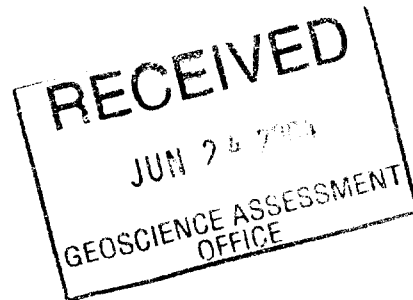




41P08NE2008 2.28006 KLOCK

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**REPORT ON
2003-2004 EXPLORATION
ON THE
KLOCK PROPERTY
LARDER LAKE MINING DIVISION,
NORTHEASTERN ONTARIO
of
SUDBURY CONTACT MINES LIMITED**



**NTS: 41 P/8
June 07, 2004**

**MPH Consulting Limited
P.Sobie, P. Geo.**

SUMMARY

The Klock Property, held by Sudbury Contact Mines Ltd., is located approximately 30 km west-southwest of the town of New Liskeard in northeastern Ontario. The property is presently composed of 68 unpatented mining claims (16,752 hectares) situated in Speight, Auld, Van Nostrand, Klock, Leo and Dane Townships, although this report documents work carried out on the original 32 claim block on the north shore of Lady Evelyn Lake. These claims were staked in 2002 on the basis of a few weakly anomalous till samples with kimberlitic indicator minerals (KIMs) that had been collected in the mid-1990's by Sudbury Contact.

In early February 2003, an airborne high-resolution magnetic survey was flown over the Klock Property which outlined some 88 anomalies of various rankings with characteristics similar to known kimberlite pipes in the Timiskaming area. A program of reconnaissance ground prospecting and till sampling was conducted on the property in September 2003 in order to evaluate some of the most attractive geophysical targets, and also to establish the general background abundances of KIMs.

Fifty-five till samples were collected on the Property, with about half located slightly down-ice of the centres of high-priority magnetic anomalies, and the rest located away from geophysical targets to establish background. The till samples were processed by SGS Lakefield Research and concentrates were forwarded to Mineral-Logic Diamond Exploration Consultancy in Cape Town for picking and probing, yielding positive results in many cases.

A GPS surveying crew was employed in winter 2004 in order to precisely locate the centres of the high-priority airborne anomalies and to facilitate follow-up ground magnetics for smaller targets. Out of these targets, three core drill holes were completed on the Klock Property in early April 2004, totalling 321.4 metres, before the early Spring break-up forced the suspension of operations. Two of the holes intersected new kimberlite discoveries, designated KL-01 and KL-22, while a third hole intersected diabase and granite. The two discoveries are especially significant in that they are the first to be found west of the Montreal River at Timiskaming, they are large (~5ha and ~9.5ha, respectively), relatively shallowly covered, and would appear to represent part of a larger cluster of intrusions based on several unexplained highly anomalous till samples. Also of course, KL-01 has been shown to be significantly diamond-bearing based on the discovery hole.

A total of ~\$335,000 has been expended on the property between August, 2003 and May, 2004. It is recommended that work continue evaluating the targets on the Klock Property and that the discoveries receive further drilling, and that the property be expanded significantly in order to capture the likely area of other kimberlite intrusions.

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 Grid Map, Target KL-27
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 Geophysical Survey Map (mag), Target KL-40

MAPS – Map Pocket

Grid Map, Property Overview

Map 1a	Compilation Map with Garnet Recoveries	Scale 1:25,000
Map 1b	Compilation Map with Ilmenite Recoveries	Scale 1:25,000
Map 1c	Compilation Map with Chrome Diopside Recoveries	Scale 1:25,000
Map 1d	Compilation Map with Chromite Recoveries	Scale 1:25,000

INTRODUCTION

The Klock Property is composed of a core group of 33 contiguous unpatented mining claims staked in 2002 (481 units) which covers approximately 7,696 hectares in the Klock, Van Nostrand, Leo and Dane Townships. The property has been greatly expanded in recent months to the north, west and east. The property is held 100% by Sudbury Contact Mines Limited.

In early February 2003, an airborne high-resolution magnetic survey was flown over the Klock Property which outlined some 88 anomalies of various rankings with characteristics similar to known kimberlite pipes in the Timiskaming area. A program of reconnaissance ground prospecting and till sampling was conducted on the property in September 2003 in order to evaluate some of the most attractive geophysical targets, and also to establish the general background abundances of KIMs.

Fifty-five till samples were collected on the Property, with about half located slightly down-ice of the centres of high-priority magnetic anomalies, and the rest located away from geophysical targets to establish background. The till samples were processed by SGS Lakefield Research and concentrates were forwarded to Mineral-Logic Diamond Exploration Consultancy in Cape Town for picking and probing, yielding positive results in many cases.

This report details the till sampling program, the follow-up ground magnetic surveys, and the limited core drilling program carried out on the Timiskaming Property between September 2003 and April 2004. The co-ordination and implementation of technical requirements was conducted by MPH Consulting Limited under the management supervision of P. Sobie. Till sampling was conducted by Kevin Montgomery, airborne and ground geophysics was supervised by Jeremy Brett, and the core drilling was supervised by Sharyn Alexander.

LOCATION AND ACCESS

The Klock Property covers 33 core claims on the north shore of Lady Evelyn Lake primarily in Klock and Van Nostrand Townships, Larder Lake Mining Division, northeastern Ontario. The property stretches to about 10km north of the lake, and is west of the Montreal River, approximately 30 km west-northwest of the town of New Liskeard (Figure 1).

The property can be reached by motor vehicle from paved Highway 65, connecting the town of New Liskeard with the village of Elk Lake. The Klock Property claims can be reached by way of Henwood Township Road 3 (Lundy Twp. Forest Access Road), which

SUDBURY CONTACT MINES LIMITED

TIMISKAMING DIAMOND PROJECT

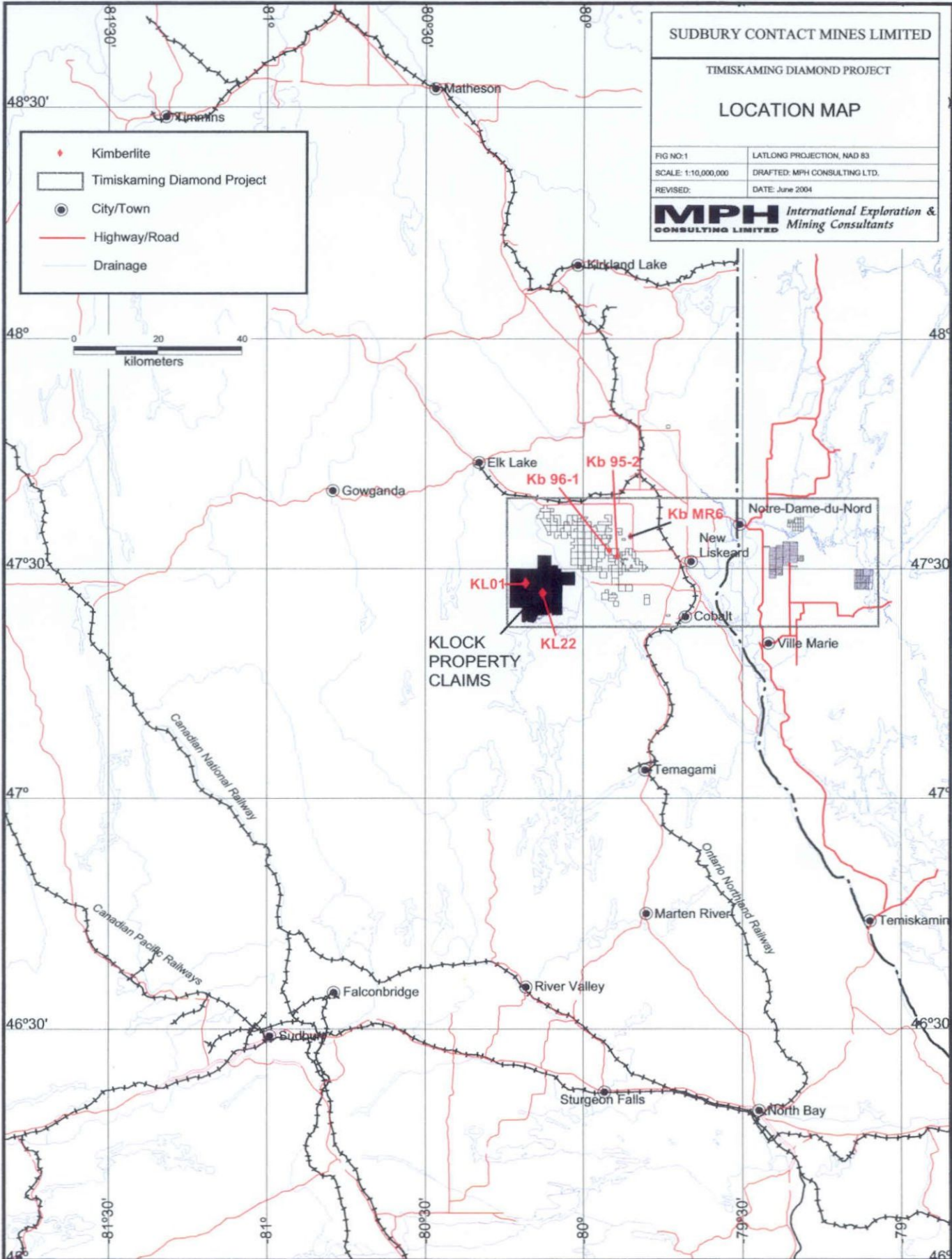
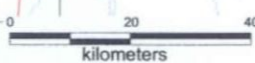
LOCATION MAP

FIG NO: 1
SCALE: 1:10,000,000
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LATLONG PROJECTION, NAD 83
DRAFTED: MPH CONSULTING LTD.
DATE: June 2004

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CONSULTING LIMITED

- ◆ Kimberlite
- Timiskaming Diamond Project
- City/Town
- Highway/Road
- Drainage

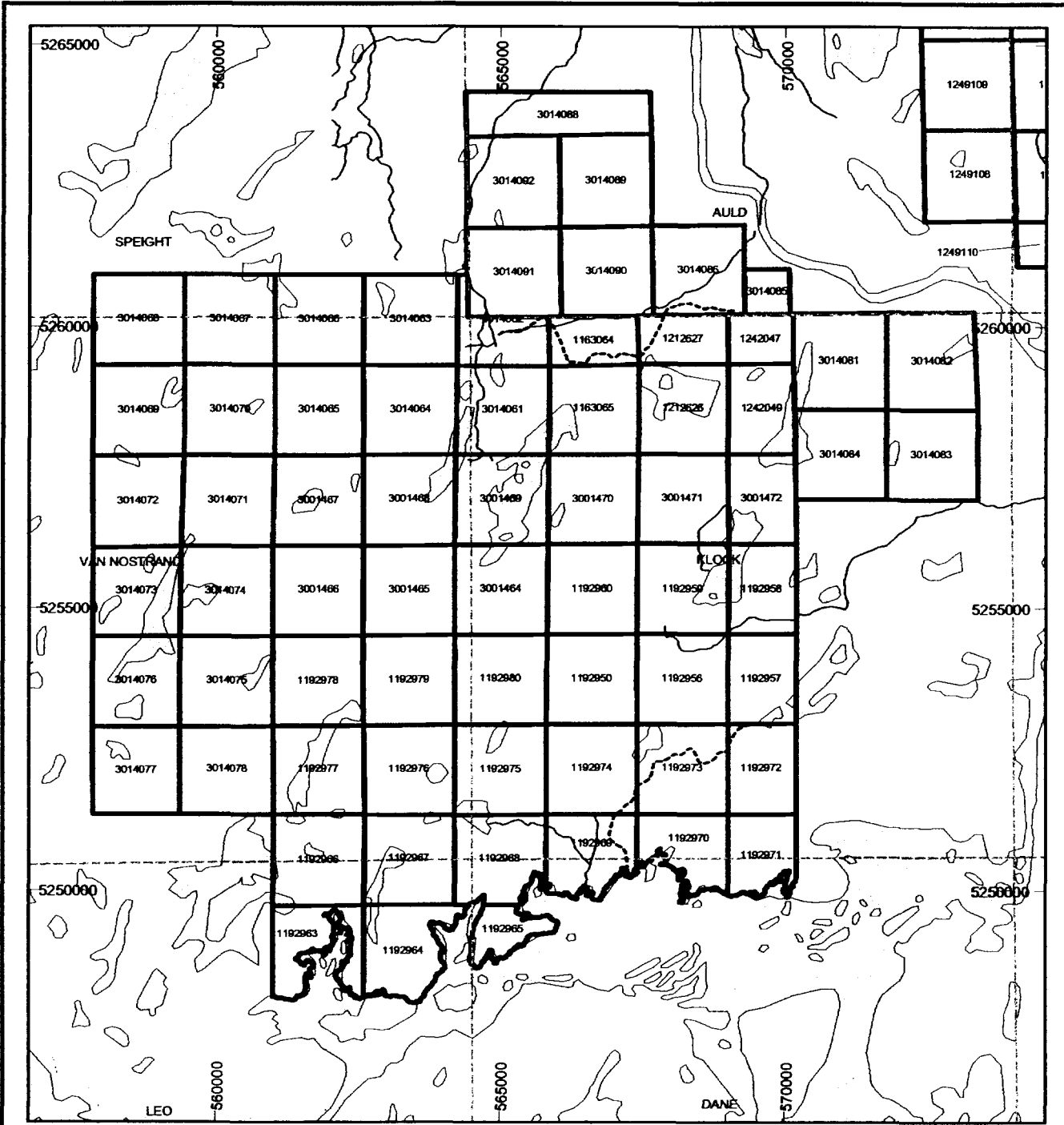


extends southward from Highway 65, cutting through the centre of the Sudbury Contacts Lundy claims to the Montreal River, where a controlled access bridge has been erected by the Elk Lake Planing Mill to access timber west of the river. A growing network of logging roads provides access to approximately half of the core claims, with skidoo trails and helicopter providing access to the rest. Sudbury Contact has arranged for bridge access until April 30th, 2005 although the bridge is not utilized between May 1st and October 31st, as per its Land Use Permit.

Much of the exploration described here-in was helicopter-supported due to the time of year that it occurred.

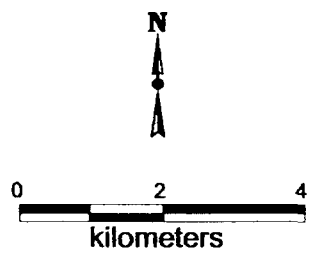
PROPERTY DESCRIPTION

The Klock Property is presently composed of 61 contiguous unpatented mining claims in Dane, Klock, Leo, Speight and Van Nostrand Townships (Figure 2). The property is currently being expanded, with staking nearing completion. A complete listing of the current claims (as of May 20, 2004) is provided in Appendix A.



LEGEND

- Sudbury Contact Mines Ltd. Unpatented Claim
- Sudbury Contact Mines Ltd. Patented Claim
- Highway
- Road
- Trail
- Railway
- Pipeline
- River
- Township Boundary
- Park



Sudbury Contact Mines Ltd.

Timiskaming Diamond Project, Ontario

**KLOCK PROPERTY
CLAIM BLOCK MAP**

FILE: clatblock.wor	FIGURE NO.: 2
SCALE: AS SHOWN	DRAFTED: MC
PROJ.: UTM Zone 17, NAD07	DATE: June 2004

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INCORPORATED IN CANADA

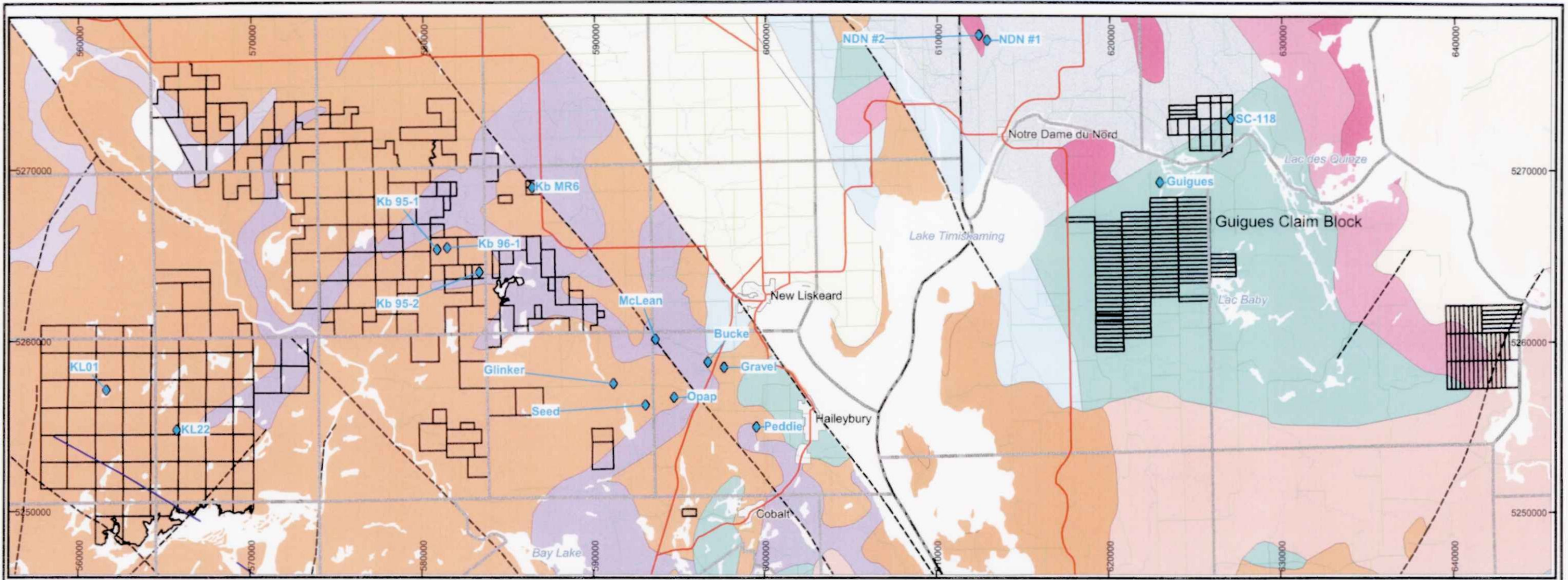
REGIONAL AND PROPERTY GEOLOGY

The property lies within the Archean Superior Province in the eastern Canadian Shield. The property area covers the Timiskaming portion of the Lake Timiskaming Structural Zone (LTSZ), a long-lived deep-seated northwest trending structure that hosts not only the Timiskaming kimberlite cluster, but also the Attawapiskat, Kyle Lake and Kirkland Lake kimberlite clusters (Montgomery, 2003).

Bedrock geology on the Klock Property has never been subjected to detailed government mapping to our knowledge, but regionally consists of two main classifications (Figure 3): Paleoproterozoic (~2450-2200Ma) Huronian Supergroup rocks consisting of tillites and sediments, and later intrusive Nipissing Diabase (~2200Ma) dykes and sills throughout the northeast portion of property. The SUD geophysics has confirmed that these intrusions follow preferential orientations along the main NW trend, in sympathy with, or occupying, the major fault zones of the Lake Timiskaming Structural Zone. The dykes are particularly prominent magnetic features. Both the dykes and sills are indicated by the property magnetics to be much more wide-spread than presently portrayed as on Fig. 3.

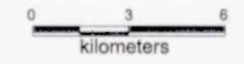
The Timiskaming kimberlite field lies to the east of the Klock Property area with four kimberlite pipes (MR-6, 95-1, 95-2 and 96-1) that comprise a distinct sub-cluster occur on Sudbury Contact's Ontario Timiskaming Property, due west of the town of New Liskeard. The Geological Survey of Canada has age-dated Sudbury Contact discovery Kimberlite 95-2 recently, arriving at 155.3+/-2.3 Ma from perovskite U-Pb analysis, which puts this kimberlite in the oldest intrusive event (Sobie, 2003). Seven other kimberlites occur 4-12 km southeast of the property and include the older Bucke, Gravel, Seed and Peddie pipes dated at ~153Ma, followed by the OPAP and McLean pipes at ~140Ma, with the Glinkers pipe dated at ~134Ma (Sobie, 2002).

Glacial and lacustrine deposits variably mantle all of the above rocks (Figure 4). In general, the area was covered by the Laurentide Ice Sheet that deposited a sandy/silty till during the main southwestward advances, thence southward and then southeastward minor advances during the deglaciation period. The majority of the area to the east and north of the property was submerged beneath glacial Lake Barlow between 9,500 and 8,000 years ago which deposited thick sequences of fine-grained lacustrine sediments that reach up to 60m thick (Sobie, 2002).



BEDROCK GEOLOGY LEGEND

JURASSIC ◆ Kimberlite	SOUTHERN and SUPERIOR PROVINCES EARLY PALEOZOIC TO NEOPROTEROZOIC (0.45 to 0.9 Ga) 34 Grenville swarm (~575 Ma): Diabase Dykes	SUPERIOR PROVINCE ARCHEAN Massive Granodiorite to Granite	NEO-TO MESOARCHEAN (2.5 to 3.4 Ga) Metasedimentary Rocks
SILURIAN □ Sandstone, Shale, Dolostone, Siltstone	PROTEROZOIC MESOPROTEROZOIC (0.9 to 1.6 Ga) Sudbury swarm (1238 Ma): Diabase Dykes	Diorite-monzonite-granodiorite suite	Felsic to intermediate metavolcanic
ORDVICIAN □ Shale, Limestone, Dolostone, Siltstone	PALEOPROTEROZOIC (1.6 to 2.5 Ga) Mafic and related intrusive rocks Nipissing diabase sills (2219 Ma)	Foliated tonalite suite:	Mafic to intermediate metavolcanic rocks
	HURONIAN SUPERGROUP (2.2 Ga to 2450 Ma) Cobalt Gp. :	Gneissic Tonalite Suite	Mafic to ultramafic metavolcanic rocks



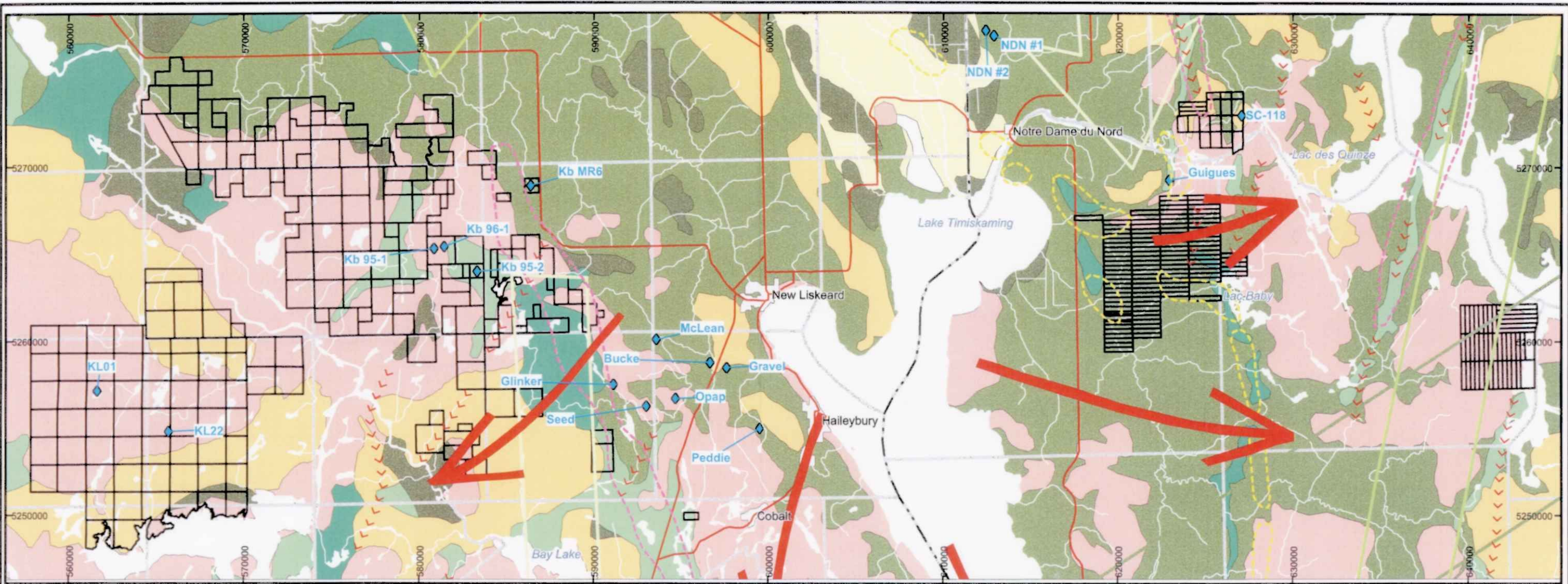
SUDBURY CONTACT MINES LIMITED

TIMISKAMING DIAMOND PROJECT

**REGIONAL
BEDROCK GEOLOGY**

FIG NO:3 UTM PROJECTION, NAD 27
 SCALE: as shown DRAFTED: MPH CONSULTING LTD.
 REVISED: DATE: JUNE 2004

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 CONSULTING LIMITED



GLACIAL DEPOSITS LEGEND

QUATERNARY

RECENT

Organic deposits: peat, muck and marl

Glaciomarine deposits: silt and clay,

Glaciofluvial outwash deposits: gravel and sand

Glaciofluvial ice-contact deposits: gravel and sand

Till: undifferentiated

Alluvial Deposits

PRECAMBRIAN

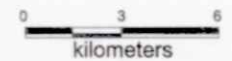
Bedrock: undifferentiated

GLACIAL FEATURES LEGEND

Esker Crest
Moraines; frontal, interlobate
Eskers, subaqueous fans, outwash

Ice Direction
Youngest
IV
III
II
I
Oldest

◆ Kimberlites
□ Sudbury Contact Mines Ltd. Claim
- - - Provincial Boundary



SUDBURY CONTACT MINES LIMITED

TIMISKAMING DIAMOND PROJECT

REGIONAL QUATERNARY GEOLOGY

FIG NO:4 UTM PROJECTION, NAD 27
SCALE: as shown DRAFTED: MPH CONSULTING LTD.
REVISED: DATE: JUNE 2004

MPH International Exploration & Mining Consultants
CONSULTING LIMITED

TILL SAMPLING PROCEDURE

The till sampling program consisted of a field crew headed by geologist Kevin Montgomery along with senior geological technician Robert Peever of MPH Consulting Limited. Till sampling was carried out in September 2003 on the Property. Sample sites were chosen to coincide with previously identified airborne magnetic targets. A total of 55 sites were visited and good quality till samples collected at all but two where lacustrine sands were encountered (Maps 1a-d). See Appendix B for site descriptions.

At each site, a small pit was dug between an average of 0.1 to 2.0 m in depth, and a 10-15 kg sample of till was collected below the soil. This till was field screened to -6 mm to remove oversized rock clasts and vegetation material. The field screened till samples were securely packaged in sealed white plastic pails and shipped from New Liskeard, Ontario, to SGS Lakefield Research located in Lakefield, Ontario. To ensure quality control, synthetic diamond spikes were added to random samples beforehand. The mineral concentrate was later shipped to Mineral-Logic Diamond Exploration Consultancy out of Cape Town, South Africa, for further analysis.

At SGS Lakefield Research, the samples were initially sieved to a -4 mm material concentrate. The -4 mm sieved till material was then processed to recover kimberlitic indicator minerals as well as gold grains according to their standard flowsheet. In essence the +2 mm material was screened off and stored, while the -2 mm material was sieved to obtain a -1 mm fraction, which was then concentrated by a combination of shaking table and heavy liquid separation. The tabled pre-concentrate was passed through diluted methylene iodide (S.G. of 3.1) to capture the kimberlitic indicator minerals, of which chrome diopside is the lightest with an S.G. of 3.1. A hand magnet was utilized to produce a ferromagnesian and a non-magnetic concentrate, which were then sieved to produce a -0.25 mm, and +0.25-0.5 mm, and a +0.5-1.0 mm fraction.

At Mineral-Logic, the various size and magnetic portions of each sample were re-combined to ensure standardization with the Mineral-Logic procedures. The samples were then weighed and sieved into four size fractions (+1000, +710, +425, and +250 microns), with each fraction being de-magnetized using a tailings test magnet. Each fraction was then weighed. The fractions, excluding the magnetic and -250 micron components, were then examined under a binocular microscope and any potentially kimberlitic indicator minerals recovered (Zweistra, 2004a).

TILL SAMPLING RESULTS AND DISCUSSION

The detailed analytical overview from Mineral-Logic can be found in Appendix C which includes reports detailing positive probing of the historical grains (Sept. 2003), kimberlitic grain picking of the 2003 samples (6 February, 2004), and the mineral chemistry of grains found in several of the most highly anomalous samples (February and March, 2004).

The till sampling was in general highly effective, with a well-defined indicator train leading to the KL-01/KL-02 area in the northwestern corner of the core claims being outlined (Maps 1a-d). Till sample K1, taken immediately over geophysical target KL-01 returned literally thousands of indicators, with lessor, but still highly anomalous numbers of grains found at geophysical targets KL-02 (till sample K2), KL-11 (K4), KL-12 (K6), KL-20 (K9), KL-22 (K10), KL-26/27 (K12/K14) and KL-40 (K18). Also, and most importantly, there are differences indicated within the grain populations of samples K2, K9 and K18 that suggest these are distinct from the KL-01 dispersion train as seen in till samples K1 and K40. As well there are indications within the KL-01 dispersion train that multiple sources are involved, and therefore more kimberlites are likely present to the north.

Although only three of these targets could be drill tested this past winter, the negative result at KL-02 is extremely significant, meaning the large numbers of KIMs recovered there, and indeed all along the northern boundary of the core claims, suggests that other kimberlites lie to the north, and hence the staking being carried out by the company. Also, many of the samples collected as background checks were either barren or returned very few grains, meaning that most of the anomaly-specific till samples returning larger number of grains were in fact prioritizing that anomaly. This relationship was borne out at KL-22.

DISCUSSION OF GEOPHYSICAL SURVEYS

In 2002, Fugro Airborne Surveys carried out an airborne high-resolution magnetic survey over the western portion of the Timiskaming Property. The survey employed a line spacing of 75 m with tie lines every 750 m and a mean terrain clearance of ~60 m. Helicopter ground speed was maintained at ~30 m/s, such that at 10 readings per second, magnetic measurements were recorded every 3 metres or so along the survey lines.

The airborne magnetic survey outlined numerous isolated magnetic anomalies, of positive and negative contrast with the surrounding magnetic background, with signatures similar to the known kimberlite pipes in the area. A selection of the anomalies were field checked in September 2003 in order to ensure that magnetic bedrock exposures were not the causative bodies. Eleven of the airborne magnetic anomalies were given high priority by MPH Consulting Limited on the basis of geophysics and till sampling results.

To precisely locate the centers of the airborne magnetic anomalies on the ground, a GPS surveying crew (Elk Lake Community Forest) was employed from January through April, 2004, to obtain +/- 1m accuracy using a Differential Global Positioning System (DGPS) unit. This work was sufficient to target drill holes on the larger anomalies, and to facilitate follow-up ground magnetics for smaller targets.

The smaller targets were followed-up using a full grid, usually those deemed from the airborne data to be of less than 100m diameter. These targets were subjected to tightly spaced 25m line-spaced magnetic surveying over these grids.. For these larger targets, simple crossed profiles were employed, centered over the anomaly, or several profiles executed across the strike of the target body. The ground geophysical work was conducted by Michael Vumbaca of Mountain Valley Geophysics, Toronto, during the spring of 2004. See Appendix E for grid and geophysical survey plans.

DISCUSSION OF CORE DRILLING

A short core drilling program consisting of three holes totalling 321.4 metres was drilled in Van Nostrand and Klock Townships on the Property between March 21 and April 10, 2004, under the supervision of geologist Sharyn Alexander and senior geological technician Robert Peever. Drilling was performed by Boart-Longyear Inc. out of Haileybury, Ontario. The core is stored in New Liskeard, Ontario.

A brief summary of each drill hole is outlined below. Detailed logs can be found in Appendix D.

HOLE KL01-1

Commenced: Mar.27 Completed: Mar.31/04

Location: 561625E / 5257145N (Nad 27)

Claim: 3001467, Klock Township

Dip: -70 Azimuth: 009

Length: 156.4 m

Summary:	0-13.7m	Overburden/Boulders
	13.7-35.8m	Matrix Supported Magmaclastic Macrocrystic Kimberlite with a Segregationary inter-clast matrix (HK)
	35.8-156.4m	Matrix Supported Magmaclastic Macrocrystic Kimberlite Breccia with non-magmatic inter-clast matrix (TKB) (note: several sections of darker, Olivine-rich HK kimberlite throughout TKB unit)
	156.4m	EOH

Analytical results have been received for the first five samples submitted from this

kimberlite from Kennecott Canada Exploration Inc. Mineral Processing Laboratory (see Appendix E) which may be summarized as follows:

Cumulative Results by Facies – Kimberlite KL-01

Facies	Sample Weight	# Diamonds	Micro Diamonds	1-D Macrodiamonds	2-D Macrodiamonds	+1mm Diamonds	Total Carats
Upper HK	32.15kg.	14	13	1	0	0	0.00301
Lower TKB	55.80kg.	13	12	1	0	0	0.00429
Total	87.95kg.	27	25	2	0	0	0.00730

Cumulative Results Per Sieve Size Classes – Kimberlite KL-01

Upper HK Facies			Lower TKB Facies		
Sieve Class (mm sq. mesh)	Diamonds (#)	Weight of Diamonds (carats)	Sieve Class (mm sq. mesh)	Diamonds (#)	Weight of Diamonds (carats)
1.70 to 2.36	0	0	1.70 to 2.36	0	0
1.18 to 1.70	0	0	1.18 to 1.70	0	0
0.85 to 1.18	0	0	0.85 to 1.18	0	0
0.600 to 0.850	0	0	0.600 to 0.850	0	0
0.425 to 0.600	0	0	0.425 to 0.600	0	0
0.300 to 0.425	0	0	0.300 to 0.425	1	0.000996
0.212 to 0.300	2	0.000947	0.212 to 0.300	2	0.001312
0.150 to 0.212	4	0.001008	0.150 to 0.212	4	0.001062
0.105 to 0.150	8	0.001055	0.105 to 0.150	6	0.000920
Totals	14	0.003010	Totals	13	0.004290
Total Processed	32.15 kilograms		Total Processed	55.80 kilograms	

HOLE KL02-1

Commenced: Apr.2 Completed: Apr.3/04

Location: 562325E / 5257075N (Nad 27)

Claim: 3001467, Klock Township

Dip: -45 Azimuth: 030

Length: 78.0 m

Summary: 0-8.5m Overburden
 8.5-8.7m Diabase, Siltstone boulder fragments
 8.7-78.0m Pink to gray Granite Gneiss, Minor epidotization
 78.0m EOH

HOLE KL22SE-1

Commenced: Apr.6 Completed: Apr.8/04

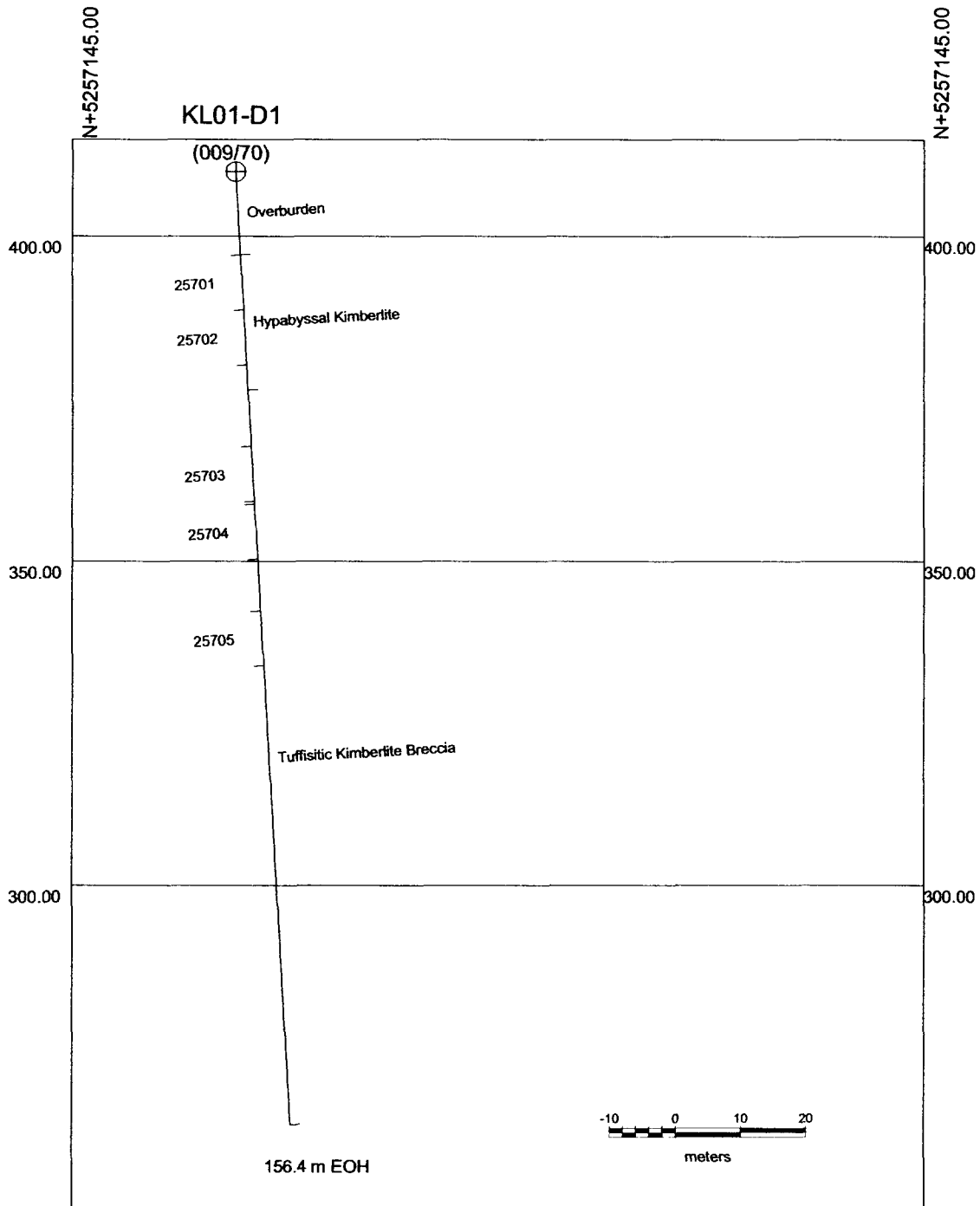
Location: 565712E / 5254818N (Nad 27)
 Claim: 3001464, Klock Township
 Dip: -90 Azimuth: 000
 Length: 87.0 m

Summary: 0-21m Overburden
 21-29.4m Boulders/Clay Till
 29.4-73.5m Massive Matrix Supported Magmatic V. Macrocrystal
 Kimberlite with a uniform magmatic inter-clast matrix (HK)
 73.5-87.0m Matrix Supported Magmaclastic Macrocrystic Kimberlite
 Breccia with magmaclastic inter-clast matrix (HKB); mud
 seams
 87.0m EOH

Significant amounts of petrographical, indicator mineral and microdiamond data is pending on both kimberlites.

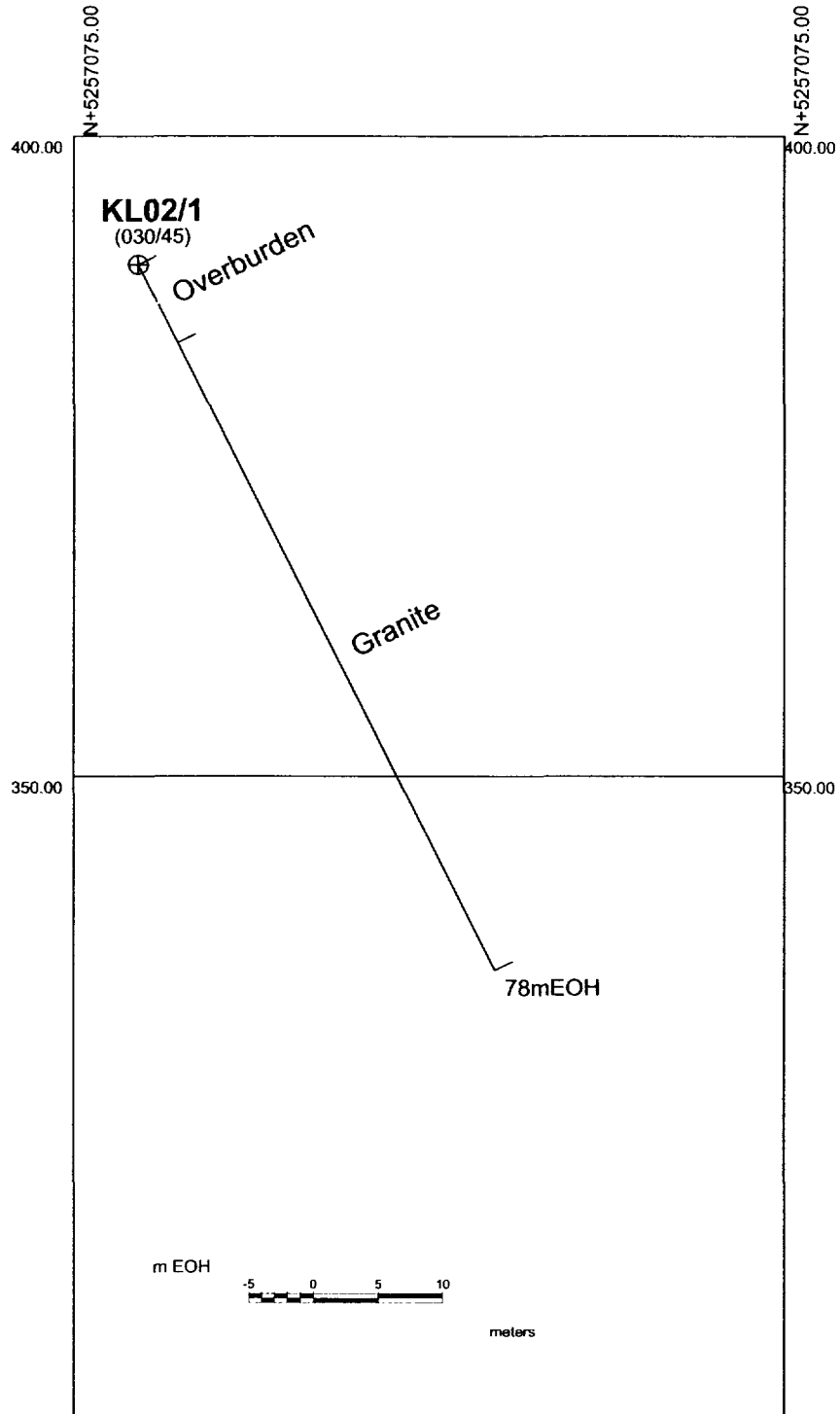
Only three of the planned six-eight holes could be drilled in this program due to the deterioration conditions caused by the early Spring. It had been hoped to drill targets KL-01 and KL-02 with helicopter support, and then up to six others including KL-22 with road access before demobilizing back across the Montreal River by April 30th. However the unusually mild March and April meant the entire program had to be helicopter supported, rather than allowing for mostly road mobilization/demobilization and support operations, and therefore costs were very high.

However the grid and geophysics work was completed, and therefore eight targets are at the drill-ready stage for resumption of operations after bridge access is again permitted, on November 1st.



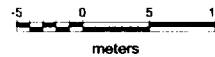
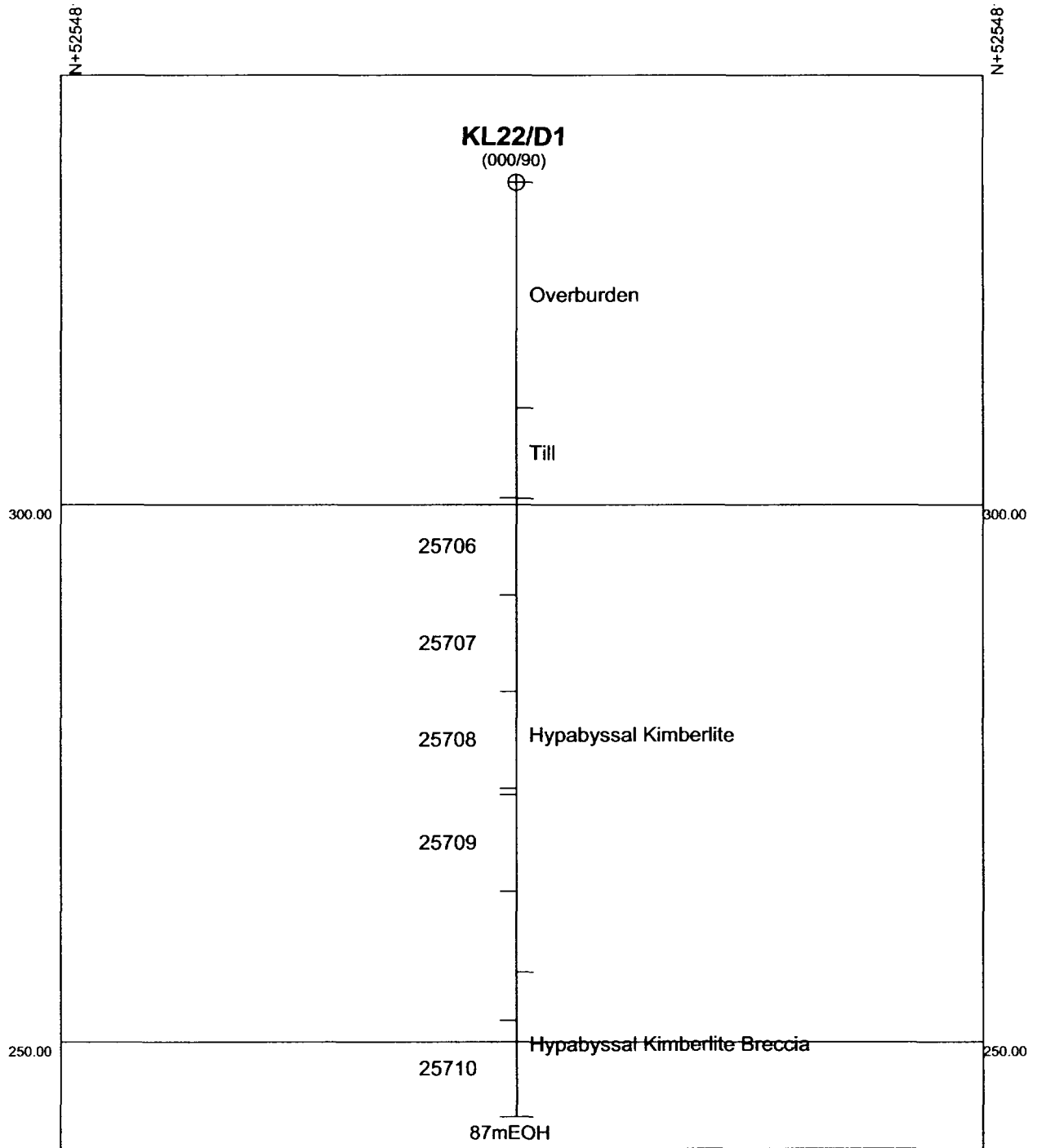
Claim No.: 3001467, Van Nostrand Twp.
 UTM Zone 17, NAD27

Sudbury Contact Mines Ltd.	
TIMISKAMING PROJECT	
VERTICAL SECTION THROUGH KL01/D1 FACING NORTH	
SCALE: 1:1000	DRAWN BY: MC
FIGURE NO.: 5	DATE: JUNE 2004
MPH Consulting Ltd	



Claim No.: 3001467, Van Nostrand Twp.
 UTM Zone 17, NAD27

Sudbury Contact Mines Ltd.	
TIMISKAMING PROJECT	
VERTICAL SECTION THROUGH KL02/1	
FACING NORTH	
SCALE: 1:500	DRAWN BY: MC
FIGURE NO.: 6	DATE: JUNE 2004
MPH Consulting Ltd	



Claim No.: 3001464, Klock Twp.
UTM Zone 17, NAD27

Sudbury Contact Mines Ltd.	
TIMISKAMING PROJECT	
VERTICAL SECTION THROUGH KL22/D1 FACING NORTH	
SCALE: 1:500	DRAWN BY: MC
FIGURE NO.: 7	DATE: JUNE 2004
MPH Consulting Ltd	

CONCLUSIONS AND RECOMMENDATIONS

Reconnaissance ground prospecting and till sampling was carried out on the Klock Property in September 2003 in order to examine high-priority magnetic anomalies previously identified by an earlier airborne survey. The till sampling was in general highly effective, with a well-defined indicator train leading to the KL-01/KL-02 area in the northwestern corner of the core claims being outlined (Maps 1a-d). Till sample K1, taken immediately over geophysical target KL-01 returned literally thousands of indicators, with lessor, but still highly anomalous numbers of grains found at geophysical targets KL-02 (till sample K2), KL-11 (K4), KL-12 (K6), KL-20 (K9), KL-22 (K10), KL-26/27 (K12/K14) and KL-40 (K18).

After follow-up ground magnetic surveys, three diamond core holes were completed on the property in Van Nostrand and Klock Townships in March/April 2004 to test the anomalies. Two of the holes (KL-01 and KL-22) intersected new kimberlites whilst the third hole at target KL-02 intersected diabase and granite. The two discoveries are especially significant in that they are the first to be found west of the Montreal River at Timiskaming, they are large (~5ha and ~9.5ha, respectively), relatively shallowly covered, and would appear to represent part of a larger cluster of intrusions based on several unexplained highly anomalous till samples. Also of course, KL-01 has been shown to be significantly diamond-bearing based on the discovery hole.

A number of high-priority targets could not be drilled during this program due to the early Spring break-up, and budget constraints. Therefore it is recommended that work should continue evaluating these targets, using the results from the till sampling and drill programs as reference. Also, and as has been implemented, there is compelling evidence that the new cluster is wider spread, and the Klock Property should be significantly expanded.

Expenditures over the past nine months have totalled approximately \$335,000.

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Email: psobie@mphconsulting.com

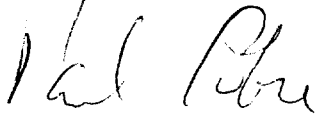
CERTIFICATE OF AUTHOR

I, Paul A. Sobie, B.Sc., am a Professional Geologist, residing at 179 Guelph Street, Rockwood, Ontario, and hereby certify:

1. I am a member in good standing of the Association of Professional Geoscientists of Ontario, Membership # 0374;
2. I am a graduate of Laurentian University, Sudbury, Ontario with a B.Sc. Honours degree in geology in 1987;
3. I have been employed continuously from 1987 as a geologist with MPH Consulting Limited, and since 1993, as managing director of MPH Consulting Botswana (Pty) Limited, a subsidiary company, located in Gaborone, Botswana, MPH Consulting Lesotho (Pty.) Limited, in Maseru, Kingdom of Lesotho, and of MPH Consulting South Africa (Pty) Limited, in Johannesburg, Republic of South Africa;
4. I am an officer and director of MPH Consulting Limited (“MPH”) of Toronto, the parent company, spending the majority of my time in Canada;
5. I have a total of twenty-one years of direct experience with diamond projects in Canada and Southern Africa, including managerial responsibilities for all manner of projects ranging from conceptual grassroots exploration through to feasibility studies on advanced projects. Additional experience has included independent valuations and production audits on producing mines, as well as verification/audit work for parties completing due-diligence, and/or participating in joint ventures;
6. I have historical experience and knowledge of the Timiskaming Kimberlite fields, having worked for Monopros Limited as a student in the area between 1982 and 1984, acted as consultant for Falconbridge Limited since 1998, for Hucamp Mines Ltd. and for Sudbury Contact Mines Limited since 2001;
7. As a result of my education, professional experience and professional qualifications, I am a qualified person as defined in National Instrument 43-101;
8. I have visited the properties comprising the Timiskaming Diamond Project (the “Property”) including the Klock Property numerous times, the most recent being during April, 2004;

9. This report was prepared under my supervision, with maps and figures prepared by MPH geologists and geophysicists under my direction;
10. The sources of information and data not based on personal examinations were obtained from the references cited in the report in connection with such information, which to the best of my knowledge and experience is correct;
11. I am not aware of any material fact or material change with respect to the subject matter of this technical report which is not reflected in this report, the omission to disclose which would make this report misleading;
12. I have no interest, direct or indirect, in the Property nor do I have any beneficial interest, direct or indirect, in the securities of Sudbury Contact Mines Limited, or any of the companies mentioned in this report; and

Dated this 10th of June, 2004.

A handwritten signature in cursive script, appearing to read "Paul Sobie".

(Signed) *Paul Sobie*

Paul A. Sobie, B.Sc., P.Geo.

APPENDIX A KLOCK PROPERTY UNPATENTED CLAIMS LIST

Appendix A - Timiskaming Diamond Project, Klock Property Claims

Updated May 20, 2004

Mining Lands - Mining Claims Client Report

Larder Lake - Division 80

CLIENT: 198617 - SUDBURY CONTACT MINES LIMITED

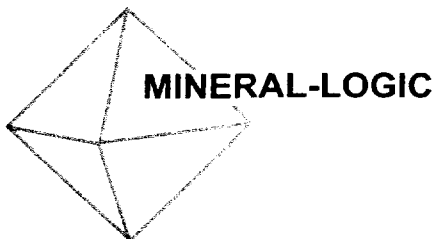
TOWNSHIP / AREA	Claim Number	Recording Date	Claim Due Date	Status	Percent Option	Work Required	Total Applied	Total Reserve	Claim Bank
DANE	L 1192965	2002-AUG-08	2004-AUG-08	A	100.00%	\$2,000	\$0	\$0	0
KLOCK	L 1163064	2004-FEB-26	2006-FEB-26	A	100.00%	\$4,000	\$0	\$0	0
KLOCK	L 1163065	2004-FEB-26	2006-FEB-26	A	100.00%	\$6,400	\$0	\$0	0
KLOCK	L 1192950	2002-AUG-08	2004-AUG-08	A	100.00%	\$6,400	\$0	\$2,209	0
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KLOCK	L 1192957	2002-AUG-08	2004-AUG-08	A	100.00%	\$4,800	\$0	\$2,209	0
KLOCK	L 1192958	2002-AUG-08	2004-AUG-08	A	100.00%	\$4,800	\$0	\$2,209	0
KLOCK	L 1192959	2002-AUG-08	2004-AUG-08	A	100.00%	\$6,400	\$0	\$2,209	0
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KLOCK	L 1192968	2002-AUG-08	2004-AUG-08	A	100.00%	\$6,400	\$0	\$2,209	0
KLOCK	L 1192969	2002-AUG-08	2004-AUG-08	A	100.00%	\$5,200	\$0	\$2,209	0
KLOCK	L 1192970	2002-AUG-08	2004-AUG-08	A	100.00%	\$4,800	\$0	\$2,209	0
KLOCK	L 1192971	2002-AUG-08	2004-AUG-08	A	100.00%	\$4,000	\$0	\$2,209	0
KLOCK	L 1192972	2002-AUG-08	2004-AUG-08	A	100.00%	\$4,800	\$0	\$2,209	0
KLOCK	L 1192973	2002-AUG-08	2004-AUG-08	A	100.00%	\$6,400	\$0	\$2,210	0
KLOCK	L 1192974	2002-AUG-08	2004-AUG-08	A	100.00%	\$6,400	\$0	\$2,210	0
KLOCK	L 1192975	2002-AUG-08	2004-AUG-08	A	100.00%	\$6,400	\$0	\$2,210	0
KLOCK	L 1192980	2002-AUG-08	2004-AUG-08	A	100.00%	\$6,400	\$0	\$2,210	0
KLOCK	L 1212626	2004-FEB-26	2006-FEB-26	A	100.00%	\$6,400	\$0	\$0	0
KLOCK	L 1212627	2004-FEB-26	2006-FEB-26	A	100.00%	\$4,000	\$0	\$0	0
KLOCK	L 1242047	2004-FEB-26	2006-FEB-26	A	100.00%	\$3,200	\$0	\$0	0
KLOCK	L 1242049	2004-FEB-26	2006-FEB-26	A	100.00%	\$4,800	\$0	\$0	0
KLOCK	L 3001464	2002-AUG-08	2004-AUG-08	A	100.00%	\$6,400	\$0	\$2,210	0
KLOCK	L 3001469	2002-AUG-08	2004-AUG-08	A	100.00%	\$6,400	\$0	\$2,210	0
KLOCK	L 3001470	2002-AUG-08	2004-AUG-08	A	100.00%	\$6,400	\$0	\$2,210	0
KLOCK	L 3001471	2002-AUG-08	2004-AUG-08	A	100.00%	\$6,400	\$0	\$2,210	0
KLOCK	L 3001472	2002-AUG-08	2004-AUG-08	A	100.00%	\$4,800	\$0	\$2,210	0
KLOCK	L 3014061	2004-FEB-26	2006-FEB-26	A	100.00%	\$6,400	\$0	\$0	0
KLOCK	L 3014062	2004-FEB-26	2006-FEB-26	A	100.00%	\$3,600	\$0	\$0	0
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KLOCK	L 3014084	2004-MAY-13	2006-MAY-13	A	100.00%	\$6,400	\$0	\$0	0
LEO	L 1192963	2002-AUG-08	2004-AUG-08	A	100.00%	\$4,800	\$0	\$2,209	0
LEO	L 1192964	2002-AUG-08	2004-AUG-08	A	100.00%	\$5,600	\$0	\$2,209	0
SPEIGHT	L 3014063	2004-FEB-26	2006-FEB-26	A	100.00%	\$6,400	\$0	\$0	0
SPEIGHT	L 3014066	2004-FEB-26	2006-FEB-26	A	100.00%	\$6,400	\$0	\$0	0
SPEIGHT	L 3014067	2004-MAR-08	2006-MAR-08	A	100.00%	\$6,400	\$0	\$0	0
SPEIGHT	L 3014068	2004-MAR-08	2006-MAR-08	A	100.00%	\$6,400	\$0	\$0	0
VAN NOSTRAND	L 1192966	2002-AUG-08	2004-AUG-08	A	100.00%	\$6,400	\$0	\$2,209	0
VAN NOSTRAND	L 1192967	2002-AUG-08	2004-AUG-08	A	100.00%	\$6,400	\$0	\$2,209	0
VAN NOSTRAND	L 1192976	2002-AUG-08	2004-AUG-08	A	100.00%	\$6,400	\$0	\$2,210	0
VAN NOSTRAND	L 1192977	2002-AUG-08	2004-AUG-08	A	100.00%	\$6,400	\$0	\$2,210	0
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VAN NOSTRAND	L 3001465	2002-AUG-08	2004-AUG-08	A	100.00%	\$6,400	\$0	\$2,210	0
VAN NOSTRAND	L 3001466	2002-AUG-08	2004-AUG-08	A	100.00%	\$6,400	\$0	\$2,210	0
VAN NOSTRAND	L 3001467	2002-AUG-08	2004-AUG-08	A	100.00%	\$6,400	\$0	\$2,210	0
VAN NOSTRAND	L 3001468	2002-AUG-08	2004-AUG-08	A	100.00%	\$6,400	\$0	\$2,210	0
VAN NOSTRAND	L 3014064	2004-FEB-26	2006-FEB-26	A	100.00%	\$6,400	\$0	\$0	0
VAN NOSTRAND	L 3014065	2004-FEB-26	2006-FEB-26	A	100.00%	\$6,400	\$0	\$0	0
VAN NOSTRAND	L 3014069	2004-MAR-08	2006-MAR-08	A	100.00%	\$6,400	\$0	\$0	0
VAN NOSTRAND	L 3014070	2004-MAR-08	2006-MAR-08	A	100.00%	\$6,400	\$0	\$0	0
VAN NOSTRAND	L 3014071	2004-MAR-08	2006-MAR-08	A	100.00%	\$6,400	\$0	\$0	0
VAN NOSTRAND	L 3014072	2004-MAR-08	2006-MAR-08	A	100.00%	\$6,400	\$0	\$0	0
VAN NOSTRAND	L 3014073	2004-MAR-09	2006-MAR-09	A	100.00%	\$6,400	\$0	\$0	0
VAN NOSTRAND	L 3014074	2004-MAR-09	2006-MAR-09	A	100.00%	\$6,400	\$0	\$0	0
VAN NOSTRAND	L 3014075	2004-MAR-09	2006-MAR-09	A	100.00%	\$6,400	\$0	\$0	0
VAN NOSTRAND	L 3014076	2004-MAR-09	2006-MAR-09	A	100.00%	\$6,400	\$0	\$0	0
VAN NOSTRAND	L 3014077	2004-MAR-09	2006-MAR-09	A	100.00%	\$6,400	\$0	\$0	0
VAN NOSTRAND	L 3014078	2004-MAR-09	2006-MAR-09	A	100.00%	\$6,400	\$0	\$0	0
TOTALS						\$359,600	\$0	\$70,705	0



Klock Property Core Claims

APPENDIX B TILL SAMPLING DESCRIPTIONS

APPENDIX C TILL SAMPLING ANALYTICAL RESULTS



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Diamond Exploration Consultancy

THE MINERAL CHEMISTRY OF INDICATORS RECOVERED FROM TILL SAMPLES

Prepared for

MPH Consulting Ltd.
133 Richmond St. West
Suite 615
Toronto
M5H 2L3

15 September, 2003

Report No. ML03/036

1

1. INTRODUCTION

This report documents and interprets the indicator mineral chemistry of selected indicators submitted for analyses. The indicator minerals were recovered from till sample concentrates derived from the Timiskaming Project (Zweistra, 2003).

2. RESULTS

Electron microprobe analyses were undertaken on a Jeol electron microprobe at the Council for Geoscience. The relevant XY plots and full analyses are appended. The data in the plots have been grouped according to ice sheets / Townships as requested.

2.1 E Lundy

The garnets are all calcium-saturated G9 varieties (Fig.1). No subcalcic G10 grains are present. They have somewhat elevated CaO contents. The chromites (Figures 2 & 3) comprise a broadly kimberlitic population, with one grain being compositionally consistent with diamond inclusion type chromites. The chrome diopsides appear to be non-kimberlitic, having low Na₂O contents and Ca#.

2.2 W Lundy

The garnets are predominantly G9 varieties, with a single Cr-poor grain (Figure 5). The Cr-poor garnet is a fragmented megacryst. The chromites (Figure 2) include a xenocryst which cannot be equivocally classified as kimberlitic, the magmatic grain being 'kimberlitic'. One grain picked as chromite is an aluminous spinel. None are DI types (Figure 3). The single ilmenite is a fragmented, kimberlitic megacryst (Figure 4), with a composition suggesting moderate diamond preservation potential (Figure 8). The chrome diopsides are kimberlitic.

2.3 Cane Twp.

The garnets are lherzolitic, with the exception of a single Cr-poor eclogitic variety derived from barren Group-II eclogite (Figure 5). None of the former are subcalcic. The chromites include a magmatic and a xenocrystic variety (Figure 2). Neither are DI types (Figure 3). The single ilmenite is a kimberlitic, fragmented megacryst, with a composition suggestive of moderate diamond preservation potential (Figure 8). The chrome diopsides are kimberlitic.

2.2 Klock

The garnets comprise predominant G9 varieties, with a single G10 grain (Figure 7). The latter has a very low Cr₂O₃ content and an MnO content of > 0.37, suggesting derivation from within the graphite stability field (Grutter & Menzies, 2003). The G9 garnets are relatively enriched in CaO. The single chromite (Figure 2) is a xenocryst and cannot be positively identified as "kimberlitic". The single ilmenite is a kimberlitic, fragmented megacryst, with a composition suggestive of moderate diamond preservation potential (Figure 8).

3. DISCUSSION & CONCLUSIONS

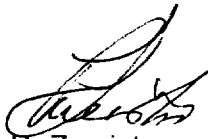
Too few grains are present for a statistically meaningful comparison between the 'blocks'. However, a brief comparison is undertaken for completeness.

- The garnets from E Lundy and Klock are similar to one another, while those from W Lundy and Cane are more similar to one another.
- Comparison of the data with known kimberlites in the area shows that the garnets from E Lundy and Klock could derive from MR6, NDN#1 or ND#2. The chromites show similarities to Mr6, but are generally lower in Cr₂O₃. The garnets from W Lundy and Cane show overlaps with garnets from 95-1, 95-2, Bucke, Gravel and Guigues.
- While the majority of indicators clearly derive from kimberlitic sources, the only indication of diamond is provided by the DI-type chromite in the E Lundy data.

4. REFERENCES

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Zweistra, P. (2003). Re-Picking of Concentrates from 86 Till samples, Timiskaming Project, Ontario. Report No. ML03/032 to MPH Consulting, August, 2003.



P. Zweistra

18 September, 2003

Fig. 1: Garnet Compositions

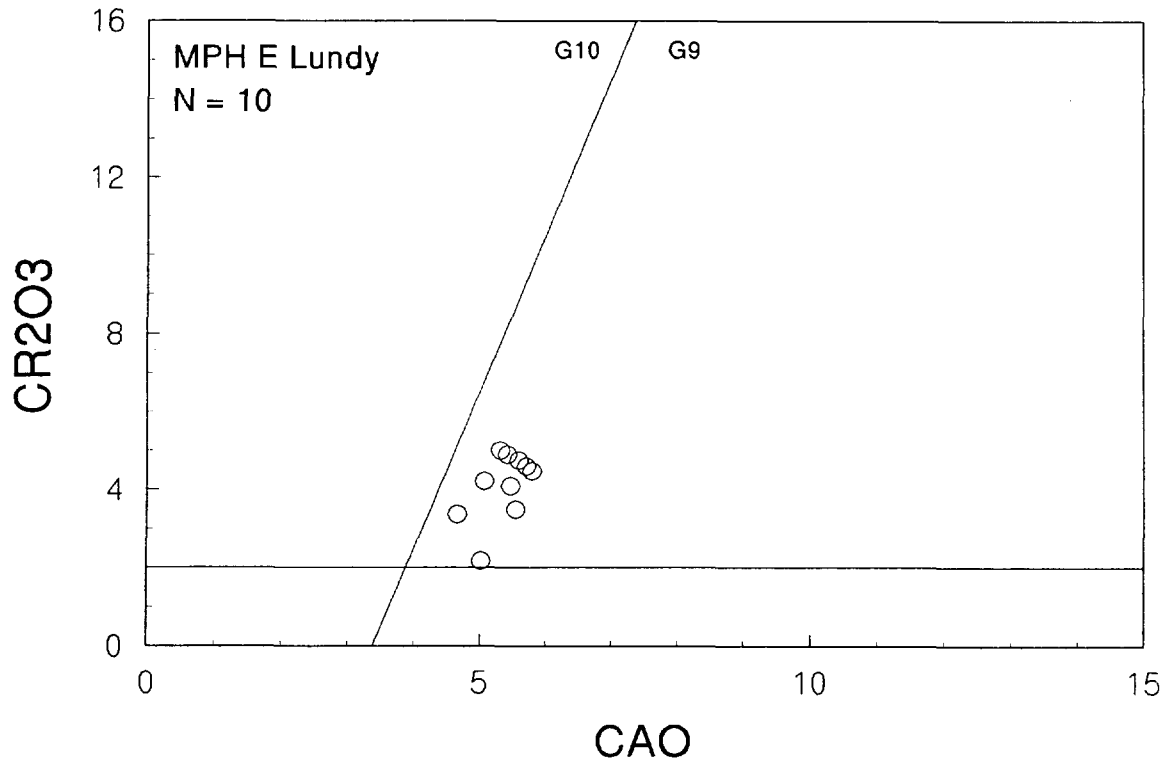


Fig. 2: Chromite Compositions

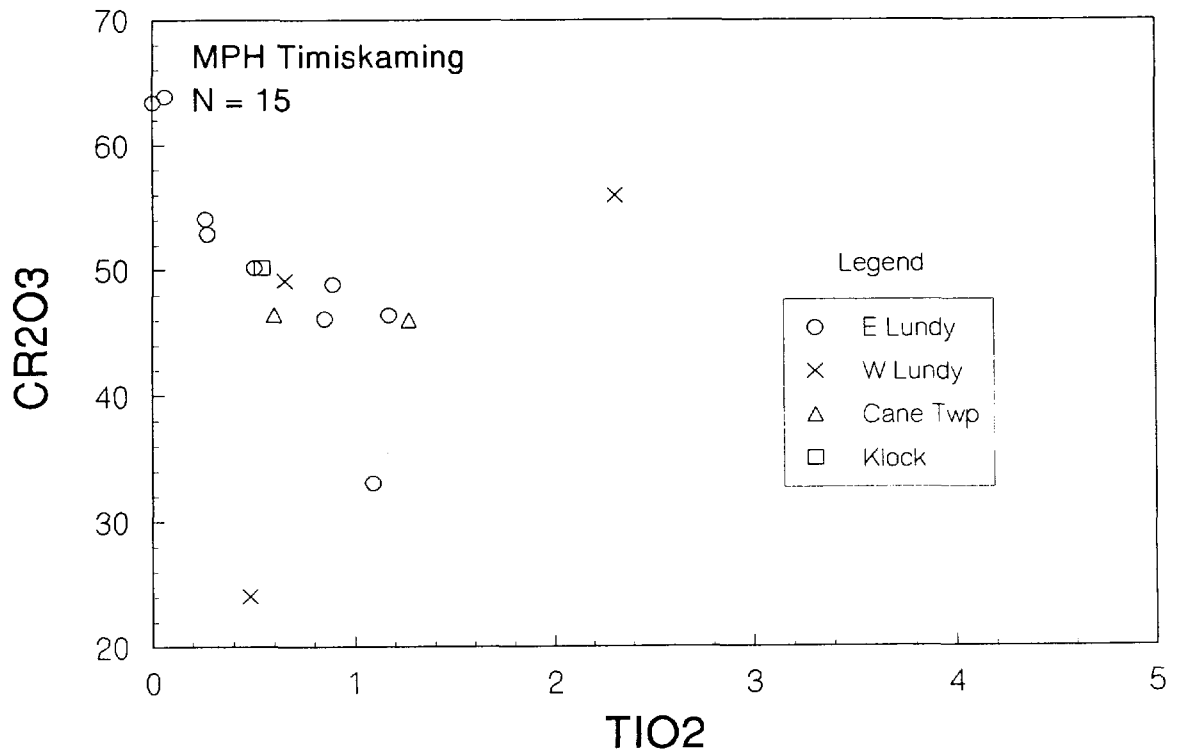


Fig. 3: Chromites

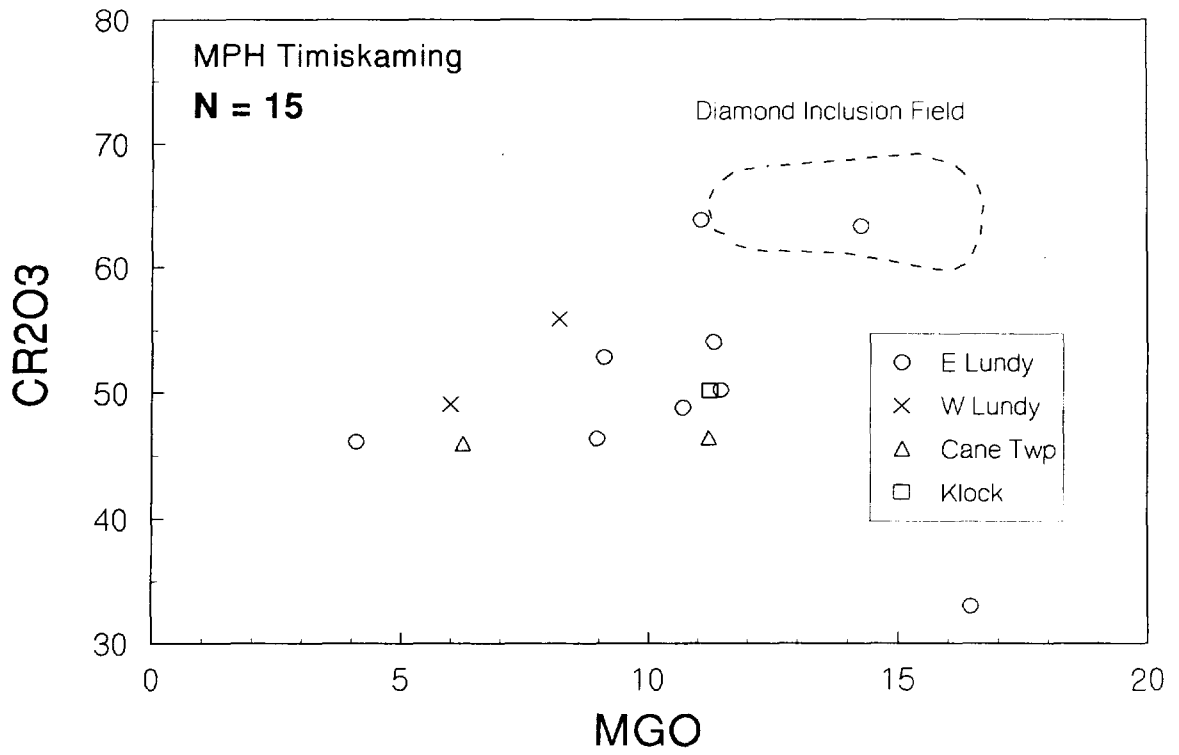


Fig. 4: Ilmenite Compositions

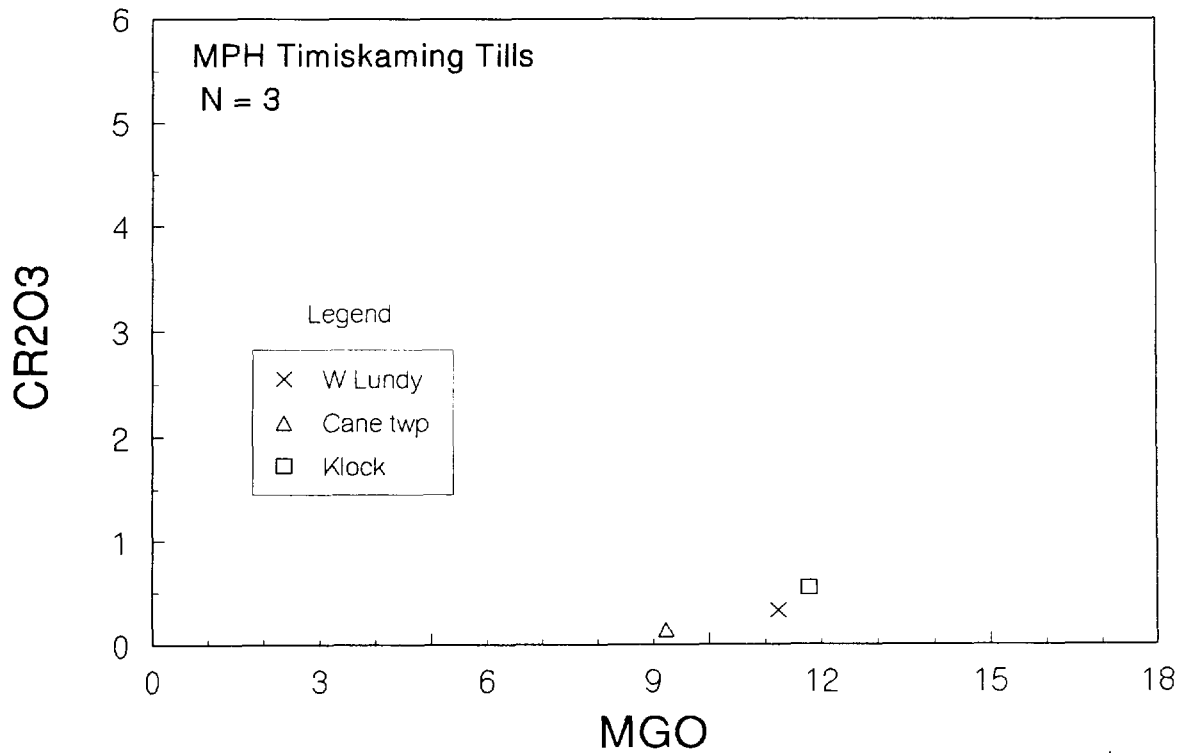


Fig. 5: Garnet Compositions

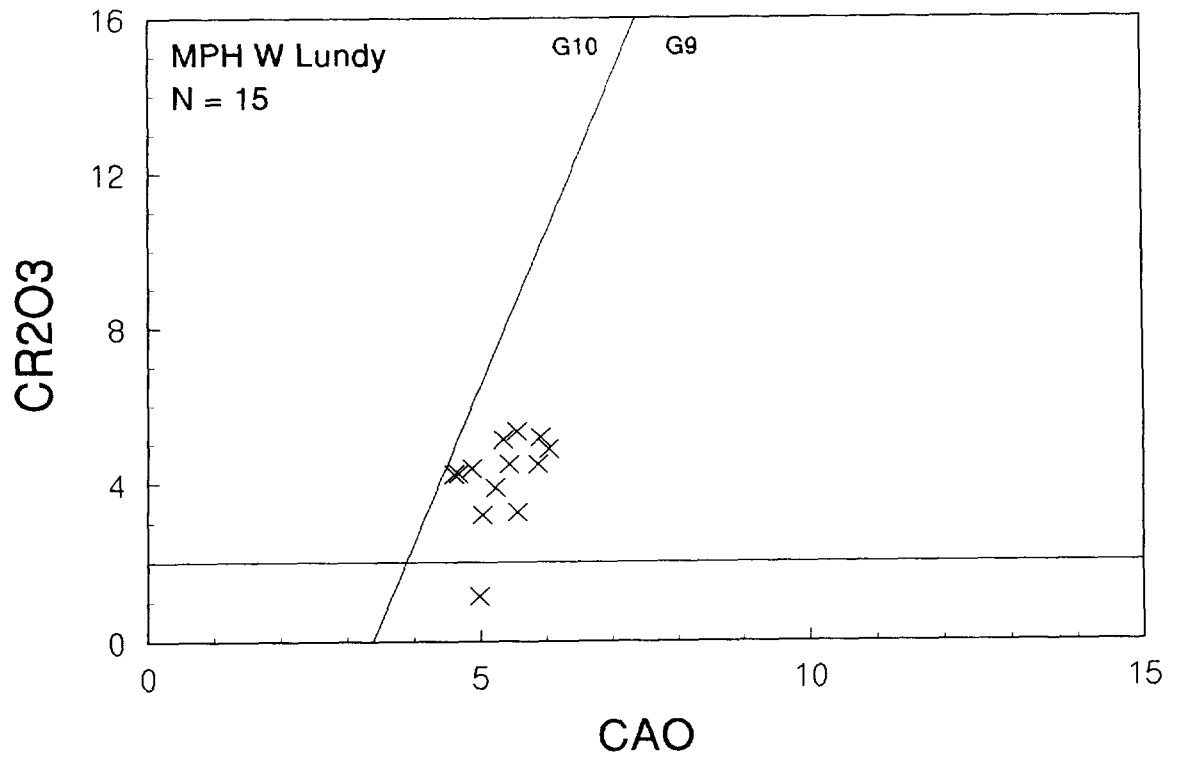


Fig. 6: Garnet Compositions

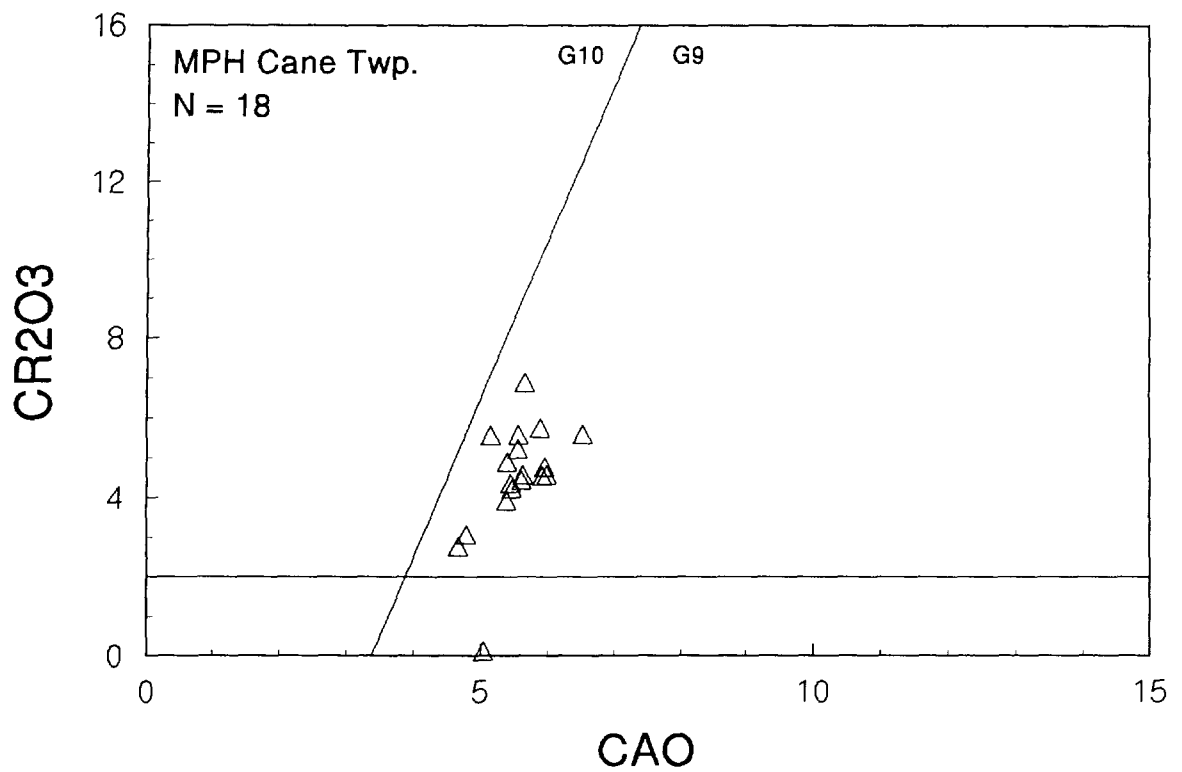


Fig. 7: Garnet Compositions

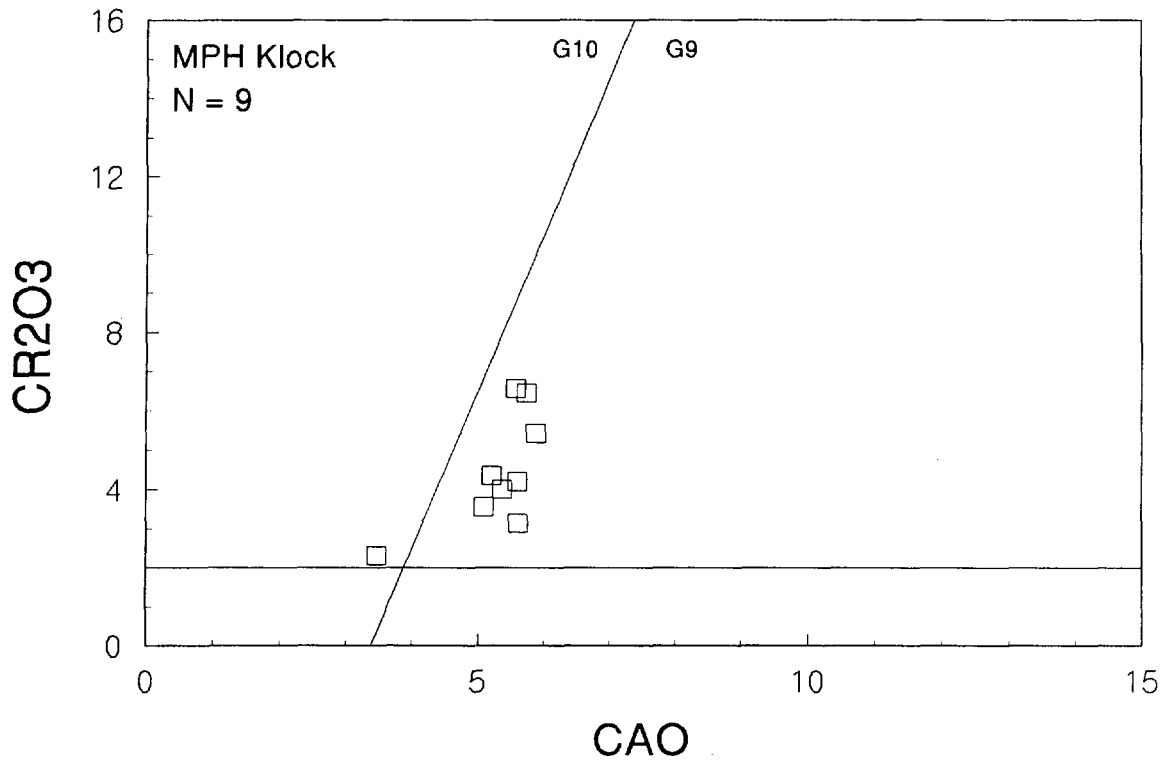
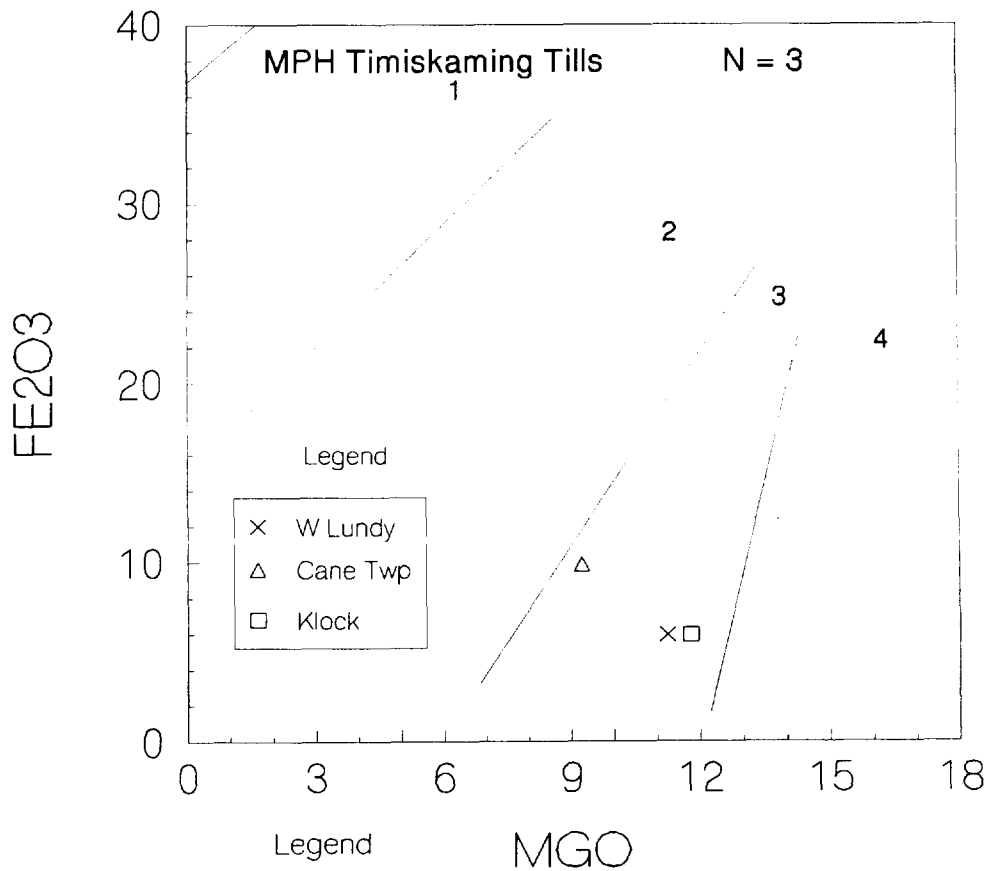


Fig. 8. Ilm. Diamond Preservation Potential

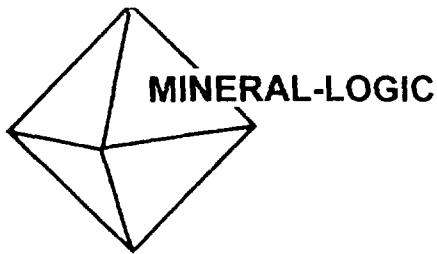


1 = No Preservation, 2 = marginal pres., 3 = intermed. pres., 4 = ultimate pres.

	SAMPLE	No	Mnt	GRAIN	SIO2	TIO2	AL2O3	CR2O3	FE2O3	FEO	MNO	MGO	CAO	NA2O	K2O	TOTAL	CLSFCN
1	5289-300	1	1	1	42.27	0.09	20.39	3.99		7.39	0.34	19.80	5.37			99.64	K
2	5290-300	2	1	1	42.60	0.11	19.34	5.42		7.11	0.45	19.53	5.88			100.44	K
3	5290-300	3	1	2	42.69	nd	21.19	2.30		7.04	0.46	21.67	3.46			98.81	"G10"
4	5291-300	4	1	1	41.96	nd	18.10	6.55		6.96	0.40	20.10	5.57			99.64	K
5	5293-300	5	1	1	42.39	0.07	20.46	3.55		8.04	0.40	19.97	5.09			99.97	K
6	5294-300	6	1	1	42.21	0.32	17.58	6.44		6.32	0.19	20.44	5.73			99.23	K
7	5294-300	7	1	2	42.27	nd	19.99	4.20		7.82	0.50	19.63	5.60			100.01	K
8	5295-300	8	1	1	42.24	0.26	19.19	4.35		7.90	0.34	19.88	5.20			99.36	K
9	5295-300	9	1	2	42.23	nd	20.64	3.13		8.86	0.54	18.83	5.61			99.84	K
10	35457-300	10	1	1	41.65	nd	19.82	3.49		10.94	0.35	17.47	5.54			99.26	K
11	35458-300	11	1	1	42.06	0.71	19.03	4.09		8.19	0.30	19.94	5.46			99.78	K
12	35458-300	12	1	2	42.28	0.09	21.12	2.17		9.74	0.35	19.03	5.02			99.80	K
13	4526-300	13	1	1	42.31	nd	18.87	5.74		7.22	0.38	19.73	5.89			100.14	K
14	4526-500	14	1	1	42.10	0.23	18.68	5.57		8.30	0.40	18.97	5.56			99.81	K
15	4526-500	15	1	2	42.13	0.22	21.98	0.12		10.25	0.46	19.05	5.04	0.03		99.28	K
16	4529-300	16	1	1	41.49	nd	18.60	5.59		9.01	0.40	17.71	6.52			99.32	K
17	4529-300	17	1	2	42.49	0.08	20.04	4.22		7.32	0.42	19.83	5.46			99.86	K
18	4552-300	18	1	1	42.25	nd	19.87	4.36		7.33	0.49	19.81	5.45			99.56	K
19	4555-300	19	1	1	42.40	0.12	19.52	5.11		7.10	0.35	20.09	5.35			100.04	K
20	4555-300	20	1	2	41.79	nd	19.69	4.24		7.17	0.39	20.55	4.67			98.50	K
21	4555-300	21	1	3	42.18	0.05	19.70	5.17		7.84	0.48	19.03	5.91			100.36	K
22	4564-300	22	1	1	42.80	nd	20.05	4.49		7.34	0.39	19.74	5.44			100.25	K
23	4564-300	23	1	2	40.92	0.52	20.28	3.88		6.97	0.29	21.07	5.22			99.15	K
24	4564-300	24	1	3	41.47	0.17	19.97	3.25		11.29	0.57	17.07	5.56			99.35	K
25	4564-300	25	1	4	41.70	1.12	19.80	1.14		10.95	0.34	18.81	4.98			98.84	K
26	4589-300	26	1	1	42.05	nd	20.61	3.19		10.38	0.38	18.04	5.03			99.68	K
27	4592-300	27	1	1	42.05	0.05	19.53	4.90		7.44	0.46	19.48	5.42			99.33	K
28	4592-300	28	1	2	42.36	nd	20.62	3.37		7.18	0.44	20.65	4.66			99.28	K
29	4592-300	29	1	3	41.99	nd	19.46	4.75		7.60	0.37	19.52	5.59			99.28	K
30	4592-300	30	1	4	42.04	0.07	19.29	5.01		7.81	0.46	19.38	5.31			99.37	K
31	4593-300	31	1	1	42.13	0.06	19.95	4.21		7.62	0.44	20.22	5.07			99.70	K
32	4790-300	32	1	1	42.98	0.39	21.04	2.75		7.19	0.43	20.97	4.67			100.42	K
33	4790-300	33	1	2	42.61	nd	20.73	3.06		7.77	0.36	20.27	4.78			99.58	K
34	4790-300	34	1	3	42.36	0.10	19.70	4.55		7.97	0.36	19.23	5.92			100.19	K
35	4791-300	35	1	1	42.11	nd	19.33	5.22		7.41	0.36	19.46	5.55			99.44	K
36	4791-300	36	1	2	42.66	0.07	20.22	3.92		7.84	0.47	19.60	5.39			100.17	K
LOST DURING POLISHING																	
37	4791-300	38	1	4	42.58	nd	20.18	4.43		6.60	0.38	20.38	5.61			100.16	K
38	4791-300	39	1	5	42.53	0.38	18.91	5.56		6.40	0.23	20.66	5.15			99.82	K
39	4791-300	40	1	6	42.20	0.81	17.31	6.87		6.73	0.21	20.29	5.66			100.08	K
40	4791-300	41	1	7	40.69	nd	20.27	4.58		8.25	0.41	18.82	5.98			99.00	K
41	4793-300	42	1	1	42.54	0.10	19.67	4.57		7.88	0.41	19.49	5.63			100.29	K
42	4793-300	43	1	2	42.42	0.07	19.27	4.90		8.16	0.44	19.75	5.40			100.41	K
43	4793-300	44	1	3	42.04	nd	19.54	4.77		8.19	0.46	19.00	5.96			99.96	K
44	5009-300	45	1	1	42.18	0.08	19.58	4.59		7.98	0.48	19.17	5.71			99.77	K
45	5009-300	46	1	2	42.06	0.06	19.75	4.47		9.77	0.46	18.11	5.79			100.47	K
46	5010-300	47	1	1	42.47	nd	19.90	4.37		7.48	0.48	20.26	4.87			99.83	K
47	5010-300	48	1	2	42.24	nd	19.41	5.32		7.58	0.39	19.90	5.55			100.39	K
48	5011-300	49	1	1	42.19	nd	20.04	4.49		8.24	0.55	19.13	5.87			100.51	K
49	5108-300	50	1	1	42.70	nd	19.97	4.22		7.64	0.51	20.34	4.60			99.98	K
50	5108-300	51	1	2	42.19	0.08	19.88	4.87		7.67	0.38	19.16	6.03			100.26	K
51	35457-300	52	1	1	53.00	0.33	0.66	0.97		5.20	0.09	18.31	19.59	0.40		98.55	NK
52	35457-300	53	1	2	53.80	0.29	0.75	1.07		5.28	0.17	19.04	19.09	0.48		99.97	NK
53	35458-300	54	1	1	52.95	0.35	0.91	1.17		5.78	0.14	18.64	18.65	0.61		99.20	NK
54	35458-300	55	1	2	52.64	0.30	0.98	1.19		5.43	nd	18.55	18.90	0.53		98.52	NK
55	4530-300	56	1	1	54.63	0.09	0.39	1.06		3.09	0.09	16.91	22.23	1.33		99.82	K
56	4530-300	57	1	2	54.24	0.16	0.36	1.52		3.37	nd	16.88	21.06	1.49		99.08	K
57	4564-300	58	1	1	54.71	0.24	0.33	1.64		3.64	nd	16.77	20.91	1.53		99.77	K
58	4564-300	59	1	2	26.78	0.83	0.87	6.23		17.40	nd	0.88	31.00	0.02		84.01	??
59	4589-300	60	1	1	54.51	0.07	2.89	2.47		1.49	nd	15.62	19.27	2.51		98.83	K
60	4593-300	61	1	1	54.22	0.24	3.05	2.48		1.49	nd	15.65	19.48	2.53		99.14	K
61	4593-300	62	1	2	54.13	0.10	3.72	3.15		1.55	nd	14.81	18.54	3.58		99.58	K
62	5289-500	1	2	1	0.06	53.62	0.28	0.55	5.91	27.03	0.28	11.77	nd			99.50	K

MPHTill1.xls

SAMPLE	No	Mnt	GRAIN	SIO2	TIO2	AL2O3	CR2O3	FE2O3	FEO	MNO	MGO	CAO	NA2O	K2O	TOTAL	CLSFCNTN
63	5294-300	2	2	1	0.10	0.54	15.10	50.14	4.69	17.63	nd	11.24	nd		99.44	K
64	35457-300	3	2	1	0.13	1.09	29.95	33.06	6.03	12.42	nd	16.44	nd		99.12	K
65	35457-500	4	2	1	nd	0.50	12.66	50.18	7.91	16.70	nd	11.45	nd		99.40	K
66	4526-300	5	2	1	0.07	0.60	15.35	46.43	7.94	17.61	nd	11.21	nd		99.21	K
67	4552-300	6	2	1	0.05	1.27	13.99	45.99	6.17	25.61	nd	6.23	0.05		99.36	K
68	4564-300	7	2	1	0.20	0.48	41.45	24.04	4.39	11.30	nd	18.29	nd		100.15	K
		8	2	1	0.07	0.06	5.73		2.22		nd	11.06	nd		98.76	K
70	4592-300	9	2	2	0.08	0.26	11.87	54.03	4.86	16.60	nd	11.31	nd		99.01	K
		10	2	3	0.10	nd	9.40		0.70		nd	14.26	nd		99.55	DI
72	4592-300	11	2	4	0.07	0.27	11.48	52.85	5.49	19.98	nd	9.10	nd		99.24	K
73	4593-300	12	2	1	nd	0.85	12.74	46.10	6.80	28.09	nd	4.08	nd		98.66	K
74	4593-300	13	2	2	0.05	1.17	13.10	46.38	8.15	21.08	nd	8.96	nd		98.89	K
75	4593-300	14	2	3	0.05	0.89	13.57	48.82	6.92	18.41	nd	10.70	nd		99.35	K
ilm →	76	4793-500	15	2	1	nd	50.09	0.63	0.14	9.83	28.34	0.25	9.23	nd	98.51	K
	77	5011-300	16	2	1	nd	2.31	1.14	55.91	9.77	21.21	nd	8.18	nd	98.52	K
	78	5108-300	17	2	1	36.76	0.22	2.98	nd	nd	12.13	nd	9.44	22.91	84.44	????
	79	5111-500	18	2	1	nd	0.65	12.64	49.11	5.53	25.10	nd	5.99	nd	99.02	K
	80	5111-500	19	2	1	0.06	53.34	0.27	0.33	5.92	27.71	0.31	11.23	nd	99.17	K



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Diamond Exploration Consultancy

THE RECOVERY OF POTENTIAL KIMBERLITIC INDICATORS FROM TILL SAMPLES SUBMITTED UNDER BATCH MPH2003-3

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1. INTRODUCTION

Seventy-three pre-concentrated till samples were submitted for the recovery of potential kimberlitic indicator minerals in late December 2003. This report documents the sample processing and indicator recoveries. It was requested that certain samples be processed first. Since these are prospecting samples, surface texture analyses was undertaken on positive samples, but not on subsequent ones once P. Sobie of MPH indicated that this was not required.

2. SAMPLE PROCESSING

The various size and magnetic portions of each sample were re-combined to ensure standardisation within the Mineral-Logic procedures. The samples are then weighed and sieved into four size fractions (+1000, +710, +425 and +250 microns), with each fraction being de-magnetised using a tailings test magnet. Each fraction is then weighed. The fractions (excluding the magnetic and -250) are then examined under a binocular microscope and any potentially kimberlitic indicator minerals recovered. Details of sample weights are given in Table 1.

Table 1: Breakdown of Sample Weights

	Sample	Comb. Wt.	Check Wt	Mag	Non-Mag	+1000	+710	+425	+250	-250
1	K1	45.97	45.96	8.02	37.94	0.15	7.24	16.21	13.26	1.08
2	K2	9.25	9.26	1.81	7.45	0.00	0.08	0.50	6.20	0.67
3	K3	16.1	16.07	5.82	10.25	0.00	0.08	0.94	8.01	1.22
4	K4	8.29	8.51	0.96	7.55	0.01	0.26	0.85	5.55	0.88
5	K5	2.8	2.78	0.41	2.37	0.00	0.02	0.19	1.85	0.31
6	K6	4.81	4.78	0.51	4.27	0.00	0.07	0.68	3.18	0.34
7	K7	11.39	11.39	4.66	6.73	0.01	0.07	0.55	5.44	0.66
8	K8	8.18	8.19	1.05	7.14	0.01	0.05	0.57	6.19	0.32
9	K9	22.39	22.35	5.47	16.88	0.01	0.12	2.02	12.99	1.74
10	K10	5	4.97	0.26	4.71	0.00	0.10	0.35	3.76	0.50
11	K11	20.06	20.03	3.92	16.11	0.01	0.30	2.78	12.47	0.55
12	K12	14.35	14.34	2.89	11.45	0.00	0.08	0.83	9.85	0.69
13	K13	7.04	7.09	1.32	5.77	0.00	0.05	0.35	4.83	0.54
14	K14	4.25	4.32	0.68	3.64	0.00	0.10	0.42	2.83	0.29
15	K15	8.64	8.60	1.21	7.39	0.00	0.02	0.40	6.63	0.34
16	K16	6.36	6.35	0.84	5.51	0.00	0.04	0.31	4.68	0.48
17	K17	5.49	5.50	0.52	4.98	0.00	0.01	0.19	4.38	0.40
18	K18	9.25	9.24	2.81	6.43	0.00	0.05	0.44	5.27	0.67
19	K19	2.68	2.69	0.32	2.37	0.00	0.02	0.34	1.74	0.27
20	K20	36.38	35.95	9.74	26.21	0.00	0.26	3.19	21.01	1.75
21	K21	6.56	6.58	0.91	5.67	0.00	0.03	0.38	4.90	0.36
22	K22	7.33	7.34	1.42	5.92	0.00	0.04	0.35	5.11	0.42
23	K52/23	8.46	8.44	1.46	6.98	0.00	0.10	0.49	5.98	0.41
24	K24	7.41	7.41	0.14	7.27	0.00	0.01	0.24	6.79	0.23
25	K25	9.07	9.06	2.14	6.92	0.00	0.09	1.24	5.39	0.20
26	K27	2.13	2.10	0.44	1.66	0.00	0.03	0.42	1.04	0.17
27	K28	0.86	0.84	0.14	0.70	0.00	0.01	0.11	0.51	0.07
28	K29	10.63	10.62	1.92	8.70	0.00	0.24	0.84	6.84	0.78
29	K30	2.18	2.18	0.22	1.96	0.00	0.02	0.11	1.69	0.14
30	K31	8.49	8.50	1.55	6.95	0.00	0.06	0.49	5.91	0.49
31	K32	6.5	6.49	0.62	5.87	0.00	0.02	0.29	5.08	0.48
32	K33	7.73	7.75	1.55	6.20	0.01	0.10	0.46	5.21	0.42
33	K34	4.84	4.86	0.47	4.39	0.01	0.06	0.41	3.61	0.30
34	K35	7.54	7.52	1.68	5.84	0.01	0.20	0.74	4.33	0.56
35	K36	10.72	10.73	2.58	8.15	0.00	0.05	0.54	6.96	0.60
36	K37	11.23	11.22	2.15	9.07	0.00	0.17	0.76	7.45	0.69
37	K38	4.69	4.68	1.22	3.46	0.00	0.01	0.32	2.78	0.35
38	K39	15.49	15.47	2.51	12.96	0.01	0.61	1.70	9.00	1.64

	Sample	Comb. Wt.	Check Wt	Mag	Non-Mag	+1000	+710	+425	+250	-250
39	K40	7.12	7.09	1.43	5.66	0.00	0.06	0.62	4.51	0.47
40	K41	9.03	9.03	1.24	7.79	0.00	0.03	0.49	6.91	0.36
41	K42	7.58	7.59	1.21	6.38	0.00	0.04	0.38	5.60	0.36
42	K43	8.43	8.45	1.38	7.07	0.00	0.06	0.52	5.79	0.70
43	K44	8.67	8.66	1.10	7.56	0.00	0.01	0.39	6.82	0.34
44	K45	14.95	14.92	3.49	11.43	0.00	0.12	0.74	8.84	1.73
45	K46	1.44	1.42	0.13	1.29	0.00	0.03	0.24	0.93	0.09
46	K47	18.68	18.97	5.02	13.95	0.00	0.11	0.89	12.31	0.64
47	K48	5.76	5.75	0.65	5.10	0.00	0.01	0.16	4.64	0.29
48	K49	7.57	7.55	2.07	5.48	0.01	0.02	0.32	4.74	0.39
49	K50	3.16	3.16	0.35	2.81	0.01	0.04	0.62	2.07	0.07
50	K51	17.07	17.07	2.61	14.46	0.01	0.10	0.70	12.18	1.47
51	K52	16.08	16.08	1.69	14.39	0.01	0.11	4.25	9.72	0.30
52	K53	8.17	8.15	1.60	6.55	0.00	0.03	0.36	5.69	0.47
53	T1	4.53	4.55	0.30	4.25	0.00	0.09	0.42	3.39	0.35
54	T2	3.4	3.38	0.52	2.86	0.00	0.06	0.33	2.33	0.14
55	T3	11.61	11.61	1.71	9.90	0.00	0.04	0.45	9.11	0.30
56	T4	7.17	7.16	1.43	5.73	0.00	0.03	0.55	4.60	0.55
57	T5	9.25	9.22	1.35	7.87	0.00	0.01	0.39	7.26	0.21
58	T6	7.09	7.09	1.18	5.91	0.00	0.08	0.58	5.05	0.20
59	T7	13.24	13.22	2.70	10.52	0.00	0.11	0.43	9.08	0.90
60	T8	11.28	11.26	1.93	9.33	0.00	0.06	0.86	8.09	0.32
61	T9	32.15	31.73	6.00	25.73	0.00	0.04	3.97	20.93	0.79
62	T10	1.7	1.71	0.37	1.34	0.00	0.01	0.09	1.06	0.18
63	B17	62.83	62.81	1.64	61.17	0.00	0.31	4.84	48.92	7.10
64	B18	42.35	42.35	0.49	41.86	0.00	0.11	3.20	35.99	2.56
65	B19	23.09	23.06	1.57	21.49	0.01	0.13	3.99	17.19	0.17
66	B20	21.67	21.64	0.12	21.52	0.01	0.13	3.52	17.68	0.18
67	B21	23.72	23.71	4.26	19.45	0.02	0.37	5.18	13.63	0.25
68	B22	30.79	30.76	3.37	27.39	0.00	0.32	1.86	22.26	2.95
69	B23	19.82	19.79	0.26	19.53	0.00	0.06	1.66	17.48	0.33
70	B24	216.14	215.67	0.05	215.62	0.00	0.01	1.34	197.77	16.50
71	B25	222.9	222.80	0.30	222.50	0.00	0.01	11.85	198.67	11.97
72	B26	16.22	16.21	1.14	15.07	0.01	0.13	1.99	12.74	0.20
73	B27	57.83	57.79	0.29	57.50	0.00	0.02	14.28	42.57	0.63

3. RESULTS

Some samples were found to contain abundant indicators. In these cases, picking was suspended at either 100 or 50 grains per size fraction in order to speed-up turn-around.

Details of indicator minerals recovered are given in Table 2. Surface feature details on the 'urgent' sample appear in Table 3.

Sample	Size	Garnet	Ilm	Chr	CD
T1	BARREN				
T2	BARREN				
T3	BARREN				
T4	BARREN				
T5	250	2	1		
T6	250	1			
T7	250	8	1	1	1
T8	425	1		1	

Table 2: Details of Indicators Recovered					
Sample	Size	Garnet	Ilm	Chr	CD
T8	250	3		1	
T9	710			1	
	425	1	29	2	
	250	(13)	>51	10	5
T10	250				1
K1	1000	13	80	4	
	710	>100	>100	>100	1
	425	>100	>100	>100	36
	250	>100	>100	>100	>100
K2	710			1	
	425		12	3	
	250	7	13	26	
K3	425		2		
	250		1	1	1
K4	710		1		
	250	3		12	
K5	250	1			
	-250			1	2
K6	710			1	
	425	2	4		
	250		1	6	2
K7	710		1		
	250			1	
K8	710	1			
	250			1	1
K9	425	3			
	250	>53		8	5
K10	425	1			
	250	1		8	1
K11	250	1		3	3
K12	250	3		9	
K13	425	1			
	250			2	
K14	425	1			
	250	1		5	
K15	250	5			
K16	250				2
K17	250	2			
K18	710	1			
	425	1			
	250	5	1	3	
K19	BARREN				
K20	250			2	
K21	250	1			
K22	250			3	
K52/K23	250	2			
K24	250	1			
K25	250	1	1		
K27	250		1		
K28	BARREN				
K29	425	1			
	250	1			
K30	BARREN				
K31	425			1	
	250			3	

Table 2: Details of Indicators Recovered					
Sample	Size	Garnet	Ilm	Chr	CD
K32	425	1			
	250	1		4	
K33	425	1			
	250	1		3	
K34	425	1			
	250	1			
K35	250	1			
K36	425	1	1		
	250	5		1	1
K37	425			2	
	250	2		2	
K38	BARREN				
K39	425	1		2	
	250	1			
K40	710	4	15	1	
	425	>50	>50	>50	
	250	>50	>50	>50	11
K41	425			1	
	250	1			2
K42	425	2		2	
	250			1	
K43	250	1		3	
K44	250		1		2
K45	BARREN				
K46	710	1			
	425	1			
	250	1			
K47	250			3	
K48	425			1	
K49	425	1			
K50	250			1	
K51	425			1	
	250	1		2	3
K52	250	2			
K53	250	1			
B17	BARREN				
B18	710			3	
	425	2		18	6
	250	14		16	29
B19	BARREN				
B20	BARREN				
B21	BARREN				
B22	BARREN				
B23	BARREN				
B24	BARREN				
B25	BARREN				
B26	BARREN				
B27	BARREN				

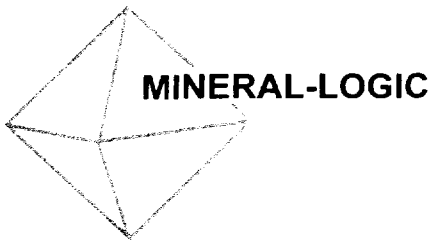
Table 3: Surface Feature Details

Sample	Size	Mintype	No.	WITH ROS			NO ROS			SPINELS			Comment
				C1	C2	C3	C4	C5	C6	G1	G2	G3	
K12	250	Gt	3	3 SKS									
		Cr	9							6	3		
K14	425	Gt	1		1SS								
	250	Gt	1				1						
		Cr	5							2	3		
K10	425	Gt	1	1SKS									
	250	Gt	1				1						
		Cr	8							7	1		
		CD	1		1SS								
K22	250	Cr	3							2			
K1	1000	Gt	13	13									9SKS, 4SS-incl 1DAF
		Ilm	80	4SS	75SS			1					
		Cr	4							1		3	
	710	Gt	>100	61									39SKS, 22SS-incl 11DAF
					34		5						18SKS, 16SS-incl 8DAF
		Ilm	>100		100SS								
		Cr	>100							18	70	12	
		CD	1		1SS								
	425	Gt	>100	51									31SKS, 20SS-incl 6DAF
					49								33SKS, 16SS-incl 7DAF
		Ilm	>100		100SS								
		Cr	>100							20	62	18	
		CD	36	8SS	28SS								
	250	Gt	>100	43									1ROK, 31SKS, 11SS-all DAF
					26								17SKS, 9SS-incl 2DAF
		Ilm	>100		56SS								
		Cr	>100							23	27	6	
		CD	>100	31SS	30SS								
K25	250	Gt	1	1SS									
		Ilm	1	1SS									
K27	250	Ilm	1		1SS								

Table 3: Surface Feature Details													
Sample	Size	Mintype	No.	WITH ROS			NO ROS			SPINELS			Comment
K40	710	Gt	4	3SKS	1SKS								
		Ilm	15	2SS	13SS								
		Cr	1								1		
	425	Gt	>50	29	9							14SKS, 15SS	
		Ilm	>50	10SS	37SS		3	2					
		Cr	>50							12	38		
	250	Gt	>50	35								1ROK, 18SKS, 16SS-incl 5DAF	
		Ilm	>50		12		3					2SKS, 10SS-incl 4DAF	
		Cr	>50			7							
		CD	11	2SS	9SS				3	22	32		
K18	710	Gt	1	1SS/DAF									
	425	Gt	1	1SS/DAF									
	250	Gt	5	3	2							1SKS, 2SS	
		Ilm	1		1SS								
		Cr	3							3			
K4	710	Ilm	1		1SS								
	250	Gt	3	3								1SKS, 2SS 1 with DAF	
		Cr	12							12			
K17	250	Gt	2	2SS									
K53	250	Gt	1	1SS									
ROS = remnant of original surface				C1-C3									
C1 = no abrasion						C3 = no abrasion			DAF = diagenetic alteration feature.				
C2 = minor abrasion						C4 = minor abrasion							
C3 = mod. To extensive abrasion						C5 = mod. To extensive abrasion							
SKS = sub-keliphitic surface						G1 = no abrasion							
ROK = remnant of keliphyte						G2 = slight abrasion							
SS = sculptured surface						G3 = mod. To extensive abrasion							



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Diamond Exploration Consultancy

**THE MINERAL-CHEMISTRY OF INDICATORS
RECOVERED FROM TILL SAMPLES K1 AND K40,
TIMISKAMING PROJECT, ONTARIO**

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k1_k40TILL.doc

1. INTRODUCTION

This report documents the analyses and interpretation of indicator minerals from till samples K1 and K40. Indicator recovery results were reported separately (Zweistra, 2004).

Selected indicators were analysed on a Jeol electron microprobe at the Council for Geoscience. The relevant XY plots and full analyses are appended.

2. RESULTS AND INTERPRETATION

2.1 Sample K1

The garnets comprise a typical upper mantle population, with both peridotitic and Cr-poor varieties present. (Figure 1). Seven of the former are subcalcic, but with low Cr₂O₃ contents. Their MnO contents suggest that four of these are associated with diamond (Grutter and Menzies, 2003), the others being associated with harzburgite from the graphite stability field. The Cr-poor garnets (Figure 2) plot in the eclogitic field, with two (one on the 0.07wt.% Na₂O line) being compositionally consistent with eclogitic diamond inclusion type garnets. The chromites define a broadly 'kimberlitic' signature, with one being similar to DI type chromites (Figure 3). The ilmenites are 'kimberlitic', with a distinct separation between Cr-poor megacrysts and metasomatic varieties (Figure 4). All but one of the chrome diopsides fall within 'kimberlitic' parameters, the one grain having high Al₂O₃ being an amphibole.

The presence of diamond indicator G10 garnets, potentially eclogitic DI garnets and a single DI type chromite indicate that the source kimberlite is likely to contain diamond. Looking at the data set as a whole, and assuming that the grains derive from a single source, The overall garnet signature is not encouraging from an economic point of view, suggesting derivation from a low grade source. The two distinctive ilmenite populations are noteworthy, **possibly** suggestive of more than one source. The ilmenite compositions suggest a low-to-moderate diamond preservation potential (Figure 5), with an index of 0.33.

Follow-up to locate and assess the source by means on microdiamond and indicator analyses is recommended.

2.2 Sample K40

The garnets comprise a typical upper mantle population, with both peridotitic and Cr-poor varieties present. (Figure 6). Fifteen of the former are subcalcic, but with low Cr₂O₃ contents. Their MnO contents suggest that nine of these are associated with diamond (Grutter and Menzies, 2003), the others being associated with harzburgite from the graphite stability field. The Cr-poor garnets (Figure 7) plot in the eclogitic field, being compositionally consistent with derivation from barren type-II eclogite. The chromites define a 'kimberlitic' signature, with three grains plotting in the DI field (Figure 8). Only one is compositionally consistent with DI type chromites. The ilmenites, with the exception of one, are 'kimberlitic', with a distinct separation between Cr-poor megacrysts and metasomatic varieties (Figure 9). All of the chrome diopsides fall within 'kimberlitic' parameters.

The presence of G10 and a single DI type chromite suggests that diamond is likely to be present in the source. Overall, the data is suggestive of a low-grade kimberlite. The ilmenite compositions suggest a low-to-moderate diamond preservation potential (Figure 10), with an index of 0.34.

3. COMMENT

The indicator chemistries from both samples are very similar, suggesting derivation from a geochemically similar source.

4. REFERENCES

Grutter, H. and Menzies, A. (2003). Mutually consistent classification schemes for Mantle-Derived Garnet and Chromite, for use by Diamond Explorers. Ext. Abs. 8IKC.

Zweistra, P. (2004). Report No. ML04/005 to MPH Consulting.



P. Zweistra

6 February, 2004

Fig. 1: Garnet Compositions

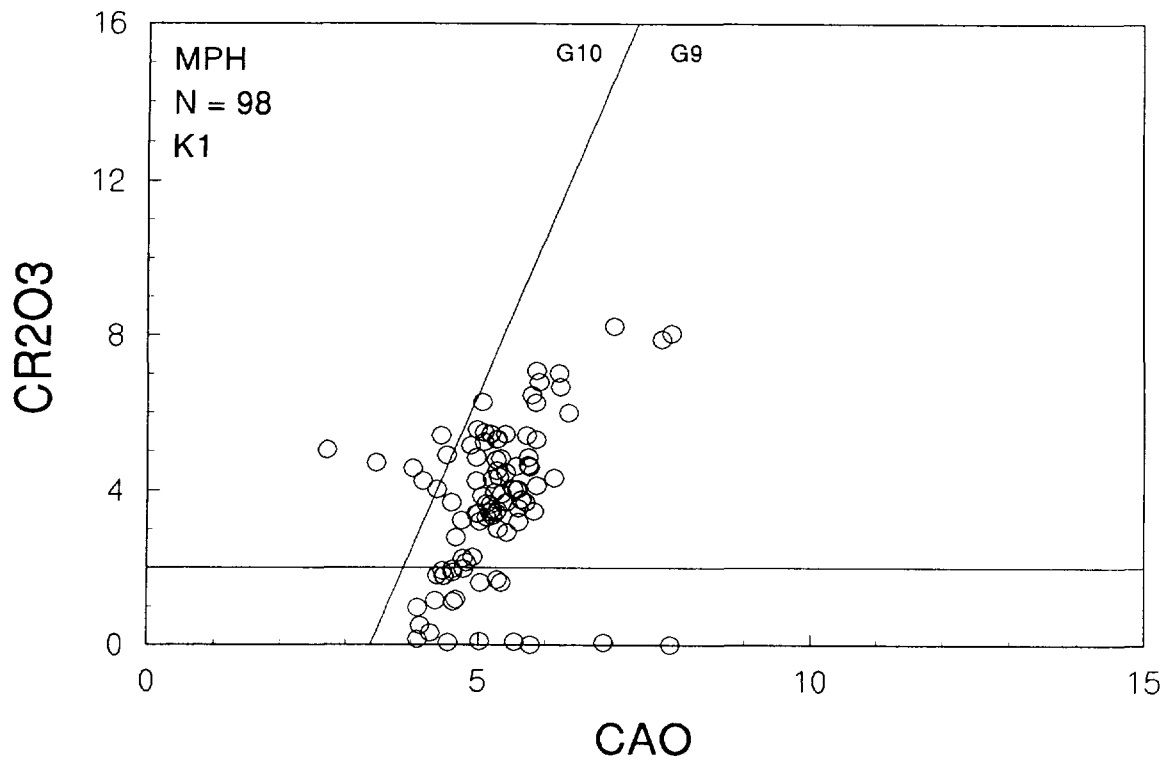


Fig. 2: Cr-Poor Garnets

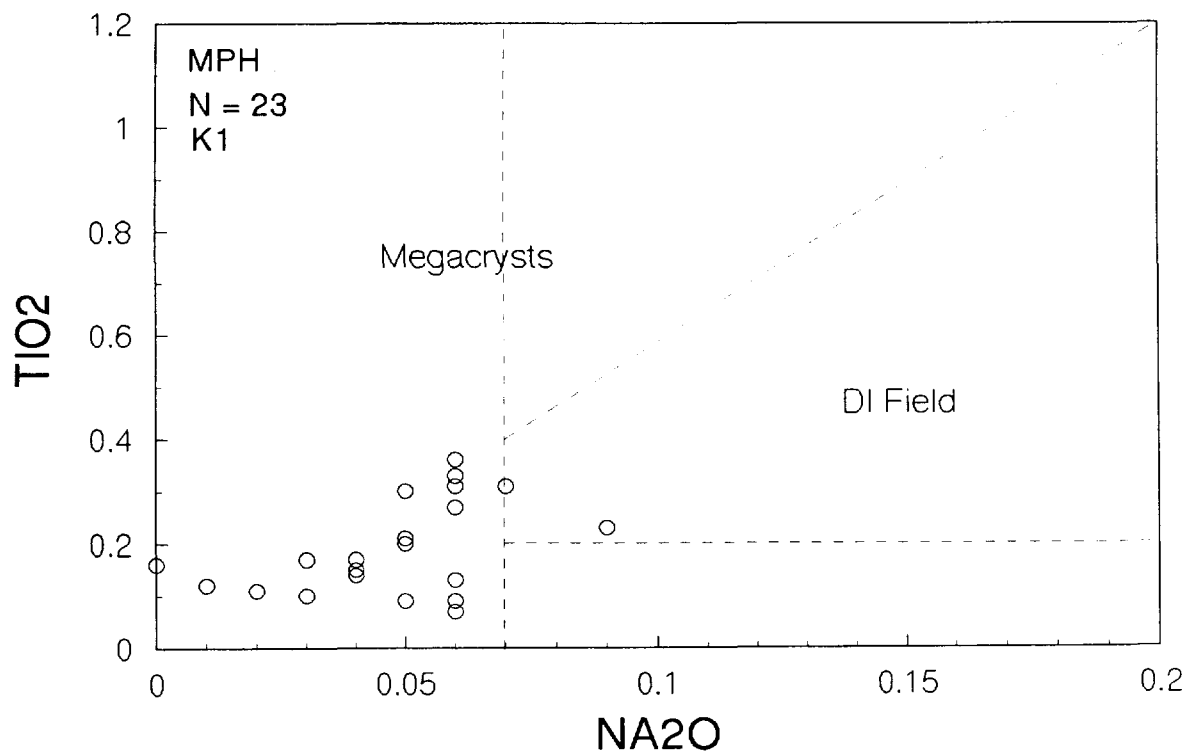


Fig. 3: Chromite

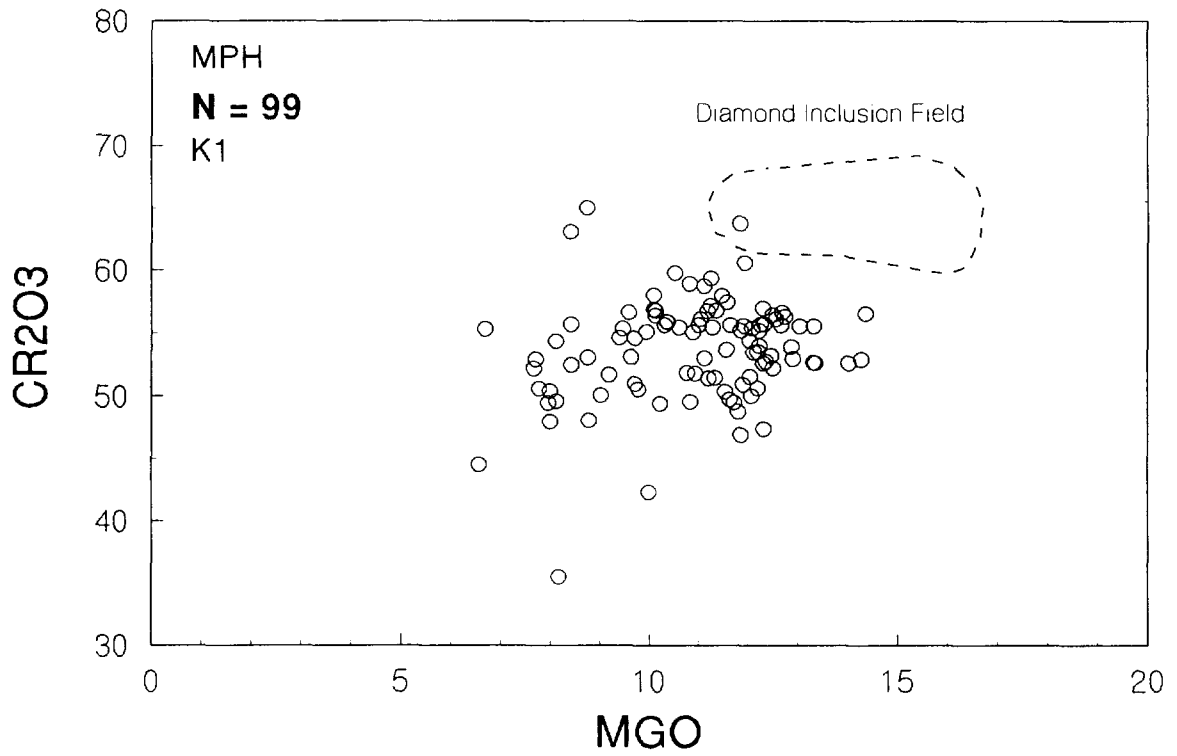


Fig. 4: Ilmenite Compositions

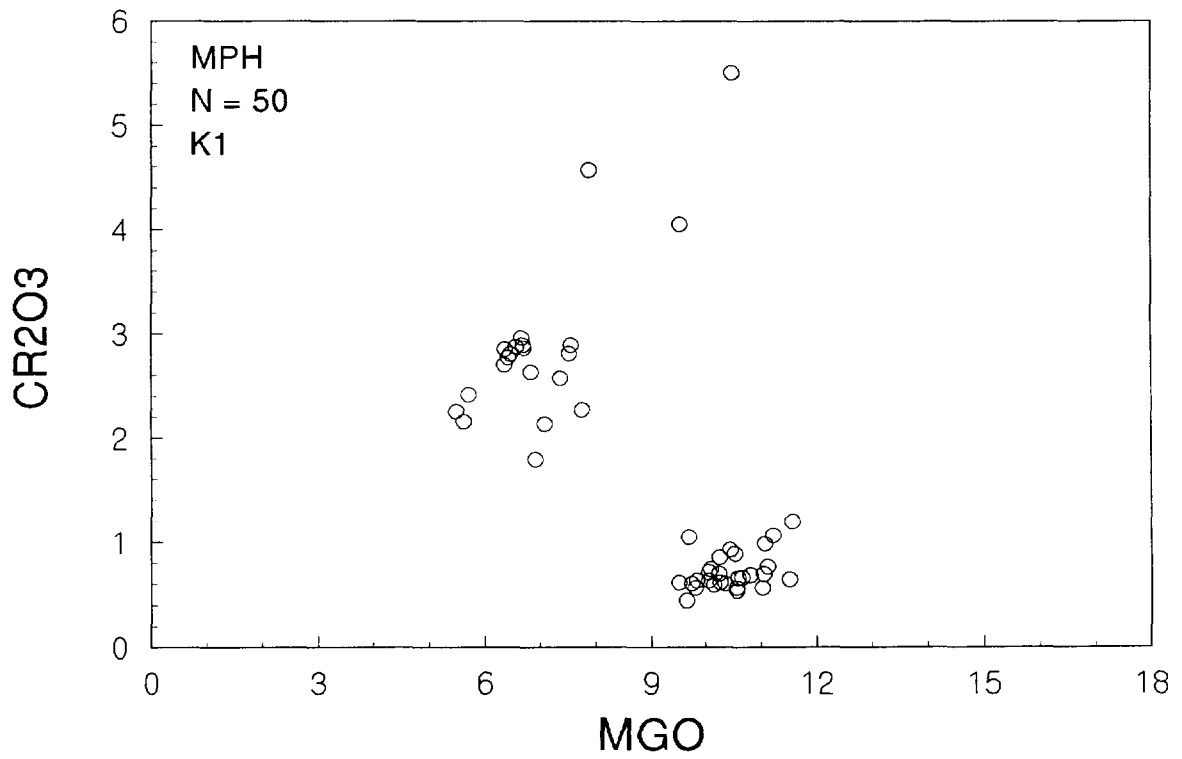
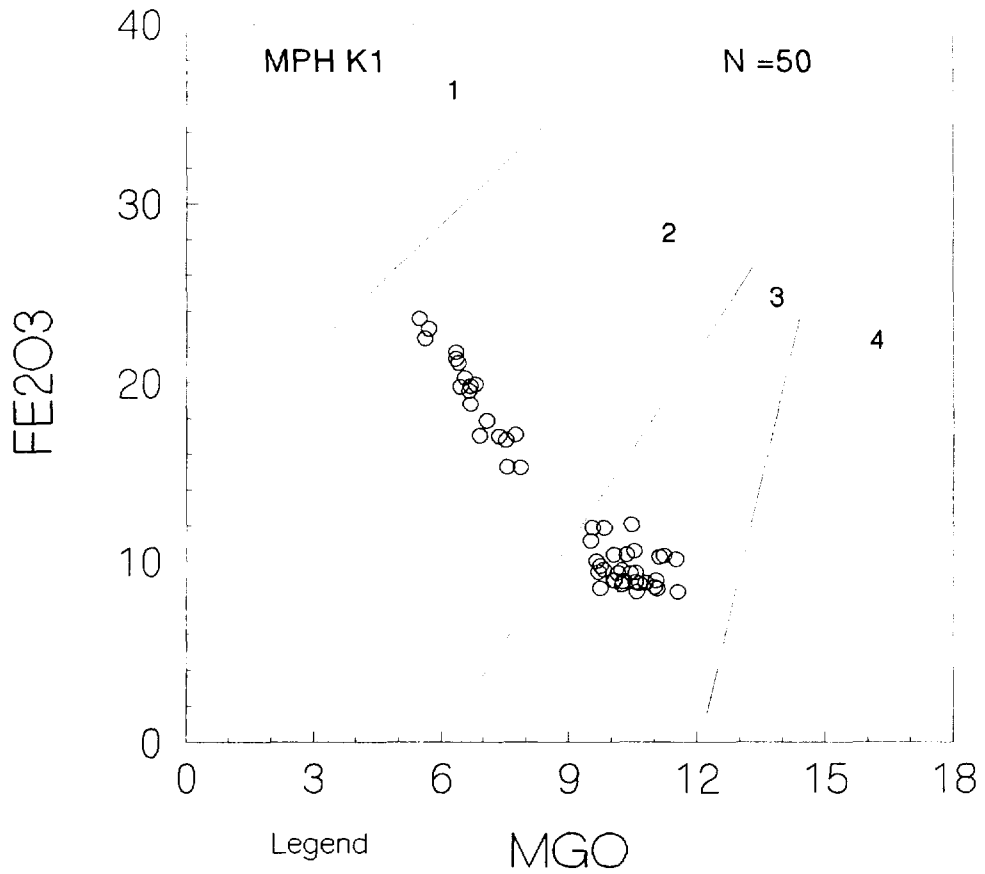


Fig.5: Ilm. Diamond Preservation Potential



1 = No Preservation, 2 = marginal pres., 3 = intermed. pres., 4 = ultimate pres.

Fig. 6: Garnet Compositions

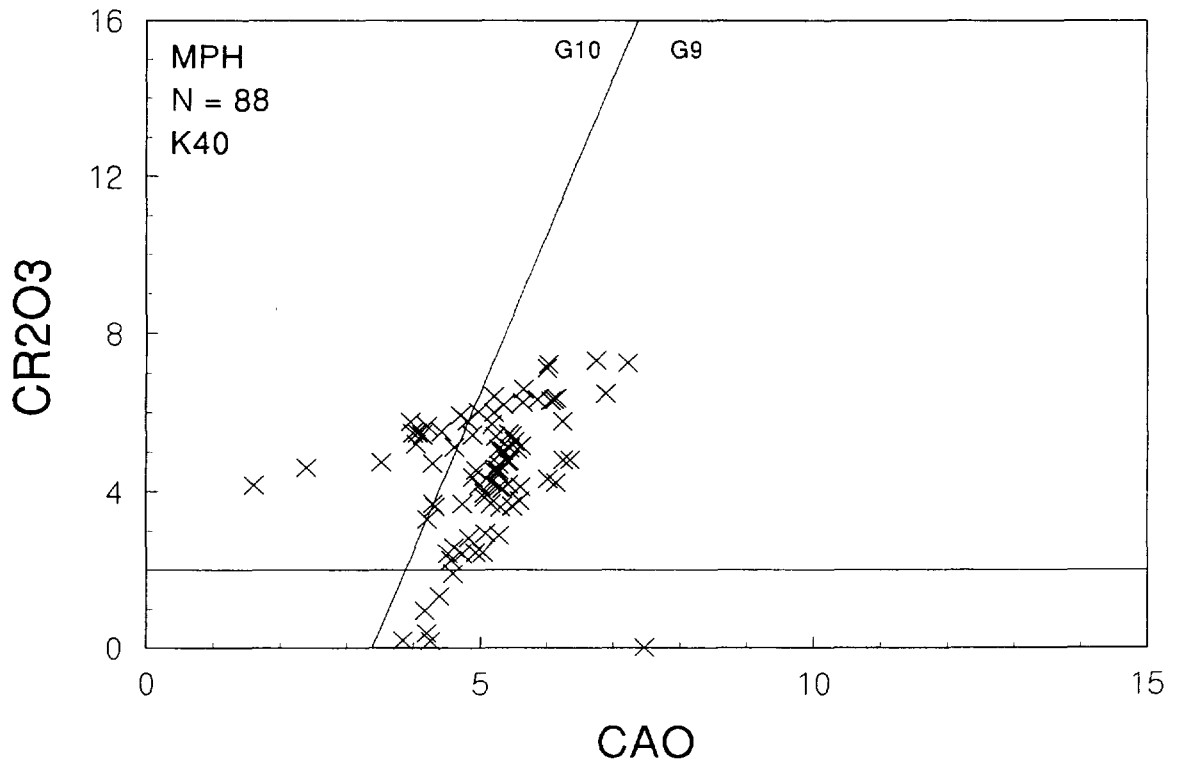


Fig.7 Cr-Poor Garnets

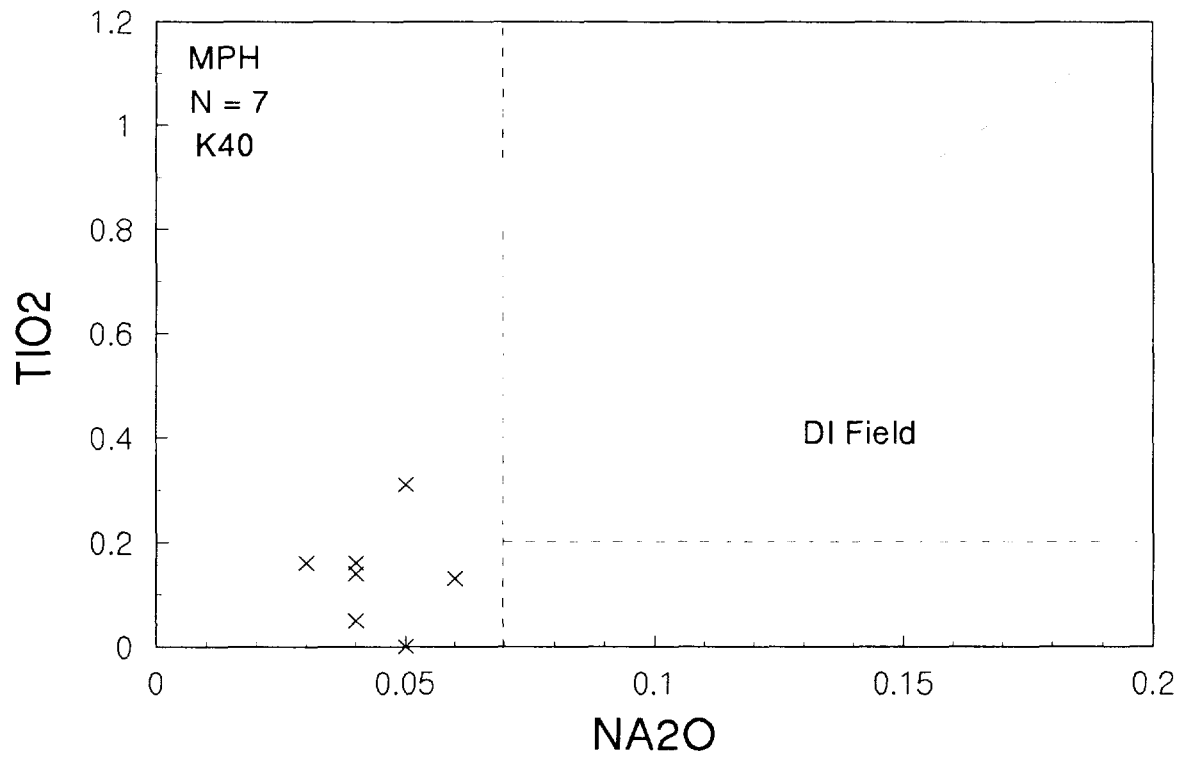


Fig.8: Chromite

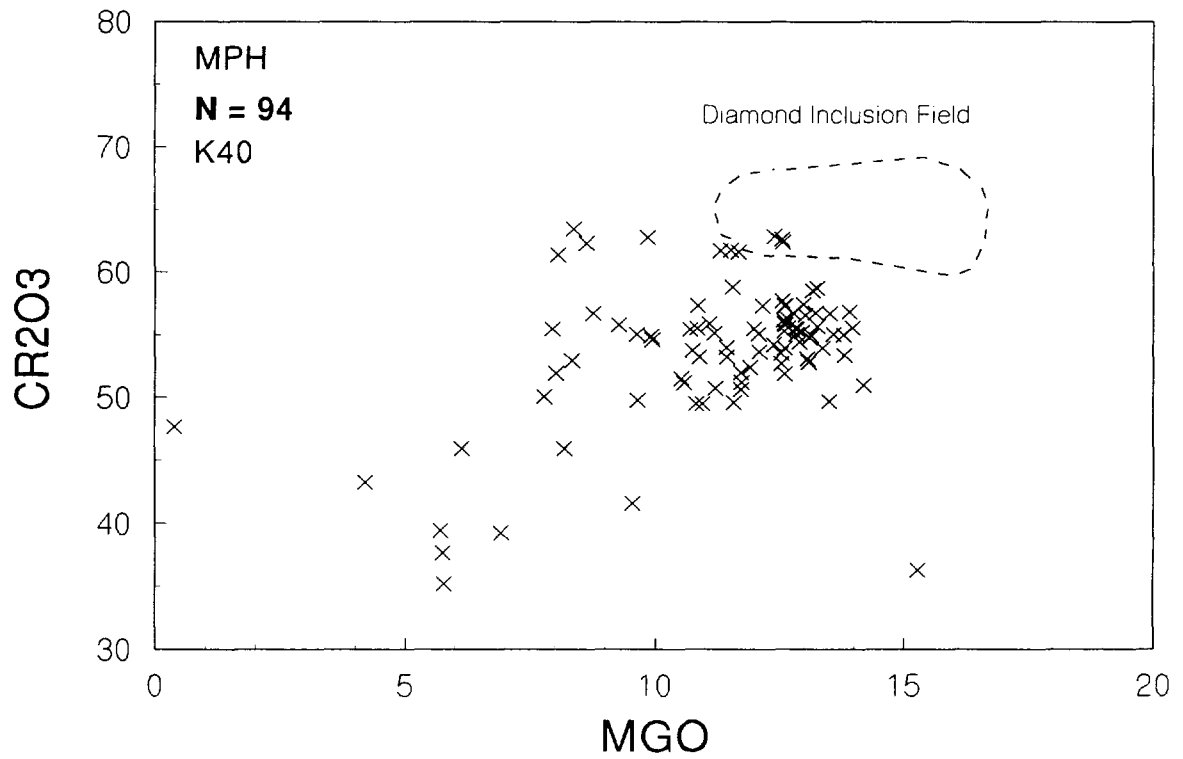


Fig.9: Ilmenite Compositions

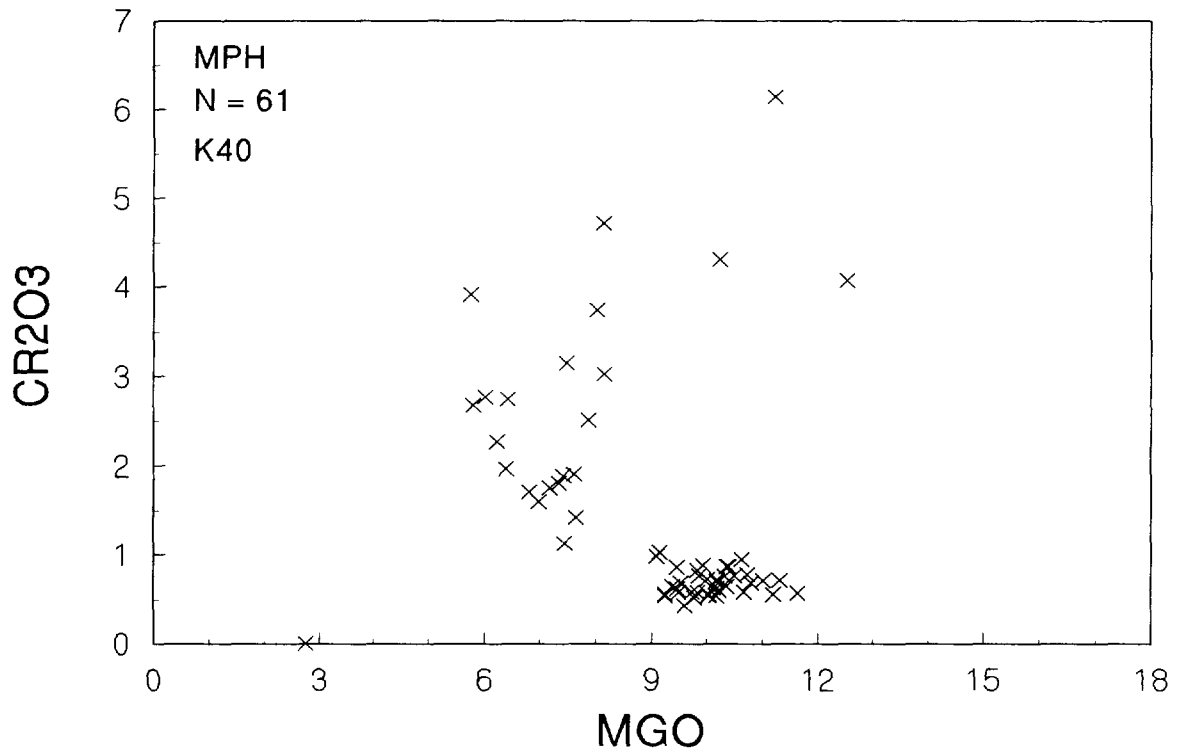
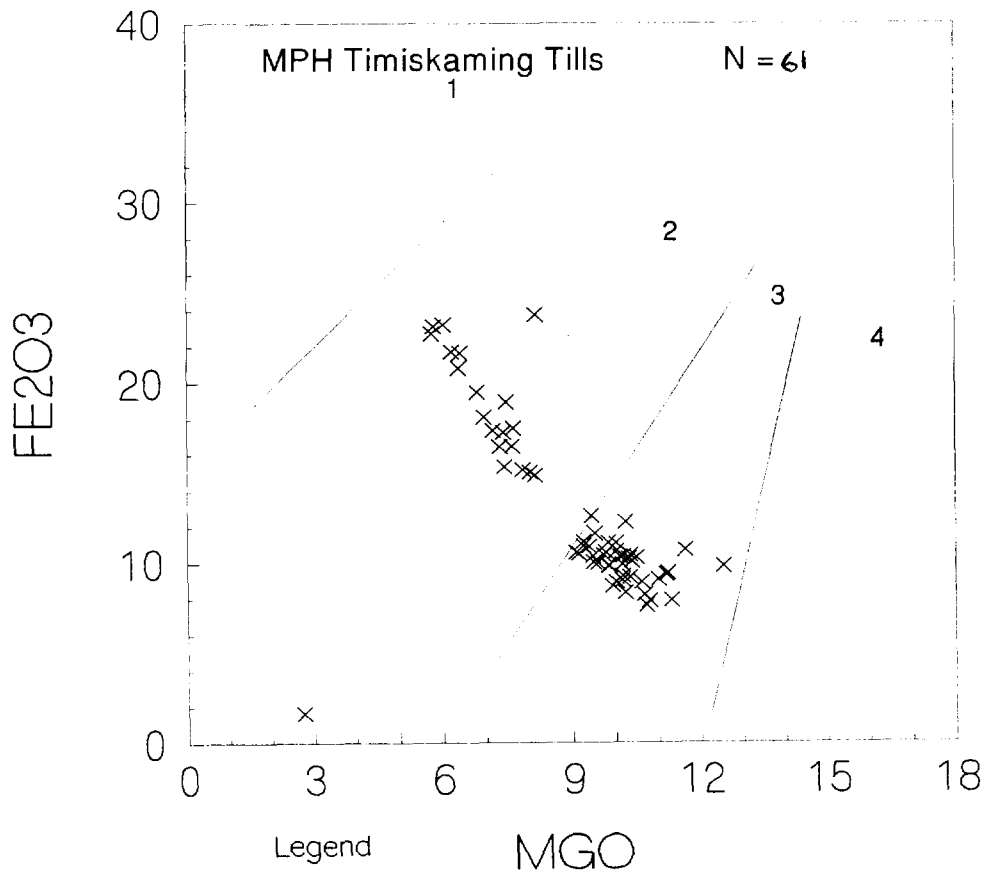


Fig.10: Ilm. Diamond Preservation potential



1 = No Preservation, 2 = marginal pres., 3 = intermed. pres., 4 = ultimate pres.

	SAMPLE	NUMBER	SiO2	TiO2	AL2O3	CR2O3	FE2O3	FEO	MNO	MGO	CAO	NA2O	K2O	TOTAL
1	K1	1	39.91	0.20	17.53	8.23	0.00	8.18	0.47	17.42	7.03			98.97
2	K1	2	41.65	0.00	18.95	7.01	0.00	6.70	0.33	19.05	6.20			99.89
3	K1	3	40.29	0.00	18.80	7.08	0.00	6.41	0.36	19.78	5.86			98.58
4	K1	4	40.74	0.00	20.38	5.23	0.00	6.47	0.37	20.52	5.08			98.79
5	K1	5	40.87	0.00	20.48	4.84	0.00	6.65	0.39	20.33	4.96			98.52
6	K1	6	40.91	0.05	19.73	5.44	0.00	6.65	0.36	20.07	5.40			98.61
7	K1	7	40.76	0.00	17.40	7.89	0.00	7.53	0.29	17.33	7.75			98.95
8	K1	8	41.08	0.12	19.17	6.44	0.00	6.99	0.34	19.57	5.79			99.50
9	K1	9	40.59	0.00	19.48	6.26	0.00	6.55	0.37	20.39	5.05			98.69
10	K1	10	40.20	0.00	17.53	8.04	0.00	7.17	0.42	17.62	7.90			98.88
11	K1	11	40.89	0.06	18.78	6.79	0.00	7.53	0.40	19.36	5.90			99.71
12	K1	12	41.31	0.00	20.35	5.31	0.00	7.55	0.41	20.10	5.28			100.31
13	K1	13	40.98	0.10	20.64	4.60	0.00	7.97	0.45	19.46	5.56			99.76
14	K1	14	41.43	0.00	20.90	4.35	0.00	7.47	0.37	20.27	5.30			100.09
15	K1	15	41.28	0.00	20.18	5.45	0.00	7.33	0.40	20.10	5.18			99.92
16	K1	16	41.48	0.00	21.18	3.86	0.00	7.44	0.32	20.58	5.05			99.91
17	K1	17	41.40	0.00	21.26	3.68	0.00	8.63	0.44	19.36	5.42			100.19
18	K1	18	40.52	0.00	20.57	3.77	0.00	8.64	0.53	18.89	5.65			98.57
19	K1	19	41.33	0.00	21.08	4.56	0.00	6.99	0.39	21.33	4.01			99.69
20	K1	20	41.44	0.00	21.52	3.33	0.00	9.01	0.57	19.15	5.21			100.23
21	K1	21	41.08	0.08	19.24	6.66	0.00	6.77	0.37	19.65	6.21			100.06
22	K1	22	41.22	0.00	21.53	3.39	0.00	8.21	0.40	20.32	4.99			100.06
23	K1	23	40.82	0.19	19.64	5.56	0.00	7.53	0.37	20.39	4.97			99.47
24	K1	24	40.73	0.00	20.27	4.77	0.00	7.10	0.40	20.70	5.26			99.23
25	K1	25	41.21	0.09	20.39	4.83	0.00	7.88	0.40	19.34	5.74			99.88
26	K1	26	40.70	0.25	19.34	5.40	0.00	7.56	0.40	19.84	5.72			99.21
27	K1	27	41.33	0.00	21.02	4.00	0.00	8.29	0.39	19.42	5.57			100.02
28	K1	28	40.80	0.00	21.39	3.46	0.00	8.75	0.58	18.97	5.83			99.78
29	K1	29	41.05	0.00	20.33	5.14	0.00	7.21	0.40	20.94	4.88			99.95
30	K1	30	40.76	0.00	21.02	3.75	0.00	8.95	0.54	18.91	5.64			99.57
31	K1	31	41.33	0.00	21.56	3.50	0.00	7.38	0.53	19.98	5.21			99.49
32	K1	32	41.39	0.00	21.01	4.23	0.00	6.51	0.37	20.59	4.96			99.06
33	K1	33	41.59	0.00	21.24	4.24	0.00	6.78	0.43	21.25	4.17			99.70
34	K1	34	41.17	0.08	19.83	5.29	0.00	6.99	0.42	19.84	5.26			98.88
35	K1	35	41.18	0.00	21.13	3.53	0.00	8.69	0.43	18.78	5.60			99.34
36	K1	36	40.94	0.14	20.54	4.46	0.00	7.27	0.31	19.73	5.41			98.80
37	K1	37	41.64	0.06	21.55	3.30	0.00	8.38	0.46	19.46	5.12			99.97
38	K1	38	41.42	0.07	19.93	5.43	0.00	6.21	0.38	20.61	5.18			99.23
39	K1	39	41.83	0.00	20.42	5.03	0.00	5.63	0.37	22.96	2.70			98.94
40	K1	40	41.53	0.00	20.37	4.89	0.00	7.21	0.46	20.61	4.52			99.59
41	K1	41	41.10	0.00	21.03	3.68	0.00	8.41	0.53	18.86	5.71			99.32
42	K1	42	40.88	0.00	21.16	3.48	0.00	8.35	0.43	19.28	5.28			98.86
43	K1	43	41.50	0.00	21.76	3.22	0.00	7.84	0.43	19.84	4.75			99.34
44	K1	44	41.15	0.00	20.94	4.02	0.00	7.03	0.54	20.00	5.59			99.27
45	K1	45	41.06	0.00	21.27	3.42	0.00	8.40	0.51	18.91	5.26			98.83
46	K1	46	41.19	0.00	21.26	3.18	0.00	7.55	0.53	19.29	5.60			98.60
47	K1	47	41.52	0.06	20.50	4.70	0.00	6.43	0.33	21.93	3.45			98.92
48	K1	48	41.13	0.08	20.93	3.90	0.00	7.07	0.32	19.96	5.35			98.74
49	K1	49	42.02	0.00	21.35	3.69	0.00	6.93	0.31	20.70	4.60			99.60
50	K1	50	41.68	0.00	21.79	2.90	0.00	7.64	0.31	19.86	5.43			99.61
51	K1	51	41.31	0.12	19.89	4.63	0.00	7.74	0.37	19.11	5.74			98.91
52	K1	52	41.18	0.00	20.86	3.42	0.00	8.35	0.30	19.76	5.17			99.04
53	K1	53	41.28	0.00	20.15	5.41	0.00	6.82	0.34	20.56	4.44			99.00
54	K1	54	40.96	0.07	19.67	4.59	0.00	7.81	0.36	20.00	5.76			99.22
55	K1	55	41.22	0.00	19.67	4.81	0.00	7.10	0.35	20.27	5.33			98.75
56	K1	56	41.94	0.05	21.25	3.39	0.00	7.08	0.33	20.59	4.96			99.59
57	K1	57	41.32	0.00	19.63	5.48	0.00	7.09	0.44	19.86	5.08			98.90
58	K1	58	41.24	0.00	20.46	4.32	0.00	8.21	0.47	18.81	6.13			99.64
59	K1	59	40.99	0.00	18.81	6.25	0.00	7.22	0.40	19.56	5.85			99.08
60	K1	60	41.14	0.00	20.86	3.00	0.00	8.89	0.49	19.33	5.29			99.00

	SAMPLE	NUMBER	SiO2	TiO2	Al2O3	CR2O3	FE2O3	FeO	MNO	MGO	CAO	NA2O	K2O	TOTAL
61	K1	61	40.98	0.25	19.86	5.30	0.00	6.99	0.37	19.62	5.86			99.23
62	K1	62	41.57	0.14	21.05	4.02	0.00	7.49	0.37	20.72	4.38			99.74
63	K1	63	41.27	0.08	20.95	3.63	0.00	7.51	0.35	20.24	5.18			99.21
64	K1	64	41.31	0.29	21.78	2.24	0.00	8.18	0.26	20.37	4.77			99.20
65	K1	65	41.01	0.11	22.31	1.61	0.00	9.84	0.41	18.95	5.34	0.02		99.58
66	K1	66	41.05	0.12	20.34	4.50	0.00	7.34	0.31	20.02	5.27			98.95
67	K1	67	41.54	0.12	21.25	3.20	0.00	7.96	0.38	20.08	5.02			99.55
68	K1	68	41.06	0.00	20.89	4.02	0.00	7.74	0.42	19.78	5.52			99.43
69	K1	69	41.65	0.29	20.39	4.28	0.00	7.40	0.40	20.07	5.21			99.69
70	K1	70	41.17	0.15	20.87	3.95	0.00	7.74	0.35	20.04	5.24			99.51
71	K1	71	41.02	0.10	21.21	3.65	0.00	8.38	0.47	19.40	5.12			99.35
72	K1	72	40.75	0.21	19.05	5.98	0.00	7.79	0.27	18.83	6.34			99.22
73	K1	73	40.35	0.08	19.99	4.11	0.00	12.88	0.62	16.50	5.87			100.40
74	K1	74	41.20	0.16	22.19	1.61	0.00	9.09	0.36	19.26	5.03	0.00		98.90
75	K1	75	41.41	0.19	22.17	2.14	0.00	8.26	0.42	20.37	4.82			99.78
76	K1	76	41.76	0.10	22.93	0.98	0.00	7.95	0.42	21.00	4.09	0.03		99.23
77	K1	77	40.98	0.12	22.02	1.69	0.00	11.43	0.51	17.80	5.28	0.01		99.83
78	K1	78	41.73	0.23	21.66	2.27	0.00	7.97	0.28	19.93	4.92			98.99
79	K1	79	41.36	0.28	21.43	2.79	0.00	8.44	0.35	20.33	4.67			99.65
80	K1	80	41.31	0.31	21.86	1.93	0.00	8.61	0.39	20.37	4.46	0.07		99.24
81	K1	81	41.48	0.36	21.83	1.97	0.00	8.57	0.29	19.90	4.78	0.06		99.18
82	K1	82	41.58	0.31	22.12	1.79	0.00	8.68	0.31	20.12	4.49	0.06		99.40
83	K1	83	41.46	0.30	22.00	1.79	0.00	9.00	0.31	20.04	4.48	0.05		99.38
84	K1	84	41.59	0.33	22.26	1.95	0.00	8.51	0.30	20.29	4.61	0.06		99.84
85	K1	85	41.38	0.27	21.98	1.87	0.00	8.91	0.39	20.07	4.62	0.06		99.49
86	K1	86	41.26	0.17	22.33	1.80	0.00	10.52	0.45	19.13	4.39	0.04		100.05
87	K1	87	41.37	0.20	22.47	1.18	0.00	8.59	0.45	19.78	4.67	0.05		98.71
88	K1	88	41.23	0.17	22.89	1.16	0.00	9.56	0.39	19.61	4.36	0.03		99.37
89	K1	89	41.41	0.13	22.55	1.12	0.00	8.38	0.46	19.89	4.63	0.06		98.57
90	K1	90	40.39	0.14	22.98	0.14	0.00	14.79	0.37	16.51	4.09	0.04		99.45
91	K1	91	39.40	0.10	22.27	0.00	0.00	21.37	0.48	10.25	5.78	0.03		99.68
92	K1	92	39.21	0.10	22.33	0.07	0.00	19.30	0.52	11.28	6.88	0.03		99.72
93	K1	93	38.96	0.07	22.38	0.08	0.00	21.90	0.41	11.03	5.54	0.06		100.43
94	K1	94	38.89	0.09	21.85	0.07	0.00	22.86	0.48	10.93	4.55	0.05		99.77
95	K1	95	38.96	0.09	22.11	0.09	0.00	22.98	0.46	10.52	5.02	0.06		100.29
96	K1	96	41.54	0.21	23.26	0.31	0.00	11.02	0.37	19.40	4.28	0.05		100.44
97	K1	97	41.12	0.15	23.38	0.51	0.00	10.94	0.36	19.33	4.13	0.04		99.92
98	K1	98	38.37	0.23	22.17	0.00	0.00	22.71	0.40	8.22	7.88	0.09		99.98
99	K1	1	0.07	44.62	0.13	2.13	17.86	27.36	0.23	7.08	0.00			99.48
100	K1	2	0.08	40.47	0.10	2.25	23.54	26.52	0.20	5.48	0.00			98.64
101	K1	3	0.07	51.98	0.26	0.65	8.31	27.61	0.27	10.58	0.07			99.80
102	K1	4	0.10	50.60	0.21	0.56	9.55	27.83	0.32	9.80	0.00			98.98
103	K1	5	0.07	51.60	0.17	0.69	8.95	26.60	0.21	11.04	0.00			99.33
104	K1	6	0.06	44.65	0.16	2.27	17.09	26.19	0.22	7.75	0.00			98.39
105	K1	7	0.07	49.15	0.20	0.63	11.88	26.42	0.36	9.82	0.00			98.53
106	K1	8	0.08	49.45	0.21	0.61	11.14	27.40	0.23	9.50	0.00			98.63
107	K1	9	0.00	51.36	0.32	0.76	10.25	26.10	0.28	11.11	0.00			100.19
108	K1	10	0.05	47.06	0.18	5.50	12.03	23.45	0.27	10.47	0.00			99.00
109	K1	11	0.09	42.71	0.15	2.96	19.51	26.42	0.22	6.66	0.00			98.72
110	K1	12	0.08	50.93	0.21	0.71	10.38	27.59	0.32	10.04	0.07			100.33
111	K1	13	0.00	51.28	0.19	0.92	9.35	27.23	0.28	10.44	0.00			99.69
112	K1	14	0.05	52.05	0.22	0.68	8.82	27.32	0.31	10.79	0.00			100.24
113	K1	15	0.05	51.99	0.25	0.64	10.10	26.01	0.30	11.50	0.00			100.84
114	K1	16	0.05	42.68	0.11	2.87	20.26	26.62	0.13	6.56	0.00			99.28
115	K1	17	0.07	47.79	0.08	4.05	11.90	25.75	0.24	9.54	0.05			99.47
116	K1	18	0.08	51.86	0.18	0.59	9.33	28.42	0.26	10.13	0.00			100.84
117	K1	19	0.06	51.05	0.25	0.88	10.59	26.94	0.29	10.52	0.00			100.58
118	K1	20	0.00	51.78	0.18	0.53	9.37	27.42	0.26	10.55	0.06			100.15
119	K1	21	0.07	51.95	0.18	0.63	8.98	28.63	0.27	10.04	0.00			100.76
120	K1	22	0.05	42.88	0.08	2.89	19.80	26.47	0.23	6.69	0.00			99.08

	SAMPLE	NUMBER	SiO2	TiO2	Al2O3	CR2O3	FE2O3	FEO	MNO	MGO	CAO	NA2O	K2O	TOTAL
121	K1	23	0.00	50.92	0.22	0.60	10.38	27.00	0.27	10.34	0.07			99.80
122	K1	24	0.05	42.21	0.07	2.85	21.68	26.41	0.27	6.36	0.00			99.90
123	K1	25	0.06	45.17	0.17	1.79	17.03	28.14	0.23	6.91	0.00			99.51
124	K1	26	0.09	51.74	0.20	0.61	8.87	28.02	0.34	10.25	0.00			100.13
125	K1	27	0.08	51.72	0.20	0.74	8.94	28.36	0.28	10.08	0.00			100.40
126	K1	28	0.06	52.50	0.25	1.19	8.30	26.25	0.37	11.55	0.06			100.53
127	K1	29	0.11	44.34	0.13	4.57	15.26	25.78	0.20	7.87	0.00			98.26
128	K1	30	0.00	51.85	0.19	0.85	8.72	27.93	0.35	10.24	0.07			100.20
129	K1	31	0.08	41.87	0.11	2.77	21.08	26.02	0.28	6.42	0.00			98.63
130	K1	32	0.08	44.41	0.08	2.57	16.98	26.66	0.25	7.36	0.00			98.39
131	K1	33	0.07	40.70	0.10	2.41	22.99	26.33	0.19	5.70	0.00			98.49
132	K1	34	0.00	51.88	0.32	0.56	8.58	26.78	0.25	11.01	0.00			99.38
133	K1	35	0.09	41.93	0.10	2.70	21.32	26.31	0.19	6.35	0.00			98.99
134	K1	36	0.00	43.30	0.09	2.80	19.74	27.17	0.27	6.45	0.00			99.82
135	K1	37	0.05	52.00	0.24	0.66	8.77	27.52	0.34	10.64	0.00			100.22
136	K1	38	0.07	51.68	0.21	0.69	9.51	28.04	0.28	10.23	0.00			100.71
137	K1	39	0.08	43.31	0.10	2.86	18.78	26.84	0.26	6.70	0.00			98.93
138	K1	40	0.00	52.24	0.25	0.98	8.48	26.92	0.34	11.06	0.00			100.27
139	K1	41	0.07	50.74	0.22	1.04	9.43	28.17	0.27	9.69	0.00			99.63
140	K1	42	0.00	42.94	0.09	2.63	19.88	26.23	0.23	6.82	0.00			98.82
141	K1	43	0.07	50.62	0.19	0.44	10.01	28.12	0.30	9.64	0.00			99.39
142	K1	44	0.00	51.37	0.20	1.06	10.32	25.93	0.28	11.21	0.00			100.37
143	K1	45	0.06	40.94	0.09	2.15	22.44	26.63	0.24	5.62	0.00			98.17
144	K1	46	0.05	0.10	15.54	35.50	18.51	21.80	0.00	8.17	0.00			99.67
145	K1	47	0.07	51.49	0.19	0.56	8.85	27.28	0.30	10.55	0.00			99.30
146	K1	48	0.07	45.22	0.11	2.89	15.28	26.96	0.25	7.55	0.06			98.39
147	K1	49	0.07	50.70	0.20	0.60	9.74	28.07	0.26	9.73	0.00			99.38
148	K1	50	0.06	44.60	0.14	2.81	16.78	26.56	0.21	7.52	0.00			98.68
149	K1	51	0.22	1.59	2.69	55.30	10.06	19.11	0.00	9.45	0.00			98.42
150	K1	52	0.14	0.61	10.88	49.53	9.01	17.25	0.00	10.84	0.00			98.26
151	K1	53	0.22	1.13	13.12	52.60	4.36	14.82	0.00	13.36	0.00			99.62
152	K1	54	0.24	0.32	8.21	53.08	9.19	18.92	0.00	9.64	0.05			99.65
153	K1	55	0.12	0.26	14.28	49.98	5.86	15.57	0.00	12.07	0.00			98.14
154	K1	56	0.08	0.13	13.56	55.62	0.58	15.77	0.00	11.65	0.00			97.39
155	K1	57	0.05	0.00	17.55	52.72	0.31	15.43	0.00	12.37	0.06			98.48
156	K1	58	0.10	0.08	11.78	56.94	4.04	15.50	0.00	12.30	0.00			100.73
157	K1	59	0.07	0.00	10.59	56.77	4.26	16.14	0.00	11.36	0.00			99.19
158	K1	60	0.06	0.07	16.12	50.90	4.07	16.32	0.00	11.90	0.00			99.44
159	K1	61	0.09	0.16	12.88	56.75	0.00	17.30	0.00	10.14	0.00			97.32
160	K1	62	0.00	1.16	7.83	54.60	5.88	19.33	0.00	9.39	0.00			98.19
161	K1	63	0.00	0.05	17.80	50.64	1.64	15.57	0.00	12.20	0.00			97.90
162	K1	64	0.07	0.07	11.80	55.17	4.47	14.91	0.00	12.23	0.00			98.72
163	K1	65	0.08	0.09	12.36	56.59	0.00	17.40	0.00	9.58	0.00			96.10
164	K1	66	0.11	0.44	6.61	57.98	5.31	17.53	0.00	10.09	0.00			98.07
165	K1	67	0.12	0.29	14.72	51.53	4.37	16.05	0.00	12.04	0.00			99.13
166	K1	68	0.00	0.06	11.41	53.47	6.61	14.80	0.00	12.12	0.00			98.47
167	K1	69	0.07	0.68	13.82	52.44	0.03	20.91	0.00	8.43	0.00			96.37
168	K1	70	0.19	0.40	11.75	55.61	3.36	14.69	0.00	12.66	0.00			98.66
169	K1	71	0.15	2.02	3.51	60.59	4.48	15.84	0.00	11.94	0.00			98.54
170	K1	72	0.00	0.38	11.25	51.81	6.85	16.99	0.00	10.77	0.00			98.05
171	K1	73	0.09	0.24	12.31	55.10	0.00	17.62	0.00	9.94	0.00			95.30
172	K1	74	0.06	2.56	0.79	44.47	19.84	23.54	0.00	6.57	0.00			97.83
173	K1	75	0.10	0.50	9.97	57.13	2.84	16.40	0.00	11.25	0.00			98.18
174	K1	76	0.08	0.71	9.05	56.07	5.30	14.29	0.00	12.56	0.05			98.11
175	K1	77	0.08	0.17	12.04	55.53	4.30	13.43	0.00	13.32	0.00			98.87
176	K1	78	0.05	0.57	6.99	57.45	6.59	15.56	0.00	11.58	0.00			98.79
177	K1	79	0.06	0.73	13.37	42.29	12.98	18.91	0.00	9.99	0.00			98.33
178	K1	80	0.00	1.94	4.01	55.89	8.28	18.01	0.00	10.35	0.00			98.48
179	K1	81	0.10	1.04	6.16	55.60	8.11	18.01	0.00	10.31	0.00			99.33
180	K1	82	0.07	0.83	6.27	48.03	14.66	19.75	0.00	8.77	0.00			98.38

	SAMPLE	NUMBER	SiO2	TiO2	AL2O3	CR2O3	FE2O3	FEO	MNO	MGO	CAO	NA2O	K2O	TOTAL
181	K1	83	0.06	0.00	8.33	53.62	9.70	15.10	0.00	11.57	0.00			98.38
182	K1	84	0.00	0.14	11.65	55.53	4.98	13.65	0.00	13.03	0.06			99.04
183	K1	85	0.10	0.42	10.83	50.94	8.22	19.10	0.00	9.71	0.00			99.32
184	K1	86	0.08	0.00	17.50	52.87	1.99	12.97	0.00	14.28	0.00			99.69
185	K1	87	0.10	0.00	14.91	50.32	5.83	16.57	0.00	11.55	0.00			99.28
186	K1	88	0.08	0.08	14.28	52.65	5.10	13.84	0.00	13.32	0.00			99.35
187	K1	89	0.07	0.62	12.25	46.91	11.29	16.05	0.00	11.85	0.00			99.04
188	K1	90	0.09	0.06	14.05	52.90	4.43	14.22	0.00	12.91	0.00			98.65
189	K1	91	0.06	0.18	16.46	47.37	7.23	15.76	0.00	12.32	0.00			99.38
190	K1	92	0.00	0.61	9.74	56.62	5.26	14.48	0.00	12.69	0.00			99.40
191	K1	93	0.07	0.28	11.93	53.98	5.34	15.20	0.00	12.23	0.00			99.03
192	K1	94	0.00	0.14	10.72	56.42	4.71	14.32	0.00	12.50	0.00			98.81
193	K1	95	0.05	0.29	15.10	53.90	1.81	14.64	0.00	12.87	0.00			98.66
194	K1	96	0.06	0.05	16.29	49.48	5.36	16.61	0.00	11.73	0.00			99.58
195	K1	97	0.00	0.21	14.65	51.41	5.15	17.11	0.00	11.34	0.00			99.87
196	K1	98	0.13	0.28	10.50	49.57	7.52	20.56	0.00	8.12	0.00			96.67
197	K1	99	0.06	0.09	10.95	57.95	1.45	15.61	0.00	11.48	0.00			97.60
198	K1	100	0.00	1.60	1.75	55.67	10.93	20.34	0.00	8.42	0.00			98.70
199	K1	101	0.00	0.43	8.61	55.04	7.67	16.90	0.00	10.89	0.00			99.55
200	K1	102	0.09	0.00	13.19	59.76	0.00	14.63	0.00	10.53	0.00			98.20
201	K1	103	0.00	0.96	5.70	50.38	12.35	20.88	0.00	7.99	0.00			98.26
202	K1	104	0.00	0.00	13.31	56.09	1.40	16.83	0.00	11.05	0.00			98.68
203	K1	105	0.06	0.07	7.58	59.32	5.33	15.98	0.00	11.26	0.00			99.60
204	K1	106	0.06	0.00	13.47	56.52	2.90	12.00	0.00	14.36	0.05			99.36
205	K1	107	0.00	0.90	11.39	47.92	8.28	21.79	0.00	7.99	0.00			98.27
206	K1	108	0.07	0.94	1.21	65.01	2.71	19.08	0.00	8.74	0.00			97.76
207	K1	109	0.00	0.16	11.45	55.40	3.41	17.17	0.00	10.61	0.00			98.20
208	K1	110	0.00	0.00	17.40	52.57	0.88	15.56	0.00	12.32	0.00			98.73
209	K1	111	0.05	1.16	4.43	55.28	6.78	22.60	0.00	6.68	0.00			96.98
210	K1	112	0.06	0.65	9.97	55.61	4.15	16.89	0.00	11.00	0.00			98.34
211	K1	113	0.05	0.31	4.18	63.74	4.15	14.46	0.00	11.84	0.05			98.78
212	K1	114	0.00	1.23	3.80	63.10	0.17	19.82	0.00	8.40	0.00			96.53
213	K1	115	0.08	0.41	11.76	56.29	3.66	14.77	0.00	12.74	0.00			99.71
214	K1	116	0.00	0.00	16.00	49.71	5.75	16.64	0.00	11.63	0.00			99.73
215	K1	117	0.07	0.08	14.19	51.38	5.41	17.06	0.00	11.21	0.00			99.40
216	K1	118	0.00	0.35	11.89	56.88	0.00	17.22	0.00	10.09	0.00			96.43
217	K1	119	0.00	0.11	13.43	55.35	2.16	15.27	0.00	12.08	0.00			98.40
218	K1	120	0.00	0.82	9.36	50.07	9.88	20.11	0.00	9.02	0.00			99.26
219	K1	1	0.06	0.00	15.99	53.51	1.77	15.76	0.00	12.20	0.00			99.30
220	K1	2	0.00	0.97	10.65	52.98	5.75	17.05	0.00	11.13	0.00			98.53
221	K1	3	0.10	0.69	10.15	56.39	1.08	17.74	0.00	10.12	0.00			96.27
222	K1	4	0.07	0.15	12.02	55.85	1.27	17.38	0.00	10.38	0.00			97.13
223	K1	5	0.06	0.05	16.71	48.77	5.62	16.56	0.00	11.80	0.00			99.57
224	K1	6	0.09	0.22	17.56	52.22	0.73	15.72	0.00	12.51	0.00			99.05
225	K1	7	0.13	0.98	11.43	55.69	2.81	15.74	0.00	12.33	0.00			99.11
226	K1	8	0.09	0.06	11.56	55.56	4.43	15.48	0.00	11.92	0.00			99.10
227	K1	9	0.12	0.29	10.18	55.66	5.58	14.89	0.00	12.25	0.07			99.04
228	K1	10	0.00	1.77	6.78	55.41	6.70	17.05	0.00	11.29	0.00			99.00
229	K1	11	0.08	0.08	10.59	55.19	6.04	15.49	0.00	11.85	0.00			99.31
230	K1	12	0.07	0.05	17.71	52.58	1.09	13.10	0.00	14.02	0.00			98.62
231	K1	13	0.07	51.06	0.19	0.60	8.50	28.27	0.32	9.73	0.05			98.79
232	K1	14	0.59	1.95	6.96	54.30	0.96	21.41	0.00	8.11	0.05			94.33
233	K1	15	0.00	2.57	1.47	49.43	14.79	21.51	0.00	7.95	0.00			97.72
234	K1	16	0.00	2.45	1.16	52.87	11.69	21.74	0.00	7.71	0.00			97.62
235	K1	17	0.00	0.93	4.12	51.68	13.02	18.48	0.00	9.19	0.00			97.42
236	K1	18	0.05	0.08	13.26	49.36	6.18	17.51	0.00	10.22	0.00			96.66
237	K1	19	0.08	0.06	12.88	51.78	4.00	16.16	0.00	10.94	0.00			95.90
238	K1	20	0.00	0.68	9.67	53.17	6.73	13.98	0.00	12.47	0.00			96.69
239	K1	21	0.00	1.24	2.40	50.57	16.23	21.28	0.00	7.77	0.00			99.49
240	K1	22	0.05	0.00	17.78	54.36	0.00	14.35	0.00	12.03	0.00			98.57

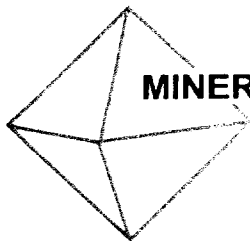
	SAMPLE	NUMBER	SIO2	TIO2	AL2O3	CR2O3	FE2O3	FEO	MNO	MGO	CAO	NA2O	K2O	TOTAL
241	K1	23	0.07	2.72	2.65	54.53	9.20	19.55	0.00	9.70	0.00			98.42
242	K1	24	0.06	0.13	9.33	58.92	2.06	16.45	0.00	10.82	0.00			97.77
243	K1	25	0.09	0.05	6.35	58.74	7.44	16.08	0.00	11.12	0.00			99.87
244	K1	26	0.00	1.66	1.64	52.17	14.04	21.45	0.00	7.67	0.00			98.63
245	K1	27	0.00	2.90	1.95	53.00	10.85	20.91	0.00	8.76	0.00			98.38
246	K1	28	0.13	0.42	12.12	50.51	7.66	19.50	0.00	9.78	0.00			100.13
247	K1	29	0.00	0.10	11.80	56.71	2.39	16.46	0.00	11.18	0.00			98.64
248	K1	30	53.33	0.12	3.40	2.06	0.00	2.24	0.00	14.79	19.90	2.51	0.01	98.35
249	K1	31	54.14	0.05	0.00	0.99	0.00	1.88	0.00	16.84	23.73	0.83	0.00	98.46
250	K1	32	53.98	0.41	3.56	3.71	0.00	1.88	0.00	13.79	16.95	3.89	0.01	98.17
251	K1	33	54.21	0.00	1.49	1.68	0.00	1.96	0.00	16.24	21.08	1.80	0.01	98.46
252	K1	34	53.47	0.00	2.28	1.95	0.00	2.34	0.00	14.99	19.27	2.41	0.00	96.71
253	K1	35	54.52	0.09	0.20	1.07	0.00	1.86	0.00	17.12	23.13	0.73	0.00	98.72
254	K1	36	53.55	0.00	1.58	1.91	0.00	1.93	0.00	15.91	21.09	1.64	0.00	97.61
255	K1	37	54.11	0.16	1.65	1.43	0.00	2.41	0.00	16.90	20.44	1.49	0.01	98.59
256	K1	38	54.48	0.10	0.51	0.96	0.00	2.15	0.00	17.21	22.31	0.95	0.01	98.67
257	K1	39	54.24	0.11	0.35	1.47	0.00	2.39	0.00	16.81	22.22	1.07	0.00	98.66
258	K1	40	53.77	0.09	0.45	1.91	0.00	1.75	0.00	16.65	21.81	1.25	0.00	97.68
259	K1	41	53.90	0.12	1.22	1.20	0.00	1.85	0.00	16.75	22.34	1.17	0.00	98.55
260	K1	42	53.73	0.14	0.93	1.80	0.00	2.24	0.13	17.22	20.64	1.38	0.00	98.21
261	K1	43	54.02	0.06	1.91	1.13	0.00	1.79	0.00	16.66	21.20	1.55	0.00	98.32
262	K1	44	54.10	0.15	0.94	1.68	0.00	2.29	0.00	17.27	20.74	1.35	0.00	98.52
263	K1	45	46.49	0.24	9.44	2.00	0.00	2.94	0.00	19.79	10.37	3.66	1.11	96.04
264	K1	46	54.12	0.00	1.24	2.21	0.00	3.49	0.11	15.27	19.61	2.50	0.01	98.55
265	K1	47	54.31	0.08	0.07	0.94	0.00	2.21	0.11	16.76	23.36	0.90	0.00	98.74
266	K1	48	54.71	0.08	0.28	1.51	0.00	1.81	0.00	17.23	22.73	1.06	0.00	99.41
267	K1	49	54.17	0.16	1.71	1.64	0.00	2.70	0.09	16.70	20.33	1.65	0.03	99.15
268	K1	50	53.86	0.15	1.87	2.66	0.00	2.25	0.00	16.34	19.85	2.07	0.00	99.05
269	K1	51	54.13	0.16	0.68	1.83	0.00	2.43	0.09	15.99	21.74	1.81	0.03	98.86
270	K1	52	52.75	0.00	1.74	3.41	0.00	2.56	0.00	14.64	18.94	3.03	0.02	97.07
271	K1	53	50.96	0.28	3.21	2.48	0.00	2.78	0.00	14.27	18.55	2.99	0.00	95.52
272	K1	54	54.14	0.00	2.58	1.40	0.00	1.39	0.00	16.01	21.84	1.66	0.01	99.02
273	K1	55	52.46	0.12	0.31	1.25	0.00	2.43	0.00	16.37	22.34	1.00	0.01	96.28
274	K1	56	52.72	0.00	3.23	3.04	0.00	1.47	0.00	14.63	19.70	2.69	0.01	97.48
275	K1	57	53.12	0.07	2.01	2.28	0.00	2.10	0.00	15.70	19.95	2.11	0.01	97.34
276	K1	58	53.08	0.00	2.49	0.82	0.00	2.19	0.00	15.90	20.58	1.89	0.00	96.95
277	K1	59	54.12	0.09	1.57	1.90	0.00	2.39	0.00	15.55	20.85	2.13	0.12	98.72
278	K1	60	52.56	0.11	2.49	2.55	0.00	1.62	0.00	15.45	20.35	2.19	0.01	97.32
279	K40	1	41.21	0.14	18.74	7.22	0.00	6.53	0.31	19.71	6.02			99.88
280	K40	2	41.30	0.00	21.65	3.61	0.00	6.72	0.33	21.04	4.32			98.97
281	K40	3	41.23	0.14	18.32	7.25	0.00	6.87	0.40	18.35	7.22			99.78
282	K40	4	40.82	0.00	19.33	6.33	0.00	7.20	0.38	18.94	6.11			99.11
283	K40	5	41.24	0.19	20.19	4.98	0.00	7.38	0.39	19.97	5.31			99.65
284	K40	6	40.77	0.00	20.63	4.31	0.00	7.92	0.31	18.71	6.01			98.66
285	K40	7	41.63	0.07	20.53	4.77	0.00	7.26	0.36	19.78	5.43			99.83
286	K40	8	41.73	0.00	20.19	5.20	0.00	6.78	0.37	21.25	4.03			99.55
287	K40	9	41.08	0.46	18.45	6.58	0.00	6.10	0.21	20.40	5.65			98.93
288	K40	10	41.54	0.00	22.35	2.42	0.00	8.09	0.34	20.11	4.51			99.36
289	K40	11	42.17	0.00	21.56	4.17	0.00	6.04	0.30	24.00	1.60			99.84
290	K40	12	41.44	0.06	20.63	4.68	0.00	6.56	0.33	20.43	5.27			99.40
291	K40	13	41.70	0.00	22.08	2.42	0.00	7.69	0.33	20.63	4.72			99.57
292	K40	14	41.59	0.22	23.21	0.96	0.00	7.99	0.40	20.91	4.17			99.45
293	K40	15	41.26	0.00	20.93	4.54	0.00	7.08	0.37	20.31	5.27	0.05		99.76
294	K40	16	41.14	0.00	20.57	4.55	0.00	7.57	0.38	19.81	4.94			98.96
295	K40	17	40.54	0.15	18.32	7.11	0.00	6.93	0.32	19.57	6.00			98.94
296	K40	18	40.95	0.09	19.51	6.02	0.00	6.84	0.31	20.53	4.97			99.22
297	K40	19	41.09	0.05	21.80	2.94	0.00	8.66	0.43	19.58	5.08			99.63
298	K40	20	41.30	0.08	20.18	5.26	0.00	7.05	0.29	20.41	5.50			100.07
299	K40	21	41.40	0.20	20.36	5.09	0.00	7.41	0.36	19.89	5.44			100.15
300	K40	22	41.09	0.00	19.99	5.92	0.00	6.83	0.29	20.67	4.70			99.49

	SAMPLE	NUMBER	SiO2	TiO2	AL2O3	CR2O3	FE2O3	FEO	MNO	MGO	CAO	NA2O	K2O	TOTAL
301	K40	23	41.35	0.08	19.42	6.19	0.00	6.69	0.41	19.93	5.35			99.42
302	K40	24	41.12	0.00	21.29	3.61	0.00	8.75	0.40	18.96	5.48			99.61
303	K40	25	41.27	0.00	21.52	3.28	0.00	8.50	0.51	19.84	4.20			99.12
304	K40	26	41.83	0.16	22.62	1.33	0.00	8.09	0.37	19.96	4.39	0.03		98.75
305	K40	27	41.55	0.00	20.42	4.76	0.00	7.71	0.41	19.87	5.40			100.12
306	K40	28	41.56	0.14	19.84	5.07	0.00	8.10	0.37	19.36	5.55			99.99
307	K40	29	40.83	0.14	22.99	0.38	0.00	12.51	0.49	17.43	4.19	0.04		98.96
308	K40	30	41.76	0.00	19.80	5.65	0.00	6.79	0.37	20.88	4.20			99.45
309	K40	31	41.37	0.18	22.23	2.56	0.00	8.65	0.40	20.07	4.61			100.07
310	K40	32	41.38	0.00	20.74	4.57	0.00	7.28	0.33	20.22	5.22			99.74
311	K40	33	40.67	0.16	23.11	0.17	0.00	14.95	0.42	16.60	4.25	0.04		100.33
312	K40	34	39.88	0.05	22.65	0.19	0.00	19.60	0.44	13.45	3.84	0.04		100.10
313	K40	35	38.81	0.13	22.23	0.00	0.00	22.67	0.45	8.55	7.47	0.06		100.31
314	K40	36	41.55	0.00	21.69	3.69	0.00	7.17	0.37	20.60	4.73			99.80
315	K40	37	42.08	0.06	21.03	4.61	0.00	6.45	0.35	22.96	2.39			99.93
316	K40	38	40.93	0.00	21.20	3.76	0.00	8.94	0.49	18.80	5.59			99.71
317	K40	39	40.38	0.12	18.01	7.30	0.00	7.35	0.30	18.95	6.74			99.15
318	K40	40	41.33	0.15	20.21	4.47	0.00	7.81	0.43	19.75	5.26			99.41
319	K40	41	41.53	0.18	22.16	2.45	0.00	8.08	0.32	20.14	5.03			99.89
320	K40	42	41.45	0.08	19.93	5.44	0.00	7.01	0.36	20.55	4.88			99.70
321	K40	43	41.27	0.10	20.25	5.44	0.00	6.94	0.37	21.10	4.13			99.60
322	K40	44	41.31	0.17	19.31	6.33	0.00	7.62	0.36	19.71	5.86			100.67
323	K40	45	41.49	0.21	19.63	5.08	0.00	7.18	0.34	20.08	5.27			99.28
324	K40	46	41.09	0.06	19.66	5.39	0.00	7.65	0.39	19.57	5.22			99.03
325	K40	47	41.66	0.07	20.08	5.13	0.00	6.96	0.38	20.84	4.61			99.73
326	K40	48	41.01	0.17	19.20	5.77	0.00	7.07	0.29	19.50	6.24			99.25
327	K40	49	41.75	0.00	20.71	4.75	0.00	7.10	0.48	21.45	3.51			99.75
328	K40	50	41.09	0.31	22.42	1.91	0.00	8.77	0.40	20.14	4.59	0.05		99.63
329	K40	51	41.13	0.23	19.79	5.45	0.00	7.61	0.35	19.64	5.43			99.63
330	K40	52	41.65	0.08	20.16	5.48	0.00	6.95	0.43	21.47	4.05			100.27
331	K40	53	41.39	0.00	21.21	3.62	0.00	9.00	0.39	18.87	5.47			99.95
332	K40	54	41.26	0.22	19.63	5.79	0.00	7.03	0.33	20.44	4.81			99.51
333	K40	55	41.02	0.14	20.63	4.18	0.00	7.51	0.30	19.82	5.42			99.02
334	K40	56	40.79	0.42	19.00	6.29	0.00	7.29	0.36	19.29	6.06			99.50
335	K40	57	41.07	0.28	19.67	5.40	0.00	7.70	0.35	19.62	5.47			99.56
336	K40	58	41.08	0.00	21.08	3.68	0.00	8.38	0.48	19.27	5.16			99.13
337	K40	59	41.68	0.23	21.55	2.81	0.00	8.52	0.42	20.09	4.83			100.13
338	K40	60	41.38	0.00	19.49	6.24	0.00	6.76	0.38	19.99	5.64			99.88
339	K40	61	41.41	0.24	20.88	3.97	0.00	7.62	0.32	20.17	5.06			99.67
340	K40	62	41.53	0.30	22.02	2.24	0.00	8.58	0.35	20.42	4.56			100.00
341	K40	63	41.37	0.00	20.01	5.48	0.00	6.53	0.44	21.46	3.98			99.27
342	K40	64	41.19	0.08	19.30	6.40	0.00	6.74	0.46	20.26	5.20			99.63
343	K40	65	41.29	0.00	20.39	4.80	0.00	7.76	0.41	19.17	6.24			100.06
344	K40	66	45.69	0.00	24.15	2.87	0.00	7.85	0.42	22.80	5.28			109.06
345	K40	67	41.30	0.12	19.88	5.51	0.00	7.05	0.41	20.70	4.42			99.39
346	K40	68	41.36	0.00	20.84	4.16	0.00	7.40	0.37	20.25	4.98			99.36
347	K40	69	40.97	0.21	19.03	5.99	0.00	7.34	0.29	19.94	5.20			98.97
348	K40	70	40.84	0.00	19.95	5.70	0.00	7.24	0.36	19.93	5.18			99.20
349	K40	71	40.54	0.05	19.97	4.22	0.00	10.84	0.61	16.62	6.14			98.99
350	K40	72	41.57	0.05	21.00	3.85	0.00	7.11	0.36	20.32	5.06			99.32
351	K40	73	41.15	0.05	20.90	4.10	0.00	7.82	0.46	19.27	5.27			99.02
352	K40	74	41.09	0.00	20.23	4.80	0.00	8.12	0.44	18.65	6.35			99.68
353	K40	75	41.48	0.09	21.39	3.60	0.00	7.29	0.37	20.16	5.30			99.68
354	K40	76	41.57	0.00	20.73	4.51	0.00	7.58	0.36	20.22	5.21			100.18
355	K40	77	41.41	0.17	20.10	5.03	0.00	7.62	0.37	19.86	5.34			99.90
356	K40	78	41.83	0.08	21.40	3.68	0.00	6.47	0.33	21.40	4.29			99.48
357	K40	79	41.59	0.00	20.59	4.72	0.00	7.04	0.35	20.90	4.28			99.47
358	K40	80	41.50	0.08	19.66	5.76	0.00	6.56	0.34	21.23	3.95			99.08
359	K40	81	40.72	0.00	18.98	6.36	0.00	7.13	0.37	19.41	6.15			99.12
360	K40	82	41.23	0.00	20.66	4.11	0.00	8.08	0.34	19.73	5.60			99.75

	SAMPLE	NUMBER	SiO2	TiO2	Al2O3	CR2O3	FE2O3	FEO	MNO	MGO	CAO	NA2O	K2O	TOTAL
361	K40	83	41.53	0.00	20.52	4.36	0.00	6.89	0.40	20.48	4.89			99.07
362	K40	84	41.54	0.21	21.65	2.45	0.00	8.21	0.44	20.33	4.93			99.76
363	K40	85	41.25	0.00	20.47	4.22	0.00	6.79	0.35	20.22	5.16			98.46
364	K40	86	41.40	0.21	19.52	5.16	0.00	7.44	0.37	19.87	5.61			99.58
365	K40	87	40.69	0.11	18.68	6.47	0.00	7.79	0.36	18.74	6.89			99.73
366	K40	88	41.04	0.00	20.41	4.07	0.00	7.86	0.36	20.00	5.33			99.07
367	K40	89	53.89	0.00	1.95	1.25	0.00	1.78	0.00	16.40	21.85	1.52	0.00	98.64
368	K40	90	53.37	0.21	3.01	2.80	0.00	2.13	0.00	14.93	18.84	2.82	0.02	98.11
369	K40	91	53.66	0.00	1.36	1.43	0.00	1.57	0.00	16.55	22.50	1.22	0.02	98.29
370	K40	92	53.73	0.16	0.60	2.34	0.00	1.92	0.00	17.11	20.87	1.57	0.00	98.30
371	K40	93	54.24	0.07	0.28	1.30	0.00	1.94	0.00	17.17	22.81	1.04	0.00	98.85
372	K40	94	53.82	0.15	0.58	1.37	0.00	1.95	0.00	16.81	22.00	1.20	0.01	97.88
373	K40	95	54.29	0.00	0.33	2.37	0.00	1.86	0.00	16.77	21.27	1.64	0.00	98.53
374	K40	96	54.06	0.18	0.34	2.06	0.00	2.03	0.00	16.93	21.27	1.39	0.00	98.26
375	K40	97	54.47	0.11	0.57	1.94	0.00	1.88	0.00	17.10	21.40	1.37	0.01	98.84
376	K40	98	54.40	0.08	0.45	3.03	0.00	1.86	0.00	16.27	20.58	1.99	0.07	98.73
377	K40	99	53.90	0.10	2.60	3.38	0.00	1.87	0.00	15.50	19.26	2.75	0.02	99.36
378	K40	1	0.00	50.52	0.18	0.65	10.91	28.45	0.26	9.38	0.00			100.35
379	K40	2	0.00	52.16	0.21	0.56	9.38	26.69	0.25	11.20	0.00			100.45
380	K40	3	0.00	50.32	0.14	0.83	11.16	27.39	0.34	9.83	0.00			100.01
381	K40	4	0.00	50.73	0.18	0.63	10.35	27.27	0.33	10.11	0.00			99.60
382	K40	5	0.00	52.53	0.18	0.59	8.26	27.92	0.30	10.67	0.00			100.45
383	K40	6	0.00	45.78	0.11	1.91	16.50	27.35	0.25	7.61	0.00			99.51
384	K40	7	0.00	51.08	0.13	0.72	10.37	27.40	0.32	10.18	0.05			100.26
385	K40	8	0.00	50.35	0.17	0.73	11.12	27.11	0.33	10.01	0.00			99.81
386	K40	9	0.00	52.01	0.17	0.54	9.04	28.40	0.24	10.17	0.00			100.58
387	K40	10	0.00	49.03	0.19	0.86	12.61	26.97	0.28	9.45	0.00			99.38
388	K40	11	0.00	51.73	0.19	0.70	9.92	28.07	0.26	10.17	0.05			101.08
389	K40	12	0.00	45.30	0.07	4.71	14.89	25.97	0.17	8.14	0.07			99.32
390	K40	13	0.00	45.26	0.07	1.89	17.25	27.19	0.30	7.41	0.00			99.37
391	K40	14	0.00	41.68	0.09	2.75	21.63	25.81	0.23	6.42	0.00			98.61
392	K40	15	0.00	50.26	0.17	0.59	10.44	27.53	0.32	9.73	0.00			99.05
393	K40	16	0.00	44.76	0.12	1.75	17.34	27.23	0.24	7.17	0.00			98.61
394	K40	17	0.00	44.69	0.12	1.60	18.10	27.49	0.27	6.97	0.00			99.24
395	K40	18	0.00	50.16	0.08	4.07	9.84	22.39	0.38	12.53	0.00			99.46
396	K40	19	0.00	50.66	0.18	0.76	10.25	26.91	0.25	10.32	0.00			99.34
397	K40	20	0.00	51.46	0.19	0.95	8.94	27.08	0.27	10.62	0.00			99.51
398	K40	21	0.00	51.03	0.21	0.43	10.00	28.44	0.25	9.60	0.07			100.03
399	K40	22	0.00	52.60	0.24	0.69	7.92	27.83	0.24	10.79	0.00			100.31
400	K40	23	0.00	44.00	0.10	1.71	19.44	27.20	0.25	6.80	0.00			99.50
401	K40	24	0.00	41.22	0.10	2.77	23.19	26.14	0.20	6.02	0.00			99.63
402	K40	25	0.00	45.70	0.12	1.81	16.46	27.71	0.32	7.33	0.00			99.45
403	K40	26	0.05	1.62	2.08	61.78	5.69	15.71	0.00	11.53	0.00			98.46
404	K40	27	0.00	52.64	0.23	0.78	7.66	27.97	0.26	10.72	0.00			100.26
405	K40	28	0.00	50.76	0.21	0.52	10.62	27.89	0.32	9.78	0.00			100.10
406	K40	29	0.00	51.10	0.33	0.57	10.76	24.88	0.33	11.64	0.00			99.61
407	K40	30	0.00	50.87	0.22	0.56	10.69	27.53	0.25	10.03	0.07			100.22
408	K40	31	0.00	45.48	0.09	3.74	15.04	26.38	0.22	8.02	0.00			98.98
409	K40	32	0.00	49.96	0.17	0.69	11.66	27.65	0.31	9.52	0.00			99.96
410	K40	33	0.08	2.08	3.93	58.51	6.88	14.00	0.00	13.16	0.00			98.65
411	K40	34	0.00	51.86	0.15	0.65	9.21	27.93	0.26	10.35	0.00			100.41
412	K40	35	0.00	0.52	10.05	55.55	4.76	13.82	0.00	12.68	0.00			97.39
413	K40	36	0.07	50.76	0.18	0.62	10.39	28.57	0.28	9.47	0.00			100.34
414	K40	37	0.00	40.59	0.08	3.91	22.68	26.03	0.22	5.75	0.00			99.26
415	K40	38	0.00	49.71	0.14	0.56	11.17	27.93	0.28	9.25	0.00			99.05
416	K40	39	0.00	48.36	0.31	6.14	9.49	23.26	0.21	11.23	0.00			99.00
417	K40	40	0.00	45.93	0.09	2.51	15.19	26.95	0.28	7.86	0.05			98.86
418	K40	41	0.00	42.20	0.05	2.27	21.67	26.60	0.26	6.22	0.00			99.27
419	K40	42	0.00	52.72	0.18	0.71	7.96	26.99	0.26	11.31	0.00			100.13
420	K40	43	0.00	51.90	0.13	0.60	8.33	28.17	0.29	10.22	0.00			99.63

	SAMPLE	NUMBER	SIO2	TIO2	AL2O3	CR2O3	FE2O3	FEO	MNO	MGO	CAO	NA2O	K2O	TOTAL
421	K40	44	0.06	52.24	0.10	0.88	8.75	29.05	0.30	9.93	0.00			101.31
422	K40	45	0.00	41.33	0.07	2.68	23.10	26.58	0.25	5.80	0.00			99.80
423	K40	46	0.00	51.76	0.15	0.54	8.95	28.39	0.28	10.03	0.00			100.10
424	K40	47	0.00	51.09	0.08	0.58	9.86	28.13	0.27	9.84	0.00			99.86
425	K40	48	0.06	51.54	0.17	0.63	9.28	27.90	0.30	10.18	0.06			100.12
426	K40	49	0.00	50.05	0.11	0.98	10.58	28.54	0.28	9.08	0.00			99.62
427	K40	50	0.00	50.42	0.14	1.03	10.51	28.83	0.22	9.14	0.00			100.29
428	K40	1	0.16	0.57	3.79	62.89	5.19	14.05	0.00	12.40	0.00			99.05
429	K40	2	0.09	0.69	2.52	63.49	1.98	19.18	0.00	8.39	0.00			96.35
430	K40	3	0.00	0.00	14.76	51.89	5.23	14.85	0.00	12.59	0.00			99.31
431	K40	4	0.17	0.27	9.25	57.34	5.13	14.39	0.00	12.59	0.00			99.13
432	K40	5	0.11	2.13	2.01	55.47	7.46	20.90	0.00	7.96	0.00			96.04
433	K40	6	0.10	0.00	14.77	49.47	6.49	17.44	0.00	10.95	0.00			99.22
434	K40	7	0.14	0.31	11.55	56.18	3.73	14.85	0.00	12.58	0.00			99.33
435	K40	8	0.07	0.00	15.58	49.58	5.90	16.59	0.00	11.59	0.00			99.31
436	K40	9	0.07	0.47	14.36	55.13	0.00	16.51	0.00	11.20	0.00			97.74
437	K40	10	0.10	0.23	11.12	55.21	6.18	14.27	0.00	12.96	0.00			100.08
438	K40	11	0.36	0.70	0.17	0.18	63.43	30.86	0.00	0.00	0.00			95.70
439	K40	12	0.06	0.05	12.91	49.47	8.42	17.20	0.00	10.83	0.00			98.94
440	K40	13	0.11	47.52	0.08	4.30	12.28	24.40	0.21	10.24	0.00			99.14
441	K40	14	0.12	0.44	9.45	54.99	6.80	15.30	0.00	12.06	0.00			99.16
442	K40	15	0.16	3.99	0.92	35.21	25.54	26.04	0.00	5.78	0.00			97.64
443	K40	16	0.08	50.94	0.15	0.87	10.10	27.07	0.31	10.39	0.00			99.91
444	K40	17	0.06	5.00	1.28	39.20	20.40	25.38	0.00	6.94	0.00			98.25
445	K40	18	0.07	1.05	5.41	54.88	9.20	18.25	0.00	9.93	0.00			98.79
446	K40	19	0.08	0.05	13.58	52.76	5.58	13.97	0.00	13.09	0.00			99.11
447	K40	20	0.13	0.00	11.38	55.87	4.62	14.36	0.00	12.60	0.00			98.96
448	K40	21	0.11	46.43	0.16	1.13	15.34	28.32	0.32	7.43	0.00			99.24
449	K40	22	0.05	1.99	2.86	55.79	9.04	19.60	0.00	9.29	0.00			98.62
450	K40	23	0.08	50.77	0.28	0.77	10.33	26.76	0.29	10.49	0.00			99.77
451	K40	24	0.06	45.50	0.14	1.42	17.48	27.13	0.24	7.64	0.00			99.61
452	K40	25	0.06	51.49	0.21	0.71	9.11	26.45	0.30	11.01	0.00			99.34
453	K40	26	0.08	50.70	0.20	0.58	10.05	28.53	0.24	9.49	0.00			99.88
454	K40	27	0.00	43.51	0.11	3.15	18.93	25.58	0.23	7.47	0.00			98.99
455	K40	28	0.00	1.71	3.27	52.90	11.92	20.87	0.00	8.35	0.00			99.01
456	K40	29	0.06	0.69	0.97	62.32	6.65	19.12	0.00	8.64	0.00			98.46
457	K40	30	0.09	0.37	8.39	53.98	9.32	16.12	0.00	11.44	0.00			99.70
458	K40	31	0.00	0.73	10.84	53.65	6.39	15.63	0.00	12.10	0.00			99.34
459	K40	32	0.08	0.30	11.06	53.20	6.53	17.14	0.00	10.89	0.05			99.24
460	K40	33	0.09	0.12	13.28	56.72	2.11	13.48	0.00	13.51	0.00			99.31
461	K40	34	0.10	50.15	0.18	0.54	10.95	28.50	0.23	9.25	0.00			99.90
462	K40	35	0.07	0.55	11.88	55.51	4.01	14.73	0.00	12.82	0.00			99.57
463	K40	36	0.09	0.61	11.15	55.08	3.42	15.22	0.00	12.08	0.00			97.65
464	K40	37	0.07	0.25	11.60	51.14	7.70	17.58	0.00	10.58	0.00			98.92
465	K40	38	0.07	0.24	11.14	54.95	5.45	13.46	0.00	13.14	0.00			98.45
466	K40	39	0.00	0.51	11.45	53.48	5.52	14.40	0.00	12.54	0.00			97.90
467	K40	40	0.11	0.00	17.55	50.96	3.06	12.75	0.00	14.19	0.05			98.67
468	K40	41	0.00	1.17	3.29	62.63	5.08	13.85	0.00	12.56	0.06			98.65
469	K40	42	0.00	0.21	5.23	58.80	7.86	14.79	0.00	11.56	0.00			98.45
470	K40	43	0.00	0.00	14.33	51.19	5.62	15.90	0.00	11.74	0.00			98.78
471	K40	44	0.06	0.00	14.02	53.37	4.44	12.66	0.00	13.80	0.00			98.34
472	K40	45	0.00	41.08	0.16	3.03	23.75	22.20	0.22	8.15	0.00			98.59
473	K40	46	0.07	0.47	12.36	54.20	5.35	15.67	0.00	12.39	0.00			100.51
474	K40	47	0.09	0.34	14.40	52.41	4.53	16.58	0.00	11.90	0.00			100.25
475	K40	48	0.00	42.34	0.09	1.97	20.78	26.50	0.20	6.38	0.00			98.26
476	K40	49	0.00	0.22	12.30	55.81	4.30	14.89	0.00	12.62	0.00			100.14
477	K40	50	0.05	0.08	11.70	56.74	4.18	14.45	0.00	12.77	0.00			99.97
478	K40	51	0.05	0.07	12.53	56.85	3.35	12.69	0.00	13.90	0.00			99.44
479	K40	52	0.10	0.69	3.65	61.75	6.15	15.84	0.00	11.32	0.00			99.50
480	K40	53	0.10	2.08	14.78	41.56	8.80	20.98	0.00	9.55	0.00			97.85

	SAMPLE	NUMBER	SiO2	TiO2	AL2O3	CR2O3	FE2O3	FeO	MNO	MGO	CAO	NA2O	K2O	TOTAL
481	K40	54	0.06	0.44	5.05	55.42	10.36	16.27	0.00	10.71	0.00			98.31
482	K40	55	0.00	0.00	11.92	56.22	3.75	14.07	0.00	12.68	0.00			98.64
483	K40	56	0.00	0.18	12.53	55.02	3.92	12.72	0.00	13.58	0.00			97.95
484	K40	57	0.09	0.52	8.60	55.49	5.47	16.57	0.00	10.85	0.00			97.59
485	K40	58	0.06	0.20	6.43	56.73	7.49	19.57	0.00	8.78	0.00			99.26
486	K40	59	0.10	0.56	8.83	47.66	6.76	30.67	1.58	0.39	0.06			96.61
487	K40	60	0.23	0.70	14.44	49.76	3.93	20.06	0.00	9.66	0.00			98.78
488	K40	61	0.06	1.81	2.37	51.91	13.53	21.38	0.00	8.03	0.00			99.10
489	K40	62	0.00	2.03	11.90	43.22	7.77	28.48	0.00	4.20	0.00			97.60
490	K40	63	0.00	0.48	11.42	53.22	6.00	16.38	0.00	11.44	0.00			98.94
491	K40	64	0.07	0.07	11.96	55.53	4.41	15.57	0.00	12.00	0.00			99.61
492	K40	65	0.07	0.19	9.57	55.90	6.09	16.63	0.00	11.10	0.00			99.55
493	K40	66	0.09	0.32	11.92	53.74	5.16	17.74	0.00	10.76	0.00			99.73
494	K40	67	0.08	0.05	12.87	53.95	4.92	13.26	0.00	13.37	0.00			98.50
495	K40	68	0.07	1.66	3.22	55.01	10.46	18.93	0.00	9.65	0.00			99.00
496	K40	69	0.09	0.00	15.63	50.72	4.80	17.39	0.00	11.21	0.00			99.84
497	K40	70	0.06	0.66	2.36	61.39	5.47	20.07	0.00	8.08	0.00			98.09
498	K40	71	0.08	0.83	14.07	45.93	6.36	25.21	0.00	6.15	0.00			98.64
499	K40	72	0.07	1.30	11.26	52.66	5.76	15.58	0.00	12.54	0.00			99.17
500	K40	73	0.00	52.61	0.07	0.00	1.66	41.84	0.56	2.75	0.00			99.50
501	K40	74	0.05	0.10	12.75	55.56	4.55	12.70	0.00	13.97	0.00			99.68
502	K40	75	0.00	0.10	11.02	57.34	3.56	14.16	0.00	12.62	0.00			98.80
503	K40	76	0.06	0.00	15.43	49.67	7.17	13.68	0.00	13.49	0.00			99.50
504	K40	77	0.10	0.24	10.05	58.73	3.67	13.55	0.00	13.25	0.00			99.59
505	K40	78	0.10	0.16	11.04	55.29	6.37	14.87	0.00	12.59	0.00			100.43
506	K40	79	0.00	0.11	32.61	36.28	2.55	14.25	0.00	15.28	0.00			101.08
507	K40	80	0.00	0.37	10.89	55.03	5.56	13.97	0.00	12.84	0.00			98.66
508	K40	81	0.00	0.16	9.79	57.41	5.55	13.69	0.00	12.98	0.00			99.59
509	K40	82	0.05	0.06	12.08	55.44	4.62	14.13	0.00	12.85	0.00			99.23
510	K40	83	0.05	0.05	13.47	53.06	6.03	14.22	0.00	13.06	0.00			99.94
511	K40	84	0.05	3.83	2.42	45.92	15.24	22.66	0.00	8.20	0.00			98.33
512	K40	85	0.00	0.29	5.03	61.62	5.31	14.77	0.00	11.68	0.00			98.70
513	K40	86	0.11	0.18	9.85	56.57	5.89	13.64	0.00	13.02	0.06			99.32
514	K40	87	0.07	3.01	2.94	57.34	6.78	18.44	0.00	10.87	0.00			99.45
515	K40	88	0.09	1.53	3.24	54.60	11.22	18.31	0.00	9.95	0.05			98.99
516	K40	89	0.09	3.94	1.41	39.39	21.23	26.27	0.00	5.72	0.00			98.06
517	K40	90	0.12	49.96	0.21	0.87	10.44	26.36	0.26	10.35	0.00			98.58
518	K40	91	0.08	0.19	10.23	56.74	5.46	13.44	0.00	13.23	0.00			99.37
519	K40	92	0.11	0.20	12.04	54.42	5.36	14.26	0.00	12.90	0.00			99.29
520	K40	93	0.18	0.06	15.30	54.97	2.01	13.63	0.00	13.79	0.00			99.94
521	K40	94	0.08	0.43	8.29	57.35	5.94	14.92	0.00	12.16	0.00			99.18
522	K40	95	0.07	0.00	13.10	53.93	4.90	14.62	0.00	12.61	0.00			99.23
523	K40	96	0.05	0.00	14.02	51.95	4.95	15.90	0.00	11.72	0.00			98.59
524	K40	97	0.06	0.16	13.29	54.74	4.13	14.17	0.00	13.11	0.00			99.66
525	K40	98	0.00	0.06	12.60	52.83	7.04	13.82	0.00	13.08	0.00			99.42
526	K40	99	0.05	0.42	9.21	57.69	4.57	14.31	0.00	12.56	0.00			98.81
527	K40	100	0.00	3.14	0.63	37.62	25.78	25.21	0.00	5.76	0.00			98.14
528	K40	101	0.12	2.03	3.34	62.40	4.03	15.20	0.00	12.57	0.00			99.69
529	K40	102	0.08	0.50	2.82	62.81	5.53	17.58	0.00	9.86	0.08			99.26
530	K40	103	0.09	0.16	7.42	51.51	12.50	16.94	0.00	10.53	0.00			99.15
531	K40	104	0.09	50.50	0.21	0.77	9.85	27.68	0.27	9.86	0.00			99.23
532	K40	105	0.00	3.07	1.20	50.04	13.25	22.08	0.00	7.80	0.00			97.44
533	K40	106	0.10	0.05	13.14	55.63	4.06	14.08	0.00	13.26	0.00			100.33
534	K40	107	0.23	0.00	15.32	50.61	4.94	16.59	0.00	11.73	0.00			99.41



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Diamond Exploration Consultancy

**THE MINERAL CHEMISTRY OF INDICATORS
RECOVERED FROM SAMPLES K2, K9 & K18, AND
COMPARISONS WITH SAMPLES K1 AND K40**

Prepared for

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26 March, 2004

Report No. ML04/015

1. INTRODUCTION

This report documents the analyses of selected indicators recovered from samples K2, K9 and K18.

P. Sobie of MPH Consulting requested that these results be compared to those of samples K1 and K40, reported in February, 2004.

2. RESULTS

The grains were mounted and submitted to the Council for Geoscience (Geological Survey) for polishing and analyses on their Jeol electron microprobe. The relevant XY plots and full analyses are appended.

The garnets are predominantly peridotitic, with lesser Cr-poor varieties (Figure 1). The former are G9 lherzolitic grains, with three subcalcic G10 harzburgitic grains. The Cr-poor grains, based on their compositions appear to include websteritic and fragmented megacrystic varieties. The chromites comprise both xenocrysts and lesser magmatic grains, the latter characterised by higher TiO₂ contents (Figure 2) and define a broadly kimberlitic population. Three chromites from sample K2 have higher Cr₂O₃ contents relative to their TiO₂ contents. None are diamond inclusion varieties (Figure 3). The ilmenites are 'kimberlitic' (Figure 4) with the exception of one grain. Two populations are present (Figure 5). The higher MgO population comprising predominant fragmented megacrysts, as opposed to the metasomatic grains, which generally have lower MgO. The chrome diopsides are lherzolitic.

In summary, the indicators are all, with the exception of one ilmenite, mantle-derived (kimberlitic). A kimberlitic source or sources is clearly present 'up-ice'. Two of the G10 garnets derive from within the DSF, indicating of the presence of diamond, the G10 with the lowest Cr₂O₃ having elevated MnO indicative of derivation from the graphite stability field. The ilmenite compositions suggest poor-to-moderate diamond preservation potential (with a DPI of 0.35) if diamond is indeed present in the source/s.

3. COMPARISON WITH SAMPLES K1 and K40

Comparison of the K2, K9 and K18 data with that of samples K1 & K40 (Zweistra, 2004) shows close similarities between the two, but also some significant differences:

3.1 The garnets from the two data sets show very similar signatures. This is to be expected, since garnet is not a good discriminator.

3.2 Comparison of the chromite chemistries (Figures 7 and 8) shows considerable overlap, but also some possibly significant differences. These are best illustrated in Figure 7. Samples K1 and K40 contain a population of grains with high Cr₂O₃ relative to their TiO₂ contents. These are largely absent from the other three samples, with the exception of three (possibly four) grains in sample K2. The chromites from samples K2, K9 and K18 are similar, and characterised by lower Cr₂O₃ relative to TiO₂ when compared to those from K1 and K40.

3.3 The ilmenites show complete compositional overlap (Figure 9).

4. CONCLUSIONS

- Comparison of the two samples shows that some mixing of sources is apparent. Samples K1 and K40 appear to represent input from a source different to that of K9, K18 and to a lesser degree, K2, based on their chromite chemistries.
- More than one source is indicated by the data, with some "mixing" a possibility. The two sources are by and large represented by samples K1 and K40, and K9, K18 and K2.
- The presence of diamonds is indicated by the presence of G10 garnets in the sources of samples K9, and K1 & K40. In addition, the chromites from K1 and K40 (and four from K2) are more encouraging from a prospecting point of view.
- Follow-up to locate the sources of the G10 garnets, and to a lesser degree the higher Cr₂O₃ chromites is warranted.

5. REFERENCE

Zweistra, P. (2003). The Mineral-Chemistry of Indicators Recovered from Till Samples K1 and K40, Timiskaming Project, Ontario. Report No. ML0/006 to MPH Consulting.

P. Zweistra
24 March, 2004

Fig. 1: Garnet Compositions

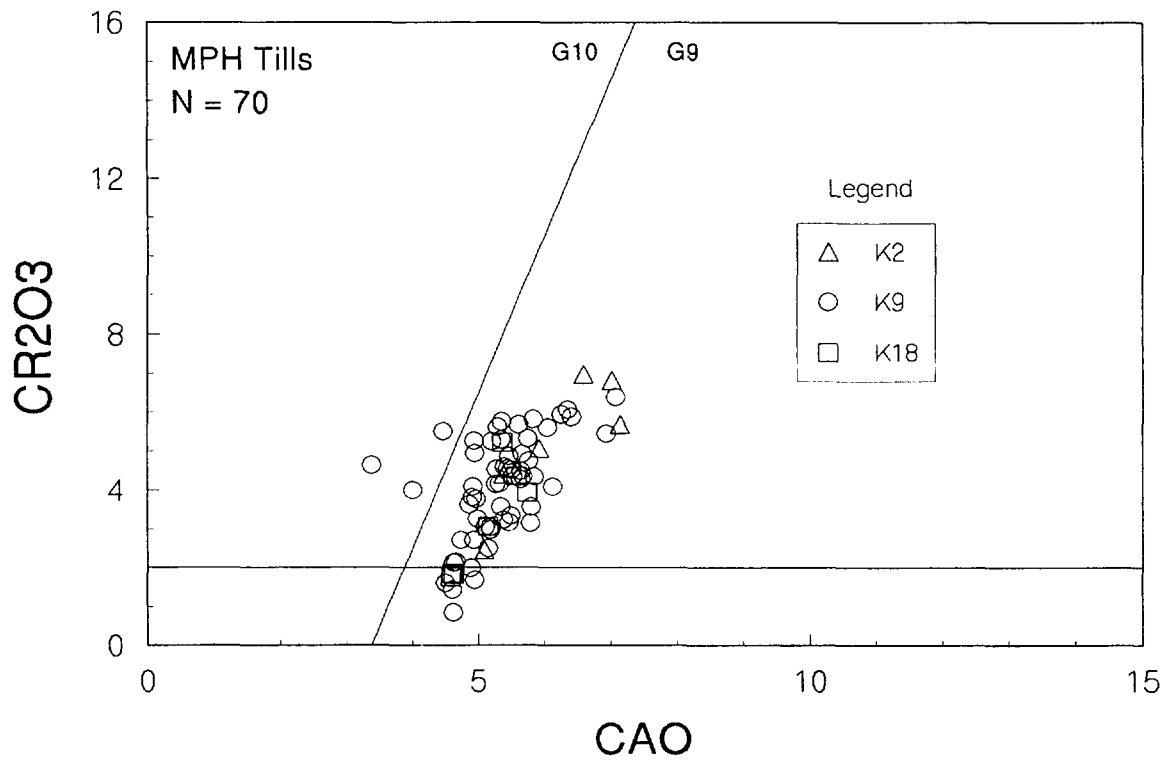


Fig.2: Chromite Compositions

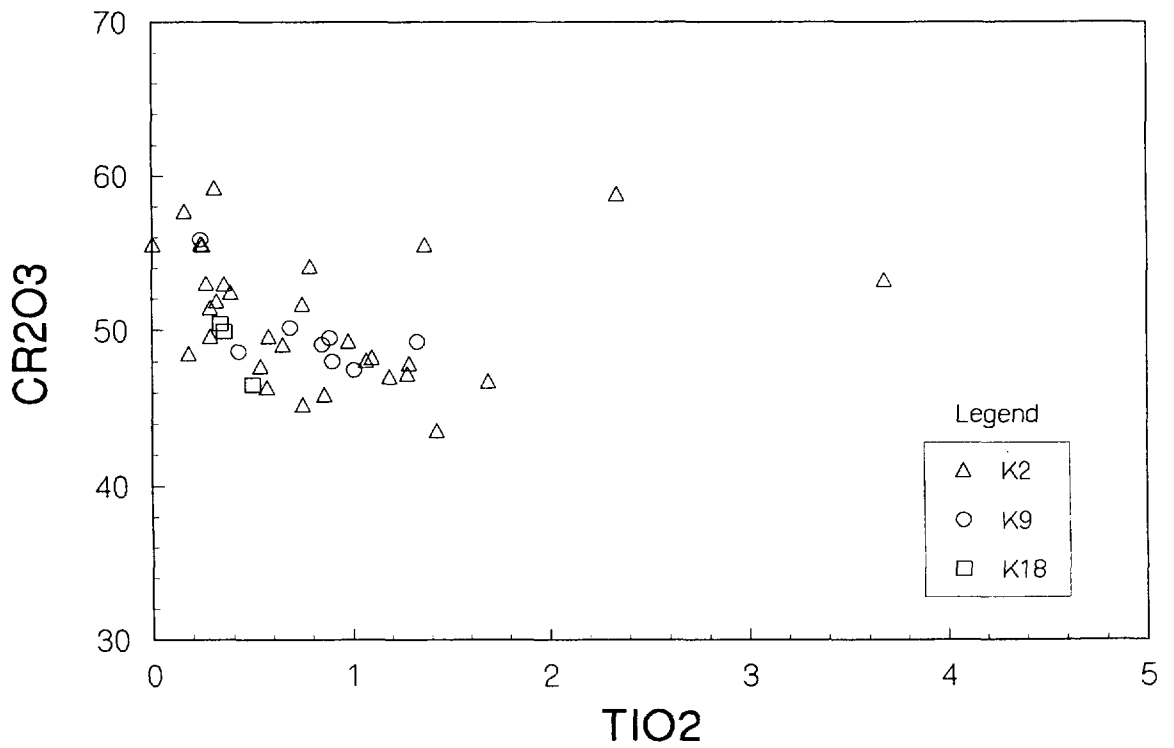


Fig.3: Chromite

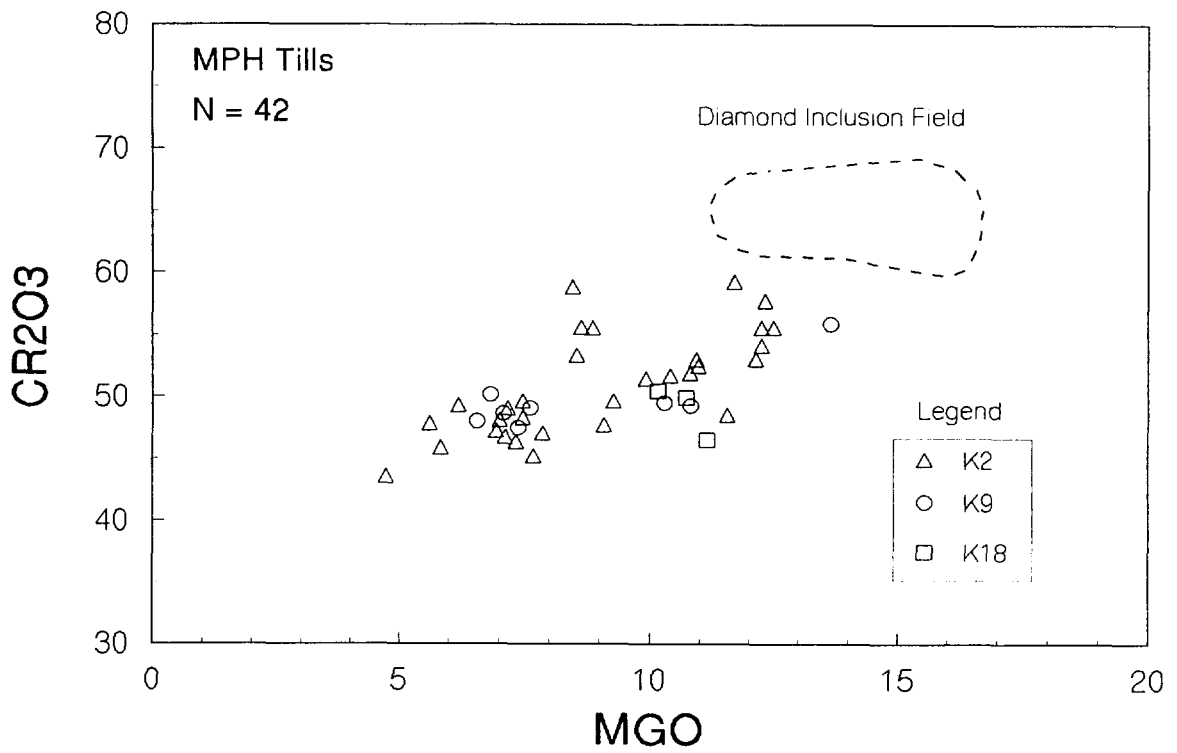


Fig.4: Ilmenite Compositions

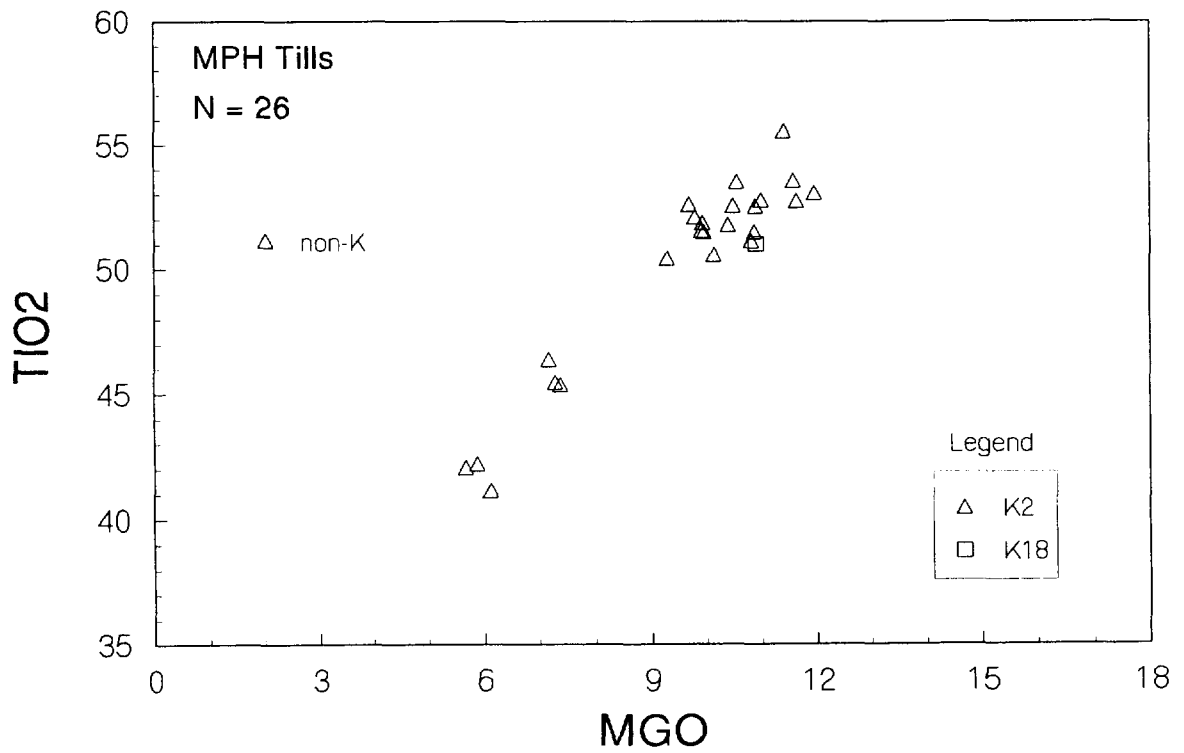


Fig.5: Ilmenite Compositions

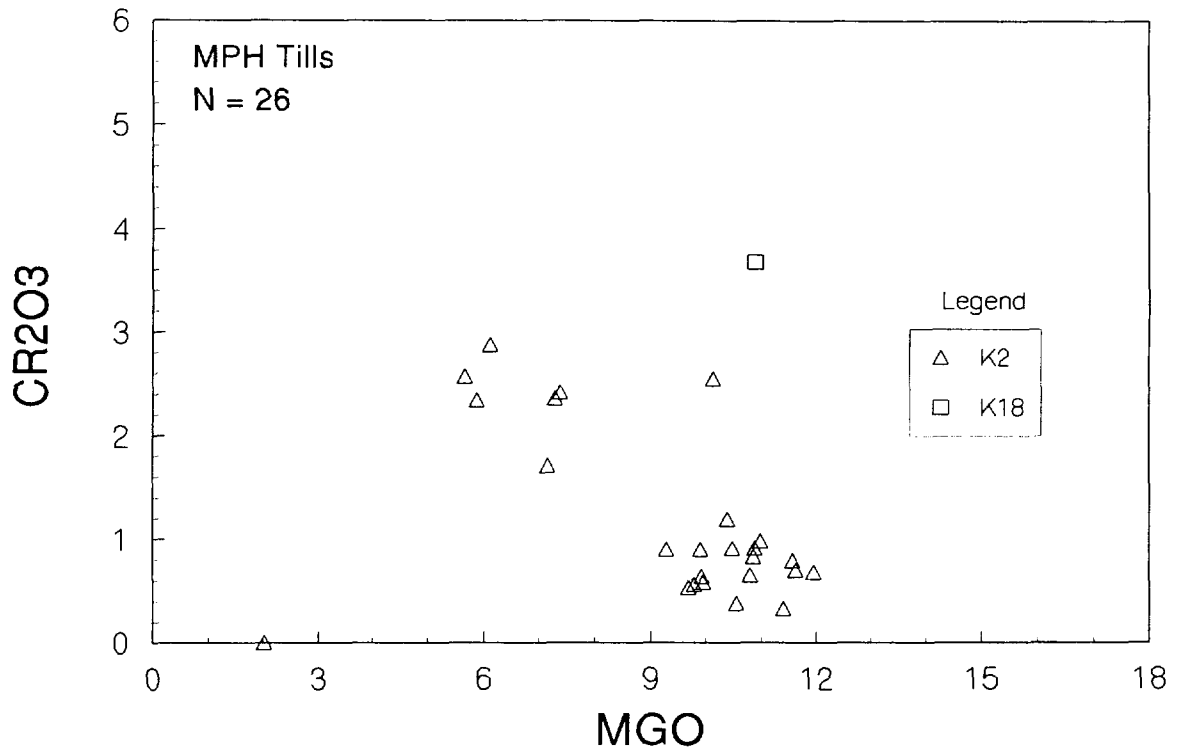
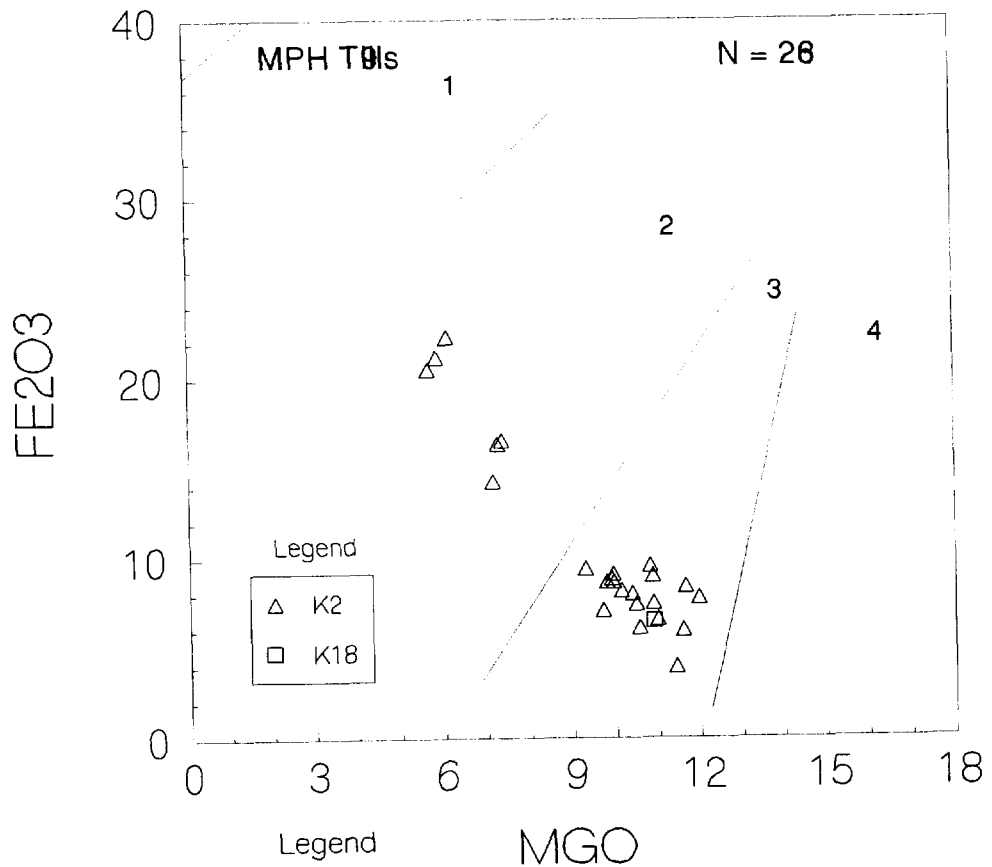


Fig.6: Ilm. Diamond Preservation Potential



1 = No Preservation, 2 = marginal pres., 3 = intermed. pres., 4 = ultimate pres.

Fig.7: Chromite Compositions

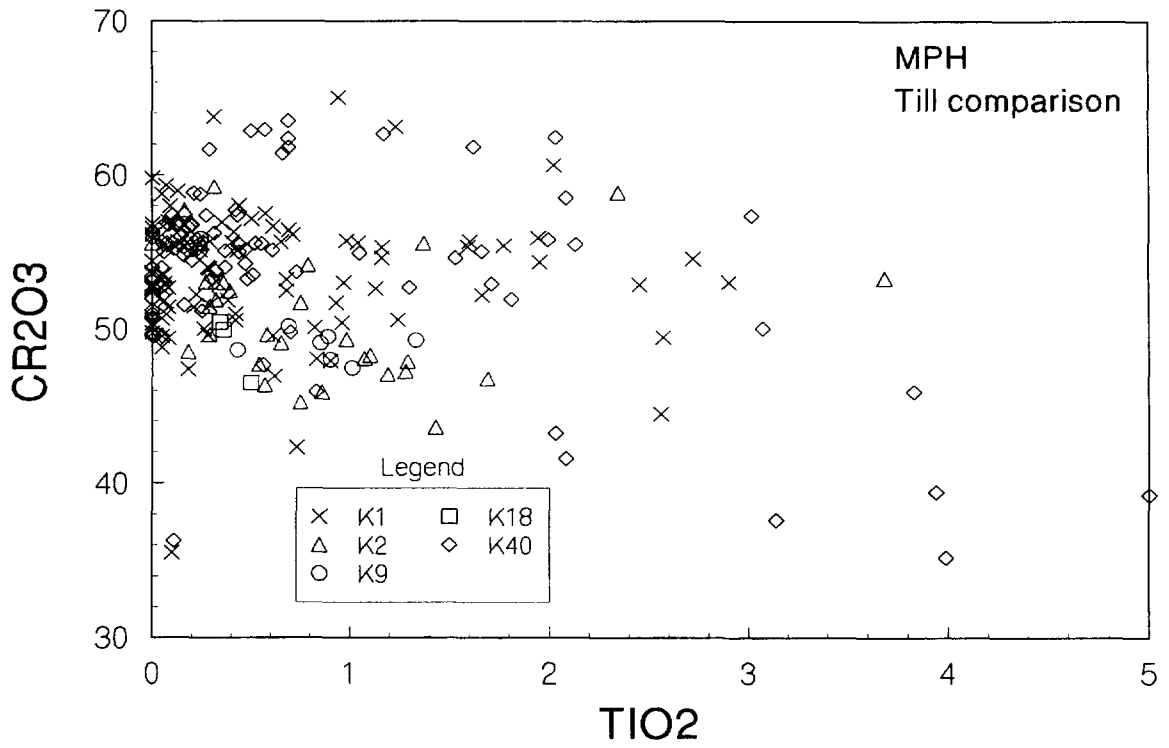


Fig.8: Chromite

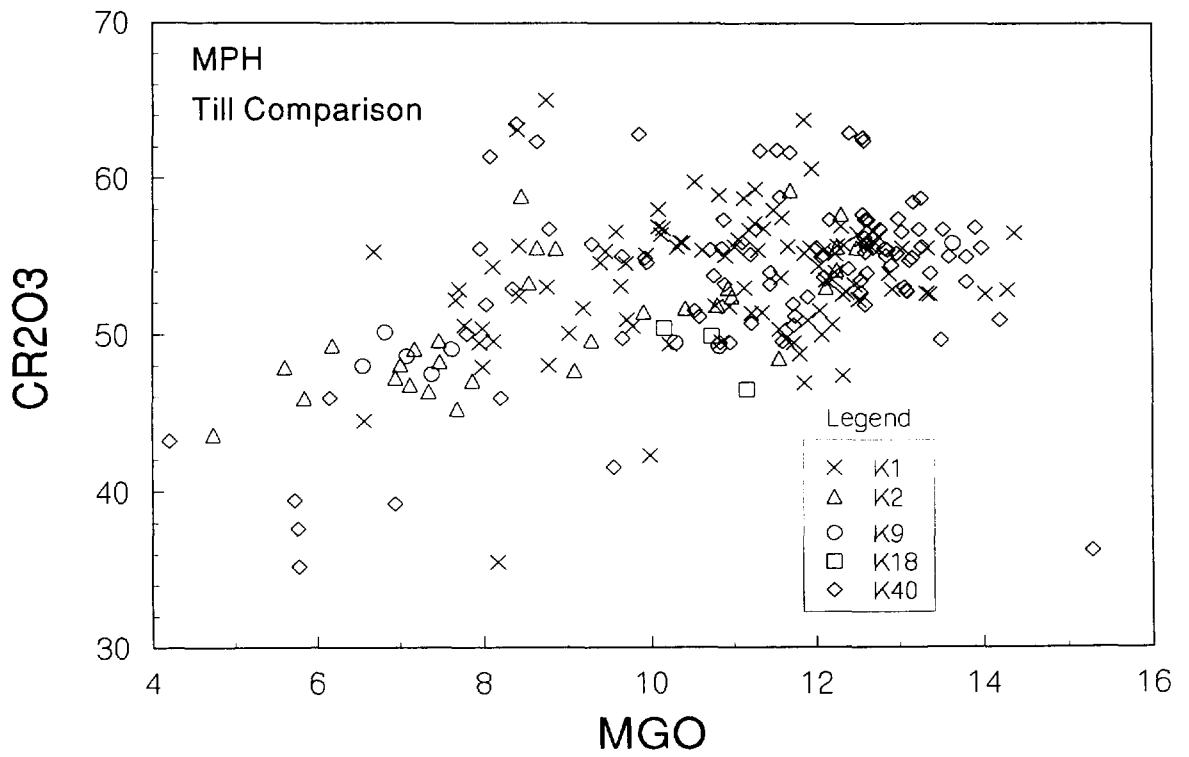
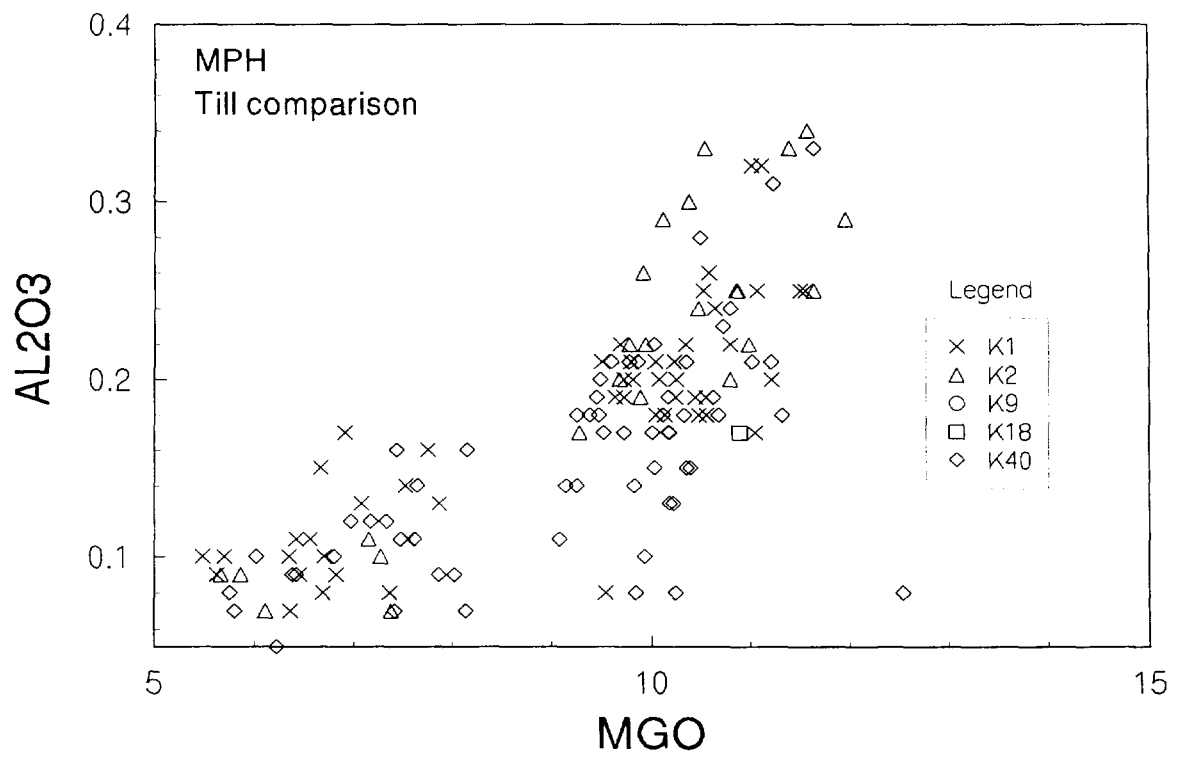
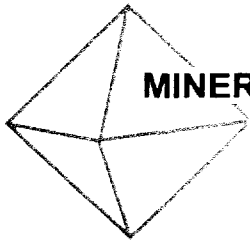


Fig.9: Ilmenite Compositions



	Sample	Size	Type	SiO2	TiO2	Al2O3	CR2O3	FE2O3	FEO	MNO	MGO	CAO	NA2O	K2O	TOTAL	Classfctn		
1	K2	250	Gar	40.84	0.00	20.30	4.39		7.29	0.39	20.06	5.38			98.65	G9		
2	K2	250	Gar	41.49	0.00	21.95	2.45		8.37	0.35	19.94	5.09			99.64	G9		
3	K2	250	Gar	41.71	0.14	19.87	5.06		7.91	0.40	19.77	5.93			100.79	G9		
4	K2	250	Gar	39.80	0.10	18.55	5.68		11.48	0.62	15.64	7.14			99.01	G9		
5	K2	250	Gar	40.68	0.09	18.01	6.96		7.19	0.31	19.21	6.59			99.04	G9		
6	K2	250	Gar	40.54	0.07	18.13	6.81		7.49	0.42	18.71	7.01			99.18	G9		
7	K9	250	Gar	40.62	0.80	21.33	0.85		10.55	0.37	19.51	4.62			98.65	meg?		
8	K9	250	Gar	40.91	0.00	19.02	5.94		7.43	0.32	18.75	6.25			98.62	G9		
9	K9	250	Gar	41.35	0.00	19.79	5.33		6.69	0.35	19.65	5.75			98.91	G9		
10	K9	250	Gar	41.20	0.00	20.10	4.54		7.11	0.30	20.53	5.45			99.23	G9		
11	K9	250	Gar	41.07	0.00	19.71	4.93		6.86	0.40	20.14	5.67			98.78	G9		
12	K9	250	Gar	41.37	0.00	20.64	3.80		6.92	0.35	20.73	4.91			98.72	G9		
13	K9	250	Gar	41.67	0.00	20.54	3.99		7.36	0.41	21.20	4.00			99.17	"G10"		
14	K9	250	Gar	41.14	0.00	20.75	3.22		8.40	0.52	19.01	5.38			98.42	G9		
15	K9	250	Gar	41.43	0.00	20.31	4.53		7.30	0.36	20.03	5.27			99.23	G9		
16	K9	250	Gar	41.63	0.19	20.82	3.26		8.08	0.31	19.56	4.98			98.83	G9		
17	K9	250	Gar	41.51	0.10	19.44	5.82		6.59	0.34	19.64	5.83			99.27	G9		
18	K9	250	Gar	41.04	0.00	22.18	1.44		10.12	0.47	19.08	4.61			98.94	web		
19	K9	250	Gar	41.13	0.11	18.88	5.88		7.44	0.33	18.91	6.41			99.09	G9		
20	K9	250	Gar	41.18	0.07	21.24	3.04		8.21	0.34	20.42	5.18			99.68	G9		
21	K9	250	Gar	40.45	0.11	21.01	3.04		8.06	0.40	20.43	5.10			98.60	G9		
22	K9	250	Gar	41.05	0.10	19.68	5.25		6.64	0.30	20.55	5.20			98.77	G9		
23	K9	250	Gar	41.32	0.00	20.44	4.09		7.70	0.41	19.24	6.13			99.33	G9		
24	K9	250	Gar	40.71	0.00	20.97	3.57		8.82	0.53	19.08	5.80			99.48	G9		
25	K9	250	Gar	41.55	0.00	20.73	3.76		7.07	0.42	20.53	4.96			99.02	G9		
26	K9	250	Gar	41.62	0.00	20.26	4.63		7.32	0.33	21.70	3.38			99.24	G10		
27	K9	250	Gar	40.96	0.20	20.43	3.56		8.04	0.38	19.82	5.34			98.73	G9		
28	K9	250	Gar	41.04	0.22	19.42	4.87		8.24	0.32	19.58	5.46			99.15	G9		
29	K9	250	Gar	41.31	0.00	19.80	5.27		7.53	0.41	20.29	4.94			99.55	G9		
30	K9	250	Gar	40.60	0.06	18.25	6.39		6.97	0.42	18.97	7.07			98.73	G9		
31	K9	250	Gar	41.25	0.00	20.40	4.09		7.28	0.49	20.73	4.92			99.16	G9		
32	K9	250	Gar	41.47	0.00	20.75	3.15		8.88	0.62	18.72	5.79			99.38	G9		
33	K9	250	Gar	41.39	0.00	19.52	5.62		7.21	0.41	20.13	5.29			99.57	G9		
34	K9	250	Gar	41.86	0.05	21.52	2.71		8.73	0.50	19.65	4.73			99.75	G9		
35	K9	250	Gar	41.33	0.00	20.35	4.34		7.38	0.43	19.98	5.52			99.33	G9		
36	K9	250	Gar	41.40	0.00	20.97	3.16		8.78	0.52	19.03	5.46			99.32	G9		
37	K9	250	Gar	41.78	0.33	21.31	2.49		8.27	0.38	20.31	5.15			100.02	G9		
38	K9	250	Gar	41.25	0.11	19.73	4.48		7.90	0.35	19.62	5.65			99.09	G9		
39	K9	250	Gar	41.69	0.08	19.88	4.95		6.65	0.40	20.92	4.95			99.52	G9		
40	K9	250	Gar	40.89	0.00	18.90	5.45		7.96	0.41	18.85	6.94			99.40	G9		
41	K9	250	Gar	41.60	0.13	22.01	1.99		9.26	0.42	19.89	4.89			100.19	web		
42	K9	250	Gar	40.74	0.16	19.66	4.34		8.47	0.43	19.11	5.68			98.59	G9		
43	K9	250	Gar	41.30	0.11	20.13	4.27		7.25	0.26	20.29	5.65			99.26	G9		
44	K9	250	Gar	41.33	0.21	19.86	4.74		7.82	0.35	19.88	5.76			99.95	G9		
45	K9	250	Gar	41.49	0.00	22.15	1.60		9.29	0.48	19.60	4.50			99.11	web		
46	K9	250	Gar	41.29	0.05	21.31	2.71		9.35	0.45	19.62	4.93			99.71	G9		
47	K9	250	Gar	41.69	0.00	22.24	2.13		7.75	0.37	20.72	4.66			99.56	G9		
48	K9	250	Gar	41.59	0.07	19.25	5.68		6.51	0.35	20.38	5.61			99.44	G9		
49	K9	250	Gar	41.40	0.21	20.02	4.15		8.20	0.31	19.67	5.26			99.22	G9		
50	K9	250	Gar	42.10	0.10	21.78	2.12		8.29	0.47	20.46	4.62			99.94	G9		
51	K9	250	Gar	41.51	0.00	19.91	4.34		7.55	0.36	19.41	5.85			98.93	G9		
52	K9	250	Gar	41.32	0.00	20.22	4.59		7.69	0.41	19.73	5.40			99.36	G9		
53	K9	250	Gar	40.99	0.00	20.70	3.34		8.73	0.45	19.09	5.49			98.79	G9		
54	K9	250	Gar	41.97	0.00	20.81	3.62		7.07	0.35	19.77	4.86			98.45	G9		
55	K9	250	Gar	41.17	0.07	20.36	2.96		8.64	0.46	19.26	5.19			98.11	G9		
56	K9	250	Gar	41.43	0.20	19.07	5.51		6.85	0.34	21.10	4.46			98.96	G10		
57	K9	250	Gar	41.76	0.10	20.24	4.16		7.27	0.43	20.40	5.32			99.68	G9		
58	K9	250	Gar	41.48	0.00	19.26	5.75		6.98	0.34	19.86	5.35			99.02	G9		
59	K9	250	Gar	40.87	0.00	18.47	5.30		6.96	0.43	20.06	5.35			97.44	G9		
60	K9	250	Gar	40.64	0.11	18.57	6.07		7.57	0.32	19.02	6.35			98.65	G9		
61	K9	250	CD	52.94	0.05	1.98	2.25		2.16	0.00	16.62	20.18	1.73	0.00	97.91	K		
62	K9	250	CD	53.67	0.21	2.84	2.32		1.46	0.00	15.82	20.27	2.21	0.00	98.80	K		
63	K9	250	CD	53.70	0.17	0.58	1.51		2.54	0.15	17.33	21.16	1.10	0.00	98.24	K		
64	K9	250	CD	53.98	0.00	0.95	3.02		2.01	0.08	16.39	20.43	2.06	0.00	98.92	K		
65	K9	250	CD						Lost during mounting / polishing									
66	K2	425	Ilm	0.00	55.53	0.33	0.33	3.95	29.38	0.26	11.39	0.00			101.17	K / meg		
67	K2	425	Ilm	0.00	53.50	0.33	0.38	6.12	29.03	0.29	10.54	0.00			100.19	K / meg		
68	K2	425	Ilm	0.00	52.09	0.22	0.56	8.69	29.14	0.27	9.78	0.00			100.75	K / meg		
69	K2	425	Ilm	0.00	45.49	0.10	2.36	16.34	27.74	0.21	7.27	0.00			99.51	K / meta		
70	K2	425	Ilm	0.00	52.73	0.25	0.70	8.42	26.43	0.26	11.63	0.00			100.42	K / meg		
71	K2	425	Ilm	0.00	51.79	0.30	1.19	8.01	27.84	0.23	10.38	0.00			99.74	K / meg		
72	K2	425	Ilm	0.00	42.22	0.09	2.34	21.18	27.29	0.23	5.86	0.00			99.21	K / meta		
73	K2	425	Ilm	0.00	45.38	0.07	2.42	16.56	27.34	0.25	7.37	0.06			99.46	K / meta		
74	K2	425	Ilm	0.00	42.09	0.09	2.57	20.53	27.50	0.26	5.66	0.00			98.70	K / meta		
75	K2	425	Ilm	0.00	52.60	0.20	0.53	7.07	29.72	0.33	9.68	0.00			100.13	K / meg		
76	K2	425	Ilm	0.00	51.49	0.25	0.83	9.00	26.67	0.29	10.85	0.00			99.38	K / meg		
77	K2	425	Chr	0.09	53.55	0.34	0.79	5.97	27.32	0.32	11.57	0.00			99.95	K / meg		



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Diamond Exploration Consultancy

THE MINERAL CHEMISTRY OF INDICATORS RECOVERED FROM SAMPLE K4

Prepared for

MPH Consulting Ltd.
Suite 615
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M5H 2L3

27 March, 2004

Report No. ML04/017

1. INTRODUCTION

This report documents the analyses of selected indicators recovered from sample K4.

2. RESULTS

The grains were mounted and submitted to the Council for Geoscience (Geological Survey) for polishing and analyses on their Jeol electron microprobe. The relevant XY plots and full analyses are appended. Note that one of the grains selected as chromite is probably staurolite.

The three garnets are all peridotitic Ca-saturated varieties (Figure 1). The chromites comprise xenocrysts only (Figure 2) and as such, do not define a kimberlitic population. None are diamond inclusion varieties (Figure 3). The single ilmenite is a kimberlitic, fragmented megacryst.

In summary, the garnets and the single ilmenite derive from a kimberlitic source. The chromites cannot be equivocally identified as either kimberlitic or non-kimberlitic. No indication of the presence of diamond exists in this data set.

Too few grains, particularly garnet, were recovered to adequately assess the diamond potential of the source. Further work to locate and assess the diamond potential of the source of the indicators is warranted.

P. Zweistra
27 March, 2004

Fig. 1: Garnet Compositions

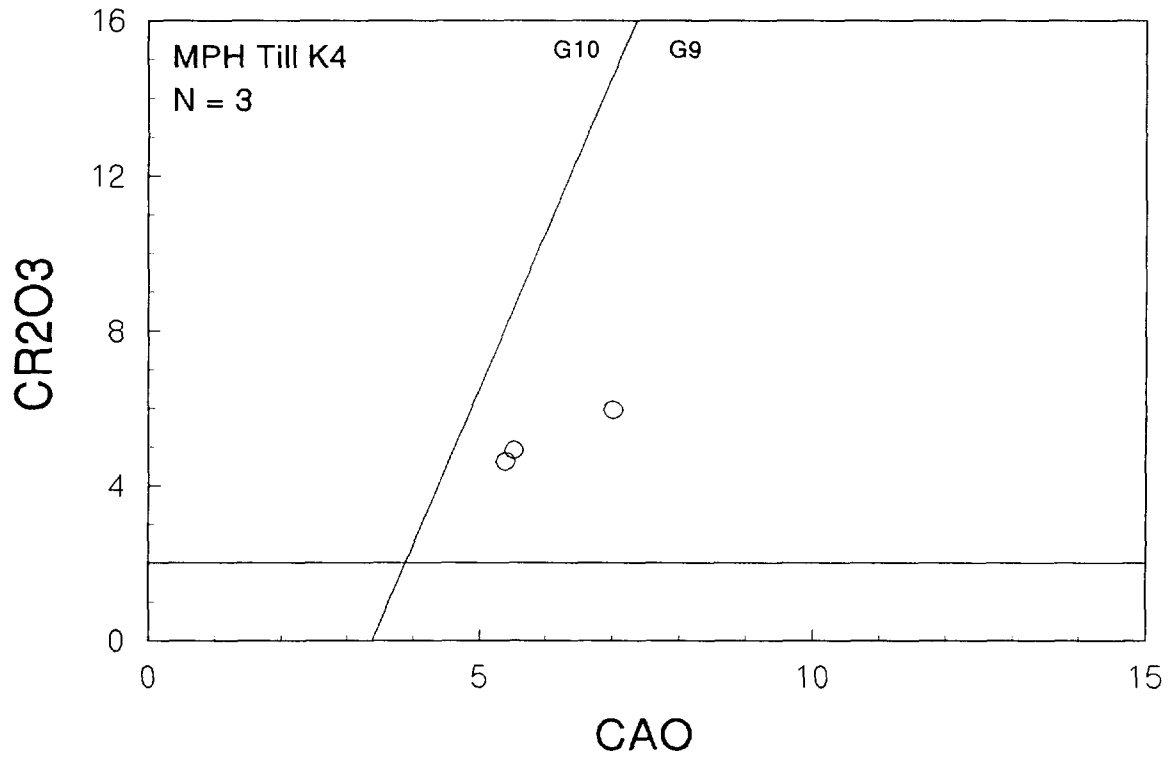


Fig.2: Chromite Compositions

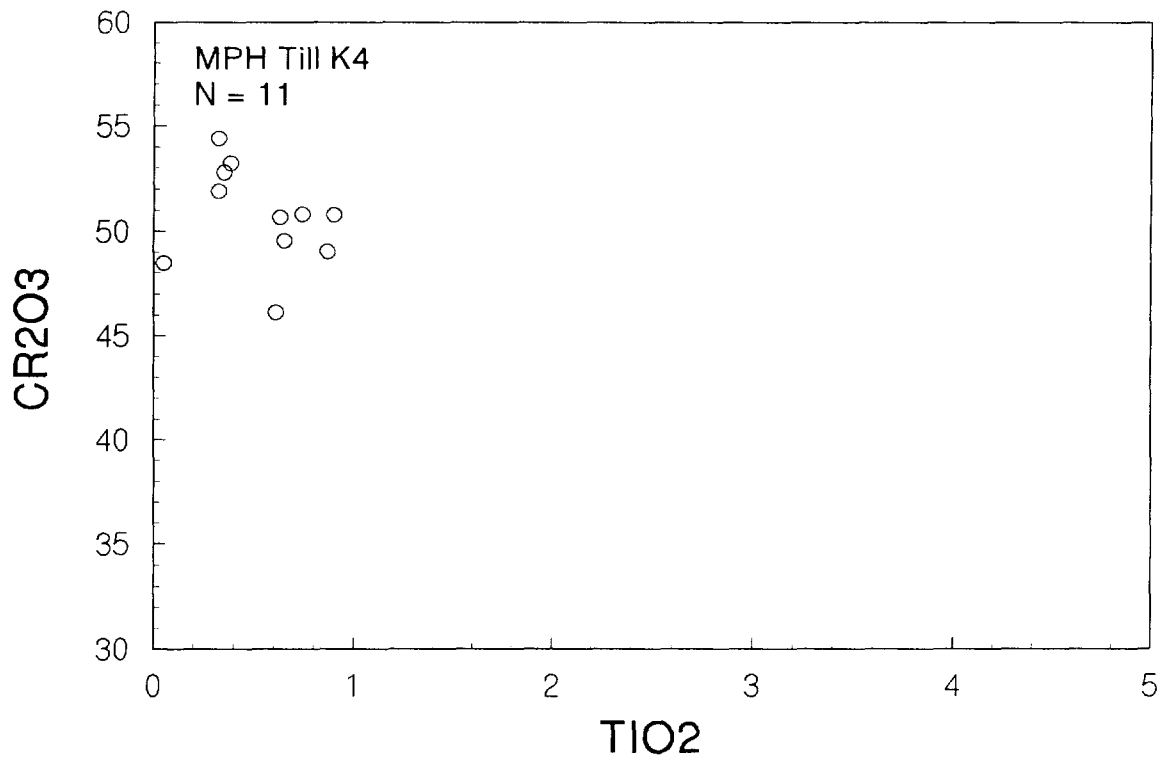
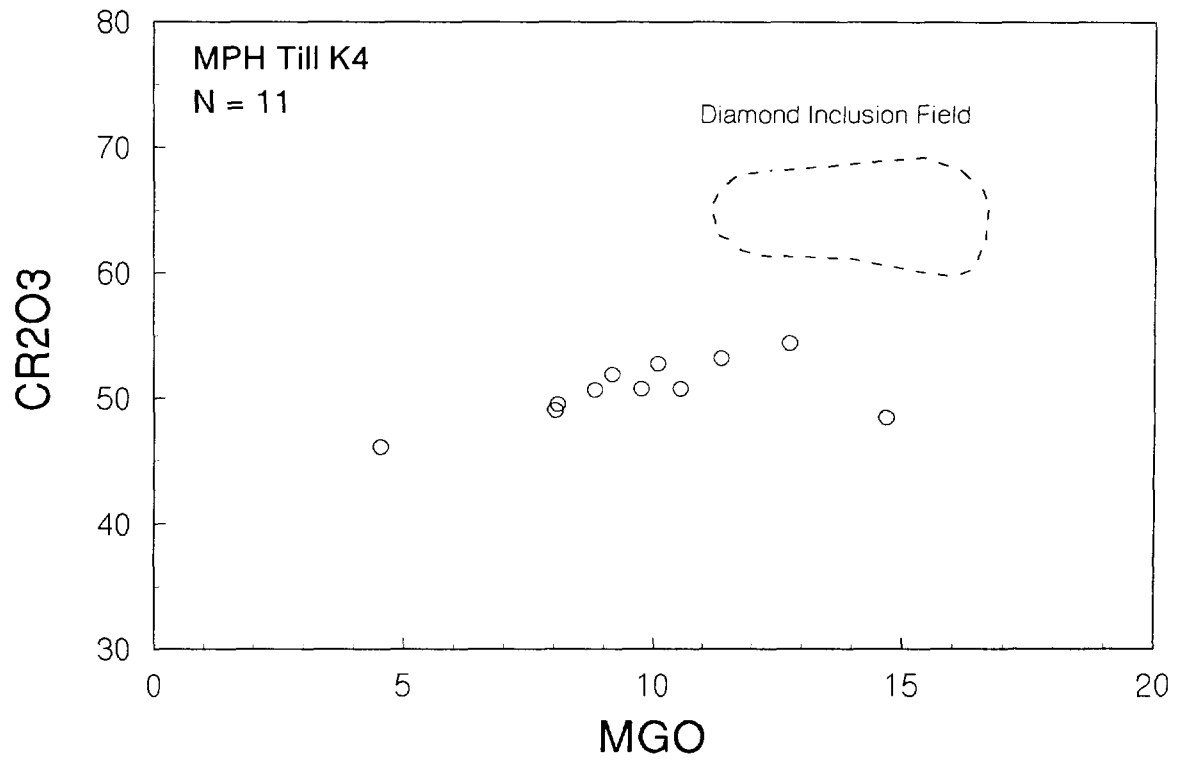


Fig.3: Chromite



	Sample	Size	Type	SIO2	TIO2	AL2O3	CR2O3	FE2O3	FEO	MNO	MGO	CAO	NA2O	K2O	TOTAL	Classfctn
1	K4	250	1G sKS	41.78	0.00	19.44	5.96	0.00	7.19	0.37	18.69	7.01			100.44	G9
2	K4	250	1G SS	41.69	0.00	20.31	4.91	0.00	7.21	0.41	19.59	5.52			99.64	G9
3	K4	250	1G SS	41.68	0.00	20.39	4.62	0.00	7.42	0.37	19.66	5.40			99.54	G9
4	K4	710	2IL SS	0.00	50.53	0.26	1.16	9.09	27.81	0.22	9.77	0.00			98.84	K / meg
5	K4	250	G2 SP	0.00	0.05	22.09	48.46	0.69	12.73	0.00	14.67	0.00			98.69	xeno
6	K4	250	G2 SP	0.13	0.32	12.76	54.39	3.91	14.63	0.00	12.75	0.00			98.88	xeno
7	K4	250	G2 SP	0.00	0.35	12.37	52.77	5.04	18.56	0.00	10.10	0.00			99.20	xeno
8	K4	250	G2 SP	0.00	0.61	13.68	46.10	6.71	27.34	0.11	4.54	0.00			99.09	xeno
9	K4	250	G2 SP	0.06	0.65	14.41	49.52	3.75	22.16	0.00	8.08	0.00			98.64	xeno
10	K4	250	G2 SP	0.05	0.63	11.10	50.65	7.37	20.60	0.00	8.83	0.00			99.23	xeno
11	K4	250	G2 SP	34.10	0.28	33.23	0.00	0.00	13.74	0.22	0.95	0.08			82.60	??
12	K4	250	G2 SP	0.00	0.90	12.33	50.76	5.44	19.29	0.00	9.76	0.05			98.53	xeno
13	K4	250	G2 SP	0.09	0.32	12.33	51.90	4.90	19.87	0.00	9.17	0.00			98.58	xeno
14	K4	250	G2 SP	0.00	0.74	12.46	50.79	6.07	18.03	0.00	10.56	0.00			98.66	xeno
15	K4	250	G2 SP	0.07	0.87	10.73	49.02	8.11	21.80	0.00	8.03	0.00			98.63	xeno
16	K4	250	G2 SP	0.09	0.38	12.56	53.21	4.11	16.47	0.00	11.38	0.00			98.20	xeno

K = kimberlitic

NK = non-kimberlitic

G9 = lherzolitic garnet

G10 = harzburgitic garnet

"G10" = Graphite field harzburgitic garnet

meta = metasomatic

meg = megacryst

web = websteritic

xeno = xenocryst

Mag = magmatic

APPENDIX D CORE DRILL LOGS

MPH International Exploration & Mining Consultants				KIMBERLITE EXPLORATION DETAILED DRILL CORE LOG		Project: Sudbury Contact Mines Ltd / Timiskaming (Ontario)		Commenced: March 27 / 2004		HOLE#: KL01 - D1		PAGE: 1 OF: 4					
				CORE SUMMARY SHEET		Hole #: KL01 - D1		Township: Klock		Completed: March 31 / 2004		Depth: 21 m		Az/Dip: 009.5 / 68			
						Collar Co-ords: 561625E / 5257145N (NAD27)		Claim: 3001467		Contractor: Boart-Longyear Inc.		NQ Equipment		Depth: 75 m		Az/Dip: 008.5 / 69	
						Azimuth/Dip: 009 / -70		Elevation: 410 m asl		Logged By: Sharyn Alexander		Depth: 150 m		Az/Dip: 009 / 69			
						Final Depth(m): 156.4 m		Sampled By: Robert Paever		Depth:		Az/Dip:					
From (metres)	To (metres)	Core Recovery (%)	R.O.D. (%)	Textural-Genetic Description and Code (Clement and Skinner, 1985, Field and Scott-Smith, 1998)	Matrix Description	Macro/Xenocryst Abundancies (% and size) (O=ol, G=grt, C=chr, CD=chr. dip., Ilm=ilmenite)	Autolith Abundancies (type, % and size)	Mantle Nodules (type, %, and size)	Crustal Xenoliths (type, %, and size)	Country Rock Xenoliths (type, %, and size)	Ratio of K:biot-K:f	Sampling Information (Samp. #, type)	From: (Metres)	To: (Metres)			
0	13.7			Overburden / Boulders													
13.7	35.3			Matrix Supported Magmatic Macrocrystic Kimberlite with segregatory inter-clast matrix (HK) 13.7-20.15 - Weathered HK 20.15-28.8 - Fresh HK 28.8-35.3 - Weathered HK	lt. brown dk. brown lt. brown	Olivine - 30-40%	Autoliths vs. glob. segregation/nucleated globules?		Siltstone / Quartzite		MIDA #25701 MIDA # 25702	13.7 22.7	22.7 31.7				
35.3	156.4			Matrix Supported Pelletal-textured Magmatic Macrocrystic Kimberlite Breccia with non-magmatic inter-clast matrix (TKB) note: sections of darker HK distributed throughout 35.8-54.7 - TKB 54.7-56 - HK (Petrography) 56-59 - TKB 59-64 - HK 64-74.2 - TKB 74.2-80.7 - HK (Petrography) 80.7-94.5 - TKB 94.5-156.4 - TKB (higher % Ol., more granitic CRX)	blue dk. brown/gr. blue dk. grn., Fg. blue dk. grn., Cg. blue blue	Olivine - 20%		Olivine-rich mantle nodules (altered white) vs. altered Olivine xenocrysts 10-25% 0.5-4 cm	Siltstone (gray) Quartzite (white, gray, red)		MIDA #25703 Petrography MIDA #25704 MIDA #25705	45.0 54.95 54.5 72.0 77.9	54.0 55.05 63.5 81.0 78.0				
	156.4			End of Hole		Olivine - 30%, altered white											

Legend CRX = country rock xenocryst, KB = kimberlite breccia (hypabyssal), TKB = tuffitic KB, TX = tuffitic kimberlite, MK = macrocrystic kimberlite, F = flow alignment, P = pellets, G = globules, sizes should be differentiated as >2mm, <2-19mm, <15-4mm, <4mm, 1mm and <1mm

MPH International Exploration & Mining Consultants				KIMBERLITE EXPLORATION DETAILED DRILL CORE LOG		Project: Sudbury Contact Mines Ltd. / Timiskaming (Ontario)		Commenced: March 27 / 2004		HOLE#: KL01 - D1		PAGE: 2 OF: 4																	
From (metres)		To (metres)		Core Recovery (%)		R.Q.D. (%)		Textural-Genetic Description and Code (Clament and Skinner, 1985, Field and Scott-Smith, 1998)		Matrix Description		Macro/Xenocryst Abundancies (% and size) (O=ol, G=grt, C=chr, CD=chr. dip., ilm=ilmite)		Autolith Abundancies (type, % and size)		Mantle Nodules (type, %, and size)		Crustal Xenoliths (type, %, and size)		Country Rock Xenoliths (type, %, and size)		Ratio of Kb/non-Kb		Sampling Information (Samp. #, type)		From (Metres)		To (Metres)	
0		12						Overburden (cased to 12m)																					
12		13.7						Boulders (quartzite, reddish)																					
13.7		20.15		99		90		Matrix Supported Magmatic Macrocrystic Kimberlite with segregationary inter-clast matrix (HK), weathered, with autoliths/globules		lt. brn. / gm. (weathered appearance)		Olivine - 30-40%, 0.5-3mm, altered white (serpentinized), in both Kb and Autoliths. Phlog. - 5%, 1-5mm. Garnet - <1%, 2-4mm, red (mostly in mantle nodules) ilm. - <2%, 1-3mm CD - trace (one in autolith, 3mm) C - trace, 2-4mm		Autoliths vs. Globular segregation nucleated globules? blue/grn. matrix 20-40% 1-20 cm irregular edges Fg. margins CRX poor		Peridotitic (Ol., serp., Gt.) 20%, 0.5-7 cm avg. 1-3cm subrounded altered rims Pelletal-textured? (found in both autoliths/globules and host Kb)		Siltstone, Quartzite (gray, altered rims, zoned) 5-15% 0.5-7 cm avg. 1-2 cm subrounded-subangular		90/10		MIDA # 25701		13.7		22.7			
20.15		28.8		99		96		Matrix Supported Magmatic Macrocrystic Kimberlite with segregationary inter-clast matrix (HK), with autoliths/globules		dark brn./gm. ('fresher' version of above HK)		Olivine - 30-40%, 1-8mm, some altered white. Phlog. - 5%, 1-5mm Gt. - trace, 1-4mm C - trace, 1-4mm		Autoliths/globules/nucleated globules gm. matrix 20-40% 1-20 cm irregular edges Fg. rims		Peridotitic (Ol., serp., Gt.) 20%, 0.5-7 cm avg. 1-3cm subrounded altered rims/zoned pelletal textured? (found in both autoliths/globules and host Kb)		Siltstone, Quartzite (gray, alteration rims, zoned) 5-15% 0.5-8 cm avg. 1-2 cm subangular		90/10		MIDA # 25702		22.7		31.7			
28.8		35.8		99		99		Matrix Supported Magmatic Macrocrystic Kimberlite with segregationary inter-clast matrix (HK), weathered, with autoliths/globules		lt. brn. / gm. (weathered appearance)		Ol. - 30%, 1-8mm, altered white (serp.) Phlog. - 3%, 1-4mm Gt. - 1%, 1-4mm, purple, red, one orange (often found in mantle nodules/globules) ilm. - trace, 1-3mm		Autoliths/globules/nucleated globules 20-40% 1-10cm blue-grn. matrix irregular edges Fg. rims		Peridotitic (Ol., serp., Gt.) 20%, 0.5-5 cm avg. 1-2 cm subrounded-subangular altered rims		Siltstone, Quartzite (some granitic?) 10-15% 0.5-30 cm avg. 1-2 cm some zoned subrounded-subangular		90/10									
35.8		59.0		100		99		Matrix Supported Pelletal-textured Magmatic Macrocrystic Kimberlite Breccia with a non-magmatic inter-clast matrix (TKB)		blue-grn., Fg. (serpentinized?)		Ol. - 20% (less than in HK above), 1-5mm, some alteration (white) ilm. - 1-2%, 1-4 mm Phlog. - <2%, 2-4 mm CD - trace, one 4x6 mm C - trace, 1-4 mm Gt. - rare		Autoliths/nucleated globules 5-10%, 1-4 cm Some cored by mantle nodules, surr. by pelletal material?		Peridotitic (Ol., serp., Gt.) 10-20% 0.5-4 cm subrounded-subangular		Siltstone (drk. gray) zoned, rimmed 5%, 0.5-10 cm avg. 1-2 cm subangular		80/20		MIDA # 25703		45.0		54.0			
								cont'd				cont'd		cont'd		cont'd		cont'd											

Legend CRX = country rock xenocryst, KB = kimberlite breccia (hypopyresis), TKB = tuffitic kimberlite, MK = macrocrystic kimberlite, F = flow alignment, P = pellets, G = globules, sizes should be differentiated as <2mm, 2-16mm, >16mm

MPH International Exploration & Mining Consultants				KIMBERLITE EXPLORATION DETAILED DRILL CORE LOG				Project: Sudbury Contact Mines Ltd / Timiskaming (Ontario)		Commenced: March 27 / 2004		HOLE#: KL01 - D1		PAGE: 3 OF: 4	
				Hole #: KL01 - D1		Township: Klock		Completed: March 31 / 2004		Depth: 21 m		Az/Dip: 008.5 / 68			
				Collar Co-ords: 561625E / 5257145N (NAD27)		Claim: 3001487		Contractor: Boat-Longyear Inc. NQ Equipment		Depth: 75 m		Az/Dip: 008.5 / 69			
				Azimuth/Dip: 009 / -70		Elevation: 410 m asl		Logged By: Sharyn Alexander		Depth: 150 m		Az/Dip: 009 / 69			
				Final Depth(m): 156.4 m		Sampled By: Robert Peever				Depth:		Az/Dip:			
From (metres)	To (metres)	Core Recovery (%)	R.Q.D (%)	Textural-Genetic Description and Code (Clement and Skinner, 1985, Field and Scott-Smith, 1996)	Matrix Description	Macro/Xenocryst Abundances (% and size) (Ozol, Gsgnt, Cscr, CDscr, dop, ilm=ilmrite)	Autolith Abundances (type, % and size)	Mantle Nodules (type, %, and size)	Crustal Xenoliths (type, %, and size)	Country Rock Xenoliths (type, %, and size)	Ratio of Kb/non-Kb	Sampling Information (Samp. #, type)	From: (Metres)	To: (Metres)	
		100	100	54.7-56 - Dk. blue/bk. HK, Olivine-rich, CRX poor. Could be HK autolith within blue TKB unit. Found Gt., CD, Phlog., 30% mantle nodules/Olivine xenos. (Could be Cg. version of HK found at 59-54m)			Darker 'HK' mat (similar to fresh HK' from above) 1%, 1-5 mm	very altered, white (serpentinized?). Rapidly deteriorating, swelling when wet. Zoned (serp. rim). Several coring globules, surr. by pelletal material. Could be altered Olivine xenocrysts?		Quartzite (white, reddish) 10-15%, 1-7 cm subangular-subrounded (Gt. inclusions led to iron staining?)		MI04 #25704	54.5	63.5	
59	63.5 - 64.2 (contact sub-parallel to CA)	100	98	Matrix Supported Magmatic Macrocrystic Kimberlite with magmatic (segregational) inter-clast matrix (HK) (resembles Cg. HK from 20.15-28.8m) * entire section could be large autolith within TKB unit?	dk. blk./grn.	Olivine - 30-40%, 1-6mm, fresh/green, some serpentinized. Phlog. - 1-3%, 2-5mm C / ilm. - trace	Autoliths/globules? (or segregatory matrix?) (whole unit is one autolith?)	Peridotitic (Ol., serp.) 10-15%, 1-5 cm commonly zoned (serp. alteration at nms), subangular.		Siltstone/Quartzite 5%, 1-4 cm subangular, zoned (serp. nms?)	95/5				
53.5 - 64.2	74.2	99	99	Matrix Supported Pelletal-textured Magmatic Macrocrystic Kimberlite Breccia (TKB) (same blue TKB as 35.8-59m)	lt. blue/grn. (serpentinized?)	Olivine - 5-10%, 2-5 mm, some altered white Phlog. - 5%, 2-5 mm ilm. - <5%, 2-4 mm C - trace, one 3 mm Gt. - trace, 2-5 mm	Autoliths/nucleated globules 5-10%, 1-5 cm (most cored by mantle nodules/Ol. xenos, surr. by dk. 'HK' mat.)	Peridotitic (Ol., serp., Gt.) 15-25% 0.5-4 cm, avg. 1cm subangular-subrounded Highly altered. Could be altered Olivine xenocrysts?		Siltstone (dk. gray) 5%, 0.5-15 cm avg. 1-2 cm subangular, alteration nms Quartzite (granitic?) (white, reddish) 20%, 1-8 cm avg. 1-3 cm gametiferous? zoned (red rims) subangular-subrounded	75/25	MI04 #25705	72.0	81.0	
74.2	gradational 80.7	100	100	Matrix Supported Magmatic V. Macrocrystic Kimberlite (HK) with segregatory inter-clast matrix	dk. blk./blue	Olivine - 20-30%, 1-10 mm Phlog. - 5%, 2-5 mm Gt. - trace, 2-5 mm ilm. / C - trace, 1-5 mm	Autoliths/nucleated globules? (or segregatory matrix?) (cored by mantle nodules)	Peridotitic (Ol., serp., Gt.) 0.5-3 cm altered, zoned (often surr. by pelletal mat./ 'HK') subangular		siltstone (dk. gray) 5%, 1-5 cm subangular	95/5	Petrography	77.9	78.0	
80.7	gradational 156.4	99	99	Matrix Supported Pelletal-textured Magmatic Macrocrystic Kimberlite Breccia (TKB) (same blue TKB as 64-74.2, more CRX rich)	blue/grn. (serpentinized?)	Olivine - 5-10%, 1-5 mm Gt. - <3%, 2-5 mm CD - trace, 1-3 mm C / ilm. - trace, 1-3 mm	Autoliths/nucleated globules 5%, 1-3 cm	Peridotitic (Gt., red) 10%, 0.5-4 cm subangular some surr. by pelletal material		Siltstone (dk./lt. gray), subangular 10-15%, 1-5 cm alteration nms	80/20 to 70/30				
				cont'd		cont'd				cont'd					

Legend CRX = country rock xenocryst, KB = kimberlite breccia (hypabyssal), TKB = lufiteic KB, TK = lufiteic kimberlite, MK = macrocrystic kimberlite, F = flow alignment, P = pellets, G = globules, sizes should be differentiated as +2mm, -2+10mm, -15+4m

**KIMBERLITE EXPLORATION
DETAILED DRILL CORE LOG**

Project: Sudbury Contact Mines Ltd. / Timiskaming (Ontario)		Commenced: March 27 / 2004		HOLE#: KL01 - D1	PAGE: 4 OF: 4
Hole #: KL01 - D1		Township: Klock		Completed: March 31 / 2004	Depth: 21 m
Collar Co-ords: 561625E / 5257145N (NAD27)		Claim: 3001467		Contractor: Boart-Longyear Inc. NQ Equipment	Depth: 75 m
Azimuth/Dip: 009 / -70		Elevation: 410 m asl		Logged By: Sharyn Alexander	Depth: 150 m
Final Depth(m): 156.4 m		Sampled By: Robert Peever		Depth:	Az/Dip:

From (metres)	To (metres)	Core Recovery (%)	R.Q.D. (%)	Textural-Genetic Description and Code (Clement and Skinner, 1985, Field and Scott-Smith, 1996)	Matrix Description	Macro/Xenocryst Abundances (% and size) (O=ol, G=grt, C=chr, CD=chr, dip, flm=ilmenite)	Autolith Abundances (type, % and size)	Mantle Nodules (type, % and size)	Crustal Xenoliths (type, %, and size)	Country Rock Xenoliths (type, %, and size)	Ratio of Kb/non-Kb	Sampling Information (Samp. #, type)	From: (Metres)	To: (Metres)
	156.4			94.5-156.4 - more Olivine rich (20%) 105-156.4 - more CRX fragments (30%), siltstone, quartzite, plus granitic CRX. 110.4 - large clear calcite pod/vein, 5-10 cm thick End of Hole	darker blue/grn. dark blue/gm	Ol. - 20%, 1-5 mm, altered white Ol. - 10-15%, 1-5 mm				Quartzite (white, reddish) 10-15%, 1-10 cm subangular Granite (similar to quartzite CRX) towards end of core	70/30			

Legend CRX = country rock xenofragment, KB = kimbabite breccia (hypabyssal), TKB = lufuatic KB, TK = lufuatic kimbabite, MK = macrocrystic kimbabite, F = flow alignment, P = pellets, G = globules, sizes should be differentiated as >20mm, <2-19mm, <15-4mm

HOLE: KL02-D1**DIAMOND DRILL LOG**

COMPANY:	Sudbury Contact Mines Ltd.	LOCATION:	Klock Township, Ontario	COLLAR ELEVATION:	390 m
PROPERTY:	Timiskaming Diamond Project	CLAIM #:	3001467	COLLAR AZIMUTH:	030
DRILL DATE:	April 2-3, 2004	GRID LOCATION:	562325E / 5257075N Nad27 Datum	COLLAR DIP:	-42
CONTRACTOR:	Boart-Longyear Inc.	OBJECTIVE:	Test airborne magnetic anomaly	HOLE LENGTH:	78.0 m
LOGGED BY:	Sharyn Alexander			CORE SIZE:	NQ

FROM	TO	LITHOTYPE	GEOLOGICAL DESCRIPTION	SAMPLE	FROM	TO	LENGTH
0	8.5 m	Overburden					
8.5	8.7 m	Boulders	Diabase (magnetic), siltstone boulder fragments				
8.7	78.0 m	Granite	Granite gneiss, pink, Mg. to Cg. Feldspar, 30%; Qtz, 60%; amphibole (Hb?), 10%. Thin Hb stringers throughout core, parallel to gneissic banding. Few qtz. veins (1-5cm), parallel to banding. 33.2-33.5m; 37-39m; 43-46m; 50-52.4m: V.Cg. feldspar-Qtz. (almost pegmatitic)				
	78.0 m	End of Hole					

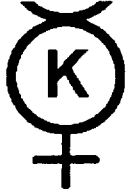
MPH CONSULTING LTD. International Exploration & Mining Consultants				KIMBERLITE EXPLORATION DETAILED DRILL CORE LOG				Project: Sudbury Contact Mines Ltd / Timiskaming (Ontario)			Commenced: April 9/2004			HOLE#: KL22 SE D1		PAGE: 1 OF: 2							
				CORE SUMMARY SHEET				Hole #: KL22 SE - D1			Township: Klack			Completed: April 9/2004			Depth:		Az/Dip:				
								Collar Co-ords: 595712E / 5254919N (NAD27)			Claim: 3001454			Contractor: Boert-Longyear Inc			NQ Equipment			Depth:		Az/Dip:	
								Azimuth/Dip: 000/90			Elevation: 330 m est.			Logged By: Sharyn Alexander			Depth:		Az/Dip:				
								Final Depth(m): 87.0 m			Sampled By: Robert Paever			Depth:		Az/Dip:							
From (metres)	To (metres)	Core Recovery (%)	R.Q.D. (%)	Textural-Genetic Description and Code (Clement and Skinner, 1985, Field and Scott-Smith, 1998)	Matrix Description	Macro/Xenocryst Abundances (% and size) (O=ol, G=gt, Cr=cr, CD=chl, dop, il=ilm, mnt)	Aulitic Abundances (type, % and size)	Merite Nodules (type, % and size)	Crustal Xenoliths (type, % and size)	Country Rock Xenoliths (type, % and size)	Rats of Kibon/Kb	Sampling Information (Camp #, type)	From (Metres)	To (Metres)									
0	21			Overburden																			
21	29.4			Boulders / Clay Till																			
29.4	73.5			Massive Matrix-Supported Magmatic Macrocrystal Kimberlite with a uniform magmatic inter-clast matrix (HK)	Black	Olivine: 20-30%, fresh (green)						MIDA # 25706	29.35	38.4									
												Hand Sample	31.05	31.25									
												Petrography	35.4	35.5									
												KIM Sample	38.3	39.15									
												MIDA # 25707	38.4	47.4									
												MIDA # 25708	47.4	56.4									
												MIDA # 25709	57.0	66.0									
73.5	87.0			Matrix to Clast-Supported Magmatic Macrocrystal Kimberlite Breccia with a magmatic (segregationary) inter-clast matrix (HKB) with mud seams	Lt. green / brown	Olivine: 10-20%, altered white						Hand Sample	75.8	76.0									
												MIDA # 25710	78.0	87.0									
	87.0			End of Hole								Petrography	80.9	81.0									

Legend CRX = country rock xenoliths, KB = kimberlite breccia (hypopyssal), TKB = tuffitic KB, TK = tuffitic kimberlite, MK = macrocrystic kimberlite, F = flow alignment, P = pallas, G = globules, sizes should be differentiated as $20mm$, $20-15mm$, $15-10mm$, $10mm$ and $1mm$

MPH INTERNATIONAL EXPLORATION & MINING CONSULTANTS				KIMBERLITE EXPLORATION DETAILED DRILL CORE LOG				Project: Sudbury Contact Mines Ltd. / Timiskaming (Ontario)		Commenced: April 8/2004		HOLE#: KL22 SE D1		PAGE: 2 OF: 2			
								Hole #: KL22 SE - D1		Township: Klock		Completed: April 8/2004		Depth:		Az/Dip:	
								Collar Co-ords: 565712E / 5254818N (NAD27)		Claim: 3001464		Contractor: Boart-Longyear Inc. NQ Equipment		Depth:		Az/Dip:	
								Azimuth/Dip: 000/-90		Elevation: 330 m asl		Logged By: Sharyn Alexander		Depth:		Az/Dip:	
								Final Depth(m): 87.0 m		Sampled By: Robert Peeper		Depth:		Az/Dip:			
From (metres)	To (metres)	Core Recovery (%)	R.Q.D. (%)	Textural-Genetic Description and Code (Clement and Skinner 1985, Field and Scott-Smith, 1998)	Matrix Description	Macro/Xenocryst Abundances (% and size) (O=ol, G=gnt, C=chr, CD=chr_dpp, lms=ilmelite)	Aulolith Abundances (type, % and size)	Mantle Nodules (type, %, and size)	Crustal Xenoliths (type, %, and size)	Country Rock Xenoliths (type, %, and size)	Ratio of Kb/non-Kb	Sampling Information (Samp. #, type)	From (Metres)	To (Metres)			
0	21			Overburden													
21	29.4			Boulders (granite/diabase), Clay Till													
29.4	73.5	99	98	Massive Matrix Supported Magmatic Macrocrystal Kimberlite with a uniform magmatic inter-clast matrix (HK)	black. Fg. to Mg. (Ol. + phlog.)	Olivine - 20-30%, green (fresh), V.Cg. 2-15 mm (avg. 2-6 mm). A few grains altering white, esp. along grain fractures. Some altered black. Garnet - 2%, 2-10 mm (avg. 2-3 mm), red Phlog. - 3%, 1-5 mm Ilmenite - trace, 1-5 mm CD - trace, 1-3 mm	none observed	Peridotitic nodules (green Ol., some serpentinized, Gt. Grains) <5% 0.5-1.5 cm subrounded	Siltstone (dk. gray/black) 10%, 0.5-15 cm (avg. 1-3 cm) subangular	90/10	MiDA # 25706 Hand Sample Petrography KIM Sample	29.35 31.05 35.4 38.3	38.4 31.25 35.5 39.15				
				31.2m - flow banding (?) 54m - mud seam (2 cm)													
		99	75	57-68m - core very fractured/broken up (major fracture pattern perpendicular to CA, minor fracture pattern parallel to CA). Some fractures filled with calcite vein material (mm-thick).								MiDA # 25707 MiDA # 25708 MiDA # 25709	38.4 47.4 57.0	47.4 56.4 66.0			
		99	95			(Less Olivine nch towards end of unit, 10-20% Ol.)											
73.5	87.0	98	98	Matrix to Clast Supported Magmatic Macrocrystal Kimberlite Breccia with magmatic (segregatory) inter-clast matrix (HKB) (few auloliths, pelletal material)	Lt. green / brown coarser grained then above Matrix composed of sm. fragments of siltstone/shale CRX	Olivine - 10-20%, altered white, 3-6 mm Phlog. - 1-2%, 1-5 mm Garnet - 1-2%, 2-5 mm, red Ilmenite - trace, 1-3 mm Chromite - rare, 2-3 mm	< 1% (one found at 83.8 m) Lt. brown matrix, chilled margins, contained Gt. grain (3x4 mm)	Peridotitic (green Ol., Gt.) <1% one large nodule at 79 m (4x6 cm), squarish shape	Banded Argillite (red/gray) 30-40% 1-10 cm (avg. 1-3 cm) subangular Siltstone (dark/light gray) 5-10% 1-4 cm Diabase (black) one large frag. at 82 m (12 cm)	65/35 to 50/50	Hand Sample MiDA # 25710 Petrography	75.8 78.0 80.9	76.0 87.0 81.0				
				73.4 m - mud seam (very fractured core), 1-2 cm 83.2 m - mud seam, 1-2 cm 88 m - mud seams, 0.5-1 cm													
	87.0			End of Hole													

Legend CRX = country rock xenolith, KB = kimberlite breccia (hypabyssal), TXB = sulfidic KB, TX = sulfidic kimberlite, MK = macrocrystic kimberlite, F = flow alignment, P = pellets, G = globules, sizes should be differentiated as +2mm, -2+19mm, -16+4mm

APPENDIX E MICRODIAMOND ANALYTICAL REPORTS



KENNECOTT CANADA EXPLORATION INC.

**MICRODIAMOND ANALYSIS
TEST REPORT
04MD011
MPH Submittal**

Prepared for:
MPH Consulting Limited
Suite 615, 133 Richmond St. W.
Toronto, Ont. M5H 2L3

Jim Crawford
Laboratory Manager
May 6, 2004

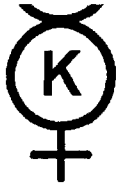


Accredited to ISO/IEC 17025 for specific registered tests.

Mineral Processing Laboratory

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

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KENNECOTT CANADA EXPLORATION INC.

Mineral Processing Laboratory

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METHOD DESCRIPTION

Accredited to ISO/IEC 17025 for specific registered tests.

Five samples were submitted for caustic fusion processing and microdiamond recovery. The as-received samples were processed according to registered methods and standard operating procedures. The results are summarized in the Certificates of Analysis. Standard operating procedures are listed below, sample abnormalities and possible damage caused during shipping are noted on the Certificate.

MICRO DIAMOND SAMPLE PROCESSING

Sample processing at Kennecott Canada Exploration Inc. Mineral Processing Laboratory in Thunder Bay, ON consists of wet chemical processes including fusion with NaOH, dissolving in KNO_3 , neutralization with HCl, sieving and classifying (see Figure 1 for a summary flow sheet). This procedure reduces the sample size from 10 kilograms to a concentrate of approximately 15 grams.

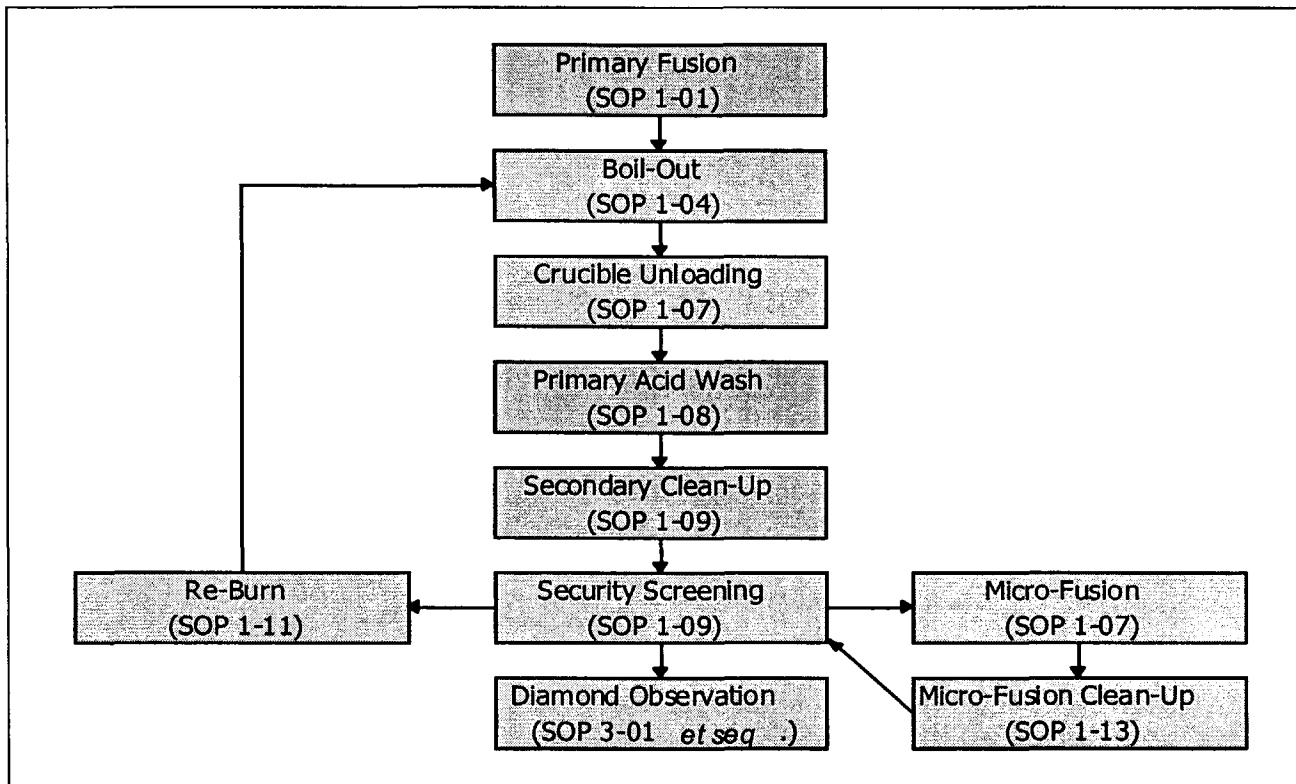
After samples are received, they are logged in and stored outdoors before processing. Processing commences with samples being placed into stainless steel pots with NaOH and heated for several hours in a process called Caustic Fusion. The sample material is then dissolved using KNO_3 and more heat. Depending on client requests, the slurry of sample and dissolved reagents is poured through a sieve of .075mm, .125mm or 0.15mm square aperture screen. Material retained on the screen is neutralized with HCl. Further sieving, with a 1mm square aperture screen, results in the removal of any larger micro diamonds from the sample. These stones are placed in a drop safe for security reasons and described (following the flow sheet in Figure 2) as soon as possible.

The remaining sample material moves through subsequent cycles of Caustic Fusion, dissolution and neutralization until all potentially diamondiferous rock fragments are digested. The resulting resistate mineral concentrate is sent to the microscopy laboratory for observation.

This report refers to samples processed as-received.

(*) Denotes deviations from standard operating procedures.

FIG. 1: MICRO-DIAMOND FLOW SHEET



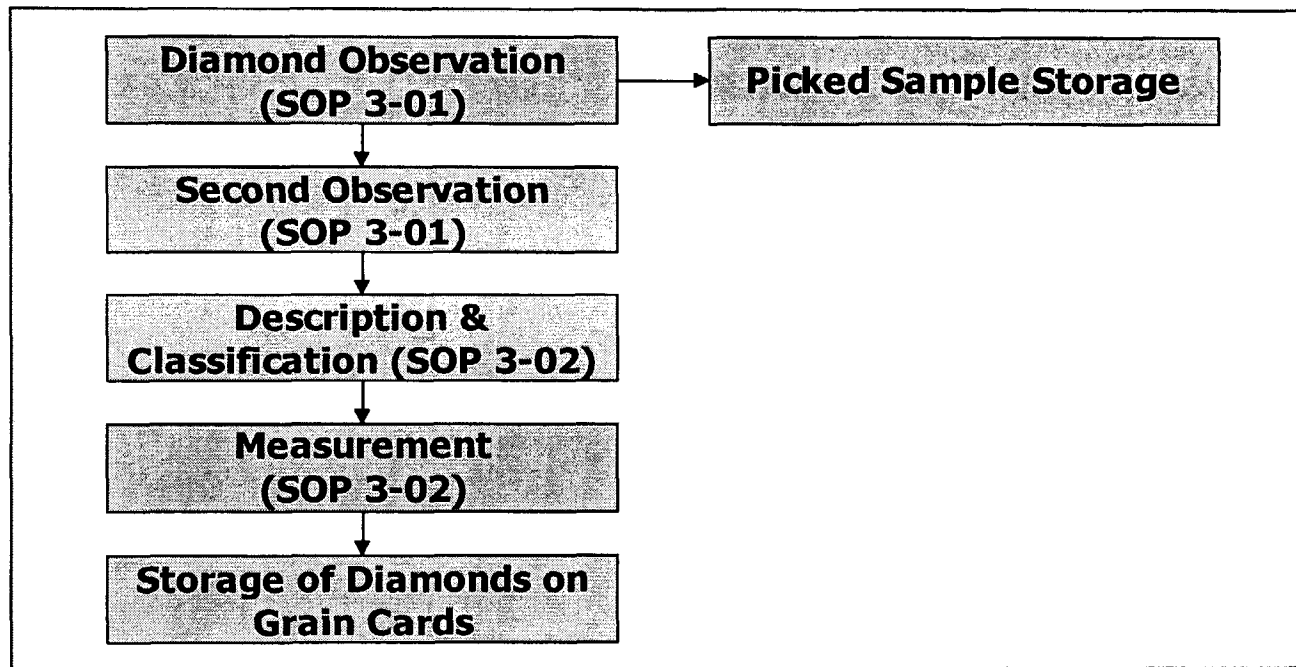
This report refers to samples processed as-received.

MICRO DIAMOND CONCENTRATE MICROSCOPE EXAMINATION

Observation of micro diamond concentrates was performed in Kennecott Canada Exploration Inc. Mineral Processing Laboratory in Thunder Bay (see Figure 2). Trained Mineral Technicians examined each grain using binocular microscopes equipped with fibre-optic lights. Mineral Technicians removed all suspected micro diamonds, recorded stone counts on an observation log sheet, and later transfer the data to the Laboratory Information Management System. Following observation, suspected micro diamonds are examined by a mineralogist who confirms the grain identifications. All stones are then described and classified.

(*) Denotes deviations from standard operating procedures.

FIG. 2: OBSERVATION & CLASSIFICATION FLOW SHEET.



This report refers to samples processed as-received.

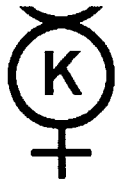
MD Method 1 and 3 Quality Control Measures

Samples received are divided into sets or batches of one to twenty-five samples. One in fifteen samples within the batch are randomly selected for spiking with laser etched diamonds. At least one sample per batch is selected for spiking. A random number between 1 and 5 diamond spikes are added to each sample selected for spiking. Samples selected for spiking are spiked after the sample has been loaded into a crucible and placed in a kiln ready to begin processing. Once the sample has been reduced to an observable concentrate, it is submitted to the observation lab. Identified spikes are returned to the QA/QC specialist and recovery is calculated as a percentage. Lab recovery is calculated as a 12-month rolling average, with lower limit being 3 standard deviations below the average. If recovery of one or more samples falls below the lower limit, the batch is deemed non-conforming.

Data Verification

For every batch, once all mineral processing is complete, all relevant data is compiled and a final report or Certificate of Analysis is generated. At minimum, 10 percent of all reports are verified in their entirety and all other reports are spot-checked. Verification involves tracing data back to original handwritten test results recorded in process flow sheets, logs or tables. The reports are then signed by Team Leaders, Laboratory Manager and the QA/QC Specialist and issued to the client.

This report refers to samples processed as-received.



KENNECOTT CANADA EXPLORATION INC.

Mineral Processing Laboratory

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



CERTIFICATE OF ANALYSIS METHOD 1: MICRODIAMOND PROCESSING

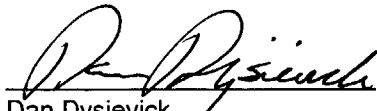
Date Received: **07-Apr-04**
Waybill: **Manitoulin 7457811**
Work Order #: **04MD011**
Project: **MPH Submittal**

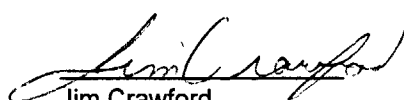
Company: MPH Consulting Limited
Suite 615, 133 Richmond St. W.
Toronto, Ont. M5H 2L3
Attention: Paul Sobie
Telephone: (416) 365-0930
Facsimile: (416) 365-1830

Lab Billing Code: **113100-RE260**

	Client Sample Reference	DATE STARTED	SAMPLE WT (kg.)	CONC. WT (gm)	PRIMARY FUSION	SECONDARY FUSION	MICRO FUSIONS	DATE COMPLETED
1	25701	8-Apr-04	16.02	8.7	2	1	2	26-Apr-04
2	25702	8-Apr-08	16.13	9.2	2	0	3	26-Apr-04
3	25703	8-Apr-08	18.11	9.8	2	1	2	26-Apr-04
4	25704	8-Apr-08	19.48	7.3	2	1	2	26-Apr-04
5	25705	8-Apr-08	18.21	8.5	2	0	3	26-Apr-04
			87.95	43.5	11	3	12	

Accredited to ISO/IEC 17025 for specific registered tests.

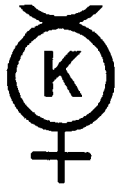

Dan Dysievick
MD Processing Team Leader


Jim Crawford
Laboratory Manager


Ian Hamilton
QA/QC Specialist

The quality of microdiamond extraction and selection from rock samples (Methods 1 and 3) is subject to monitoring through a rigorous internal quality assurance/quality control (QA/QC) scheme. Microdiamond recovery is calculated for one sample in every batch. One batch consists of up to ten samples, depending on individual sample weights. Therefore, at least 10% of samples are quality control samples.

Continual QA/QC monitoring involves comparison of microdiamond from each batch to statistically acceptable internal performance standards. Processing and selection at the laboratory extracts, on average, 99.67% (0.65% expanded uncertainty at the 95% confidence limit) of all contained microdiamonds.



KENNECOTT CANADA EXPLORATION INC.

Mineral Processing Laboratory

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



CERTIFICATE OF ANALYSIS METHOD 3: MICRODIAMOND OBSERVATION


Date Received: 07-Apr-04
Waybill: Manitoulin 7457811
Work Order #: 04MD011
Project: MPH Submittal

Company: MPH Consulting Limited
Suite 615, 133 Richmond St. W.
Toronto, Ont. M5H 2L3
Attention: Paul Sobie
Telephone: (416) 365-0930
Facsimile: (416) 365-1830

Lab Billing Code: 113100-RE260

	Client Sample Reference	+0.5 mm SIEVE DIAMOND COUNT	-0.5 mm SIEVE DIAMOND COUNT	TOTAL DIAMOND COUNT	SYNTHETICS	DATE
1	25701	0	12	12	0	28-Apr-04
2	25702	0	2	2	0	28-Apr-04
3	25703	0	7	7	2	29-Apr-04
4	25704	0	5	5	0	30-Apr-04
5	25705	0	1	1	0	28-Apr-04
		0	27	27	2	

Accredited to ISO/IEC 17025 for specific registered tests.


Chris Berner
Observation Team Leader


Jim Crawford
Laboratory Manager


Ian Hamilton
QA/QC Specialist

The quality of microdiamond extraction and selection from rock samples (Methods 1 and 3) is subject to monitoring through a rigorous internal quality assurance/quality control (QA/QC) scheme. Microdiamond recovery is calculated for one sample in every batch. One batch consists of up to ten samples, depending on individual sample weights. Therefore, at least 10% of samples are quality control samples.

Continual QA/QC monitoring involves comparison of microdiamond from each batch to statistically acceptable internal performance standards. Processing and selection at the laboratory extracts, on average, 99.67% (0.65% expanded uncertainty at the 95% confidence limit) of all contained microdiamonds.



KENNECOTT CANADA EXPLORATION INC.

Mineral Processing Laboratory

1300 West Walsh St. Thunder Bay, Ontario, Canada P7E 4X4 Telephone (807) 473-5558 Facsimile (807) 473-5860



CERTIFICATE OF ANALYSIS METHOD 3: MICRODIAMOND CLASSIFICATION

Date Received: 07-Apr-04
Waybill: Manitoulin 7457811
Work Order #: 04MD011
Project: MPH Submittal

Company: MPH Consulting Limited
Suite 615, 133 Richmond St. W.
Toronto, Ont. M5H 2L3

Attention: Paul Sobie
Telephone: (416) 365-0930
Facsimile: (416) 365-1830

Lab Billing Code: 113100-RE260

Client Sample Reference	STONE	SIEVE SIZE (mm)	STOCK EX SIEVE (mm)	X mm	Y mm	Z mm	WEIGHT IN OCTACARATS	FRAGMENT/INT ACT	MORPHOLOGY	COLOUR	CLARITY	COLOUR INTENSITY	INCLUSIONS/CLEAVAGES	RESORPTION	SURFACE FEATURES	COMMENTS	DATE
25701	1	0.212	<0.500	0.32	0.27	0.31	47139.84	Fragment	IRREGULAR	Grey	Transparent	1	2	-			3-May-04
25701	2	0.212	<0.500	0.32	0.27	0.31	47139.84	Fragment	IRREGULAR	Grey	Transparent	1	1	-	FROST		3-May-04
25701	3	0.150	<0.500	0.42	0.25	0.13	24024	Fragment	IRREGULAR	Grey	Transparent	1	0	-			3-May-04
25701	4	0.150	<0.500	0.30	0.28	0.22	32524.8	Fragment	IRREGULAR	Grey	Transparent	1	1	-			3-May-04
25701	5	0.150	<0.500	0.30	0.23	0.15	18216	Fragment	SULAR WITH OCTAHEDRAL AGGREGATE FEAT	Brown	Transparent	1	1	5			3-May-04
25701	6	0.150	<0.500	0.28	0.26	0.18	23063.04	Fragment	SULAR WITH OCTAHEDRAL AGGREGATE FEAT	Grey	Transparent	1	1	5			3-May-04
25701	7	0.106	<0.500	0.48	0.1	0.15	12672	Fragment	IRREGULAR	White	Transparent	0	0	-			3-May-04
25701	8	0.106	<0.500	0.27	0.23	0.18	19673.28	Fragment	IRREGULAR	Grey	Transparent	1	0	-	FROST		3-May-04
25701	9	0.106	<0.500	0.26	0.16	0.17	12446.72	Fragment	IRREGULAR	Grey	Transparent	1	1	-			3-May-04
25701	10	0.106	<0.500	0.32	0.2	0.14	15768.6	Fragment	IRREGULAR	Grey	Transparent	1	0	-			3-May-04
25701	11	0.106	<0.500	0.19	0.18	0.15	9028.8	Fragment	IRREGULAR WITH OCTAHEDRAL FEATURES	Grey	Transparent	1	2	-			3-May-04
25701	12	0.106	<0.500	0.24	0.17	0.18	11489.28	Fragment	IRREGULAR WITH OCTAHEDRAL FEATURES	Grey	Transparent	1	0	5	STEPPED		3-May-04
25702	1	0.106	<0.500	0.22	0.15	0.15	8712	Fragment	IRREGULAR	Brown	Transparent	2	0	-			3-May-04
25702	2	0.106	<0.500	0.36	0.24	0.18	14590.04	Fragment	IRREGULAR	Grey	Transparent	2	0	-			3-May-04
25703	1	0.300	<0.500	0.47	0.43	0.26	57657.6	Fragment	IRREGULAR	Brown	Transparent	3	2	-			3-May-04
25703	2	0.212	<0.500	0.42	0.3	0.26	57657.6	Fragment	IRREGULAR	Grey	Transparent	3	3	-			3-May-04
25703	3	0.106	<0.500	0.32	0.18	0.18	18247.86	Intact	OCTAHEDRAL AGGREGATE	Grey	Transparent	1	1	5	STEPPED		3-May-04
25703	4	0.106	<0.500	0.30	0.2	0.17	17952	Fragment	IRREGULAR WITH OCTAHEDRAL FEATURES	Brown	Transparent	2	3	4-5			3-May-04
25703	5	0.106	<0.500	0.22	0.17	0.19	12506.56	Fragment	IRREGULAR	Brown	Transparent	2	3	-			3-May-04
25703	6	0.106	<0.500	0.18	0.18	0.18	8123.84	Fragment	IRREGULAR	Brown	Transparent	2	3	-			3-May-04
25703	7	0.150	<0.500	0.31	0.23	0.18	22587.84	Fragment	IRREGULAR	Grey	Transparent	1	1	-			3-May-04
25704	1	0.212	<0.500	0.36	0.36	0.26	73000.00	Fragment	IRREGULAR	White	Transparent	0	0	-			3-May-04
25704	2	0.150	<0.500	0.44	0.23	0.2	35622.4	Fragment	IRREGULAR	White	Transparent	0	1	-			3-May-04
25704	3	0.150	<0.500	0.37	0.24	0.19	29694.72	Fragment	IRREGULAR	Grey	Transparent	1	1	-			3-May-04
25704	4	0.106	<0.500	0.30	0.24	0.18	22809.6	Fragment	IRREGULAR WITH OCTAHEDRAL FEATURES	Grey	Transparent	1	1	-			3-May-04
25704	5	0.150	<0.500	0.32	0.25	0.13	18304	Fragment	IRREGULAR	Grey	Transparent	3	1	-	FROST		3-May-04
25705	1	<0.106	<0.500	0.38	0.14	0.12	11531.52	Fragment	IRREGULAR	White	Transparent	0	0	-			3-May-04

Accredited to ISO/IEC 17025 for specific registered tests.

Weight in carats was calculated using the following formula: $X(mm) \times Y(mm) \times Z(mm) \times \text{Specific Gravity of } 3.52 / 200 \text{ mg}$
Intensity of Colour - scale of 0 - 5 with 5 being the most intense
Cleavages and Inclusions - scale of 0 - 5 with 5 having the most cleavages and inclusions
Resorption - scale of 1 - 6 with 1 having most resorption
1 carat = 1×10^8 octacarat

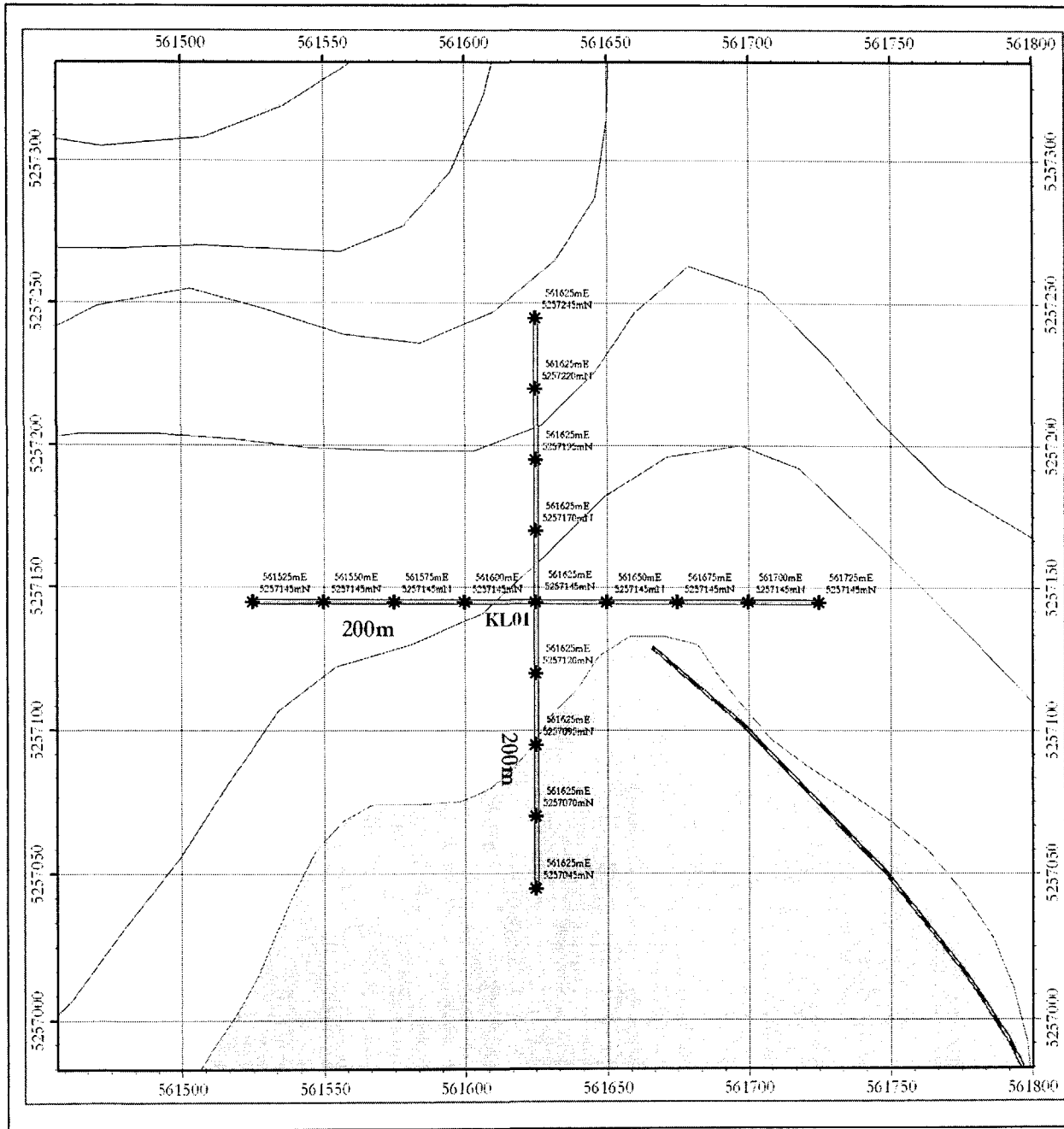
Chris Berner
Observation Team Leader

Jim Crawford
Laboratory Manager

Ian Hamilton
QA/QC Specialist

The quality of microdiamond extraction and selection from rock samples (Methods 1 and 2) is subject to monitoring through a rigorous internal quality assurance/quality control (QA/QC) scheme. Microdiamond recovery is calculated for one sample in every batch. One batch consists of up to ten samples, depending on individual sample weights. Therefore, at least 10% of samples are quality control samples.
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APPENDIX F GRID AND GEOPHYSICAL SURVEY PLANS



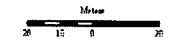
**KLOCK TWP
ANOMALY
POINTS AS OF
APRIL 19, 2004**

Map Prepared for:
MPH

April 19, 2004

1 centimeter equals 15 meters

1:1,500

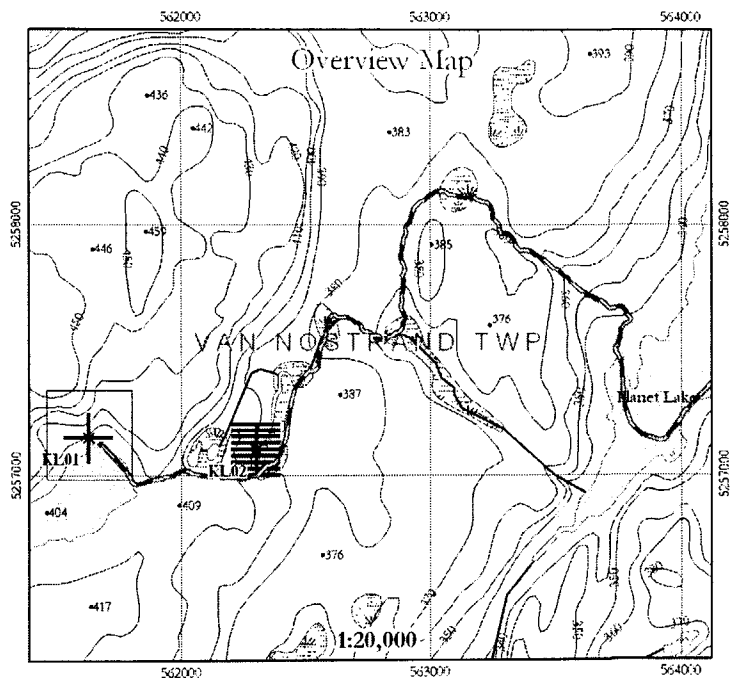


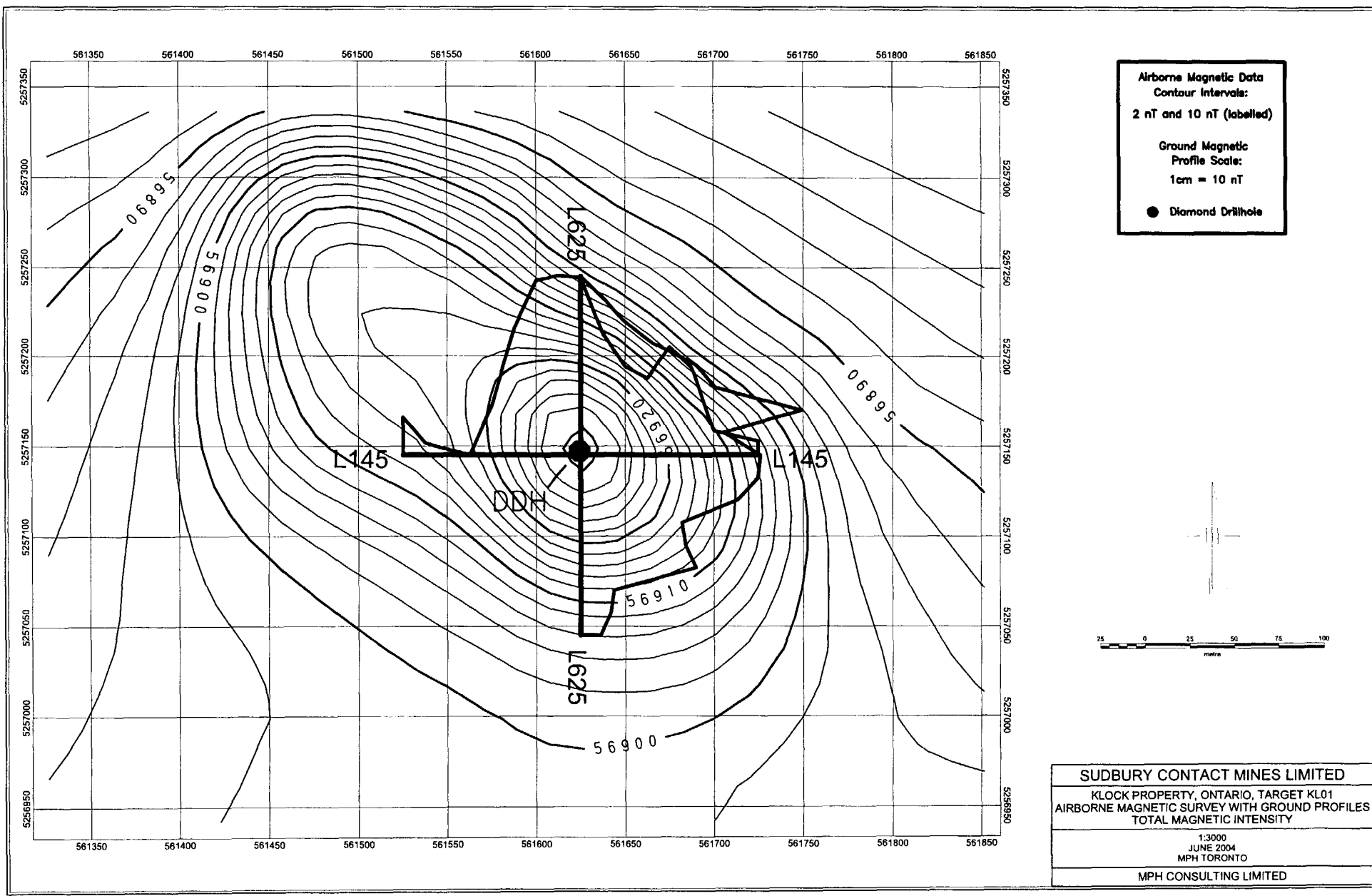
Produced by the Elk Lake
Community Forest (ELCF).
Coordinates are in NAD 27,
Zone 17 North.
For additional copies or more
information call 1-(705)-678-2477.

- Snowmobile Trail
- Snowshoe Trail
- ==== Grid Lines
- * 25m interval pits
- HARVEST BOUNDARY
- PINK RIBBON LINE
- Proposed Harvest
- Boundary Lines

Ontario Digital
Topographic Database

<ul style="list-style-type: none"> Treed Area Island Lake / River Mash / Pen Pin Pole Building (to scale) Boundary - Township/District Boundary - Indian Reserve Boundary - International Boundary - Intermunicipal Boundary - Prov./National Park Boundary - Township Lot Contour Lines (10 meter interval) Contour Lines - Approx. Contour Lines - Depression Road Pipeline Transmission Line 	<ul style="list-style-type: none"> Railway River/Stream River/Stream - intermittent Trail Fishing Trail Airstrip - Paved Bridge Feather Culline Race Track - Centerline Airstrip - Unpaved Fence Line Rock Rapids Dam Spot Elevations (meters above MSL) Building - Symbolized Mine - Headframe Monument - Historical Monument - Horizontal Tower
---	---

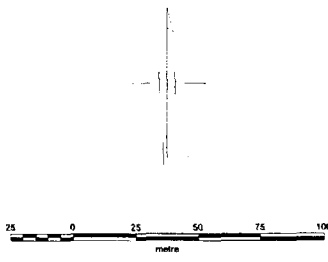




Airborne Magnetic Data
 Contour Intervals:
 2 nT and 10 nT (labelled)

Ground Magnetic
 Profile Scale:
 1cm = 10 nT

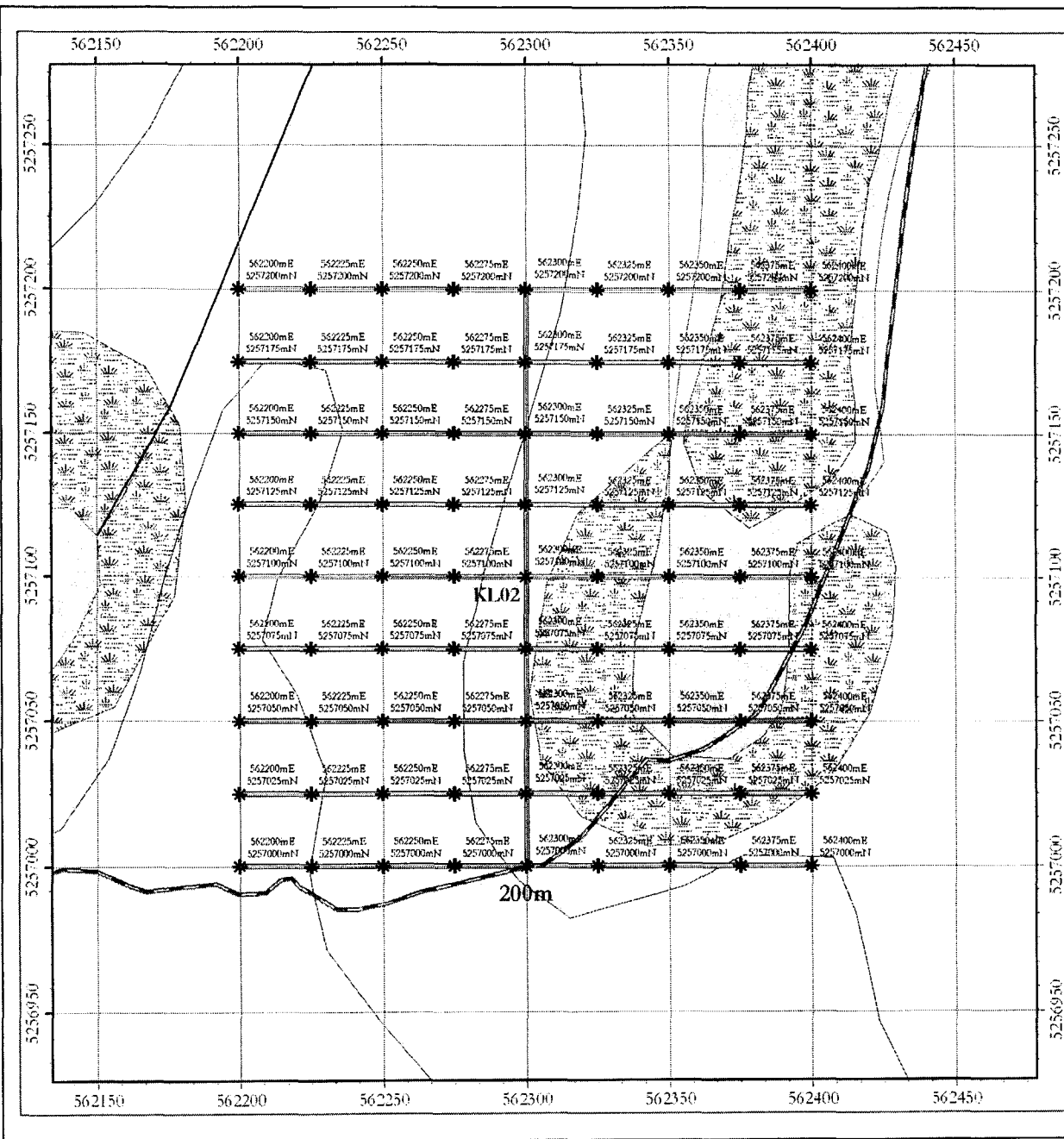
● Diamond Drillhole



SUDBURY CONTACT MINES LIMITED
 KLOCK PROPERTY, ONTARIO, TARGET KL01
 AIRBORNE MAGNETIC SURVEY WITH GROUND PROFILES
 TOTAL MAGNETIC INTENSITY

1:3000
 JUNE 2004
 MPH TORONTO

MPH CONSULTING LIMITED



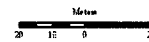
**KLOCK TWP
ANOMALY
POINTS AS OF
APRIL 19, 2004**

Map Prepared for:
MPH

April 19, 2004

1 centimeter equals 15 meters

1:1,500



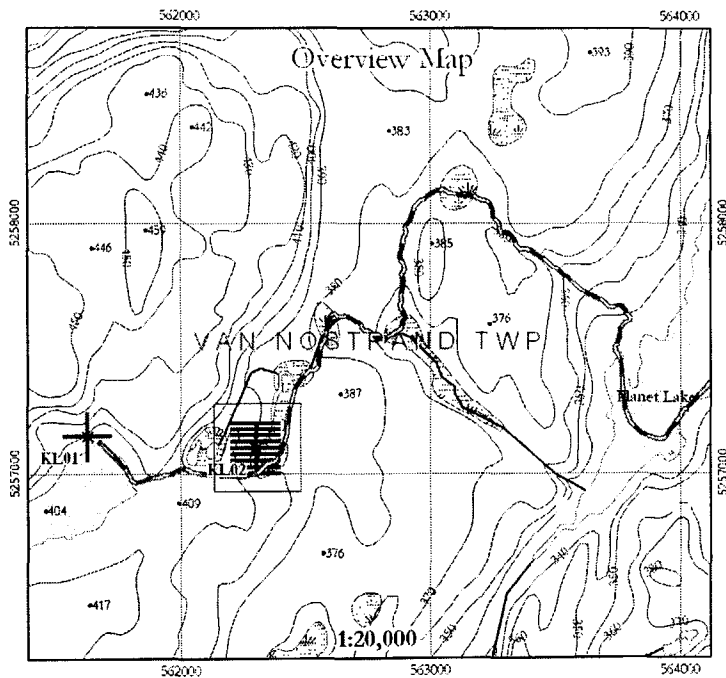
Produced by the Elk Lake
Community Forest (ELCF).
Coordinates are in NAD 27,
Zone 17 North.
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information call 1-(705)-678-2477.

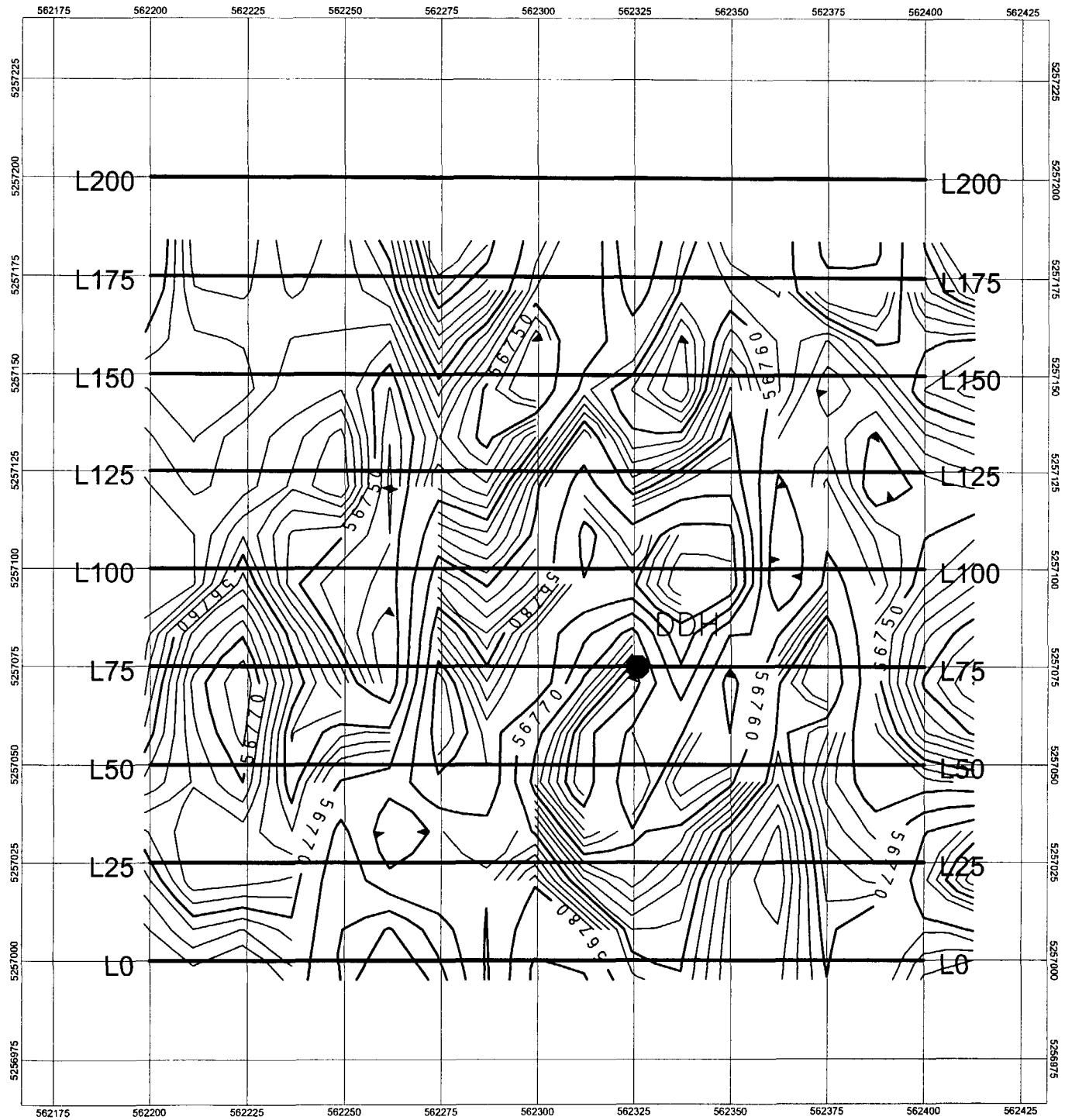
- Snowmobile Trail
- Snowshoe Trail
- Grid Lines
- * 25m interval pts
- HARVEST BOUNDARY
- PINK RIBBON LINE
- Proposed Harvest
- Boundary Lines



Ontario Digital
Topographic Database

<ul style="list-style-type: none"> • Tired Areas ○ Island ○ Lake / River ○ Marsh / Pen ⊗ Pile ■ Building (to scale) — Boundary - Township/District — Boundary - Indian Reserve — Boundary - International — Boundary - Interspersional — Boundary - Prev./National Park — Boundary - Township Lot — Contour Lines (10 meter interval) — Contour Lines - Appendix — Contour Lines - Depression — Road — Pipeline — Transmission Line 	<ul style="list-style-type: none"> — Railway — River/Stream — River/Stream - Intermittent — Trail — Hiking Trail — Airway - Fawed — Bridge — Feature Outline — Race Track - Centreline — Airway - Unpaved — Fence Line ★ Rock × Rapids ⊕ Dam • Spot Elevation (meters above MSL) • Building - Symbolized • Mine - Headframe □ Monument - Historical □ Monument - Horizontal ⊙ Tower
---	---

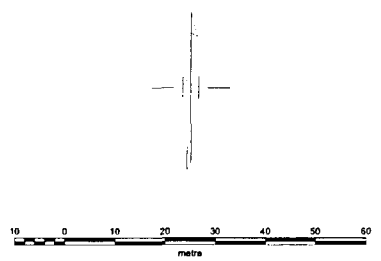




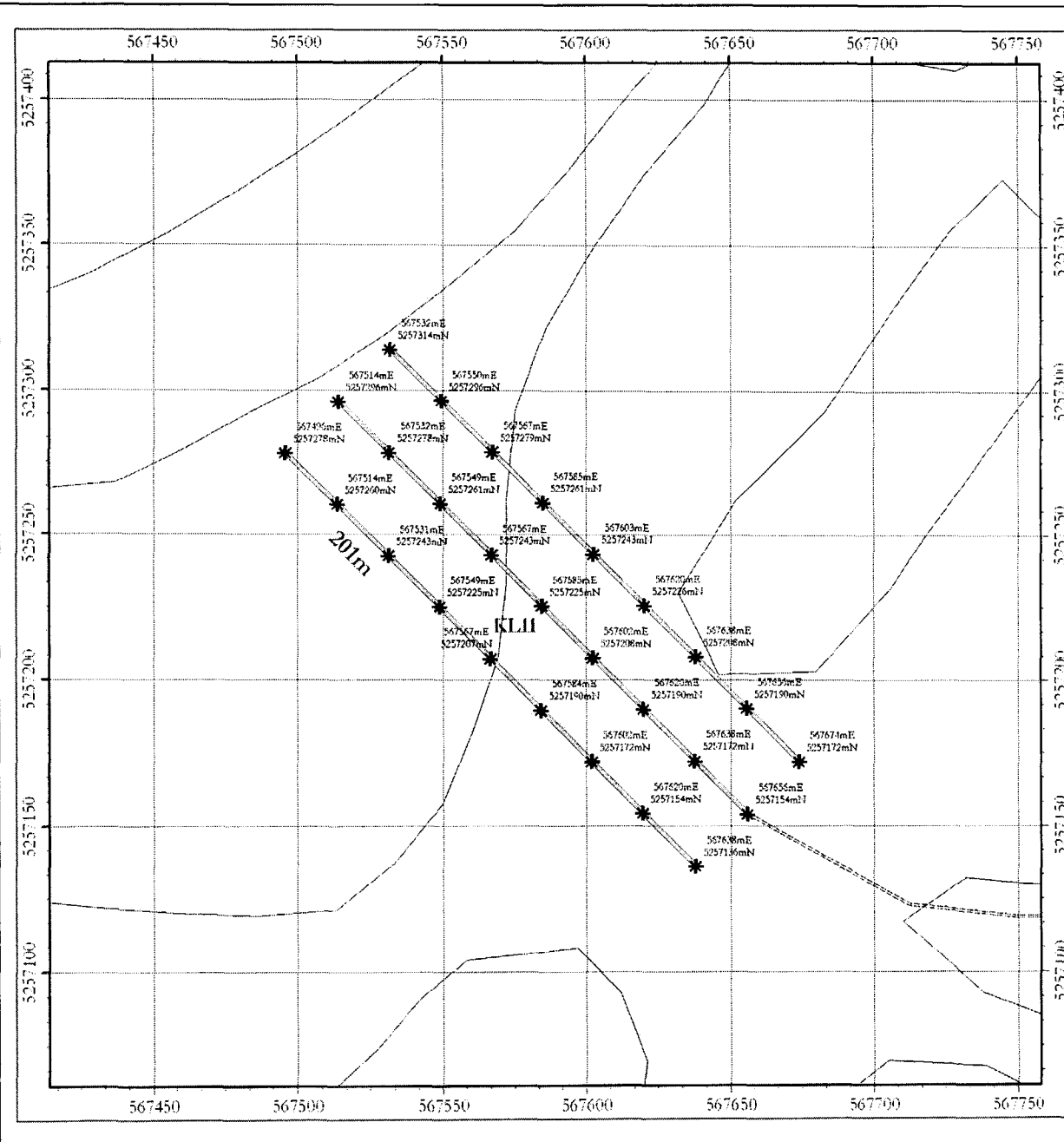
Airborne Magnetic Data
Contour Intervals:
 2 nT and 10 nT (labelled)

Ground Magnetic
Profile Scale:
 1cm = 10 nT

● **Diamond Drillhole**



SUDBURY CONTACT MINES LIMITED
KLOCK PROPERTY, ONTARIO, TARGET KL02 GROUND MAGNETIC SURVEY TOTAL MAGNETIC INTENSITY
1:1500 JUNE 2004 MPH TORONTO
MPH CONSULTING LIMITED



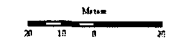
**KLOCK TWP
ANOMALY
POINTS AS OF
APRIL 19, 2004**

Map Prepared for:
MPH

April 19, 2004

1 centimeter equals 15 meters

1:1,500



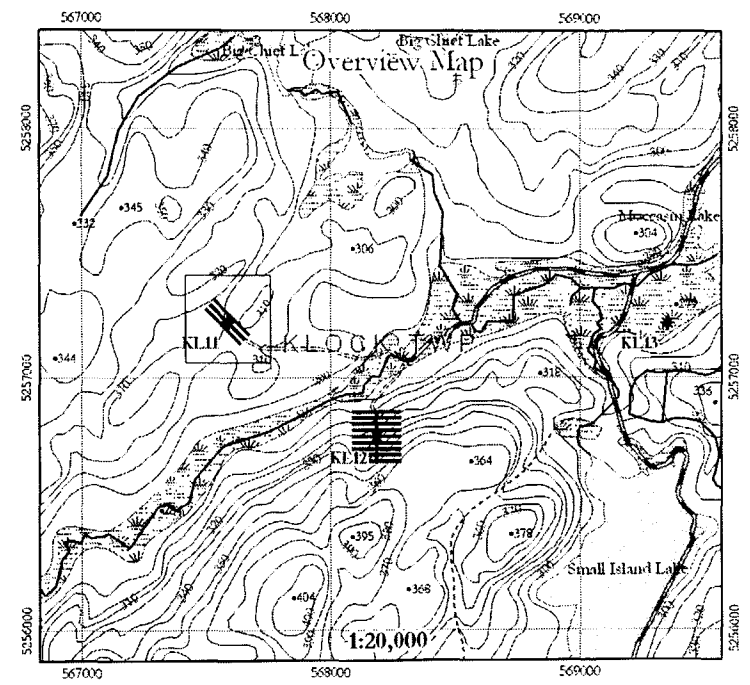
Produced by the Elk Lake
Community Forest (ELCF).
Coordinates are in NAD 27,
Zone 17 North.
For additional copies or more
information call 1-(705)-678-2477.

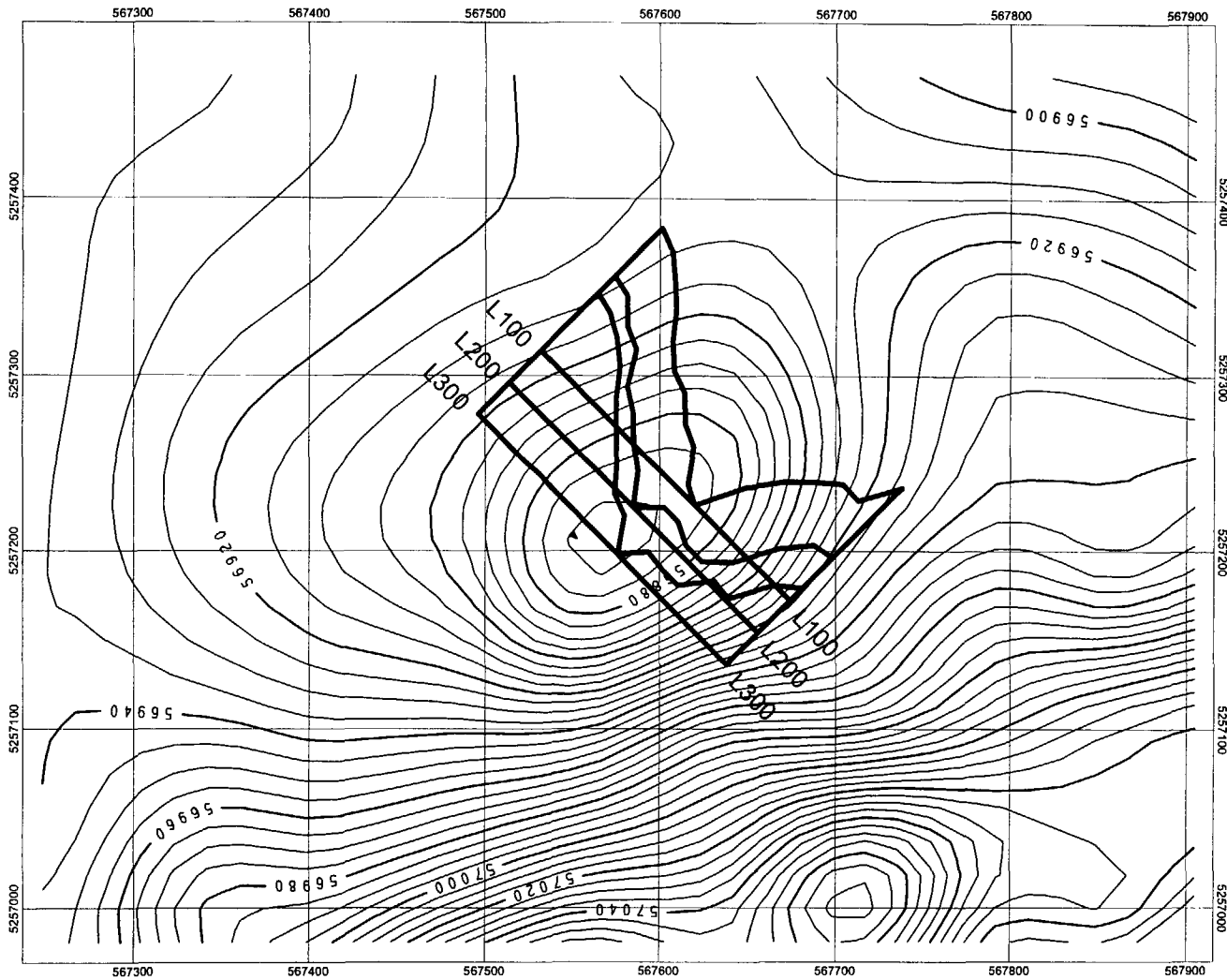
- Snowmobile Trail
- ==== Snowshoe Trail
- Grid Lines
- * 25m interval pnts
- HARVEST BOUNDARY
- PINK RIBBON LINE
- Proposed Harvest
- Boundary Lines



**Ontario Digital
Topographic Database**

<ul style="list-style-type: none"> Treed Areas Island Lake / River Marsh / Fen Pin Pole Building (to scale) Boundary - Township/District Boundary - Indian Reserve Boundary - Intersectional Boundary - Intersessional Boundary - Provincial/National Park Boundary - Township Lot Contour Lines (10 meter interval) Contour Lines - Approx. Contour Lines - Depression Road Pipeline Transmission Line 	<ul style="list-style-type: none"> Railway River/Stream River/Stream - intermittent Trail Hiking Trail Airstrip - Paved Bridge Features Outline Race Track - Centerline Airstrip - Unpaved Fence Line Rock Rapids Dam Spot Elevations (meters above MSL) Building - Symbolized Mine - Headframe Monument - Historical Monument - Horizontal Tower
---	---

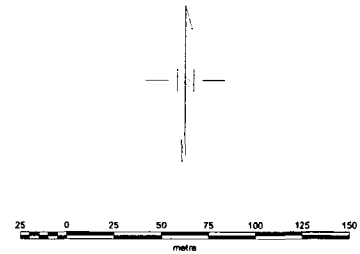




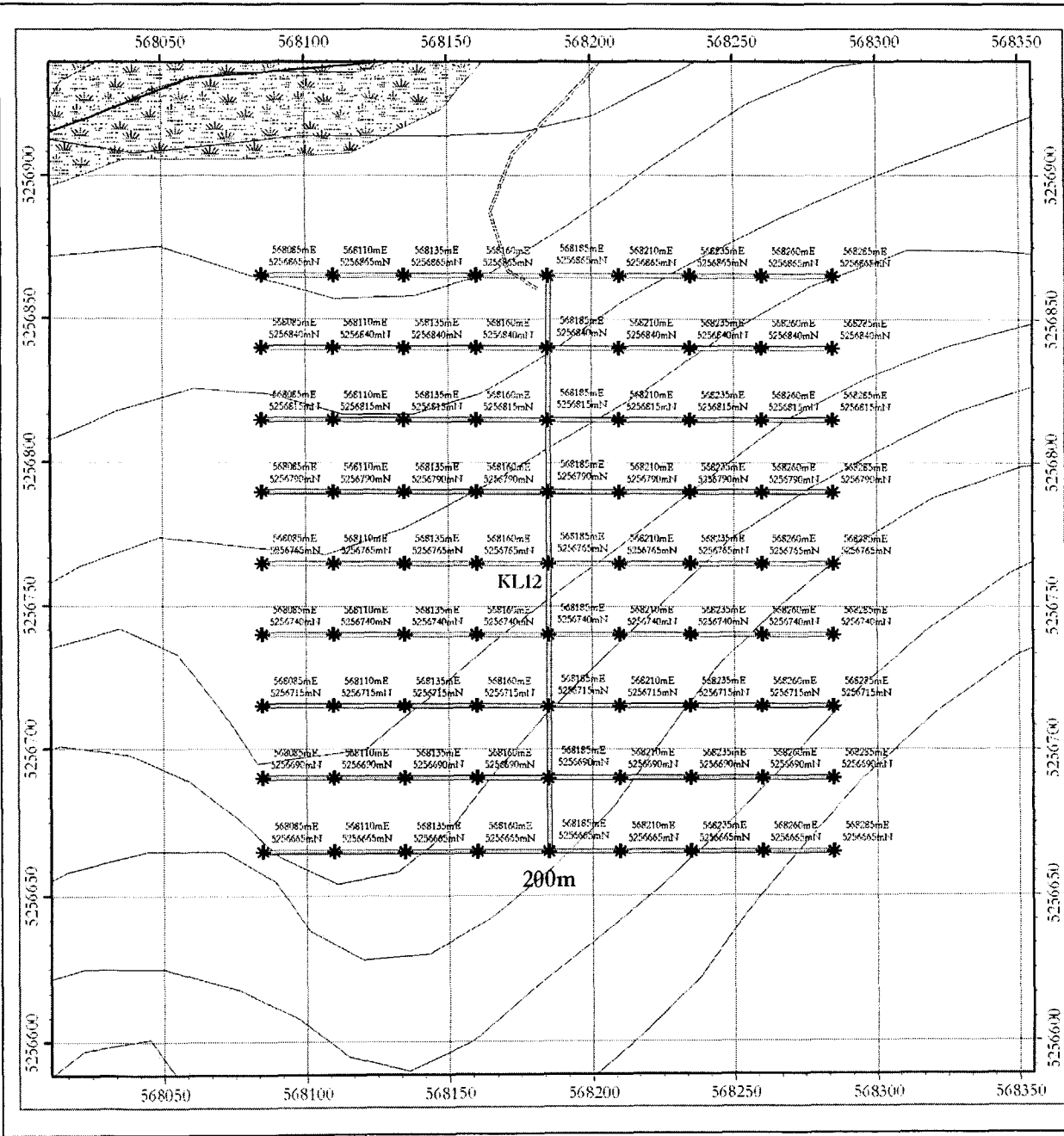
Airborne Magnetic Data
 Contour Intervals:
 2 nT and 10 nT (labelled)

 Ground Magnetic
 Profile Scale:
 1cm = 15 nT

 ● Diamond Drillhole



SUDBURY CONTACT MINES LIMITED KLOCK PROPERTY, ONTARIO, TARGET KL11 AIRBORNE MAGNETIC SURVEY WITH GROUND MAGNETIC PROFILES TOTAL MAGNETIC INTENSITY
1:4000 JUNE 2004 MPH TORONTO
MPH CONSULTING LIMITED



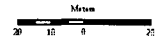
**KLOCK TWP
ANOMALY
POINTS AS OF
APRIL 19, 2004**

Map Prepared for:
MPH

April 19, 2004

1 centimeter equals 15 meters

1:1,500

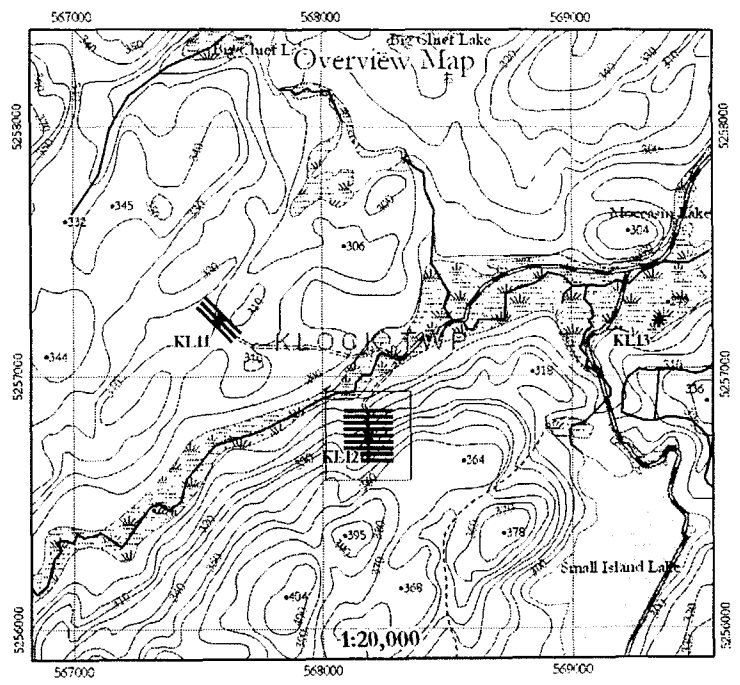


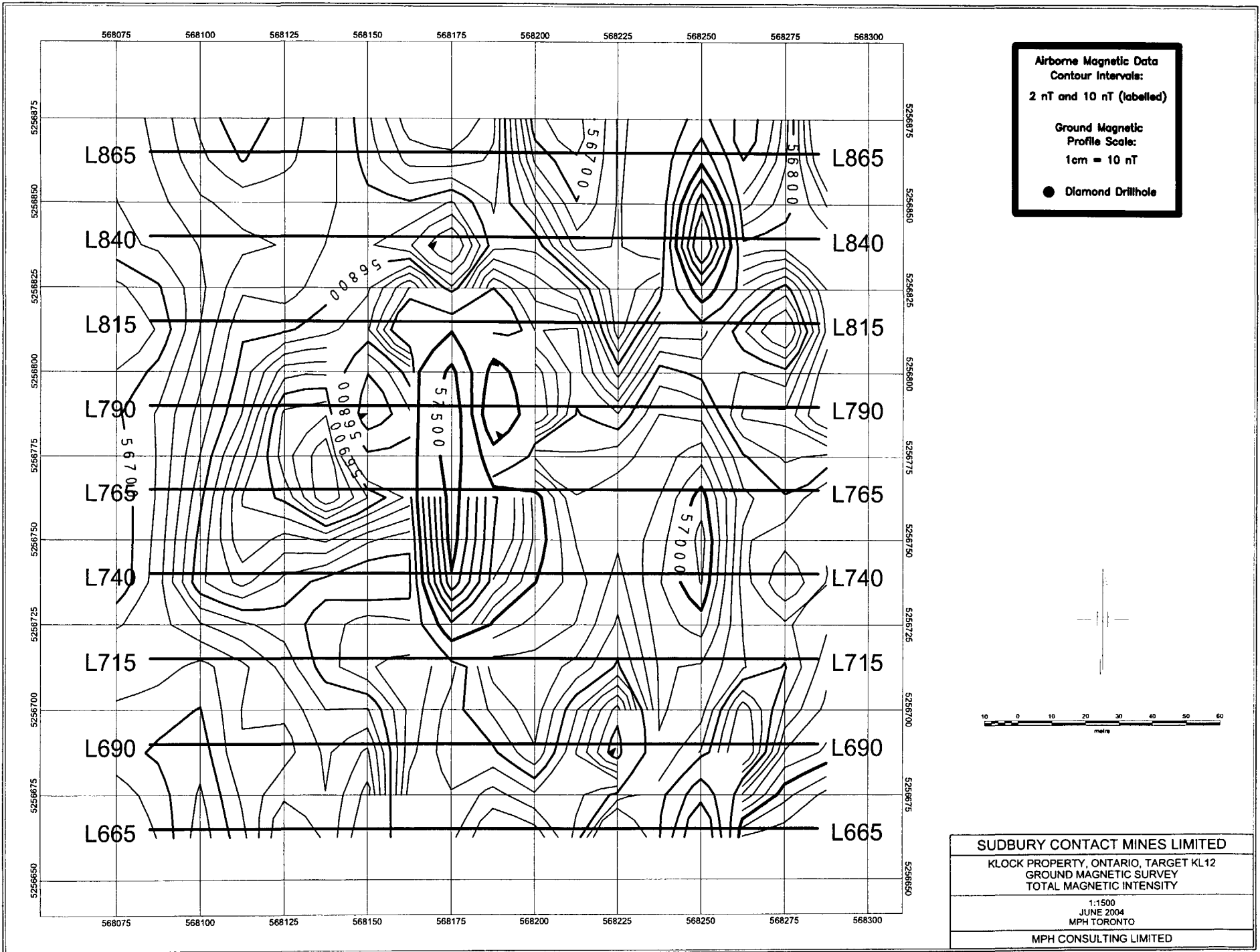
Produced by the Elk Lake
Community Forest (ELCF).
Coordinates are in NAD 27.
Zone 17 North
For additional copies or more
information call 1-(705)-678-2477.

- Snowmobile Trail
- Snowshoe Trail
- Grid Lines
- 25m interval pits
- HARVEST BOUNDARY
- PINK RIBBON LINE
- Proposed Harvest
- Boundary Lines

**Ontario Digital
Topographic Database**

Treed Area:	Railway
Island	River/Stream
Lake / River	River/Stream - intermittent
Marsh / Fen	Trail
Pit Pile	Hiking Trail
Building (to scale)	Airstrip - Faded
Boundary - Township/District	Bridge
Boundary - Indian Reserve	Feature Outline
Boundary - International	Ease Track - Contourline
Boundary - Interprovincial	Airstrip - Unpaved
Boundary - Provincial Park	Fence Line
Boundary - Township Lot	Rock
Contour Lines (10 meter intervals)	Rapids
Contour Lines - Approx.	Dam
Contour Lines - Depression	Spot Elevation (meters above MSL)
Road	Building - Symbolized
Pipeline	Mine - Headframe
Transmission Line	Monument - Historical
	Monument - Horizontal
	Tower

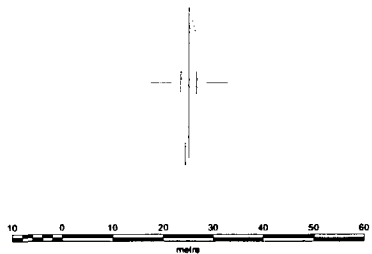




Airborne Magnetic Data
Contour Intervals:
 2 nT and 10 nT (labelled)

Ground Magnetic
Profile Scale:
 1cm = 10 nT

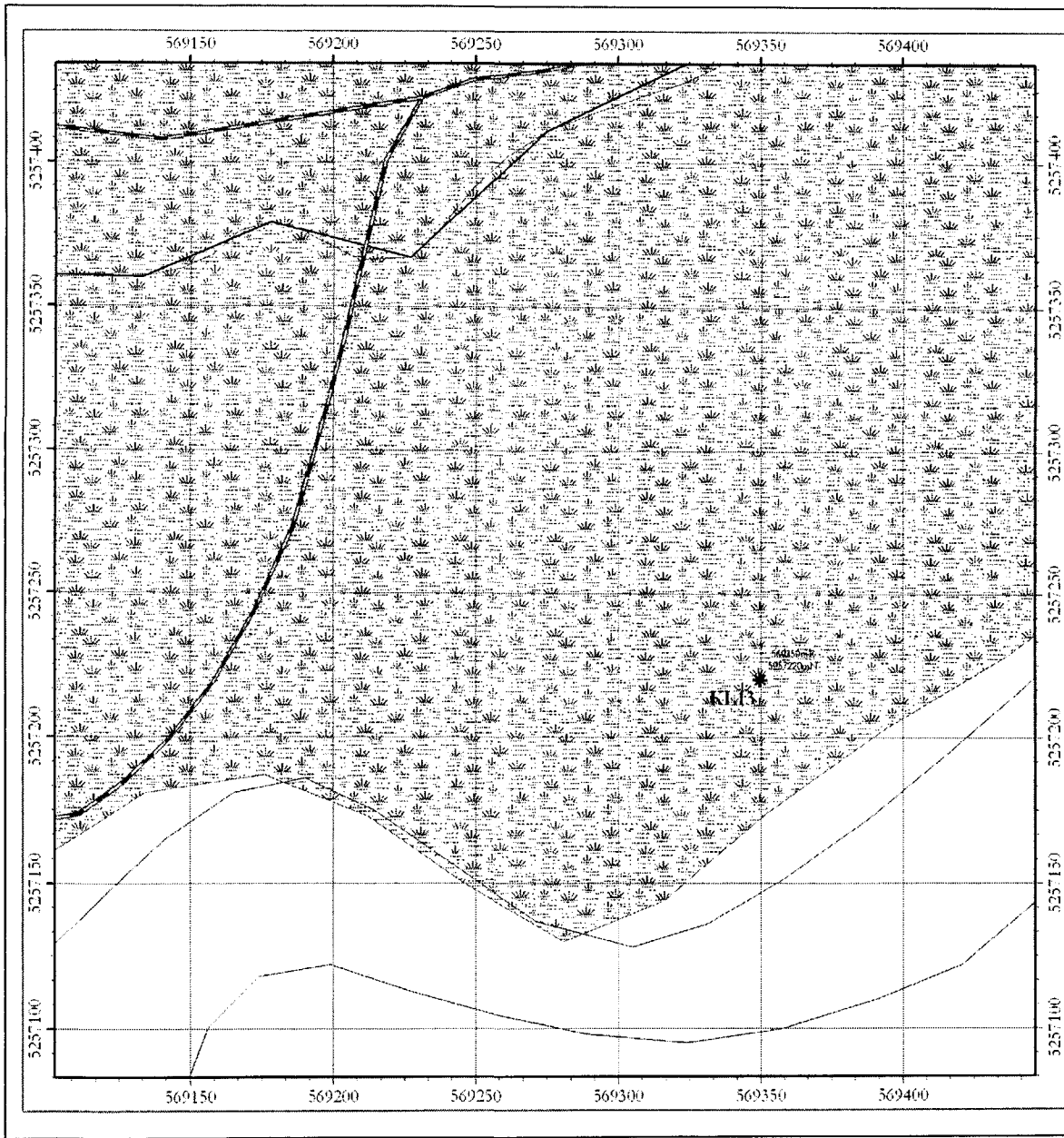
● Diamond Drillhole



SUDBURY CONTACT MINES LIMITED
 KLOCK PROPERTY, ONTARIO, TARGET KL12
 GROUND MAGNETIC SURVEY
 TOTAL MAGNETIC INTENSITY

1:1500
 JUNE 2004
 MPH TORONTO

MPH CONSULTING LIMITED



**KLOCK TWP
ANOMALY
POINTS AS OF
APRIL 19, 2004**

Map Prepared for:
MPH

April 19, 2004

1 centimeter equals 15 meters

1:1,500

Scale bar showing 0, 10, 20 meters

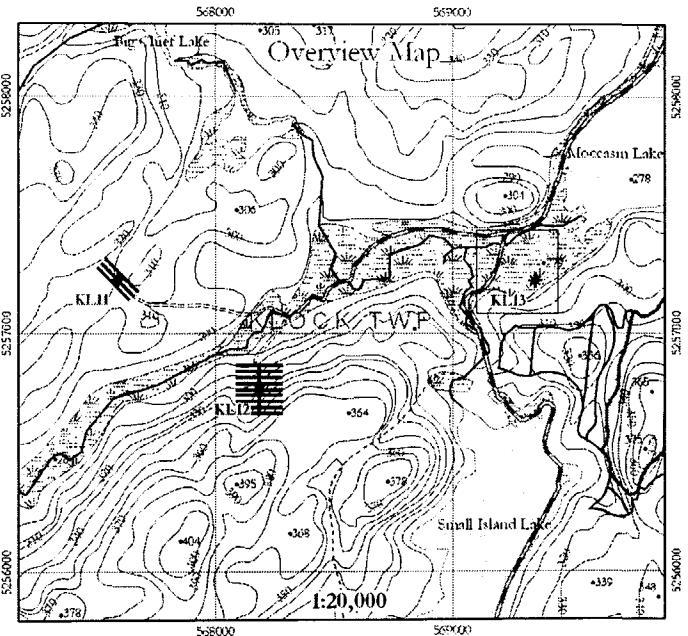


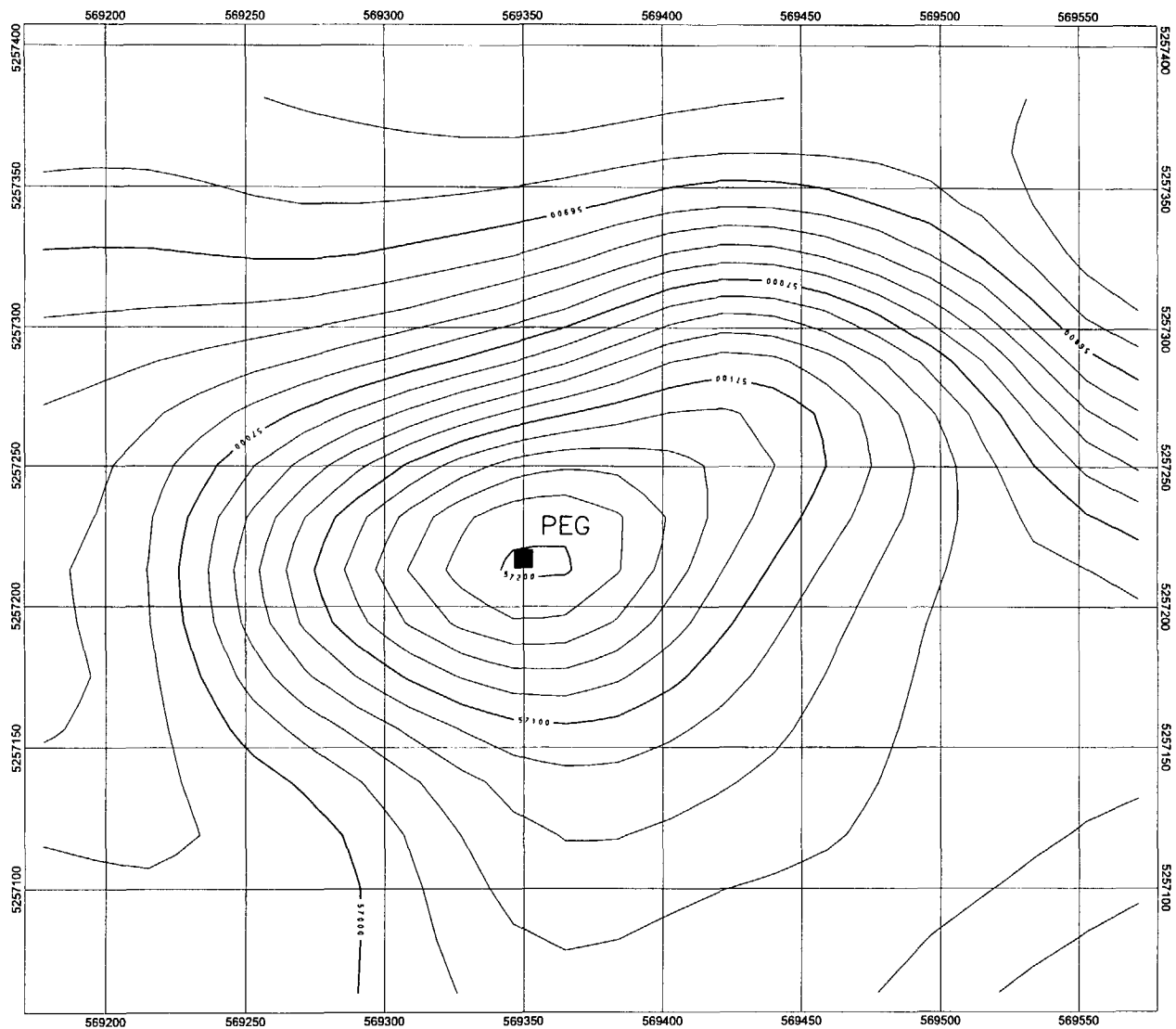
Produced by the Elk Lake
Community Forest (ELCF)
Coordinates are in NAD 27,
Zone 17 North.
For additional copies or more
information call 1-(705)-678-2477.

- Snowmobile Trail
- Snowshoe Trail
- Grid Lines
- 25m interval puts
- HARVEST BOUNDARY
- PINK RIBBON LINE
- Proposed Harvest
- Boundary Lines

Ontario Digital
Topographic Database

- | | |
|------------------------------------|-----------------------------------|
| Treed Areas | Railway |
| Island | River/Stream |
| Lake / River | River/Stream - Intermittent |
| Marsh / Pen | Trail |
| Pic Nook | Hiking Trail |
| Building (to scale) | Airstrip - Paved |
| Boundary - Township/District | Bridge |
| Boundary - Indian Reserve | Fence Outline |
| Boundary - Interprovincial | Race Track - Contested |
| Boundary - Forest/National Park | Airstrip - Unpaved |
| Boundary - Township Lot | Fence Line |
| Contour Lines (10 meter intervals) | Rock |
| Contour Lines - Approx. | Rapids |
| Contour Lines - Depression | Dam |
| Road | Spot Elevation (meters above MSL) |
| Pipeline | Building - Symbolized |
| Transmission Line | Mon. - Headframe |
| | Monument - Historical |
| | Monument - Horizontal |
| | Tower |

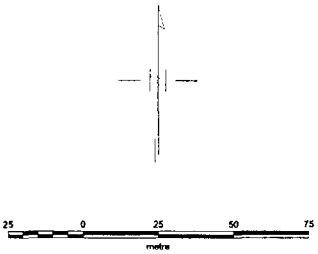




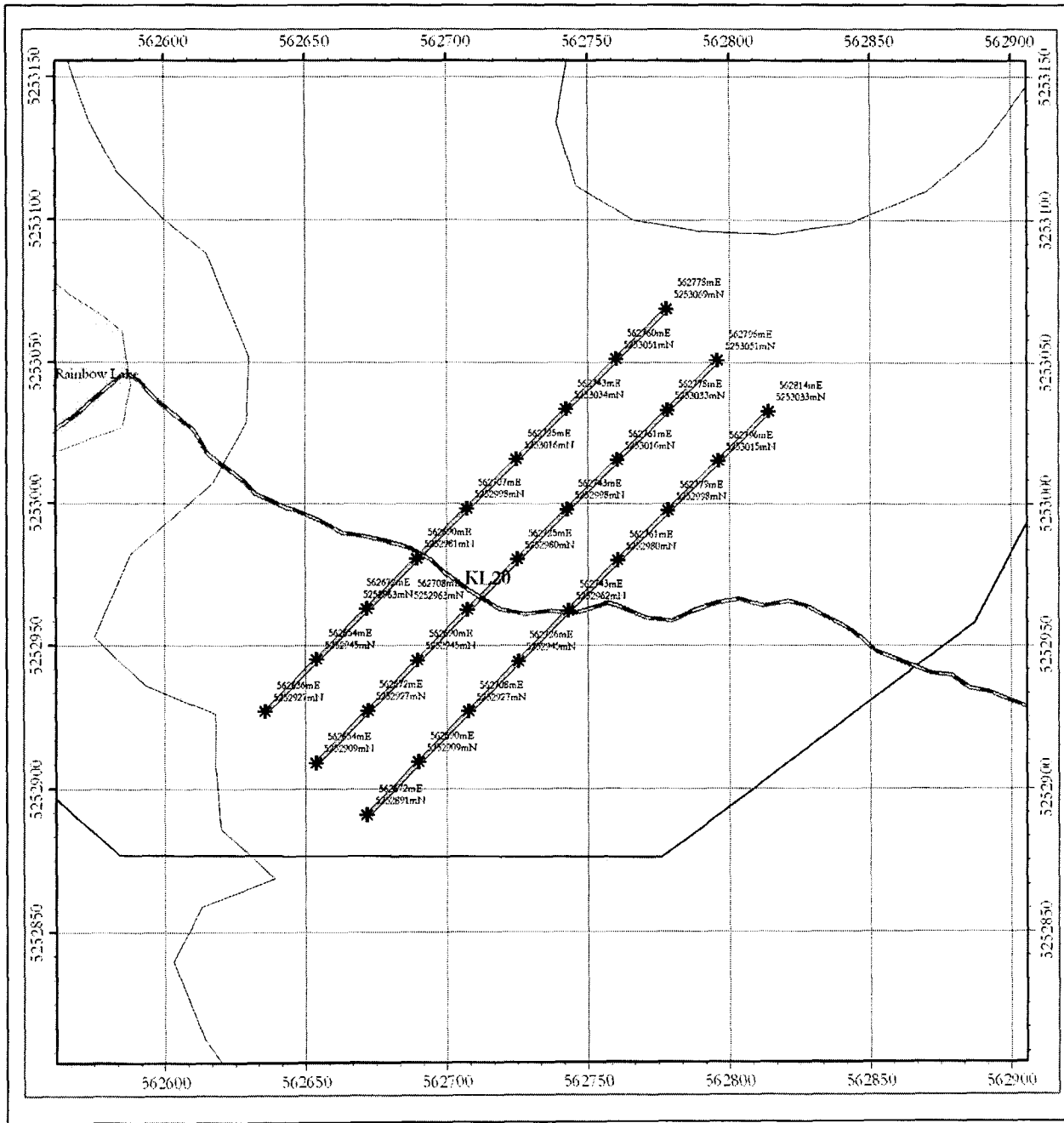
Airborne Magnetic Data
Contour Intervals:
20 nT and 100 nT (labelled)

Ground Magnetic
Profile Scale:
NA

● Diamond Drillhole



SUDBURY CONTACT MINES LIMITED KLOCK PROPERTY, ONTARIO, TARGET KL13 AIRBORNE MAGNETIC SURVEY TOTAL MAGNETIC INTENSITY
1:2500 JUNE 2004 MPH TORONTO
MPH CONSULTING LIMITED



**KLOCK TWP
ANOMALY
POINTS AS OF
APRIL 19, 2004**

Map Prepared for:
MPH

April 19, 2004

1 centimeter equals 15 meters

1:1,500



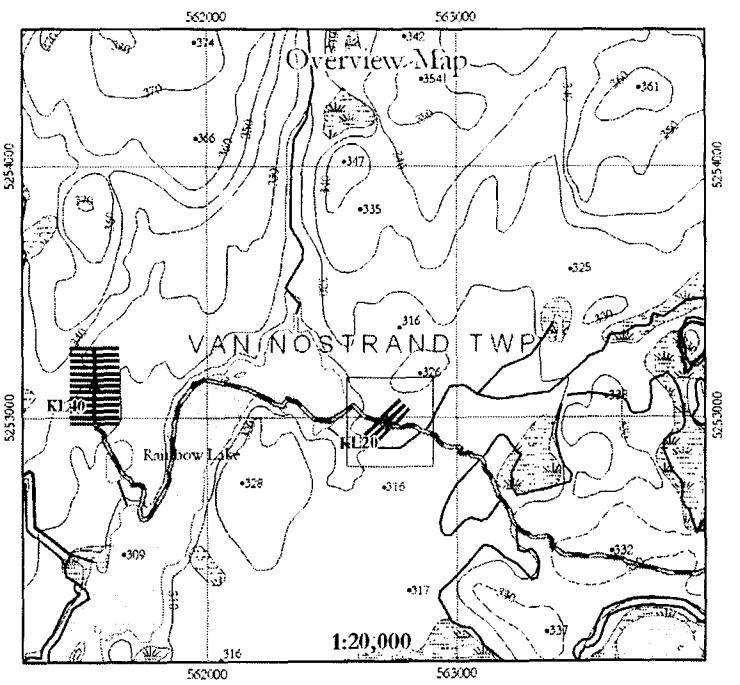
Produced by the Elk Lake
Community Forest (ELCF).
Coordinates are in NAD 27,
Zone 17 North.
For additional copies or more
information call 1-(705)-678-2477.

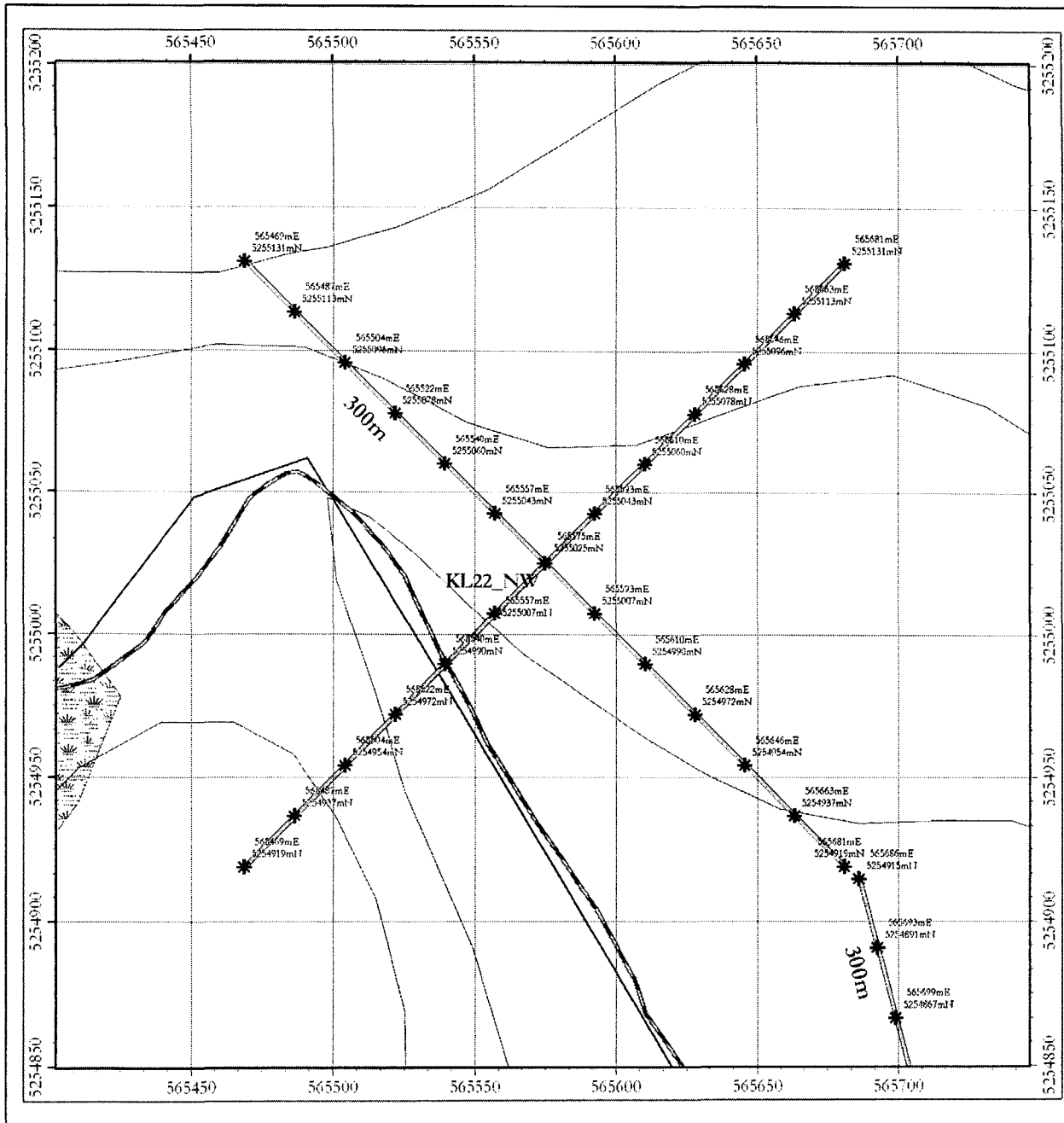
- Snowmobile Trail
- Snowshoe Trail
- Grid Lines
- 25m interval puts
- HARVEST BOUNDARY
- PINK RIBBON LINE
- Proposed Harvest
- Boundary Lines



Ontario Digital
Topographic Database

Island	River/Stream	Race Track - Intermittent
Lake / River	Trail	Hiking Trail
Marsh / Fen	Airstrip - Faxed	Bridge
Pin Pile	Feature Outline	Race Track - Centerline
Building (to scale)	Race Track - Unpaved	Fence Line
Boundary - Township/District	Boundary - Indian Reserve	Rock
Boundary - Intermunicipal	Boundary - Provincial/National Park	Rapids
Boundary - Township Lot	Contour Lines (10 meter interval)	Dam
Contour Lines - Approx	Contour Lines - Depression	Spot Elevations (meters above MSL)
Road	Pipeline	Building - Symbolized
Transmission Line		Mine - Headframe
		Monument - Historical
		Monument - Horizontal
		Tower





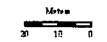
**KLOCK TWP
ANOMALY
POINTS AS OF
APRIL 19, 2004**

Map Prepared for:
MPH

April 19, 2004

1 centimeter equals 15 meters

1:1,500



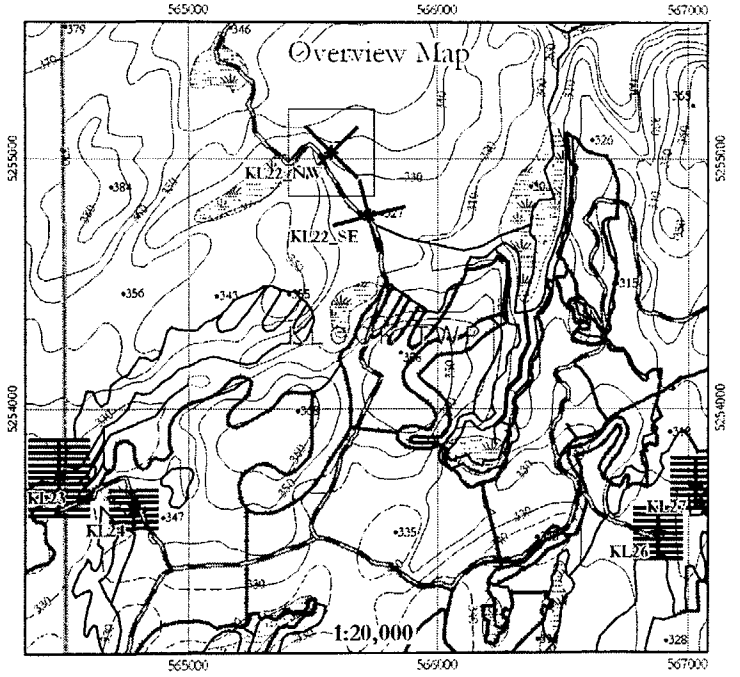
Produced by the Elk Lake
Community Forest (ELCF).
Coordinates are in NAD 27,
Zone 17 North.
For additional copies or more
information call 1-(705)-678-2477.

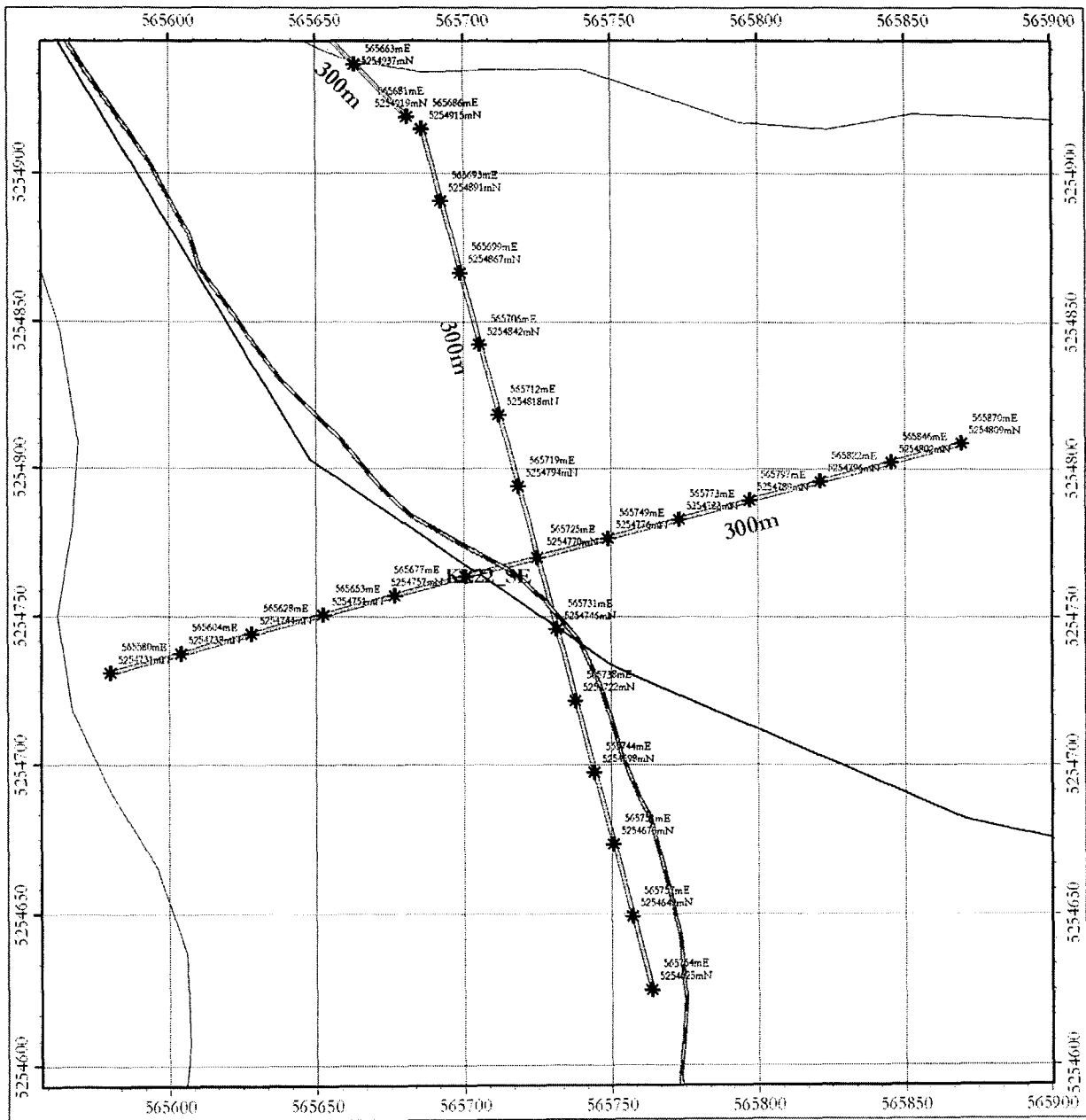
- Snowmobile Trail
- Snowshoe Trail
- ==== Grid Lines
- * 25m interval puts
- HARVEST BOUNDARY
- PINK RIBBON LINE
- Proposed Harvest
- Boundary Lines



**Ontario Digital
Topographic Database**

<ul style="list-style-type: none"> Treed Areas Island Lake / River Marsh / Pen Pit Pile Building (to scale) Boundary - Township/District Boundary - Indian Reserve Boundary - International Boundary - Interjurisdictional Boundary - Prov./National Park Boundary - Township Lot Contour Lines (10 meter interval) Contour Lines - Approx. Contour Lines - Depression Road Pipeline Transmission Line 	<ul style="list-style-type: none"> Railway River/Stream River/Stream - Intermittent Trail Highway Trail Airstrip - Paved Bridge Feature Outline Race Track - Centeline Airstrip - Unpaved Fence Line Rock Rapids Dam Spot Elevation (meters above MSL) Building - Symbolized Mine - Headframe Monument - Historical Monument - Horizontal Tower
--	---





**KLOCK TWP
ANOMALY
POINTS AS OF
APRIL 19, 2004**

Map Prepared for:
MPH

April 19, 2004

1 centimeter equals 15 meters

1:1,500



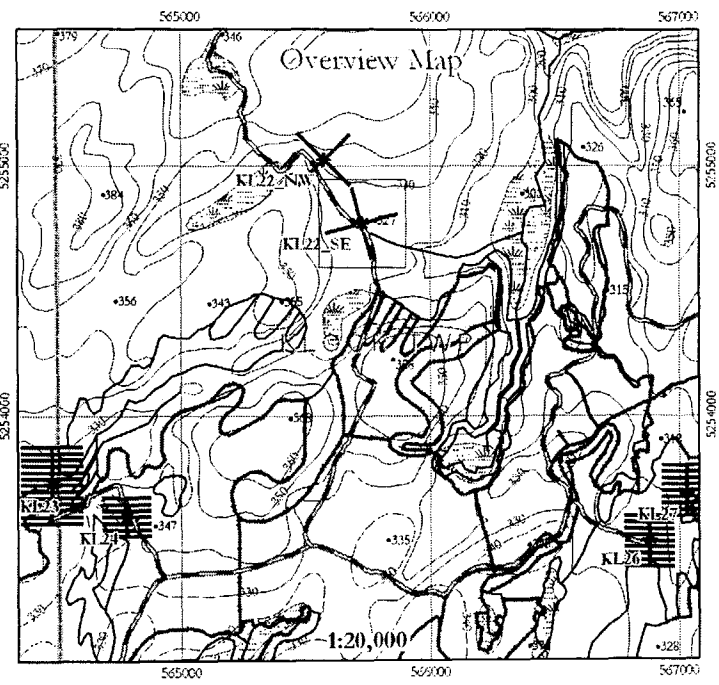
Produced by the Elk Lake
Community Forest (ELCF).
Coordinates are in NAD 27,
Zone 17 North.
For additional copies or more
information call 1-(705)-678-2477.

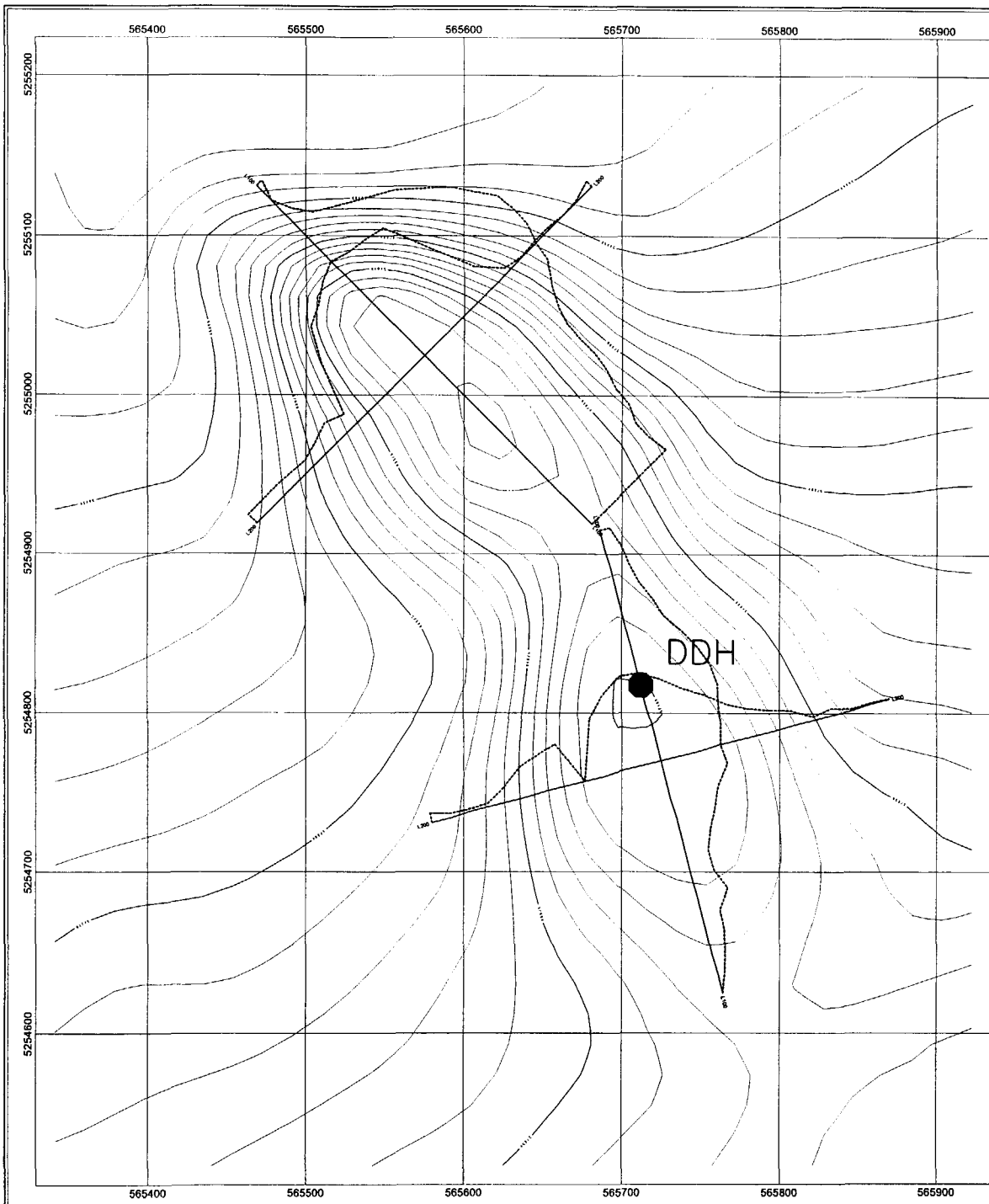
- Snowmobile Trail
- ==== Snowshoe Trail
- Grid Lines
- * 25m interval puts
- HARVEST BOUNDARY
- PINK RIBBON LINE
- Proposed Harvest
- Boundary Lines



**Ontario Digital
Topographic Database**

Treed Area:	Railway
Island	River/Stream
Lake / River	River/Stream - intermittent
Marsh / Fen	Trail
Pit Pile	Hiking Trail
Building (to scale)	Airstrip - Favored
Boundary - Township/District	Bridge
Boundary - Indian Reserve	Feature Outline
Boundary - International	Race Track - Centreline
Boundary - Interprovincial	Airstrip - Unpaved
Boundary - Provincial/National Park	Fence Line
Boundary - Township Lot	Rock
Contour Lines (10 meter interval)	Rapid
Contour Lines - Approx	Dam
Road	Spot Elevation (meters above MSL)
Pipeline	Building - Symbolized
Transmission Line	Mine - Headframe
	Monument - Historical
	Monument - Horizontal
	Tower

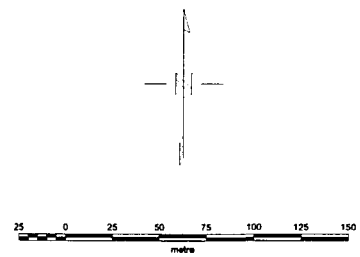




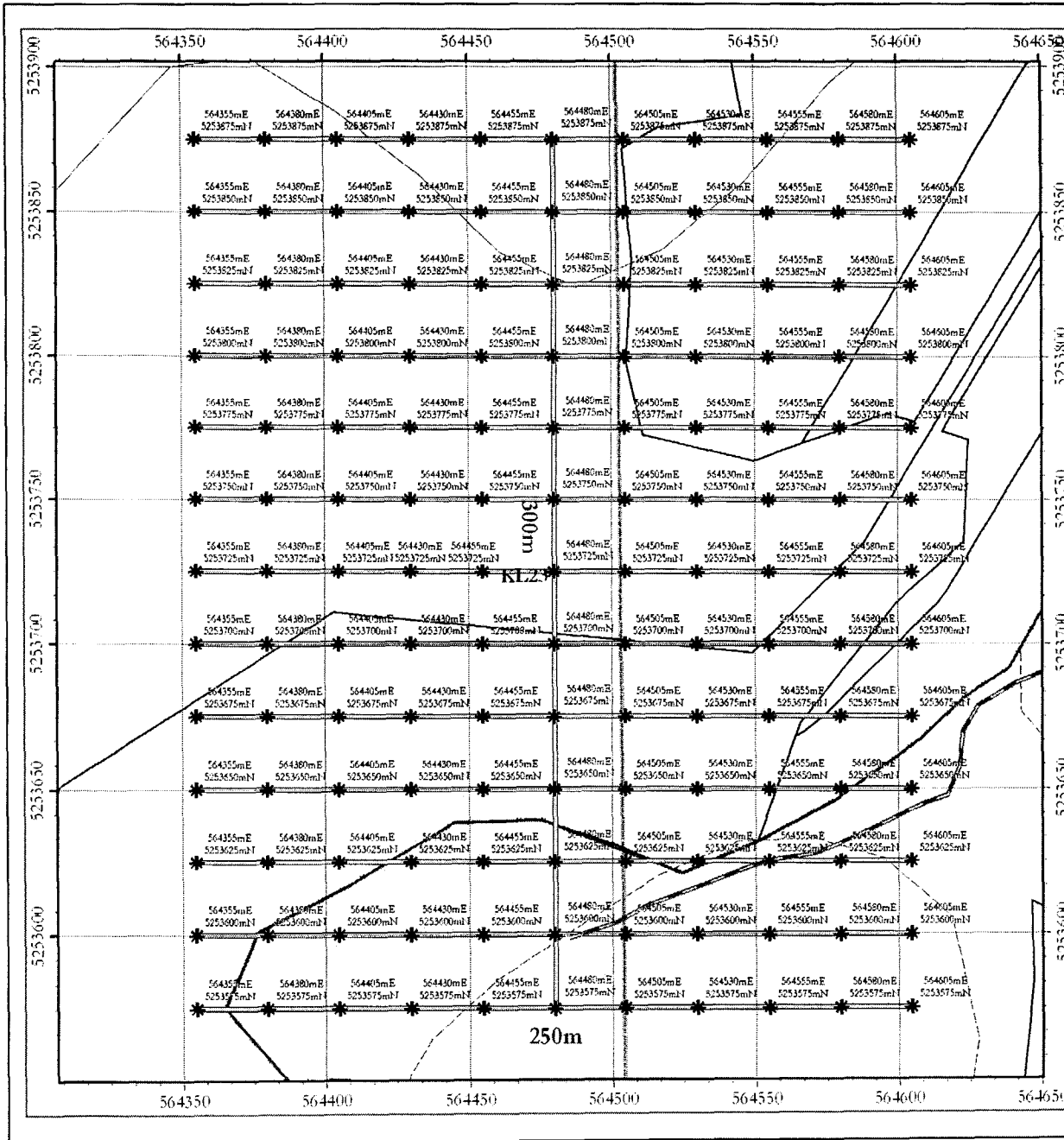
Airborne Magnetic Data
 Contour Intervals:
 2 nT and 10 nT (labelled)

Ground Magnetic
 Profile Scale:
 1cm = 10 nT

● Diamond Drillhole



SUBURY CONTACT MINES LIMITED
KLOCK PROPERTY, ONTARIO, TARGET KL22 AIRBORNE MAGNETIC SURVEY WITH GROUND MAGNETIC PROFILES TOTAL MAGNETIC INTENSITY
1:4000 JUNE 2004 MPH TORONTO
MPH CONSULTING LIMITED



**KLOCK TWP
ANOMALY
POINTS AS OF
APRIL 19, 2004**

Map Prepared for:
MPH

April 19, 2004

1 centimeter equals 16 meters

1:1,500

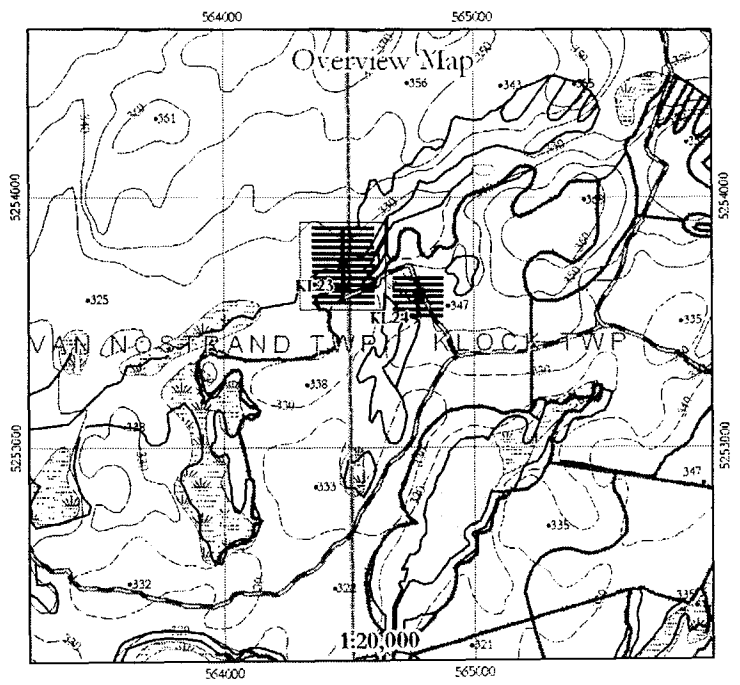


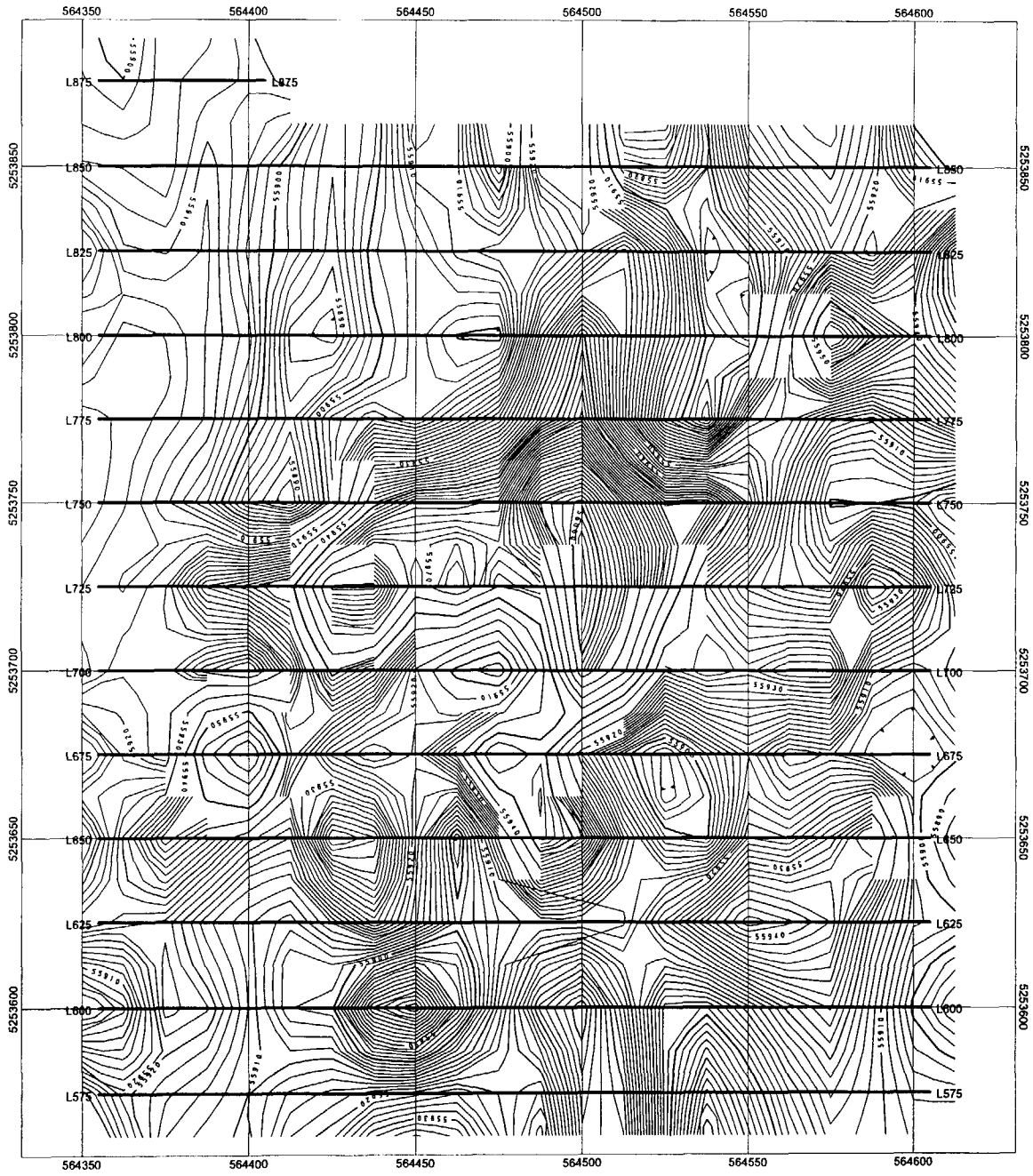
Produced by the Elk Lake
Community Forest (ELCF).
Coordinates are in NAD 27,
Zone 17 North.
For additional copies or more
information call 1-(705)-678-2477.

- Snowmobile Trail
- ==== Snowshoe Trail
- Grid Lines
- * 25m interval puts
- HARVEST BOUNDARY
- PINK RIBBON LINE
- Proposed Harvest
- Boundary Lines

Ontario Digital
Topographic Database

Treed Areas	Railway
Island	Face Track - Centerline
River/Stream	Anchorage - Unpaved
Lake / Ponds	Trail
Marsh / Pen	Fishing Trail
Pin Pole	Airstrip - Fawcett
Building (to scale)	Bridge
Boundary - Township/District	Feature Outline
Boundary - Indian Reserve	Race Track - Centerline
Boundary - International	Fence Line
Boundary - Provincial	Rock
Boundary - Town/Parish	Spot Elevation (meters above MSL)
Contour Lines (10 meter intervals)	Dam
Contour Lines - Approx.	Building - Symbolized
Contour Lines - Depression	Mine - Headframe
Road	Monument - Historical
Pipeline	Monument - Horizontal
Transmission Line	Tower

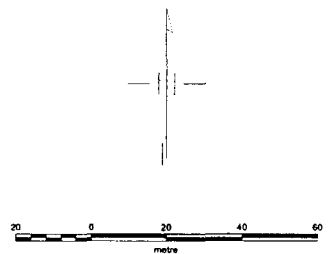




Airborne Magnetic Data
Contour Intervals:
 2 nT and 10 nT (labelled)

Ground Magnetic
Profile Scale:
 1cm = 10 nT

● Diamond Drillhole

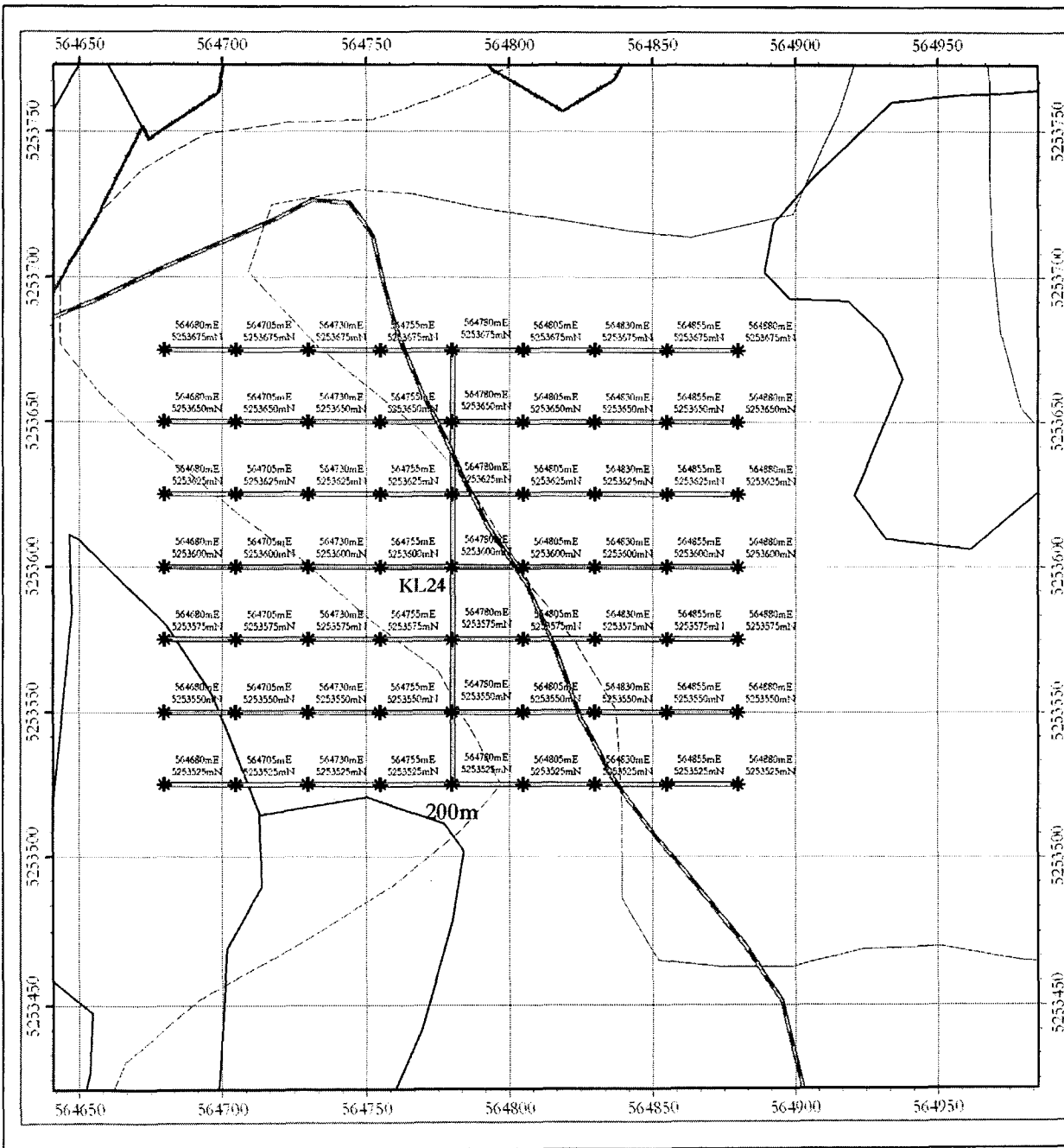


SUDBURY CONTACT MINES LIMITED

KLOCK PROPERTY, ONTARIO, TARGET KL23
 GROUND MAGNETIC SURVEY
 TOTAL MAGNETIC INTENSITY

1:2000
 JUNE 2004
 MPH TORONTO

MPH CONSULTING LIMITED



**KLOCK TWP
ANOMALY
POINTS AS OF
APRIL 19, 2004**

Map Prepared for:
MPH

April 19, 2004

1 centimeter equals 15 meters

1:1,500



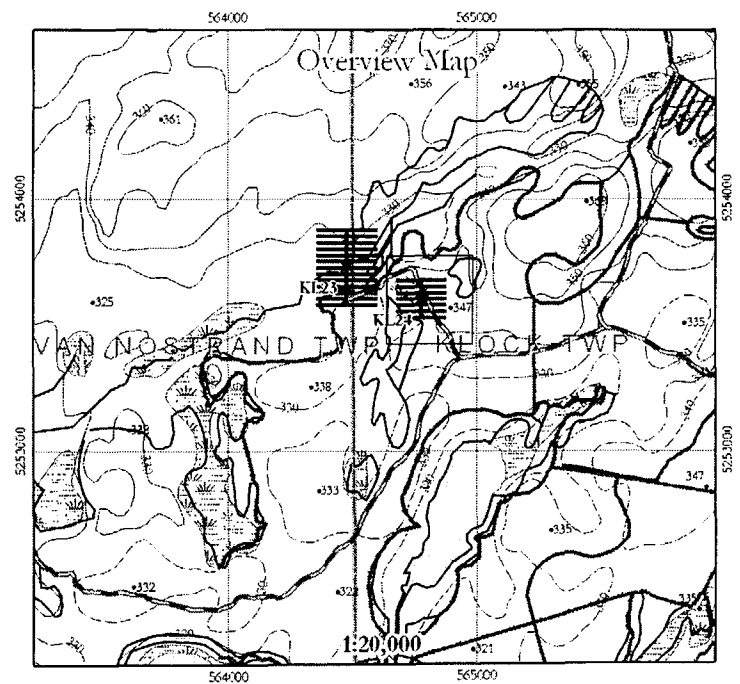
Produced by the Elk Lake
Community Forest (ELCF).
Coordinates are in NAD27,
Zone 17 North.
For additional copies or more
information call 1-4705-678-2477.

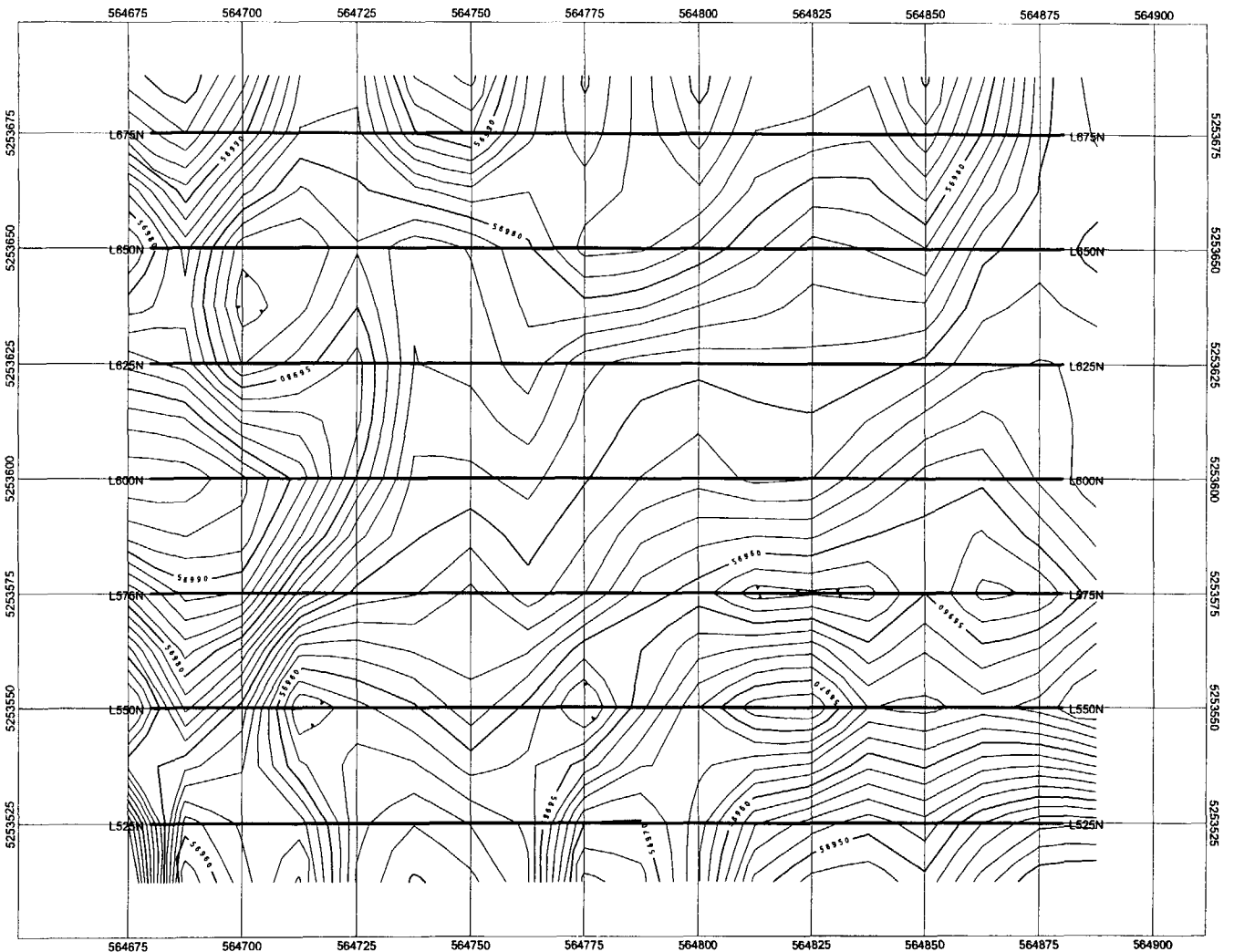
- Snowmobile Trail
- Snowshoe Trail
- Grid Lines
- * 25m interval pnts
- HARVEST BOUNDARY
- PINK RIBBON LINE
- Proposed Harvest
- Boundary Lines



Ontario Digital
Topographic Database

Treed Areas	Railway
Island	River/Stream
Lake / River	Road - Intermittent
Marsh / Fen	Trail
Pit Filled	Hiking Trail
Building (to scale)	Airway - Pavet
Boundary - Township/District	Bridge
Boundary - Indian Reserve	Feature Outline
Boundary - Interjurisdictional	Race Track - Centerline
Boundary - Provincial National Park	Airway - Ungavd
Boundary - Township Lot	Fence Line
Contour Lines (10 meter interval)	Rock
Contour Lines - Approx.	Rapids
Contour Lines - Depression	Dam
Road	Spot Elevation (meters above MSL)
Pipeline	Building - Symbolized
Transmission Line	Mine - Headframe
	Monument - Horizontal
	Monument - Vertical
	Tower

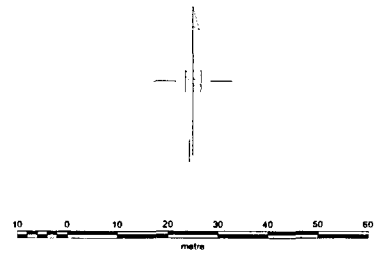




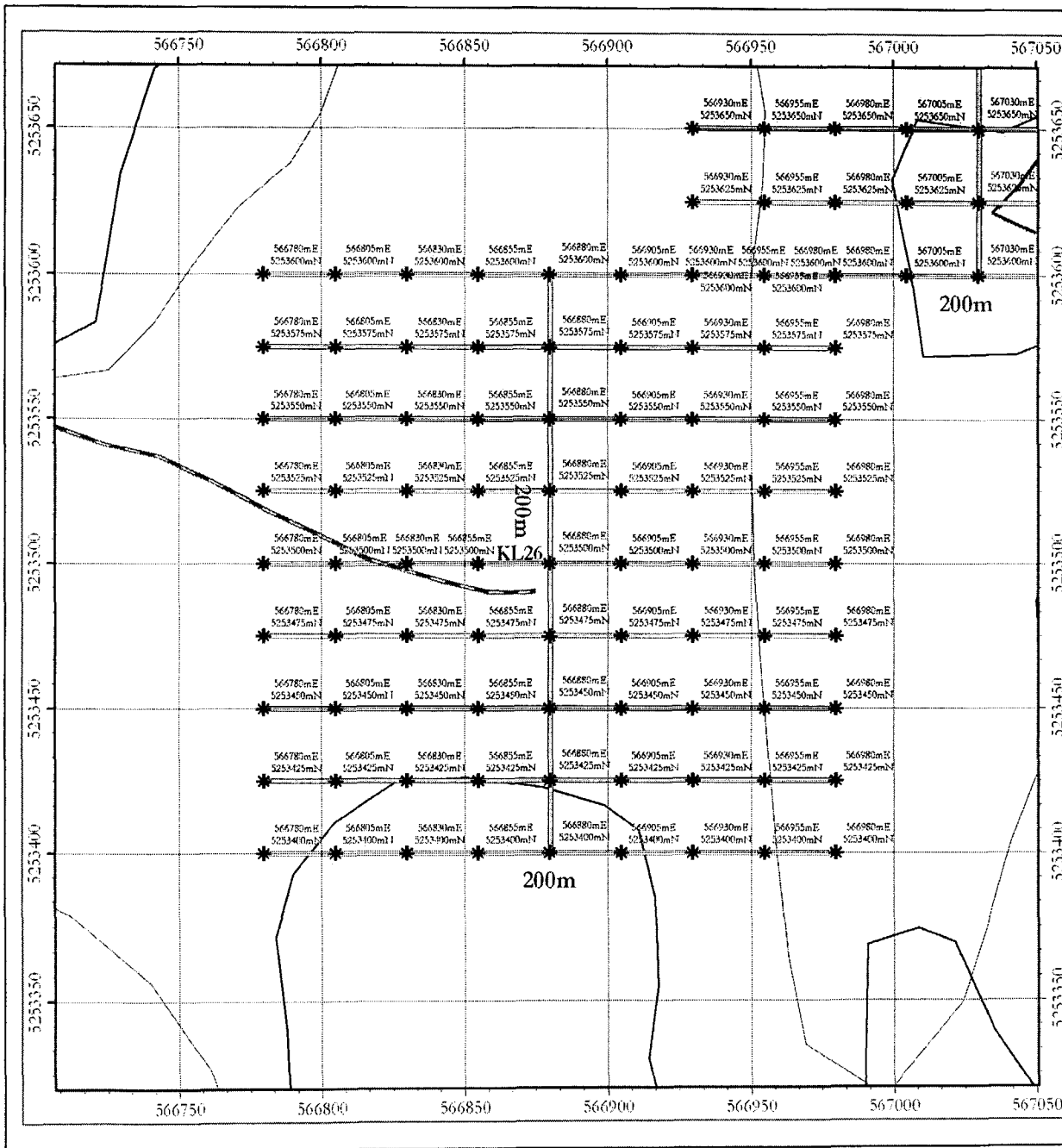
Airborne Magnetic Data
Contour Intervals:
 2 nT and 10 nT (labelled)

Ground Magnetic
Profile Scale:
 1cm = 10 nT

● **Diamond Drillhole**



SUDBURY CONTACT MINES LIMITED
KLOCK PROPERTY, ONTARIO, TARGET KL24 GROUND MAGNETIC SURVEY TOTAL MAGNETIC INTENSITY
1:1500 JUNE 2004 MPH TORONTO
MPH CONSULTING LIMITED



**KLOCK TWP
ANOMALY
POINTS AS OF
APRIL 19, 2004**

Map Prepared for:
MPH

April 19, 2004

1 centimeter equals 15 meters

1:1,500



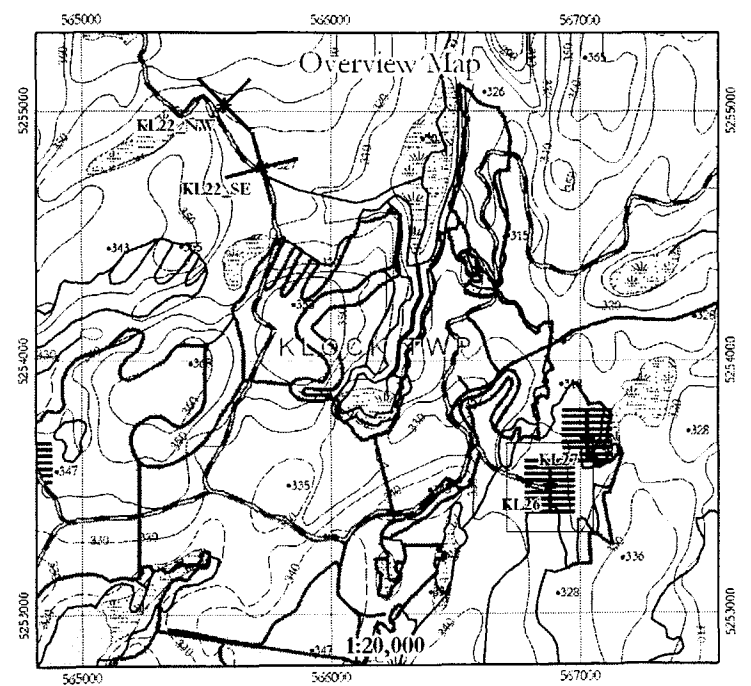
Produced by the Elk Lake
Community Forest (ELCF).
Coordinates are in NAD 27,
Zone 17 North.
For additional copies or more
information call 1-(705)-678-2477.

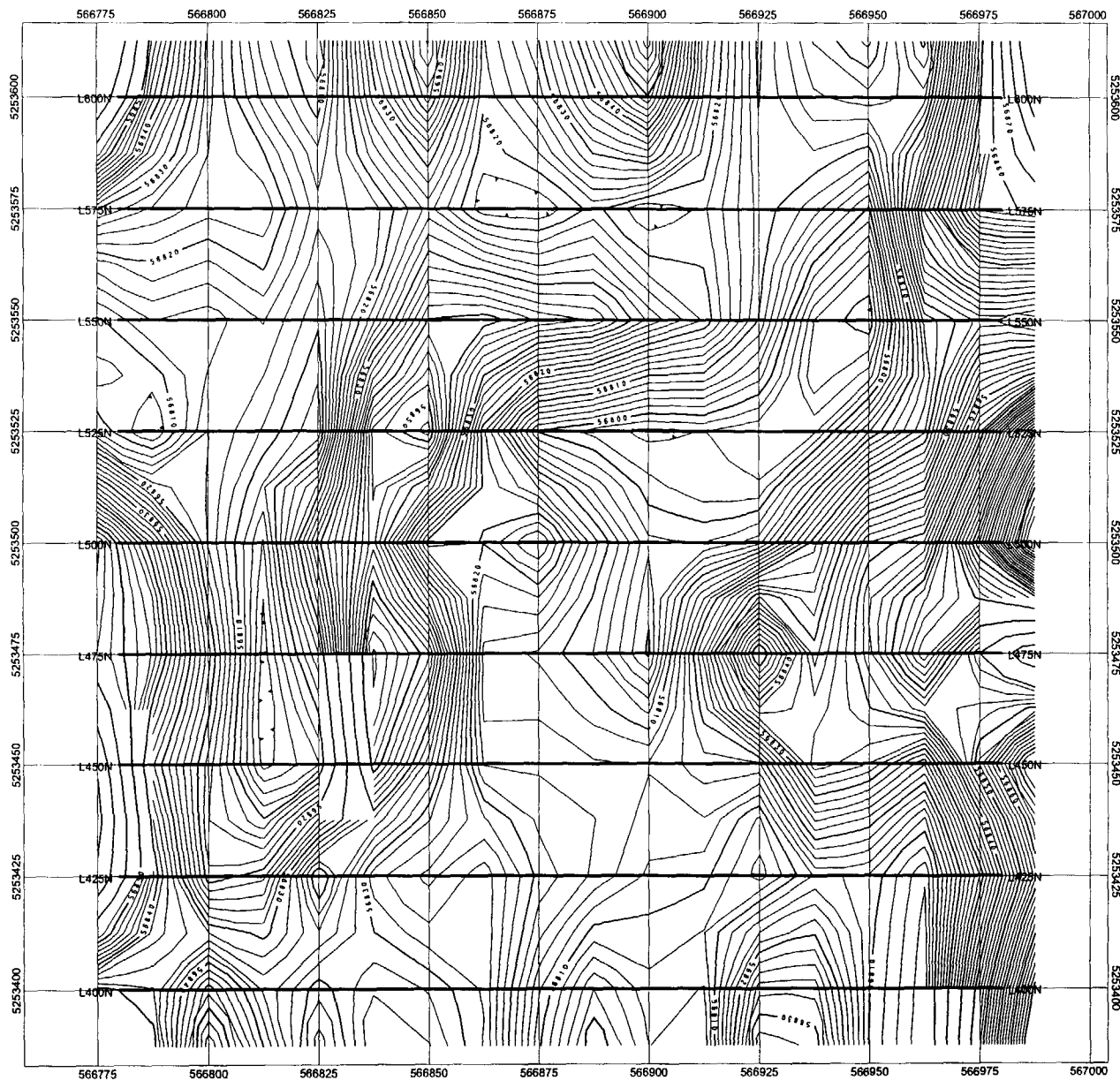
- Snowmobile Trail
- ==== Snowshoe Trail
- Grid Lines
- * 25m interval pts
- HARVEST BOUNDARY
- PINK RIBBON LINE
- Proposed Harvest
- Boundary Lines



Ontario Digital
Topographic Database

<ul style="list-style-type: none"> Treeed Area Island Lake / River Marsh / Fen Pit Pile Building (to scale) Boundary - Township/District Boundary - Indian Reserve Boundary - International Boundary - Interprovincial Boundary - Prov./National Park Boundary - Township Lot Contour Lines - Approx. Contour Lines - Depression Road Pipeline Transmission Line 	<ul style="list-style-type: none"> Railway River/Stream River/Stream - intermittent Trail Hiking Trail Airstrip - Fenced Bridge Feature Outline Race Track - Centeline Airstrip - Unfenced Fence Line Rock Rapids Dam Spot Elevations (meters above M.S.L.) Building - Symbolized Mine - Headframe Monument - Historical Monument - Horizontal Tower
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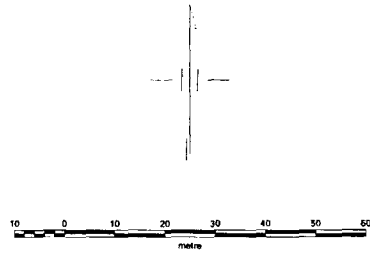




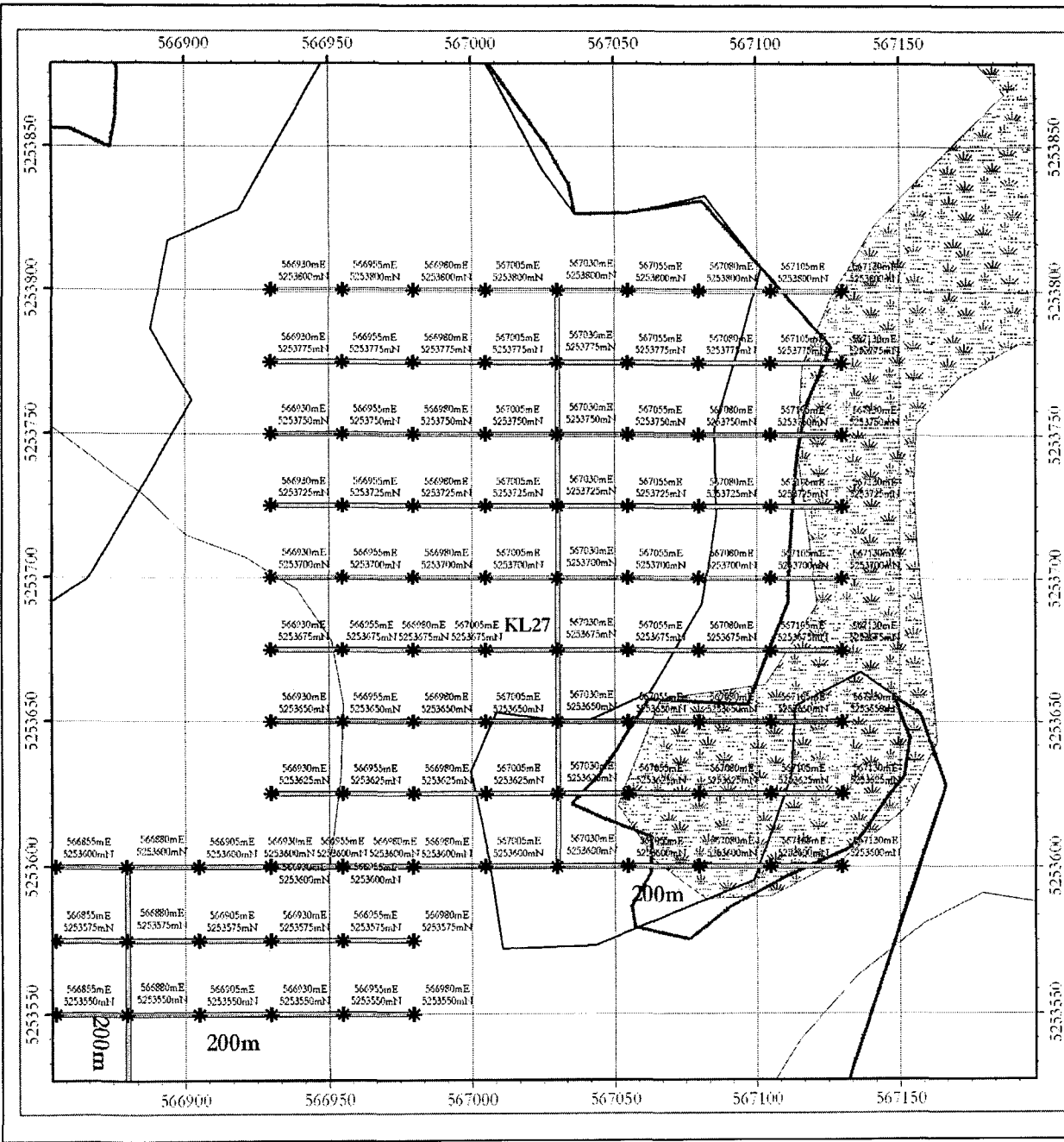
Airborne Magnetic Data
Contour Intervals:
 2 nT and 10 nT (labelled)

Ground Magnetic
Profile Scale:
 1cm = 10 nT

● **Diamond Drillhole**



SUDBURY CONTACT MINES LIMITED
KLOCK PROPERTY, ONTARIO, TARGET KL26 GROUND MAGNETIC SURVEY TOTAL MAGNETIC INTENSITY
1:1500 JUNE 2004 MPH TORONTO
MPH CONSULTING LIMITED



**KLOCK TWP
ANOMALY
POINTS AS OF
APRIL 19, 2004**

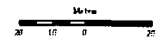
- Snowmobile Trail
- ==== Snowshoe Trail
- Grid Lines
- * 25m interval puts
- HARVEST BOUNDARY
- PINK RIBBON LINE
- Proposed Harvest
- Boundary Lines

Map Prepared for:
MPH

April 19, 2004

1 centimeter equals 15 meters

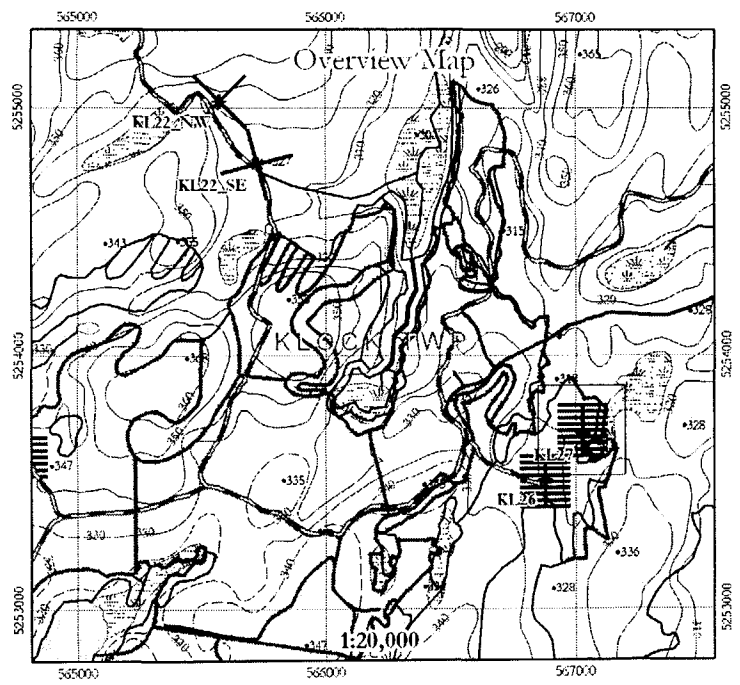
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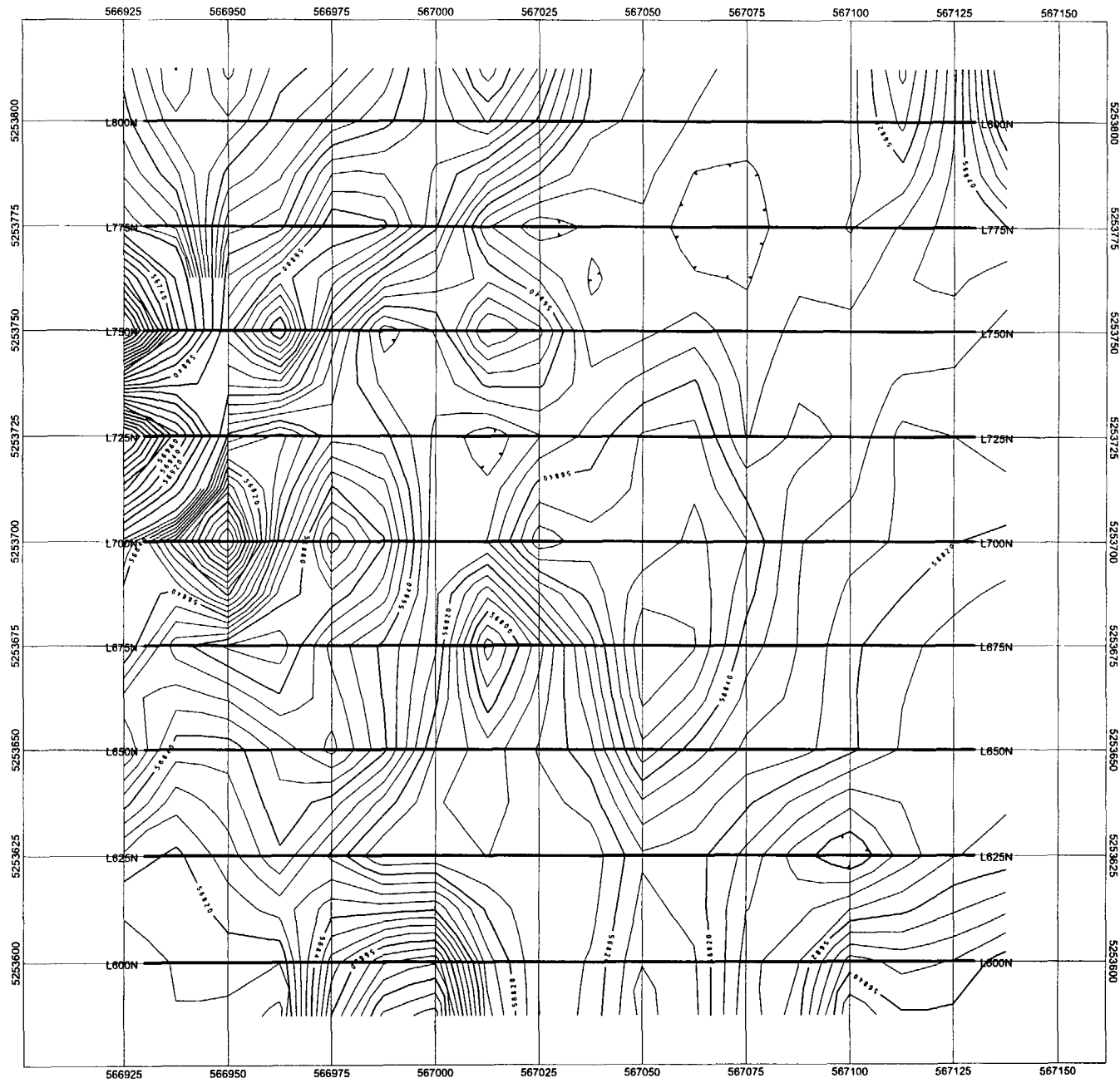


Produced by the Elk Lake
Community Forest (ELCF).
Coordinates are in NAD 27,
Zone 17 North.
For additional copies or more
information call 1-(705)-678-2477.

Ontario Digital
Topographic Database

Treed Areas	Railway
Island	River/Stream
Lake / River	River/Stream - intermittent
Marsh / Fen	Trail
Pin Pile	Hiking Trail
Building (to scale)	Airstrip - Favour
Boundary - Township/District	Bridge
Boundary - Indian Reserve	Feature Outline
Boundary - International	Race Track - Centreline
Boundary - Interprovincial	Airstrip - Unpaved
Boundary - Provincial Park	Fence Line
Boundary - Township Lot	Rapids
Contour Lines (10 meter interval)	Dam
Contour Lines - Approx.	Spot Elevation (meters above MSL)
Contour Lines - Depression	Building - Symbolized
Road	Mine - Headframe
Pipeline	Monument - Historical
Transmission Line	Monument - Horizontal
	Tower

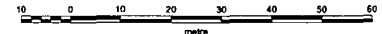




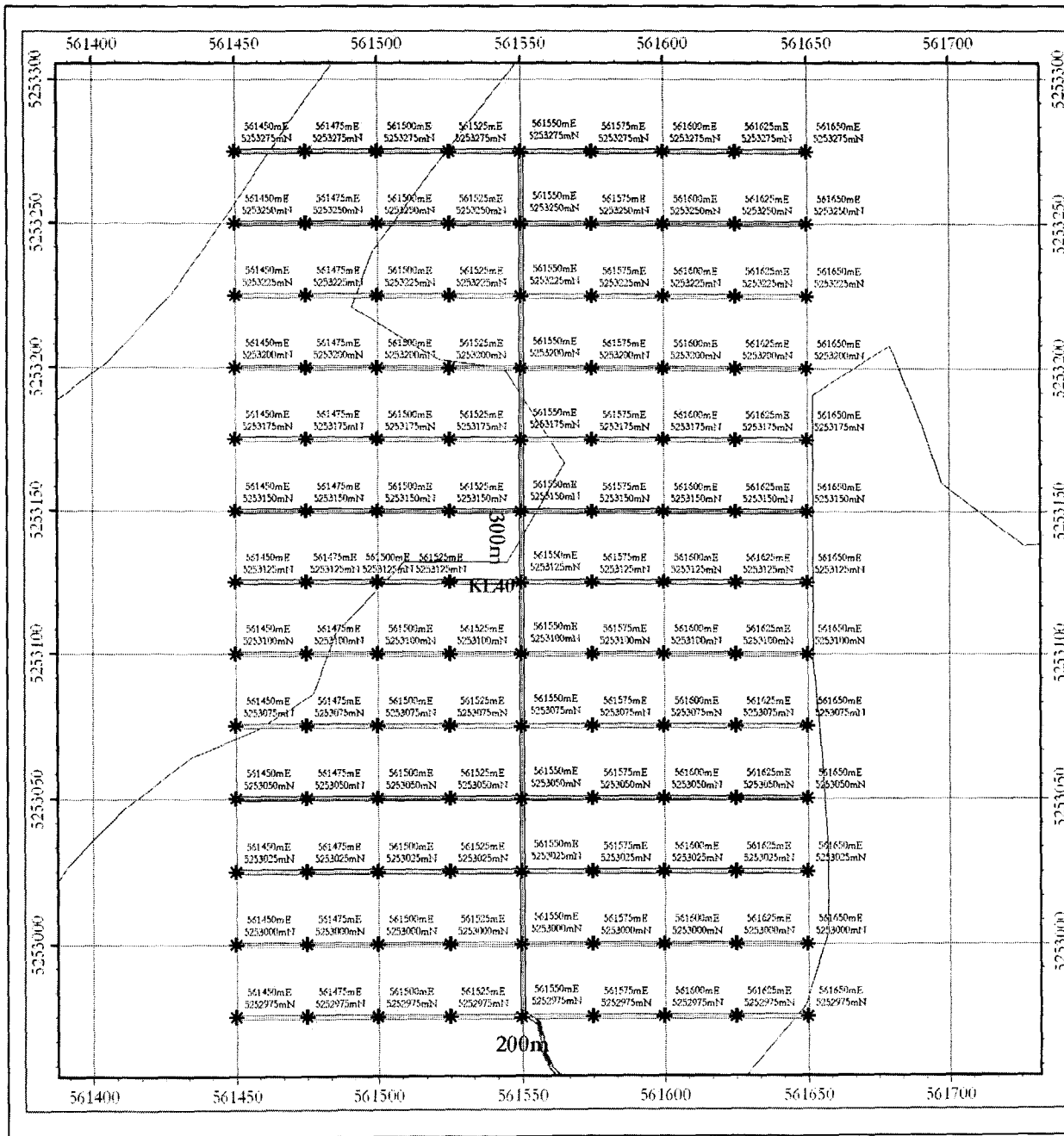
Airborne Magnetic Data
Contour intervals:
2 nT and 10 nT (labelled)

Ground Magnetic
Profile Scale:
1cm = 10 nT

● Diamond Drillhole



SUDBURY CONTACT MINES LIMITED KLOCK PROPERTY, ONTARIO, TARGET KL27 GROUND MAGNETIC SURVEY TOTAL MAGNETIC INTENSITY
1:1500 JUNE 2004 MPH TORONTO
MPH CONSULTING LIMITED



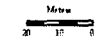
**KLOCK TWP
ANOMALY
POINTS AS OF
APRIL 19, 2004**

Map Prepared for:
MPH

April 19, 2004

1 centimeter equals 16 meters

1:1,500

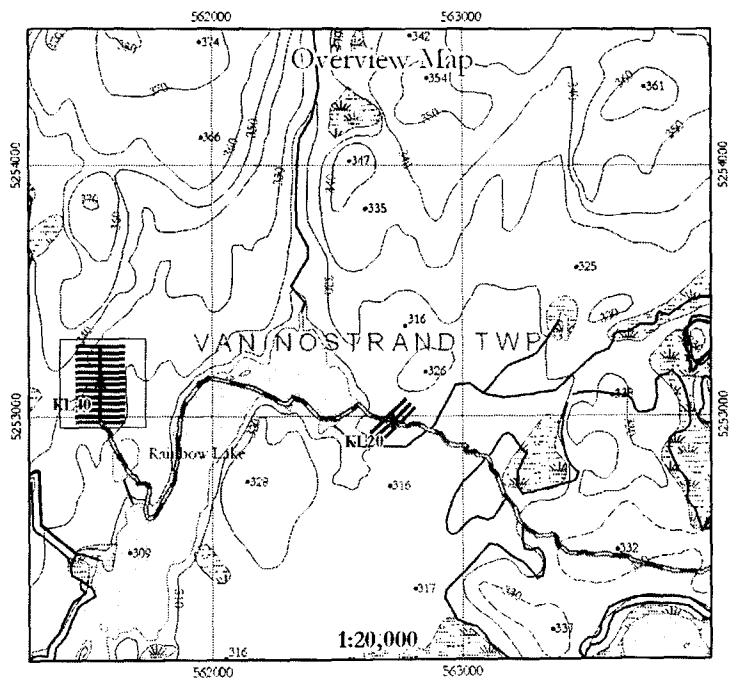


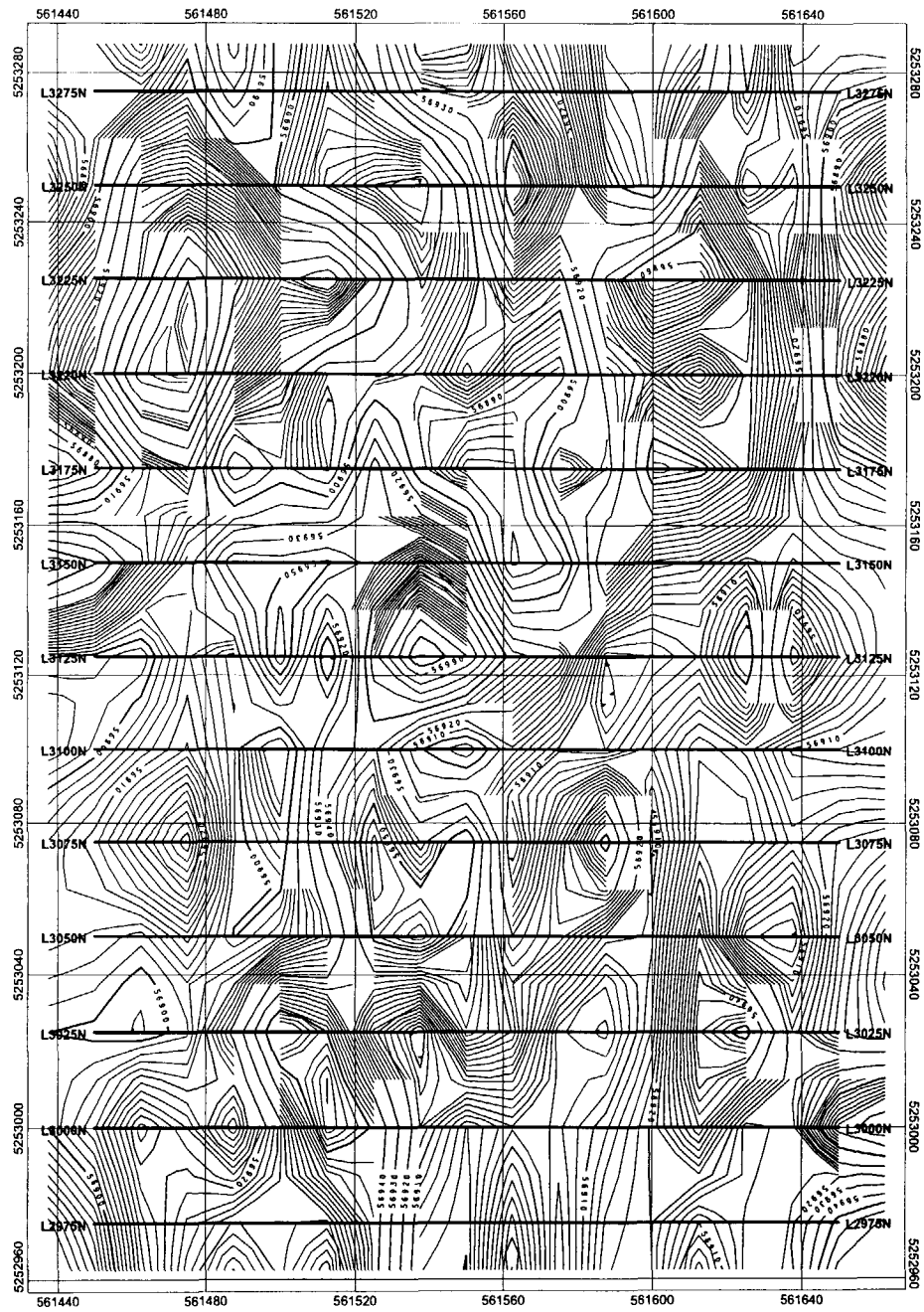
Produced by the Elk Lake
Community Forest (ELCF).
Coordinates are in NAD 27,
Zone 17 North.
For additional copies or more
information call 1-(705)-678-2477.

- Snowmobile Trail
- Snowshoe Trail
- Grid Lines
- 25m interval puts
- HARVEST BOUNDARY
- PINK RIBBON LINE
- Proposed Harvest
- Boundary Lines

Ontario Digital
Topographic Database

Treed Areas	Railway
Island	River/Stream
Lake / Fires	River/Stream - Intermittent
Marsh / Pea	Trail
Pit Pile	Hiking Trail
Building (to scale)	Airstrip - Farrow
Boundary - Township/District	Bridge
Boundary - Indian Reserve	Feature Outline
Boundary - International	Race Track - Centerline
Boundary - Intersessional	Airway - Unpaved
Boundary - Provincial National Park	Fence Line
Boundary - Township Lot	Rock
Contour Lines (10 meter intervals)	Rapids
Contour Lines - Approx.	Dam
Contour Lines - Depression	Spot Elevation (meters above MSL)
Road	Building - Symbolized
Pipeline	Mine - Headframe
Transmission Line	Monument - Historical
	Monument - Horizontal
	Tower

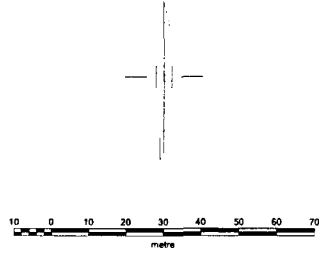




Airborne Magnetic Data
 Contour Interval:
 2 nT and 10 nT (labelled)

Ground Magnetic
 Profile Scale:
 1cm = 10 nT

 ● Diamond Drillhole



SUDBURY CONTACT MINES LIMITED KLOCK PROPERTY, ONTARIO, TARGET KL40 GROUND MAGNETIC SURVEY TOTAL MAGNETIC INTENSITY
1:2000 JUNE 2004 MPH TORONTO
MPH CONSULTING LIMITED

APPENDIX G CERTIFICATE OF EXPENDITURES

Sudbury Contact Mines Limited
 Klock Property Exploration Program
 Larder Lake Mining Division
 August 1, 2003 to May 31, 2004.

Project Manager	\$ 14,562.50
Contract Geologists	\$ 9,000.00
Geological Technicians/Casual Labour	\$ 15,990.00
Geophysicists	\$ 6,552.50
Computer Geologists	\$ 2,275.00
Accommodation/Office/Core Storage	\$ 7,020.45
Food/Supplies	\$ 2,542.93
Truck Rental/Fuel/kms.	\$ 8,358.92
Project Manager Travel Costs	\$ 847.20
Support/Equipment/Shipping/Field Supplies	\$ 6,614.38
Office Support/Plotting/Maps/Publications	\$ 0.00
Analytical Costs	\$ 14,909.67
Core Drilling	\$ 58,130.55
Helicopter Support	\$ 99,848.57
GPS Surveying/Linecutting	\$ 38,507.83
Petrographical/KIM Consulting	\$ 8,138.10
Geophysical Contractors	\$ 6,891.26
Administration Fees	\$ 28,461.06
TOTAL	\$334,824.07

Certified by:

Paul Abri

Date:

June 10, 2004

Note: This certificate has been constructed from Detailed Cost Accounting Ledgers prepared by MPH Consulting Limited, on behalf of their client, Sudbury Contact Mines Limited.

Work Report Summary

Transaction No: W0480.01043 Status: APPROVED (D)
 Recording Date: 2004-JUN-24 Work Done from: 2003-AUG-01
 Approval Date: 2004-OCT-05 to: 2004-MAY-31

Client(s):
 198617 SUDBURY CONTACT MINES LIMITED



Survey Type(s):

ASSAY PDRILL 41P08NE2008 2.28006 KLOCK

900

Work Report Details:

Claim#	Perform	Perform Approve	Applied	Applied Approve	Assign	Assign Approve	Reserve	Reserve Approve	Due Date
L 1192950	\$26,123	\$26,123	\$6,400	\$6,400	\$0	0	\$19,723	\$19,723	2005-AUG-08
L 1192956	\$1,417	\$1,417	\$6,400	\$6,400	\$0	0	\$0	\$0	2005-AUG-08
L 1192957	\$708	\$708	\$4,800	\$4,800	\$0	0	\$0	\$0	2005-AUG-08
L 1192958	\$1,417	\$1,417	\$4,800	\$4,800	\$0	0	\$0	\$0	2005-AUG-08
L 1192959	\$1,417	\$1,417	\$6,400	\$6,400	\$0	0	\$0	\$0	2005-AUG-08
L 1192960	\$1,417	\$1,417	\$6,400	\$6,400	\$0	0	\$0	\$0	2005-AUG-08
L 1192963	\$1,417	\$1,417	\$4,800	\$4,800	\$0	0	\$0	\$0	2005-AUG-08
L 1192964	\$708	\$708	\$5,600	\$5,600	\$0	0	\$0	\$0	2005-AUG-08
L 1192965	\$0	\$0	\$2,000	\$2,000	\$0	0	\$0	\$0	2005-AUG-08
L 1192966	\$708	\$708	\$6,400	\$6,400	\$0	0	\$0	\$0	2005-AUG-08
L 1192967	\$708	\$708	\$6,400	\$6,400	\$0	0	\$0	\$0	2005-AUG-08
L 1192968	\$1,417	\$1,417	\$6,400	\$6,400	\$0	0	\$0	\$0	2005-AUG-08
L 1192969	\$2,125	\$2,125	\$5,200	\$5,200	\$0	0	\$0	\$0	2005-AUG-08
L 1192970	\$708	\$708	\$4,800	\$4,800	\$0	0	\$0	\$0	2005-AUG-08
L 1192971	\$708	\$708	\$4,000	\$4,000	\$0	0	\$0	\$0	2005-AUG-08
L 1192972	\$708	\$708	\$4,800	\$4,800	\$0	0	\$0	\$0	2005-AUG-08
L 1192973	\$708	\$708	\$6,400	\$6,400	\$0	0	\$0	\$0	2005-AUG-08
L 1192974	\$1,417	\$1,417	\$6,400	\$6,400	\$0	0	\$0	\$0	2005-AUG-08
L 1192975	\$2,125	\$2,125	\$6,400	\$6,400	\$0	0	\$0	\$0	2005-AUG-08
L 1192976	\$8,125	\$8,125	\$6,400	\$6,400	\$0	0	\$1,725	\$1,725	2005-AUG-08
L 1192977	\$0	\$0	\$6,400	\$6,400	\$0	0	\$0	\$0	2005-AUG-08
L 1192978	\$14,124	\$14,124	\$6,400	\$6,400	\$0	0	\$7,724	\$7,724	2005-AUG-08
L 1192979	\$7,416	\$7,416	\$6,400	\$6,400	\$0	0	\$1,016	\$1,016	2005-AUG-08
L 1192980	\$13,416	\$13,416	\$6,400	\$6,400	\$0	0	\$7,016	\$7,016	2005-AUG-08
L 3001464	\$75,332	\$75,332	\$6,400	\$6,400	\$0	0	\$68,932	\$68,932	2005-AUG-08
L 3001465	\$1,417	\$1,417	\$6,400	\$6,400	\$0	0	\$0	\$0	2005-AUG-08
L 3001466	\$1,417	\$1,417	\$6,400	\$6,400	\$0	0	\$0	\$0	2005-AUG-08
L 3001467	\$126,666	\$126,666	\$6,400	\$6,400	\$96,000	96,000	\$24,266	\$24,266	2005-AUG-08
L 3001468	\$0	\$0	\$6,400	\$6,400	\$0	0	\$0	\$0	2005-AUG-08
L 3001469	\$2,125	\$2,125	\$6,400	\$6,400	\$0	0	\$0	\$0	2005-AUG-08
L 3001470	\$0	\$0	\$6,400	\$6,400	\$0	0	\$0	\$0	2005-AUG-08
L 3001471	\$25,414	\$25,414	\$6,400	\$6,400	\$7,392	7,392	\$11,622	\$11,622	2005-AUG-08
L 3001472	\$13,416	\$13,416	\$4,800	\$4,800	\$8,616	8,616	\$0	\$0	2005-AUG-08
\$334,824	\$334,824	\$192,800	\$192,800	\$112,008	\$112,008	\$142,024	\$142,024		

Work Report Summary

Transaction No:	W0480.01043	Status:	APPROVED (D)
Recording Date:	2004-JUN-24	Work Done from:	2003-AUG-01
Approval Date:	2004-OCT-05	to:	2004-MAY-31
External Credits:	\$0		
Reserve:	\$142,024	Reserve of Work Report#:	W0480.01043
	<u>\$142,024</u>	Total Remaining	

Status of claim is based on information currently on record.

Date: 2004-OCT-05

GEOSCIENCE ASSESSMENT OFFICE
933 RAMSEY LAKE ROAD, 6th FLOOR
SUDBURY, ONTARIO
P3E 6B5

Tel: (888) 415-9845
Fax: (877) 670-1555

SUDBURY CONTACT MINES LIMITED
C.P. 87, 765 CHEMIN DE LA MINE GOLDEX
VAL D'OR, QUEBEC
J9P 4N9 CANADA

Submission Number: 2.28006
Transaction Number(s): W0480.01043

Dear Sir or Madam

Subject: Deemed Approval of Assessment Work

We have approved your Assessment Work Submission with the above noted Transaction Number(s) as per 6(7) of the Assessment Work Regulation. Only eligible assessment work is deemed approved for assessment work credit. The attached Work Report Summary indicates the results of the approval.

NOTE: The report has not been reviewed for technical deficiencies and reported expenses were not evaluated based on the Industry Standard.

At the discretion of the Ministry, the assessment work performed on the mining lands noted in this work report may be subject to inspection and/or investigation at any time.

If you have any question regarding this correspondence, please contact STEVEN BENETEAU by email at steve.beneteau@ndm.gov.on.ca or by phone at (705) 670-5855.

Yours Sincerely,



Ron C. Gashinski
Senior Manager, Mining Lands Section

Cc: Resident Geologist

Sudbury Contact Mines Limited
(Claim Holder)

Caroline Laroche
(Agent)

Assessment File Library

Sudbury Contact Mines Limited
(Assessment Office)

Date / Time of Issue: Thu Oct 07 11:22:06 EDT 2004

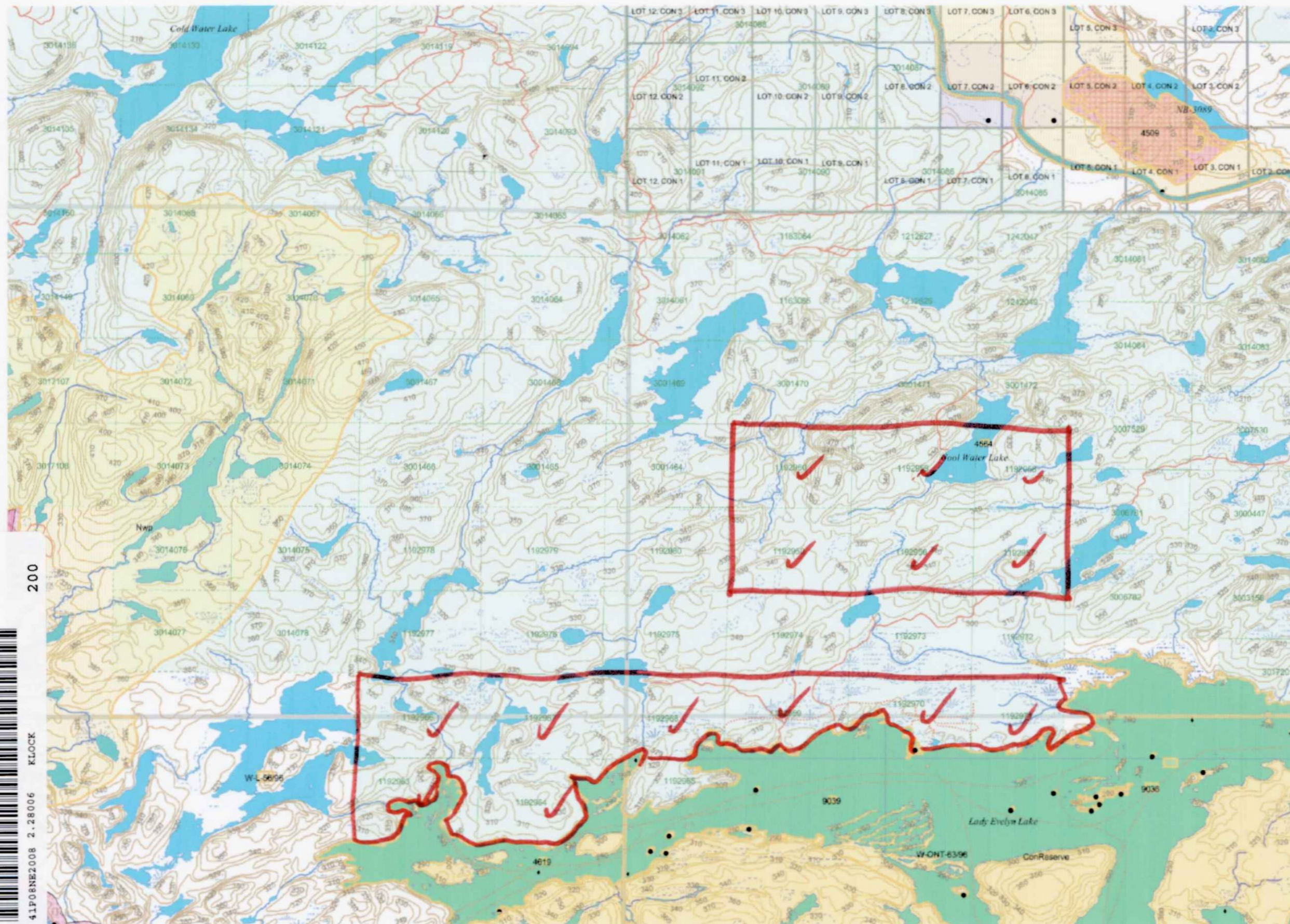
TOWNSHIP / AREA
KLOCK

PLAN
G-3435

ADMINISTRATIVE DISTRICTS / DIVISIONS

Mining Division
Land Titles/Registry Division
Ministry of Natural Resources District

Larder Lake
TIMISKAMING
KIRKLAND LAKE

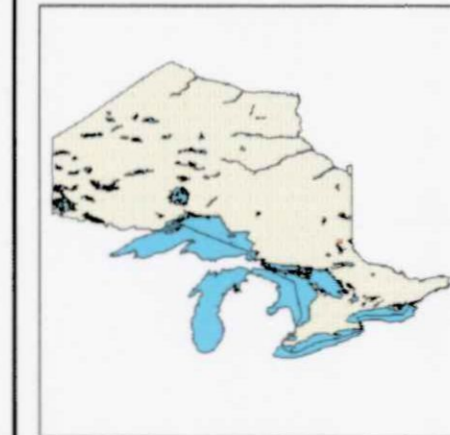


TOPOGRAPHIC

- Administrative Boundaries
- Township
- Concession Lot
- Provincial Park
- Indian Reserve
- Oil, Pt & Pie
- Contour
- Mine Shaft
- Mine Headframe
- Railway
- Road
- Trail
- Natural Gas Pipeline
- Utilities
- Tower

Land Tenure

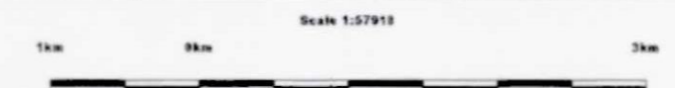
- Freehold Patent**
 - Surface And Mining Rights
 - Surface Rights Only
 - Mining Rights Only
- Leasehold Patent**
 - Surface And Mining Rights
 - Surface Rights Only
 - Mining Rights Only
- Licence of Occupation**
 - Uses Not Specified
 - Surface And Mining Rights
 - Surface Rights Only
 - Mining Rights Only
 - Land Use Permit
 - Order In Council (Not open for staking)
 - Water Power Lease Agreement



LAND TENURE WITHDRAWALS

- Mining Claims
- Filed Only Mining Claims
- 1234** Areas Withdrawn from Disposition
- Mining Acts Withdrawal Types**
 - Wsm Surface And Mining Rights Withdrawn
 - Ws Surface Rights Only Withdrawn
 - Wm Mining Rights Only Withdrawn
- Order In Council Withdrawal Types**
 - Wsm Surface And Mining Rights Withdrawn
 - Ws Surface Rights Only Withdrawn
 - Wm Mining Rights Only Withdrawn

IMPORTANT NOTICES



2.28006
PDRILL
ASSAY

200
KLOCK
41P08NE2008 2.28006

NAD 83
5 degree grid

Those wishing to stake mining claims should consult with the Provincial Mining Recorders' Office of the Ministry of Northern Development and Mines for additional information on the status of the lands shown hereon. This map is not intended for navigational, survey, or land title determination purposes as the information shown on this map is compiled from various sources. Completeness and accuracy are not guaranteed. Additional information may also be obtained through the local Land Titles or Registry Office, or the Ministry of Natural Resources.

The information shown is derived from digital data available in the Provincial Mining Recorders' Office at the time of downloading from the Ministry of Northern Development and Mines web site.

General Information and Limitations
 Contact Information:
 Provincial Mining Recorders' Office
 Wileet Green Miller Centre 933 Ramsey Lake Road
 Sudbury ON P3E 6B5
 Home Page: www.mrdm.gov.on.ca/MNDMMINESLANDS/miswmpge.htm

Toll Free
 Tel: 1 (888) 415-9845 ext 57
 Fax: 1 (877) 670-1444

Map Datum: NAD 83
 Projection: Geographic Coordinates
 Topographic Data Source: Land Information Ontario
 Mining Land Tenure Source: Provincial Mining Recorders' Office

This map may not show unregistered land tenure and interests in land including certain patents, leases, easements, right of ways, flooding rights, licences, or other forms of disposition of rights and interest from the Crown. Also certain land tenure and land uses that restrict or prohibit free entry to stake mining claims may not be illustrated.

SampleNo	Easting_NAD83	Northing_NAD83	Date	ClaimNo	TWP	NTS	Site Comments	Vegetation	DriftThickness_m	SampleDepth_m	Distanceto_oc_m	Striations_Az	TilColour	Texture	ClastContent_%	ClastType_%	Compaction	Oxidation	VegDepth_cm	MicrodiamondsAdded	NormalizedWeight_kg
K1	561684	5257407	Sept 17/03	3001467	Van Nostrand	41P/8	small gully, northeast corner of lake, target KL-1	Mixed Forest	>1 m	0.3-0.7		none	Khaki brown	oxidized silty sand	20% pebble size	granite, quartzite, minor volcanics rare BIF	low	medium	30		10
K2	562281	5257316	Sept 17/03	3001467	Van Nostrand	41P/8	east side of a small hill, west side of small lake, target KL-2	Mixed Forest	<1 m	0.3-0.8	Minor magnetic mafic intrusive boulders in till	none	Khaki brown	oxidized silt	15-20%	mostly boulders of quartzite and 20% mafic volcanics	low	medium	40	1	10
K3	562570	5258057	Sept 17/03	3001469	Klock	41P/8	plateau west side of Klock Lake, north of KL-3 target which was not helicopter accessible	jackpine forest	<1 m	0.3-0.75	50 m south weathered granite	none	light grey brown	unoxidized sandy silt	10-15%	50% felsic intrusive and 50% mafic volcanics	medium	low	20		10
K4	567605	5257467	Sept 17/03	3001471	Klock	41P/8	east side of large hill, target KL-11	Mixed Forest (spruce and birch)	<1 m	0.2-0.5	40 m to north greywacke sediment	none	Khaki brown	oxidized silt	<1%		low	medium	20		10
K5	569313	5257222	Sept 17/03	3001472	Klock	41P/8	top of hill, south of small creek, 230 m south of KL-13 target	Mixed Forest	<1 m	0.3-0.55		none	dark to orange brown	oxidized sandy silt	15%	40% mafic volcanics, 40% felsic intrusive and 20% other	low	medium	15		10
K6	568219	5256961	Sept 17/03	3001471	Klock	41P/8	steep slope, target KL-12	Mixed Forest	<1 m	0.1-0.5	till right on top of hematitic siltstone	none	light brown	oxidized silt	1-5% subrounded clasts	moderately magnetic siltstone clasts	low	medium	40	2	10
K7	562474	5254454	Sept 17/03	1192978	Van Nostrand	41P/8	hill in swampy area, 200 m south of target KL-18	Mixed Forest	<1 m	0.35-0.85	50 m NE siliceous felsic intrusive	none	light to golden brown	oxidized sandy silt	35%	50% granite, 40% mafic volcanics and 10% sediments	high	medium	30	1	10
K8	563609	5253656	Sept 17/03	1192979	Van Nostrand	41P/8	small knoll, target KL-19	Spruce Forest (very minor birch)	<1 m	0.3-0.6		none	cream brown	unoxidized sandy silt	10% sub to round pebble size	70% granite & 30% mafic volcs	low	low	50		10
K9	562705	5253006	Sept 17/03	1192976	Van Nostrand	41P/8	plateau south of swampy area, 200 m south of target KL-20	Mixed Forest	>1 m	0.4-0.8		none	golden brown	unoxidized sandy silt	45%	35% felsic intrusive, 35% mafic volcs, 30% seds	med to high	low	35		10
K10	565518	5255033	Sept 17/03	3001464	Klock	41P/8	outcrop plateau west of creek, target KL-22 in creek bed	Mixed Forest	<1 m	0.1-0.4	50 m to northwest greywacke	none	brown	oxidized sandy silt	1-3% pebble size		low	medium	20	2	10
K11	564473	5253746	Sept 17/03	1192980	Van Nostrand	41P/8	clear-cut, 220 m south of KL-23, scattered siltstone boulders	none	>1 m	0.3-0.75		none	golden brown	unoxidized sandy silt (damp)	30%	40% felsic intrusive, 30% mafic volcanics, 30% sediments	high	low	10		10
K12	566894	5253695	Sept 17/03	1192950	Klock	41P/8	clear-cut area, till sample taken 40 m south of KL-26	none	>1 m	0.15-0.3	magnetic sedis30-50 m east of center of KL-26	none	dark brown	oxidized gravelly silt	30%	mostly sediments and minor granite	low	med to high	0	3	10
K13	564771	5253667	Sept 17/03	1192980	Klock	41P/8	clear-cut area, till sample taken 160 m south of KL-24	none	>1 m	0.5-1	100 m east of KL-24 siltstone	none	grey to golden brown	unoxidized sandy silt (damp)	10%	30% granite, 30% mafic volcanics, 30% seds, 10% other	high	low	30		10
K14	567063	5253667	Sept 17/03	1192950	Klock	41P/8	clear-cut area, target KL-27	none	<1 m	0.1-0.4		none	khaki brown	oxidized clayey silt	15%	15%	low	med to high	20		10
K15	568694	5254440	Sept 17/03	1192956	Klock	41P/8	clear-cut area, till sample taken 200 m southwest of KL-36	none	>1 m	0.45-0.8		none	golden brown	unoxidized sandy silt (damp)	15%	40% seds, 30% felsic intrusive, 30% mafic volcs	high	low	20	1	10
K16	570019	5255135	Sept 17/03	1192958	Klock	41P/8	clear-cut area, south side of small knoll, target KL-35	none	>1 m	0.1-0.3	70 m @ 300 black massive siltstone	none	Khaki brown	oxidized silt	20%	70% siltstone, 20% granite, 10% mafic volcs	low	medium	10		10
K17	569882	5253861	Sept 17/03	1192957	Klock	41P/8	clear-cut area, 250 m south of target KL-39	none	<1 m	0.3-0.65	50 m to the west siltstone	165	light orange brown	oxidized sandy silt	15%	60% sediments 20% mafic volcanics 20% felsic intrusives	high	med to high	25		10
K18	561573	5253358	Sept 18/03	1192978	Van Nostrand	41P/8	small knoll, several large boulders of granite, target KL-40	Mixed Forest	>1 m	0.4-0.7		none	Khaki brown	oxidized gravelly silt	10% mostly pebbles	quartzite and minor granite clasts	low	medium	40		10
K19	564089	5252210	Sept 18/03	1192976	Van Nostrand	41P/8	small hill, till sample taken 220 m south of target KL-46	Conifer Forest	>1 m	0.3-0.75	25 m north hematitic siltstone	none	light brown	oxidized sandy silt	15%	80% siltstone, 20% granite	high	medium	25	2	10
K20	562017	5253406	Sept 18/03	1192978	Van Nostrand	41P/8	flat ground 40 m west of lake, target KL-43	Mixed Forest (white pine, spruce, birch)	>1 m	0.3-0.6		none	Khaki brown	oxidized gravelly silt	40% round pebble size clasts	mostly granite	medium	high	30		10
K21	564431	5252126	Sept 18/03	1192975	Van Nostrand	41P/8	top of mound among flat conifer forest, target KL-48	Conifer Forest	>1 m	0.4-0.8		none	tan brown	unoxidized sandy silt	15%	80% siltstone and 20% other	high	low	30		10
K22	564421	5252853	Sept 18/03	1192975	Van Nostrand	41P/8	small knoll, well bedded hematitic siltstone at target KL-47	Spruce Forest	>1 m	0.15-0.5	25 m to east of till sample hematitic siltstone	none	cream brown	oxidized silt	15%	50% angular siltstone and 50% subrounded granite	low	low to med	50	1	10
K23	568148	5252461	Sept 18/03	1192974	Klock	41P/8	clear-cut area, till sample taken 200 m south of KL-52	none	>1 m	1	50 m south of KL-52 laminated siltstone	none	grey brown	unoxidized sandy silt	20%	80% siltstone, 20% mafic volcs and felsic intrusive	high	low	30	2	10
K24	567016	5252002	Sept 18/03	1192974	Klock	41P/8	top of large hill, 880 m @ 300 from KL-58	Mixed Forest (40% birch, 60% spruce)	>1 m	0.2-0.6		none	beige brown	oxidized silt	5%	angular siltstone with minor round granite clasts	low	low to med	20		10
K25	561433	5250429	Sept 18/03	1192966	Leo	41P/8	top of long gradual slope, 280 m south of target KL-63	Mixed Forest (spruce some birch)	>1 m	0.45-0.85		none	tan brown	unoxidized sandy silt	15%	75% siltstone 20% mafic volcs and felsic intrusive	high	low	40	1	10
K26	564951	5250184	Sept 18/03	1192968	Dane	41P/8	top of elongate ridge	Mixed Forest	>1m	0.3-1		none	light brown	SAND	NONE	NONE	low				10
K27	564291	5250145	Sept 18/03	1192968	Leo	41P/8	top of slope, approx 175 southwest of target KL-70	Mixed Forest	<1 m	0.2-0.4	25 m to east siltstone, till on top of siltstone	none	light orange brown	oxidized sandy silt	10%	70% siltstone, 20% granite 10% other	medium	medium	20		10
K28	565886	5250492	Sept 18/03	1192969	Dane	41P/8	west side of small plateau hill, about 400 m north of Lady Evelyn Lake	Mixed Forest (spruce 7 scattered poplar)	>1 m	0.4-0.8		none	light brown	oxidized clayey silt	3%	angular siltstone	low	medium	10	1	10
K29	563564	5251751	Sept 18/03	1192976	Van Nostrand	41P/8	top of small hill	Mixed Forest	<1 m	0.35-0.85	basal till right on top of siltstone outcrop	none	tan brown	unoxidized sandy silt	20%	75% siltstone 10% mafic volcs 10% felsic intrusive	medium	low	35		10
K30	567349	5250650	Sept 18/03	1192969	Dane	41P/8	top of small hill	Mixed Forest	>1 m	0.2-0.5		none	cream brown	unoxidized clayey silt	<1%		low	low	40		10
K31	563580	5253325	Sept 18/03	1192979	Van Nostrand	41P/8	top of small hill, 300 m south of target KL-19	Mixed Forest	>1 m	0.5-0.7		none	tan brown	unoxidized sandy silt	15%	100% siltstone	high	low	35		10
K32	568431	5253600	Sept 18/03	1192956	Klock	41P/8	top of a small plateau, clear cut area	none	>1 m	0.1-0.4	several large boulders of siltstone & granite	none	Khaki brown	oxidized silt (damp)	1-5%	angular siltstone	low	med to high	20	2	10
K33	566031	5254203	Sept 19/03	1192950	Klock	41P/8	clear cut	none	>1 m	0.4-0.9		none	light orange brown	oxidized sandy silt	15%	75% siltstone 10% mafic volcs, 10% felsic intrusive	medium	medium	25		10
K34	565790	5257571	Sept 20/03	3001469	Klock	41P/8	top of hill, east of Klock Lake, east side of lake large angular granite boulders	Mixed Forest	<1 m	0.4-0.7		none	light brown	unoxidized silt	<1%	granite pebbles	medium	low	30		10
K35	565557	5253032	Sept 19/03	1192975	Klock	41P/8	clear cut area	none	>1 m	0.4-0.9	laminated siltstone boulders everywhere	none	tan-light orange brown	oxidized sandy silt	30%	75% siltstone, 10% mafic volcs, 10% felsic intrusive	high	medium	25	2	10
K36	566389	5256156	Sept 20/03	1192960	Klock	41P/8	southern edge of the crest of a hill	Mixed Forest	>1 m	0.3-0.55		none	khaki brown	oxidized silt	20% subrounded	siltstone, hard pan till & minor granite	medium	medium	40	1	10
K37	566612	5255049	Sept 19/03	1192960	Klock	41P/8	clear cut area, sample taken on cut slope of small mound	none	>1 m	1		none	light orange brown	oxidized sandy silt	30%	40% siltstone, 40% felsic intrusive and 20% mafic volcs	medium	medium	15		10
K38	564537	5255745	Sept 20/03	3001464	Klock	41P/8	top of hill	Mixed Forest (local white pines)	<1 m	0.1-0.25	basal till on top of granite bedrock	none	light khaki brown	oxidized silt	3% round pebble to local boulders	granite	low	medium	10		10
K39	567629	5255430	Sept 19/03	1192959	Klock	41P/8	clear cut area, sample taken on cut slope of small mound	Spruce and replanted jackpine	>1 m	0.4-0.85		none	grey to tan brown	unoxidized sandy silt	30%	no description	high	none	30		10
K40	561453	5255273	Sept 20/03	3001466	Van Nostrand	41P/8	flat plateau	Mixed Forest (birch, tag maple & pine)	<1 m	0.2-0.5	hard pan till hit at 50 cm	none	Khaki brown	oxidized silt	10% round	granite and till clasts	med to high	low to med	30	2	10
K41	568439	5255992	Sept 19/03	1192959	Klock	41P/8	edge of clear cut area	Mixed Forest	>1 m	0.4-0.85		none	tan to orange brown	oxidized sandy silt	15%	50% siltstone, 30% felsic intrusive, 10% mafic volcs	medium	medium	30	1	10
K42	564114	5251296	Sept 20/03	1192967	Van Nostrand	41P/8	top of broad plateau	Spruce Forest	<1 m	0.1-0.3	basal till right on top of siltstone outcrop	none	cream brown	unoxidized silt	3-5%	pebble size angular siltstone	low	low	30		10
K43	565753	5256890	Sept 20/03	3001469	Klock	41P/8	top of hill start of plateau	Mixed Forest (white pine & birch)	>1 m	0.4-0.85		none	dark brown	oxidized sandy silt	15%	50% siltstone, 30% felsic intrusive, 20% mafic volcs	high	medium	30		10
K44	570111	5252972	Sept 20/03	1192972	Klock	41P/8	top of plateau	Mixed Forest (mostly spruce, minor birch)	>1 m	0.2-0.45	70 m to west large siltstone outcrop	none	cream brown	unoxidized silt	15%	angular siltstone	low	low	30		10
K45	563537	5256319	Sept 20/03	3001465	Van Nostrand	41P/8	top of mound west of swamp	Mixed Forest	1-2 m	0.5-1	5 m southeast epidotized granite	none	tan brown	oxidized sandy silt	20%	50% seds, 35% felsic intrusive, 15% mafic volcs/diabase	medium	medium	40	2	10
K46	561459	5248780	Sept 20/03	1192963	Leo	41P/8	top of hill	Mixed Forest	1 m	0.2-0.6		none	brown	oxidized silt	30%	angular siltstone boulders	low	medium	40		10
K47	563197	5255172	Sept 20/03	3001465	Van Nostrand	41P/8	plateau, south of small lake	Mixed Forest	<1 m	0.4-.65	basal till on top of bedrock (granite or mafic volc)	200?	brown	oxidized sandy silt	30%	50% felsic intrusive 40% sediments 10% other	high	medium	30		10
K48	570146	5256055	Sept 20/03	1192958	Klock	41P/8	edge of clear cut area northeast of lake	none	>1 m	0.35-0.65		none	brown	oxidized sandy silt	10-15%		high	medium	25		10
K49	562103	5256147	Sept 20/03	3001466	Van Nostrand	41P/8	top of long gradual slope	Mixed Forest (white pine, tag maple, birch)	<1 m	0.5-0.7	basal till on top of silicified granite bedrock	none	tan brown (slight orange)	oxidized clayey silt	15% pebble size subangular to subrounded		medium	medium	40	1	10
K50	569976	5252165	Sept 20/03	1192972	Klock	41P/8	small plateau, north of swamp	Conifer Forest (minor birch)	>1 m	0.4-0.7		none	golden brown	unoxidized silt	10%	80% siltstone, 15% felsic intrusive, 5% mafic volcs	high	low	20		10
K51	566515	5251469	Sept 20/03	1192969	Klock	41P/8	200 m east-northeast of swamp	Mixed Forest (white pine & birch)	>1 m	1		none	golden brown	unoxidized sandy silt	20%	siltstone local boulders	medium	low	20		

**KLOCK TWP
AND AREA**

2.28006



- Outcrop or partially outcrop areas
- Snowmobile Access (current as of March 8, 2004)
- Drill Sites

April 19, 2004

Scale 1:50,000

500 0 500 Meters

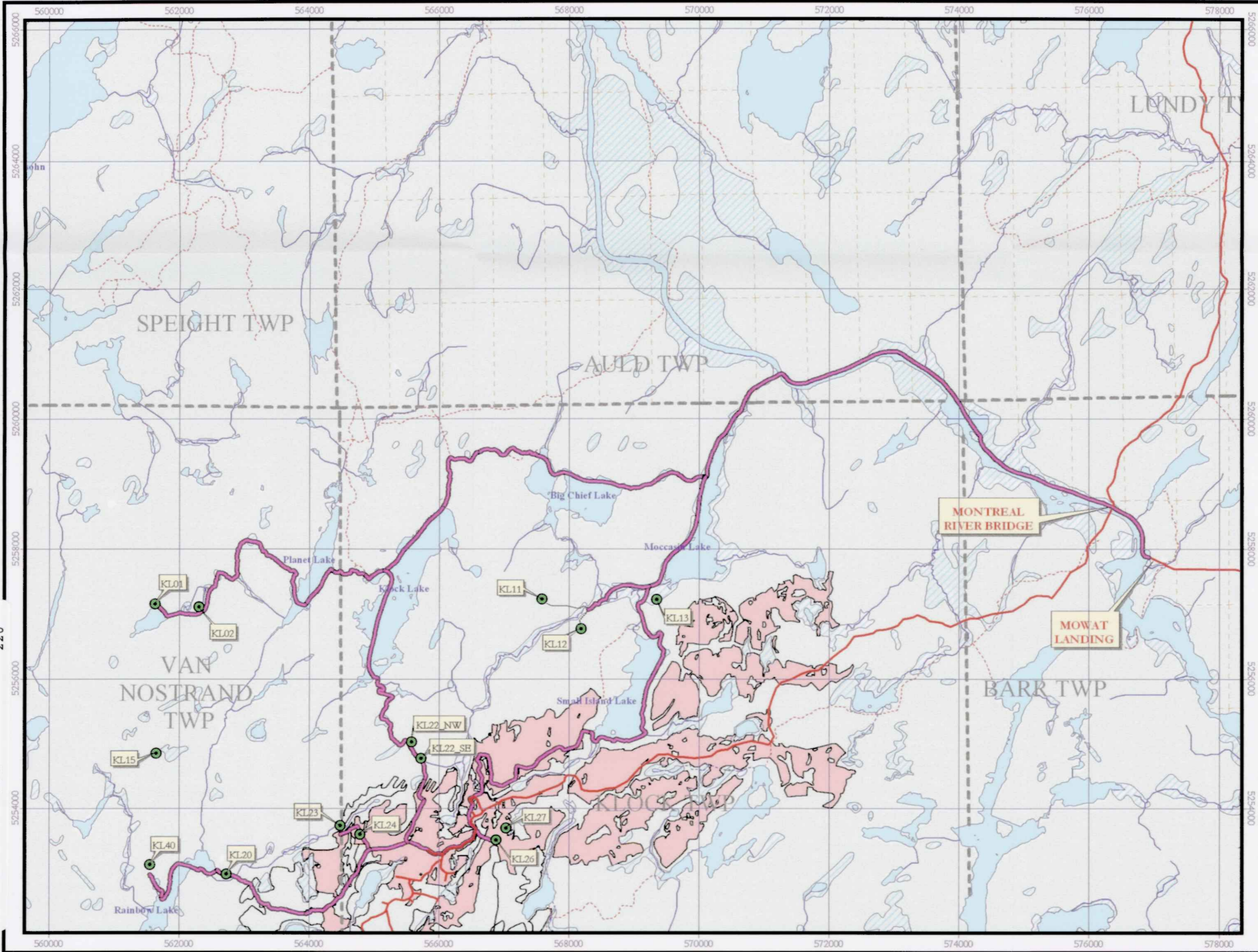
Coordinated are
in NAD 27, Zone
17 North.

Contour intervals
are 10 meters.



Produced by the Elk Lake
Community Forest (ELCF).

For additional copies or more
information call 1(705)678-2477



220

41P08NE2008 2.28006 KLOCK



● KL01-D1
(009/70)
156.4mEOH

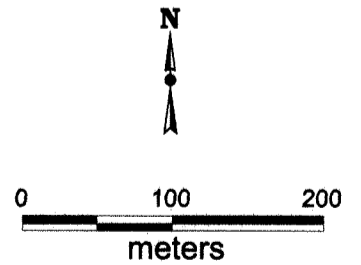
● KL02-1
(030/42)
78mEOH

3001467

LEGEND

- Diamond Drill Hole
- ⊙ Historical RC Drill Hole
- Sudbury Contact Mines Ltd. Unpatented Claim
- Road
- - - Trail
- River

2.28006



Sudbury Contact Mines Ltd.

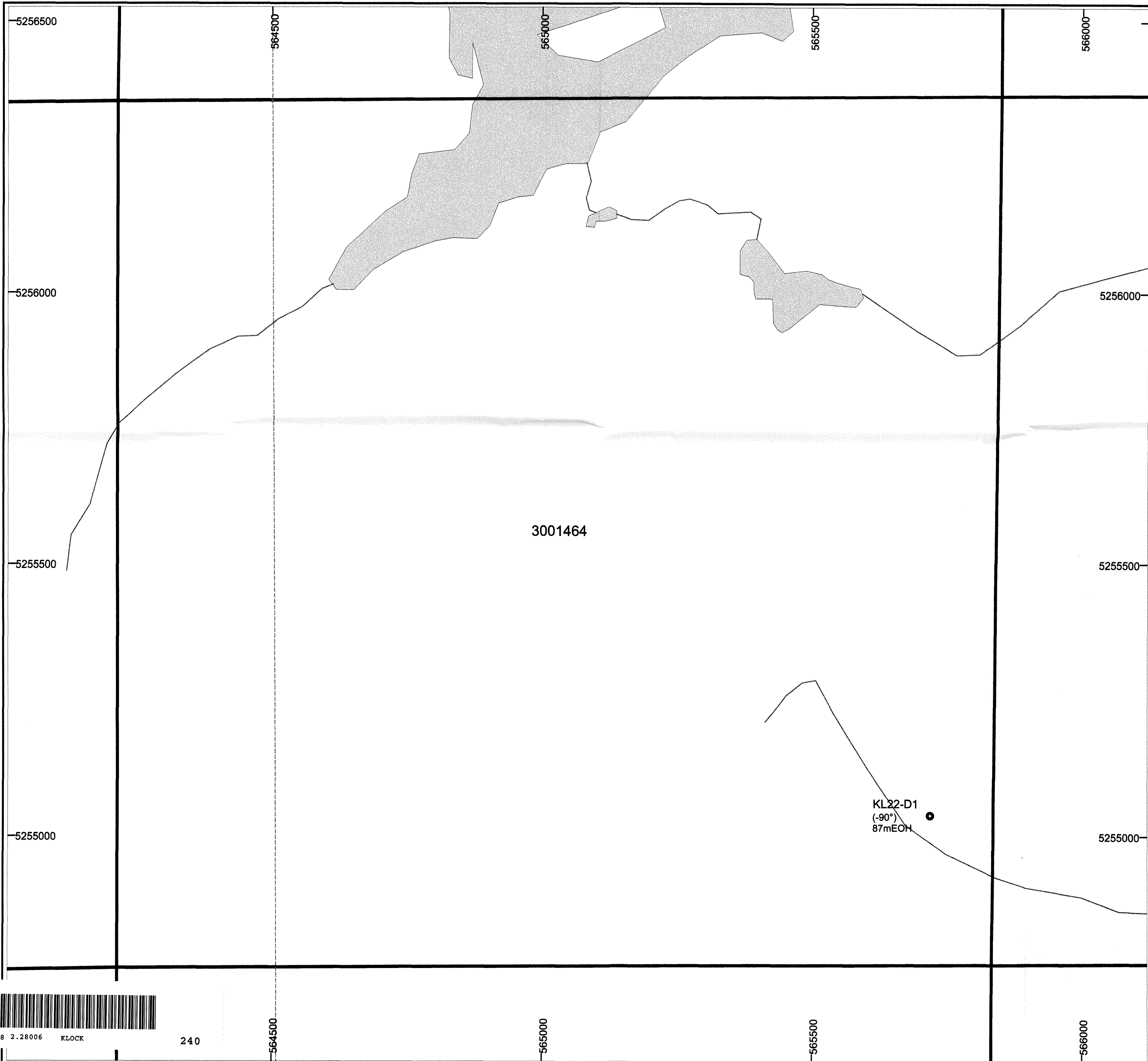
Timiskaming Diamond Project, Ontario

KLOCK PROPERTY
CLAIM NO. 3001467
DRILLING PLAN MAP

FILE: DrillPlan.wor	MAP NO.: 1
SCALE: 1:5000	DRAFTED: MC
PROJ.: UTM Zone17, NAD27	DATE: June 2004

MPH International Exploration & Mining Consultants
CONSULTING LIMITED

230
 41P08NE2008 2.28006 KLOCK



LEGEND

- Diamond Drill Hole
- ⊙ Historical RC Drill Hole
- Sudbury Contact Mines Ltd. Unpatented Claim
- Road
- - - Trail
- River

N

0 100 200
meters

Sudbury Contact Mines Ltd.

Timiskaming Diamond Project, Ontario
KLOCK PROPERTY
CLAIM NO. 3001464
DRILLING PLAN MAP

FILE: DrillPlan.wor	MAP NO.: 2
SCALE: 1:5000	DRAFTED: MC
PROJ.: UTM Zone17, NAD27	DATE: June 2004

MPH International Exploration & Mining Consultants
CONSULTING LIMITED

3001464

KL22-D1
(-90°)
87mEOH



41P08NE2008 2.28006 KLOCK

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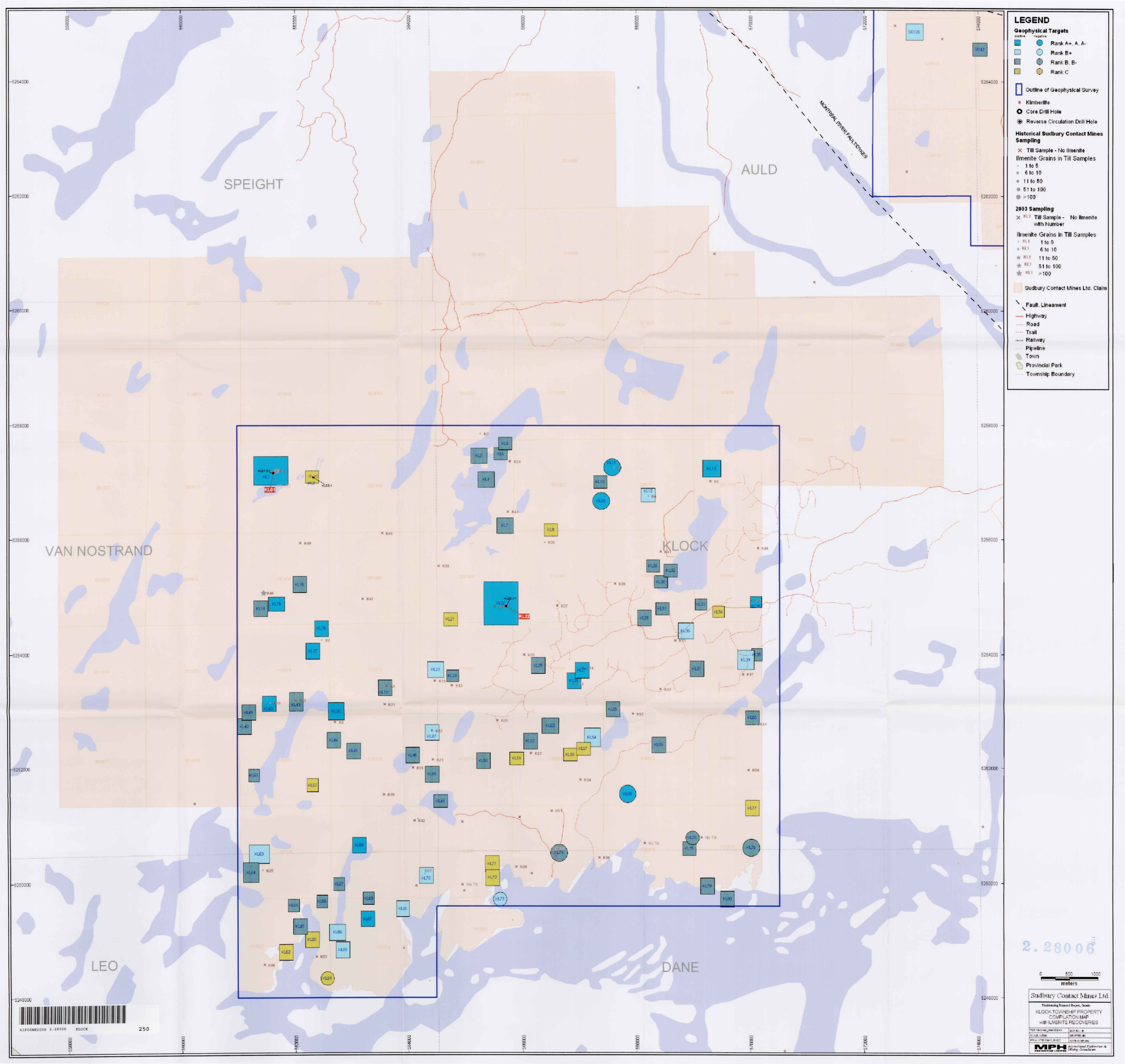
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LEGEND

Geophysical Targets

- Rank A+, A-
- Rank B+
- Rank B, B-
- Rank C

Outline of Geophysical Survey

Kimberlite

Core Drill Hole

Reverse Circulation Drill Hole

Historical Sudbury Contact Mines Sampling

Till Sample - No Ilmenite

Ilmenite Grains in Till Samples

- 1 to 5
- 6 to 10
- 11 to 50
- 51 to 100
- >100

2003 Sampling

Till Sample - No Ilmenite with Number

Ilmenite Grains in Till Samples

- KL1 1 to 5
- KL1 6 to 10
- KL1 11 to 50
- KL1 51 to 100
- KL1 >100

Sudbury Contact Mines Ltd. Claim

Fault, Lineament

Highway

Road

Trail

Railway

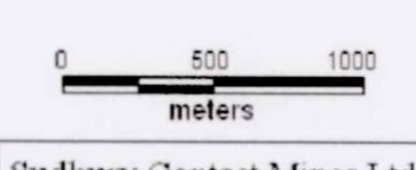
Pipeline

Town

Provincial Park

Township Boundary

2.28006



Sudbury Contact Mines Ltd.

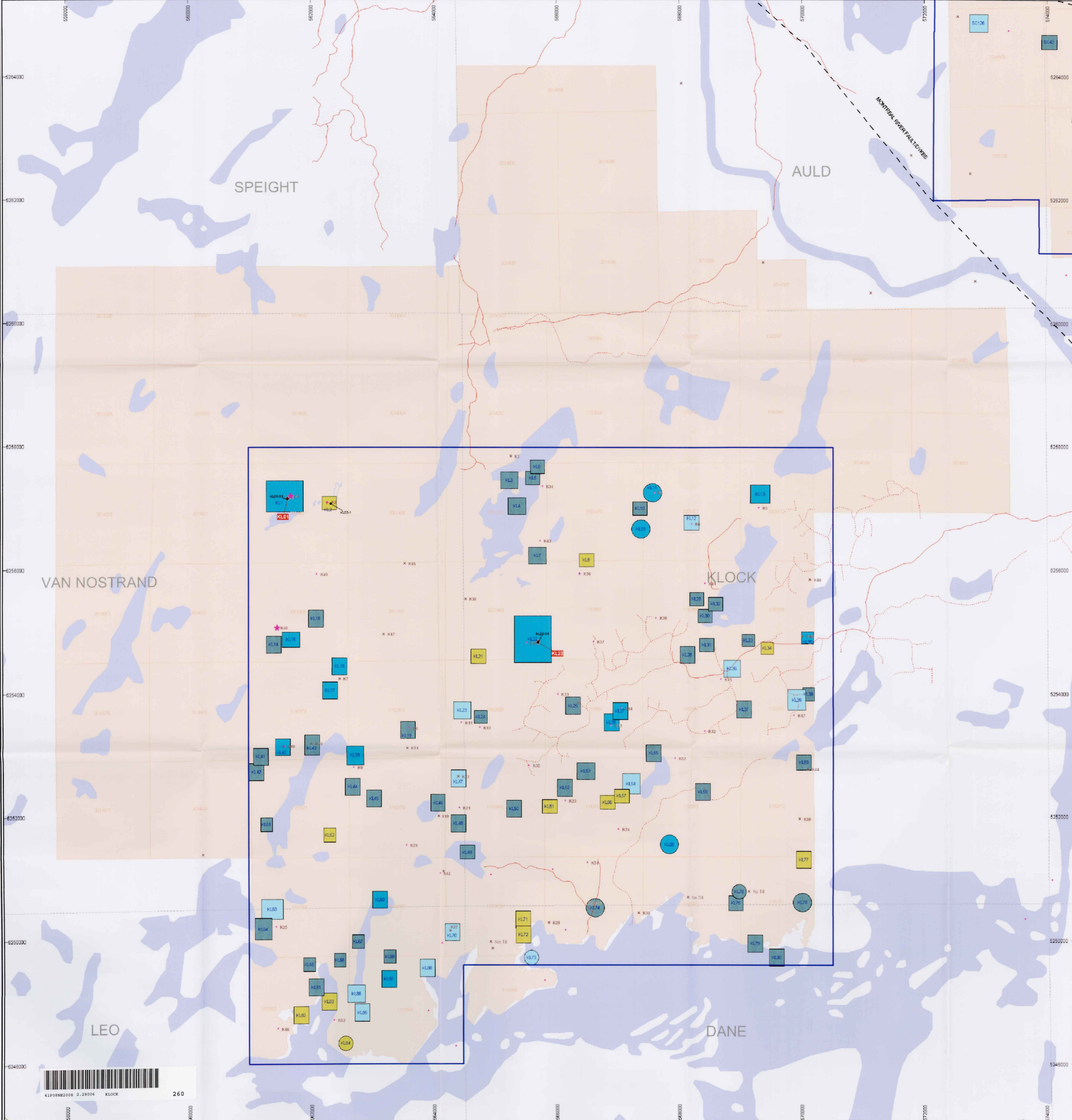
Technical Drawing Project, Osoyoos

KLOCK TOWNSHIP PROPERTY
COMPILATION MAP
WITH ILMENITE RECOVERIES

FILE NUMBER: 2008-02-28006	DATE: 02/28/08
DRAWN BY: J. D. H. / J. D. H.	CHECKED BY: J. D. H. / J. D. H.
SCALE: 1:50,000	DATE: 02/28/08

MPH
Mining Professionals & Engineers Inc.





LEGEND

Geophysical Targets

- Rank A+, A, A-
- Rank B+
- Rank B, B-
- Rank C

Outline of Geophysical Survey

Kimberlite

Core Drill Hole

Reverse Circulation Drill Hole

Historical Sudbury Contact Mines Sampling

Till Sample - No Pyrope

Pyrope Grains in Till Samples

- 1 to 5
- 6 to 10
- 11 to 50
- 51 to 100
- >100

2003 Sampling

Till Sample - No Pyrope with Number

Pyrope Grains in Till Samples

- KL1 1 to 5
- KL1 6 to 10
- KL1 11 to 50
- KL1 51 to 100
- KL1 >100

Sudbury Contact Mines Ltd. Claim

Fault, Lineament

Highway

Road

Trail

Railway

Pipeline

Town

Provincial Park

Township Boundary



2.28006

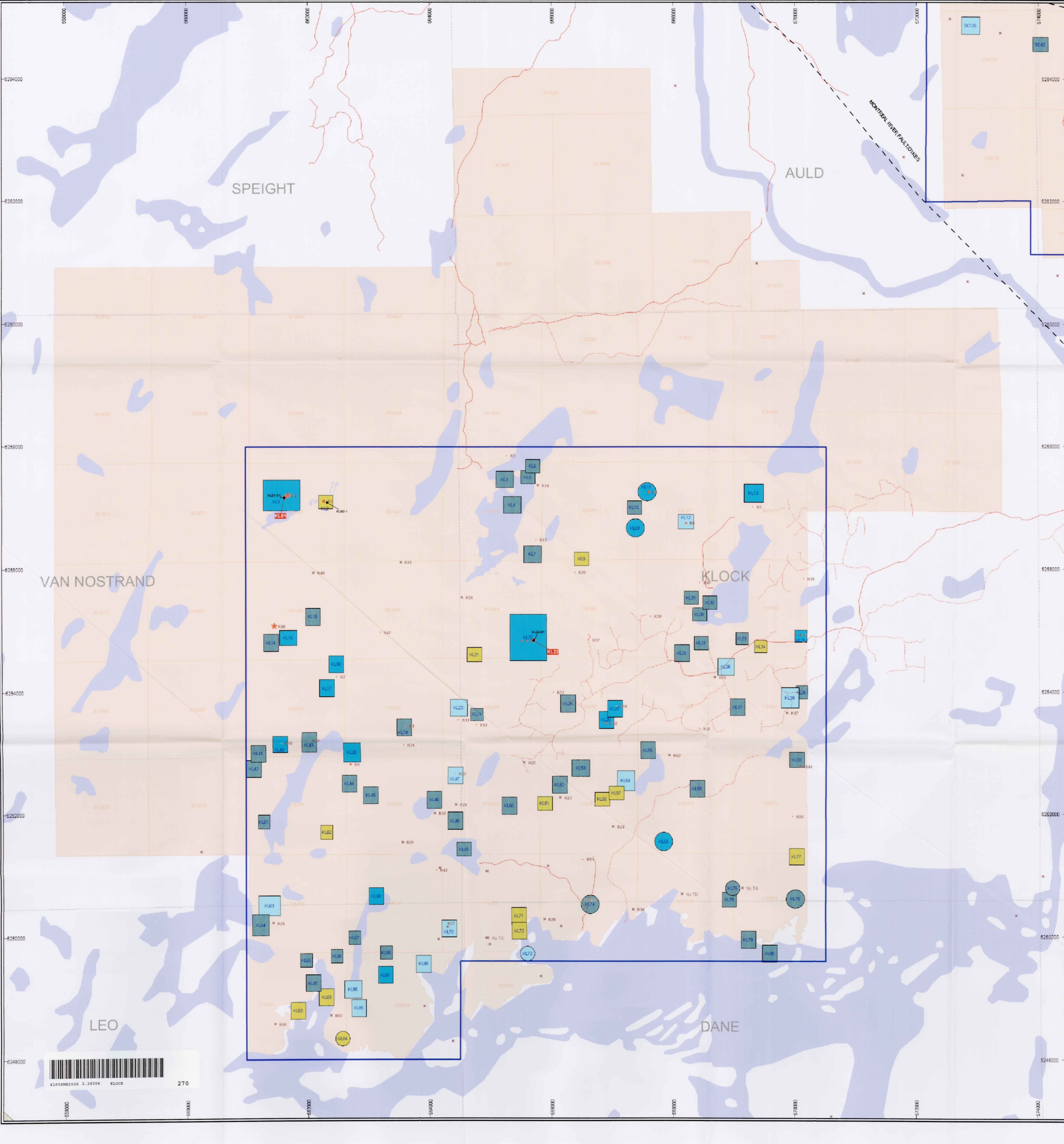
0 500 1000 meters

Sudbury Contact Mines Ltd.

2008-08-20

KLOCK TOWNSHIP PROPERTY
COMPLIATION MAP
with PYROPE RECOVERIES

MPH



LEGEND

Geophysical Targets

- Rank A+, A, A-
- Rank B+
- Rank B, B-
- Rank C

Outline of Geophysical Survey

Kimberlite

Core Drill Hole

Reverse Circulation Drill Hole

Historical Sudbury Contact Mines Sampling

- Till Sample - Not Analyzed for Chromite

2003 Sampling

- Till Sample - No Chromite with Number

Chromite Grains in Till Samples

- KL1 1 to 5
- KL1 6 to 10
- KL1 11 to 50
- KL1 51 to 100
- KL1 >100

Sudbury Contact Mines Ltd. Claim

Fault, Lineament

Highway

Road

Trail

Railway

Pipeline

Town

Provincial Park

Township Boundary

419082008 2.28006 KLOCK 270

2.28006

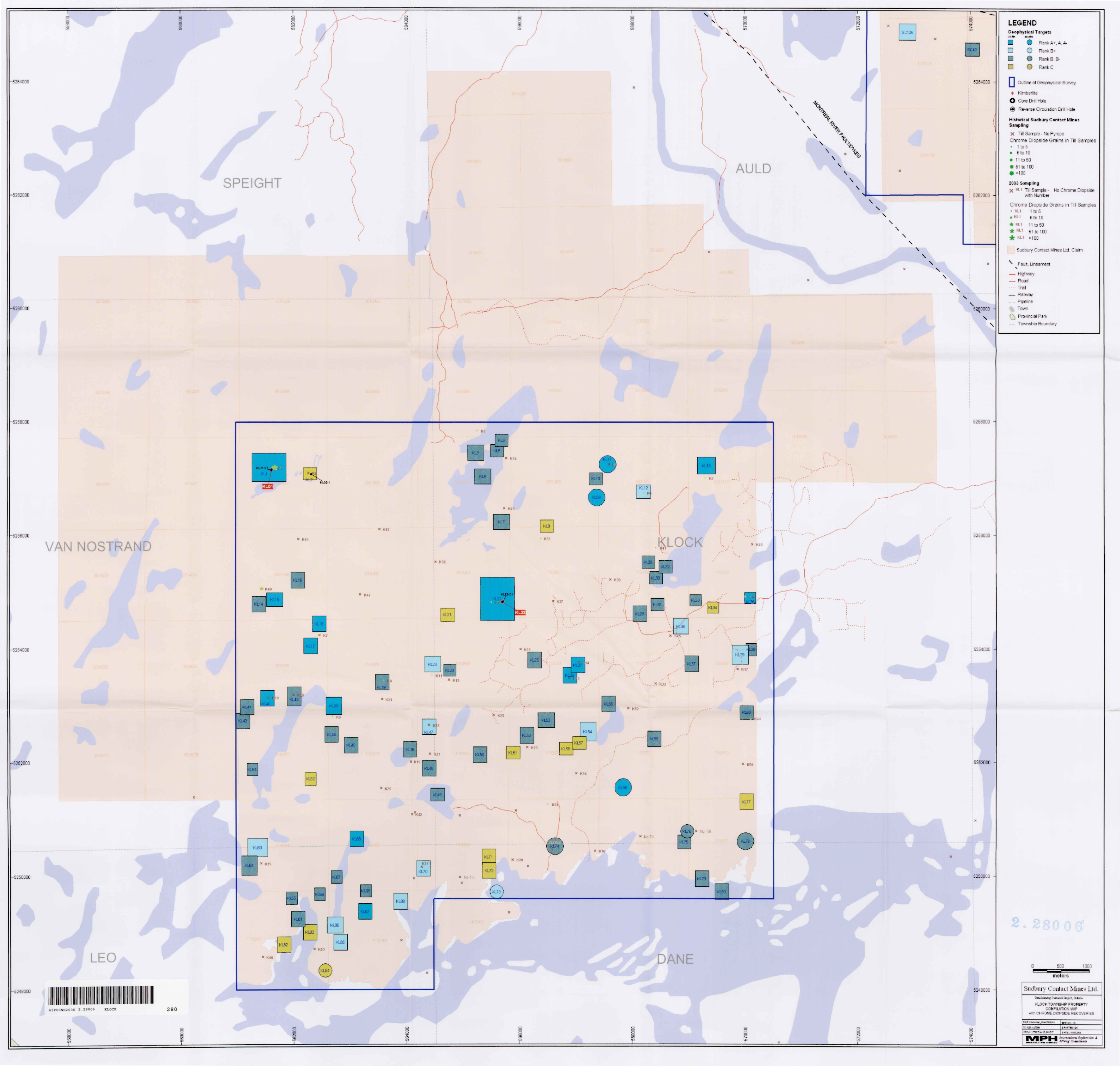
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meters

Sudbury Contact Mines Ltd.

2.28006

KLOCK TOWNSHIP PROPERTY
COMPLIATION MAP
WITH CHROMITE RECOVERIES

MPH
Municipal Engineer &
Geological Consultant



LEGEND

Geophysical Targets

- Rank A+, A, A-
- Rank B+
- Rank B, B-
- Rank C

Outline of Geophysical Survey

- Kimberlite
- Core Drill Hole
- Reverse Circulation Drill Hole

Historical Sudbury Contact Mines Sampling

- Till Sample - No Pyrope
- Chrome Diopside Grains in Till Samples
 - 1 to 5
 - 6 to 10
 - 11 to 50
 - 51 to 100
 - >100

2003 Sampling

- Till Sample - No Chrome Diopside with Number
- Chrome Diopside Grains in Till Samples
 - KL1 1 to 5
 - KL1 6 to 10
 - KL1 11 to 50
 - KL1 51 to 100
 - KL1 >100

Sudbury Contact Mines Ltd. Claim

Fault Lineament

- Highway
- Road
- Trail
- Railway
- Pipeline
- Town
- Provincial Park
- Township Boundary

VAN NOSTRAND

SPEIGHT

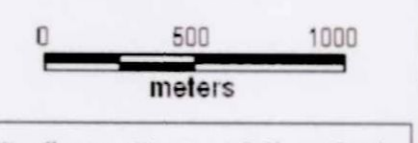
AULD

KLOCK

LEO

DANE

2.28006



Sudbury Contact Mines Ltd.

Tracing & Survey Dept., Ontario
 KLOCK TOWNSHIP PROPERTY
 COMPLETION MAP
 WITH CHROME DIOPSIDE RECOVERIES

PREPARED BY: [Name]	DATE: [Date]
CHECKED BY: [Name]	DATE: [Date]
APPROVED BY: [Name]	DATE: [Date]

MPL Professional Engineer & Geologist