GM 25428

A REVIEW OF THE NEW QUEBEC RAGLAN NICKEL DEPOSITS

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A REVIEW OF THE NEW QUEBEC RAGLAN NICKEL DEPOSITS UNGAVA, NEW QUEBEC

INTRODUCTION

New Quebec Raglan Mines Ltd. holds four contiguous mining exploration licenses and 67 adjoining mineral claims in the Cape Smith-Wakeham Bay nickel-copper belt of Ungava, New Quebec (Map 1). These properties comprise approximately 142 square miles and extend for 45 miles eastwest along the belt. Exploration and development are being carried out by New Quebec Raglan Mines Ltd., a company that was formed in 1965 by a merger of Bilson Quebec Mines Ltd. and Raglan Quebec Mines Limited.

This report reviews the geology of all the nickel sulphide deposits and showings which have been discovered in this area to date, and gives an indication of the long term potential for the New Quebec Raglan property.

GENERAL GEOLOGY

The Wakeham Bay - Cape Smith Proterozoic belt consists of an upper series (Chukotat) of folded sedimentary and volcanic rocks which have been intruded by basic and ultrabasic sill-like bodies. This group lies unconformably on the more metamorphosed Povungnituk series which grades into granitic gneisses to the north and rests unconformably on Archean granites to the south. Folding in this belt is generally along an ENE-WSW axis with overthrusting in a SSE direction.

The New Quebec Raglan concessions are underlain by rocks of the Chukotat Series (Map 2). Pillow lavas of basaltic composition predominate, associated with siltstone, shale and minor amounts of dolomite, gabbro and concordant ultrabasic intrusive rocks. The lavas, gabbros and ultrabasic rocks have all suffered varying degrees of alteration whereas the sedimentary rocks show little alteration effects. The structural pattern is dominated by a syncline extending from Cross Lake at the western end to Raglan Lake in the east. At the western

end, this syncline is simple, open and plunging gently eastward. The central and eastern parts of the syncline are more complex; thinner, overturned and modified by thrust faulting.

Significant nickel-copper sulphide mineralization is associated with the concordant ultrabasic intrusive rocks of the Chukotat Series. On the New Quebec Raglan concessions, known sulphide occurrences are found along a strike length of 40 miles, extending from Cross Lake on the west to the Povungnituk River on the east (Map 2). Sulphides occur as disseminations or as massive lenses within peridotites and two main types of sulphide/ultrabasic rock associations appear to be present:

1. Discontinuous, irregular ultrabasic intrusive bodies (e.g. Katiniq/Raglan) with which sulphides are generally high in nickel (up to 13% in massive sulphides) and have a characteristic Ni:Cu ratio of 4:1.
2. Continuous ribbon-like ultrabasic bodies (e.g. Cross Lake area) with which sulphides are relatively low in nickel (1-3% in massive sulphides) and have a characteristic Ni:Cu ratio approaching 1:1.

The differences between these two associations probably reflects the mode of emplacement of the ultrabasic material rather than any difference in the igneous rock itself. The main sulphide minerals include pyrrhotite, nickeliferous pyrrhotite, pentlandite and chalcopyrite. Significant concentrations of sulphides are localized in embayments and structural traps in the lower contact of the ultrabasic bodies. These sulphides are believed to have been emplaced with the ultrabasites by segregation and settling of an immiscible sulphide liquid.

EXPLORATION

Raglan Quebec Mines began intensive exploration drilling in

the Cross Lake area in 1961 and by 1964 had indicated substantial tonnages of low grade nickel-copper sulphides. In 1964, high grade mineralization to a depth of about 1000' was discovered in the Raglan West area. Falconbridge, through Bilson Quebec Mines, also discovered extensive high grade nickel sulphide mineralization in the Katiniq area during the same period. After the two companies merged, detailed drilling confirmed and extended the high grade zones at Katiniq and Raglan.

Exploration of New Quebec Raglan holdings to date has outlined 6 separate nickel-copper deposits and indicated an additional 15 nickel showings which are largely untested. Significant features of these deposits and showings are illustrated on the accompanying maps and are discussed below in a west to east sequence.

CROSS LAKE

Structure

One of the largest known nickel-copper sulphide deposits occurs at Cross Lake near the western end of the property. Ultrabasic rocks occur in a synclinal structure which is closed at the western end, strikes ENE and plunges 30° to the east (Map 2). The ultrabasite is 400' to 500' thick at the western end and decreases to 200' toward the east. Mineralized zones are separated by local longitudinal and cross folds along the lower contact of the ultrabasite on the south limb of the structure. Although faulting is minor, in some places ore lenses are displaced 100 feet.

Mineralization

The whole lower contact of the intrusive is mineralized with variable amounts of disseminated pyrrhotite and pentlandite, and exploration diamond drilling on 200' centres to a depth of 1400' has made 37 significant sulphide intersections. Major sulphide concentrations occur in four zones, called the central, north and their deep extensions.

Mineralization consists of lenses of massive and disseminated sulphides, 20 to 120' thick, which occur near the base of the ultramafic intrusive. Reference to the attached sections shows that mineralization is associated with the steep side of inflections in the lower ultrabasite contact. Where the contact flattens suddenly, sulphides are concentrated near the point of inflection and occur adjacent to the up-dip portion.

Raglan Nickel Mines Ltd. estimated that this deposit contains 5,882,400 tons grading 1.44% Ni and 0.65% Cu. Existence of a deep zone with sulphides concentrated in a synclinal trap gives this area potential for additional tonnage.

C1 AND C2 ZONES

C1 Zone

C1 consists of four small disconnected sulphide bodies which occur on the steeply dipping south limb of the Cross Lake synclinal structure (Map 2). As seen on the attached section, sulphides are in ultrabasite adjacent to its basal contact. Similar to Cross Lake, sulphides are concentrated on the steep up-dip side of sudden inflections in the contact. This deposit is outlined by about 40 intersections from which Raglan Quebec Mines Ltd. estimated 1,301,900 tons grading 1.71% Ni and 0.96% Cu.

C2 Zone

C2 occurs immediately to the east of C1 and consists of 4 small high grade zones which are connected by a low grade network. Sulphides have the form of a thin sheet contained in the peridotite about 50' above, and parallel to the footwall contact. The attached section shows that sulphides are fairly continuous but the irregular shape and distribution of the high grade sections may result in mining this deposit as four separate bodies. Raglan Quebec Mines Ltd. estimated 2,717,900 tons grading 1.65% and 0.99% Cu.

Irregularity in thickness, grade and continuity could lead to mining problems and resulting reduced tonnages, but further potential

exists at depth.

SHOWINGS 18 AND 17

Showing 18 consists of weakly disseminated sulphides in a large ultrabasic body. Surface samples averaged 0.48% Ni. A weak EM conductor has been traced over a length of ½ mile near the footwall of the ultrabasite but no further work has been done on this showing to date.

At showing 17, a 200' x 100' strongly mineralized gossan occurs in an arcuate ultrabasic body. Surface samples averaged 1.12% Ni. Two moderately strong conductors, both about 600' long, were outlined nearby, but they do not connect with the showings. Further work is warranted in this area.

SHOWING NO. 3

Structure

No. 3 showing is a group of gossans at the western end of a thin, irregular ultrabasic intrusive (Map 2). This ultrabasic body strikes approximately east-northeast, dips 45°N and averages 400' in thickness. It is overlain by pillowed volcanics and underlain by a thin gabbro sill. The main showing is 300-400' long, 700' wide and consists of 30-70% disseminated sulphides adjacent to an embayment of the lower ultrabasite contact.

Mineralization

Ten holes have been drilled at 300' centres on this showing. Seven holes indicate continuous mineralization, of which six were used to calculate a reserve of 1,000,000 tons grading 2.81% Ni. The main body outlined by this drilling does not appear at surface and lies some 200' above the lower contact as shown on the attached section. Considerable mineralization occurs in the hangingwall of the main zone and this material would be available to open pit operations.

This deposit requires diamond drilling on 50' centres to assure the calculated tonnage. The main zone has been drilled to a depth of only 600' and there is a good possibility for depth potential to the west.

SHOWING NO. 2

Structure

No. 2 showing lies ¼ mile east of No. 3 near the eastern end of the same ultrabasic body. The main surface showing is adjacent to the footwall contact of the ultrabasite (Map 2). The dip of the contact is regular and varies from 70°N on the west to 45°N on the east.

Mineralization

Significant mineralization was intersected in 5 of 13 holes drilled in 1958 - 1962. Similar to No. 3 deposit, the main mineralized zone occurs at the basal contact of the peridotite body and is overlain by smaller disseminated zones in the hangingwall. The attached section shows that there is little indicated continuity on dip to a tested depth of 500'. Closer spaced drilling might succeed in detecting additional high grade pods or might establish enough continu ty to develop ore zones in the range of 100,000 tons.

SHOWINGS NO. 1 AND NO. 4 - KATINIQ AREA

Structure

These showings are at the lower contact of an ultrabasic body 1½ miles long and 200-800' thick (Map 2). The ultrabasite is overlain by volcanics and underlain by gabbro and quartzite. Strike of the ultrabasite is eastwest in the western part and N70°E in the eastern area. The maximum thickness coincides with this change in strike. Dips vary along strike but average about 60°N.

Early Work

A group of surface showings and gossans, the most important of

which are No's 1 and 4, are associated with this ultrabasic intrusion. No. 1 showing consists of three small lenses of disseminated nickeliferous sulphides contained within the ultrabasic intrusive at its western extremity. A strong EM conductor was found over the main showings. Nine shallow packsack holes drilled in 1958 intersected sulphides grading 2.4% Ni but due to the spacing and shallow depth, it was impossible to assess the showing at this stage.

The No. 4 showing consists of several elongate 300' x 50' low grade gossans adjacent to the basal contact of the peridotite, and an overlying high grade disseminated zone within the ultrabasite. A series of shallow holes drilled on an EM conductor associated with the disseminated zone intersected mineralization with an average grade of 2.5% Ni and indicated some possibility of sulphide continuity.

The original Katiniq showing consists of a zone of surface mineralization about 1800' east of the No. 4 showing. This gossan occurs within an embayment in the lower ultrabasite contact. A good EM anomaly was detected over the peridotite adjacent to the showing.

Mineralization

Sulphides are concentrated near the lower peridotite contact where sudden dip inflections occur (see sections). Contours on the lower ultrabasite contact show that the dip between surface and 300' level is steep on the eastern part of the belt, rises in the centre of the belt, where a broad shallow trough is formed, and steepens again on the west. This structural pattern probably reflects cross folding with an anticlinal axis lying in the centre of the intrusive at section 344E. Mineralization follows the troughs and plunges east and west from section 344E. Sections show that sulphide bodies exhibit extreme irregularities in thickness, shape and continuity, which is characteristic of the belt.

Katiniq area drill results to December 31st, 1968 indicate 3,392,900 tons grading 3.06% Ni and 0.89% Cu.

Exploration drilling in 1969 has confirmed continuity of the mineralization in the central area and extension of the No. 1 showing

area. In the No. 1 showing area, zones in excess of 200' grading 2.55% Ni have been intersected but continued irregularity in thickness and grade is indicated. Further surface drilling is planned for both the extreme east and west ends of the Katiniq area.

SHOWINGS NO'S 5, 6, 7 AND 8

These showings are associated with an eastwest trending ultrabasic intrusive 2 miles long and 200-2500' wide (Map 2). This ultrabasic body has an extremely high sulphide content and it is exceptional to find rock that does not contain visible sulphides of low nickel content.

No. 5 Showing:

No. 5 consists of a gossan in peridotite rubble which is 250' x 75' and occurs within a footwall embayment of the basal contact of the intrusive. A good EM conductor, 400' long, occurs over the showing and 3 packsack and 3 deeper holes traced a zone of low grade (1.5% Ni) disseminated sulphides for a strike length of 400'. As illustrated on the attached section, these sulphides occur well above the basal contact.

Drilling on the east end of the conductor indicates that the sulphides pinch out at a vertical depth of 230' but one 5.0' intersection grading 8.7% Ni was cut at a depth of 380'. No significant sulphides were intersected at the west end of the conductor. Although the results of this drilling are unimpressive and the sulphides are generally low in nickel, further drilling should be undertaken to test the possibility of high grade lenses occurring at depth to the east.

No. 6 Showing

No. 6 main showing is 800' long, 150'-250' wide and consists of small concentrations of sulphides within the ultrabasic intrusive. Thirteen surface samples averaged 0.29% Ni and 0.09% Cu. An EM survey of this area indicated a moderate conductor about 1200' long. Struc-

tural control for the sulphides is not evident from surface but correlation with the EM results suggests that the mineralization plunges west of north. Two holes were drilled to depths of about 900' at the east and west extremities of the showing, but significant grades were not encountered.

Further depth drilling is required to explore this extremely wide ultrabasic intrusive.

No. 7 Showing

No. 7 is a series of 4 small widely spaced gossans which are localized within small embayments in the basal contact of the ultrabasite. Drilling was done along a moderate 2500' EM conductor which is subparallel to the showings and the base of the ultrabasic intrusive. Two holes at the extremities of the conductor did not intersect significant sulphides. Further work is planned.

No. 8 Showing

No. 8 consists of a number of separate gossans, the largest of which is the most westerly and from which a series of grab samples averaged 0.79% Ni. Mineralization is localized partly by an embayment in the footwall and partly by a gabbro inclusion. A hole collared at the thinnest part of the showing intersected 1.61% Ni and 0.28% Cu. Two other holes spaced 500' apart on a weak geophysical conductor both intersected sulphides. One 4.7' intersection assayed 6.45% Ni. Further work is planned.

SHOWINGS 13 AND 14

These two showings consist of several small zones of weakly disseminated sulphides in the peridotite. Surface samples of these showings assayed 0.46% Ni and 0.71% Ni. A ground EM survey indicated a weak conductor on No. 13. Further work is required.

SHOWINGS 15 AND 16

Showing No. 15 is an area of mineralized, frost heaved,

ultrabasite boulders from which surface samples assayed 0.97% Ni and 0.79% Ni. Two conductors were outlined in an EM survey (Map 2). The conductor in the centre of the peridotite gives a very weak response but the second conductor is strong and has been traced for 1600' adjacent to the lower contact of the ultrabasic intrusive. Although some mineralized serpentinite boulders are present in the area, this anomaly may be due to a conductive slate. This area will be checked by diamond drilling to assess the anomalies.

Showing No. 16 is a zone of moderate mineralized serpentinite rubble. Surface samples assayed 1.24% Ni and 0.44% Ni. An EM survey indicated a very weak conductor adjacent to the showing.

SHOWINGS 9 AND 12

No. 9 consists of two 250' x 50' areas in serpentinite which contain minor disseminated sulphides (Map 2). Several surface samples average 0.33% Ni. EM anomalies were not found at No. 9 showing, but moderate conductors were found to the south and east. One hole was drilled to test the conductor to the south and a 7.0' zone of disseminated sulphides assaying 2.95% Ni and 0.69% Cu was intersected in the peridotite. Anomalies in this wide zone of serpentinite will be tested by drilling.

No. 12 is two gossan in a 400' x 300' area from which one sample assayed 2.55% Ni. A weak conductor passes through this showing and two holes were drilled to test for mineralization to a vertical depth of 400'. Discontinuous zones of disseminated sulphides assaying 0.34% Ni and 0.44% Ni. were intersected within the peridotite. The basal contact appears to be regular in this area and dips about 34°N. In view of the characteristic discontinuous nature of the sulphide lenses, further work is required to fully explore this area.

SHOWINGS 10 AND 11 - BOUNDARY AREA

These showings consist of two 200' x 50' gossans adjacent to an embayment in the lower contact of an ultrabasic lense. Surface

samples assayed as high as 4.51% Ni. Three parallel EM conductors were outlined in this area, with the strongest near the footwall contact. Preliminary shallow drilling outlined a zone of low grade mineralization which included one 12.0' intersection assaying 5.03% Ni.

A program of 17 holes collared on 150' centres was completed in 1968. Small pods of high grade sulphides were found along a 1400' strike length associated with lenses of peridotite. The attached section shows that mineralization occurs as erratic discontinuous lenses at the contact of the peridotite. More detailed drilling is needed to establish continuity and explore down-dip extensions.

RAGLAN DEPOSITS

Structure

In the Raglan area, surface sulphide mineralization is found in several locations within ultrabasic intrusives which strike EW and dip north (Map 2). These ultrabasic rocks have been intruded into a complexly folded and faulted series of metasedimentary and metavolcanic rocks. Extensive drilling of the surface showings by Raglan Quebec Mines Limited indicated near surface sulphide lenses east and west of the Povungnituk River. This success prompted a program to test the ultrabasic mass for sulphides down dip to the north. Drilling to a depth of 1200' indicated a sizeable zone called Raglan West.

Mineralization

Drilling has outlined four distinct sulphide deposits in the Raglan area: Raglan Surface, Raglan West and Raglan East (Upper and Lower) (Map 2). The indicated ore reserve calculated as of December 31, 1968 is as follows:

	Tons	% Ni	% Cu
Raglan West	1,616,200	4.29	0.94
Raglan East - Upper	52,600	2.63	0.74
- Lower	821,900	4.88	1.09
Raglan Surface	130,000	3.97	1.03
TOTAL	2,620,700	4.43	0.99

The Raglan Surface deposit is a flat lying, lenticular pod of massive sulphides which occurs 20 feet above the basal contact of an ultrabasic intrusive (see section). Mineralization is covered by an average of 13.0 feet of overburden. Base of the zone is approximately 80.0 feet below the surface, which makes it amenable to open pit mining.

The Raglan West deposit is down dip on the same contact as the Raglan surface zone. It consists of a zone of massive sulphides at about 1000' depth, the shape of which is shown diagrammatically on the accompanying black diagram. In common with the other deposits in the Ungava belt, the ore zone shows irregular thickness, flat-lying attitude and rapid change in elevation and dip (see section).

The Raglan East ore zones occur in an irregular series of serpentinized peridotite lenses which are separated by layers of slate, volcanic rocks, gabbro and jasperoid. The attached section shows the East Lower deposit is a flat-lying zone of sulphides which averages 20.0' wide within an ultrabasite lens. The East Upper deposit is a series of discontinuous sulphide lenses at the base of, or within, one of the upper ultrabasic bodies.

Shaft sinking to the 875 level is currently in progress for detailed testing of the shape and attitude of these sulphide bodies and to provide openings for lateral and depth exploration.

METALLURGY

Milling and flotation characteristics have been tested for the Cross Lake, C2, Katiniq and Raglan West sulphide deposits. The accompanying diagram shows comparative grade recovery curves for each deposit.

Katiniq shows the best treatment characteristic and is followed by Raglan West. The C2 and Cross Lake deposits show less satisfactory results. Low nickel in sulphides and fine sulphide-silicate intergrowths in these deposits produce lower concentrate grades.

LONG TERM POTENTIAL

A study of comparative statistical and geological models is of value in estimating the long term potential of the New Quebec Raglan nickel belt.

A total of 22 mineral showings are known in the belt and of these, 8 have been investigated in some detail, namely; Cross Lake, C1, C2, Showing No. 3, Showing No. 2, Showing No's 1 and 4 (Katiniq) and Raglan deposits. The results of exploration of these deposits to date are as follows:

1. One deposit in the 5,000,000 ton size.
2. Five deposits are in the 1,000,000 to 3,000,000 ton size.
3. Two showings have not yielded significant tonnages.

If this percentage of success is extrapolated to the 22 known occurrences, we should expect to discover:

1. Three deposits in the 5,000,000 ton size.
2. Fourteen deposits in the 1,000,000 to 3,000,000 ton size.
3. Five showings will not yield significant tonnages.

On this basis, the indicated potential for the entire belt should be:

1. 14 x 1,500,000 = 21,000,000 tons.
2. 3 x 5,000,000 = 15,000,000 tons.

TOTAL 36,000,000 tons (including presently known ore)

These extrapolations may not be considered fair, as it could be argued that the probability is not necessarily 100% that they can

be extended to all deposits in the belt. However, aside from these mathematical extrapolations, an estimate of long-term potential can be made on geological grounds. This is based on geologic features which apparently lead to sulphide concentration in the deposits explored. All deposits appear to occur either in the peridotite or at its lower contact and appear to be locally controlled by the following:

Cross Folds - A cross fold at Cross Lake flattens the lower peridotite contact over a considerable area and places it near to surface. Although this situation probably also occurs in the Katiniq area, existing maps indicate that this situation is not likely to occur again along the belt and further 3,000,000 to 5,000,000 ton deposits will probably be found over a considerable range of depth.

Contact Irregularities - Surface patterns appear to reflect vertical patterns and most deposits appear to be related to irregularities in the attitude of the lower peridotite contact or to change in thickness of the peridotite intrusive. Using these changes in contact attitude and sill width as indicators, five more localities for finding further ore in the 1,000,000 to 2,000,000 ton size are indicated as follows:

1. Showing No. 6 area.
2. Showings No's 10 and 11 area.
3. Showings No's 14 and 15 area.
4. Showing No. 7 area.
5. Showing No. 18 area.

It seems likely that one or two of these areas could contain two ore bodies of the 1½ million ton size, which indicates a total tonnage for the five areas of about 10 to 12 million. This potential plus about 17 million already known to exist gives a total potential of 29 million tons. This figure is about two-thirds of that indicated by the extrapolation described based on 8 out of 22 deposits.

This estimation of long-term potential should be qualified by consideration of metallurgical characteristics. A straight count

of four tests (Cross Lake, C2, Katiniq and Raglan) shows two of poor and two of good concentrating characteristics. This suggests that about 50% of the ore to be found will have poor milling characteristics. On a rough basis of Cross Lake - 6,000,000 tons, C1 and C2 - 4,000,000 tons, Katiniq - 3,400,000 tons, and Raglan - 2,600,000 tons (total 16,000,000 tons) about 10 out of 16 million tons or 62% would have poor concentrating characteristics. The attached diagram, which shows the nickel:sulphur ratios from mineral showings 1-8 inclusive, indicates that these ratios divide themselves evenly into two groups of four, one of which has high nickel:sulphur ratios comparable to the better concentrating material, and the other of which has lower nickel:sulphur ratios comparable to Cross Lake. This 50/50 split compares favourable with the 50% figure calculated above.

CONCLUSIONS

The indicated reserve tonnages, concentrating characteristics, and pounds of metal available in the best known deposits are listed in a table on the next page. Diamond drilling in these areas shows the relatively small and erratic nature of the sulphide bodies. In all cases however, the drilling has been relatively shallow and considerable depth potential exists. Work on the other 15 known showings has indicated significant trends but information is limited and inconclusive as to the size, shape and distribution of sulphide pods. A long term program of investigation of these showings and geophysical conductors by closely spaced diamond drilling will be required to successfully explore the area.

Based on geological and numerical patterns, the long term potential of the New Quebec Raglan concessions is estimated at 29 to 36 million tons of economically interesting nickel sulphides. About half of the mineralization to be found will probably have poor concentrating characteristics.

RAGLAN NICKEL BELT

SUMMARY OF ORE RESERVES

Deposit	Tons	% Ni	% Cu	Concentrate Grade % Ni	Concentrate Grade % Cu	Concentrate Recovery % Ni	Concentrate Recovery % Cu	Available Ni. Lbs.	Available Ni. Lbs.	Remarks
Cross Lake	5,882,400	1.44	0.65	4.8	5.5	78	90	131,766,000	68,236,000	Best of 5 Lakefield Tests, 1962
C-2	2,717,900	1.65	0.99	8		75		67,404,000	48,378,000[1]	Best of 3 Lakefield Tests, March, 1963
C-1	1,301,900	1.71	0.96					33,328,000[2]	22,392,000[1]	No mill tests available
Showing #3	1,000,000	2.81						45,000,000[3]		No mill tests available
Katiniq	3,392,900	3.06	0.89	12.5	3.6	84	82	174,422,000	49,523,060	Mill test #2 - 7 based on medium grade material assaying 2.2% Ni. Lakefield, March 23, 1966
Raglan Deposits	2,620,700	4.43	0.99	12.9		80.6		187,148,360	46,711,880[1]	Mill test #2, May 9, 1969 Based on an overall composite of 3.37% Ni and 0.85% Cu.
TOTAL	16,915,800	2.01	0.84[4]							

1 - Used 90% recovery.
2 - Used 75% recovery.
3 - Used 80% recovery.
4 - Does not include #3 Copper.

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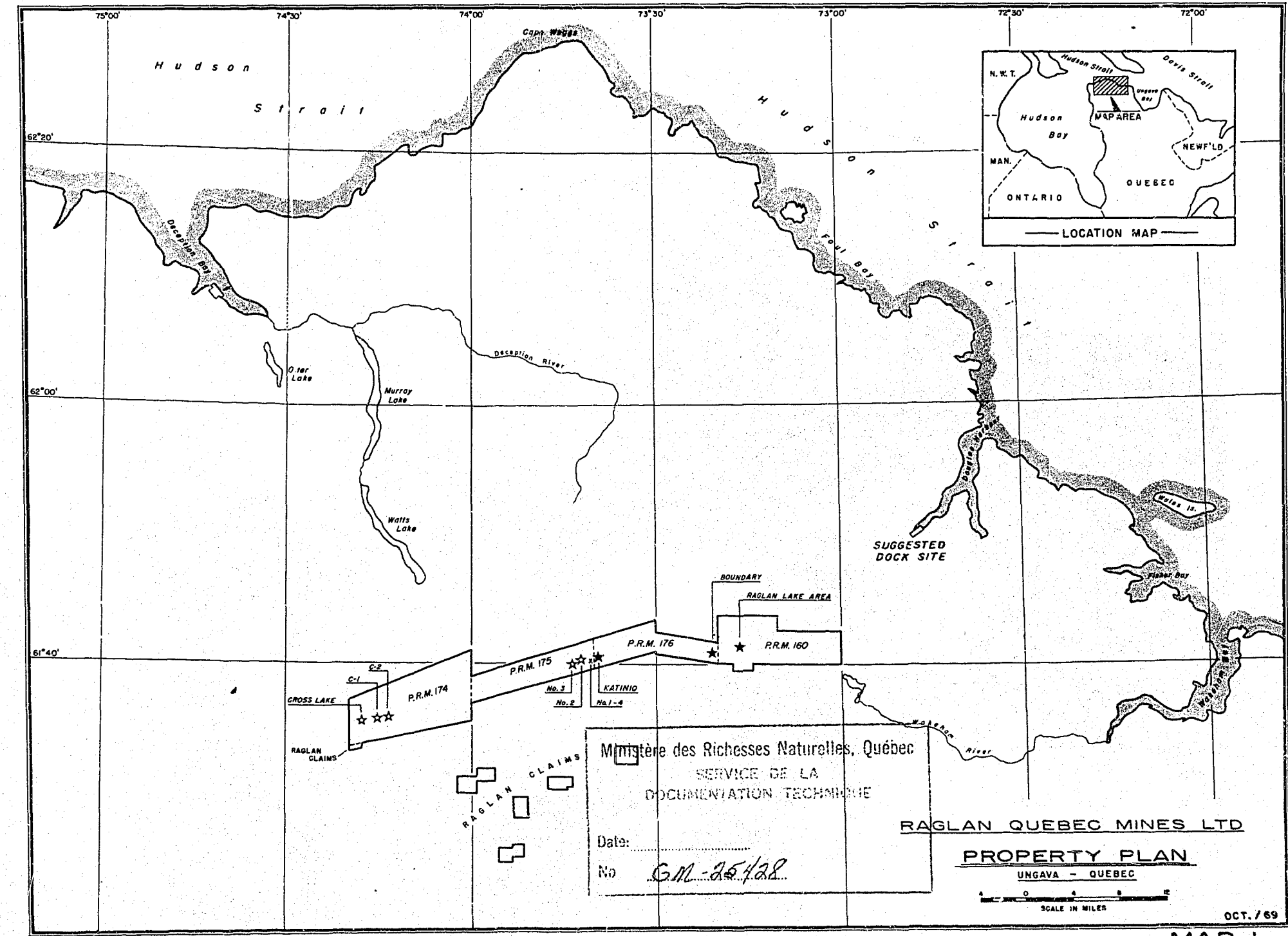
JCC:kr
November 3rd, 1969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74°30'
74°00'
73°30'
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72°30'
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62°20'
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61°40'
Hudson Strait
Cape Wodge
Hudson Strait
Foul Bay
Deception Bay
Deception River
Otter Lake
Murray Lake
Watts Lake
SUGGESTED DOCK SITE
Wales Is.
Fisher Bay
Wakeham Bay
Wakeham River
BOUNDARY
RAGLAN LAKE AREA
P.R.M. 160
P.R.M. 176
P.R.M. 175
P.R.M. 174
C-2
C-1
CROSS LAKE
No. 3
No. 2
KATINIQ
No. 1-4
RAGLAN CLAIMS
RAGLAN CLAIMS
N.W.T.
Hudson Strait
Davis Strait
Ungava Bay
MAP AREA
Hudson Bay
NEWF'LD
MAN.
QUEBEC
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RAGLAN QUEBEC MINES LTD
PROPERTY PLAN
UNGAVA - QUEBEC
SCALE IN MILES
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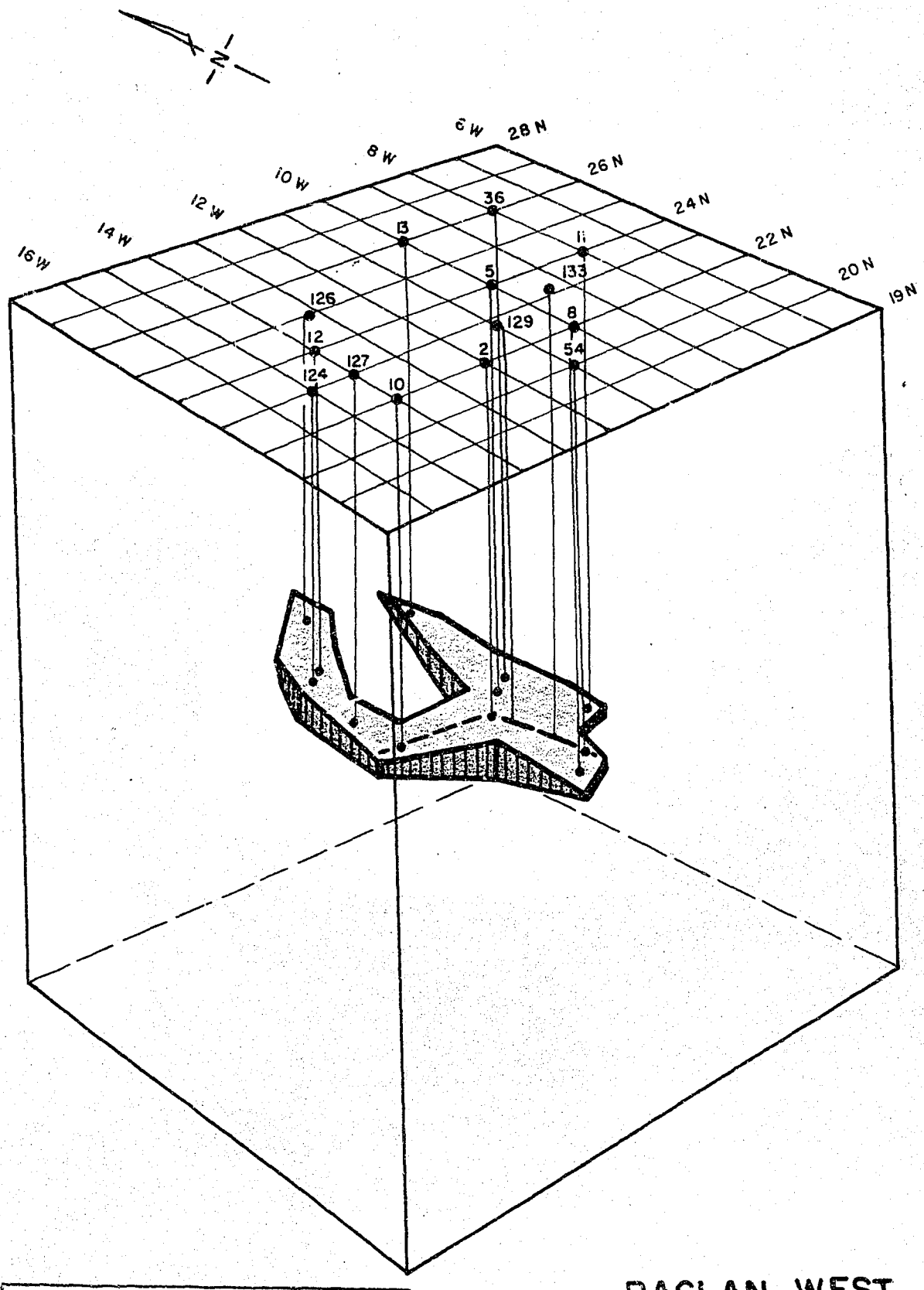
MAP 1



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No G.M.-25428

RAGLAN WEST
MAIN ZONE
DIAGRAMMATIC SHAPE

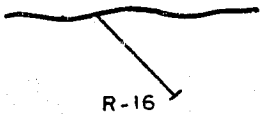
Scale: 1"=300'

NEW QUEBEC RAGLAN MINES LIMITED

TYPICAL VERTICAL SECTIONS
THROUGH SHOWINGS

(TO ACCOMPANY MAP 2 - OCT./69)

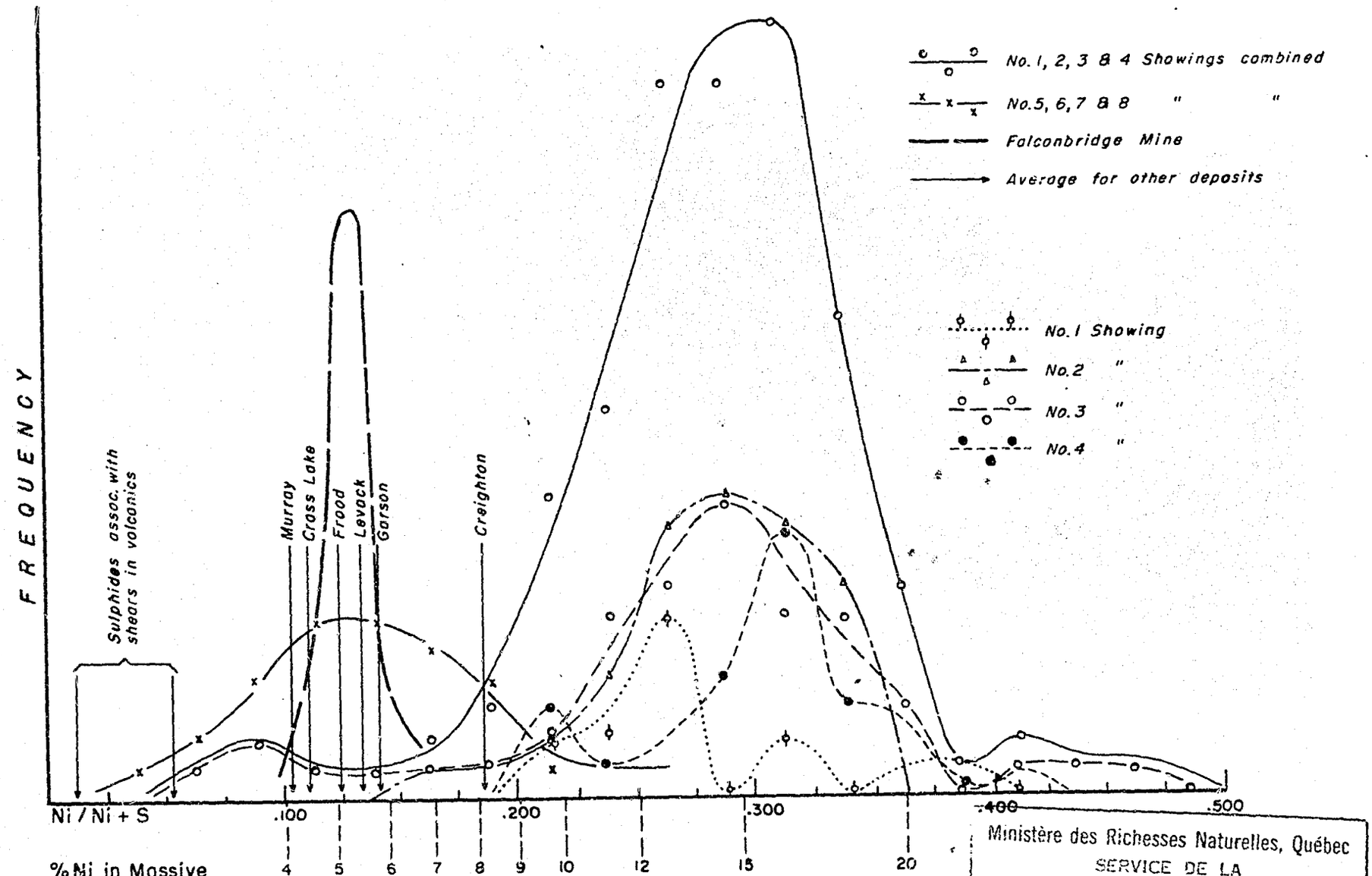
LEGEND



Diamond drill hole

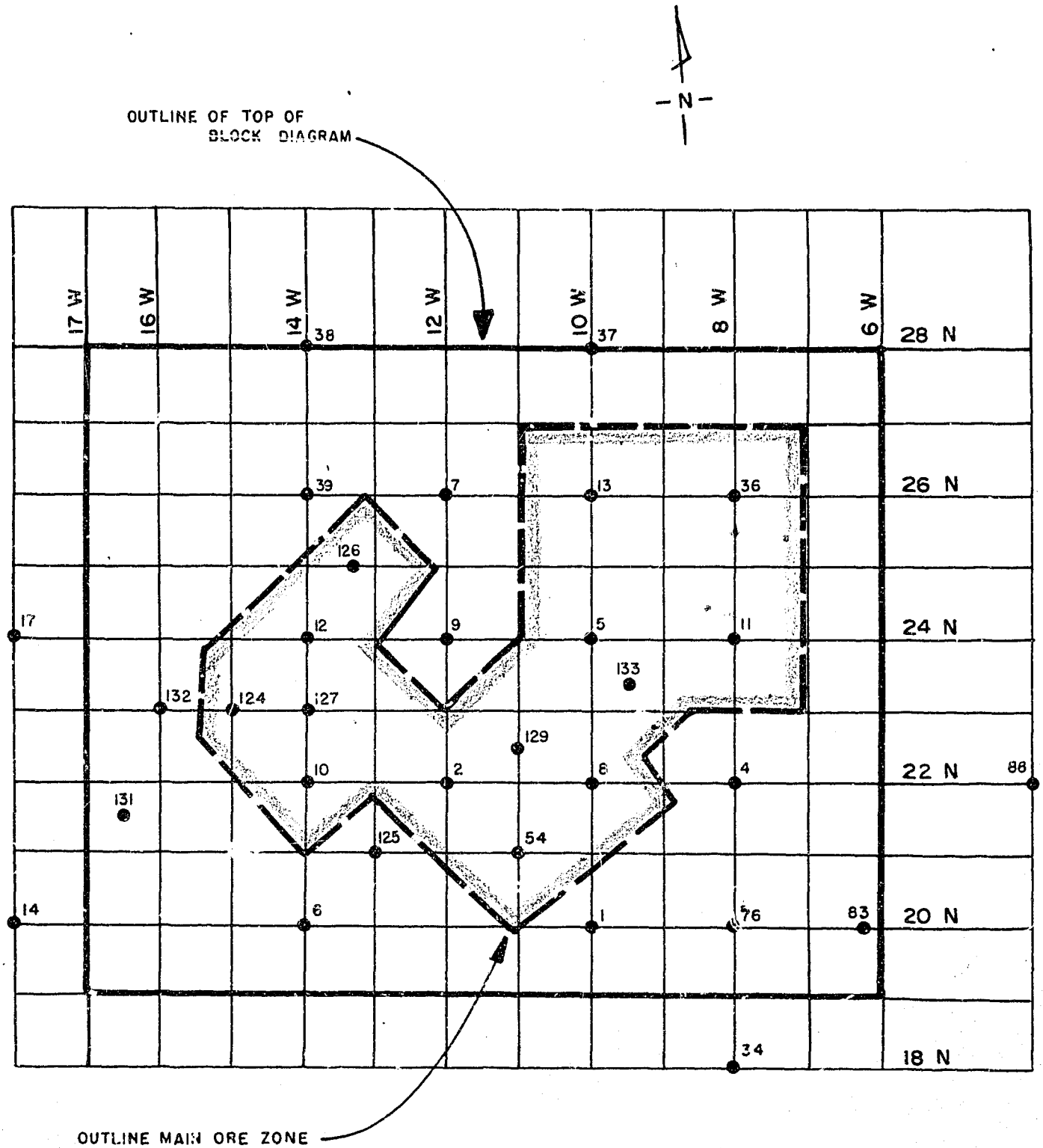
Ultrabasic rocks

Mineralized zone



NEW QUEBEC RAGLAN MINES LIMITED

NICKEL / NICKEL + SULPHUR RATIOS



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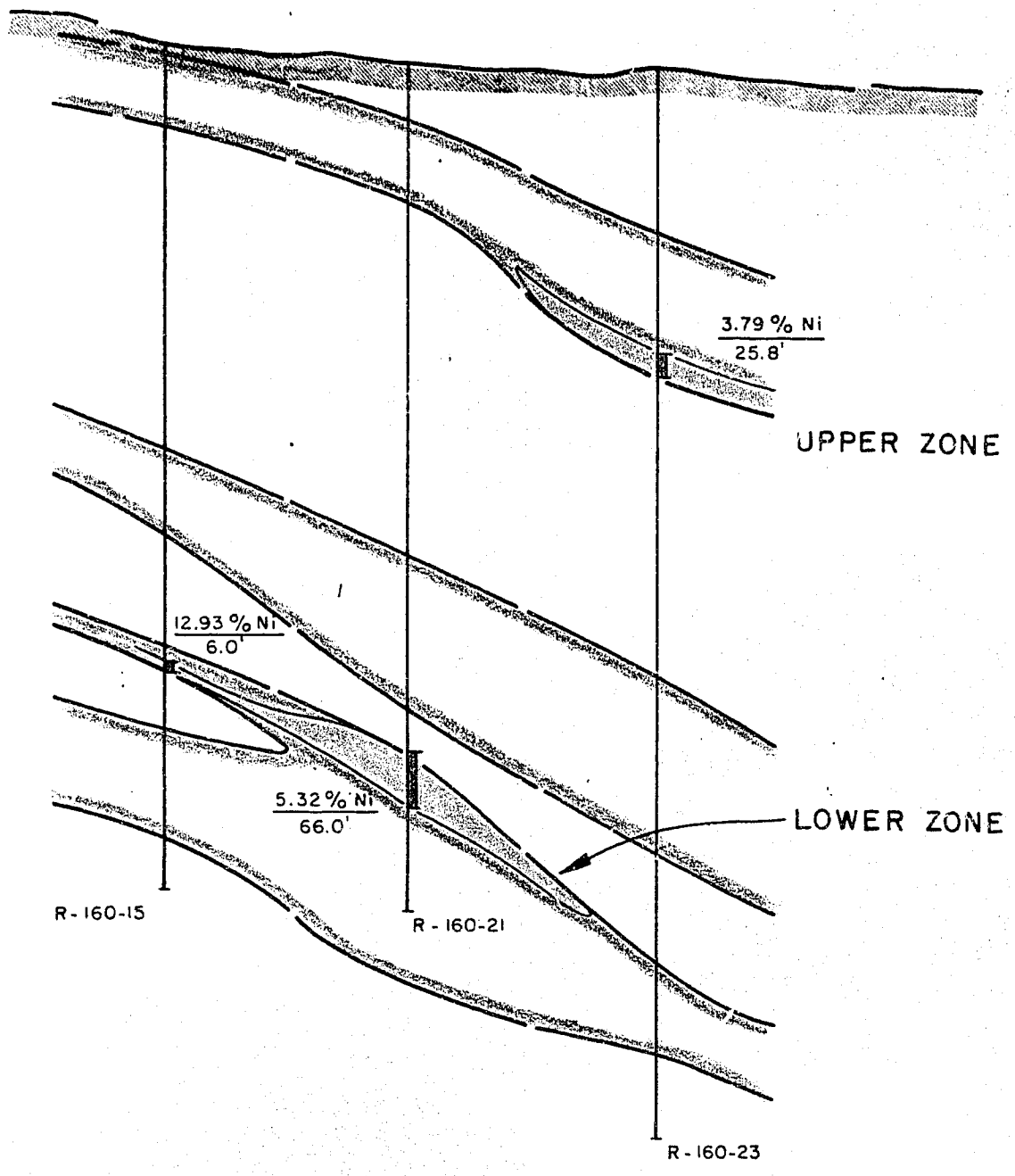
RAGLAN WEST

MAIN ZONE

DIAGRAMMATIC OUTLINE OF MAIN ORE ZONE

Scale: 1"= 200'



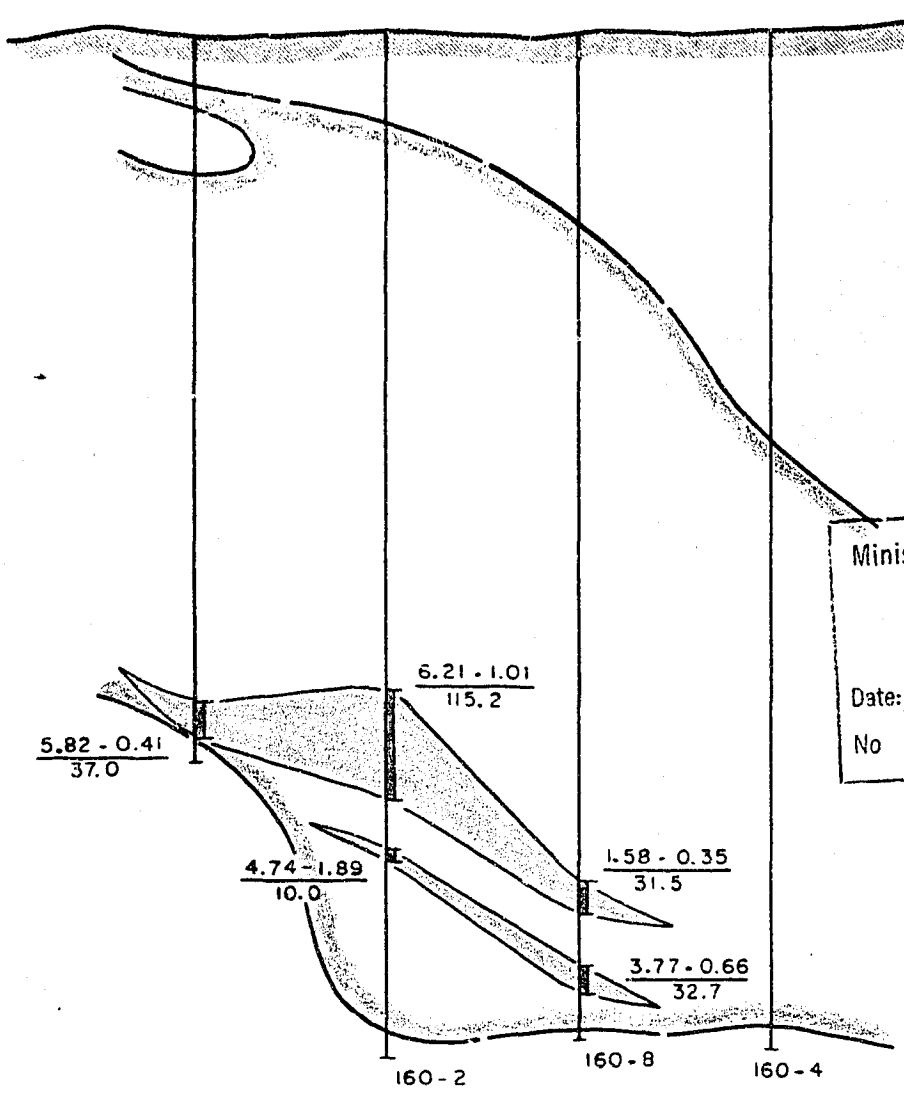
RAGLAN EAST

SECTION A' - A°

(LOOKING NORTHWEST)

SCALE 1" = 200'

OCT. '89



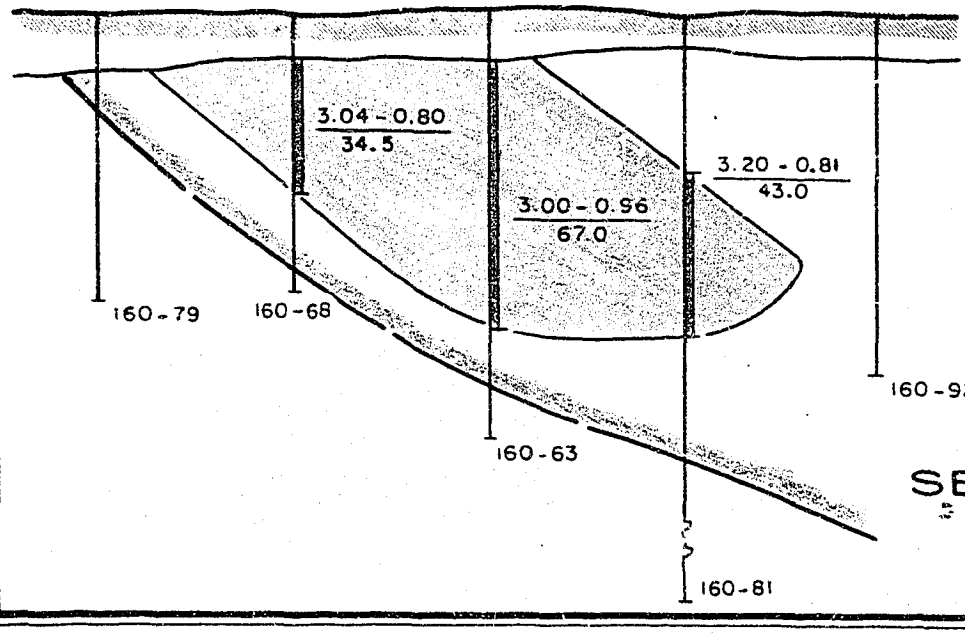
RAGLAN WEST

SECTION 22 N

(LOOKING NORTH)

SCALE 1" = 200'

OCT./69



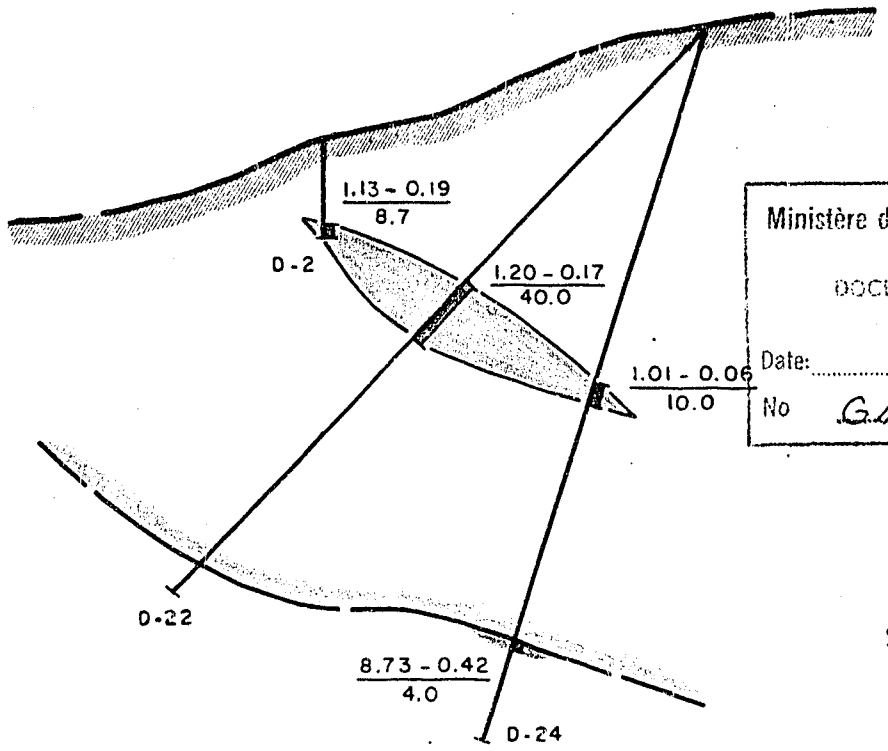
RAGLAN SURFACE

SECTION 10,800 E

(LOOKING WEST)

SCALE 1" = 50'

OCT./69



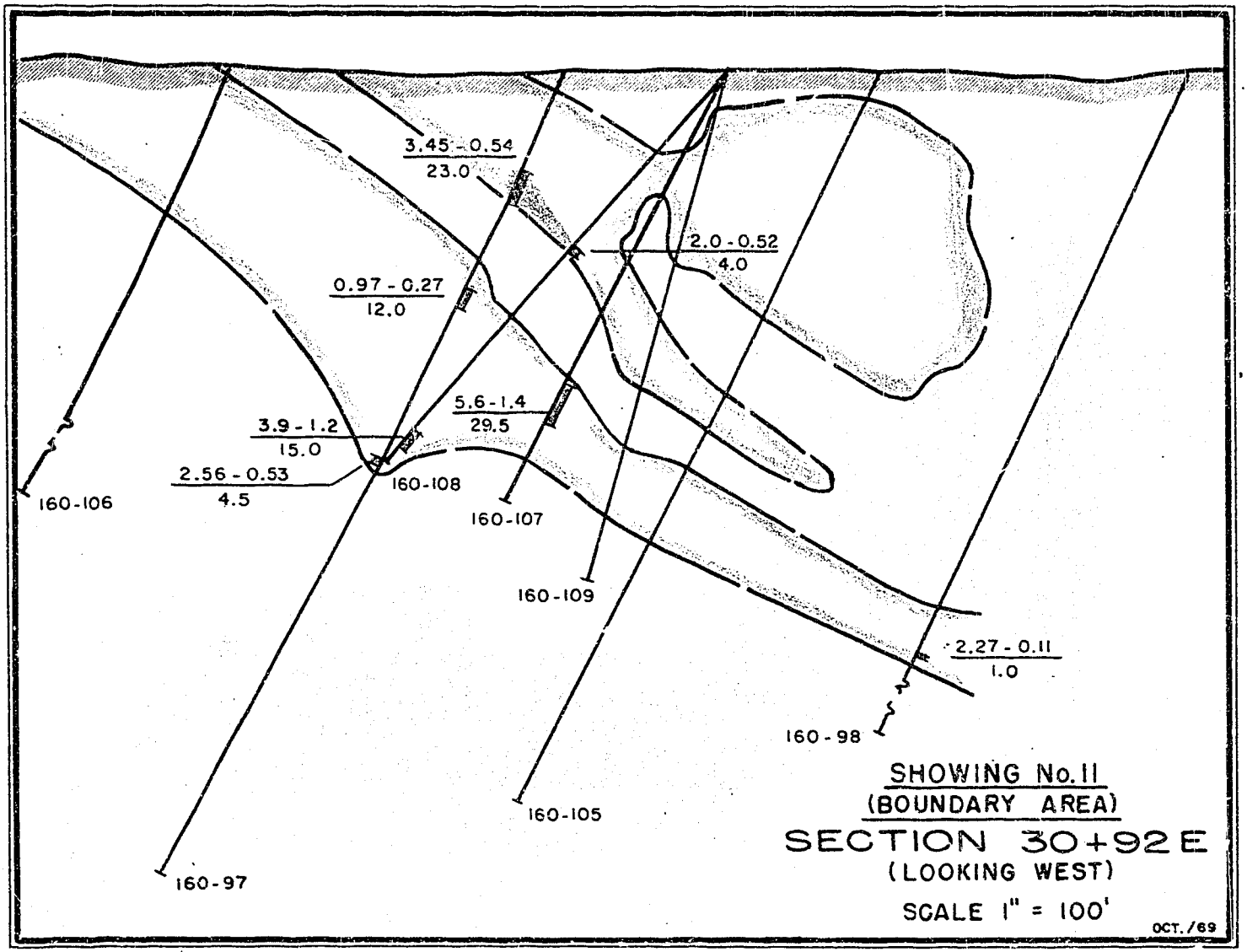
SHOWING No.5

SECTION 448 E

(LOOKING WEST)

SCALE 1" = 100'

OCT./69



SHOWING No.11

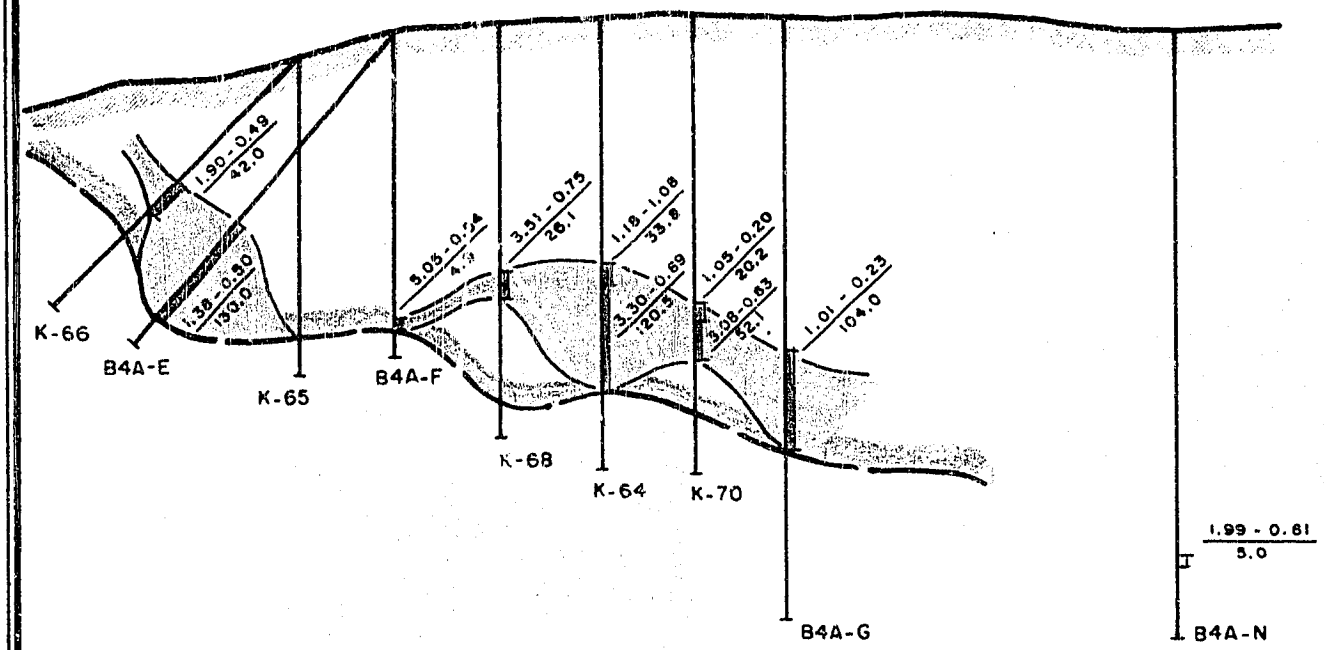
(BOUNDARY AREA)

SECTION 30+92 E

(LOOKING WEST)

SCALE 1" = 100'

OCT./69



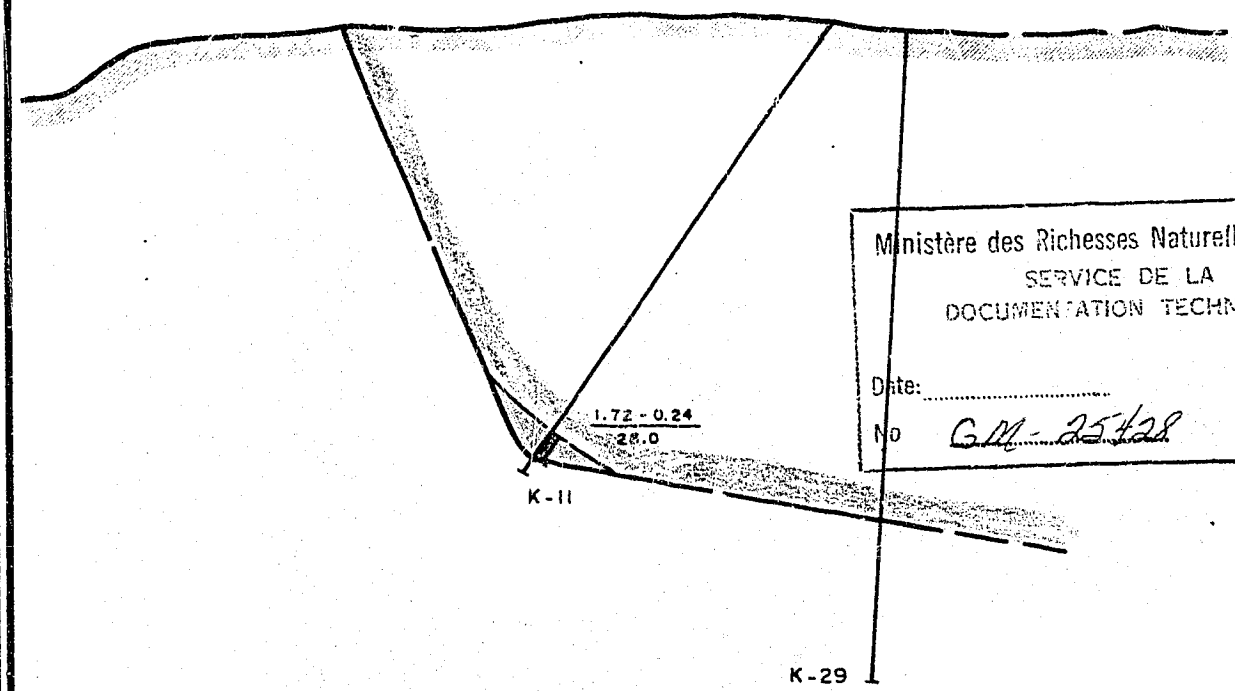
KATINIQ AREA

SECTION 344 E

(LOOKING WEST)

SCALE 1" = 200'

OCT./69



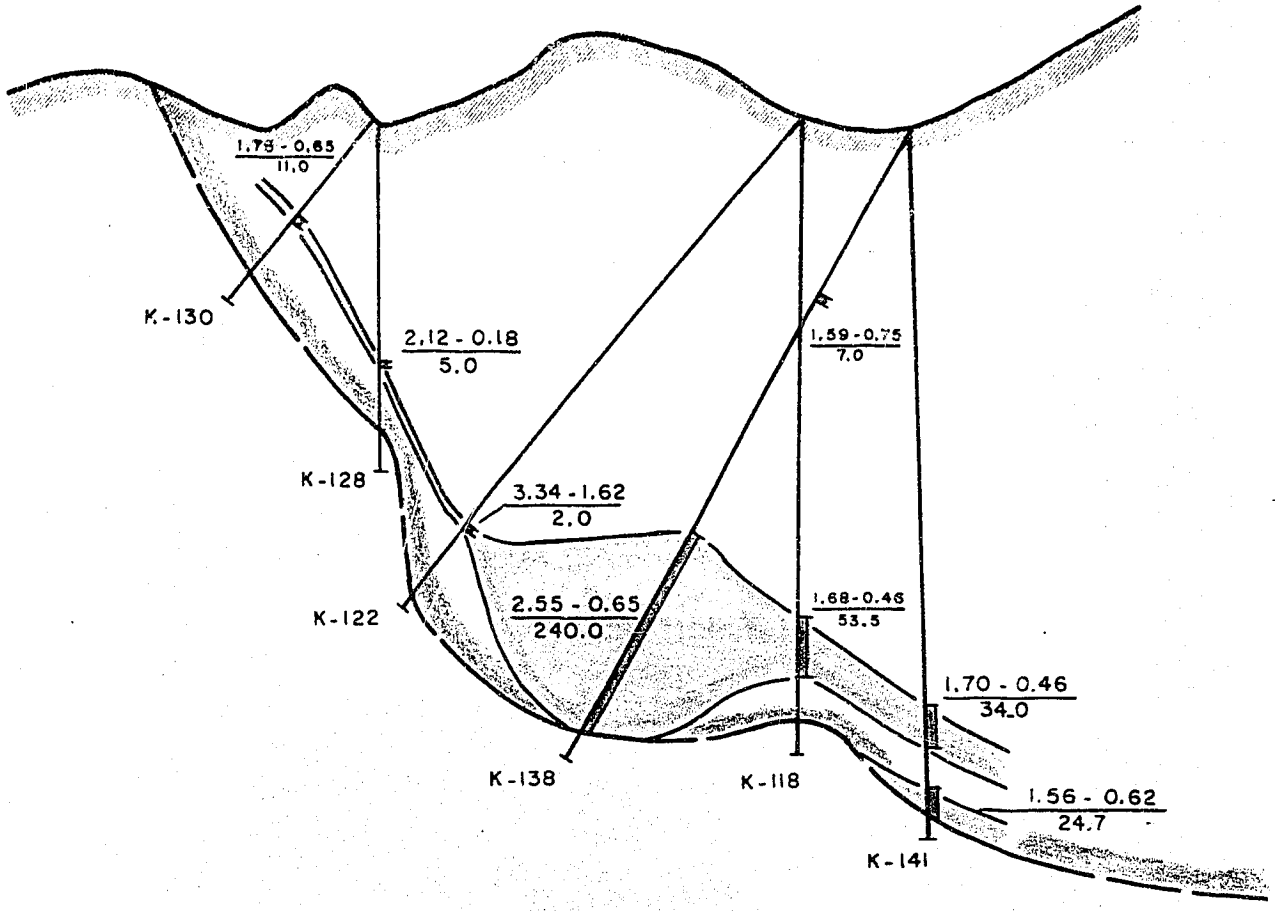
KATINIQ AREA

SECTION 355+50 E

(LOOKING WEST)

SCALE 1" = 200'

OCT./69



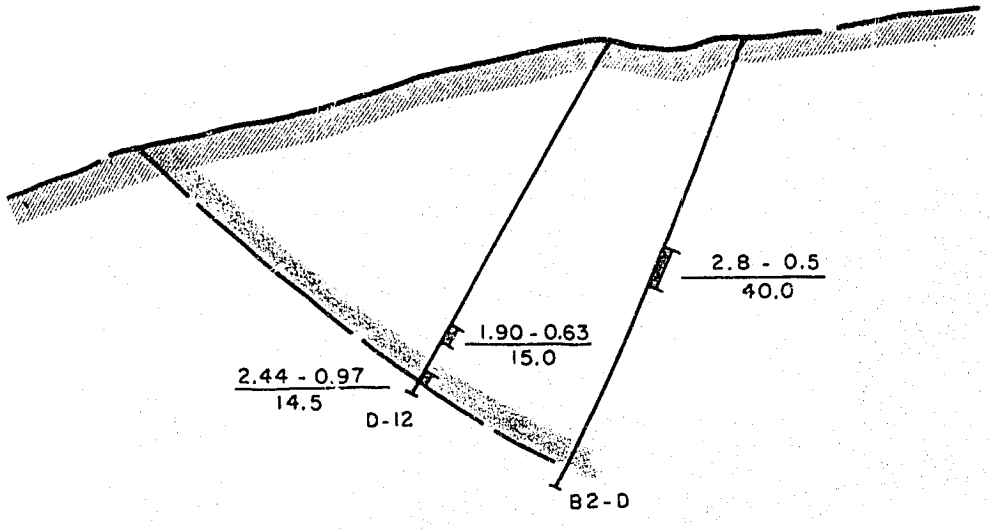
KATINIQ AREA

SECTION 322 E.

(LOOKING WEST)

SCALE 1" = 200'

OCT. /69



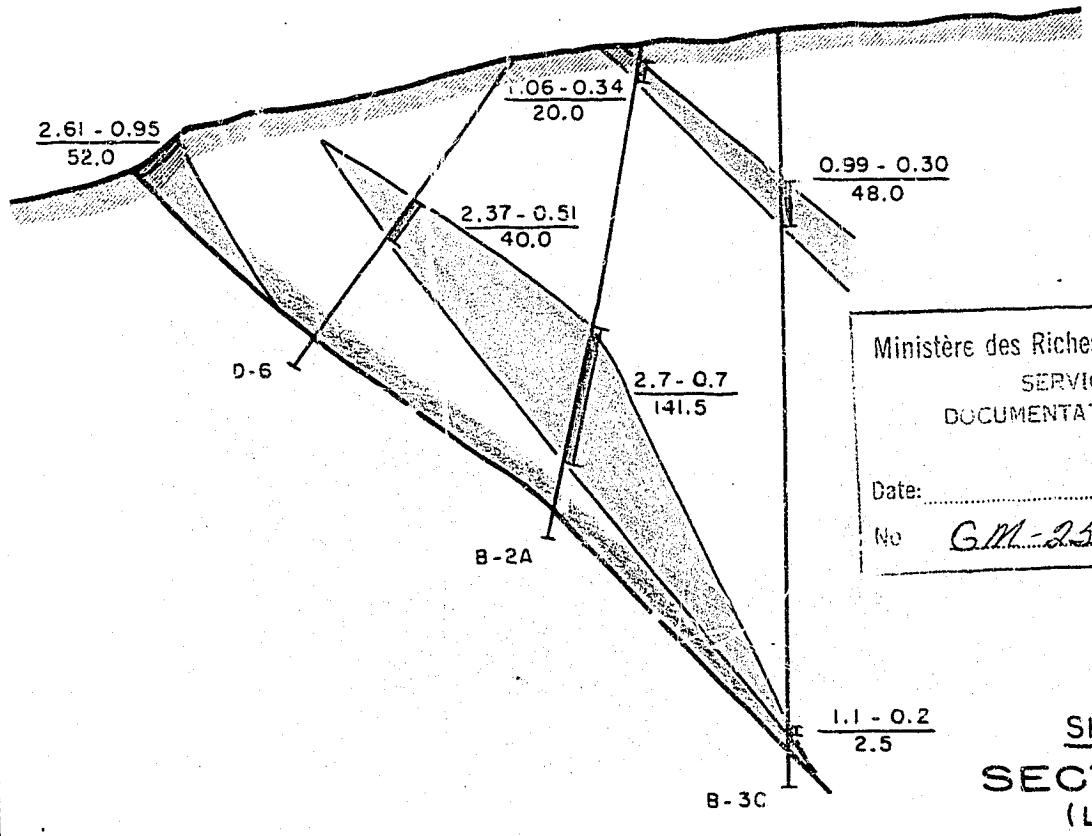
SHOWING No. 2

SECTION 206E

(LOOKING WEST)

SCALE 1" = 200'

OCT./69



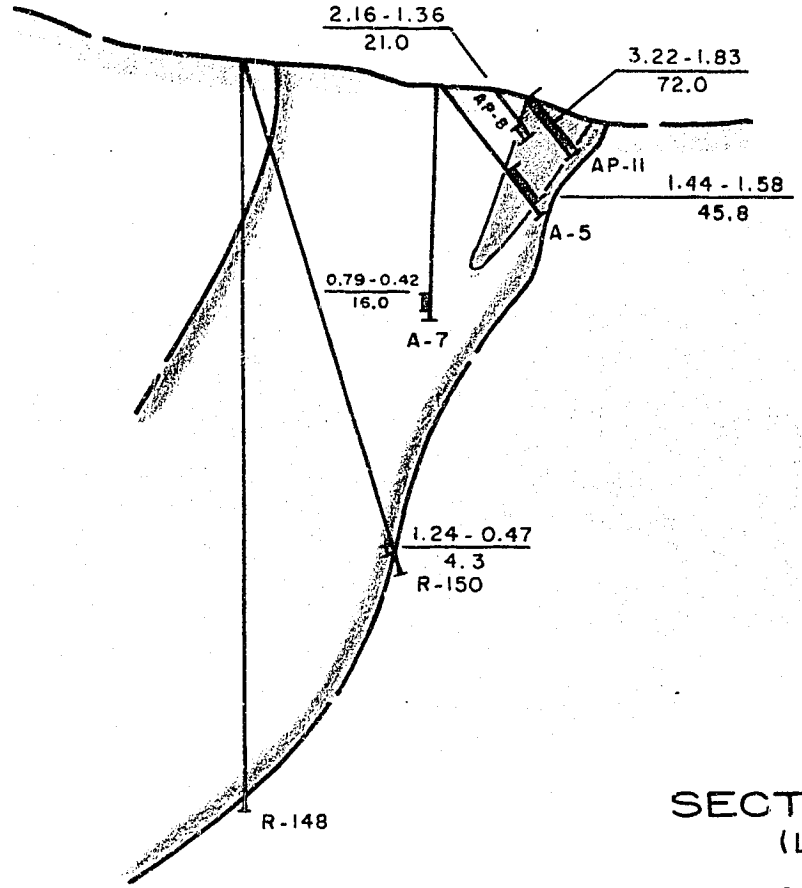
SHOWING No. 3

SECTION 148E

(LOOKING WEST)

SCALE 1" = 200'

OCT./69



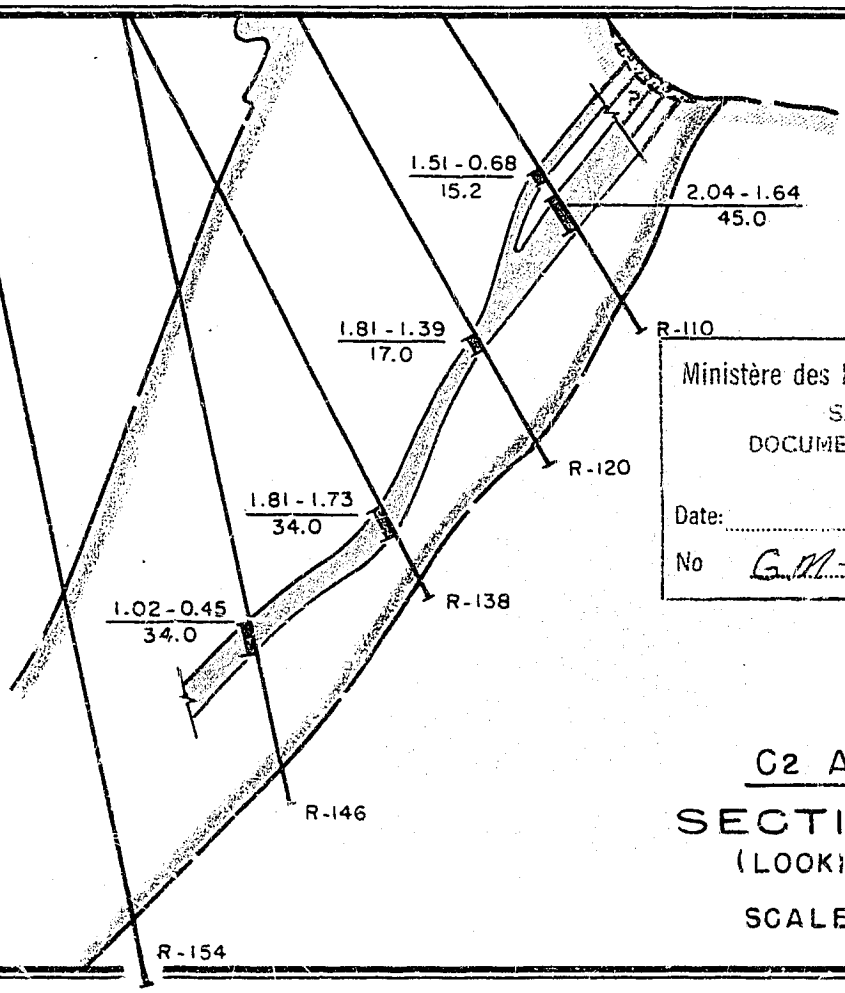
C1 AREA

SECTION 7600 E

(LOOKING EAST)

SCALE 1" = 200'

OCT./69



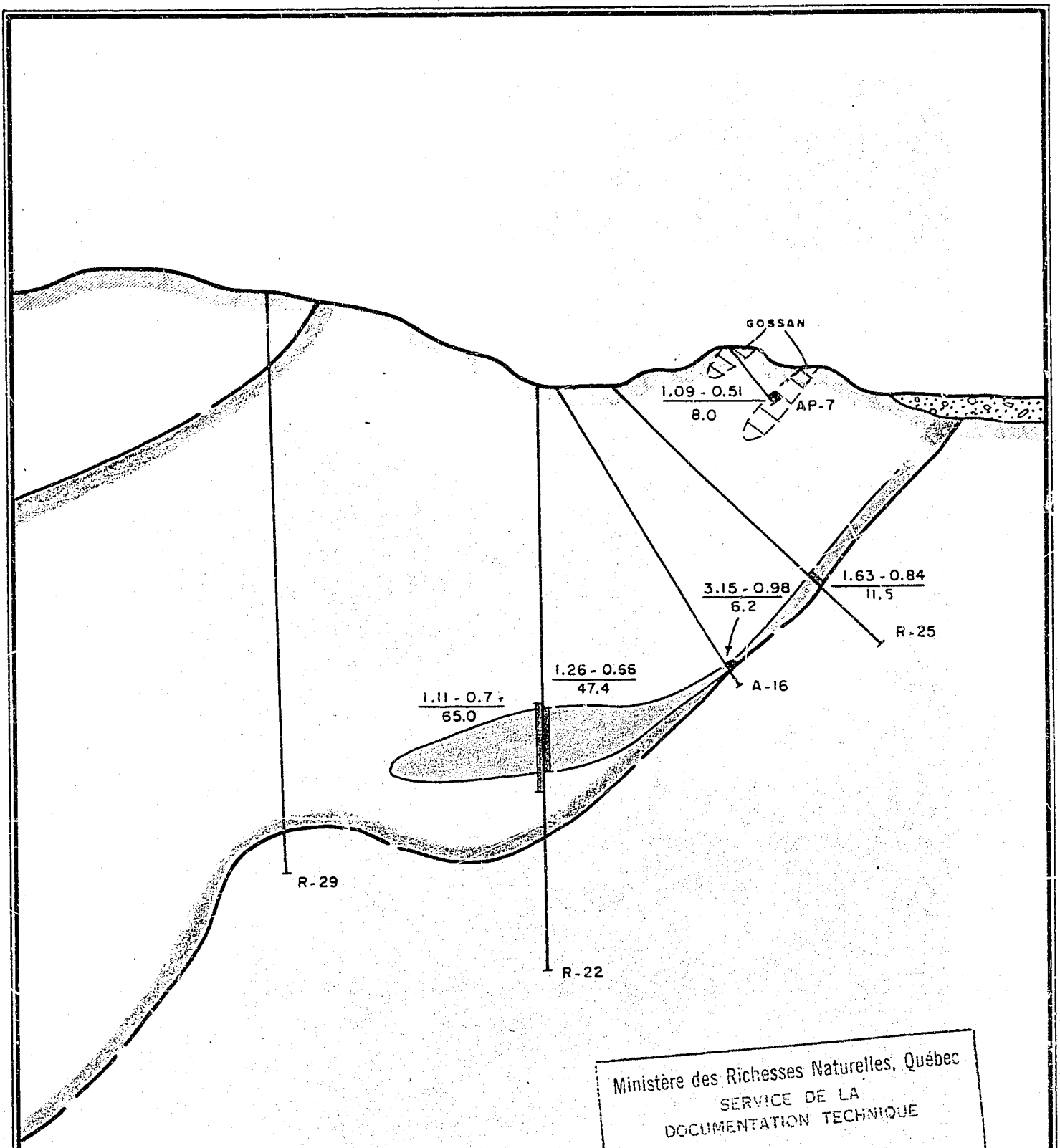
C2 AREA

SECTION 6 W

(LOOKING EAST)

SCALE 1" = 200'

OCT./69



CROSS LAKE

SECTION 600 E

(LOOKING EAST)

SCALE 1" = 100'

OCT./69