



42A04NW0025 2.7055 SEWELL

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REPORT ON
SOIL AND HUMUS GEOCHEMICAL
SAMPLING PROGRAM

SEWELL 1-81

SEWELL TOWNSHIP
PORCUPINE MINING DIVISION

RECEIVED
AUG 16 1984
MINING LANDS SECTION

PETER S. LEBARON

NORANDA EXPLORATION CO. LTD

AUGUST 8, 1984

TIMMINS, ONTARIO

NTS. ~~41-0-10~~
42-B-01-NE

Qual.
2.6335

REPORT ON SOIL AND HUMUS GEOCHEMICAL

SAMPLING PROGRAM, SEWELL 1-81

INTRODUCTION

During the period May 19 to June 10, 1983, a geochemical survey consisting of humus and soil sample collection was carried out on Noranda Exploration claim group Sewell 1-81.

A total of 440 humic and 749 soil samples were collected and analysed for Au, Ag, As, Cu and Zn.

PROPERTY DESCRIPTION

The claim group consists of 33 contiguous mining claims as follows:

536915, 536916, 536940, 536941, 538613	- Patented
628047, 622143 to 622157 inclusive	- Expire Oct. 7, 1984
663220 to 663228 inclusive	- Expire Oct. 26, 1984
687617 to 687619 inclusive	- Expire Feb. 14, 1985

The survey covers all claims except 687617 to 687619, but for assessment purposes, only that part of the survey covering the remaining 25 unpatented claims (663220-228, 622143-157, 628047) is considered in this report.

LOCATION AND ACCESS

The property is located in south-central Sewell Township, about 36 miles southwest of Timmins. A dry-weather bush road crosses the eastern part of the claim group about 3 miles south of HWY 101 west.

PREVIOUS WORK

- 1945 - 47 geological mapping, trenching, magnetic survey, and diamond drilling (14 holes, total of 3,870 ft) by Mining Corporation.
- 1980 - 83 Noranda Exploration:
1980 - 2 dd holes, total of 497 ft.
1981 - 4 dd holes, total of 1,097 ft; limited mag, I.P. and E.M.
1982 - 4 dd holes, total of 1,579 ft; limited I.P.
1983 - 7 dd holes, total of 2,937 ft; stripping of outcrop area.

GENERAL GEOLOGY

Very little rock is exposed on the property, but diamond drilling indicates the area in the vicinity of the gold showing on patented claim 536916 to be underlain by strongly amphibolitized, partially recrystallized intermediate to mafic volcanics and intrusives.

These vary from fine-grained schists to coarse-grained gabbroic rocks, commonly with gradational contacts suggesting a metamorphic origin for the different textures. Coarse-grained rocks can be seen to become increasingly altered to chlorite-sericite schists in shear zones in diamond drill core.

Gold is associated with quartz veining and fine, disseminated pyrite in east-northeasterly-trending shear zones within the volcanic assemblage.

TOPOGRAPHY AND DRAINAGE

Terrain in the survey area is quite flat, with local relief of less than 50 ft. Overburden appears to consist mainly of lodgement till, probably in the range of 20 to 50 ft deep, overlain by sandy soil.

The property is well-drained with the exception of one swampy area bordering a creek running east-west just north of the patented claims.

Much of the property has been cleared by logging operations in recent years and a heavy growth of alders and young poplar has developed between the remaining areas of poplar and spruce forest.

SURVEY PROCEDURE

On the 25 unpatented claims covered by the survey, a total of 298 humus and 669 soil samples were taken at 100 ft intervals (where possible) on lines spaced at 400 ft. A total of 27 line miles were traversed during the survey.

Humus samples consist of black, partially decomposed organic material - mainly leaves, needles and grasses - which were collected by hand, taking care not to include any soil particles.

The soil samples were taken from the "B" horizon at a depth of 8 to 15 inches with long-nose shovels and placed in 8"x4" paper bags. The soil is generally yellow-brown, sandy loam.

SAMPLE ANALYSIS

Humus samples sent to X-Ray Assay Laboratories Limited, Don Mills, Ontario were analysed for Au, As, Cu, and Zn. Gold and silver content were determined by neutron activation; copper and zinc by plasma emission spectrometry. Additional samples sent to Chimitec Ltee, Ste. Foy, Quebec, were analysed for Cu, Zn and Au by neutron activation.

All soil samples were analysed for Au, Cu, and Zn by the Noranda Exploration laboratories in Bathurst, New Brunswick, using atomic absorption spectrometry after dissolution in acid.

Total number of analyses are as follows:

Humus: 298 analyses for Au, Cu, Zn
180 analyses for As

Soil: 669 analyses for Au, Cu, Zn
87 analyses for As

SURVEY RESULTS

Although several isolated high values were obtained from both soil and humus samples, no significant geochemical anomalies are apparent. A complete statistical analysis of results has not been done, but an examination of the plotted values leads to the following observation:

1) Humus samples: Cu - background 10 to 20 ppm; two anomalous values of 60 and 65 ppm on L20E/2+00N and 0+00 B.L.

Zn - wide range of background values: 20 to 100 ppm; several possibly anomalous values of up to 250 ppm; one anomaly of 400 ppm on L8E/22+00N.

Au - background 1-5 ppb; several scattered anomalous values of 14-19 ppb; the value of 187 ppb on L0/1+00N lies beside a trench on the main gold showing.

As - background 1-10 ppm; one anomalous zone on L16W, 20N (36ppm) and 21N (120ppm).

2) Soil Samples: Cu - background 1-10 ppm, maximum value is 22 ppm; no definite anomalies.

Zn - background 10-30 ppm, maximum value is 109 ppm on L24W/12+00S.

Au - background 0 ppb; several scattered anomalous values of 10 to 50 ppb; one high value of 420 ppb on L36E/23+00N.

As - background of 0-20 ppm; one possibly anomalous value of 55 ppm on L4/3+00N.

All humus and soil anomalies cover only one line and one or two adjacent stations and all are one - element anomalies. The lack of response in the area of the main gold showing on patented claim 536916 suggests that soil and humus sampling may indicate bedrock concentrations of gold (and/or Cu-Zn) but that poor results do not necessarily indicate an absence of bedrock mineralization.

CONCLUSIONS

The anomalies obtained from humus and soil sampling on the property do not warrant follow-up diamond drilling or additional sampling. The lack of response near a known gold showing exposed at surface indicates that humic and soil geochemical surveys in this area are not effective in defining bedrock mineralization.

Peter S. LeBaron

Peter S. LeBaron
August 7, 1984.

APPENDIX
(Labour and Analysis Costs)

Costs of sampling and sample analysis on the 25 unpatented claims to be considered for assessment work credits are as follows:

Labour: 2 men x 10 days = 20 man-days

Sample Analysis:

- 1) Humus: 118 samples (Chimitec) @ \$9.85/sample (Au,Cu,Zn)
 180 samples (X-Ray Labs) @ \$11.25/sample (Au,As,Cu,Zn)
 Total 298 samples - \$3,187.30
- 2) Soil: 582 samples (Noranda Bathurst Labs) @ \$4.25/sample (Cu,Zn,Au)
 87 samples (Noranda Bathurst Labs) @ \$4.50/sample
 (Cu,Zn,Au,As)
 Total 669 samples - \$2,865.00

TOTAL COST OF SAMPLE ANALYSIS: \$6052.30 (967 samples)

XRAL

X-RAY ASSAY LABORATORIES LIMITED

1885 LESLIE STREET • DON MILLS ONTARIO M3B 3J4 • (416) 445-5755

COPY TO:

NORANDA EXPLORATION COMPANY LIMITED

ATTN: JOHN W. LONGRY

P.O. BOX 1205

TIMMINS, ONTARIO

P4H 7J5

SAME

ATTACHED TO:

NORANDA EXPLORATION COMPANY LIMITED

ATTN: JOHN W. LONGRY

P.O. BOX 1205

TIMMINS, ONTARIO

P4H 7J5

SAME

CUSTOMER NO. 333

INVOICE NO.	INVOICE DATE	WORK ORDER NO.	DATE SUBMITTED
18034	27-JUN-83	13598	1-JUN-83
TERMS NET 30 DAYS			
1% PER MONTH INTEREST ON ACCOUNT OVER 30 DAYS			

HUNUS		TIMMINS, ONTARIO	
SMALL FRY		49250	

QUANTITY	DESCRIPTION METHOD	XRAL CODE	UNIT COST	AMOUNT
255	AL RS NA	2.20 0.0 0.0	7.50	1912.50
258	1ST ELEMENT CHARGE DCP	7.0 0.0 0.0	1.25	322.50
258	DI PPM DCP	7.0 0.0 0.0	0.90	232.20
258	2N PPM DCP	7.0 0.0 0.0	0.90	232.20
259	PREPARATION HUNUS OR LEAVES	2.0 0.0 0.0	0.70	181.30
SENT TO				
JUL 8				
NORANDA				
P. L. Bann 946-E				
CHARGE TO		TYPE OF WORK	AMOUNT	
946-E1T-15			2885.45	
FIELD APPROVAL		PAYMENT APPROVED		
AUTHORIZED				
SUB-TOTAL				\$ 2630.70

SHIPPING CHARGES	CUSTOM BROKERAGE	TELEX	MINIMUM CHARGES
4.75			
OTHER			SURCHARGE - RUSH SERVICE
			\$ 4.75

TOTAL CANADIAN FUNDS

\$ 2635.45

PLICATE COPY

CHIMITEC LEE

700 Rue Nérée Tremblay, Ste-Foy Québec G1N 4H7 (418) 683-1777

Exploration Noranda Ltée,
P.O. Box 1205,
Timmins, Ont.
P4N 7J5

FACTURE NO: 6516

DATE: 14 septembre 1983

NUMÉRO DU RAPPORT: 302-83

PROJET:

COMMANDE:

316	Analyses de Cuivre	\$ 1.90	\$600.40
316	Analyses de Zinc	0.95	300.20
307	Analyses d'Or	7.00	2,149.00
total			<u>\$3,049.60</u>

CHARGE TO	TYPE OF WORK	AMOUNT
946	E1	1500
934	E1	1000
939	E1	549 60
FIELD APPROVAL <i>[Signature]</i>		PAYMENT APPROVED
AUTHORIZED <i>[Signature]</i>		3049 60

m11

sept.

COMPTE PAYABLE DÈS RÉCEPTION

NOTRE NUMERO	63902
OUR NUMBER	
DATE	Aug 31/85
COMM. DU CLIENT	
CUSTOMER'S ORDER	
VENDEUR	
SALESMAN	
CONDITIONS	
TERMS	
F. A. D.	
F. O. D.	

ADRESSE
ADDRESS

Germania




Neil Mulvaney

YIA

FACTURE INVOICE

GCI#				
28905	19 C _u , Zn, Au, Ag @	4.50	85	50
28907	102 C _u , Zn, Au @	4.25	437	75
32233 ✓	174 C _u , Zn, Au @	4.25	739	50
32235 ✓	64 C _u , Zn, Au @	4.25	102	003
32236 ✓	40 C _u , Zn, Au @	4.25	170	00
	360 sample gas @ 0.25		90	00

0437

CHARGE TO	TYPE OF WORK	AMOUNT
E 939 15	E1	523.25
946 15	E1	1101.50
FIELD APPROVAL 		PAYMENT APPROVED 
AUTHORIZED 		1624.75

NOTRE NUMERO	63915
OUR NUMBER	
DATE	Sept 30/82
COMM QUILLIENT	
CUSTOMER'S ORDER	
VENDEUR	
SALESMAN	
CONDITIONS	
TERMS	
F. A. R.	
F. O. B.	

**FACTURE
INVOICE**

[illegible]

DN 37

**PAYMENT
APPROVED**

1093.50

RECEIVED AUG 10 1988

Noranda Exploration Co. Ltd.
P.O. BOX 30 920 BRIDGE ST.
BATHURST, N.B. E7A-2N0

VENDU A
SOLD TO

LIVRE À
SHIPPED TO

ADRESSE
ADDRESS

VIA

NOTRE NUMÉRO
OUR NUMBER

63975

DATE

COMM. DU CLIENT
CUSTOMER'S ORDER

VENDEUR
SALESMAN

**CONDITIONS
TERMS**

F. A. B.
F. O. B.

FACTURE INVOICE

[illegible]

CHARGE TO	WORK	
946-E2-15		706.50
FIELD APPROVAL	PAYMENT APPROVED	
AUTHORIZED	706.50	

SENT TO

AUG 15 P.M.

NORANDA

Aug.



900

Mining Lands Section

File No 2.7055

Control Sheet

TYPE OF SURVEY _____ GEOPHYSICAL
 _____ GEOLOGICAL
 _____ GEOCHEMICAL
 EXPENDITURE

MINING LANDS COMMENTS:

L.D. Lga.

E. Hurst

Signature of Assessor

84-09-11

Date _____



Ministry of
Natural
Resources

Report of Work
(Geophysical, Geological,
Geochemical and Expenditures)

322/84

27055
The Mining Act

- Instructions: - Please type or print.
- If number of mining claims traversed exceeds space on this form, attach a list.
Note: - Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.
- Do not use shaded areas below.

Type of Survey(s) GEOCHEMICAL		Township or Area SEWELL	
Claim Holder(s) NORANDA EXPLORATION COMPANY LIMITED		Prospector's Licence No. A-34387	
Address SUITE 400 - 55 YONGE ST., TORONTO, ONTARIO			
Survey Company NORANDA CREW		Date of Survey (from & to) 19 05 83 10 06 83	Total Miles of line Cut 27.0
Name and Address of Author (of Geo-Technical report) PETER LEBARON, P.O. BOX 1205, TIMMINS, ONTARIO			

Credits Requested per Each Claim in Columns at right

Special Provisions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
For each additional survey: using the same grid: Enter 20 days (for each)	- Radiometric	
	- Other	
	Geological	
	Geochemical	20
Man Days Complete reverse side and enter total here	Geophysical	Days per Claim
	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
Airborne Credits	Geochemical	
	Electromagnetic	
	Magnetometer	
	Radiometric	

Mining Claims Traversed (List in numerical sequence)

Mining Claim		Expend. Days Cr.
Prefix	Number	
P	622143	16.12
	622144	16.12
	622145	16.12
	622146	16.12
	622147	16.12
	622148	16.12
	622149	16.12
	622150	16.12
	622151	16.12
	622152	16.12
	622153	16.12
	622154	16.12
	622155	16.12
	622156	16.12
	622157	16.12
	628047	16.12
	663220	16.12
	663221	16.12
	663222	16.12
	633223	16.12
	633224	16.12

Expenditures (excludes power stripping)

Type of Work Performed CHEMICAL ANALYSIS	
Performed on Claim(s) SECTION 77 (19)	
As listed on right side	
Calculation of Expenditure Days Credits	
Total Expenditures \$ \$6052.30	Total Days Credits 403
Instructions Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.	

Date Aug. 10/84	Recorded Holder or Agent (Signature) R.C. Denommee
---------------------------	--

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.		
Name and Postal Address of Person Certifying R.C. DENOMMEE, P.O. BOX 1205		
TIMMINS, ONTARIO		Date Certified Aug. 10/84
		Certified by (Signature) R.C. Denommee

RECEIVED
AUG 13 1984
A.M. 7:18 P.M. 5:16

RECORDED
AUG 13 1984
Receipt No. _____

Total number of mining claims covered by this report of work.

25

For Office Use Only	
Total Days Cr. Recorded 903	Date Recorded Aug. 13/84
Date Approved as Recorded 87.9.13	Mining Recorder [Signature]

1984 08 24

Your File:
Our File: 2.7055

Mr. Bruce Hanley
Mining Recorder
Ministry of Natural Resources
60 Wilson Avenue
Timmins, Ontario
P4N 2S7

Dear Sir:

We have received reports and maps for a Geochemical Survey submitted under Special Provisions (credit for Performance and Coverage) on Mining Claims P 628047 et al in the Township of Sewell.

This material will be examined and assessed and a statement of assessment work credits will be issued.

We do not have a copy of the report of work which is normally filed with you prior to the submission of this technical data. Please forward a copy as soon as possible.

Yours sincerely,

S.E. Yundt
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3
Phone: (416)965-6918

A. Barr:sc

cc: Noranda Exploration Company Limited
Suite 400
55 Yonge Street
Toronto, Ontario
M5E 1J4

cc: Noranda Exploration Company Limited
P.O. Box 1205
Timmins, Ontario
Attn: R.C. Denomme.

Noranda Exploration Company, Limited
(no personal liability)

P.O. Box 1205, Timmins, Ont. P4N 7J5

noranda

August 14, 1984

S.E. Yundt,
Director, Land Management Br.,
Ministry of Natural Resources,
Whitney Block, Room 6643,
Queen's Park,
Toronto, Ontario.
M7A 1W3

RECEIVED

AUG 16 1984

MINING LANDS SECTION

Attn: Ray Pichette

Dear Sir:

Enclosed please find reports and maps for Geophysical Surveys,
Geology and Geochem for Loughheed 1 to 4, Sewell and Bowyer Twps.
submitted under Special Provisions.

Hoping this material meets with your approval.

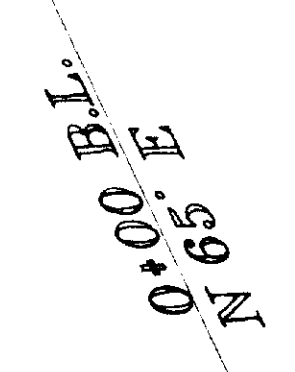
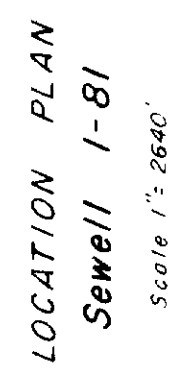
Yours truly,

NORANDA EXPLORATION CO. LTD.



R.C. Denomme
Landsman

c.c. file
RCD/tf
Enclosure

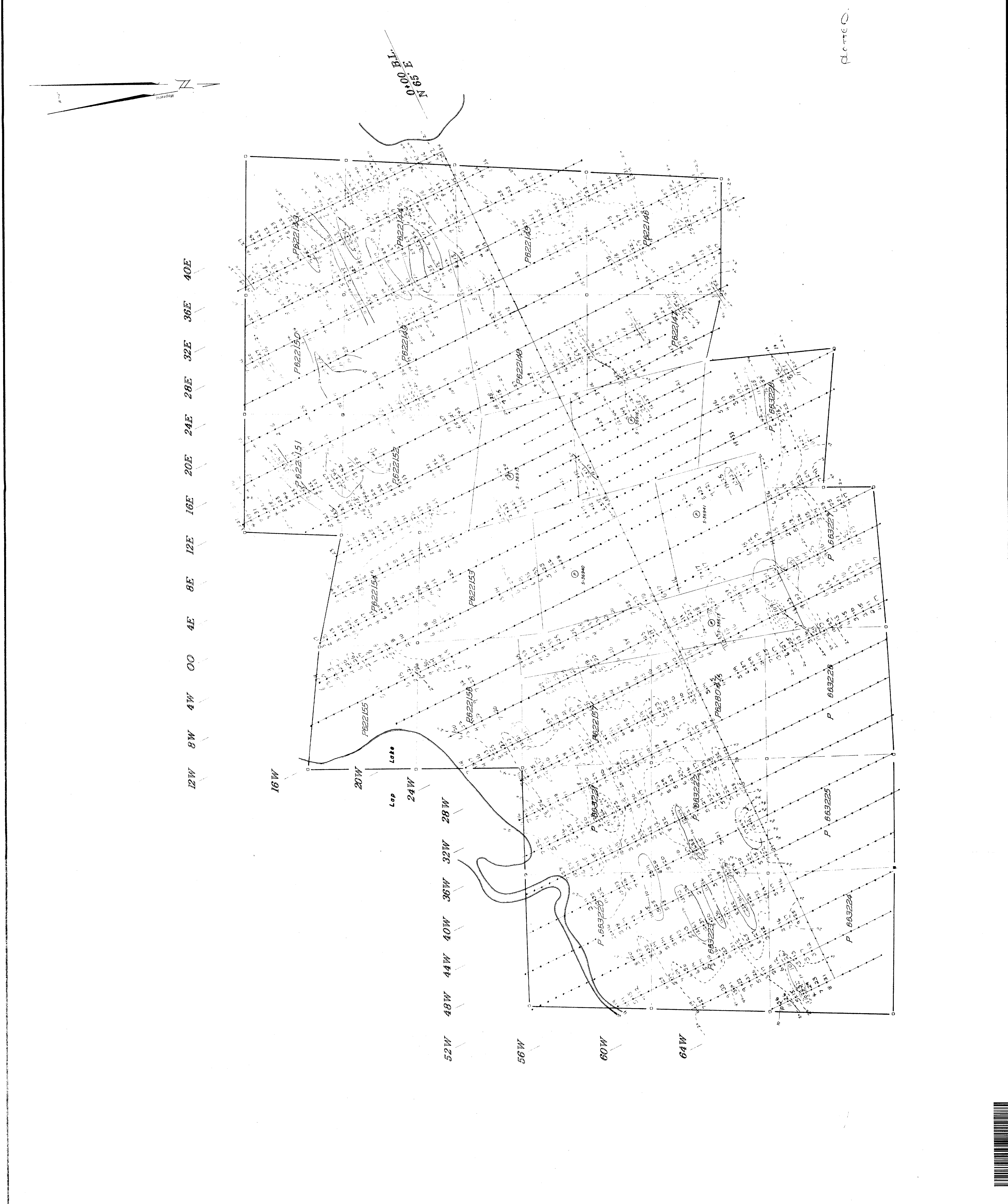
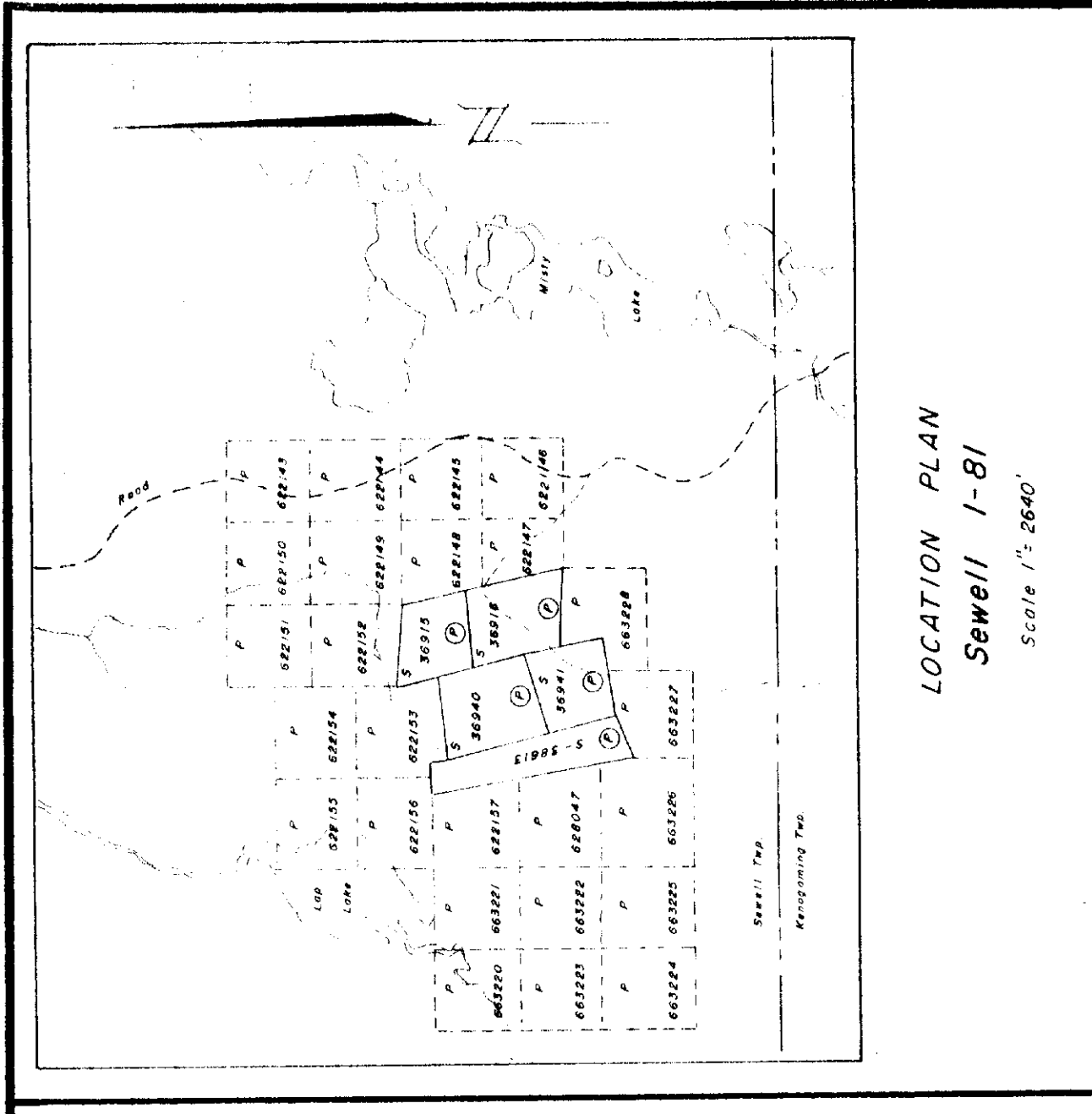


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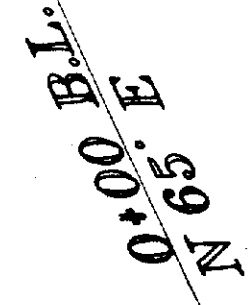
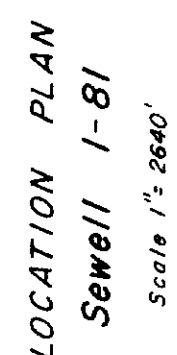
55065

Peter S Baron Aug 10/87

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REVISED	
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PROJ. NO.	66322
N.T.S.	1:400
DWG. NO.	1-81
NORANDA EXPLORATION CO. LTD.	



27055

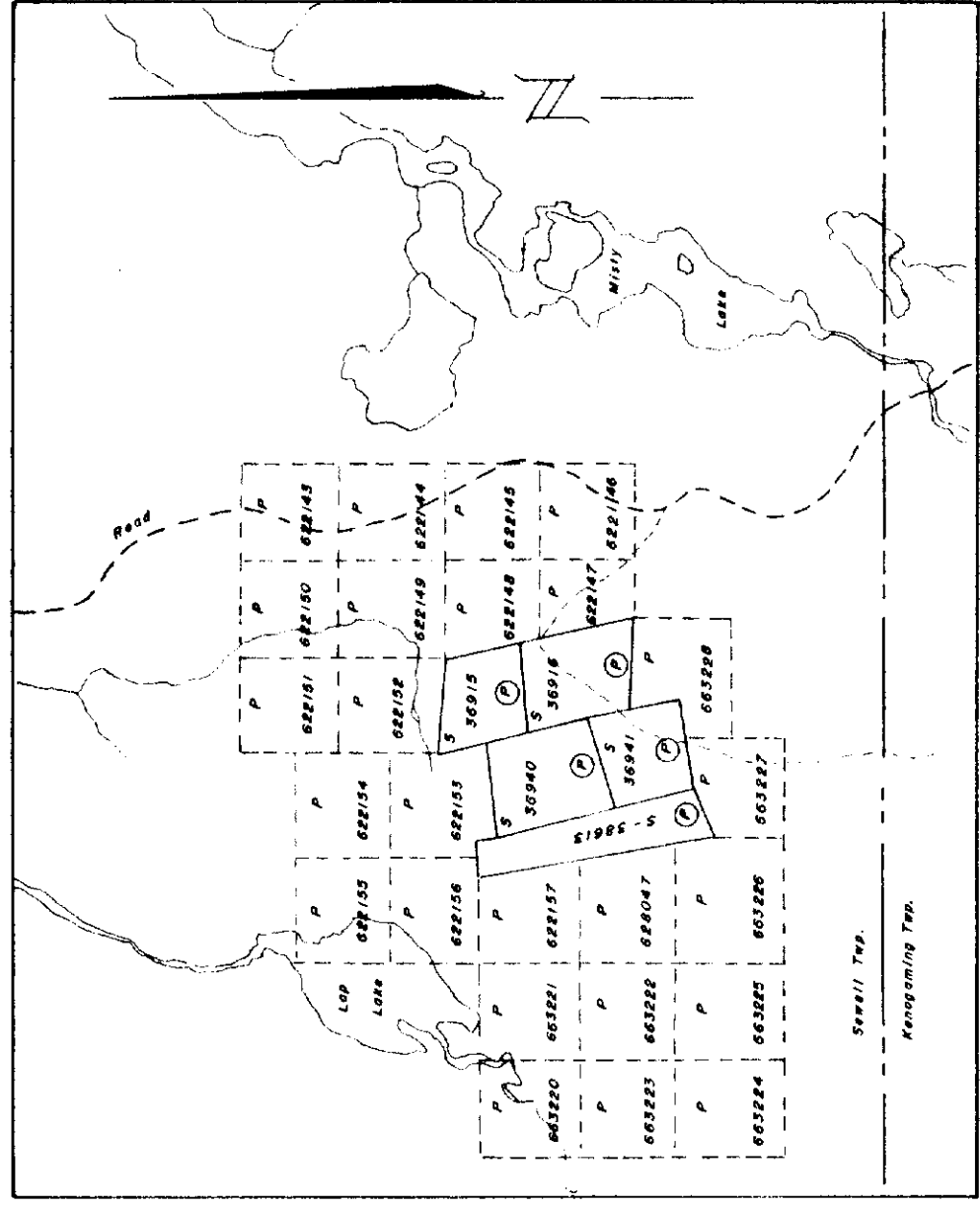
Prof. S. L. Bacon Aug. 10/84

Humus Sampling
C-12
Sewell 1-81

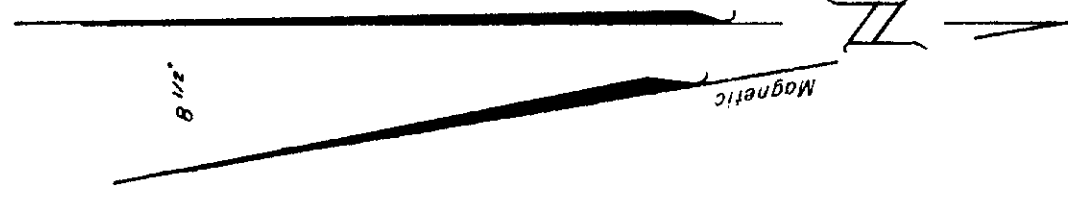
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SURVEYED BY:
DRAWN BY:
NORAND
OFFICE:

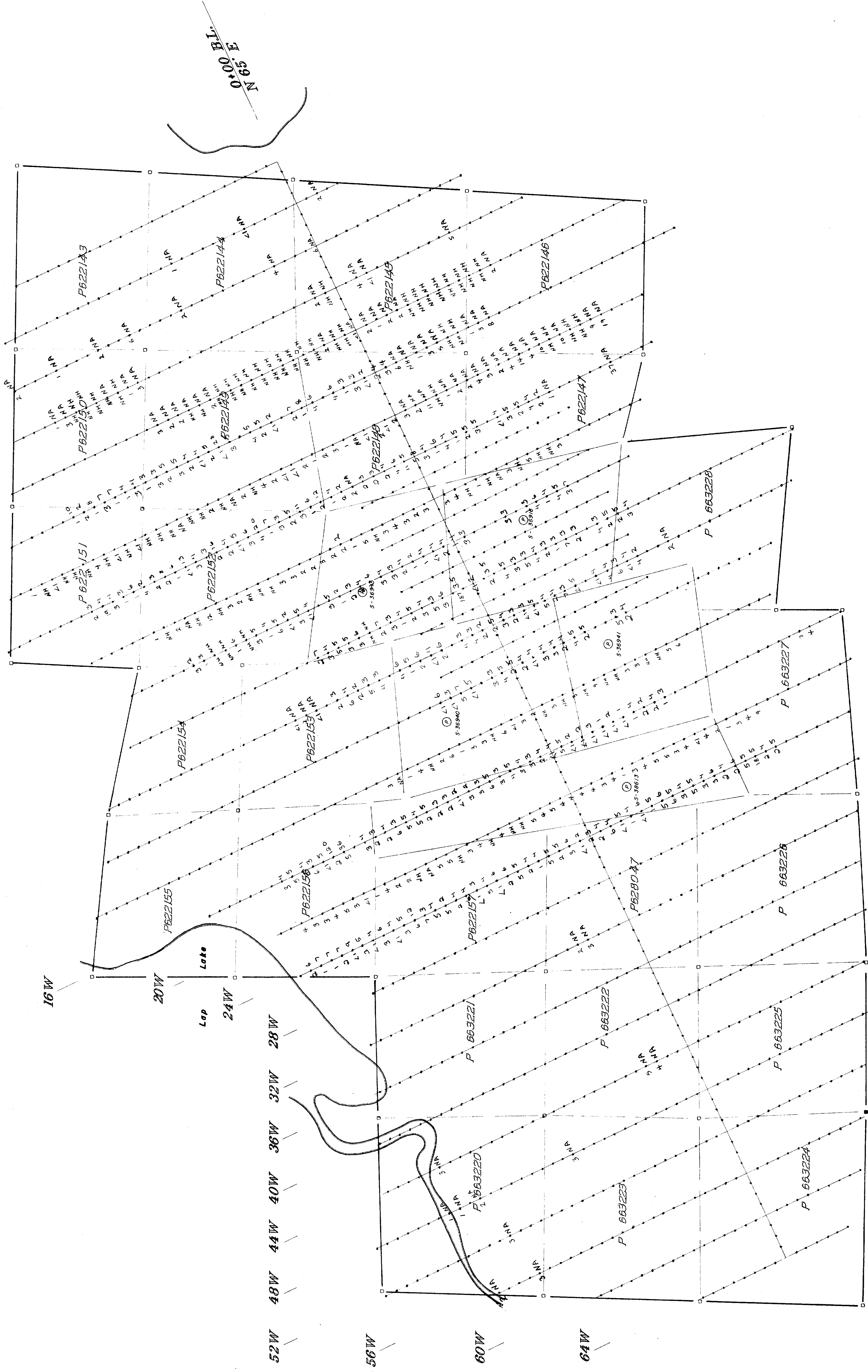
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LOCATION PLAN
Sewell 1-81
Scale 1:2500



12W 8W 4W 00 4E 8E 12E 16E 20E 24E 28E 32E 36E 40E



As to ppm

NH to No. 1000
NA to No. 1000

2.7055

R. S. Brown Aug. 10/64

REVISED	
PROJECT	HUMUS SAMPLING
SURVEYED BY	A. S.
DRAWN BY	Sewell 1-81
DATE	
SCALE	
PROJECT	NORANDA EXPLORATION CO. LTD.
DWG. NO.	
OFFICE	

