

009538

92INW042-07

PROPERTY FILE

92 1/11W

PRELIMINARY REPORT ON RED HILL

Willis W. Osborne

July 7, 1971

## PRELIMINARY REPORT ON RED HILL

### Geology:

The general geology of the Red Hill Property, located 5 miles south-southwest of Ashcroft, B.C., consists of small granodiorite stocks intruded into predominantly volcanic rock. The volcanic rock is mainly felsite (probably dacite) which is commonly porphyritic, and some basalt. One highly fractured zone of felsite could be intrusive.

Regional metamorphism, affecting the rocks above is of the greenschist facies. The felsite varies from a grey rock with chlorite specks and chlorite along foliation planes to a light grey rock with sericite along foliation planes. The latter occurs more on the west and southwest parts of the mapped area, and the sericite could be a product of metasomatism.

The area seems to have undergone a fairly active structural history. The foliation is northwest striking and steeply dipping to the southwest. Contacts seem to generally follow foliation. Two assumed faults, one of which is offset by the other, intersect in the center of the mapped area. The strongest evidence for these is the presence of strong linears on air photos. Movement along these could have separated the western granodiorite stock from the south-eastern intrusive body and offset it to its present position. Some evidence conflicts with this interpretation.

Mineralization consists of pyrite, chalcopyrite, chalcocite, malachite, azurite and other secondary minerals. The pyrite occurs mainly along what seems to be a discontinuous zone extending from the western intrusive to the south-southeast. It appears to form an aureole around the western intrusive, and to be vaguely associated with the possible felsite intrusive; then it follows along the eastern side of the southeast intrusive body. Copper mineralization was found mainly off the northwest end of the southeast intrusive and also widely scattered along the eastern part of the mapped area.

### Geophysical and Geochemical Data

An I.P. survey on the property roughly confirms the existence of the large pyrite zone described above. South of 200N a north-trending copper-soil anomaly occurs to the east of the pyrite - I.P. anomaly, but north of 200N it

swings abruptly to the northwest and seems to occur just to the southwest of the I.P. anomaly. A VLF anomaly overlaps the west edge of the soil anomaly. No outcrop was seen in this area.

Conclusions and Recommendations:

A Diamond Drill hole is recommended at 200N - 232E to be drilled  $-60^{\circ}$  to the east. This is located to test both the soil anomaly and the VLF anomaly. The zone is thought to dip to the west for two reasons: First, because the regional foliation dips in that direction and second, because of the location of the geochem anomaly (to the east and up the hill) in respect to the VLF anomaly. Since the soil anomaly would roughly indicate the location of the zone at the surface, a VLF anomaly on the same zone but along the west side of the geochem anomaly would indicate a westerly dip.

Little outcrop was found in the area of the VLF and soil anomalies. Some fragments with 40% pyrite were found 100 feet south of 204N - 226E, otherwise, not too much can be said geologically about this area.

Finally, in judging any property in this area recognition must be given to its location—west of the Highland Valley and south of the Maggie Mine—, consequently any company should be more willing to drill anomalous and interesting zones than they would be apt to do in other areas.

Willis W. Osborne

July 7, 1971



NORANDA EXPLORATION CO. LTD.

Property RED HILL

Sheet No. 2 Hole No. NR-1

Project No. 1023 N.T.S.

Core Size: B.Q.

Logged by: W. W. OSBORNE

Lat.	Elev.	Dip	Collared
Dep.	Depth	Bearing	Completed

CREST ASSAYS

Footage	Rec'y	Rock Type/Alteration	Graphic Log	Mineralization/Structure	% Sulfides	Sample No.	Lt.	ASSAYS			
								AU	AG	CU	MO
151-186.5		Green and grey and. Weak carb. veining 159-176. Some qtz. w/py bands.		Mod.-intense fol. 0.3 py to 164; 3.1 to 167; 0.6 to 176; 0.2 to end. Strong bnds. of py from 169-167.	0.6						
186.5-187.5		Lt. grey and buff felsite.		Weak to moderate fol. Fine kl. material w/py.	0.6						
187.5-217		Green and grey and w/talc & chl. Weak qtz.-carb. veining.		Mod.-intense fol. Zones of int. fol. 193-196; 197-198; 201.6-203.6; 207-208.	0.5						
217-234		Green and grey and.		Moderate fol.	0.9	M 1806 (220-230)	10	TR	TR	TR	TR
234-252		Lt. grey to grey aph. felsite.		Gougy fract.in first 5 H. A black min. is ass. w/py.;wk.-mod.fol.	0.4	M 1807 (230-240)	10	TR	TR	TR	TR
240-250	95					M 1808 (240-250)	10	TR	TR	TR	TR
252-253½		Bas.		Min. mod. fol.	0.8	M 1809 (250-260)	10	TR	TR	TR	TR
253½=273		And.		Mod. fol.	0.5	M 1810 (260-270)	10	TR	TR	TR	TR
273-306		Dk. to lt. grey felsite; Sr along fol. planes.		Weak to mod. fol. Mod. frs. w/ a lil min. ass. w/py to 282. Weak to end.	0.6						

NORANDA EXPLORATION CO. LTD.

RED HILL

Sheet No. 3 Hole No. NR-1

Property \_\_\_\_\_

Project No. 1023 N.T.S.

Core Size: B.Q.

Logged by: W. W. OSBORNE

Lat. \_\_\_\_\_ Elev. \_\_\_\_\_ Dip \_\_\_\_\_ Collared \_\_\_\_\_

Dep. \_\_\_\_\_ Depth \_\_\_\_\_ Bearing \_\_\_\_\_ Completed \_\_\_\_\_

crest ASSAYS

Footage	Rec'y	Rock Type/Alteration	Graphic Log	Mineralization/Structure	% Sulfides	Sample No.	Lt.				
306-312		And. (There is some chlor. in these sections.) Weak carb. veining. A few quartzose zones.		Py; mod. fol.	1.3						
312-326		Grey felsite w/chloritic zones over last 5 ft. it is grading toward and.		Py; mod & intense fol.	1.1						
326-366		Grey and w/chl. 1" qtz. vn. at 353 and 356.		Mod.-intense fol. 1.2 py. to 336; 2.2 to 239; 1.2 to end. Four bands of py. between 336 and 339.	1.3						
366-367		Dk. green bas.		Weak to moderate fol.	0.6						
367-387		Grey rk. Prob. and. Talc along fol. planes. Little chl. 2 1" Qtz. vns. at end.		Intense fol. Last 3' is fairly well brkn. w/gouge along fractures. 2.8 py. to 376; 0.8 to end	1.7						
387-403		Aph. grey rk. w/chl. on some frs Prob. felsite. One qtz. vn. at 400.		Rk. well brkn. w/gouge along fractures. Weak-mod. fol.	0.4						
403-412		And. Weak carb. & qtz. veining.		Well brkn. Weak to mod. fol. 0.3 py to 410½; 4.5 to end.	1.8						
412-434		Grey felsite w/some chl. along fractures and as specks.		Weak-mod. fol.	0.4						

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Property RED HILL

Sheet No. 4

Hole No. NR-1

Project No. 1023 N.T.S.

Core Size: B.Q.

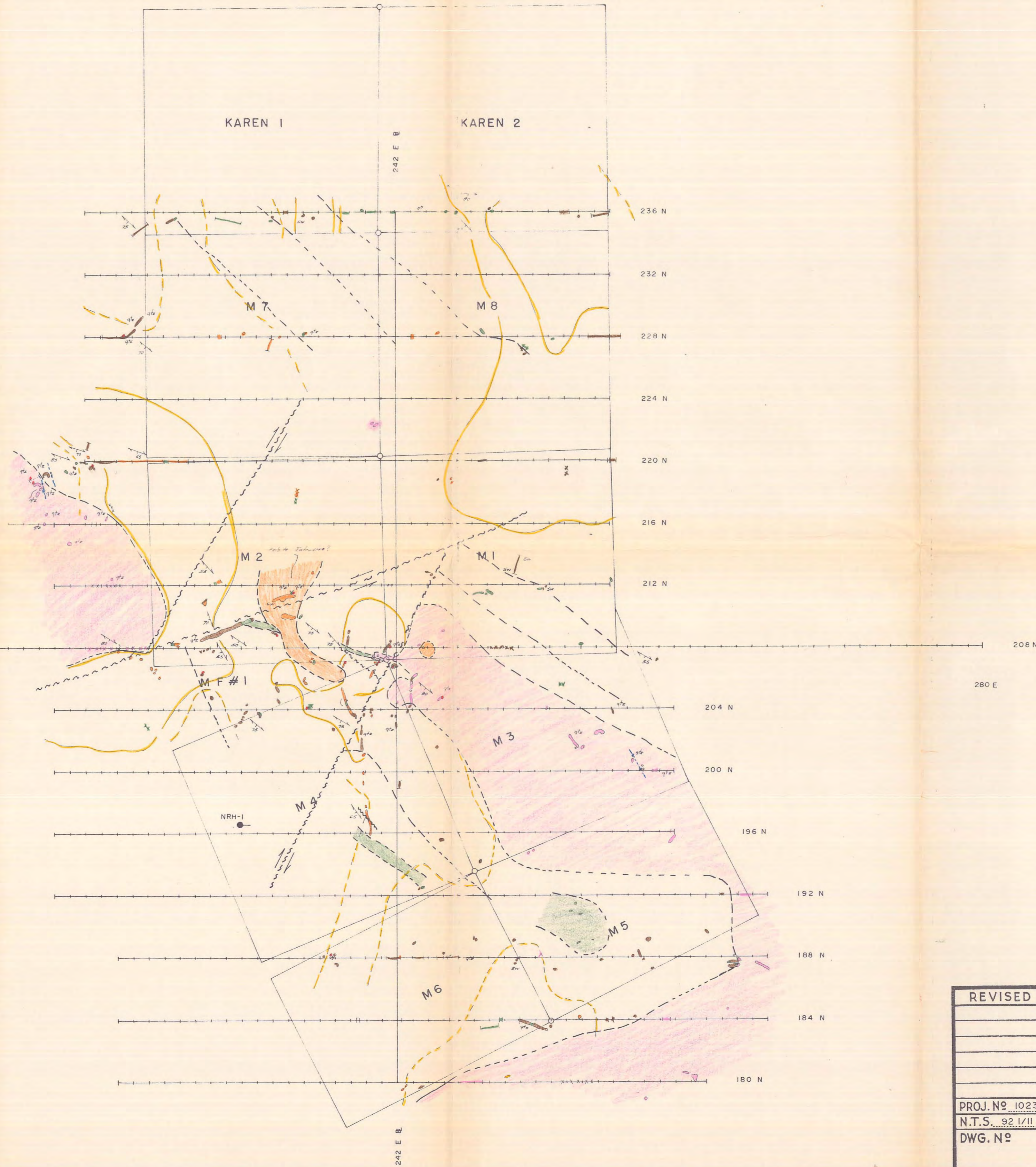
Logged by: W. W. OSBORNE

Lat.		Elev.		Dip		Collared		CREST ASSAYS					
Dep.		Depth		Bearing		Completed		AU	AG	CU	MO		
Footage	Rec'y	Rock Type/Alteration		Graphic Log	Mineralization/Structure		% Sulfides	Sample No.	Lt.				
434-435		Bas.			Weak fol.		0.2						
435-447		Same as 412-434.			Weak-mod. fol.		0.4	M 1811	10	TR	TR	0.01	TR (440-450)
447-452		"			Well brkn., gougy rk. Weak - mod. fol.		0.6	M 1812	10	TR	TR	0.02	TR (450-460)
452-457		"			Weak - mod. fol.		1.4	M 1813	10	TR	TR	0.05	TR (460-470)
457-458		Bas.			Weak fol.		0.5	M 1814	10	TR	TR	0.02	TR (470-480)
458-474		And. One 1' qtz.vn.at 462. Weak carb. veining.			Mod.fol. Specks of cpy at 463; 464 and 469.		3.4						
460-470	99												
474-475		Bas.			Weak fol.		0.3						
475-502		Grey to lt. grey rk. w/some chl. in seams.			0.4 py to 492.5; 4.0 to 495; 0.4 to end.		0.7	M 1815	10	TR	TR	0.01	TR

END OF HOLE

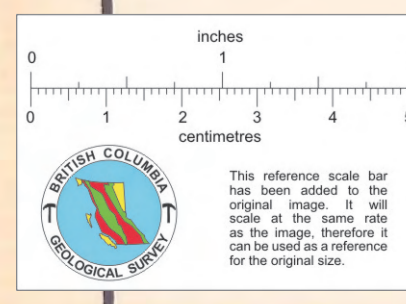
Lacanex Base Line 200E

to Cache Cr.  
Trans Canada Highway  
to Spruce Bridge



- LEGEND**
- Quartz-diorite granodiorite with minor diorite
  - Basalt
  - Felsite with sericite along foliation planes and highly fractured felsite
  - Felsite with chlorite along foliation planes (sericite may be present)
  - Areas of 10% and greater pyrite
  - Areas of 0.6 to 10% pyrite
  - Copper mineralization
  - Qtz veining
  - Stockwork of quartz veins
  - Qtz vein / approx. location of quartz vein
  - Contact - defined, approx, assumed
  - Fault - defined, assumed
  - Outcrop
  - Traverse across an outcrop
  - Fragment
  - Adit

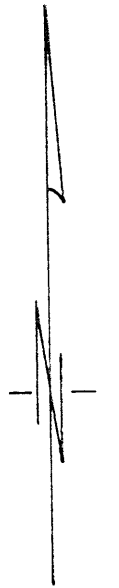
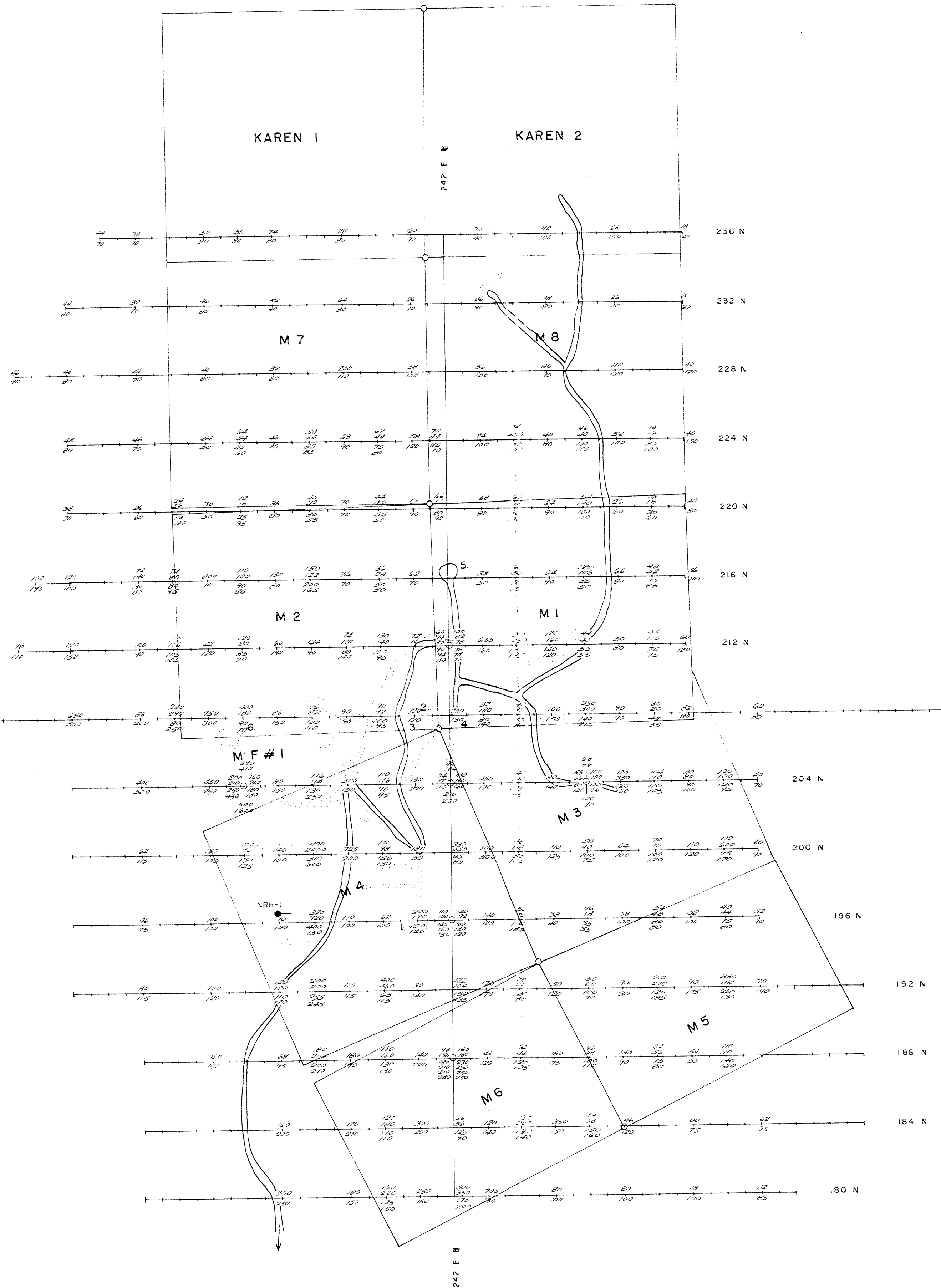
REVISED	RED HILL	
	GEOLOGY	
	PROJECT:	
PROJ. NO 1023	SURVEYED BY: W. Osborne	DATE: JULY 8, 1971
N.T.S. 92.1/11.W.	DRAWN BY: J. Mac	SCALE: 1" = 400'
DWG. NO	<b>NORANDA EXPLORATION CO. LTD.</b>	
	OFFICE: VANCOUVER	





Lacanex Base Line 200E

to Cache Cr.  
Trans Canada Highway  
to Spruce Bluffs



**LEGEND**

- Roads:
- Trenches:
- Cleared Areas:
- Drill Holes:
  - 1. One hole definite, Chip bags nearby
  - 2. One hole definite
  - 3. Two holes definite, one possible hole
  - 4. One hole definite
  - 5. One hole definite
  - 6. One hole definite
- ALL PERCUSSION HOLES.

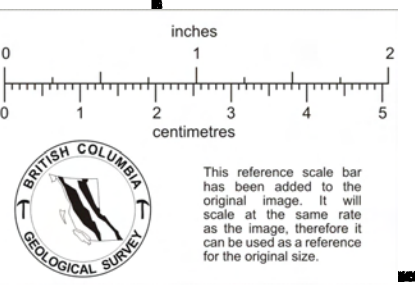
**Profiles**

Total Cu Total Zn

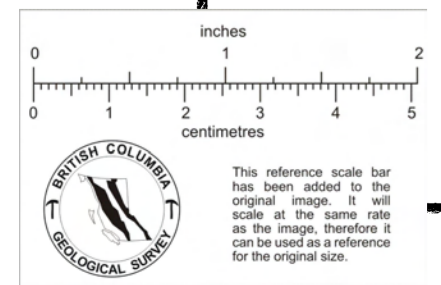
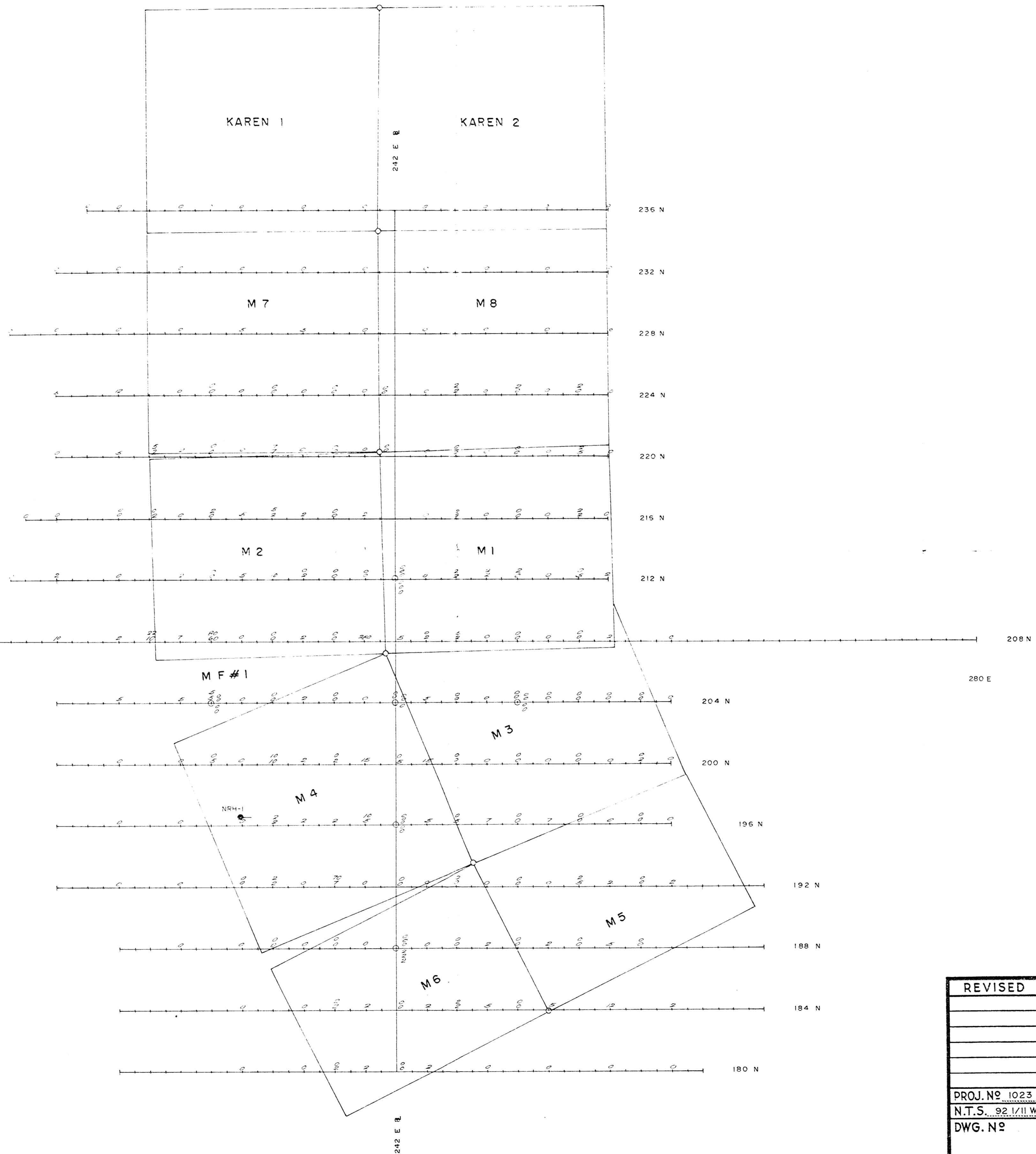
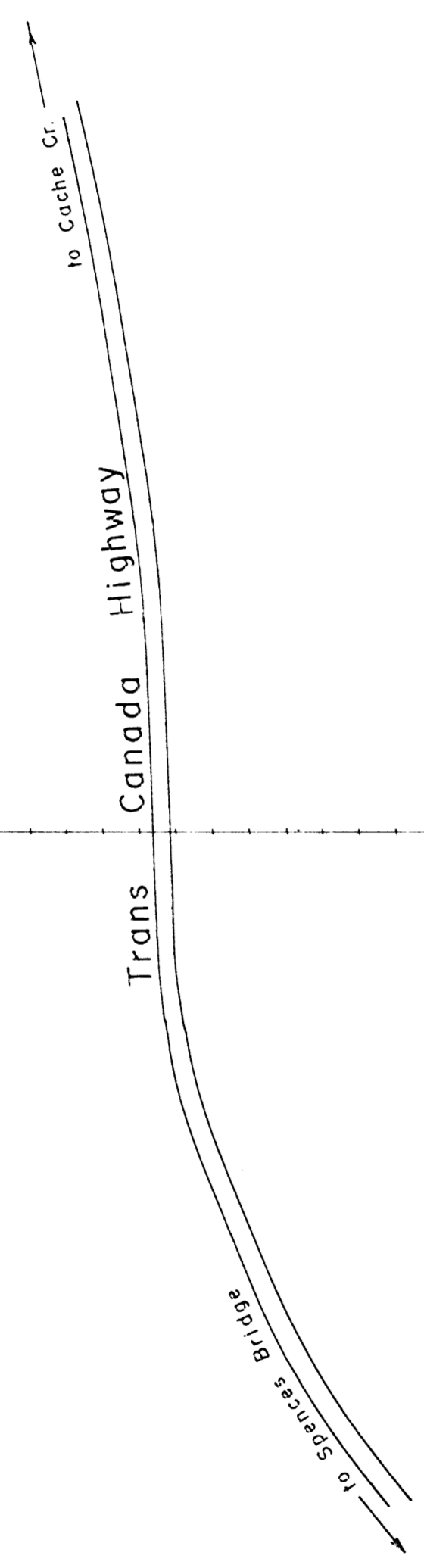
**Grid Readings**

Total Cu  
Total Zn

REVISED	RED HILL	
	SOIL SURVEY	
PROJECT:		
PROJ. NO. 1023	SURVEYED BY:	DATE: MAY - JUNE, 1971
N.T.S. 92.1/11.W	DRAWN BY:	SCALE: 1" = 400'
DWG. NO.	NORANDA EXPLORATION CO. LTD.	
	OFFICE: VANCOUVER	



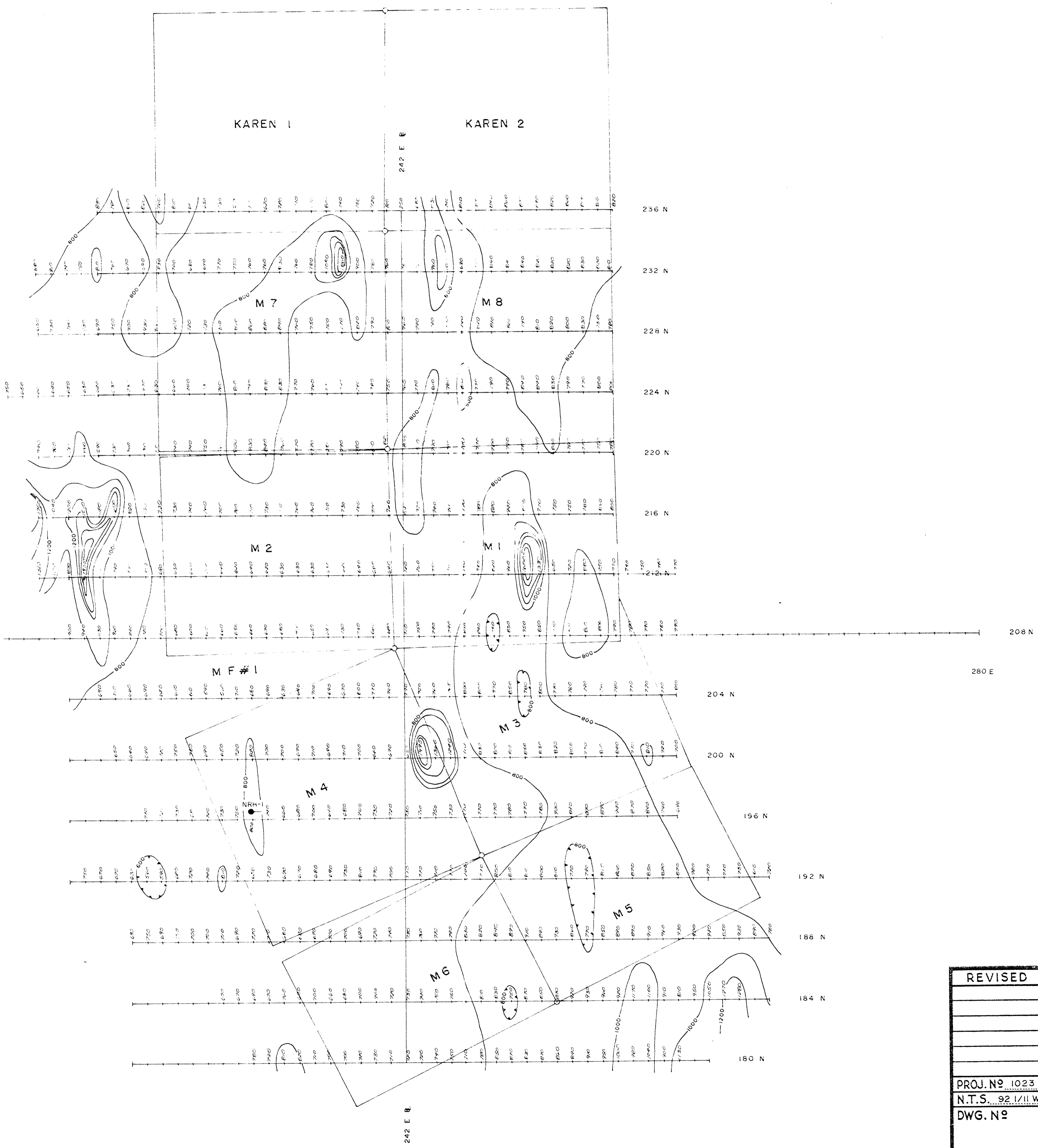
Lacanex Base Line 200 E



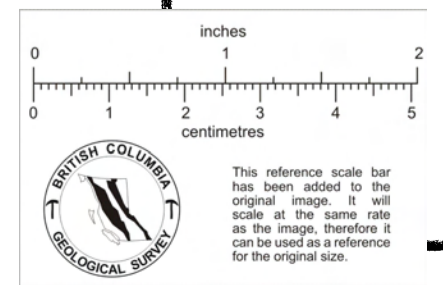
REVISED	RED HILL	
	SOIL SURVEY	
	Total - Mo	
PROJECT:		
PROJ. NO. 1023	SURVEYED BY:	DATE: MAY-JUNE, 1971
N.T.S. 92.1/11 W.	DRAWN BY:	SCALE: 1" = 400'
DWG. NO.	NORANDA EXPLORATION CO. LTD.	
	OFFICE: VANCOUVER	

Lacanex Base Line 200 E

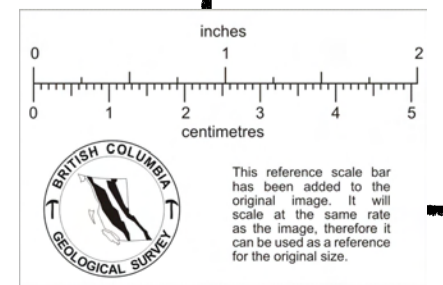
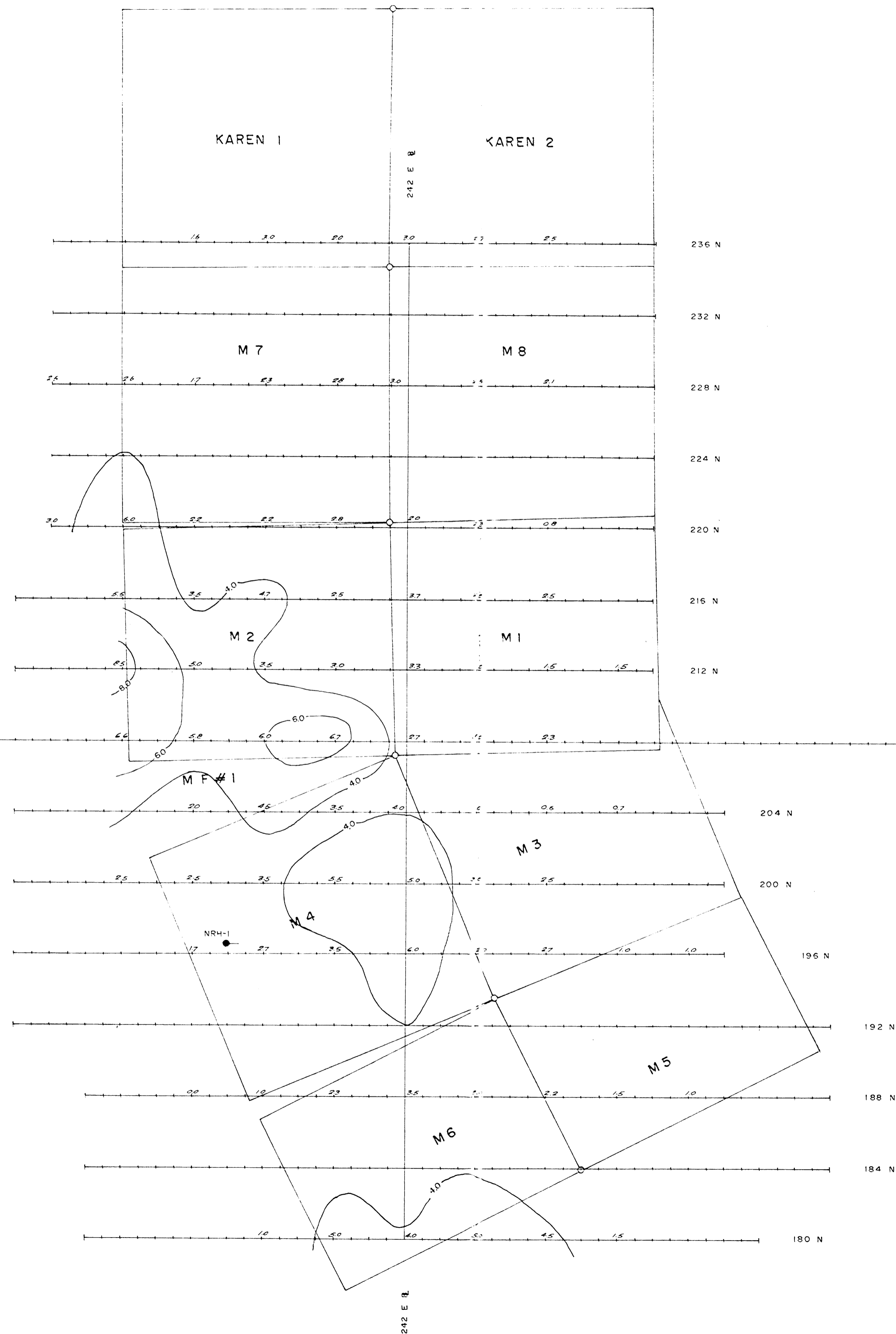
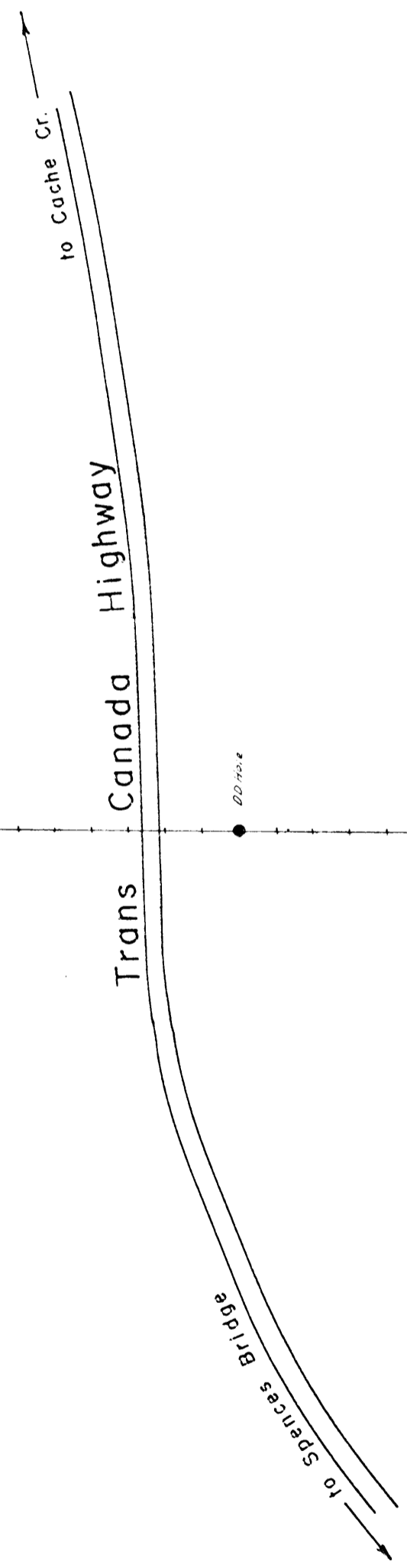
Trans Canada Highway  
to Cache Cr.  
to Spence Bridge



REVISED	RED HILL	
	MAGNETOMETER SURVEY	
	CONTOUR MAP	
PROJECT: _____		
PROJ. NO. 1023	SURVEYED BY: _____	DATE: _____
N.T.S. 92 1/11 W	DRAWN BY: _____	SCALE: 1" = 400'
DWG. NO.	NORANDA EXPLORATION CO. LTD.	
	OFFICE: VANCOUVER	



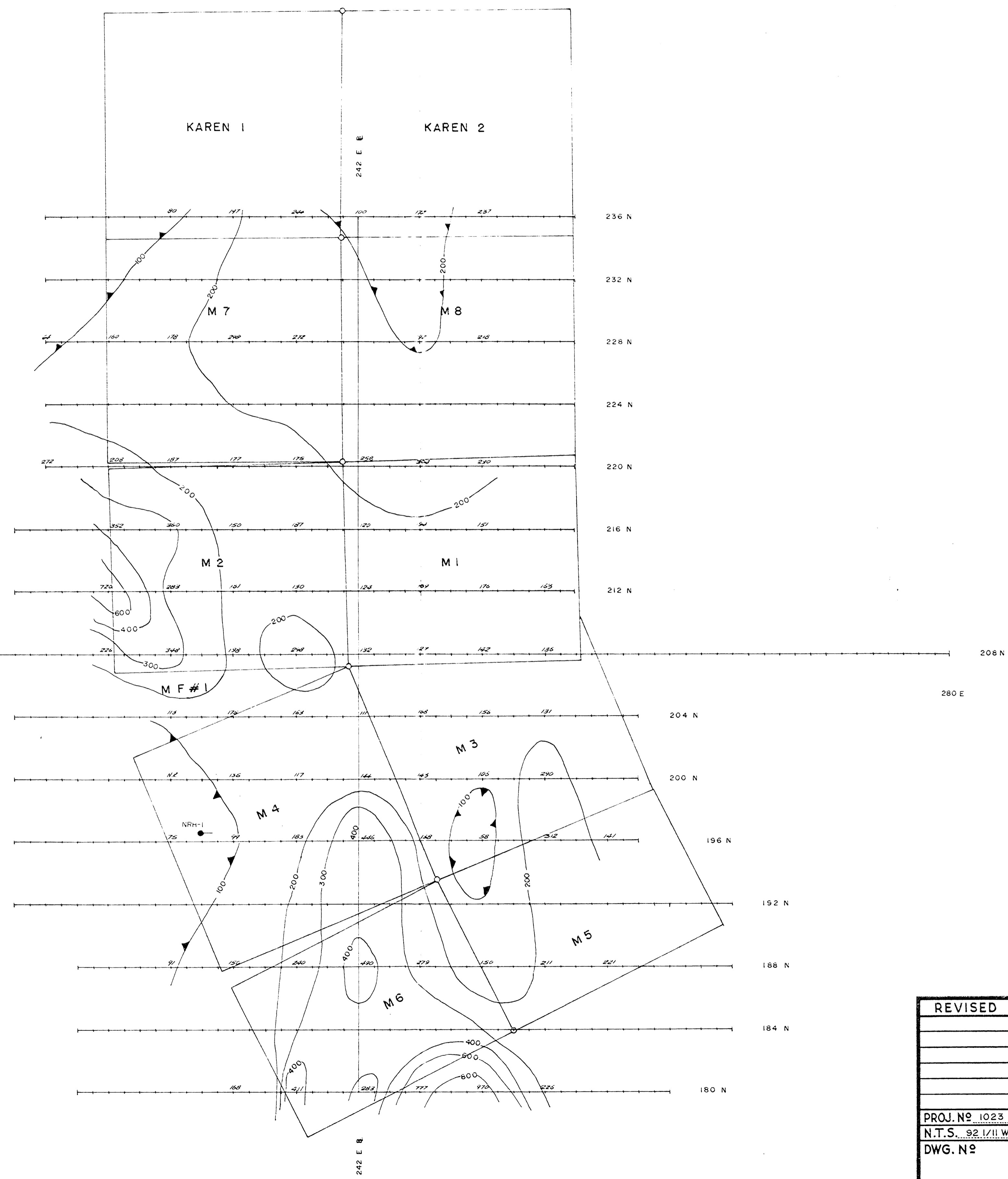
Lacanex Base Line 200 E



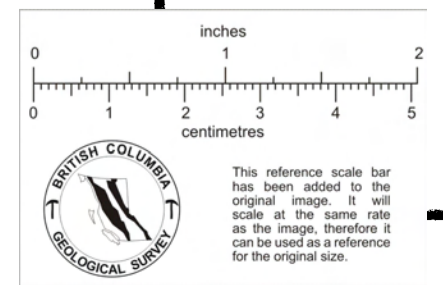
REVISED	RED HILL	
	I.P. SURVEY	
	F.E.% CONTOUR MAP	
	X= 400' n=1 FREQ: 10 & 0.3 Hz.	
	DIPOLE - DIPOLE ARRAY	
	PROJECT:	
PROJ. NO 1023	SURVEYED BY: A. Hamilton	DATE: April, 1971
N.T.S. 92.1/11.W	DRAWN BY: <i>R.H.</i>	SCALE: 1" = 400'
DWG. NO	NORANDA EXPLORATION CO. LTD.	
	OFFICE: VANCOUVER	

Lacanex Base Line 200 E

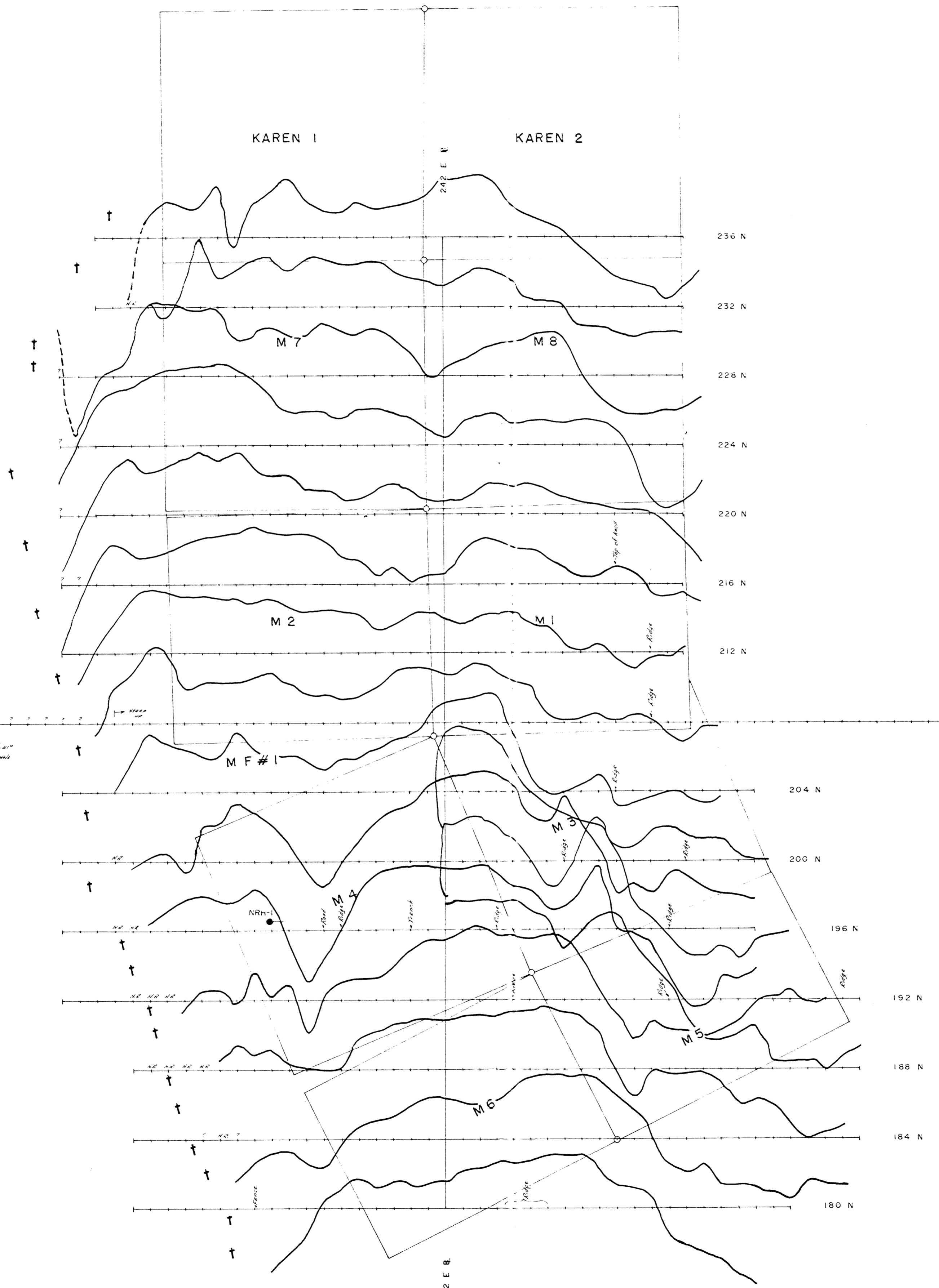
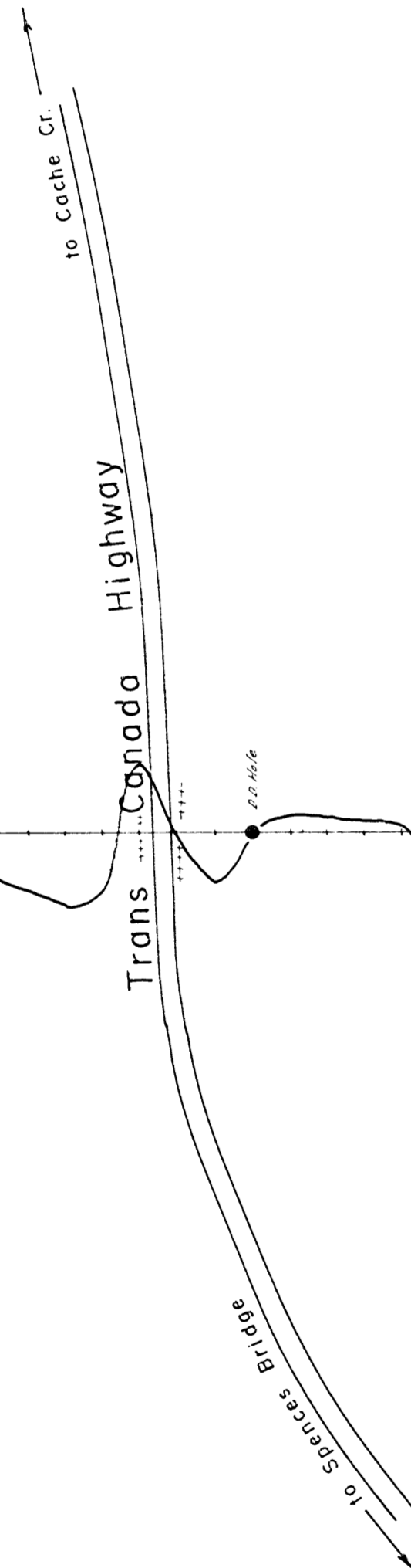
To Cache Cr.  
Trans Canada Highway  
To Strath's Bridge



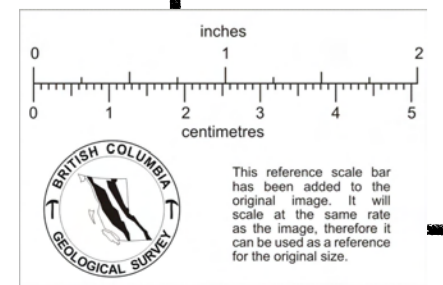
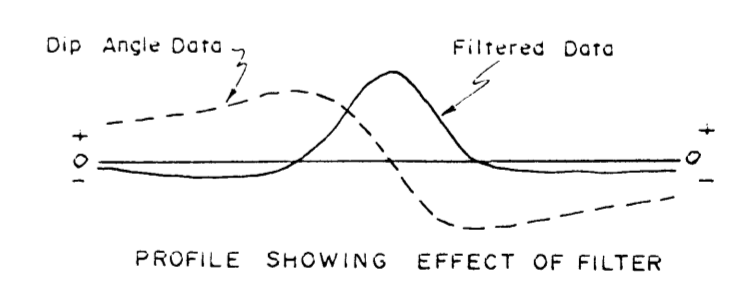
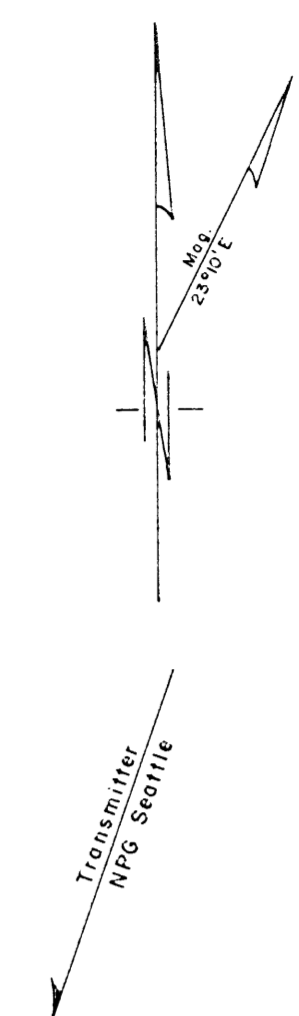
REVISED	RED HILL	
	I.P. SURVEY	
	RESISTIVITY CONTOUR MAP $\frac{R_a}{2\pi}$ in Ohm ft.	
	X = 400' n=1	
	DIPOLE-DIPOLE ARRAY	
PROJECT: _____	DATE: APRIL, 1971	
PROJ. NO. 1023	SURVEYED BY: A. Hamilton	SCALE: 1" = 400'
N.T.S. 92.1/11 W	DRAWN BY: _____	
DWG. NO. _____	NORANDA EXPLORATION CO. LTD.	
	OFFICE: VANCOUVER	



Lacanex Base Line 200 E

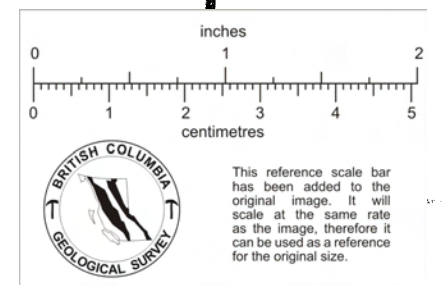
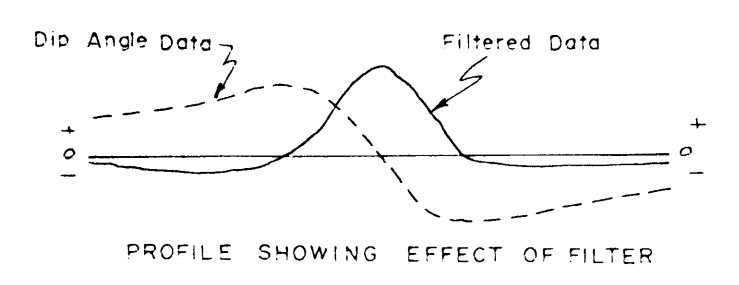
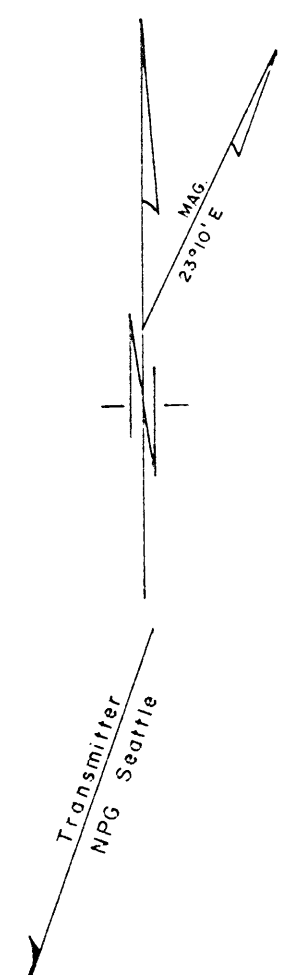
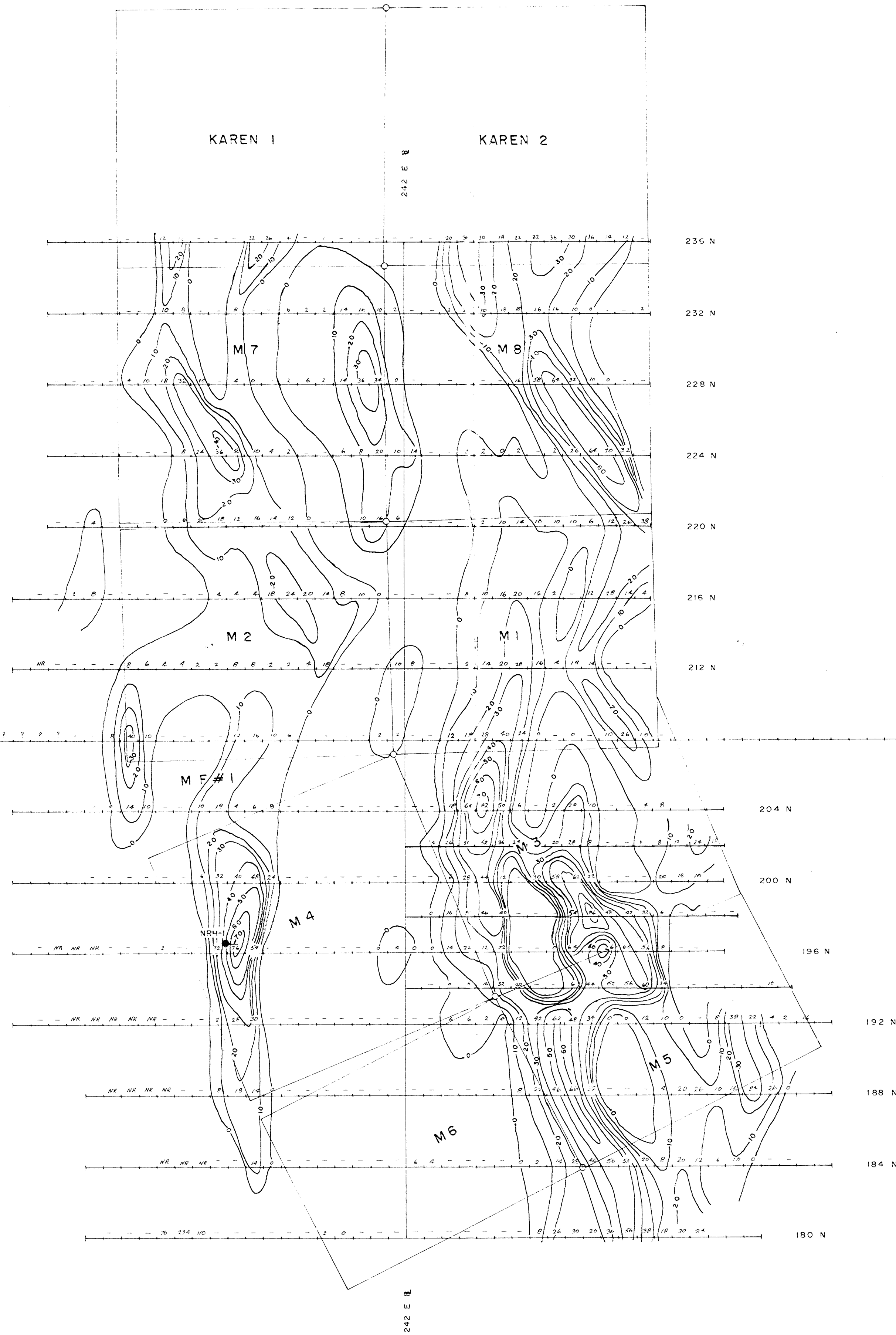
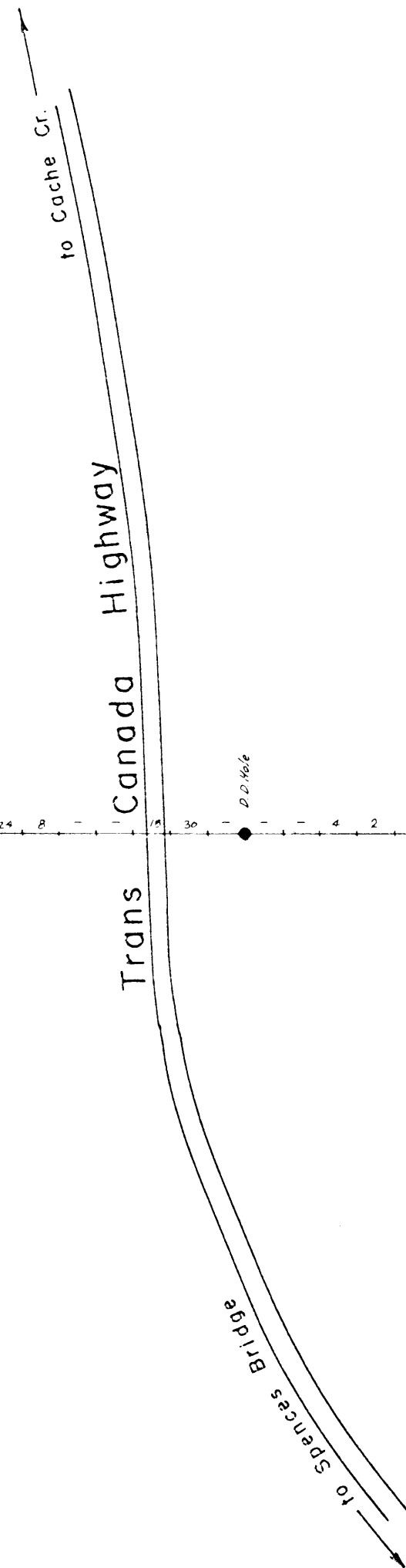


t - Power line



REVISED	RED HILL	
	VLF E-M PROFILES	
	Data recorded and plotted in % Slope	
PROJECT:		
PROJ. No. 1023	SURVEYED BY: Bryan Fraser	DATE: Feb. 1971
N.T.S. 92/11 W	DRAWN BY:	SCALE: 1" = 400'
DWG. No	NORANDA EXPLORATION CO. LTD.	
	OFFICE: VANCOUVER	

Lacanex Base Line 200 E



REVISED	RED HILL	
	VLF E-M CONTOUR MAP	
	Contour Map of Filtered Data in %	
	Data Interval 100'	Contour Interval 10 %
PROJECT:		
PROJ. No. 1023	SURVEYED BY: Bryan Fraser	DATE: Feb. 1971
N.T.S. 92.1/11 W	DRAWN BY:	SCALE: 1" = 400'
DWG. No.	NORANDA EXPLORATION CO. LTD.	
	OFFICE: VANCOUVER	