2.18232

ASSESSMENT WORK REPORT

FOR

MINING CLAIM NO. 1212048
LARDER LAKE
LUNDY TOWNSHIP, ONTARIO

PREPARED BY:

Dr. John W. Pollock
SETTLEMENT SURVEYS LTD.
17 Wellington Street, Box 2529
NEW LISKEARD, Ontario
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Telephone (705) 647-8833
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E-mail: jpollock@onlink.net

March 16, 1998

TABLE OF CONTENTS

1997 ASSESSMENT WORK REPORT - Claim # 1212048, Lundy Township

1.0 INTRODUCTION

Claim 1212048 consists of 16 units and was staked in Lundy Township on December 28, 1995. John W. Pollock is the owner of record. The recording date is January 10, 1996. The work done on the property included taking 8 to 10 kg till samples for kimberlite indicator minerals and prospecting.
A portion of the current claim abstract is reproduced below:

MINISTRY OF NORTHERN DEVELOPMENT AND MINES
LARDER LAKE
CLAIM ABSTRACT

Claim No: L1212048

Status:active

Due Dato: 2999-.JAN-10 Work Required $ 6,400
Staked: 1995-DEC-28 15:45

Description of Claim:
LUNDY (G-3439)
NE 1/4 OF N 1/2 LOT 4 CON 2
Claim Units; 16
Claim Bank: 0 Claim Units; 16

Claim ownership
Percentage Client# Recorded Holder(s)
100.00 301410 POLLOCK JOHN W.

STAKER 1996-JAN-10 MCBRIDE LEONARD

OTHER 1997-APR-07

WORK PERFORMED: 6400 (AMAG, ASSAY, PROSP) APPROVED: 1997-AUG-01

WORK 1997-APR-07 $ 6,400 Work Applied
APPROVED: 1997-AUG-01

2. LOCATION AND ACCESS

The claim is accessible from Highway 65 to the Hudson/ Lundy Townships (Twin Lakes) area or from Highway 558 (Haileybury West Road) to Barr Township and the southern parts of Lundy. Trails of various types and condition lead from the major roads to the work areas in claim 1212048. During the winter, all areas are accessible by snow machine (see Map 1 previous page and Maps 2&3 in Appendix 1).

3. PROPERTY DESCRIPTION

The property has generally a rugged topography with topographic highs formed by diabase sills and numerous faults. Other areas in the vicinity of Moffat Creek are relatively flat consisting of mostly wetlands underlain by clay. There are also forested areas overlying sand and/or flat lying sediments of the Gowganda formation.

4. PREVIOUS PROSPECTING WORK

Except for John Pollock's previous OPAP work (OPAP 96-101), which consisted of prospecting, till samples and airborne geophysics, very little work has been done on claim 1212048 in the past. A little work was done during the early days of the Cobalt camp on the claim (which is located in lot 4, Con. 2), on a showing which contains chalcopyrite in a 15cm wide quartz vein.
Sudbury Contact Mines Limited has carried out extensive work in Lundy Township adjacent to 1212048 as summarized in the following description:
Upon completion of a large scale reconnaissance till and esker pit sampling program for diamond and gold in 1993, an airborne geophysical survey was flown over a large area including most of Lundy Township. In December of 1994, four claims totaling 42 units or 672 hectares were staked in Lundy Township to cover interesting magnetic and geochemical results. This claim group represents a portion of the Sudbury Contact Mines Ltd. Montreal River "A" Project area. In the winter of 1995 and 1996, a program consisting of line cutting, followed by magnetic and VLF EM ground geophysical surveys, was conducted to cover the more promising airborne anomalies. In March of 1995, a reverse circulation (RC) drill program was completed to test anomalies on grids 95-1, 95-2 and 95-3. This successfully resulted in the discovery of two kimberlite pipes, one on grid 95-1 and the other on grid 95-3. Subsequently, the RC program in March of 1996 resulted in the discovery of a third kimberlite pipe on grid 96-1 (from assessment files: Sudbury Contact 1996b:1).

5. REGIONAL AND GENERAL GEOLOGY LUNDY TOWNSHIP

Although Burrows and Hopkins included some very general information regarding the geology of Lundy in their 1922 Ontario Bureau of Mines Report, the definitive geology for the township was field mapped by Leo Owsiacki and assistants in 1981 and 1982 and published as Ontario Geological Survey Map P.2733 in 1985. The following description is taken from the marginal notes:

The map area (Lundy Twp) is underlain by Early Proterozoic Lorrain and Gowganda Formation Sedimentary Rocks of the Cobalt Group of the Huronian Super group. The rocks were subsequently intruded by a moderately-dipping diabase sill and steep-dipping diabase dikes and plugs of Nipissing age. Middle Proterozoic diabase and olivine diabase dikes intrude all older rocks (Owsiacki 1985).

A good summary of the regional geology is available from Sudbury Contact Mines Limited:
The bedrock of the region is part of the Cobalt Embayment of the Huronian Supergroup, which is in the Southern Structural Province of the Canadian Shield. Middle Precambrian Huronian sedimentary rocks of the Cobalt Group unconformably overlie Early Precambrian metavolcanic and metasedimentary rocks (Johns, 1985). The Early and Middle Precambrian rocks have both been intruded by Ni-pissing Diabase dike and sill complexes which occur as a series of cone or arc-shaped intrusions that produce circular to oval outcrop patterns. There are several different varieties of diabase.
The Cobalt Group is divided into two formations; the Lorrain and Gowganda. the Lorrain Formation is comprised of arkose, quartz arenites, metamorphosed arenite, and a basal maroon wacke. The Gowganda Formation is further subdivided into the Coleman Member and the overlying Firstbrook Member. The Coleman Member consists of pebblywacke, argillite, arkose and conglomerate. The Firstbrook Member is made up of black and grey argillite, red argillite and siltstone, and red siltstone and wacke (Johns, 1985).
The dominant structural feature in the immediate region of interest is the Cross Lake Fault. This fault dips 65' to the northeast and is an important feature of the Timskaming Rift Valley proposed by Lovell and Caine (1970),(adapted from Sudbury Contact 1996c:1).

6. PROSPECTING AND TILL SAMPLING WORK REPORT FOR CLAIM 1212048

Goals and Objectives

The 1997 prospecting work was designed to build upon our 1996 attempt to evaluate base metal conductors and potential kimberlite anomalies that were identified as a result of the 1996 OPAP work. Specific till sampling work was done in 1997 on three promising airborne anomalies within claim # 1212048 (16 Units).

Work Undertaken

May 17, 1997- 4 man/days

General prospecting on claim L1212048 by John Pollock. Harley Walton, Paul Walton and George Pollock. Outcrops were checked along the diabase sill for AG, CU mineralization, and an old showing was sampled. Three till samples were taken for indicator mineral analysis.

May 31st, 1997-5 man/days

General prospecting on claim L1212048 by John Pollock, Brett Medland. Harley Walton, Paul Walton and George Pollock. Outcrops were checked along the diabase sill for AG, CU mineralization. Another three till samples (10kg) were taken for indicator mineral analysis and photographs taken of the sample locations.

June 14, 1997 -5 man/days

Till sampling on claim L1212048 by John Pollock, Keith Windsor, Harley Walton, Paul Walton and George Pollock. Six till samples (8- 10kg) #s 3a,3b,3c, 4,5,5b, were taken for indicator mineral analysis.

June 16, 1997- 5 man/days

Till sampling on claim L1212048 by John Pollock, Bob Dillman (Consulting Geologist), Harley Walton, Paul Walton and George Pollock. Ten till samples (8- 10kg) #s 7,8, and a, b, c, d, plus additional samples from previous sites # 5&3 and two stream sediment samples.

Summary

Altogether in 1997, a total of 22 till/sediment samples were taken from six locations on claim 1212048 (see Map2, Appendix 1). Five of these were processed by R. Dillman Geological Services and a separate five from the same locations were analyzed by Kennecott Canada Exploration Inc. Twelve samples wereretained for future reference.

Because of the weight of the samples and lack of road access, a 4wheel ATC bike and an 8 wheel Argo were used during the field work to transport equipment and samples.

Names and Addresses of those assisting with the work:

George Pollock, 240 Georgina, Haileybury- 705-672-2893
Keith windsor, 184 Jaffray St. New liskeard, POJ IPO -705-647-6615
Harold Walton and Paul Walton, 1438 Lakeshore RD. New liskeard, POJIPO 705-647-4461
Brett Medland, 483 Broadwood, NL, PO JIPO 705-647-4263
Robert Dillman, Mount Brydges, Ont. NOL IWO - 519-264-9278

7. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The 1996 OPAP aerial magnetometer and VLF-EM survey) identified three targets on claim 1212048 (see Map3, Appendix 1) and part of a fourth target. On the vertical gradient magnetometer map there are three negative magnetometer anomalies indicated. The VLF- EM map data also shows a conductive EM sub-circular anomaly in the same location as one of the vertical gradient targets. This is possibly a kimberlite pipe or a massive sulphide deposit. These anomalies are located only 1.5 to 2 km south of and on the same faults as Sudbury Contact's 95-1, 95-2 and 96-1 pipes (95-2 and 96-1 produced diamonds). The 1997 prospecting/till sample work was undertaken to follow up on the above work. In general, the till samples produced very encouraging results as indicated from the summary remarks of the two indicator mineral analysis reports that were produced. These are summarized below:

Robert Dillman (Consulting Geologist) see complete report Appendix 1, Document #1

" Here is my interpretation of the concentrates I made from the samples that we collected together. I feel that the results are good and that additional exploration of your property is warranted"

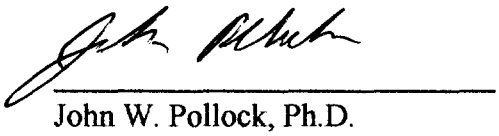
Kennecott Canada Exploration Inc.: see Appendix document #2

In the summary of the report by Kennecott, Mr. Kevin Kivi, Senior Geologist recommends " Follow-up exploration is warranted to find the source rock of these grains and sample it for diamonds."

MY RECOMMENDATION

Complete a ground magnetometer survey on claim 1212048 to verify the three "bullseye" kimberlite targets identified by the January 1997, airborne magnetometer survey. Further soil/till stream sediment sampling should also be done down-ice of the targets in 1998. If the three targets are confirmed, they should be tested by RC or Diamond drilling.

This report was prepared and submitted by Dr. John Pollock



John W. Pollock, Ph.D.

Prospectors Licence # K22773
Client # 301410

8. REFERENCES

Fipke, C.E., J.J. Gurney, and R.O. Moore
1995 Diamond Exploration Techniques Emphasizing Indicator Mineral Geochemistry and Canadian Examples. Geological Survey of Canada Bulletin 423.

Johns, G.W.
1985: Geology of Firstbrook and Parts of Surrounding Township Area, District of Timiskaming; Ontario Geological Survey Report 237; 58p. Accompanied by Map 2474, scale I inch to 1/2 mile (1:31,680).

Lovell, H.L., and Caine, T.W.
1970: Lake Timiskaming Rift Valley, Ontario Department of Mines, Miscellaneous Paper 39, 16p.

Morris, T.F. and C.A. Kaszycki
1995 A Prospector's Guide to Drift Prospecting for Diamonds; Northern Ontario; Ontario Geological Survey, Open File Report 5933, 110 p.

Owsiacki, L.
1985: Geology and Mineral Deposits of Lundy Township, Timiskaming District; Ontario Geological Survey, Map P.2733, Geological Series-Preliminary Map, Scale 1:15840 or I inch to 1/4 mile. Geology 1981, 1982.

Pollock, J. W.
1996 1996 OPAP Report for Lundy Township, OPAP96-101. Filed for assessment work.

Sudbury Contact Mines Limited

1995 Geophysical Surveys, Lundy Twp. Property. By Exploration Services. Assessment File

1996a Assessment Report on the March 1995 Reverse Circulation Drilling Program on the Montreal River "A" Property, Larder Lake Mining Division by W. A. Hubachek Consultants. Assessment file

1996b Report on the 1995/96 Mapping Program on the Montreal River "A" Property by W. A. Hubachek Consultants. Assessment file

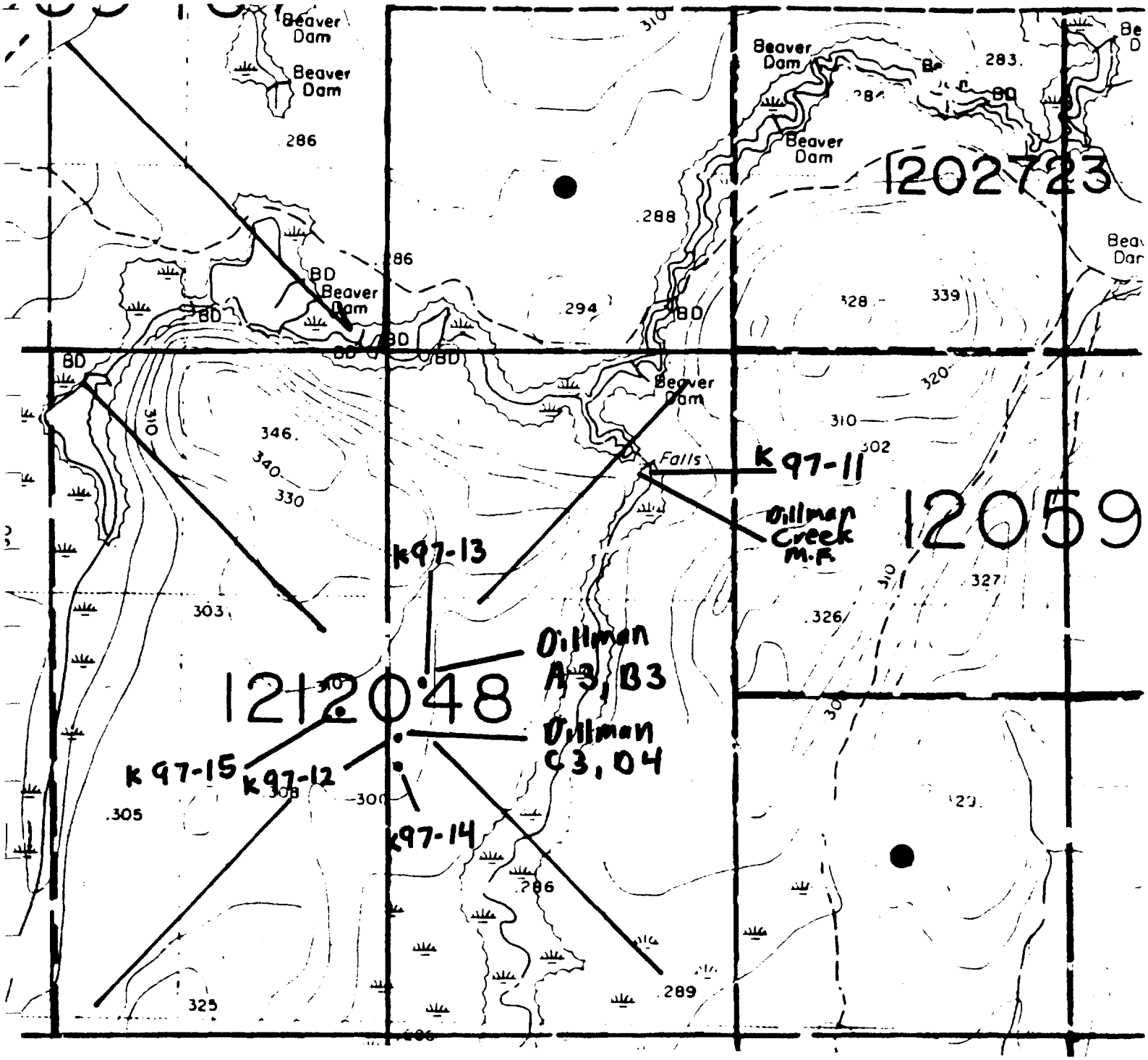
1996c Report on the 1995/96 Mapping Program on the Montreal River "A" Property, Grid 96-4, Hudson Township, by W. A. Hubachek Consultants. Assessment file

APPENDIX 1: MAPS

Map 1. Project Location Map (on page 4)

Map 2: Map Showing Till Sample Locations on Claim 1212048

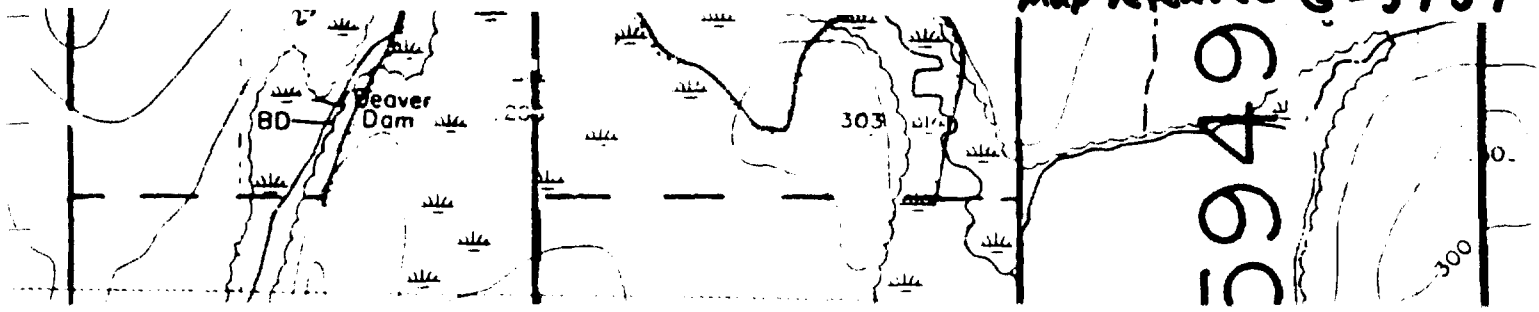
Map 3. Lundy Area Map Showing Known Pipes and Potential Kimberlite Targets

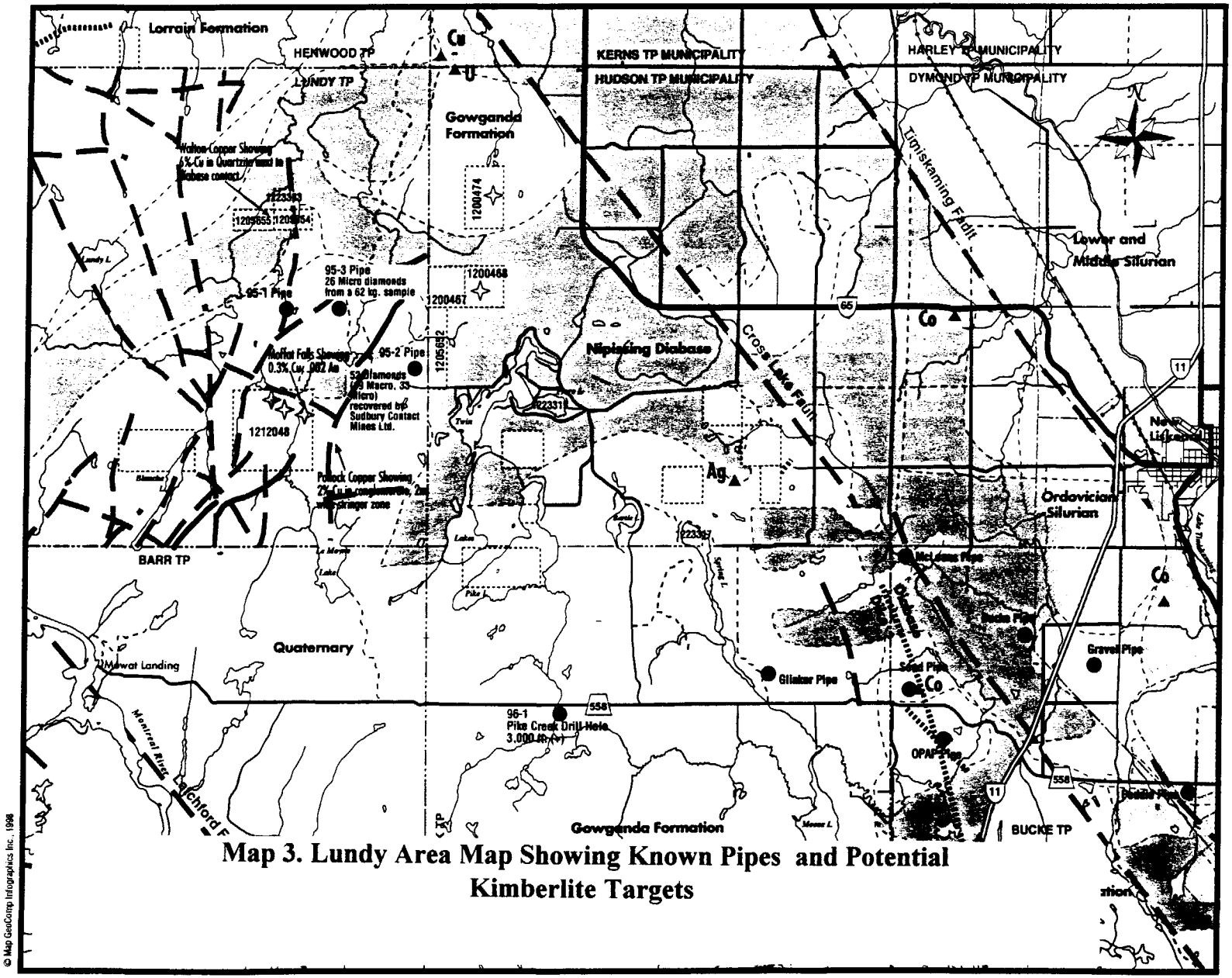


Dillman A-3 - Dillman Samples
K97-15 - Kennecott Exploration Samples

Map 2: Map Showing Till Sample Locations on Claim 1212048

Map reference G-3439





Map 3. Lundy Area Map Showing Known Pipes and Potential Kimberlite Targets

Note: *Some of the information on this map and especially the pipe locations in Lundy and Barr townships are speculative and have not been confirmed by any person or mining company. This map is a graphic representation of data derived from information provided by multiple independent sources. GeoComp InfoGraphics Inc. and Blackstone Development Inc. will not be responsible for or be held liable for any errors or omissions therein. Any conclusions based on information provided in this graphic are solely, the responsibility of the persons making them and information contained herein should be verified independently. This map has been examined by a qualified geologist and is considered to be reasonably accurate and consistent with source data provided.*

Top Half - Geological Survey
Source: Ontario Geological Survey: Map 2205, Timmins-Kirkland Lake, Geological Compilation Series. Original compilation 1964, revised 1970-71.

Bottom Half - Geological Survey
Source: Ontario Geological Survey: Map 2361 Sudbury -Cobalt, Geological Compilation Series. Original compilation 1965-9, revised 1974-5.

Symbols

- Known Kimberlite Pipe
- Kimberlite Pipe Target
- Metal/Mineral Occurence
- Pollock/Walton/ Windsor Group Claims
- Fault
- Lady Evelyn Lake Anticline

Metal and Mineral Reference

Ag	Silver
Co	Cobalt
Cu	Copper
U	Uranium

0 1000 2000 3000 4000 Metres
0 2000 Feet

Cobalt Area Kimberlite Potential

For Further Information Contact
John Pollock
(705) 647-8833
Fax: (705) 647-7026

Scale:(see bar scale)	Date: March 1998
Drawn by: M. Hawirko	Map No. LBBD. v3

For additional colour or monochrome prints please contact GeoComp InfoGraphics or J. Pollock as above.

GeoComp Infographics Inc.
50 Silver St., P.O. Box 699
Cobalt Ont. P0J 1C0
(705) 679-5500 • Fax: (705) 679-5519
email: blackstn@mt.net

APPENDIX 2

ASSESSMENT WORK DOCUMENTS AND RESEARCH REPORTS

DOCUMENT 1.

ROBERT DILLMAN, ARJADEE PROSPECTING REPORT

Sample #s A3,B3, C3, D4 and Creek M.F. are from Claim 1212048

June 26, 1997

To: John Pollock, Harold and George

FAX IN

Four pages

From: Robert Dillman

Here is my interpretation of the concentrates I made from the samples that we collected together. I feel that the results are good and that additional exploration of your property is justified. I have communicated my impressions of your property to my client and I hope to hear back from them soon. I may need some microprobe data to help move this along. I have submitted 21 grains for microprobe analysis and it will take a short time for the results.

I had to renumber the samples that Harold gave to me in a box because I was having trouble reading some of the labels. The vials have been labeled accordingly and the original labels are still on the outside so that there should not be any confusion. I apologize for any in convince.

I will send the concentrates that I have made back to you within a few days. I have included glass vials containing some kimberlite indicator minerals and other grains I feel could be indicator minerals. You may want to select some of these grains for further microprobe evaluation especially after we receive the results of the grains I have currently selected for analysis. You may also find that I did not remove all the very small indicator minerals out of the concentrates. This is due to the fact that I feel that they are the same as the larger grains I have selected and they are very difficult to pick. You may want to probe some of these grains for interest sake

I will inform you ASAP when I have further information.

Sincerely,

R. Dillman

WALTON-POLLOCK CLAIMS
LUNDY TOWNSHIP, NEW LISKEARD AREA, ONTARIO
MICROSCOPE IDENTIFICATION OF KIMBERLITE INDICATOR MINERALS

* DENOTES CREEK SAMPLE ? UNCERTAIN IDENTIFICATION, MICROPROBE ANALYSIS RECOMMENDED

SAMPLE NUMBER	PYROPE P L R O	ECLOGITE? GARNET	CHROME? CPX	ILMENITE?	CHROMITE?	OLIVINE?	COMMENTS
A#3 N.L.	– 3 1 3	+10	15	10	3	4	Pyr. + Cr cpx in +0.5 mm fraction, darker outer rim on some cpx preserved, spherical garnets. 3 zircon.
B#3 N.L.	– 2 – 2	10	3	8	3	2	abundant orange spherical garnet, some in crystal form, abundant minute spherical ilmenite, 1 cpx composite with phlogopite
C#3 N.L.	-- -- -- --	3	1	3	--	--	very small heavy mineral concentrate
D#4 150m. W N.L.	-- -- -- --	3	5	3	--	--	small concentrate, clay coating most grains.
CREEK M.F. *	-- -- 1 3	5	3	5	3	--	Some spherical garnets, fragments of cpx.
1200467 20m. N. P-2	-- -- -- --	?	1	7	--	--	small concentrate, many orange almandine garnet, strong tenor of spherical garnets.
1200467 70m. N. P-2	-- -- -- 1?	?	2	2	1?	--	good crystal form to pyrope?, broken octahedral crystal of chromite?, abundant orange almandine many in spherical shape.
HW-1	-- -- -- --	?	1	1?	1	--	several spherical and crystalline orange garnet, pyrite Fe oxide – limic Fe grains, malachite on several crude grains sulphide iron formation close to sample site
HW-2	-- -- -- --	?	--	?	--	--	several spherical + crystal form orange garnet
HW-3	-- -- -- --	?	--	?	--	--	several spherical + crystal form orange garnet
HW-4	-- -- -- --	?	--	?	--	--	several spherical + crystal form orange garnet

WALTON-POLLOCK CLAIMS
LUNDY TOWNSHIP, NEW LISKEARD AREA, ONTARIO
MICROSCOPE IDENTIFICATION OF KIMBERLITE INDICATOR MINERALS

* DENOTES CREEK SAMPLE ? UNCERTAIN IDENTIFICATION, MICROPROBE ANALYSIS RECOMMENDED

SAMPLE NUMBER	PYROPE P L R O	ECLOGITE? GARNET	CHROME? CPX	ILMENITE?	CHROMITE?	OLIVINE?	COMMENTS
NW-5	-- -- -- --	?	--	4?	--	--	small concentrate, several spherical orange garnet, 4 ilmenite?
NW-6	-- -- -- --	--	--	--	--	--	1 black metallic
NW-7	-- -- -- --	--	--	--	--	--	no heavy minerals >3.0 sp. gr.
NW-8	-- -- -- --	?	--	?	--	--	on olivenus kimberlite indicators, small orange and pink garnet 1 ilmenite in clay conglomerates (lithic grains)

SUMMARY

Kimberlite indicator minerals are present in the **A-D** series samples and in the **CREEK M.F.** sample collected from the same area. Many of the kimberlite mineral grains have eroded edges, extensive fracturing and polished surfaces indicating that transport of the grains away from the source has occurred. Some of the kimberlite grains have retained features suggesting that the distance to the source is not great or possibly that there are more than one source contributing to the grains observed in the concentrates Evidence of this includes: garnets with spherical and good crystal shapes, phlogopite-Cr clinopyroxene composite, zoned Cr clinopyroxene grains with darker outer edge partially remaining. Based on the abundance of kimberlite indicator minerals present and the physical shapes features retained it is suggested that the area where these samples were taken requires additional sampling.

Most of the samples in the series **2600467** and **HW** contain smooth spherical orange garnets, some in crystal form and spherical black metallic grains most likely ilmenite Microprobe analysis of some of these grains may show a kimberlitic/eclogitic affinity. Cr clinopyroxene is present in three of the samples in both **1200467** samples and in **HW-1**.

Fresh pyrite grains, both Fe oxide and lithic Fe oxide grains are present in sample **HW-1** and mostly likely represent sulphide formations occurring very close to the sample site Several rusty grains are coated in malachite. The perfect black metallic spheres could be bird shot

Sincerely,

Robert J. Dillman B.Sc
Geologist
June 26, 1997

SUSPECTED KIMBERLITE INDICATOR MINERALS SELECTED FOR E.O.S. MICROPROBE ANALYSIS

SAMPLE No.	GRAIN No.	DESCRIPTION
A#1	1	lilac pyrope, 1 of 3.
	2	lilac pyrope, 2 of 3, black inclusions of ilmenite or chromite.
	3	orange pyrope, smooth-shapeless, fresh appearance. shagreen texture preserved.
	4	orange pyrope-eclogite?, spherical, striated surface, 1 of 8 similar grains.
	5	orange pyrope-eclogite?, rounded crystal shaped, striated surface. 2nd of simular grains
	6	Cr clinopyroxene, bright green, glassy, disk shaped, eroded edges
	7	Cr clinopyroxene, bright green, glassy, blocky, eroded edges
	8	chromite?, weak octahedral crystal form, minor rounding of edges. 1 of 3.
	9	picroilmenite? blocky, eroded edges.
	10	picroilmenite? blocky, eroded edges. luecoxene in a pit
	11	picroilmenite? blocky, eroded edges.
	12	olivine, blocky, angular to eroded edges
	13	olivine, blocky, angular to eroded edges
1200467	1	deep red-orange garnet, good crystal form
70m. N. P-2	2	orange garnet, spherical, common in sample
	3	ilmenite, spherical.
	4	ilmenite, spherical.
HW-1	1	orange-red garnet, spherical
	2	orange garnet, spherical.
	3	orange garnet, spherical.
	4	Cr clinopyroxene, fragment with round edges.

Mr. R. Dillman,
R. J. Dillman Geological Services,
8901 Reily Drive,
RR 5, Mount Brydges,
N0L 1W0

Ph/Fax 519-264-9278

July 2 1997,

R. L. Barnett Geological Consulting Inc.,
9684 Longwoods Road,
RR 32, London, Ontario.
N6P 1P2

Ph. 519-652-1498
Fax 519-652-1475

Dear Robert,

The identity of "non-indicator" minerals in the Walton-Pollock samples received, June 25 1997, is:

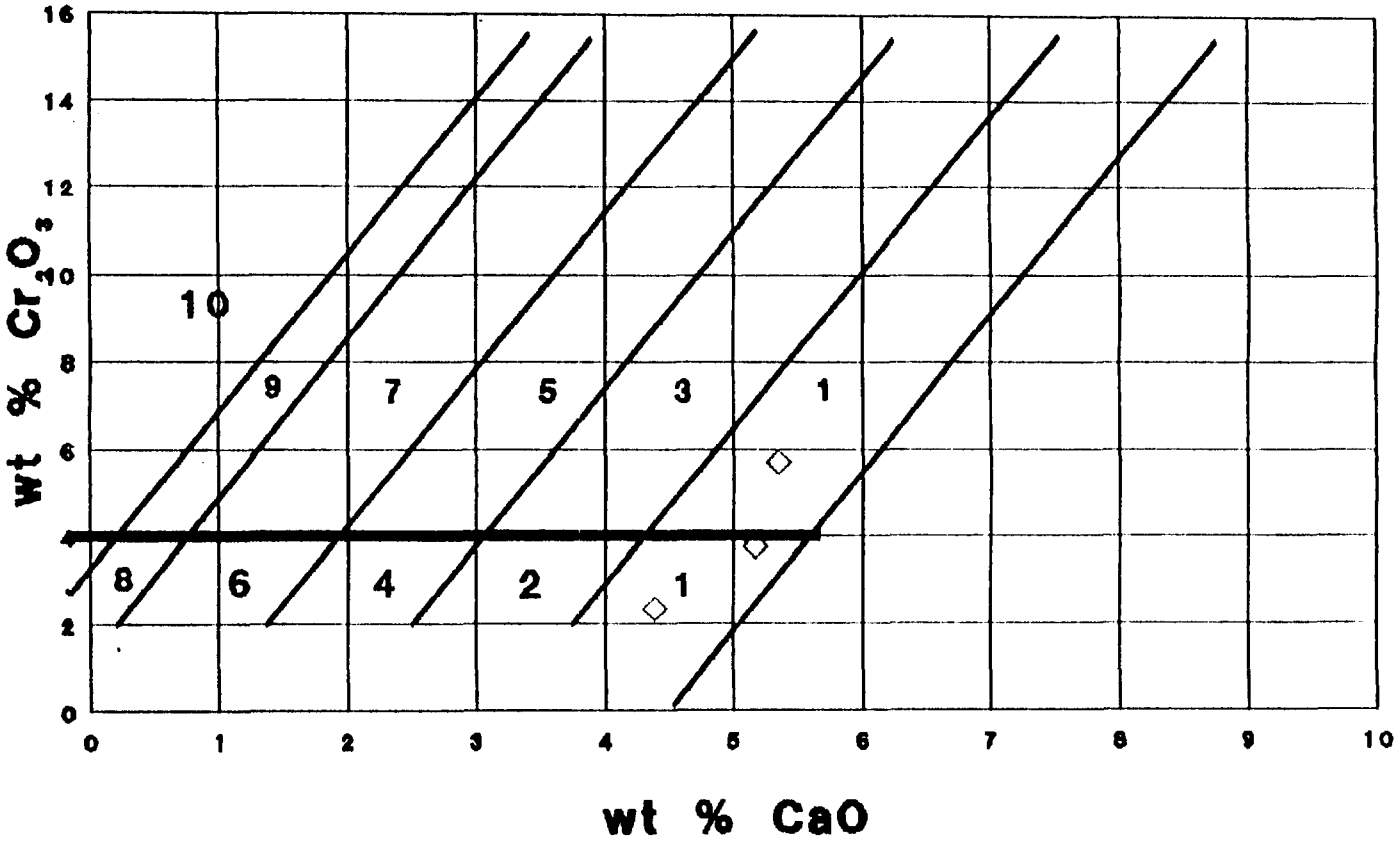
A3	4,5	
70-P2	1,2	
HW	1,2	- spessartine almandine ss
A3	9,10,11	- simple ilmenite
A3	12	- Fe orthopyroxene
70-P2	4	- magnetite - Fe oxide

Sincerely,

R. L. Barnett

GARNET – R. DILLMAN

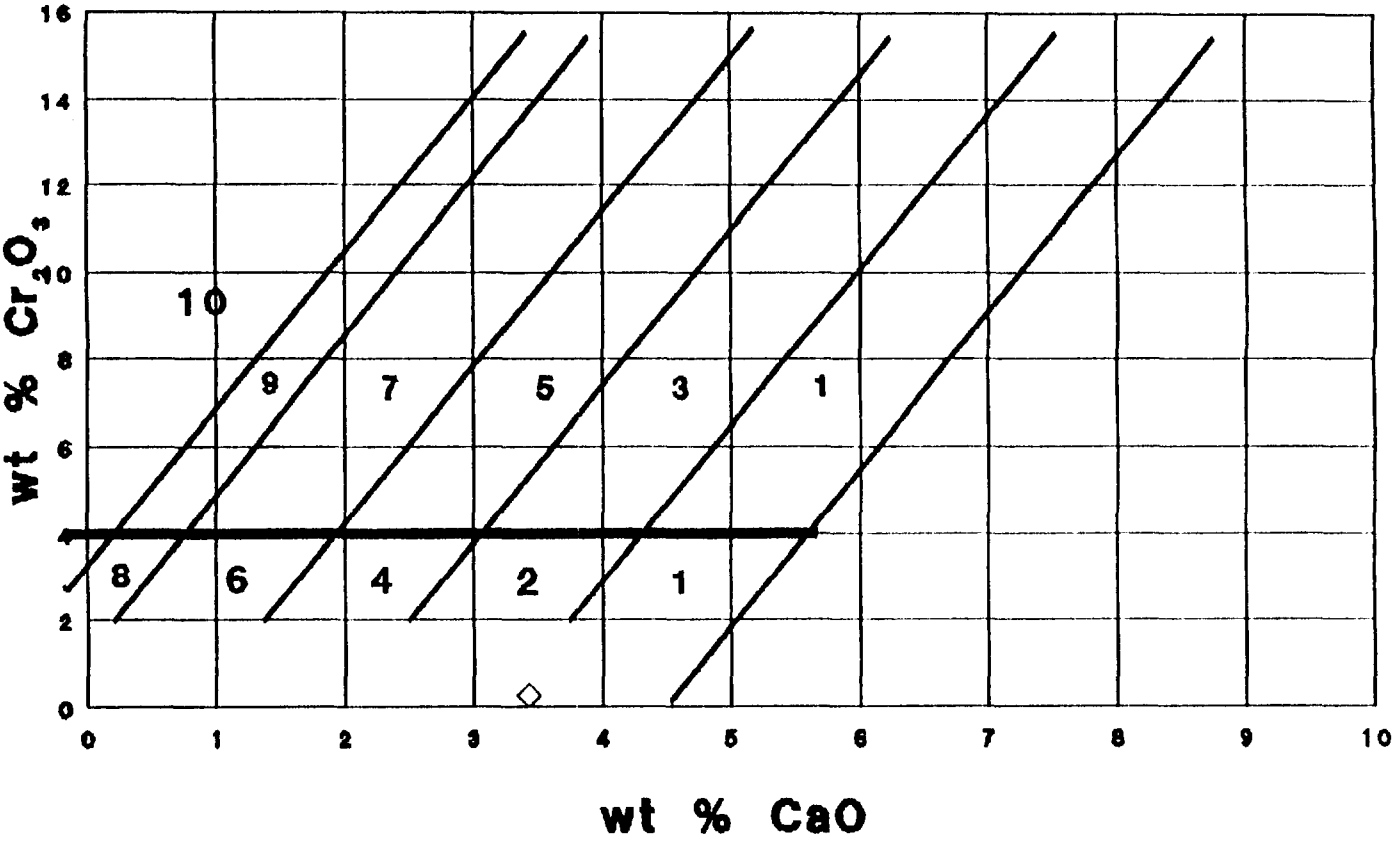
WALTON–POLLOCK SAMPLE A3



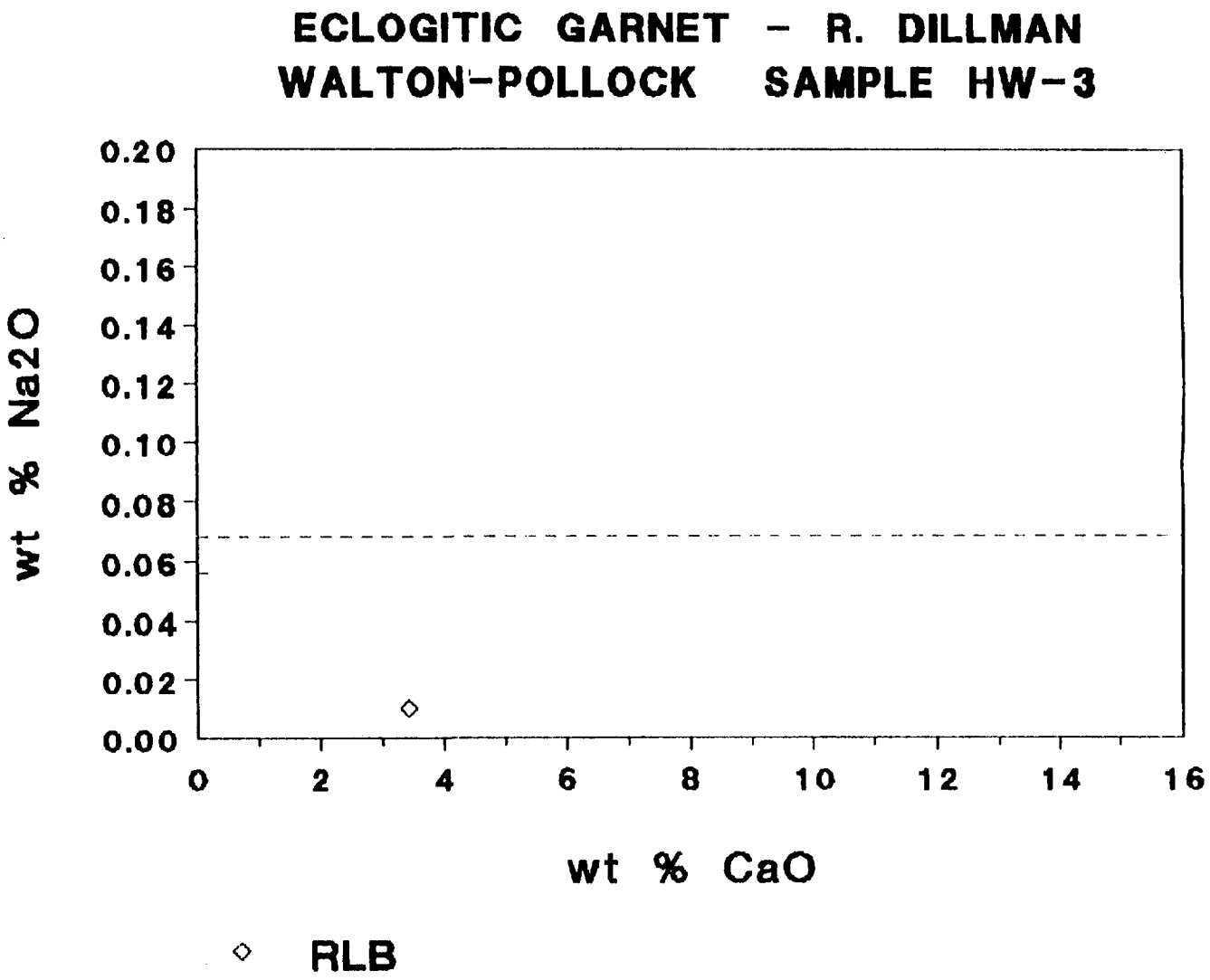
◇ RLB

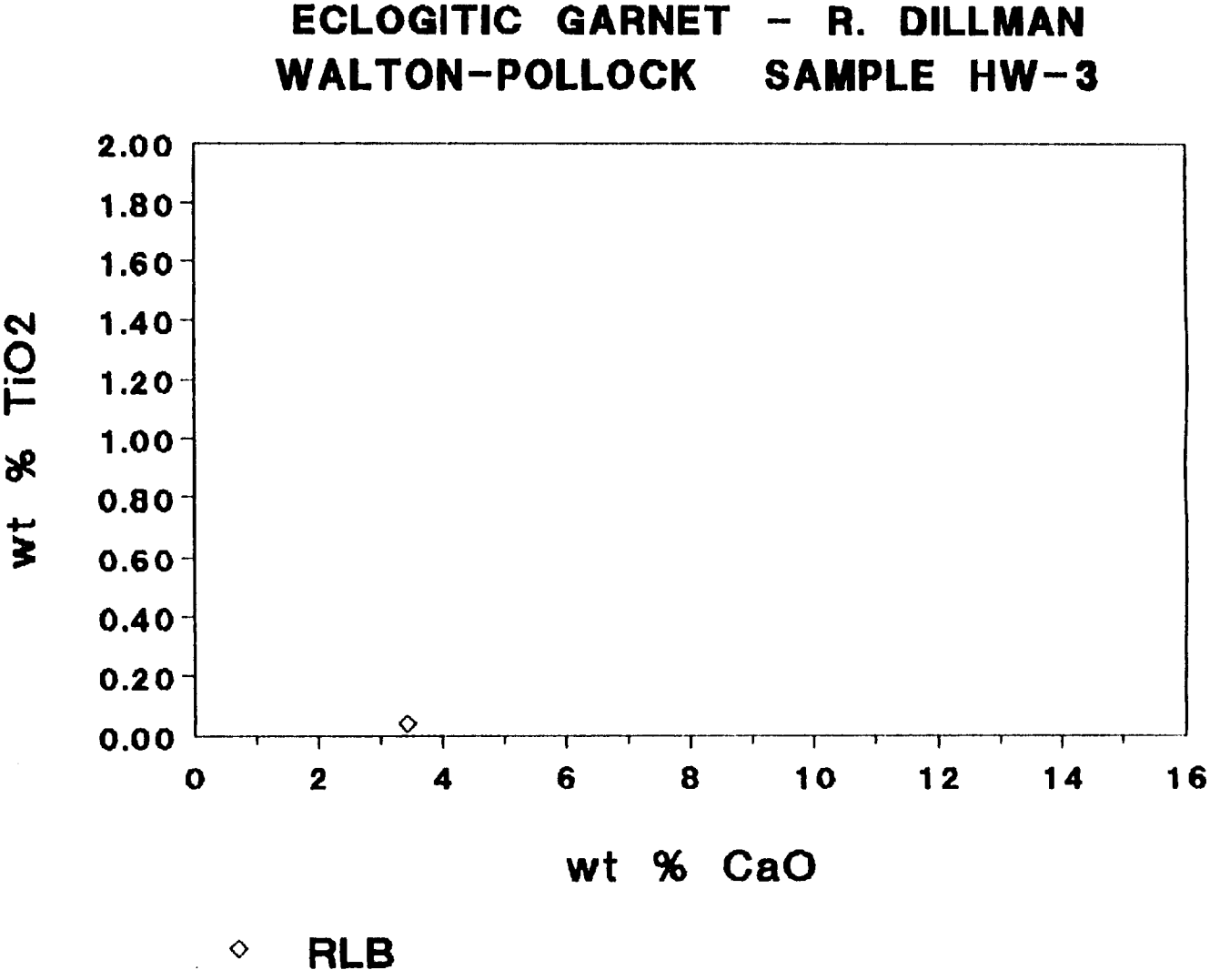
GARNET – R. DILLMAN

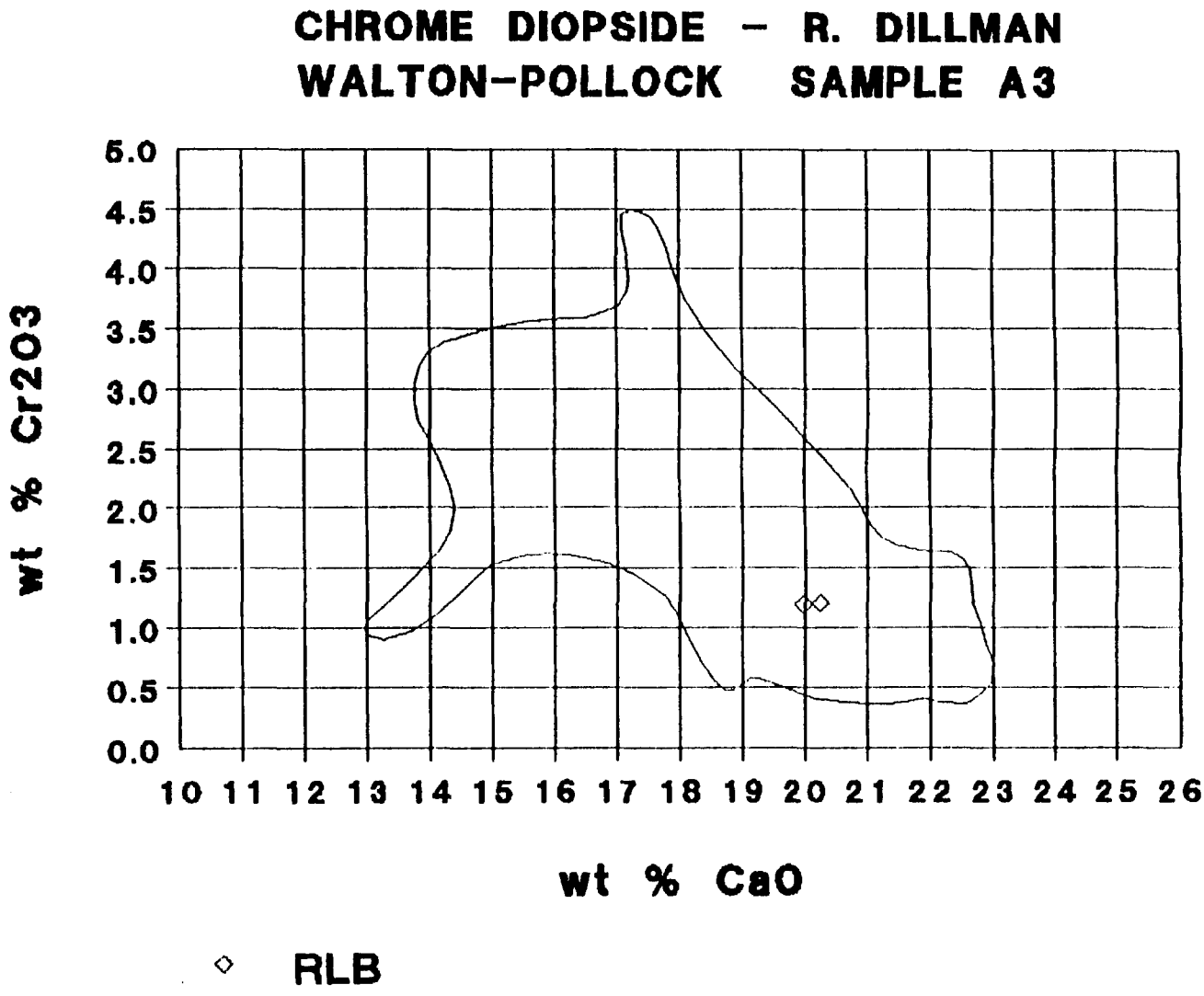
WALTON-POLLOCK SAMPLE HW-3

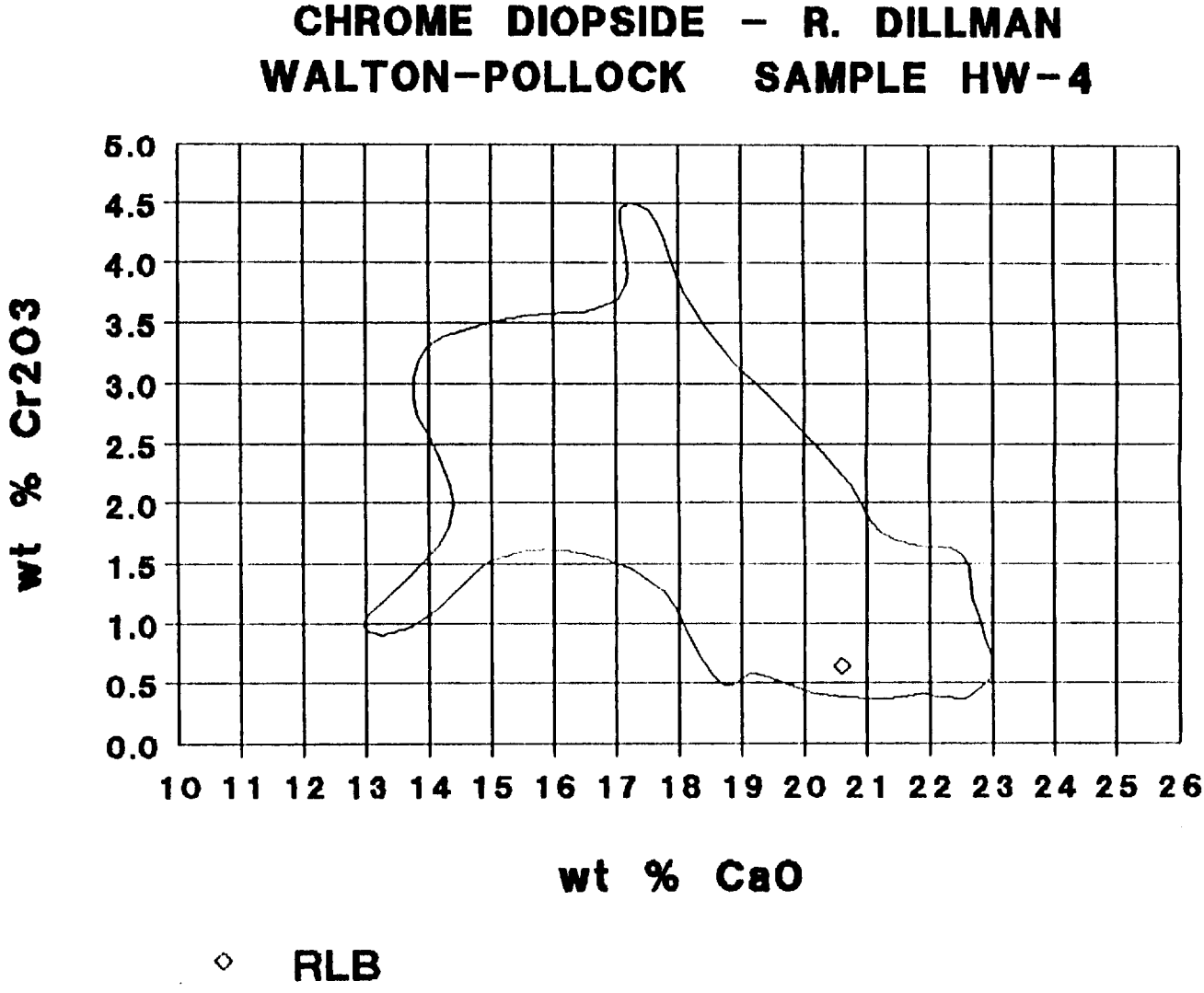


◇ RLB

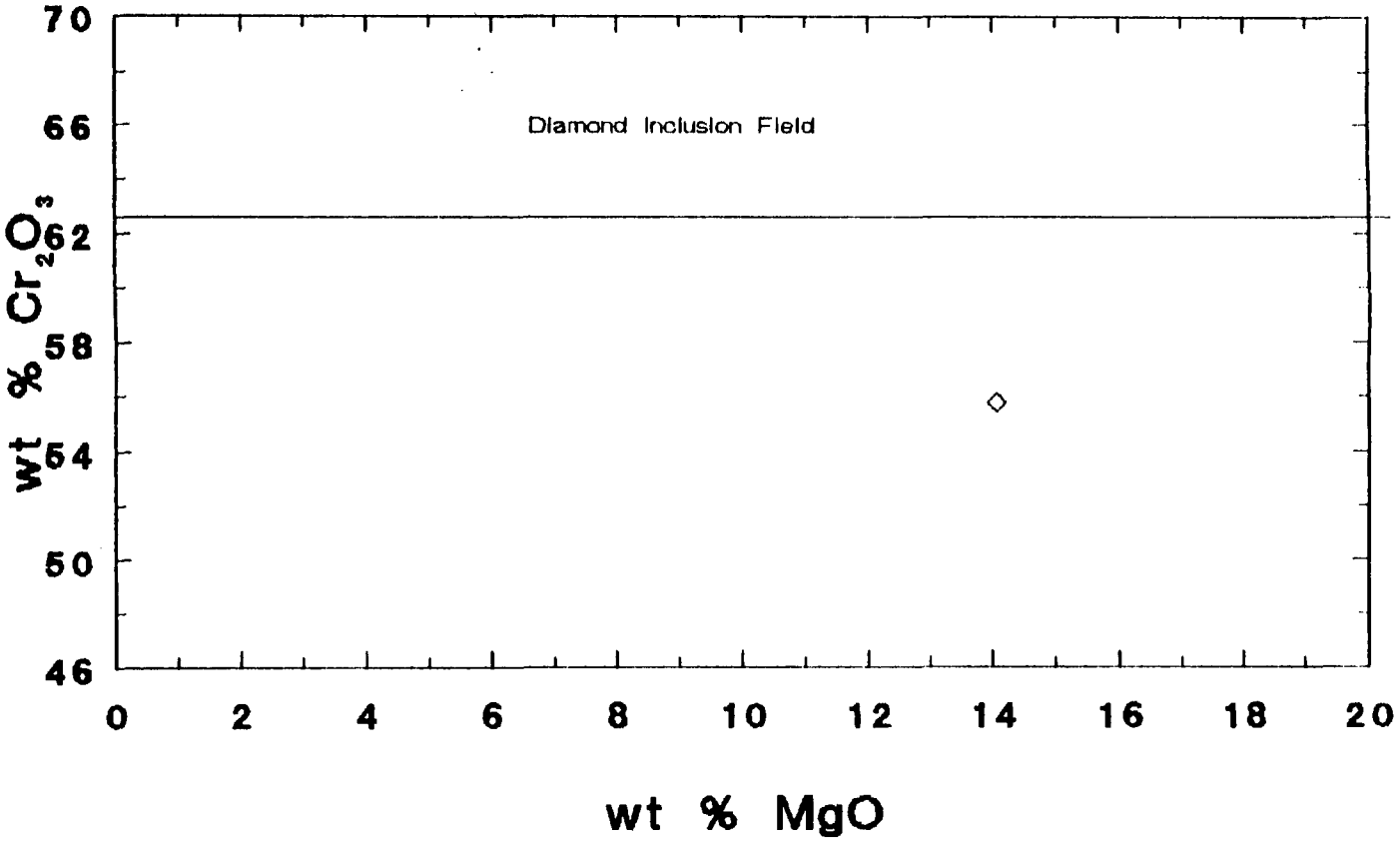

ECLOGITIC GARNET - R. DILLMAN
WALTON-POLLOCK SAMPLE HW-3
wt % Na2O
0.20
0.18
0.16
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
0
2
4
6
8
10
12
14
16
wt % CaO
RLB


ECLOGITIC GARNET - R. DILLMAN
WALTON-POLLOCK SAMPLE HW-3
wt % TiO2
2.00
1.80
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
0
2
4
6
8
10
12
14
16
wt % CaO
RLB


CHROME DIOPSIDE – R. DILLMAN
WALTON–POLLOCK SAMPLE A3
wt % Cr2O3
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26
wt % CaO
◇ RLB

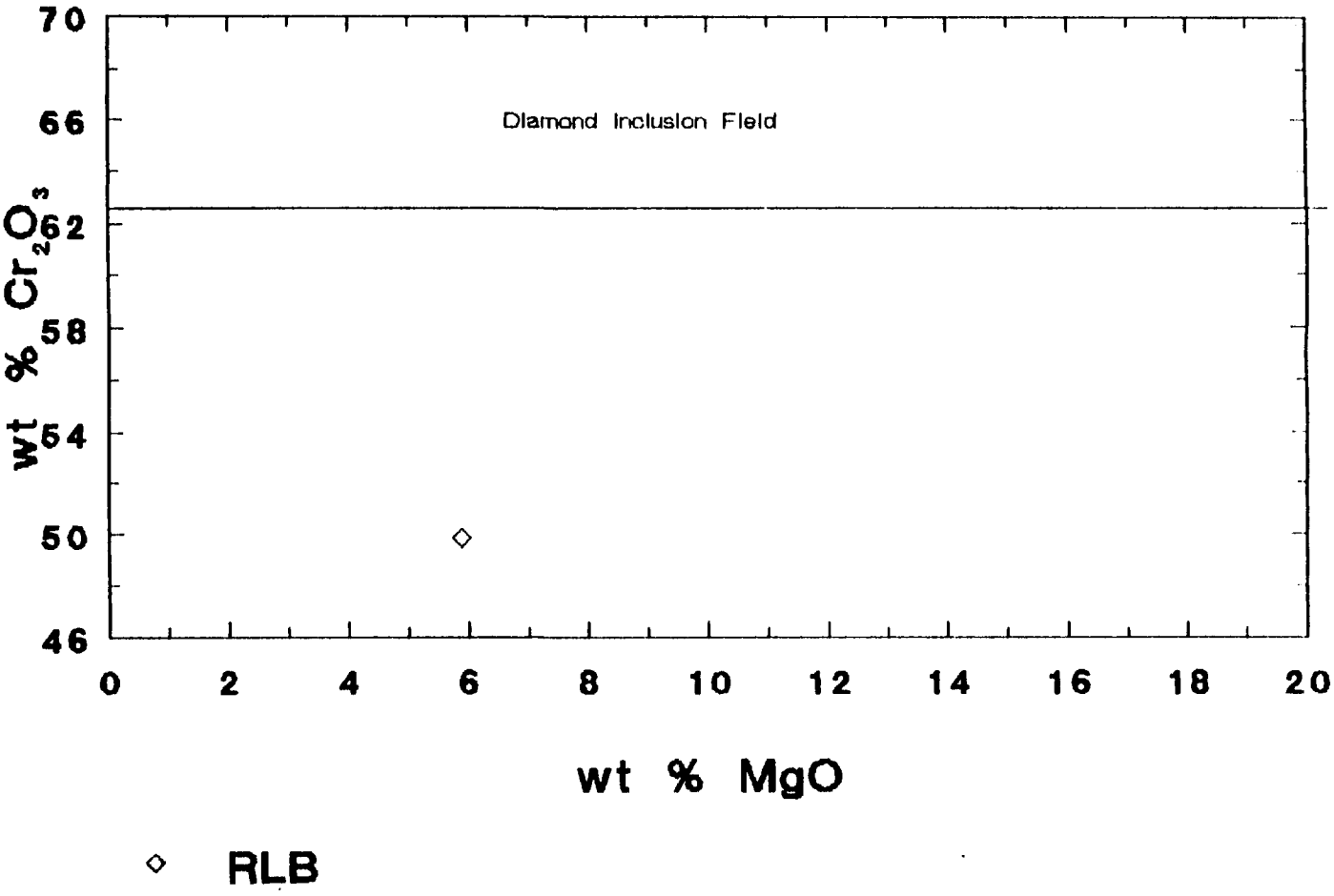

CHROME DIOPSIDE – R. DILLMAN
WALTON-POLLOCK SAMPLE HW-4
wt % Cr2O3
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26
wt % CaO
◇ RLB

CHROMITE - R. DILLMAN
WALTON-POLLOCK SAMPLE A3-8



◇ RLB

CHROMITE - R. DILLMAN
WALTON-POLLOCK SAMPLE 70-P2-3



◇ RLB

PYROPE, R. DILLMAN, WALTON-POLLOCK SAMPLES, June 29 1997, R.L.B.

	1	2	3
SIO2	41.32	41.62	41.59
TIO2	.05	.23	.21
A203	22.31	20.06	22.64
C203	3.76	5.71	2.34
FEO	8.14	7.50	8.01
MGO	19.01	19.14	19.99
MNO	.57	.43	.42
CAO	5.17	5.35	4.39
SUM	100.33	100.04	99.59

SI	5.910	*	5.991	*	5.947	*
AL	.090	6.000	.009	6.000	.053	6.000
AL	3.671	*	3.394	*	3.761	*
TI	.005	*	.025	*	.023	*
CR	.425	*	.650	*	.265	*
FE	.974	*	.903	*	.958	*
MN	.069	*	.052	*	.051	*
MG	4.053	*	4.107	*	4.260	*
CA	.792	9.989	.825	9.956	.673	9.989
O	24.000	*	24.000	*	24.000	*
	F/M	.257		.233		.237
	F/FM	.205		.189		.191

1 A3-1
2 A3-2
3 A3-3

ECL-PYROPE, R. DILLMAN, WALTON-POLLOCK SAMPLES, June 29 1997, R.L.B.

	1
SIO2	38.58
TIO2	.04
A2O3	22.43
C2O3	.27
FEO	26.92
MGO	8.17
MNO	.45
CAO	3.43
NA2O	.01
SUM	100.30

SI	5.937	*
AL	.063	6.000
AL	4.004	*
TI	.005	*
CR	.033	*
FE	3.464	*
MN	.059	*
MG	1.874	*
CA	.566	*
NA	.003	10.008
O	24.000	*
F/M	1.880	
F/FM	.653	

1 HW-3

CLINOPYROXENE, R. DILLMAN, WALTON-POLLOCK SAMPLES, June 29 1997, R.L.B.

	1	2	3
SIO2	53.90	53.87	53.80
TIO2	.34	.37	.46
A203	.94	1.13	.94
C203	1.20	1.19	.64
FEO	5.39	5.24	5.93
MGO	17.84	17.84	17.02
MNO	.13	.05	.14
CAO	20.25	19.98	20.61
K20	.00	.00	.00
NA20	.50	.52	.50
SUM	100.49	100.19	100.04

SI	1.963	*	1.963	*	1.972	*
AL	.037	2.000	.037	2.000	.028	2.000
AL	.003	*	.012	*	.012	*
TI	.009	*	.010	*	.013	*
CR	.035	*	.034	*	.019	*
FE	.164	*	.160	*	.182	*
MG	.968	*	.969	*	.930	*
MN	.004	*	.002	*	.004	*
CA	.790	*	.780	*	.809	*
NA	.035	*	.037	*	.036	*
K	.000	2.008	.000	2.004	.000	2.004
0	6.000	*	6.000	*	6.000	*
	F/M	.174		.166		.200
	F/FM	.148		.143		.167

1 A3-6
2 A3-7
3 HW-4

ORTHOPYROXENE, R. DILLMAN, WALTON-POLLOCK SAMPLES, June 29 1997, R.L.B.

	1
SIO2	55.35
TIO2	.10
A2O3	1.39
C2O3	.33
FEO	10.68
MGO	29.44
MNO	.23
CAO	2.43
K2O	.00
NA2O	.03
NIO	.08
SUM	100.06

SI	1.960	*
AL	.040	2.000
AL	.018	*
TI	.003	*
CR	.009	*
FE	.316	*
MG	1.554	*
MN	.007	*
CA	.092	*
NA	.002	*
K	.000	*
NI	.002	2.004
O	6.000	*
F/M	.208	
F/FM	.172	

1 A3-13

CHROMITE, R. DILLMAN, WALTON-POLLOCK SAMPLES, June 29 1997, R.L.B.

	1		2	
SIO2	.04		.01	
TIO2	.33		1.30	
A203	13.90		10.97	
C203	55.76		49.86	
FEO	15.68		31.22	
MNO	.28		.27	
MGO	14.06		5.88	
ZNO	.17		.37	
NIO	.20		.23	
SUM	100.42		100.11	
SI	.010	*	.003	*
TI	.063	*	.270	*
AL	4.164	*	3.564	*
CR	11.207	*	10.868	*
FE	3.333	*	7.198	*
MN	.060	*	.063	*
MG	5.327	*	2.416	*
ZN	.032	*	.075	*
NI	.041	24.238	.051	24.509
0	32.000	*	32.000	*
	F/M	.637		3.005
	F/FM	.389		.750

1 A3-8
2 70-P2-3

ECL-PYROPE, R. DILLMAN, WALTON-POLLOCK SAMPLES, June 29 1997, R.L.B.

	1
SIO2	38.58
TIO2	.04
A2O3	22.43
C2O3	.27
FEO	26.92
MGO	8.17
MNO	.45
CAO	3.43
NA2O	.01
SUM	100.30

SI	5.937	*
AL	.063	6.000
AL	4.004	*
TI	.005	*
CR	.033	*
FE	3.464	*
MN	.059	*
MG	1.874	*
CA	.566	*
NA	.003	10.008
O	24.000	*
	F/N	1.880
	F/FM	.653

1 HW-3

Mr. R. Dillman,
R. J. Dillman Geological Services,
8901 Reily Drive,
RR 5, Mount Brydges,
N0L 1W0

Ph/Fax 519-264-9278

July 2 1997,

R. L. Barnett Geological Consulting Inc.,
9684 Longwoods Road,
RR 32, London, Ontario,
N6P 1P2

Ph. 519-652-1498
Fax 519-652-1475

Dear Robert,

The identity of "non-indicator" minerals in the Walton-Pollock samples received, June 25 1997, is:

A3	4,5	
70-P2	1,2	
HW	1,2	- spessartine almandine ss
A3	9,10,11	- simple ilmenite
A3	12	- Fe orthopyroxene
70-P2	4	- magnetite - Fe oxide

Sincerely,

R. L. Barnett

SUSPECTED KIMBERLITE INDICATOR MINERALS SELECTED FOR E.D.S. MICROPROBE ANALYSIS

SAMPLE No.	GRAIN No.	DESCRIPTION
467-19-1	1	orange garnet spherical, good population.
	2	same
	3	Cr clinopyroxene, bright green, glassy. eroded edges
	4	Cr clinopyroxene, bright green, glassy, blocky, eroded edges.
	5	chromite?, spherical
	6	same.
	7	same.
	8	picroilmenite? spherical.
467-19-2	1	deep red-orange garnet, spherical 1 of 1
70m. N. P-2	2	orange garnet, spherical. 1 of 1
	3	orange garnet, spherical. good population
	3	chromite?, spherical
	4	chromite?, spherical.
	5	bright green cpx.
	6	bright green cpx.
	7	bright green cpx.
	8	bright green cpx.

WALTON-POLLOCK CLAIMS
LUNDY TOWNSHIP, NEW LISKEARD AREA, ONTARIO
MICROSCOPE IDENTIFICATION OF KIMBERLITE INDICATOR MINERALS

* DENOTES CREEK SAMPLE ? UNCERTAIN IDENTIFICATION, MICROPROBE ANALYSIS RECOMMENDED

SAMPLE NUMBER	PYROPE P L R O	ECLOGITE? GARNET	CHROME? CPX	ILMENITE?	CHROMITE?	OLIVINE?	COMMENTS
467-19-1	-- -- -- --	4?	6	2?	3?	--	Suspected KIM's in -0.5 mm fraction, most cpx uniform colour, cpx polished grains, spherical garnets and chromite, abundant orange almandine, fragments of brown euhedral zircons.
467-19-2	-- -- -- 2?	4?	8	2?	5?	--	abundant orange spherical garnet, shapeless cpx grains with rounded edges, uniform colour spherical chromite and ilmenite
HW-9	-- -- -- --	--	--	--	--	--	no obvious indicator minerals
HW-10	-- -- -- --	--	--	--	--	--	no obvious indicator minerals

SUMMARY

Cr clinopyroxene is present in both samples of the 467 series. Additional minerals suspected of having a kimberlite affinity include: chromite, ilmenite and garnet. Microprobe analysis is recommended on some of these grains. Polishing on cpx suggests movement from source. Spherical chromite? and ilmenite suggest source is close to site. Most indicator grains are restricted to the -0.5 mm fraction.

Sincerely,

Robert J. Dillman B.Sc.
Geologist
July 4, 1997

FAX IN

July 6, 1997

To: John Pollock

From: R. Dillman

Two pages

John

I had a second look at the grains I selected for microprobe analysis taken from the two samples Keith sent and I decided I would like to see more analysis from that area so I picked an additional set of grains. Some good probe results in that area would add to the evidence that a pipe occurs in the vicinity of the claim. KIM's occurring on 1200467 could not come from any of Sudbury Contacts' unknown pipes since they are located down-ice from the sample site

Results might be available by the end of this week. Call if you have any questions.

Sincerely,

R. Dillman

SUSPECTED KIMBERLITE INDICATOR MINERALS SELECTED FOR E.D.S. MICROPROBE ANALYSIS

SAMPLE No.	GRAIN No.	DESCRIPTION
467-19-1	1	orange garnet spherical, good population
	2	same
	3	Cr clinopyroxene, bright green, glassy, eroded edges
	4	Cr clinopyroxene, bright green, glassy, blocky, eroded edges
	5	chromite?, spherical
	6	same.
	7	same.
	8	picroilmenite? spherical
	9	same.
467-19-2	1	deep red-orange garnet, spherical 1 of 1
70m. N. P-2	2	orange garnet, spherical, 1 of 1
	3	Cr cpx.
	4	Cr cpx.
	5	chromite? spherical
	6	chromite? spherical
	7	chromite? spherical
	8	chromite? spherical
	9	chromite? weak octahedral shape
	10	chromite? angular fragment
	11	orange garnet, spherical
	12	ilmenite, spherical
	13	orange garnet
	14	Cr cpx.
	15	garnet, orange
	16	garnet, orange
	17	Cr cpx.

APPENDIX 2

DOCUMENT 2: KENNECOTT CANADA EXPLORATION INC. REPORT

Sample #s 97-11, 97-12, 97-13, 97-14 and 97-15 are from claim 1212048

KENNECOTT CANADA EXPLORATION INC.

Settlement Surveys Ltd.
1997 New Liskeard Samples
Heavy Mineral Results

Report: 97HM009

Kevin Kivi, P. Geol.
Senior Geologist
Thursday, October 16, 1997

MINERAL PROCESSING LABORATORY
1300 West Walsh Street, Thunder Bay ON P7E 4X4
Phone (807) 473-5558 Fax (807) 473-5660

Table of Contents

List of Appendices (separated by blue pages)

Samples

In late July, 19 samples were submitted to Kennecott Canada Exploration Inc. in Thunder Bay for heavy mineral processing. Samples weighed about 10 kilograms each.. As discussed with Settlement Surveys, samples 97-4B and 97-5B were combined apparently because the numbers written on the containers were not clearly legible.

Sample processing, microscopy, grain selection and electron microprobe confirmation were completed. This report is a summary of results.

Processing

Samples are weighed in and checked against shipping forms. Next samples are deslimed until water discharge is clear, then screened over a 1 mm. sieve. The +1 mm. oversize is stored, and the undersize fraction is dried in a large oven. The dry sample is then sized using automated sieve shakers, equipped with the following sieves:

Canadian Sieve Series	Sieve Opening (mm.)
35	0.5 mm.
60	0.25 mm.

Only the +60 -35 fraction moves forward. All other fractions are stored. Magnetic separation, an operation that splits the sample into a magnetic and non-magnetic fraction, occurs next. The non-magnetic fraction is stored, and the magnetic fraction proceeds to liquid separation. Liquid separation occurs by pouring the magnetic fraction in large funnels filled with sodium polytungstate, a non-toxic liquid of S.G. 2.89 g./cc.. Minerals that sink in sodium polytungstate (sinks) are tapped-off with a stop-cock at the base of the funnel then washed; floats are discarded. All sodium polytungstate is recovered from all fractions. The heavy mineral concentrate (mag. sinks) is then dried, vialed, weighed and forwarded to microscopy.

Microscopy

Microscopy was conducted by specially trained KCEI staff. Microscopy was completed on 18 heavy mineral concentrates.

Specially trained mineral technicians search through the heavy mineral concentrates using a binocular microscope equipped fibre-optic light and Gerryts belt. Mineral technicians set aside each suspected kimberlitic grain, then record the totals on a picking sheet, and later transfer the information to a database. These results are presented in an appendix titled "Picking Results".

Next, suspected indicator minerals are checked by a geologist, who describes and numbers each grain to be probed. The grains are then mounted on paper with releasable plastic tape, and identified by the sample number, grain number, grain type and sieve size. Geologists are expected to submit any mineral with a chance of being kimberlitic for electron microprobe analysis .

Electron Microprobe Analysis

Electron microprobe analyses are conducted by R.L. Barnett Geological Consulting Inc., in London, Ontario. Grains submitted by geologists are mounted, polished, and carbon coated. Grain mounts are then placed in the electron microprobe, and checked in energy dispersive system (EDS) mode. Rapid evaluation of each grain is possible by looking at the EDS spectra, which displays a graph with major components such as Si, Al, Mg, and Fe represented as peaks. Common minerals like plagioclase feldspar, simple ilmenite, staurolite and magnetite are quickly identified by their distinctive peaks and are not analysed. This procedure eliminates EMP analysis of common minerals not related to kimberlites. If there is any doubt on a mineral's affinity, then it is analysed. An appendix authored by R.L. Barnett describes EMP analysis of indicator minerals in detail.

Analyses are received as email attachments in Thunder Bay when completed. Minor data processing converts the data storage medium from individual files to database. Analytical data can now be matched with any related information, and exported in various formats to other files, programs or plots.

Electron microprobe analyses are then reprocessed using a program called Min-id, written by Malcolm Gent, a researcher with Saskatchewan Energy and Mines. Min-id establishes a mineral name to each analysis by looking at the oxide amount, and fitting it into known range for each mineral type. In each case a mineral name is assigned, which converts an array of oxides into a meaningful mineral name. This output improves oxide chemistry by presenting an alternative output that may be more universally understood by a variety of readers.

Mineralogy

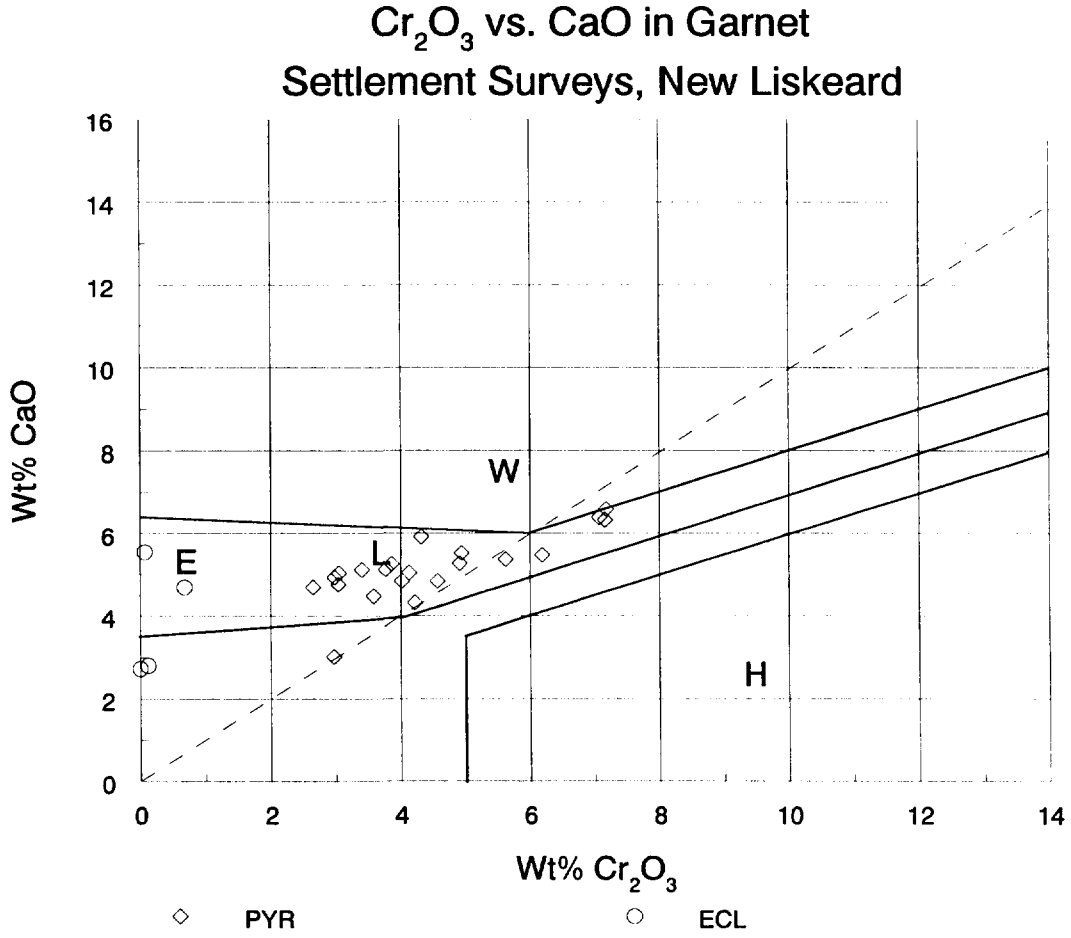
The New Liskeard Samples yielded heavy mineral concentrates from which peridotitic and eclogitic garnet, chrome diopside, chrome spinel, picroilmentite, orthopyroxene and olivine were confirmed by electron microprobe analysis. A total of 124 grains were described and submitted. Rapid evaluation of EDS spectra identified many non-indicator minerals, which were not analysed. Of 124 grains submitted, 97 EMP analyses were returned. Electron microprobe analyses are discussed with common X-Y scatter plots in subsequent sections and tabulated in an appendix of this report. Non-kimberlitic minerals identified using the EDS system are not described in this report.

Pyrope Garnet

Electron microprobe analysis of 25 garnets are likely derived from kimberlite. The strong trend along the L domain is a domain of two-pyroxene paragenesis (Sobolev, 1974). This trend indicates deep lithosphere lhertzolite affinity. Lhertzolite is a rock consisting of olivine, clinopyroxene, orthopyroxene and garnet. Garnets that plot above this trend, in the W domain, have mineral chemistry suggest wehrlitic affinity. Wehrlite is a high calcium rock consisting of olivine, clinopyroxene and garnet. All analyses that plot in the H domain have affinity to hartzburgite, a calcium depleted rock consisting of olivine, orthopyroxene and garnet. Low calcium, high chrome garnets (in H domain) are associated with higher diamond contents in kimberlite (Gurney, 1995).

Peridotitic garnets recovered from the New Liskeard property show lhertzolitic affinity. No analyses plot within the hartzburgite (H) domain.

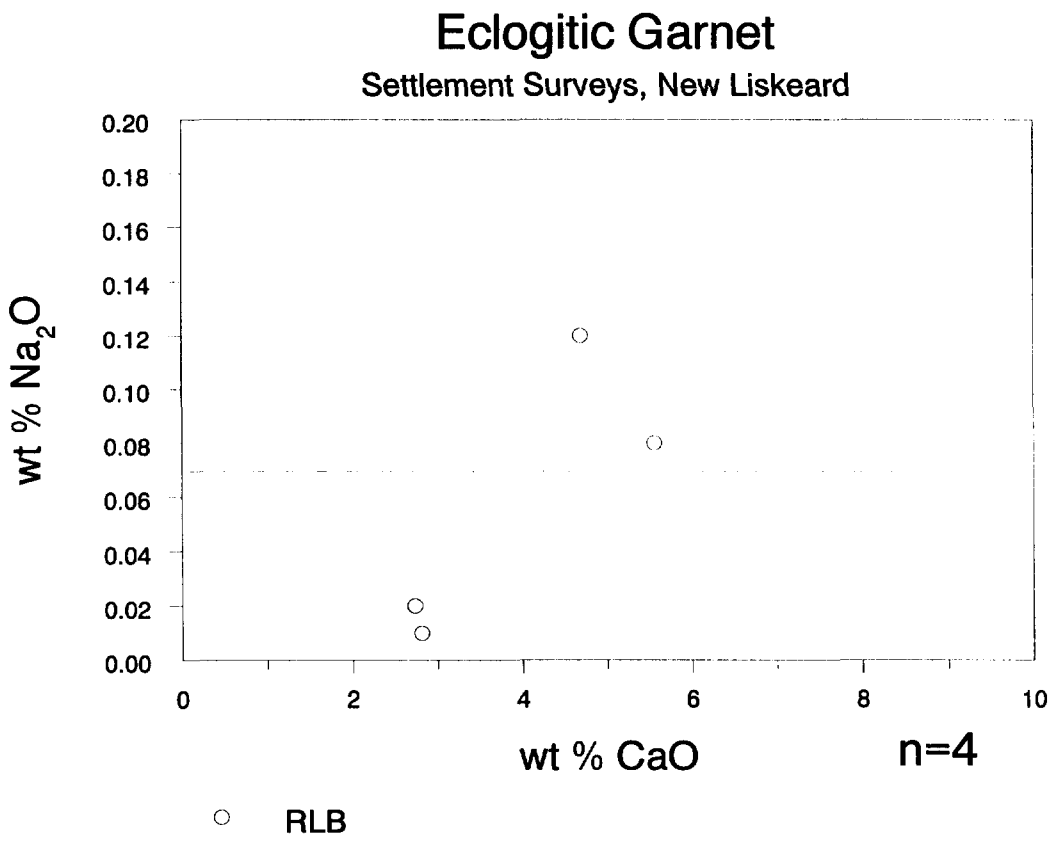
Four eclogitic garnets recovered plot along the E domain. One eclogitic garnet is slightly elevated in chrome.



Eclogitic Garnet

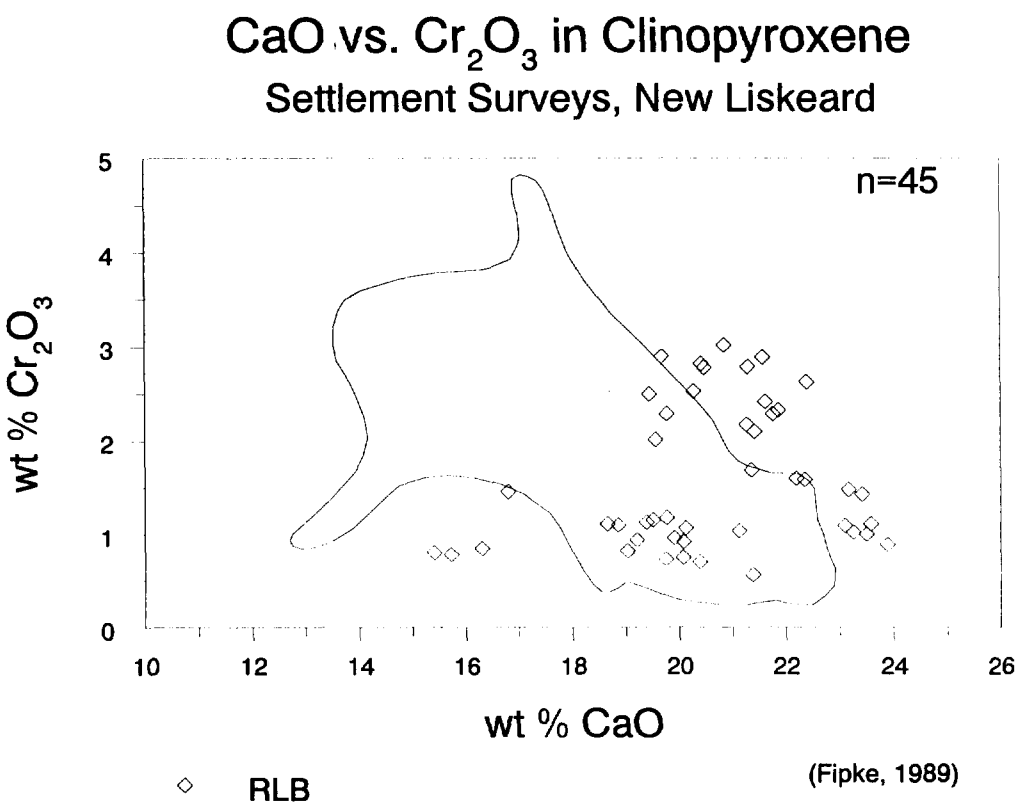
Four orange garnets, considered to have eclogitic affinity were picked from heavy mineral concentrates. These garnets are pyrope-almandine solid solution. In the previous calcium-chrome plot, these garnets (plotted as circles) contain up to 0.5 wt % Cr2O3 and high calcium.

The following calcium-sodium plot shows elevated sodium is present in two garnets, which strongly suggests eclogitic affinity.



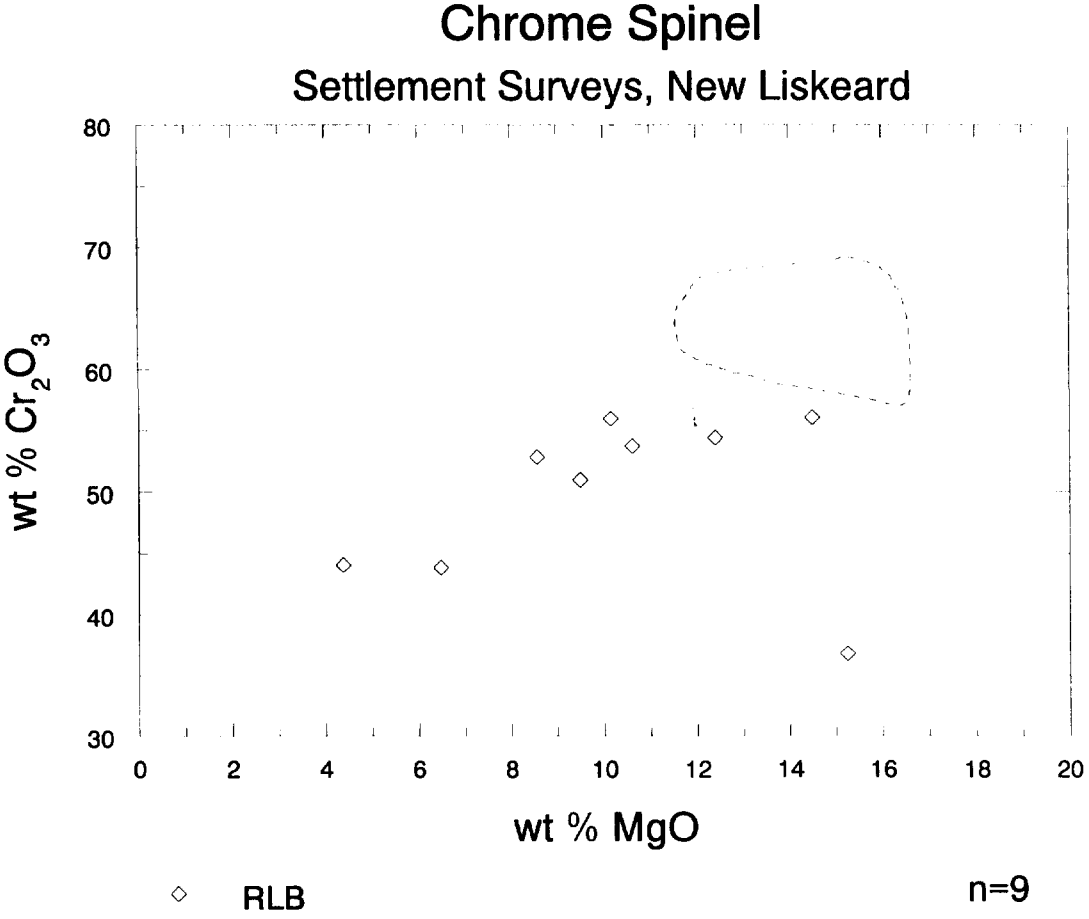
Clinopyroxene

Four vague groupings of CPX analyses are apparent in the calcium-chrome scatter plot. The significance of the groupings is unknown, but clinopyroxene analyses that plot within the domain defined by Chuck Fipke in G.S.C. Open File 2124 are likely derived from lhertzolite and wehrlite. Chrome-poor clinopyroxene (< 1 wt % Cr2O3), may represent the megacryst suite of possibly cognate origin, although this topic is still highly debated. (Mitchell, 1986, Woolley, 1996). Clinopyroxenes associated with eclogite were not found in any of the heavy mineral concentrates.



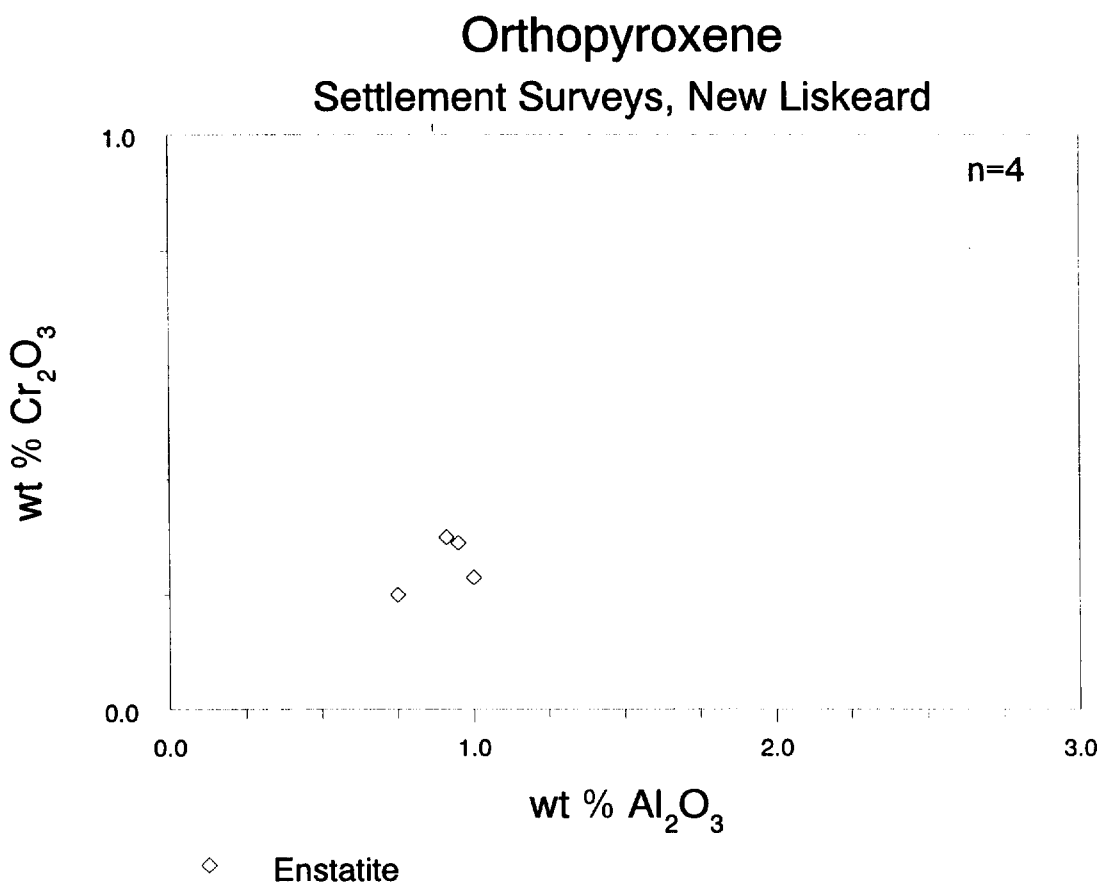
Chrome Spinel

Chrome spinel with as much as 56.1 wt% Cr2O3 were recovered from the New Liskeard concentrates. Chrome spinel which plot within the dotted domain (published diamond inclusion chemistry, Fipke, 1989) are considered to be diamond stability field composition. No chrome spinel from this submittal have diamond inclusion chemistry. The lithological source rock of mantle derived chromite cannot be established with the magnesium-chrome plot (Gurney, 1995).



Orthopyroxene

Alumina-chrome shows a grouping of analyses with low alumina and elevated chrome. Decreased Al2O3 reflects increased pressure (Sobolev, 1974). The grouping from these few OPX grains is less than 1.0 wt. % Al2O3, which indicates a high pressure source.



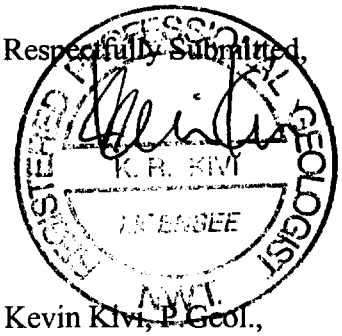
Olivine

Six olivine grains were recovered from heavy mineral concentrates and analysed with the electron microprobe. Those with high forsterite end-member may have kimberlitic affinity, especially when they occur with other kimberlite indicator minerals.

Summary

Processing and microscopy of New Liskeard samples liberated many grains suspected to be kimberlitic in nature. Hartzburgitic affinity was not noted in the small sample of pyrope garnet chemistry, but an eclogitic component may be present. Follow-up exploration is warranted to find the source rock of these grains and sample it for diamonds.

Respectfully Submitted,



Kevin Kivi, P.Geol.,
Senior Geologist,
KENNECOTT CANADA EXPLORATION INC.

Thursday, October 16, 1997.

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Alan R. Wooley et al. (1996): Classification of Lamprophyres, Lamproites, Kimberlites, and the Kalsilitic, Melilitic and Leucitic Rocks, The Canadian Mineralogist, Alkaline Rocks: Petrology and Mineralogy, (Editors: R.H. Mitchell, G.N. Eby & R.F. Martin), Vol. 34, part 2, pp. 175-186.

Sample Locations

Company SETTLEMENT

Contact JOHN POLLOCK

KENNECOTT CANADA EXPLORATION INC.

Mineral Processing Laboratory
1300 West Walsh St.
Thunder Bay, Ontario, Canada P7E 4X4
Phone (807)473-5558 Fax (807) 473-5660

Sample Types:
1 Till 4 Rock
2 Esker 5 Drill Core
3 Stream 6 Beach

Sampchar	Type	Area	Prov	Nts	Utmzone	Easting	Northing	Date
97-1A	1	NEW LISKEARD	ONT					07/25/97
97-1B	1	NEW LISKEARD	ONT					07/25/97
97-2	1	NEW LISKEARD	ONT					07/25/97
97-3A	1	NEW LISKEARD	ONT					07/25/97
97-3B	1	NEW LISKEARD	ONT					07/25/97
97-4A	1	NEW LISKEARD	ONT					07/25/97
97-4B	1	NEW LISKEARD	ONT					07/25/97
97-5A	1	NEW LISKEARD	ONT					07/25/97
97-5B	1	NEW LISKEARD	ONT					07/25/97
97-6	1	NEW LISKEARD	ONT					07/25/97
97-7	1	NEW LISKEARD	ONT					07/25/97
97-8	1	NEW LISKEARD	ONT					07/25/97
97-9	1	NEW LISKEARD	ONT					07/25/97
97-10	1	NEW LISKEARD	ONT					07/25/97
97-11	3	NEW LISKEARD	ONT					07/25/97
97-12	1	NEW LISKEARD	ONT					07/25/97
97-13	1	NEW LISKEARD	ONT					07/25/97
97-14	1	NEW LISKEARD	ONT					07/25/97
97-15	1	NEW LISKEARD	ONT					07/25/97

KENNECOTT CANADA EXPLORATION INC.

Mineral Processing Laboratory
1300 West Walsh St.
Thunder Bay, Ontario, Canada P7E 4X4
Phone (807)473-5558 Fax (807) 473-5660

Laboratory Weights
Settlement Surveys, New Liskeard

Sampchar	Start Weight	Wt. Minus	Wt.60 Fraction	Weight Mags	Weight Sinks	Date
97-1A	10200 grams (g.)	5100 g.	3500g.	709g.	74.7 g.	08/13/97
97-1B	10200 grams (g.)	5400 g.	3558g.	871g.	105.8 g.	08/13/97
97-2	9800 grams (g.)	4700 g.	2362g.	618g.	111.2 g.	08/12/97
97-3A	10000 grams (g.)	7500 g.	4100g.	1196g.	202.3 g.	08/12/97
97-3B	10400 grams (g.)	4000 g.	2111g.	538g.	84.2 g.	08/13/97
97-4A	10400 grams (g.)	5200 g.	4000g.	1175g.	215.5 g.	08/14/97
97-4B	20200 grams (g.)	5700 g.	2512g.	702g.	101.2 g.	08/12/97
97-5A	10600 grams (g.)	3500 g.	1284g.	348g.	26.6 g.	08/12/97
97-6	8200 grams (g.)	3900 g.	2278g.	710g.	86.6 g.	08/12/97
97-7	11400 grams (g.)	3100 g.	1205g.	411g.	44.5 g.	08/13/97
97-8	10000 grams (g.)	3500 g.	1644g.	535g.	115.8 g.	08/13/97
97-9	9800 grams (g.)	2500 g.	922g.	297g.	678.0 g.	08/12/97
97-10	10200 grams (g.)	4600 g.	1672g.	516g.	5.0 g.	08/13/97
97-11	6600 grams (g.)	500 g.	138g.	29g.	4.6 g.	08/12/97
97-12	10300 grams (g.)	2300 g.	1104g.	300g.	50.1 g.	08/12/97
97-13	10400 grams (g.)	400 g.	112g.	39g.	12.2 g.	08/12/97
97-14	9800 grams (g.)	5000 g.	2992g.	969g.	135.0 g.	08/13/97
97-15	7300 grams (g.)	300 g.	96g.	35g.	8.7 g.	08/12/97

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Picking Results
Settlement Surveys, New Liskeard

Sampchar	Siev	Fraction	Pyr	Ecl	Cpx	Ilm	Chr	Opx	Oli	Remarks	Picker	Date
97-1A	60	MAG	0	0	1	0	0	0	1		TR	08/28/97
97-1B	60	MAG	0	0	5	0	1	0	8		CB	08/27/97
97-2	60	MAG	0	0	0	0	0	0	1		TR	08/27/97
97-3A	60	MAG	0	0	2	0	0	0	0		AM	08/27/97
97-3B	60	MAG	0	0	0	0	0	0	0		AM	09/04/97
97-4A	60	MAG	1	0	5	0	0	0	5	OTHER POSS GRAINS	BW	09/04/97
97-4B	60	MAG	0	0	1	0	0	0	3		TR	08/22/97
97-5A	60	MAG	1	0	2	0	0	0	19	OTHER POSS GRAINS	SP	08/29/97
97-6	60	MAG	13	1	40	10	0	0	10	OTHER POSS CPX	DC	08/27/97
97-7	60	MAG	0	0	0	0	0	0	0	POSS CPX & POSS ILM	DC	08/26/97
97-8	60	MAG	5	2	2	4	5	0	5		DC	08/27/97
97-9	60	MAG	2	0	1	0	0	0	0		SB	08/25/97
97-10	60	MAG	1	0	0	0	0	0	1	OTHER POSS GRAINS	SB	08/28/97
97-11	60	MAG	0	0	0	0	0	0	0		SB	08/21/97
97-12	60	MAG	0	0	1	0	0	0	0		AM	08/29/97
97-13	60	MAG	0	0	3	0	0	10	5	OTHER POSS GRAINS	SB	08/28/97
97-14	60	MAG	0	1	5	1	0	0	0		TR	08/26/97
97-15	60	MAG	0	0	1	4	0	0	3		DC	08/27/97

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Grain Descriptions
Settlement Surveys, New Liskeard

Sampchar	Grain	Siev	Fraction	Grtype	Colour	Shape	Lustre	Clarity	Remarks	Date	Geologist
97-1A	1	60	MAG	CPX	358C	SANG	VIT	TRNSL	SUGARY	/ /	
97-1A	2	60	MAG	ILM	7C	SANG	METAL	OPAQ	RIBBED SURFACE	09/02/97	JB
97-1B	1	60	MAG	CPX	358C	SANG	VIT	TRNSP		09/03/97	JB
97-1B	2	60	MAG	CPX	366C	SANG	VIT	TRNSP		09/03/97	JB
97-1B	3	60	MAG	CHR	7C	SANG	DULL	OPAQ		09/03/97	JB
97-1B	4	60	MAG	OLI	608C	SANG	VIT	TRNSP		09/03/97	JB
97-1B	5	60	MAG	OLI	608C	SANG	VIT	TRNSP		09/03/97	JB
97-3A	1	60	MAG	CPX	359C	SANG	VIT	TRNSL		09/05/97	JB
97-3A	2	60	MAG	CPX	359C	SANG	VIT	TRNSP		09/06/97	JB
97-4A	1	60	MAG	CPX	359C	SANG	VIT	TRNSP		09/07/97	JB
97-4A	1	60	MAG	PYR	256C	SANG	VIT	TRNSP	CORUNDUM?	09/03/97	JB
97-4A	2	60	MAG	CPX	359C	SANG	WAXY	TRNSL		09/03/97	JB
97-4A	2	60	MAG	OLI	607C	ANG	VIT	TRNSP		09/08/97	JB
97-4A	3	60	MAG	CPX	359C	SANG	VIT	TRNSL		09/03/97	JB
97-4A	4	60	MAG	CPX	359C	SANG	VIT	TRNSL		09/03/97	JB
97-4A	5	60	MAG	CPX	359C	SRND	DULL	TRNSL		09/03/97	JB
97-4A	6	60	MAG	CPX	359C	SANG	VIT	TRNSL		09/03/97	JB
97-4A	7	60	MAG	OLI	608C	SANG	VIT	TRNSP		09/03/97	JB
97-4A	8	60	MAG	OLI	608C	SANG	VIT	TRNSP		09/03/97	JB
97-4A	9	60	MAG	OLI	608C	SANG	VIT	TRNSP		09/03/97	JB
97-4A	10	60	MAG	OLI	608C	SANG	VIT	TRNSP		09/03/97	JB
97-4A	11	60	MAG	OLI	608C	SANG	VIT	TRNSP		09/03/97	JB
97-4A	12	60	MAG	ILM	7C	SANG	SMETAL	OPAQ		09/03/97	JB
97-5A	1	60	MAG	PYR	256C	ANG	VIT	TRNSP		09/09/97	JB
97-5A	2	60	MAG	CPX	366C	SANG	VIT	TRNSP		09/10/97	JB
97-5A	3	60	MAG	CPX	366C	SANG	VIT	TRNSP		09/11/97	JB
97-5A	4	60	MAG	CPX	366C	SANG	VIT	TRNSP		09/12/97	JB
97-5A	5	60	MAG	CPX	366C	SANG	VIT	TRNSP		09/13/97	JB
97-5A	6	60	MAG	OLI	67C	SANG	VIT	TRNSP		09/14/97	JB
97-5A	7	60	MAG	OLI	608C	SANG	VIT	TRNSP	GROSSULAR?	09/15/97	JB
97-5A	8	60	MAG	OLI	608C	SANG	VIT	TRNSP	GROSSULAR?	09/16/97	JB
97-5A	9	60	MAG	CHR	7C	ANG	SMETAL	OPAQ		09/17/97	JB
97-5A	10	60	MAG	ECL	171C	SANG	VIT	TRNSP		09/18/97	JB
97-5A	11	60	MAG	ECL	171C	SANG	VIT	TRNSP		09/19/97	JB

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Grain Descriptions
Settlement Surveys, New Liskeard

Sampchar	Grain	Siev	Fraction	Grtype	Colour	Shape	Lustre	Clarity	Remarks	Date	Geologist
97-5A	12	60	MAG	ECL	171C	SANG	VIT	TRNSP		09/20/97	JB
97-5A	13	60	MAG	ECL	171C	SANG	VIT	TRNSP		09/21/97	JB
97-6	1	60	MAG	PYR	236C	ANG	VIT	TRNSP	MULTIMINERALIC	09/03/97	JB
97-6	2	60	MAG	PYR	2562C	ANG	VIT	TRNSP		09/03/97	JB
97-6	3	60	MAG	PYR	2562C	ANG	VIT	TRNSP		09/03/97	JB
97-6	4	60	MAG	PYR	2562C	ANG	VIT	TRNSP		09/03/97	JB
97-6	5	60	MAG	PYR	2562C	ANG	VIT	TRNSP		09/03/97	JB
97-6	6	60	MAG	PYR	2562C	ANG	VIT	TRNSP		09/03/97	JB
97-6	7	60	MAG	PYR	2562C	ANG	VIT	TRNSP		09/03/97	JB
97-6	8	60	MAG	PYR	2562C	ANG	VIT	TRNSP		09/03/97	JB
97-6	9	60	MAG	PYR	2562C	ANG	VIT	TRNSP		09/03/97	JB
97-6	10	60	MAG	PYR	2562C	ANG	VIT	TRNSP		09/03/97	JB
97-6	11	60	MAG	PYR	2562C	ANG	VIT	TRNSP		09/03/97	JB
97-6	12	60	MAG	PYR	176C	ANG	VIT	TRNSP		09/03/97	JB
97-6	13	60	MAG	PYR	176C	ANG	VIT	TRNSP		09/03/97	JB
97-6	14	60	MAG	PYR	1765C	ANG	VIT	TRNSP		09/03/97	JB
97-6	15	60	MAG	ECL	1485C	ANG	VIT	TRNSP		09/03/97	JB
97-6	16	60	MAG	CPX	360C	ANG	VIT	TRNSP		09/03/97	JB
97-6	17	60	MAG	CPX	360C	SANG	VIT	TRNSP		09/03/97	JB
97-6	18	60	MAG	CPX	360C	SANG	VIT	TRNSP		09/03/97	JB
97-6	19	60	MAG	CPX	368C	SANG	VIT	TRNSP		09/03/97	JB
97-6	20	60	MAG	CPX	368C	SANG	VIT	TRNSP		09/03/97	JB
97-6	21	60	MAG	CPX	358C	SANG	VIT	TRNSP		09/03/97	JB
97-6	22	60	MAG	CPX	359C	SANG	VIT	TRNSP		09/03/97	JB
97-6	23	60	MAG	CPX	359C	SANG	VIT	TRNSP		09/03/97	JB
97-6	24	60	MAG	CPX	359C	SANG	VIT	TRNSP		09/03/97	JB
97-6	25	60	MAG	CPX	359C	SANG	VIT	TRNSP		09/03/97	JB
97-6	26	60	MAG	CPX	372C	SANG	VIT	TRNSP	OFF COLOUR	09/03/97	JB
97-6	27	60	MAG	CPX	372C	SANG	VIT	TRNSP	OFF COLOUR	09/03/97	JB
97-6	28	60	MAG	CPX	372C	SANG	VIT	TRNSP	OFF COLOUR	09/03/97	JB
97-6	29	60	MAG	ILM	7C	ANG	METAL	OPAQ		09/03/97	JB
97-6	30	60	MAG	ILM	7C	ANG	METAL	OPAQ		09/03/97	JB
97-6	31	60	MAG	ILM	7C	ANG	METAL	OPAQ		09/03/97	JB
97-6	32	60	MAG	ILM	7C	ANG	METAL	OPAQ		09/03/97	JB

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Settlement Surveys, New Liskeard

Sampchar	Grain	Sieve	Fraction	Grtype	Colour	Shape	Lustre	Clarity	Remarks	Date	Geologist
97-6	33	60	MAG	ILM	7C	ANG	METAL	OPAQ		09/03/97	JB
97-6	34	60	MAG	ILM	7C	ANG	METAL	OPAQ		09/03/97	JB
97-6	35	60	MAG	ILM	7C	ANG	METAL	OPAQ		09/03/97	JB
97-6	36	60	MAG	ILM	7C	ANG	METAL	OPAQ		09/03/97	JB
97-6	37	60	MAG	ILM	7C	ANG	METAL	OPAQ		09/03/97	JB
97-6	38	60	MAG	ILM	7C	ANG	METAL	OPAQ		09/03/97	JB
97-6	39	60	MAG	OLI	607C	ANG	VIT	TRNSP		09/03/97	JB
97-6	40	60	MAG	OLI	608C	ANG	VIT	TRNSP	POSSIBLE	09/03/97	JB
97-6	41	60	MAG	OLI	608C	ANG	VIT	TRNSP	POSSIBLE	09/03/97	JB
97-6	42	60	MAG	OPX	607C	ANG	VIT	TRNSP		09/03/97	JB
97-6	43	60	MAG	OPX	607C	ANG	VIT	TRNSP		09/03/97	JB
97-6	44	60	MAG	OPX	607C	ANG	VIT	TRNSP		09/03/97	JB
97-6	45	60	MAG	OPX	607C	ANG	VIT	TRNSP		09/03/97	JB
97-7	1	60	MAG	ILM	7C	ANG	METAL	OPAQ		09/22/97	JB
97-7	2	60	MAG	CPX	365C	SANG	DULL	SANG		09/23/97	JB
97-7	3	60	MAG	CPX	365C	SANG	DULL	SANG		09/24/97	JB
97-8	1	60	MAG	PYR	245C	SANG	VIT	TRNSP		09/03/97	JB
97-8	2	60	MAG	PYR	2573C	SANG	VIT	TRNSP		09/03/97	JB
97-8	3	60	MAG	PYR	2573C	SANG	VIT	TRNSP		09/03/97	JB
97-8	4	60	MAG	PYR	2573C	SANG	VIT	TRNSP		09/03/97	JB
97-8	5	60	MAG	PYR	2573C	SANG	VIT	TRNSP		09/03/97	JB
97-8	6	60	MAG	ECL	021C	SANG	VIT	TRNSP		09/03/97	JB
97-8	7	60	MAG	CPX	367C	SRND	WAXY	TRNSL		09/03/97	JB
97-8	8	60	MAG	CPX	366C	SANG	VIT	TRNSP		09/03/97	JB
97-8	9	60	MAG	ILM	7C	SANG	METAL	OPAQ		09/03/97	JB
97-8	10	60	MAG	ILM	7C	SANG	METAL	OPAQ		09/03/97	JB
97-8	11	60	MAG	ILM	7C	SANG	METAL	OPAQ		09/03/97	JB
97-8	12	60	MAG	ILM	7C	SANG	METAL	OPAQ		09/03/97	JB
97-8	13	60	MAG	CHR	7C	SANG	VIT	OPAQ		09/03/97	JB
97-8	14	60	MAG	CHR	7C	SANG	VIT	OPAQ		09/03/97	JB
97-8	15	60	MAG	CHR	7C	SANG	VIT	OPAQ		09/03/97	JB
97-8	16	60	MAG	CHR	7C	SANG	VIT	OPAQ		09/03/97	JB
97-8	17	60	MAG	CHR	7C	SANG	VIT	OPAQ		09/03/97	JB
97-9	1	60	MAG	PYR	251C	ANG	VIT	TRNSP		09/03/97	JB

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Grain Descriptions
Settlement Surveys, New Liskeard

Sampchar	Grain	Sieve	Fraction	Grtype	Colour	Shape	Lustre	Clarity	Remarks	Date	Geologist
97-9	2	60	MAG	PYR	244C	ANG	VIT	TRNSP		09/03/97	JB
97-9	3	60	MAG	CPX	360C	SANG	VIT	TRNSL		09/03/97	JB
97-10	1	60	MAG	PYR	237C	ANG	VIT	TRNSP		09/03/97	JB
97-10	2	60	MAG	CPX	372C	SANG	VIT	TRNSP	OFF COLOUR	09/03/97	JB
97-10	3	60	MAG	CPX	372C	SANG	VIT	TRNSP	OFF COLOUR	09/03/97	JB
97-10	4	60	MAG	CPX	372C	SANG	VIT	TRNSP	OFF COLOUR	09/03/97	JB
97-11	1	60	MAG	CHR	7C	SRND	VIT	OPAQ		09/03/97	JB
97-12	1	60	MAG	CPX	360C	SRND	WAXY	TRNSL		09/03/97	JB
97-12	2	60	MAG	ECL	1565C	SANG	VIT	TRNSP	OFF COLOUR	09/03/97	JB
97-12	3	60	MAG	ECL	1495C	SANG	VIT	TRNSP	OFF COLOUR	09/03/97	JB
97-12	4	60	MAG	ECL	1635C	SANG	VIT	TRNSP	OFF COLOUR	09/03/97	JB
97-13	1	60	MAG	CPX	360C	SRND	VIT	TRNSP		09/03/97	JB
97-13	2	60	MAG	CPX	360C	SANG	VIT	TRNSP		09/03/97	JB
97-14	1	60	MAG	OPX	360C	SRND	VIT	TRNSP		09/03/97	JB
97-14	2	60	MAG	OPX	360C	SANG	VIT	TRNSP		09/03/97	JB
97-14	3	60	MAG	OPX	359C	SRND	VIT	TRNSP		09/03/97	JB
97-14	4	60	MAG	OPX	359C	SANG	VIT	TRNSP		09/03/97	JB
97-14	5	60	MAG	OPX	358C	SANG	VIT	TRNSP		09/03/97	JB
97-15	1	60	MAG	ILM	7C	SANG	METAL	OPAQ		09/03/97	JB
97-15	2	60	MAG	ILM	7C	SANG	METAL	OPAQ		09/03/97	JB
97-15	3	60	MAG	ILM	7C	SANG	METAL	OPAQ		09/03/97	JB
97-15	4	60	MAG	ILM	7C	SANG	METAL	OPAQ		09/03/97	JB

METHODOLOGY OF SAMPLE PREPARATION

AND

ELECTRON MICROPROBE MINERAL ANALYSIS

R. L. BARNETT GEOLOGICAL March 24, 1995

The purpose of this section is to describe the manner in which the mineral grains of interest are mounted, polished and then analyzed with an electron microprobe.

The mineral grains of interest, garnet, clinopyroxene, olivine, ilmenite and chromite, are generally received attached to paper with cellotape. Grains are identified by a specific number written immediately adjacent to each mineral grain.

The basic technique of electron microprobe mineral analysis requires that the surface of each grain be highly polished. The method of mounting and polishing the grains is as follows:

(i) All grains are mounted on rectangular glass slides that are commonly used to make standard petrographic thin sections. The actual mounting surface of the glass slide is first etched with acid to ensure good adherence of the plastic mounting medium.

(ii) Before the grains are removed from their location on the paper, their corresponding numbers are written in two or three parallel rows on the surface of the etched glass with the aid of a binocular microscope. Care is taken to use an ink which is not soluble in plastic. A small dab of plastic is then placed beside each number.

(iii) With the aid of a binocular microscope and using sharp tweezers, the cellotape is carefully pulled back to expose one grain at a time. Using a sharp point, the grain is then coated in a small amount of plastic to prevent unpredictable movement due to static electricity. The plastic-coated grain is then carefully removed from the cellotape and transferred to the dab of plastic beside the proper number. In this manner, up to 100 grains can be mounted on one rectangular glass slide. The actual number of grains per slide is determined by the size of the grains involved.

Throughout the mounting procedure, extreme care is taken to ensure that first, the grains are not lost, and second, that the proper grain is mounted and identified with the proper number.

(iv) The slide is then put on a warm hot plate to set the plastic enclosing each grain.

(v) Next, small grains of quartz are placed in plastic at the ends and strategically about the margin of each slide to provide resistance during the polishing process. The entire glass slide is then covered in a layer of plastic and put on the hot plate and allowed to harden slowly, over a period of hours under a moderate heat.

(vi) Using extreme caution, the section is then polished. The surface of the polished grain mount is examined and re-examined throughout the polishing process to ensure that the individual grains are present at the surface of the plastic. Also, it is necessary to ensure that the grains are not too thin and in danger of being wiped off the glass slide.

Although the grains, as sent, are mounted in sequential numerical order, it is essential that grains of similar size be mounted on the same glass slide. In this way, the grains all appear at the polished surface simultaneously. If larger grains are mixed with smaller grains, the larger grains appear at the polished surface, while the smaller grains are still covered in plastic.

A consequence of these constraints of grain size variation is that the grains are not necessarily mounted and analyzed in numerical order. This requires that the analyses be re-assembled in numerical order. The benefits of mounting grains according to grain size, far outweigh the possible problems in data processing after generation of the initial microprobe mineral analyses.

The first and most important benefit of this mounting procedure is an overall efficiency which leads to a much faster turn around time. A greater number of grains can be mounted, polished and analyzed in a shorter period of time. This procedure eliminates the necessity of repeated polishing of the grain mounts, thereby minimizing the chance that some of the grains might be wiped off the glass slide.

(vi) As silicate mineral grains and plastic do not conduct electrical current, the next step in the process is to coat the polished grain mounts with a thin layer of carbon. To eliminate problems of differential conductivity, which can introduce some analytical error, the mineral standards are routinely cleaned on a polishing lap and the standards and polished grains mounts are coated simultaneously with carbon vapour in a vacuum evaporator-carbon coater.

(vii) It is extremely important that the proper grains be easily located and identified once the polished and carbon-coated grain mounts are in the sample chamber of the electron microprobe. A map of each polished grain mount is made and with the aid of a binocular microscope each grain number is written directly into the carbon-coated surface with a scribe. This scribing process

perturbs the conductivity of the thin layer of carbon, and the number is easily seen using the secondary electron detector on the microprobe.

(viii) The final step is analysis of the individual, carbon-coated mineral grains. All mineral analyses are produced by R. L. Barnett using a Model JXA-733 JEOL electron microprobe in the laboratory of R. L. Barnett Geological Consulting Inc. This microprobe is equipped with five wavelength spectrometers and a Tracor Northern EDS, spectrometer and stage automation system.

R. L. Barnett has over 25 years experience with electron microprobe analytical techniques and was Director of the Electron Microprobe Analytical Laboratory at The University of Western Ontario from 1973-1994. The mineral standards used as a basis for the mineral analyses have been assembled by R. L. Barnett over the last 20 years, and during this interval, have been the basis for hundreds of theses and scientific papers. These mineral standards have been obtained from various places such as the Geophysical Laboratory and Smithsonian Institution in Washington. Most recently, R. L. Barnett obtained clinopyroxene and chrome-pyrope mineral standards used by Dr. Nickolai Sobolev.

Electron microprobe mineral analysis is a comparative analytical technique in which the x-ray yields of mineral standards of accurately known composition are compared with the x-ray yields of the unknown minerals. It is important that appropriate standards be used for each unknown mineral species, to minimize certain inequities in the data reduction programs. Garnet reference standards are used for pyrope mineral analyses, clinopyroxene standards for unknown clinopyroxenes, ilmenite for ilmenite and chromite for chromite, etc.

A backscattered electron detector, BSE, on the electron microprobe is used to examine in detail, the surface and possible compositional variation on the polished surface of each mineral grain. The backscattered electron detector displays by variation in grey level intensity on a CRT screen. The variation in mean atomic number of the area rastered by the electron beam reflects compositional variation. Using the backscattered electron detector, the surface of each grain is examined at a magnification range of 40-2000 times in an attempt to identify and avoid mineral inclusions and fine-scale cracks that might perturb the electron beam - sample interaction and lead to analytical error.

Throughout the entire analytical procedure, all attempts are made to ensure reproducibility and analytical accuracy. Special attention is given to chrome and the reference mineral standards are repeatedly and intermittently analyzed to ensure optimum accuracy.

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EMP Analyses
Settlement Surveys, New Liskeard

Analyses By:
R.L. Barnett Geological Consulting Inc.

Sampchar	Grainno	SiO2	Al2O3	TiO2	Cr2O3	FeO	MgO	MnO	CaO	Na2O	Sum	Min-id Statistical Mineral Group
97-1A	1	53.71	0.96	0.28	1.04	4.73	17.21	0.04	21.13	0.50	99.62	CPX_02_DIOPSIDE_>ONE_S.D.
97-1B	1	54.66	2.20	0.00	1.60	1.35	16.29	0.00	22.19	1.60	99.90	CPX_05_CHROME_DIOPSIDE_>ONE_S.D.
97-1B	2	54.11	0.83	0.23	1.13	5.12	18.35	0.10	19.39	0.49	99.77	CPX_02_UNKNOWN
97-1B	3	0.00	13.22	1.41	44.12	34.83	4.38	0.56	0.00	0.00	99.11	CHROMITE
97-2	1	55.06	0.79	0.28	0.92	4.84	18.07	0.06	20.09	0.42	100.55	CPX_02_UNKNOWN
97-2	2	41.03	22.78	1.04	0.07	12.21	16.78	0.29	5.55	0.08	99.83	G_02_HIGH_TITANIUM_PYROPE_>ONE_S.D.
97-3A	1	54.64	1.35	0.01	1.02	2.82	16.25	0.04	23.26	0.77	100.17	CPX_05_CHROME_DIOPSIDE_>ONE_S.D.
97-3A	2	55.27	0.38	0.11	2.33	2.41	15.82	0.00	21.86	1.76	99.94	CPX_05_UNKNOWN
97-4A	1	41.90	22.16	0.00	3.58	7.00	20.43	0.40	4.47	0.00	99.94	G_09_CHROME_PYROPE_>ONE_S.D.
97-4A	2	55.09	4.01	0.16	0.80	4.42	17.55	0.05	15.41	2.44	99.96	CPX_02_DIOPSIDE_>ONE_S.D.
97-4A	3	54.16	0.76	0.31	0.94	5.42	18.17	0.11	19.21	0.42	99.51	CPX_02_UNKNOWN
97-4A	4	55.10	1.83	0.04	1.69	1.81	15.92	0.01	21.36	1.78	99.56	CPX_05_CHROME_DIOPSIDE
97-4A	5	55.10	2.08	0.25	1.46	3.40	18.79	0.01	16.80	1.70	99.64	CPX_02_UNKNOWN
97-4A	6	53.57	1.17	0.19	0.89	2.61	16.57	0.04	23.89	0.62	99.57	CPX_05_UNKNOWN
97-4A	7	41.13	0.00	0.00	0.00	6.82	51.34	0.00	0.00	0.00	99.62	OLIVINE_Fo_#
97-4A	8	41.13	0.00	0.01	0.00	7.14	51.54	0.06	0.00	0.01	100.29	OLIVINE_Fo_#
97-4A	9	41.07	0.02	0.00	0.00	6.98	51.54	0.06	0.00	0.00	100.06	OLIVINE_Fo_#
97-4A	10	41.02	0.00	0.00	0.00	7.79	50.67	0.07	0.00	0.00	99.84	OLIVINE_Fo_#
97-4A	11	40.41	0.00	0.00	0.00	10.31	48.52	0.01	0.00	0.00	99.56	OLIVINE_Fo_#
97-4B	1	54.34	1.02	0.30	0.96	5.07	17.56	0.11	19.91	0.51	99.79	CPX_02_DIOPSIDE_>ONE_S.D.
97-4B	2	41.18	0.00	0.00	0.00	7.87	50.47	0.05	0.00	0.00	99.92	OLIVINE_Fo_#
97-5A	1	42.19	21.65	0.00	4.22	6.65	20.76	0.34	4.32	0.00	100.13	G_10_LOW_CALCIUM_CHROME_PYROPE_>ONE_S.D.
97-5A	2	54.28	0.89	0.35	1.07	5.04	17.93	0.09	20.13	0.51	100.30	CPX_02_UNKNOWN
97-5A	3	54.67	0.83	0.29	0.70	4.85	18.07	0.05	20.39	0.40	100.27	CPX_02_UNKNOWN
97-5A	4	54.09	1.20	0.45	0.73	6.02	17.28	0.10	19.75	0.46	100.10	CPX_04_UNKNOWN
97-5A	5	54.13	0.84	0.34	0.75	5.50	18.01	0.07	20.07	0.52	100.24	CPX_04_UNKNOWN
97-5A	9	0.00	11.27	0.82	50.99	26.18	9.49	0.35	0.00	0.00	99.32	PICRO_CHROMITE
97-5A	12	38.58	22.87	0.06	0.12	26.00	8.70	0.56	2.81	0.01	99.71	G_05_MAGNESIAN_ALMANDINE_>ONE_S.D.
97-6	1	42.36	23.10	0.00	2.97	6.49	21.63	0.28	3.02	0.00	99.85	G_09_CHROME_PYROPE_>ONE_S.D.
97-6	3	41.79	22.53	0.01	3.05	8.38	19.30	0.40	5.03	0.00	100.49	G_09_CHROME_PYROPE_>ONE_S.D.
97-6	4	41.78	21.80	0.02	4.02	7.46	19.48	0.42	4.84	0.00	99.82	G_09_CHROME_PYROPE_>ONE_S.D.
97-6	5	42.22	21.51	0.00	4.13	7.14	19.78	0.46	5.04	0.00	100.28	G_09_CHROME_PYROPE_>ONE_S.D.
97-6	6	41.71	20.51	0.22	5.62	5.78	20.72	0.25	5.37	0.00	100.18	G_10_LOW_CALCIUM_CHROME_PYROPE_>ONE_S.D.
97-6	7	41.64	21.83	0.05	3.86	7.35	19.61	0.41	5.25	0.00	100.00	G_09_CHROME_PYROPE_>ONE_S.D.

KENNECOTT CANADA EXPLORATION INC

Mineral Processing Laboratory
1300 West Walsh St.
Thunder Bay, Ontario, Canada P7E 4X4
Phone (807)473-5558 Fax (807) 473-5660

EMP Analyses
Settlement Surveys, New Liskeard

Analyses By:
R.L. Barnett Geological Consulting Inc.

Sampchar	Grainno	SiO2	Al2O3	TiO2	Cr2O3	FeO	MgO	MnO	CaO	Na2O	Sum	Min-id Statistical Mineral Group
97-6	8	41.68	21.56	0.00	4.57	7.16	19.40	0.41	4.84	0.00	99.62	G_10_LOW_CALCIUM_CHROME_PYROPE_>ONE_S.D.
97-6	9	41.40	21.29	0.10	4.32	8.62	18.42	0.41	5.92	0.00	100.48	G_09_CHROME_PYROPE
97-6	10	41.57	21.31	0.02	4.91	6.76	19.76	0.46	5.27	0.00	100.06	G_10_LOW_CALCIUM_CHROME_PYROPE_>ONE_S.D.
97-6	11	41.06	22.70	0.03	2.98	8.91	18.81	0.44	4.93	0.00	99.86	G_09_CHROME_PYROPE_>ONE_S.D.
97-6	12	41.79	22.14	0.37	2.65	7.47	20.73	0.25	4.69	0.00	100.09	G_01_TITANIAN_PYROPE_>ONE_S.D.
97-6	13	37.95	22.12	0.05	0.00	29.28	6.64	1.03	2.73	0.02	99.82	G_05_MAGNESIAN_ALMANDINE
97-6	14	42.57	21.72	0.33	3.04	6.64	20.70	0.27	4.76	0.00	100.03	G_09_CHROME_PYROPE_>ONE_S.D.
97-6	15	41.58	22.37	0.87	0.68	10.87	18.46	0.37	4.69	0.12	100.01	G_02_HIGH_TITANIUM_PYROPE_>ONE_S.D.
97-6	16	54.88	0.43	0.15	1.43	2.01	16.71	0.00	23.42	1.12	100.16	CPX_05_UNKNOWN
97-6	17	54.90	2.22	0.00	2.82	1.59	15.25	0.00	20.42	2.50	99.72	CPX_06_UNKNOWN
97-6	18	54.82	1.28	0.15	2.29	1.73	15.86	0.03	21.76	1.80	99.74	CPX_05_CHROME_DIOPSIDE_>ONE_S.D.
97-6	19	54.81	1.87	0.32	2.02	2.70	16.53	0.04	19.56	2.09	99.96	CPX_06_UREYITIC_DIOPSIDE
97-6	20	55.30	0.58	0.07	2.79	2.45	15.82	0.00	21.30	2.12	100.44	CPX_06_UNKNOWN
97-6	21	54.70	0.77	0.12	2.89	2.27	15.63	0.01	21.58	1.92	99.91	CPX_06_UNKNOWN
97-6	22	54.59	1.49	0.00	1.00	1.40	16.97	0.00	23.50	1.02	99.98	CPX_05_UNKNOWN
97-6	23	55.03	1.57	0.02	1.09	1.49	16.62	0.02	23.10	1.31	100.27	CPX_05_CHROME_DIOPSIDE_>ONE_S.D.
97-6	24	54.58	2.29	0.01	1.59	1.61	16.10	0.02	22.35	1.55	100.12	CPX_05_CHROME_DIOPSIDE_>ONE_S.D.
97-6	25	55.10	0.56	0.11	1.48	2.66	16.15	0.00	23.17	1.30	100.55	CPX_05_UNKNOWN
97-6	26	53.75	0.96	0.31	1.18	5.46	18.17	0.06	19.77	0.53	100.20	CPX_02_DIOPSIDE_>ONE_S.D.
97-6	27	55.14	3.96	0.19	0.78	4.15	17.52	0.02	15.72	2.46	99.96	CPX_02_DIOPSIDE_>ONE_S.D.
97-6	28	54.86	3.22	0.25	0.85	4.07	17.84	0.08	16.31	2.23	99.74	CPX_02_DIOPSIDE_>ONE_S.D.
97-6	29	0.00	0.35	49.02	0.63	40.00	7.82	0.24	0.00	0.00	98.27	PICRO_ILMENITE
97-6	30	0.00	0.27	49.92	0.62	38.96	8.21	0.20	0.00	0.00	98.38	PICRO_ILMENITE
97-6	31	0.01	0.45	49.78	0.09	39.09	8.57	0.24	0.00	0.00	98.33	PICRO_ILMENITE
97-6	32	0.00	0.56	53.48	0.07	32.93	11.92	0.19	0.00	0.00	99.39	PICRO_ILMENITE
97-6	35	0.01	0.46	50.19	0.13	38.90	8.45	0.27	0.00	0.00	98.56	PICRO_ILMENITE
97-6	38	0.00	0.45	50.94	0.08	38.84	8.52	0.32	0.00	0.00	99.41	PICRO_ILMENITE
97-6	42	58.00	0.91	0.00	0.30	3.67	36.54	0.00	0.11	0.06	99.70	CPX_05_UNKNOWN
97-6	43	57.81	0.95	0.00	0.29	4.60	35.83	0.04	0.16	0.04	99.81	CPX_05_UNKNOWN
97-6	44	57.84	0.75	0.05	0.20	3.93	36.73	0.04	0.21	0.04	99.89	CPX_05_UNKNOWN
97-6	45	57.81	1.00	0.00	0.23	4.84	36.05	0.02	0.18	0.02	100.24	CPX_05_UNKNOWN
97-7	2	54.50	0.73	0.29	0.82	5.43	18.34	0.09	19.03	0.48	99.72	CPX_02_UNKNOWN
97-7	3	54.45	0.84	0.20	0.56	4.64	17.75	0.10	21.38	0.24	100.18	CPX_02_UNKNOWN
97-8	1	41.61	22.27	0.00	3.77	7.69	19.18	0.38	5.12	0.00	100.02	G_09_CHROME_PYROPE_>ONE_S.D.

KENNECOTT CANADA EXPLORATION INC

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1300 West Walsh St.
Thunder Bay, Ontario, Canada P7E 4X4
Phone (807)473-5558 Fax (807) 473-5660

EMP Analyses
Settlement Surveys, New Liskeard

Analyses By:
R.L. Barnett Geological Consulting Inc.

Sampchar	Grainno	SiO2	Al2O3	TiO2	Cr2O3	FeO	MgO	MnO	CaO	Na2O	Sum	Min-id Statistical Mineral Group
97-8	2	41.25	19.09	0.11	7.07	6.38	18.97	0.39	6.39	0.00	99.65	G_10_LOW_CALCIUM_CHROME_PYROPE_>ONE_S.D.
97-8	3	41.41	18.82	0.11	7.18	6.64	19.03	0.23	6.59	0.00	100.01	G_10_LOW_CALCIUM_CHROME_PYROPE_>ONE_S.D.
97-8	4	41.16	18.80	0.12	7.16	6.66	18.97	0.37	6.33	0.00	99.57	G_10_LOW_CALCIUM_CHROME_PYROPE_>ONE_S.D.
97-8	7	55.57	0.63	0.13	2.42	2.33	15.89	0.00	21.62	1.92	100.53	CPX_05_UNKNOWN
97-8	8	53.95	1.61	0.14	1.11	2.63	16.39	0.00	23.58	0.78	100.19	CPX_05_UNKNOWN
97-8	10	0.00	0.53	51.05	0.12	37.74	9.34	0.27	0.00	0.00	99.38	PICRO_ILMENITE
97-8	12	0.00	13.00	0.44	53.73	21.83	10.61	0.35	0.00	0.00	100.35	PICRO_CHROMITE
97-8	13	0.00	12.56	0.54	54.45	19.58	12.39	0.24	0.00	0.00	100.01	PICRO_CHROMITE
97-8	14	0.00	10.87	0.48	55.98	21.96	10.15	0.37	0.00	0.00	100.19	PICRO_CHROMITE
97-8	16	0.00	26.69	1.32	36.78	19.65	15.24	0.20	0.00	0.00	100.09	SUB_PICRO_CHROMITE
97-8	17	0.02	12.05	0.45	52.86	25.39	8.55	0.39	0.00	0.00	100.00	PICRO_CHROMITE
97-9	1	41.09	20.95	0.00	4.94	7.24	19.62	0.42	5.52	0.00	99.78	G_09_CHROME_PYROPE_>ONE_S.D.
97-9	2	41.16	22.23	0.04	3.40	8.20	19.70	0.48	5.11	0.00	100.32	G_09_CHROME_PYROPE_>ONE_S.D.
97-9	3	54.67	3.56	0.14	2.90	1.31	14.54	0.01	19.68	3.09	99.91	CPX_06_UNKNOWN
97-10	1	41.01	19.70	0.43	6.19	7.48	19.44	0.42	5.47	0.00	100.14	G_11_UVAROVITE_PYROPE_>ONE_S.D.
97-10	2	54.17	0.86	0.26	1.11	5.44	18.99	0.13	18.66	0.55	100.17	CPX_02_UNKNOWN
97-10	3	53.78	1.01	0.34	1.10	5.59	18.57	0.10	18.86	0.53	99.89	CPX_02_DIOPSIDE_>ONE_S.D.
97-10	4	53.55	0.89	0.32	1.16	5.34	18.34	0.10	19.51	0.54	99.77	CPX_02_UNKNOWN
97-11	1	0.00	12.87	0.39	56.08	15.84	14.49	0.19	0.00	0.00	100.08	PICRO_CHROMITE
97-12	1	54.58	3.27	0.18	2.53	1.48	14.99	0.00	20.27	2.43	99.75	CPX_05_CHROME_DIOPSIDE_>ONE_S.D.
97-13	1	54.86	2.51	0.14	2.10	1.39	15.72	0.00	21.42	2.00	100.15	CPX_05_CHROME_DIOPSIDE_>ONE_S.D.
97-13	2	55.09	2.40	0.12	2.18	1.28	16.01	0.01	21.27	2.05	100.42	CPX_05_CHROME_DIOPSIDE_>ONE_S.D.
97-14	1	54.90	1.80	0.11	3.02	1.59	15.29	0.00	20.85	2.60	100.18	CPX_06_UNKNOWN
97-14	2	54.98	3.97	0.04	2.50	1.41	14.42	0.00	19.44	3.01	99.77	CPX_05_CHROME_DIOPSIDE_>ONE_S.D.
97-14	3	55.06	0.46	0.15	2.63	1.81	16.17	0.00	22.39	1.75	100.43	CPX_05_UNKNOWN
97-14	4	55.40	1.93	0.05	2.29	2.52	16.30	0.03	19.77	2.12	100.42	CPX_06_UREYITIC_DIOPSIDE
97-14	5	54.54	2.78	0.16	2.78	1.41	14.99	0.03	20.48	2.66	99.85	CPX_05_CHROME_DIOPSIDE_>ONE_S.D.
97-15	1	0.01	0.64	53.93	0.27	33.24	11.07	0.18	0.00	0.00	99.54	PICRO_ILMENITE
97-15	3	0.01	4.03	1.58	43.90	41.45	6.47	0.52	0.00	0.00	98.65	SUB_PICRO_CHROMITE

Ontario Ministry of Northern Development and Mines

Declaration of Assessment Work Performed on Mining Land

Mining Act, Subsection 65(2) and 66(3), R.S.O. 1990

Transaction Number (office use)
W9880.00173
Assessment Files Research Imaging

31M12SW2002 2.18232 LUNDY 900

y of subsections 65(2) and 66(3) of the Mining Act. Under section 8 of the to review the assessment work and correspond with the mining land holder. ıg Recorder, Ministry of Northern Development and Mines, 6th Floor,

Instructions: - For work performed on Crown Lands before **recording** a claim, use form 0240.
- Please type or print in ink.

2.18232

1. Recorded holder(s) (Attach a list if necessary)

email jpollock@onlink.net

Name	Client Number
JOHN W POLLOCK	301410
Address	**Telephone Number**
17 WELLINGTON ST. N., P.O. Box 2529	705-647-8833
NEW LISKEARD, ONTARIO P0J 1P0	Fax Number 705-647-7026
Name	Client Number
Address	Telephone Number
	Fax Number

2. Type of work performed: Check (✓) and report on only ONE of the following groups for this declaration.

☑ Geotechnical: prospecting, surveys, assays and work under section 18 (regs) ☐ Physical: drilling, stripping, trenching and associated assays ☐ Rehabilitation

Work Type	Office Use
Till sampling, heavy mineral processing, microscopy and electron microprobe analysis	Commodity
	Total $ Value of Work Claimed 6,552
Dates Work Performed From 17 05 97 (Day / Month / Year) To 16 10 97 (Day / Month / Year)	NTS Reference
Global Positioning System Data (if available) Township/Area LUNDY	Mining Division Larder Lake
M or G-Plan Number G 3439	Resident Geologist District Kirkland Lake

Please remember to: - obtain a work permit from the Ministry of Natural Resources as required;
- provide proper notice to surface rights holders before starting work;
- complete and attach a Statement of Costs, form 0212;
- provide a map showing contiguous mining lands that are linked for assigning work;
- include two copies of your technical report.

RECEIVED
MAR 17 1998 10:15
GEOSCIENCE ASSESSMENT OFFICE

3. Person or companies who prepared the technical report (Attach a list if necessary)

Name	Telephone Number
John Pollock	705-647-8833
Address	**Fax Number**
Box 2529 New Liskeard Ont P0J 1P0	705-647-7026
Name Robert Dillmar Geological Services	Telephone Number 519-264-9278
Address 8401 Reilly Drive, Mount Brydges Ont	Fax Number 519-264-9278
Name K. Kivi, Kennecott Canada Exploration Inc.	Telephone Number 807-473-5558
Address 1300 West Walsh St. Thunder Bay, Ontario P7E 4X4	Fax Number 807-473-5660

4. Certification by Recorded Holder or Agent

I, John W. Pollock (Print Name), do hereby certify that I have personal knowledge of the facts set forth in this Declaration of Assessment Work having caused the work to be performed or witnessed the same during or after its completion and, to the best of my knowledge, the annexed report is true.

Signature of Recorded Holder or Agent		Date
John Pollock		March 16, 1998
Agent's Address	**Telephone Number**	**Fax Number**
Box 2529 New Liskeard Ont P0J 1P0	705-647-8833	705-647-7026

0241 (02/96)

Deemed June 15/98

5. Work recorded and distributed [illegible] was performed [illegible]

Mining Claim Number. Or if work was done on other eligible mining land, show in this column the location number indicated on the claim map.		Number of Claim Units. For other mining land, list hectares.	Value of work performed on this claim or other mining land.	Value of work applied to this claim.	Value of work assigned to other mining claims.	Bank. Value of work to be distributed at a future date.
eg	TB 7827	16 ha	$26, 825	N/A	$24,000	$2,825
eg	1234567	12	0	$24,000	0	0
eg	1234568	2	$ 8, 892	$ 4,000	0	$4,892
1	1212048	16	6,552.00	6,552.00	~~0~~	~~0~~
2						
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12						
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14						
15						
		Column Totals				

I, John W. Pollock (Print Full Name), do hereby certify that the above work credits are eligible under subsection 7 (1) of the Assessment Work Regulation 6/96 for assignment to contiguous claims or for application to the claim where the work was done.

Signature of Recorded Holder or Agent Authorized in Writing	Date
John Pollock	March 16/98

6. Instructions for cutting back credits that are not approved.

Some of the credits claimed in this declaration may be cut back. Please check (✓) in the boxes below to show how you wish to prioritize the deletion of credits:

- ☐ 1. Credits are to be cut back from the Bank first, followed by option 2 or 3 or 4 as indicated.
- ☐ 2. Credits are to be cut back starting with the claims listed last, working backwards; or
- ☑ 3. Credits are to be cut back equally over all claims listed in this declaration; or
- ☐ 4. Credits are to be cut back as prioritized on the attached appendix or as follows (describe):

Note: If you have not indicated how your credits are to be deleted, credits will be cut back from the Bank first, followed by option number 2 if necessary.

For Office Use Only

Received Stamp

RECEIVED
MAR 17 1998
GEOSCIENCE ASSESSMENT OFFICE

Deemed Approved Date	Date Notification Sent
Date Approved	Total Value of Credit Approved
Approved for Recording by Mining Recorder (Signature)	

0241 (02/96)

Ontario Ministry of Northern Development and Mines

Statement of Costs for Assessment Credit

Transaction Number (office use)
W9880.00173

Personal information collected on this form is obtained under the authority of subsection 6(1) of the Assessment Work Regulation 6/96. Under section 8 of the Mining Act, the information is a public record. This information will be used to review the assessment work and correspond with the mining land holder. Questions about this collection should be directed to the Chief Mining Recorder, Ministry of Northern Development and Mines, 6th Floor, 933 Ramsey Lake Road, Sudbury, Ontario, P3E 6B5.

2.18232

Work Type	Units of Work Depending on the type of work, list the number of hours/days worked, metres of drilling, kilometres of grid line, number of samples, etc.	Cost Per Unit of work	Total Cost
collecting till samples	19	150	2,850.00
(22 samples collected -			
10 sent for analysis)			
Associated Costs (e.g. supplies, mobilization and demobilization).			
(1) R. Dillman Geological Services, Mount Brydges, Ont.			
heavy mineral sample processing, microscopy and microprobe		5 X 238.94*	1,194.70
(2) Kennecott Canada Exploration Inc. - Thunder Bay, Ont.			
heavy mineral processing, microscopy and microprobe		5 X 322.22	1,611.10
* microprobe costs not included			
Transportation Costs			
(1) 2 trucks - 8 return trips to Lundy Twp from N.L.			
8 X 40 = 320 km at .30 ¢/km			
~~**Food and Lodging Costs**~~			
(2) 5 days ATC use		5 X 60	300.00
(3) 5 days ARGO use		5 X 100	500.00
		Total Value of Assessment Work	6,552.00

RECEIVED
MAR 17 1998
GEOSCIENCE ASSESSMENT OFFICE

Calculations of Filing Discounts:

1. Work filed within two years of performance is claimed at 100% of the above Total Value of Assessment Work.
2. If work is filed after two years and up to five years after performance, it can only be claimed at 50% of the Total Value of Assessment Work. If this situation applies to your claims, use the calculation below:

TOTAL VALUE OF ASSESSMENT WORK × 0.50 = Total $ value of worked claimed.

Note:
- Work older than 5 years is not eligible for credit.
- A recorded holder may be required to verify expenditures claimed in this statement of costs within 45 days of a request for verification and/or correction/clarification. If verification and/or correction/clarification is not made, the Minister may reject all or part of the assessment work submitted.

Certification verifying costs:

I, John W. Pollock (please print full name), do hereby certify, that the amounts shown are as accurate as may reasonably be determined and the costs were incurred while conducting assessment work on the lands indicated on the accompanying Declaration of Work form as recorded holder (recorded holder, agent, or state company position with signing authority) I am authorized to make this certification.

Signature	Date
John Pollock	March 16/1998

0212 (02/96)

Ministry of
Northern Development
and Mines

Ministère du
Développement du Nord
et des Mines

Ontario

Geoscience Assessment Office
933 Ramsey Lake Road
6th Floor
Sudbury, Ontario
P3E 6B5

Telephone: (888) 415-9846
Fax: (705) 670-5881

Visit our website at:
www.gov.on.ca/MNDM/MINES/LANDS/mlsmnpge.htm

June 2, 1998

JOHN W. POLLOCK
17 WELLINGTON STREET NORTH
PO BOX 2529
NEW LISKEARD, ONTARIO
P0J-1P0

Dear Sir or Madam:

Submission Number: 2.18232

Subject: Transaction Number(s):		**Status**
	W9880.00173	Deemed Approval

We have reviewed your Assessment Work submission with the above noted Transaction Number(s). The attached summary page(s) indicate the results of the review. WE RECOMMEND YOU READ THIS SUMMARY FOR THE DETAILS PERTAINING TO YOUR ASSESSMENT WORK.

If the status for a transaction is a 45 Day Notice, the summary will outline the reasons for the notice, and any steps you can take to remedy deficiencies. The 90-day deemed approval provision, subsection 6(7) of the Assessment Work Regulation, will no longer be in effect for assessment work which has received a 45 Day Notice. Allowable changes to your credit distribution can be made by contacting the Geoscience Assessment Office within this 45 Day period, otherwise assessment credit will be cut back and distributed as outlined in Section #6 of the Declaration of Assessment work form.

Please note any revisions must be submitted in DUPLICATE to the Geoscience Assessment Office, by the response date on the summary.

If you have any questions regarding this correspondence, please contact Steve Beneteau by e-mail at benetest@epo.gov.on.ca or by telephone at (705) 670-5855.

Yours sincerely,

ORIGINAL SIGNED BY
Blair Kite
Supervisor, Geoscience Assessment Office
Mining Lands Section

Correspondence ID: 12363
Copy for: Assessment Library

Work Report Assessment Results

Submission Number: 2.18232

Date Correspondence Sent: June 02, 1998 **Assessor:** Steve Beneteau

Transaction Number	First Claim Number	Township(s) / Area(s)	Status	Approval Date
W9880.00173	1212048	LUNDY	Deemed Approval	June 02, 1998

Section:
17 Assays ASSAY
18 Other MICRO

Correspondence to:
Resident Geologist
Kirkland Lake, ON

Assessment Files Library
Sudbury, ON

Recorded Holder(s) and/or Agent(s):
JOHN W. POLLOCK
NEW LISKEARD, ONTARIO

Correspondence ID: 12363

Ministry of Natural Resources
Ontario
Ministry of Northern Development and Mines

geology reference-COBALT

RESIDENT GEO.

INDEX TO LAND DISPOSITION

PLAN
G-3439

TOWNSHIP
LUNDY

M.N.R. ADMINISTRATIVE DISTRICT
TEMAGAMI

MINING DIVISION
LARDER LAKE

LAND TITLES/REGISTRY DIVISION
TIMISKAMING

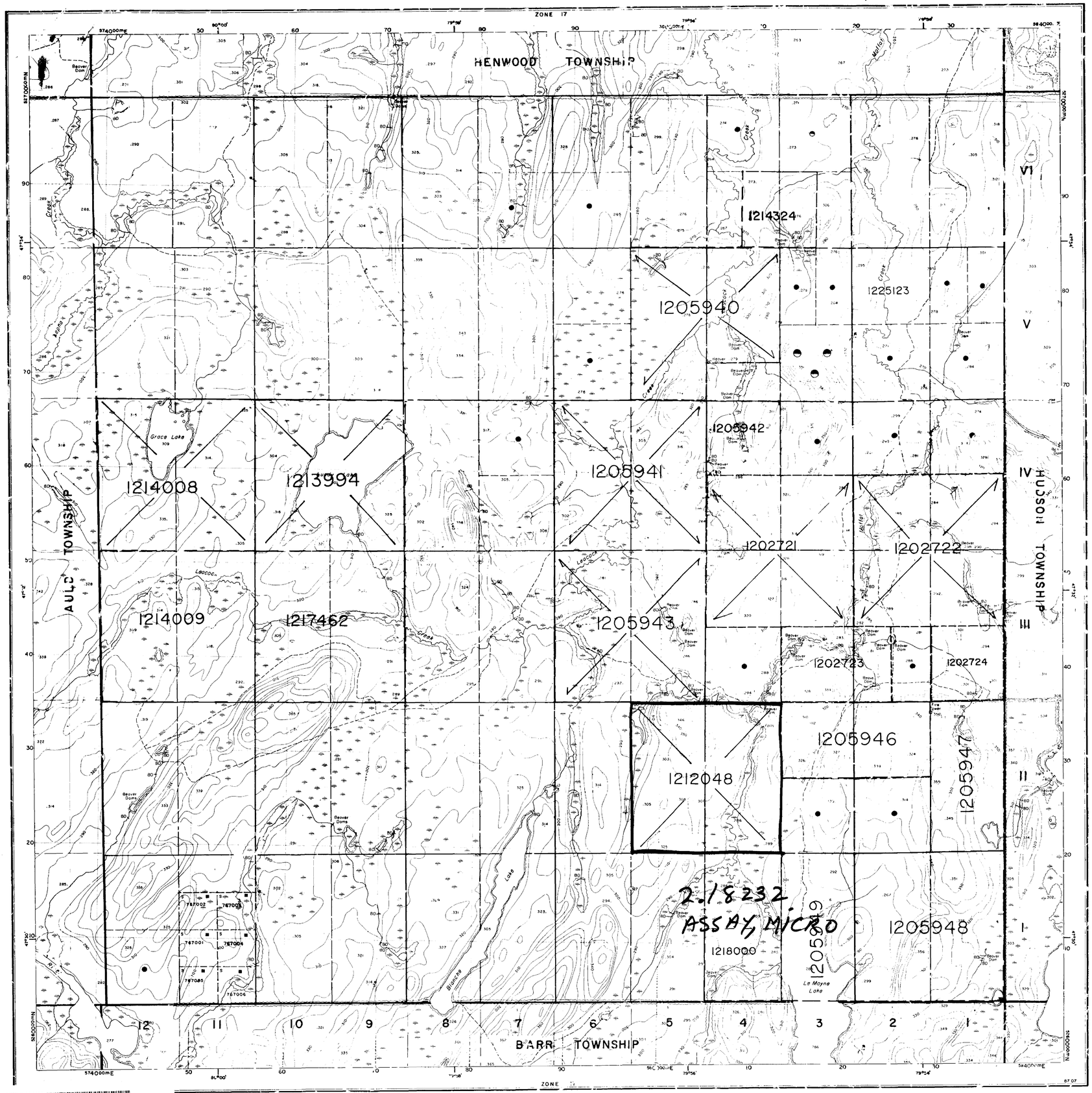
LUNDY

Scale 1:20 000

1000 Metres 0 1000 2000 Metres

1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000 Feet

Contour Interval 10 Metres



SYMBOLS

Boundary
- Township, Meridian, Base line
- Road allowance, surveyed
- shoreline
- Lot/Concession, surveyed
- unsurveyed
- Parcel; surveyed
- unsurveyed
- Right-of-way
- railway
- utility
- Reservation
- Cliff, Pit, Pile
- Contour
- Interpolated
- Approximate
- Depression
- Control point (horizontal)
- Flood land
- Mine shaft
- Pipeline (above ground)
- Railway; single track
- double track
- abandoned
- Road; highway, county, township
- access
- trail, bush
- Shoreline (original)
- Transmission line
- Wooded area

AREAS WITHDRAWN FROM DISPOSITION

MNR - Mining Rights Only
SRO Surface Rights Only
M + S - Mining and Surface Rights

Disposit	Order No.	Date	Disposition	File
SEC.36/80	W.2/83	25/2/83	S.R.O.	130540
SEC.35/80	W.11/85			
SEC.36/80	W.11/85			

ORDER NO.OL-18/96 NER OPENS W.11/85 NER

DISPOSITION OF CROWN LANDS

Patent
- Surface & Mining Rights
- Surface Rights Only
- Mining Rights Only

Lease
- Surface & Mining Rights
- Surface Rights Only
- Mining Rights Only

- Licence of Occupation
- Order-in-Council
- Cancelled
- Reservation
- Sand & Gravel

NOTICE OF FORESTRY ACTIVITY

THIS TOWNSHIP / AREA FALLS WITHIN THE _____ LATCHFORD MANAGEMENT UNIT
AND MAY BE SUBJECT TO FORESTRY OPERATIONS.
THE MNR UNIT FORESTER FOR THIS AREA CAN BE CONTACTED AT: P.O. BOX 38
LAKESHORE DRIVE
TEMAGAMI, ONT.
P0H 2H0
705-569-3622

DATE OF ISSUE

MAY 20 1998

PROVINCIAL RECORDING OFFICE - SUDBURY

THIS TOWNSHIP FALLS WITHIN THE TEMAGAMI COMPREHENSIVE PLANING AREA. SPECIAL WORKING CONDITIONS MAY APPLY TO EXPLORATION ACTIVITIES. FOR MORE DETAILS PLEASE CONTACT:
DISTRICT MANAGER,
NORTH BAY DISTRICT
MINISTRY, NATURAL RESOURCES

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES, AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.

CIRCULATED APRIL 19/88 **ARCHIVED APRIL 3, 1995**

ARCHIVED APRIL 18, 1997

Map base and land disposition drafting by Surveys and Mapping Branch, Ministry of Natural Resources.

The disposition of land, location of lot fabric and parcel boundaries on this index was compiled for administrative purposes only