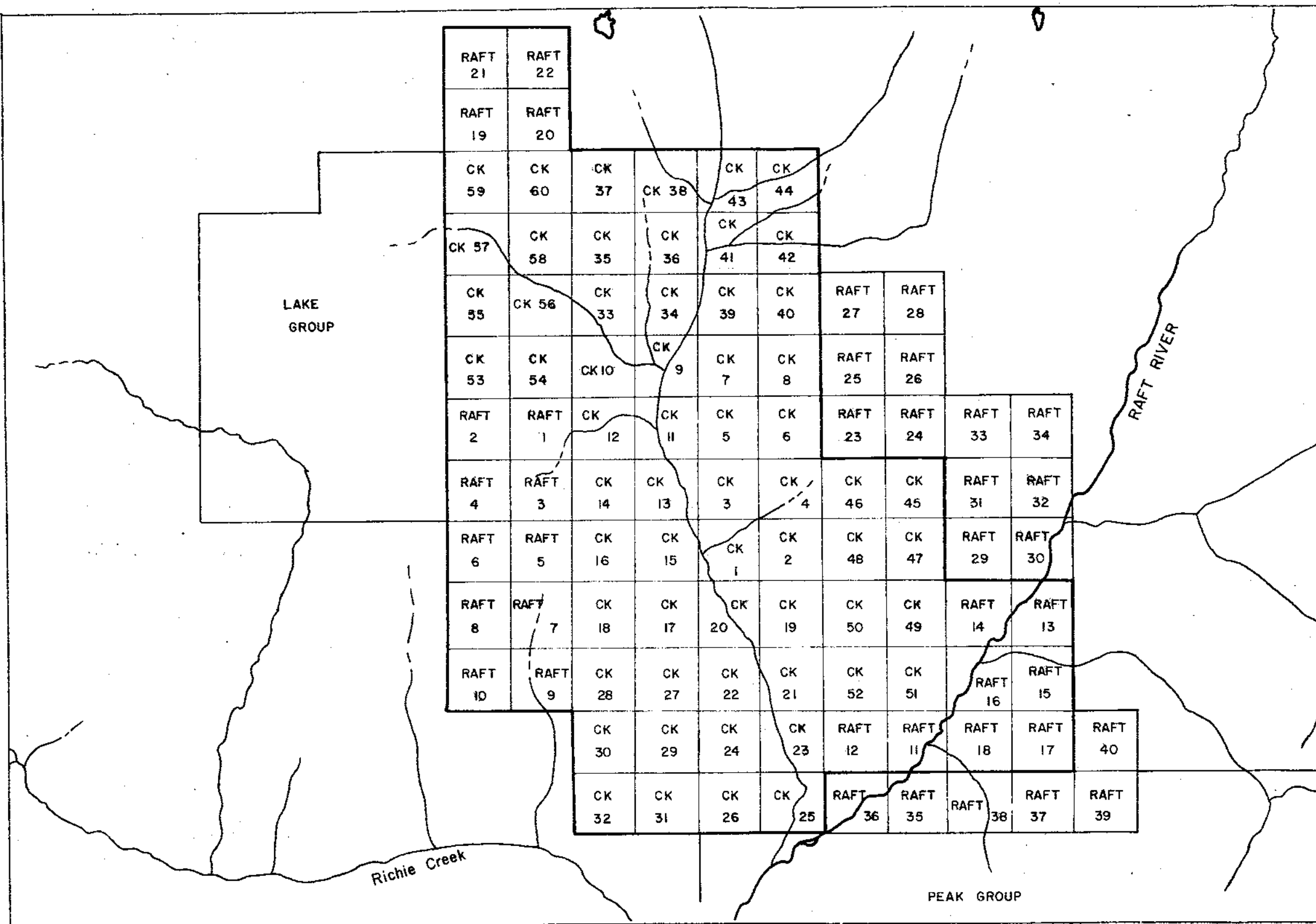
Items 1. through 7.

Total.....\$37,290

DBP:asm

October 7, 1974
Vancouver Office*D.B. Petersen*

D.B. Petersen



119°30'

51°55'

Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. **5192** MAP **#5**



N.T.S.
 82-M-13

B.B. Peterson



RIO TINTO CANADIAN EXPLORATION LTD.
 CK OPTION CLEARWATER AREA, BC.
 CLAIM MAP
 CK and RAFT CLAIMS
 AUG. 1974 U.P./y.m. DWG. L-6222

RIO TINTO CANADIAN EXPLORATION LIMITED

DIAMOND DRILL RECORD

HOLE NO : CK-1

LOCATION : 28 south 8320 East

AZIMUTH : 90°

PROPERTY : C.K. Option

DIP : -45°

LENGTH : 300 ft.

ELEVATION : +3,500 ft.

Claim No.: CK 50

STARTED : 8 June 1974

CORE SIZE : BQ W/line

DATE LOGGED : 10 June -

SECTION : 28 South

16 June '74.

COMPLETED : 15 June 1974

DIP TESTS : -

LOGGED BY : D.B. Petersen

PURPOSE : To test geochemical soil anomaly & mineralization in trenches.

CONTRACTOR: Connors Drilling Ltd.

FOOTAGE		DESCRIPTION	SAMPLE NO	FOOTAGE		LENGTH	% Pb	% Zn				
from	to			from	to							
0	8	Overburden										
8	30	ALTERNATING BIOTITE GNEISS & PEGMATITE.	C24101	8	20	12ft	<.01	.02				
		GNEISS 50% quartz, ± 50% dark opaque mafic (biotite ?) Gneissosity ± 60% to core axis. PEGMATITE ± 95% quartz, ± 5% green chlorite. ± 60% pegmatite veins & stringers parallel to gneissosity, ± 40% random orientation. No cross-cutting relationship.										
		Pyrrhotite ± 4%, in veinlets ± 1/8 thick and sparsely disseminated in gneiss, very sparse disseminated pyrrhotite in pegmatites. Very minor disseminated chalcopyrite.										
		30.0 1/2" veinlet pyrrhotite										
30	43	PEGMATITE. Occasional knots of chlorite	C24103	30	40	10	.01	.01				
		Minor disseminated pyrrhotite, also in stringers.	C24104	40	50	10	.01	.01				
43	53	GNEISS, gneissosity @ 30% to c/axis										
53	73	GNEISS, gneissosity @ 70% to c/axis										
73	77	PEGMATITE; occasional relict gneiss										
77	98	ALTERNATING PEGMATITE & GNEISS, Pegmatite contains disseminated bands of chlorite										
		Occasional stringers of orthoclase.										

D.B. Petersen

RIO TINTO CANADIAN EXPLORATION LIMITED

DIAMOND DRILL RECORD

HOLE No:

C.K.- 1

PAGE No:

Two

FOOTAGE		DESCRIPTION	SAMPLE No	FOOTAGE		LENGTH	%Pb	%Zn	%Cu	oz Au	oz Ag
from	to			from	to						
98	118	PEGMATITE, moderate chlorite, minor orthoclase									
118	135	GNEISS, gneissosity @ 45° to c/axis									
135	169	ASSIMILATED GNEISS, pegmatite-gneiss contact zone. Pegmatite displaying relict gneissic texture - Biotite altered to chlorite in varying degrees of intensity. Gneissosity @ varying angles to c/axis.									
		167.5 - 169.0 50 - 70% massive pyrrhotite with minor Zns cpy 70% to core axis	C24105	167.5	169.0	1.5	0.01	0.52	0.05	Tr	Tr
169	185.5	PEGMATITE, composed of ± 60% white felspar ± 40% quartz. V. minor chlorite GNEISS, gradational contacts									
185.5	195.5	PEGMATITE 191 - 192 gneiss									
195.5	199.5	GNEISS, gneissosity @ 45° to core axis.									
199.5	201	PEGMATITE									
201	215	GNEISS, gneissosity @ 70° to core axis. At 205 & 209 ft. evidence of folding. In patches, weak assimilation by pegmatites.									
215	217	Andesite dyke very finely grained									
217	226	GNEISS, gneissosity @ 45° to core axis. In patches, weak assimilation.									
226	300	PEGMATITE, ± 50% white felspar, ± 40% quartz Very minor disseminated pink garnet Occasional stringers of pyrrhotite.									
	300	END OF HOLE									

As Peterson

RIO TINTO CANADIAN EXPLORATION LIMITED

LOCATION : 8,065 S 5,015 E or .. DIAMOND DRILL RECORD HOLE NO : CK-2B
 AZIMUTH : 70° 866 S Drill Base Line PROPERTY : C.K. Option
 DIP : -48° LENGTH : 445 feet ELEVATION : ±3,850 ft Claim No.: CK # 1
 STARTED : 20 June 1974 CORE SIZE : BQ W/Line DATE LOGGED : 25-27 June SECTION :
 COMPLETED : 27 June 1974 DIP TESTS : @ 307' = 58° LOGGED BY : D.B. Petersen
 PURPOSE : To test geochemical anomaly & southern projection of mineralized showings on West side of Creek.
 CONTRACTOR: Connors Drilling Ltd.

FOOTAGE		DESCRIPTION	SAMPLE NO	FOOTAGE		LENGTH						
from	to			from	to							
0	40	Overburden, till										
40	52.5	BIOTITE GNEISS; partially assimilated by pegmatite. ± 50% quartz, 50% chloritised biotite, ± 2% pyrrhotite ± 2% disseminated pyrrhotite.										
52.5	223	PEGMATITE, containing ± 60% 45° white felspar, ± 40% quartz occasional clots chlorite, and calcite stringers. Occasional xenoliths of biotite gneiss, intensely chloritised. Minor disseminated pink garnet. Occasional stringers, white, fresh muscovite. 152.0 Sample for thin section 164 - 166.5 Rhyolite dyke Biotite gneiss xenolith										
223	230	BIOTITE GNEISS, intensely silicified, moderately chloritised PYRRHOTITE in stringers and disseminated										
230	236	MARBLE										
236	242	CONTACT ZONE; alternating pegmatite & biotite gneiss.										
242	249	BIOTITE GNEISS intensely silicified										
249	252	MARBLE										

D.B. Petersen

CS-21
RIO TINTO CANADIAN EXPLORATION LIMITED
DIAMOND DRILL RECORD

FOOTAGE		DESCRIPTION	SAMPLE NO	FOOTAGE		LENGTH									
from	to			from	to										
252	291	BIOTITE GNEISS; with occasional veinlets of pegmatite. Minor disseminated pink garnets. Occasional contorted bedding. eg @ 273 ft.													
		PYRRHOTITE, weak, in stringers and disseminated.													
291	293	MARBLE													
293	304	BIOTITE GNEISS													
		pyrrhotite minor disseminated													
304	319	MARBLE, minor pink garnets													
319	329	BIOTITE GNEISS													
		Pyrrhotite, minor disseminated.													
329	334	MARBLE													
		Very minor disseminated sphalerite?													
334	375	BIOTITE GNEISS													
		No determinable pyrrhotite, numerous stringers and hairlines of barren quartz random orientation, Minor quartz-chlorite stringers cut by barren quartz stringers													
		360.0 Fault 0.5 ft gouge													
		376.0 Fault 0.5 ft gouge													
375	377	PEGMATITE with chlorite crystals													
377	385	BIOTITE GNEISS intensely silicified, pink garnets													
		Barren quartz stringers & hairlines, pyrrhotite, minor disseminated													
385	388	MARBLE													
388	393	PEGMATITE & BIOTITE GNEISS													
393	408	BIOTITE GNEISS intensely silicified													
		Pyrrhotite, minor disseminated													
408	413	CONTACT ZONE intensely silicified													
413	420	MARBLE													
420	423	BIOTITE GNEISS silicified													
423	432	PEGMATITE, chlorite crystals													
		Pyrrhotite, stringers & dissemination													
432	443	BIOTITE GNEISS													
443	445	CONTACT ZONE silicified biotite gneiss													

BB Peterson

RIO TINTO CANADIAN EXPLORATION LIMITED

LOCATION : 5 + 50S 5300E or ..	DIAMOND DRILL RECORD	HOLE NO : CK-3B
AZIMUTH : 70°	Drill Base Line 495S 105E	PROPERTY : C.K. Option
DIP : -54°	LENGTH : 250 feet	ELEVATION : ±3,800 ft Claim No.: CK # 1
STARTED : 28 June 1974	CORE SIZE : BQ W/Line	DATE LOGGED : 3 - 5 July SECTION : 5.5S
COMPLETED : 4 July 1974	DIP TESTS : -	LOGGED BY : D.B. Petersen
PURPOSE : To test the mineralised trenches west of creek		CONTRACTOR: Connors Drilling Ltd.

FOOTAGE		DESCRIPTION	SAMPLE NO	FOOTAGE		LENGTH						
from	to			from	to							
0	13	OVERBURDEN till										
13	15.5	MARBLE										
15.5	17.5	BIOTITE GNEISS										
17.5	76	PEGMATITE hard, white, ± 50% quartz ± 50% orthoclase, stringers of weakly chloritised biotite, minor disseminated pink garnet										
		13' - 15' weak oxidation										
		Pyrrhotite, very occasional minute wisps.										
76	78	CONTACT ZONE , Pegmatite-biotite gneiss ?										
78	79	BIOTITE GNEISS										
79	82	CONTACT ZONE pegmatite-biotite gneiss										
82	119	PEGMATITE, hard, white ± 50% orthoclase occasional stringers biotite										
119	126	CONTACT ZONE alternating pegmatite & chloritised biotite gneiss										
126	156	BIOTITE GNEISS, occasional veins of pegmatite, occasional coarse garnets Disseminated pyrrhotite										
156	168	MARBLE Occasional specks Zns? and pyrrhotite										
168	170	CONTACT ZONE, chlorite & pegmatite										
170	191	BIOTITE GNEISS, with irregular pegmatite veining, irregular gneissosity.										

D.B. Petersen

RIO TINTO CANADIAN EXPLORATION LIMITED

LOCATION : 800S 4470E

DIAMOND DRILL RECORD

HOLE NO : CK-4 B

AZIMUTH : 90°

PROPERTY : C.K. Option

DIP : 55°

LENGTH : 157 feet ELEVATION : ± 4,060 ft Claim No.: CK 13

STARTED : July 6, 1974

CORE SIZE : BQ W/Line DATE LOGGED : July 15, 1974 SECTION : 8 South

COMPLETED : July 14, 1974

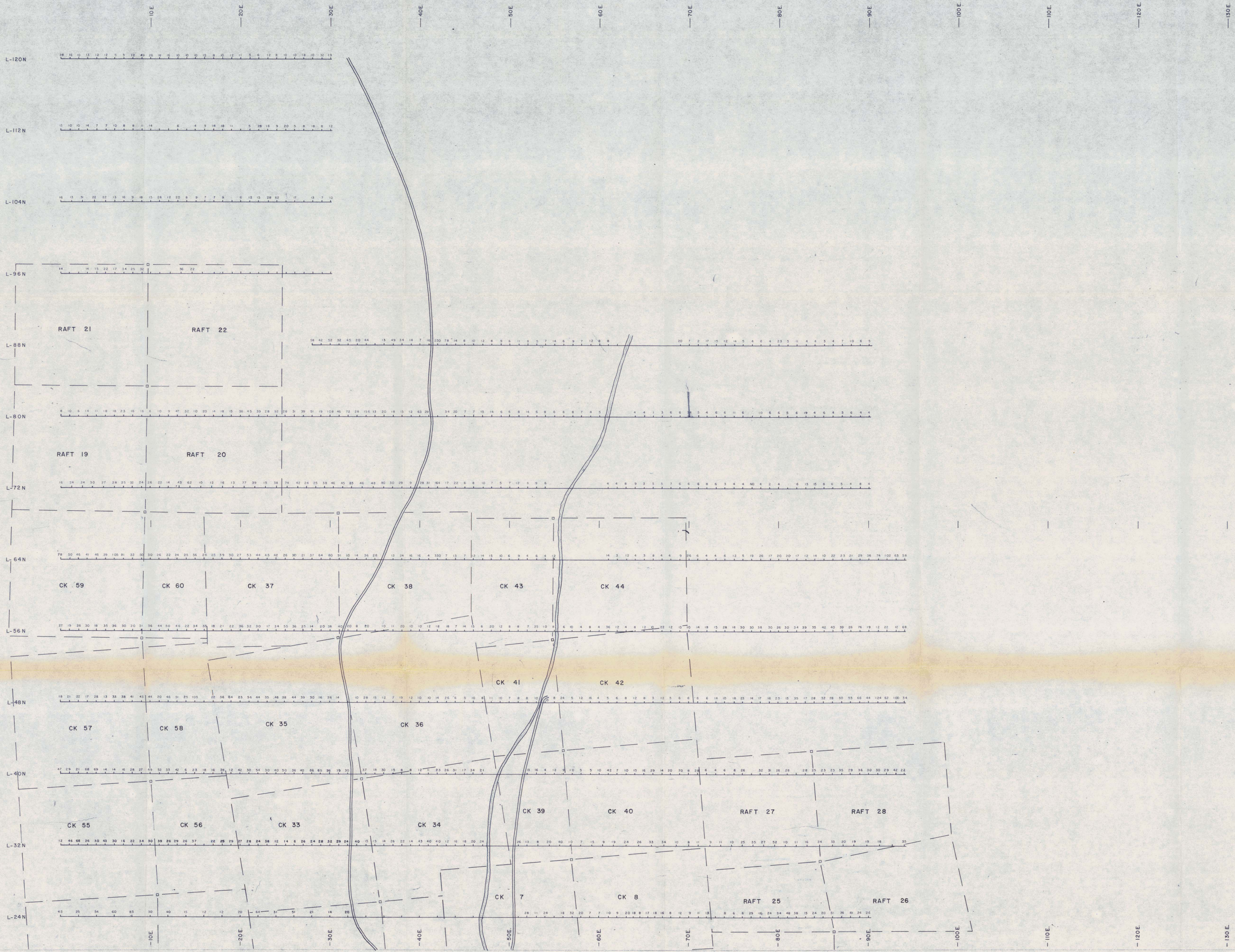
DIP TESTS : LOGGED BY : Hugh Willson

PURPOSE : To test geochemical soil anomaly on west side of creek

CONTRACTOR: Connors Drilling Ltd.

FOOTAGE		DESCRIPTION	SAMPLE NO	FOOTAGE		LENGTH						
from	to			from	to							
0	67	Overburden: Till, boulders & sand - Boulders predominantly pegmatite										
67	69	INTERMEDIATE INTRUSIVE ROCK approx 10% chloritized hornblende phenocrysts - poss- ibly boulder										
69	131	PEGMATITE - 25% quartz and N 75% feldspar or altered feldspar, chloritized vein 6" thick at 87' - 6" of chlorite and 2" potassium feldspar @ 92' - elsewhere minor disseminated chlorite & chlorite filled fractures - no common orientation - there appear to be two types of feldspar : one alters to light yellow potassium feldspar and the other alters to very light green plagioclase. - occasional garnet present - from 127 to 130 have more quartz and more yellow potassium feldspar. Minor iron staining at 77'										
131	140	QUARTZ FELDSPAR BIOTITE CHLORITE GNEISS the core is distinctly magnetic but no sulfides were seen, probably magnetite present.										

H. Peterson

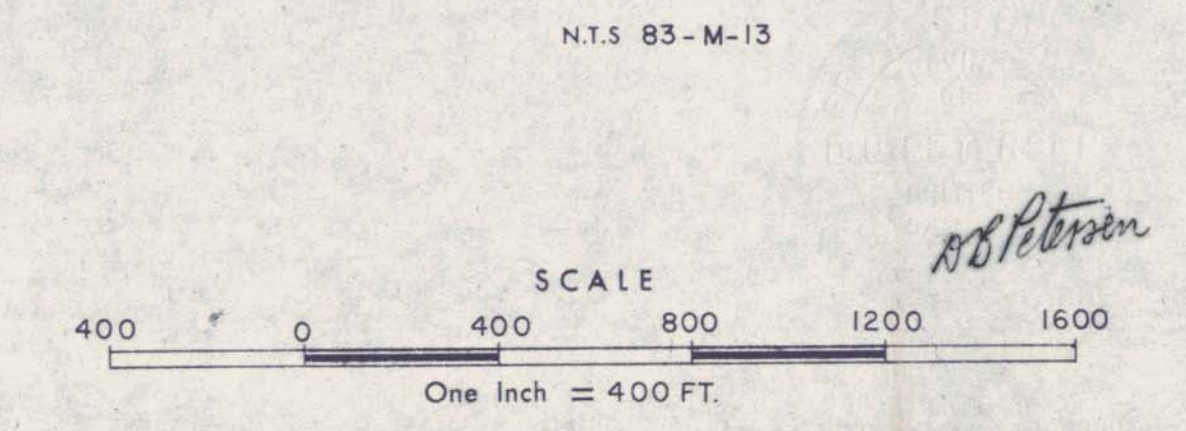
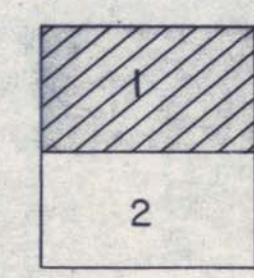


W46 J
2125

5192
MAP 1
Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO 5192 MAP #1

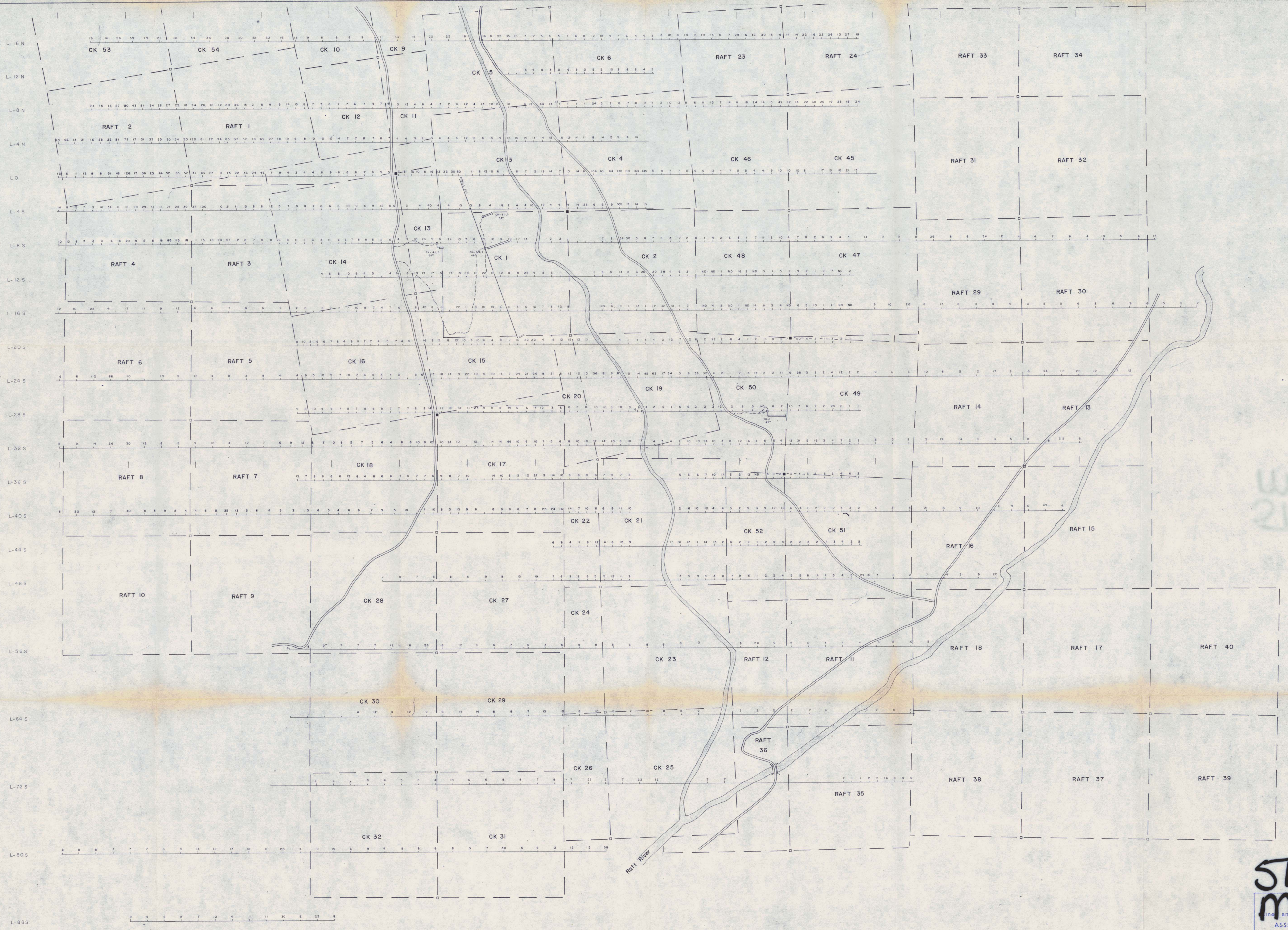


LEGEND
 Claim post - located
 Claim post - unlocated
 Roads
 Drill access roads



N.T.S. 83-M-13

RIO TINTO CANADIAN EXPLORATION LIMITED
 CK OPTION - CLEARWATER AREA B.C.
 SOIL SAMPLING
 COPPER
 DRILL HOLES
 JULY 74 DP/ym DWG. 8304-1



5192
MAP 2



LEGEND

- Claim post - located
- Claim post - unlocated
- Roads -
- Drill access roads -

ppm Cu

RIO TINTO CANADIAN EXPLORATION LIMITED

CK OPTION - CLEARWATER AREA BC.

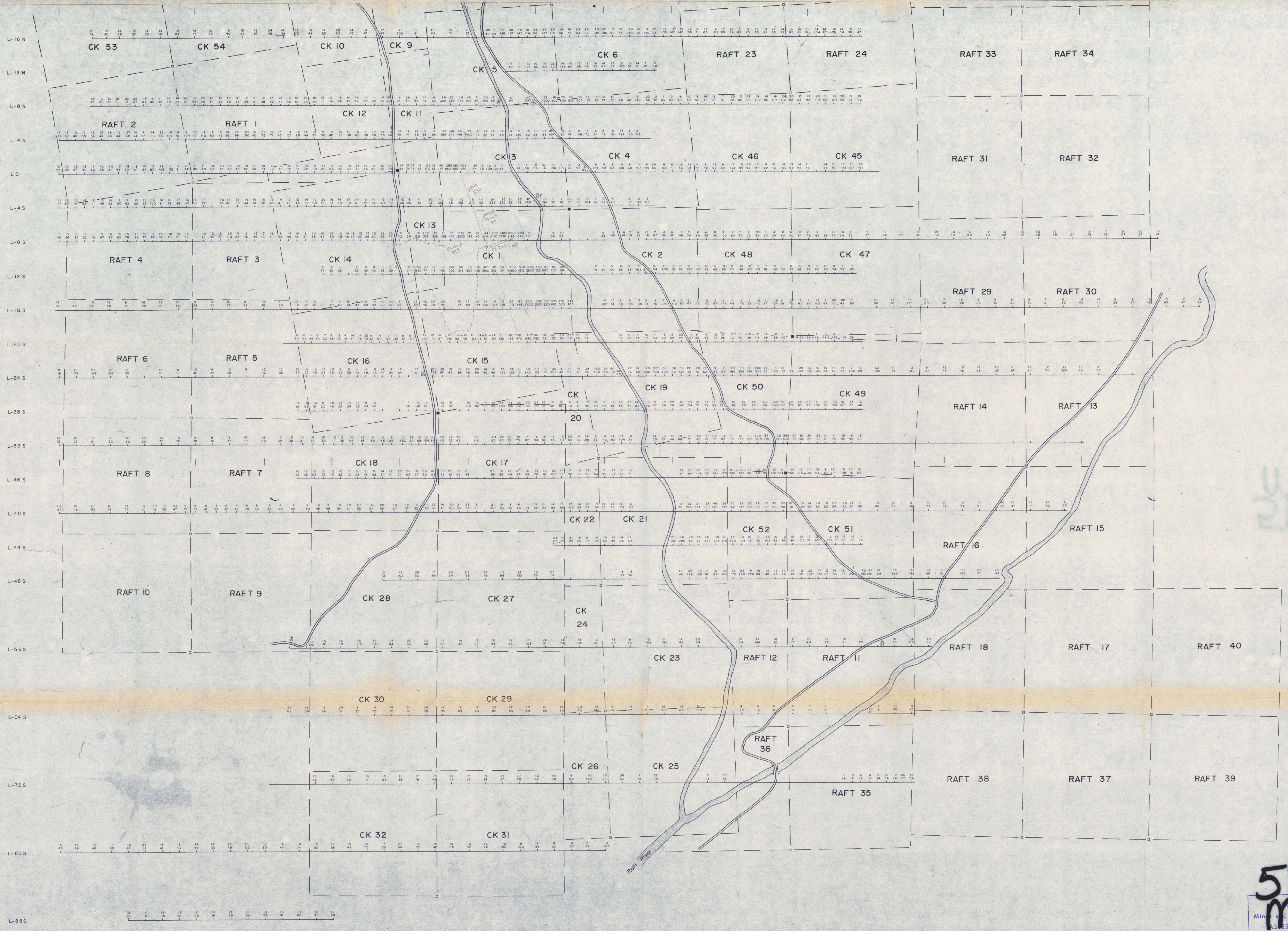
SOIL SAMPLING
COPPER
DRILL HOLES

JULY 74 DP/ym DWG. 8304-2

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MAP 2

N.T.S. 83-M-13

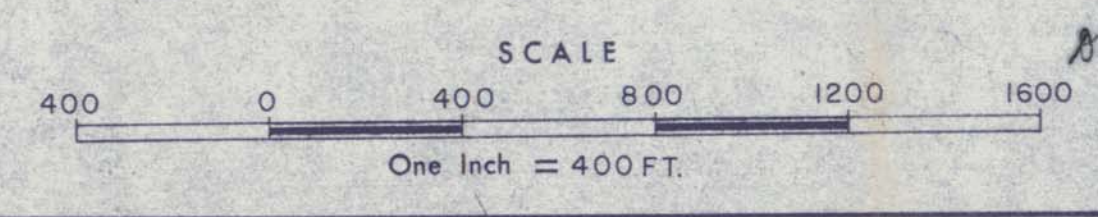
Signature



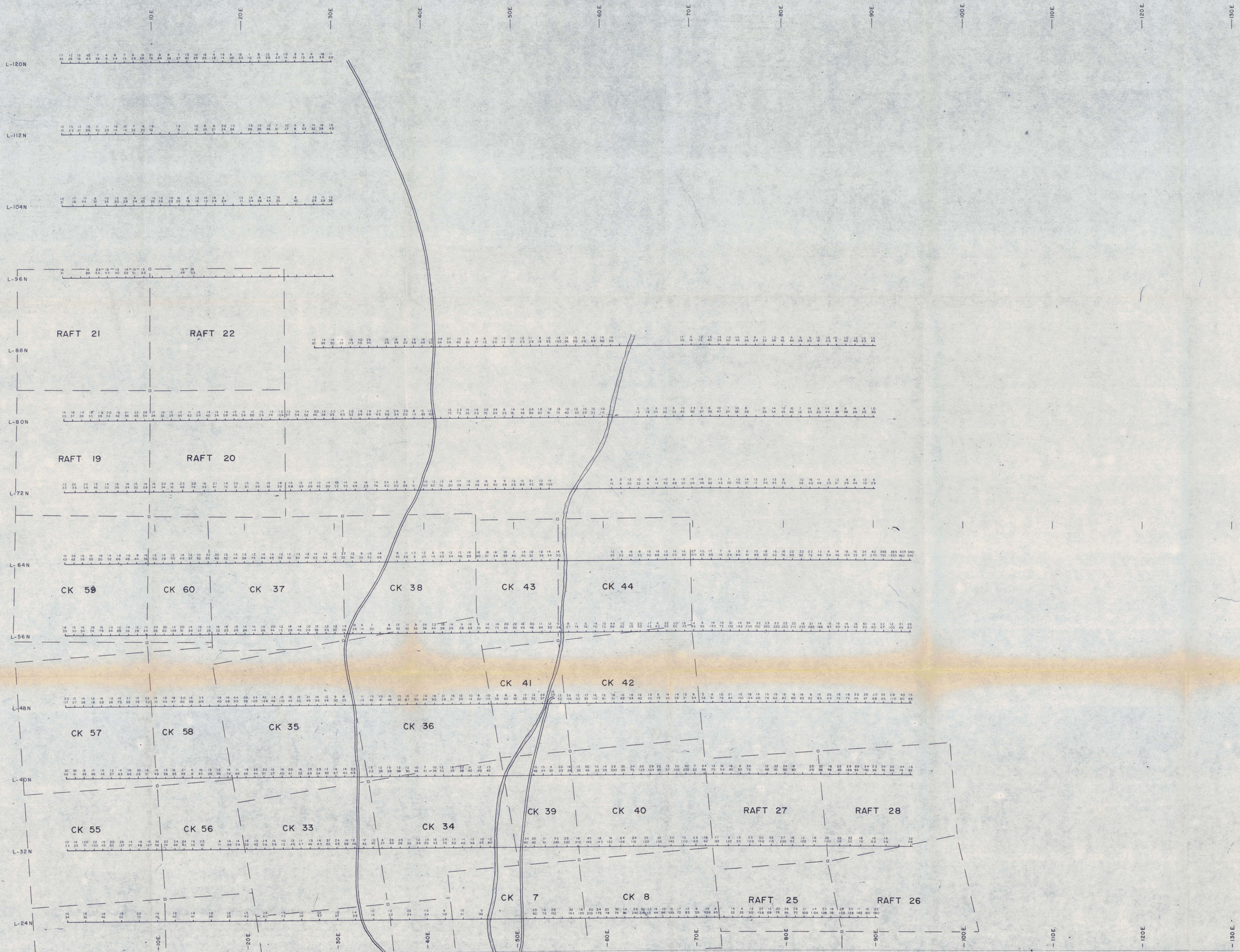
5192
 MAP #3
 MINERAL ASSESSMENT REPORT
 NO. 5192 MAP #3

N.T.S. 83-M-13

RIO TINTO CANADIAN EXPLORATION LIMITED
 CK OPTION - CLEARWATER AREA BC.
 SOIL SAMPLING
 LEAD, ZINC
 JULY 74 DP/ym DWG. 8303-1



LEGEND
 Claim post - located [Symbol]
 Claim post - unlocated [Symbol]
 Roads [Symbol]
 Drill access roads [Symbol]
 ppm Pb Zn [Symbol]
 2



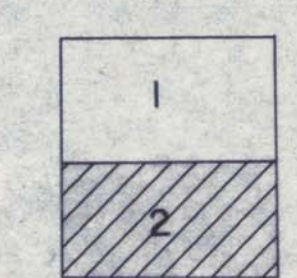
W407
R105

5192
MAP 4
Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 5192 MAP #4



LEGEND
 Claim post - located
 Claim post - unlocated
 Roads
 Drill access roads

ppm Pb
Zn



N.T.S 83-M-13

SCALE
 400 800 1200 1600
 One Inch = 400 FT.

RIO TINTO CANADIAN EXPLORATION LIMITED
 CK OPTION - CLEARWATER AREA BC.
 SOIL SAMPLING
 LEAD, ZINC
 JULY 74 DP/m. DWG. 8303-2