



52E11SE8459 2.5560 SNOWSHOE BAY (SHOAL

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REPORT ON GEOCHEM
COMPUTER ANALYSIS SHOAL LAKE AREA
ONT-MAN

BY

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MINING LANDS SECTION



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Pocket

Rock Sampling Locations Map
with Geochemical Anomalies

LOCATION

The area covered in this report is in the vicinity of Gull Bay which is in the S.W. part of Shoal Lake Ontario.

SUMMARY

A suite of 147 rock samples were sent to Barringer-Magenta for semi-whole rock analysis. The results were computer processed using ratio and principal components analysis.

Several anomalous areas were detected.

DESCRIPTION

The data set included the following elements : AL₂O₃, FE₂O₃, CAO, MGO, TI₂O, MNO, NA₂O, K₂O, P₂O₅, BE, CD, CR, CO, CU, NI, SR, TH, ZR, V, ZN .

The data was sorted into the following categories : mafic, basalt, andesite, dacite, and rhyolite. This was done by comparing the oxides in the data set to average oxides for the above rock types as taken from Rock and Rock Minerals by Pirsson .

The data sets corresponding to each of the rock types were then processed by Principal Components Analysis.

Various ratios were run using the original data set.

DISCUSSION

Principal Components Analysis - This is a method by which the elements in the data set are sorted as to their influence in the data set. Eigenvalues are used for the above and a set of coefficients called eigenvectors are also produced. These are used in a regression type of analysis to find anomalous areas.

K2O/NA2O ratios - These ratios will increase in the vicinity of gold veins. (ie. NA2O depletion)

MGO/CAO ratios - These ratios decrease in the vicinity of gold veins. (ie. CAO increase - carbonate increase)

OXIDES/NORMAL OXIDES - These ratios increase in the vicinity of gold veins. (ie. there is a general increase in oxides) The values found at Cameron Island (Duport gold deposit) were used for comparison.

CONCLUSION

The sample sites indicated as anomalous are an indication that they occur in an alteration envelope.

RECOMMENDATION

Geophysics either IP or E-M should be carried out over the anomalous areas. Drilling should be done on any targets found.

REFERENCES

Davis J.C Statistics and Data Analysis in Geology

Fryer B.J., Kerrich R., Hutchinson R.W., Peirce M.G., and
Rogers D.S Archean precious-metal hydrothermal systems
Dome Mine, Abitibi Greenstone Belt. I. Patterns of
alteration and metal distribution

Kerrich R., Fyfe W.S., The Gold-Carbonate Association:
Source of CO_2 and CO_2 fixation reactions in Archean Lode
Deposits.

Hutchinson R.W., and Burlington J.L. Some broad
characteristics of greenstone belt gold lodes.

APPENDIX A

SITE NUMBERS SORTED INTO ROCK TYPES

MAFICS

502	56857	961	996
503	56897	962	3981
514	56898	968	3982
515	56900	970	3988
516	56223	976	27378
521	955	977	27379
530	956	978	56411
532	957	979	56412
56836	958	980	56422
56855	959	981	
56856	960	995	

BASALT

519	974	27371	56403
525	982	27375	56415
56837	986	27377	56416
56856	990	27382	56426
963	3990	27383	

ANDESITE

504	56845	985	27374
522	56846	989	56407
527	56858	991	56408
531	964	993	56413
533	969	994	56417
534	971	3987	56420
536	972	3997	
56815	973	27372	
56841	975	27373	

DACITE

506	56812	984	56410
510	56828	992	56418
529	56832	3983	56421
535	56844	27376	56423
537	951	27380	56424
540	953	27381	56425
56801	954	27384	
56802	967	56402	
56807	983	56405	

RHYOLITE

505	512	56840	56229
507	513	56899	56406
508	520	952	56409
509	539	987	56414
511	56806	988	56419

APPENDIX B

PRINCIPAL COMPONENTS FOR MAFIC ROCK

(note MO,PB,AG eliminated - small variation)

column 1 = element
 column 3 = percent trace

column 2 = eigenvalue
 column 4 = cumulative percent trace

Fe2O3	6.73	33.67	33.67
Ti2O	4.19	20.95	54.63
Al2O3	2.88	14.44	69.07
Cd	2.13	10.66	79.73
MnO	1.56	7.80	87.54
Cr	.73	3.67	91.22
Co	.58	2.92	94.14
Cu	.43	2.16	96.31
Zn	.27	1.35	97.67
Th	.19	.96	98.63
V	.08	.43	99.06
Zr	.08	.41	99.48
CaO	.06	.30	99.78
P2O5	.02	.12	99.90
MgO	.01	.09	100.00
K2O	.00	.00	100.00
Be	.00	.00	100.00
Ni	.00	.00	100.00
Na2O	.00	.00	100.00
sr	.00	.00	100.00

ANOMALOUS SITES

995 Cameron Island

APPENDIX C

PRINCIPAL COMPONENTS FOR BASALT ROCK

(note MO, PB, AG eliminated - small variation)

column 1 = element
 column 3 = percent trace

column 2 = eigenvalue
 column 4 = cumulative percent trace

AL2O3	7.63	38.17	38.17
CAO	4.66	23.32	61.50
MNO	2.17	10.86	72.36
P2O5	1.83	9.19	81.55
CD	1.22	6.14	87.69
CR	.89	4.46	92.16
CU	.58	2.92	95.08
V	.40	2.02	97.11
BE	.23	1.17	98.29
ZN	.13	.66	98.95
SR	.08	.44	99.40
MGO	.06	.31	99.72
ZR	.03	.16	99.88
K2O	.01	.08	99.97
TH	.00	.00	100.00
TI2O	.00	.00	100.00
CO	.00	.00	100.00
NA2O	.00	.00	100.00
NI	.00	.00	100.00
FE2O3	.00	.00	100.00

ANOMALOUS SITES

963 Manitoba
 27371 Island S.W. Gull Bay
 27383 Island Centre Gull Bay

APPENDIX D

PRINCIPAL COMPONENTS FOR ANDESITE ROCK

(note MO,PB,AG eliminated - small variation)

column 1 = element
 column 3 = percent trace
 column 2 = eigenvalue
 column 4 = cumulative percent trace

MGO	4.61	23.07	23.07
FE2O3	3.51	17.56	40.64
BE	2.66	13.30	53.95
TH	2.42	12.11	66.06
AL2O3	1.73	8.68	74.75
ZR	1.23	6.17	80.92
CD	1.02	5.10	86.02
CU	.85	4.26	90.29
Ti2O	.50	2.54	92.84
CR	.44	2.21	95.05
CAO	.42	2.10	97.16
V	.25	1.27	98.43
P2O5	.17	.86	99.29
SR	.09	.47	99.77
NI	.04	.22	100.00
NA2O	.00	.00	100.00
K2O	.00	.00	100.00
CO	.00	.00	100.00
ZN	.00	.00	100.00
MNO	.00	.00	100.00

ANOMALOUS SITES

none

APPENDIX E

PRINCIPAL COMPONENTS FOR DACITE ROCK

(note MO, PB, AG eliminated - small variation)

column 1 = element
 column 2 = eigenvalue
 column 3 = percent trace
 column 4 = cumulative percent trace

AL203	6.07	30.38	30.38
TI20	3.86	19.34	49.72
CD	3.51	17.59	67.32
NA20	2.10	10.51	77.83
CR	1.19	5.99	83.83
CO	.86	4.32	88.15
CU	.78	3.91	92.07
SR	.51	2.59	94.66
BE	.37	1.89	96.56
ZR	.23	1.15	97.71
TH	.18	.94	98.66
V	.10	.52	99.18
FE203	.09	.45	99.64
P205	.04	.23	99.88
NI	.02	.11	100.00
CAO	.00	.00	100.00
K2O	.00	.00	100.00
MNO	.00	.00	100.00
ZN	.00	.00	100.00
MGO	.00	.00	100.00

ANOMALOUS SITES

535 Border
56812 N.W. of Gull Bay
967 Rabbit Pt
27376 S.W. Gull Bay (Island)
27384 Centre Gull Bay (Island)

APPENDIX F

PRINCIPAL COMPONENTS FOR RHYOLITE ROCK

(note MO, PB, AG eliminated - small variation)

column 1 = element
 column 2 = eigenvalue
 column 3 = percent trace
 column 4 = cumulative percent trace

FE203	4.99	24.96	24.96
AL203	4.81	24.07	49.03
CAO	2.89	14.46	63.50
TI20	1.65	8.29	71.80
CO	1.38	6.92	78.72
CR	.96	4.80	83.53
CD	.95	4.76	88.29
P205	.74	3.71	92.00
NA2O	.46	2.31	94.32
SR	.39	1.97	96.29
BE	.25	1.28	97.58
ZR	.21	1.08	98.66
NI	.11	.59	99.25
K2O	.06	.33	99.59
TH	.05	.26	99.85
MGO	.02	.09	99.95
CU	.01	.03	99.98
MNO	.00	.00	100.00
V	.00	.00	100.00
ZN	.00	.00	100.00

ANOMALOUS SITES

56899 Calm Bay
 987 Twin Pt.
 988 Twin Pt.
56406 Manitoba

APPENDIX G

RATIOS

COLUMN 1 = SITES COLUMN 2 = K20 / NA20
 COLUMN 3 = M60 / CA0

(* = ANOMALY)

502		.19	.96
503		.11	.55
504	N.W. of Gull Bay	1.55 *	.69
505		.42	.99
506	N.W. of Gull Bay	2.49 *	.74
507		.47	.06
508		.91	.89
509		.94	1.50
510	N.W. of Gull Bay	.82 *	.39
511		.74	.39
512	N.W. of Gull Bay	.47	<u>.14</u> *
513		.58	.51
514		.15	2.59
515		.03	.70
516		.13	.27
519	N.W. of Gull Bay	1.06 *	.47
520	N.W. of Gull Bay	1.21 *	.43
521		.69	.28
522		.56	.39
525		.32	.37
527		.44	.68
529		.86	1.10
530		.39	.34
531		.47	.35
532		.20	.34
533		.61	.33
534		.47	.50
535		.15	.21
536		.35	.37
537		.22	.21
539		.17	.20
540	N.W. of Gull Bay	.14	<u>.07</u> *
56801	N.W. of Gull Bay	1.03 *	.41
56802		.32	.35
56806		.47	.13
56807		.42	.27
56812		.38	.30
56815		.46	.30
56828		.09	.26
56832	N.W. of Gull Bay	.17 *	.92
56836		.35	.65
56837		.42	1.15
56840		.36	.27
56841		.96	.37
56844		.40	.29
56845		.27	.30

APPENDIX G cont

RATIOS

COLUMN 1 = SITES COLUMN 2 = K20 / NA20
 COLUMN 3 = MGO / CAO

(* = ANOMALY)

56846	.63	.46	
56855	.17	.43	
56856	.46	.64	
56857	.08	.35	
56858	.65	.43	
56896	<u>1.17</u> *	.79	↗ Base line 0+00 6+00w
56897	.37	.46	
56898	.34	.42	
56899	<u>2.37</u> *	.24	Calm Bay
56900	.32	.65	
56223	.09	.61	
951	<u>1.04</u> *	.71	Manitoba
952	.49	.13	* Manitoba
953	.28	.29	
954	.35	.29	
955	.19	.57	
956	.57	.56	
957	.53	.64	
958	.13	.66	
959	.78	.60	
960	.19	.65	
961	<u>1.95</u> *	.59	Manitoba
962	.13	.44	
963	.17	.58	
964	.63	1.10	
967	.10	.30	
968	.94	.79	
969	.16	.04	* Rabbit Pt.
970	.17	.91	
971	.51	.23	
972	.31	.41	
973	.48	.34	
974	.30	.69	
975	.54	.38	
976	.21	.40	
977	.11	.51	
978	.50	.64	
979	.08	.47	
980	.06	.40	
981	.12	.23	
982	.54	.44	
983	.54	.25	
984	.30	.55	
985	.48	.27	
986	<u>1.07</u> *	.72	S. of Twin PT.
987	<u>1.74</u> *	.32	Twin Pt.

APPENDIX G cont

RATIOS

COLUMN 1 = SITES COLUMN 2 = K20 / NA20
 COLUMN 3 = MGO / CAO

(* = ANOMALY)

988	5.99 *	.28	Twin Pt.
989	.45	.29	
990	1.49 *	<u>.14</u>	* Twin Pt.
991	.88	1.25	
992	1.18 *	.23	Twin Pt.
993	.63	.19	
994	.79	.27	
995	.61	.50	
996	.10	.43	
3981	.11	.51	
3982	.18	.59	
3983	.42	<u>.13</u>	* Manitoba
3987	.16	<u>.11</u>	* Manitoba
3988	.25	.77	
3990	.58	1.55	
3997	.58	.64	
37371	.13	.49	
27372	.57	.61	
27373	.48	.62	
27374	.36	.59	
27375	.40	.40	
27376	.26	.50	
27377	.15	.99	
27378	.12	.94	
27379	12.07 *	<u>.08</u>	* Gull Bay Centre (Island)
27380	.50	.34	
27381	.15	.64	
27382	.30	.41	
27383	1.19 *	1.07	Gull Bay Centre (Island)
27384	<u>.16</u>	.34	
59229	1.60 *	.69	Manitoba
56402	.45	1.00	
56403	.10	.56	
56405	.48	.32	
56406	.51	.23	
56407	.29	.42	
56408	.46	.37	
56409	.36	.32	
56410	.54	.40	
56411	1.43 *	.81	Manitoba
56412	.90	.87	
56413	.20	.34	
56414	1.82 *	1.64	Manitoba
56415	.31	.85	

APPENDIX G cont

RATIOS

COLUMN 1 = SITES COLUMN 2 = K20 / NA20
 COLUMN 3 = MgO / CaO

(* = ANOMALY)

56416	.27	.57	
56417	.69	.51	
56418	.43	.26	
56419	.30	.30	
56420	<u>1.74</u> *	.69	Manitoba
56421	.07	.38	
56422	.38	.75	
56423	.18	.51	
56424	.36	.74	
56425	.15	<u>.09</u> *	Manitoba
56426	.38	.56	

APPENDIX H
 (* = anomaly ** = Dupont) **Cameron Island**
 RATIO OXIDE / NORMAL OXIDE

SITE	AL2O3	FE2O3	CAO	MGO	TI2O	MNO	NA2O	K2O	P2O5	
502	1.26	1.89	1.16	2.28	1.28	.97	.99	.36	.86	
503	1.02	1.75	1.76	2.00	1.14	1.21	.63	.14	.95	
504	1.06	.84	.61	.86	.61	.61	.78	2.38	.52	
505	1.02	.14	.08	.17	.32	.17	1.28	1.06	.48	
506	1.05	.13	.22	.33	.33	.20	.66	3.26	.52	
507	.97	.08	.70	.09	.40	.53	.88	.82	.57	
508	.92	.17	.08	.16	.31	.19	1.51	2.70	.38	
509	.94	.25	.12	.36	.32	.24	1.24	2.31	.48	
510	1.05	.17	.27	.22	.35	.14	.81	2.92	.62	
511	.98	.14	.24	.20	.36	.22	1.23	1.81	.48	
512	.89	.08	.41	.11	.23	.30	1.49	1.38	.48	
513	.94	.27	.13	.14	.31	.16	1.59	1.82	.48	
514 *	.66	1.68	1.23	6.55	.39	1.23	.08	.02	.67	W. Gull Bay
515	1.15	1.70	1.03	1.46	1.20	1.14	1.17	.07	.81	
516	1.17	1.51	1.42	.78	1.22	.87	1.14	.29	.86	
519	.75	2.58	.96	.93	.96	4.94	.22	.47	1.57	
520	.83	.13	.27	.23	.21	.28	.96	2.30	.14	
521	1.52	1.25	1.39	.79	1.62	1.08	1.02	1.40	.86	
522	.97	1.05	.90	.71	.62	1.95	.93	1.03	1.05	
525	1.00	1.38	1.05	.79	2.10	1.07	1.06	.66	1.19	
527	1.23	.79	.67	.94	1.00	.55	1.51	1.31	.81	
529	1.12	.11	.04	.09	.28	.09	1.36	2.31	.19	
530	1.11	2.67	1.67	1.17	1.21	4.91	.43	.33	.62	
531	1.23	.74	1.02	.73	.70	.76	1.16	1.07	.57	
532	1.03	1.64	2.39	1.66	1.49	1.43	.60	.23	1.14	
533	1.09	.75	.70	.47	.53	.68	1.19	1.43	.76	
534	1.01	.64	.99	1.02	.78	.55	1.13	1.04	1.67	
535	1.05	.17	.42	.18	.28	.14	2.11	.62	.33	
536	1.11	.46	.96	.73	.63	.33	1.46	.99	2.24	
537	1.01	.29	.68	.30	.58	3.03	1.54	.68	.95	
539	.95	.16	.50	.20	.28	.18	1.82	.61	.29	
540	.96	.24	1.26	.20	.92	.81	1.42	.40	.86	
56801	1.02	.50	.43	.36	.35	.57	.94	1.91	.62	
56802	.94	.38	.32	.23	.40	.42	1.42	.90	.57	
56806	.89	.15	.59	.16	.39	.25	1.11	1.03	.52	
56807	1.07	.43	.62	.34	.51	.64	1.39	1.14	.57	
56812	.94	.30	.53	.32	.66	.47	1.28	.96	1.29	
56815	1.01	.92	1.03	.63	.73	.88	.83	.75	1.81	
56828	1.07	.63	.81	.43	.69	.40	.78	.15	.67	
56832	.76	.78	1.09	2.04	.12	1.19	.22	.50	.33	
56836	1.17	1.84	1.47	1.94	1.28	1.11	.91	.63	.86	
56837 *	.37	3.28	.68	1.60	2.11	3.27	.16	.13	.62	N. W. of Gull Bay
56840	.77	.31	.57	.31	.14	.19	.79	.56	.29	
56841	.47	.97	2.87	2.19	.07	2.21	.11	.21	.38	
56844	1.07	.56	.74	.43	.18	.25	1.11	.88	.29	
56845	1.08	.48	.77	.48	.62	.66	1.35	.73	1.00	
56846	1.11	.64	1.02	.97	.93	.74	1.11	1.39	2.14	
56855	1.01	1.61	1.78	1.55	1.74	1.09	.56	.19	1.19	

APPENDIX H cont
 (* = anomaly ** = Dupont) Cameron Island
 RATIO OXIDE / NORMAL OXIDE

SITE	AL2O3	FE2O3	CAO	MGO	TI2O	MNO	NA2O	K2O	P2O5	
56856 *	.93	1.10	1.90	2.49	.86	1.44	.51	.46	2.10	NW of Gull Bay
56857	1.07	1.51	1.73	1.24	2.00	1.25	.89	.15	1.62	
56858	.99	.53	.84	.74	.47	.55	1.10	1.41	.86	
56896	.92	1.84	.64	1.03	.72	1.22	.65	1.50	1.67	
56897	.71	.95	2.72	2.57	.90	1.03	1.09	.81	1.76	
56898	.75	.85	2.87	2.48	.86	1.32	1.18	.81	2.00	
56899	.92	.26	.28	.14	.16	.36	.54	2.55	.19	
56900	1.13	1.08	1.71	2.29	.68	1.04	.82	.52	.57	
56223 *	.95	1.46	1.79	2.25	.92	1.33	.59	.11	.57	
951	.97	.55	.27	.39	.38	.48	.90	1.86	.52	Calm Bay
952	.89	.26	.59	.16	.61	.25	.97	.95	.90	
953	1.09	.36	.90	.54	.62	.29	1.14	.62	.81	
954	1.01	.38	.83	.50	.64	.33	1.03	.71	.81	
955	.95	1.85	.92	1.08	2.51	1.41	1.67	.61	2.71	
956	1.03	1.89	.66	.76	2.72	1.15	1.17	1.30	2.86	
957	1.17	1.61	.62	.81	.88	1.19	1.54	1.62	2.38	
958 *	.98	1.79	1.40	1.90	1.06	1.43	.75	.19	.71	Manitoba
959 *	.89	2.20	1.24	1.52	2.25	1.85	.89	1.38	1.57	
960	1.07	1.64	1.83	2.44	1.27	1.22	.79	.29	.71	
961	.93	1.54	1.78	2.16	.82	2.59	.29	1.13	.62	
962	1.16	1.60	1.69	1.53	1.35	1.65	.98	.26	1.00	
963 *	.82	1.54	1.04	1.23	3.86	1.11	.78	.26	1.76	
964	.93	.63	.78	1.76	.75	.70	1.32	1.65	1.10	
967	1.09	.16	.44	.27	.14	.19	2.39	.49	.29	
968	1.36	1.08	1.82	2.96	.45	1.16	.60	1.12	.38	
969	1.04	.50	1.39	.13	.37	.56	1.12	.35	.76	
970	1.01	1.70	1.07	2.01	1.53	1.20	.89	.30	1.29	
971	1.00	.88	1.17	.55	.95	.80	1.02	1.03	1.62	
972	1.08	.71	.71	.60	.71	.61	1.48	.91	.95	
973	1.05	.67	.87	.61	.70	.73	1.11	1.04	.95	
974	1.21	1.41	.59	.84	1.23	.91	1.33	.79	1.71	
975	1.05	1.11	.96	.76	.99	1.03	1.04	1.10	1.57	N.E of Rabbit Pt
976 *	.83	2.32	1.77	1.45	3.00	2.18	.77	.32	1.81	
977 *	.86	2.02	1.75	1.82	2.89	1.45	.61	.13	1.38	
978	1.05	1.48	1.43	1.87	.76	1.35	.59	.58	.67	
979 *	.93	2.33	1.34	1.30	3.50	2.67	.85	.14	1.52	N.E of Rabbit Pt.
980 *	.88	1.90	1.54	1.27	3.08	1.57	.99	.13	1.67	
981 *	.85	1.79	2.47	1.15	3.12	2.11	1.11	.27	1.52	
982	1.11	1.26	.84	.76	1.13	1.82	1.06	1.14	1.33	
983	.94	.69	.78	.41	.45	.87	1.21	1.28	.81	
984	1.05	.55	.38	.43	.41	.44	1.63	.98	.62	
985	1.13	.95	.96	.54	1.02	1.06	1.14	1.08	1.76	
986	1.11	1.40	.84	1.24	.99	.99	.63	1.32	.90	
987	.80	.44	.39	.26	.15	.73	.56	1.94	.19	
988	.87	.33	.27	.16	.15	.52	.18	2.18	.29	
989	1.11	.82	.97	.57	.68	.88	1.20	1.07	1.57	
990	1.56	.57	.42	.12	1.04	.36	1.01	2.96	1.95	
991	1.04	.83	.74	1.88	.63	1.12	.67	1.17	.81	

APPENDIX H cont
 (* = anomaly ** = Dupont) Cameron Island
 RATIO OXIDE / NORMAL OXIDE

SITE	AL2O3	FE2O3	CAO	MGO	Ti2O	MNO	NA2O	K2O	P2O5	
992	1.19	.28	.32	.15	.57	.34	.81	1.89	.67	
993	1.23	.53	.57	.23	.88	.68	1.30	1.63	1.95	
994	1.17	1.02	.80	.44	.79	1.13	1.10	1.72	1.81	
995 **	.50	2.28	2.58	2.64	4.86	1.54	.43	.51	.95	
996 **	.96	1.99	1.17	1.04	3.48	3.01	1.22	.25	1.76	Cameron Island
3981	1.01	1.79	1.13	1.19	2.01	1.09	1.14	.24	1.29	
3982	1.16	1.49	1.59	1.94	1.09	1.12	1.02	.36	.62	
3983	1.10	.38	.79	.21	.62	.52	1.23	1.01	.86	
3987	1.09	.47	1.24	.29	.42	.90	1.20	.38	1.86	
3988 *	.97	2.07	1.24	1.97	3.72	1.53	1.22	.61	1.33	Manitoba
3990	.47	2.44	.76	2.42	2.47	2.72	.35	.40	1.00	
3997	1.10	1.00	.88	1.15	.57	.96	1.03	1.18	.71	
27371	1.06	1.22	1.01	1.02	.95	1.07	1.69	.43	2.52	
27372	1.03	.63	.76	.95	.29	.54	1.34	1.51	1.48	
27373	1.03	.67	.81	1.02	.31	.62	1.40	1.32	1.48	
27374	.99	.57	.66	.80	.26	.47	1.61	1.15	1.19	
27375	1.05	1.26	1.41	1.16	.79	1.95	.43	.34	.24	
27376	.95	.53	.76	.78	.18	.52	1.61	.83	1.10	
27377	1.09	1.20	1.18	2.38	.68	1.01	.67	.20	.24	
27378	1.05	1.08	1.48	2.87	.48	1.08	1.25	.30	.19	
27379	.13	.16	7.18	1.22	.09	.97	.03	.84	.29	
27380	1.07	.27	.46	.31	.28	.30	1.53	1.52	.38	
27381	1.08	.31	.26	.35	.23	.25	2.25	.65	.48	
27382	1.15	1.33	.97	.81	1.34	1.30	1.49	.89	1.38	
27383	1.22	.89	.42	.93	.73	.42	1.28	3.00	3.48	
27384	1.13	.24	.32	.22	.13	.36	2.50	.78	.62	
56229	.99	.18	.33	.46	.25	.22	.63	1.98	.33	
56402	.92	.24	.22	.45	.25	.24	1.90	1.67	.95	
56403	.81	.91	2.36	2.71	.35	.77	.45	.08	.19	
56405	1.11	.23	.46	.31	.57	.20	1.82	1.74	.90	
56406	.79	.34	.57	.27	.58	.44	.89	.91	1.24	
56407	1.02	.78	1.24	1.06	.95	.59	1.11	.64	1.86	
56408	.95	.94	.96	.73	.79	.71	.99	.89	1.81	
56409	.87	.31	.50	.33	.32	.23	1.49	1.07	.67	
56410	.92	.38	.54	.45	.47	.30	1.04	1.09	.62	
56411	.60	2.88	.86	1.42	.54	2.91	.20	.58	.90	
56412	.55	3.18	.86	1.53	.50	5.17	.20	.36	.43	
56413	.85	.99	.88	.60	.98	1.22	1.02	.40	1.71	
56414	.00	.08	.00	.02	.01	.03	.00	.02	.04	
56415	1.17	1.30	.75	1.31	1.38	1.13	1.22	.74	2.14	
56416	1.21	.91	.73	.86	1.17	.97	1.50	.79	1.38	
56417	.74	1.78	.89	.92	.75	1.99	.61	.84	1.10	
56418	.91	.48	.72	.38	.57	.42	1.02	.86	1.86	
56419	.88	.34	.51	.31	.38	.23	1.22	.73	.57	
56420	.94	.97	.82	1.17	.86	.60	.44	1.52	.86	
56421	.84	.93	.67	.51	.61	1.02	1.27	.17	.95	
56422 *	.77	2.14	1.28	1.96	2.91	1.33	.85	.64	1.48	Manitoba
56423	.77	.81	.34	.35	.25	1.04	1.35	.49	.43	
56424	.90	.89	.43	.66	.34	.66	1.26	.89	.52	
56425	.93	.24	.83	.15	.78	.36	1.30	.38	1.10	
56426	1.21	1.03	.80	.93	.86	.77	1.44	1.08	1.33	

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SAMPLE ID	AL2O3 %	FE2O3 %	CAO %	MGO %	TIO2 %	MNO %	NA2O %	K2O %	P2O5 %
502	18.9	15.1	6.35	6.09	1.18	.145	3.10	.578	.18
503	15.3	14.0	9.63	5.33	1.05	.181	1.97	.220	.20
504	15.9	6.75	3.33	2.29	.565	.0911	2.44	3.79	.11
505	15.3	1.09	.47	.466	.296	.0259	4.01	1.69	.10
506	15.8	1.02	1.18	.877	.302	.0301	2.08	5.18	.11
507	14.6	.669	3.82	.244	.372	.0792	2.77	1.30	.12
508	13.8	1.35	.48	.428	.288	.0280	4.73	4.30	.08
509	14.1	1.97	.64	.962	.293	.0358	3.90	3.68	.10
510	15.8	1.37	1.48	.577	.318	.0205	2.55	4.65	.13
511	14.7	1.11	1.34	.526	.328	.0335	3.86	2.87	.10
512	13.4	.654	2.26	.306	.213	.0450	4.69	2.20	.10
513	14.1	2.16	.73	.369	.285	.0234	4.99	2.89	.10
514	9.95	13.4	6.75	17.5	.355	.185	.257	.039	.14
515	17.3	13.6	5.62	3.91	1.10	.171	3.66	.123	.17
516	17.6	12.1	7.79	2.09	1.12	.130	3.59	.469	.18
519	11.3	20.6	5.27	2.47	.879	.741	.702	.747	.33
520	12.5	1.05	1.45	.627	.190	.0419	3.02	3.66	.03
521	22.8	10.0	7.62	2.11	1.49	.162	3.21	2.23	.18
522	14.5	8.39	4.91	1.90	.571	.293	2.91	1.64	.22
525	15.0	11.0	5.75	2.11	1.93	.160	3.32	1.05	.25
527	18.4	6.34	3.67	2.50	.920	.0829	4.74	2.09	.17
529	16.8	.873	.23	.253	.255	.0143	4.28	3.68	.04
530	16.7	21.3	9.11	3.12	1.11	.736	1.36	.531	.13
531	18.5	5.92	5.60	1.94	.648	.114	3.63	1.70	.12
532	15.4	13.1	13.1	4.44	1.37	.215	1.88	.368	.24
533	16.4	6.00	3.84	1.26	.488	.102	3.73	2.27	.16
534	15.1	5.09	5.42	2.72	.715	.0827	3.55	1.66	.35
535	15.8	1.37	2.28	.477	.254	.0217	6.63	.982	.07
536	16.6	3.67	5.27	1.96	.576	.0500	4.57	1.58	.47
537	15.2	2.28	3.72	.790	.532	.0454	4.82	1.08	.20
539	14.2	1.27	2.76	.545	.258	.0265	5.71	.968	.06
540	14.4	1.89	6.88	.522	.846	.122	4.45	.639	.18
56801	15.3	3.99	2.36	.957	.325	.0855	2.95	3.03	.13
56802	14.1	3.05	1.75	.611	.364	.0633	4.46	1.43	.12
56806	13.4	1.22	3.23	.416	.355	.0381	3.49	1.64	.11
56807	16.1	3.40	3.38	.903	.470	.0956	4.36	1.81	.12
56812	14.1	2.40	2.89	.854	.609	.0708	4.02	1.52	.27
56815	15.1	7.32	5.61	1.68	.668	.132	2.60	1.19	.38
56828	16.0	5.02	4.45	1.16	.636	.0596	2.46	.232	.14
56832	11.4	6.24	5.95	5.45	.113	.179	.682	.795	.07
56836	17.5	14.7	8.03	5.19	1.18	.167	2.87	.995	.18
56837	5.55	26.2	3.72	4.26	1.94	.491	.500	.208	.13
56840	11.5	2.49	3.12	.833	.126	.0283	2.48	.896	.06
56841	7.10	7.75	15.7	5.84	.0679	.332	.355	.340	.08
56844	16.0	4.50	4.06	1.16	.166	.0375	3.48	1.40	.06

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SAMPLE ID	AL203 %	FE203 %	CAO %	MGO %	TIO2 %	MNO %	NA2O %	K2O %	P2O5 %
56845	16.2	3.83	4.20	1.27	.566	.0992	4.24	1.16	.21
56846	16.6	5.11	5.59	2.58	.858	.111	3.50	2.21	.45
56855	15.2	12.9	9.74	4.15	1.60	.164	1.77	.305	.25
56856	13.9	8.80	10.4	6.64	.790	.216	1.59	.739	.44
56857	16.1	12.1	9.46	3.32	1.84	.187	2.78	.242	.34
56858	14.8	4.23	4.59	1.97	.429	.0826	3.46	2.24	.18
56896	13.8	14.7	3.49	2.75	.659	.183	2.03	2.38	.35
56897	10.7	7.58	14.9	6.87	.829	.155	3.42	1.28	.37
56898	11.3	6.81	15.7	6.62	.792	.198	3.72	1.28	.42
56899	13.8	2.06	1.55	.369	.146	.0537	1.71	4.06	.04
56900	17.0	8.62	9.35	6.12	.627	.156	2.59	.829	.12
56223	14.2	11.7	9.81	6.00	.846	.200	1.84	.174	.12
951	14.5	4.36	1.48	1.05	.351	.0717	2.83	2.95	.11
952	13.3	2.05	3.24	.415	.560	.0377	3.06	1.51	.19
953	16.3	2.85	4.95	1.45	.573	.0437	3.57	.990	.17
954	15.2	3.04	4.55	1.34	.593	.0493	3.22	1.13	.17
955	14.2	14.8	5.05	2.88	2.31	.212	5.23	.971	.57
956	15.5	15.1	3.60	2.03	2.50	.172	3.66	2.07	.60
957	17.5	12.9	3.37	2.15	.809	.179	4.82	2.57	.50
958	14.7	14.3	7.68	5.07	.978	.215	2.36	.306	.15
959	13.3	17.6	6.80	4.06	2.07	.277	2.81	2.19	.33
960	16.0	13.1	10.0	6.52	1.17	.183	2.48	.461	.15
961	14.0	12.3	9.76	5.78	.758	.388	.920	1.79	.13
962	17.4	12.8	9.25	4.08	1.24	.247	3.09	.414	.21
963	12.3	12.3	5.70	3.29	3.55	.167	2.44	.415	.37
964	13.9	5.05	4.28	4.69	.690	.105	4.14	2.62	.23
967	16.3	1.25	2.42	.727	.132	.0284	7.49	.779	.06
968	20.5	8.65	9.93	7.89	.415	.174	1.89	1.78	.08
969	15.6	4.00	7.62	.345	.336	.0837	3.52	.560	.16
970	15.1	13.6	5.86	5.36	1.41	.180	2.78	.482	.27
971	15.0	7.06	6.39	1.47	.871	.120	3.20	1.64	.34
972	16.2	5.65	3.89	1.59	.649	.0919	4.66	1.45	.20
973	15.8	5.35	4.78	1.64	.647	.110	3.49	1.66	.20
974	18.2	11.3	3.23	2.23	1.13	.136	4.18	1.26	.36
975	15.8	8.90	5.27	2.02	.909	.155	3.26	1.75	.33
976	12.5	18.5	9.69	3.87	2.76	.327	2.41	.502	.38
977	12.9	16.1	9.56	4.86	2.66	.217	1.93	.207	.29
978	15.8	11.8	7.80	4.99	.699	.202	1.85	.919	.14
979	13.9	18.6	7.35	3.47	3.22	.401	2.68	.221	.32
980	13.2	15.2	8.41	3.38	2.83	.236	3.12	.202	.35
981	12.8	14.3	13.5	3.08	2.87	.316	3.50	.426	.32
982	16.6	10.1	4.60	2.02	1.04	.273	3.34	1.81	.28
983	14.1	5.52	4.28	1.09	.410	.130	3.81	2.04	.17
984	15.7	4.43	2.08	1.14	.375	.0659	5.13	1.56	.13
985	16.9	7.63	5.25	1.43	.942	.159	3.59	1.71	.37

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SAMPLE ID	AL2O3 %	FE2O3 %	CAO %	MGO %	TIO2 %	MNO %	NA2O %	K2O %	P2O5 %
986	16.7	11.2	4.59	3.30	.915	.148	1.97	2.10	.19
987	12.0	3.48	2.13	.687	.134	.110	1.77	3.08	.04
988	13.1	2.63	1.49	.415	.141	.0773	.579	3.47	.06
989	16.7	6.59	5.28	1.53	.624	.132	3.78	1.70	.33
990	23.4	4.56	2.32	.317	.958	.0541	3.17	4.71	.41
991	15.6	6.66	4.03	5.03	.582	.168	2.11	1.86	.17
992	17.8	2.20	1.76	.405	.522	.0510	2.55	3.01	.14
993	18.4	4.21	3.13	.602	.807	.102	4.09	2.59	.41
994	17.6	8.17	4.40	1.18	.730	.169	3.44	2.73	.38
995	7.53	18.2	14.1	7.04	4.47	.231	1.34	.811	.20
996	14.4	15.9	6.42	2.78	3.20	.451	3.82	.397	.37

SAMPLE ID	RE PPM	CD PPM	CR PPM	CO PPM	CU PPM	PB PPM	NI PPM
502	.2	<	37.6	75	74.1	<5	52
503	.2	<	43.1	81	34.5	<5	46
504	.5	<	21.5	43	29.5	<5	20
505	.7	<	6.0	32	5.3	<5	7
506	.7	<	6.1	17	1.0	<5	7
507	.7	<	12.7	33	1.0	<5	6
508	.5	<	2.4	33	5.8	<5	3
509	.8	<	2.5	16	<.8	<5	6
510	.5	<	3.7	27	23.1	<5	6
511	.5	<	5.8	16	<.8	<5	6
512	.5	<	2.4	17	1.4	<5	5
513	.5	<	1.7	27	9.2	<5	2
514	<.1	<	571	105	<.8	<5	677
515	.2	<	28.6	75	38.0	<5	40
516	.5	<	18.4	47	34.9	<5	29
519	.3	<	<.8	39	18.3	<5	21
520	.6	<	<.8	17	<.8	<5	5
521	.2	<	49.6	74	51.4	<5	42
522	.3	<	44.8	41	10.4	<5	41
525	.5	<	7.4	75	30.1	<5	26
527	.2	<	31.3	33	60.7	<5	37
529	.2	<	<.8	11	1.3	<5	2
530	<.1	<	31.4	95	1.0	<5	58
531	.4	<	107	41	3.7	<5	39
532	.2	<	123	78	67.6	<5	77
533	.6	<	17.5	27	11.5	<5	19
534	.2	<	141	43	14.3	<5	68
535	1.1	<	2.0	49	4.7	<5	7
536	.5	<	97.7	32	54.3	<5	43
537	.7	<	31.8	40	41.3	<5	17
539	.7	<	4.5	30	15.3	<5	8
540	.3	<	10.1	39	45.1	<5	17
56801	.7	<	4.8	33	8.3	<5	12
56802	.4	<	14.1	32	14.0	<5	11
56806	.1	<	13.8	17	5.1	<5	11
56807	.2	<	19.8	21	36.3	<5	15
56812	.6	<	9.7	41	2.6	<5	19
56815	.8	<	3.1	54	13.8	<5	17
56828	.8	<	75.9	86	125	<5	40
56832	.7	<	5.6	51	3.3	<5	17
56836	.5	<	157	87	63.3	<5	94
56837	.4	<	805	127	316	<5	297
56840	.3	<	3.8	51	23.2	<5	23
56841	.6	<	12.1	52	2.7	<5	31
56844	1.4	9	4.5	52	20.2	<5	18

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SAMPLE ID	BE PPM	CD PPM	CR PPM	CO PPM	CU PPM	PB PPM	NI PPM
56845	.7	<7	27.7	47	14.7	<5	15
56846	.7	<7	37.0	55	9.7	<5	28
56855	.5	<7	52.4	100	14.0	<5	51
56856	.7	<7	308	75	4.6	<5	101
56857	.7	<7	40.8	84	8.5	<5	36
56858	.3	<7	71.9	47	63.4	<5	50
56896	.6	<7	2.1	47	9.0	<5	37
56897	.9	<7	247	55	19.1	<5	51
56898	1.4	<7	224	55	99.8	<5	47
56899	1.6	<7	<.8	26	3.2	<5	<1
56900	.2	<7	89.6	65	94.2	<5	106
56223	.3	<7	199	80	99.9	<5	122
951	.3	<7	6.0	21	4.7	<5	5
952	.6	<7	64.3	27	21.0	<5	26
953	.4	<7	55.1	46	32.0	<5	31
954	.4	<7	52.1	41	35.2	<5	39
955	2.0	<7	<.8	53	82.1	<5	18
956	1.3	<7	1.6	65	32.6	<5	30
957	3.1	<7	<.8	50	25.2	<5	17
958	.4	<7	7.9	68	34.9	<5	36
959	2.0	<7	<.8	84	127	<5	38
960	.3	<7	136	74	82.3	<5	91
961	.3	<7	70.0	80	40.8	<5	53
962	.2	<7	117	71	35.0	<5	77
963	2.3	<7	10.0	80	91.4	<5	43
964	.7	<7	184	47	21.8	<5	89
967	1.1	<7	13.1	39	10.6	<5	10
968	<.1	<7	385	70	43.0	<5	228
969	.4	<7	<.8	32	2.1	<5	10
970	.3	<7	80.4	73	64.3	<5	76
971	.3	8	3.4	44	13.0	<5	10
972	.2	<7	4.7	41	3.0	<5	10
973	.4	<7	8.8	41	3.6	<5	11
974	.6	<7	<.8	43	36.6	<5	10
975	.2	<7	7.4	44	5.1	<5	11
976	1.4	<7	58.3	86	36.1	<5	115
977	.9	<7	68.1	86	11.8	<5	70
978	.1	<7	295	77	50.0	<5	115
979	1.4	<7	74.4	93	59.3	<5	80
980	.9	<7	79.9	89	77.6	<5	84
981	.9	<7	71.6	86	53.7	<5	68
982	.7	<7	1.9	57	16.4	<5	15
983	.7	8	4.4	44	13.9	<5	10
984	.5	<7	3.5	27	3.0	<5	5
985	.7	<7	.9	52	12.1	<5	10

ARNOLD MICKELSON

WO NO: 83-0108

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SAMPLE ID	BE PPM	CD PPM	CR PPM	CO PPM	CU PPM	PB PPM	NI PPM
986	.5	<7	45.9	56	63.7	<5	57
987	1.4	<7	2.0	26	24.5	<5	6
988	.9	<7	1.3	24	9.1	<5	5
989	.7	<7	6.8	41	33.8	<5	11
990	1.3	<7	933	38	7.8	<5	107
991	.3	<7	102	47	29.6	<5	53
992	.5	<7	18.9	18	3.0	<5	3
993	.6	<7	1.7	40	9.3	<5	10
994	1.2	<7	<.8	40	28.8	<5	10
995	1.8	<7	38.6	140	1260	<5	224
996	1.4	<7	68.0	80	87.7	<5	360

ARNOLD MICKELSON

WD NO: 83-0108

PAGE:

SAMPLE ID	SR PPM	TH PPM	ZR PPM	V PPM	ZN PPM	MO PPM	AG PPM
502	226 ✓	15	85	293	98	<30	<5
503	227 ✓	19	59	292	94	<30	<5
504	232 ✓	18	87	113	79	<30	<5
505	240 ✓	14	98	33.4	20	<30	<5
506	318 ✓	13	93	25.4	40	<30	<5
507	554 ✓	10	89	33.4	25	<30	<5
508	317 ✓	<6	86	20.7	20	<30	<5
509	252 ✓	6	89	25.6	34	<30	<5
510	247 ✓	<6	88	28.4	36	<30	<5
511	210 ✓	<6	94	30.2	27	<30	<5
512	306 ✓	<6	84	15.1	17	<30	<5
513	349 ✓	6	98	23.4	21	<30	<5
514	13.6 ✓	14	24	88.9	111	<30	<5
515	131 ✓	15	76	241	115	<30	<5
516	318 ✓	20	81	255	78	<30	<5
519	194 ✓	15	173	27.0	124	<30	<5
520	310 ✓	<6	109	7.6	39	<30	<5
521	293 ✓	17	87	387	138	<30	<5
522	395 ✓	16	178	65.3	84	<30	<5
525	293 ✓	15	146	278	75	<30	<5
527	295 ✓	<6	104	198	95	<30	<5
529	558 ✓	<6	148	8.2	25	<30	<5
530	85.8 ✓	18	83	305	162	<30	<5
531	275 ✓	8	83	155	77	<30	<5
532	503 ✓	22	49	260	113	<30	<5
533	218 ✓	10	185	52.9	112	<30	<5
534	443 ✓	9	122	106	80	<30	<5
535	863 ✓	<6	86	25.2	39	<30	<5
536	2010 ✓	16	151	91.2	43	<30	<5
537	623 ✓	10	146	59.4	45	<30	<5
539	634 ✓	11	120	21.6	33	<30	<5
540	245 ✓	18	99	124	46	<30	<5
56801	405 ✓	19	102	30.8	57	<30	<5
56802	355 ✓	<6	86	59.3	35	<30	<5
56806	237 ✓	<6	86	39.5	26	<30	<5
56807	289 ✓	<6	109	65.8	54	<30	<5
56812	540 ✓	20	188	55.2	35	<30	<5
56815	283 ✓	17	184	9.2	90	<30	<5
56828	215 ✓	18	77	169	70	<30	<5
56832	95.0 ✓	24	263	2.7	216	<30	<5
56836 ✓	301 ✓	22	91	245	111	<30	<5
56837 ✓	14.0 ✓	25	84	246	343	<30	<5
56840 ✓	246 ✓	20	147	15.2	49	<30	<5
56841 ✓	85.1 ✓	25	125	8.2	136	<30	<5
56844 ✓	453 ✓	19	238	2.9	75	<30	<5

ARNOLD MICKELSON

WO NO: 83-0108

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SAMPLE ID	SR PPM	TH PPM	ZR PPM	V PPM	ZN PPM	MO PPM	AG PPM
56845	203	18	268	57.6	154	<30	<5
56846	722	24	128	129	88	<30	<5
56855	206	20	120	263	126	<30	<5
56856	578	34	129	207	122	<30	<5
56857	527	28	110	296	121	<30	<5
56858	215	18	135	104	63	<30	<5
56896	155	19	202	29.2	211	<30	<5
56897	803	26	71	222	86	<30	<5
56898	820	25	77	194	88	<30	<5
56899	71.6	21	171	1.5	66	<30	<5
56900	154	21	34	175	90	<30	<5
56223	180	20	34	259	90	<30	<5
951	321	7	139	33.8	58	<30	<5
952	364	12	100	86.6	74	<30	<5
953	413	18	103	74.7	63	<30	<5
954	390	18	112	70.3	79	<30	<5
955	596	25	238	78.6	96	<30	<5
956	183	19	231	259	125	<30	<5
957	990	23	208	6.6	164	<30	<5
958	137	19	77	306	121	<30	<5
959	718	30	176	124	149	<30	<5
960	302	20	39	259	114	<30	<5
961	157	20	29	304	145	<30	<5
962	183	21	63	300	131	<30	<5
963	589	24	158	288	117	<30	<5
964	707	18	134	91.3	77	<30	<5
967	849	13	72	20.1	23	<30	<5
968	157	16	20	152	103	<30	<5
969	353	19	108	25.2	29	<30	<5
970	73.9	20	77	320	120	<30	<5
971	194	20	156	26.6	118	<30	<5
972	211	19	150	50.1	63	<30	<5
973	201	18	112	55.8	80	<30	<5
974	232	19	191	41.3	171	<30	<5
975	156	21	164	33.5	128	<30	<5
976	237	27	131	327	127	<30	<5
977	256	28	115	305	126	<30	<5
978	429	18	34	227	98	<30	<5
979	360	22	151	356	114	<30	<5
980	353	21	130	350	143	<30	<5
981	343	27	132	316	115	<30	<5
982	160	21	177	40.1	128	<30	<5
983	132	18	244	4.6	136	<30	<5
984	130	6	159	18.1	75	<30	<5
985	248	25	189	20.7	133	<30	<5

ARNOLD MICKELSON

WO NO: 83-0108

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SAMPLE ID	SR PPM	TH PPM	ZR PPM	V PPM	ZN PPM	MO PPM	AG PPM
986	226	25	70	241	118	<30	<5
987	72.6	24	145	3.6	106	<30	<5
988	112	14	159	1.9	73	<30	<5
989	177	21	225	10.6	143	<30	<5
990	216	20	267	11.5	60	<30	<5
991	161	19	163	91.6	110	<30	<5
992	204	7	262	33.0	33	<30	<5
993	192	20	223	6.9	111	<30	<5
994	383	22	211	6.6	318	<30	<5
995	288	30	120	722	178	<30	<5
996	342	23	161	339	113	<30	<5

Gold Assay Report

The total number of assays were 72 of which 27 were composites consisting of 2 to 11 samples per composite for a complete total of 216 samples assayed.

We had hoped to pick something up in the composites and then re-assay each individual sample to find its location. It worked on another project but didn't pick anything up here.

However, some individual samples did run and tying them into the geology structure, geophysics and geochemistry may prove interesting.

Appendix

Assay Sheets and Rock Descriptions.

Pocket

Assay Location Maps with Gold Assays.

A. Mickelson
May 14/83

ARNOLD MICKELSON
1029 WALLER AVE., PH. 452-7143
WINNIPEG, MAN. R3T 1P2

DIAMOND DRILL RECORD - Rock Samples

Date Began Date Completed

Property Project No. Depth

Hole No. Co-ord Horizontal Length

Sheet No. Direction

Claim No. Elevation Angle

Assay for Gold & Silver (Shoal Lake)

Remarks Resident Geologist.

Location	Sample NUMBER	WIDTH	Au		ASSAY				Rock Type (Description)	AVERAGES						
			Ag	Ag	CU	ZN	PB	HT		WIDTH	AU	AG	CU	ZN	PB	
28	541		Tr.	.22					Orange reddish Qtz. V. in (Runn...)							Strike of rock
28(a)	542		Tr.	.24					Flt. Cream coloured surface (Hydrite tuff?)							(Qtz Eyes Pebbly)
28(b)	543		Tr.	.02					Rusty zone about 2" wide (Shot thru 1/6" str of orange Qtz)							
28(c)	544		Tr.	.02					Siliceous talc sch. (Shear zone) weathered surface							
28(d)	545		Tr.	.02					Sil. Tal. sch. (Tuff?)							
28(e)	546	.014		.06					Looks like Phyllite (Patches of rust - little str. or lenses of Qtz up to an inch. Qtz eyes, pebbles.)							
29	547	.018		.08					Rusty sheared andesite tuffs??							
30(a)	548		Tr.	.16					Milky Qtz vien 6" wide							specimen looks sugary orange
30(b)	549		Tr.	.18					Milky Qtz vien 1" wide							Sto crystalline. Black inclusions
30(c)	550		Tr.	.02					Milky Qtz vien 1" wide							of H.B. or tourmaline?? +
30(d)	56201		Tr.	.10					Milky Qtz vien 1" wide							also andesite sed that
30(e)	56202		Tr.	.16					Milky Qtz vien 1" wide							may be wall rock - Not
30(f)	56203		Tr.	.12					Milky Qtz vien 1" wide							a continuous but a radiating
30(g)	56204	.016		.04					Milky Qtz vien 1" wide							series of viens & str
30(h)	56205		Tr.	.06					Milky Qtz vien 1" wide							up to at least 1" wide - almost
30(i)	56206		Tr.	.08					Milky Qtz vien 1" wide							looks like one half of a
30(j)	56207		Tr.	.10					Milky Qtz vien 1" wide							spider - rusty & rotted sections
30(k)	56208		Tr.	.04					North Wall Rock. (Andesite Sed.)							Qtz str in it up to 2"
30(l)	56209		Tr.	.12					Milky Qtz vien (6" wide) About 5' N of ...							
31	56210		Tr.	.04					Very rusty H.B. Garnet 6" N. ? looks like inclusions in Qtz (above)							
32	56211		Tr.	.14					V. Rotted rusty H.B. GN (Looks sedimentary.)							
33	56212		Tr.	.10					V. Rusty white material Sugary (Bleached)							
34	56213		Tr.	.06					Rusty sheared andesite or tuff (15' N of S. wall of Qtz Vieng.)							
35	56214		Tr.	.08					H.B. Schist some rusty Qtz str (About 15' S of N. wall) S. wall							
36	56215	.018		.12					Smoky to white Qtz with Py str. ? 500' N.W. of Rabbit Pt. (Rust)							
37	56216		Tr.	.08					Rusty graphite with visible chalcopyrite (N.E. corner Gull Bay							
38	56217		Tr.	.16					V. Rusty Andesite sed or tuff (Sugar Bleached white material 300' N. of ...)							
39	56218			.74					Smoky Qtz (Tuff??) with arsenopy (Muck Pile 15' land)							

age (2)

No. 504-R1-4M-1-64.

HUDSON BAY EXPLORATION AND DEVELOPMENT CO. LTD.

CORRECTED DIP TESTS

DIAMOND DRILL RECORD Rock Samples

Date Began Date Completed
 Property Project No. Depth
 Hole No. Co-ord Horizontal Length
 Sheet No. Direction
 Claim No. Elevation Angle

Assay for Gold (Shoal Lake)
 C - Composite
 1st# - Sequence #
 2nd# (last) - # of Locations of samples
 in composite.
 Resident Geologist.

Composite Sample Hole #	NUMBER	WIDTH	ASSAY					WIDTH X ASSAY					AVERAGES					
			AU	AG	CU	ZN	PB	NI	WIDTH	AU	AG	CU	ZN	PB	NI			
C-1-3	901		Tr															
C-2-10	2		Tr															
C-3-11	3		Tr															
C-4-2	4		Tr															
C-5-5	5		Tr															
C-6-5	6		Tr															
C-7-9	7		Tr															
C-8-3	8		Tr															
C-9-4	9		Tr															
C-10-6	910		Tr															
C-11-4	1		Tr															
C-12-4	2		Tr															
C-13-5	3		Tr															
C-14-6	4		Tr															
C-15-7	5		Tr															
C-16-3	6		Tr															
C-17-4	7		Tr															
C-18-7	8		Tr															
C-19-3	9		Tr															
C-20-5	920		Tr															
C-21-8	1		Tr															
C-22-10	2		Tr															
C-23-10	3		Tr															
C-24-8	4		Tr															
C-25-5	5		Tr															
C-26-7	6		Tr															
C-27-3	7		Tr															
28-1	8		Tr															
29-1	9		Tr															
30(a)	930		0.014															
30(b)	1		Tr															
30(c)	2		Tr															

Milky Crystalline Qtz with Chlorite Inclusions
 Granodiorite (West of shaft)
 Green Andesite Porphyry (H.B., Py, Pyrr, Phenocrysts (Muck Pile))
 Milky Qtz & Calcite in Sheared Chloritic Schist, Py. Specs (Muck Pile)
 Qtz of Muck Pile (Milky)

Black Fox Mine

~~DIAMOND DRILL RECORD~~ Rock Samples

Date Began..... Date Completed

Property..... Project No..... Depth

Hole No..... Co-ord Horizontal Length

Sheet No..... Direction

Claim No..... Elevation Angle

Assay For Gold (Shoal Lake)

Resident Geologist

Composite		Sample		ASSAY						WIDTH X ASSAY						AVERAGES					
DEPTH #	NUMBER	WIDTH	AU	AG	CU	ZN	PB	NI	WIDTH	AU	AG	CU	ZN	PB	WIDTH	AU	AG	CU	ZN	PB	
31 A	933		0.052																		
31 B	4		Tr																		
31 C	5		Tr																		
31 D	6		Tr																		
31 E	7		Tr																		
31 F	8		Tr																		
31 G	9		Tr																		
31 H	940		0.028																		
31 i	1		Tr																		
11 171																					
32 (a)	965		Tr																		
32 (b)	6		Tr																		
173																					
(Manitoba) (Manitoba)																					
Milky Crystalline sugary Qtz with Chlorite inclusions (Cal m Bay) Very talcy looking Schist with Qtz strcs (Cal m Bay) V. shrd chlorite looking Schist. with a few Qtz strcs. Surface looks pebbly Chl. Sch. with Py. specs. V. Alt. Gabbro (Chloritic) Imprints of lge Phenocrysts of H.B. Alt. Andesite Porphyry (Feld) very chloritic Looks like (31 E) but has Qtz with some Py specs. Rusty felsite dike with Excessive py specs. Andesite sed with Biotite Milky Qtz 100' S + 10' E of cliff on line 132 W (Asarco Anomaly) V. rusty Rotted Qtz 150' S of cliff on line 132 W																					



Warnock Hersey Professional Services Ltd.
 1154 Sanford Street Winnipeg Manitoba R3E 2Z9 (204)786-7546 Telex 07-57254

WINNIPEG December 10, 1982

ASSAY OF 1 SAMPLE ORE.

RECEIVED December 2, 1982 FROM Mr. A. Mickelson, 1029 Waller Ave, Winnipeg, Man.

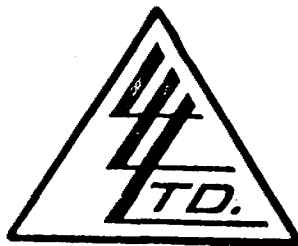
LABORATORY NUMBERS	MARKS ON SAMPLES	GOLD	SILVER	COPPER				
		OUNCES PER TON OF 2000 LBS.	OUNCES PER TON OF 2000 LBS.	Cu. PER CENT.	PER CENT.	PER CENT.	PER CENT.	PER CENT.
B 3530	# 59295	Nil		.02	Spectacular Looking Float			

THE FOLLOWING CURRENT QUOTATIONS:
 THE VALUES WHERE GIVEN ARE BASED ON

Gold at per oz.
 Silver at per oz.

Warnock Hersey Professional Services Ltd.
 Per *[Signature]*

To: DUANE POLIQUIN,
 168 26th Avenue,
 Surrey, B.C. V4B 5E7



File No. 24170
 Date November 25, 1982
 Samples Rock Chips

Certificate of
ASSAY of
LORING LABORATORIES LTD.

Page # 1

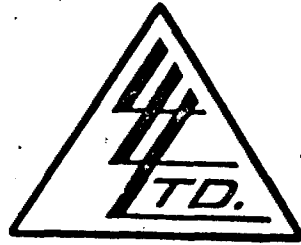
SAMPLE No.	OZ/TON Gold	OZ/TON Silver
<u>"Rock Chips"</u>		
541	Trace	.22
542	Trace	.24
543	Trace	.02
544	Trace	.02
545	Trace	.02
546	.014	.06
547	.018	.08
548	Trace	.16
549	Trace	.18
550	Trace	.02
56201	Trace	.10
56202	Trace	.16
56203	Trace	.12
56204	.016	.04
56205	Trace	.06
56206	Trace	.08
56207	Trace	.10
56208	Trace	.04
56209	Trace	.12
56210	Trace	.04

I **Hereby Certify** THAT THE ABOVE RESULTS ARE THOSE
 ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES

Rejects Retained one month.
 Pulps Retained one month
 unless specific arrangements
 made in advance.

Ed. J. [Signature]
 Assayer

To: DUANE POLIQUIN,
 168 - 26th Avenue,
 Surrey, B.C. V4B 5E7



File No. 24170
 Date November 25, 1982
 Samples Rock Chips

Certificate of
ASSAY
LORING LABORATORIES LTD.

Page # 2

SAMPLE No.	OZ/TON Gold	OZ/TON Silver
56211	Trace	.14
56212	Trace	.10
56213	Trace	.06
56214	Trace	.08
56215	.018	.12
56216	Trace	.08
56217	Trace	.16
56218	1.500	.74
59280	.012	.16
59281	.006	.10
59282	.004	.08
59283	.008	.20
59284	.024	.14
59285	.020	.12
59286	.020	.10
59287	.382	.54
59288	.202	.32
59289	.026	.18
59290	.018	.04

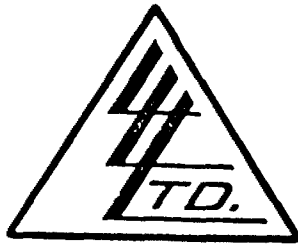
*From
Falcon
Lake*

I **Hereby Certify** THAT THE ABOVE RESULTS ARE THOSE
 ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES

Rejects Retained one month.
 Pulps Retained one month
 unless specific arrangements
 made in advance.

[Signature]
 Assayer

To: DUANE POLIQUIN,
100 - 26th Avenue,
Surrey, B.C. V4B 5E7



File No. 24463
Date March 4, 1983
Samples Rock Chip

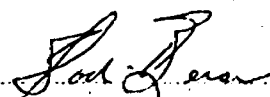
Certificate of
ASSAY of
LORING LABORATORIES LTD.

Page # 1

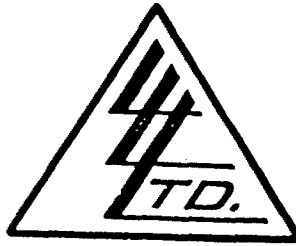
SAMPLE No.	OZ/TON Gold
<u>"Rock Chip"</u>	
901	Trace
902	Trace
903	Trace
904	Trace
905	Trace
906	Trace
907	Trace
908	Trace
909	Trace
910	Trace
911	Trace
912	Trace
913	Trace
914	Trace
915	Trace
916	Trace
917	Trace
918	Trace
919	Trace
920	Trace

I Hereby Certify THAT THE ABOVE RESULTS ARE THOSE
ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES

Rejects Retained one month.
Pulps Retained one month
unless specific arrangements
made in advance.


Assayer

To: DUANE POLIQUIN,
1600 - 26th Avenue,
Surrey, B.C. V4B 5E7



File No. 24463
Date March 4, 1983
Samples Rock Chip

Certificate of
ASSAY OF
LORING LABORATORIES LTD.

Page # 2

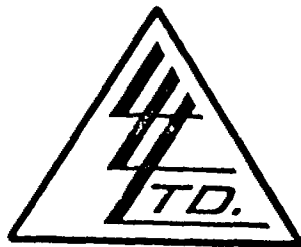
SAMPLE No.	OZ/TON Gold
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922	Trace
923	Trace
924	Trace
925	Trace
926	Trace
927	Trace
928	Trace
929	Trace
930	.014
931	Trace
932	Trace
933	.052
934	Trace
935	Trace
936	Trace
937	Trace
938	Trace
939	Trace
940	.028
941	Trace

I Hereby Certify THAT THE ABOVE RESULTS ARE THOSE
ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES

Rejects Retained one month.
Pulps Retained one month
unless specific arrangements
made in advance.


Assayer

To: DUANE POLIQUIN,
10 - 26th Avenue,
Surrey, B.C. V4B 5E7



File No. 24463
Date March 4, 1983
Samples Rock Chip

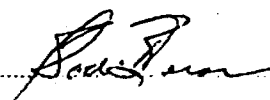
Certificate of
ASSAY
LORING LABORATORIES LTD.

Page # 3

SAMPLE No.	OZ/TON Gold
965	Trace
966	Trace

I Hereby Certify THAT THE ABOVE RESULTS ARE THOSE
ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES

Rejects Retained one month.
Pulps Retained one month
unless specific arrangements
made in advance.


Assayer



FWM

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

2-5560 may

Instructions: - Please type or print.

#46-83



52E11SE8459 2.5560 SNOWSHOE BAY (SHOAL)

900

Type of Survey(s) **ASSAYS**

Claim Holder(s) **A. MICKELSON**

Address **1029 WALLER AVE., WINNIPEG, MAN. R3T 1P2**

Survey Company **SELF**

Date of Survey (from & to) **8 9 82 15 3 83**

Name and Address of Author (of Geo-Technical report) **AS. ABOVE**

Prospector's Licence No. **H.9724**

Total Miles of line Cut

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	
For each additional survey: using the same grid: Enter 20 days (for each)	- Radiometric	
	- Other	
Man Days Complete reverse side and enter total(s) here	Geological	Days per Claim
	Geochemical	
	Geophysical	
Airborne Credits Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	Days per Claim
	Magnetometer	
	Radiometric	

Mining Claims Traversed (List in numerical sequence)

Prefix	Mining Claim Number	Expend. Days Cr.
K	589192	21.5
	589193	21
	589194	21
	589195	21
	589198	21
	589199	20
	589200	20
	589201	20
	589398	20
	589399	20
	589402	20
	589403	20
	589414	20
	589415	20
	589418	20
	589419	20
	589422	20
	589423	20
	589438	20

RECEIVED

MAR 15 1983

MINING LANDS SECTION

KENORA MINING DIV.

MAR 16 1983

AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

Expenditures (excludes power stripping)

Type of Work Performed **SECT. 77(17) ANALYSIS, ASSAYS**

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures **\$ 5783.50** ÷ **15** = **385.5** Total Days Credits

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.

589192

Total number of mining claims covered by this report of work. **19**

Date **Mar 16/83** Recorded Holder or Agent (Signature) *A. Mickelson*

For Office Use Only

Total Days Cr. Recorded **385.5** Date Recorded **Mar. 16/83** Mining Recorder *[Signature]*

Date Approved as Recorded **8.6.27** Blank Inspector *[Signature]*

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 **A. MICKELSON**

Date Certified **Mar 16/83** Certified by (Signature) *A. Mickelson*

1029 Waller Ave
Winnipeg, Manitoba
R3T 1P3

June 15/84

Mr. S. E. Yundt
Director
Land Management Branch
Whitney Block Room 6643
Queen's Park.
Toronto, Ontario
M7A 1W3

Dear Sir,

RECEIVED

JUN 18 1984

MINING LANDS SECTION

Please find enclosed 5 maps
to which I have added the claim
lines and claim numbers as you
requested.

My file # is 2.5560

I hope that everything is in
order. I remain —

Yours Sincerely

A. Mickelson

A. Mickelson

Ph: 452-7143

Area Code: 204

RECEIVED	
Land Management Branch	
CLAIMS DELAYED	<input type="checkbox"/>
CLAIMANTS RELEASE	<input type="checkbox"/>
JUN 18 1984	
SEARCHED	
SERIALIZED	
INDEXED	
FILED	

May 31, 1984

REGISTERED

File: 2.5560

Mr. A. Mickelson
1029 Waller Avenue
Fort Garry
Winnipeg, Manitoba
R3T 1P2

Dear Sir:

RE: Assaying submitted on Mining Claims K 589192
et al in the Areas of Snowshoe Bay and Moosin
Bay

Enclosed is a copy of our letter dated November 3, 1983,
requesting additional information for the above-described
survey.

Unless you can provide the required data by June 11, 1984
the mining recorder will be directed to cancel the work
credits recorded on March 16, 1983.

For further information, please contact Mr. Ray Pichette
at (416)965-4888.

Yours sincerely,

S.E. Yundt
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3
Phone: (416)965-1380

S. Hurst:mc

cc: Mining Recorder
Kenora, Ontario

Encl.

84-06-12
allow 2 more weeks
for receipt of
data.
- received called
by resident geologist
MWR Kenora.
R.

46-83

2.5560

November 3, 1983

Mr. A. Mickelson
1029 Galloway Avenue
Winnipeg, Manitoba
R3T 1P2

Dear Sir:

RE: Sample assay expenditures submitted on mining claims
K 589192 et al in the Areas of Snowshoe Bay and Moosin
Bay

Enclosed are the plans, in duplicate, for the above-mentioned survey. Please sign each map and show the claim lines and claim numbers, and return them to this office.

Upon receipt of the above information, assessment of the survey will be done promptly and a statement of approved credits will be issued.

Yours very truly,

E.F. Anderson
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3
Phone: (416)965-1380

D. Kinvig:mc

cc: Mining Recorder
Kenora, Ontario



June 13/83

Mining Lands Comments

[Empty comment box]

To: Geophysics

Comments

Approved

Wish to see again with corrections

Date

Signature

To: Geology - Expenditures *Mr. Kustra.*

Comments

L.D.
lqd

Approved

Wish to see again with corrections

Date

Signature

To: Geochemistry

Comments

Chemical analyses and computer analysis of chemical data carried out but no geochemical map other than for sample sites and a "colour code" for results. Is THIS ACCEPTABLE?

Approved

Wish to see again with corrections

Date

Aug 22 1983

Signature

John A. [Signature]

To: Mining Lands Section, Room 6462, Whitney Block.

(Tel: 5-1380)

#46-83

1983 06 02

2.5560

Mr. Wade Mathew
Mining Recorder
Ministry of Natural Resources
808 Robertson Street
Box 5160
KENORA, Ontario
P9N 3X9

Dear Sir:

We have received data for Assaying submitted under Section 77(19) of the Mining Act R.S.O. 1980 submitted on mining claims K589192 et al in the Areas of Snowshoe Bay, Shoal Lake and Moonsin Bay.

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

Yours very truly

E.F. Anderson
Director
Land Management Branch

Whitney Block, Room 6450
Queen's Park
Toronto, Ontario
M7A 1W3
Phone 416/965-1380

A.Barr:eib

cc: Mr. A. Mickelson
1029 Waller Avenue
Winnipeg, Man.
R3T 1P2

1029 Waller Ave.,
Fort Garry, WINNIPEG,
R3T 1P3, Manitoba

May 12, 1983

Mr. Fred Matthews,
Room 6450 Whitney Block,
Queen Park, TORONTO,
M7A 1W3, Ontario

RECEIVED

MAY 19 1983

MINING LANDS SECTION

Dear Sir:

Please find enclosed two each of two reports concerning rock geochemistry computer analysis and gold assays for assessment work on my claims in the S.W. Shoal Lake area.

I have also enclosed the raw data from Barringer and cost sheet with the reports.

The object of this survey, as part of my continuing search for blind ore bodies in this area, was to take selective rock samples and have them analyzed by Barringer and use the results from previous years and put them through a computer to **hopefully** obtain rock geochemical anomalies that could be tied into the structure, geology and E.M. anomalies of the grid and surrounding area. Although my airborne anomalies are still valid, the ground E.M. has to be done over because the frequency was set too high in the original survey and probably picked up a lot of garbage.

My first approach with a computer was to do histograms.

We then did what Jim, who does my computer work, called a 90 percentile survey which I plotted on a 1" = 400' map that was 4' x 8' using overlays. He also did a regression analysis that gave us a contoured map.

However, I gave him figures that I had obtained from the University and Hudson's Bay Mining and Smelting, as well as from Barringer.

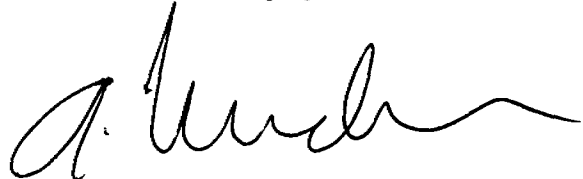
I culled these out of the Barringer figures and sent Barringer another one hundred select samples to be analyzed. Jim should have had 175 samples to work with but I decided to cull out the 1976 results because they were just getting their plasma jet going then and still had some bugs in it.

Also, I had to re-sample one small area in Manitoba, as well as used data obtained from Manitoba that complemented our Ontario data. This also gave us anomalies in Manitoba. I have allowed for this in our final cost.

Hoping everything is in order.

I remain,

Sincerely yours,



A. Mickelson

Encl: 7

ARNOLD MICKELSON
1029 WALLER AVE., PH. 452-7143
WINNIPEG, MAN. R3T 1P2

May 13, 1983

Cost Statement

Re: S.W. Shoal Lake Project

Barringer	2,282.60
Computer Analysis	2,800.00
Gold Assays	807.50

Total - 5,890.10



ARNOLD MICKELSON
1029 WALLER AVE., PH. 452-7143
WINNIPEG, MAN. R3T 1E2



304 CARLINGVIEW DRIVE
 METROPOLITAN TORONTO
 REXDALE, ONTARIO
 CANADA M9W 5G2
 PHONE: 416-675-3870
 TELEX: 06-989183

SERVICES FOR THE EARTH AND ENVIRONMENTAL SCIENCES

DATE: Feb. 15, 1983

PROJECT: 100.41

PERIOD COVERED:

SALES ORDER:

PROGRESS BILLING:

SHIPPING REPORT:

WORK REPORT: 83-108

FED. SALES TAX: N/A

ONT. SALES TAX: N/A

- Arnold Mickelson
1029 Waller Avenue
- Winnipeg, Manitoba
3RT 1P3

TERMS: NET 30 days

AUTHORITY: A. Mickelson

TO: ANALYSIS

101 Rock Samples

Preparation - crushing, pulverising @ \$4.10 \$ 414.10 ✓

Multi-element analysis HF/HNO₃/HClO₄
 @ \$18.50 1,868.50

TOTAL INVOICE

\$2,282.60

INVOICE N^o 8623

To A. Mickelson
1029 Waller Ave.
Wpg. Man.

From J. Brown
17 Barton Ave.
Wpg. Man.

STATEMENT

RE: SHOAL LAKE GEOCHEM

MAY 3/83

CONSULTING FEE.....	\$1500.00
COMPUTER ANALYSIS.....	\$2650.00

TOTAL	\$4150.00

Manitoba portion	\$1350.00
Ontario portion	\$2800.00

*Paid
May 10/83
Jm Brown*



LORING LABORATORIES LTD.

629 BEAVERDAM RD. N.E. CALGARY, ALTA. T2K 4W2

TO DUANE POLIQUIN,
16840 - 26th Avenue,
Surrey, B.C. V4B 5E7

INVOICE No 24463

DATE March 4, 1983

Rock Chip SAMPLES

43	Gold Assays	@ 10.50	451.50
		@	
		@	
		@	
		@	
		@	
		TOTAL	\$ 451.50

THIS IS YOUR INVOICE

PLEASE PAY THE AMOUNT SHOWN

TERMS — 30 DAYS



LORING LABORATORIES LTD.

629 BEAVERDAM RD. N.E. CALGARY, ALTA. T2K 4W2

TO DUANE POLIQUIN,
16840 - 26th Avenue,
Surrey, B.C. V4B 5E7

INVOICE No. 24098

DATE November ²⁵ 3, 1982

.....Rock..... SAMPLES

26	Gold & Silver Assays	@	12.00	312.00
28	Gold & Silver Assays	@	12.00	336.00
		@		
		@		
		@		
		@		
			TOTAL	\$ 336.00 312.00

THIS IS YOUR INVOICE

PLEASE PAY THE AMOUNT SHOWN

TERMS — 30 DAYS

28
12

56
28

336

*Original
Misplaced
AM*

Warnock Hersey

HEAD OFFICE
SIEGE SOCIAL ... 128 Elmslie, LaSalle, Qué. H8R 1V8 — Tel. (514) 366-3100

ISSUING OFFICE ADDRESS:
ADRESSE DU BUREAU D'ÉMISSION:

1154 Sanford Street
WINNIPEG, Manitoba R3E 2Z9

DATE December 10, 1982	CLIENT NO.	OUR ORDER NO. - NOTRE NO. DE COMM. B 3530	CODE 710-09	CLIENT'S ORDER NO. - NO. COMMANDE DU CLIENT
---------------------------	------------	--	----------------	---

INVOICED TO/FACTURÉ À

REPORTED TO/RAPPORT TRANSMIS À

Mr. A. Mickelson
1029 Waller Avenue
WINNIPEG, Manitoba
R3T 1P2

SAME

REPORT DATE DATE DU RAPPORT	REPORT NO. NO. DU RAPPORT		
		1 Au. det. @ \$9.00	\$ 9.00
		1 Cu. det. @ \$9.00	9.00
		Preparation charge: 1 sample @ \$2.00	<u>2.00</u>
		TOTAL	\$20.00

RECEIVED PAYMENT
Warnock Hersey Professional Services Ltd.
Per. *[Signature]*

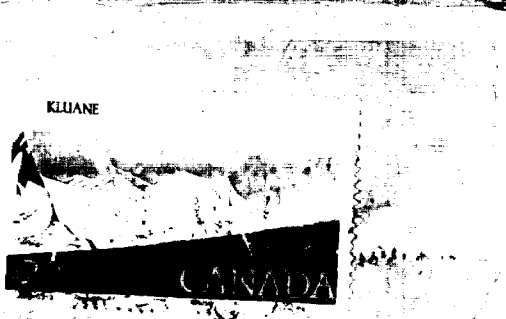
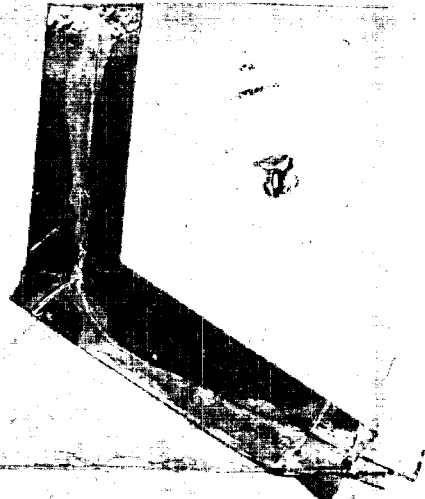
REMIT PAYMENT TO: **WARNOCK HERSEY PROFESSIONAL SERVICES Ltd.**
FAIRE REMISE À: **LES SERVICES PROFESSIONNELS WARNOCK HERSEY Ltée**

PLEASE ATTACH COPY OF INVOICE TO YOUR REMITTANCE
VEUILLEZ INCLURE COPIE DE FACTURE AVEC VOTRE REMISE
128 Elmslie Street
LA SALLE, P.Q. H8R 1V8

INVOICE NO. / FACTURE NO.

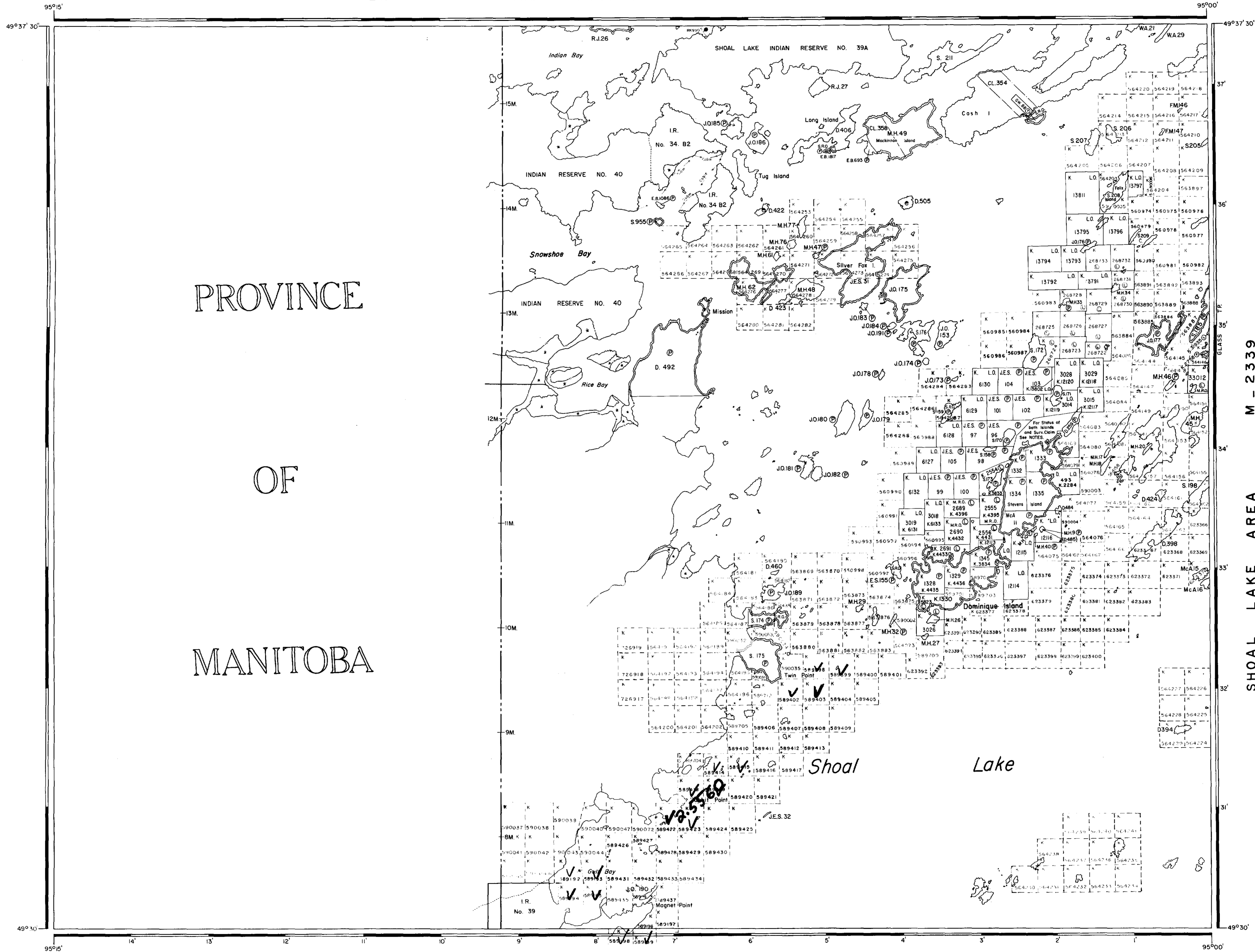
DEPT. 710 - 82852

THIS ACCOUNT FOR PROFESSIONAL SERVICES IS DUE ON PRESENTATION • COMPTE DE SERVICES PROFESSIONNELS, EXIGIBLE SUR PRÉSENTATION
ALL OVERDUE ACCOUNTS SHALL BEAR INTEREST AT THE RATE OF 2% PER MONTH. (24% PER ANNUM)
UN INTÉRÊT DE 2% PAR MOIS, SERA CALCULÉ SUR LES COMPTES EN ARRÉRAGES. (24% PAR ANNÉE)



MINNEAPOLIS
WINNIPEG MAN.
WINNI

EWART TP. and INDIAN BAY M_1975



PROVINCE

OF

MANITOBA

AREA OF
SNOWSHOE BAY
 SHOAL LAKE

DISTRICT OF KENORA

KENORA MINING DIVISION

SCALE: 1-INCH = 40 CHAINS

LEGEND

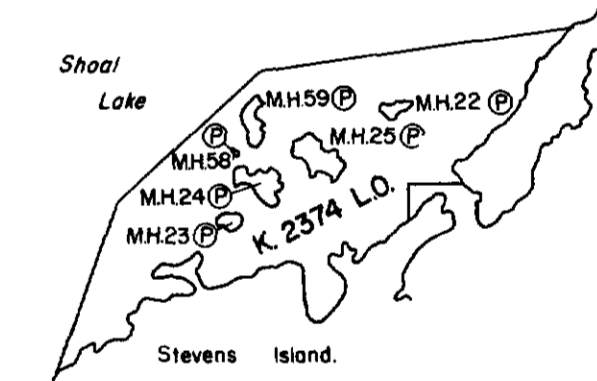
- PATENTED LAND ● or ⊕
- CROWN LAND SALE C.S.
- LEASES L.
- LOCATED LAND Loc.
- LICENSE OF OCCUPATION L.O.
- MINING RIGHTS ONLY M.R.O.
- SURFACE RIGHTS ONLY S.R.O.
- ROADS
- IMPROVED ROADS
- KING'S HIGHWAYS
- RAILWAYS
- POWER LINES
- MARSH OR MUSKEG
- MINES
- CANCELLED
- PATENTED S.R.O.

NOTES

400' surface rights reservation along the shores of all lakes and rivers.

Flooding rights reserved up to 1064' above sea level.

Scale: 1 INCH = 20 CHAINS.

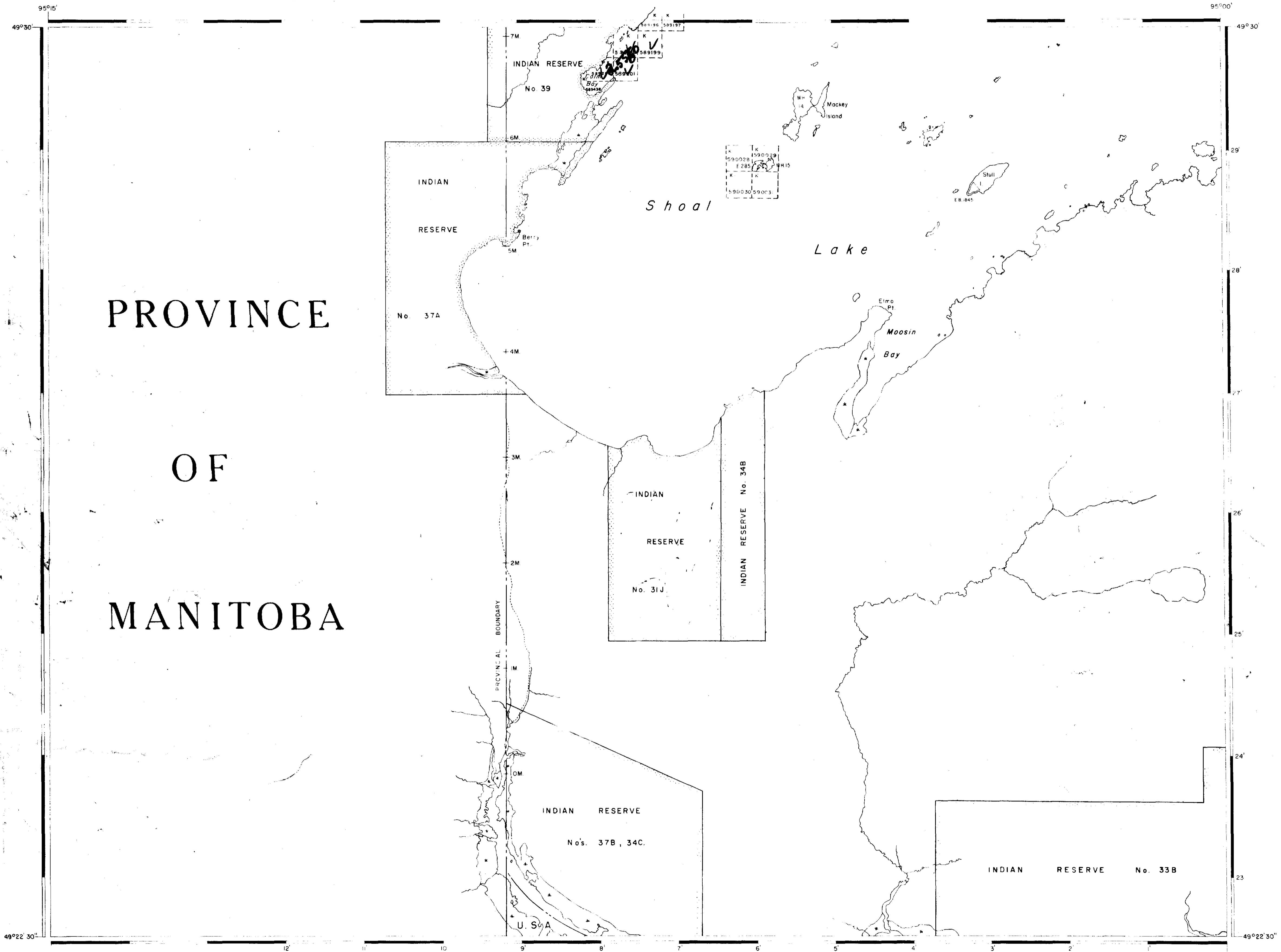


DATE OF ISSUE
 SEP 30 1983
 Ministry of Natural Resources
 TORONTO

ONTARIO
 MINISTRY OF NATURAL RESOURCES
 SURVEYS AND MAPPING BRANCH

Date: 17th JAN. 1974 Plan No.
 National Topographic Series
 52 E-11 **M_2704**

SHOAL LAKE AREA M - 2339



PROVINCE

OF

MANITOBA

AREA OF
MOOSIN BAY
 SHOAL LAKE
 DISTRICT OF
 KENORA
 KENORA
 MINING DIVISION
 SCALE: 1-INCH = 40 CHAINS

LEGEND

- | | |
|-----------------------|--------|
| PATENTED LAND | Ⓟ |
| CROWN LAND SALE | C.S. |
| LEASES | Ⓛ |
| LOCATED LAND | Loc |
| LICENSE OF OCCUPATION | L.O. |
| MINING RIGHTS ONLY | M.R.O. |
| SURFACE RIGHTS ONLY | S.R.O. |
| ROADS | — |
| IMPROVED ROADS | — |
| KING'S HIGHWAYS | — |
| RAILWAYS | — |
| POWER LINES | — |
| MARSH OR MUSKEG | — |
| MINES | ⋆ |
| CANCELLED | ⊘ |

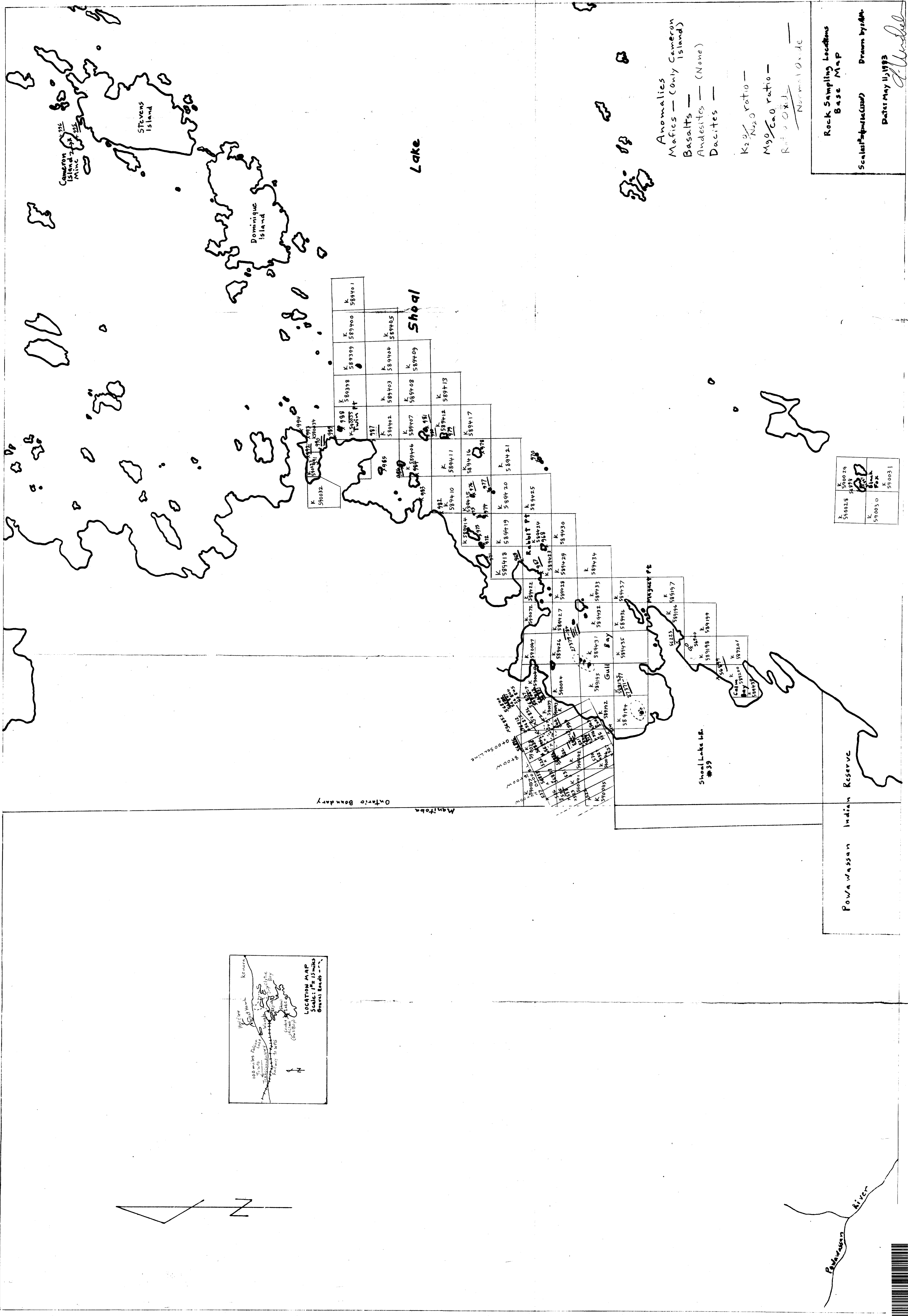
NOTES

400' Reserve around all lakes & rivers to Dept. of Lands & Forests.

DATE OF ISSUE
AUG 15 1983
 Ministry of Natural Resources
 TORONTO

NATIONAL TOPOGRAPHIC SERIES 52 E 6
 PLAN NO. **M.2687**
 ONTARIO
 MINISTRY OF NATURAL RESOURCES
 SURVEYS AND MAPPING BRANCH



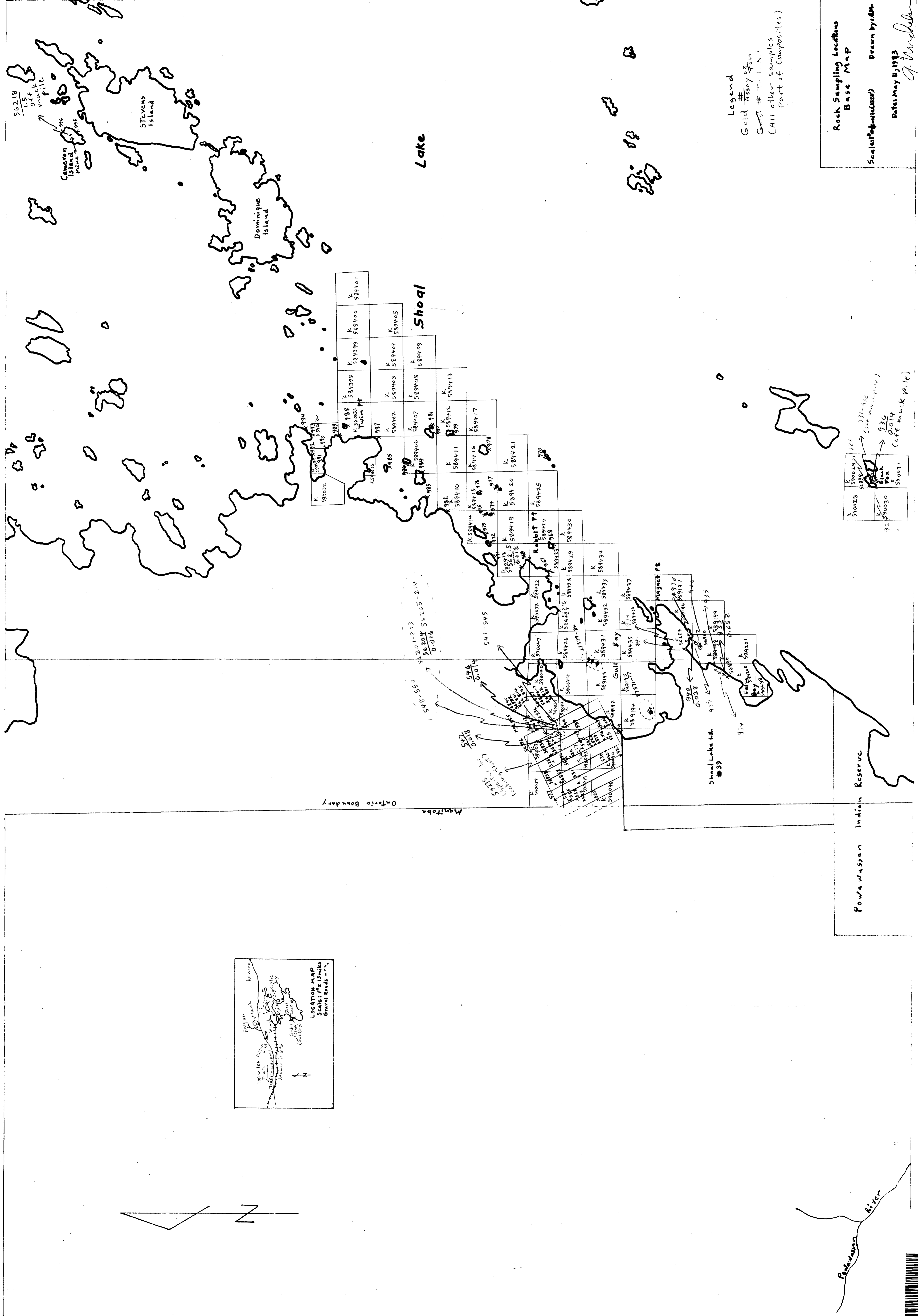


LOCATION MAP
 Scale: 1" = 12.5 miles
 Gravel Road - - -

Anomalies
 Mafics - (Only Cameron Island)
 Basalts -
 Andesites - (None)
 Dacites -
 K₂O / Na₂O ratio -
 MgO / CaO ratio -
 R₂O₃ / O₂ -
 Normal Oxide

Rock Sampling Locations
 Base Map
 Scale: 1" = 12.5 miles
 Drawn by: M.A.
 Date: May 11, 1973

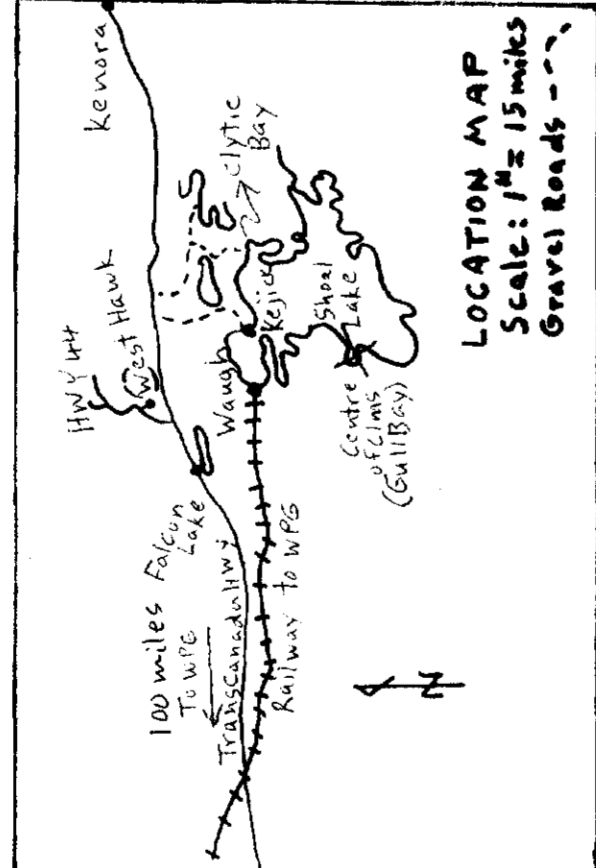
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K 589496	589496
K 589497	589497
K 589498	589498
K 589499	589499
K 589500	589500



Legend
 Gold Assay $\frac{oz}{ton}$
 T. to N.I.
 (All other samples Part of Composites)

Rock Sampling Locations
 Base Map
 Sealant-A.M. (1953) Drawn by A.M.
 Dates May 11, 1953

ARNOLD, MICKELSON,
 1021 WILSON AVE., W. 457148
 MINNEAPOLIS, MINN. 55412



589401	589402	589403	589404	589405
589406	589407	589408	589409	589410
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589466	589467	589468	589469	589470
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589476	589477	589478	589479	589480
589481	589482	589483	589484	589485
589486	589487	589488	589489	589490
589491	589492	589493	589494	589495
589496	589497	589498	589499	589500

