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41010NE2001 OP93-323 GREENLAW

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## ONTARIO PROSPECTORS ASSISTANCE PROGRAM

,

#### FINAL SUBMISSION REPORT

# RIDEOUT EAST/HOTSTONE WEST/WAKAMI SOUTH PROPERTIES

GREENLAW TOWNSHIP

NTS 41 0/10

47 43'N LATITUDE 82 48'W LONGITUDE

> BARRY MCDONOUGH JANUARY 8, 1994



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#### 1.0 INTRODUCTION

This report is being prepared for the Ministry of Northern Development and Mines as the final requirement for its Ontario Prospector Assistance Program. This report is a joint submission from Kervin McDonough (OP93-324) and Barry McDonough (OP93-323) letalling the work completed on their jointly held properties in and Cunningham Townships of the Porcupine Mining Greenlaw Division (NTS Reference 41 0/10) at 47 43'N latitude, 82 48'W longitude. The initial proposal for the 1993 program consisted of three separate areas. The Hotstone West property made up of six repatented claims is held 100% by Kervin McDonough. The Ridout East property consists of twenty-six unpatented claims, fifteen of which are held 100% by Kervin McDonough and eleven claims which are jointly held by Barry McDonough (50%) and Kervin McDonough (50%). The third claim group named Wakami South is made up of two block claims with a total of eighteen units located at near the junction of Wakami River and Sultan Creek. This property is jointly held by Kervin McDonough (50%) and Barry McDonough (50%). In addition, a regional diamond indicator exploration program was proposed.

All the claims included in this submission are presently in good standing. (Please see Appendix A).

Exploration has been concerned with the discovery of a precious metal (Gold) ore body, but the potential for base metals exists in the area.

The aim of the program for the 1993 season was to enhance the database on all three properties. This was accomplished by ongoing systematic exploration programs which took the following forms. In the case of the Ridout East property ten kilometres of grid line was geophysically surveyed to complete exploration initiated in 1992 and complicated by technical problems. Prospecting was also done over an area that had been mapped the previous fall and had returned anomalous gold values.

Additional line cutting was completed on Hotstone West and the entire property was surveyed using a magnetometer. Electromagnetic surveys were conducted over the newly cut grid and further mechanical stripping was completed and superficially mapped and sampled.

The Wakami South property had grid lines cut and both magnetometer and VLF electromagnetic surveys conducted. Earlier in the season the claim block was prospected.

The regional diamond exploration program was proposed in the preliminary OPAP application. Kervin McDonough's failing health made this impractical. Mr. McDonough passed away December 10, 1993. At the time of this report an application for a vesting order has been initiated with the Mining Commissioner. Interest in all claims possessed by Mr. McDonough will be vested with his wife and sole beneficiary, Delcey McDonough.

A great deal of assistance was provided by Mr. John Wakeford, area manager of Noranda Exploration Company, Limited in Timmins. Mr. Wakeford allowed Mr. McDonough and the author the use of technical and field equipment. Mr. Wayne Corstorphine, also of Noranda, provided technical assistance and lent a great deal of his time and personal support to the author. No option agreement was reached but it was agreed that Noranda have access to all data collected in exchange for their assistance.

2.0 LOCATION AND ACCESS

All three properties are located within Greenlaw Township which is a part of the Porcupine Mining Division. Situated fifty miles east of Chapleau, Ontario the Hotstone West property is accessible by four-wheel drive vehicle (Figure 1). Ridout East is accessible by cance along the Wakami River or from a portage on the northeast edge of Hotstone Lake (Figure 2). Air Service is available year-round (both fixed and rotary wing) from Timmins. Seasonal bases are in operation from Chapleau and Foleyet during the summer month.

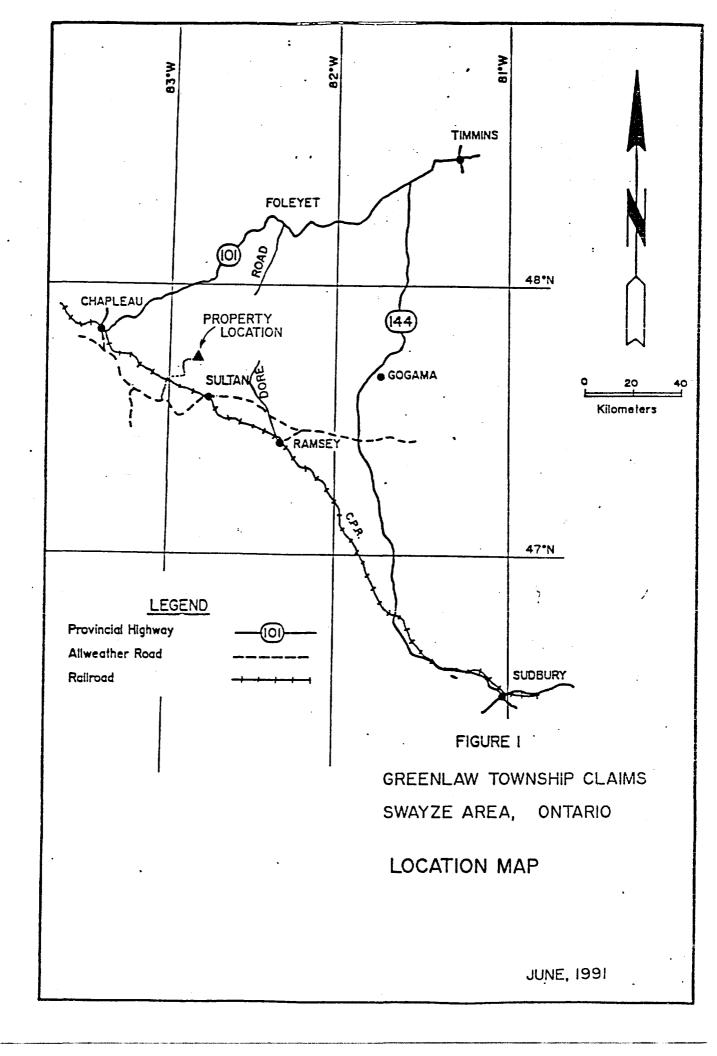
Access to the Ridout East property was along the Wakami River route noted above. Likewise, access to the Wakami South property is along the Wakami River canoe route (Figure 3).

The camp was located on a large stripped area immediately west of Hotstone Lake.

3.0 GENERAL GEOLOGY

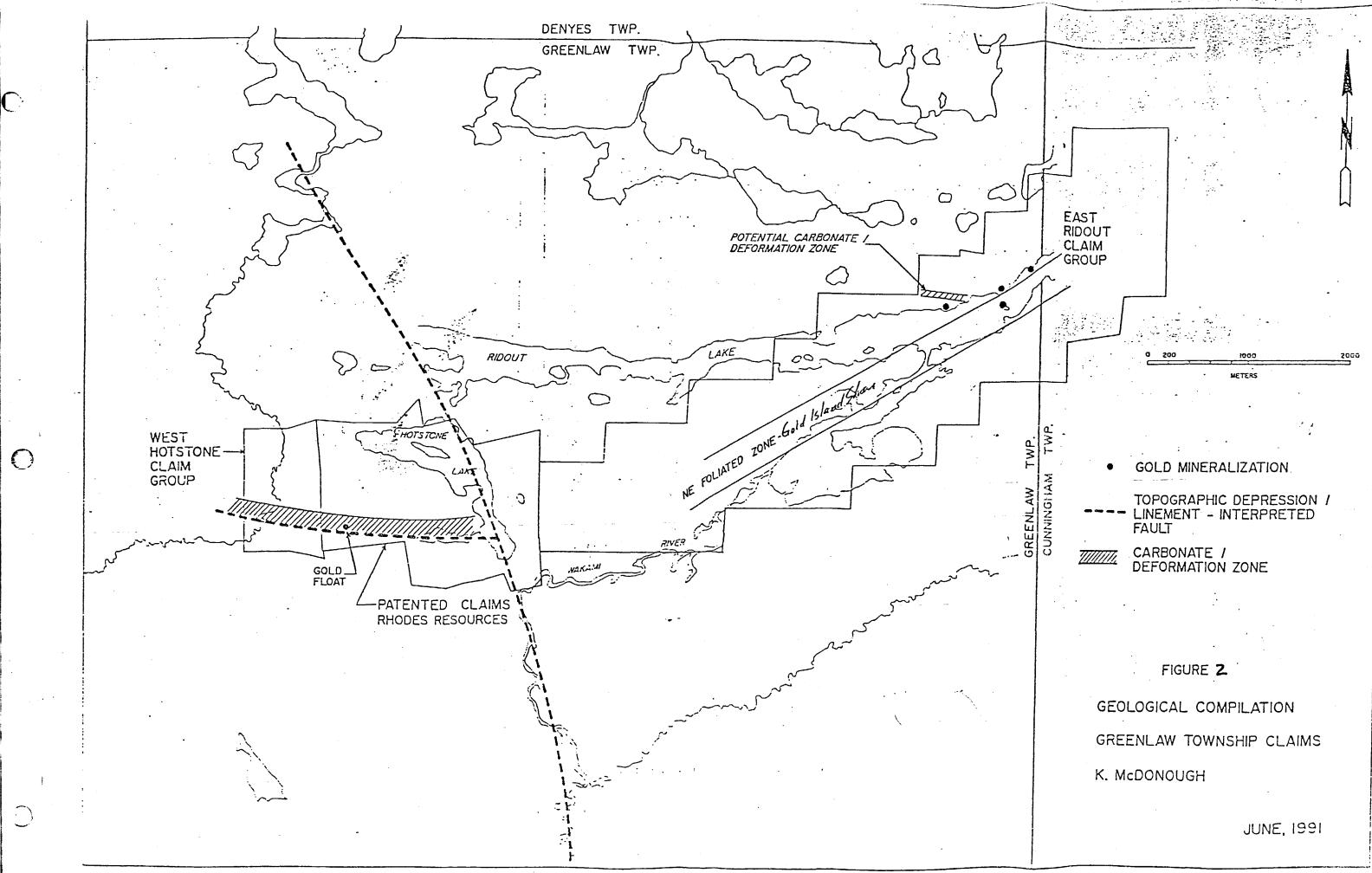
#### <u>Ridout East</u>

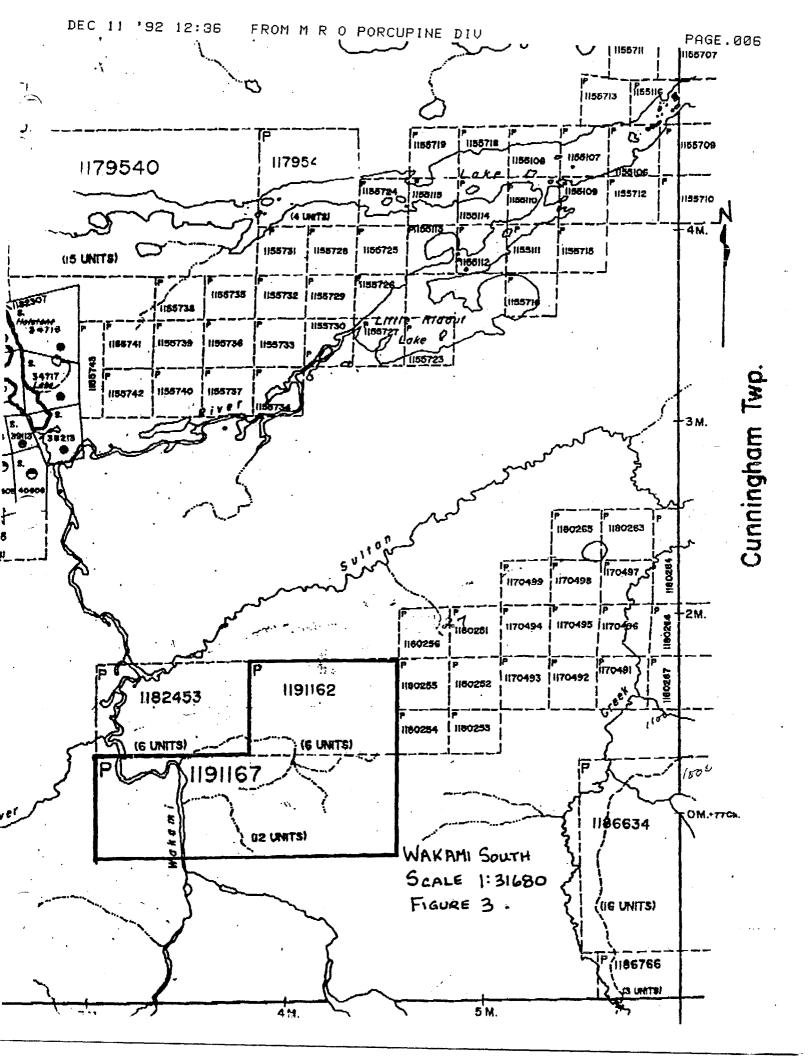
The property is characterized by east-west trending intermediate to mafic volcanic flows and tuffs interbedded with sediments, chert and iron formation. The sediments include finely laminated argillite (some units containing thinly banded ankerite), greywackes and conglomerate.



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Strata generally strikes 080 to 090 degrees and dips vary from moderate to steeply north to steeply south.

Structure plays a significant role in any mineralization. A number of structural elements are at play on this property. The most prominent is the Rideout Lake Shear Zone which trends 090 degrees. Extensively investigated in the past it has yielded few encouraging results.

Of particular interest is the Gold Island Shear, bearing 065 degrees. It intersects the Ridout Lake Shear obliquely. At this junction significant gold values were obtained. This structure was investigated late in the 1991 field season and was found to continue along the north shore of Ridout Lake. Another structure of interest is the Engineer Lake Fault which trends approximately 350 degrees and truncates not only the Ridout Lake Shear but all other structures as well. This fault runs sub-parallel to the Wakami River Fault which cuts the Hotstone Lake Carbonate Zone and displaces it some 1700 metres. The amount of movement along the Engineer Lake Fault is presently unknown. This structure inhabits to far eastern extent of the property.

Chloritization is the most prevalent form of alteration in the area. Sericitization and carbonitization are abundant as well. Silicification has been noted in several local areas.

#### <u>Hotstone West</u>

Sheared and intermediate to mafic flows, tuffs and sediments typify the geology of the area. Its most significant feature is, however, the Hotstone Lake Carbonate Zone which is composed of interbedded ultramafic-komatiitic flows and tuffs, metasediments and minor cherty banded iron formation. The entire package is contained with a serpentinized massive ultramafic intrusive.

From an economic perspective, interest in this area is as a result of thirteen quartz boulders which were discovered in 1984 by Noranda Exploration while digging a sump for their stripping and washing program. The average assay for these boulders was approximately 1.5 ounce per ton Au with values ranging up to 14 ounce per ton Au. Visible gold was noted. Due to the angularity, size and extreme friability of these boulders it is believed that their source is in close proximity to their area of discovery.

#### Wakami South

This property is characterised by large areas of drift and swamp covering. The outcrops that have been mapped in the area are primarily vertical dipping massive and/or pillowed intermediate volcanics cut by quartz veins and diabase dykes. The feature of interest on this property is the expression on surface of a large circular body. This anomaly coincides with airborne magnetic low which is flanked by magnetic highs and electromagnetic conductors. Never before investigated on surface and potentially significant, this area was staked with the intention of conducting linecutting, geophysical and prospecting programs. 4.0 PREVIOUS WORK

Please see Appendix B.

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#### 5.0 WORK DONE

The primary focus of the 1993 field season was to expand upon the data that was collected the previous year and perhaps interest a mining company in an option agreement. The bulk of the work was to be done by Kervin McDonough between the dates of May 18 and October 10, 1993 but failing health seriously curtailed his effectiveness. Employment opportunities arose that dictated that the author be out of the province for the period of June 9 to October 1, 1993. To compensate, local contractors were hired to assist Mr. McDonough in the absence of the author. The contractors' fees were paid primarily from Mr. McDonough's grant.

#### Ridout East

The purpose of the program was to complete the geophysical survey program started in the spring of 1992. Ultimately it was hoped that, by geophysical methods, an ore body could be established.

The original winter VLF survey was successful in identifying a geophysical signature which coincided with the general trend of the Gold Island Shear.

Subsequently the grid was extended into the bush along the north and south shores of Ridout Lake. The grid was cut by Gabriel Sutherland from Timmins, Ontario between June 3 and June 15, 1992 with the assistance of the author. The grid covered a total of 13.8 kilometres on the property.

The 1992 summer program consisted of extending both the magnetometer and VLF surveys across this new grid. The

magnetometer survey was conducted between June 12 and June 15, 1992. Due to the problems encountered with the VLF unit only the magnetometer survey was done.

The 1993 program was conducted between May 18 and May 21, 1993 by the author using a Crone RADEM-VLF unit using the Cutler Maine frequency (Please see Instruments and Methods).

The resulting maps were produced using the facilities of Noranda Exploration in Timmins.

One day was spent prospecting an area that was mapped the previous fall by Ed Sawitzsky of Norwin Geological Services of Sudbury, Ontario. Mr. Sawitzsky found anomalous gold values that were followed up by the author. Ten rock samples were taken for assay.

#### Hotstone West

Line cutting and trenching programs were conducted in 1990. The 1991 program included washing and mapping of existing trenches. The 1992 program consisted of a detailed mapping survey done over the existing grid and the mapping of the trenches with respect to the grid and extension of some of the existing grid lines.

In 1993 season a native line cutter, Mike Wabano of Timmins, was employed to add onto the existing Hotstone West grid. Magnetometer and VLF surveys were conducted by John Charbonneau of Timmins and the author respectively.

Initially it was hoped that a hole could be drilled into a resulting anomaly but funds were not sufficient to allow this.

Instead further mechanical stripping was done along the sections that were proposed for drilling in an effort to establish a similar database. Mr. Charbonneau operated a John Deere 450 Tractor rented from Tracks and Wheels in Timmins.

It was too late in the season to conduct a washing program so mapping and sampling was done over the unwashed trenches. A total of twelve rock samples were taken.

#### Wakami South

This property became the cause for attention when a curious physical feature was noted on a 4:1 air photo enlargement (1:3960 scale). After consulting Ontario Government maps of the area and noting uninvestigated quartz veins as well as the zone's proximity to the Hotstone fault, it was decided to stake a six unit claim. Later a twelve unit claim block was added. Mike Wabano cut an 975 metre baseline along the west boundary of the property in 1992. In May of 1993 the author prospected this baseline and along east-west running claim lines taking one rock sample for assay.

During the summer of 1993 Mr. Wabano cut a 11.8 kilometre grid and magnetometer and VLF surveys were run in October by John Charbonneau and the author respectively.

#### Regional Sampling for Diamond Indicator Minerals

Originally proposed in the initial OPAP application of 1993, this became impractical due to the failing health of Kervin McDonough and the absence of the author who had employment commitments in the Northwest Territories.

#### 6.0 INSTRUMENTS AND METHODS

The VLF instrument used in the 1993 survey was the Crone RADEM-VLF. The RADEM VLF measures field strength with an accuracy of 1%. The surveys utilized either the NAA (Cutler, Maine) frequency of 24.0 kHz (Ridout East and Wakami South) or the Seattle, Washington frequency of 24.8 kHz (Hotstone West).

An area was designated as a base station and the unit was zeroed. Grid lines were done in loops and at the end of each days' surveying another reading was taken at the base station so any drift corrections could be made.

The magnetometer used for the 1993 surveys was a Geometrix G-816 Proton Precession magnetometer. As with the VLF survey, lines were done in loops with duplicate readings being conducted along the baseline to calculate drift corrections.

The resulting maps were produced using the facilities of Noranda Exploration in Timmins with the assistance of Mr. Wayne Corstorphine. Drift corrections were done automatically by Noranda's geophysical program. A great deal of support and technical assistance was provided by Noranda Exploration Company, Limited of Timmins, Ontario.

7.0 RESULTS

Ridout East

#### VLF Survey

A number of isolated cross-overs were discovered during the VLF survey but conductors extending across a number of lines were also encountered. The locations of these conductors may be seen on the map accompanying this report. It is of interest to note that all conductors encountered, save for Conductor A, mimic the orientation of the Gold Island Shear. These conductors may in fact define a structural zone that has predated the major East-West regional structural trend and may, in fact, be related to a gold mineralization event. All conductors are interpreted below: <u>Conductor A</u>

Located between L0+00 and L2+00 E, is a weak conductor with no associated magnetic expression. It coincides with a large swamp. Outcrop in the vicinity display traces to ten percent pyrite in hand specimen. The nature of the dip angle and field strength indicate a thinly banded zone of sulphides.

#### <u>Conductor</u> B

This conductor extends across the south end of the grid from L5+00 E to L13+00 E. There is no magnetic expression associated with this conductor. The geology of the area indicates a contact between an felsic intrusive and clastic sediments occurs in this area. This is the likely source of this conductor.

#### Conductor C

This is a moderate conductor located between L13+00 E and L15+00 E on the north shore of Ridout and is associated with a magnetic high. The conductor approximates the contact between a highly sheared and altered ankerite schist and mafic volcanics. While no sulfides were noted in outcrop, the conductor is likely due to thinly banded sulphides and possibly a small, concordant, iron formation.

#### <u>Conductor</u> D

Located between L11+00 E and L13+00 E, Conductor D is actually two weak to moderate parallel conductors that have no magnetic expression. They are located within a package of mafic volcanics to mylonites. The high field strengths may indicate small bands of sulphides.

Please see accompanying map.

#### Prospecting

Prospecting done in the vicinity of Mr. Ed Sawitzsky's 1992 mapping program returned poor results. A total of nine samples were taken with the highest assay being 0.02 gram/tonne Au.

Please see accompanying map.

#### Hotstone West

#### Magnetometer Survey

Only 2.35 miles of survey was conducted over four grid lines. The survey was complicated by an error in chaining where extended lines changed measurement systems from imperial to metric. To simplify all readings were converted to imperial.

A somewhat offset but fairly continuous trend is observed between L0+00 and L12+00W between 6+00N (on L0+00) and 9+00N (on L12+00W). Mapping and trenching in the area fail to completely explain the anomaly but regional trends indicate a shear zone coincident with a contact between sheared and carbonate altered ultramafic volcanics and a sheared mafic to intermediate volcanics. The centres of the magnetic anomalies are covered by swamp or overburden. The anomaly centred at L0+00/10+00N was observed to be contact between a chlorite-carbonate altered mafic volcanic flow and a felsic intrusive sill (?). This contact may be zone of concentration for secondary magnetite or pyrrhotite mineralization.

The anomaly on L4+00W/11+00N coincides with a chloritesericite schist unit and may also be due to secondary magnetite or pyrrhotite.

The anomaly on L3+00W/1400N occurs in an area of poor outcrop exposure and cannot be explained.

Please see accompanying map.

#### VLF Survey

As with the magnetometer survey, chainage irregularities made necessary a conversion of data from metric to imperial on a best-fit basis.

The best anomaly encountered stretched from L0+00/5+50N to L8+00W/6+00N. Associated with a mag high this conductor likely represents an electromagnetic expression of a east-west trending shear zone which coincides with an ultramafic/mafic contact. Of particular interest is the location of the auriferous boulders discovered in 1984. The sump in which they were discovered lies on strike of this trend approximately 150 meters to the east.

Two other cross-overs occur on L0+00 at 18+50N and 19+50N but these appear isolated. Both occur within a swamp and cannot be explained geologically.

Another cross-over occurs at L12+00W/8+50N but is isolated.

Please see accompanying map.

#### Trenching

Ideally a number of diamond drill holes would have been preferred. Due to lack of funds this more economical method of exploration was decided upon.

Five sections were trenched, mapped and a total of twelve samples were taken. The trenching was successful in locating undiscovered quartz veins and lithological contacts. Unfortunately, assay results were poor with the highest assay being 48 ppb Au.

The time of year, late fall, made it impractical to conduct a washing program on the new trenches. Mapping was done to tie in the trenching with the existing grid.

Sections were trenched in an attempt to derive data similar to that which would have been gathered with a series of drill holes. Unfortunately, the best target, a coincident east-west trending magnetometer/VLF anomaly occurs in a swamp where trenching with a bulldozer is impossible.

Please see accompanying map.

#### <u>Wakami South</u>

#### Magnetometer Survey

Numerous isolated mag anomalies were encountered. These are likely due to local magnetic intrusive bodies (ie. plugs or dykes).

The most pronounced anomalous trend occurs between L4+00E/2+00N and L6+00E/1+50S with an associated magnetic low

flanking it on the southeast (L7+00E/1+50S). This anomaly occurs in a large swamp and no geological explanation is possible.

A strong mag response was found at L0+00/2+00S which coincides with a northwest/southeast trending stream and may indicate a shear/fault zone.

Another strong anomaly occurs at L0+00/3+50N. Prospecting in this area found a course grained intrusive body.

Isolated anomalies at 1+50N and 2+50N on L1+00E are unexplained due to lack of mapping/prospecting coverage.

Please refer to map in pocket at back of this report.

#### VLF Survey

A number of isolated cross-overs were discovered during the VLF survey but conductors extending across a number of lines was also encountered. The locations of these conductors may be seen on the map accompanying this report. (Please note: An error in plotting was made by the author resulting in a large break in the data of L0+00. In fact, the data is continuous and the resultant map is due to entry error).

Heavy overburden and lack of geological data in this area makes interpretation difficult.

#### Conductor A

This conductor, which stretches from L4+00W to L2+00W, has no associated magnetic anomaly. Field strengths are relatively moderate and may indicate clay minerals in overburden limiting VLF response to a banded graphite/sulphide body.

#### Conductor B

Stretching from L6+00E to L9+00E this anomaly has an associated moderate magnetometer anomaly flanking to the south of it. This may indicate a thinly banded iron formation.

#### Conductor C

Located between L11+00E and L13+00E this anomaly has moderate field strength, no associated magnetic response and is covered by an area of heavy overburden. It is likely a thinly bedded dyke-like graphite/sulphide body.

Please see accompanying map.

#### 8.0 CONCLUSIONS AND RECOMMENDATIONS

Structurally complex, possessing local zones of known gold mineralization and containing areas of pervasive silica and carbonate alteration, the Hotstone/Ridout region has abundant potential for hosting a gold deposit of economic value. In addition the presence of ultramafic volcanic rocks makes it a potential base metal target. Further exploration is warranted on the Hotstone West, the Ridout East and Wakamí South properties.

Please note: The death of Kervin McDonough freezes all claims in which he held an interest for a period of one year.

#### <u>Rideout East</u>

The 1992 winter magnetometer and VLF results indicate the gold bearing trend observed on Gold Island is not isolated and continues below the lake and may suggest an en echelon system. This conclusions has been borne out in the 1993 survey with most of the conductors observing the same trend. Only a diamond drilling program could properly assess the potential of these structures hosting auriferous quartz veins and the possibility of an ore body of economic grade.

The following are suggested for future exploration:

1. Surface prospecting of all conductors with the goal of discovering an explanation for the anomalies within the exposed rock.

2. A geochemical program over the existing cut grid. The 1992 geological survey conducted by Mr. Sawitzsky of Norwin Geological Services, Sudbury, Ontario, recommended a number of areas of interest that should be given special attention. (Mr. Sawitzsky's report was filed for assessment in May, 1993).

3. If sufficient funds are acquired, an Induced Polarization Survey should be completed over the grid to assess potential at depth.

4. A mechanical trenching program to follow up any anomalous values encountered.

5. Contingent upon financing, a diamond drill hole to test geophysical targets.

#### Hotstone West

1. A geochemical survey along the existing grid lines to help isolate the potential source of the auriferous boulders.

2. A small diamond drilling program consisting of one to four holes at 400 foot centers to test the continuous magnetic and electromagnetic target.

#### Wakami South

1. Geochemical sampling down grid lines and along streams to determine presence of precious metals and diamond indicator minerals.

2. Geochemical sampling along existing grid lines to help explain geophysical conductors given the lack of geological exposure in the area.

Respectfully submitted,

Barry McDonough Geologist

APPENDIX A

CLAIM NUMBERS

#### CLAIM NUMBERS

#### RIDEOUT EAST

P.1155699\* P.1155700\* P.1155703\* P.1155700\* P.1155704\* P.1155705\* P.1155708\* P.1155709\* P.1155710\* P.1155712 P.1155106+ P.1155107+ P.1155108+ P.1155109+ P.1155110+ P.1155111+ P.1155112+ P.1155113+ P.1155114+ P.1155115+ P.1155116+ P.1155707 P.1155711 P.1155715 P.1155718 P.1155719

\* Cunningham Township

- + Ownership = 50% Kervin McDonough/
  - 50% Barry McDonough

#### HOTSTONE WEST

P.1129270 P.1129271 P.1129273 P.1129274 P.1129275

WAKAMI SOUTH

P.1191162+ P.1191167+

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# APPENDIX B

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\*overburden (RC) drilling

	TYPE OF WORK				Numb	ers be	low re	presen	t the y	/ear in	which	the v	vork w	ras don	e;e.g.,	68 fo	ir 1968	3.	<b>.</b>	
RE	EXPLORATION DATA filed at the SIDENT GEOLOGIST'S OFFICE	GICAL	GEOCHEMICAL	HING, ING	ŪN	DATA	UNDERGROUND WORK	PROSPECTUS, NOTES, CORRESPONDENCE	AIRBORNE MAGNETOMETER	RNE ROMAGNETIC	AIRBORNE RADIOMETRIC	GROUND MAGNETOMETER	GROUND ELECTROMAGNETIC	GROUND RADIOMETRIC	INDUCED POLARIZATON	SELF POTENTIAL	ΙνιτΥ	-		
	COMPANY/AUTHOR (file number)	GEOLOGICAL	GEOCH	TRENCHING, STRIPPING	DRILLING	ASSAY	UNDER	PROSPE	AIRBOF	AIRBOF	AIRBOF	GROUN	GROUN	GROUN	POLARI	SELF PC	RESISTIVITY			
	Kidd Creek Mines Ltd.	82-										82	82							
	T-2512	83						ļ						FEM	+ 14	;			<b> </b>	_
	· · · · · · · · · · · · · · · · · · · ·											84	84							
				<b> </b>		02						011								-
	Noranda Expla T-2823				83	83.						84	84 (NLF)						<b>}</b>	-
	1-2823					<u> </u>										·				-
	Righted Pro-Abraida Evalo				85							83-	83-						[	İ.
	Kirkland Rio-Abranda Explo. T-285.3.			·								84	84							
	1-800.5.												(VLF)							
 	Tlark Prode								84	84			_							
	J. Larche Property T-2876	1		1						(Ent	(LF)									
																		•		
	Noranda, Explo.	83										83	83							
	Noranda, Explo. T-2782												(HLEN	n)					<u>                                     </u>	
	· .	<u> </u>		<u> </u>																
	Noranda Explo T-2854.	<b> </b>		ļ	85							84	84	14,000					<b> </b>	
	T-2854.												CULEY	hrew	)					<u> </u>

HLEM = horizontal loop EM.

TYPE OF WORK				Numt	pers be	low re	presen	t the y	/ear in	which	n the v	vork w	as dor	ie;e.g.,	68 fo	r 1968	3.	
EXPLORATION DATA filed at the RESIDENT GEOLOGIST'S OFFICE	GEOLOGICAL	GEOCHEMICAL	TRENCHING. STRIPPING	DNI	ASSAY DATA	UNDERGROUND WORK	PROSPECTUS, NOTES, CORRESPONDENCE	AIRBORNE MAGNETOMETER	AIRBORNE ELECTROMAGNETIC	AIRBORNE RADIOMETRIC	GROUND MAGNETOMETER	GROUND ELECTROMAGNETIC	GROUND RADIOMETRIC	INDUCED POLARIZATON	SELF POTENTIAL	RESISTIVITY	-	
COMPANY/AUTHOR (file number)	GEOLG	GEOCI	TREN	DRILLING	ASSA	UNDEI	PROSP	AIRBORNE MAGNETON	AIRBO	AIRBO RADIC	GROU MAGN	GROUI	GROUI		SELF P	RESIS		
Regal Petroleum Ltd.	84				84			84	84.									T
T-2878																		 $\downarrow$
	<u> </u>																	 ╀
Folkstone Persources Ltd.	85	85			85						84- 85	84- 85 (NLE)		84- 85				+
T-2656											60	(VLE)		22				 ╀
Greyhawk. Resources.	85	85																 <u> </u> .
T-3041										•								 ╀
Patrie /Tremblay Property	89	89.			89			89	89									 t
T-3318	Ţ								(ViF)									 +
M Toumplay Pomete	┼──										89							 ╀
M. Trumblay Property T-3312																		Ţ
K Matagard and	. 90-	<b> </b>	90		90													 ╀
K. McDonaugh prop. T-3415	91		91		91					·····								 t
	92				1 */													 Γ

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TYPE OF WORK				Numt	ers be	low re	presen	t the y	/ear in	which	the v	vork w	ras dor	ne;e.g.,	68 fo	r 1968	3.	
EXPLORATION DATA filed at the RESIDENT GEOLOGIST'S OFFICE	BICAL	GEOCHEMICAL	HING, ING	ĄG	DATA	UNDERGROUND WORK -	PROSPECTUS, NOTES, CORRESPONDENCE	AIRBORNE MAGNETOMETER	INE	NE . IETRIC	GROUND MAGNETOMETER	GROUND ELECTROMAGNETIC	D IETRIC	D ZATON	SELF POTENTIAL	итү		
COMPANY/AUTHOR (file number)	GEOLOGICAL	беосні	TRENCHING. STRIPPING	DRILLING	ASSAY DATA	UNDERG	PROSPE CONRES	AIRBOR	AIRBOR	AIRBORNE RADIOMETRIC	GROUN MAGNE	<b>GROUNI</b> ELECTR	GROUND RADIOMETRIC	INDUCED POLARIZATON	SELF PO	RESISTIVITY		
Kennecatt Canada Inc T-3481	92										92	92						
T-3481					ļ							(41	[m]					[
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#### CERTIFICATE OF QUALIFICATION

I, Barry McDonough reside at 24 Greenmeadow Court, in the city of St. Catharines, Ontario, L2N 6Y8.

I have been practising my profession for seven years and am a graduate of McMaster University B.Sc (1986) in Geology. I am a fellow of the Geological Association of Canada.

I am the owner of 50% interest in thirteen claims covered in this report. The report is based on work personally performed or directly supervised by myself or my father, K. J. McDonough. Mr. McDonough owns 100% of all claims covered in this report save for the above mention eleven claims for which he holds the remaining 50% interest.

| )Ar | ry McDonough

# **BIBLIOGRAPHY**

# Sawitzky, E. G.. <u>Geological Report On The Ridout Lake</u> <u>Property For Kervin McDonough</u>. 1993

00/00/00 10.04 D100 208 0012

NOREY TIMMINS

7056423300-

705 268 9572;# 2/ ;



Established 1928

# Swastika Laboratories

A Division of TSL/Assayers Inc.

Assaying - Consulting . Representation

# Assay Certificate

# 3W-1774-RA1

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Company: NORANDA EXPLORATION CO. LTD.	Date: JUN-03-93
Project: KM? Atm: J. Wakeford	Copy 1. J. Wakeford 2. K. McDonough, 24 Greenmeedow Cr.
We hereby certify the following Assay of 10 tock samples	3. st. Catherines Ont. L2N 6Y8 Fx 937-5073

We hereby certify the following Assay of 10 rock samples submitted JUN-01-93 by.

Sample Number	Au g/tonne	Au oz/ton	Au check g/tonne	An check oz/ton	i
RE-93-1 RE-93-2 RE-93-3 RE-93-4 RE-93-5	0.01 0.01 0.02 0.01	.001 .001 .001 .001 .001	0.02	.001	
RE-93-6 RE-93-7 RE-93-8 RE-93-9 WS-93-1	0.01 0.01 0.01 0.01 0.01	.001 .001 .001 .001 .001	0.01	.001	1. ž

One assay ton used

Certified by

P.O. Box 10, Swastika, Ontario P0K 1T0 Telephone (705) 642-3244 FAX (705) 642-3300

## CHAUNCEY ASSAY LABORATORIES LTD.

33 Chauncey Avenue, Toronto, Untario MBZ 2Z2 Tel: (416) 239-3527 FAX: (416) 239-4012

#### CERTIFICATE OF ANALYSIS

CERTIFICATE NO.	: MI-3402	DATE: N	OVEMBER 12,	1993
SUBMITTED BY:	Barry MCDONDUGH			
DATE RECEIVED:	NOVEMBER 5, 1993	SAMPLES OF:	ROCKS	

SAMPLE NO:

Au PPB

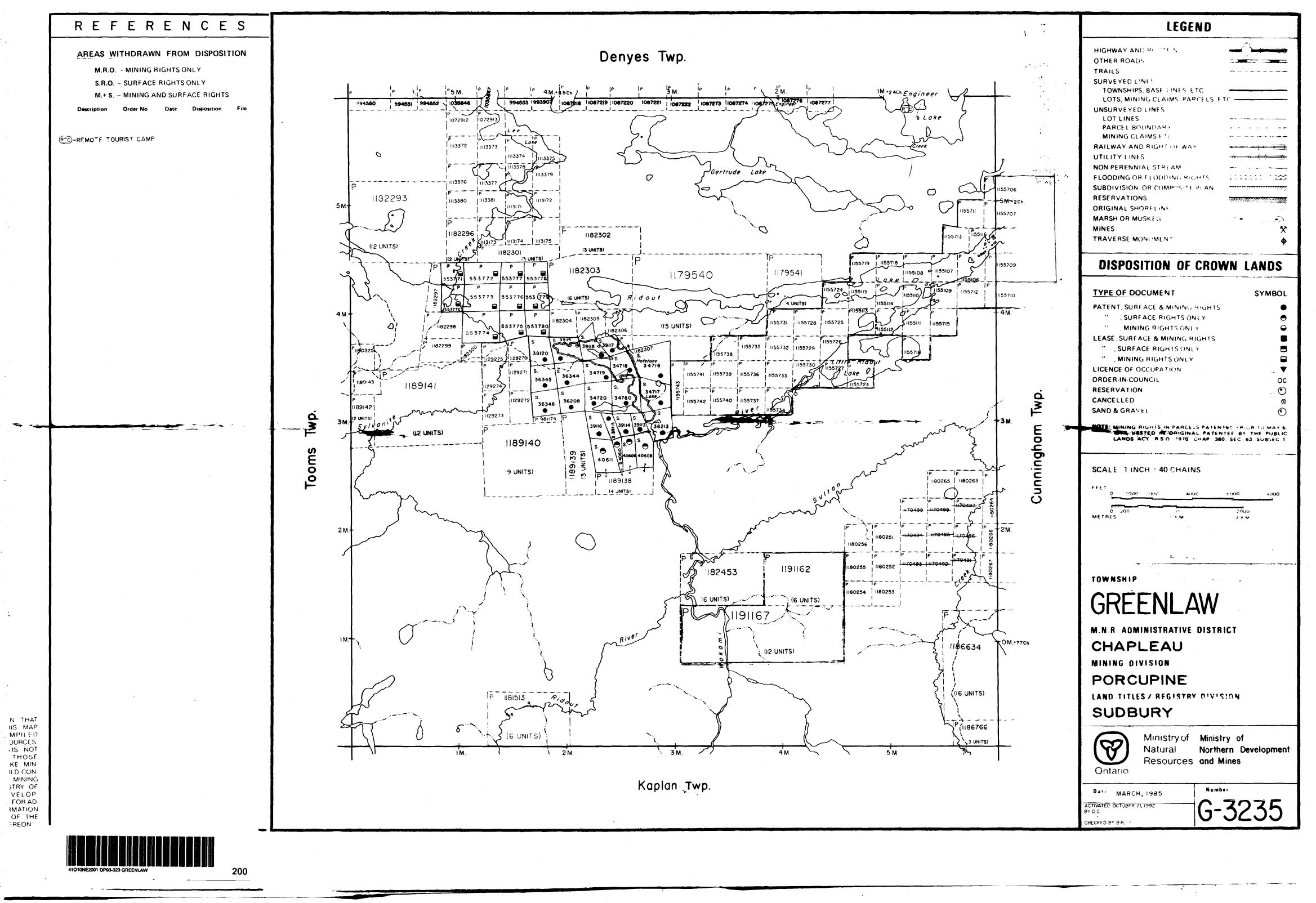
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- HS-93-1 41
- HS-93-2 23
- HS-93-3 19
- HS-93-4 25
- HS-93-5 16
- HS-93-6 **48**
- HS-93-7 19
- HS-93-8
- HS-93-9 19
- HS-93-10
- HS-93-11 51

HS-93-12

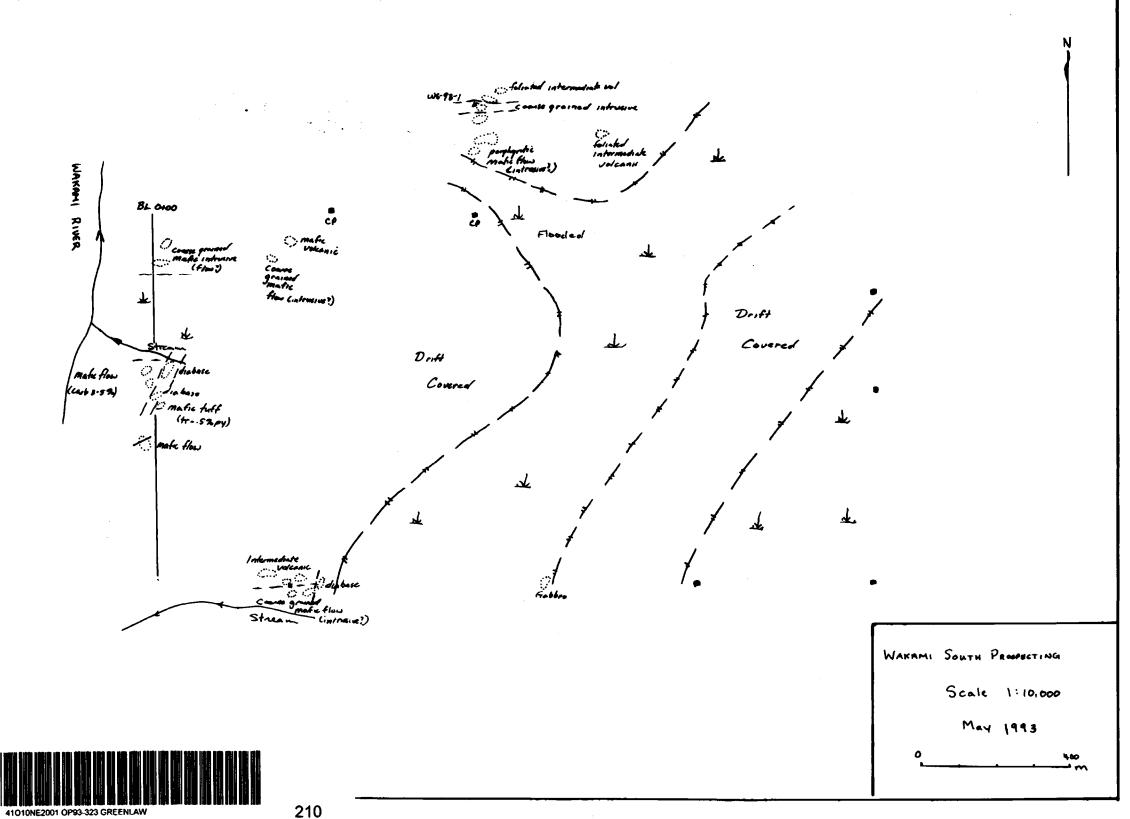
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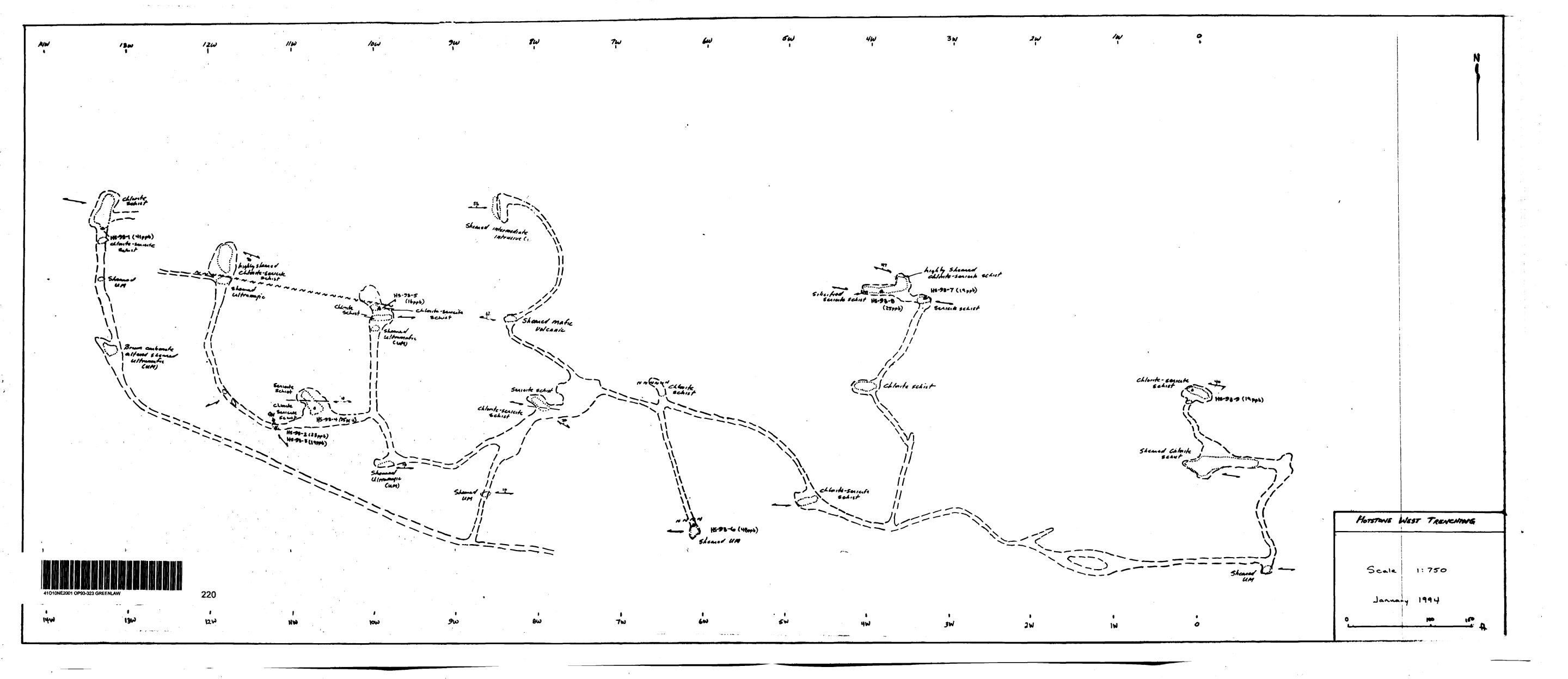


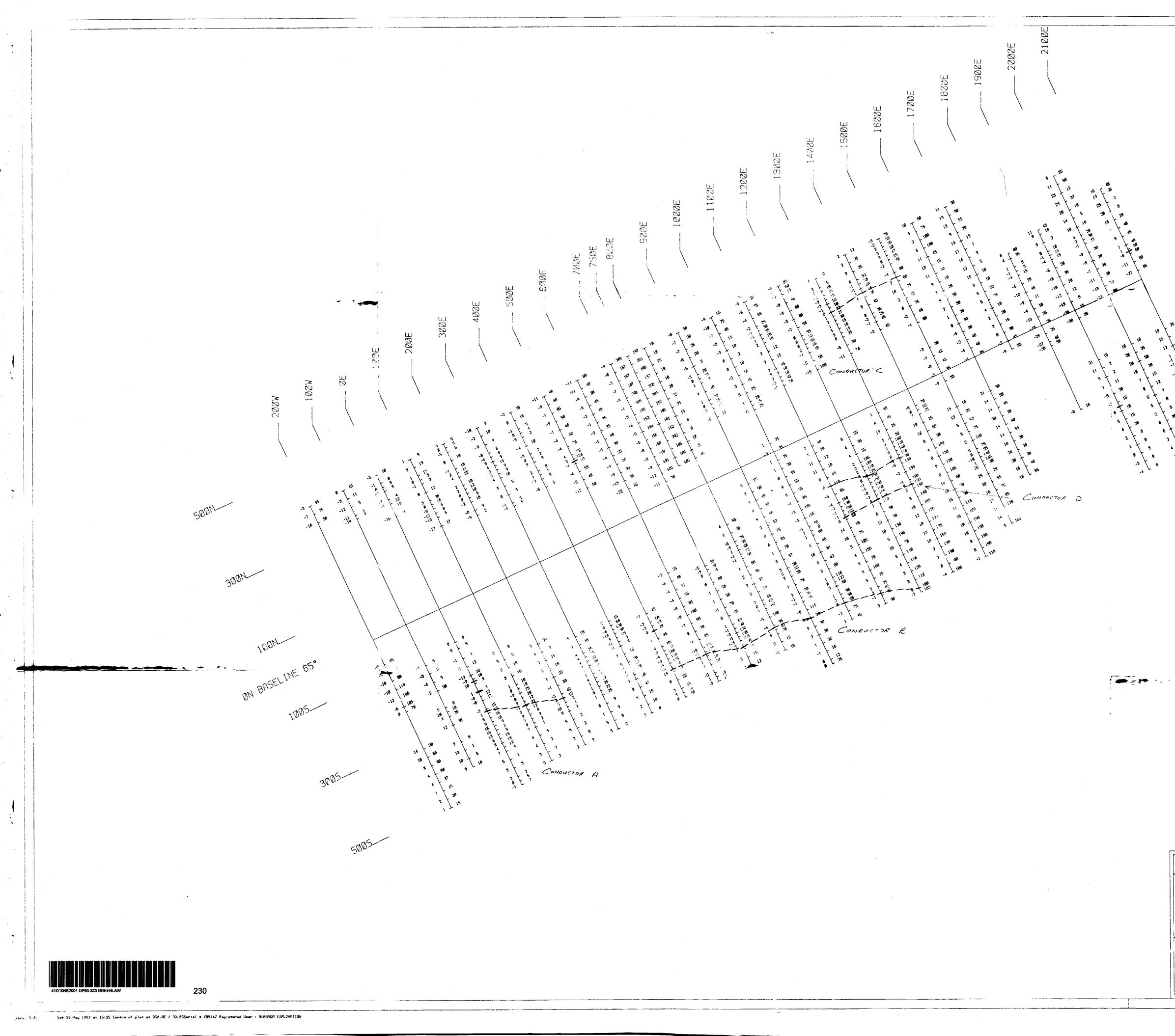
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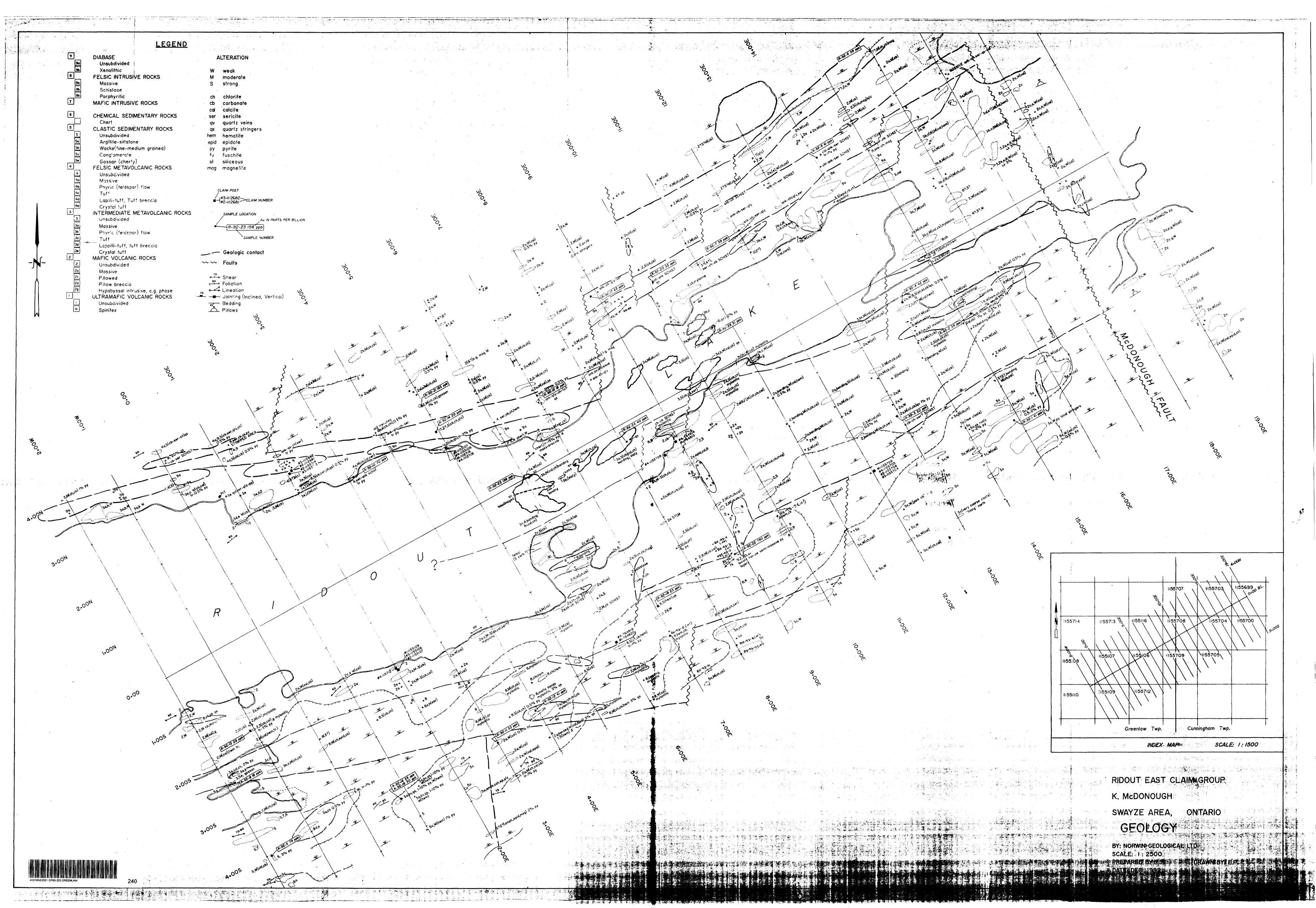
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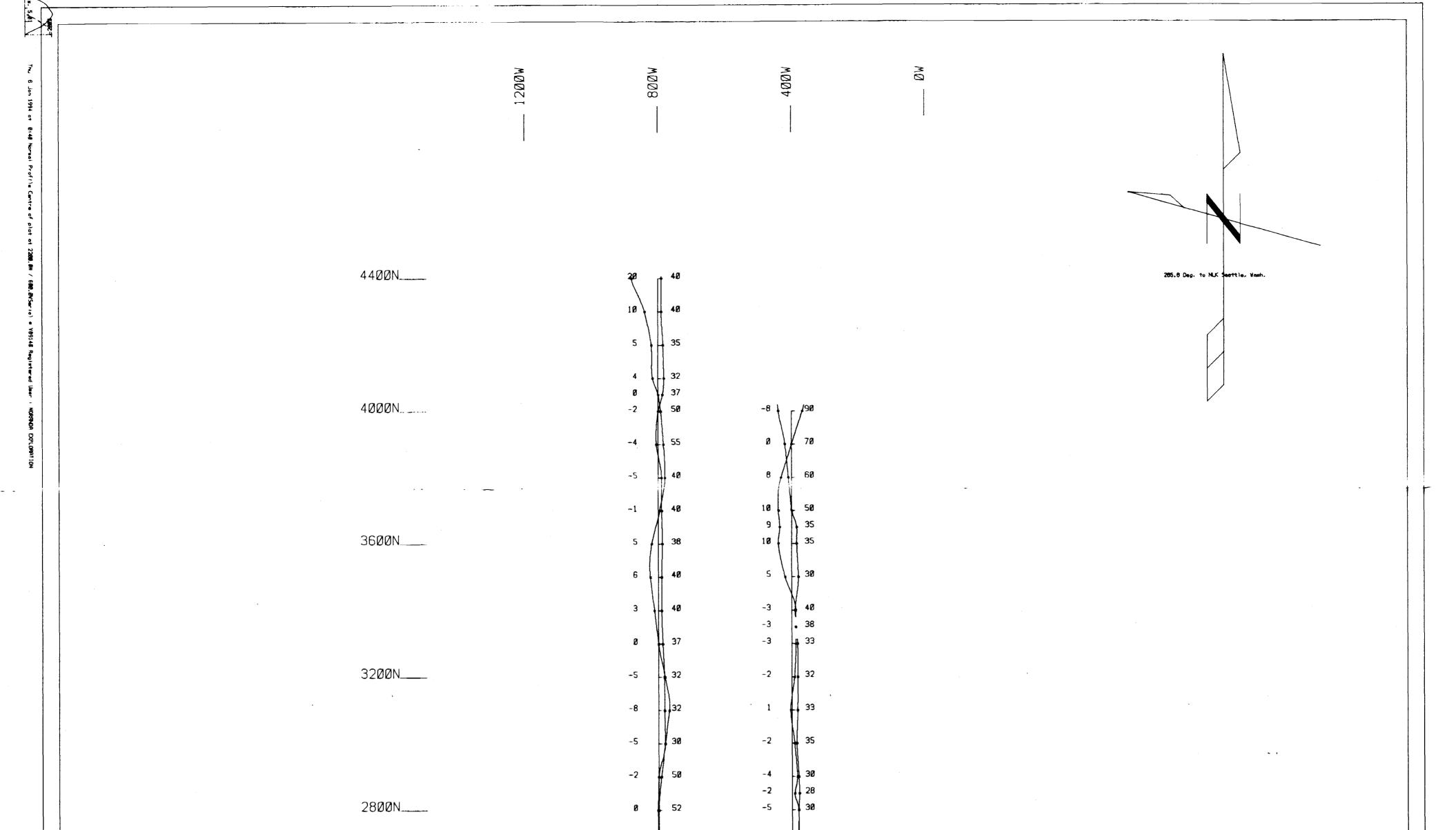
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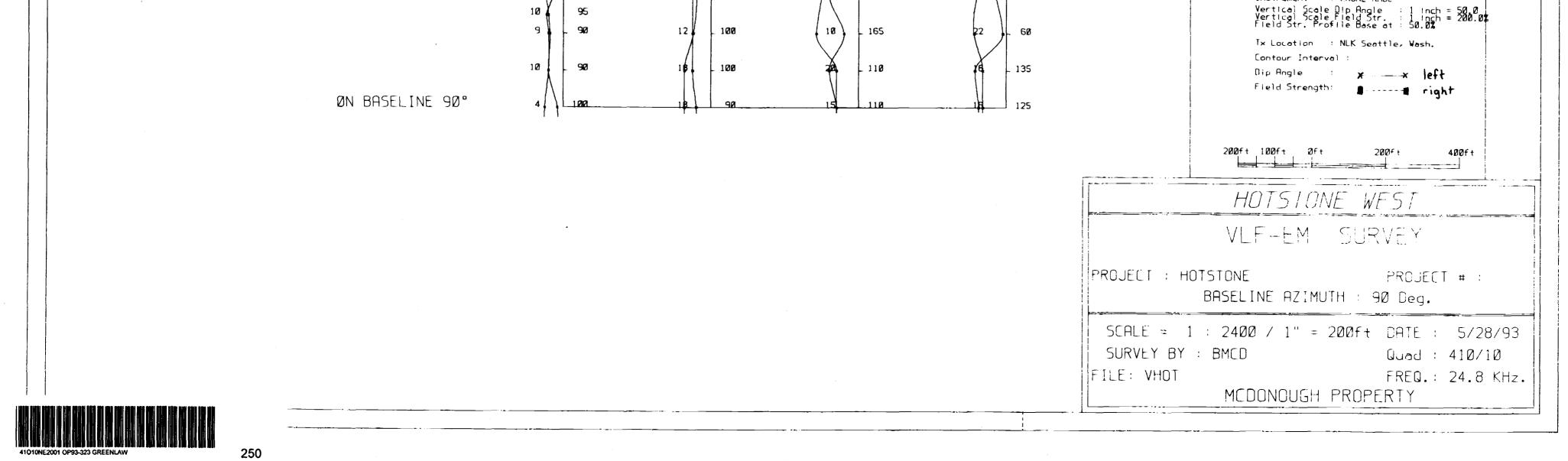


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	-
Instrument : CRONE VLF	
Tx Location ; NAA Cutler, Maine Contour Interval ;	
100m 50m 0m 100m 200m	
RIDOUT EAST	
VLF-EM SURVEY	
PROJECT : RIDOU PROJECT # : BASELINE AZI III : 65 Deg.	
SCALE = 1: 5000       DATE : 5/28/93         SURVEY BY : BMCD       NTS : 41 0/10         FILE: VRID       FREQ.: 24.0 KHz.         KERVIN MCDONOUGH	





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		-4 35	5 x -5	25 -7	40	
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	2000N	-6 30	Ø ~9	-1	65	
		-6 35	5 -2	60 6	- 150	
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	1600N	-1 52	2 -6	- 25 -6	37	
		-2 72	0 -5	40 -1	78	
		-3 46	8 -5	40 -1	45	
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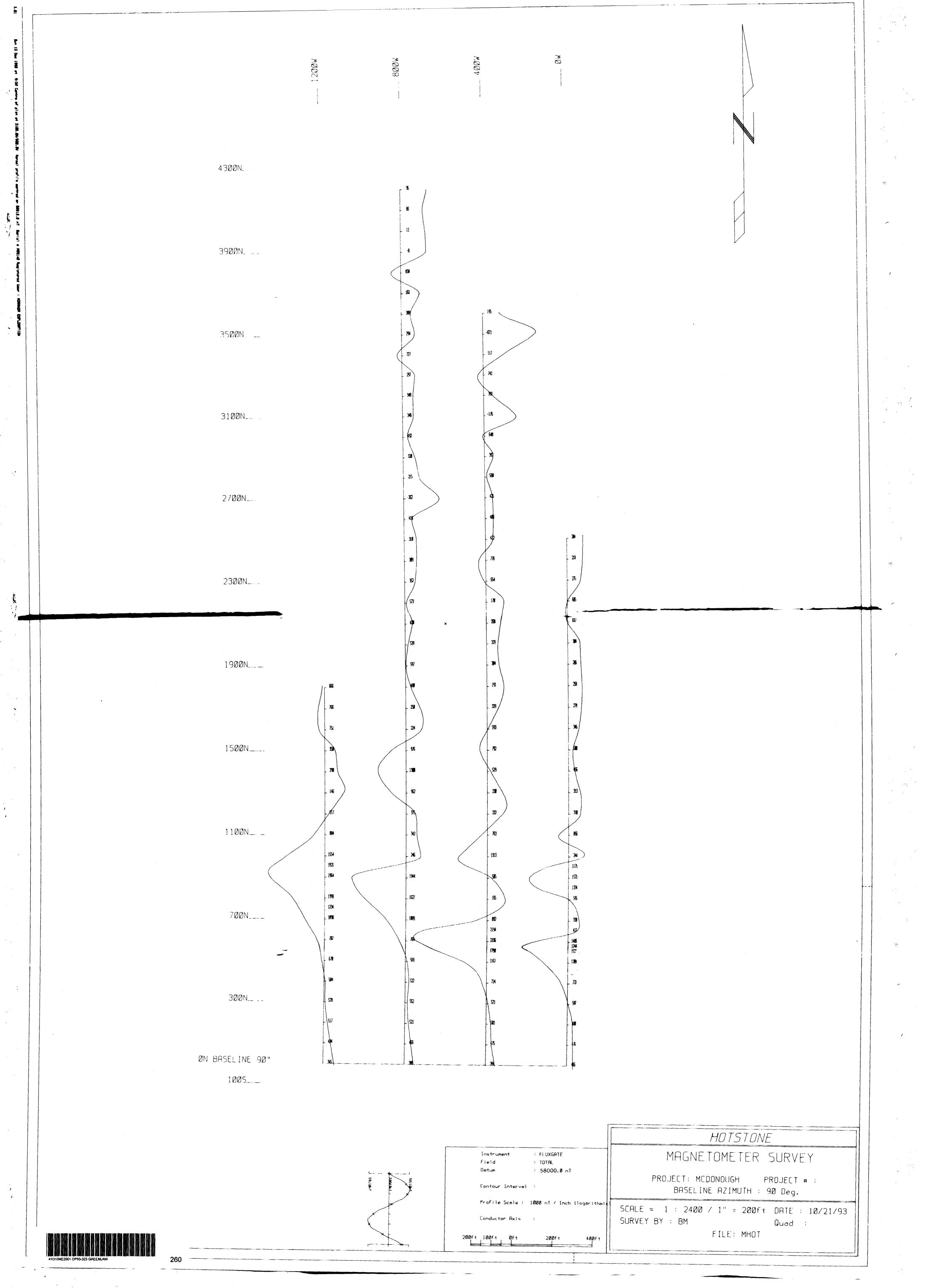
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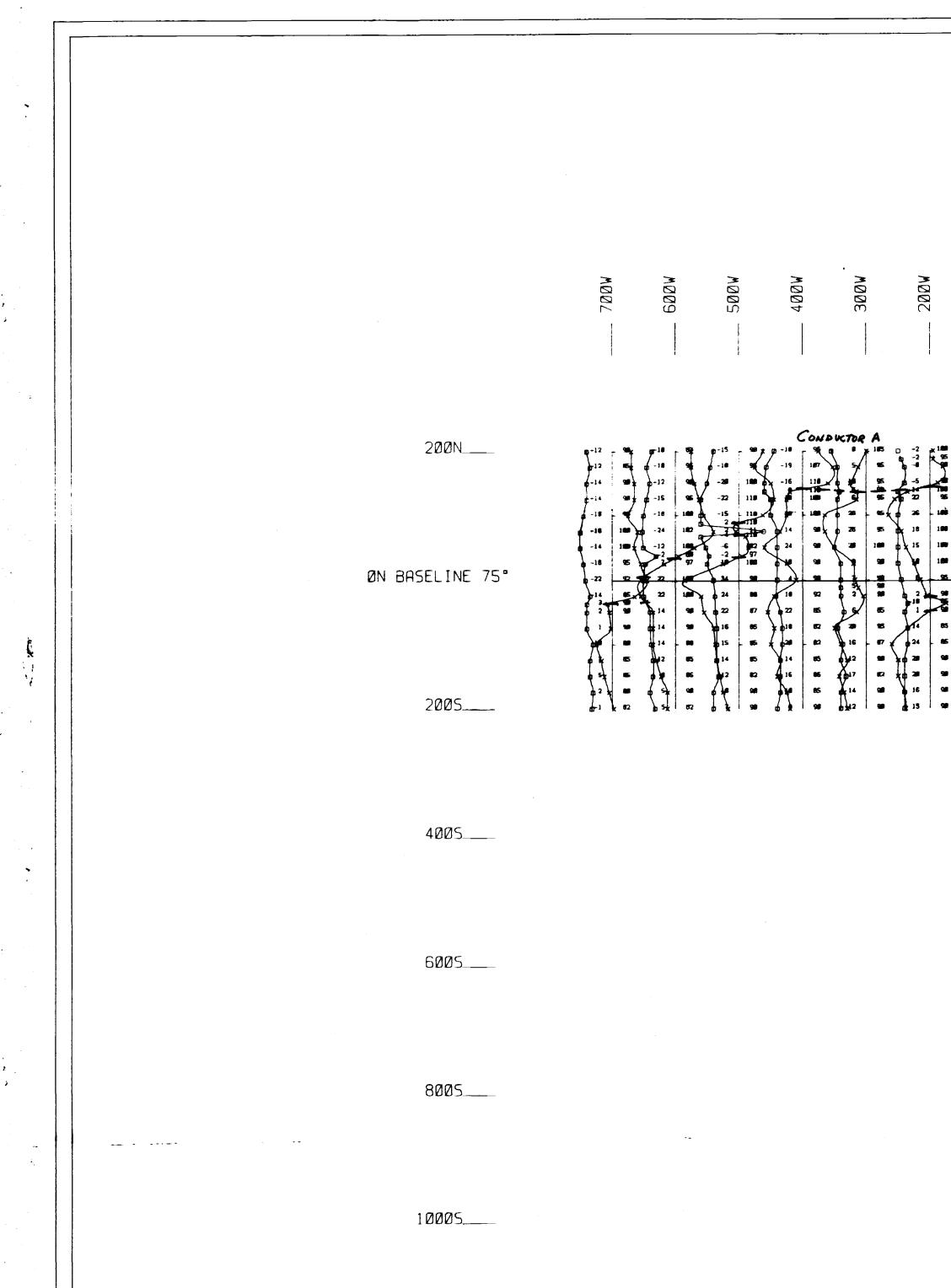
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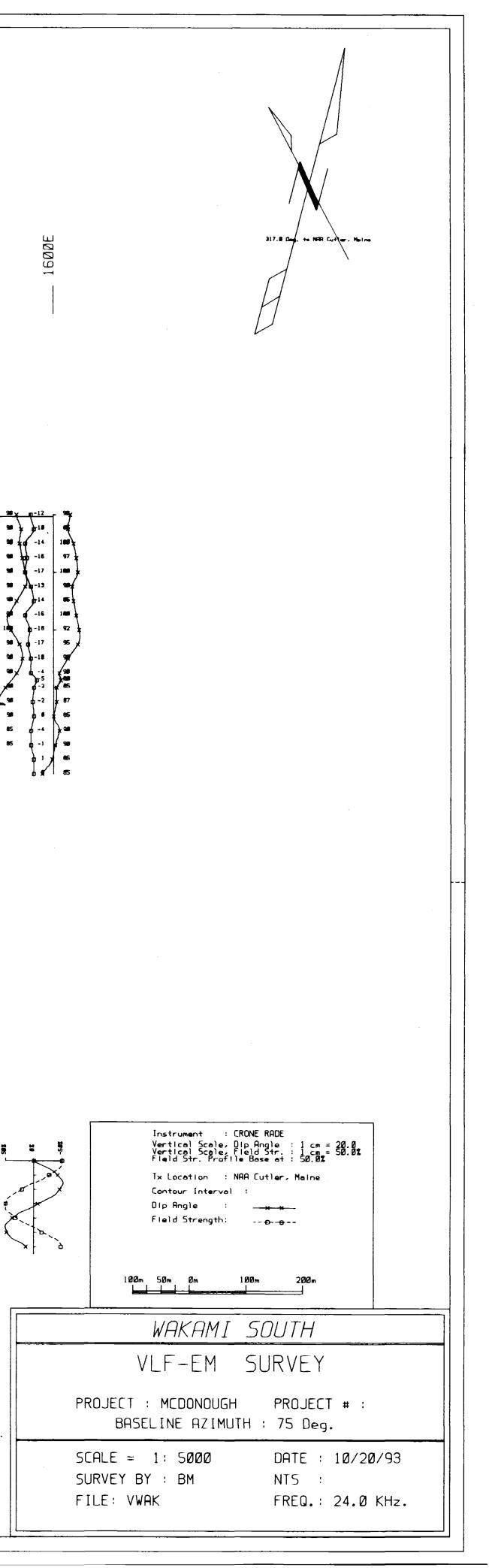
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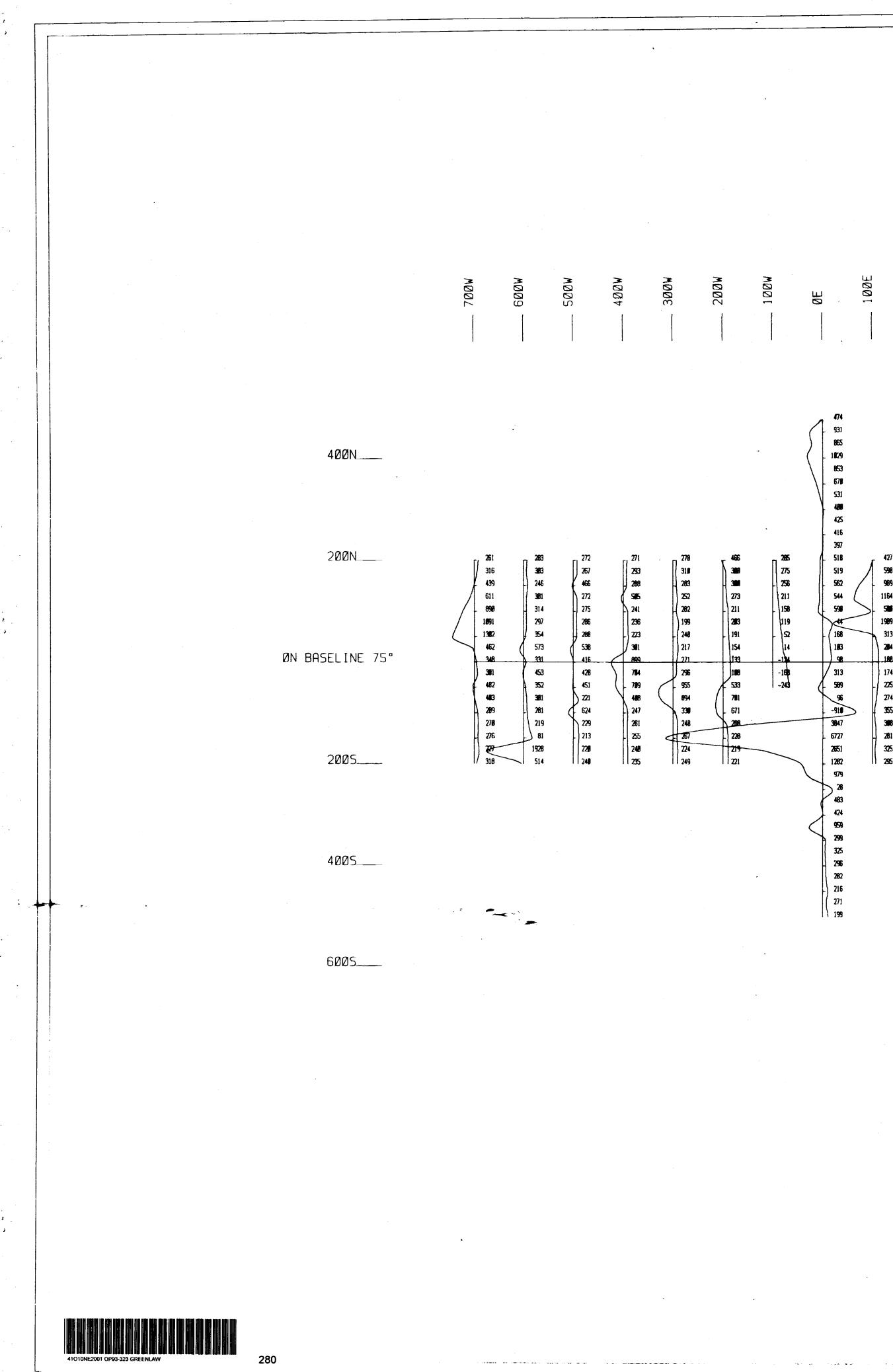
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