Mattawa B, Discovery Hill & Tower Lake Areas TRENCHING PITTING & STRIPPING REPORT

Mattawan Twp. Ontario, Canada



Prepared by:

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March 15, 2005

Cover:

The cover illustrates the stripping done at the face of the Mattawa B showing, described as area S2 in the text of this report.

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Trenching Pitting and Stripping Report – Mattawan Twp

Contents GENERAL GEOLOGY......10 DESCRIPTION OF WORK PROGRAM UNDERTAKEN.......11 OUTLINE OF PROGRAM RESULTS.......12 New Logging Road Examinations 12 Float Study. 12 CERTIFICATE......22 APPENDICES......23

Maps

Map	1	Index Map		4
Map		Grid Locations		
Map	3	Map Area Locations		7
Map	4	Property Ownership		8
Map	5	Mattawa B Stripped Areain		
Map	6	Mattawa B Stripped Detailin	back	pocket
Map	7	Discovery Hill Stripped Areain	back	pocket
Map	8	Discovery Hill Stripping Detailin	back	pocket
Map	9	Tower Lake Stripped Area Indexin	back	pocket
Map	10	Tower Lk Oct 10 Traversein	back	pocket
Map	11	Tower Lk Oct 12 Traversein	back	pocket
Map	12	Tower Lk Garnetite Areain	back	pocket
Map	13	Tower Lk Garnetite Detailin	back	pocket
Map	14	Tower Lk Roadside Pit Areain		
Map	15	Map Indexin	back	pocket

Trenching Pitting and Stripping Report – Mattawan Twp

INTRODUCTION

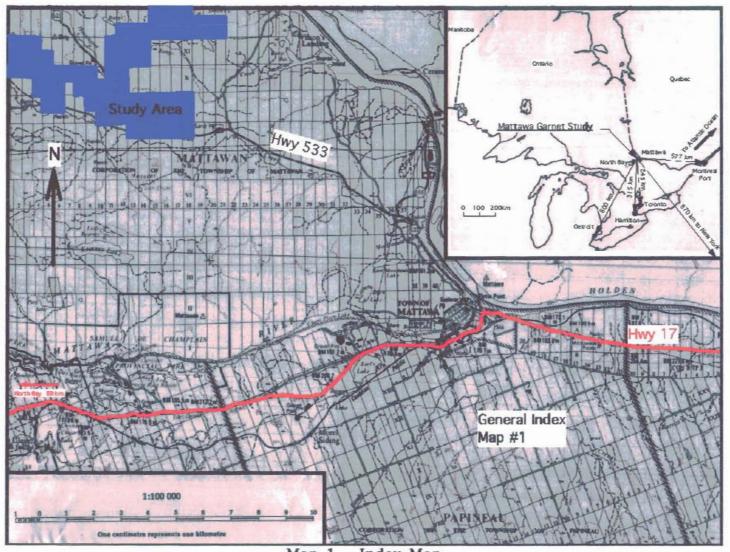
In August 2004, Bob Komarechka, Geologist, was contracted by BMCTBG to conduct localized mapping, collect samples, undertake stripping, pitting, trenching and prepare a report on their Mattawa property covering 28 unpatented claims totaling 67 units of 20 hectares each. This work was undertaken over three areas labeled: the Tower Lake Area, the Discovery Area and the Mattawa B area (see Area Locations Map #3). The location of this work was tied to three separate grids cut at different times over these areas; these being the Mattawa B Grid, The Discovery Hill Grid and the Tower Lake grid. A fourth grid was cut earlier by Hudson Bay Exploration and Development Company Limited - HBED (see Grid Locations Map #2). Three map areas were studied in this program (see Area Locations Map #3), these being labeled: The Tower Lake Area, The Discovery Hill Area, and The Mattawa B Area. Within these areas Maps 5, 7 and 14 show the specific areas of stripping.

This field work was undertaken from September 30, 2004 to Oct. 30, 2004. Further office work followed to the completion of this report on March 15, 2005. Interpretation of previous core logging and digitizing of previous exploration work was also digitally merged with the newly collected to allow for further interpretation.

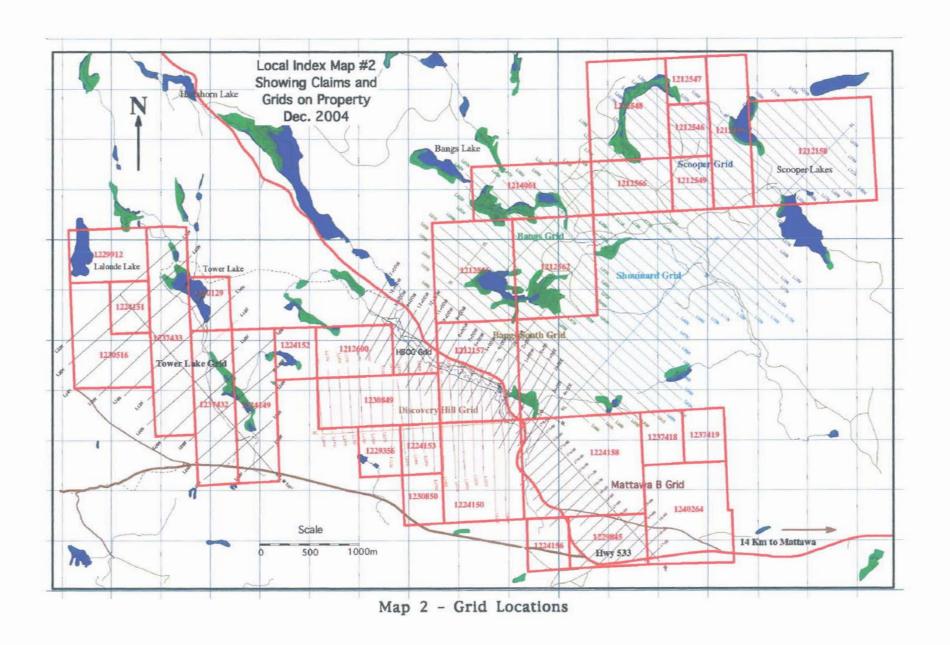
LOCATION & ACCESS

The study area is located in northwestern Mattawan township bounded in the northeast by Smith Lake, the northwest by Lalonde Lake, the southwest by Harrington Creek. The general location is shown on the General Index map 1. The site is located within Sudbury Mining Recorders District centered at a latitude of 46°23' N and longitude of 78° 52'E. The extent of this work being centered at UTM NAD83 co-ordinates 662000mE and 5139000mN. The area is located on the Mattawa NTS sheet 31L/7.

Access to the center of the area is obtained by taking highway 533 approximately 16 km north of the town of Mattawa. Highway 533 bisects the property with the Discovery Hill and Tower Lake Map sheets to the west and the Mattawa B sheet to the East. Numerous secondary roads and trails traverse the property.



Map 1 - Index Map

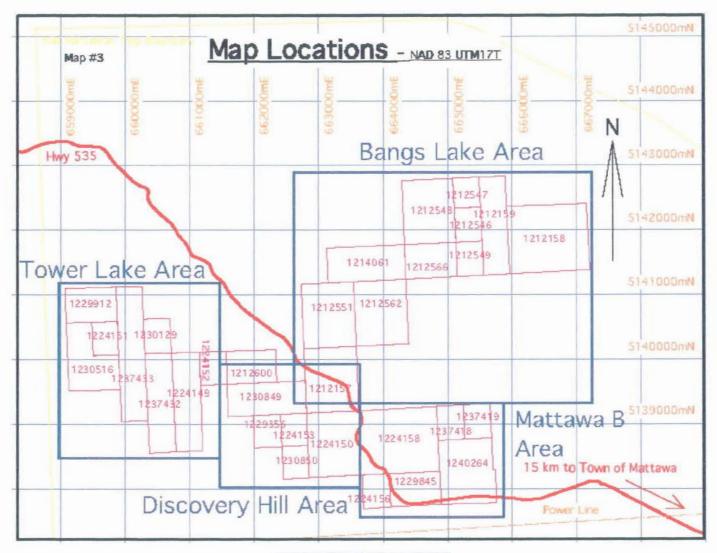


MINING CLAIMS EXAMINED

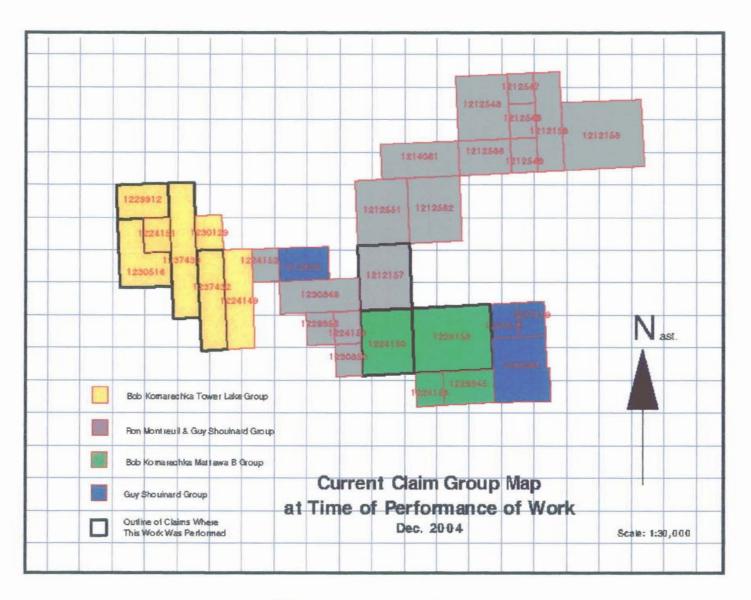
This work was performed on the three underlined map areas shown on the table below with the contiguous claims in the area. Earlier expired claims are shown in yellow. Claims on which work was done being shown in green.

Table 1: Mattawan Garnet Claims									
Map Area	Grid Area	Claim #	Initial Ownership	Ownership 03/27/00	Area Hectares	No. of Units			
	Tower Lake Grid	S 1224149	BK, RM, GS	BMCTBG	60	3			
		S 1224151	BK, RM, GS	BMCTBG	20	1			
Tanas I ala		S 1229912	BK, RM, GS	BMCTBG	40	2			
Tower Lake		S 1230129	BK, RM, GS	BMCTBG	20	1			
Map Area		S 1230516	BK, RM, GS	BMCTBG	60	3			
		5 1237432	BK, RM, GS	BMCTBG	60	3			
		5 1237433	BK, RM, GS	BMCTBG	80	4			
De la Company	Discovery Hill Grid	S 1212157	RM, GS	BMCTBG	80	4			
		S 1212600	GS	BMCTBG	40	2			
		S 1224150	BK	BMCTBG	80	4			
Discovery		S 1224152	RM, GS	BMCTBG	20	1			
Hill Map Area		S 1224153	RM, GS	BMCTBG	20	1			
		S 1229356	RM, GS	BMCTBG	20	1			
		S 1230849	RM, GS	BMCTBG	40	2			
		S 1230850	RM, GS	BMCTBG	20	1			
	Bangs S Grid	S 1212551	RM, GS	BMCTBG	80	4			
		S 1229360	GS	GS	80	4			
	Bangs Grid	S 1212562	RM, GS	BMCTBG	80	4			
		S 1214061	RM, GS	BMCTBG	60	3			
		S 1212566	RM, GS	BMCTBG	40	2			
	Schouinard	S 1237417	GS	GS	80	4			
Bangs Lk	Grid	S 1191935	RM, GS	RM,GS	200	10			
Map Area	Scooper Grid	S 1212158	RM, GS	BMCTBG	120	6			
Claims not in		S 1212159	RM, GS	BMCTBG	40	2			
this study		S 1212546	RM, GS	BMCTBG	20	1			
		S 1212547	RM, GS	BMCTBG	20	1			
		S 1212548	RM, GS	BMCTBG	80	4			
		S 1212549	RM, GS	BMCTBG	20	1			
	Schouinard E. Grid	S 1237418	GS	BMCTBG	20	1			
		S 1237419	GS	BMCTBG	20	7			
5.5.7年的第三节点		S 1240264	GS	BMCTBG	80	4			
Mattawa B	Mattawa	S 1224156	BK	BMCTBG	20	1			
Map Area	Grid	S 1224158	BK	BMCTBG	120	6			
HIGH ALCO		S 1229845	BK	BMCTBG	40	2			
3 Stripped	7 Grid	28 Current			1320	67			
Areas	Areas	Claims			На.	units			

INITIAL OWNERSHIP CODE: BK: Robert G. Komarechka, RM: Ron Montreuil, GS: Guy Shouinard



Map 3 - Area Locations



Map 4 - Property Interests

SUMMARY of PREVIOUS EXPLORATION WORK

The earliest work on this property consisted of numerous pits, trenches and a small adit, made with hand steel, constructed by persons unknown a few hundred meters south of the western edge of the Bangs Grid on claim 1224158. From conversations with local prospectors¹, these trenches were made several decades ago in the pursuit of gold.

Government regional geological compilations were also done by Harding (1944) and Lumbers (1976), covering this area for basic bedrock geology, and Harrison (1971), for surficial geology.

The areas around the western edge of the Bangs Grid, Bangs South Grid, and the eastern edge of the Discovery Grid, was staked by Hudson's Bay Exploration and Development Co. Ltd. This occurred after having heard of anomalous gold values from an earlier stream geochemical survey (undertaken by Monopros looking for diamonds). An exploration program designed to target gold consisted primarily of a VLF-EM survey, percussion overburden drilling and three diamond drill holes (Davies, 1986; 1987). Further gold anomalies were encountered in overburden including 3 basal till samples exceeding 50 ppb Au, with a high of 345 ppb Au. Believing this gold to be placer and derived from distant sources, the claims were allowed to lapse. The diamond drilling on this program reported intersecting significant thicknesses of 'garnetiferous gneiss'. This core is currently stored at the outside Drill Core Library, near Kirkland Lake, Ontario.

In the fall of 1992 while prospecting for diamonds, the author, recognizing the eclogitic garnet, staked claim S1197395 and claim S1197394 just south of the western end of the Bangs South Grid. These claims consisted of one 2x3 unit (since expired and now restaked as claim S1224158) and claim S1197394, a 1x2 unit (now restaked as claim S1229845). During the summer of 1993 this author undertook a partial reconnaissance mapping of the various ultramafic rocks on the Mattawa B site and prepared several thin sections. Analysis determined the olivine by both thin section and XRD as of hortonolite composition. Some samples were assayed a hand cobbled eclogite sample of 800# was crushed and screened resulting in successful beneficiation (by panning) of the garnets. (This work was undertaken by Cambrian College supervised by this author). See OPAP report OP93-685 pg. 34-39 for more information on this.

A further program involving linecutting followed by a VLF, total and gradient magnetometer survey as well as thin section analysis, was undertaken during 1994. The geophysical surveys confirmed the lithological contacts observed and outlined. A very strong coincident high magnetic and conductive anomaly was located on this property. (See OPAP report OP94-302 Sec. 1 for more information on this work). Following this work a test of the -10 to +12 mesh unbeneficiated garnetiferrous rock was tested as a non-silica sandblast material with very favorable results. Total liberation of the garnets from the host rock was achieved below 12 mesh. A further evaluation of the mineral potential of the metatroctolite on the staked ground was undertaken in 1995. This evaluation consisted of the collection of numerous surface samples followed by whole rock and multi-element analysis. No significant metal values were obtained from this last study. See OPAP report OP95-269. (Komarechka 1994, 1995, 1996, 1997, Stoness, 1995).

¹ Personal Communication with Guy Shouinard, local prospector and adjacent claimholder

A series of prospecting reports, line cutting and physical work reports of scrapings were conducted by the prospectors Guy Schouinard and Ron Montreuil over much of the study area (Shouinard 1997, 1998, 2000). The assessment reports for this work is located in the Sudbury Resident Geologist's files.

A point count and thin section study was conducted on garnet samples collected from the Discovery Hill Area and also from the area just south of the Bangs South Grid. At the same time a localized magnetometer survey was also undertaken in this area as well (High G Minerals Corporation, 1999, located in the Sudbury Resident Geologist's files).

A percussion drill program was undertaken on claim 1224158 on the Mattawa B property just south of the Bangs South Grid while held by High G Minerals Corporation. This program which included microscopic examination of the chip samples defined an extensive resource of garnetiferous eclogite grading 30% garnet (Komarechka 1999).

A magnetometer VLF survey was conducted over the east half of the Tower Lake Grid. (Komarechka 2000).

A magnetometer VLF survey was conducted over the Bangs Grid. (Laronde 2000)

A magnetometer VLF survey was undertaken over the west half of the Tower Lake Grid. (Komarechka 2000).

A magnetometer survey was conducted over the Discovery Hill Grid. (Laronde 2002).

Magnetometer VLF surveys were conducted over the Bangs South Grid, the Schouinard Grid and the Scooper Grid. (Shouinard, Montreuil 2002).

An extensive geological mapping program was conducted over the claims - excluding the Mattawa B claims, during the summer and fall of 2001 and later submitted as assessment work. (Komarechka 2002)

GENERAL GEOLOGY

Regionally the study area occurs in the Grenville province within an E-W to N-S folded band of ortho and paragneisses of amphibole to granulite facies. Areas of intrusive gabbroic, ultramafic and eclogitic rocks also exist in the study area. A later structural overprint of the NNW trending Temiscaming rift structure occurs in the area.

Outcrop is locally common on the higher elevation and steeper areas while extensive overburden is prevalent in the lower elevations and flatter areas. Forest cover is primarily maples and beech with birch in the lower wetter areas. Pine and spruce also occur in the more rugged and unlogged areas. For detailed geology see the earlier geological report, Komarechka 2002.

DESCRIPTION OF WORK PROGRAM UNDERTAKEN

The program was undertaken in 3 phases. Appendix 1 described the daily activities undertaken in the field.

Phase 1 consisted of locating, briefly logging and correlating the geology from archived core drilled on the property to the previous mapped geology. The core description stated significant garnet content. This core originally drilled by Hudson's Bay Exploration and Development Co. Ltd. was found located in the MNDM outdoor core storage area west of Kirkland Lake. The core was laid out and holes 1, 2 and part of 3 was examined. Hole 3 was partially studied from the edge of the core box as the palette on which they were stacked was leaning dangerously. The laid out core was digitally photographed (see Appendix 2) and compared to the existing logs. Notes were taken to describe the garnet content in more detail (see Appendix 3). Map 7 shows the location of these holes in relation to the current work.

Phase 2 involved field mapping, site examination and sample collection on the Mattawa Property to:

- determine the best location for stripping and pitting to best enhance the extent, quality and grade of the garnets present, as well as follow up of known garnet float.
- to examine further areas not studied in the earlier mapping and
- to investigate for any dimension stone potential.

A total of 28 field samples, mostly garnet bearing, were also collected, studied under a stereomicroscope and described in Appendix 6. Three of these samples were collected and later cut to help determine their dimension stone potential.

Phase 3 consisted of a stripping, trenching and pitting program followed by mapping of these areas. In many cases the deeper and less geologically significant pits were filled in for safety reasons. A total of 26 pits, 3 trenches and 18 stripped areas were prepared and mapped. These locations are shown on Maps 6-15 and tabled in Appendix 7. Two of the stripped areas S2 and S12 were stripped with the potential of them being later bulk sampled. The stripping locations were tied to the previous grids in the area and also GPS'd. Digital photos of these areas (see Appendix 4) were taken at locations as indicated by portions of their photo numbers matching the sites. Samples were also collected from some of these sites as shown on Maps 6-15 and described in Appendix 6. Appendix 5 describes the notation used in the sample labeling.

Mapping was undertaken in gridded waterproof field notebooks at a scale of 1: 2,000 and were later scanned and digitally copied on a NAD 83 17T UTM registered digital Ontario Base Map with claim fabric of the area purchased from MNDM. Locations of stations on lines nearby were GPS'd and downloaded on the registered digital map base to confirm locations.

During this program, from September to the end of October, accommodation was obtained at a local motel in Mattawa. Access to the site was obtained by the use of a 4 wheel drive vehicle and the use of a quad on the access trails

Later digital and interpretive work was carried out periodically from November 2004 to March 17, 2005. This consisted of layering of previous digital data with the new mapping. This work and the vector image layered maps were prepared

using the application VectorWorks. Due to the widespread location of this work several maps were prepared for each of the three stripped areas, those being, The Mattawa B Area, The Discovery Hill Area and The Tower Lake Area. The current budget precluded examination of other prospective areas.

OUTLINE of PROGRAM RESULTS

The program undertaken has allowed for better delineation and understanding of several of the more accessible major garnet bodies on the property. A cursory look of the potential dimension stone resources was also undertaken. These details are described below.

PHASE 1: CORE STUDY

The results of the archived Hudson Bay core study has revealed that the core had been cut in feldspathic paragneiss previously described as Unit 1 in earlier mapping on the area (Komarechka 2002). The garnets present were of a 6 mm to 1.5 mm size and found in very sparse concentrations (10%) with local concentrations of up to 25% over several meters (see photos of the middle of Core 3 in appendix 2. No evidence of any eclogite or gabbro was noted in the core. A thin lamprophyre dike not previously noted was observed in core 3.

No garnet concentrations of any significance was noted in the core examined. Appendix 2 contains photos of this core while Appendix 3 contains further log information on this core.

PHASE 2: FIELD RECONNAISSANCE STUDY

A cursory field examination was undertaken on site to:

- 1. Determine the extent and location of roads recently constructed and any new exposures of garnetiferous rock.
- 2. Follow up to try and locate the source of garnetiferous float found in the Tower Lake area
- 3. Determine the extent of garnetiferous rock in the NW of the Tower Lake Area. This area was previously only crudely mapped.
- 4. Locate areas for potential stripping to best understand the extent of the garnetiferous rocks in selected areas optimizing the existing budget

New Logging Road Examination

New logging roads were constructed on the Mattawa B area over the last two years. These roads were located using GPS on a quad and outcrops along their route were described. These are shown on Map 5. Further examination along skidder trails were partially undertaken. No major new discoveries or extensions of garnetiferous rock were exposed along the examined roads or trails.

Float Study

Several days were spent examining two areas of garnetiferous rock float. The first of these was the eclogite float found at the south end of the Tower Lake group near the intersection of the Olrig Logging Access Road and line 4N. Despite extensive searching in the area no bedrock source of the float was found. An outcropping

ridge to the north immediately adjacent to the float was found to be granitic gneiss while going up an anticipated ice trend to the NNE revealed no further float or even exposed outcrop. An examination uphill to the north northwest did reveal a boulder train of garnet bearing amphibolite-ecologitic garnet bearing gneiss that extended for about 100 meters. A location for a potential stripping site was located here.

A second garnetiferous float was also examined on the Tower Lake Property on line 6N about 300m northeast from CP3 of claim 1237433. This float consisted of garnetite with garnet content ranging from 40-90% (60% being typical). The other consituents of this boulder being pegamatitic amphibole crystals, ilmenite and plagioclase often interstitial to the garnet. See photos of the Garnetite Float in Appendix 4 on CD. Outcrop in the area consisted of amphibolite gneiss with occasional garnet but of a different nature and in sub economic grades. The area surrounding the float was examined and as previous, no similar garnet bearing rock outcrop was found in the area. A boulder train however did exist down-ice of the boulder and this direction was used to travel up-ice to the next outcrop, which unfortunately, was not garnetiferous. Several locations were selected for test pitting based on this direction up-ice toward the outcrop exposure.

Traverses

Several traverses and site visits were undertaken. On Oct. 4th an investigation along the new logging roads and trails in the Mattawa B area was conducted and sites selected for stripping and trenching. Outcrop located in this traverse is shown on Map 5 and 6.

On Oct 5th a traverse was undertaken on the Tower Lake Area to the two float boulders to try and find any float trains prior to stripping (see Maps 12 and 14). Some boulder trains were located as shown on Maps 12 and 14. On October 6th a traverse was conducted on the west end of the Discovery Hill Area to locate the most efficient access to the desired stripping site S12 as shown on Map 7 and 8. On Oct. 7th a traverse was undertaken to determine other possible stripping sites and to investigate for dimension stone potential of the Gabbroic body in the southern part of Discovery Hill. Sample BK07-10-04D was collected at this time. On Oct. 8 additional trails in the Discovery Hill Area were examined for access to the S12 area and the area east of S12 was examined for continuity of the zone at S12.

On Oct 10 a traverse was conducted to examine the area at the north end of Tower Lake for its garnet and dimension stone potential. This area is shown on Map 10. No significant garnet was found and some gabbro samples were collected for their dimension stone potential.

On Oct. 12 a traverse was conducted on the northwest side of Tower Lake to investigate the possible northern extension of the garnet zone found there during earlier mapping (Komarechka 2002). The result of this work showed that an extension of the garnet zone was present (see Map 11). A traverse on Oct. 13 was undertaken near the roadside eclogite float at the southwest end of Tower Lake as shown on Map 14. The result of this traverse failed to find any outcrop or garnetiferous float. On October 29th a traverse was undertaken on the trails and stripped area in the Discovery Hill Area to collect the data as shown on Maps 5 and 6.

Sample Collection and Examinations

Samples collected in the course of this project were described in Appendix 6, along with some microphotographs. The locations of these samples are shown on Maps 5 - 14.

PHASE 3: STRIPPING, PITTING AND TRENCHING PROGRAM

A stripping program was undertaken on the property from October 18 - 29, 2004. This program consisted of 19 stripped sites, 26 pits and 3 trenches resulting in 1,589 square meters of exposure and removal of a total of 1,258 cubic meters of overburden. Many of the deeper and less significant pits were refilled. The areas and extent of this work is shown on a table in Appendix 7. Further specific locations can be found on Maps 5-14. This work was undertaken by the following contractors:

Excavation: Janveaux Forest Products Ltd.

P.O. Box 40

Mattawa, Ontario, POH 1VO

Outcrop Washing: Guy Shouinard

P.O. Box 331 Mattawa, Ontario

Supervision, Outcrop Mapping

& Report Preparation:

Bob Komarechka, Geologist

545 Granite St.

Sudbury, Ontario, P3C 2P4

Excavation was carried out on the Mattawa B Area with a 19 ton Daewood DH170 track excavator. A larger track excavator, a Cat 320B with a 1.25 cubic yard bucket was later used for the Discovery Hill and Tower Lake areas.

Washing was undertaken by Guy Schouinard, prospector and former owner of some of these properties. Washing was undertaken with two pumps, a high pressure washer with a piston pump and another standard Honda vane pump. A significant quantity of hoses were also required to reach the outcrops. The rental of these pumps and hoses was also from Janveaux Forest products.

Bob Komarechka was the geologist on site supervising activities, mapping the exposed rock and the author of this report.

Mattawa B Area

A total of 10 pits, 3 trenches and 11 stripped areas were excavated in the Mattawa B Area as shown on Maps 5 & 6. A large stripped area of 160 square meters (shown as S1 & S2 on Map 6) was stripped as a potential bulk sample site. This site was located along a cliff face outcrop and appeared to be of a consistent garnet quality both from the observed outcrop and the results of a previous percussion chip drill program (Komarechka 1999). The result of stripping this face has resulted in confirmation of the consistency of both grade, size and quality of the garnet: that being, orange-red subhedral 1-2 mm garnets comprising 30% of the host metaeclogite. A well defined foliation having a strike of 135° and dip of 45-60° E was

noted. Slight local variations in garnet concentration occurred in meter sized bands along this orientation, but overall a consistent grade was observed.

Trenches and pits were also dug to better define the east contact with the overlying granitic gneisses and confirmed the eastward curvature in strike in the southern part of the eclogite body. The presence of discreet eclogite bodies along this east contact may reflect the results of stoping of the overlying granitic gneiss with intrusion of the underlying eclogite.

A number of areas were stripped and pitted to determine the consistency of the grade of the garnets within the proposed eclogite body. Generally the exposed eclogite rocks confirmed the previous results of the earlier percussion drill chip evaluation both in size and grade of the garnet.

Several pits were also dug to find the northern strike extension of this body. The results of this work confirmed extension of the eclogite northward along a previously indicated magnetic trend. Further pitting to determine the end of this trend was not undertaken and the strike extension remains open to the north.

Discovery Hill Area

The stripping on this area is shown on Maps 7 and 8. Map 7 showing the general area and periferral stripping sites as well as the location of the Hudson Bay Exploration and Development Company Ltd. diamond drill holes. Map 8 shows more detail of the main area of stripping along the face and top of a steep near cliff like slope. In the Discovery Hill Area a total of 8 stripped areas resulted in 757 square meters of stripping resulting in a volume of 436 cubic meters of displaced overburden. Stripping area S11 occurs along an east west ridge of minimal overburden along the trail constructed to S12. Bedrock here consists of flaser textured garnet amphibolite biotite gneiss with occasional green epidote or olivine stretched blebs. Contact with the adjacent garnet poor amphibole gneiss was observed to the east as indicated by the dark north trending line on Map 8. No contact was found to the west or north as the overburden was not stripped here. Stripped area S12 occurs at the base of the steep slope. This area originally had about 40% outcrop exposure. This flaser textured garnet amphibolite gneiss (similar to that in S11) appears from previous outcrop mapping (see Komarechka 2002) to be continuous to the top of the slope at stripped area S15 (see field photos of these stripped areas on CD in the Discover Hill Field Photo Folder in Appendix 4). The east and west contact of this area is shown on S12 as being fault bound with associated pegmatite. The unit is terminated to the north by an east-west striking lamprophyre dike (see sample description and photo BK2-29-10-04 in Appendix 6) followed by granitic gneiss. Another stripped area S18 occurs further north. This is an epidotized eclogite containing blebby aggregates of garnet (see outcrop photos in folder DH S18 in Appendix 4). The extent of this unit was not determined.

On Map 7, to the west of the stripped area described above, lies stripped area S13 and S14. S13 contains larger garnets in an eclogite with variable grade while S14 contains the same flaser textured garnet amphibole gneiss as described in S11, S12 and S15. An abrupt change in dip occurs between the two stripped areasS13 and S14 suggesting an anticlinal axis or possible fault. An extension of this suggested anticline (fault) may be evidenced in the stripped area of S12 (see photos 118_1823S1.jpg and 118_1824S12.JPG in Appendix 4). Overburden between S14 and S12 prevent confirmation of this structure.

Tower Lake Area

Besides the traverses undertaken over the area two areas were pitted resulting in 16 pits exposing 221 square meters being exposed and a total of 420 cubic meters of overburden being removed. The majority of these pits were later refilled. Map 9, an index map of Tower Lake, shows the location of Maps 12, 13 and 14 where the pitting was undertaken. Map 12 shows the location of a clustering of pits (further shown in detail on Map 13) and the location of pit PT25F. The T indicates Tower Lake Area and F indicates the pit was refilled.

Pit PT25F was dug at the location of a very strong variation in the magnetic field orientation. The compass needle at this site went through a 360° variation within a 50 meter distance along line 8N. At a depth of 3 meters a contact was found between granitic gneiss to the northeast and a massive vermiculite band with associated magnetite to the southwest. Samples BK1 and BK2-28-10-04 was collected from this site. (See the description and microphoto of this sample in Appendix 6).

The remainder of the pits in the clustered area, PT11 to PT24F, were dug to follow up on the up ice direction of a large Volkswagon sized Garnetite boulder containing 40 to 90% garnet (see photos in Appendix 4). These pits encountered granitic gneiss or no outcrop at all and most were refilled. Later pits PT21F and PT22F encountered biotite amphibole ilmenite gneiss. This may be significant as ilmenite was also found in the garnetite boulder. Unfortunately no significant garnet was located in outcrop. A possible contact was later shown on Map13 that might suggest further pitting to the northwest of the garnetite boulder may be warranted.

Map 14 shows the location of pit P26F. This pit was dug to try and locate the source of another volkswagon-sized garnet bearing float - this time being composed of eclogite. A series of garnet bearing amphibolite plagioclase gneiss boulders were found along a north west direction and a pit was dug where this trend appeared to end. This pit was dug to a depth of 3 meters and encountered granitic gneiss. Due to the depth of overburden in the area and limited budget no further pits were dug.

CONCLUSION and DISCUSSION of RESULTS

As a result of the above study the following is evident:

- 1. Three sizeable zones of garnet bearing rock were investigated. These being: the Mattawa B Zone, Zone B of the Discovery Hill Area and Zone A of the Tower Lake Area. Significant amounts (+25% garnet) occurs in these areas. Two of these areas, the Mattawa B Area and Zone B of the Discovery Hill Area, have areas stripped suitable for bulk sample testing with routes amenable to upgrading for truck haulage.
- 2. All areas contain garnets less than 3mm in size. Mattawa B contains garnets in the range of 3-1mm, Zone B of Discovery Hill 1-0.25mm and Tower Lake Area 1-0.5 mm. In all 3 areas the garnets contain minimal inclusions and no quartz was visible in the host rock.
- 3. The garnets in Mattawa B are found in a meta-eclogite rock while the garnets in Zone B of Discovery Hill occur in a garnet amphibolite biotite gneiss with associated olivine. The garnets of Zone A in the Tower Lake Area occur in an amphibole plagioclase gneiss varying between meta-eclogite and garnet amphibole gneiss.

- 4. Zone A of the Tower Lake Area was found to extend further north than shown by earlier mapping. Inadequate time was available to determine the full distance of this extension.
- 5. The Mattawa B zone was also shown to continue further north then previously determined and also remains open to the north.
- 6. No bedrock source was found for either the eclogite or garnetite boulder float found in the Tower Lake Area.
- 7. The source of the 360° magnetic azimuth deflection was determined to be magnetite along a contact zone between granitic gneiss to the northwest and garnet bearing amphibolite plagioclase gneiss to the west. The presence of this contact may suggest an area for further investigation of the source of the garnetite float boulder in the area.
- 8. While the gabbro units were examined for their dimension stone potential, no determinations were made as to any significant areas for extraction. Deterrents included partly weathered olivine, plucking out of garnet and biotite, and the presence of some fracturing. It is possible that other areas may be found in the area with less problems or alternatively improvements may occur with rocks below surface weathering.
- 9. The old Hudson Bay core failed to reveal any significant garnet worthy of follow up.

RECOMMENDATIONS

The following recommendations are proposed as a follow up to this study:

- 1. A process of permitting for bulk sampling should be submitted to the Ontario Ministry of Northern Development and Mines for both the Mattawa B area and Discovery Hill Zone B.
- 2. Bulk sampling should be undertaken on the Mattawa B and Zone B of Discovery Hill to determine the recovery efficiency of the garnets and the market value of their final product verses the production and beneficiation cost.
- 3. Should the recoveries and final product prove acceptable a more detailed mapping and drill program should be undertaken to determine the reserves at Discovery Hill Area Zone B and further definition of those reserves at Mattawa B.
- 4. Zone A at Tower Lake should be mapped in further detail. This may be facilitated by forest logging roads which are planned for construction in this area this year.
- 5. The Bangs Lake and other garnet zones which were not part of this study should be mapped out in further detail.
- 6. Claims with minimal potential should be re-examined with further field work to determine the merits of retaining them.

ACKNOWLEDGEMENT

The author would like to thank the Ministry of Northern Development and Mines for their support in permitting the purchase of their digital claim database combined with the digital Ontario Base Map data for this study area.

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CERTIFICATE

I, Robert G. Komarechka, of the City of Sudbury, in the Province of Ontario hereby certify as follows:

- That I am a consulting geologist currently residing in Sudbury.
- That I am a graduate, B.Sc. Geology major, of Laurentian University of Sudbury, Ontario, a registered professional geologist in the Province of Alberta (APEGGA), affiliated with the Canadian Council of Professional Engineers, a fellow of the Canadian Gemmological Association, a registered professional Geologist with the Association of Professional Geoscientists of Ontario (APGO), a member of the Geological Association of Canada and that I have been practicing my profession for twenty years.
- That I had an interest in some of the properties at the time when this work was done and still do at the time of this report preparation.
- That this report is based on field observations collected over the months of September and October of 2004 as well as consolidation of previous work and report preparation from October 2004 to March 2005.

Robert G. Komarechka P.Geo.

Dated at Sudbury, Ontario, this 15th day of March, 2005.

APPENDICES

APPENDIX 1 Daily Activities

Mattawan Garnet Program 2004 Summary of Field Activities

Phase 1: a) Review of the old Hudson Bay Core

Sept. 30: Left Sudbury @ 4:52AM for Kirkland Lake to view archived Hudson Bay diamond qdrill core previously drilled on the property. Arrived in Kirkland Lake to the resident geologists office at 8:30 AM and met with Dave Guindon, geologist of MNDM, to obtain keys and instructions to the outside core storage area. Drove to storage area and located core on several cross-piled pallets. Dave Guindon arrives and assists with the movement of core. I layout the core and digitally photograph it. Hole 3 was under a dangerously tilted palette and was not laid out, although observation of the core as seen from the edge of the boxes was undertaken and found to match the logs on hand. The core was re-stacked and the keys returned. Arrived in Sudbury at 9:30 PM.

Phase 2: b) Confirm Garnet Locations of Guy Schouinard in NW Tower Lake Area c) Incorporate Data on the Mattawa B Claims, Select Sites for Stripping d) Field Observations of Garnet Rich Float in Tower Lake Area, e) Review Sites and Locate Areas for Stripping

i) Review Dimension Stone Potential in Field

Oct. 3: Prepared for trip to Mattawa, loaded vehicle, trailer and quad and drove to Mattawa. Checked in at the Valois Motel, unpacked and setup equipment. Met Guy Schouinard while having supper and discussed possibility of hiring him for washing outcrop. Prepared for field trip the next day.

Oct. 4: Work undertaken on claim 1224158 on Mattawa B. Used quad for access along new logging access road and trails. Met Guy again in the morning. Later met with Ben Whiting who was just leaving after doing field work on Imperial Metals Papineau garnet property. Stated he was looking at the Vanadium potential there. Investigated, with the quad, the extent of the new logging roads and some trails on the Mattawa B property and GPS'd their location. Check for a water source for washing - creek was dry. Investigated adjacent troctolite for dimension stone. Oct. 5: Work undertaken on claims 1237432 and 1237433. Investigated Tower Lake Area roadside eclogite float (Zone J) and flagged garnetiferous float train to NW off claim group. Traversed along N-S claim line to area of 360° magnetic deflection. Looked for outcrop and flagged location of greatest deflection for later stripping. Investigated area around garnetite float (Zone J) for possible outcrop. Flagged route of probable glacial up-ice trend for later pitting. Located potential sites for pitting. Flagged out route along old skidder trail for access to site. Oct. 6: Worked on claims 1230849, 1212157 and 1224150. Investigated west side of Discovery Hill. Spent time cutting bush and deadfalls on overgrown access road. Flagged out potential sites for stripping along access road (Zone D). Located and flagged out a route through the bush adjacent to Zone E to a potential bulk sample site on Zone B.

Oct. 7: Worked on claims 1224150 and 1212157. Investigated south side of Discovery Hill. Found skidder trail route giving close access to potential bulk sample site of Zone B. Located a water pool with flowing water along a dried up creek bed for outcrop washing. Checked out potential of a bulk sample site at Zone A. Investigated dimension stone potential of the nearby gabbro NW of Zone A. Collected sample BK1-07-10-04 for later sawing.

Oct. 8: Worked on claims 1224150 and 1212157. Contacted MNR in North Bay. Appointment scheduled with Marinus Verwey to review plans for anticipated stripping on crown land. Investigated southeast side of Discovery Hill and Zone B. Attempted unsuccessfully to find a trail route to the top of Discovery Hill. Investigated garnet potential and dimension stone potential. Picked up dimension stone sample BK1-08-10-04.

Mattawan Tp. Stripping Report

BMCTBG

Oct. 9: Worked on all claims. Rain in morning. Worked in office on digital files. Prepared georefrenced bitmap for downloading data. Downloaded GPS data of waypoints and tracklogs. Purchased stationary. Hooked up and prepared trailer for next days work.

Oct. 10: Worked on claim 1229912. <u>Used quad</u> on Tower Lake trail. Investigated area north of Tower Lake. Undertook mapping traverse along claim perimeter starting from NW of Tower Lake to Lalonde Lake then back on SE traverse to Tower Lake.

Oct. 11: Worked on all claims. Worked in office on map files. Determined the anticipate locations for stripping to send maps to MNR for their review.

Oct. 12: Worked on claims 1224151 and 1230516. <u>Used Quad</u> for access on trail on the west side of Tower Lake. Traversed along west boundary of claims and investigated extension of Zone A.

Oct. 13: Worked on claims 1224151, 1230516 and 1237432. Contacted Ramash Mandel re: proposed stripping program to discuss compliance. Finished off maps for MNR visit tomorrow. Investigated roadside garnetiferrous meta-eclogite float on claim 1237432 in the Tower Lk. Area to follow up on potential outcrops in the area. Also tried to find the source of the high magnetic anomaly to the east and any dimension stone potential.

Oct. 14: Met with MNR Rep. Marinus Verwey, made field visit and discussed proposed stripping program. Met with Denis Janveax of Janveax Forest Products and discussed logistics and equipment for planned stripping program next week. Packed up gear and left for return to Sudbury as a major rain and wind storm was expected for the next few days.

Phase 3: g) Undertake Trenching and Mapping of Favourable Areas h) Strip and Map at Least Two Areas for Potential Bulk Sampling i) Review of the Dimension Stone Potential of the Area

Oct. 17: Prepared for trip to Mattawa, loaded vehicle, trailer and quad and drove to Mattawa. Checked in at the Valois Motel, unpacked and set up equipment. Oct. 18: Worked on claim 1224158. Had breakfast with Guy Shouinard @ 7:00AM and discussed his availability for washing outcrop. Arrived on site at Mattawa B, track excavator (Daewoo DH170 19 ton machine with a 3/4 yd bucket) on site, operator, Less Novak, arrives shortly thereafter. Light snow falling in the area. I supervised excavation as operator undertook cleanup at base of potential face of bulk sample area and stripped off face of outcrop. Oct. 19: Worked on claim 1224158. Located trenches and supervised stripping on Mattawa B. Oct. 20: Worked on claim 1224158. Set Guy up with trailer & Quad for use with washing. Undertook locating and supervised trenching to confirm consistency and extend strike extension of Mattawa B Zone. Track slips off and machine is down 2 hours while we work track back on. Planned stripping on strike extension curtailed. Began mapping trenches. Undertook filling of deeper unimportant pits. Moved track excavator to the highway showing and dug two pits, which were later filled. Visited Mattawa public library, downloaded and uploaded email. Oct. 21: Worked on claims 1224250 and 1212157 supervising stripping. On hwy roadside trackhoe down 1 hr. as mechanic works on hydraulic leak and tightens loose fittings. Trackhoe is walked over to Discovery Hill. Guy continues washing outcrop. Skidder trail cleared as track hoe moves toward potential bulk sample site on Zone B. Pit is dug for washing water enroute. Stripping undertaken on an outcrop just prior to proposed and enroute to bulk sample site. Oct. 22: Worked on claims 1224250 and 1212157 supervising stripping. Arrived on site, machine being walked out due to hydraulic leak another larger machine (a Cat 320B with a 11/4 yd bucket) being dropped off. Met with Denis Janveax. Prepare men working signs for posting in field due to hunters in the area. Flagged off open trenches on Mattawa B with danger tape. Picked up seized wash pump and had repairs undertaken. Guy lays out hoses for washing on Zone B. Guy starts washing on S1 on Zone B while operator strips on S2 the proposed bulk sample site. Met Ron Montreuil on site. He proceeds to show me all his top showings on Discovery Hill as well as a route for an access route to the top of Discovery Hill that had been shown to me previously by Guy.

Oct. 23: Worked on claims 1224250 and 1212157 supervising stripping. Operator finishes stripping on S2 of Zone B and starts access trail westward to existing road on west side of Discover Hill. Guy begins laying out hoses to S2. I flag out access route to top of Discovery Hill. Operator brings up 2nd pressure pump as 1st pump is barely supplying water to this height. Washing of S2 starts.

Oct. 24: Worked on Claims 1224250, 1212157 and 1224158. Track hoe operator takes day off.

Guy washes S1 on Discovery Hill. I begin mapping on Mattawa B trenches.

Oct. 25: Worked on Claims 1224250, 1212157 and 1224158. Guy washing outcrop at S1. Operator arrives late due to truck problems and continues to work on access trail. I continue

mapping trenches at Mattawa B.

Oct. 26: Worked on Claims 1224250, 1212157 and 1224158. Had breakfast with Guy and help him set up pump. (Pump is taken from site each day to avoid theft). New trackhoe operator Germain shows up and finishes trail to Zone E and finishes off trail to top of Discovery Hill. Guy proceeds to finish washing at S2. I continued mapping of trenches at Mattawa B and returned to assist Guy tear down pump. Picked up Germaine at west end of Discovery Hill where he had taken track excavator for refueling.

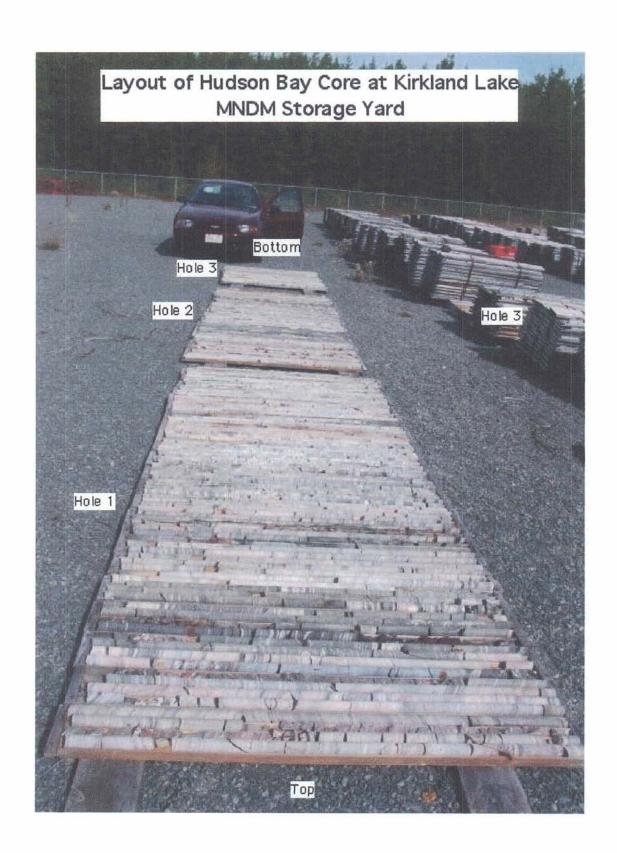
Oct. 27: Had breakfast with Guy and Germain. Escorted Germain to Tower Lake site and showed site requiring trenching. Left his vehicle and drove him back to the track excavator. I proceed to show Germain the location of sites to strip on top of Discovery Hill. I requested he use the track excavator to help Guy move the pump from S3, strip at Zone E, undertake stripping on top of Discovery Hill. I return to Mattawa B to finish off mapping of trenches. Guy shows up at 3:00PM on Mattawa B and undertakes washing of face and its upper edge. I return to Tower Lake and meet operator on site with mechanic who has just repaired the machine. I request he check the high pressure pump as it does not seem to work now. He determines that the pump has been damaged as grit has gotten into the pump (there was no screen on the pump). I assist Guy washing and tearing down the hoses.

Oct. 28: Worked on claim 1237432 in the Tower Lake area. Supervised pitting and trenching. Mapped some pits. Undertook pitting of 360° magnetic anomaly. Mapped pit bedrock, took sample and filled in pit due to its depth. Packed gear for departure tomorrow. Guy using quad. Oct. 29: Worked on claims 1212157, 1224150 and 1237432. Checked out of Valois Motel. Used quad, supervised pitting and trenching. Mapped remaining pits. Filled in deeper pits of no interest. Returned to Discovery Hill and completed mapping of stripping. Left field in darkness as

rain developed. Met with Guy and paid his invoices. Left for Sudbury in evening.

APPENDIX 2

Previous Hudson Bay Exploration and Development Company Limited Core Photos





Top of Hudson Bay's Hole #1





Middle of Hudson Bay's Hole#1





Bottom of Hudson Bay's Hole#1





Top of Hudson Bay's Hole #2





Middle of Hudson Bay's Hole#2



Mattawan Tp. Stripping Report

BMCTBG



Bottom of Hudson Bay's Hole#2



Mattawan Tp. Stripping Report



Top of Hudson Bay's Hole #3



Mattawan Tp. Stripping Report



Part of Middle of Hudson Bay's Hole#3



APPENDIX 3

Previous Hudson Bay Exploration and Development Company Limited Notes on Core

Hudson Bay Exploration and Development Company (Mingold) Core Drilled on Mattawan Township 1966

Field Observations

Three holes were drilled in LOT 12, CON X of Mattawan Township, by Mingfold Resources Inc., an affiliate of Hudson Bay Exploration and Development Company (HBED), in the search of anomalous placer gold previously observed by De Beers and confirmed by later sampling of overburden by HBED. The assessment report of this work is found in the Sudbury Resident Geologists Office. While the core is located in the outdoor core storage area near Kirkland Lake.

Due to the statement in the assessment report of core intersecting significant thicknesses of 'garnetiferous gneiss' in the area of our current garnet study, one day was allocated on Sept. 30, 2004 for examination of this core. As shown in the photographs of Appendix 2, the core consisted primarily of feldspathic gneiss. The garnet present in core 1 (22 boxes from 83'-505') and core 2 (21 boxes from 75'-457') was very minor (less than 10%) and of a local nature. Hole 3 was partially laid out (9 boxes from 32'-198') while the rest was left under a pile of dangerously tipping core stack. The cor in the stack was partially examined in situ. Hole 3 had the most garnets (up to 25%) especially in the more mafic gneiss bands (see photos of middle of core 3 in appendix 2) but these were bands again of a limited nature being a few meters wide at most. The existing core logs matched the observed core. A minor lamprophyre dike was also noted in core 3 that was not described in the core.

The core was also examined for its potential for dimension stone but was found to be too fractured with abundant biotite rich bands. It is doubtful that suitable dimension stone could be obtained from the location of this core drilling.

APPENDIX 4

Field Site Photos Located as a separate digital file on CD Not included in the Assessment Report

APPENDIX 5 Sample Label Notation

Sample Label Notation

As an example in the sample, BK8-19-06-01DFCS,

- **BK** denotes that the sample was collected by Bob Komarechka.
- 8 denotes that this was the eight sample collected that day.
- 19-06-01 denotes that the sample was collected on June 19, 2001.
- F denotes that the sample collected is float and may not be indicative of the underlying bedrock.
- D indicates the sample was collected for its evaluation as dimension stone
- C denotes that the sample collected is a composite, usually in areas of variable geology.
- S denotes the sample is of overburden or soil

Note that the last four letters are frequently not present in the sample description.

General Notes:

Amphibole plagioclase gneiss is used here in these descriptions and report as a generic term. Amphibole is often altered to biotite locally and perhaps to a limited regional degree. Extensive biotite alteration does not preclude the name amphibole plagioclase gneiss. Additionally amphibole plagioclase gneiss occasionally does appear to progress into a granulite facies with the development of a granular texture and the alteration of amphibole to pyroxene. Often the size of the mafic grains does not permit the confirmation of either pyroxene or amphibole. Frequently later hydrothermal conditions under retrograde conditions result in both the pyroxenes and amphiboles developing into biotite.

The presence of zoisite, omphacite and diopside is based on the colour, cleavage and associated minerals. No thin section work has been undertaken to confirm any mineral identification in this study.

Eclogite notation of type A Eclogite refers to an omphacite-garnet composition. Type B refers to a hornblende zoisite composition, while type C refers to a glaucophane epidote composition.

Additionally retrograde metamorphism and hydration can affect these eclogites as well. Often bands of eclogite will grade into an amphibole plagioclase gneiss or can be in discordant contact with them. For a more detailed description of eclogite, see Petrogenesis of Metamorphic Rocks 5th Edition by Winkler, Helmut. G. F.

APPENDIX 6

Sample Descriptions and Microphotographs

Rock Name	% Garnet	Garnet Size mm 0.25 - 0.75	Pink	brown, B-Horizon, mixture of minor organics with mineral grains coated with iron oxide, composition of grains - 50% amphibole: black, subhedral, 0.25-1.0mm, 10% plagioclase: wh, subangular, 0.25-0.5 mm, 5% biotite: possibly vermiculite, black, subhedral, 0.25-1.0mm & 5% olivine: green white to olive green,					
Soil / 30% organics removed	30%								
Amphibolite	15%	0.25 <i>-</i> 0.75		black to very dark gray, heavy, dense, granoblastic rock consisting of 55% black amphibolite, 10% black biotite, Good trace of magnetite. 20% olivine: olive green to yellow white olivine	М1				
BK3A-04-10-04 Dunite				very dark gray to greenish gray, heavy, finely crystalline, granoblastic, olivine and 20% magnetite appearing as tiny euhedral octahedral crystals.	M1				
Amphibole plagioclase gneiss	0%			salt and pepper coloured, very finely crystalline, slightly gneissic containing 60% black amphibole and 45%white plagioclase, minor quartz was noted. This rock suggests it was a rafted slab of remelted country rock, tilted vertically on edge.	М1				
Meta Troctolite	0.0	0.0		Dark gray, finely crystalline, granoblastic, on weathering olivine becomes soft dark brown, waxy serpentine and iron oxide mixture with specks of black magnetite, plagioclase spinel wheathers to fine blebs of sucrosic light tan yellow. 40% olivine: dark olive green to yellow white, massive, associated with 20% black to submettallic magnetite, 40% Plagioclase: pastel green, breaking with a conchoidal fracture due to very fine interstitial green spinel.					
Olivine Amphibolite	0.0	0.0		Black to very dark gray, heavy, medium crystalline, subhedral, granoblastic consisting of 60% amphibole, 30% olivine and 10% biotite - vermiculite, magnetic probably due to magnetite.	M1				
	Amphibolite Dunite Amphibole plagioclase gneiss Meta Troctolite	Soil / 30% organics removed 30% Amphibolite 15% Dunite 0% Amphibole plagioclase gneiss 0% Meta Troctolite 0.0	Soil / 30% organics removed 30% 0.25 - 0.75 Amphibolite 15% 0.25 - 0.75 Dunite 0% Amphibole plagioclase gneiss 0% Meta Troctolite 0.0 0.0	Soil / 30% organics removed 30% 0.25 - 0.75 Amphibolite 15% 0.25 - 0.75 Dunite 0% Amphibole plagioclase gneiss 0% Meta Troctolite 0.0 0.0	Soil / 30% organics removed 30% 0.25 - pink brown, B-Horizon, mixture of minor organics with mineral grains coated with iron oxide, composition of grains - 50% amphibole: black, subhedral, 0.25-1.0mm, 10% plagioclase: wh, subangular, 0.25-0.5 mm, 5% biotite: possibly vermiculite, black, subhedral, 0.25-1.0mm & 5% olivine: green white to olive green, subangular, magnetite: good trace. Amphibolite 15% 0.25 - 0.75 Amphibolite 0% black apphibolite, 10% black biotite, Good trace of magnetite. 20% olivine: olive green to yellow white olivine very dark gray to greenish gray, heavy, finely crystalline, granoblastic, olivine and 20% magnetite appearing as tiny euhedral octahedral crystals. Amphibole plagioclase gneiss 0% salt and pepper coloured, very finely crystalline, slightly gneissic containing 60% black amphibole and 45% white plagioclase, minor quartz was noted. This rock suggests it was a rafted slab of remelted country rock, tilted vertically on edge. Meta Troctolite 0.0 0.0 Dark gray , finely crystalline, granoblastic, on weathering olivine becomes soft dark brown, waxy serpentine and iron oxide mixture with specks of black magnetite, plagioclase spinel wheathers to fine blebs of sucrosic light tan yellow. 40% olivine: dark olive green to yellow white, massive, associated with 20% black to submettallic magnetite, 40% Plagioclase: pastel green, breaking with a conchoidal fracture due to very fine interstitial green spinel. Olivine Amphibolite 0.0 0.0 Black to very dark gray, heavy, medium crystalline, subhedral, olivine and 10% blotite - vermiculite, magnetic probably olivine and 10% blotite - vermiculite, magnetic probably				

Sample No.	Rock Name	% Garnet	Garnet Size mm	Colour	Description	Pai #
BK1-06-10-04	Amphibole Plagioclase Garnet Gneiss	30%	0.25-1.0	orange red	salt and pepper, slightly gneissic, crumbly, consisting of 30% plagioclase: white, subhedral, 0.25-0.50mm, 30% amphibole: black, subhedral, 0.25-1.0mm, 30% biotite: black, subhedral, 0.25-1.0mm.	M1
	Coronitic Gabbro (Polished)	10%	<0.10	tan orange	mottled tan - dark brown, coarsely crystalline, porphyrytic, consisting of 30% of black to dark gray irregularly orientated lathes of amphibolitized augite rimmed by a tan coloured corona of microcrystalline garnet in a matrix of randomly orientated 1-2cm long lathes of plagioclase. Dimension Stone Commentary: this rock has an attractive net texture somewhat similar to sample BK4-10-10-04 but having more and larger crystals of plagioclase. There appears to be a minor pinpoint plucking of amphibole and magnetite grains from the mafics. This may be due to this being a surface sample.	М1
BK1-08-10-04D	Amphibole Epidote Plagioclase Garnet Gneiss (Polished)	30%	0.1-0.25	orange	dark gray matrix of amphibolite, green epidote? and plagioclase with minor biotite, trace of magnetite - ilmenite. Tiny garnets appear as veils throughout this rock. This rock appears proximal to an adjacent gabbro and is probably related to the contact zone. <u>Dimension Stone Commentary:</u> This rock as in sample BK1-07-10-04 appears to exhibit pinpoint plucking -in this case from the tiny garnets.	
BK1A-08-10-04	Plagioclase Garnet Amphibole Gneiss	27%	0.2-0.3	pinkish orange	Light pinkish colour with black flecks consisting of 50% plagioclase: white, subhedral, 1-0.2mm, 13% black amphibolite, 5%green mineral possibly epidote, 5% black biotite, good trace of ilmenite.	М1
BK1-10-10-04	Plagioclase Pegmatite	0	0		White to slightly pink in part (iron stained), coarsely crystalline plagioclase.	М1

Sample No.	Rock Name	% Garnet	Garnet Size mm	Colour	Description	Pail #				
BK2-10-10-04	Leuco Metagabbro	0	0		green gray, medium crystalline with scattered black to dark gray crystals of ferroaugite metamorphosed to amphibolite with magnetite cores, 80% plagioclase: pastel green gray, consisting of plagioclase partially converted to microcrystalline spinel, 20% ferroaugite altered to amphibolite with magnetite cores, some olivine may also be associated with the mafics.					
BK3-10-10-04 Coronitic Gabbro Pegmatite		12	<0.1		60% plagioclase: cream white to light gray matrix with very finely crystalline subhedral garnets around the perimeter of titanaugite (partly biotized & amphibolitized), 40% titanaugite: black very coarsely crystalline subhedral 1-3cm amphibolitized titanaugite often with ilmenite in the core with biotite rims, tr apatite.	М1				
BK4-10-10-04D	Coronitic Gabbro (Polished)				brownish tan coarsely crystalline, granoblastic, consisting of 40% ferroaugite: black to dark gray with magnetite-ilmenite cores surrounded by a very fine microcrystalline corona of orange garnets in a matrix of interstial 60% tan white plagioclase lathes 1-0.5 cm long. Dimension Stone Commentary: Interesting and attractive textured rock. It takes a good polish but contains numerous fine cracks and pin point pluckings which may be related to a weathering effect from this being a surface sample. Note that texture is variable within this rock type.	M1				
BK1-12-10-04	Plagioclase Garnet Amphibole Gneiss	30	0.5-0.2	flesh orange	tan brown with plagioclase garnet matrix with streaks of black amphibole streaks consisting of 50% plagioclase: white, subhedral, very finely crystalline 0.2-0.5mm, sucrosic, 15% amphibolite: black, subhedral, 5% Ilmenite.	М1				
BK2-12-10-04	Garnet Epidote Plag. Amph. Gneiss	40	1.5-0.5	orange	Consisting of 30% epidote: green gray, very finely crystalline, sucrosic, often associated with plagioclase 18% plagioclase: white very finely crystalline sucrosic12% amphibolite: black, anhedral, 1.5-0.5mm.	M1				

Sample No.	Rock Name	% Garnet	Garnet Size mm	Colour	Description					
BK3-12-10-04	Garnet Amphibolite Gneiss		45 0.75- Orang 0.25 fleshy r		Red gamet bands within a matrix of 40% black amphibole d and 15% plagioclase.					
BK1-20-10-04	Meta Eclogite	30-40	1-2	pinkish red	Garnets show plagioclase rims	М1				
BK2-20-10-04	Meta Eclogite Hwy Pit	25	0.5-1.5	Orange red	Dark gray matrix of black amphibole and biotite with white interstitial sucrosic plagioclase and accicular green mineral (possibly epidote), trace of tiny inclusions of submstallic mineral probably magnetite or ilmenite in garnets, garnet concentration variable from 15-30%.	M1				
BK3-20-10-04S Sand		0	0		white with minor dark flecks consisting of 80% quartz: clear, upper medium to lower coarse grained, well sorted with inclusions of mica, 15% feldspar: frosty white to pink, lower coarse grained, 5% Mafics: dark gray to black, angular fragments of biotite and amphibole.	M1				
BK1-22-10-04 Laminated Qtz. Bio. Plag. Gneiss		0	0		Finely laminated 10-30 cm wide bands of plagioclase rich rock separated by thin bands of black biotite bands. Rock was ripped up from bedrock at base of creek when digging up the water hole. Rock may be a vertically dipping mylonite along the course of the creek bed but lack of outcrop required to confirm this.	M1				
BK1-28-10-04 Magnetite Olivine Vermiculite Schist		0	0		Easily weathered earthy bronze schist consisting of 20-40 cm bands of black-gray submetallic magnetite and also occurring interstitially in the micaceous bands, magnetite comprising 60% of the rock with bronze coloured vermiculite comprising 40% of the rock. Magnetite bands can also contain up to 60% olivine.	М1				
BK2-28-10-04 Magnetite Vermiculite Schist		0	0	·	Same as in sample BK1-28-10-04 but having more magnetite.	М1				
BK1-29-10-04	Amphibole Biotite Gneiss	5	20-30	tan red	Black, crumbly, containing abundant biotite altered to vermiculite and black amphibole with interstitial magnetite, large garnets present containing abundant inclusions of amphibole and biotite.	M1				

Sample No.	Rock Name	% Garnet	Garnet Size mm	Colour	Tan brown, highly weathered crumbly rock with unusual glomerophyric texture consisting of very fine to microcrystalline rusty brown earthy matrix containing more firm brown spheroidal bodies approximately 3-1 cm diameter which have internal tan white1-2mm diameter phenocrysts (pos leucite or some zeolite). Magnetic probably due to magnetite.					
BK2-29-10-04	Lamprophyre dyke	0	0							
BK2a-29-10-04 Lamprophyre		0	0		Medim gray weathering to rusty tan brown, very finely to microcrystalline with occasional dark greenish black phenocrysts or megacrysts of serpentized olivine with associated magnetite, trace of very finely scatteredpyrite. Also contains phenocrysts of <1mm white to tan mineral possibly a zeolite such as leucite.	M1				
BK3-29-10-04	Meta Eclogite	20	3-0.5	orange	Green gray, granoblastic, matrix of black amphibole and very finely crystalline green mineral possibly epidote associated with plagioclase, a trace of quartz was noted. The garnets exhibited planar fractures with occasional light yellow brown coatings. These garnets may be multicrystalline clumps.	М1				
BK4-29-10-04	Flaser Garnet Amph. Plag. Gneiss	30	1-0.25	Orange red	Dark gray sucrosic matrix of 40% black amphibole 1-0.5mmand 30% white plagioclase0.5mm. Garnets show minimal inclusions and can occur in higher density swirls containing up to 60% garnet locallygiving the red texture noted. The material crumbles easily (on surface) liberating garnets on crushing. Garnets are slightly magnetic.	М1				

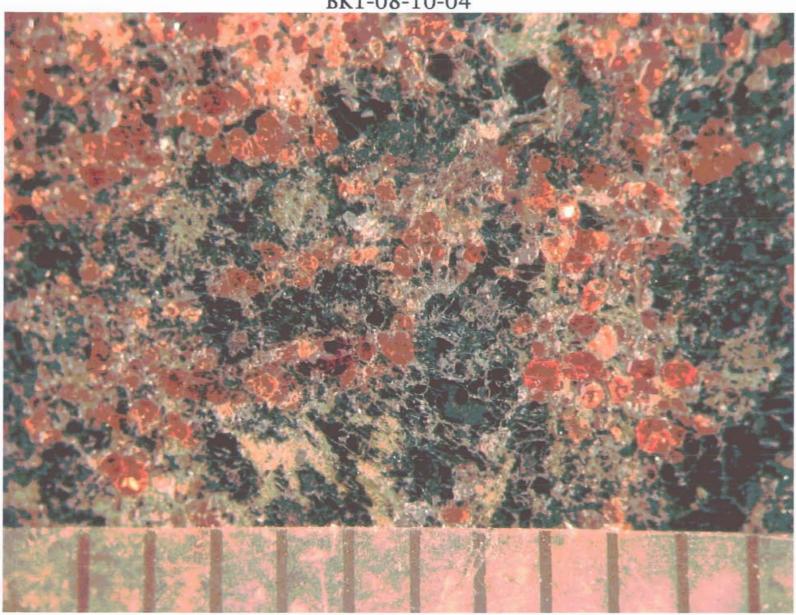
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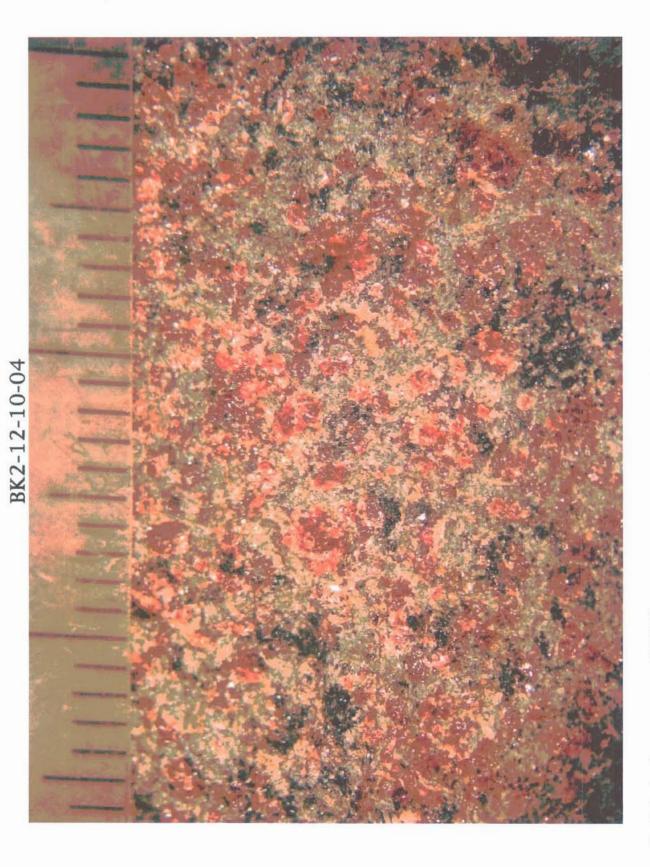
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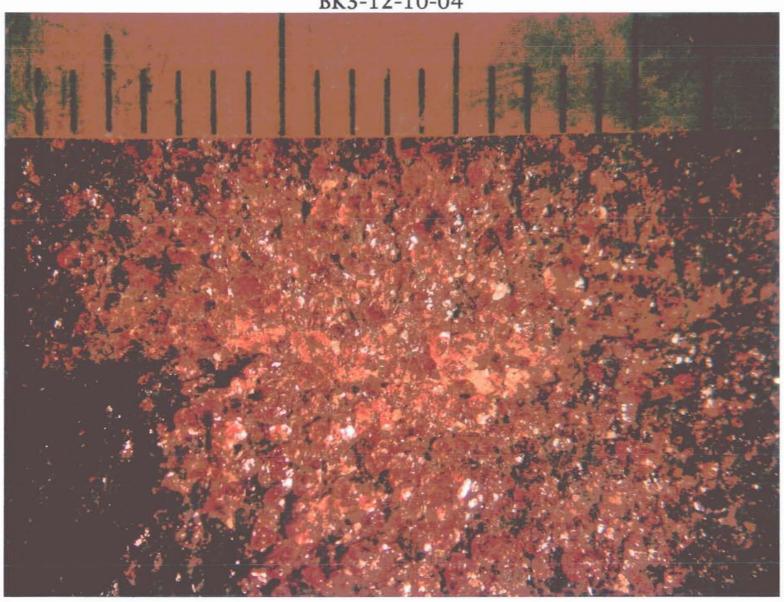
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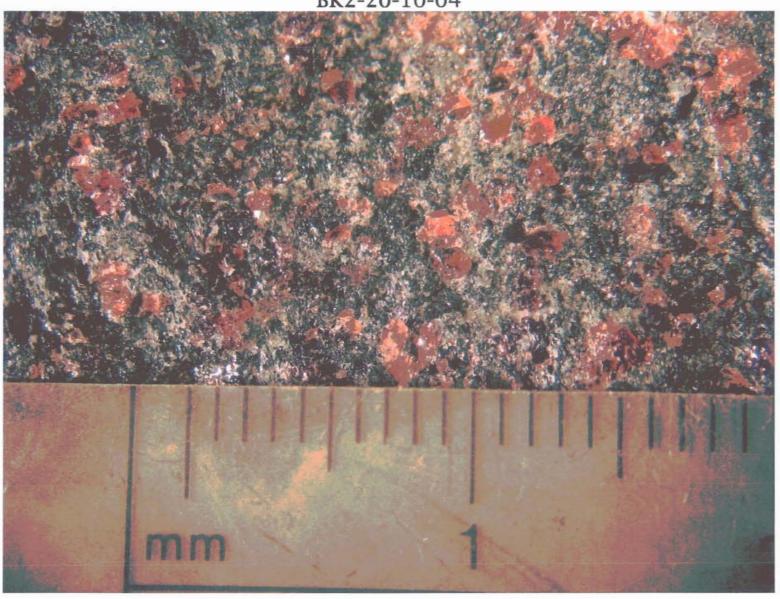




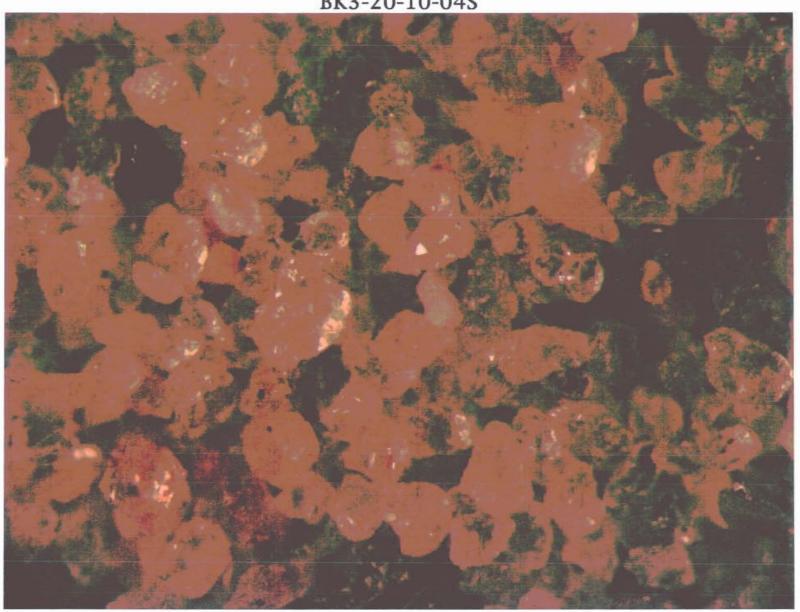
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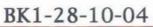


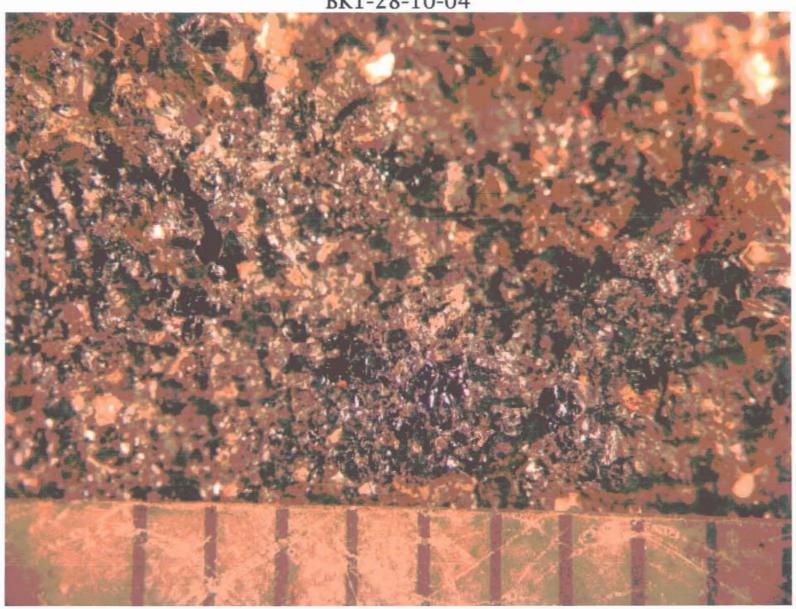




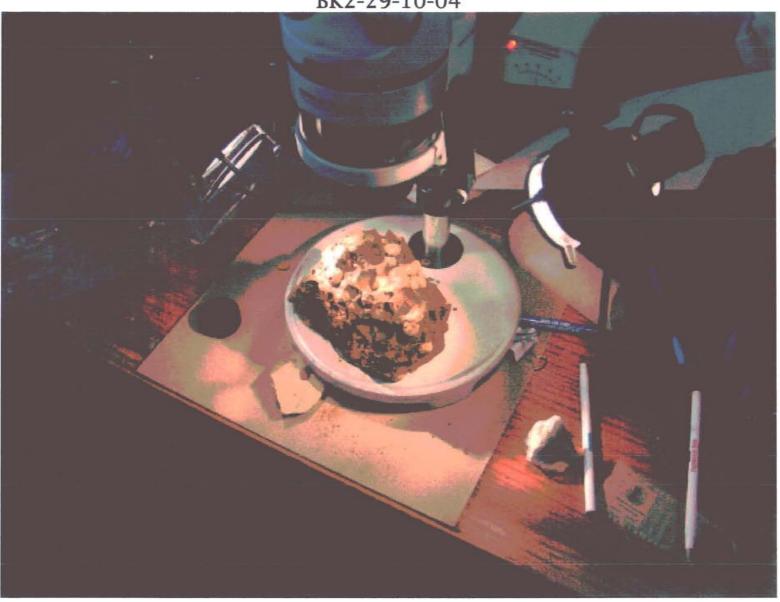


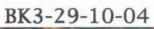


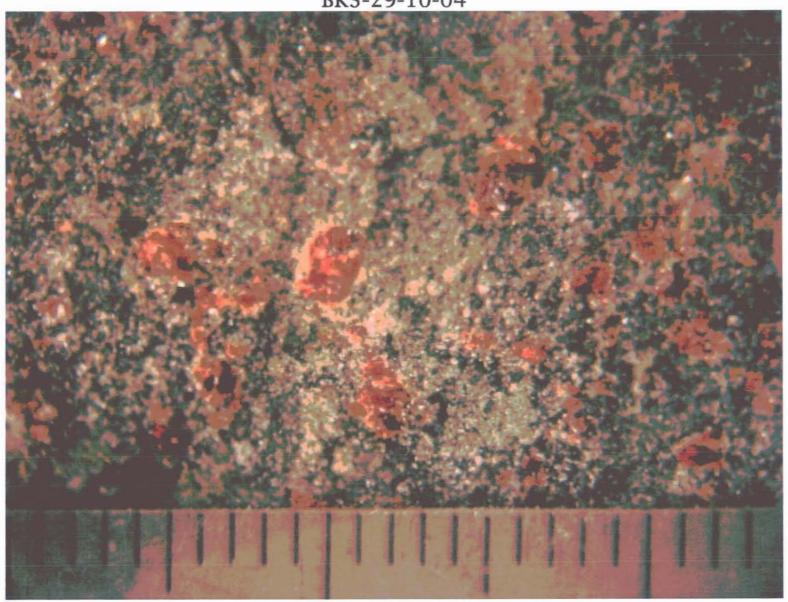


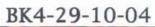


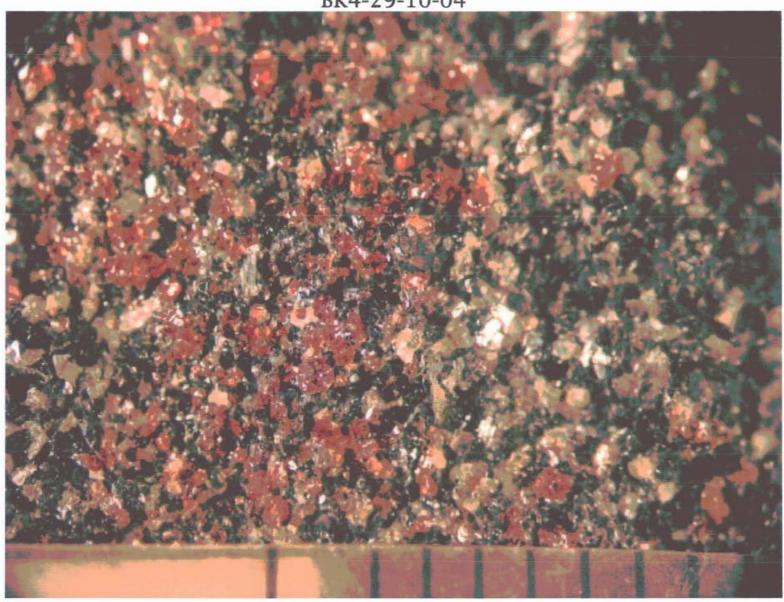












APPENDIX 7 Scope of Stripping Program

Area	Claim #	Date of	Stripped	Trenched	Pit	Length	Width	Depth	Area	Volume
		Work	Area	Area		m	m	m	mxm	Removed
Matteria D	1224150	0-+ 10	C1			10	10	0.5	100	
Mattawa B	1224158	Oct. 18	S1			10	10	0.5	100	50
	1224158	Oct. 18	\$2			15	4	0.5	60	30
	1224158	Oct. 19	S2a			4.5	1.5	0.2	6.75	1.35
	1224158	Oct. 19		T1		43	3	0.5	129	64.5
	1224158	Oct. 19		T2		13	2	1	26	26
	1224158	Oct. 19		T3		20	2	1	40	40
	1224158	Oct. 19	\$3			5	5	0.5	25	12.5
	1224158	Oct. 19	S4			10	3	8.0	30	24
	1224158	Oct. 19			P1	2	3	2	6	12
	1224158	Oct. 20	S5			6	3	0.1	18	1.8
	1224158	Oct. 20	S6			4	4	0.1	16	1.6
	1224158	Oct. 20	S7			6	4	0.15	24	3.6
	1224158	Oct. 20	S8			2	1	0.1	2	0.2
	1224158	Oct. 20	S9			6	3	0.1	18	1.8
	1224158	Oct. 20	S10			5	3	0.1	15	1.5
	1224158	Oct. 20			P2	6	2	0.75	12	9
	1224158	Oct. 20			Р3	4	2	2	8	16
	1224158	Oct. 20			P4	3	2	0.5	6	3
	1224158	Oct. 20			P5	3	2	0.5	6	3
	1224158	Oct. 20			Р6	3	3	0.3	9	2.7
	1224158	Oct. 20			P7	6	3	0.1	18	1.8
	1224158	Oct. 20			Р8	4	3	0.5	12	6
	1224158	Oct. 20			Р9	3	3	1	9	9
	1224158	Oct. 20			P10	4	4	5	16	80
Total	1 claim	3 days	11	3	10				611.75	401.35

Area	Claim #	Date of Work	Stripped Area	Trenched Area	Pit	Length	Width	Depth	Area	Volume Removed
Discovery	1224150	Oct. 21	S11			19.5	3	0.5	58.5	29.25
Hill	1224150	Oct. 22,23	S12			90	6	0.6	540	324
	1224150	Oct. 27	S13			22	2	0.5	44	22
	1224150	Oct. 27	S14			7	3	0.5	21	10.5
	1212157	Oct. 27	S15			7	7	0.5	49	24.5
	1212157	Oct. 27	S16			4	2	1	8	8
	1212157	Oct. 27	S17			5	2	0.5	10	5
	1212157	Oct. 27	S18			13	2	0.5	26	13
Total	2 claims	4 days	8						756.5	436.25
Tower Lake	1237432	Oct. 28			P11	2.5	2	0.2	5	1
TOWER Lake		_		_	P11	5	3		15	1.5
	1237432 1237432	Oct. 28			P12		2	0.1	13	26
	1237432	Oct. 28			P13	6.5	2	2.5	14	35
	1237432	Oct. 28		_	P14	9	2	2.5	18	36
		Oct. 28			P15	7	2	2	14	28
	1237432	Oct. 28							14	28
	1237432	Oct. 28			P17	7	2	2		
	1237432	Oct. 28			P18	2	2	0.2	4	0.8
	1237432	Oct. 28			P19	3	5	0.5	15	7.5
	1237432	Oct. 28			P20	6	2	2	12	24
	1237432	Oct. 28			P21	6	2	2	12	24
	1237432	Oct. 28			P22	3	3	0.5	9	4.5
	1237432	Oct. 28			P23	6	2	2	12	24
	1237432	Oct. 28			P24	6	2	2	12	24
	1237432	Oct. 28			P25	3	9	3	27	81
	1237432	Oct. 29			P26	5	5	3	25	75
Total	1 claim	2 days			16				221	420.3
Grand Total	4 claims	9 days	19	3	26				1589.25	1257.9

Symbols

Gneissosity strike/dip Gneissosity with no dip **Anticline** \leftrightarrow **Syncline** Plunging Anticline Plunging Syncline Survey Post Old Grid Marker Sample Location Claimpost Observed Claimpost Assumed Claim Lines in Field Subdivided Claim Lines Fault Observed Fault Inferred AKS Area of Kaotic Structure DIC Swamp Sample number BK3-19-06-01 % garnet:crystal size, % ilmenite (background colour matches rock type)

Roads and Trails

Trail - Overgrown or Skidder Trail
Trail - Quad
Road - 4wd
Road - Gravel
Road - Paved
Road - Condition Unknown

Rock Types 6 Surficial Material (generally till, soil, sand) 5b Albite Pegmatite 5a Pegmatite 4i Mylonite 4h Flaser Garnet Amphibole Gneiss 4g Flaser Gabbro Gneiss 4f Graphitic Plagioclase Gneiss 4e Feldspar Granulite Gneiss 4d Epidote Amphibole Gneiss 4c Biotite Amphibole Ilmenite Gneiss 4b Diopside Plagioclase Gneiss 4a Thinly Laminated Feldspar Amphibolite Gneiss 3j Eclogite 3i Peridotite, often uralitized 3h Massive Magnetite

3g MetaTroctolite 3f Ilmenitic Gabbro

3d Coarsely Crystalline Gabbro 3c Gabbro Anorthosite Gneiss

3b Anorthositic Gabbro 3a Anorthositic Gneiss

2b Amphibole Plagioclase Gneiss 2a Plagioclase Amphibole Gneiss

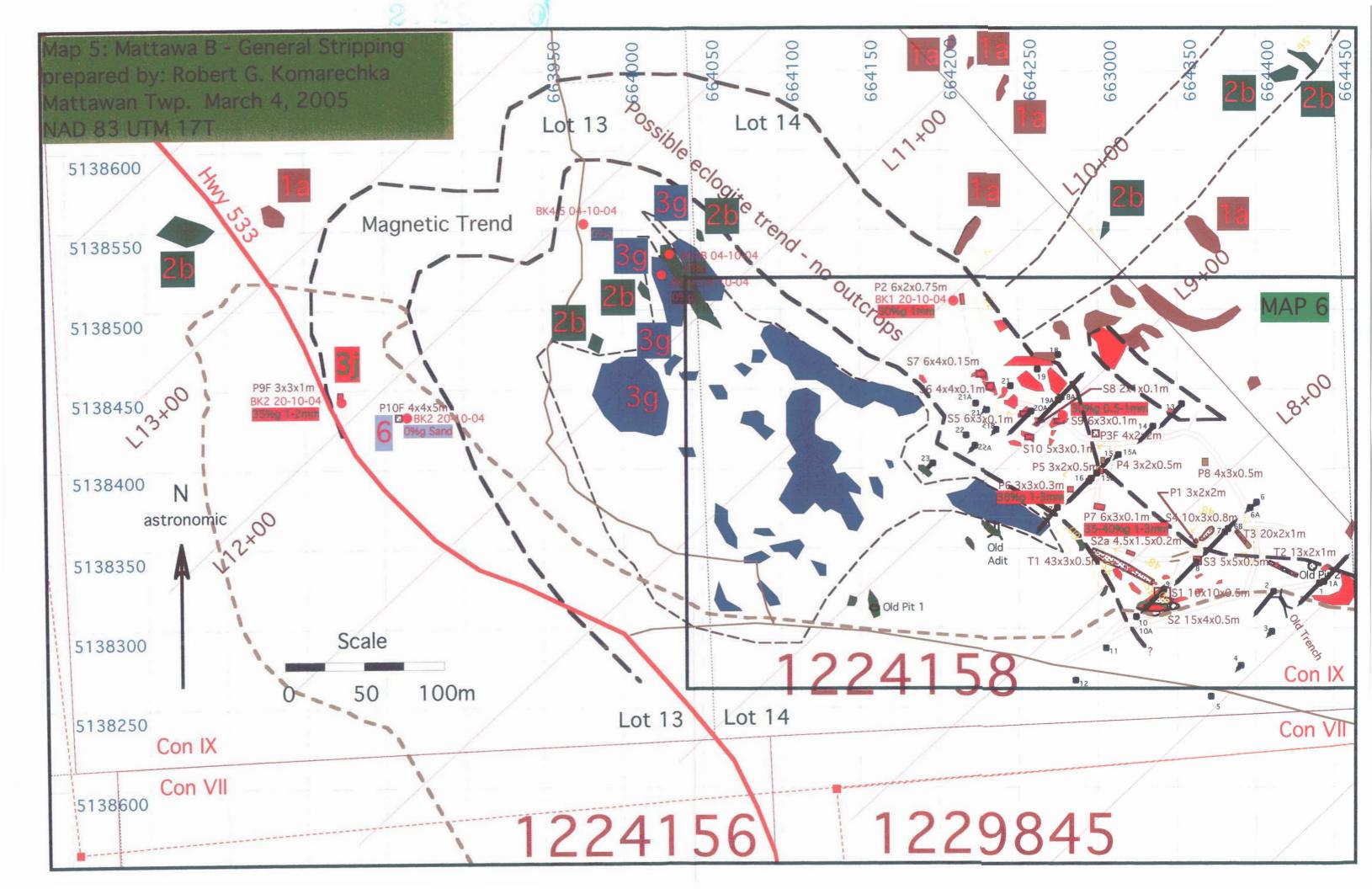
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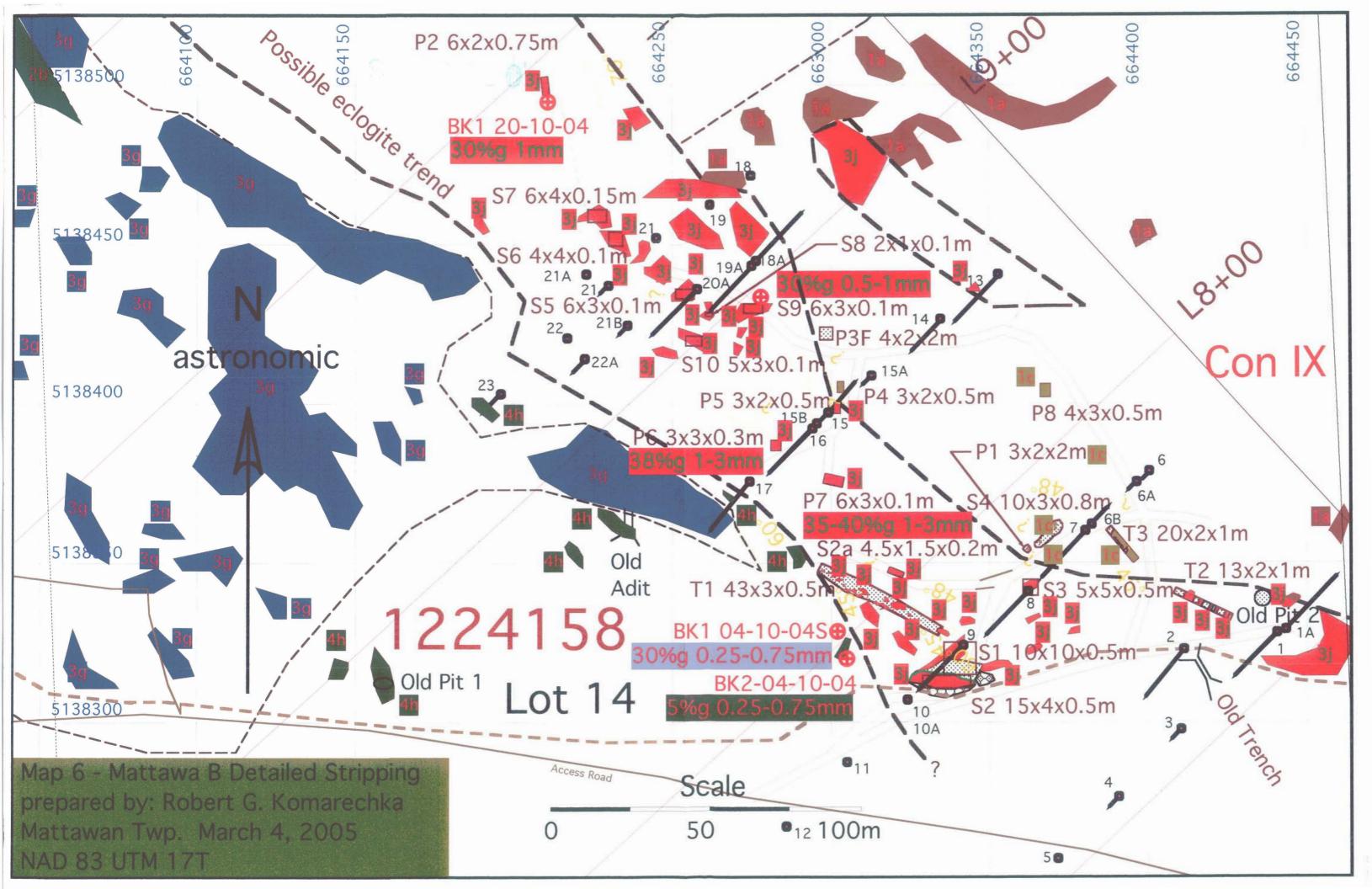
1d Quartz Feldspar Biotite Gneiss

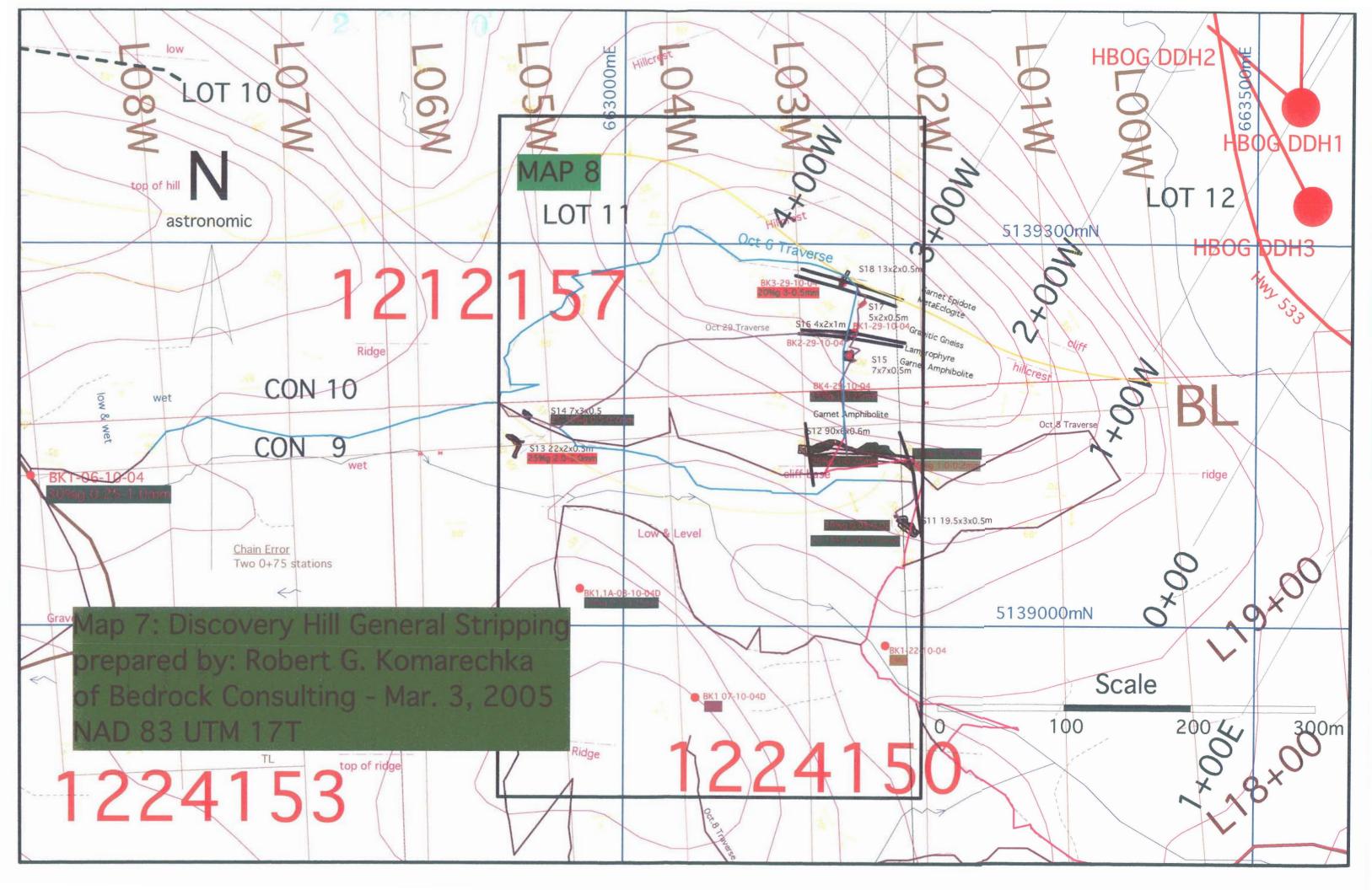
1c Feldspar Amphibole Quartz Gneiss 1b Feldspar Amphibole Biotite Gneiss

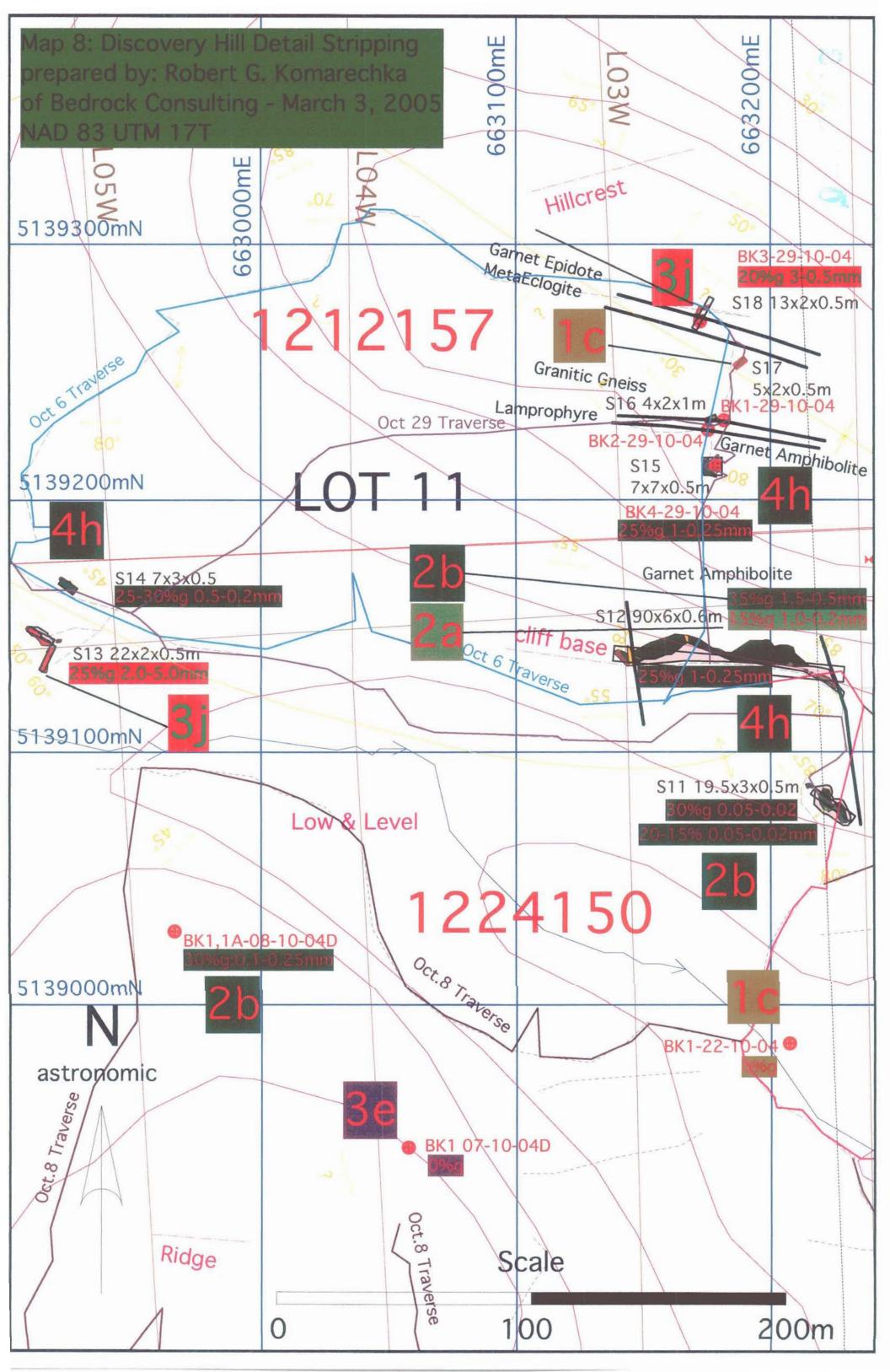
1a Feldspar Amphibole Biotite Quartz Gneiss

Areas with Observed +20% Garnet









2.20000

